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A CLINICAL LECTURE

ON A CASE OF PERVERTED LOCALISATION OF SENSATION OR ALLACHÆSTHESIA.

Delivered in the University of Edinburgh.

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I show you to-day a case which I believe to be one of functional disease of the nervous system. It has been under observation for three months, and exhibits numerous interesting features, among which I shall speak in detail of only one, namely, abnormal localisation of tactile and other skin impressions. A general sketch of the case is necessary to our understanding this special feature.

History and Description of Case.

W. F. is a tall, spare man, 49 years of age, who says that he was formerly a belt cutter and afterwards a commercial traveller, that he has often been ill, having had Bright's disease and prolapse of the rectum, headache, palpitation, breathlessness, and a great variety of other nervous symptoms. He was sent to us as a case of Bright's disease; but the albuminuria soon disappeared, and the œdema, which was distinct on admission, passed rapidly away. But as they disappeared various nervous symptoms manifested themselves, and these have continued with little alteration during the months that we have watched him.

His family history is unimportant, except that his father died of brain disease, apparently apoplexy, at the age of 58 years. His social surroundings were said to be favourable, but exposed him a good deal to changes of weather, and he seems to have indulged in alcohol to a considerable extent. He says that he has suffered much from prolapsus ani, and that he had convulsions shortly before his admission to the wards. He asserts that the doctor who then attended him regarded them as uræmic. The amount of Bright's disease that we witnessed was certainly not such as should have led to anything of the kind, and I incline to think that the seizures must have been of a purely functional nature.

He is a tall, fair man, of neuro-sanguine constitution, has an alert manner, and an expression of countenance fitted to suggest the propriety of close inquiry into his statements. His right foot and leg are constantly in motion except when he is asleep; his left foot and left hand also jerk, but less rhythmically and severely. His eyes show a distinct degree of staring, and the size of his thyroid gland varies remarkably. His temperature is always normal.

The alimentary system shows nothing of importance except some dyspepsia and considerable diarrhœa associated with the prolapse already mentioned.

The hæmopoietic system shows normal blood in respect to corpuscles and hæmoglobin, normal lymphatic glands and spleen, but the thyroid gland is sometimes of natural size, sometimes considerably enlarged.

With regard to the circulatory system, he complains of palpitation, a feeling of faintness, with irregularity of heart action, but unattended by murmurs. His pulse is sharp, 104 per minute, with very low tension between the beats. There is no thickening of the vessel walls.

The respiratory system presents no abnormality, except that the voice is somewhat hoarse, and the expiration is at times much prolonged, apparently from hindrance to expiration.

The integumentary system is natural, but for profuse perspiration, a slight tendency to acne, and an undue irritability of the vessels which readily produces the phenomenon of urticaria scripta.

The urinary system is now normal.

The functions of the reproductive system are stated to have been in abeyance for two years and a-half.

The nervous system in respect of its sensory functions shows many abnormalities. There are no important subjective phenomena, nor are there any objective abnormalities on the right half of the body. On the left half all kinds of skin impressions are perceived readily, and with normal acuteness, but they are incorrectly localised. This faulty localisation does not vary, but in the arm and leg constantly shows that an impression of touch, of pain, of temperature, applied, say, over the middle third of the radius is perceived as if over the middle third of the ulna. If on the thumb it is felt as if on the little finger, and, similarly, displacement occurs, but always to the same spot over the greater part of the arm and the leg. The left half of the trunk shows a corresponding peculiarity, but above the level of the clavicle there is nothing wrong. In the arm and leg, however, there are areas in which correct localisation exists. Fig 1 represents the front, Fig. 2 the back of the hand and arm, the dark shaded parts showing the areas of localisation, the rest of the limb being abnormal, so that a touch at A is felt as if it were at α, a touch at α as if it were at A. So with B, C, D, E, with their respective Greek letters, while at F, G, and H there is no displacement. It will be observed in the drawing that in the middle of the front of the forearm there is a small portion of skin stretching across the normal area, in which faulty localisation occurs. Fig 3 represents the front of the leg, Fig 4 the back. An impression at A is felt at α, and *vice versâ*, one at B is felt at β, and so on. On the front and on the back of the leg a narrow area is marked by shading, and over this field localisation is correct. Fig. 5 represents the front of the trunk. Above the clavicle the shading marks one area of normal localisation; all the rest of this part of the trunk shows displacement of impressions except the narrow shaded line, which is normal. A touch at A is invariably perceived at α, a touch at B as if it were at β, a touch at C as if it were at γ, a touch at D as if it were at Δ. Impressions at E are referred to F, at F are referred to B, at G are referred to C, at H are referred to D, while at I, J, and K they are correctly interpreted. Fig. 6 represents the back of the trunk. Corresponding to the iliac crest, the shaded area marks normal condition. In all the rest localisation is altered. Thus at A, a touch is felt as if at α; at B, as if at β; at C, as if at γ, and so on. Many separate observations have been made, and the transference has always been in the same direction, and to the same points. The whole face and neck, tongue, and lips are normal.

The eyes showed from the first a certain staringness, but this tendency is growing more distinct. Von Graefe's symptom of Graves's disease, the delayed descent of the upper eyelid, was at first present occasionally, but has now become constant. The sight is acute, both as to form and colour; the pupils are equal, and react to light. The patient complains of occasional diplopia, but in both eyes there is marked marginal scotoma. Dr. Mackay has kindly taken perimetric tracings for us. The field of vision for different colours is altered in an interesting and suggestive way, for the perception of blue is relatively much more diminished than that of red. The ophthalmoscope reveals no structural change in the nerve or retina. The hearing is deficient in the left ear, but merely from excess of wax. Taste, smell, and muscular sense are normal.

The motor functions are disturbed in respect that there is constant movement in the right foot and leg, and this movement is of a rhythmical kind, exactly corresponding to ankle clonus. I have called it causeless or spontaneous ankle clonus. In the left foot and in the right hand non-rhythmical jerking movements are to be seen; they resemble the movements of chorea rather than the regular oscillation that mark the clonus. It is to be observed that the motor



Fig. 1.

Fig. 2.

constant jerking. Voluntary movements are well performed so far as the face, the hands, and arms are concerned. The patient stands as steadily as the clonus permits, and is not made worse when he closes his eyes. His gait is most peculiar, for he advances with a kind of corkscrew movement, taking three steps to the right, then three to the left, three to the right and three to the left with perfect regularity. He turns well enough, and he can walk

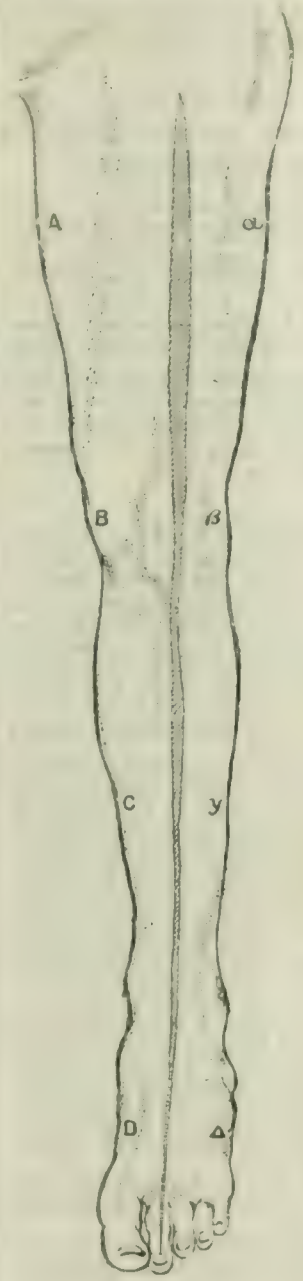


Fig. 3.

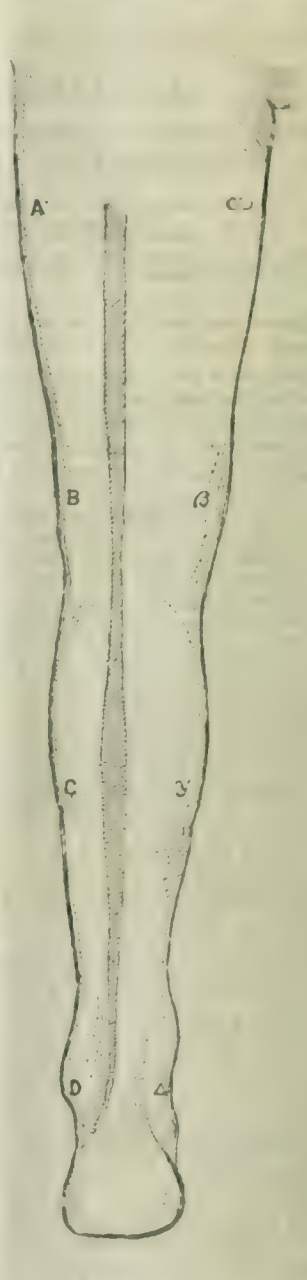


Fig. 4.

changes are most marked in the right leg, while the sensory skin changes are in the left side. The organic reflexes are normal, the skin reflexes are well marked, although their demonstration is interfered with by the clonic spasms. The knee-jerk is exaggerated on both sides, and ankle clonus is easily demonstrated in the left foot, less easily in the right, the difficulty being due to the

backwards, but with the same three-step movements. The gait gets worse if he is supported by people on each side of him, and it is brought about by each second step having an exaggerated adduction, so that the foot which is raised for the advance is passed over and in front of the other foot. This, he says, is not the result of any feeling of giddiness, but simply because he cannot help making these move-

ments. No abnormality has been discovered in the electric conditions of nerves or muscles.

The vasomotor functions show, in addition to the undue irritability of vessels, which marks itself by the urticaria scripta, generally distributed throughout the body, an abnormality of the thyroid gland which I have not hitherto seen. On some occasions it is so small that it can scarcely be made out, on others so large as to constitute a distinct tumour. Emotional excitement and physical exercise often cause the enlargement, but not invariably. The transitions are frequently abrupt, the rise and fall occurring within a few hours; there are no trophic changes. The cerebral and mental functions are normal. The patient sleeps well, and during sleep is free from his jerking movements, but they immediately recur on his awaking.



Fig. 5.

The records of his case have been kept with the most admirable care by the resident physicians and clinical clerks in charge, Drs. Murray Leslie and Cattanach, and Messrs. Laing and Murray Stewart, but I feel especially grateful to Mr. Laing for his unwearied patience in eliciting the facts and testing the accuracy of the patient's statements; and to Mr. Fothergill for the admirable drawings which he has made of this and other patients.

COMMENTARY.

As I have already told you, I shall discuss to-day only the sensory changes. The first question to emerge is, of course, whether the patient's statements are true or false. There is something in his manner which is little fitted to inspire confidence, and he has been often in hospital with various nervous symptoms, and I have been told that after one of his former visits he had taken some credit to himself for having outwitted the officials. Such considerations as these have led us to watch him very closely, to pay him surprise visits, to see him when he was not aware of being observed, to have an eye kept upon him by quite a number of good observers, and never once during the three months has any one of them seen him walk except in his three-step method, never once have they seen him awake without his ankle clonus being briskly in action, and only a degree of diminution occurs when his attention is absorbed as completely as we find it possible to do. I do not believe that any man could keep up, during a period of three months, clonus of the right foot, and irregular jerking spasms of the left and of the right hand, by a mere effort of malingering, and I think that a malingerer could not always remember to take the triple step, as our patient always

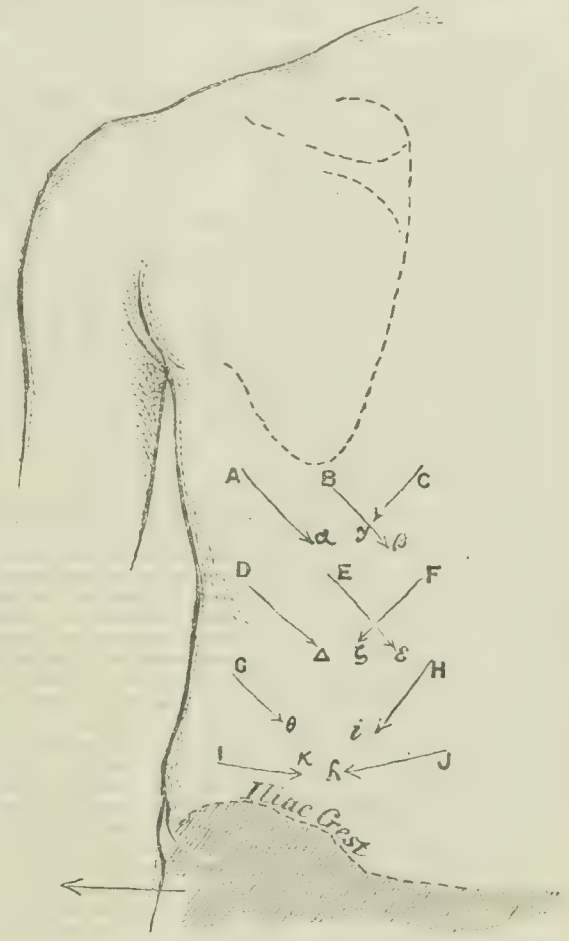


Fig. 6.

does, and therefore I think his motor symptoms are genuine, and give proof of profound disturbance of the nervous system. The sensory symptoms were only discovered when his case was being taken, and all who have had to do with him have come to the conclusion that he is describing truly what he experiences, and some of us have had a good deal of experience of judging of men, and are not supposed to be over credulous. But while one cannot be absolutely certain as to the sensory phenomena, the vasomotor changes have a definiteness that cannot be overlooked, and could not possibly be simulated.

We are led the more readily to accept his statements in regard to his skin impressions by the records that we possess of allied changes in the case of other patients.

Mr. Victor Horsley kindly examined the patient with me when he lectured before the University as holder of th

Cameron prize, and his researches upon transference of impressions in connection with lesions in the Rolandic area had led me to expect he would be specially interested in the case. He had found that in connection with disease of particular portions of that area, say that for movement of the thumb, the patient not only exhibited the motor phenomena now so well recognised, but also a certain deficiency of tactile sensibility in the skin of the thumb, and a tendency to refer touch to higher segments, as for example to the wrist, when the patient was really touched near the tip of the thumb. Mr. Horsley told me that he had not before seen such a transference as exists in our patient's case. I have demonstrated the phenomena also to a number of physicians eminent in neurology, and have written an account of it to several professional friends at a distance, and have looked through the literature of nerve diseases with a view of discovering some similar case, but without success.

The condition which approaches it most nearly is that which Professor Obersteiner, of Vienna, was the first to describe fully, and to which he gave the name allochiria (ἄλλος χείρ). Our case obviously is not referable to that category, for whereas in allochiria a touch is felt as if it were applied at a corresponding point on the opposite side of the body, in ours it is on the same side, on the same limb, but on the opposite side of it, although at the same level. Allochiria has been studied not only by Obersteiner but by Ferrier, Fischer, Hammond, Brown-Séquard, Leyden, Féré, Gellé, Gay of Bournemouth, and others, but perhaps most fully by Dr. M. Weiss of Prague. These observers have ascertained that allochiria may affect one kind of sensory impression or all varieties, that not only may touch, but temperature-perception, pain, tickling be referred to the opposite side, but also that sight and hearing may be so transferred, and that not only may the skin, but mucous surfaces, be affected as well, and that even reflex movements and electrical stimulation applied on one side may produce their effects exclusively or in part on the other.

The kind of explanation which has commended itself to most writers on allochiria is suggested by the fact that it is so often found associated with locomotor ataxy or other organic disease of the cord. It consists in the conception that one or more of the paths for sensory impressions being blocked, a transference is effected by commissural fibres to the corresponding conducting structures in the oppposite column, and so the sensorium receives an erroneous impression. I doubt whether this explanation proves very satisfying to anyone, but certainly it cannot apply in the case of our patient, seeing that the impressions are not referred to the opposite side of the body, but only to the opposite side of the limb. It might be suggested that we should account for faulty localisation of sensory impressions by ascribing it to morbid action of the nerve endings or of the nerves. But if this explanation were correct one would expect it to be associated with some alteration of perception in other respects, some loss of acuteness; but here no such abnormality exists—the acuteness of perception is as good on the one side of the body as the other, it is only the localisation that is disturbed. It might be conceived that some faulty conduction in the spinal cord or in the higher sensory tracts might account for it; but if the true seat of morbid action were there, one would also expect altered sensibility of other kinds. It is obviously most reasonable to refer it to the sensory centres and to a disturbance of a sensory faculty, which is developed somewhat later than others. From the time of birth a child perceives painful and other impressions but only by degrees does it learn to localise them. This faculty alone is interfered with in our patient. Now it is conceivable that a change might arise in the nerve cells which receive the impressions, or in the mysterious borderland where the mental and the physical meet, but I should think that few will feel warranted in dogmatising as to which of these may be at fault in such a case as the present.

But I would venture to suggest that this case may perhaps lend some support to the opinion that in allochiria as well as in this case the fault is not so much in the conducting fibres as in a morbid action of the centres.

As to whether it is likely that any gross lesion exists in the sensory centres one is scarcely entitled to speak, but I think that this and all our patient's other symptoms are functional, and I hope to see them disappear.

The name allochiria has proved so useful in relation to the symptom which Obersteiner described, that I have thought it well to try to coin an expression which may serve as a name for this kind of faulty localisation, and, after consulting with my colleague, Professor Butcher, have decided to suggest the name "allachaesthesia," from ἀλλαχῆ or ἀλλαχοῦ, elsewhere, and ἀισθησία, perception, as the most satisfactory term that occurs to us.

A CASE OF ACROMEGALY.

By J. DRESCHFELD, M.D., F.R.C.P.,
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I WISH to record briefly the following case, which has been under my care at the Manchester Infirmary. Though the affection has existed for several years, and, as seen from the photograph (taken by Mr. F. Ashe, clinical clerk), was well



pronounced, the patient was little inconvenienced by it, and sought admission on account of extreme dyspnœa, which had only come on a few weeks before admission.

The patient, S. B., a weaver, aged 30, married, was admitted on September 11th, 1893. He had always enjoyed good health. Twelve months ago he was troubled with pain in the regions of the kidney, and had difficulty in passing urine, which had incapacitated him from his work for several weeks, but had not troubled him since. About five years ago he noticed that his [illegible] enlarged; eat became larger, and that he required larger boots; shortly after he noticed that his head became larger and that his hats became too small. He had been troubled with pain in the head and neck for some time. He was able to follow his work till recently, when he began to suffer from great difficulty of breathing, which prevented him from following his occupation. He had always been tem-

perate and regular in his habits. There is no history of syphilis. His mother, aged 76, is alive and well; the father died, aged 57, from apoplexy; he has five sisters and one brother living, all well.

Present Condition.—Patient looks a strong, well-built man; is 5 feet 10½ inches in height, and weighs 13 stone 9 pounds. On looking at the patient one is at once struck with the appearance of his head, hands, and feet, which are considerably enlarged. The complexion is pallid, and the expression of the face dull. The bones of the head and face are enlarged generally. The external occipital protuberance forms a large prominent ridge; the superciliary ridges are much increased, and cause the forehead to stand backwards; the upper eyelids, and to a less extent the lower lids, have a swollen appearance, but there is no œdema; the malar prominences are enlarged, the left more than the right, and the distance between the prominences is increased. The lower jaw is greatly enlarged and elongated, and the chin is not in the mesian plane, but is slightly displaced towards the right side, and the general appearance of the lower jaw suggests a greater enlargement of the left inferior maxilla; both lips are thickened, and the lower more than the upper. The tongue appears not enlarged; its surface is rough and slightly coated. The nose is enlarged and the alæ nasi thickened; the ears are very large and their cartilages thickened.

Measurements of the Head and Face.

	By Measure.	By Callipers.
	Cms.	Cms.
From glabella to external occipital protuberance	35.0	21.0
Between two malar prominences	—	14.5
,, glabella and symphysis menti	—	15.5
,, zygoma and symphysis (right side)	18.0	16.3
,, ,, ,, (left side)	18.5	16.8
,, zygoma and angle of jaw (right)	7.4	—
,, ,, ,, (left)	7.6	—
,, angle of jaw and symphysis (right)	11.1	—
,, ,, ,, (left)	11.8	—
Circumference of head (taking ext. occip. protuberance and superciliary ridges as fixed points)	—	59.0

The measurements were taken by Mr. F. Ashe, clinical clerk.

The neck is short and thickset, the thyroid gland cannot be felt, but on each side of the neck, beneath the sterno-cleido-mastoid, a large, painless, fairly hard tumour can be felt. The upper border of the tumours can be well made out; below the tumours extend into the thorax beneath the clavicles. The tumours are not connected with the thyroid. The glands in the axilla are not enlarged. Enlarged glands can be felt in the right inguinal region, not in the left. The clavicles are enlarged, especially at their inner end; the sternum and ribs are larger, but neither the sternum nor the ribs stand unusually forward. Length of sternum, from outer clavicular notch to base of ensiform cartilage 16 cms.; to point of ensiform cartilage 22 cms. There is no marked kyphosis; the back of the thorax is covered with a number of pendulous warts. Circumference of chest in nipple line 99 cms.; the chest and shoulder muscles are well developed.

The hands are enormously developed and enlarged in every direction. There is no œdema, the fingers are thick and somewhat flattened, there is nothing abnormal about the nails and no clubbing, the metacarpal and carpal bones and the lower portions of the ulna and radius are also enlarged.

Measurements of Right Upper Extremity.	Cms.
Length of arm from acromion to olecranon	37.0
Circumference of the arm at its middle	29.0
Length of forearm, olecranon to styloid process of ulna	26.5
Circumference of forearm at its middle	25.5
,, ,, wrist at line of styloid of ulna	19.0
Length of hand from wrist to tip of middle finger	22.0
,, middle finger (from palmar fold to tip)	8.5
,, ,, ,, dorsal (from metacarpo-phalang. joint to tip)	11.8
,, little finger (palmar surface)	6.8
,, thumb (dorsal surface)	7.0
Circumference of middle finger at lower end	8.2
,, ,, little finger	6.9
,, ,, of thumb	7.8
Length of nail of middle finger	1.1
Breadth ,, ,, ,,	2.0
Circumference of hand at middle of palm without thumb	24.5
,, ,, hand with thumb	28.8
Breadth of hand at metacarpo-phalangeal joint	11.5

Amount of water displaced by immersing right hand as far as a line transversely round wrist at level of styloid process of ulna:

	Cbc.
For a normal hand A.	430
,, ,, B.	460
Patient's right hand	640
,, left ,,	680

Lower extremities: Nothing abnormal about the thighs or knees, the head of the tibia is slightly enlarged internally, the ankles appear slightly enlarged and broader, the feet are very much enlarged, and here again the toes more than any other part, and especially the big toes.

Measurements of Right Lower Extremity.	Cms.
Length of thigh from iliac crest to head of fibula	58.0
Circumference at middle of thigh	46.5
Circumference at knee (middle of patella)	39.0
Length of patella	6.0
Breadth of patella	8.0
Length of leg (from head of fibula to external malleolus)	38.5
Circumference of calf	31.3
,, ankle (just above internal malleolus)	24.5
Greatest length of foot	25.0
Circumference over heel and instep	34.0
,, of foot over back of toes	25.5
,, ,, great toe	10.8
,, ,, middle toe	5.8
,, ,, little toe	6.1
Length of nail of big toe	1.2
Breadth	3.0
Length of great toe from proximal joint to tip	10.0

The skin and subcutaneous tissue of the extremities show nothing abnormal; the muscles are well developed, and the muscular power of both upper and lower extremities, measured by the dynamometer, shows on right hand 80 kgm., on left hand 50 kgm.

Examination of the Respiratory System.—The patient complained of a slight cough and dyspnœa; there is but little frothy mucus expectorated. His voice is rough and husky. The thorax expands well on inspiration; the inspirations are laboured, 18 per minute. Percussion shows distinct dulness of the upper part of the sternum, extending latterly slightly to the right side, below as far as the insertion of the second rib, and above to the inner end of each clavicle. The air enters both lungs freely, the breathing is vesicular; a few rhonchi are heard in both bases.

Laryngoscopic examination shows the epiglottis large and thick; the vocal cords appear normal. The examination of the heart and blood vessels shows nothing abnormal. The pulse is 92, fairly strong. The blood shows an increase of leucocytes, and very few eosinophile cells.

Digestive System.—The tongue is not hypertrophied; the tonsils are slightly enlarged, the appetite is good, the bowels regular. The liver and spleen normal in size. The urine is acid, specific gravity 1025, normal in quantity and colour. It contains a slight deposit of mucus and a small amount of albumen, no sugar, nor peptones. Microscopically examined it shows a few leucocytes and squamous epithelial cells; no casts.

Nervous System.—The patient is fairly intelligent, and, beyond an occasional headache, has no other subjective symptoms. The pupils are equal; they react slightly to light and accommodation; the patient is quite blind on the left eye, and cannot distinguish between light and shade; in the right eye vision is $\frac{6}{6}$; myopia 5 D; there is no hemianopsia and no colour blindness. Ophthalmoscopically both discs are found markedly atrophied, the left more than the right; the disc is of dead white colour; the margin is well defined. The vessels are small, and both discs are cupped; there is no affection of any of the eye muscles. All the other cranial nerves show no changes; smell and taste are normally perceived; the patient is slightly deaf. There is no wasting of any muscles; the various sensations and reflexes, both superficial and deep, are normal. The temperature is normal, and the patient does not suffer from any profuse perspirations.

The diagnosis of the case was clear enough, as all the obvious symptoms noticed in acromegaly were present. The atrophy of the optic discs, as need scarcely be mentioned, was due to the pressure of an enlarged pituitary body, and the sternal dulness probably to some changes in connection with the thymus gland. Tumours in the neck, except an enlarged thyroid, is a rare symptom in acromegaly; they were present however in the well known case described by Henrot[1]; enlargement of the thyroid gland has been repeatedly noticed, but in our case these tumours were not connected with the thyroid, but were separate from it and extended into the upper part of the thorax and where, to judge from the sternal dulness, an intrathoracic tumour existed which most likely took its origin from the thymus gland. As to the nature of these tumours no definite opinion could be formed. It is not unlikely that both they and the intrathoracic mass were of the nature of lymphosarcomata, which we know from the observations of Virchow, Köster, and others, sometimes take their starting point from the remains of the thymus gland. In favour of this view may be stated the fact that under the administration of arsenic these tumours distinctly and perceptibly diminish in size. The dyspnœa from which the patient suffered was partly due to the pressure of these tumours.

With the pulmonary hypertrophic osteo-arthropathy, an affection of which some cases and summary of the hitherto published ones has been recently described in the BRITISH MEDICAL JOURNAL by Mr. W. Thorburn, our case had nothing in common except the dyspnœa and the cough, but both rapidly subsided under treatment.

As regards the progress of the case I need only mention that the patient was put on arsenic, and the dose was gradually increased. His chief trouble, the dyspnœa, which became most oppressive on the least exertion, rapidly disappeared, the tumours in the neck considerably diminished, and after three weeks' stay in the hospital the patient left to resume his work. The other symptoms, with the exception of the headache, which had also improved, remained the same.

The symptoms and the pathological anatomy of acromegaly are now sufficiently well known, and have been well summarised by Souza Leite in his treatise,[2] and by Marie.

Numerous cases have been published since then, but we wish to refer only to those which terminated fatally and where the necropsy was made, as such only are likely to clear up the pathology of the disease. Holschewnikoff[1] gives the *post-mortem* appearances in a case of syringomyelia; the hands were large and hypertrophied as in acromegaly. The skin of the hands was thickened in the superficial and deeper layers; the bones of the hands showed some exostoses. No affection of the pituitary body: no enlargement of the thyroid and of the thymus: no persisting parts could be found. The spinal cord showed changes (gliomatosis) which were connected with the syringomyelia, the fifth and sixth cervical nerves, and branches of the brachial plexus showed a hyaline degeneration. The author looks upon acromegaly as a neurotic hypertrophy, dependent on changes in the peripheral (sensory and vasomotor) nerves. Recklinghausen endorses this view, and, as in acromegaly there is only thickening of the terminal parts of the extremities and trunk, proposed the term pachyæmia.

Arnold[2] gives a very complete and minute description of the changes found in one of Erb's[3] cases, which case is chiefly interesting as two brothers were affected with the disease, and as the affection was looked upon by Marie as one of hypertrophic osteo-arthropathy (as there was no apparent enlargement of the bones of the face, and as the fingers showed marked bullous enlargement, and as wrists, ankles, forearms, and legs appeared thickened). The bones were found thickened, but not altered in length, and showed partly compact and partly porous osteophytes, and the changes were looked upon as new formations, chiefly periosteal, but also intraosteal, with rarefaction of the bone; the muscles showed vacuolation and proliferation of the nuclei, and atrophy of the muscular fibres and changes in the interstitial tissue of the muscles; the subcutaneous tissue was thickened and sclerosed; the changes in the nervous system were chiefly confined to the peripheral nerves, which showed a hyperplasia of the nervous tissue, and contained a number of small nerve fibres. There was no enlargement of the pituitary body; the thyroid gland showed no changes, and of the thymus gland only a few remains were found imbedded in masses of fat.

J. S. Bury[4] gives the *post-mortem* appearances of the case described by Ross.[5] A large gliomatous tumour was found extending from the chiasma to the cerebellum, compressing the chiasma and the optic tracts, and causing excavation of the sella turcica. Each lobe of the thyroid was enlarged, and contained a cyst: in front of the pericardium were found large fatty masses, in which the remains of the thymus gland were imbedded.

Marie and Marinesco.[10]—The skin showed marked hypertrophy, the mucous membranes of the oral and nasal cavities, and of the pharynx, larynx, and trachea an infiltration with leucocytes; the bones showed the usual changes, the inferior ganglia of the sympathetic were sclerosed, the neuroglia of the brain was increased, and the follicles of the thyroid hyperplastic, and there was also hyperplasy of the follicles of the pituitary body.

Duchesneau.[11]—The case is interesting, as there was marked atrophy of the arms and legs, which the author believed to be due to pressure on the spinal nerves by the thickened vertebræ. The usual changes in the skin and bones were found, and enlargement of the pituitary body, of the thyroid, and of the thymus. At the time of publication the nervous system had as yet not been examined microscopically.

Gauthier[12] gives the necropsy of a case described by him before.[13] The pituitary body formed a large tumour compressing the cavernous tissue, and consisting of normal brain elements; the thyroid was enlarged; of the thymus no remains could be found. The bones were not specially examined.

Holsti[14] gives a detailed account of the necropsy of a case. There was enlargement of the pituitary body, remains of thymus gland embedded in fat; the thyroid enlarged, hard, and showed increase of interstitial tissue, while the glandular elements were atrophied; there was also atrophy of some muscles (glutei). A microscopic examination of some of the enlarged and thickened bones—big toe and terminal portion of clavicle—gave evidence of a hyperplastic and varying osteitis. Only one nerve of the brachial plexus was examined and no changes were found.

It cannot be said that our knowledge of the pathology of acromegaly has been much advanced by these observations, except that some of the views hitherto held as to the causation of the disease can scarcely any longer be considered tenable, as the view of Klebs which makes the disease dependent on the persistence of the thymus.

The enlargement of the pituitary body must be looked upon as a symptom rather than as the cause of acromegaly, and, considering that a part of it is developed from the oral cavity, its enlargement would harmonise with the hypertrophy of the mucous membrane of the oral and nasal cavities.

The thyroid gland has been found altered in many though not in all cases of acromegaly. In Arnold's case it was found quite normal, in some cases it was found enlarged, in others atrophied, and in others again it contained cysts. It is not, therefore, at all likely that there is a causal connection between the two affections.

Recklinghausen and others look upon acromegaly as a neurotrophic affection, and this appears the most plausible view. As will be seen from the above-quoted cases and from some of the other observations, changes in the nervous system, especially in the sympathetic ganglion and also in the peripheral nerves (Holschewinkoff), have been noted, besides diffuse alterations in the central nervous system. These changes, however, are so varied, so inconsistent, and in some cases were so insignificant that they themselves can scarcely be looked upon as the cause of the neurotrophic symptoms, and until we know more of the neurotrophic centres the primary cause for the symptoms of acromegaly will remain obscure, and may be placed in a line with other trophic affections, as the arthropathies seen in locomotor ataxy and syringomyelia, and it must be noted that in these affections we do occasionally find partial hypertrophy of bone and osteophytic deposits.

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CLINICAL REMARKS ON A CASE OF SPORADIC CRETINISM.

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THE case which is represented by the photographs which illustrate this paper is a remarkable example of a remarkable disease. The patient, who was kindly sent to me by Dr. David Menzies, is suffering from sporadic cretinism—in other words, from the infantile form of myxœdema. She was admitted to the Edinburgh Royal Infirmary on March 10th, 1893. At that time—when the photographs which are reproduced in Figs. 1, 2, 3, 4, and 5 were taken—though she did not look more than 2 or 2½ years of age, her actual age was 16 years and 4 months. She measured only 29½ inches in length, and weighed only 2 st. 5½ lbs. The anterior fontanelle was widely open; it measured 6 by 5½ centimetres. The stumps of the first set of teeth were still present. She was unable to stand, though she could support herself in a semi-erect position by leaning on her chest and arms (see Fig. 1). She was unable to creep in the ordinary way, but she could pull herself along for a short distance on her belly by her arms. Her intelligence was to all intents and purposes *nil*, but she could see, hear, and taste. Owing to her defective mental development the condition of smell could not be satisfactorily determined.

During the six weeks that she was under close observation in the hospital she never uttered any intelligible articulate sound; but her mother said that she could say "Da-da" and

"Ma-ma." Swallowing was difficult, apparently in consequence of the enormous swelling of the tongue. She was unable to chew, and had consequently to be fed with liquid and soft foods.

The patient looked more like one of the lower animals than a member of the human race. The photographs give no adequate idea of the extremely repulsive appearance which she represented. Her facial appearance and expression resembled that of a bull-dog more than anything else. But notwithstanding these repulsive characteristics and her almost entire want of intelligence, she was the darling of her mother. The case is indeed a remarkable illustration of maternal affection. Up to the date of the patient's admission to the hospital the mother had only been separated from the child one night since its birth. It was with the very greatest difficulty that she was persuaded to allow the patient to come



Fig. 1.—Sporadic cretin in semi-erect position.

into the hospital; she only did so on condition that she should pass the whole of the day with her. Every particle of solid food which the child had swallowed since its birth had been first chewed by the mother before being put into its mouth.

Family History.—The case presents all the characteristic features of sporadic cretinism, though in a very exaggerated degree. The patient is the eldest of four children; the second child, a girl aged 12 years, is healthy and tall; the third, a boy, died when 1 year and 10 months old, of "cramps in the stomach;" the fourth, a girl aged 6 years, is very healthy, tall, and strong. There was one miscarriage, between the births of the first and second children. The parents are both healthy people. The father, aged 42, measures 6 feet 2 inches, and the mother, aged 41, measures 5 feet 5¾ inches in height. Both parents come of a healthy stock, and so far as can be ascertained no similar or allied diseases have occurred in any of their relatives.

Etiology.

The parents have lived in their present house for eighteen years; the patient was born at her grandfather's house in the country, where her mother went to be confined. Her mother states that she is unable to account in any way for the development of the disease, unless it was due to a strain of the back which she received when she was five months pregnant. The patient's birth was unattended with difficulty.

Except that the tongue seemed to be unduly large and the skin more mottled than natural, nothing was thought to be amiss with the child until she was nine months old. About this time her mother noticed that she seemed to have stopped growing; she says that the child has hardly grown at all since. Up to this time she had been chiefly breast-fed.

Prevalence of Sporadic Cretinism and Myxœdema in a Limited District of Edinburgh.—But although the parents cannot account in any way for the causation of the disease, there is one fact which is certainly of interest, and perhaps of importance from an etiological point of view. In the part of Edinburgh in which the patient lives, sporadic cretinism and myxœdema are, relatively speaking, so common that they may almost be said to abound. The remarkable cases of sporadic cretinism which Dr. John Thomson described in a recent number of the *Edinburgh Medical Journal*, and the typical case of myxœdema which is represented in the first plate in my *Atlas of Clinical Medicine*, live within a stone's throw of this patient's residence; and there were, when I first saw this patient, at least five other cases of sporadic cretinism and some other cases of myxœdema within a radius of half a mile. The extraordinary prevalence of sporadic cretinism in this limited part of Edinburgh is remarkable, and can hardly be a mere coincidence. It seems to suggest that sporadic cretinism and myxœdema (or rather the atrophic condition of the thyroid gland, which is the pathological substratum of myxœdema and sporadic cretinism) are in some cases perhaps due to a local or endemic cause. In conjunction with Dr. John Thomson, I am endeavouring to obtain further information on the point. We are trying to ascertain the place of residence and place of birth of all the cases of sporadic cretinism and myxœdema which are to be found in the city.

Sporadic cretinism is not a common disease. When I published the first part of my *Atlas of Clinical Medicine* I could only find 43 recorded cases. But these figures undoubtedly give a very erroneous idea of the frequency and prevalence of the disease. During the past year or two, in consequence of the great interest and attention which have been directed to myxœdema and sporadic cretinism, as a result of the extraordinary improvement which is effected in these diseases by thyroid treatment, a large number of new cases have been recorded. We now know that the disease is very much more prevalent than it was supposed to be three years ago. But, notwithstanding this fact, the occurrence of 6 cases in a limited district of this city is very remarkable and undoubtedly calls for further investigation.

History of Patient.

Previous Illnesses.—When 3½ years old the patient was very ill with "stoppage of the bowels;" at 5 she had chicken-pox; at 7, measles; at 8, whooping-cough; at 10, scarlet fever; and at 12 years of age a large glandular abscess on the right side of the neck, which was lanced. Three scars represent the position of the abscess, and show that it must have been severe. Her hair, which was previously pretty thick, began to come out after the attack of scarlet fever; it has not grown since.

The Condition of the Patient before Treatment.—I have said that sporadic cretinism is the infantile form of myxœdema. Like myxœdema, the disease depends upon arrested or defective secretion of the thyroid gland. The symptoms of sporadic cretinism are identical with those of myxœdema. Of course there are differences in detail, but they are easily explained by the difference in age, and by the fact that children affected with the infantile form of myxœdema do not grow and develop. Their mental development and bodily growth are both arrested. The case which I am now recording is a remarkable illustration in point. As I have already stated, the patient at the age of 16 years only measured 29½ inches in length. Her mental development is completely arrested.

Though she can grunt and bark like one of the lower animals, she does not seem to be able to produce any articulate sound, and yet she seems to have some sort of dull intelligence. The first night that she was in hospital and separated from her mother she was very miserable. She kept the whole ward awake with her inhuman-like barks, and grunts, and groans, for she could not scream, or cry, or weep after the manner of an ordinary child. The nurses were unable to pacify her, and the disturbance which she produced was so great that one of the house-physicians had to be sent for. He carried the patient to an empty (delirium tremens) ward, and with admirable fortitude and patience walked her about for a considerable time in his arms. He has since confessed



Fig. 2.—Sporadic cretin, aged 16 years 4 months. The large tongue, hands, and feet, the umbilical hernia, the bald patch on the head, and the swollen condition of the face are well seen.

to me that he did not at all relish the experience; in fact, he says that he "got quite a turn." He had not seen the patient before, and he could hardly realise that he was dealing with a human being. He felt as if he were trying to soothe some strange and weird animal. The repulsive and inhuman appearance of the patient, and its brute-like roaring in the dead of night in an empty delirium tremens ward were sufficient to give most men "a turn." Even the best efforts of this gentleman did not succeed in quieting the patient, and relief was only obtained after the administration of a dose of bromidia. The disturbance which the child created was so great that we reluctantly determined if it was repeated to send the patient home. Fortunately, she soon became accustomed to her new surroundings, and except during an attack of influenza, which will presently be described, gave little trouble during the rest of her stay in hospital.

I have said that her facial appearance reminded me of a bulldog. The head was large in proportion to the body. The mouth was of enormous size, and always open. Saliva frequently dribbled away from it. The lips were very thick and blue; the lower lip was everted, and in it there could be seen some large dilated veins. The tongue, which was of enormous size, both as regards length and breadth, and of a dark purple colour, constantly projected between the teeth. The nose was very small, sunken, and snub-shaped; while the nostrils were large, dilated, and set widely apart. The eyes, which were small and bead-like, were partly closed by the œdematous swelling of the lids. These appearances are represented in Figs. 2, 3, and 4. There was no blush on the cheeks, but in this respect the case was not exceptional, for the malar blush, which is so characteristic of myxœdema, is very rarely present in sporadic cretinism. The face was pale, and the skin of the body generally of a dingy yellow hue. The



Fig. 3.—Showing the enormous swelling of the tongue and mouth, the thick neck and supraclavicular swellings.

scalp over the position of the anterior fontanelle was destitute of hair (see Fig. 5); a considerable quantity of coarse, dry, shaggy hair, covered the back and sides of the head. The eyebrows were hardly perceptible. The eyelashes in the lower lids were scanty; there was slight blepharitis. The cavity of the mouth was very capacious.

The belly was large, and an umbilical hernia of (relatively) great size projected from it, and added not a little to the extraordinary appearance which the patient presented in the nude condition. (See Fig. 1.) (It is a curious fact that an umbilical hernia is nearly always present in cases of sporadic cretinism, but I am not acquainted with any case in which the hernia was so large as in this patient.)

The hands and feet were very broad and thick, and wrinkled like those of a washerwoman. The legs, thighs, arms, and forearms were firm; the tissues were evidently infiltrated with a solid œdema, for, as the result of the thyroid feeding, the firmness entirely disappeared, and the limbs rapidly became soft and flabby; the solid œdema seemed, as it were, to melt away after a few doses of thyroid extract.

The skin was mottled and very harsh and dry; the mother

stated that the patient never sweated. Several moles and warts, some of them pigmented, were scattered over the surface of the body. In the subjoined photographs a pigmented mole may be seen on the left side of the trunk, and another on the right side of the neck. The sensibility of the skin was, so far as could be ascertained, quite normal.

The neck was very thick, and a large elastic swelling was situated at the root of the neck above each clavicle. The fatty swellings, which are so characteristic of sporadic cretinism and myxœdema, were larger in this than in any other case of myxœdema or sporadic cretinism which has come under my notice. There were no pseudo-lipomata elsewhere. The spine was curved towards the right, and the tibiæ were bent as if from the result of rickets. The appetite was said to be good, but the patient was often sick; this, her mother stated, was sometimes due to laughing. The breath had a disagreeable odour. The bowels were very costive. At times the patient was very flatulent. The temperature was subnormal. The mother stated that the patient was always worse during winter, and somewhat better and brighter during the heat of summer. The pulse was of normal frequency. The urine contained a small quantity of globulin. The child paid no attention to the calls of Nature. The mother stated that she slept well and was of a placid disposition, and that she was in the habit of playing with toys; but the degree of intelligence which was present before the thyroid treatment was so slight that I am not disposed to attach much importance to this statement. Like many other mothers, this one had an exaggerated idea of the mental capacity of her offspring.



Fig. 4.—Showing swelling of tongue, lips, eyelids, enormous mouth, pigmented mole on right side of neck and supraclavicular swellings.

The child was admitted to the hospital in order to be treated by thyroid feeding. The case was not a favourable one, and I did not expect great things from the treatment: but I was anxious to see whether some improvement could not be effected, and I am glad to say that a considerable amount of improvement has undoubtedly taken place.

I may say in passing that in two other cases of sporadic cretinism I have obtained most satisfactory results from thyroid feeding. One (the case which is reported in my *Atlas of Clinical Medicine*) has apparently been completely cured; the other, a child who has suffered from the disease since it was a year old, is progressing and developing under the thyroid feeding in a very remarkable manner; but I do not propose on the present occasion to go into details with regard to these cases.

Result of Treatment.

The result of the treatment in the case which I am now recording has been as follows:

Dose of Thyroid Extract Administered.—On April 1st 5 minims of Brady and Martin's extract of thyroid were administered. On April 3rd the dose was increased to 7 drops. Soon after taking the medicine the patient vomited; for the rest of the day she was in a very excited condition, grunting continuously and laughing in a way which was peculiar to herself. The temperature rose to 99.4. On April 4th the dose was reduced to 5 minims. On April 9th 5 minims were given in the morning and 3 minims at night. The same dose was repeated on the 10th and on the 11th. In consequence of the larger dose the patient became very excited, could not sleep, and was for several hours in what can only be termed a hysterical condition. The dose was consequently on the 12th again diminished to 5 drops. The state of excitement was followed by considerable depression. On April 14th and 15th 7 drops, and on the 16th 10 drops were administered in two doses, one in the morning and one in the evening. As the patient again became excited the dose was finally restricted to 5 minims once a day. This seemed to be the maximum dose which could be borne satisfactorily.



Fig. 5.—Shows the bald patch on the top of the head, the swelling of the tongue, and a mole on the left cheek.

Results of the Treatment.—April 8th. The treatment had already produced a very marked effect; the temperature had risen at least a degree and a half, the swelling of the tongue and lips and body generally was very much less marked (see table of measurements); the patient swallowed better than she did, she looked brighter and seemed to fix and follow an object with the eye in a way she did not do before, the mouth was now frequently closed; this was never observed before the treatment; the skin was not nearly so rough and harsh.

On April 17th it was noted that the patient looked very much brighter, and was much thinner; the firm myxœdematous infiltration of the tissues seemed to have entirely disappeared; the skin was much less harsh and dry, and peeling was beginning on the legs and feet. Her mental condition was much more lively; she took much more notice of things than she used to do. The constipation had almost entirely disappeared. She had lost 3¾ lbs. in weight since the treatment was commenced, and this notwithstanding that she was eating well; she then

pints of milk in the twenty-
potatoes, and gravy.
mother said she never
taking
emacia-
May 2nd. One hour after
patient was suddenly
she knew that I took a special interest in the case,
for. When I saw the patient, at 7 P.M., she was
continuously, and kicking her legs about as
n was hot, temperature 102°.
On questioning the mother, I found that the patient had
dinner consisting of gravy, potatoes, and beef-tea—
so taken a hearty tea of milk and
was quite sweet, and she had had the same biscuits
to be due to anything that the patient
a probable that the symptoms were due to a com-
, and the subsequent course of events showed
mination of the matter. A typical case of
had been admitted into the ward a few days previously, and
next the fireplace, near to which the patient and
were in the habit of spending most of the day. When I saw
P.M. I at once gave her a teaspoonful of brandy and one
morphiæ. The nurse was instructed to repeat the dose
time to time if the pain and collapse continued, and to apply warm
to the abdomen. At 11 P.M. the patient was better.
the night the temperature rose to 103.8°.
May 3rd. On the morning of May 4th the temperature was 102.2°. The child was
ill, but distinctly better. She was free from pain; her
was dry, and she was very thirsty. Half a grain of quinine was
every four hours.
May 5th. The temperature rose last night to 104.2°. This morning it is
and the pulse is
The child looks much better. The quinine to
(one grain) doses.
May 7th. The patient has not slept a wink for forty-eight hours. Last
and grunted continuously; but she looks better this
is taking a large quantity of milk. To have ten drops of
P.M., and a second dose at 10 P.M., if she does not sleep.
May 8th. The patient had a very good night after the bromidia. She
looks better.
May 9th. The patient looks bright, and almost as well as she did before
the attack of influenza. She took two pints of milk yesterday. The
which has been discontinued since May 3rd, to be again
in the same dose as before—5-drop doses of Brady and
Martin's extract once daily. To go on with the brandy (half a teaspoonful
three or four times a day).
—May 10th. The skin is peeling freely from the
and feet, the hair is beginning to grow. The anterior fontanelle is
smaller and firmer than it was at the time of her admission. The child is
bright. The blueness of the lips and tongue has almost entirely dis-
appeared. She laughs when spoken to. Though her legs are very weak,
she is able to stand leaning on a chair better than she has ever done
before. The globulin which was present in the urine at the time of her
admission to hospital has disappeared.
May 12th. Still improving; is taking nearly three pints of milk daily.
May 15th. The patient was stripped and exposed for a short time at the
clinical lecture yesterday. An hour afterwards she became blue all over,
and collapsed without any apparent cause. The blueness lasted for two
hours, during which time she had two doses of brandy. After the
collapse she became very hot; at 6 P.M. the temperature (taken by the
rectum) was 106° F. Two grains of quinine were immediately adminis-
tered; at 8 P.M. the temperature had fallen to 101.
May 17th. The temperature is normal, and the patient is bright, and
seems in her usual state of health. At the urgent request of her mother
she was allowed to go home to-day.

Condition after Treatment for Two Months.

On June 7th she was looking decidedly better and brighter, tongue smaller, expression more intelligent, and a crop of fine hairs was growing on the bald part of the head. She was stronger than at the time of her discharge from hospital, but her legs were still very soft and flabby; in fact, the legs and arms seemed to consist entirely of skin and bone; no muscle could be felt. A large molar tooth on each side of the lower jaw was pushing through the gum. The gums were swollen, inflamed, and suppurating. The hands were much smaller, and the palms less wrinkled than they used to be. The umbilical hernia was not nearly so large. The skin was smooth and soft. The patient had been taking 5 drops of Brady and Martin's extract every other day since her discharge from hospital. She now measured 32 inches in length; in other words, she had grown 2½ inches since the thyroid treatment had been commenced. She was ordered to take one tabloid of Burroughs and Wellcome's extract of thyroid instead of the liquid preparation (5 minims of Brady and Martin's extract), every other day.

The photograph, reproduced in Fig. 6, was taken on this day, but it does not sufficiently represent the improved appearance of the patient; just as the photographs (reproduced in Figs. 1, 2, 3, 4, and 5) fail to give an adequate idea of the repulsive appearance which the patient presented before treatment.

Condition after Six Months' Treatment.

I visited the patient on November 15th, and was greatly struck with her altered appearance. She looks much bigger and older than she did three months ago. Before the thyroid treatment was commenced she did not look more than 2 or 2½ years of age; she now looks at least 4 or 5. She has grown 6⅝ inches since April 1st; she now measures 36 inches in length. The curvature of the spinal column is much more apparent than it was before. Both her father and mother say that she is much brighter and more intelligent. She says "Da-da" and "Ma-ma," claps her hands in imitation of her sister, and seems to understand some things that are said to her. The anterior fontanelle is much smaller than it used to be, and very firm; it is evidently being filled in with bone. The hair has grown over the bald part of the scalp; the eyebrows are also much thicker, stronger, and longer. She has got four new teeth; the legs are firmer, but still very soft. The patient is able to support herself on her legs much better than she used to do, but she is still unable to stand erect even with support.



Fig. 6.—Representing condition after two months' treatment.

In some respects the patient does not seem so well as she was at the end of July. The skin is more dry and harsh, the tongue is larger, and the supraclavicular swellings are more marked. The dose of thyroid was consequently increased from one to one and a-half tabloid every other day. I would have ordered a larger dose had I been certain that the mother would have given it to the patient, but she was so impressed with the profound depression and emaciation which were produced by the larger doses which were given in the hospital, that it was with difficulty she could be persuaded to increase the dose at all. The patient is taking plenty of milk, is sleeping well, and is, her mother says, quite contented and happy. The gums are, as they have been all along, much thickened and inflamed, and there are numerous abscesses at the roots of the old stumps. The mother had been previously advised to have the stumps extracted. This was again insisted upon. Since I saw the patient, in July, she has spent a month in the country. Her mother states that she sweated profusely during the hot weather.

Summary of the Effects of Treatment.

From the account which has just been given it will be seen that the thyroid feeding very rapidly produced a marked change in the condition of the patient. The œdematous infiltration of the tissues rapidly subsided, and, in the course

of a few weeks, entirely disappeared. In the course of a single week the swelling of the lips, tongue, and body generally had decreased considerably (see Table of Measurements). At the end of six weeks the skin had become soft and smooth, peeling being in this, as in the other cases which I have closely observed, well marked.

In the course of six months the patient has grown 6½ inches (equal to one-fifth of her total length before treatment), and she looks at least two years older than she did before the treatment was commenced. She is certainly more lively and intelligent looking. The open fontanelle is filling rapidly up. The hair has grown over the bald area of the scalp.

The following table of measurements shows the alterations in the length and size of the body which have taken place as the result of the treatment.

I hope to report the further effects of the treatment in this very remarkable case at some future date.

Table of Measurements, showing the results of Thyroid Feeding.

	April 3rd.	April 8th.	June 7th.	Nov. 15th.
Length	29½ in.	29¾ in.†	32 in.	36 in.
Breadth of mouth	6 cms.	5 cms.	5 cms.	4½ cms.
Mouth from above downwards	5 ,,	3½ ,,	3½ ,,	3 ,,
Thickness of upper lip ...	1½ ,,	1 ,,	1 ,,	1 ,,
Thickness of lower lip ...	1½ ,,	1 ,,	1 ,,	1 ,,
Circumference of neck above swelling	34 ,,	29 ,,	25 ,,	30 ,,
Circumference of neck over swelling	37 ,,	32 ,,	26 ,,	34 ,,
Circumference of head	51½ ,,	51½ ,,	50 ,,	51 ,,
,, ,, abdomen	21½ in.	20 in.	18 in.	18½ in.
,, ,, thorax ...	22 ,,	21½ ,,	21 ,,	21½ ,,
,, ,, thigh ...	26 cms.	26 cms.	19½ cms.	24 cms.
,, ,, calf ...	18½ ,,	17 ,,	14½ ,,	16½ ,,
,, ,, arm ...	17 ,,	14 ,,	12 ,,	14 ,,
,, ,, forearm .	18 ,,	16¾ ,,	13 ,,	15 ,,
Length of foot...	11½ ,,	11¼ ,,	12½ ,,	13¾ ,,

† The increase of a quarter of an inch was probably due to the increased extension of the limbs (the result of diminished œdema) rather than to an actual increase in the length of the body.

CASE OF BILATERAL FACIAL PARALYSIS, DUE TO INJURY BY FORCEPS AT BIRTH.

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L. G., aged 7 years, was brought to me at the Bristol Children's Hospital on April 20th, 1893. Her mother said that the patient was her first child; that the labour was very tedious, lasting three days, and that finally she was delivered by forceps with some difficulty. She subsequently noticed bruises in front of each ear of her baby, but these disappeared in about a month. The child was bottle-fed, and "did not suck very well, and had never been able to move her face as other children did"; otherwise she had always been well, and had never had any illness.

The girl was suffering from bilateral peripheral facial paralysis. There were no lines of expression in the face, the skin of which was quite smooth. The girl could not frown or raise the eyebrows; she could partially close the eyes by relaxing the levatores palpebrarum: there was no movement of the orbiculares oculorum. The lower lids were very thin, with an upper border more concave than normal, slightly dropping away from the eyeballs. The muscles of the ears, nose, and cheeks did not move. The lips were thick, and the lower one was protuberant; the patient could move them a little, bring them together and blow out a candle, but could not whistle. On testing the patient's speech it was found that she could pronounce labials, though not very distinctly, but labio-dentals with more difficulty, and there was a tendency to replace the latter by anterior palato-linguals. She raised the larynx well in swallowing, and could depress the lower jaw forcibly. Epiphora occurred on the slightest excess of the lachrymal secretion (from non-action of the tensores tarsorum). When the girl was angry the skin of the face flushed.

The bones of the face were well developed. There was no deafness, nor evidence of otitis media, nor loss of taste. The palate moved well. No response to either the constant or interrupted current was obtained, but the girl was very sensitive, so that only weak currents could be employed. It was not considered justifiable to anæsthetise her for further



evidence on this point on account of the paralysis of the orbiculares oculorum. There was no evidence of any other lesion.

This appears to be a case of double peripheral facial paralysis, complete in the upper part, but incomplete in the lower part of the face; the history and absence of evidence of any other cause point to its being due to pressure of forceps at birth. The good development of the facial bones is an interesting feature, as the facial nerve is not supposed to supply these structures.



The lesion must be a rare one, for facial paralysis from pressure of forceps at birth is usually unilateral and transient; a few cases in which a unilateral lesion from this cause has proved permanent have been recorded, but I do not know of any case but this in which a bilateral lesion has been other than temporary.

(The girl was shown at a meeting of the Bristol Medico-Chirurgical Society in May, 1893.)

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

MYXŒDEMA TREATED WITH THYROID TABLOIDS. Readers who will "look here, upon this picture and on that," will see a faithful representation of some of the effects produced upon an old-standing case of myxœdema, by five weeks' treatment with thyroid extract (Burroughs and Wellcome's tabloids).

Mrs. S., aged 65, widow of a sailor, had been the subject of myxœdema for twenty years. As to her condition before treatment, it is enough to say that her symptoms were typical, but that visceral changes were not yet declared, nor had the mind sunk into a state of hebetude; that perhaps



Before treatment.

the most pronounced characteristic was the deterioration of the voice, and the least the alteration of the shape and size of the hands; and that she had long been bedridden. She had declined hypodermic injections of thyroid juice, and feeding with sheep's thyroid glands had failed, owing doubtless to the difficulty of securing their regular administration.

The tabloids, each containing five grains of the extract of sheep's thyroid glands, were first given on October 14th, 1893. Her daily dose was for the first week, two; for the next three weeks, three; and for the succeeding fortnight, four; since which time two have been taken daily; an allowance which must be made, I suppose, for the rest of her life.

After a few days' treatment she began to complain of pains in her limbs, the tongue became thickly coated, and, although the temperature never rose above 99°, she felt very feverish and thirsty. Peeling of the cuticle began about this time, starting from the legs and extending over the whole surface, since which the skin has become, comparatively, soft and smooth. In a fortnight a very marked change was apparent, and by November 8th she had got over the sense of fever and thirst, the tongue was clean, the voice clear, and a condition of fretful moroseness had given place to cheerfulness and animation. The limbs and trunk had regained their normal size and, although weak, she was practically well.

By December 30th she got up every day and remained out of bed longer and longer. To-day she sang a song to me, and, considering her age and station, her performance was excellent, the intonation being remarkably true. The scalp examined showed a thick regrowth of hair, but "where the shining locks divide the parting line is," still, "all too wide." However, at 65 that has been seen independently of myxœdema.



After treatment.

The photographs were taken by Mr. Swain, of High Street, Broadstairs, who has retained the negatives.

Thos. F. Raven, M.R.C.S., L.R.C.P.,
Honorary Secretary, East Kent District of the South-Eastern Branch of the British Medical Association.
Broadstairs.

ON THE ADVANTAGE OF COMBINING DYES WITH URETHRAL INJECTIONS FOR OBSTINATE GLEET. It will be admitted that by far the greater number of cases of gonorrhœa recover under the most ordinary of routine treatments; but it will be as readily conceded by most practitioners that a small proportion of gleets prove intractable, and drift from one hand to another. The morning discharge in these obstinate cases varies in significance. In the smaller number it is mere mucus—the secretion of the recently overstimulated urethral glands. In the larger pro-

portion, however, the thin gleety discharge emanates from definite patches of congestion, granular erosions, or from tracts of inflammation which occur behind some stricture of large calibre. Such changes of surface may be seen in all parts of the entire canal, from the opening of the bladder to the meatus. These diseased patches shed off the shreds of muco-pus which are so often seen in the morning urine in the shape of white flakes, banners, or threads. It is difficult for those who do not employ the electric urethroscope to say whether these patches or granular erosions are situated in the penile urethra, and are therefore accessible and curable by ordinary urethral injections; or whether they are located in the membrano-prostatic sections, and are therefore beyond the reach and control of the injections which the patient is able himself to employ. The additions of dyes to the injection settles this point for us; for by such means the flakes or threads are dyed. For some years I have been in the habit of providing each hospital patient with a colouring injection, in order to save the time which is necessary for the examination of the deep or posterior urethra with the electric prostatoscope. The patient brings me the first part of the morning urine, and, if only coloured threads are visible in it, I know that the penile urethra is at fault, because in only about 6 per cent. can an injection, given without undue force, pass the opening of the membranous urethra. If only white threads appear, I realise that foci of the disease are in the deep or posterior urethra, and I at once attack the membrano-prostatic sections of the canal. Generally there is a mixture of white and coloured threads, and this bears out the more advanced teaching concerning gleet, that the posterior urethra is, in a large majority of cases, affected as well as the anterior. The dyes I use most commonly are tr. catechu ℥viij ad ℥j, and the liquid extract of red gum ℥iv ad ℥j; watery solution of methyl violet, 1 in 3,000, can also be employed. Of course, if time is not an object, the practitioner can wash out the penile urethra himself into one glass, and cause the patient to pass water into another. By this means he will be able at once to see whether the posterior section is involved as well as the anterior.

E. HURRY FENWICK, F.R.C.S.,
Surgeon to the London and St. Peter's Hospitals.

THE TREATMENT OF PSORIASIS BY THYROID EXTRACT.

I HAVE tried the thyroid extract as yet in two cases of psoriasis only—the one a girl of 15, the other a married woman of 40.

The woman, aged 40, had been affected with the disease for 18 years. I treated her for nineteen consecutive days, during which I administered daily on the average 22½ minims of Brady and Martin's extract, which quantity is stated by the manufacturers to equal exactly one quarter of a sheep's thyroid gland. This dose is rather more than the double of Dr. Bramwell's average dose, and the duration of treatment extended well beyond the time by which, according to his cases, well marked improvement ought to occur. But I was not able to attribute to the thyroid treatment any influence whatsoever on the disease. The doses I gave varied on different days. However, on three of the days I gave m 30 daily, on two of them m 35 daily, on one of them m 40, on another m 45 of the extract. In Dr. Bramwell's second and third cases he produced profuse shedding of scales within the same period (nineteen days) by a daily dose of five minims only.

The girl of 15 whom I treated had been previously under my care for psoriasis of seven years' duration, and had got quite well under external applications only by the end of August last. Since then the disease had again appeared, although in a much less degree than before, and, at the date that thyroid treatment was commenced, namely, October 23rd, consisted only of small spots scattered somewhat sparsely over the trunk and limbs. I treated her for a month, namely, until November 23rd, a period of 31 days, during which I administered on the average seventeen minims of the thyroid extract daily, which is nearly double Dr. Bramwell's average dose, or (considering the girl's age) is more than the double of it. As in the previous case, so in this case also, I was not able to attribute to the thyroid treatment effect of any kind on the disease. In this case equally, the doses given varied on different days. However, on six of the days I gave daily m 30 of the extract, on two of them m 35 daily, on one of them m 40, and on another m 45. The total quantity of extract, taken by the patient in the month, was very nearly the equivalent of six thyroid glands.

My patients were of the same sex as Dr. Bramwell's, they were respectively of about the same ages as his first and second cases, and I used the same preparation of the thyroid gland that he did; also I was particularly careful with this preparation. I obtained it direct from the manufacturers, who state that it will keep well for a fortnight; but I always got it fresh every week, and I kept it in ice, in a refrigerator, so as to avoid still further any deterioration.

It is perhaps futile to speculate on the causes of the difference between my two cases and his three. Two of his cases were treated while summer was coming on; and in summer psoriasis is wont to be less marked than in winter, but this fact will not at all account for his records as they stand. Pregnancy will cause psoriasis to disappear completely within about ten days, but it is impossible to suppose that this was a factor in all of his three cases, especially in the third one. A very spare diet is capable of causing the disappearance of psoriasis, but Dr. Bramwell expressly states that no special diet was prescribed. A double dose, with mine, would not produce even a shadow of the effect that half the quantity, nay a quarter of the quantity, did with his patients.

BALMANNO SQUIRE.

Weymouth Street, W.

THE TREATMENT OF EPILEPSY.

WILL you allow me again to direct attention to the signal efficacy of a combination of potass. brom. with belladonna in the treatment of this distressing disease? A patient called on me this week whom I first saw at the outdoor department of the Glasgow Royal Infirmary, and who was then a terrible victim to epileptic attacks, occurring as they did with great severity, often more than once daily. He was put on the following treatment: ℞ Potass. bromidi ʒss; tinct. belladonnæ ʒiij; infusi gentianæ co. ad ʒviij. M. Sig. cap. ʒss ter in die. ℞ Camph. monobrom gr. xlviii; ext. gentianæ q. s. ut ft. massa, et div. in pil. xii Sig. cap. unam hora somni. This medicine was regularly taken, and he informed me the other day that he had not had a fi for ten months. I elsewhere pointed out that in cases of epilepsy and its pathological congeners, such as enuresis, spermatorrhœa, etc., there are probably hyperæmic patches in certain tracts of the nervous system, and that in consequence sensibility is preternaturally heightened in those situations. The bromides and belladonna act upon the nerve centres by stimulating the vaso-constrictor nerves, thus causing a relative anæmia and diminished sensibility. I believe this to be the explanation of the *modus medendi* of these agents.

D. CAMPBELL BLACK, M.D.,
Professor of Physiology in Anderson's College Medical School, Glasgow.

BLENNORRHAGIC URETHRAL STRICTURE IN A YOUNG SUBJECT.

A. B., a boy aged 5 years, was brought to London in May, 1891, for treatment. There was extreme difficulty in micturition, and the urine was constantly dribbling away. No. 4 mm. bougie was obstructed, then firmly grasped, and held at the commencement of the deep urethra. The meatus was capacious, and the urethra was not sensitive.

The disease had existed for three years; urethritis, with much pain, swelling, and thick yellow discharge had appeared when the child was only 2 years. The discharge lasted for ten months, and the symptoms of coarctation gradually followed.

I found the stricture very rebellious to dilatation, and unyielding to any but tapering metal instruments. As treatment progressed, I ultimately succeeded, however, in arriving at the usual conditional cure with the latter instruments.

The urethritis was, of course, the cause of the stricture, but close questioning and examination of the urine failed to elicit the cause of the urethritis. The mother, however, stated that the nurse suffered from a yellow discharge at the time. She is quite sure there was no traumatism.

In this connection I may be permitted to draw attention to an adaptation of Brunton's auriscope for endoscopic use, which I have used for some time past. Its great merit is economy and dual utility. I have fixed a small electric lamp into the "improved illuminating hand lamp," *vide* Arnold's *Catalogue*, p. 108, 1885, and apply this lamp into the funnel of the auriscope. I have modified and elongated the specula. I find it easy also to adapt the instrument, if desired, to "aero-urethroscopy," the funnel-shaped tubes plugging the meatus, and so preventing escape of air after inflation.

Crouch End. JAMES MACMUNN.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

ROYAL PORTSMOUTH HOSPITAL.

CASE OF ANEURYSM OF THE AORTA AND INNOMINATE ARTERY: SIMULTANEOUS LIGATURE OF CAROTID AND SUBCLAVIAN ARTERIES.[1]

(By John Ward Cousins, M.D.Lond., F.R.C.S., Senior Surgeon to the Hospital, and to the Portsmouth and South Hants Eye and Ear Infirmary.)

[Reported by T. Hill Bishop, M.B., House-Surgeon.]

H. T., a married man, aged 35, was admitted to the Royal Hospital on December 13th, 1892. He complained of a swelling at the root of the neck, accompanied by considerable pain and shortness of breath on the slightest exertion. There was no history of syphilis. He had always been a steady

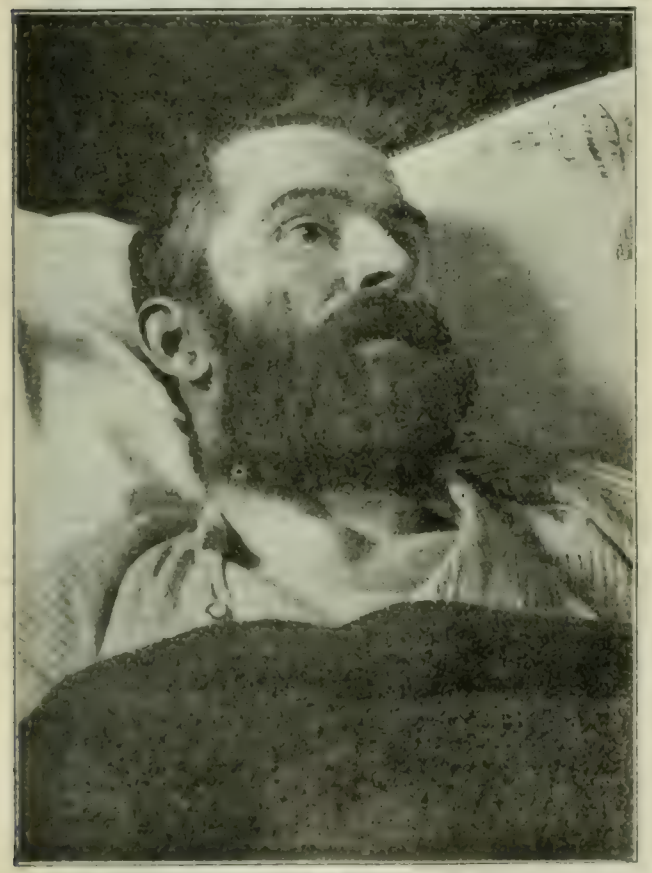


Fig. 1.

and sober man, and his occupation for the last twelve years had been that of shipwright in the Portsmouth Dockyard, his duties often involving the use of heavy hammers. His illness commenced with severe pain in the chest about fifteen months before admission. This improved for a time, but left behind what he described as a twitching feeling at the root of the neck. Four months before admission the pain again returned, and he was forced to go on the sick list, under medical treatment, until the time of his admission to the hospital. He noticed the pulsating swelling in the neck shortly after the first attack of severe pain, and he stated that it originally appeared in the centre of the episternal notch, and shortly afterwards moved over to the right side.

On admission a pulsating tumour, about the size of a small orange, was found just above the right sterno-clavicular articulation. The heart appeared considerably enlarged, the



Fig. 2.—Anterior view of aneurysm: 1, subclavian incision; 2, aortic aneurysm; 3, dilated aorta.

apex beat being felt in the anterior axillary line, between the seventh and eighth ribs. A soft double *bruit* could be heard over the precordial region, most loudly in the aortic area.

On admission the case was placed under the care of Dr. James Watson, who ordered a restricted diet, with absolute rest in the recumbent position, and iodide of potassium in 7-grain doses to be taken four times in the twenty-four hours. This treatment was continued for three months, the diet being still further restricted to six ounces of solid food and

[1] Read at a meeting of the South-East Hants District of the Southern Branch of the British Medical Association.

one pint of milk daily. The doses of iodide of potassium were gradually increased until 25 grains were taken every eight hours. No beneficial effects were noticed from this treatment, and there was no evidence of coagulation taking place within the tumour, the size of which seemed slightly increased. Subsequently Dr. Watson consulted with Dr. Ward Cousins about the advisability of surgical interference. After several consultations of the hospital staff it was decided that an operation might be performed with some hope of success, in view of the patient's age, good physical condition, steady habits, and tranquil and courageous demeanour. The

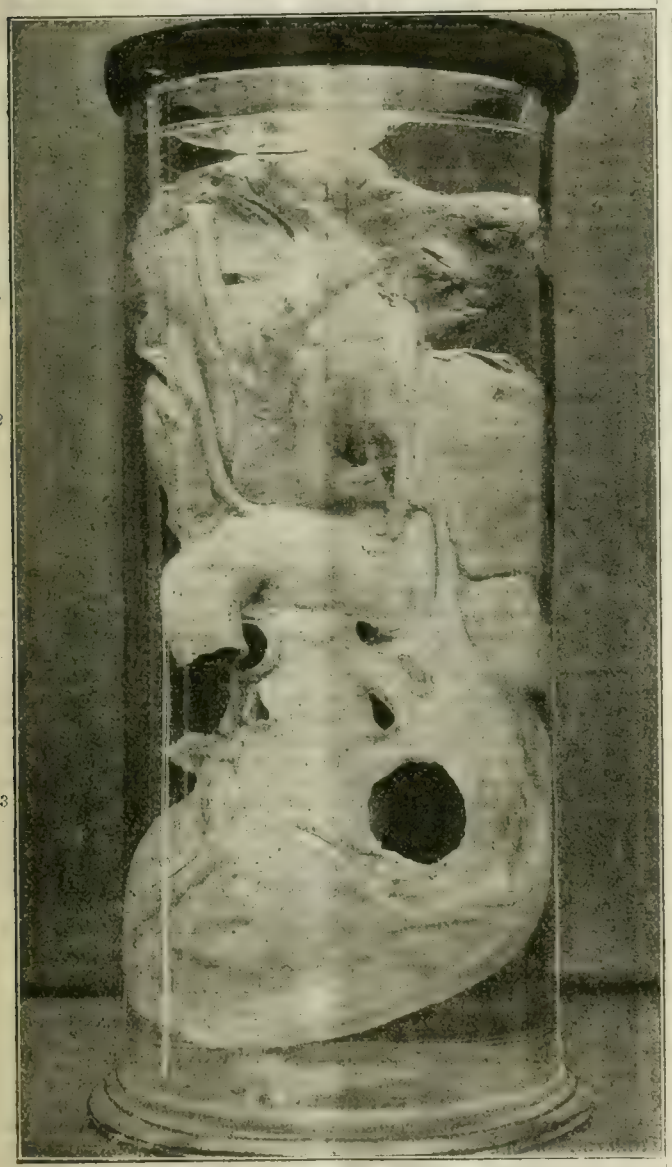


Fig. 3.—Posterior view of aneurysm; 1, vessels with the ligatures attached; 2, aneurysmal sac; 3, left auricle.

nature of the operation, with the special risks, was fully explained to the patient; and also the alternative treatment of a purely palliative character, which gave no prospect of cure. The patient at once decided, with characteristic pluck, to undergo all risk, and take the slight chance which operation seemed to offer.

Accordingly, on March 22nd, 1893, three months after admission, Dr. Ward Cousins performed the operation of simultaneous ligature of the carotid and subclavian arteries. The operation was somewhat prolonged by the difficulty experienced in finding the subclavian, which was displaced at least one inch and a-half to the outer side of its normal situation. The patient rallied well from the operation, and was only slightly sick. For several days he continued in a satisfactory condition, while the pulsation in the aneurysmal tumour was markedly diminished.

On March 29th, seven days after the operation, he began to complain of pain at the root of the neck, and the pulsation appeared somewhat increased. His temperature rose to 102°, and he became restless and slept badly.

On April 1st there was free hæmorrhage from the subclavian wound, from which there had been slight oozing before. The swelling was now noticeably increased in size, and the pulsation was greater than before the operation. From this time he became rapidly worse, and the aneurysmal swelling and pulsation increased daily. There were frequent hæmorrhages from the subclavian wound, and several times the blood loss was considerable before the hæmorrhage could be controlled. Dyspnœa was very marked, and the patient got rapidly weaker.

On April 4th he died, after two severe attacks of hæmorrhage.

Post-mortem Examination.—The heart and large vessels were removed entire, and after dissection and mounting it was found that the aneurysm had its origin from the upper part of the aortic arch, and extended as far as the origin of the large vessels on the left side, and involved the innominate trunk. The arch of the aorta itself was also greatly dilated. The left ventricle was also considerably dilated and hypertrophied. The ligatures were found in position on the carotid and subclavian trunks, and the vessels were perfectly healthy at the points of deligation.

Remarks by Dr. Ward Cousins.—The double ligature in this case was applied for supposed innominate aneurysm involving more or less of the aorta. The physical indications, however, of extensive thoracic aneurysm were certainly indistinct before the operation. The anterior regions of the chest were resonant and free from any trace of pulsation. The diminution of the radial pulse on the right side was very slight, and tracheal dyspnœa was entirely absent. On the other hand, the cardiac impulse was decidedly increased, and the apex beat appeared at least 2 inches below the normal position. The carotid wound healed by first intention, and the relief afforded by the operation for the first few days looked very hopeful. The venous hæmorrhage from the subclavian wound was controlled by carefully regulated pressure and constant watching, and it appeared to ooze generally from around the aneurysmal sac. During the final stage the symptoms clearly indicated greatly increased intrathoracic pressure. As regards the operation, the deligation of the subclavian artery was rendered somewhat difficult by the venous congestion of the neck, the widely diffused pulsation of the cervical tumour, and the distorted position of the artery.

I am much indebted to my colleague, Mr. C. H. Newby, for the photographs accompanying this communication.

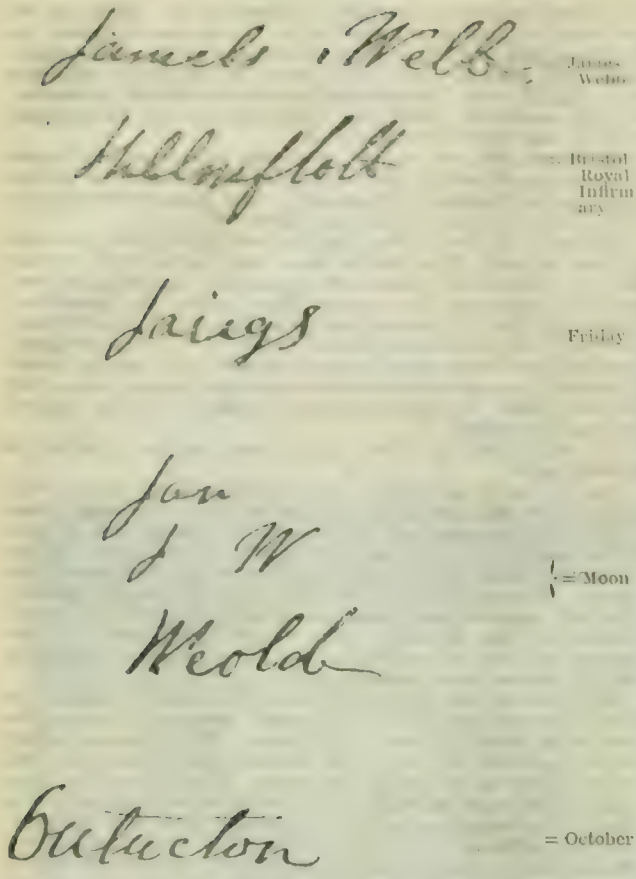
BRISTOL ROYAL INFIRMARY.

MOTOR APHASIA WITHOUT HEMIPLEGIA, WITH REMARKS.

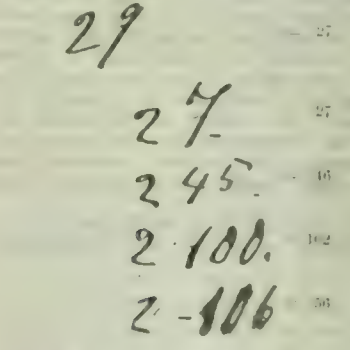
(By Henry Waldo, M.D., M.R.C.P., Physician to the Infirmary.)

J. W., aged 48, carriage washer, was brought to the infirmary on October 14th, 1893, with total loss of voluntary speech. The onset, two days before admission, was quite sudden. There was no loss of power in the arms (except that the grasp of the right hand was perhaps a little weaker than that of the left) or legs. The knee-jerk on the right side was slightly in excess of that on the left. The lower part of the face was paralysed on the right side. The tongue came out straight and appeared to have escaped any palsy. There was no affection of sensation. Motor aphasia is so generally associated with right hemiplegia that one is unable to test the ability to write.

This man can write his own name, an almost automatic process; but he is quite unable to write anything else (agraphia).



Figures, too, he was equally unable to write.



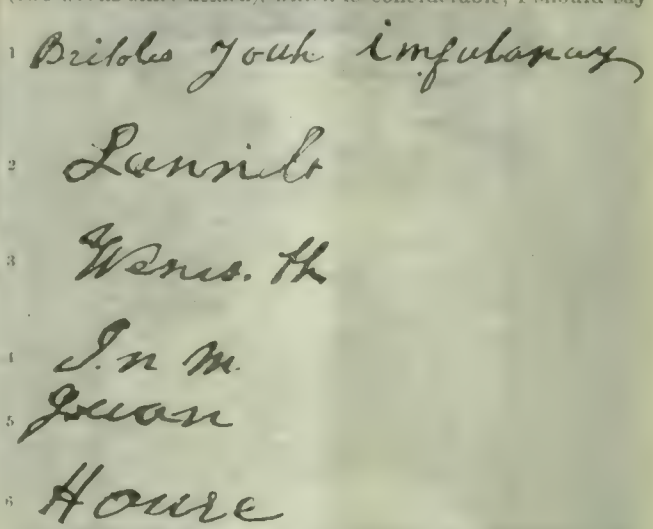
He could not write from dictation, nor could he copy.

A lesion limited to the motor speech region sometimes abolishes the power of reading (alexia), and sometimes, as in this case, it does not. The probable reason is that this man is accustomed to read a good deal, and he still continues to do so, and appears to understand what he reads. There is a total absence of sensory aphasia. He can understand a written direction to perform any simple action. There is no indication of "word-deafness," "word-blindness," or "mind-blindness."

It is said that the lesion sometimes occurs in the right cerebral hemisphere in left-handed people. I have been on the look out for this during the last twenty years, but have never seen it. I had a patient with right hemiplegia (due to embolism) without aphasia, and thought its absence may be owing to her being left handed, but she was right handed.

The lesion in this cabman was undoubtedly on the left side of the brain, as shown by the somewhat enfeebled right hand grasp; the slight excess of the right knee-jerk, and above all in the right facial palsy, which was unmistakably of central origin.

In the absence of any signs of cardiac disease or of syphilis, and with the suddenness of the attack the cause was most likely a small hæmorrhage (although there had been no headache or giddiness and the urine contained no albumen) from the first branch of the left middle cerebral artery, and breaking down of nerve matter in the posterior part of the third frontal convolution and the adjacent part of the ascending frontal. Judging by the progress the patient has made (two weeks since attack), which is considerable, I should say



1. = Bristol Royal Infirmary. 2. = London. 3. = Wine St. 4. = I am better. 5. = Quarterly Inventory (copied). 6. = Horse.

the lesion was in the conducting path, extending from the motor speech region to the internal capsule, rather than in the centre itself. The proximity of the centre for the movement of the angles of the mouth would suggest the likelihood of facial paralysis. He cannot smell with the right nostril, but he says it followed an injury to the nose many years ago. Mr. Richardson Cross, the ophthalmic surgeon to the infirmary, has been good enough to examine this patient's eyes, and he tells me he considers the fundus normal, the edges of the nerves very slightly pale, but no neuritis or atrophy. He says the fields are fairly normal; very slight narrowing in right field, and no hemianopsia.

The temperature was subnormal; pulse 80, regular, fair volume and tension; respiration not interfered with throughout.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

F. W. PAVY, M.D., F.R.S., in the Chair.

Tuesday, January 2nd, 1894.

FIBROMYOMA OF UTERUS BECOMING SARCOMATOUS.

DR. LEE DICKINSON recounted what he thought was an instance of the above nature. It concerned a woman, aged 48, in whom a uterine tumour had been noticed twelve months; subsequently the tumour grew rapidly, and was accompanied with exhausting discharge and symptoms due to compression of the pelvic viscera. No operation was undertaken, on account of her exhausted condition when admitted. After death it was found that the tumour was about the size of a melon; externally it presented the macroscopic and microscopic characters of a fibromyoma; a portion had "sprouted" into the pelvic cavity, and this had the structure of a spindle-celled sarcoma. The author thought that the sarcoma tissue arose from the muscle-fibre cells. There were no metastatic growths, and part of the growth had undergone calcification.

Mr. ALBAN DORAN observed that this subject presented itself in two aspects, namely, whether the tumour underwent a histological transformation or whether a tumour of smooth muscle cells changed its life characters and became malignant. He thought that a myoma might become malignant as such, the metastatic growths having a myomatous structure. He observed also that many rapidly-growing "fibroids" were not malignant, and small ones that might at first seem to have taken on malignant characters might, nevertheless, turn out eventually to be benign. "Fibroids," again, might become œdematous or might become the seats of carcinoma—a fact explained by the occurrence of gland tissue in many of the ordinary uterine tumours of this kind.

NOTE ON SOME SO-CALLED CELLS OF ENDOGENOUS ORIGIN.

Mr. J. JACKSON CLARKE said that a paper of considerable importance, A. Korotneff's[1], bearing on the question of the relation of sporozoa to cancer appeared soon after his own original communications[2] were made to the Society last session. Korotneff had since published a separate volume on the subject. The conclusions arrived at by the Russian biologist were essentially the same as those previously enunciated by the author.[3] After pointing out some minor points of difference between his account and that of Korotneff, the author referred to the following important points of agreement: (1) That in the "cell nests" of squamous epitheliomata, and in the corresponding parts of mammary and other cancers, parasites, some free from the host cells, were to be observed undergoing various reproductive processes. (2) That these free parasites were but another phase of the intracellular parasites described by Soudakewitch and others. (3) That in many cancers there was to a biologist the strongest evidence that the parasites had caused the growth. Paget's disease had been re-examined by Mr. D'Arcy Power,[4] who found that some of the structures described by Wickham could not be accounted for by alterations in the epithelial cells, etc., and that they were possibly "parasitic organisms differing entirely from the 'cancer bodies' of Ruffer." With regard to cells of endogenous origin, Ruffer and Plimmer[5] had said: "We, like most other observers, have not been able to satisfy ourselves as to the formation of endogenous cells:" this was in harmony with the opinion previously expressed by the author. Specimens of squamous epithelioma were shown. In one were cell inclusions with a distinct "peripheral granule layer,"[6] as described previously by Soudakewitch, the author, and Ruffer and Plimmer; in the other, capsules filled with granular "spores," as described by Wickham and the author; and parasites, as described by the author and Korotneff, were present.

A CASE OF TAR CANCER.

Mr. D'ARCY POWER illustrated the histology of a specimen of squamous-celled carcinoma removed by Mr. Butlin from the scrotum of a man, a barge builder, who was in the habit of working in clothes often soaked with gas tar. The author had placed pieces of the growth into the vagina of white rats and rabbits, previously kept sore by the daily application of iodine liniment; the pieces remained four days within the vaginæ, but the results in all were negative. In the lantern slides next exhibited the author drew attention to the histology of the growth itself; the microphotographs showed the ingrowth of processes from the epidermis, in the centre of which ingrowths the horny layers were prolonged; in connection with the corneous cells of the columns were large epithelial elements, some of which, at least, were due to cell fusion, two or more large cells being concerned: some such fusions presented what appeared to be a corneous capsule which was regularly striated in the radial direction, and outside this was a second similarly striated zone, beyond which were the more peripheral cubical cells of the ingrowing column. As to the presence of "cancer bodies" in the cells, this was very doubtful; there were, however, appearances faintly suggestive of such in certain of the peripheral cells.

[1] Alexis Korotneff, *Centralbl. für Bakt.*, March 23rd, 1893.
[2] December 20th, 1892, January 17th, 1893, February 21st, 1893.
[3] Jackson Clarke, *Morbid Growths and Sporozoa*, 1893.
[4] D'Arcy Power, *Journal of Pathol.*, November, 1893.
[5] Ruffer and Plimmer, *Ibid.*, October, 1893.
[6] Jackson Clarke, *Med. Press and Circ.*, September 23rd, 1893.

Mr. S. G. SHATTOCK proposed that all the preparations exhibited by Mr. Clarke and Mr. Power should be referred to the Morbid Growths Committee with a view, not of offering dogmatic statements as to their meaning, but in order that the appearances described might be carefully criticised and reported upon, since at the present juncture it was of the greatest importance to be clear on the facts. The body more especially referred to by Mr. Clarke, did it strictly correspond with what could be gathered from the author's description, would not do less than go towards showing the presence of a psorosperm in carcinoma.

Dr. KANTHACK had frequently observed epithelial cell fusions in carcinomata; the fused cells assumed various irregular shapes, and the remains of their nuclei would stain bluish or green with the Ehrlich-Biondi reagent. In a serocystic breast he had seen capsulated and peripherally striated forms such as had been described in carcinomata, and similar bodies might be found in blisters after twenty-four hours. He did not attach any high importance to staining reactions as a means of diagnosis in this question. The body described as a spore-bearing cyst in one of Mr. Clarke's sections he considered to be a capillary containing leucocytes.

Dr. W. G. SPENCER inquired whether pigment was found in the epithelial cells of the growth in Mr. Power's specimen, for in soot cancer of the scrotum this was well known to be the case; he had himself described such an instance.

RUPTURED SACCULUS OF BLADDER FOLLOWING STRICTURE.

Mr. F. C. WALLIS recited the case of a man who suffered from stricture after amputation of the penis, and in whom the above occurred. The catheter withdrew only a little blood-stained urine, yet a large fluid swelling was present reaching towards the umbilicus. The abdomen was opened and a space discovered containing two pints of foul urine; the bladder lay empty at the bottom of this cavity. After death the extravasation, which was extraperitoneal, was found to have occurred from a softened sacculus situated towards the upper part and left side of the bladder.

Mr. HURRY FENWICK adverted to the rarity of extraperitoneal rupture of the bladder, there being only about 16 such cases on record.

Mr. J. JACKSON CLARKE noticed a specimen of subperitoneal rupture in St. Mary's Hospital Museum.

Mr. W. MACADAM ECCLES had made a *post-mortem* examination on a man, aged 63, with a greatly hypertrophied prostate. Drainage from the perineum was had recourse to. A large extraperitoneal cavity, holding three-quarters of a pint of fœtid urine, was found after death; the bladder was sacculated, but it was not clear that the extravasation had taken place from a sacculus; it might have occurred from the perineal wound.

SYPHILITIC DISEASE OF THE KNEE-JOINT.

Mr. DAVIES COLLEY exhibited the bones from the knee-joint of a man, excised thirteen years ago. He thought that the appearances they presented corresponded with what were now regarded as syphilitic. The patient had had syphilis twenty years before admission into the Seamen's Hospital. Swelling of the joint was the chief clinical feature, without pain: the ends of the bones were enlarged, and grating was to be felt. The joint contained no pus, but the articular cartilage was destroyed and there were patches of eburnation on the tibia and femur, whilst the upper surface of the tibia was deeply and coarsely pitted; the bones showed, moreover, osteophytic outgrowths at the margins. Death occurred from pyæmia. He observed also that the history included one of many superficial abscesses situated especially about the affected knee, but these occurred some ten years before. Eburnation, however, and osteophytic outgrowths were not in accord with the usual form of syphilitic disease of the joints.

Mr. W. G. SPENCER did not think there was very strong evidence that the lesions were caused by syphilis: he suggested they were due to a septic condition to which tuberculosis was possibly superadded.

Mr. J. JACKSON CLARKE had seen a case clinically like that described, but affecting the terminal joint of one of the fingers in a man, aged 47; there was little pain. The condition was successfully dealt with by iodide of potassium.

Mr. ANTHONY A. BOWLBY remarked that though extensive

erosion due to syphilis was rare, syphilitic disease of joints was not so. The painlessness of the affection often caused the disease to be overlooked. He regarded the evidence in the present case as pointing to the lesions being syphilitic. There was not the nodular lipping, as was seen in osteo-arthritis, but the pointed osteophytes due to inflammation.

CHOLESTERIN CYST OF KIDNEY.

Mr. HURRY FENWICK showed the kidney of a man, aged 22, from whom he had removed a vesical calculus. Ten days after the operation the patient complained of pain in the right kidney, and a swelling formed, which was incised; there flowed out clear urine containing glistening crystals of cholesterin. Death occurred ten days later, when it was found that one of the calyces was dilated from the presence of a stone in the ureter; in this calyx the cholesterin was found. Dr. Murchison and Dr. Norman Moore had recorded somewhat similar cases.

CARD SPECIMENS.

Mr. DAVIES COLLEY: Fibroma of the Plantar Fascia.—Mr. HURRY FENWICK: A two-ounce Stone formed round a Hairpin.—Dr. LEE DICKINSON: Calculous Obstruction of the Ureter.

EPIDEMIOLOGICAL SOCIETY.

R. THORNE THORNE, M.B., F.R.C.P., in the Chair.

Wednesday, December 20th, 1893.

BACTERIAL POISONS.

DR. WILLIAM HUNTER read a paper in which, after a cursory sketch of the progress of bacteriology, he observed that for a time attention had been withdrawn from the functions of the cell by the novel interest directed to the irritant. The word "poison" in this connection had acquired a different meaning from that which it had when it was supposed to be the sole and essential cause of the disease in the individual, and the means of its communication to others. That could be predicated only of the microbes, though the phenomena of the disease were the effects of the poisons formed directly or indirectly by the bacteria in and from the surrounding fluids. They were poisons only in a potential sense, and relatively to the organism in which they were formed. Bacteria could obtain their N from organic salts of ammonium, but more usually got it in the form of NH_2 from albumens which they first converted into peptones, while they derived their C from carbohydrates, fatty and organic acids, albumen, and even glycerine and alcohol; but the greatest differences in the characters of the products of bacterial action were connected with their independence of or need for oxygen, and the facilities for obtaining it. It was the absence or deficiency of oxygen that distinguished putrefaction from decomposition, and was a necessary condition of fermentation—the source of many poisons. Ferments like those secreted by the salivary, gastric, and pancreatic glands, capable of converting albumen into peptone, or starch and cane sugar into glucose, were formed by many bacteria, ferments acting on gelatiniferous tissues by some, and on fibrin by a few. These were rendered inert by exposure to high temperatures, precisely as were the digestive ferments. The characters of inflammatory and other morbid processes were closely connected with those of the ferments of the respective bacteria. Staphylococci, for example, dissolved connective tissue, leading to local necroses or abscesses, but by breaking down and occluding the lymph vessels, tended to limit the spread of the inflammation, whereas those excited by streptococci, as erysipelas, were marked by rapid extension while suppuration was rare. The fibrinous exudation in diphtheria was due far less to the specific bacillus of Loeffler than to the streptococci, which were however unable to liquefy it. It thus bore no relation to the intensity of the disease itself, for the characteristic phenomena were the effect of the absorption of poisons formed by the specific bacillus, and the subsequent disintegration of the membrane was effected by staphylococci, etc. It was an open question whether these ferments merely acted on other organic matter, as in digestion, or whether they could transform some part of it into like ferments, or again, as Sidney Martin was induced to believe from a comparison of his own researches in diphtheria, the ferment formed by the bacilli was stored up in the spleen and elsewhere, continuing to produce poisons from the fluids of the body perhaps long after the bacilli had disappeared. The poisons he isolated were an albumose and an organic acid, that of Roux and Yersin being a ferment, and probably the link between the bacilli and the poisons proper. That the albumoses themselves were the actual poisons, and not merely the vehicles of some chemical poison combined with them, appeared from the impossibility of discovering such poison by chemical means, and by the remarkable effects exerted by slight physical influences. A remarkable property of the albumoses was that of attracting or repelling the leucocytes, the aggregation of which in and around the seat of infection tended to arrest or impede the morbid processes by the struggle which ensued between them and the pathogenic microbes. The pyrexia attending most infectious diseases, "fevers," as they were commonly called, was not caused by the albumoses, the injection of which, unless in quantities so great as to set up other disturbances, was followed—at least in the case of those of tubercle, diphtheria, tetanus, and some others—by no rise, often indeed by a fall, of temperature. But by far the most remarkable and important property of the albumoses, which, while it distinguished them strongly from the ptomaines or alkaloidal poisons approximated them to the ferments, was the length of time that they remained in the system, or more probably that their influence on the protoplasm endured. This was no doubt a factor in the course and duration of each disease, but its chief interest lay in its bearing on the phenomenon of acquired immunity. The extent of the alteration effected in the entire animal economy could not be better illustrated than by the complete immunity that could be thus conferred in a very short time against so intensely virulent a poison as that of tetanus, and the still more astonishing fact that the injection of a few drops of blood serum from such an animal sufficed to impart an equal immunity to another.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

J. ADAMSON, M.D., President, in the Chair.

Thursday, December 14th, 1893.

CASES.

DR. GEORGE MURRAY showed a case of Acromegaly in a patient aged 40.—Dr. DRUMMOND showed (1) a patient, aged 40, who, after sleeping in a field when intoxicated, noticed pain in the right shoulder. At present there was Bulging of the Sternal end of the Clavicle. The pulse in right arm was affected by respiration, stopping at end of expiration. The left bronchus was interfered with. In a similar case the *post-mortem* examination disclosed a large aneurysm springing from the back of the arch and pressing on the bronchus and innominate. (2) A married woman, aged 23, with Locomotor Ataxy. The teeth were highly suggestive of congenital syphilis, but the domestic history pointed to the possibility of its having been acquired.—Mr. WILLIAMSON showed (1) a boy, aged 7, who was admitted to hospital with a Growth in the Upper Left Eyelid. An endeavour to dissect it out failed, and to get it away the healthy eye had to be sacrificed. The orbit was packed with chloride of zinc, and when the slough separated the whole orbit was white and bare, like that of a skeleton. The deformity left was very slight. The tumour was found to consist of small, round cells, each cell lying in a groundwork of its own. (2) A man with the Crystalline Lens Dislocated into the Anterior Chamber. Lens opaque. Had had an attack of glaucoma. Intended to try and remove the lens, and failing, to extirpate the eye.—The PRESIDENT showed a case of Infantile Paralysis in a child aged 3 years and 3 months. Onset eight weeks, accompanied by fever. Four days later both legs were completely paralysed. They were now wasting.—Mr. RUTHERFORD MORISON showed (1) some cases of Syphilis illustrating the Multiform Character of some Secondary Eruptions. (2) Syphilitic Necrosis of Tibia. (3) Cases showing Transition from Chronic Superficial Glossitis to Epithelioma.—Dr. ROBERTSON showed (1) a girl with Hoarseness of three months' duration, coming on after attending a relative with consumption. Over the right vocal cord was a granulating mass. Sweating, wasting, etc., were also present. (2) A man with Syphilitic History whose Right Vocal Cord was Fixed

in the Position of Phonation. In the right arytenoid region was some ulceration.—Dr. BEVERIDGE showed a Hydrocephalic Monster delivered with great difficulty by turning. There was deformity of face—only one eye—a Cyclopic monster.

STAFFORDSHIRE BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

H. M. MORGAN, L.R.C.P.Lond., President, in the Chair.

Thursday, November 30th, 1893.

CASES AND SPECIMENS.

DR. HIND showed: (1) A married woman, aged 26, who had not been confined, suffering from a hard tumour in the upper part of the right rectus abdominis. She had noticed the



Case of Myxœdema before treatment.

swelling for nine months. There was no history of syphilis, and the patient had not had a blow. Diagnosis: Ossifying Myositis. (2) A Dermoid of the Left Ovary, containing cheesy matter, hair, bone, and cartilage; and also a Cystic Ovary removed from the other side of the same patient. (3) An Atrophied End of a Femur from an unsuccessful case of excision of the knee. The patella had been sawn across and united by silk sutures, and yet no trace of the junction line could be seen.—Dr. MCALDOWIE exhibited a patient suffering from Pseudo-hypertrophic Paralysis in a very advanced stage; also Photographs of two other cases which had recently been under his care.—Mr. WEST exhibited: (1) A man, aged 54, who had been suffering from Myxœdema of eight years' duration, and who had rapidly improved under the thyroid extract treatment. He had been taking Burroughs and Wellcome's thyroid tabloids (20 grains daily) for ten weeks, and the accompanying photographs show the man before and after this ten weeks' treatment. The man's mental condition had improved in an equally marked degree. (2) A case of Conical Corneæ in a woman, aged 28. The condition had manifested itself as usual soon after puberty. There was irregular astigmatism which did not admit of correction by lenses; and the vision in the right eye was less than $\frac{5}{60}$. Mr. West intended to operate on this eye by Von Graefe's method of cauterising the apex of the cone.—Mr. HERBERT H. FOLKER exhibited: 1. A single woman, a paintress, aged 32, whose vision had been failing for two years. R V $\frac{6}{12}$ + 1 D = $\frac{6}{6}$; L V $\frac{6}{12}$ + 1 D = $\frac{6}{6}$. Periphery of lens covered with dots; fundus healthy. 2. A widow, aged 52, whose vision had been failing for three years. Disseminated dot cataract with striæ and vacuoles, also advancing senile cataract. R V $\frac{6}{60}$, not improved; L V $\frac{6}{36}$ + 1 D = $\frac{6}{12}$.—



Case of Myxœdema after treatment.

Mr. W. H. FOLKER exhibited a Clamp for the removal of piles, which he had invented and exhibited two years previously. His experience and that of his colleagues who had used it since then had been most satisfactory. Mr. Folker claimed for his clamp the following advantages: (1) Absence of pain, (2) absence of hæmorrhage, (3) perfect recovery within a week, (4) impossibility of subsequent contraction or inconvenience.—Mr. SPANTON exhibited: (1) Ovaries and Fallopian Tubes removed by abdominal section from a married lady 30 years of age, for chronic ovaritis and salpingitis. The tubes were entirely matted round the ovaries, and densely adherent. The operation was followed by recovery. (2) A small Ovarian Tumour removed by abdominal section from a married woman aged 27, followed by rapid recovery. (3) The Right Lobe of a Cystic Goitre, removed

from a single woman aged 21, where the cyst had been previously treated by injections of iodine, etc., without success. It was found impossible to enucleate the cyst, so the entire lobe was removed. Recovery was rapid and complete.—Dr. Allan exhibited an Osteoma, the size of a hen's egg, which he had removed from the crest of the ilium in a boy aged 12. The tumour was supposed to have resulted from a fall nine months previously.—Mr. Alcock showed a specimen of Central Sarcoma of the Tibia in a man aged 28. The leg was amputated on November 25th, 1893, and the patient so far has progressed to convalescence without the slightest rise of temperature. Up to the time of admission the patient had been walking about, and yet the bone was so excavated and thin that on lifting up the leg on the operating table it snapped in two.—Mr. Hatton exhibited a Plate with Two Teeth which had been swallowed by a lady, and passed three days afterwards without inconvenience.

Intracranial Complications of Chronic Otitis Media.

Mr. Hatton read a paper on the subject. He related a case of temporo-sphenoidal abscess in which he trephined on November 16th, 1893, and the patient was apparently making a good recovery. There was necrosis of the upper wall of tympanum, but the mastoid antrum was not affected. The acute symptoms commenced on November 15th with severe pain in the head, fainting, and vomiting. There were no convulsions or rigors: the temperature was normal, and the pulse 60; there was drowsiness, with perfect, but delayed, cerebration. On November 16th the patient was in a state of coma; the temperature had risen to 100.6°, but quickly fell to normal; pulse 52. Optic neuritis, but no paralysis of cranial nerves. The operation was performed at 5 P.M., and an abscess with very fœtid pus was found about 1 inch from the surface. The patient became conscious at 9 P.M., and has remained so since.

Paper.

Dr. Hind read a paper on Some interesting Points in the Osteology of Quaternary Man.

MIDLAND MEDICAL SOCIETY.

Henry Eales, M.R.C.S., Ex-President, in the Chair.

Wednesday, December 6th, 1893.

Hereditary Chorea.

Dr. Russell showed two cases of hereditary chorea. The patients were twin brothers, aged 34. Both father and grandmother suffered from the same complaint. The disorder began seven years ago, nearly simultaneously in the two cases. The reflexes were exaggerated; double clonus present. In neither case was there any mental deficiency.

Specimens.

Mr. Christopher Martin showed two specimens of Ruptured Tubal Pregnancy.—Mr. F. Marsh showed (1) a large cartilaginous "Loose Body" which he had removed from the knee-joint; and (2) a large mass of Myxomatous Polypi removed from the nose by means of the snare.

Sarcoma.

Dr. Short read notes of a case of Multiple Sarcoma of the Subcutaneous Tissues secondary to a growth in the left iliac fossa. The patient was an old lady, aged 71 years, who developed a tumour in the left iliac region, followed by small nodules under the skin of the abdomen. These nodules were at first no larger than a small shot: they grew rapidly, and some were as large as a small nut at the time of death. Those on the abdominal wall were followed by similar growths in the back and limbs. The skin over them became bluish from small venules, but no ulceration occurred. She died about six months after the growths were first noticed. One of the subcutaneous nodules had been removed, and sections, made by Dr. Douglas Stanley, showed the growth to be a round-celled sarcoma, without excess of pigment.

Paper.

Dr. Arthur Foxwell read a paper on Hæmoptysis.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

W. Hunter, M.D., President, in the Chair.

Wednesday, December 6th, 1893.

Dermatitis Exfoliativa Pigmentosa.

Dr. Handford showed a fair man with light hair, aged 55, who was so deeply pigmented all over, but especially on the face, axillæ, and groins, as to give rise to a suspicion of Addison's disease. But the mucous membrane of the mouth was not affected, the pulse tension fair, the heart's action strong, and the general health good. The skin was rough and scaly, and occasionally bullæ appeared. The skin affection commenced thirteen years ago. The pigmentation resembled that due to arsenic, but was much more intense than was usual. The pigmentation had only commenced during the last six months.

Recognition and Treatment of Strabismus.

Mr. E. C. Kingdon read a paper on this subject. He said one of the most common causes was hypermetropia, in which divergent strabismus was rare and convergent common. It depended on the difference between optic and visual axes. The treatment was to correct hypermetropia by supplying suitable glasses; nearly full correction for constant use would certainly cure most cases. Where the squinting eye was amblyopic from disuse the sound one should be covered for some hours daily, and stereoscopic training used. Lastly, there was operative treatment—either internal tenotomy on the bad eye, or double internal tenotomy or internal tenotomy combined with external advancement on bad eye. If the operation were done unnecessarily a divergent squint might develop. The method of stereoscopic training was described. A divergent strabismus was often connected with myopia. Diplopia occurred in early stages. Later the retinal image of the unsound eye was discarded, and when this eye was blind from disuse the operative treatment should be confined to it, either external tenotomy or external tenotomy combined with internal advancement. Among other causes of squint he mentioned cerebral tumour, and, in conclusion, described the method for testing for strabismus, describing primary and secondary deviation.

Remarks were made by Drs. Hunter, Cattle, and Ransom.

Acute Peritonitis following Attempts to Procure Abortion.

Mr. A. R. Anderson read an account of two cases. In the first case the symptoms resembled those of intestinal obstruction. As there had been instrumental as well as medicinal attempts in this case, it was thought probable that the peritonitis originated from some source of infection in the pelvis. Laparotomy was performed, but none was found. There was acute general peritonitis. No pus or fluid effusion; lymph sticking neighbouring coils of bowel together everywhere. The symptoms progressed, and death ensued in forty-eight hours. Necropsy failed to discover the cause of the disease. In the second case the symptoms were indistinguishable from those of perforative appendicitis. No instruments had been used, but excessive purgation had been caused by the drugs taken. The patient was six months pregnant. On opening the abdomen a mass of inflamed omentum was found stuck by recent lymph to the side of the uterus and abdominal wall. The adhesions were easily broken down. Coils of small bowel were seen much congested and glued together with inflammatory exudation. There was no perforation of the appendix or cæcum, and nothing wrong beyond inflammation of their peritoneal coat. The patient's condition before operation was desperate; next day it had somewhat improved. Forty-eight hours after she miscarried. Eventually she made a good recovery. The difficulties in diagnosis that often arose in cases of acute peritonitis, and the causation and treatment of the disease, were discussed.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

Edwin Rickards, M.A., M.B., F.R.C.P., President, in the Chair.

Thursday, December 14th, 1893.

Peritoneal Hæmorrhagic Cyst.

Mr. Barling showed a man, aged 53, upon whom he had operated three months previously. The cyst had commenced six months before that. The history gave no

account of any injury to the abdomen. Three weeks' pain in the epigastrium preceded the appearance of the tumour, and up to the time of admission there was loss of weight. When the abdomen was opened the cyst was found partly adherent in front to the parietal peritoneum and the great omentum. Between seven and eight pints of blood-stained fluid escaped, and the cyst wall, which was thickly lined with old blood clot, was fixed in front of the vertebræ. Examination of the fluid showed the absence of any amylolytic ferment, of urea, and of hydatid elements. The incision was stitched to the parietal wound, and the patient had done well since, having gained a stone in weight in the last two months; but there was still a deep sinus left. Mr. Barling regarded the cyst as originating in a hæmorrhage at the base of the mesentery.

SPECIMENS.

Mr. HASLAM showed a specimen of a Separation of the Lower Epiphysis of the Femur, which had been complicated with rupture of the inner and middle coats of the popliteal artery and bruising of the vein, causing gangrene of the limb, in a lad aged 19, apparently the result of injury.—Mr. LAWSON TAIT exhibited a specimen of Leaking Pyosalpinx, which gave evidence of having originated in a tubal pregnancy of very early date, and it illustrated a not unusual form of the secondary dangers of this condition. The patient was rapidly recovering.—Mr. F. MARSH showed a specimen of Malignant Stricture of Œsophagus in which gastrostomy was performed. Death occurred from exhaustion six days later.—Mr. JORDAN LLOYD showed a Papillomatous Tumour as large as a hazel nut, which had been passed *per urethram* by a man aged 35, and also the "Parent" Tumour, the size of a pigeon's egg, which had been removed by suprapubic cystotomy. The patient had paroxysmal hæmaturia, with attacks of retention, for ten months. The growth was cut away with a stout nasal polypus snare and the bladder wound sutured with catgut. Urine was passed *per urethram* the day following the operation, and a rapid and uncomplicated recovery followed.—Dr. PURSLOW showed a Fœtal Head extracted by cephalotribe. The fœtus, which was fully developed but much decomposed, presented by the breech, and, in endeavouring to deliver the head, which was arrested at the brim, the neck gave way, leaving the head in the uterus. When Dr. Purslow saw the case, in consultation, four hours later, the uterus was firmly contracted on the head, which was high up above the brim. After very considerable difficulty extraction was effected by the cephalotribe, the blades having to be removed and reapplied several times before they obtained a good grasp of the head.

PAPER.

Dr. SIMON read a paper on Pneumonia.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

J. S. CLOUSTON, M.D., President, in the Chair.

Wednesday, December 6th, 1893.

GENERAL PARALYSIS.

DR. ELKINS showed 3 female general paralytics. During 1891, 8 female general paralytics were admitted to the Royal Asylum at Morningside; during 1892, 6; and during 1893 (up to date) 11. This seemed to imply that this particular form of disease was on the increase among women, but against this it had to be kept in mind that the certifiable area in insanity had increased, and, further, that they now received at Morningside a great many cases which formerly were treated in the various city poor houses.

SMALL-POX.

Dr. A. T. SLOAN showed two patients after recovery from small-pox, and photographs of what he described as a rare complication of small-pox, namely, herpes zoster, in a young man.

ACROMEGALY IN A GIANTESS.

Dr. BYROM BRAMWELL showed a case of acromegaly. The patient was a woman of 6 ft. 2 in. in height, and 24 st. 8 lbs. in weight on admission. Until the age of 16 she had been of normal size. At that age she began to grow rapidly, and at the age of 20 she had attained to her present enormous dimensions. There then began to be manifest weariness, lassitude, perspiration, swelling of feet, curtailment of the outer part of the field of vision (unilateral hemianopsia); the hands were large but not very characteristic; nor was the face very typical, so that probably her state was one of giantism plus acromegaly. There was no arrest of menstruation, and there was a number of fine warts on the surface of the skin. She was first treated on thyroid extract, but that was a failure. She was then put on pituitary extract, and she had greatly improved. It might, of course, be that the altered conditions consequent on her change to hospital life led to much of this improvement. Another case under Dr. Bramwell's care had been treated with thyroid extract with marked improvement, whereas previously the pituitary extract had failed to alter the condition.

VALVULAR OPENING IN ABDOMINAL WALL.

Mr. F. M. CAIRD showed a patient with a valvular opening in the abdominal wall. The patient, a young woman, had an impermeable stricture of the œsophagus after swallowing caustic, and the operation of gastrostomy after the method of Wietzel had been performed.

SPECIMENS.

Dr. R. MACKENZIE showed the Distal Phalanx from a compound comminuted fracture of the thumb, where amputation had been performed at the metacarpo-phalangeal joint.—Mr. COTTERILL showed the Larynx and Adjacent Tissues from a patient on whom tracheotomy and gastrostomy had been performed for cancerous growth.—Dr. T. CARMICHAEL showed a Temporal Bone of a child, aged 3 months, who had died of septic thrombosis after four days' illness.—Dr. A. BRUCE showed specimens of Anchylostoma Duodenale from Egypt.—Dr. JAMES RITCHIE showed: (1) A Cystic Kidney, and (2) A Ruptured Heart. The rupture, which occurred while the patient (an old lady) was lying quietly in bed, was in the anterior wall of the left ventricle.—Dr. W. RUSSELL showed: (1) A Gall Stone undergoing disintegration in the gall bladder; and (2) An example of Advaneed Fatty Infiltration of the Heart.

CHANGES IN THE CIRCULATION PRODUCED BY PYREXIA.

Dr. GRAHAM BROWN read a note on this subject. He described a series of experiments which he had made with various fluids, at different pressures and with varying propelling forces. The conclusion appeared to be that the altered condition of the cardiac action and of the blood tension, the movements and alteration in shape of leucocytes, all were means to restore the balance which had been disturbed in the state of pyrexia. Further, that this change in the circulation might be a means of destroying organisms existing in the blood in certain specific fevers.

TREATMENT OF STRUMOUS DISEASE OF THE EXTREMITIES.

Mr. A. G. MILLER read a note on what he described as Esmarch's new method of treating strumous diseases of the extremities by passive congestion, but which he had been informed by Mr. F. M. Caird was really Beer's method. He showed two cases that were being treated with advantage. He described the mode of applying the pressure by elastic bandage over lint, indicating the safety of the method and its advantages.

MANCHESTER PATHOLOGICAL SOCIETY.

F. A. SOUTHAM, F.R.C.S., President, in the Chair.

Wednesday, December 13th, 1893.

MULTIPLE NEUROMATA.

DR. E. S. REYNOLDS and Mr. J. COLLIER showed specimens from a case of Multiple Neuromata occurring in a man aged 26. He had suffered from weakness as long as he could remember, and had noticed the growths for about ten years. He had lost all voluntary power except the movements of the head, the right forearm, and the respiratory muscles. There was no affection of sensation, and no paralysis of the bladder and rectum. He was very much emaciated, and innumerable tumours could be seen and felt almost all over the body, varying in size from a small apple to a split pea. He died of exhaustion. The necropsy showed that the neuromata were practically universal in the somatic and sympathetic nerves, even to the finest filaments, the nerves between the tumour

masses being enormously thickened; the anterior roots of the cord were affected inside the spinal canal, but there was no affection of the cranial nerves inside the skull. The microscopic report on the specimens was deferred.

CHOREA AND ENDOCARDITIS IN A DOG.

Dr. MOTHERSOLE showed a specimen of endocarditis of the mitral and tricuspid valves from a collie dog which was affected with chorea which followed on an attack of distemper.

SMALL WHITE KIDNEY.

Dr. BRAZIL read notes of a case which proved *post mortem* to be a typical instance of this rare condition. The patient was a boy aged 15, who ten years before his death had scarlatina. No history of acute nephritis. For two years he had been suffering from frequently recurring attacks of headache and vomiting. He had œdema of the face and anæmia. The heart was enormously hypertrophied, and the pulse showed very high tension. Urine, 20 ounces to 52 ounces daily, acid, sp. g. 1007 to 1016; urea from 0.5 to 1.6 per cent. Albumen from ¼ to ¾. Proteid quotient 7. Granular casts. The patient developed universal œdema, and died of uræmia.

CARD SPECIMENS.

Various card specimens were shown by Dr. HARRIS.

REVIEWS.

HEALTHY HOSPITALS. By Sir DOUGLAS GALTON. Oxford: The Clarendon Press. 1893. (Demy 8vo, pp. 300. 10s. 6d.)

THERE seems to be a certain appropriateness in the publication of this work by one of our University Presses, inasmuch as it deals with the principles to be observed in the construction of healthy hospitals rather than with the practical application of these principles to produce concrete results, and it is the special province of a university to instil principles, leaving it to others to teach the application of these principles to the affairs of life. We are told, for instance, that anatomy as a science may properly be included in a university curriculum, though as the basis of a lucrative surgical practice its teaching should be left to the medical schools. Be this as it may—and the question is a complex one—Sir DOUGLAS GALTON's book is not so academic as not to be welcome to the ordinary reader, nor so technical as to repel all but hospital experts. The author considers the present a suitable time for the publication of his observations, since considerable development has been taking place in the construction of hospitals in late years, especially in England, France, Germany, and America; it seems probable that this activity will continue in this country under the influence of the county councils and other bodies, to whom the management of local affairs is being by degrees entrusted.

After some preliminary remarks and the definition of a hospital, we have chapters upon site, air, warming, and lighting, and a sketch of some of the "methods in which the before-mentioned principles have been applied in hospitals." The ward unit is then considered with the ward offices, the manner of aggregating the ward units, and the administrative buildings. Next follow observations on some points connected with hospitals for incurables, children's hospitals, convalescent homes, infectious hospitals, and lying-in institutions: and the last chapter is headed "Remarks on Temporary Structures and Conclusion." The aim of the book is, as above stated, not to give actual plans for hospitals, but rather to suggest the principles which should govern their design. It is not claimed that the principles enunciated in the work are new, but they lie somewhat scattered through various publications. In this treatise they are brought together in an accessible form, which will be helpful to medical men as well as to those who are charged with obtaining the funds necessary for the erection of hospitals. The architect who takes his work seriously will probably consult the magnificent volumes lately published by Mr. Burdett on the *Hospitals and Asylums of the World*. Medical men and members of hospital committees who wish to acquaint themselves with general principles that they may be in a position to criticise with intelligence the plans of their architect will do well to provide themselves with Sir Douglas Galton's able and lucid work.

A TREATISE ON THE SCIENCE AND PRACTICE OF MIDWIFERY. By W. S. PLAYFAIR, M.D., LL.D., F.R.C.P. Eighth edition. Two vols. London: Smith, Elder and Co. 1893. (Demy 8vo, pp. 433 and 440. 28s.)

THE seventh edition of this favourite textbook was published in 1889, and the author has found it necessary, in order to keep abreast of the progress in obstetrics, to rewrite almost completely some of the chapters, such as those on extra-uterine pregnancy, the Cæsarean section, symphysiotomy, and septicæmia. The chapters under these headings give, on the whole, an excellent account of the subjects of which they treat, yet we cannot help feeling that the claims of symphysiotomy and Cæsarean section against craniotomy of the living child have scarcely been presented as fully as their importance at the present time seems to deserve.

We do not think, for instance, that it can be accurately said that "most British authorities are of opinion that Cæsarean section need not be resorted to if the smallest diameter of the pelvis exceed 1¾ inch," or that "we must only resort to Cæsarean section when no other means of delivery are possible." If further experience proves the truth of the evidence of the present day that symphysiotomy permits the passage of a living child at term through a pelvis with a conjugate of 2¾ inches then it would seem that craniotomy of the living child will be justifiable only in very rare circumstances which will be independent of the size of the pelvis.

On page 166, vol. ii, the author states that the probable situation of the placenta can be ascertained by auscultation. There is, we believe, no evidence in support of this statement, which is contrary to the general opinion of obstetricians, and, we think, to the author's own opinion as expressed in the paragraphs dealing with the uterine *souffle*.

The work is generally well up to date and the author describes and illustrates the method of induction of premature labour by Champetier de Ribes's bag, which was brought before the profession in this country in papers read at the Nottingham meeting of the British Medical Association.

The attractive style in which the work is placed before the reader is well known, and we are sure that the eighth edition will well maintain the reputation of previous ones as being amongst the first treatises on midwifery in the English language.

CHINESE CENTRAL ASIA. By HENRY LANSDELL, D.D., M.R.A.S., F.R.G.S. London: Sampson Low, Marston and Co. 1893. (Two vols., 900 pages, 3 maps, 100 illustrations. Demy 8vo. 36s.)

THESE elegantly got up volumes contain the record of the latest journey of an experienced traveller extending over 50,000 miles, through five kingdoms of Europe, four of Africa, and every kingdom of Asia. The adventurous explorer has been the first European to cross the ice-clad Tian Shan Mountains, half as high again as Mont Blanc, into Chinese Turkestan, as a pioneer investigator into the demography, religious, and social life of the peoples of Central Asia. He has added largely to the knowledge of the flora and fauna of extensive areas as well as to the anthropology of Asiatic races. We are specially concerned with what Dr. LANSDELL has to tell us of therapeutics as practised in some of the countries which he visited. Not the least interesting of his medical notes is his graphic account of the treatment of the insane at Bokhara. He had been informed that these afflicted individuals were cruelly treated by being beaten while prayers from the Koran were said over them, and by being picketed like horses to posts in the yard of a kind of mullah-doctor (a curious embodiment of religion with medicine).

In the house of this pietistic doctor, called the Ishan, Dr. Lansdell found the great man treating his patients as possessed of a devil and dealing in charms, consisting of extracts from the Koran, placed in receptacles to be worn on the afflicted part of the body. Crowds were waiting to pay for the nostrums, yet so are they now in every civilised commu-

nity in the West, only the credulous with us have to pay a higher price and are accommodated in more elegant apartments and environment. The maniacs presented a saddening spectacle. One lunatic, who had been there for six months, kept violently jumping and dancing about though chained. The result of this treatment has not been satisfactory. The detention of the patients is intended to be only temporary; after a short residence they are let loose and find a refuge in the hollow tombs left by the collapse of the clay heaped around the corpse, which, dried by the heat of the sun, cracks and falls to pieces.

Dr. Lansdell relates the curious superstition that unless the body be whole at the time of death the deceased cannot enter heaven. Imbued with this belief the Bokharists will not submit to amputation.

The Kara-Kirghese doctors, in the plenitude of their belief in *similia similibus curantur* for obstinate yellow jaundice, order the patient to wear a piece of gold on the forehead or look at a piece of gold all day, or, in the absence of the precious metal, substitute a brass basin. Mountain sickness is credited to a young lady, whom, before the patient, they load with obscene and disgusting reproaches, thereby hoping to shock the fair one's modesty and drive her away. Treatment by symbol is also followed, as in giving the roasted eyes of an ox for ophthalmia. Dr. Lansdell states that lingering parturition is attributed to a devil, and an attempt is made to frighten him out of the woman by the unexpected onset of a troop of horsemen brandishing their whips, screaming, and making hideous noises.

Many other things of interest to the inquiring scientific medical reader are to be met with in these volumes, which are written in a modest and fascinating style. It adds something to the influence for good of Dr. Lansdell's excellent work in travel to know that during this arduous and sometimes perilous journey of two and a-half years, as well as his former journeys through Siberia and in Russian Central Asia, he drank nothing stronger than tea.

On the Surgical Treatment of Deformities. By William Adams, F.R.C.S., Consulting Surgeon to the Great Northern Central Hospital; the National Hospital for the Paralysed and Epileptic, etc. London: Baillière, Tindall and Cox. 1893. (Cr. 8vo, pp. 55. 2s. 6d.)

This small volume is a reprint of two post-graduate lectures, one of which, delivered early in the year, discusses the principles of surgery applicable to the treatment of the deformities, and some recent departures from those principles; and the other of later date deals with the surgical treatment of deformities. Mr. Adams, in these published lectures, gives a lucid and comprehensive review of the present condition of orthopædic surgery, and though, as might be expected, somewhat conservative in his views, recognises as worthy of careful consideration the recent deviations and modifications in its practice. Having been so long and closely associated with the development of subcutaneous tenotomy, there is no one better fitted than Mr. Adams to advocate the merits of this method and to maintain its superiority.

The substitution of the open method under antiseptic precautions is regarded by Mr. Adams as a retrograde step in orthopædic practice; but it still remains to be shown why antiseptic or aseptic methods which have hitherto been applied so successfully to every other branch of surgery should not be applied with good prospects of like success to the operative treatment of deformities. Mr. Adams is as much opposed to the modern practice of immediate extension after tenotomy, and is disposed to retain the use of the costly and ungainly appliances which most surgeons would be only too glad to regard as obsolete.

Public Health and Demography. By Edward F. Willoughby, M.D. London: Macmillan and Co. 1893. (Crown 8vo, 525 pp., 39 illustrations. 4s. 6d.)

This work is modelled upon the author's *Principles of Hygiene*, but with many additions and improvements. Certain subjects, such as vital statistics, sewage disposal, unhealthy trades, and sanitary law are dealt with in more detail than was the case in the original work. The discussion of the two last-named subjects is still far from complete, but this is due no doubt to the fact that the author has not had unlimited space at his disposal. The book contains much valuable information, the subject of dietetics in particular being ably dealt with.

The section dealing with preventable disease contains some statements which the author confesses are opposed to traditional teaching; these he says he is prepared to defend. The question arises, however, whether it would not have been better to have avoided altogether the enunciation of unorthodox views in a work of this kind.

Clinical Gynæcology: being a Handbook of Diseases Peculiar to Women. By Thomas More Madden, M.D., F.R.C.S.Edin. London: Baillière, Tindall and Cox. 1893. (Demy 8vo, pp. 578, with 259 illustrations. 12s. 6d.)

This work contains the writer's experience of the diseases peculiar to women, extending over a quarter of a century. Although they are called "lectures" the chapters have been so carefully systematised that the author will not be disappointed in hoping that the treatise may prove acceptable as a handbook of gynæcology. With the exception of a few rare conditions, which, however, on account of their importance, should have been included—we may mention prolapse of the mucous membrane of the urethra and vesico-uterine fistula—the lecture form has not led to the omission of any serious disease. The book is written so clearly and in such a judicial spirit that its appearance is a real gain to students.

The writer does full justice to the works of others, and there is a total absence of lists of personal cases which appear without any educational justification in some other books on this subject. Yet on every page we may read the temperately worded mature judgment of the writer, and there is a refreshing vigour in his denunciation of abdominal section for displacements and other non-fatal affections of the uterus and ovaries.

We are inclined to think that the writer devotes a little too much attention to the consideration of the mechanical treatment of minor displacements of the uterus, and the author's experience that the direction of the fissure in cervical laceration is in the majority of cases antero-posterior is probably exceptional; and while a long description of ovariotomy is given, there is but a mere allusion to abdominal hysterectomy. The evolution of this operation is one of the most interesting subjects in gynæcology; as it has not yet assumed a permanent form, a chapter devoted to its development, with an account of the various methods of performing it, would have proved of interest and value to students.

The work is excellently printed, and the illustrations are good. In the sketch of an ovariotomy we should have preferred to see the operator's sleeves rolled up above the elbow. On page 221 "Kuge" is printed for "Ruge."

The author may be congratulated upon having produced an interesting and highly commendable work, and upon having placed it in such a pleasant form before his readers. It is a work which we bring with confidence to the notice of all earnest students and practitioners.

REPORTS AND ANALYSES

AND

DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

JAPANESE SOYA.

Under this name Mr. John Mullett, of 49, Fenchurch Street, sends us some samples of real soya, made from the soya pine of Japan, which is used there and is the universal sauce. Japanese soya is undoubtedly one of the most wholesome and agreeable methods of giving a pleasant flavour to soups, vegetables, gravies, fish, and meat, and its analysis is as follows: As made in Japan this soya is produced from the soya bean, crushed wheat, crushed barley, and common table

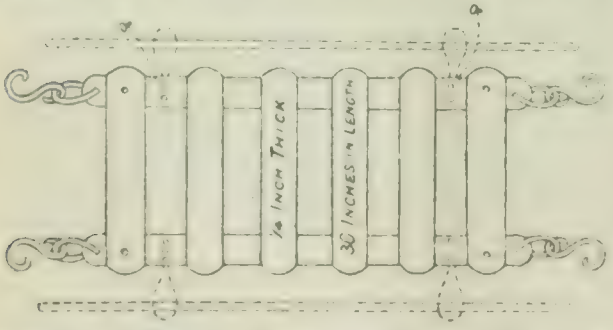
salt. It contains a considerable percentage of albumin and has a very agreeable aroma, so that it is not without nutritive value at the same time that it is an appetiser which may be used alike in the foods of the invalid and the healthy.

PURE SOLUBLE COCOA.

This cocoa powder is said to be made from the finest cocoa beans from which all the superfluous fat has been removed by a special process, and it is also stated that no chemical material has been used in the manufacture; moreover, as it contains no added starch or sugar, it is a highly concentrated form of cocoa. From examination of the sample sent for analysis it may be stated that the forementioned claims appear to be fully justified. Trial of the cocoa in the usual manner also shows that it is a well prepared article readily soluble, and producing a beverage of agreeable aroma, flavour, and general character. It is prepared by Messrs. John Rothwell at their cocoa works, Wigan.

AN IMPROVED STRETCHER FOR HOSPITAL, AMBULANCE, AND MILITARY USE.

Dr. E. D. Worthington, F.R.C.S.Edin., Surgeon-Major (R.) Canadian Volunteer Militia, Sherbrooke, Province of Quebec, Canada, writes: Some time ago I put together a rather primitive apparatus for use in a very troublesome case of fracture of the neck of the femur, and I was so satisfied with its great usefulness that since that time I have frequently called its aid into requisition. My apparatus was as follows:—Eight pieces of pine, six of them being 30 inches in length, 4 inches in breadth, and ½ inch thick; the other two 3 inches in breadth, ¾ inch thick, and the length of the patient's bedstead, inside measurement. The ends and edges of them were rounded, and made perfectly smooth. When everything was ready I passed the short pieces under the patient, from side to side, at regular intervals from the head to the feet. The long pieces were then carefully inserted under the ends of the short ones. The apparatus was put together in a minute, and one person at each corner lifted the patient easily and steadily on this temporary stretcher. The bed underneath was then arranged without the least discomfort to the patient. In all the stretchers I have seen the patient had to be lifted upon them, while in this plan the stretcher is made under the patient. I believe that for field use the above put together in sets, with a wooden pin to be dropped in a hole at each corner, would be more serviceable and in every respect better than the present army stretcher. When wanted for use the under sheet of the bed should be pulled



smooth, and the short pieces passed under the patient, beginning just above the heel, and up to the head at regular intervals, of course between the under sheet and the patient's shirt or chemise; that at the head should be passed under the pillow. The side pieces are then introduced, gently depressing the mattress, if necessary, passing along; the wooden pins are dropped into the holes at the four corners, and then the attendants lift the patient up, and drop the claws or hooks over the end bars of the iron bedstead. For a description of the stretcher I refer to the accompanying diagram. At each corner there is a loop and a hook. The loop should be of rather stout webbing, and fastened on the under surface of the ends of the long side pieces with a couple of copper rivets. Each loop holds as a fixture a claw or hook for suspending the stretcher on the cross bars of the bedstead at the head and foot.

In the ordinary ambulance service, when the waggon reaches the scene of the accident, the tray or slide is run out with its comfortable looking mattress, upon which the injured person is lifted. When he reaches his home or the hospital he is lifted off at a great expense of unnecessary suffering. All this time the "white elephant" of the case, the mattress, has been under him, and it will cost him as much pain to get it from under him as it cost originally to get him on it. My stretcher, on the other hand, may be adjusted under the patient, the stretcher slung in the ambulance, and when the hospital is reached the stretcher is run out, carried to the ward, and hung to the cross bars of the bedstead, the clothing of the patient removed, the stretcher lowered on to the sheet of the bed, and then the wooden frame removed. No infliction of lifting and pulling from one side of the bed to the other. The objection may be urged that the apparatus being composed of so many pieces, some of them may be lost, but it will be the duty of those in charge to take measures accordingly. The two side pieces and the six short ones with poles, consisting of one set, when strapped together will not be a very cumbersome affair. They can be put together and taken apart in a minute, and any extra care required in adjustment will be more than made up in usefulness. All that will be necessary to render this stretcher suitable for field use will be the addition of four loops of webbing of suitable strength, two on each side, fastened with copper rivets on the under surface of the long side pieces, the loops being large enough to allow of passing on each side a pole to answer the double purpose of handles to lift by and to form sides for the stretcher.

At the first meeting of the South-West London Medical Society held recently, the President, Mr. T. S. Howell gave an address, in the course of which he contended that the social position of the medical profession in the past was superior to that held by it at the present time. This he attributed in large measure to the growing practice of charging one shilling for visit and medicine. Gratuitous attendance on the really poor, and clubs for those in receipt of good wages, were practices to be encouraged.

Bequests.—The late Mrs. Mary Edwards, of Great Missenden, Bucks, who died on September 27th, has by her will bequeathed £100 to the National Hospital for the Paralysed and Epileptic (Queen Square, Bloomsbury) for the general purposes of the hospital, and a further sum of £500 to be applied for the endowment of an annuity to be called "The Elizabeth Nisbet Annuity," in memory of her mother, the income to be paid by the governors or managers of the hospital to some female suffering from paralysis; £200 each to the High Wycombe and Earl of Beaconsfield Memorial Cottage Hospital at High Wycombe, the Cancer Hospital, Brompton, and the Middlesex Hospital for the benefit of the cancer ward; and £100 each to St. Mary's Hospital (Paddington) and the Hospital for Sick Children (Great Ormond Street).

An Overcrowded Asylum.—The City Coroner held an inquest recently on the body of a lunatic named John Mahon, who died at the Richmond Lunatic Asylum, Dublin, from injuries inflicted on the night of December 25th, 1893, by another patient named Joseph Walsh. Dr. Norman, resident medical superintendent of the asylum, deposed that the deceased was an inmate of the healthy department; Joseph Walsh was also a patient in the same ward. The latter was well-behaved, and assisted in the work of the ward. Walsh told witness that Mahon accused him of stealing from him, and he kicked him in the abdomen when kneeling at his bedside. The symptoms displayed by Mahon after being kicked were those of rupture. After hearing evidence generally, the jury found that Mahon died from shock due to rupture caused by a kick on the stomach, inflicted by Joseph Walsh, adding that the overcrowded condition of the asylum increased the liability to occurrences of this kind, and that the liability would be decreased by a larger number of attendants and more accommodation. In his last annual report, published recently, Dr. Norman stated that the establishment was generally overcrowded, as it contained several hundreds more than its normal number.

ANALYSIS AND REPORT
ON
ORIGINAL DOCUMENTARY EVIDENCE CONCERNING THE USE OF OPIUM IN INDIA.

[FURNISHED TO THE "BRITISH MEDICAL JOURNAL" BY UPWARDS OF 100 INDIAN MEDICAL OFFICERS.]

V.

The Conditions which Cause and Influence the Use of Opium: (a) *Climate and Extremes of Temperature:* (b) *Sanitary Conditions, Malaria, and Other Diseases.—Opium as a Prophylactic and a Remedy.*

AMONGST the conditions favouring and necessitating the use of opium, a predominating place, as can easily be understood, must be given to the climate of India. Considering first the climate from the point of view of temperature, it is well known that all degrees of the latter are found in that vast empire, from the burning and dry heat, for example, in North Guzerat during the months of March to June, through all degrees of warmth, with and without dampness, to cool and cold regions, down to the severe cold of an almost Siberian winter on the mountains of Kashmir. Besides the great change from the hot to the cold season of many places to which the inhabitants are accustomed, and which they are therefore able to endure, many of them, especially those in military service, who are sent far away from their birthplace, have to endure the vicissitudes of a climate to which they never were accustomed. The effect of opium rendering these extremes of temperature more tolerable is often mentioned in the replies sent in response to our inquiries, and it is said that of the soldiers who come up to the high regions of Kashmir, those who take opium bear the cold there much better than those who do not. Again, the subtropical and tropical heat of the southern parts of India, especially in the plains and vales, does not exhaust the native who uses opium to such a degree as it does the European and the abstainer from opium.

A gentleman who has served both in Guzerat and in the Mahratta country, Deccan, writes: "Opium consumption in the Deccan is very exceptional: in Northern Guzerat it is almost universal among the cultivating classes. The climate of the latter country is from March to June extremely hot, a burning dry wind sweeps all day over the arid land, rocks exposed to the sun's rays cannot be touched with the hand, while even in the shade they are hot to the touch, like a plate warmed for the dinner table. The Englishman living in this country during this season is parched with a thirst from 9 A.M. till sunset, which it is useless to try and quench. This period of the year, though said to be healthy, is extremely exhausting. In June the rains begin, and then till October extreme damp heat follows the extreme dry heat of the hot weather; days of heavy rain are followed by days of bright sunshine. The country is often reduced to a quagmire, and pools of standing water surround the villages. In October the rains cease, and the air begins to get dry and cool; the drying vegetation produces fever, which continues to be prevalent more or less till the end of the year. The Deccan has a comparatively temperate climate; the hot weather is much cooler, the rainy season both cooler and drier than in Guzerat, and the cold weather that succeeds the rains less feverish. I have said that the cultivator of Guzerat takes opium, while the cultivator of Deccan does not. There is little racial difference between the chief cultivating classes of the two provinces: to what, then, is their difference of habit to be attributed if not to climate? The Guzerat farmer alleges that opium keeps off fever and is in other ways good for his constitution, and I think that the above stated facts show that there may be a good deal in what he says. At all events, the habitual use of opium has not weakened the brains or the body of the farmer of Guzerat."

From the information supplied we may take it as a rule that where the climate is temperate, the air neither excessively hot nor cold, the soil dry, where no dampness and no malaria prevails, opium is not used to any large extent. Thus in the northern districts of the Punjab, on the frontier of Afghanistan, and again in Darjeeling in the north of Bengal, in Lansdowne in British Garwhal, in Almona, on the Kumaon Hills, in the high and healthy places of the Central Provinces, etc., opium is not in general use. The air in these places is bracing, and no special stimulant is required. But wherever dampness, and with it malaria, is prevalent, as in low-lying districts, in the plains, and especially in swampy regions, but sometimes also in elevated places, opium is more or less in general use, that is to say, in these places we find, according to the conditions of health and wealth, a larger or smaller percentage of the population using the drug as a beneficial stimulant and prophylactic. A correspondent from the Belgaum district, Bombay Presidency, writes: "The climate of the Ghauts is excessively damp, with a rainfall of 120 inches per annum. The jungles are dense, and the population of these parts suffer much from fever and bowel complaints. Opium is used sparingly but generally, and counteracts fatigue, damp, and hunger."

Bengal, and especially Lower Bengal is, as is well known, the land of fevers, and accordingly, *a priori*, opium might be expected to be in general use. This expectation is fully confirmed by our correspondents from these districts.

A correspondent from Burdwar in Lower Bengal writes: "Malarial fevers, bowel complaints, and rheumatic affections are extremely prevalent. Opium is very generally used for the two latter complaints, and, no doubt, gives great relief. It is used by 20 to 30 per cent. of the population, and perhaps more."

Another gentleman with great experience writes from Bengal: "The damp climate of East Bengal and the waterlogged nature of the soil affect the physique and health of the people, and opium is more largely used in the more malarious districts than in the healthier parts. If it were not so expensive it would be much more largely used than it is, as the people believe most fully in its beneficial effects. In Bengal it is very seldom taken in excess, and in my long service of thirty-two years I cannot recall a single case of death from abuse of opium. It is chiefly smoked, but it is also taken to a considerable extent in pills. My experience is that the moderate use of opium is purely beneficial. It undoubtedly keeps off fever, as I have observed repeatedly when on sporting tours, and it also enables a man to make more physical exertion. An old and highly-reputed Hindu gentleman (a Maharajah) only recently told me that there was hardly a Hindu gentleman of over 40 who did not take opium, and found it beneficial."

From a neighbouring province—Assam—a correspondent writes: "Climate tropical: country very low—swampy uncultivated areas covered with dense primeval forest; people subject to malaria of a very virulent type. Opium is an undoubted prophylactic, as far as malaria is concerned. Of course opium is extensively used by the people of this province. The moderate use of opium for the people of this country is, in the absence of quinine, an absolute necessity of life."

But it is not only in the low plains of Bengal that opium is used as a prophylactic against malaria; it is also employed in elevated regions if they are unhealthy.

A Surgeon-Major, writing from Bengalore, in Southern India, says: "I served for a year in the Rumpa rebellion in the hill tracts of Central India, where malaria is of a deadly type. All the hill tribes use opium as a prophylactic against fever, and eat 2 to 3 grains every morning before going to their work. It also acts as a stimulant, and they are unfit for work until they have had it. They suffer very little from malaria. The prisoners brought down to the plains, if deprived of their opium, died of fever. The mortality amongst the officers and sepoys serving in these hills was dreadful from malarial fever, beri-beri, etc."

A well-known Surgeon-Lieutenant-Colonel expresses himself on the relation between the use of opium and diseases as follows: "Opium is unquestionably used by the inhabitants of Hyderabad (in Deccan) as a prophylactic. They begin to take it as such, though many people take it as a stimulant: for instance, after attacks of bowel complaint, by the advice of their hakims (doctors). The people who take it regularly say that it conduces to regularity of all their functions, regularity of meals, regularity of sleep and of digestion, and that in this or some other way it protects them against diar-

rhœa, dysentery, and cholera, which they firmly believe they would be liable to if they left it off. My own opinion is that it does protect against bowel disorders, such as acute enteritis in children, and diarrhœa, dysentery, and cholera in adults. Against these diseases and against malaria it might reasonably be supposed to have a prophylactic action, if only by protecting against chills. It is not, however, employed as a prophylactic against malaria in this part of India."

In the opinion of some other authorities, however, the specific action of opium on malaria is due to a body which, in the Indian drug, is found in a much larger proportion than in other kinds of opium, that is, narcotine. Experiments made with narcotine have proved it to be a febrifuge. A thorough scientific investigation of this question is desirable. Numerous as are the testimonies to the prophylactic virtue of opium against malaria, several of our correspondents state that the use of opium for this purpose is by no means universal amongst the native population, and some entirely deny that the drug has any such property. These, however, are but a small minority, and as a rule those who do not know of its use as a prophylactic against malaria are speaking from observations they have made in places where malaria is either not very prevalent or is altogether unknown. One correspondent, writing from Ajmer-Merwara, Rajputana, in reply to the question as to the presence of any insanitary conditions, says: "There are none. The district is a healthy one on account of the physical aspect of the country. Malarial fever exists after the rains, but not to any great extent." And to the question: "Is opium used by the inhabitants as a prophylactic, and has it any protective influence against malaria?" the same correspondent replies: "Not to my knowledge; I have never heard of its being so used. In my opinion, it is in no sense a prophylactic, nor has it any effect in producing disease except when consumed in very large quantities." But another correspondent, a Surgeon-Lieutenant-Colonel who has lived in Punjab, the North West Provinces, and is living now in Bengal, replies to the same question as follows: "Yes: it certainly does act as a prophylactic against malarial fevers. Many (soldiers marching) often take a small dose of opium before starting, and it does them good—as much as a cup of hot tea or coffee does us. I do not like facing the fog and cold before sunrise, and if I could not get a cup of tea or coffee or cocoa, I should take a little opium myself." If we were to look for the "golden mean" between these discordant opinions and experiences, we were not very far from it by accepting the following opinion of a doctor living in Rajputana: "In my opinion, when taken in moderation, the drug, like other stimulants, has a protective influence against malaria, and probably also against liability to other diseases. The people do not, as far as I have seen, knowingly take it as a prophylactic, but presumably experience has taught them that they are better with it than they are without it."

MEDICAL BULLETINS

CONCERNING DISTINGUISHED INVALIDS.

Opinions of Representative Physicians and Surgeons as to the Rules which should Govern their Issue; Statement of the Author of the "Code of Medical Ethics."

The author of the *Code of Medical Ethics* writes: In deference to the special requests made to me as the author of the *Code of Medical Ethics* (by practitioners whose position entitles their solicitation to serious consideration) to frame a rule, if practicable, for the guidance of the profession in the matter of "bulletins," still a burning question, and inasmuch as it is, in my opinion, rightly held that the existing ill-judged system of issuing bulletins not only contravenes the true spirit of ethics, but tends also to engender ill-feeling and dissension among the faculty, I have reluctantly been induced to submit the following suggestive statement for the consideration of various eminent representative practitioners in Great Britain and Ireland, and whose names are herewith enclosed, with the view to evolve from their deliberate and severely critical opinion the lines on which to draft the suggested rule (hereto appended) in the hope of averting professional discord and contentious criticism.

MEMORANDUM.

That much difference of opinion exists on the question may be taken for granted. Looking at it, however, from a medico-ethical point of view, I am strongly inclined to the opinion that undue importance (stimulated, it may be, by a feeling, more or less acute, of jealousy) has been attached to the passing notoriety gained—or rather assumed to be gained—by the affixing to medical bulletins of the signatures of the attendant practitioners, from which, nevertheless, I firmly and conscientiously believe that beyond the personal gratification possibly derived by a junior practitioner from the transient publicity accorded to his name, but little, if any, professional advantage is gained.

If, indeed, as some allege, the practice merely pandered to the public appetite for sensational news, it could not, in my opinion, be too severely criticised and condemned. When, on the other hand, it arises from a purely honest public anxiety for authenticated information in the dangerous illness of, for instance, an illustrious or popular statesman, a distinguished prelate or esteemed dignitary, or some noble character beloved and respected by the nation, I not only fail to realise any valid objection thereto, but am forcibly impressed with the conviction that, in such and like cases, the natural public solicitude may be legitimately gratified without in any degree impairing professional morality; as a matter of fact, indeed, under the implied limitations the prescriptive custom of issuing signed bulletins has an evident meaning and the sanction of weighty precedents. Moreover (and the question may, I think, fairly be asked), if the signatures of the faculty in attendance be deemed relevant and essential in bulletins relating to Royalty, why should the principle be regarded as irrelevant and objectionable in cases of special note, though of minor national importance? Be that as it may, it is, I apprehend, to the form rather than to the substance of bulletins that exception is generally taken—inasmuch as when the desired information is simply recorded in a newspaper paragraph, but without the customary signatures, no grave objection would appear to be raised. The conventional practice, withal, is one that it has hitherto been found impracticable or inexpedient to prohibit; and whenever the question of its abuse unhappily arises, it should be ethically determined according to the essential and collateral incidents of the particular case. At the same time the multiplicity of bulletins, the ill-judged flourish of titles and degrees, and the insertion of unnecessary details are always open to obvious objection and reproof. Need I add that personal modesty and good taste—two important factors which could not fail to exert a healthy restraining influence in the framing of bulletins—are natural gifts not always to be found in one and the same person, much less are they equally shared by all alike. Be that as it may, in view of the non-existence of any rule, written or traditional, by which the faculty should be governed in issuing bulletins (by some regarded, rightly, as a possible mode of covert medical advertising) in the illnesses of distinguished patients, I should hail with much satisfaction the authoritative utterance of the respective Royal Colleges—jointly or severally—on the subject which would tend to allay contention, and thereby promote the true interests of the profession—an appeal which I would hope will sooner or later meet with an effective response in the form of a carefully-defined rule. Meanwhile, in the hope of averting contentious criticism, and so far to promote professional harmony, I would suggest, as ethically essential—

That in all cases of illness, except in the Royal Family, or of notable personages of national interest (in which professionally authenticated daily reports are rendered more or less imperative with the view to allay public anxiety), the medical attendant or attendants shall loyally withhold their signatures from bulletins; and, further, shall not allow their names to appear in any paragraph published in the newspapers relative to their patients; a contrary course, in so far as it may constitute a covert mode of unprofessional advertising, is opposed to the best traditions of the faculty and justly condemned by it, as are all oblique, indirectly inspired, and unauthorised communications to the lay press.

Practitioners, moreover, will best consult their own honour and dignity, and true personal interests withal, by a conscientiously rigid but courteous refusal to be interviewed by reporters, or other non-related persons, with reference to the illness of patients; in regard to whom the desired information should emanate solely from, and its responsibility (clearly expressed) be accepted by the patient or his family.

In a word, the principle enunciated in the following old Hippocratic adjuration should constitute the simple rule and guide of the Faculty of Medicine:

"Quæcunque inter curandum videro audiverove, siquidem ea effari non expediat, silentio suppressurum."

The address of Professor Maragliano, Secretary-General of the International Medical Congress, should have been given as Genoa, and not as stated in the last number of the Journal.

Presentation.—At the last meeting of the Court Bold Robin Hood, A.O.F., Dr. Iles, the late Medical Officer of the Court, was presented with an illuminated address, as a mark of respect and esteem.

In the forthcoming issue of Mr. Howe's *Directory of Metropolitan Charities*, the editor estimates the approximate income for the present year of all the charitable institutions having their headquarters in London to amount to £5,549,500.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

Subscriptions to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, JANUARY 6TH, 1894.

METROPOLITAN ASYLUMS BOARD STATISTICS.

The Metropolitan Asylums Board has emerged from its earlier condition of a mere Poor Law department, and now stands before the public as one of the great institutions of the metropolis, an institution which not only takes the lead in regard to preventive medicine, but touches the interests, and threatens to enter into the family life, of the great majority of dwellers in this great County of London. The definition of what is isolation, and of what is meant by the term "proper lodging and accommodation," expands year by year, and if once a sufficiency of beds is provided to deal completely with an epidemic, there is but little doubt that the sanitary authorities will press for the removal of infectious cases from a larger and larger circle. Thus the whole of London will gradually become personally interested in the good governance of the hospitals of the Asylums Board. This is our excuse, if indeed any were needed, for returning again to the question of the mortality of the cases treated in these institutions.

The bald fact that, while the mortality of scarlet fever in London among cases which were treated at home amounted to only 2.3 per cent., that of cases treated in the hospitals amounted to 6.4 per cent., and that, in regard to diphtheria, home-treated cases died at the rate 22.5 per cent., against hospital cases at the rate of 29.1 per cent., is so important that a considerable space in the Report of the Asylums Board is devoted to an exposition of the fallacy of statistics as a means of gauging hospital non-success in relation to particular kinds of disease. It is pointed out, properly enough, that we have in such matters to deal not with quantity alone, but with quality: the quality of the cases admitted to the hospitals varying enormously in different places and at different times. Attention is also drawn to the fact that a very considerable number of patients are so ill on arrival that they pass away in periods varying from two to thirty hours after their admission, and that some of them are moribund when they come in.

All these things are perfectly true, but it is not quite certain that the inference is permissible that the hospitals are receiving specially severe cases, and that their mortality is therefore not comparable with that outside. While it is certain that many cases are brought to hospital when *in extremis*, it is also true that a large number are not removed at all because their condition makes removal impossible; and we are inclined to doubt whether the hospitals can fairly take credit for their desperate cases so long as we have no means of eliminating from the home-treated ones those which equally rapidly sink after the diagnosis of the disease becomes possible. Nay, we may go a step further and say that the probability is that there has been no such picking out of cases as is here suggested. We are told that the ambulance arrangements are so perfect that within a very few minutes of the receipt of a message, either from Norfolk House or direct from the patient, the ambulance is on the road. Certainly no selection is possible by the Board's officials, and as for the local medical men there has been no inducement to any of them to limit his applications. The hospitals have been popular. During a considerable portion of the epidemic it has been a scramble for beds; first come first served has been the rule, and even if any selection were made preference was given not only to those who were desperately ill, but to those who were likely to act as "foci" of disease. We ought to know a good deal more about the cases which applied but failed to obtain admission before we can allow the hospitals credit for a specially selected set of bad cases.

It should be pointed out moreover that, granting all the report says on the subject, and admitting the right to deduct the 122 cases of scarlet fever "practically moribund" on admission, the comparative mortalities even then stand—home treated, 2.3 per cent.; hospital treated, 5.5.

As regards diphtheria the difference is not so great, but here another factor crops up which is not so prominent in relation to scarlet fever, namely, the very different mortality between the different hospitals. Scarlet fever death-rates range from 5.05 at the South-Western to 7.68 per cent. at the Eastern Hospital, but the deaths from diphtheria vary from 21.83 at the North-Western to the frightful percentage of 56.6 at the South-Eastern. Naturally it will at once be imagined that this great difference must depend upon some variation in the type of the disease in the districts served by these two hospitals, but exactly the reverse seems to be the case if we may judge by the Registrar-General's returns for the year. Taking the parishes which contributed fifty cases and upwards to the North-Western Hospital as indicating those which it mainly served, we find Paddington, St. Marylebone, St. Pancras, and Islington its principal source of supply, although of course cases came also from other parts. The diphtheria mortality of these parishes was 0.4 per 1,000. The South-Eastern Hospital, however, whose numbers were much smaller, drew chiefly from St. Saviour's, St. Olave's, Camberwell, Greenwich, Woolwich, and Lewisham, from each of which upwards of ten cases were sent; and in these parishes the mortality from diphtheria amounted only to 0.28 per 1,000 of population. Hence we find nothing in the local mortality as published by the Registrar-General to explain the excessive proportion of deaths at this particular hospital.

Another matter of great interest, in which the hospitals seem to differ a good deal, is the occurrence of post-scarlatinal diphtheria. Dr. Caiger, of the South-Western Hospital, has shown in a most striking manner the circumstances under which this complication has arisen, connecting it in a most definite way with overcrowding, and especially with want of floor space; and if equally careful observations should show the same relationship in other

hospitals the conclusion would be inevitable that the crowding and the continuous occupation of the wards under the control of the Asylums Board is already having a deteriorating influence upon the patients.

The facts point strongly to the necessity for the appointment of a chief medical officer, having under him a competent pathological department, who should visit the various hospitals and ensure some sort of uniformity. No one can rise from a perusal of the report of the Asylums Board without being struck by the lack of any orderly system in the manner in which the reports of the medical officers to the different hospitals are draw up, and the consequent untrustworthiness of the statistics founded on them. How they have been compiled we do not presume to say; probably each medical superintendent put down what he though interesting, and then a clerk, innocent of medical knowledge, tabulated the matter.

We are told that among the complications of diphtheria one of the most common was croup, occurring in 7.9 of the cases under treatment; but on referring to the table whence this information is derived, we find that croup is only mentioned in relation to two out of all the hospitals, and tracheotomy only in one, the Eastern, whereas we have it from the medical reports that at the North-Western the operation was performed 58 times, and at the South-Eastern 22 times. Rhinitis, to the aggregate of 236 cases, occurred in three hospitals where rhinorrhœa was unknown; in a fourth hospital just the opposite held good; and at the South-Eastern, where 56 per cent. of the patients died, neither the one nor the other seems to have been observed. This latter hospital also seems peculiar in the extreme freedom of its diphtherial cases from albuminuria, that complication having occurred only once out of its 138 patients, whereas at each of the other hospitals it occurred over 100 times; and also in having no cases either of otitis or otorrhœa, one or other of which diseases (but never both) occurs at each of the other hospitals. Obviously there is a complete absence of system in the methods of tabulation, similar cases being entered under different headings at the different hospitals, and in some not entered at all.

Turning to the table of complications in cases of scarlet fever, we find that "diphtheria" occurred in four hospitals, and we regret to say that prominent amongst these are the two hospitals devoted to the reception of convalescents.

From four of the hospitals, however, no such cases are reported, but two of them return cases of "diphtheria during convalescence;" another, 169 cases of "diphtheritic condition of fauces;" and one reports cases of "diphtheritic condition of fauces on admission." "Croup," again, only occurred at two hospitals, but in them in considerable numbers. We need hardly say that these places were free from "laryngitis," which, however, occurred at three other hospitals which were free from "croup;" and one hospital, which had neither "croup" nor "laryngitis," had one case of "laryngeal obstruction, tracheotomy"—a complication elsewhere apparently unknown. Compilations of this character are of very little value for statistical purposes, and we can only hope that the Asylums Board has better grounds than such-like figures for its belief that the mortality of the cases in its hospitals is diminishing year by year. What the exact meaning of the facts may be it is difficult to say, but it is a statement from which people may derive a certain amount of satisfaction, that the mortality per cent. of cases of diphtheria treated in the hospitals of the Board has gone down from 59.35 in 1888 to 29.35 in 1892.

AN ANTIVIVISECTIONIST FAILURE.

AMONG a number of useful little books published in the *Romance of Science Series* by the Society for Promoting Christian Knowledge is a volume entitled *Our Secret Friends and Foes*, by Professor P. F. Frankland, F.R.S. The work gives a popular account of the present state of knowledge concerning micro-organisms. It is not our intention to review the book here, nor to offer any opinion upon its merits or demerits as a scientific production; it will suffice to say that the author is well known as a chemist who has made the study of micro-organisms a speciality. It would scarcely be credited outside our own country that the praiseworthy efforts of a philanthropic society to interest the general public in the various developments of modern science, by placing cheap volumes written by acknowledged experts within the reach of every class of reader, should form the subject of a hostile manifestation. Nevertheless, this has actually occurred, and the manifestation in question emanated from the Victoria Street antivivisectors. The Secretary of this Society issued a circular last July calling attention to certain passages in the book which were "calculated to encourage the unjustifiable and demoralising practice of experimenting on living animals." This circular, a copy of which has come into our possession, was sent to each member of the Society for Promoting Christian Knowledge, calling upon him or her, if the objections to the book were considered valid, to write to the Editorial Secretary and "protest against the continued publication of it."

It does not in the least concern us who prompted the issue of this circular—by what means the "protests" were secured, nor how much pressure it was necessary to bring to bear upon each of the "protestors." The Lord Chief Justice, as might have been expected, was amongst those who protested, and that the weight of his opinion should not be frittered away in the form of a mere signature, he wrote a letter which was printed in full in the circular, together with one from Canon Wilberforce. Lord Coleridge's letter was also sent at whose instigation we do not care to inquire—to the daily papers, and in order to make our story more complete we append a copy of it:

1, Sussex Square, W., 27th June, 1893.

Madam,—I have signed this paper, not exactly with pleasure, for the whole subject is utterly odious to me, but with great willingness. I have never seen any reason to change or qualify the opinions I expressed many years ago in an article on vivisection which your Society reprinted. Should the book in question not be withdrawn by the Society for Promoting Christian Knowledge, I shall at once withdraw myself from it, as it will in my judgment become a Society for the Promotion of Unchristian Knowledge. Very good men, I am quite aware, take a different view, and will continue to support the Society; but a man, however obscure, must act upon his convictions, especially when they have not been hastily taken up and are not quite ignorantly maintained.—I am, Madam, your obedient servant, (Signed) COLERIDGE.

Miss Monro.

Canon Wilberforce was more concise, but not less decisive in his acquiescence:

The Deanery, Southampton, June 3rd.

Dear Mr. Bryan,—Unless this iniquitous book is withdrawn, I shall at once withdraw from the Society for Promoting Christian Knowledge, and do my utmost to induce others to do so also.—Yours,

(Signed) BASIL WILBERFORCE.

It may appear strange to our readers that the opinions of an eminent lawyer and a philanthropic divine on a subject of which they have no special knowledge should be considered of such importance by the Victoria Street people. But we have no desire to raise controversial matter, as our present object is simply to show by the narration of facts that these well-meaning, but utterly mistaken, agitators against a perfectly harmless little book have done their own cause no manner of good possibly some harm and have indirectly been the means of helping the sale of the work and of raising the status of the Society which has published it to a higher level in the opinion of scientific men. It is not the first time in the history of scientific development that an ill-advised attack has defeated its own object.

We do not know how far the members of the Society for Promoting Christian Knowledge, to whom the circular was addressed, may have been influenced by the legal and clerical denunciations quoted above, but the result was that a protest was signed by from 60 to 70 people, and lodged with the Secretary in July. Whether all these protestors had read the work; whether they were competent to form an opinion of the statements objected to; whether, in fact, they had weighed or were capable of fairly estimating the evidence put before them in the form of quotations snatched from the context, we have no means of ascertaining. More than half the protestors were clergymen of various grades, and about fifteen of them were women. One reverend gentleman appears to have been quite carried away by his emotions, for, not content with putting his signature, he added: "Shocked beyond measure to find that the Society has sanctioned the tearing of unchristian knowledge, by this atheistic augury, from the entrails of crucified beasts, '*et propter vitam vivendi perdere causas.*'"

According to one of the rules of the Society:

> Any book or tract published by the Committee of General Literature and Education which shall be objected to by three members of the Society at a general meeting shall be referred, *without discussion or division*, to the Standing Committee, together with a written statement of the objections, signed by the objectors, and such explanatory remarks as the author and General Literature Committee respectively may see fit to submit; and the decision of the Standing Committee shall be final. If the Standing Committee shall require any work, bearing the author's name, to be altered, it shall not be republished by the Society without the author's consent.

It is quite unnecessary for the readers of this Journal to be troubled with the details of the objections put forward in the original circular and the final protest. We should only have to give the old story which has been told and retold ever since the advancement of physiological science in England has been hampered by a pseudo-sentimentality which does us little credit as a nation. The protestors of course consider it very much to our credit that it has not been found possible to establish a Pasteur Institute here. They plead, as one among other objections to the work, that the author has stated that "preventive medicine, which is essentially a product of the present century, has advanced with giant strides in consequence of the rapid growth of our knowledge concerning these microscopic foes and their habits. In this great advance we have in England unfortunately lagged behind. Signs are not wanting, however, that public opinion is slowly changing in its attitude towards this branch of science, and is beginning to appreciate the importance of such beneficent investigations, which it is all but impossible at the present time to carry on in this country"—which statement is perfectly true, the Victoria Street Society notwithstanding.

But we must hasten to the *dénouement*. The Standing Committee met on November 6th, and announced their decision in the following terms: "The Standing Committee, having taken into consideration the statement of objections made under Rule xxxvi against the book entitled *Our Secret Friends and Foes*, by Professor P. F. Frankland, and the remarks thereon, submitted respectively by the author and the General Literature Committee, are unable to see sufficient reason for withdrawing the book from the Society's list."

The Society is to be congratulated on the sound common sense displayed in this decision. It may be that a few secessions from the Society will result, and among these is already to be enumerated that of Lord Coleridge, recently announced, but the withdrawal of members who see anything to cavil against in the plain statement of the way in which man and animals have been benefited by the knowledge of the methods of alleviating suffering and eradicating disease gained by the pursuit of the experimental method in physiology will, in the long run, only increase the total strength of the Society, even if diminishing its total membership by an unimportant section of misguided sentimentalists.

Sir Richard Quain, Bart., President of the General Medical Council, has accepted an invitation to inaugurate formally the new Medical School of the University College of South Wales and Monmouthshire at Cardiff on February 14th.

The Paddington Vestry have under consideration a recommendation from the Sanitary Committee to the effect that a lady sanitary inspector be appointed tentatively for one year at a salary of £60. They have been anticipated in this respect by Marylebone and other London vestries, which realise the need of lady inspectors in the enforcement of sanitary law at places of business where females are mainly, if not exclusively, employed.

It is a notable fact that while the subscriptions to the memorials of Monsieur Gounod and Dr. Jowett have rapidly reached most highly satisfactory figures, upwards of £4,000 in each case; the memorial to Sir Richard Owen, inaugurated under Royal auspices and most professed approval of the civilised world, as expressed in the periodical press, has as yet reached only £1,000. The contrast is somewhat humiliating to lovers of science and to those who had supposed that the memorial to a man whose eminence had shed the highest lustre upon his country and whose services were recognised throughout the world would readily receive adequate support. Evidently, however highly science may be thought of and spoken of, those who admire it are not very ready to back their opinions.

Surgeon-Major Ernest Harrold Fenn, of the Coldstream Guards, who has been appointed Companion of the Indian Empire, is the only medical officer whose name appears in the list of New Year's honours. He has for the past five years filled the responsible post of surgeon to the Marquis of Lansdowne, Viceroy of India; his previous services include the Afghan war of 1879, when he accompanied Lord Roberts to Cabul, and was with his column during its famous march to Candahar; he was under fire at the battle of Candahar, and was mentioned in despatches. On his return to England he was appointed surgeon in the 3rd Battalion of the Grenadier Guards; later on he accompanied the Guards' Brigade to Egypt, where it suffered severely from typhoid fever. In November, 1888, he accompanied the Marquis of

Lansdowne to India as surgeon to the Viceroy, and recently he has formed one of the Mission, under Sir Mortimer Durant, to the Ameer of Afghanistan. During his stay at Cabul he was requested by the Ameer to operate upon one of his officials for stone in the bladder. We congratulate Surgeon-Major Fenn on the well-earned honour Her Majesty the Queen has been pleased to confer upon him.

THE results of the recent Third M.B. examination (Medicine, Surgery, and Midwifery) at Cambridge were published in the JOURNAL last month. The most striking feature of the lists is the large number of St. George's men, one in every four names in them being that of a student from this school. The St. George's contingent, it is not uninteresting to notice, includes three ex-university oarsmen—Messrs. Gardner, Fison, and Noble.

PAROCHIAL MEDICAL RELIEF.

AT an inquest held a few days ago, when a witness had characterised a parochial medical officer as "inhuman" because he declined to prescribe for a child without an order from the relieving officer, Dr. Danford Thomas, coroner for Central Middlesex, made some sensible observations. He stated that the law compelled no parochial doctor to visit or prescribe for a parish patient unless by order. The reason for this was that there must be regular hours for the attendance of relieving officer and surgeon or it would be impossible for the various sick persons to be attended to. If the doctor was liable to be called to a sick poor person whenever any person chose to send to him, often after the patient had been ill for days, he would have no leisure and no rest, which were most essential to his proper attendance on the sick poor who had applied for an order in the usual way. Rules and regulations were essential in the interests of the sick patients as well as of the doctor himself.

SMALL-POX AND VACCINATION AT LEICESTER: STRIKING TESTIMONY.

SOME interesting vaccination statistics were given by the chairman of the Sanitary Committee, at the last meeting of the Leicester Town Council. It appears that there have been 281 cases of small-pox treated in the hospital during the past year, and, of these, 126 were unvaccinated (13 died), whilst 155 had been vaccinated in infancy, but not revaccinated: of these, none died. Still more significant is the fact that of the unvaccinated, 83 were children under 10 years of age, that is, 65.9 per cent. of the unvaccinated: of these 83, 9 died. Thus Leicester has suffered severely as regards her infantile unvaccinated population—much more severely proportionately than any other town. The chairman of the Sanitary Committee went on to make the striking and most satisfactory statement "that there had been no case of a vaccinated child under 10 years of age treated for small-pox!"

DISINFECTION AFTER DEATH BY PHTHISIS.

DR. HAY, the health officer of Aberdeen, has made the suggestion to his sanitary authority that disinfection of rooms, bedding, and clothing used by persons who have died from phthisis and other tuberculous diseases should be practised as a useful measure. In the absence from the list of diseases compulsorily notifiable of phthisis and allied maladies, Dr. Hay thinks that this smaller safeguard of *post-mortem* disinfection will have value, not only in eradicating as far as possible the disease from the fatally invaded house, but also as serving to indicate to the community the infectious nature of that disease. Dr. Hay would deal with all forms of fatal tuberculous sickness alike, although the danger of infection is probably much greater in the lung form than in any other. He is about to prepare a set of instructions as to precautions to be observed by medical practitioners during the life of sufferers from these diseases.

THE BRITISH MEDICAL ASSOCIATION IN SCOTLAND.

IT is proposed to hold a joint meeting of the Edinburgh (Fife and Lothian), the Stirling, Kinross, and Clackmannan, and the Border Counties Branches of the British Medical Association, at Edinburgh, on February 2nd. The meeting will take place in the University Surgical Theatre of the Royal Infirmary, at 4 P.M., and the members will dine in the Waterloo Hotel at 6.30 P.M. Professor Annandale, the President of the Edinburgh Branch, will occupy the chair. Those who propose to exhibit patients, specimens, or apparatus, ought, as early as possible, to send intimation to Dr. Philip, Secretary of the Edinburgh Branch, 4, Melville Crescent.

MR. C. G. WHEELHOUSE.

WE regret to learn that Mr. C. G. Wheelhouse, Direct Representative on the General Medical Council, and one of the Vice-Presidents of the British Medical Association, in whose service he has expended much time and energy, has been seriously indisposed at his house at Filey. He caught cold on a journey to attend the Leeds Assizes, and suffered an attack of congestion of the lungs. From this he is now recovering, but, acting under the advice of Dr. Clifford Allbutt, he intends to pass the winter in the south of England. We may venture to express the hope, which will be heartily joined in by his former colleagues in Leeds and by the members of the British Medical Association in general as well as by the residents of Filey, where his influence has always been exerted in support of any movement for the improvement of that watering place and for the benefit of the fishermen, that he may shortly be fully restored to health.

THE VICTORIA CROSS.

IT is worthy of note that in addition to Surgeon-Major Lloyd, whose decoration with the Victoria Cross is this week announced, two other medical officers have also received the Victoria Cross for their conduct during the operations in Burmah—namely, Surgeon-Captain J. Crimmin, of the Bombay Establishment, and Surgeon-Captain F. S. Le Quesne, of the Army Medical Staff. Surgeon-Major Lloyd, who was 40 years of age on January 1st, was appointed Surgeon in the Army Medical Staff August 4th, 1878, and Surgeon-Major August 4th, 1890.

THE OUT-PATIENT QUESTION.

A CONFERENCE was held recently between the honorary medical staffs of the three medical charities of Leeds and the Leeds Workpeople's Hospital Fund. The result is thus summed up by the *Leeds Mercury*: "It was generally admitted that something required to be done to correct the prevailing evils, which are (1) the overcrowding of the out-patient department with trivial cases; and (2) the application for treatment by people who can well afford to pay for medical advice. It was felt, however, that it was a matter of delicacy, and also of great difficulty; and, though some suggestions were made, no one could say how the problem was to be solved. Every speaker recognised that it was a matter for serious deliberation. That being so, no resolution was passed." This is, in fact, the ordinary termination of such meetings a general admission that something ought to be done, combined with an utter inability to do anything. The circumstances in Leeds are much like those in other great towns. The number of out-patients given in the latest report of the General Infirmary is 62,859, or about one-sixth of the whole population of Leeds. Of these, however, the majority come from outside the city; but, then, this is only one out of three charities represented at the meeting. These are the usual complaints—the triviality of many of the cases, the ability of many of the patients to pay, the load of useless labour thrown on the medical officers, the injustice to the medical men of the neighbourhood. And we may say

that there is the usual unwillingness to consider any scheme which can even promise a radical remedy. Yet such a scheme has been often proposed; and, without binding ourselves to its support, we may say at least that it deserves discussion by those who, like the Leeds authorities, are feeling the evils of the present system:

Draft Scheme.

1. The casualty department to be strictly separated from the out-patients', restricted exclusively to the treatment of street accidents and sudden illnesses occurring in the streets, and only "first aid" to be given. No repetition of visits.

2. The out-patient department to be open for consultation only (or in selected cases, at the discretion of the medical officers, for treatment also) to such persons as shall have previously forwarded a recommendation from some medical authority and some lay governor or institution jointly. These recommendations to entitle the bearer to have a day fixed for consultation.

3. Only a given number of new patients to be received each day by each out-patient medical officer.

None of these rules to apply to former in-patients who are directed to attend as out-patients.

All recognised medical charities within the radius of the hospital to have a right to send cases for consultation, under Rule 2, to the out-patient department, and the signature of the proper officer to entitle the patient to have a consultation fixed.

It is urged in behalf of such a system that the cases properly belonging to the out-patient department are never urgent. All urgent cases would apply as in-patients, and ought to be admitted on their urgency. We wish that the question could be adequately discussed on the basis of some definite scheme on which action could be taken.

THE HEALTH OF DUBLIN.

The Public Health Committee of the Dublin Corporation have drawn up a report on the recent outbreak of typhoid fever, and the causes to which that has been attributed. There is also a report from Sir Charles Cameron. With regard to the condition of the dairy yards, it is asserted that they are regularly inspected, that they have diminished in number, and that if they are kept clean there is no law to enforce their removal. The committee recommends the immediate preparation of a report on the street sewers, as to line, flow, section, construction, and condition. This intention, however, was expressed in January, 1892, and in January, 1894, its fulfilment without delay is urged. A street will be selected, in which every cross drain will be proved by hydraulic test, and wherever faults are found the occupiers and owners are to be required to correct them at once. As to private slaughter houses, the report recommends the purchasing of these, and that no new licences shall be granted. A further recommendation is that the daily cleansing of the dairy yards shall be undertaken by the Corporation, and that a system of daily removal of all stable manure shall be organised.

THE DISCOVERY OF CHLOROFORM.

The *Century Magazine* for January, which is an exceedingly brilliant number, contains a paper on "Sir James Simpson's Introduction of Chloroform," written by his daughter. Following up the American discovery of sulphuric ether as an anæsthetic, we are told of Simpson's infinite pains and frequent disappointments in his search for a more effectual means of avoiding the agonies of operation. Sir James was daring even to rashness in his experiments, and, as a rule, tried the effect of agents upon himself, more than once endangering his life in doing so. The account of the first trial of chloroform reminds one somewhat of the Bacchanalian orgies of Squire Western and his bucolic companions; and, despite the weighty interests with which the sitting was fraught, we cannot repress a smile at the ludicrous disappearance of the investigators "under the table." On returning home after a weary day's labour, Dr. Simpson, with his two friends and assistants (Drs. George Keith and Matthews Duncan), sat down to their somewhat hazardous work in Dr. Simpson's dining room. Having inhaled several substances, but without much effect, it occurred to Dr. Simpson to try a ponderous material which, on account of its great weight, he had hitherto regarded as no use. It happened to be a small bottle of chloroform. It was searched for, and recovered from beneath a heap of loose paper; and, with each tumbler newly charged, the inhalers resumed their occupation. Immediately an unwonted hilarity seized the party; they became bright-eyed, very happy, and very loquacious, expatiating on the delicious aroma of the new fluid. The conversation was of unusual intelligence, and quite charmed the listeners—some ladies of the family and a naval officer, a brother-in-law of Dr. Simpson. But, suddenly, there was a talk of sounds being heard like those of a cotton mill, louder and louder; a moment more, then all was quiet; then a crash. On awaking, Dr. Simpson's first perception was mental. "This is far stronger and better than ether," said he to himself. His second was to note that he was prostrate on the floor, and that among the friends about him there was both confusion and alarm. Hearing a noise, he turned about, and saw Dr. Duncan beneath a chair; his jaw had dropped, his eyes were staring, his head was bent half under him; he was quite unconscious, and was snoring in a most determined and alarming manner. More noise still, and much motion. And then his eyes overtook Dr. Keith's feet and legs making valorous efforts to overturn the supper table, or more probably to annihilate everything that was on it. After such convincing testimony to its power, Sir James lost no time in publicly proclaiming the virtues of the new anæsthetic.

THE INFLUENZA EPIDEMIC.

There is good ground for believing that the epidemic of influenza, though it has extended in certain directions, has on the whole diminished during the past three weeks. In London there seems to be no doubt that it is on the decline. It would appear that the diminution began to be felt in London and Berlin at about the same time—that is to say, in mid-December, 1893. The deaths from diseases of the respiratory organs in London, which were a little below the average in the week ending November 11th, 1893, rose rapidly in the following weeks, and were nearly twice the average in the week ending December 9th. Since then there has been a marked decline, and in the last week of 1893 they were below the average. The deaths directly attributed to influenza have also declined. Our Edinburgh correspondent states that the epidemic has almost entirely disappeared from that city. Extensions of the epidemic are to be recorded in some country districts, especially in Hertfordshire, Northamptonshire, Cambridgeshire, and Lincolnshire. Late in December, 1893, Copenhagen became infected, and the epidemic has been very extensive, as many as 1,835 cases having been recorded in the last weekly return.

CHEMISTS AND DRUGGISTS AND THE PHARMACY ACTS.

Chemists and druggists possess in the Pharmacy Acts provision for the protection of their material interests which contrasts, favourably for them, with the legal protection afforded to those engaged in most other occupations. In addition to having individually a legal recognition, they have also, in the Pharmaceutical Society, a representative organisation, incorporated by Royal Charter, through the medium of which considerable influence could be exercised for giving effect to the preferential advantages it offers them. It is remarkable, therefore, that the requirements of the Pharmacy Act, 1868, as well as the powers conferred by it, have hitherto been, to a very great extent, disregarded and inoperative. It was only by strenuously pressing upon the Council of the Society the necessity of taking cognisance of the serious mischief resulting from general and systematic disregard of the law relating to the sale of poisons, that we succeeded in awakening that body to action in this matter. Its action has already had some beneficial effect, and it

gives promise that, in the future, there will be better provision for the safety of the public in regard to the supply of poisons. But we have reason to believe that the action taken by the Council of the Pharmaceutical Society in this respect has not met with approval from many chemists and druggists whose tendencies correspond more or less with ideas favourable to the irregular practices which have hitherto prevailed in the sale of poisons. We do not mention this as a reproach, for the interval which has elapsed since the passing of the Pharmacy Act of 1868, bringing all chemists and druggists into one recognised body, has necessarily been a period of transition. But there has now been time for retrograde tendencies to have become extinct. If such a feeling as that we have referred to really exists to any great extent among chemists and druggists, it must be characterised as singularly erroneous, and inconsistent with the position occupied by them. Moreover, there can be little doubt that in regard to the more complete settlement of the question in which we take especial interest, the prevalence of such a feeling among chemists and druggists would materially help to impede the administration of the Pharmacy Act in the spirit of its original intention. We have felt it to be our duty, in regard to the interests of the general public, to urge upon the authorities that the provisions of the Pharmacy Acts should be more thoroughly enforced, and are gratified at finding that our endeavours are being attended with success. But we cannot overlook the fact that the duty, thus undertaken, should long since have been performed by chemists and druggists, or on their behalf, not only because the obligation of seeing that the provisions of the Pharmacy Acts are upheld, lies upon them as members of a privileged body; but also because the maintenance of those provisions is directly conducive to the protection of their material interests. It is by affording hearty support to the work which is being undertaken in this direction by the Council of the Pharmaceutical Society that chemists and druggists may obtain a remedy for grievances of which they complain, and at the same time justify the advantages conferred upon them by law, out of regard for the interests of the general public.

POST-GRADUATE TEACHING IN LONDON.

The London Post-Graduate Course will commence again on January 15th, and the prospectus before us shows that the arrangements have been made to cover almost the whole year; so that at whatever time a man has an opportunity of coming to London, he will be pretty sure of finding lectures and demonstrations going on to suit his convenience. Lectures and demonstrations will be given at the following places: Brompton Consumption Hospital, Queen Square Hospital for Paralysis, Children's Hospital, Great Ormond Street, Moorfields Ophthalmic Hospital, Blackfriars Skin Hospital, Bethlem Hospital, London Throat Hospital, Cleveland Street Sick Asylum, King's College, and the Parkes Museum. It is hoped also that it will be found possible to arrange for some practical classes in gynæcology. All information regarding the lectures may be obtained from the secretary, Dr. Fletcher Little, 32, Harley Street, W. These courses have now been going on for several years, and the popularity of the lectures has been such that, as we are informed, upwards of a hundred post-graduate students were on the books during the winter term just over. It is a healthy sign that this institution should have grown so rapidly to such large dimensions. Few would have thought some years ago that so many medical men would have been found willing to spend their holidays in lectures and ward work, and in the endeavour to graft on their practical experience the precision of the class room. Whether it is the result of competition or of a growing desire to be in all things up to date, the fact remains that men who have been in practice a few years find it an advantage to come to London for a time—a couple of weeks or a couple of months, as may be most convenient—in order to refresh their knowledge. The benefit to the public is incalculable. Medicine and surgery are not crafts one training in which will serve for a lifetime; new things are constantly being discovered which it is difficult indeed for a man in country practice to follow or keep up with, and it is immensely to the advantage of the public that every facility should be offered to medical men for going through an occasional course of post-graduate study. So important in fact does this seem that we wonder no attempt has been made to place post-graduate teaching on a permanent basis by providing for it a permanent home. This would be an object well worthy of the philanthropy of some of those wealthy people who are anxious to turn their wealth to useful purposes. In all ages men have been found willing to establish colleges for the teaching of the young. Education, however, does not now end with youth; in medicine especially advances are so great that it must be constantly renewed. Why, then, should not a post-graduate college be established as a permanent institution, with all the resources and authority which a permanent home would give it? Its utility to the profession would be undoubted, but even greater would be its advantage to the public, whose health and life so often hang on the skill of their medical advisers.

SOOTHING SYRUPS.

The advocates of free trade in poisons are at present rejoicing over the encouragement they have recently received in a judgment declaring that the application of the term "poison" to preparations containing small amounts of morphine is "an abuse of language." Upon that authority a circular has been issued informing the holders of stamped medicine licences that they are at liberty to disregard the Pharmacy Act in the sale of such articles. As a practical commentary upon this proceeding we find in the *Manchester Examiner* of December 28th, 1893, a report of an inquest upon a child which had been dosed with a popular soothing syrup, and was certified to have died from narcotic poisoning. Medical evidence showed that the syrup was not safe to give to any child, and that the doses administered were far too large. One of the jury suggested that a bottle of the syrup should be analysed so that such cases might be stopped, but that object cannot be effected unless the law relating to such preparations is enforced. The one used in this instance belongs to a very numerous class containing morphine in small amount, but none the less dangerous when given to children, and cases are constantly occurring in which the use of these preparations is attended with fatal consequences. In the face of that notorious fact there is the strongest possible reason for refusing to accept the plea that they contain only a minute amount of poison as a justification of their sale without due precautions.

THE CHURCH AND SANITARY WORK.

At the December meeting of the Church of England Sanitary Association, an interesting paper was read by Dr. Louis C. Parkes on "The Prevention of Consumption amongst the Poor." Considerable stress was laid on the predisposing causes which lead to the development of the disease. Damp, dirt, and overcrowding, cramped and sedentary occupations, and the inhalation of dust and steam, with various depressing influences, were pointed out as rendering people liable to consumption. When to these are added overwork, anxiety, and insufficient or improper food, we see at once how enormous is the task of materially lessening the predisposing causes. So long as house rent absorbs so large a proportion of the wages of the working classes as it does at the present time, overcrowding at home is sure to continue. Rent is the one item of expenditure which can be squeezed, but unfortunately only at the expense of comfort, decency, and health. Dr. Parkes says that dirt and overcrowding in dwelling houses are more easily remedied than dampness of walls and floors, which of course is true enough so far as regards the tenant; but as regards the

local authorities the matter is reversed. Nothing is more difficult for them than to regulate overcrowding, whereas in regard to dampness they have only to shut up damp houses as unfit for habitation. Much as the individual can do to prevent the spread of consumption, there are points in regard to which none but officials can effectually intervene. Fortunately, both in regard to the condition of workshops and the structural fitness of dwelling houses, the local sanitary authorities have now very large powers, if the public will but back them up in putting them in force. The subject of the prevention of consumption is a very large one, and will be found, if carried to its logical conclusion, to tread on the toes of many interests.

LUCIFER MATCH WORKS.

A special report of the Committee on Chemical Works, drawn up in October and presented to the Secretary of State for the Home Department, has just been published as a Parliamentary paper. It deals entirely with the inquiries made as to lucifer match factories. Although the Committee have been unable to trace any cases of necrosis (except two at a well-known match factory) since the special rules were established, yet they are of opinion that danger from that disease exists where white or yellow phosphorus is used. The rules already in force require some alterations and additions, especially relating to better ventilation and periodical medical examinations. The practice of allowing persons to be employed in galleries above departments where fumes may arise is deprecated, and it is suggested that precautions should be taken for the extinction of fire in the boxing departments. There was some difference of opinion amongst the Committee as to whether it was advisable that a register should be kept with the names and addresses of persons employed in all dangerous trades, and in consequence alternative clauses are found dealing with this matter in the special rules appended to the report.

THE CHEMICAL WORKS INQUIRY.

The Departmental Committee appointed to inquire into the condition of the workers in the chemical industries has issued its report, with a series of special rules intended to mitigate, as far as may be, the dangers of their occupation. Trades to which special attention has been given are the manufacture of bleaching powder and the making of chrome compounds. The chief danger in the bleaching powder works arises from the evolution of free chlorine, and from the chloride of lime rising as a dust when it is moved. It is stated that the chlorine vapour is at times so strong that if a person unaccustomed to it were to pass the mouth of the chambers he would be knocked down; in fact, it is quite impossible to breathe within the chambers without a respirator, or "muzzle" as it is called, consisting of about thirty folds of flannel moistened with water to absorb the chlorine. It is not the mere labour of shovelling up the bleaching powder, but the hard work of drawing the breath through this thick mass of wet flannel, combined with the suffocating effect of such vapour as escapes absorption, which is the cause of the exhaustion which the work produces. "The men are obliged to inhale through the 'muzzle,' and exhale by means of the nostrils, otherwise they would be 'gassed.' The exertion of breathing through the thick folds of flannel shows itself by the red and puffed state of the men's faces and profuse perspiration on coming out of the chambers, which they are obliged to do at intervals during their work." Sometimes they can stay in half an hour; at other times not two minutes. The Committee report that the effect of the vapour and dust is to cause irritation of the mucous membranes, conjunctivitis, bronchitis, and asthma, and also to produce disease of the substance of the lung, leading in some cases to a form of consumption. Besides the recommendation of "goggles," and the occasional introduction of a drop of castor oil into the eyes, the chief suggestion of the medical report is that the "muzzles" should be wet with a solution of sulphite of soda instead of water. Water absorbs very little chlorine, and therefore the "muzzles" have to be enormously thick, but sulphite of soda exposed to chlorine becomes changed into sulphate, while the gas becomes hydrochloric acid, which is freely soluble and would therefore be absorbed by a much smaller thickness of moist flannel. The Committee state that among those who are employed in the manufacture of chrome compounds the mucous membrane of the nose is especially affected; "almost all the men working where dust was prevalent had either perforation of the septum, or had lost the septum altogether." Irritation was also set up in the throat and bronchial tubes, and many men suffered from "chrome holes" on the hands and arms, ulcers remarkable for their depth and slowness in healing, caused by the deposit of chrome dust, probably on sores and scratches. The use of solution of bismuth (the liquor bismuthi) is recommended for the purpose of moistening the respirators, and it is also advised that pieces of wool moistened with the same solution should be inserted into the nostrils, as it forms with chrome dust an insoluble compound of chromic acid and bismuth. There can be little doubt that the careful observation of the special rules suggested by the Committee will have some effect in mitigating some of the horrors of the chemical industries, but we fear that they will always remain among the most trying forms of labour on which man can be employed. The stifling vapours, the poisonous dust, the liability to be "gassed" by chlorine, or by the deadly sulphuretted hydrogen, the corrosion of the nose and skin, the destruction of the teeth, the employment in steamy and dimly lighted places, walking among unprotected vats of caustic alkali, a slip into which means death, a touch with it gangrene and ulceration, a splash into the eye incurable blindness, are all things which we gather from the report before us, are accepted as part of daily risks of these dismal industries.

MR. HOPWOOD'S FIASCO: THE FACTS AS TO SMALL-POX AND REVACCINATION.

Mr. Hopwood, M.P., has met with a small misfortune, if to be hoist with his own petard may be so described. He rashly asked the President of the Local Government Board whether Assistant Nurse Annie Flavel, of the Birmingham Workhouse, died of small-pox in the City Hospital on December 26th, 1893, and how often and on what dates she had been revaccinated. Sir W. Foster, in reply, was able to show from the medical officer's report that when she was appointed assistant nurse she admitted that she had never been revaccinated, and that, although revaccination was offered her, she did not accept it. The mother's statement also was that although her daughter had been vaccinated in infancy, she had never to her knowledge been revaccinated. This is exactly on a par with the experience gained at the small-pox hospitals. It is those who fail to get revaccinated who succeed in catching small-pox. The Committee appointed by the Epidemiological Society to examine the statistics in regard to nurses in attendance on cases of small-pox reported, that out of 1,500 such attendances, 43 contracted small-pox, and not one of these 43 had been revaccinated. Dr. Collie says: "During the epidemic of 1871, 110 persons were engaged in the Homerton Fever Hospital in attendance on the small-pox sick; all these, with two exceptions, were revaccinated, and all but these two escaped small-pox." The experience of the epidemic of 1876-77 was of the same kind, all revaccinated attendants having escaped, whilst the only one who had not been revaccinated took the disease and died of it. So in the epidemic of 1881, of 90 nurses and other attendants of the Atlas Hospital Ship (small-pox), the only person who contracted small-pox was a housemaid who had not been revaccinated. Dr. Edwardes, in his book on *Vaccination and Small-pox* (Churchill, 1892), says: "Of 734 nurses and attendants in the Metropolitan Board Hospitals, 79 had had small-pox

previously to their entrance; they escaped. Six hundred and forty-five were revaccinated on entrance; not one took small-pox; 10 escaped revaccination, and the whole 10 took small-pox." The last report of the Asylums Board, dealing with the year 1892, states that out of the 158 people employed at their Small-pox Hospital, two only contracted small-pox; one an assistant nurse who joined the staff on June 9th, and began to be ill on June 24th, three unsuccessful attempts having been made to revaccinate her; and the other a ward maid who joined on December 9th, 1892, and began to be ill on December 24th, three unsuccessful attempts at revaccination having been made after joining, but a fourth trial successfully on December 19th, when, of course, the small-pox incubation was well advanced. Compare this with the facts as to fever nurses. The same report of the Asylums Board states that "there were 2,137 persons employed during the course of the year, of whom 132, or 6 per cent., fell ill with fever, diphtheria, or measles, and 3 died." Of course, many of the nurses so employed were seasoned hands, and had had fever before. Evidently nurses catch diseases readily enough if they are fitted to receive infection, and yet the most infectious of all diseases—small-pox—they fail to catch, because by revaccination they are immune to the poison. We certainly are surprised to find an anti-vaccinator so far gone as to think that nursing statistics in regard to revaccination will help him; and we are glad Sir W. Foster was able to give Mr. Hopwood's ill-judged sally so effectual a quietus.

POISONING BY CARBOLIC ACID.

We were able to state last week that certain representations of the Pharmaceutical Society and the British Medical Association, on the subject of precautions against the ever-increasing number of carbolic poisonings, are under the consideration of the Government. The practice of keeping carbolic acid in bottles without labels or other distinguishing mark has been the cause of two more cases of accidental poisoning, one of them ending fatally. At a Christmas-eve party in Hull the acid was poured out in mistake for rum, and in one instance swallowed at a draught. We take this opportunity of expressing the hope that this matter will receive speedy attention from the authorities, whose approval of the recommendation to place carbolic acid in the "Poison" schedule is requisite for making precautionary measures compulsory. There is much reason for thinking that the sale of the undiluted acid might be placed under very stringent restrictions without interfering with the useful application of carbolic acid as a disinfectant. For that purpose one of the preparations in the form of powder would be much more convenient, while having the advantage of offering far less opportunity for misuse, and therefore not requiring to be labelled "Poison."

CHARGES AGAINST HOSPITALS.

On Saturday, December 30th, Dr. Kenny, M.P., held an inquest in Dublin regarding the death of a woman who died in Jervis Street Hospital of effusion of blood on the brain. It appeared that the deceased was found at the bottom of a stairs, and was brought by the police to Sir P. Dun's Hospital. It was sworn by a constable that he asked to have her detained, as she was unconscious, but the resident surgeon said she would be all right, and was to be taken away. She was then brought to Mercer's Hospital, where the resident medical officer said it would be a breach of etiquette to take her in, as everything had been done for her at another hospital. She was then driven to the police station, and then home. Finally she was admitted into Jervis Street Hospital, where she died. It was proved that she was comatose when admitted, and that the *post-mortem* examination revealed a large blood clot over the right parietal and frontal lobes. There was no fracture. The house-surgeon at Sir P. Dun's explained to the coroner that the woman appeared to be deeply under the influence of drink. The stomach pump was used, and he thought she would get all right. The jury added a rider to their verdict, stating that the conduct of the officials at the two hospitals deserved the gravest censure. This opinion will hardly be seriously objected to, and it may help to make young house-surgeons realise the great responsibilities which they undertake. Most hospitals have like stories to tell. We admit at once the great difficulty that may arise in such cases, especially if the patient has been drinking, but here the golden rule for the house-surgeon is "when in doubt, admit." A few hours will clear up the question, and it is better to admit a drunken man in mistake than to send a dying man out of reach of help. The reason assigned by the house-surgeon at Mercer's hospital, as sworn to by the constable, is preposterous. There is no such "etiquette" as to refuse help to a patient because he happens to have been elsewhere. We are glad to learn that the governors of Mercer's Hospital have passed a resolution in which they say: "We hereby record our condemnation of any such system of medical or surgical etiquette existing as alleged by our house-surgeon, which in our opinion is calculated to endanger life; and we hereby order that in future no such system shall be acted upon in this hospital."

THE NURSE'S WORKING DAY.

Miss Gertrude Dix, writing in the *Westminster Review*, draws attention to the hardships which have to be borne by those who enter the profession of nursing—the long hours, the constant standing, the weary stooping over patients' beds, the enforced wakefulness when accidents or urgent cases encroach on the normal hours of rest, and, in the case of probationers, the study, the attendance on lectures, and the preparation for examinations together cause a strain on young women's powers, under which they frequently break down. Nor can there be any doubt that a great deal of the difficulty could be overcome by the remedy which Miss Dix proposes, namely, the division of the twenty-four hours' work among three sets of nurses instead of two. At the same time the other side of the question cannot be entirely ignored. The money subscribed for the support of hospitals is given for the definite purpose of relieving the sick, and the managers of these hospitals feel that their position is that of trustees, bound to make it go as far as it will and to relieve as much sickness as they can. Facing the managers through every discussion on the subject are the facts that a considerable number of the nurses do not break down at all, even with the work they have at present, and that there are always far more candidates anxious to be trained than there are posts vacant. Perhaps we may fairly doubt whether, out of these numerous applicants, those best fitted for the work are always chosen. Scanning the ranks of nurses at almost any hospital, it is obvious that the neurotic element is disproportionately prominent; and although we quite admit that neurotics are sometimes the very salt of the earth, and for energy and dash carry all before them, they are sadly apt to kill themselves. Miss Dix suggests that the nurses who last out do so by giving less effective service. We are not quite sure of this, nor quite certain that a preliminary selection founded on strong backs and good teeth rather than on enthusiasm would be entirely unsatisfactory. Nevertheless, we do not believe that it is possible for nurses, working such long hours as they often do, to keep the mind always as alert and the muscles as willing as they should be to meet emergencies which may arise at any moment.

The officers and members of the British Postal Medical Officers' Association have forwarded to Mr. Spencer Walpole their congratulations on his appointment as Secretary to the Post Office, together with appreciative expressions in regard to his past services. Mr. Walpole has sent a courteous and appropriate reply.

BRITISH MEDICAL ASSOCIATION.

THE BRITISH MEDICAL JOURNAL, 1833-93.

Rates of Growth prior to 1866 and since.—Increase of Size of Journal.—New Departments.—The Number and Character of the Editorial Staff.—Subscription Cost.—Unprecedented Circulation: Nearly Three Times that of any other Weekly Medical Journal in Great Britain.—Successful Financial Administration.—Disposition of the Surplus.—The Scientific Grants and Scholarships.—The Library of the Association.

THE following table has been compiled with the view of showing the numerical progress of the growth of the Association from its first institution up to the present date, together with the respective annual places of meeting. The names of the President of the year is given, and the form in which the Transactions and Proceedings of the Society have been recorded, together with the names and dates of the respective Editors and of the General Secretaries. The weekly JOURNAL was instituted in 1841, the Association having then existed for eight years, and numbering 1,220 members. During the succeeding twenty-five years, a slow, onward though fluctuating, progress in numbers is observable, with occasional retrocessions, as in 1856-57, 1860-1, and 1864-5; the total increment for the quarter of a century being about 900, or at the average rate of less than 40 per annum. During the five years of Dr. Wynter's editorship the figures indicate little progress in numbers, which in 1856 are reported at 2,125, and in 1861 at 2,150. During the succeeding six years of Dr. W. O. Markham's editorship the numbers rose from 2,160 to 2,462, at which they stood in 1866, the thirty-third year of the existence of the Association, or at the rate of about 50 annually, or 300 in the seven annual periods. At the close of that year Mr. Ernest Hart became editor, and the stated increase for the year sprang up to 600, bringing the numbers up to 3,082 for 1867. A similar increase is shown for the following year 1867—more, therefore, than in the previous twenty-five years. At the end of ten years (1876) the numbers stand at 7,147, showing an increment of just 5,000 for the decade, or an annual

Table showing the Progress of the Association, Places of Meeting, Officers, etc., from 1833-93.

Year.	Place of Meeting.	President.	Number of Members at Each Period.	Editors of Journal.	General Secretaries to the Association.	Remarks.
1833	Bristol	Andrew Carrick, M.D.	140			
1834	Birmingham	John Johnstone, M.D., F.R.S.	316			Transactions 1833 to 1838, 460 to 570 pp. 1840, 436 pp. and 35 plates. These were continued till 1853, pages decreasing gradually to 260.
1835	Oxford	John Kidd, M.D., F.R.S.	450			
1836	Manchester	Edward Holme, M.D.	500	Transactions.	Sir Charles Hastings and James P. Sheppard, Esq.	
1837	Cheltenham	Henry C. Boisragon, M.D.	600			
1838	Bath	Edward Barlow, M.D.	940			
1839	Liverpool	Thomas Jeffreys, M.D.	1,080			
1840	Southampton	George Steed, M.D.	1,180			
1841	York	George Goldie, M.D.	1,220	Drs. Hennis Green and Streeten.		
1842	Exeter	John H. James, Esq.	1,300			
1843	Leeds	William Hey, Esq.	1,628			
1844	Northampton	Archibald Robertson, M.D., F.R.S.	1,784			
1845	Sheffield	William Favell, Esq.	1,927			
1846	Norwich	John G. Crosse, Esq.	1,856	R. J. N. Streeten, M.D.	Dr. R. J. N. Streeten.	1840 to 1852, super-royal 8vo, starting with 540 pp., increasing to 684 pp. annual volume.
1847	Derby	James Heygate, M.D., F.R.S.	1,858			
1848	Bath	George Norman, Esq.	1,795			
1849	Worcester	Charles Hastings, M.D.	1,760			
1850	Hull	Fewster R. Horner, M.D.	1,800	W. H. Rankin, M.D., and J. H. Walsh, M.D.	James P. Sheppard, Esq.	
1851	Brighton	George S. Jenks, M.D.	1,800			
1852	Oxford	John W. Ogle, M.D.	1,629			
1853	Swansea	G. Gwyune Bird, M.D.	1,853	John Rose Cormack, M.D.	Dr. J. R. Cormack (also Editor).	
1854	Manchester	William J. Wilson, Esq.	2,198			
1855	York	Thomas Simpson, M.D.	2,188	J. R. Cormack, M.D., and And. Wynter, M.D.		1853 to 1860, imp. 8vo, annual volume of 1,168 pp., gradually decreasing to 1,029 pp. in 1860.
1856	Birmingham	James Johnstone, M.D.	2,125			
1857	Nottingham	Booth Eddison, Esq.	2,065			
1858	Edinburgh	William P. Alison, M.D.	2,180	Andrew Wynter, M.D.	Dr. P. H. Williams, Worcester.	
1859	Liverpool	James R. W. Vose, M.D.	2,310			
1860	Torquay	C. Radclyffe Hall, M.D.	2,215			
1861	Canterbury	Alfred Lochée, M.D.	2,150			
1862	London	George Burrows, M.D., F.R.S.	2,120			
1863	Clifton	John A. Symonds, M.D.	2,217	W. O. Markham, M.D.		1861 to 1867, imp. 8vo, 1,400 to 1,600 pp. annually.
1864	Cambridge	George E. Paget, M.D., F.R.S.	2,422			
1865	Leamington	Samuel J. Jeffreson, M.B.	2,368			
1866	Chester	Edward Waters, M.D.	2,462		Watkin Williams, Esq., Birmingham.	
1867	Dublin	William Stokes, M.D.	3,082	Ernest Hart, Esq.		
1868	Oxford	Henry W. Acland, M.D., F.R.S.	3,627			
1869	Leeds	Charles Chadwick, M.D.	4,095	Jonathan Hutchinson, F.R.C.S.		
1870	Newcastle	Edward Charlton, M.D.	4,258			
1871	Plymouth	John Whipple, Esq., F.R.C.S.	4,403			
1872	Birmingham	Alfred Baker, Esq., F.R.C.S.	4,700			
1873	London	Sir William Ferguson, Bart., F.R.S.	5,400			In July 1867 the present series were commenced, containing 1,216 pp. annually.
1874	Norwich	Edward Copeman, M.D.	5,700			
1875	Edinburgh	Sir Robert Christison, Bart., M.D.	6,112			In 1877 ... 1,900 ,, ,,
1876	Sheffield	M. Martin de Bartolomé, M.D.	7,000			,, 1887 ... 2,920 ,, ,,
1877	Manchester	M. A. Eason Wilkinson, M.D.	7,147			,, 1890 ... 3,036 ,, ,,
1878	Bath	Randle W. Falconer, M.D.	7,536			,, 1893 ... 2,952 ,, ,,
1879	Cork	Dennis C. O'Connor, M.D.	7,810			
1880	Cambridge	George M. Humphry, M.D., F.R.S.	8,052			From October 4th, 1890, till December, 1891, the EPITOME was published in 8 pp. imp. 8vo weekly. Since that date it has been published in the JOURNAL, 4 pp. per week, 108 pp. annually, the same size as the pages of JOURNAL.
1881	Ryde	Benjamin Barrow, Esq., F.R.C.S.	9,202			
1882	Worcester	William Strange, M.D.	9,563	Ernest Hart, Esq.	Francis Fowke, Esq. (General Secretary and Manager)	
1883	Liverpool	A. T. H. Waters, M.D.	10,050			
1884	Belfast	James Cuming, M.D.	10,600			
1885	Cardiff	William Thomas Edwards, M.D.	11,249			
1886	Brighton	W. Withers Moore, M.D.	11,600			
1887	Dublin	Sir J. T. Banks, M.D.	12,000			
1888	Glasgow	W. T. Gairdner, M.D.	12,265			
1889	Leeds	C. G. Wheelhouse, F.R.C.S.	12,897			
1890	Birmingham	W. F. Wade, M.B., F.R.C.P.	13,360			
1891	Bournemouth	John Roberts Thomson, M.D.	13,861			
1892	Nottingham	Joseph White, F.R.C.S.Edin.	14,267			
1893	Newcastle	G. H. Philipson, M.D., F.R.C.P.	14,703			

average growth of 500 added to the strength of membership for each year. In 1887 the numbers stood at 12,000, another increment of just 5,000 for that decade also, a like average of 500 for each year. They stood at the end of last year (1893) at 14,703, or within a few of the same average addition to the strength of membership of nearly 500 for each annual period. The figures are highly satisfactory, but it would seem hardly probable that this steady and surprising rate of growth can be maintained much longer at the same ratio. For the possible margin of recruitment from actual members of the profession in active practice who are not yet members of the Association is growing every year narrower, and the limit must soon be reached at which almost every active "efficient" registered member of the profession is a member of the Association and forms one of the *clientèle* of the Journal. The possible increment by enrolment of English-speaking members of the profession on the other side of the Atlantic, which had begun to be a feature of growth, has been cut off by the legal interpretation of the by-laws as excluding all but those who are on the Imperial British *Register* from membership. This decision was made known in the Report of the Council of .

Our relationship with the great American profession is, however, none the less cordial because unofficial. They are always welcome guests at our meetings, and through the Journal the ties of friendship and the means of intercommunication are being increased and multiplied from year to year, so that although the official membership is limited to British subjects, the growth of that other powerful form of association and intercommunication which the Journal supplies between all English-speaking members of our common profession is still developing, and is capable of much further growth.

The official membership of the Association is as stated now 14,703, but the total issue of the British Medical Journal is now 18,000, a circulation which is, we are informed, considerably more than twice, and nearly three times, greater than that of any other medical journal in Great Britain, weekly or otherwise; it is, in fact, in excess of the total of the combined circulation of all other medical journals published in the United Kingdom. And it is still growing, for before many weeks are over we shall have to announce a further increment at the commencement of the New Year, which is thus happily inaugurated under favourable auspices.

It will be seen from another column in the table that meantime, and without any addition to the annual subscription, the increasing resources arising out from the popularity of the Journal and its growing circulation, have made it possible to supply to the members a periodical of eight or nine times the size of the Journal in 1866, and one in which every department then existing has been considerably expanded and sedulously improved, while the following new departments have successively been added: Short Memoranda—Medical, Surgical, Obstetrical, Therapeutical, and Pathological; thirty-two Societies have been added, which were not previously reported; Reports, Analyses, and Descriptions of New Inventions; Special Correspondence from eighteen British and Foreign centres not previously represented; a Public Health and Poor-law department; a Medico-Legal and Medico-Ethical department; and a department for Naval and Military Medical Services. At that date illustrations were few and far between. In all these new departments the object has been to afford adequate representation and authoritative information for the benefits of the various classes of the profession specially interested, as well as the readers at large. It is satisfactory to note that the sincerest form of flattery, namely, imitation, has been resorted to, and that every one of these departments has been copied and adopted sooner or later by our most important and successful weekly contemporary.

In lieu of the usual limited and fixed staff of contributors, the services have been enlisted of a considerable staff of editorial writers in all parts of the kingdom, who have been selected either from their special opportunities of acquiring and furnishing trustworthy information and reports as to proceedings of medical interest in their respective localities, or for their special authority and recognised ability (often combined with official position) in respect to the subjects on which they are consulted, and on which they favour us by writing on request. That staff, frequently renewed as it by necessity must be under the changes of succeeding years, numbers at the present moment 219. Each writer deals with the subject within his special competence, and for the most part on matters submitted to him by the editors from week to week for comment. The average weekly number of such writers is 49.

This method of producing a journal written by medical men for medical men, and by experts only, is one involving obviously continual vigilance and no small labour in the central editing departments of the Journal: but it is, we believe, the only sound principle of editing, and it is to that more than any other circumstance that we attribute the constantly growing popularity and authority of the Journal, and the confidence which it has gained from its readers and from the medical profession in this and other countries.

This journalistic success, aided and reinforced by the vigilant administration by the Journal and Finance Committee and the General Secretary and Manager of the large funds thus resulting from the considerable subscription list and large advertising *clientèle* which the great circulation commands, have enabled the administrators of the Association to present to every one of its members a journal which, in point of its size and of the extent, variety, and accuracy of the information which it supplies, is incalculably more valuable than it was thirty years ago, when the subscription was the same as at the present moment, remaining at £1 1s., sent free all over the world, while the cost of the *Lancet* is £1 12s. 6d. annually for the United Kingdom, and £1 14s. 8d. for the Colonies and foreign countries. At the same time any annual surplus has accrued, which has furnished a large reserve fund, valuable for the solidity and stability of the Association; it has enabled handsome and important annual grants and scholarships to be provided for the encouragement of medical research, at the present moment so ill requited and imperfectly equipped in this country, and also has supplied the costs of the various committees which keep an outlook on the public relations of the profession to the State and all its departments, which assist in revising and suggesting important medical legislation and education, and which do much to render the Association nationally useful, professionally progressive, and helpful in every class and to every department of medical relations.

The latest boon which it has been found possible to confer upon the members has been the establishment in the fine premises which are the central home of the Association and its administrative work, of a handsome reading room and library, which is from day to day largely used by a considerable number of members, and of the utility and convenience of which frequent evidence is received. By the collateral advantages which relationship with the Journal confers, its managers have been able to accumulate, with the aid of annual grants of only £200 to cover salaries, within the space of a very few years a reference library of very high value, and especially remarkable for its richness in costly books of reference, and in the most modern medical literature and periodicals of this and other countries. At the present moment the library contains 6,000 volumes, and is supplied with almost every known periodical of value. On the whole, therefore, it will probably be felt that the state of things evidenced by the facts and figures above tabulated and the inferences which may be concluded from them is highly satisfactory in the past, and of great promise for the future.

LADY DOCTORS.

At the annual meeting of the British Medical Association at Nottingham in 1892, it was decided that women should be eligible for membership of the Association. The question was raised after due notice given by Dr. Galton, who moved that Article 4 of the Articles of Association should be altered, by expunging the words, "No female shall be eligible for election as a Member of the Association." He pointed out that the excluding clause had been inserted in 1878 at the annual meeting at Bath, after a plebiscite of the members, then numbering about 7,000, 3,072 had then voted against the admission of women, and 1,051 in their favour. Since 1878

the number of ladies in the medical profession in the United Kingdom had risen from 8 to 135. The resolution was seconded by Mrs. Garrett Anderson, who was a member before 1878, and it was carried almost unanimously.

It should be added that before the date of the meeting at Nottingham, a resolution asking the Council to reconsider the rule excluding women had been adopted by the Sydney and New South Wales Branch, and that similar resolutions had been formulated by the Melbourne and Victoria Branch, the Adelaide and South Australia Branch, and the Cape of Good Hope Branch.

At the annual meeting at Newcastle this year, on August 2nd, the By-laws of the Association were altered, by a unanimous vote, by expunging the words limiting the power of the Council and branch councils "to the election of male persons" only. Female persons were thus formally rendered eligible for election. Advantage has since been taken of the new state of things, and the General Secretary informs us that the Association now numbers among its members the following fully qualified ladies:—

Anderson, Mrs. Garrett, M.D, London, W.
Aldrich-Blake, Louisa Brandreth, M.B., London, W.C.
Anderson, Annie, M.S., M.B.Lond., Muswell Hill, N.
Cadell, Grace Ross, L.R.C.P.Edin.
Cadell, Martha Georgina Isabella, M.D., Edinburgh.
Collett, Edith Grace, L.R.C.P.Edin., Edinburgh.
Dahms, Anna, M.D., Manchester.
De la Cherois, Annie, M.D., London, W.
Dove, Emily Louisa, M.B.Lond., Virginia Water.
Ellaby, Charlotte, M.D., London, W.
Gray, Sarah, L.R.C.P.Edin., Nottingham.
Keith, Caroline, L.R.C.P.Edin., London, W.
Macdonald, Isabella Macdonald, M.B.Lond., Windmill House, Arbroath, N.B.
McLaren, Alice Janet, M.B.Lond., Glasgow.
Nash, Lilias Frazer, L.R.C.P.Edin., Hackney.
Pace, Elizabeth Margaret, M.B., Lond., Glasgow.
Pearse, Margaret, M.D., New Barnet, Herts.
Scharlieb, Mary, M.D., London, W.
Walker, Jane, L.R.C.P.I., M.D., London, W.C.
Webb, Helen, M.B.Lond., London, W.

AUTOMATIC WRITING.

V.

BY A. CAMPBELL CLARK, M.D.

Automatic Writing and Spiritualism.—Concentration of Thought and Passiveness of Will.—Automatic Steadese.

A GOOD deal of brain energy has been and is being expended in studying the phenomena of so-called spiritualism. The hypnotic *furore* is replaced for the present by the revival of the spiritualistic under the leadership of Mr. Stead. There is always a sufficient number of the curious and credulous in any community to form a discipleship under such leadership, and history will repeat itself in this respect till the end of time. But outside the throng so possessed are thoughtful observers, not carried away by the new cult, observing and reflecting carefully, and searching critically for the truth through the maze of error and superstition. To this class belongs Hypnos, who reduces the question of Mr. Stead's spook experiences to a practical and yet scientific inquiry respecting the real nature of automatic writing.

What tangible or sensible proof is there of an agency outside or—inside the cranium if he likes—of a strange or familiar spirit in the arachnoid cavity, or anywhere else in the higher regions of brain anatomy? We are not concerned for the present with the question whether there are spirits or no. To raise this question would open up theological and moral questions of the most far-reaching kind. It is enough for us critically to examine automatic writing, the essential pillar of spiritualism in its relation to hypnotism on the one hand and to mental disease on the other.

"How can unconscious scrawling," Hypnos asked, "become words and sentences?" To answer this question he formulates the laws which govern legitimate hypnotic phenomena. Hypnos applies them to morbid psychology, otherwise lunacy, and particularly monomania. It is not correct to say that a fixed idea becomes a positive objective hallucination. If an hallucination it is subjective, but it may be a delusion and not an hallucination, and these are not synonymous terms. Nor is it correct to say that because a man conceives himself to be Napoleon, he must necessarily "think, speak, behave, and act accordingly." What of the Napoleon who contentedly herds asylum cattle and cleans out the pig-styes?

"Concentration of thought, of passiveness of the will, etc.," all psychologists will agree are incompatible except as sequences, which is, perhaps, what Hypnos means, that concentration of thought implies more or less exercise of will—not suspension of it. It does not necessarily imply severe volitional tension, though it means acute attention, for it is very much a question of interest in the investigation. But the fact that concentration is required clearly demonstrates that—spook or no spook—a man must be dead to external sense and all other mental stimuli; that he must acquire a state of mental isolation. "Unless I take a pen or pencil, make my mind passive, and wait for the message, I do not receive any communication," says Mr. Stead, thus again demonstrating the fact of absolute preliminary concentration. Then, again, he writes: "My hand writes almost invariably, when it is disconnected, so to speak, from my conscious brain." In other words, the conscious brain is switched off from the motor mechanism, the words dictated do not pass through the conscious brain, but in some inscrutable outlandish way penetrate the Rolandic cortex directly from without. If not, then Mr. Stead had better study the cerebral anatomy of the route by which the spirit sounds travel, and explain it.

What proof can Mr. Stead bring forward that his own conscious mind is not operative all the time, and, if operative, that it does not evolve the messages in his own brain? Why call the writing automatic if a spirit voice dictates the words? He may as well argue that the phenomena of hypnotism are of spiritualistic origin. The scientific study of hypnotism has revealed to us a subjective condition of mind which is not normal consciousness nor is it sleep, but a condition allied to somnambulism—subconscious it may be called, but certainly to a large extent automatic. That a subject can hypnotise himself in a variety of ways without the intervention of any external agent or medium is explained, as far as we are yet able to understand it, on physiological grounds. What is there in the preparatory process of Mr. Stead, the concentration, the passive condition of will, the switching off of his own conscious brain that cannot be done in the same way. He admits that there is an infinite quantity of nonsense written automatically, and we agree with him.

Lastly, Mr. Stead does not deny that his spook writes Steadese, nor does this surprise us, for there can be no question that personality must be more or less pronounced in automatic writing according as the conscious or the subconscious brain is operative; when the former a man may write coherent sense, when the latter the mind is semitorpid, unbidden thoughts arise which may be flights from memory of ideas crystallised in the past experience of the individual, or mere words, ejaculations, or fragments of sentences. In the insane delirium of acute mania, where the subconscious state prevails, the torrent of jumbled language, incoherence of words and sentences is poured forth in a stream incessant. The conscious brain in this case is truly switched off, but it has yet to be demonstrated that it is so in automatic writing, and that if it is so in extreme cases, that the phenomena are not explainable in accordance with ordinary principles of human physiology.

THE INTERNATIONAL CONGRESS OF HYGIENE AT BUDA-PESTH.

THE eighth International Congress of Hygiene and Demography will be held in September, 1894, at Buda-Pesth. The formal opening of the Congress is fixed for September 2nd, and the meetings of the various Sections will be held on September 3rd, 4th, 5th, 7th, and 8th. The closing meeting will be held on September 9th. September 6th is set apart as a day of rest or for making short excursions which have been arranged.

The scientific programme of the Congress, together with the various questions resolved upon, have already been arranged, and so many promises of support and scientific co-operation from eminent foreign scientists of high standing have been received already that the success of the Congress may be considered as fully secured.

In connection with the Congress a hygienic exhibition will be arranged, which will differ from similar undertakings

in so far that it will not be a trade or industrial exhibition, but will contain only such objects as may serve to illustrate the questions forming part of the scientific programme of the Congress.

One of the principal and most interesting part of the proceedings of this Congress will be the important discussion on diphtheria, which is arranged to take place on the fourth day. It will be remembered that the question of diphtheria was included in the programme of this Congress in consequence of a resolution of the London Congress. The Executive Committee have treated this question on the broadest possible basis, having made it a truly international question by organising special committees on diphtheria in all civilised countries. Each of these special committees will carefully study the question, entering into minute examinations, and will then present a report, which will form the basis of discussion of this important question. The reports will be considered and discussed at the joint meetings of the Sections of Bacteriology, Prophylaxis, and Hygiene of Children.

The following eminent scientists have been kind enough to undertake the task of forming and organising the committees on diphtheria in their respective countries:—Dr. Edward Seaton, F.R.C.P., etc., Lond., for England; Professor John Billings, M.D., New York, for the United States of America; Professor Baron H. v. Wiederhofer, M.D., Vienna, for Austria; Dr. Cornel Chyzer, Buda-Pesth, for Hungary; Professor Henry Ranke, M.D., Munich, for Bavaria; Dr. Edward Tordeus, Brussels, for Belgium; Dr. F. Roux, Paris, for France; Professor Frederick Löffler, M.D., Greifswald, for Germany; L. Pagliani, Ministerial Councillor, Rome, for Italy; Professor E. Almquist, M.D., Stockholm, for Sweden; Professor Dr. Nicolaus Filatow, Moscow, for Russia; Professor Dr. Francis Criadoy Aguilar, Madrid, for Spain; Professor Dr. D. Sergius, Bucharest, for Roumania; Professor Dr. Ed. Hagenbach-Burkhardt, Basle, for Switzerland; Professor Dr. S. T. Sorensen, Copenhagen, for Denmark; Professor Dr. Axel Johanessen, Christiania, for Norway; Dr. Paul Szteics, Chief Physician, Belgrade, for Servia. The interest in the excursion to Constantinople, which is arranged to take place after the closing of the Congress, will be enhanced by a visit to Belgrade, to which place those members of the Congress who take part in the excursion are invited. The Secretary-General to the Congress is Professor Dr. Coloman Müller, St. Rochus Hospital, Buda-Pesth.

SELECT PRESCRIPTIONS AND PHARMACEUTICAL NOTES.[1]

II.

Laryngeal Phthisis.—Dr. Cozzolino recommends the following powder for insufflation in cases of laryngeal phthisis:

Powdered iodoform, 25 parts
Powdered phosphate of calcium, 50 parts
Powdered boric acid, 25 parts
Menthol, 1 to 2 parts

To be insufflated night and morning.

Diphtheria.—Dr. Grancher[2] uses as a local application, applied on a pledget of cotton wool, the following solution:

Camphor, 20 parts
Castor oil, 15 parts
Alcohol (90°), 10 parts
Carbolic acid, 5 parts
Tartaric acid, 1 part

This forms a clear solution. Ten minutes after this application the mouth and pharynx should be thoroughly irrigated with a solution of boric acid (3 per cent.), or carbolic acid (1 per cent.), or plain boiled water. The quantity of irrigant used should be large, about 2 pints.

Dry, Scaly Conditions of the Epidermis.—Dr. Gordon Sharp (Leeds) sends us the following prescription as an application for the prevention and treatment of chapped hands, and as an antiseptic and deodoriser for the hands:

Spirit of camphor
Spirit of nitrous ether
Strong acetic acid; of each 1 part. Mix, and add:
Glycerine, 13 parts

Wash the parts with warm water; dry, and rub in the liniment at bedtime. The application dries in a few minutes. It may be applied again in the morning, and washed off in a few minutes. Owing to the production of acetic ether, the application has an agreeable odour.

Prurigo, etc.—To cover the skin in conditions of great irritation, as in prurigo, Dr. Tenneson[3] gives the following formula, which he has found to answer best:

Grenétine (best French gelatine)	... ...	150 parts.
Gelatine	... ...	100 ,,
Glycerine	... ...	300 ,,
Water	... ...	300 ,,
Oxide of zinc	... ...	100 ,,
		950 ,,

The gelatine is dissolved in the glycerine in a *bain-marie*, and 200 parts of water, the oxide of zinc stirred up in 100 parts of water is then added, and sufficient water is added to make up the quantity to 950. When this gelatine is to be applied, it is melted and laid on with a brush. After a few minutes the gelatine is dry.

[1] *Bromoform in Whooping-Cough.*—Dr. F. W. Burton-Fanning (Norwich) writes: In the BRITISH MEDICAL JOURNAL of December 2nd, 1893, you publish a form for prescribing bromoform, which I advocated in the *Practitioner* of last February. I now wish to add a few words to the directions there given. I have continued to use the drug with increasingly favourable results in whooping-cough, but I have also to record the occurrence in three cases of toxic symptoms after an overdose of bromoform. The symptoms presented were more or less loss of consciousness, staggering gait, contracted pupils, feeble and irregular pulse, from which the patients quickly recovered with the help of stimulants. These untoward effects, in each case, followed the administration of the last dose in the bottle, which, owing to the weight and insolubility of bromoform, is liable to contain an excess of it in whatever way it is suspended. The mothers are now cautioned to always throw away the last dose of the small quantity given them at a time, and no further accident has occurred. A less crude plan in private practice is to supply the nurse with the pure drug, and instruct her to measure each dose separately, which may then be given in syrup or other vehicle. I am corresponding with Messrs. Burroughs and Wellcome respecting the exhibition of the drug in "tabloid" form.

[2] *Rev. Int. de Rhin., d'Ot., et de Laryng.*, No. 22, 1893.

LITERARY NOTES.

AFTER the completion of the vol. xv of the *Journal of Physiology*, Mr. J. N. Langley, F.R.S., Trinity College, Cambridge, will become joint Editor with Professor Michael Foster.

La Presse Médicale is the name of a new weekly medical journal which has appeared in Paris with the New Year.

The first part of the *Anatomischer Atlas der Pharmacognosie und Nahrungsmittelkunde*, by Drs. A. Tschirsch and O. Oesterle, has just been issued by P. O. Weigel—successor of Chr. Herm. Tauchnitz—of Leipzig.

A new medical journal devoted to rectal and gastro-intestinal diseases will appear in Louisville, U.S.A., "as soon as possible after the first day of January, 1894." The journal will be called *Mathews's Medical Journal*, in honour of its editor, Dr. Joseph M. Mathews.

Drs. D. Grant and W. Gardner, of Melbourne, have announced their intention of starting a medical journal, under the title of the *Intercolonial Quarterly Journal of Medicine and Surgery*. They are to have the assistance of a number of collaborators in all the colonies.

The twelfth annual Christmas number of the *Philanthropist* contains the appeals of many deserving charities, supported as usual by an appropriate story by Mr. George Alfred Cross, entitled "John Jobson's Ghost," and a bright sketch by Mr. Cecil Clarke, entitled "At the Cross Roads."

The *United Service Gazette* of December 9th has a strong article on "Army Medical Staff Administration." The necessity of the Army Medical Staff and the Medical Staff Corps being consolidated into a distinct and homogeneous Army Medical Corps, commanded by its own officers and with its own ambulance drivers and horses, is insisted on. It is further urged that "considerable administrative changes at the fountain head of the department" are required before "the highest attainable efficiency can be reasonably looked for in the medical service of our army." The most important of these changes appears to be the substitution of a medical officer of rank and experience for a civilian clerk as the right hand man of the director-general at headquarters.

The January number of *Blackwood's Magazine* contains an interesting article by the Earl of Iddesleigh, in which extracts are given from "three fat notebooks" of his ancestor, Sir Henry Northcote, who lived between the years 1655 and 1730. The notebooks were found some months ago in a cupboard devoted to old books and papers of accounts. Sir Henry Northcote was the grandson of the Sir John Northcote, who took an active part on the side of the Parliament in the great civil war. He was educated at Eton and Oxford, where he became a Fellow of Exeter, and took the degree of Doctor of Medicine. He did not succeed to the title and estates until the death of his elder brother, Sir Francis, in

[3] *Traité Clinique de Dermatologie*

1709. After his succession it is probable that he lived in great retirement. His views on theology, politics, and things in general, have little more than a psychological and antiquarian interest, but some of his remarks on his own profession of medicine are sufficiently quaint to be quoted. Speaking of the preservation of health, he says: "The common Engredients of Health are little Care, Simplicity of Diet, rather fruits and plants than flesh; and water, which preserves the radical Moisture, without too much encreasing the radical Heat, whereas Sickness, Decay, and Death proceed commonly from the one preying upon the other, and at length wholly extinguishing it." He is very sound in his preference of observation to systems, though somewhat sweeping in his application of this wholesome principle. "It may be a question," he says, "whether the Notional Philosophy and the many fine Systems that have been built upon it has been of any great use in Physick, since we visibly see that Hypocrates's Practice was mostly built upon Observation, nor did he know anything of the Thoracic Duct, the Circulation of the Blood, etc., etc., and yet few can say that any since his time have had more or so much true Knowledge and good Success in Practice of Physick as he had. How falacious and unhappy in their Practice have we found these Systematic Gentlemen! such as Bellini, Willis, and Vanhelmont!" One might almost gather from this that Sir Henry Northcote thought it an advantage to the Father of Medicine not to have known anything of the circulation of the blood, but we can hardly suppose that he believed that a knowledge of anatomy and physiology tended to make physicians "falacious and unhappy in their Practice." To someone who asked what he should do to succeed in medicine, Sydenham replied: "Read Don Quixote; it is a good book; I read it still." To a similar question Sir Henry Northcote replied as follows: "Rather than spend your Time before the Squalid beds of poor Patients, and bear with the unsavoury Smells of a Crowded Hospital, show yourself a Scholar. Write a Poem, either a good one or a large one; compose a Latin Oration, or translate one out of that Language with your name to it; or if you can chatt or be a good companion, you may drink yourself into Practice." Had he lived at the present day, Sir Henry would probably have said: "Write a book on the use of mercury in diseases of the liver (with illustrative cases) or one on the value of squills in chronic bronchitis, 'with your name to it;' or, if your talents lie that way, sing, dance, or 'tennis' yourself into practice." Sir Henry Northcote strongly condemns the "Wicked Modern Practice of inoculating for Small-pox." In a pessimistic or dyspeptic moment he declares that the "art of Physick is no more to be depended upon than that of Astrology;" but when in a better frame of mind he pronounces "that no Science in the Republick of Learning is more beneficial to Mankind than the noble healing Faculty, and yet none is so horribly and shamefully invaded by ignorant Pretenders." On this subject Sir Henry's views are so little antiquated that the sentence last quoted might have come out of an introductory address delivered last October, and will no doubt still be quite up to date in 1994.

THE CHOLERA.

St. Petersburg.—According to the latest news from St. Petersburg the cholera epidemic there shows no signs of abating. During the seven days ending at noon on December 21st (New Style) there were reported in the Russian capital 155 fresh cases of cholera, and 68 deaths from the disease. In the week ending December 28th, 1893, the fresh cases numbered 167, and the deaths 82, showing, if any thing, an increase over the numbers of the preceding week. The total number of cases under treatment was the same on each of the dates mentioned—namely, 166. During the second period of seven days the total once dropped to 153, but again rose to the higher number. At the instance of the Prefect of St. Petersburg, a Commission was recently formed to investigate the cause of the recrudescence of cholera in the city. The commission, under the presidency of Dr. Ragozin, held a special meeting on December 20th, 1893, and made public certain conclusions at which it had arrived. These are mainly that the present fresh outbreak of the disease in St. Petersburgh is not an exceptional occurrence, as exactly similar outbreaks were observed in many parts of Russia towards the end of the epidemic in 1892; that no one particular circumstance or condition can be pointed to as the cause of the recrudescence; and that it cannot be ascribed directly to the increased consumption of dried and salted fish. An endeavour had been made to account for the outbreak in this way, as many of the cases of cholera had followed the eating of preserved fish, and as the revival of the epidemic followed not long after the commencement of the pre-Christmas fast, when salted fish forms the principal article of diet among the orthodox, it was thought that possibly some form of poison had developed in the fish, and that the cases set down as choleraic were in reality due to some irritant poison. The Commission, however, declares that though many samples of fish have been examined in none has any poison been found. They suggest that the consumption of salted fish may have caused gastro-intestinal irritation in many persons, thus making them more susceptible to the cholera poison, and may also, by inducing thirst, have led people to drink water without first boiling it. Many of the cases first thought to be due to irritant poisoning have since been proved to be choleraic by bacteriological examination of the dejecta. This occurred in a number of cases among the attendants of two orphan institutions in the city. Between December 16th and 20th fifty of the attendants in these institutions (which occupy the same building) were attacked with diarrhœa and vomiting, the illness following the consumption by the attendants of salted fish and unboiled water. It was only after the patients had been removed to the Marie Hospital that the symptoms were found to be due to cholera and not to poisoning, as had been at first supposed. Reuter's agent at St. Petersburg, telegraphing on December 31st, 1893, states that the cholera continues to prevail there. There are about 30 fresh cases and 15 deaths daily.

Statistics of the Epidemics in Germany.—The *Times* Berlin correspondent reports that since December 8th, 1893, only 6 cases of cholera in the German Empire have been notified to the Imperial Health Office, 4 of them being of an exceedingly mild type. In the year 1892, 19,719 cases of Asiatic cholera occurred in Germany, of which 8,500 ended fatally. Between January 1st and March 4th, 1893, 213 cases were registered, with 89 deaths, and during the summer there were 569 cases and 288 deaths. Besides this there were 92 cases, in which cholera bacilli were discovered in healthy persons who had been infected by intercourse with cholera patients, without, however, suffering any great inconvenience.

ASSOCIATION INTELLIGENCE.

COUNCIL.
NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 17th day of January next, at 2 o'clock in the afternoon.

FRANCIS FOWKE, *General Secretary.*

December 28th, 1893.

NOTICE OF QUARTERLY MEETINGS FOR 1894. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on January 17th, April 11th, July 11th, and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, March 22nd, June 21st, and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. FRANCIS FOWKE, *General Secretary.*

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the Office.

BRANCH MEETINGS TO BE HELD.

EDINBURGH, STIRLING, KINROSS, AND CLACKMANNAN AND BORDER COUNTIES BRANCHES.—A combined meeting of the above Branches will be held at Edinburgh on Friday, February 2nd. A medical congress of the members will take place in the University Surgical Theatre, Royal Infirmary, at 4 P.M., when a variety of patients, specimens, apparatus, etc., will be exhibited and discussed. Thereafter the members and their friends will dine together in the Waterloo Hotel, at 6.30 P.M., the president of the Edinburgh Branch, Professor Annandale, in the chair. Further information will be obtained from the Honorary Secretaries of the respective Branches.—R. W. PHILIP, 4, Melville Crescent, Edinburgh; C. T. LEWIS, Glebe Crescent, Stirling; and JAS. ALTHAM, Birbeck House, Penrith

[illegible] Branch.—The winter meeting will be held in the [illegible] College Square North, Belfast, on Thursday, January 25th, at 4 P.M. Gentlemen who wish to read papers, show patients, or bring any [illegible] communicate as early as [illegible] M.D., F.R.C.S., Honorary Secretary, 21, Great Victoria Street, Belfast.

[illegible] Branch.—The [illegible] of this Branch will be held on [illegible] by the kind permission of the President and Fellows), in the Hall of the Royal College of Physicians; and at 7.30 P.M. on the same evening, in the College, the annual dinner.—John Moloney, Honorary Secretary, St. Patrick's Hospital, James's Street, Dublin.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

The third meeting of the session 1893-94 was held on December 14th, 1893, the President, Dr. Rickards, in the chair. Thirty-nine members were present.

New Member. Mr. Claude E. Wilmot, M.B., B.Ch., was elected a member of the Association and Branch.

[A report of the scientific proceedings will be found at p. 20.]

HALIFAX AND NOVA SCOTIA BRANCH.

The regular fortnightly meeting of this Branch was held on December 7th: the President (Dr. Campbell) in the chair. Drs. Farrell, Cowie, Murray, Campbell, Ternan, M. A. B. Smith, Cuningham, Trenaman, Macdonald, Kendall, and Carleton Jones were present.

Communications.—Dr. M. A. B. Smith read notes of a case of Extrauterine Pregnancy.—Dr. Campbell read notes of two such cases.—A prolonged discussion took place on the question of operation in these cases.

STAFFORDSHIRE BRANCH.

The first general meeting of this Branch was held at Stoke-on-Trent on Thursday, November 30th, 1893; the President (Mr. H. M. Morgan) in the chair. Twenty members were present.

New Members.—The following gentlemen were elected members of the Branch: Dr. Edge, Wolverhampton; Dr. Freer, Rugeley; and Dr. Nicklin, Wolverhampton.

[The report of the scientific proceedings will be found at p. 19.]

BRITISH GUIANA BRANCH.

The quarterly meeting of this Branch was held at Georgetown on November 9th, 1893. The Hon. R. Grieve, M.D., President, in the chair. Drs. Wallbridge, Law, Daniels, Von Winckler, Bezbaroa, Gomes, Neal, Veendam, Lexeira, Conyers, Williams, Ferguson, Barnes, and the Secretary were present.

Confirmation of Minutes.—The minutes of the last meeting were read and confirmed.

Election of Officers.—The election of office bearers for 1894 was then proceeded with, and the President announced that the following gentlemen, as suggested by the Council, had been elected: *Vice-Presidents*: Drs. Wallbridge and Veendam. *Members of Council*: Drs. Leary, G. Snell, London, and Anderson. *Hon. Secretary and Treasurer*: E. D. Rowland.

Communications.—Dr. W. F. Law read a paper on Pleurisy and Pleural Effusions. He quoted several cases from his experience in the penal settlement where the patients had been under his own observation for years, and showed very conclusively that the great majority of these cases were tuberculous in nature. He advised early paracentesis where absorption of the fluid was delayed. A discussion followed in which Dr. Daniels, Dr. Ferguson, and Dr. Bezbaroa took part. The President summed up the debate and dwelt on the evidence that was fast accumulating to show that this and similar inflammatory conditions were the result of toxins produced by various micro-organisms. Dr. Law replied.—Dr. Daniels showed specimens of Brain Tumour and Osteo-sarcoma of the Head of the Tibia removed by the Surgeon-General in the hospital two or three days before, and also a specimen of a ligature of the external iliac for femoral aneurysm. The coats of the vessels had not been ruptured and the catgut ligature had disappeared in the five weeks, leaving the lumen of the vessel quite occluded by firm clots into which small new vessels could be seen to pass from the vessel wall. There had been no suppuration and the man had died from gangrene of the leg, collateral circulation in the limb never having been established. Dr. Daniels also showed a case of Osteitis Deformans.

There was no other business, and the President closed the meeting.

SPECIAL CORRESPONDENCE.

PARIS.

The Examination for the Post of Agrégé.—Lunacy Legislation in France.—Suicides in the St. Anne Asylum.—The "Baccalauréat Moderne."—Poisoning and Incendiarism in a Hospital.—A Suit for Alleged Malpraxis. General News.

The Paris Medical Faculty has decided on certain modifications in the competitive examination for *agrégés*. The surgical, medical, and obstetrical examinations are to be held in the faculties to which the candidates belong; thus Paris centralisation has received its death blow. Each faculty, moreover, is to fix the rules of the examination, and to define the limit of active service of its *agrégés*. The examining medical jury is to be composed of eleven members, who are to be chosen from the professors of that section by lot. In the surgical and obstetrical examinations there will be nine examiners. After each examination the marks are to be given; they will be placed in an envelope, which will be sealed, and at the end of the examination opened and read.

The Bill laid before the Chamber of Deputies by MM. Reinach and Lafont, concerning the modification of the lunacy law of 1838, provides that a patient shall be placed under restraint in an asylum only as a temporary arrangement. Until a tribunal has delivered judgment on his condition, no definitive arrangement can be made, and the patient must be placed among those "who are kept under observation." It is recommended that the public asylums should have two departments annexed to the building: one for epileptics, the other for cretins and idiots. There should be special asylums for criminal lunatics, and subspecial departments in other asylums; the criminal patients are probably perpetual inmates, and should be if the medical expert believes a relapse may occur. The patient should not be set at liberty until the doctor believes a relapse is not to be feared.

It has been stated that a considerable portion of the nursing staff of the St. Anne Asylum intend to strike because they are punished when the patients commit suicide in the workshop, whereas the ward nurses are not. The director stated that formerly one suicide a year was the average, whereas in the last three months there have been five, and he therefore instructed both workshop and ward keepers to look very carefully after their patients; but there was no question of fine in either case.

The "baccalauréat moderne," a recent innovation in the Paris College curriculum, is not accepted by the Council of the Paris Medical Faculty; the pupils who prepare for this examination do not study the dead languages, beyond an acquaintance with the etymology of words. The Medical Faculty advise the Minister of Instruction not to accept the "baccalauréat moderne." They think that after suppressing the Officier de Santé it will be a means of bringing him again into existence.

News comes from Rochelle that during the last two months there have been several attempts at the St. Louis Hospital to poison with corrosive sublimate alone and mixed with tartaric acid. The police made investigations at the hospital, and whilst the inquiry was being carried on a fire broke out. It was extinguished after serious damage had been done. On the wainscoting and remains of beds and bedding there were traces of an inflammable fluid, the composition of which has not yet been determined. The next morning the Procureur of the Republic visited the hospital to carry on the inquiry, and a fire broke out again in another part of the building. It was again extinguished without loss of life. The inquiry is going on, but the criminals have not yet been discovered.

A doctor has been sued in a Paris law court by the husband of a patient, and £800 damages claimed. The doctor is

accused of having committed a serious mistake in not extracting the remainder of the placenta remaining in the uterus after delivery, with the result that the patient died. The doctor pleaded that this operation was dangerous, and even impossible, considering the condition of the patient, and several other medical men confirmed his opinion. The Court decided in favour of the defendant.

Madame Kampfer, who shot at Dr. Gille de la Tourette, has been examined by MM. Brouardel and Ballet, who have concluded that the criminal is of unsound mind. The report has not yet been sent in, but as soon as it is in the hands of the judges, Madame Kampfer will be conducted to an asylum for insane.

The Michelet Asylum for Women expecting to become mothers was opened a few days ago. They are lodged at this asylum until they are about to be delivered, when they are sent to Fontenay les Roses Asylum, or to the Ledru Rollin Asylum, which they leave only when they are able to earn their living.

BERLIN.

The Charité Hospital.

Professor Rubner, Director of the Hygienic Institute in the Berlin University, has been commissioned by the "Kultus-Minister" to examine into the condition of the Charité Hospital, and to make proposals for improvements. Rubner's report has not yet been published, but what it will contain is no secret. The complaints made against the Charité are two—the unsuitability of the building for modern hospital requirements, and the overcrowding with patients. The first step towards a better state of things must be the reduction of the present 2,000 beds to about 1,200. Then the building will have to be enlarged and altered in many particulars. It is satisfactory to know that a complete plan for alterations has been worked out, and will probably very shortly obtain the official sanction. In this plan a new building with 150 beds for mental and nervous diseases is provided for, and also new dependencies for children, isolating pavilions, etc., and a large new building for the pathological institute. The cost has been calculated at about 8,000,000 marks (£400,000).

LEEDS.

Success of Yorkshire College Medical Students.—University Students.—Christmas Festivities.

At the recent London University examinations, besides three first-classes, obtained by Leeds men, the Gold Medal in Surgery was gained by Mr. Moynihan, a Leeds student. It is said that this is the first time the distinction has been gained by a provincial student, and the event is a source of congratulation, not only to the distinguished recipient of the honour, but to the school and hospital with which he is connected.

A sign of progress in the medical department of the Yorkshire College is the increased number of students preparing for university degrees; for, besides the large number of men working for the Conjoint Colleges examination, there are about ninety men taking out courses for university degrees, chiefly for Victoria, but others for London, Cambridge, and Durham.

Christmas at the General Infirmary has been celebrated as usual by a tasteful decoration of the wards, and by an excellent Christmas dinner for all those who were well enough to partake of it—about 340 in number. In the children's wards large Christmas trees were well laden with toys, to be distributed to the little patients. At the Women and Children's Hospital Christmas was celebrated by a dinner, at which not only the patients but some members of the staff joined. Presents were distributed afterwards.

SHEFFIELD.

Christmas at the Hospitals.—Death of a Nursing Sister.—Alcoholic Poisoning.

The usual Christmas entertainments have been held at the public hospital and dispensary, and the kind visitor has paid his twelfth annual visit to the fever hospital and distributed to the inmates various comforts which, situated as they are, must be very much appreciated by the recipients.

At the General Infirmary a gloom has been thrown over the usually gladsome season first by the serious illness and then the death of a valued ward sister. The removal in such a way of a much appreciated officer of an institution is always a matter of regret to those connected with a hospital; but when it happens, as in this instance, that one has fallen a victim to a malady caught in the discharge of duty, the feelings of sorrow are much intensified. Intelligent, conscientious, deeply interested in her work, strictly reliable, always cheerful, Sister Lambert was in many ways a model nurse.

A man during Christmas week boasted in a public house that he could drink twelve glasses of beer in two hours, and immediately set to work to make good his boast by drinking nine in half an hour. He at once became, as was thought, tipsy, and was taken home, but he died almost immediately. He was an habitual excessive drinker, and on the day above mentioned had already had besides beer, whisky, and rum. *Post mortem* the organs showed the pathological changes produced by alcohol.

CORRESPONDENCE.

"A GIGANTIC MEDICAL ABUSE."

Sir,—I read a good deal in the British Medical Journal about such rivalries to struggling practitioners as prescribing chemists, unqualified practitioners, quacks, patent medicines, etc. Allow me to call attention to the most scandalous abuse of all—namely, our modern hospital system. What I have to say is the outcome of practical experience, not merely from a five years' curriculum at University College and its hospital, but from a post-graduate experience of more than two additional years spent partly at the Rotunda Hospital, Dublin, and the remainder concurrently at Moorfields (Eye), Golden Square (Throat and Ear), Queen Square (Brain), Great Ormond Street (Children), Blackfriars and Leicester Square (Skin), St. Mark's (Fistula), St. Peter's (Urinary), Dean Street (Venereal), London Hospital, and St. Thomas's Hospital, nearly all of which I attended pretty regularly for about a year. I can confidently state, without the slightest fear of contradiction, that the vast majority of the out-patients treated at these hospitals are suffering from complaints which any decently educated general practitioner is quite competent to treat; that the vast majority are well able to pay the small fee which general practitioners usually charge their poorer patients; that many of them are well able to afford much higher fees; that the medical men on the staffs of our large hospitals are robbing their professional brethren of hundreds of thousands of pounds every year; that the patients are unnecessarily pauperised by the process; that wealthy corporations like our great railway companies are encouraged to get their *employés* treated without any actual remuneration to the medical men themselves; that many of the above hospitals have no students in regular attendance; and that the whole system is a gigantic and scandalous abuse. I will briefly give two details:

1. *The Hospital Staff as Gratuitous Practitioners:* In my time one of the staff at Moorfields spent two mornings every week at that hospital, two afternoons at one of the large general hospitals, two half-days at a skin hospital, two half-days at a children's hospital, and one morning in the eye department of a general hospital. This gentleman alone probably deprived his fellow practitioners of £5,000 a year, at the most modest computation, considering that several hundreds of patients used to pass through his hands in a day.

2. *Well-to-do Patients Seeking Pauper Relief:* At Moorfields I remember one patient who used to travel up regularly from Oxford, another from Norfolk, in order to get gratuitous relief. One lady, who had recently come in advance of her husband from Australia, and had acquired syphilis as a con-

sequence, used to come regularly for gratuitous treatment for syphilitic kerato-iritis, although she was under a leading surgeon as a private patient for syphilitic stricture of the rectum, paying him (I think she told me) a guinea per consultation.—I am, etc.,

WM. RUSHTON PARKER, M.A., M.D.Cantab.

Kendal, Jan. 1, 1894.

DIPHTHERIA AND DEFECTIVE DRAINAGE.

SIR,—Dr. Wilks asserts that the doctrine held by those who maintain that the poison of such unquestionably communicable diseases as enteric fever, diphtheria, and puerperal fever may, under certain conditions, be generated *de novo*, "must imply also belief in spontaneous generation." It would be more correct to say that those who differ from him believe in the doctrine of evolution, that out of one or other of the numerous products of decomposing animal matter there may be evolved the specific poisons of the diseases in question.

Dr. Seaton believes that "some harm may have come from the belief in the all-sufficiency of drainage defects to account for the existence of diphtheria." In reply to this, I venture to ask who does believe in the all-sufficiency of drainage defects? And is it not obvious that the doctrine of the all-sufficiency of infection to explain the origin and spread of diphtheria, which is held by some whose official position lends great weight to their opinions, is an incomplete and, therefore, in practice, a dangerous doctrine? It must, at any rate, be conceded that when evidence of infection from a previous case cannot be obtained, no harm can result from a careful search for defective drainage, while the neglect of such a search may be very disastrous.—I am, etc.,

Savile Row, Dec. 26th, 1893. GEORGE JOHNSON.

P.S.—Since writing the above I have seen in the January number of the *Nineteenth Century* a most interesting and suggestive article entitled "Sanitary Insurance: a Scheme," by Dr. Steeves, one of the medical officers of health of Liverpool. I recommend this instructive paper to the notice of every member of the British Medical Association.—G. J.

SIR,—In his letter in the BRITISH MEDICAL JOURNAL of December 23rd, Dr. Wilks says, "If I can trace contagion in a very large number of the so-called specific diseases, I consider it more reasonable to assume contagion in the minority than look about for another cause." It is undoubtedly true that much of the diversity of opinion that has been revealed by the recent interesting correspondence in your columns in regard to the occasional origin (as distinct from propagation) of diphtheria and septicæmia is attributable to the prevalence of some such view as that to which Dr. Wilks lends his support.

For my own part, I venture to think that such a view tends greatly to retard our knowledge concerning the conditions of origin of these diseases, and therefore to deprive us of the kind of power that grows out of such knowledge, of checking their prevalence by putting a stop to these generating conditions—just as we have well nigh extinguished what was formerly known as "gaol fever" and "ship fever." Even from the ultra-contagionist view, infective diseases must have originated at some time, and to me, at least, it seems far more rational to entertain the possibility that in addition to being propagated they may, one and all of them, be more or less frequently originated at the present day—rather than to pin one's faith to the belief that such origination could only have taken place in the Garden of Eden or some other equally obscure locality in the remote past.

Because many of these diseases are associated with the growth and multiplication of "living specific organisms," Dr. Wilks says a belief in their *de novo* origin would "imply also a belief in spontaneous generation." But this is not in the least necessary. The well known fact that common bacilli and micrococci are constantly making their entry into the body through the intestinal and respiratory mucous membranes, would supply us with the organisms ready made. So that for the origin of this or that specific disease, it would be only necessary to suppose that under the influence of certain unhealthy general or local conditions the common or micrococci so entering and escaping destruction within the body had been made to take on new properties that they had, in fact, from common organisms taken on the properties or been converted into "specific organisms." Such, clearly are the theoretical indications.

But, in spite of the prevalence of Darwinian doctrines, in spite of all that we have been told concerning the extreme morphological variability of micro-organisms, in spite of all the changing chemical products to which such bacilli and micrococci may be compelled to give rise under varied experimental conditions, the ultra-contagionist would apparently almost as soon believe in the "spontaneous generation" of organisms as in the transformation of common into so-called "specific organisms." Yet our present knowledge concerning the experimentally produced diseases in lower animals included under the term septicæmia should be by itself capable of clearing away this and other kindred prejudices.

Experimentalists tell us that there are two forms of septicæmia. One of them, known as "Davaine's septicæmia," may be originated by injecting two or three drops of putrid blood (bullock's, or that of any other animal) into the subcutaneous tissue of a rabbit. The animal dies in 23 to 25 hours; bacilli in myriads existing, even during life, in its blood. This is the origin of the disease; but it is contagious, and now, instead of two or three drops being needed, the disease can be propagated from animal to animal by even the millionth part of a drop of blood, and thus indefinitely, so virulent is its contagion.

The other form is known as "Pasteur's septicæmia," and it is producible, at will, in this way. Inject two or three drops of putrid bullock's blood (from the same stock), but this time into the peritoneal cavity of a rabbit, and now you set up a different form of the disease, though one which is also contagious and equally constant in its characters. In this case the animal does not die so rapidly; and whilst bacilli swarm in the fluids of the peritoneal cavity within twenty-four hours they are not to be found at the time of death in the blood, though they appear there and throughout the body in the course of a very few hours after death. Another difference between these forms of septicæmia is that, though the disease thus originated is a contagious one, and capable of being propagated indefinitely by means of inoculation of the peritoneal fluid, yet this fluid is nothing like so virulently contagious as is the blood in "Davaine's septicæmia." Instead of one millionth of a drop being adequate for contagion, in "Pasteur's septicæmia" about a drop is needed.

But here another and even more important point has to be mentioned. It is this, that absolutely no difference can be detected, as we are told, between "Pasteur's septicæmia" and that which is initiated after the manner of Burdon Sanderson by injecting a small quantity of a germ-free chemical irritant (namely, boiled liquor ammoniæ) into the peritoneal cavity, or into the subcutaneous tissue of a rabbit—for no difference in the disease produced results from difference in the site of introduction of the mere chemical irritant. In every particular the malady so induced is said to resemble "Pasteur's septicæmia." The organisms in this case have, therefore, come from the previously healthy body itself of the animal experimented upon, instead of being descendants of the common putrefactive organisms contained in the putrid bullock's blood, as would probably be the case in the other two forms of septicæmia.

In either case, however, we have the *de novo* origin of a contagious disease; and we have the conversion of common into so-called "specific organisms." Nay, more, we have here a most interesting illustration of Hüter's point of view, as to different contagious diseases resulting from variations in putrefactive processes; and likewise possibly an illustration of important modifications induced in the physiological activity of common putrefactive organisms according as they are injected beneath the skin or into the peritoneal cavity of a previously healthy rabbit.

Such facts surely are most suggestive in many ways; so that even if they stood alone—which is very far from being the case—they would entitle many of us to urge that, whilst accepting the facts of contagion, search should also be made for the conditions of origin of infective diseases.—I am, etc.,

Manchester Square, W., Dec. 26th, 1893. H. CHARLTON BASTIAN.

MUMPS AND HYPERPLASIA OF THE CERVICAL LYMPHATIC GLANDS.

SIR,—In the BRITISH MEDICAL JOURNAL of December 23rd, Dr. Ryle corrects my statement that "enlarged cervical glands are a part or a consequence of mumps."

I trust that I am not behind my fellows in my continual endeavour to eliminate from my published work everything which I do not know; or in case of doubt to indicate the limits of my propositions.

Still, in spite of all care, statements of a wholly unjustifiable kind will slip in, and I thank Dr. Ryle for his correction. Enlarged cervical glands may or may not be a part or a consequence of mumps; but whether or not I cannot pretend to any knowledge in the matter. I have very rarely seen cases of mumps in consultation, and never upon the *post-mortem* table.—I am, etc.,

Cambridge, Dec. 26th, 1893. T. CLIFFORD ALLBUTT.

BISHOP BARRY ON ANTIVIVISECTION.

SIR,—I beg to acknowledge the receipt, on the 17th, of your paper of December 9th, but through pressure of duty, at this season, have been till now unable to study it.

I see that in an article mainly referring to our recent Congress at Nottingham, you allude to my present relation to the antivivisection controversy in terms which seem to imply that I am unwilling or afraid to maintain it. Now on the main issue I hold exactly the same position, and that too as resolutely as before. My "silence of nearly a year" was simply due to more than nine months' absence from England, my absence from the Congress (as was publicly stated) to the impossibility of leaving my official duties here. The circular to which you allude was unconnected with the Congress, and issued, immediately on my return, to the members of the local branch of our Society.

If it had been before your readers I should not have thought it necessary to trouble you with this letter. But no one from your notice of it could form a true idea of what it really contains. Instead of failing to keep my promise of withdrawing "whatever should be shown to be false" in fact, I expressly refer to the statement of omissions and inaccuracies in the *Nine Circles* made by Professor Horsley and to the steps taken in the new edition to correct and explain them, and I add that it has "made it the duty of our Society to regret and withdraw all erroneous statements, and it will impose upon it the necessity of still greater care for accuracy in the future." As to the accusation that I have "practically repeated the old slanders in thinly-veiled language," I am at a loss to understand to what it can refer, and how anyone could have made it who had the circular before him.

The fact is that, while noticing this controversy, which undoubtedly is only what I have called it, a "not unimportant side issue," the main purpose of my circular is to deal with the opposing views as to "the rights of animals" and our duties towards them, which the discussion at the Church Congress of 1892 and elsewhere has brought out, and on which the whole question at issue really turns. My attempt may have been, as you are pleased to term it, "feeble," but it is at least well that, if it is referred to at all, it should be known for what it really is.—I am, etc.,

Windsor, Dec. 27th, 1893. ALFRED BARRY.

*** Does Bishop Barry seriously maintain that the second edition of the *Nine Circles* does not contain false statements? How is it that in the second edition no explanation whatever is given of the false statements which were made about Dr. Shore, his name not being mentioned even, and no apology being offered? How is it that Bishop Barry can remain a member of a society which, after stating that it had withdrawn the *Nine Circles*, sent out some of the same slanderous statements in other pamphlets at a time when it stated publicly that it had withdrawn them? And, lastly, how is it that Bishop Barry thought it right to go travelling about without previously clearing his character?

MEDICAL DEFENCE UNION.

SIR,—Will you allow me, in the first week of this New Year, to call the attention of your readers to this society, which has done good work for the profession generally and for its members in particular for many years. The President, as you are aware, is Professor Victor Horsley, F.R.S., and the society has reason to congratulate itself upon his accession to office. Mr. Horsley has thrown himself into the heavy duties which pertain to his office *con amore*, and his services have been most valuable and enthusiastic. The Council, consisting of elected members, meets every fortnight for the transaction of business, and all cases are brought before them and subject to their decision. This does away with the misrepresentations that have been made with regard to the working of the society; it is not "run by one or two men;" on the contrary, the Council alone can decide what is to be done in any and every case. The constant meetings of the Council prevent any undue loss of time in the conduct of a case, such as might happen if the board only sat at irregular and long intervals. The report will be out in a short time, and the work done will prove satisfactory to the profession. The society has now passed through its time of trial, and each day's work gives it the experience which is so necessary in dealing with the multifarious questions placed before it by its members. It rests upon a solid foundation, and merits the approbation of all medical men. The membership is nearly 3,000, but of course this ought, in the interests of all, to be quadrupled, and doubtless will be so when the working is better understood.

It is to be hoped that the time will come when a medical man will no sooner register than he will become a member of one or other of the defence societies. The work done in the past is the surest test of the necessity of a defence union, and many a member has reason to congratulate himself on his acumen in joining such a society.

The subscription at present is 10s. per annum dating from January 1st. Each intending member has to submit his candidature to the Council, and if elected can avail himself of the benefits to be derived from membership after the date of election. Any further information can be obtained from my colleague, Dr. Leslie Phillips, 22, Newhall Street, Birmingham, or from yours, etc.,

64, Longridge Road, S.W., Jan. 1st. A. G. BATEMAN, M.B.

THE COMMITTEE ON INDUSTRIAL LEAD POISONING.

SIR,—In your able article on the report of the Departmental Committee appointed by the Home Secretary to inquire into the conditions under which lead and its compounds are produced, etc., you say that "the investigation appears to have been carefully conducted." May I, as one of the witnesses, having had some twenty-seven years' experience of lead poisoning at the Sheffield White Lead Works, and some years' experience as one of the responsible partners, without any pecuniary interest, tell you how the inquiry was conducted so far as Sheffield was concerned.

Early one Monday morning, a message by the telephone from one of our principal hotels arrived, asking if I could see a gentleman who was staying there. Shortly after he came up to my house, and I saw him. He asked me to go down to the hotel at 4 P.M. to tell him about our lead works. I foolishly consented without making the necessary commercial arrangements. I put my work on one side to go, and went, finding what I had never been informed of, the important Committee you allude to, and certainly never expected. I protested at once, and said that I had had no time to look at my books or think the matter over, and that I could give impressions only. They said that they only wanted impressions. With regard to illness at the lead works they never saw my books, they gave me no chance of consulting them, and they only cared for my reminiscences, extending over twenty-seven years. After correcting the proof of my evidence I asked for a fee. I received the following curt reply:—

July 12th, 1893.

SIR,—In reply to your note enclosed with corrected proof of your evidence I regret to have to inform you that it is not in my power to pay fees to witnesses; I am only authorised to pay expenses.—I am, Sir, yours, etc.

In answer to this I wrote:

Sheffield, July 13th, 1893.

SIR,—Do I understand you to say that a body of gentlemen going about making inquiries for the public good take medical men on the spur of moment from their work, and that they do not intend to pay them for their trouble? Do I understand you to think that you behaved honourably in not telling me that I was going to do gratuitous work before you took advantage of my service? Please tell me to whom I am to apply for my just fee, for which I must hold you personally responsible.—Yours faithfully, ARTHUR JACKSON.

The following is the reply:

Home Department, July 14th, 1893.

Dear Sir,—I beg to acknowledge the receipt of your letter of yesterday's date, and regret exceedingly that it is not in my power to [illegible] beyond his actual having [illegible] I do not know who a member of the Committee asked you to attend. I am extremely sorry you were not informed beforehand. ...

On receipt of your letter I went to the Treasury to see two officials about it, and was informed it was totally contrary to precedent to pay professional witnesses. Yours faithfully,

I have carefully suppressed the name of the gentleman who is compelled by the Home Department to write such letters; but I do hope that you will urge upon the department the propriety of giving medical men time to think before they are asked to give evidence on important points involving the health of their fellow countrymen, and that they should be told that they are about to give a benefaction to the Treasury, involving injury to their patients and loss to themselves.—I am, etc.,

Arthur Jackson,
Senior Surgeon to the Sheffield General Infirmary, Consulting Surgeon and Treasurer to the Sheffield Public Hospital and Dispensary, Surgeon to the Lead Works.

DOCTORS' SHOPS IN GLASGOW.

Sir,—In the British Medical Journal of December 30th, 1893, there is a paragraph with the above heading which perhaps you will kindly permit me to reply to.

It is perfectly correct, as stated, that the recent pharmacy prosecutions in Glasgow were directed against the registered assistants of medical practitioners who had open shops; but I am afraid your correspondent has no authority for asserting that "there is no intention to interfere with the rights of medical practitioners as reserved by the amendments of the Pharmacy Act of 1869." If this is correct, I should like to know his authority. The question for us to consider at present, however, is not what the "intentions" of the Pharmaceutical Society are, but how far the 1868 Act will permit them to go.

The words of the Act (Section xv) are, "any person who shall sell or keep an open shop," and the recent convictions were obtained on the ground that an unregistered hand dispensed a mixture containing one or more scheduled poisons, and had also sold a small quantity of another. The defence chiefly lodged was not that medical men who keep open shops possessed any special privileges above those enjoyed under the Pharmacy Act (1868) by chemists, but that the words of the Act will not stand the interpretation that the assistant who dispenses or sells a poison must be registered as well as his employer.

We maintain that the Act only requires registration to conduct a business and that the servant makes the sale on behalf of his employer. Without doubt this was the real meaning of the Act from the time of its passing until recently. The chemists themselves not only maintain this but act up to it; so much so, that if the Pharmaceutical Society cared they could obtain convictions by the score on the very same grounds as the recent cases, in connection with *bonâ fide* businesses conducted by pharmaceutical chemists. This, however, is no concern of ours. Our contention is that our rights as medical practitioners, which were reserved in 1868 and doubly assured by the amended Act of 1869, are being unjustly and unwarrantably interfered with by a body which owes its very existence to us. If a conviction can be obtained in the case of an open shop, on the same reasoning it can quite as easily be obtained in the case of a medical man supplying drugs to his own patients only but through the medium of an unregistered assistant. It is a sale all the same.

But any decisions yet given have never gone beyond the inferior courts in Scotland, and the Glasgow Southern Medical Society, as a body of general practitioners, has very properly taken steps to obtain a definite decision from the higher courts by appointing a committee to take the matter in hand. A test case has now been stated for appeal before the High Court of Justiciary, which will come up at an early date, and we are asking the assistance of the general practitioners who have hitherto considered that they were complying with all the requirements of the law in training assistants for themselves to dispense their prescriptions.

The Treasurer, Dr. C. E. Robertson, 63, Dixon Avenue, Crosshill, Glasgow, will gladly acknowledge any subscriptions sent. I am, etc.,

James Hamilton,
Glasgow, Jan. 2nd. Secretary to Committee.

MEDICO-LEGAL AND MEDICO-ETHICAL.

A WARNING TO CHEMISTS.

The facts brought out in evidence at an inquest in Ipswich last week furnish a striking illustration of the inconvenience and possibly more serious consequences that may result from imperfect observance of the statutory provisions relating to the sale of poisons. The transaction was of a very trivial nature—the sale of a packet of precipitate powder. The purchaser was a small boy, who had been sent by his mother, then lying ill in bed, and apparently somewhat affected in her mind. According to the evidence of the boy, the precipitate was sold to him by an apprentice in a chemist's shop; and, if that were the case, the sale was unlawful, since precipitate powder is a scheduled poison. However, the chemist in whose shop the article was sold stated that he had ordered the apprentice not to sell poisons, and to refer to him whenever they might be asked for. Apparently that direction was not obeyed in this instance; and, as the woman for whom the precipitate was obtained poisoned herself with it, the matter became the subject of inquiry by the coroner. In reviewing the evidence and explaining the law affecting the case, he reminded the jury that the Pharmacy Act was passed to protect the public by making the purchase of certain articles difficult, and by restricting their sale to specially authorised persons. He considered that an offence against the Act had been committed, though the jury could not deal with that; and he proceeded to point out the responsibility that would attach to the master of the apprentice if he had negligently left him to sell poisons. The penalty to which the apprentice would be liable would not relieve his master from further liability for consequences resulting from the sale of poison by his apprentice, and, if death ensued, he might be open to a charge of manslaughter. In this case the coroner accepted the evidence that there had not been any negligence on the part of the master, and that the apprentice had acted in opposition to his master's direction, leaving the jury to decide whether the apprentice had done so thoughtlessly, or had been guilty of gross and culpable negligence, such as to make him responsible for what ensued. The jury, taking a lenient view of the case, came to the conclusion that the apprentice's conduct was very reprehensible and deserving of censure, and requested the coroner to reprimand him.

After a long consultation a verdict was given that the deceased committed suicide during temporary insanity. It will probably be said that precisely the same thing would have happened if the poison had been sold by the apprentice's master. However true that may be, it only shows that the Pharmacy Act is but a partial protection, and, for that very reason, the strict observance of its provisions is the more necessary. But there is a part of the chemist's evidence which is in this respect specially noteworthy. He stated that the sale of precipitate powder is such a common occurrence that it was not likely to be remembered, and, further, that the article is more frequently sold to children than to grown-up people. That appears to be a remarkable circumstance, which is as little in accord with the spirit of the Pharmacy Act as it is with the regard a chemist should have for his own responsibility in such transactions. The law has declared certain articles shall technically be deemed poisons, that is to say, poisons according to Act of Parliament, and they have been taken out of the ordinary course of trade by the conditions imposed upon their sale. It seems strange therefore that, even in chemists' shops, the sale of such articles should still be conducted in the loose manner described, and that any one of them should be left in a shop in such a way that a thoughtless apprentice can readily obtain access to it for sale. The inquest at Ipswich has shown what may be the consequences of such proceeding, and it teaches a lesson which should not be disregarded. Again, it is true that chemists are not under any restriction as to the persons to whom they sell certain poisons. That is another illustration of the imperfect nature of the law in its letter. But there can be no doubt that it embodies a principle, and it may be suggested that chemists might well regulate their business transactions in regard to poisons with more consideration for the spirit as well as for the strict letter of the Act. By so doing we believe they would not only contribute to the safety of the public but also materially promote their own interests.

THE MEDICAL BATTERY COMPANY.

A statement of the affairs of this Company, against which a winding-up order was granted on November 22nd, has been issued, with the accompanying observations of Mr. C. J. Stewart, Official Receiver. The liabilities are returned at £23,916, of which £19,780 will probably rank, with £4,212 of assets, and a deficiency, as regards contributories, of £119,780. The Official Receiver gives a detailed history of the operations of the Company, and says its failure is attributed by Mr. Harness to articles appearing in certain papers, and reflecting on the conduct and the nature of the business.

SUBSTITUTES AND FEES.

Dr. P. and Dr. C.—The questions in dispute well illustrate the inexpediency of entering into verbal instead of written agreements, especially in cases in which money payments are involved. A dispassionately thoughtful consideration of the various points mooted in the lengthy correspondence which has passed between the disputants leaves no doubt upon our mind as to the bearings of the case; indeed, Dr. C. (irrespective of the two prior and precisely similar professional arrangements mutually entered into and acted on) admits in his note of December 4th the accuracy of Dr. P.'s alleged conditions respectively agreed upon. We are, therefore, constrained to believe that Dr. C. has,

however unwittingly, morally erred in retaining possession of the whole of the fees received by him with the view to indemnify himself against any prospective loss by non-payment of doubtful fee debts. Inasmuch as such retention does not accord with the original or the two *de facto* subsequent arrangements mutually assented to, we venture to express a hope that Dr. C. will not fail to recognise his moral obligations in the case, and honourably fulfil them.

With reference to his later propositions that Dr P. would allow him (Dr. C.) 20 per cent. out of his own moiety of the fees wherewith to cover his expenses; and, further, to hold himself responsible for the fees of patients who have not paid, we cannot advise Dr. P. to accede thereto, seeing that such formed no part of the original or subsequent agreements, and, moreover, that, in consequence of his official status, he (Dr. P.) claims and obtains double the fees ordinarily charged by Dr. C. in which the latter participates as Dr. P.'s *locum tenens*. We need scarcely note that the pecuniary arrangement referred to differs *in toto* from that which usually obtains in England.

ADVERTISEMENT BY HANDBILL.

JUSTICE.—In response to our correspondent's request for an expression of our views as to the handbill advertisement of a "surgery," we would remark that when the several diploma-granting bodies recognise and fulfil their medico-ethical obligations to the public and the profession redress may be hoped for; meanwhile, we can only renew our oft-repeated advice, that the one effective plan to check the professionally degrading system of issuing such handbills as those of Mr. R. Marr is to forward a copy, with a simple but emphatic protest, to the authorities of the college of which the offending practitioner is a member, which we believe to be L.R.C.P. and L.R.C.S., and L.F.P.S.Glasg.

BREACH OF CONTRACT NOT TO PRACTISE.

SURGEON writes: (1) B. is bound by an agreement to A. not to practise within a certain radius for an indefinite period. B. treated a patient outside the radius. He comes and lives within the radius, and sends for B. to attend him. He has never been, and very probably never will be, A.'s patient. If B. attends him, (*a*) is he legally liable? (*b*) is there any breach of etiquette? (2) B. hears that agreements between principal and assistants have been laid aside by some courts in England.

*** (1) (*a*) The liability depends on the terms of the agreement. It probably has been so worded as to preclude B. from attending the patient under the circumstances suggested. The question of the patient having in any sense belonged to A. is not likely to arise under the agreement at all. (*b*) It is dishonourable to break an agreement into which a man has deliberately entered, and in that sense contrary to etiquette. Apart from the agreement there is no etiquette applicable to the case. (2) An agreement was set aside in 1885 in which the principal was an unqualified man, and the courts therefore held it to be an illegal agreement which could not be enforced. There have been several cases in which no such objection arose, and the courts have enforced the agreements and restrained the defaulting party from practising in breach of his contract.

THE USE OF INDIGENOUS DRUGS.

CEYLON writes: I am a medical practitioner, fully qualified, engaged in the practice of medicine as taught in the European schools of medicine, and I should be glad to know whether there is any objection to my using in the treatment of diseases drugs of known composition which I have seen used with very great efficacy by natives who practise medicine on the old Hindu system, which is still in great vogue in this island and other eastern countries.

*** In response to "Ceylon's" simple but unwonted question, which, in consequence of the dissenting views of other qualified practitioners, he feels constrained to submit for our consideration, there cannot, in our opinion, be the slightest reasonable doubt that the use of drugs, the composition of which is known, and their reputed "very great efficacy" confirmed in practice, is not "unprofessional," as alleged, notwithstanding their omission from the official European *Pharmacopœias*.

CLUB TARIFFS.

A MEMBER B.M.A.—The arrangement described by our correspondent must be a local one. It is probably entirely confined to country districts, and carried out by local courts without any authority from the general body of the Foresters' Order; indeed, 1d. a week per child is altogether opposed to a recent change in the system by the formation of Courts of Juvenile Foresters, which would be entirely unnecessary were the custom alluded to by our correspondent general. The usual allowance for successful vaccinations in the metropolitan area is 1s. 6d. per case. As to the miserable inadequacy of these payments in many cases there can be no difference of opinion.

NOTIFICATION OF PARTNERSHIP.

M.D.—The most unexceptionable mode of notifying the introduction and address of a partner is to transmit an autograph note, or a *fac simile* thereof, on note paper, to the *bonâ fide* patients of the transmitter. A printed circular is inexpedient, in so far as it is characteristic of a trade in contradistinction to a profession.

THE TITLE OF PHYSICIAN AND OF SURGEON.

F. W. C.—We recently replied to an inquiry similar to that now made by our correspondent F. W. C., to the effect that we had not ourselves expressed any definite opinion on the subject of who is entitled to call himself a physician, but had confined ourselves to giving the effect of certain decisions bearing on the point. The decisions to which we referred were that of the magistrates of Aston, affirmed by the Queen's Bench Division on appeal, and commented on by us in a leading article in the BRITISH MEDICAL JOURNAL of December 12th, 1891. Beyond what was stated in that article it is unsafe to go, in the absence of the courts of law or the General Medical Council giving a binding decision.

INQUIRER.—A Licentiate of the Society of Apothecaries whose diploma is dated on or after the appointed day named in the Medical Act, 1886 (namely, June 30th, 1887), is entitled to practise medicine, surgery, and midwifery, and is, in our opinion, entitled to call himself "surgeon." As to the title "physician," we refer our correspondent to the reply to F. W. C.

THE CLERGY AND PROFESSIONAL REMUNERATION.

M.D., SCOT., writes: The question of professional remuneration has been discussed in the BRITISH MEDICAL JOURNAL for some time, and I enclose for perusal (but not for publication) two letters received from a clergyman on the question: "Is it the rule to charge the clergy for medical attendance?" My correspondent was ill—seriously ill I understand—last winter, and recently received an account for professional attendance (and medicine no doubt, as there is no chemist in the district) and is evidently surprised that such should be sent by his medical attendant, and says that with only one other exception, and that a trifling one, he was never asked a penny for services rendered to himself or to any member of his household during a period of twenty-five years, and that that is the experience of every clergyman to whom he ever spoke on the subject both in England and Scotland. My reply was in effect that the rule was to charge clergymen, but that a difference would be made between rich and poor clergymen as was made between rich and poor laymen, adding that some members of the profession might refuse to charge or take a fee, but it was only on the principle that a man could do what he liked with his own, but that if one chose to give his time and skill for nothing it did not follow that others must do so. This reply was scarcely well taken, for the clergyman writes again that he does not agree with me, and that in his experience it is the exception and not the rule to charge the clergy. He adds: "There is a very interesting correspondence going on just now both in some English and Scotch papers on this very subject, and the unanimous testimony of the clergy in both countries goes to prove that they were exempt from doctors' fees.' My correspondent is a clergyman of the Scottish Episcopal Church, and lives fully seven miles from the nearest medical practitioner, and evidently expects professional attendance free for himself and household (although he does not exactly say so). In his first letter he says he knows "it is considered to be etiquette among physicians to act in this generous manner, especially in the case of poor clergymen."

Having this "testimony" from the clergy of England and Scotland, it would be interesting to know the views of the medical profession on the question. I do not know the number of clergy "of all denominations" in the two kingdoms, but along with their households they must make up a goodly number, and have an important bearing on the question of professional remuneration.

In conclusion I may add that I am not now practising, and it is probably on that account that my opinion was asked.

*** The reply made by M.D. to his clerical querist (influenced thereto by the Bishop of A. and other clergy) is in strict accord with the rule of the faculty; in relation to which we would refer our and his correspondent to the comments which appeared in the BRITISH MEDICAL JOURNAL of December 2nd, page 1253, col. 1, under the heading of "Medical Fees and the Clergy;" from the principle of the rule therein laid down we advisedly counsel practitioners not to deviate.

A PARTNERSHIP QUESTION.

B. B. writes: B. B. enters into partnership with A. B., A. B. guaranteeing that B. B.'s share shall not be less than £400 per annum for the first two years. In less than a year the partnership is dissolved by A. B. (the vendor) being adjudicated a bankrupt. What is your opinion of A. B.'s conduct? Can B. B. recover part of his purchase money in the Bankruptcy Court?

*** Subject to any provisions in the articles of partnership in question, we think that our correspondent would be entitled to prove against the estate of A.B. The claim, however, would seem to be contingent on the income of B.B. from the practice being less than the amount guaranteed. The matter should be brought to the attention of the trustee in the bankruptcy in order that an estimate might be made of the value of the claim in respect of which to prove. The conduct of A. B. would probably call for an explanation if the facts were laid before the General Medical Council supported by proof that A. B. knew of his insolvency at the time he entered into the contract of partnership.

G. E. M.—It would, we think, be a justifiable course to take to intimate that there would be no alternative but to commence legal proceedings to recover the amount of the charges in question if not paid within a given reasonable time.

WE are informed that Leopold Hoff's Malt Extract received a diploma and medal at the Chicago Exhibition.

PRESENTATION.—Dr. Arthur Purkiss, of Wolston, Warwickshire, was on December 29th presented with a silver-mounted walking-stick by the members of the Brandon and Wolston Ambulance Class.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY

The following appointments to the Medical Service of the Admiralty:—Richard Mullan, M.B., Surgeon, to the Indus, January 12th; Johnston H. Watson, M.B., Surgeon, to the Victory, January 7th; Charles J. Fyffe, M.B., Surgeon, to the Royal Sovereign, 3rd.

An examination of Surgeons who are eligible and may be desirous of qualifying themselves for the rank of Staff Surgeon in the Navy has been arranged to take place at Haslar Hospital on January 17th.

ARMY MEDICAL STAFF.

Surgeon-Colonel C. M. Cuffe, C.B., is under orders for India, to take the place of Surgeon-Colonel Walsh, who goes to Madras as Principal Medical Officer.

Surgeon-Captain R. H. Clement, who is serving in the Bengal Command, is granted leave to England for six months, on medical certificate.

THE PRINCIPAL MEDICAL OFFICERSHIP OF MADRAS.

We have already intimated that there was a difficulty in filling up the post of Principal Medical Officer of Madras, in succession to Surgeon-Major-General Boyd-ell, who returns by age this month. The War Office had, apparently without consultation with the Indian Government, nominated Surgeon-Colonel Beatty to the post, in spite of the fact that that officer would have had only fifteen months to serve after promotion. The Indian Government, however, refused to accept an officer so close on retirement, at the same time as we understand, intimating that in future no officer should be accepted for an administrative appointment in India for a shorter term than three years. The War Office next nominated Surgeon-Major-General Wade, at present Principal Medical Officer at Aldershot; but this proposal was met with a protest from the Horse Guards, who objected to the removal from so important a position of an officer who has held it only for a year. The result is that the Director-General has had to go as low as the fourth in order of seniority among the Surgeon-Colonels to find a Principal Medical Officer for Madras. Surgeon-Colonel Walsh has been nominated, and has, we believe, been accepted by the Government of India. In consequence of this appointment, Surgeon-Colonel Walsh must either be promoted over the heads of several officers, or he must collaborate in the higher grade till the end of 1894, when his promotion becomes due. These difficulties are the result of the short-sighted policy, which has made three years' service in a rank necessary in order to qualify for the pension of an administrative appointment, and which has thus put an entire stop to voluntary retirement.

INDIAN MEDICAL SERVICE.

Surgeon-Major D. R. Ross, M.D., Bombay Establishment, is permitted to retire from the service, which he entered as Assistant Surgeon, September 30th, 1876, attaining the rank of Surgeon-Major twelve years therefrom.

Surgeon-Major D. F. Dymott, M.B., is appointed to the medical charge of the 22nd Madras Infantry.

Surgeon-Lieutenant-Colonel H. K. McKay, Bengal Establishment, Medical Officer Nagpore Volunteer Rifles, is granted leave to Europe for one year from December 2nd, 1893.

INDIAN PAY.

A writes: It is a popular fallacy that medical officers receive exorbitant pay compared with the combatant branches; but I have not seen any comparison between the rates of furlough pay under Staff Corps rules. It is stated in the Indian Army Regulations that, "the rules laid down for the grant of leave to officers of the Indian Staff Corps apply equally to officers of the Indian Medical Service in military employ, with the following modifications in regard to the rates of pay whilst on leave out of India:

	Staff Corps.		Indian Medical Services.	
After appointment	£2000 yearly	...	£2000 yearly	
Five years' service towards pension	250	...	250	..
Ten years	—	..	250	..
Fifteen	300	...	400	..
Twenty	450	...	450	..
Twenty-five	600	...	500	..
Thirty	700	..	..	..

Why this difference after twenty years? As regards privilege leave, although nominally the same to all, it is only a name to many medical officers, because in their case it is only granted on the understanding that the State is put to no extra expense; and in many of our best stations for medical officers can only get it by the sacrifice of the larger part of his staff pay to his substitute. This does not happen to a Staff Corps officer, who in the regiment is always entitled to the services of an absentee in addition to his own. Then the [illegible] to count towards pension, in the case of medical officers strictly defined, but no such limits seem to be laid down for combatant officers.

SOCIAL DISABILITIES.

Army Medical Staff writes: [illegible] medical officers [illegible] probably largely the result of [illegible] Personally, our correspondence [illegible] private individuals [illegible] depot-medicines sent to [illegible] officers. As a remedy, he suggests that it should be made known through the profession at large that distinct invitations should be sent, when it is intended to invite medical officers, to the senior medical officer, or to the one in charge, and the "officers Army Medical Staff" included in the invitation. The majority of civilians seem to think medical officers still belong to regiments, as in the old days.

THE STRUGGLE FOR RIGHTS.

A CORRESPONDENT, writing from India, says: The Secretary of State's reply to the grievances of medical officers, set before him by deputation, can hardly be taken seriously, if the struggle for our rights is to be given up after such a reply, medical officers will only bring upon themselves merited contempt. The medical schools should be kept fully informed of the state of army medical affairs. The formation of a corps with army rank and titles is the only hope of satisfactory settlement. You have done an immensity for us, for which we must ever be grateful, but the fight is by no means ended.

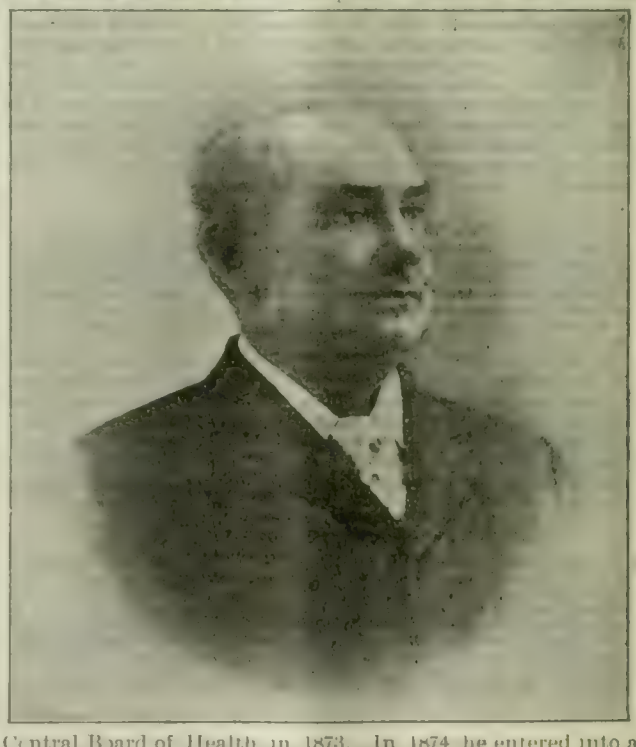
OBITUARY.

Hon. JAMES CECIL PHILLIPPO, M.D., L.R.C.S.Edin.

We deeply regret to have to report the death of Dr. J. C. Phillippo, of Kingston, Jamaica, which took place recently in his 63rd year. He was the son of the Rev. James Mursell Phillippo, who, in 1825, at the age of 25, was appointed by the Baptist Missionary Society for service at Spanish Town.

The deceased received his medical education at the University of Edinburgh. In 1853 he took the diploma of L.R.C.S.Edin., and the following year the degree of M.D. Edin. On returning to Jamaica he began to practise, and in 1859 was appointed Physician to the Middlesex City Gaol. He rapidly made his way in his profession, and was very popular, from the urbanity of his manners not less than from his care and patience as a medical attendant.

In 1860 he was made a Justice of the Peace for the parish of St. Catherine, and in 1863 became a member of the Board of Visitors to the Public Hospital, Kingston, and of the



Central Board of Health in 1873. In 1874 he entered into a partnership with Dr. A. Saunders, which continued up to the time of his decease.

As a public man—sagacious in his judgment, far-seeing in his perceptions—Dr. Phillippo was entrusted with responsible work in the colony. He was President of the Medical Council in Jamaica, and was the first President of the Jamaica Branch of the British Medical Association, and to him, in conjunction with Mr. Gayleard, is due

the formation of this the first Colonial Branch of the Association in 1878. He was re-elected President in 1885, which office he held until December, 1888. There are now fifty-six members of the Jamaica Branch, and it meets regularly for the discussion of scientific and other questions.

Dr. Phillippo was appointed a member of the Commission to inquire into the condition of the juvenile population in 1876, and in 1889 he became a member of the Privy Council of Jamaica. He took a leading part as delegate from the British Colonies at the recent Pan-American Medical Congress.

ROBERT BENTLEY, M.R.C.S., F.L.S.,

Emeritus Professor of Botany in King's College, London.

WE regret to have to record the death of Professor Richard Bentley, of Warwick Road, Earl's Court, who has been teacher of botany to many generations of members of the medical profession. At King's College, at the Botanical Gardens, and at the Pharmaceutical Society, he has been engaged in the teaching of botany to medical students for two-thirds of a century. His *Handbook of Botany* held its place for more than a score of years as the standard book, and has been in the hands of many thousands of medical students. Professor Bentley possessed admirable qualities as a teacher, and delightful characteristics as a man. His gentleness, sweetness of temper, his cheerfulness and affectionate friendships with his leading students, united to make his life a happy one, and full of loving associations. He retained his vigour of body and mind through more than the usual span of years, and, notwithstanding the inconvenience of a chronic tendency to gout, he was able throughout nearly the whole period of a long working life to fulfil all his engagements with punctual accuracy.

As the Dean of King's College Hospital he has special claims on the generations of students, who owed much, not only to his scientific teaching, but to his kind personal help and his strong religious influence. Mr. Bentley became a Member of the College of Surgeons in 1847, and was soon afterwards appointed Lecturer on Botany in the medical school of the London Hospital, and Professor of Botany in King's College. His subsequent life was entirely devoted to the advancement of botanical science, and he was the author of numerous books and papers bearing upon it, and upon the applications of botanical knowledge in medicine and in the arts. One of the last of his works of this kind was the editing, jointly with Professors Redwood and Attfield, of the *British Pharmacopœia* of 1885, which is still the official standard for all medical preparations which are recognised by the General Medical Council. Mr. Bentley was a member of several learned societies in this and other countries. Few men have been more widely loved, and none could deserve that love more unreservedly.

The funeral took place at Kensal Green. The coffin, which was covered with wreaths, including one from the members of the Guild of St. Luke, was removed during the morning to the church of St. Matthias, Earl's Court, where the first portion of the burial office was recited by the Rev. Jonas Pascal Davidson. Among those present were Mrs. Bentley (the widow), Mr. Bentley, Mr. J. W. Cunningham (representing the authorities at King's College), Dr. Attfield (representing the Pharmaceutical Society), the Rev. H. Westall, the Rev. J. Outram Marshall, Mr. A. Shaw, the Rev. R. C. Kirkpatrick (who conducted the service at the cemetery), Mr. Goodsir, Mr. Hobbrow, and many other friends of the late professor.

WILLIAM KEBBELL, M.D.EDIN., M.R.C.P.LOND.

WE deeply regret to have to report the death of Dr. William Kebbell, of Brighton, which took place, from malignant disease, on December 23rd. The deceased, who had been in bad health for the last six months, was born in Essex in 1820. He received his medical education at Edinburgh, where he took the degree of M.D. in 1843. He became a M.R.C.P.Lond. in 1859. He removed some forty years ago to Brighton, where he practised with much success. In 1874 he was appointed medical officer of health for Hove, and resigned that office only some four years ago. The deceased was consulting physician to the Sussex County Hospital. Dr. Kebbell leaves a widow, three sons, and a daughter.

A. MILNES MARSHALL, M.D., D.Sc., F.R.S.,

Professor of Zoology and Comparative Anatomy in Owens College.

WE regret to announce the death of Professor Arthur Milnes Marshall, of Owens College, Manchester. He was one of a party of tourists who have been spending their Christmas holidays at Wasdale, and was killed on Sunday by a fall on Scafell. He was born in 1852, and in 1871 he entered St. John's College, Cambridge, where he graduated as senior in the Natural Science Tripos in 1874. Before he went to Cambridge he had already taken the degree of B.A. at the London University, where he afterwards gained the further degrees of B.Sc. and D.Sc. After graduating at Cambridge he spent a few months at Dr. Dohrn's Zoological Station at Naples, and then returned to Cambridge to assist the late Professor Balfour in organising the classes of Comparative Morphology. In 1887 he entered St. Bartholomew's Hospital, and in the same year was elected a Fellow of St. John's College, and in due time took the M.D. at Cambridge. He was appointed Professor of Zoology at Owens College in 1879, and in 1885 he received the distinction of F.R.S. He took an active part in organising the courses of study for the Victoria University. He was the author of *The Frog*, of which the third edition appeared in 1888, of *Vertebrate Embryology*, and, jointly with Mr. Hurst, of *Practical Zoology*, of which a second edition was published in 1888, and contributed several papers to the *Proceedings of the Royal Society* and the *Quarterly Journal of Microscopical Science*. He was a member of our editorial staff, and we are indebted to him for many critical and valuable reviews on subjects dealing with his department of science.

ARTHUR GRAHAME GAMGEE.

THE daily papers recently referred to a terrible calamity which had befallen a member of our profession (Dr. Arthur Gamgee, F.R.S., Emeritus Professor of Physiology in Manchester) by the death of his only son, a youth aged 17, of remarkable character and attainments, who in a sudden attack of insanity, committed suicide at Cheltenham on December 17th.

Arthur Grahame Gamgee had in his 15th year won the first classical entrance scholarship at Cheltenham, and rapidly made his way in the school, obtaining in July 1893 the second place in the upper 6th form, and beating the boy who had in previous terms been head of the school. Besides obtaining the Schacht German prize in 1892, the Hornby French prize in 1893, and within a week or two of his death the first prize offered by the Professeurs Français en Angleterre, Gamgee was the winner of the Greek Testament prize (1893), and of the Latin prose prize (1893). His classical attainments, his high intellectual gifts no less than his spotless character seemed to presage for him a career of the highest distinction, and he was looked upon at Cheltenham as having a good chance in the next competition for Balliol scholarships.

Arthur Grahame Gamgee was a boy of blameless life and of the highest moral and religious aspirations. Though avowedly much worried by anxieties which he had experienced on lately assuming the office of Prefect, he was the last boy for whom so sad a fate would have been anticipated. The last act of his school life was to read the second lesson in chapel on the evening of his death.

Referring to the inquest which was held after it, the Rev. Dr. H. A. James, Principal of Cheltenham College, expressed himself as follows in a private letter addressed to his mother:

"I trust it was made abundantly clear that it (that is, his death) was arrived at by some purely physical cause, and that nothing was further from his character and views of life and duty than such an end as this.

"Having said so much do let me say how profoundly I sympathise with you in this sad, sad blow. It is not that I grieve to think of your sorrow, but that I share it to the very bottom of my heart. For I know the boy's high and noble character, and he had a very warm place in my heart, not hardened yet, I hope, by long years of school work. I cannot help bitterly regretting that I did not know more of his troubles in the house; I should have felt for him, and tried to do what I could.....It was such a pleasure to teach him. Fresh, original, and yet receptive and anxious to learn, he

was the pupil a master loves to have; and I shall miss him sorely. To watch such a mind expand and to help it ever so little is one of the dearest pleasures a schoolmaster can have.

"I know, too, how entirely loyal he was; true and genuine to the very core.....There is only one thought and word about him among all who are worthy to judge. He was not an ordinary conventional character, the kind that wins popularity with his peers; but he has won a deeper and more worthy regard than that.

"I can say nothing, I know, to comfort you; the one true comfort is to know that he was just what he was, and to have the hopes and assurances that come from that knowledge."

PROFESSOR THEOPHILO FERREIRA, of Lisbon, who recently died of influenza, began life, like the late Professor Peter, as a compositor. By indefatigable work he qualified himself for the post of teacher in a primary school. Here he found time to study medicine, and he took his degree in 1879. Whilst actively pursuing the practice of his profession he took a leading part in educational and municipal affairs. The city of Lisbon owes much to his zeal as a sanitary reformer. Dr. Ferreira was a member of the Portuguese Cortes, and an "Alderman" of the Municipal Council of Lisbon.

DR. W. S. LEAD, the oldest practitioner of St. Joseph, in the State of Missouri, who died recently, was the largest owner of slaves in that State before the civil war. He was a somewhat eccentric man, and after the slaves were liberated he erected small shanties for them all over the city. These he let to them for a rent of a few dollars a month. Many of these are still standing on land now worth hundreds of dollars a square foot, and are occupied by some of Dr. Lead's old slaves or their descendants.

THE death is announced of Dr. Samuel Henry Bailey, of Nottingham, at the age of 43. He became L.S.A. in 1874, M.B., C.M.Aberd. in 1875, and in 1877 he took the degree of M.D.Aberd. Some years ago the deceased had a severe attack of rheumatic fever, which left behind it a permanent weakness. The deceased leaves a widow and three children.

THE death is reported of Dr. T. H. Waterworth, of Southwark, who died on Christmas Day, at the age of 68. The deceased took the diploma of L.S.A. 1849, and that of M.R.C.S.Eng. in 1850; in 1860 he took the M.D.King's Coll., Aberdeen. He was formerly Medical Officer of Health for St. George-the-Martyr, Southwark, and Surgeon to the old Horsemonger Lane Gaol. At the time of his death he was Surgeon to the Surrey Dispensary.

DEATHS IN THE MEDICAL PROFESSION ABROAD.—Among the members in the medical profession in foreign countries who have recently passed away are Dr. Isaac N. Kerlin, since 1864 Medical Superintendent of the Pennsylvania Training School for Feeble Minded Children, aged 59; Dr. Leopold Hlavacek, of Chlumetz, on whom the Gold Cross for distinguished service had been conferred by the Emperor of Austria, aged 73; Dr. L. N. Luck, a prominent member of the Yates County (U.S.) Medical Society, aged 50; Dr. A. P. Meylert, of Wilkesburne, Pennsylvania, who was Medical Director of the Army of Ohio under Sherman, on whose staff he served throughout his campaigns, aged 57; Alexandra Petrowa, of Sebastopol, one of the first ladies to enter the medical profession in Russia when permission was granted to women to study medicine in St. Petersburg, aged 49; Dr. Josef Böhm, Professor of Botany in the University of Vienna; Dr. Fischer, assistant in the Natural History Museum of Paris, and a distinguished palæontologist, aged 59; Dr. Henry Bronson, of New Haven, Ex-President of the Medical Society of Connecticut, aged 89; Dr. Valentin Korisoko, of Bereska, in the Tschernigow Government of Russia, of diphtheria caught from a patient, aged 26; Dr. W. Gray Palmer, one of the best known physicians of Washington, aged 69; Dr. J. H. L. S. Germain, of Ste Hyacinthe, Canada, author of several works on medical subjects, and founder and first president of the Medico-Chirurgical Association of the District of Ste Hyacinthe, aged 60; and Dr. W. H. Jackson, for many years Head Surgeon to the New York Hospital, and the oldest member of the New York College of Physicians and Surgeons, aged 83.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

PROSECUTION FOR EXPOSING INFECTIOUS PATIENTS.

Two summonses recently taken out by the Exmouth Local Board have been dismissed with costs. It appears that the defendant, his wife, and two children were seen by a medical man on November 13th, and were certified by him to be suffering from diphtheria. Defendant and his wife were told not to send the children to school, but no further directions seem to have been given to the patients. The defendant was driven in a public conveyance on November 18th, and was seen walking about on November 21st, although he had been cautioned by the sanitary inspector with regard to isolation and not going out on the previous day. Under those circumstances it appears *primâ facie* clear that defendant had rendered himself liable to a penalty under Section 126 of the Public Health Act, which enacts that it is unlawful for any person while suffering from any dangerous infectious disorder wilfully to expose himself without proper precautions in any street, public place, shop, inn, or public conveyance. The matter was, however, to some extent complicated by the fact that the medical witnesses for the prosecution appeared in some doubt as to the accuracy of the diagnosis, it being ascertained that the certifying practitioner had notified 14 cases in the neighbourhood, none of which had proved fatal, and it being hinted that this and other facts raised the presumption that defendant was not suffering from diphtheria. If the magistrates took the view that it was not clear that the defendant was suffering from a dangerous infectious disease their decision is intelligible; otherwise it is difficult to understand why the summonses were dismissed.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns, including London, 5,280 births and 4,469 deaths were registered during the week ending Saturday, December 30th. The annual rate of mortality in these towns, which had declined from 28.6 to 24.7 per 1,000 in the preceding three weeks, further fell to 22.6 last week. The rates in the several towns ranged from 15.6 in Preston to 49.3 in Plymouth. In the thirty-two provincial towns the mean death-rate was 22.2 per 1,000, and was 1.1 below the rate recorded in London, which was 23.3 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.4 per 1,000; in London the rate was equal to 3.0 per 1,000, while it averaged 2.1 in the provincial towns, and was highest in Oldham, Birkenhead, and Plymouth. Measles caused a death-rate of 2.0 per 1,000 in Birkenhead and in Norwich; whooping-cough of 2.5 in Birkenhead and 5.4 in Plymouth; and "fever" of 1.6 in Sunderland. The 101 deaths from diphtheria in the thirty-three towns included 79 in London, and 3 each in Manchester, Sheffield, and Newcastle-upon-Tyne. Small-pox caused 5 deaths in Birmingham, 3 in Bristol, 3 in Bradford, and 1 each in Nottingham and in Oldham, but not one in London. There were 93 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, December 30th, 1893, against 128, 118, and 100 at the end of the preceding three weeks; 14 new cases were admitted during the week, against 22 and 23 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,988, against 3,129, 3,102, and 2,993 at the end of the preceding three weeks; 262 new cases were admitted during the week, against 295 and 285 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, December 30th, the 615 deaths registered in eight of the principal Scotch towns were equal to an annual rate of 21.8 per 1,000, against 23.0 and 22.3 in the preceding two weeks. This rate was 0.8 per 1,000 below the mean rate during the same period in the large English towns. Among these Scotch towns the death-rates ranged from 19.6 in Edinburgh to 36.0 in Perth. The zymotic death-rate in these towns was equal to 2.3 per 1,000; the highest rates were recorded in Dundee and Perth. The 265 deaths registered in Glasgow included 8 from scarlet fever, 8 from whooping-cough, and 3 from diphtheria.

WATERCLOSET FLUSHING CISTERN REGULATIONS.

IT appears likely that some satisfactory result will at no distant date accrue from the attention which has been called during the past year to the anomalies of the existing law relating to the flushing capacity of watercloset cisterns. Sec. 21 of the Regulations under the Metropolis Water Act of 1871 provides that "every watercloset cistern or watercloset service box hereafter fitted or fixed, in which water supplied by the company is to be used, shall have an efficient waste-preventing apparatus so constructed as not to be capable of discharging more than 2 gallons of water at each flush." This regulation certainly serves to check undue waste of water, but it appears to have been framed with a view to safeguarding the interests of the water companies rather than those of public health. It fixes a maximum which must not be exceeded, but it is contended that it is of equal, if not greater, importance that there should be a minimum, below which the flushing capacity should not be allowed to fall. It is, moreover, alleged that the minimum required for satisfactory clearance of watercloset pan, house drain, and disconnecting trap actually exceeds the maximum allowed by the existing law.

The new by-laws of the London County Council provide for the "effectual flushing and cleansing of the pan, basin, or other receptacle

and for the prompt and effectual removal therefrom and from the pan connected therewith of any solid or liquid filth," etc. This by-law would, however, appear to be governed by Sec. 21 of the Regulations above alluded to, and assuming a 2-gallon flush to be insufficient for the "effectual flushing and cleansing" contemplated, the by-law is of no avail.

A careful series of experiments has been conducted by a committee of the Sanitary Institute with a view to determining the quantity of water required to flush a watercloset, and the committee arrive at the conclusion that the minimum quantity of flushing water should be fixed at 3 gallons, and that the maximum should be not less than 3½ gallons. The London County Council has made inquiry into the matter, and has decided to recommend that the waste-preventing apparatus should be "so constructed as to be capable of discharging 3 gallons of water at each flush." The Council resolved on December 12th, 1893, to communicate this and certain other suggested amendments of the regulations under the Metropolis Water Act of 1871 to the Local Government Board. Some alteration of Regulation 21 will presumably be made. There seems to be a clear case for a fixed minimum flush; and the Sanitary Institute experiments, detailed in a special report issued recently, appear conclusive as to the inadequacy of 2 gallons. They show, moreover, that 2½ gallons give a marked improvement as compared with 2 gallons, and that 3 gallons give a still better result than 2½. There can be no objection to a fixed maximum, provided it exceeds the minimum demanded by public health requirements.

SALARIES OF HEALTH OFFICERS.

THE *Western Mercury* has some emphatic remarks upon the absurdity of the pittances paid by way of salary to medical officers of health in urban districts. As a particular instance, it states that the proposal to advance the salary of the medical officer of health for St. Austell, at present £15, was successfully opposed by a Mr. Peters. There are many "Mr. Peters" about, and it is not only in Cornwall that their attempts to stifle or starve sanitary work are made. What quantity—and quality—of work any given Mr. Peters would himself be prepared to do for £15 per annum is perhaps beside the mark; but, at all events, what is needed from the medical officer of health can only be fractionally paid for by that modest sum. Presumably Mr. Peters and his friends would like to see only £15 worth of work done.

NEW METROPOLITAN FEVER HOSPITAL.

IT is estimated that the Metropolitan Asylums Board's new fever hospital at Hither Green, Lewisham, will cost something like £100,000, exclusive of the £22,500 paid for the site. There are to be beds for 500 patients, provision being made for 352 scarlet fever cases and 112 diphtheria and enteric fever patients, while 36 beds will be for isolation purposes. The institution is to be called the Park Hospital.

INFECTIOUS HOSPITAL CONSTRUCTION.

F. J. B.—The memorandum issued by the Local Government Board on the Provision of Isolation Hospital Accommodation, with appended block plans, price 2d. (Messrs. Eyre and Spottiswoode), and the report issued by the same Board, On the Use and Influence of Hospitals for Infectious Disease, Parliamentary Command Paper, 3,290, of 1882, and since reissued, contain information of the kind required. Other recent works treating of hospital construction are vol. iv of Burdett's *Hospitals and Asylums of the World* (Churchill), and Sir D. Galton's *Healthy Hospitals* (Lewis).

NOTIFICATION BY SEVERAL PRACTITIONERS.

M. O. H.—We regard the Notification Act as requiring certification by every legally qualified medical practitioner "attending on or called in to visit" a private patient, whom he knows to be suffering from a notifiable disease, notwithstanding the fact that the attendance has been given free of charge.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.

Glanders.—Mr. T. H. BOLTON asked the President of the Board of Agriculture whether he could give the House any further information as to the increase or decrease of glanders in the metropolis; and whether, if there had not been any material decrease, he would make representations to the London County Council with a view to a reconsideration of their policy (with regard to compensation) in dealing with the disease.—Mr. GARDNER, in reply, said that he was happy to say that still further improvement had been shown in the number of horses reported to have been attacked with glanders since he replied to the similar question addressed to him on December 10th, 1893. The number of outbreaks reported and animals attacked during the past nine weeks had been 154 and 214 respectively, as compared with 194 and 394 during the corresponding period of 1892. This being the case, he could not, with any advantage, make the further representations to the London County Council which the hon. member suggested.

UNIVERSITIES AND COLLEGES.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.

THE annual examination in Materia Medica and Therapeutics for the gold medal presented to the College by Colonel William Lorimer Bathgate, in memory of his late father, Mr. William McPhune Bathgate, F.R.C.S.E., took place on October 28th last, and it has now been announced that the medal has been gained by Miss Sarah Brown McMordie, student of medicine, Edinburgh. Three candidates appeared.

MEDICAL NEWS.

SMALL-POX AT LEITH.—Twenty new cases of small-pox were reported by medical practitioners in the week ending December 30th, 1893.

THE London County Council have purchased a site at Bexley whereon to erect a new lunatic asylum for the accommodation of 2,000 patients.

THE University and Extra-Academical Medical classes at Edinburgh meet after the Christmas recess on Tuesday, January 9th.

THE INTERNATIONAL MEDICAL CONGRESS AT ROME.—The Committee has opened at Rome a special office to provide lodgings for Congress members at hotels and private houses. Members can apply also on the same purpose to Messrs. Thos. Cook and Son, Piazza Martiri, Rome, who have been requested by the Executive Committee to satisfy such applications when made in time. Excursions will be arranged in Rome under the guidance of Professor Forbes. Congress members intending to see Naples and Sicily can travel from Rome to Naples with 50 per cent. reduction on the usual railway fares, and can join the excursions which will be arranged by the Naples Agency of Messrs. Thos. Cook and Son. This agency will arrange an undetermined number of excursions to Pompeii, Vesuvius, Capri, Sorrento, Castellamare, and Baiæ, and three to Sicily with the following itinerary: Naples, Messina, Catania, Faormina, Girgenti, Syracuse, and Palermo.

MEDICAL VACANCIES.

The following vacancies are announced:

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road, W.C.—House-Surgeon. Applications, with testimonials, to the Secretary before January 8th.

CHESHIRE COUNTY ASYLUM, Upton, near Chester.—Junior Assistant Medical Officer. Salary, £120 per annum, with board, lodging, and washing. Applications and testimonials by January 15th, to Dr. Davidson, Medical Superintendent.

CITY OF MANCHESTER.—Medical Officer of Health. Salary, £850 per annum. Applications and testimonials endorsed "Medical Officer of Health," to be delivered to the Lord Mayor, Town Hall, Manchester, by January 18th.

COSFORD UNION, Suffolk.—Medical Officer and Public Vaccinator for the Boxford District. Salary, £50 per annum, exclusive of usual extra medical fees. Must reside in the District. Applications to Alfred Newman, Clerk to the Guardians, Union offices, Hadleigh, Suffolk, by January 11th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Dental Surgeon; must be a Licentiate in Dental Surgery. Applications to J. Francis Pink, Secretary, by January 8th.

HORTON INFIRMARY, Banbury.—House-Surgeon and Dispenser, duly qualified and registered. Salary, £60 per annum, with board and lodging. Applications and testimonials to C. H. Davids, 21, Marlborough Road, Banbury, by January 6th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—House Physicians. Applications and testimonials to the Secretary by January 18th.

ISLE OF WIGHT UNION.—Medical Officer for the Ryde District. Salary, £110 per annum, with usual extra fees. Applications to the Clerk, Isle of Wight Union, Newport, Isle of Wight, by January 17th.

LIVERPOOL INFIRMARY FOR CHILDREN, Myrtle Street, Liverpool.—House Surgeon. Salary, £85 per annum, with board and lodging. Applications and testimonials to be sent by January 22nd.

LIVERPOOL NORTHERN HOSPITAL.—Assistant House-Surgeon. Salary, £70 per annum, with residence and maintenance in the house. Applications and testimonials to be sent to the Chairman of Committee by January 16th.

NAAS UNION.—Clane and Timahoe Dispensary.—Medical Officer. Salary, £95 per annum and residence, with £15 yearly as Medical Officer of Health, registration and vaccination fees. Applications to the Assistant Honorary Secretary, Mr. Jno. Healy, Firmount, Clane. Election on 15th inst.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney Road, N.E.—Physician, must be Fellow or Member of the Royal College of Physicians of London. Applications to the Secretary by January 11th.

SHILLELAGH UNION. Hacketstown and Coolkenno Dispensary.—Medical Officer. Salary, £120 per annum, with £15 yearly as Medical Officer of Health, together with registration and vaccination fees. Applications to Mr. William Jones, Honorary Secretary, Woodside, Hacketstown. Election on 13th inst.

SURREY DISPENSARY, Great Dover Street, S.E.—Surgeon. Honorarium, £52 10s. per annum. Applications to J. Harrison, 179, Bermondsey Street, S.E., before January 9th.

UNIVERSITY COLLEGE OF SOUTH WALES AND MONMOUTHSHIRE.—Lecturer on Materia Medica and Pharmacy. Stipend, £50 a year. Applications to Ivor James, Registrar, by January 27th.

VICTORIA HOSPITAL FOR SICK CHILDREN, Queen's Road, Chelsea, S.W. [illegible] patients. Honorarium [illegible] in the hospital. [illegible] by December 16th.

WORCESTER GENERAL INFIRMARY. [illegible]ian. Appointment for [illegible] to the Committee under cover to the Secretary, Mr. W. Stallard, Worcester Chambers, Pierpoint Street, Worcester, by January 6th.

MEDICAL APPOINTMENTS.

ASHER, Alexander, M.B., C.M.Edin., appointed Joint Medical Officer to the Thurso Parochial Board *vice* Dr. Craven, deceased.

BARTON, Samuel J., M.D.Dub., appointed Medical Officer of Health for [illegible] Sanitary District, *vice* Shephard Thomas Taylor, M.B.Lond., resigned.

CAMPBELL, Robert, B.A., M.B.I., M.R.C.S.Eng., L.R.C.P.Lond., appointed Visiting Surgeon to the Chester General Infirmary.

COCKER, Arthur, L.D.S.I.&Edin., appointed Dental Surgeon to Shibden Industrial School, Halifax.

COLGAN, Francis Philip, L.R.C.P., L.R.C.S.I., appointed Medical Officer to the Carlow Fever Hospital, *vice* C. W. M'Dowell, M.D., deceased.

CUTCLIFFE, Montagu, M.R.C.S., L.R.C.P.Lond., appointed Medical Officer for the Northfawton District of the Okehampton Union, *vice* P. W. Hislop, M.B., C.M.Edin., resigned.

DENSHAM, H. Bryan, M.B., C.M.Edin., appointed Honorary Surgeon to the Stockton-on-Tees and Thornaby Hospital, *vice* R. W. Foss, M.D., deceased.

DUNCAN, Robert Bruce, M.D., B.S.Dunelm, appointed Resident Medical Officer to the Newcastle-on-Tyne Workhouse, *vice* R. F. Craggs, M.D. Dunelm, resigned.

FARMER, Edward John, B.A., M.B., B.Ch.Dubl., appointed Assistant Medical Officer to the Kolar Gold Fields, Mysore State, India.

FARR, Ernest Augustus, L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer of Health for the Andover Urban Sanitary District.

GARDNER, Harold, M.R.C.S.Eng., L.R.C.P.Lond., appointed Resident Medical Officer to the Chelsea Hospital for Women, Fulham Road.

GOSSAGE, W. Herbert, M.R.C.S.Eng., L.R.C.P.Lond. (late House-Surgeon), appointed House-Physician to the Westminster Hospital.

GRIFFITH, R. Glyn, M.R.C.S.Eng., appointed Chief Medical Officer to the East Indian Railway.

HAMILTON, Richard, M.B., M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Surgeon to the Chester General Infirmary.

HOGG, Gustave Heuze, M.B., C.M.Edin., appointed House-Surgeon to the General Hospital, Hobart, Tasmania.

HUDSON, C. Leopold, F.R.C.S., appointed Aural Surgeon at Middlesex Hospital.

JONES, F. Felix, M.R.C.S.Eng., L.S.A.&D.P.H.Lond., reappointed Medical Officer of Health for the combined districts of the Llanfyllin Union.

KENWOOD, Harry Richard, M.B., C.M.Edin., L.R.C.P., D.P.H.Eng., appointed Medical Officer of Health for the Finchley Urban Sanitary District of the Barnet Union, *vice* James Turle, M.D.Edin., resigned.

KINGSBURY, Edward, B.A.Dub., M.D., appointed Medical Officer for the Stapleford District of the Shardlow Union.

LAKE, William Wellington, M.R.C.S.Eng., D.P.H.Camb., appointed Medical Officer of Health for the Woking Urban Sanitary District of the Guildford Union.

MARR, James, M.B., appointed Medical Officer for the Parish of Greenlaw, *vice* P. Kynoch, L.R.C.P., L.R.C.S.Edin., deceased.

MASSON, William, M.B., C.M.Aberd., appointed Medical Officer and Public Vaccinator to the Cottingham and Willerby District of the Sculcoates Union, Hull; Medical Officer of Health to the Cottingham Local Board; and District Medical Referee to the Prudential Assurance Company, Limited.

MATHESON, R. M., M.B., C.M.Edin., appointed House-Surgeon to Nobles Hospital, Douglas, Isle of Man.

MAY, C. G., M.D., M.R.C.P., appointed Assistant Physician to the Grosvenor Hospital for Women and Children, S.W.

MOLINEUX, James, M.D. St.And., M.R.C.S.Eng., appointed Medical Officer of Health to the Sculcoates Rural Sanitary Authority.

MONHAM, Marcus Camplin, L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer for the Stickney District of the Spilsby Union.

MURRAY, John, M.B., F.R.C.S., appointed Surgical Registrar to Middlesex Hospital.

ORMEROD, Edward B., M.R.C.S., L.S.A.Lond., appointed Surgeon to *employés* of the Appantoo Gold Mining Co., Limited, Gold Coast Colony, S. Africa.

PARKER, Charles, M.B., C.M.Edin., appointed House-Surgeon to the Launceston Hospital, Tasmania.

POTTS, James Ashford, M.B.Edin., M.R.C.S., appointed Honorary Surgeon to the Ross Cottage Hospital, *vice* Brigade-Surgeon Doig, retired.

RAWSON, Edward A., M.B.T.C.D., M.Ch., appointed Medical Officer to the Workhouse of the Carlow Union, *vice* C. W. M'Dowell, M.D., deceased.

RICKETTS, Thos. Francis, B.Sc.Lond., M.D., appointed Medical Superintendent of the Hospital Ships of the Metropolitan Asylums District, *vice* R. A. [illegible], M.A., M.D.Camb.

ROBERTS, C. H[illegible], F.R.C.S., M.B.Lond., M.R.C.P., appointed Casualty Physician to St. Bartholomew's Hospital.

SOLL, Sack Noy, M.R.C.S., L.R.C.P., D.P.H.R.C.P.Lond., appointed Medical Officer to the No. 5 District of the Plympton Union, *vice* J. B. Jacob, M.B.Dub., resigned.

SHEPPERD, A. W., L.R.C.P., L.R.C.S.I., appointed Medical Officer of Health for Cowbridge.

SINCLAIR, Walter W., M.B.Aberd., reappointed Senior House-Surgeon to the Birmingham and Midland Eye Hospital, Birmingham.

SPILSBURY, Francis J., L.R.C.P.I., L.R.C.S.Edin., appointed Medical Officer for the Hogsthorpe District of the Spilsby Union.

WATTERSON, John Wm., M.B., C.M.Edin., appointed Medical Officer for the Morecambe District of the Lancaster Union.

WEBB, Wm. H., M.D.Durh., appointed Medical Officer of Health to the Kingsbridge Local Board.

WEST, Waldemar S., M.A., M.B., B.C.Cantab., appointed House-Surgeon to the North-Eastern Hospital for Children, Hackney Road.

WILSON, J. C., L.R.C.P., L.R.C.S.Edin., appointed Medical Officer for the Haworth District of the Keighley Union.

YEARSLEY, P. Macleod, F.R.C.S.Eng., appointed Honorary Aural Surgeon to the Farringdon General Dispensary.

DIARY FOR NEXT WEEK.

MONDAY.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. W. Anderson: Case of Multiple Ankylosis of the Joints of both Lower Extremities, with Muscular or Cutaneous Atrophy. Dr. P. Abraham: Observations on the Use of Thyroid Gland in the Treatment of Diseases of the Skin.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN, 8 P.M.—Annual Meeting. Election of Officers. President's Valedictory Address. Casual Communications.

TUESDAY.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—Dr. H. Howship Dickinson: Albuminuric Ulcerations of the Intestines. Mr. J. Hutchinson, jun.: Abdominal Section for Intestinal Obstruction due to Hydatid Cysts.

WEDNESDAY.

LARYNGOLOGICAL SOCIETY OF LONDON, 20, Hanover Square, W., 5 P.M.—Annual General Meeting. Election of Officers and Council. Cases, etc.: Dr. Bronner: (1) Osseous Nasal Obstructions removed by Cutting Trephine; (2) Aseptic Laryngeal Syringes. Dr. Percy Kidd: (1) Recurrent Papillomata of Larynx Twice Operated on by Thyrotomy; (2) Angioma of Larynx. Mr. L. A. Lawrence: (1) Hypertrophy of Posterior Faucial Pillars; (2) An Intralaryngeal Mirror. Dr. Scanes Spicer: (1) Multiple Papillomata of Larynx removed from a Child, aged 8; (2) Papilloma of Uvula. Mr. W. R. H. Stewart: Carcinoma of the Œsophagus. Mr. Charters J. Symonds: (1) A Doubtful Laryngeal Case; (2) Diffuse Syphilitic Laryngitis. Dr. Watson Williams: Epithelioma of Soft Palate. Annual Dinner at the Café Royal at 7.15.

HUNTERIAN SOCIETY, 8.30 P.M.—Dr. Fletcher Beach: Sporadic Cretinism, illustrated by specimens. Mr. Openshaw: Twenty-two Consecutive Cases of Amputation of the Breast.

THURSDAY.

BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M.—Annual Meeting. Election of Officers. Dr. Benington: Notes of a Case of Ruptured Tubal Gestation, Operation Eighteen Months previously for a similar condition. President's Valedictory Address.

NORTH LONDON MEDICAL AND CHIRURGICAL SOCIETY, Great Northern Central Hospital, 8.30 P.M.—Dr. Remfry: On the Use of Ergot. Dr. Beevor: A case of Cerebral Tumour.

FRIDAY.

CLINICAL SOCIETY OF LONDON, 8.30 P.M.—Dr. Soltau Fenwick: Acute Phthisis following Destruction of Mucous Membrane of the Stomach by Corrosive Fluids. Dr. W. J. Tyson: A case of Suppurating Hydatid of the Liver opened through the Chest. Dr. J. W. Washbourn and Dr. E. W. Goodall: Cases of Membranous Inflammation of the Throat during Scarlet Fever. Dr. Hale White: Diphtheritic Peripheral Neuritis causing Sudden Death.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTH.

BEARDSLEY.—On December 28th, 1893, at The Esplanade, Grange over Sands, the wife of R. H. Beardsley, L.R.C.P., L.R.C.S.(E.), L.F.P.S.G., F.R.Met. Soc., of a son.

MARRIAGE.

HEWLETT—STRATTON.—On December 28th, at Christ Church, East Sheen, by the vicar, the Rev. Albert S. Shutte, M.A., Richard Tanner Hewlett, M.D., M.R.C.P., Demonstrator of Bacteriology in King's College, London, to Louise, elder daughter of Frederick Stratton, of St. Anne's, East Sheen, S.W.

DEATHS.

GULL.—On January 2nd, at 2, Gloucester Street, Portman Square, Susan Anne, Dowager Lady Gull, widow of the late Sir William Gull, Bart., M.D., aged 75, after two days' illness.

WILKINSON.—On December 27th, at 33, Avenue Road, Grantham, Thomas Marshall Wilkinson, surgeon, F.R.C.S.E., late of Lincoln, in his 51st year.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

S. P. D. asks where he can obtain statuettes or busts in bronze, terra cotta, or marble of Hippocrates, Æsculapius, Harpocrates, and Hygeia?

SAMARITAN wishes to know if there is any home or institution where a widow aged 50, partially disabled after hysterectomy, could be received for about £20 a year.

BRAN FLOUR AND BRAN BISCUITS.

A RETIRED AILING MEDICAL MAN, of limited means, would be glad to learn where, and at what cost, he can obtain bran flour, with and without the starch removed; and to hear of a simple formula for making bran flour biscuits.

ANSWERS.

DR. R. BROADBENT.—An abstract of Sir (then Dr.) Andrew Clark's introductory address on "Body, Soul, and Spirit," will be found in the *Medical Times and Gazette*, 1855, vol. ii, p. 338, and a somewhat shorter abstract in the *Lancet*, 1885, vol. ii, p. 315.

A COUNTRY MEMBER.—There is not, we apprehend, any objection to erecting a gas lamp with the word "Surgery" to direct patients to the proper door. We presume our correspondent does not propose to affix the notice to a public street lamp.

CLUB TARIFFS.

F. L. N.—We are perfectly well aware of the facts and arguments used, but we see no reason to modify the views we have expressed.

VIOLET ODOUR OF URINE.

L.M.—The most common cause of a violet odour in human urine is either the ingestion or inhalation of eucalyptus oil. This oil is used at the present time by very many as a popular prophylactic against influenza. Some of the other terebinthinates will produce the same effect but to a much less marked extent.

INCOME TAX.

M.D.—(1) A medical practitioner can deduct part of the rent of his house, on the ground that it is used for professional purposes. (2) The profits from a resident patient or lodger are assessable, and must be added to the year's income. The profit, of course, consists only of what remains after the deduction of all expenses connected with the inmate. If any doubt remains as to the amount under (1) and (2), particulars might be sent to the Income Tax Repayment Agency, 25, Colville Terrace, Powis Square, London, W., who will advise as to what are allowable deductions and what are not.

NIGHT TERRORS.

IN reply to a question as to the cause and prevention of night terrors, published some time ago, "Machaon" writes to say that in the case of his own son it was proved conclusively, though only after she had been dismissed, that the terrors were due to the conduct of the nurse. She told the child stories of evil creatures coming in the dark to carry him away, and even donned a white sheet herself to act the part.

Dr. H. Oliphant Nicholson (Kirkcaldy) writes to express the opinion that the fear which many children have of being left alone in the dark should be respected: kind treatment, a light, and the near presence of an attendant will reassure the child, and help it to grow out of the fear, whereas harsh treatment will probably tend to intensify the fear, and produce attacks of genuine night terrors. He points out that among writers on the subject great difference of opinion exists as to the importance of digestive disturbances in the production of night terrors, and refers to the classification by Silbermann and Baginsky into: (1) idiopathic cases due to transitory hallucinations of sight occurring in highly excitable children; and (2) symptomatic occurring in strong, robust subjects, and always due to digestive disorders. The occasional association of night terrors with epilepsy and nocturnal enuresis should be borne in mind. Cases have been reported in which removal of enlarged tonsils has effected a cure. Quinine has been of use in some cases, and in excitable children bromide of potassium.

NOTES, LETTERS, Etc.

CORRECTION.—The proper title of Dr. Knight's thesis, reviewed in the BRITISH MEDICAL JOURNAL of December 23rd, 1893, is *Movable Kidney and Intermitting* Hydronephrosis.

THE LIVERPOOL SANITARY DEPARTMENT.

DR. J. STOPFORD TAYLOR (M. O. H. Liverpool) writes, with reference to a paragraph in the letter of our Special Correspondent in Liverpool, published in the BRITISH MEDICAL JOURNAL of December 23rd, 1893, to say that the statements therein made that Dr. E. W. Hope is Deputy Medical Officer of Health, and has for years more and more discharged the duties of Medical Officer are incorrect.

GREAT FECUNDITY.

DR. W. BLACKWOOD, L.R.C.P.&S.E. (Bridgeton, Glasgow) writes: I am attending a Mrs. L., who was confined of three boys and a girl on December 30th, one boy stillborn; all at full time. The stillbirth had only been a few days dead. The two boys were born first, then placenta, to which they were attached, then the dead fœtus and the girl attached to a second placenta. The mother is doing well. A boy died on January 1st, and the girl on January 2nd. The mother has had thirteen children at seven births, having had twins three times. She is 32 years old, married ten years.

A COLOUR TEST.

MISTRESS AND NURSEMAID.—"I wish, Susan, that when you give baby a bath you would be careful to ascertain whether the water is at the proper temperature. Use the thermometer." "Oh, that's all right mum, I can do without the thermometer. If baby turns red the water's too hot, if it turns blue the water's too cold. I can always tell nicely that way."

ELECTRICAL EUTHANASIA.

ELECTRICITY is now being utilised for killing homeless dogs and cats at Hartford, Connecticut, U.S.A. In the rear of the police station there is a cage just large enough for a dog to stand in, fitted up with electrical connections. The fore feet of the animal rest upon one electrode and his hind feet upon another, and when he is in position an electric current is switched on and he is put to death on the same principle as criminals are executed.

THE DANGERS OF THE LONG RECTAL TUBE.

A CORRESPONDENT recently addressed to us a question with regard to the value and safety of the long rectal tube. Mr. Harrison Cripps, to whom we referred the question, has favoured us with the following observations:—

Traditions die hard, and notwithstanding the condemnation of the long rectal tube by Brodie, Treves, and many other eminent authorities, I still find that in most cases of obstruction or supposed obstruction the tube has been introduced. Fortunately these tubes are fairly soft, so that in a capacious rectum, when they impinge, and are arrested about opposite the promontory of the sacrum, they simply coil up and do no harm. If stiffer ones are used the patient's life is placed in imminent risk. A patient at St. Bartholomew's Hospital was to be operated on for ruptured perineum. In order to increase the supposed efficacy of the injection, a quart of soap and water, with some ounces of oil, were injected by means of a long tube. The injection never returned. A few hours afterwards, owing to the acute symptoms of the patient, I assisted one of my colleagues in opening the abdomen. The soap and water and oil we found in the abdominal cavity, and a hole below a reduplicated fold in the upper part of the rectum. The patient died. The idea that these tubes can be generally passed into and beyond the sigmoid flexure is a pure delusion, save in the rarest circumstances. As a means of diagnosis, or of treating strictures beyond the reach of the finger, tubes of any kind are absolutely useless. If a stricture is actually present, it would be 100 to 1 against the long tube or bougie entering it, for it would almost certainly catch in the *cul de sac*, generally caused by the invagination of the stricture. If a stricture be not present, the arrest of the bougie by the sacral promontory leads to delusive diagnosis. Brodie, in his lectures, alludes to a case in which a worthy practitioner had spent over 150 hours in dilating a supposed stricture situated high up. The treatment had extended over a period of a year. Brodie, who was present at the *post-mortem* examination, found there was no sign of a stricture, the bougie becoming arrested by the curve of the sacrum.

INTERNATIONAL CONGRESS AT ROME.

THE Rev. Henry S. Lunn, who has had considerable experience in the organisation of co-operative travel, has arranged for a tour to Rome at the time of the International Medical Congress. The cost of the tour going to Rome *viâ* Dover, Ostend, Bâle, Lucerne, Milan, and Geneva, and returning *viâ* Florence, Strassburg, Ostend, and Dover, and including accommodation in Rome for five days, will be 16 guineas if the railway journey is made by second class, and 21 guineas if by first class. Further information can be obtained from Mr. T. H. Bishop, Secretary, 5, Endsleigh Gardens, London, N.W.

Cap Martin.

DR. CHARLES F. HUTCHINSON (Monte Carlo) writes: As there is what appears [illegible] that the Queen has been offered, and has accepted, the loan of the Empress Eugenie's villa at Cap Martin for a month's sojourn during the coming spring, it might be of some interest to your readers to know something about the locality.

[illegible] into the Mediterranean between Mentone on the east and Monte Carlo on the west; it is com[illegible] with [illegible] underwood of [illegible] [illegible] Hotel) at the extreme point. Fine roads were made, lit with gas at [illegible] a model dairy and washhouse were [illegible] vements in drainage and water sup[illegible] one of the south west slopes of this [illegible] sea, and has magnificent views over [illegible] ity of Monaco. The architect was an [illegible] experience in building in this part of [illegible] done by the firm of Jennings, and has [illegible] A more ideal residence for royalty who want[illegible] month in a good climate could hardly be [illegible] it does, perfect quiet and beautiful scenery. [illegible] s of Wales know the place well, as they stayed at the [illegible] for some time, when they wanted absolute quiet [illegible] their son, Prince Albert Victor. As an absolute proof of the salubrity of the Cap, I can state that since the opening of the hotel three years ago not a single case of illness has originated in it, [illegible] death occurred there, which, considering the crowded state of the hotel during the last three springs, I think speaks [illegible] any statistics of average duration of sunshine or [illegible] I could send you.

[illegible] Cap Martin, from its splendid situation, from its [illegible] enabling patients to walk out without discomfort in the [illegible] winter, its fragrant undergrowth, its perfect sanitation and pure water supply (all the water at the Hotel Cap Martin goes through Jennings's filters before it is delivered to the hotel), from its model dairy and private washhouses, as complete a sanitary station as it is possible to devise, and I feel confident that Her Majesty has been well advised if it be true that she has selected this beautiful spot as her residence during her stay in the sunny south.

The Value of the Movements of the Head and Eyes in the Localisation of Cerebral Diseases.

DR. EUGÈNE FARKAS (Anatomical Institute, Budapest) writes: Dr. W. Hale White, in his most interesting communication in the BRITISH MEDICAL JOURNAL of July 29th, 1893, describes a case of focal epilepsy in which the lesion existed in the left ascending parietal convolution. In a few fits the head was jerked to the left, that is to say, towards the side of the lesion. Dr. Hale White thinks that this observation and one of Professor Gotch and Mr. Parker indicated a difference between man and the ourang-outang, since Dr. Beevor and Professor Horsley had found that excitation of the cortex in the latter caused turning of the head and eyes to the opposite side. This proposition is not very probable. Many experiments, and especially those of Professor Ferrier, [illegible] dogs, cats, rabbits, guinea-pigs, and pigeons have been uniform in their results, showing that the cortical centre of the movements of the head causes, by its excitation, the rotation of the head to the opposite side mostly preceded by the movement of the eyes in the same direction. Quite concordant are the results of Dr. F. W. Mott and Professor Schäfer's experiments on different species of monkeys (*Brain*, vol. xiii, p. 165, etc.). They have observed by exciting the head and eye area of the cortex a definite rotation of the head to the opposite side. Further, there are some observations made on men [illegible] caused by excitation of the cortex have been in concordance with those observed in experiments on animals [illegible] K. Med. Assoc., vol. xii, 1890). So that if there be a marked difference of the localisation of the head and eye movements in the cortex, in the meaning of Dr. White, it would not be between man and animals, but between man and man. And that is still less probable. A peculiarity in Dr White's case is the absence of the movements of the [illegible] In the cases of Messrs. Gotch and Parker the eyes were moved together with the head, and other observers and experimenters have also noticed almost without exception that the movements of the head have been preceded by those of the eyes. The description given of the [illegible] of the head in the cases quoted is somewhat inexact. In jerking, moving, or deviation of the head the axis of the movement may be a perpendicular or a sagittal one. The contraction of the [illegible] muscle of one side carries the head to the opposite side, the axis of the movement being perpendicular. The contraction of the sterno-cleido-mastoid together with that of the other muscles (namely, splenius capitis, spl. colli, etc.) on the one side of the neck turns the head to the side of the contracted muscles. In some cases [illegible] of the cortex may be very circumscribed, and only [illegible] namely, movement of the head round the perpendicular axis to the side of the excited cortex). In some other cases the excitation of the cortex, distributed over a larger area, causes contraction of all the muscles of the neck on the opposite side, followed by the movement of the head (round the sagittal axis) to the opposite side in relation to the excited cortex. I believe this possibility cannot be excluded: it will be necessary in future observations to describe the specific kind of movements of the head. We may expect that they will be our best guides in the localisation of cerebral lesion.

The Medical Profession in Italy

According to the [illegible] just issued under the authority [illegible] at Rome, the total number of [illegible] in that year was [illegible], being a [illegible] The [illegible] varied in different [illegible] The following figures show the numbers of practitioners and the proportion to population per [illegible] in several of the principal cities: Rome, [illegible] (11.6); Naples, [illegible]; Milan, [illegible]; Turin, [illegible]; Palermo, 2[illegible] (8.2); Genoa, [illegible] (12.0); Florence, [illegible] (13.1); Bologna, 114 (10.2); Venice, 127 (8.3); and Catania, 114 (9.5). Between 1878 and 1892 the absolute number of doctors increased by rather more than 1,000 (19,120 as against 18,014), but the relative number decreased from 6.5 to 6.2 per 10,000 of population.

LETTERS, COMMUNICATIONS, Etc., have been received from:

(**A**) Messrs. Arnold and Sons, London; Dr W. A. Ardagh, Haslemere; Dr. A. Ambrose, Buckhurst Hill. (**B**) Mr. C. Browne, Sheffield; Mr. A. Barry, Windsor; Mr. W. P. M. Boyle, Devoran; Mr. E. Bower, Weymouth; Dr. C. J. Bond, Gloucester; Dr. J. S. Belcher, Gloucester; Mr. A. Bryce, Liverpool; R. Boyce, M.B., London; Mr. J. Buchanan, London; Mr. R. H. Beardsley, Grange-over-Sands; Mr. W. Blackwood, Glasgow; Mr. R. Bell, London. (**C**) Messrs. A. H. Cox and Co., Brighton; Mr. T. E. Constant, Scarborough; Mr. J. F. Cobb, Melbourne; R. Campbell, M.B., Belfast; P. Campbell, M.B., Dundee; Mr. C. N. Cornish, London; Dr. A. H. W. Clemow, London; Dr. J. S. Cameron, Leeds; Messrs. J. Cleave and Son, Crediton. (**D**) Dr. J. Dreschfeld, Manchester; H. O. Deck, M.B., Motuoka; L. Drage, M.B., Hatfield. (**E**) H. M. Eustace, M.B., Glasnevin; E. W. B.; Mr. G. C. Edwards, Felixstowe. (**F**) Mr. J. B. Fair, Bournemouth; Mr. W. F. Fenton, Clogheen; Dr. E. L. Fenn, Colchester; Dr. R. H. Fox, London; Mr. Charles Forbes, London. (**G**) Mr. H. Gardiner, London; Mr. G. Gordon, London; Dr. H. R. Greene, Knaphill; A. C. Godfrey, M.B., Southampton; Mr. M. Gillefrie, Grahamstown; Mr. J. H. Gwynne, London; Mr. J. Garth, Preston; Mr. A. W. Griffin, Bath; R. R. Giddings, M.B., Nottingham. (**H**) Dr. J. Highet, Workington; W. Hardman, M.B., Blackpool; Mr. M. Hey, London; Dr. W. G. Holloway, London; Dr. W. D. Haslam, Bournemouth; J. Hamilton, M.B., Glasgow. (**I**) Inquirer. (**J**) Dr. C. E. Jennings, London; Mr. H. F. Jenkins, Salford; Mr. A. Jackson, Sheffield; Sir George Johnson, London; Dr. E. L. Jones, Cambridge. (**K**) Dr. T. N. Kelynack, Manchester. (**L**) Mr. J. Limont, Newcastle-on-Tyne; Mr. R. Laing, Blyth; Liquor Carnis Co., London. (**M**) Dr. H. W. Maunsell, London; Dr. F. St. G. Mivart, London; M.D.; Dr. E. Morton, Redditch; Mr. J. Menzies, London; J. E. Moorhouse, M.B., Cardenden; M.O.H.; Member; Mr. H. R. C. Müller, Budapest; Mr. W. L. Morgan, Oxford; Mr. C. A. Morton, Clifton; Mr. E. J. Millard, London; Dr. E. Magennis, Lurgan; Dr. S. Mackenzie, London. (**N**) The Nobes Co., London; Dr. A. Newsholme, Brighton; Mr. W. Nathan, London. (**O**) Dr. J. W. J. Oswald, London. (**P**) Mr. J. Pim, Dublin; Palinurus; Dr. F. L. Phillips, Birmingham; Dr. R. W. Philip, Edinburgh; Mr. W. R. Parker, Kendal; Mr. J. R. Philpots, Parkstone; Mr. F. T. Paul, Liverpool; J. A. Potts, M.B., Ross; Dr. T. Pike, Great Malvern. (**R**) Dr. A. Robinson, Rotherham; Mr. L. Rawthorn, Preston; Dr. W. B. Ransom, Nottingham; Mr. G. R. Roberts, London; Mr. T. F. Raven, Broadstairs; Dr. R. R. Rentoul, Liverpool; Mr. J. Ross, Kilkenny. (**S**) Dr. G. C. Stephen, London; S. W. P.; Mr. L. Stanford, Nottingham; Dr. H. Sharman, London; D. G. Sutherland, M.B., Brora; W. W. Sinclair, M.B., Birmingham; Messrs. J. Smith and Sons, London; S. P. D.; Dr. F. F. Schacht, London; Surgeon-Lieutenant Colonel (Retired); Sir William Stokes, Dublin; Dr. F. J. Smith, London; Dr. A. T. Sloan, Edinburgh; Mr. H. H. Sturge, New Eltham; Mr. R. Stevenson, London. (**T**) Dr. J. S. Taylor, Liverpool; Mr. C. W. Thies, London; Talipes. (**U**) Mr. J. Unsworth, Liverpool. (**V**) Variola; Victim; Vivat ut Vivas. (**W**) Mr. T. C. White, London; Mr. W. S. West, Brough; Mr. Worthington, Lowestoft; Mr. P. C. Webb, London; Mr. W. J. Whittle, Nottingham; Mr. G. C. Wilkin, London; W.; Mr. F. Willard, London; G. Wight, M.B., London; etc.

BOOKS, Etc., RECEIVED.

Syllabus of Lectures on the Practice of Surgery. By Dr. N. Senn. Philadelphia: W. B. Saunders. 1894. $2.00.

The After-Treatment of Cases of Abdominal Section. By Christopher Martin. London: Simpkin, Marshall, Hamilton, Kent, and Co. 1894.

Chin-Lushai Land, including a description of the various expeditions into the Chin-Lushai Hills and the final annexation of the country. By Surgeon-Lieutenant-Colonel A. S. Reid, M.B. Calcutta: Thacker, Spink, and Co. 1893.

Textbook of Nervous Diseases. By Dr. C. L. Dana. Second Edition. New York: William Wood and Co. 1893.

Report of the Department of Pathology of University College, London, together with a collection of Papers and Abstracts published from the Laboratory. Vol. II.

The Principles of Chess in Theory and Practice. By James Mason. London: Horace Cox. 1894.

Stammering: its Nature and Treatment. By Emil Behnke. Fourth Edition. London: T. Fisher Unwin. 1893. 1s.

A Practical Treatise on Materia Medica and Therapeutics. By Dr. Roberts Bartholow. Eighth Edition. London: H. K. Lewis. 1893. 21s.

*** In forwarding books the publishers are requested to state the selling prices.

A CLINICAL LECTURE
ON
SUPRAPUBIC CYSTOTOMY.

Delivered at the Manchester Royal Infirmary.

BY F. A. SOUTHAM, M.B.OXON., F.R.C.S.,
Surgeon to the Infirmary, and Lecturer on Operative Surgery in the Victoria University.

THERE were recently at the same time in my wards six patients suffering from disease of the bladder upon whom suprapubic cystotomy had been performed, and I propose to make some remarks on this method of treatment, as the cases illustrate very aptly the chief conditions in which the operation of opening the bladder from above the pubes is indicated.

A question which is often asked is this, What are the reasons which lead you to open the bladder from above the pubes, and, in cases of stone especially, why do you now so often select the suprapubic in preference to the perineal or lateral operation?

Of the six patients, four were suffering from stone, one from tumour of the bladder, and one from chronic cystitis accompanied by hæmaturia, three of the four conditions which most commonly call for the performance of the suprapubic operation. The other condition—prostatic retention of urine—I brought under your notice in a former lecture, and illustrated by several cases in which the bladder had been opened from above the pubes, and the retention relieved, either by simple drainage, or by removal of a portion of the prostate gland (prostatectomy), so that I shall not further refer to it this morning.

STONE.

The first case was a man, aged 70, sent by Dr. Jennings, of Haslingden, who had detected the presence of a calculus on sounding the bladder. He was also suffering from evidences of marked hypertrophy of the prostate, considerable obstruction being encountered at the neck of the bladder on attempts to introduce any instrument, the calculi (of which more than one could be felt) lying in a depression behind the enlarged gland. Though the patient's age and general condition were not at all favourable for any operative interference, as he suffered from a feeble action of the heart which was much dilated, and as he was also extremely lethargic, with a tendency to drowsiness, suggesting the presence of some renal complication, it was decided to remove the calculi, and the suprapubic method was selected for the following reasons.

The extreme enlargement of the prostate would probably have been an obstacle to the successful performance of lithotrity, the calculi lying in a deep post-prostatic pouch, in which it would not have been an easy matter to have seized and crushed them. For the same reason, it would have been difficult to have made sure of removing all the fragments of the calculi after they had been crushed by washing out the bladder.

The frequent introduction of the lithotrite, and especially of the evacuating tube, would have irritated and probably caused considerable injury to the prostate.

From the character of the clear ring obtained on sounding the bladder, and from the acid reaction of the urine, the calculi were evidently of a hard nature, either uric acid or oxalate of lime. Lithotrity would therefore have necessitated a prolonged operation, and in all probability would have been followed by considerable shock, which in the patient's feeble condition and especially if, as was suspected, there was renal disease would very likely have been followed by a serious, if not by a fatal result.

The large size of the prostate was also somewhat opposed to lateral lithotomy, for as simply sounding the bladder had been followed by free prostatic hæmorrhage, a considerable division of the gland, such as the perineal operation would have involved, might have been accompanied by bleeding, which in the patient's weak condition would have been very prejudicial.

Suprapubic lithotomy was free from all these objections, for an opening above the pubes affords direct access to a post-prostatic pouch without any injury to the prostate itself, the incision being made through unimportant structures, and the operation being as a rule attended by little loss of blood. Moreover, there is no chance of fragments of calculi being left behind, and the operation, if rapidly performed, is accompanied by much less shock than a procedure like lithotrity, which, when complicated by an enlarged prostate, always takes a considerable time.

The bladder was accordingly opened from above the pubes, and eight uric acid calculi, three of which each measured an inch in diameter, were removed from a deep pouch behind the prostate, which was greatly enlarged, the intravesical projection forming a mass the size of an orange. The operation was well borne by the patient, who was sitting up in the ward on the fourth day. Though his convalescence was retarded by an attack of bronchitis, to which he was liable, and though he suffered occasionally from somewhat severe attacks of cardiac dyspnœa, he quite recovered from the effects of the operation, and after the sixth week walked out each afternoon in the grounds of the hospital, enjoying a pipe. On the fifty-first day after the performance of the operation, the suprapubic wound having quite closed, and arrangements having been made for him to return to his home in the country in the course of a day or two, he was all at once seized with urgent dyspnœa, and death took place very suddenly from simple failure of the heart's action.

In the second case the conditions were very similar, the patient being a male, aged 60 years, also suffering from considerable enlargement of the prostate gland, from whose bladder two years and a-half previously I had removed several uric acid calculi by lithotrity. Sounding the bladder was somewhat difficult on account of the obstruction caused by the prostate, which had enlarged very considerably since the previous operation, but in a depression behind it two calculi were felt, which from the ringing character of the click obtained on sounding, and from the acid reaction of the urine, were evidently of a hard nature.

For reasons identical with those in the preceding case, and also because the mere examination of the bladder had been followed by a sharp attack of prostatic bleeding, as well as by a rigor and a rise of temperature to 103°, it was decided to perform suprapubic lithotomy. The bladder was accordingly opened from above the pubes, and two uric acid calculi, each an inch in diameter, were removed from a deep pouch behind a huge intravesical enlargement of the prostate. The patient made an uninterrupted recovery from the operation, which was not followed by any elevation of temperature, and left the hospital at the end of the seventh week.

The third case was that of a boy, aged 11 years, who was admitted with the usual symptoms of stone, the urine being slightly alkaline and containing a little pus. From the clear ring obtained on sounding the calculus was judged to be of a hard nature, and, on measuring with a lithotrite, it was found to be just over 1 inch in diameter. In this instance I was rather inclined to perform lithotrity, this method of treating calculi having been recently adopted in children with great success. As, however, the boy was of a nervous, excitable temperament, and as he did not bear at all well the mere introduction of a soft catheter in order to wash out the bladder with the object of correcting the cystitis previous to a crushing operation, it was decided to perform suprapubic lithotomy. The bladder was accordingly opened from above the pubes, and a uric acid calculus, $1\frac{1}{4} \times \frac{3}{4}$ inch was extracted without any difficulty. He made a rapid recovery from the operation, being up on the tenth day, and the opening in the bladder being closed on the twelfth day, for after that date all the urine was passed by the natural route.

In the fourth case, the patient was a man, aged 58 years, suffering from stone and also from enlargement of the prostate gland. In this instance an attempt was first made to perform lithotrity, this operation being selected in preference to suprapubic lithotomy for the following reasons: The patient was a publican, and of somewhat intemperate habits; he was extremely stout, weighing 18 stone, and a few years previously had been under treatment for some time at the hospital suffering from jaundice. His habits

and his extreme stoutness, therefore, rendered him a very unfavourable subject for any cutting operation. On exposing the bladder under chloroform, it was found that the prostate was enlarged, though apparently not to a sufficient extent to interfere with the performance of lithotrity. Several calculi were felt, the largest as measured with a lithotrite being 1 inch in diameter. From the character of the sound produced on striking the stones, and from the fact that the urine was strongly alkaline and purulent, it was judged that the calculi were mainly phosphatic, and therefore well adapted for crushing. The exploration of the bladder was not followed by any rigor or rise of temperature, as in the second case, so it was probable that the kidneys were in a fairly healthy condition. The state of the urine having been improved by washing out the bladder daily for a fortnight, lithotrity was attempted: but the introduction of the instruments was attended by so much difficulty that it was thought better to proceed at once to perform suprapubic lithotomy. The bladder was therefore opened forthwith from above the pubes, and fifteen phosphatic calculi were extracted, the only difficulty encountered being the great depth at which the viscus lay from the surface owing to the presence of a subcutaneous layer of fat at least 3 inches in thickness. Though the wound was somewhat slow in healing owing to the extreme stoutness of the patient, he left the hospital at the end of eight weeks, the urine being passed by the natural route.

While the preceding cases were under treatment, a fifth patient, a male, aged 20 years, was admitted, also suffering from calculus vesicæ. In this instance lithotrity was performed, as the urine was quite healthy and the stone was of small size, measuring only half an inch in diameter. It was easily crushed, and the patient left the hospital at the end of a week.

TUMOUR OF BLADDER.

The fifth case was that of a woman, aged 45, who had suffered from intermittent hæmaturia, at times very profuse, for about two years. Her medical attendant, Dr. De Jong, suspecting the presence of a vesical tumour, asked me to explore the bladder with him, and upon making a digital examination *per urethram*, under chloroform, a large growth was felt springing from the left and posterior walls, to which it was attached by a broad base. The patient was admitted into the infirmary, and the growth, which was of soft consistence, not infiltrating the bladder wall, was readily removed through a suprapubic opening. A microscopical examination showed it to be of the nature of a papilloma. She made a rapid recovery from the operation, the wound being closed at the end of a month, and she left the hospital a fortnight later, there having been no recurrence of the hæmaturia.

Of 26 cases in which I have now performed suprapubic cystotomy, this is the only instance in which the patient has been of the female sex, all the calculi and tumours of the bladder occurring in females, which have previously been under my care, having been capable of removal through the dilated urethra. In this instance the suprapubic operation was selected on account of the large size of the tumour and its broad base of attachment, to which it would have been difficult to have gained access *per urethram*.

CYSTITIS.

The sixth case was that of a man, aged 49, sent by Dr. Dixon, of Preston, suffering from chronic cystitis accompanied by hæmaturia, for which no cause could be found. For about six months he had been troubled with pain and increased frequency in micturition, the urine being alkaline in reaction, always containing pus, and very frequently small quantities of blood. There was no history or evidence of tuberculosis, and as a stone could not be detected, and the cystitis after a prolonged trial resisted the ordinary treatment, it was resolved to explore the bladder from above the pubes, this route being selected in preference to the perineal, for in addition to a digital, it allows one also to make a visual examination of the interior of the bladder. The advantage of this method was well illustrated in the present case, for on exploring with the finger through the suprapubic opening, nothing could be detected beyond a slightly roughened condition of the mucous membrane, most marked on the posterior wall. On looking into the viscus, however, through the suprapubic wound, after its interior had been dried with sponges, a small opening was seen on the posterior wall which led into a pouch or diverticulum about an inch in depth. The mucous membrane round the opening was for some distance thickened and puckered, evidently as the result of cicatrisation after old ulceration, while in its immediate neighbourhood there were several patches of recent ulceration, from which blood could be seen to ooze. The pouch on exploration with a sound having been found empty, the bleeding points were touched with the actual cautery, introduced through the suprapubic wound. The subsequent treatment consisted in washing out the bladder daily, a tube being retained in the suprapubic opening for a longer period than usual, in the hope that by keeping the viscus in a state of rest, the cicatrisation of the ulcers would be promoted. The patient left the hospital at the end of the ninth week, the wound being closed, and he was able to retain his water for two hours at a time, no trace of blood having been seen in the urine since the operation.

As in a lecture last session I described to you the method of performing suprapubic cystotomy, I need not do so again this morning, but I will merely remind you that the success of the operation depends in a large measure upon the after-treatment, namely, keeping the wound and the urine in an aseptic condition. This can be effected by dusting the wound with boric acid, and by frequently washing out the bladder either with boric or perchloride of mercury lotion. A method of irrigating the bladder, which has been found to answer very satisfactorily in my last ten cases, is to introduce the nozzle of a Higginson's syringe into the urethra, and then to wash out the bladder *per urethram*. By this method of "urethral irrigation," which is practised daily until the wound has healed, a current of lotion is passed right through the bladder, entering at its base and leaving at the suprapubic opening, so that it is washed out very effectually.

THE MORPHOLOGY, ORIGIN, AND EVOLUTION OF FUNCTION OF THE PITUITARY BODY, AND ITS RELATION TO THE CENTRAL NERVOUS SYSTEM.[1]

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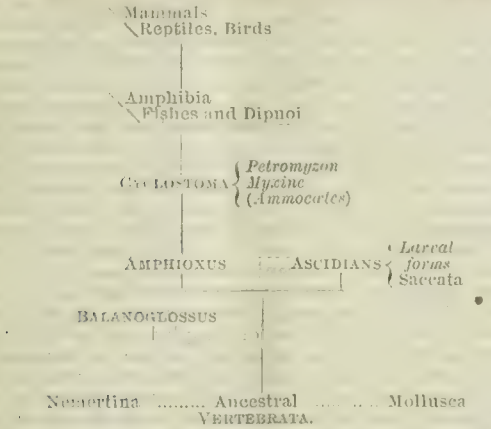
THE pituitary body occupies the position the pineal body once did. The latter was even suppposed to be the seat of the soul (Descartes), the pathway of a gullet (Owen, de Blainville), etc., till De Graaf and Spencer in 1886 showed its true significance.

My researches were commenced March, 1891. The material used was a large number of specimens, living and preserved, of larval and young amphioxus, larval and adult ascidians (oikopleura, salpa, pyrosoma), young and adult balanoglossus, ammocœtes and adult petromyzon, various fishes, and larval and adult amphibians. I have made further studies more recently on fœtal and young kittens, and the pituitary organs of the rabbit, rat, monkey, and man to elucidate points which arose from the work with the lower forms (see Zoological Tree, p. 55).

Authors who had hitherto studied the pituitary body began from myxine upwards, for example, Müller, *Virch. Arch.*, 1871, and others in his footsteps. Many clues were thus lost which only the investigation of the earliest, and especially neraniate vertebrates, could afford. Real light is thrown only by the investigation of ammocœtes (larval petromyzon) and lower forms, for these evidence a twofold function of the pituitary, and explain its twofold structure, for even in the highest mammals and man it has a twofold structure, and represents a double organ.

[1] Abstract of a paper read in the Section of Pathology at the Annual Meeting of the British Medical Association held at Newcastle, August 4th, 1893.

Zoological Tree (Phylogeny) of Vertebrata.



My investigations in larval amphioxus showed that the "subneural gland" and its relations to the neural tube are of importance. This organ exists (*a*) in a position corresponding to the pituitary of higher animals, (*b*) presents the histological structure of a secretory gland, (*c*) is developed from buccal epiblast, and (*d*) has anatomical connections both with the brain floor and the buccal roof. It is obviously the homologue of the pituitary. To particularise: observations showed the development of a small and specialised group of nerve cells in the basal part of the brain cavity (thalamocoel) with which the subneural gland came into relationship. The central canal of the spinal cord, traced forward into this region, was seen to undergo dilatation into a distinct ventricle. (Adult forms do not exhibit this so well.) A duct was further formed, which had a capillary lumen lined by ciliated epithelium, and establishing a connection between the buccal cavity and the "ventricular" cavity (thalamocoel). (It is not to be confounded with Rathke's diverticulum of the hypophysis, which can be seen in all embryonic mammals, including man, and is a blind tube denoting the tract of invagination and sinking of the hypophysis.) The nerve cells (before mentioned) aggregated around the neural opening of this duct into the neural tube; the epithelial cells (subneural gland) aggregated around the lower or buccal opening of the duct.

Owing to the degenerate character of amphioxus and its asymmetrical development in later larval life, certain alterations take place. These are to be looked upon as adaptive, and not genetic or fundamental; the notochord elongates anteriorly, the subneural gland, and oral cavity are displaced laterally; even the myotomes get displaced, this last condition persisting to adult life (*cf.* similar adaptive asymmetrical changes in flat fishes and molluscs). The study of other allied forms enables us to "allow" for this disturbing factor.

The study of the larval ammocœtes affords a more distinct realisation of the conditions foreshadowed in larval amphioxus, and one undisturbed by adaptive (or adventitious) asymmetry.

The pituitary in amphioxus and ammocœtes is a threefold structure, namely: (*a*) a subneural glandular organ, primarily median, and originating from the epithelium of the buccal roof at the orifice (*b*) of a duct lined by ciliated epithelium, which affords a communication between the buccal and neural cavities, and (*c*) a group of nerve cells around and at the back of the upper opening, where the duct widens into the ventricular cavity. This widening part is the infundibulum, and the duct may be called the buccal infundibular duct.

It occurred to me that this duct would at once allow a current of water to enter the ventricle from the buccal cavity. To demonstrate it was the crucial point; by using a very fine emulsion of carmine suspended in the water in which these animals lived, and passing it towards them by a fine nozzle, a slow stream could be passed from the bottle containing the carmine emulsion. After an hour and a-half to two hours, on killing the animal with OsO_4, and observing it under the microscope, a number of fine carmine particles could be seen in the duct, and lining all over the ventricle. By keeping the animals alive longer exposed to the carmine stream, similar particles could be traced step by step into the central canal of the cord; after a day along the whole length of the cord, and right up to the posterior free end of the canal, where the spinal canal opened into the exterior by the blastopore (neurenteric canal).

It was thus obvious that there was a *raison d'être* for the buccal-ventricular duct where the stream of water entered, for the ciliated epithelium of the central nervous cavities which propelled this stream, and for the neurenteric aperture which formed the outlet for the exit of the water current after its passage through the central nervous system.

It was thus shown that the buccal-ventricular duct served as the inlet whereby a stream of oxygen-bearing water could enter the central nervous system; and as the water (in which the animal lived) streamed slowly through the nervous tube by ciliary action, the nerve tissue would be enabled to take up oxygen from the water current, while the gaseous (CO_2) and other products of the activity of the nerve tissue would similarly pass into and exit with the outflowing stream from the posterior (and still patent) end of the neural canal.

The duct portion of the pituitary was then the inlet of a water-vascular stream which brought in oxygen to the central nervous system, while similarly the neurenteric canal, which opened into the exterior posteriorly, served as the outlet to carry away the waste products by means of the outgoing water-vascular current in ancestral vertebrata.

A similar mechanism of a water-vascular current irrigating the nerve tissues is also found in a striking form in the nervous system of various larval and adult ascidians, in balanoglossus,[3] ammocœtes, etc., while in the phyla of the animal kingdom which approximate morphologically and genetically to ancestral vertebrata (namely, larval forms of mollusca and of echinoderma) water-vascular systems of a complex kind are found permeating the tissues and organs of the body generally—being a widespread biological phenomenon in ancestral vertebrata and their allies.

A complete zoological survey enables us to formulate facts in the following terms: that a water-vascular system permeating the body tissues, and serving for the in-bringing of oxygen, and the out taking of waste products, and having inlets and outlets communicating with the aqueous medium in which the animal lives, preceded, in point of time, the development and elaboration of a true blood-vascular system.

Study of the degenerate ascidian Botryllus affords an instructive lesson. As the result of a fixed parasitic degenerate life, the olfactory organs and centre go, the visual organs and centre cease developing, and also atrophy. In the larva of botryllus the thalamocoel gets thickened in its basal part, where an aggregation of nerve cells can be seen as in other forms mentioned.

A tube is also formed connecting the stomodaeum with the thalamocoel (the buccal with the neural cavities). In the larval active form, the stream of oxygen thereby enters and aërates the brain; in the adult the fixed parasitic life demands neither brain nor body activity in the same degree; and, in correlation with that, and, owing to adaptive modifications of the head region generally, the duct closes and is obliterated.

The buccal-ventricular duct is ventral to the anterior end of the central nervous system. Its pore is a ventral neuropore, which marked the communication between buccal and ventricular cavity, and the inlet of the water-vascular current.

An earlier condition of affairs, somewhat previous in point of time to the ventral neuropore and pituitary formations, was the formation of a dorsal neuropore, which, however, soon closed in amphioxus, though in ascidians and balanoglossus the dorsal neuropore persisted into adult life. In balanoglossus a dorsal neuropore is seen, in which the opening reaches the brain surface only: in the more active young the brain is hollow, and its cavity (ventricular cavity) is in direct communication with the duct, which thus allows a

[2] The researches of Kowalevsky on Ascidians, of Götte on Amphibia, of Kölliker, His, Balfour, all agree in showing the existence of a neuranal canal.

[3] The larva of balanoglossus (tarnaria), and the bipinnaria larva of asteroids (echinoderms) also show water-vascular organs, showing the extreme antiquity of this system, and its deep significance in the animal kingdom.

stream of water (driven by ciliary action) to irrigate the brain tissue more intimately. In appendicularia and other larvalia, and in salpa (a free-swimming tunicate) a dorsal neuropore is present. In the young of salpa this ciliated tract or funnel opens into the brain cavity, though in the adult both brain cavity and ciliated tube get obliterated, and the brain becomes solid. The dorsal neuropore is also present in ammocoetes as a very transient phase. In higher forms rudiments of it (not functional) have been observed in elasmobranch fishes by Van Wijhe (1882), and by Kupfer in his monograph on Accipenser sturio (1893). It is also present in embryos of birds (Van Wijhe). It is important to note that the dorsal neuropore or its vestige is anterior to the pineal body, which arises from the posterior edge of the roof of the thalamocoel), and dorsal in position to the olfactory centres (which arise in the anterior edge of the floor of the thalamocoel). The dorsal neuropore is a more archaic structure, and represents the region where the anterior dorsal end of the nerve tube failed to sink into the tissues deeply like the rest of the nervous system. The ventral pituitary duct (buccal-infundibular duct) was a later formation in the race, appears later in the individual, and achieved a higher grade in development, having associated with it the complex structure of the glandular pituitary (anterior lobe) and the nervous pituitary (posterior lobe of higher forms). This view is strikingly borne out by the recent investigation of Salensky on pyrosoma.[4] This organism presents two morphological types (zooids), namely, the cyathozooid (a sexually produced rudimentary zooid) and the aseidiozooid (a more mature budded-out form). The former presents only the dorsal ciliated pit: the latter, which is more advanced, presents also the dorsal pit (at first), followed by the later and more developed ventral duct (pituitary duct) of stomodoeal origin. The obvious necessity of supplying a considerable amount of oxygen to the central nervous tissues was thus realised, though imperfectly, in balanoglossus, salpa, appendicularia, and the two types of pyrosoma by the dorsal neuropore and its connections with the ventricular cavity dorsally. At a later stage and in the more highly developed ascidizooid of pyrosoma, in salpa, in amphioxus, and in ammocoetes this was realised by the more complex duct and its associated organ, the pituitary, the further significance of which now remains to be seen.

These organs associated with the duct form, as mentioned before, are, (*a*) a glandular secreting structure of buccal origin (epiblastic), and (*b*) a nervous centre developed at the base of the brain at the orifice where the duct lumen widened into the ventricular cavity. Such a nervous organ situated at the orifice whereby the stream of water enters the cavities of the central nervous system would be sensitive to the quality of the water which passes over it. This is no isolated phenomenon, for we find a striking analogy in the osphradial organ and ganglion of mollusca, which is situated at the entry of the mantle or respiratory chamber and serves to test the quality of the water which passes over the respiratory organ. The obvious significance of the group of nerve cells which form the posterior lobe of the pituitary and are continued a little way up the infundibulum is that—namely, to be sensitive to the noxious quality or otherwise of the water which would enter and permeate the central nervous system. Similar specialised sensitive structures develop according to a well-recognised biological law at other orifices (buccal, respiratory, generative, etc.). From this group of mainly fusiform nerve cells peripheral processes can be traced which run down to and end freely at the buccal orifice of the duct and in its lumen, and in the newborn and fœtal kitten brain by the method of staining with chromate of silver, the central processes of these cells can be traced far backwards towards the pons. In ancestral vertebrate forms, where the pituitary duct was still functional and formed the inlet of the water-vascular stream, the sensitive nerve centre at its orifice would also be functional, while later, with the advent and growth of a blood-vascular system permeating the central nervous organs, and thereby bringing oxygen to the nerve tissues, the necessity for a water-vascular current would no longer exist. The pituitary duct thus closes up and gets obliterated (by a growth of vessels, of connective tissue, and neuroglia), and the sensory nervous structure in connection with it functions no longer and atrophies. All the above agree with facts of observation; the posterior or nervous lobe of the pituitary begins to atrophy in all forms above larval petromyzon, and in the mammals and man is an exceedingly atrophied organ possessed of very little besides neuroglia.

The *ensemble* of evidence recorded tend to prove that the pituitary is not a simple structure having one simple function, but a complex organ composed of at least three parts, namely: (*a*) An anterior secreting glandular organ (of which more anon); (*b*) a water-vascular duct; (*c*) a posterior sensitive nervous lobe, of which the last two, namely, the duct and nervous lobe, were morphologically well developed and functioned in ancestral vertebrata, but have become obliterated and atrophied in structure and function for ever in all forms above larval acraniates and ammocoetes. The posterior lobe begins to lose its nerve substance as we ascend the animal scale from ammocoetes upwards. In the larva of frog or salamander the progress of atrophy can be clearly recognised. Portions of the nervous infundibulum get thinned down here and there, in places being reduced to a mere thin layer of ependyma covered by a highly vascular pia, while the ingrowing loops of blood vessels push the ependyma in here and there towards the infundibular cavity, giving this part of the posterior lobe of the pituitary the appearance of a highly vascular plexiform saccular structure (saccus vasculosus of fishes and amphibia). Traced up to man, the posterior lobe represents little beyond a neuroglia remnant of what was once a functional portion of nerve tissue in ancestral vertebrata.

The glandular secreting portion (anterior lobe) of the pituitary is the type of a secreting structure of epithelial cells arranged in lobules and acini, with many ducts opening into one main duct (the buccal-ventricular or pituitary duct). Histological examination of it in ammocoetes and young fishes shows it, and also shows its relation to the infundibulum and posterior lobe.

The minute structure and microchemical staining reactions all agree that the glandular epithelioma is secretory[6]; and in these early forms the secretion poured into the duct would be carried with the water-vascular stream through the central nervous system.

Such a phenomenon is significant. It cannot be that a definite glandular secreting organ, developed at the orifice of a definite tube, and having its secretion carried through the said tube and so through the central nervous organs, mixed up with the oxygen-bearing water, and therefore coming into intimate contact with the nerve tissues, is non-significant. It is of some use to the organism, and must especially be so in the economy of the metabolism of the nerve tissues, just as much as the oxygen borne by the water current is. Its action would be one of two things, namely: (*a*) a trophic action on the nerve tissues, enabling them the more readily to take up and assimilate the oxygen of the water-vascular current; or (*b*) a destructive action, serving to neutralise and render innocuous the waste products of the activity of the said nerve tissues. Between two such alternatives it is difficult to decide, and after all it may be that at the root the two functions are intimately related; an adequate assimilation of the oxygen by the nerve tissues securing an adequate destruction (by oxidation) of the material products of nervous metabolism.[7]

We have seen how, with the development of the blood-vascular system invading the central nervous organs, and thereby bringing oxygen to the nerve tissues, the need for a water-vascular current no longer exists, and how the pituitary duct gets closed, the posterior neural canal (neurenteric canal) closes, the ciliated epithelium begins to show atrophy

[4] *Zool. Jahrbücher*, v, 1.

[5] The replacement of a water-vascular by a blood-vascular system in the animal kingdom, the obliteration of the water-vascular orifice and infundibular duct, the atrophy of the sensitive nervous structure connected therewith, the closing, similarly, of the outlet (neurenteric canal) of the water-vascular stream, and the final and gradual degeneration of the cilia in the central epithelium which formed the motive power which propelled the water current through the central nervous system—all seem an instructive example of evolution and dissolution.

[6] See evidence collected by Boyce (*Journ. of Path.*, i-ii, 3) and Beadles.

[7] Thus Hoppe-Seyler has shown (Virchow's *Archiv*, 1866) that in the functional activity of nerve the formation of lactic acid, a toxic metabolic by-product, is due to insufficient oxygen supply, and that if abundant O is supplied, the tissue takes it up and further oxidises the lactic acid into CO_2 and H_2O, which are eliminated. Other and similar examples occur in the animal economy

of the cilia, and the nervous tissue of the posterior lobe of the pituitary functions no longer, is not needed, and begins to die and dwindle away.

Is the secretion of the anterior glandular lobe needed after the closure of the pituitary duct and the cessation of the water-vascular stream which once carried it to the nerve tissues? Yes, for the oxygen is now brought to the nervous tissue by the blood-vascular stream. Hence the pituitary gland continues to produce its secretion, which, now that its duct is obliterated and the gland changed into a ductless gland, becomes an "internal secretion," which, being absorbed by the lymphatics, and therefore passing once more into the circulation, enters into the nerve tissues with the blood-vascular stream.

The fluid which was once passed as an "external secretion" with the water current which permeated the nervous system is now reabsorbed into the lymphatics, and goes with the general blood current once more to the nerve tissues. It still acts on the nervous system; its old trophic function is not abolished under the new *régime*, but maintained. (In fact the activity of the gland would seem to be for a time at least increased, judging by the large relative size and great vascularity of the organ as we pass up from the cyclostoma to fishes.)

As we ascend the vertebrate scale still higher, through amphibia to mammals and man, its relative size does not keep pace with the increased growth of the nervous system—an indication probably that, having attained the acme of its activity in lower vertebrates, it is in higher forms already beginning to show signs of diminishing activity, though, of course, still functionally active even in man.

In passing, a reference is needed to the views on the oral cavity as representing a pair of coalesced (right and left) gill slits, and that the hypophysis was the representative of a pair of preoral gill arches (Dohrn), which has been carried to an extreme by Marshall (1882). These views were partly the outcome of an erroneous interpretation of the value of branchiomerism in determining metameric segmentation of the head, and partly the outcome of a similar attempt to apply the "vertebrate theory" of Goethe to the formation of the anterior head region (Goethe's and Oken's views, developed by Owen). Both views have been shown to be unsupported by facts, and a more correct orientation of the head structures (both oral and preoral) have shown (Van Wijke, 1882; Ahlborn, 1884; Gegenbaur, 1887; Lankester, Rabl, Hatschek, 1888-92) that all gill arches and gill clefts are *post*-oral, that analogous structures do not exist in oral or preoral regions, that branchiomerism is not parallel, and does not correspond with metamerism.

A survey and investigation based on all classes of vertebrata show that the hypophysis occupies the position and relationship to the other structures which may be condensed into the following table:

Relation of Pituitary to other Nerve Centres and Head Structure, in order from before back.

Nerve centre.	Olfactory centre.	Posterior lobe of pituitary	The bulbo-spinal centres.
Nerves.	Olfactory nerves.	Hypophyseal nerves.	Bulbo-spinal nerves.
Distribution.	Epithelium of nasal sac.	Pituitary duct and gland (anterior lobe).	Buccal, etc., and general cutaneous.
Body region.	Pre-oral (prostomial).	Oral.	Post-oral (branchial, etc., and general body).

The old views of Blainville and Owen that the pituitary represents the pathway of an invertebrate gullet were based on erroneous interpretations of zoological facts: a revival of similar views—for example, in making the third ventricle represent a cephalic stomach as in crustacea, and the central canal of the cord the remnants of a pre-vertebrate gut (Gaskell and Bland Sutton)—has failed through want of adequate zoological, histological, or pathological evidence; while, on the other hand, Hubrecht's and Lankester's view of the origin of vertebrates from platyhelmia, of which living nemertinae are the nearest allies, still remains established, in contrast to the others and further evidence is daily accumulating.

In regard to the size and weight of the pituitary, its prevalent variations—from 0.3 to 0.6 g. (Quain, 1881); and 0.4 to 0.9 g. (Boyce and Beadles, 1892)—would bring it under the Darwinian law of panmixia; if so, the indication being what study of lower vertebrates shows, namely, that it has probably passed the acme of its activity, and in man is functioning less vigorously.

A reference is needed to the thyroid and its functions in lower vertebrata before concluding. The author has investigated this organ during the last year, and at the discussion three days ago (August 1st, 1893) on the function of the thyroid was able to state that the origin and mode of evolution and its activity in lower forms indicates that the thyroid is to be looked upon as associated anatomically with a primitive respiratory system, and physiologically with the respiratory gaseous exchange of the blood and tissues; while the phenomena following its destruction by disease or experiment are to be interpreted as at the bottom a disturbance of the gaseous metabolism and malassimilation of oxygen by the body tissues, to which are probably correlated the subnormal temperature, weakness, twitchings, excess of fat, and languor and weakness of muscular and brain tissues consequent upon such destruction.

Having regard to the obvious features of parallelism which both organs, according to the author, thus exhibit in their early evolution in vertebrate animals, a physiological relationship would seem to exist between the thyroid and the pituitary glands. If such an explanation is correct, the recent results of enlargement (? compensatory) of the pituitary after thyroidectomy may be explained; for the concordant results of Stieda, Hofmeister, and Gley (1892-3), go to prove such an enlargement of the pituitary after thyroidectomy. But otherwise the parallelism fails, for the pituitary belongs both anatomically and physiologically to the central nervous system, and the thyroid to the respiratory function of the blood-vascular system, and thereby of the tissues generally.

The main conclusions from the above lines of investigation all point to the important trophic influence of the pituitary gland on the central nervous system of vertebrates. If the origin and mode of evolution of its function be such, we ought clearly to get definite and predicable effects from the ablation or destruction of the gland whether experimentally or by disease. The evidence of disease has not yet thrown light on the nature of its function and experimental destruction (so far as the author is aware) has given negative results (Horsley, 1886; Gley, Marinesco, and others, 1892-3; and literature to end of March, 1893). Negative results are, however, of doubtful value, and cannot overweigh the positive evidence derived from comparative study based on sufficiently extensive material, and where all the facts concerning origin and mode of evolution of both structure and function are harmonious and consistent. The author therefore ventures to state what such predicable effects might be in successful cases of ablation of the pituitary. For it was stated above as the result of the present investigation, that the pituitary gland exercises a trophic action on the nerve tissues, which in more definite terms meant "enabling them (*a*) to take up and assimilate oxygen from the blood stream, and (*b*) to destroy and render innocuous the waste products of metabolism, and that at root these two functions are intimately related, and are really at root part of one process (vital or bio-chemical); an adequate assimilation of oxygen by the nerve tissues securing an adequate destruction (by oxidation) of the waste products."[3]

The predicable results of the ablation or destruction of the gland would therefore be those due to (*a*) a malassimilation of oxygen by the nerve tissues, and simultaneously (*b*) an insufficient destruction, and therefore accumulation of waste products; thus bringing about a rapid nutritional failure and death of the central nervous system. In general terms we would therefore expect in the animal:

Vide supra and footnote from Hoppe-Seyler.

[3] As proved by actual histological examination; (*Cf.* thyroid) evidence accumulated by Horsley, Boyce, etc. (*Univ. Coll. Pathol. Lab. Reports*, 1893-4)

1. Depression of [illegible] commencing failure of activity in the [illegible].

2. Muscular weakness (the first peripheral effect).

3. Loss of [illegible] (correlated to 1 and 2).

4. The development of [illegible]s and irregular contractions (spasms) of the [illegible] (in relation to the further progress of nutritive [illegible] of the nerve centres).

5. A waste of sufficient heat production, and subnormal temperature.

6. A wasting of the body tissues (in relation to the more rapid failure of nutrition of the central nervous system).

7. A probable compensatory polypnœa, or attacks of dyspnœa (the peripheral indication of the failure of the nerve centres to assimilate oxygen).

8. A rapid progress towards death. Future research must negative or confirm these statements.

In conclusion, the author would wish to call attention to the [illegible] value of studying biological problems (to the physiologist and pathologist) from the comparative and zoological standpoints, and by experiments on the lower vertebrates, to obtain light more particularly *on the origin and evolution of structures and functions* and to understand their *relative value* in relation to the higher animals and man, following especially the method of the great Darwin.

BRONCHO-PNEUMONIA SIMULATING ACUTE PULMONARY TUBERCULOSIS.

By J. KESER, M.D., F.R.C.S.,
Physician to the French Hospital, London.

ACUTE miliary tuberculosis is admittedly very difficult to distinguish in certain cases from typhoid fever, and matters are still further complicated by the fact that there is a form of broncho-pneumonia which simulates acute pulmonary tuberculosis. A curious example of this pathological mimicry has lately come under my notice, and a short description of the case may be acceptable:

I first saw the patient, a girl of 15, on April 16th. I heard that she had been at school in Paris, and that until April 1st she had remained in good [illegible] at the end of March [illegible] pleuro-pneumonia. The [illegible] died in her 12th year from [illegible] tuberculous meningitis when 8 years of [illegible] and well; the fourth is the present [illegible] and the fifth, born in 1878, died from diarrhœa and [illegible] from the bowels (tuberculous enteritis?) at the age of 7 months.

On [illegible] the patient came to Paris [illegible] friends, who noticed [illegible] pains and fever, [illegible] to be feverish and coughed [illegible] was then put to bed, and [illegible] the [illegible] pleurisy supervened on the [illegible] at my rate, little notice was taken of [illegible] and it was not examined medically; but she got worse [illegible] back to London. She had to wait for some time at Newhaven in a cold and draughty [illegible].

When I saw her on April 16th she was very ill indeed. The face was [illegible], the [illegible] and the [illegible] was covered with a [illegible] coat. The [illegible] were normal, though [illegible] and [illegible] were [illegible] the [illegible] tongue was [illegible] bowels [illegible] No [illegible] in the chest [illegible] tossan, no [illegible]

Dr. [illegible] at with me, and [illegible] could be noticed. [illegible] that of the [illegible], and that the [illegible] tuberculosis; but we [illegible]

During the [illegible] became most serious [illegible] would supervene would be speedily [illegible].

The temperature was quite erratic, and presented on consecutive days [illegible] known form of variation. On April 22nd and 23rd, for example, it [illegible] on the 23rd [illegible] April 25th [illegible] A.M. and [illegible] P.M., and one time [illegible] A.M., while on the [illegible] there were two [illegible] and [illegible] and more minimum between [illegible]. In fact, the chief clinical [illegible] was a great irregularity; the [illegible] and during the last week of the illness [illegible] extremely [illegible].

The condition of the central nervous system was peculiar: violent [illegible] with [illegible], and [illegible] [illegible] after the resumption of [illegible].

Examination of the [illegible] to no positive conclusions. The [illegible] were detected [illegible] Mackenzie saw the patient, two days after, [illegible] apparent [illegible] and [illegible] [illegible] [illegible]

As to treatment, quinine, digitalis, antipyrin, etc., seem to be worse than useless, but tepid or cold washing, whenever the temperature reaches 102°, is certainly of very great use; ice on the head, milk diet, and a small quantity of stimulants towards the end of the illness have been prescribed in my case. I also gave acetate of ammonia, with the view of increasing elimination by the kidneys.

ON ACUTE ANTEFLEXION OF THE UTERUS IN THE LATER MONTHS OF PREGNANCY.

By JAMES BRAITHWAITE, M.D.Lond.,
Obstetric Physician to the Leeds General Infirmary.

A case of pregnancy was sent to the Leeds Infirmary in September, 1892, with a letter from two medical men of experience, saying that they believed the case to be one of extra-uterine gestation.

The patient was aged 34, and had had five children, the last two years ago. In April, 1892, the patient believed herself to be again pregnant. In July she began to bleed a little every day but in small amount, and this hæmorrhage continued up to the time of her admission in September. There was a large rounded central abdominal tumour reaching half a finger's breadth above the umbilicus, and occupying the greater portion of the abdominal cavity below. Whether this was the womb or not it clearly contained a living child, for its movements could be felt by the hand. Vaginal examination found a rounded swelling anteriorly, and the uterus apparently lying behind it and with no continuity with it so far as the finger alone could ascertain. The finger, pressed up between the tumour and the cervix, did not arrive at any point of union. The uterus also seemed to be movable independently of the tumour to the moderate degree which its cramped position behind it admitted, for it was pressed against the sacrum. This, as it will be seen, turned out to be a mistake, but at the time it gave me this impression. The cervix was very dilatable, and I passed an index finger up, and at a height of about 2 inches reached the top of a very elongated cervix. The finger could then be turned forward into the cavity of the uterus, and the fœtal head, covered by the membranes, was felt. Labour came on the same day, and was concluded satisfactorily.

I certainly thought on first examination that the child was not in the uterine cavity. In the year 1888 I was associated with Mr. E. O. Croft, of Leeds, in a similar case.

Precisely the same condition was found as in the case already described, and much doubt existed whether the child was really in the womb or not. The cervix, or the uterus, lay directly behind the tumour and parallel to it, and no continuity, or but a doubtful one, between them could be detected. I dilated the cervix sufficiently to admit of the passage of the finger, which at the height of fully 2 inches reached a ledge anteriorly, over which it could be passed somewhat downwards and forwards into the uterine cavity. The ledge was formed by the angle between the cervix and body, and it was necessarily pressed downwards to admit of access to the uterine cavity. I ruptured the membranes, and the labour was completed the same evening or next morning by my friend, but it was difficult.

At the beginning of November, 1892, I admitted another case into the ward, precisely like the other cases related. It should be noticed that in these cases there was anteflexion only, without more version than enough to draw the cervix upwards a little. Secondly, that the cervix was somewhat elongated and pressed between the body of the uterus and the sacrum. It was not carried up almost out of reach as in the ordinary anteversion with pendulous belly, but it was a little elevated. Thirdly, all the cases were primiparæ, and, as might be expected, in none of them was there what is known as pendulous belly with separation with the recti muscles. Indeed, the two conditions—acute flexion and pendulous belly—are inconsistent with each other, for it is the absence of yielding in the abdominal walls which favours the flexion.

Although there are many references to anteversion with pendulous belly, there are, as far as I can discover, on record only two cases of the condition which forms the subject of this paper. Matthews Duncan, in his *Diseases of Women* (1886, p. 397), says that in advanced pregnancy we have two kinds of anteversion; one, common pendulous belly, the other extremely rare; he adds, "I have seen only one case of it in a primipara." In this case the uterus was anteflexed, and could not be replaced as in common pendulous belly. It was, in Duncan's opinion, not displaced secondarily, but grew into this peculiar shape and position.

A second reference to it is in the American *Journal of Obstetrics* (February, 1890, p. 156) in which a case is recorded as one of "dextro-torsion of the pregnant uterus simulating extrauterine pregnancy." This case is precisely like those I have related except that the body of the uterus fell to the right side instead of directly anteriorly. The writer of this paper is Dr. W. H. Wenning, of Cincinnati. The case so exactly simulated extrauterine gestation that after numerous consultations and examinations Dr. Wenning and his friends proceeded to abdominal section.

On opening the body Dr. Wenning says, to use his own words, "general surprise and consternation seized us all," for nothing was found but the pregnant uterus bent like a retort.

Dr. Wenning made a complete search into the German literature of the subject and he states that Küstner[1] relates a similar case to his, except that the patient was in an earlier stage of pregnancy. Barnes, in his *Diseases of Women* (1873, pp. 671-672) observes: "In some rare cases of early pregnancy the fundus has been locked behind the symphysis pubis in complete anteversion, forming a counterpart to the retroversion of the gravid uterus."

This anteflexion of the early months has, however, no direct connection with the present subject, which is the resemblance such cases in the later months have to extrauterine gestation and the difficulty of diagnosis. It is probable that this condition is more common than has been supposed, and its similarity to extrauterine gestation must be remembered.

In every case, however, of advanced or full term abdominal ectopic gestation which I have seen—and I have now operated upon six—the uterus lay in front of the sac containing the child, not behind it. This is a most important point in the diagnosis, but there can be no absolute certainty until the finger is passed up the dilated cervix.

[1] *Handbuch der Geburtshülfe*, Band II, p. 541, 1889.

TOTAL EXTIRPATION OF THE UTERUS.

By MACPHERSON LAWRIE, M.D.,
Physician to the Sanatorium for Diseases of Women, Weymouth.

Mrs. F., aged 66, a widow, consulted me during November, 1892, on account of pain in the region of the uterus, and a vaginal discharge. These symptoms had been in existence for about one year. The discharge was at first muco-purulent, but for three months had assumed a hæmorrhagic character, and the pain had become very severe. The periods ceased at the age of 50.

On November 20th the uterus was dilated, and an indurated, nodular mass found to occupy the upper part of the uterine cavity. This was thoroughly scraped away with the curette.

This operation was followed by great relief, but in three months the symptoms returned. The uterus was again dilated, and the growth, which had attained greater size, was again thoroughly curetted. For a second time the patient's condition was much improved, but in six weeks the old symptoms began to return. A third time the uterus was dilated. The growth was found to have developed more rapidly. With a strong, sharp curette the growth and underlying tissues were completely scooped out, till almost the whole thickness of the uterus at that part had been removed.

Severe constitutional disturbance took place after this operation, but the results seemed all that could be desired for some four or five months, when she wrote to say that the pain had recurred in a most severe form, and was accompanied by considerable hæmorrhage. It was now quite useless to propose any further palliative measures, and she consented to face the risk of complete removal of the uterus.

The operation took place on October 25th, 1893. The patient had never had any children, and the vagina was so narrow that it was necessary to divide the perineum and recto-vaginal septum down to the bowel, and afterwards to stretch the enlarged vagina by means of retractors.

The uterus was somewhat higher than usual in the pelvic cavity. The os could be distinguished towards the upper extremity of the vagina. After dragging down the uterus by means of a pair of single-toothed forceps attached to the posterior lip, it became possible to make out the cervix invested by the bladder in front. A firm hold of the posterior part of the cervix was obtained by means of a strong vulsellum, the uterus pulled down as far as possible, and the vulsellum given to my friend, Dr. Smyth, who was assisting in the operation, to hold. The vaginal mucous membrane was

next cut across in the anterior fornix with scissors, after it had been ligatured in three parts to control hæmorrhage. The mucous membrane was then peeled from the under surface of the bladder as far as the anterior lip; the process of separating the bladder from the cervix proved difficult and tedious; the bladder was dilated, its coats were thin, and it was unusually adherent. The index finger and a blunt instrument, shaped like a large spud, were chiefly employed, with occasional application of the scissors; at one part the separated bladder was so thin that the sound could be seen through its coats.

When the separation had been carried out as thoroughly as possible without interfering with the plica vesico-uterina, the vaginal mucous membrane covering the posterior surface of the cervix was cut across, and, after some dissection behind the uterus, a small opening was made through the peritoneum into Douglas's pouch. This opening was subsequently enlarged, and by passing two fingers into the peritoneal cavity and over the fundus of the uterus, it was found possible to press down the peritoneal fold between the uterus and bladder, and cut it through by means of a pair of scissors held in the other hand.

The uterus was now completely separated from its attachments in front and behind, and only held on each side by the broad ligaments. These structures were transfixed with No. 4 Chinese silk ligatures, which were firmly tied and the uterus cut away. By gentle traction on the ligatures the whole field of operation was brought into view, and all hæmorrhage effectually controlled. The cavity was thoroughly douched and cleansed. The wound in the perineum was brought together with five silkworm gut sutures, and the vagina packed, as far as the upper limits of the broad ligaments, with iodoform gauze. Before removing the patient from the table the bladder was filled with water, and found quite intact.

The after-history of the case was uneventful. She had almost no fever except on one occasion, when the temperature rose to 101.° The pulse varied between 90 and 100. The iodoform gauze was renewed twice, and then not replaced, and the vagina was well washed out daily after the first few days. The catheter was used every four or six hours for the first three days; on the third day the bowels were well opened, and the urine passed voluntarily.

Microscopical examinations, by Surgeon-Major J. Smyth, confirmed the diagnosis of epithelioma.

A CASE OF SEBORRHŒA PSORIASIFORMIS.[1]

By STEWART STIRLING, M.D., F.R.C.S.EDIN.,
Edinburgh.

THE case was one of the more uncommon forms of the seborrhœic process, simulating psoriasis and syphilis, and would naturally, according to Unna, have been included in his large group of dermatoses called eczema seborrhoicum.

The patient, a young man 27 years of age, was first seen by me in July 1892, at the Edinburgh Skin Dispensary. The history was that the rash had been present for two years. It commenced by a few small, reddish, slightly itchy spots about the size of herring scales over the breast bone, followed after a year by fresh spots on the back, between the shoulders, and in the axillæ. Four months later, after an attack of pleurisy, the eruption came out more abundantly over the thorax and arms, a few spots appearing at the same time on the forehead near the border of the hair, and on the thighs. The patient had had no form of skin affection previously, except a profuse "dandruff," which had existed for many years. There was no family history of skin disease. His case had been pronounced on several occasions to be syphilitic, but he denied ever having had syphilis. The eruption, as examined by me in July, 1892, consisted of numerous round, oval, and irregular spots or patches—some having a diameter of a sixpence—of a dusky red or raw ham colour, varying in size from a pea to half a crown in diameter, densely distributed over the trunk and limbs, especially on the front and back of the chest and in the axillæ. The larger patches were well defined, slightly raised, hyperæmic, and thickly covered with soft, loosely adherent, greyish-white scales. The smaller spots gave a rough impression to the finger, and looked like papules capped by scales. A few dull red greasy spots were present on the forehead near the margin of the scalp, and some isolated spots were observed on the thighs and legs. There was a tendency to grouping and to symmetrical arrangement. A few of the lesions here and there, especially on the arms and upper part of the back, had a distinctly yellowish tinge.

On a hasty inspection the first impression was that of a papulo-squamous syphilide, but there were found no syphilitic manifestations and absolutely no specific history. Syphilis having been excluded psoriasis suggested itself, but there was the absence of the usual localisation of psoriasis on the elbows, knees, and scalp, and the presence of dusky-red patches topped with soft grayish-white scales contrasted with the brighter red colour and the dry silvery-white scales of ordinary psoriasis. There were also diffuse dry seborrhœa of the scalp and hyperactivity of the sweat glands of the body; and lastly the eruption was attended with itching, which had become more severe and which was worse at night.

The treatment was at first not quite satisfactory, the eruption proving very obstinate and showing a constant tendency to recurrence. Under both arsenic alone and Donovan's solution the number of spots increased. Perchloride of mercury had no apparent effect. Of the local remedies employed Hebra's "spiritus saponatus alkalinus" for the scalp and a strong ointment of resorcin and sulphur precipitate for the body were found to be the most efficacious. The resorcin was suspended sometimes because of its irritating effect upon the skin and replaced by mild tarry applications. While the lesions were clearing up there was a tendency to the formation of ringed patches. After treatment for two months and a-half the eruption had almost entirely disappeared, leaving no evident stains, and the patient discontinued his attendance at the dispensary.

After an absence of five months, the patient presented himself again, in February, 1893. The disease had recurred, but in a somewhat altered form. Again there was well-marked seborrhœa of the head, and the rash had assumed a new phase, both as to its distribution and the character of the individual lesions. The lesions now occupied the lower half of the trunk, especially the sacral region and the abdomen, extending upwards on the thorax towards the axillæ. The face, arms, and front of the chest were unaffected, and only a few scattered spots were present on the upper half of the back. Several spots were located about the thighs; but on the legs—especially the calves—there were numerous patches, and a few larger areas from the coalescence of smaller patches. These last presented a deeper red colour than the rest of the eruption. The individual lesions on the trunk consisted of round or oval, circumscribed, slightly elevated, crimson-coloured patches, with pale yellowish borders. They varied in size from a split pea to three-quarters of an inch in diameter, and had a tendency to coalesce. The smaller spots had the appearance of stains, and were not perceptibly raised. The patches were covered with thin, greyish, fatty scales, again contrasting with the dry silvery-white scales of psoriasis. It would thus almost appear that from the brighter red or crimson colour, and the more uniform shape of the patches, the disease had in its progress gradually acquired a greater resemblance to true psoriasis.

With regard to the treatment of this relapsed or progressive stage, after several unsuccessful attempts with resorcin, sulphur, and tar, the disease yielded to an ointment of chrysarobin, tar, and mercury for the trunk, and a varnish of chrysarobin with traumaticin for the legs. The seborrhœa of the scalp was treated with Hebra's "spiritus saponatus alkalinus." The chrysarobin treatment had to be suspended on account of the painful erythematous eruptions it caused on the trunk. Arsenic was tried again, but it aggravated the disease. Under the chrysarobin treatment the patches gradually cleared up, those over the sacrum forming rings and segments, leaving yellowish stains, which soon disappeared.

The differential diagnosis of this case is founded entirely upon its clinical aspects. While the patient was under observation, it appeared to me that he presented an amalgamation of symptoms which I had not seen before, and on referring to the literature of the subject, I was unable to discover any reported cases which exactly (or very nearly) corresponded with the one under consideration.

The interesting cases described by Drs. Brooke and Wickham in the *British Journal of Dermatology* for 1889 and 1892 respectively, although evidently closely related, presented important points of difference in their clinical features. I had no difficulty in my mind in excluding from the diagnosis syphilis and true psoriasis, and of associating the lesions found on the body with antecedent and coexisting seborrhœic manifestations. Although accepting to a great extent Unna's description of seborrhœic eczema, I confess that after careful and prolonged study I was constrained to abandon that view of the case, as I had failed to discover any of the eczematous manifestations believed by dermatologists to constitute part of the process. All these were conspicuous by their absence. There was no marked infiltration of the skin, no tendency to the formation of vesicles or papules, and the "disposition to respond to irritation by exudation"—one of the features by which Unna defines eczema—was absent.

[1] Read in the Section of Dermatology at the Annual Meeting of the British Medical Association held in Newcastle-on-Tyne, August, 1893.

In conclusion, I beg to suggest that the phase of disease presented in this case, from its mode of evolution and subsequent behaviour—especially under treatment, and from its general symptoms—indicates:

1. An inflammatory process or dermatitis simulating psoriasis.
2. That it owes its origin to the seborrhœic conditions of the skin, especially the head.
3. That it is probably parasitic.

OSTEOMA OF THE SUPERIOR MAXILLA: EPITHELIOMA OF THE TONGUE.

By H. T. DRESCHFELD, L.D.S.,
House Dental Surgeon to the Victoria Hospital, Manchester.

P. H., aged 52, a mechanic by trade, first came under my notice on August 23rd, 1893. At that time he was suffering from epithelioma of the inferior anterior surface of the tongue in a median position on either side of the frenum. The submaxillary lymphatic glands were only slightly affected. The right cheek was deformed by a rounded swelling extending over the whole of the superior maxilla, with a





vertical elevation of at least 1¾ inch. This was found to be a solid bony tumour, which, according to the patient's history, had been caused by a fall from a ladder about twenty-three years previously: it had rapidly developed, and then remained stationary, without causing pain or any inconvenience, except the external deformity, until the present time. The orbit and nasal cavity were practically free from any pressure effects; the palate and alveolar border on the right side were, however, greatly displaced inwards, causing the teeth of the lower jaw on the right to articulate outside the upper jaw in self-formed sockets in the bony tumour itself; the articulation of the molars of the left side was normal. The left lateral incisor and canine teeth of the inferior maxilla, owing to this displacement, occupied the middle line, and were in a position posterior to the normal. This malposition brought the edges of these teeth into contact with the under surface of the tongue, in the position of the epithelioma described. This irritation accounted for the occurrence of the disease in such an uncommon position.

The epithelioma was removed by Mr. Southam. Access to the mouth being difficult, an incision was made from the angle of the mouth on the right side backwards, the anterior two-thirds of the tongue and the greater part of the floor of of the mouth being cut away. No ill-effects have yet been noticed in the patient, who was upon the third day removed home.

The accompanying figures are taken from photographs of plaster casts.

THE PROGNOSIS AND TREATMENT OF ACTINOMYCOSIS.

By W. B. RANSOM, M.A., M.D., M.R.C.P.,
Physician to the General Hospital, Nottingham.

On November 10th, 1891, I reported to the Royal Medical and Chirurgical Society the case of a man with actinomycosis of the prostate and rectum. At that date he had for a month been free from all signs of disease, and his recovery was entirely independent of surgical procedure. It was then not justifiable to speak of him as completely cured, as a recurrence of the disease was still possible. Now, however, that two years have elapsed and the patient is still in perfect health, such a claim may fairly be made. It is to the means of his recovery that I wish to draw attention.

When the patient first came under observation—January, 1891—he was suffering from distension of the bowels and alternating diarrhœa and constipation: the stools were occasionally slimy and blood-streaked, and in February spherules of actinomyces were found in them. This condition was soon relieved by turpentine enemata, and entirely cured by April after a course of calomel and β-naphthol. The urine, however, continued to show the spherules, which, there was reason to believe, came from an inflammatory focus in the prostate gland. During July and August the patient took iodide of potassium and liquor hydrargyri perchloridi, and during September and October took the iodide only in doses of a drachm daily. Under this treatment the urine gradually improved, so that after October 15th no more traces of the fungus were found. Since November, 1891, several examinations of the urine have been made, always with a negative result, and the patient had been free from all symptoms of disease, stout, and able to walk twenty miles a day.

In the paper read at the Royal Medical and Chirurgical Society, speaking of iodide of potassium, I said that "the drug has done no harm, and may possibly have contributed to the suppression of the disease." Since then, however, Thomassen and Nocard in Europe, and others in America have extensively used the iodide in the "wooden tongue" and other forms of actinomycosis of cattle, and have come to the conclusion that it exercises a marked remedial influence on the disease.

In man the drug has hitherto been little used, but successful cases have been reported from France, Germany, and Italy. Thus Buzzi and Galli-Valerio,[1] in a case of extensive disease of the face, in which incisions had failed, obtained a complete cure with 30 grains daily continued for three months, and Netter[2] observed healing of an actinomycotic abscess of the chest wall take place in a month, the daily dose of iodide of potassium averaging a drachm. Actinomycotic inflammations in man, though they may undergo partial recessions, are not known ever to resolve spontaneously. It may be asked whether the mercury also aided; but, although improvement began while it was being taken with the iodide, it was not until a month after its stoppage that the last specimen of the fungus was found. I therefore

[1] BRITISH MEDICAL JOURNAL, EPITOME, August 5th, 1892.
[2] *Semaine Médicale*, November 10th, 1893

think that my case is an instance of cure of actinomycosis by iodide of potassium.

It is of the greatest importance that the profession should at once recognise that iodide of potassium has a therapeutic action in this disease comparable to that in syphilis, that cases of superficial disease may get well without operation, while cases of deep-seated disease, in which operation is impracticable, may also afford a chance of recovery.

It is not probable that operations will be altogether dispensed with: abscesses must be drained and necrosed tissues removed; but these spheres will be limited, and a pleasanter and safer treatment adopted.

In many recorded cases of visceral actinomycosis, operation has failed, and it is probable that a knowledge of the action of iodides might have averted their fatal ending. It may also be noted that possibly some lesions diagnosed as syphilitic from their yielding to iodides, may, in fact, have been produced by the actinomyces.

A NOTE ON TUBERCLE BACILLI IN HOUSE DUST.

By R. SHALDERS MILLER, M.B., B.S.LOND., F.R.C.S.

IN April, 1892, it occurred to me to examine dry dust from a house in which there had been a series of cases of phthisis. I will briefly relate these in chronological order.

About fourteen years before the above date a gentleman affected with phthisis lived in the house, and left it only a short time before his death. An old lady then lived in the house for about six years, and died there, but not from the same disease. Then a lady, a family connection of my own, with her five daughters, took up her residence there, four of the girls being most of the time at school. In a year this lady became the subject of phthisis. She lived for three years and then died of that disease. During her illness the eldest daughter showed symptoms and slight physical signs of the same complaint, and came to stay at my house for about six weeks. She returned home apparently well, and has remained in good health ever since. A few months after the mother's death the second daughter, who had not long left school, displayed similar symptoms, and also came to stay at my residence, and fortunately recovered her health. She is still alive, and perfectly well and strong.

Early in January, 1892, the third daughter, who had left school only the previous Christmas, and had been suffering from a severe cold, exhibited consolidation of the left apex. She was a plump but delicate girl, who had experienced a good deal of illness in childhood from bronchitis and a severe attack of pneumonia. This poor girl, who was about 18 years of age, also came to stay at my house for about seven weeks, but she became rapidly worse, general infection taking place quite suddenly from the bursting of a tuberculous nucleus into one of the bronchial tubes, and she died exactly a month after returning home.

Several times during her visit I made stained specimens of sputum, and found an ever increasing prevalence of tubercle germs. I also obtained samples of dry dust, six in all, from various parts of her home. Unfortunately five of the six were ruined in the course of preparation, but the remaining one, which was scraped off the top of the dining room door, showed no fewer than eight groups of tubercle bacilli on a single microscopic slide; one of the groups numbering several hundred germs.

After [illegible] had their house fumigated with sulphur, and advised [illegible]ing it, which has since been done. The house was an old one, [illegible] constructed of wood, and I much doubt if anything [illegible]ing it down would be adequate to destroy its infective qualities. It would be hardly fair to ask workmen to pull it down. I communicated the above facts to Dr. Douglas Powell, who had very kindly seen this last patient.

Since then I have learned from one of the medical journals that very similar observations have been made, in almost parallel circumstances, by a Paris physician whose name I do not now recall.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

BREAST CARCINOMA WITH MYELOIDS: EXCISION, FOLLOWED BY TWO RECURRENCES: CURE.

THE rare pathological phenomena of this case, no less than its fortunate termination, render it worthy of record. E. P., aged 45, was admitted into the Cancer Hospital in October, 1885, with a hard nodular tumour of twelve months' duration in the upper part of the right breast. It was of the size of a large bean; in the axilla was a lymph gland slightly smaller. On removal the cut surface of the breast tumour was of a uniform reddish-black, that of the gland white; but another axillary gland, not enlarged, resembled the parent in its melanotic appearance. Upon microscopical examination no pigment could be found, and the condition was seen to be due to excessive vascularity. The sections presented the familiar characteristics of mammary carcinoma, with the strange addition of abundant well-marked myeloid corpuscles; there was no sarcoma tissue.

In February, 1887, a nodule was again removed from the inner end of the scar, with another axillary lymph gland; and in the following October two nodules, as large as hazelnuts, were dissected out of the fibres of the pectoralis. The macroscopic and microscopic phenomena were identical with those of the primary lesion. The patient has since remained well. She was last seen in August, 1893, in good health, and with no trace of disease.

In textbooks myeloid corpuscles are described in association with malignant new growths of the connective tissue series only. I have found them in the thickened wall of an ordinary breast cyst, but have never before seen them in carcinoma, nor do I know of any similar case. They appear to be minute plugs of some fibrinous substance entangling numerous leucocytes, and to indicate abnormal hyperæmia.[1]

Gloucester Place, Portman Square, W. HERBERT SNOW

ANTISEPTICS IN TYPHOID FEVER.

THE treatment of typhoid fever by carbolic acid has, doubtless, been tried by many physicians on theoretical grounds, as stated in Dr. Sloan's memorandum in the BRITISH MEDICAL JOURNAL of March 25th, 1893, and given up as futile. I have so treated it myself, as also by liquor hydrargyri perchloridi and salicylate of soda, without any beneficial results. However, after reading Dr. Sloan's memorandum, I determined upon giving it another trial. Three cases at once presented themselves; two adults received 3 grains of pure carbolic acid, and a child of 12 years 2½ grains three times a-day. This treatment was continued for a week without lowering the temperature or in any other way benefiting them. These cases pursued their usual weary course and recovered. Last year I treated a number with yeast, and avoided giving animal broths, without any benefit. Antifebrin, naphthalin, and boric acid all have been tried without result. Small doses of antifebrin certainly lower the temperature, and are, therefore, at times useful. I know of no drug that has any effect in cutting short the disease.

Ballarat. A. TEEVAN, M.R.C.S.Eng.

HÆMATOMA OF LABIUM OBSTRUCTING DELIVERY.

ON October 20th, 1893, I was requested to visit a woman immediately. The husband came for me at 10.30 A.M., and said a midwife (untrained) had been with his wife since 2 A.M., and could not get the case over. On my arrival I was informed by the midwife that the woman had been "off her head" for the past week. The labour was natural until a very large lump appeared, which the head could not get past. No one present could tell me when the lump came there.

The patient, a rather delicate woman, aged 37 years, had on the abdomen two scars of incisions for "abdominal abscess" twelve years ago. She had had four children, no miscarriages. She had never suffered with varicose veins. The left labium was about the size of a fœtal head, blue and shining, the skin over it being very tense, obviously a hæmato-

[1] Vide note to Plate XI of my *Cancers and the Cancer Process.*

toma. Hooking my finger round this I felt the head low down, strong pains making fruitless attempts to expel the head.

I administered chloroform, and with difficulty put on forceps and commenced traction, at the same time depressing the hæmatoma. During the second attempt the hæmatoma burst, and a large clot flew across the bed; no hæmorrhage followed, and a living female child was easily extracted; the placenta was expressed without difficulty.

There was a clean tear, about 3 inches long, in the labium, leading to a large cavity, which I syringed out with Condy's fluid (subsequently with sol. hydrarg. perchlor., 1 in 1,500), and packed with sal alembroth wool. The patient made a very good recovery, the wound being quite healed in fourteen days.

Cranleigh. ALEX. HOPE WALKER, L.R.C.P., M.R.C.S.

CHRONIC HYDROCEPHALUS: DRAINAGE; TEMPORARY IMPROVEMENT.

A. K., a child, aged 9 weeks, was brought to me with hydrocephalus, presumably congenital, for the abnormal size of the head was noticed very soon after birth, and the labour was a difficult one, necessitating the use of forceps. There was a very clear history of syphilis. The patient had all along suffered from convulsions; the pupils did not react to light, nor was there any evidence that he had any perception of light. The ophthalmoscope revealed intense œdema of both retinæ, so intense that the discs were wholly indistinguishable on either side. I applied pressure for a week, but the size of the head increased rapidly in spite of this treatment, and I determined to try drainage. As a preliminary step, however, I determined to tap and then apply elastic pressure, so as in some measure to accustom the cerebral circulation to its changed conditions. I withdrew about half a pint of cerebro-spinal fluid, and after a few days made an incision in the corner of the left anterior fontanelle. The improvement was immediate and obvious. The tube was left out when the secretion seemed to be no longer excessive, but the removal was followed in a few weeks by a reaccumulation, and the operation was repeated on the right side. The result was the same as before, and after three weeks of drainage I became very hopeful of cure. The improvement lasted for over a month, when convulsions, which had ceased altogether, began again. The head began to droop to the left shoulder, and to enlarge, but the swelling was quite asymmetrical, the left side being very much the larger; the sutures, which had joined up, began to give, the left cranial bones being raised decidedly over the level of the right. I explored both ventricles, the right with an entirely negative result, while from the left the syringe came back full of thin pus. There could be no doubt that I had entered the ventricle, and I concluded that one ventricle had become shut off from the other. I made a free incision into the old scar on the left side, and drained freely, but the child died four days afterwards.

Permission was obtained to examine the head only *post mortem*. Mr. C. M. Phillips, who conducted the examination in my unavoidable absence, found that the left ventricle was shut off from the right; a plug of purulent lymph lay in the dilated foramen of Monro; there was much pus on the left side, none at all on the right. The ependyma on the left was thickened, granular, and swollen; that on the right seemed perfectly normal.

Early in the treatment the bandages had been worked off late one night, and it was sixteen hours before I was summoned again to dress the head. Presumably the mischief had been done then, for I can recall no other time when there was any failure of antiseptic precautions. How the inflammatory process should have been limited as it was, it is very hard to see; but the fact remains that the thickening of the ependyma gradually diminished from one side of the foramen of Monro to the other, so as to show a gradual transition from inflamed tissue on the left to apparently normal tissue on the right.

I cannot think that this case furnishes any argument against the operation, where antiseptics can be fully maintained. The improvement for the time was very obvious. Some measure of sight even was obtained, for the child learned to recognise his bottle. Surely the operation is indicated for this reason alone, just as morphine might be for the pain of a cancer. It seems as if the right ventricle had been cured, for there was no hypersecretion from that side for at least a month before death.

The child lived three months after treatment had begun, though death seemed imminent when first he was tapped, and he made a perfect recovery from an attack of bronchopneumonia while he was under my hands.

Belsize Park, N.W. B. BASKETT, B.A.Oxon., M.R.C.S., L.R.C.P.

IODOFORM DERMATITIS.

IN the EPITOME accompanying the BRITISH MEDICAL JOURNAL of November 25th, 1893, a case of iodoform dermatitis is reported by Matschke, and as a similar result of the application of iodoform has occurred in a case at present under my care, it may be interesting to your readers to have a short note of it.

J. D., aged 40, a strong healthy man, had both bones of the right leg broken six years ago. Since then he had had a varicose condition of the veins of the injured leg. In October, 1893, he consulted me for two very large ulcers on this leg. Rest, the support of a rubber bandage, and the ordinary treatment for such cases, caused the ulcers quickly to assume a healthy appearance and become much smaller.

On November 10th iodoform ointment (10 grs. to ʒj of benzoated lard) was prescribed, to be applied on lint. On the day after the application the skin around the ulcers was much inflamed. On the next day the whole of the surface of the leg from knee to ankle was covered with a vesicular eruption from which serum freely exuded. The unguent was immediately stopped, and the leg quickly resumed its usual appearance on the application of lead and opium lotion. However, on again applying the rubber bandage which had previously been used over the iodoform dressing, the vesicular rash again appeared, but in a more severe and extensive form. He also complained that on the other leg a similar rash appeared everywhere "that salve" had touched. Patches of eczema also appeared on his fingers. The iodoform and the bandage used over it having been abandoned, his leg again improved, and the ulcers are now almost quite healed.

Garston. J. J. O'HAGAN, M.B.Vict.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

LIVERPOOL NORTHERN HOSPITAL.

PISTOL-SHOT WOUND OF THE STOMACH: OPERATION: RECOVERY.

(Under the care of Mr. ARTHUR H. WILSON.)

C. H. A., aged 18, was admitted on March 26th, 1893. He stated that while cleaning a pistol it suddenly went off. Upon joining his fellow workmen they noticed him looking very pale and gave him a considerable dose of brandy and water. As he grew rapidly worse he was taken home, and Dr. Leitch, of the North Dispensary, sent for, who ordered his removal to the Northern Hospital.

When first seen he was very restless, calling out with pain, and asking for a drink every few minutes. His lips were very pallid, his skin covered with a clammy perspiration, and his pulse extremely bad—weak, intermitting, and irregular. Breathing was shallow, and pain prevented his drawing a deep breath. The abdominal walls were rigid, but there was no dulness. The ambulance surgeon stated that he had vomited a quantity of blood before reaching the hospital. There was a large ragged hole, much burnt at the edges, in his coat, with small holes in his waistcoat and shirt. The wound in the abdominal wall was a small hole with blackened edges, situated to the left of the epigastric region, and immediately below the costal arch.

Although his condition seemed extremely dangerous, it was deemed advisable to give him the chance of operation, and he

was at once sent to the operating theatre. Ether was administered. A director was passed along the bullet track, and seemed to lead almost vertically through the abdominal wall into the peritoneal cavity. The incision was made downwards for about 3 inches. The left margin of the liver and the stomach were exposed to view, the former uninjured. The stomach was then drawn out, and the wound of entrance at once seen on the anterior wall, about 2 inches from the pylorus and midway between the two borders. The hole was small, with the edges a good deal bruised, and clear watery fluid was flowing quite freely through the aperture, probably the brandy and water administered at the time of the accident. A hole was then made with dissecting forceps through a portion of the great omentum free from large vessels, and about 1 inch from the greater curve. Some difficulty was experienced in examining the posterior wall of the stomach, but not so much as had been anticipated. The posterior aperture was found, perhaps, a little nearer the upper than the lower border, as though the anterior surface had been directed somewhat upwards. The margins were more shreddy than those of the anterior, but nothing was seen to escape until the patient began to retch. The probe was passed easily through the stomach. The edges of the anterior opening were then pared with scissors, and a rather large vein laid bare, but luckily not cut. The aperture was closed by seven Lembert's sutures.

The posterior opening was pared and closed with four Lembert's sutures, but as it looked as if, opposite the third suture, the peritoneum was missing, it appeared unwise to trust it, and the whole row was invaginated and another line of five sutures placed, so that nine were used for the posterior aperture. During the suturing the operation was prolonged, as difficulties arose with the anæsthetic, and I advised his being allowed to come round a little, hoping he might not feel much, but as almost every touch of the stomach made him retch, it was necessary again to place him well under. The finger was then swept most carefully several times over the parts behind the stomach, but nothing like the bullet could be felt, and as there was no hæmorrhage I determined to leave it, trusting it was lodged in his back. The abdomen was flushed out with water that had been boiled, but as it was not quite cool enough a little boracic lotion was added. It quickly ran back clear, as there was very little blood in the peritoneum, and none had escaped into it during the operation. The abdominal wound was then closed, peritoneum and muscles being drawn together by green gut, and the skin sutured except the lowest half-inch. No drainage tube was inserted. The patient was on the operating table about an hour and a-quarter. There was marked improvement in the patient's condition at the close of the operation. His pallor had gone; the lips were pink and the pulse was better. During the operation he had hypodermic injections of ether and brandy.

In the evening he seemed pretty comfortable. The pulse was 123, and the temperature 98.6°. He had one-sixth of a grain of morphine twice. Early the following morning he vomited about 5 ounces of blood, and two or three hours later again brought up a similar quantity, but of rather offensive smell. His temperature at midnight had been 101.8° F., but was falling. He was allowed nothing either by mouth or rectum, and complained bitterly of thirst. The pulse was still intermittent but otherwise good; there was no abdominal pain or distension.

On the third day he was allowed to suck a little ice. On the fourth day he complained of pain in the abdomen, so Mr. Brooks, the senior house-surgeon, dressed the wound, and, finding it nearly healed, took out two stitches. As he seemed rather weaker, a nutrient enema of brandy, beef-tea, and milk was ordered, but he complained that they caused him griping pain, so, after the second, they were discontinued, and he was allowed a teaspoonful of iced milk and water hourly.

It is not necessary to trace the case further in detail. On the fifth day the remaining stitches were removed. The nourishment was slowly increased each day until on the seventh day he was taking ℥j hourly, and on the eighth day commenced ℥ij hourly. On the fourteenth day he had his first solid food, namely, bread and butter with his tea. On the seventeenth day he was allowed fish. The wound was found by measurement to be opposite about the first lumbar vertebra.

The patient was discharged on May 3rd perfectly well, but he was ordered to wear a binder for the present, as there seemed a little inclination to bulge on coughing at the site of the wound. He has remained perfectly well since except for a short illness not associated with the accident, and the cicatrix is firm and resistant. Four months after operation one of the green gut sutures came away, separation having occurred in the loop, the knot still holding.

REMARKS BY MR. ARTHUR H. WILSON.—Two or three points of interest may be briefly mentioned. The most alarming symptom was undoubtedly the condition of the pulse, due, I suppose, to some profound depression produced through the pneumogastric. Again, the recovery, not only in the pulse but in all the symptoms at the completion of operation, was remarkable, and I think largely traceable to the flushing with very hot water. A third point is that, whatever may be the usual experience, in the case before us it was not very difficult either to find or to close the posterior aperture. There was no bleeding from the laceration made in the omentum, but a point I regret in the operation is the omission to suture it at the close. I would suggest that the following three causes helped to a successful result in this case: (1) that the operation was performed so soon after the injury, probably only two hours elapsing between the shot and the closure of both apertures; (2) there was little or no hæmorrhage into the peritoneal cavity, nearly all bleeding taking place into the stomach; (3) the boy was shot on an empty stomach, having taken no solid food since his breakfast, that is, for seven or eight hours; this would tend to diminish the immediate shock, as well as to reduce the danger of food materials escaping into the peritoneum. There can, I think, be no question as to the urgent necessity of laparotomy in these cases, and I find the following statement in the EPITOME of the BRITISH MEDICAL JOURNAL of August 26th, 1893, by von Bramann, made before the Congress of the German Surgical Society, in recording 8 cases of gunshot wound of the abdomen; "The operation is especially indicated in every case in which the direction taken by the bullet leads not only to a probability, but even a possibility of a wound of the stomach. In 99 per cent. of cases of such injury to the stomach, death is inevitable under any plan of expectant treatment."

SOUTH CHARITABLE INFIRMARY AND COUNTY HOSPITAL, CORK.

WOUND OF THE PULMONARY ARTERY.

(By PATRICK T. O'SULLIVAN, M.B., F.C.S., Pathologist and House-Surgeon.)

A WELL-DEVELOPED muscular man, J. D., aged 27 years, a coal porter, was brought to the hospital by the police on the morning of November 20th, 1893. He had been stabbed during a drunken family squabble by his brother-in-law, a boy of 18 years. The deceased lived for thirty-seven hours after the infliction of the wounds. The external wound was in the second left intercostal space, three-quarters of an inch from the border of the sternum. It was situated obliquely, and was half an inch wide.

On *post-mortem* examination, it was found that the thin anterior edge of the lung was incised, the pericardium was opened also—there were about 4 ounces of blood in it—and a wound three-eighths of an inch long was seen in the longitudinal axis of the pulmonary artery. This latter wound was practically sealed by the traction of the elastic fibres of the arterial coats and by adhesive inflammation. The peritoneal cavity had also been opened, causing purulent peritonitis.

The length of time the man lived with a wound in such a large artery was due, I think, to the direction of the wound: if the cut had been transversely situated the retraction of the edges would have caused a freer flow of blood, and death would have resulted earlier.

MR. WILLIAM BULLER HEBERDEN, who now becomes one of the joint secretaries of the Inland Revenue Board, is the representative of the renowned physician of that name, so often mentioned in Boswell's *Johnson* and other last century memoirs.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

W. S. CHURCH, M.D., F.R.C.P., Vice-President, in the Chair.

Tuesday, January 9th, 1894.

ALBUMINURIC ULCERATION OF THE BOWELS.

DR. W. H. DICKINSON said that, in the Croonian Lectures of 1876, he had referred to the occurrence of ulceration of the bowel with the granular kidney, and had since given further instances of the same association with evidence in one that the intestinal lesion was hæmorrhagic. The paper now before the Society gave a number of additional cases, covering altogether the experience of forty years, and presenting a total of twenty-two examples in which ulceration of the bowel was coincident with, and presumably pathologically connected with, renal disease. Eight instances were appended as of collateral interest, in which, under similar circumstances of renal disease, the bowel was the seat of hæmorrhagic extravasation without ulceration. The ulcers were not confined to any one part of the bowel, though most frequent in the lower part of the ileum, nor were they especially associated with any of the glandular structures. The most marked character of the ulcers was their association with hæmorrhage; recent extravasation, and pigmentation the result of extravasation, were frequently to be seen in their neighbourhood, and in three cases where the specimens were subjected to microscopic investigation blood in various states of alteration was found in the submucous tissue in connection with the lesion. Two cases were adduced in which the stomach was ulcerated as well as the bowel, in one the ulceration being associated, as in the bowel, with extravasation of blood. In the twenty-two cases of intestinal ulceration upon which the paper was based the kidneys were diseased in all; in fourteen they were granular, in two large white. In nineteen of the cases hypertrophy of the heart was noted; in nine there was retinal hæmorrhage or exudation. Thus the albuminuric ulcer presented itself in company with other members of the cardio-vascular series to which it apparently belonged. The lesion mostly presented itself late in the course of the renal disease, and often brought about the fatal issue by means of peritonitis and perforation. The symptoms commonly present were griping, abdominal tenderness, diarrhœa, and vomiting. In a minority of cases no symptoms were to be observed.

Dr. HALE WHITE remarked that the late Sir William Gull and Dr. Fagge both had taught that ulceration of the bowel was associated with the presence of Bright's disease. He himself had published a paper on ulcerative colitis, and in that paper he had approached this subject from another point of view, taking the intestine as the starting point. Four of his patients out of twelve had suffered from granular kidney, while a fifth had had symptoms of gout. In five of the cases ulceration in the small intestine occurred, and two of these had granular kidney, while one was gouty. This same gouty man had an ulcer in the stomach as well, and though his kidneys were stated to be healthy, the speaker believed that he was the subject of Bright's disease. Peritonitis from these ulcers might occur without their perforating, and when death occurred it was commonly due to diarrhœa, exhaustion, and peritonitis. The form of ulcer associated with Bright's disease he had therefore included amongst the varieties of ulcerative colitis. His view of the pathology of these ulcers was that they were primarily inflammatory, and that the hæmorrhage was an indication of the severity of this inflammation. In his own cases there was evidence of colitis extending for some distance round the ulcers. In cases of purpura, where extensive hæmorrage occurred in other regions, ulceration did not follow this hæmorrhage, and the epistaxis of Bright's disease was not usually associated with ulceration. In a recent specimen of dochmia duodenalis there were multiple hæmorrhages, but this had led to no ulceration.

DR. MITCHELL BRUCE had not met with any cases in which here had been indubitable ulceration in Bright's disease, but he had seen two cases of very profuse hæmorrhage from the bowel occurring in the course of this malady. The ulceration must be extremely rare, and he asked the author in what proportion of cases of Bright's disease either hæmorrhage or ulcer had been found.

DR. HERRINGHAM referred to two specimens of ulcer of the stomach which were side by side in the museum of St. Bartholomew's Hospital; the base of the ulcer was formed of blood clot, and both were taken from men who had died from "cirrhosis of the kidneys." He believed that these ulcers were produced by inflammation rather than by hæmorrhagic erosion.

The CHAIRMAN had not noticed the association of ulcer with chronic Bright's disease, although he had often remarked on the presence of pigmentary changes in the intestinal tract. He inquired in how many instances amyloid disease was also present.

Dr. DICKINSON, in reply, said that Sir William Gull had never spoken to him of the association of intestinal ulceration with granular kidney, though they had had many conversations on the subject of Bright's disease. He found no evidence of enteritis, and the hæmorrhages were deep in the bowel, and were present elsewhere independently of ulceration. The ulceration was rare, and had been observed in the *post-mortem* room at St. George's Hospital about twice a year. The intestinal pigmentation was, he thought, due to hæmorrhages of old date. There was only one case of lardaceous disease in his series, and that was caused by an abscess, which had been discharging for a year before death.

ABDOMINAL SECTION FOR ACUTE INTESTINAL OBSTRUCTION DUE TO MULTIPLE HYDATID CYSTS; REMOVAL OF THE CYSTS; RECOVERY.

Mr. J. HUTCHINSON, jun., who read this paper, said that the patient, a man, aged 53, was seized with symptoms of acute obstruction three days before the operation. He had frequent vomiting, abdominal pain, constipation, hiccough, etc. No cause could be assigned, but both *per rectum* and through the anterior abdominal wall two hard tumours could be felt; further, there was a good-sized fatty hernia above the umbilicus, and the patient was sent up to the London Hospital with the diagnosis of strangulation in this. The only point of importance in the previous history was the occurrence of ascites at the age of 30 cured by a single tapping. On abdominal section the author found three hydatid cysts projecting from the peritoneum of the mesentery, and extending in a row from the right of the umbilicus to the recto-vesical pouch, in which lay the largest of the three. They were of cartilaginous hardness and ivory whiteness, the largest being the size of a goose's egg, and apparently impacted in the pelvis. It was, however, after enucleation of the other two, brought up towards the wound and removed. There was remarkably little hæmorrhage throughout, owing partly to the great age of the hydatid cysts. The latter had walls one-third of an inch in thickness, and contained numerous daughter cysis; they were in part calcareous. Mr. Hutchinson suggested that the attack of ascites twenty-three years before gave the date of their deposit within the abdomen. The patient recovered from the operation satisfactorily. Attention was drawn to the subject of subperitoneal hydatids, the rarity with which they caused obstruction, and to other points of interest in the case detailed.

Mr. GODLEE had met with a hydatid cyst in Douglas's fossa which caused an obstruction to the flow of urine, and which was relieved by tapping *per rectum*.

Mr. SHEILD inquired if the cyst was twisted on its pedicle. The case illustrated the natural method of cure of hydatids. The operation for multiple abdominal hydatids was often incomplete, there being much hæmorrhage, and the result being most unsatisfactory.

Mr. WALLIS said that it was remarkable to find hydatids alive in such thick-walled cysts. These cases were, as a rule, beyond removal by operation, though it might be advisable to open the abdomen for the relief of symptoms.

The CHAIRMAN quoted a case which was under his care eighteen months ago. A man presented himself with an abdominal tumour which had been diagnosed as an hydatid cyst thirty-five years previously, and had not got larger since. On opening it a few daughter cysts were still found

to be white and transparent. It had originated in the under surface of the liver.

Mr. HUTCHINSON, in reply, believed that the parasite was still living at the time when he operated. Many instances of multiple subperitoneal hydatids were to be found amongst the deer in the Zoological Gardens. The patient was fortunate in having only three cysts, all readily removable. They were scarcely pedunculated, and only caused obstruction by pressure, the lowest cyst being jammed in the pelvis between the rectum and the bladder.

MEDICAL SOCIETY OF LONDON.

F. DE HAVILLAND HALL, M.D., F.R.C.P., Vice-President, in the Chair.

Monday, January 8th, 1894.

AFTER a short paper by Mr. WM. ANDERSON,

CASES OF DISEASES OF THE SKIN TREATED WITH THYROID GLAND.

Dr. PHINEAS ABRAHAM said he had begun to employ the thyroid gland, in the form of Burroughs Wellcome and Co.'s tabloids, five months ago, and up to the present time he had prescribed them to about 100 patients; but as the notes of a few cases had been mislaid, his observations referred to only 90. For certain reasons he had been chary in ordering them to private patients. In one case the lady declared that the lozenges were "disgusting," and declined to take any more after the first dose. Curiously enough, two patients with advanced nodular leprosy expressed themselves as feeling better after taking the tabloids, and there was certainly a rapid diminution of febrile attacks with acute erysipelatous œdema; but, of course, he did not suppose that the remedy was going to have any real curative effect in that disease. The usual dose he gave was three tabloids per diem, and if unpleasant symptoms ensued this was reduced to two or one. As a rule, the patients seemed to prefer them after meals; but in those cases in which they did good, he found it made little difference whether they were swallowed on an empty stomach or not. The tabloids had been administered in 65 cases of psoriasis, 5 of lichen planus, 7 of eczema, 2 of chronic urticaria, 5 of lupus, 1 of prurigo senilis, and in 1 of a peculiar papular eruption which superficially simulated adenoma sebaceum. Of the psoriasis cases, 17 might be discarded as having been under treatment or observation for too short a time. In the remaining 48, some definite improvement was noted in 18, but only 7 of these latter were under treatment with thyroid gland alone. In 16, the result as regards the eruption was practically negative, and in 15 there was actual increase of the eruption during the exhibition of the remedy. In 28 of the patients disagreeable symptoms were complained of—such as headaches, palpitations, muscular tremors, neuralgic pains, dyspepsia, etc. Of the 5 cases of lichen planus there was marked improvement in 3, but these also were under external treatment at the same time. Three complained of disagreeable symptoms. Of the 7 eczema cases 3, he believed, derived benefit from the thyroid, but they also were under simultaneous other treatment. Unpleasant effects were produced in 3. Neither of the 2 cases of chronic urticaria derived the slightest benefit; the trouble, indeed, was rather increased. The case of prurigo senilis also derived no benefit: the anomalous papular eruption, however, certainly began to diminish after the patient commenced with the tabloids, but this case was also under other treatment. Two of the lupus cases showed improvement, but they also were under external treatment. The conclusions that he thought might be deduced from his observations and from those of others, so far, were as follows: (1) The ingestion of thyroid gland, although of specific therapeutical value in myxœdema and sporadic cretinism, has no constant effect in psoriasis, and in many other diseases of the skin. (2) In a large number of cases the results are negative, and in a few the cutaneous lesions are aggravated. (3) In a certain number (a minority) there is a distinct and marked curative effect. (4) At the present time there were no prior indications as to which cases its administration is likely to benefit. (5) In a considerable number of the patients disagreeable constitutional effects are induced. (6) Age and sex have nothing to do with the success of the remedy. In future he intended to employ thyroid treatment only in cases which "hung fire" under usual methods, or in those in which its use may be physiologically indicated.

The CHAIRMAN said no patient of his had objected to thyroid gland as being disagreeable to take.

Dr. MORGAN DOCKRELL said he had tried the administration of thyroid in sixty cases of psoriasis, avoiding any other treatment at the same time. The treatment was most beneficial in young people, and in the debilitated rather than in the robust. Disagreeable symptoms were often experienced, and the administration of the remedy almost always determined marked debility, to counteract which he usually ordered a tonic of some kind.

Dr. EDDOWES said the symptoms induced by the remedy were sometimes so unpleasant that the treatment had had to be abandoned. Cases in which the treatment had failed to give relief sometimes did well under external applications. He had been unable to obtain any definite indication of the class of cases in which the thyroid treatment was likely to be of benefit.

Mr. W. ANDERSON referred to a case of a man, aged 35, who had suffered from typical psoriasis since the age of 5. The thyroid treatment in this case had done harm rather than good.

Dr. HINGSTON FOX pointed out that the discrepancies observed in the therapeutical effects of the gland might be explained by the variations in the size and quality of the gland itself. Of the existence of such variations he had satisfied himself by personal investigation in the slaughter house. He also pointed out that the gland in the human female underwent periodical enlargement, and, assuming that similar changes took place in the normal sheep at corresponding periods, he urged that these changes, of which nothing was positively known, might account for some of the discrepancies. Until chemists had succeeded in isolating and defining the active principle which the thyroid gland contained their experiments must necessarily be rough, and therefore exposed to numerous fallacies and discrepancies.

Dr. ABRAHAM replied.

OBSTETRICAL SOCIETY OF LONDON.

G. E. HERMAN, M.B.Lond., F.R.C.P., President, in the Chair.

Wednesday, January 3rd, 1894.

SPECIMENS.

THE following specimens were shown:—Dr. CHEPMELL: Uterus and Vagina from fatal case of septicæmia, showing point of infection.—Dr. WILLIAM DUNCAN: Hypertrophied Nymphæ and Clitoris removed by excision.—Dr. PROBYN WILLIAMS: (*a*) Heart with only One Auricle; (*b*) Hydrocephalus *plus* Spina Bifida.—Dr. EDEN: Unruptured Tubal Gestation.

PREGNANCY AND BRIGHT'S DISEASE.

The PRESIDENT read a paper on six more cases of pregnancy and labour with Bright's disease. After giving details of the cases, the author compared them with others reported in former communications by him to the Society, in all eleven in number, and then compared these eleven cases with twelve cases of puerperal eclampsia, also published by him in the Society's *Transactions*. He drew the following general conclusions: There are at least two kinds of renal disease to which a pregnant woman is specially liable. One of these is a very acute disease, in which premonitory symptoms are either absent or of duration measurable by hours or days. It attacks chiefly primigravidæ. It often causes intrauterine death of the child. It is attended with extreme diminution of the quantity of urine, and the small quantity of urine that is passed is greatly deficient in urea, but contains enough albumen to make it solid on boiling. This disease is accompanied with rapidly recurring fits. If it run a favourable course, the fits cease, then the urine increases in amount, and the percentage of urea in it rises. If the excretion of urea be not re-established, the case quickly ends fatally. Such cases seldom, if ever, pass into chronic Bright's disease. The other is a disease which attacks older subjects, chiefly those who have had children before. Its premonitory symptoms extend over a period measurable by weeks or months. It often leaves

to intrauterine death of the child. It is accompanied generally by increase in the quantity of urine, with copious loss of albumen, but not so much in proportion to the urine as in the more acute disease, and with diminution in the elimination of urea, but not nearly so great a diminution as in the more acute disease. Delivery is followed by temporarily increased diuresis and increase in the urea elimination. When this increase is considerable, the albuminuria usually diminishes and disappears, and the patient gets well. When the increase is only slight, the albuminuria persists, and the case becomes one of chronic Bright's disease. This form of disease is sometimes attended with fits, but generally not. The presence of albuminuric retinitis affects the prognosis unfavourably. When the pressure within the abdomen is greater than usual, the amount of urine may be diminished, but in such cases the diuresis and the augmentation of the urea elimination after delivery are proportionately greater. In the acute disease which causes eclampsia, and in the chronic disease when it is associated with excessive intra-abdominal pressure, much of the albumen is paraglobulin. The cases in which the albumen is mainly serum albumen generally either die or pass into chronic Bright's disease.

VAGINAL SECRETION.

Dr. Gow read a paper on this subject. He summed up as follows: (1) The facts are brought forward to prove that the vagina secretes; (2) the secretion is whitish and opaque, and resembles in appearance thick starch mucilage; (3) the opacity of the secretion is due to the presence in it of numerous flat nucleolated cells; (4) chemically the fluid is albuminous in nature, and there is no evidence of the presence of mucin; (5) the reaction is acid, but the fluid when secreted is alkaline—the acidity depends on decomposition from the presence of bacteria; (6) the possible nature of the acid was discussed.

After some complimentary remarks from the PRESIDENT, Dr. LEWERS said he had noted that after extirpation of the uterus the vagina was not less moist than normal.

Dr. HORROCKS had always thought the vagina secreted, but he considered it had yet to be proved that the secretion was alkaline at first. He was sceptical as to the presence of bacteria in the vagina of a healthy woman. Secretion from virgin vaginæ would have to be examined before the points could be settled, and it was obviously only on rare occasions that such secretion could be obtained.

Dr. GOW, in reply, said there had been many experiments to prove that there were bacteria in the healthy vagina, though there was no suggestion that such bacteria were pathogenic. He had tried to show that if the organisms were excluded from the vagina, the secretion was alkaline. It would be very difficult to carry out Dr. Horrocks's suggestion, and make experiments similar to those described in the paper in single women. Moreover, the presence of cervical secretion would invalidate the results.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

DONALD HOOD, M.D., President, in the Chair.

Friday, January 5th, 1894.

SPECIMENS.

THE following specimens were shown:—Mr. R. W. LLOYD: A Stricture of the Sigmoid Flexure.—Dr. GOULD MAY: A Dog's Heart containing Filaria from Fiji; these gave rise to no symptoms except cough, and did not appear to shorten life. They grew to 5 inches in length, and were not found in the human being.

SUCCESSFUL CASE OF CRANIOTOMY.

Dr. MAITLAND THOMPSON read notes of this case. A primipara, aged 26, only 4 feet 10 inches in height, had been in labour forty-eight hours, and membranes ruptured. Rachitic pelvis; forceps of no avail. Perforation was performed, and the skull bones entirely removed. Evisceration and dismemberment subsequently were necessary, the whole operation taking four hours. The case did extremely well, the patient getting up on the twentieth day.

Dr. LEWERS suggested the advisability of symphysiotomy in such cases.

Mr. LUNN and Dr. CLEMOW related cases of craniotomy in their practices during the last few months.

TUBAL GESTATION SUCCESSFULLY TREATED BY ABDOMINAL SECTION.

Dr. LEWERS related this case. The patient suffered for a short time with vaginal discharge and iliac pains. On April 1st she also had sickness and more pain; the vagina and cervix were bluish and the breasts full. There was fulness to the right side of the uterus, which was enlarged. On April 10th she had severe pain and vomiting; the uterus was examined and found empty. Abdominal section was performed on the 22nd, and a three-months fœtus was lying amongst the intestines. The right tube was ruptured anteriorly, and a second rupture was found posteriorly. The tube was removed, toilet of peritoneum done, iodine water (tr. iodine. ℥j to the quart) being used. One week later stitches were removed, and pulse rose to 140, temperature to 102°, with swelling of salivary glands. A few days later there was some discharge from the wound, which again healed shortly. There was no distinct interval of amenorrhœa. Previous examination of the uterus was advocated where possible, and Dr. Lewers was of opinion that the loss of blood was spread over some days.

ECTOPIC GESTATION.

Dr. SCHACHT related two cases under his own care and two under that of Dr. Travers. Abdominal section was successfully performed in all four. There were two symptoms common to all the cases: hæmorrhage and—irrespective of the period—irregular pain. In two a pulsating vessel was distinctly felt at the lower part of the mass *per vaginam*.

Remarks were made by Dr. MAITLAND THOMPSON, Dr. GOULD MAY, Dr. TRAVERS, and Dr. LEWERS.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

W. T. G. WOODFORDE, M.D., President, in the Chair.

Monday, December 18th, 1893.

TENURE OF OFFICE.

A DISCUSSION on this subject was opened by Mr. WYNTER BLYTH, who deprecated appointments for a limited term of years, as less secure than those held during the pleasure of the Board. He also wished that pressure should be brought to bear on the Local Government Board against sanctioning strictly "whole time" appointments, since they were no better paid by the local authorities than were others.

Dr. ARMSTRONG referred to the permanence of appointments made under the new Public Health Act for London, which he hoped might soon be extended to the provinces, but, as regards those under the Public Health Act, 1875, the control of the Local Government Board was illusory. Besides there were always men ready to take an appointment at the most paltry salary to add a few pounds to their incomes or to keep out a rival practitioner. The Local Government Board ought to insist on county councils exercising the powers conferred on them under Sections 17 to 19 of the Local Government Act, 1888, of appointing medical officers to counties and large combined districts, with adequate salaries and pensions. A period of practical service as assistant medical officer to a county or large district or borough should in future be required of aspirants to responsible positions.

Dr. EUSTACE HILL and Mr. SERGEANT, as county officers, concurred in the expediency and justice of the transfer of such powers from the Local Government Board to the county council.

Dr. WILLOUGHBY suggested that the Local Government Board could, without waiting for fresh legislation, hasten the extinction of "half-timers" and "five- or ten-pounders" by simply refusing their consent to all unsatisfactory appointments. Referring to the question of "whole time," he, while insisting on the incompatibility of general medical practice with the independence of the officer and his proper relations with local practitioners, maintained that practice as a consultant and expert, or a professor in public health, would conduce to his efficiency.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Dr. VACHER read a paper on this subject. These reports

should be on a uniform plan, and of one size—large 8vo—with no type less than small pica and old-faced figures uniform, in fact, with those of the Local Government Board and the Registrar-General. Those from each county, etc., could be bound in series for reference. The nomenclature and classification of diseases and age periods must be those sanctioned by the Local Government Board and Registrar-General; but the order of the subjects in each report might be varied according to circumstances, provided each were considered separately, and nothing of material interest omitted. These he considered in order, laying great stress on the value of analyses of deaths from preventable, and of cases of notifiable diseases, according to ages, localities, etc.; the expediency of stating and reiterating year after year the needs of the district, as by laws, plant, sanitary works, staff, etc.; and the value of good maps, showing the physical characters of the district, the distribution of the population, the incidence of disease, etc.; adding that such reports might be an effective means of improving and educating the public. In the discussion that followed, several county officers complained of the incompleteness and vagueness of many reports, and condemned in strong terms the practice, most prevalent in so-called "health resorts," of manipulating the statistics of population and death as to make the death-rate appear in far too favourable a light; urging that the drawing up of reports should form a part of every course of instruction and examination for diplomas in Public Health.

METROPOLITAN COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION:

HERTS DISTRICT.

HENRY POWER, M.B., F.R.C.S., President, in the Chair.

Wednesday, December 13th, 1893.

CASES.

MR. J. C. FISHER showed (1) Congenital Hypertrophy of the Foot. The PRESIDENT requested that casts of both legs be made and presented to the Museum of the Royal College of Surgeons.—MR. J. C. FISHER also showed (2) Excision of Hip for Tuberculous Disease of the Epiphysial Line; the result was excellent. (3) Removal of half the tongue, floor of mouth, and part of the alveolar margin of the jaw and the soft part of the submaxillary region for Carcinoma. The patient was a man, aged 52; operation two years and a-half ago; no return; speech good.—A general discussion ensued.

DIAGNOSIS AND TREATMENT OF MAMMARY CANCER.

MR. MARMADUKE SHEILD read a paper on this subject. After discussing the theories as to the origin of cancer, he went on to lay stress on nipple irritation and mastitis as preliminary to cancer, and a painting of Paget's disease of the nipple was shown in illustration. The difficulties of early diagnosis from chronic mastitis, deep cyst, and chronic abscess were discussed and illustrative cases related, and the great value of exploratory incision in cases of doubt was insisted upon. Early and free incision gave the best results. In cases of doubt between chronic mastitis—sometimes syphilitic—and cancer, it was his practice to cover the breast with a thick layer of mercurial ointment and gauze tissue, bandaging with considerable pressure. Iodide of potassium was given internally. If at the end of three weeks the hardness was more evident, especially if a hard nodule could be felt with the flat hand, he would at once advise removal in a woman of the "cancerous age." The skin should be fully removed, and all outlying portions of the mammary gland also. The question of opening the axilla was touched upon and the special danger of injuring the large axillary vein illustrated. The author next spoke about the electrical treatment of cancer, and distinguished between electrolysis and the passage of the interrupted current through the growth. The latter plan seemed to have been adopted. He adduced theoretical reasons why this could hardly prove curative, and added that he was aware that a large number of cases had been subjected to this treatment, but few results had been published. In conclusion, the author pointed out the class of cases unfavourable for operation, and gave an illustrative case showing the spontaneous disappearance of cancer under severe illness. The treatment of cancer by drugs, dietary, caustic pastes, and other such methods was also treated shortly.—A very interesting discussion then took place, in which nearly everyone present joined; and MR. SHEILD replied.

MANCHESTER MEDICAL SOCIETY.

C. E. GLASCOTT, M.D., President, in the Chair.

Wednesday, December 6th, 1893.

EXCISION OF ELBOW JOINT.

MR. WHITEHEAD showed a man whose elbow he had excised for ankylosis due to a comminuted fracture, the result of a fall. One of the detached fragments strongly resembled the coronoid process, and the case had been originally treated by a chemist, who professed to diagnose and reduce a dislocation, and who afterwards attempted to complete the cure by passive motion.

URETERAL CALCULI.

MR. WHITEHEAD also exhibited eleven calculi which he had removed from the lower end of the ureter of a female after dilating the urethra and the orifice of the ureter. Frequency of micturition was the only subjective symptom, but the presence of a comet-shaped tumour in the region of the bladder neck could be easily detected *per vaginam*, and also traced through the abdominal wall by palpation.

URETHRAL CALCULUS.

MR. SOUTHAM showed a calculus removed from the fossa navicularis of an adult, the subject of congenital phimosis and contraction of the meatus. It consisted of uric acid and was fusiform in shape, being an exact mould of the fossa where it appeared to have formed. Lying in the deeper part of the urethra were several small phosphatic concretions, and the bladder contained a larger calculus, also phosphatic, the secondary result of chronic cystitis, apparently induced by the obstruction to micturition caused by the blocking of the terminal portion of the canal.

THYROID FEEDING IN PSORIASIS.

DR. BROOKE related five cases of obstinate psoriasis, all young males, who had been subjected to the thyroid treatment. One thyroid in pellet was given daily. Not one case showed any improvement, two were acutely aggravated, and two complained of loss of virile power. Dr. Bramwell's report showed that the drug was capable of influencing some cases very powerfully, but these results and those of other observers communicated privately proved that it was not, in any sense a specific, but that its field of action was limited.

DIAGNOSIS OF CHOLERA.

Professor SHERIDAN DELÉPINE read a paper on this subject which will be published.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

J. S. CLOUSTON, M.D., President, in the Chair.

Wednesday, December 20th, 1893.

CASES.

DR. BYROM BRAMWELL showed a case of Lupus (a girl) under treatment with thyroid extract. Myxœdematous patients frequently died of tuberculosis. This suggested a relationship, and thyroid extract had been exhibited for several months. Apparently the result had been improved nutrition of skin, which had enabled it to arrest the action of and destroy the vitality of the tubercle. The preparation used was that of Brady and Martin, and the dose 5 to 10 minims. Dr. Bramwell showed a second case, which had just come under observation and treatment.—DR. JAMES C. DUNLOP showed a series of cases of Webbed Fingers occurring in three generations, the grandfather in the left hand (middle and ring fingers), the father in the left hand also, and the infant in both hands and feet (three centre toes).—DR. NORMAN WALKER showed a case of Rodent Ulcer, of four years' standing, in a man. The case was evidently one of carcinoma.—MR. F. M. CAIRD showed a case of Charcot's Disease in both knees. There was no history of syphilis. Ten years ago the eyesight began to get affected; eight years ago the left knee-joint; and two and a-half years ago the right knee. There was great hyperplasia of the tissues.—

Dr. W. RUSSELL showed a series of photographs illustrating cases of Lupus treated in Berlin with tuberculin.

SPORADIC CRETINISM.

Dr. BYROM BRAMWELL read notes of a case of sporadic cretinism.[1]

Remarks were made by Dr. IRELAND, Dr. W. TAYLOR, and others; and Dr. BYROM BRAMWELL replied.

SELF-INFLICTED BULLET WOUND OF THE HEAD.

Dr. SLOAN related the salient points of this case. A man with a strong hereditary tendency to insanity placed a revolver close to his forehead, rather to the left of the middle line, and fired. The outer and inner tables of the skull were penetrated, the bullet dropped on the cribriform plate of the ethmoid, and the brain substance was extensively injured. The latter wound discharged substances, which were certainly not aseptic, for several days. There was no blackening, scorching, or singeing of the skin, but the deeper tissues superficial to the bone, as well as the bone itself, were somewhat blackened. The patient made a perfect recovery, and whereas before the attempted suicide, or at all events on the day, or the day after that event, he might have been certified as a person of unsound mind, he was now quite well mentally. Dr. Sloan's remarks were illustrated by the exhibition of the revolver, the extracted bullet, some unfired cartridges, the charge of black gunpowder, the fragments of bone, some of them blackened, photographs, boards of various thicknesses at which the revolver in question had been discharged at various distances.

The PRESIDENT spoke of a patient under his care who had been almost successful in an attempt at suicide, inflicting fearful injuries on his head, but who recovered, and in addition had now quite thrown off his maniacal state.

Dr. P. A. YOUNG narrated a similar case of even a more serious kind.

Other members spoke, and Dr. SLOAN replied.

STATIC ELECTRICITY.

Dr. DAWSON TURNER gave a practical demonstration of the therapeutic methods employed in static electricity, with exhibition of apparatus.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

T. KILNER CLARKE, M.A., F.R.C.S., President, in the Chair.

Friday, December 1st, 1893.

ABSCESS IN THE LUNG.

DR. CHURTON and Mr. LITTLEWOOD read notes of a case, and showed the patient, a girl, aged 12 years. She had two small abscesses, which had apparently formed in a collapsed portion of lung on the right side. The heart was pulled over to the right, the apex beat being close to the right nipple. The abscess was opened and drained, after excising portions of two ribs. The patient made a good recovery.

Remarks were made by Dr. BARRS and Dr. EDDISON.

GANGRENOUS ABSCESS IN LUNG.

Dr. PRIESTLEY LEECH read a paper on a case of gangrenous abscess of the lung in a youth, aged 22, who had an attack of what was believed to be pneumonia of the left lung, in April, 1892. The abscess was opened in the second intercostal space, at a depth of 3½ inches from the surface, and a drainage tube inserted. The patient finally recovered, and the tube was taken out in April, 1893. He has since continued in good health, and all expectoration has ceased.

Dr. IRVING (Huddersfield) related a case. The patient (a man) became suddenly ill. On the second day there was a pleuritic rub, which soon disappeared. On the third day he expectorated some offensive dark phlegm, and continued to do so for the next four months, sometimes in large quantities. He then expectorated a very large quantity of horrible-smelling stuff, and with it what appeared to be a slough of lung. After this he rapidly recovered. After the first few days there were no definite localising physical signs.

Remarks were made by Dr. BARRS, Dr. EDDISON, Dr. CHURTON, and the PRESIDENT.

[1] See BRITISH MEDICAL JOURNAL, January 6th, 1894.

TREPHINING FOR HÆMORRHAGE.

Dr. IRVING also read notes of this case. A painter, aged 35, fell a distance of fifteen feet. On admission to the infirmary he was insensible to sound, but not to light or pinching. Coma rapidly supervened. There was no wound, but ecchymosis round the left eye and some depression in the left temple. Fracture with depression was diagnosed. On laying bare the bone a fracture was discovered extending in various directions. A disc of bone was removed just in front of the temporal ridge, and the base of one of the fractured portions of bone sawn across, by removal of which the upper border of a large clot was shown. The clot extended downwards and backwards, and to expose its full extent two more discs of bone had to be removed by the trephine, one in front of, and the other behind, the coronal suture. By this means a fairly large portion of the parietal bone was removed, and the extent of the hæmorrhage exposed. On the removal of the clot the bleeding was seen to be from several points, the chief being from a branch of the middle meningeal artery. It was found impossible to tie the bleeding vessels, and the surface of the dura mater was plugged with iodoform gauze, and the scalp brought together by a few stitches. The patient made a complete recovery, and returned to work about two months after the accident. The opening in the skull measured 4½ by 3½ inches.

Cases of a cognate character were related by Mr. LITTLEWOOD, Dr. PRIESTLEY LEECH, and Mr. C. SMEATON; and Mr. LAWFORD KNAGGS referred to the diagnostic value of the pupil phenomena in these cases.

DILATATION OF COLON TREATED BY WASHING-OUT.

Dr. CHURTON showed a boy, aged 6 years, who, always rather delicate, had been feeble and thin since measles followed by whooping-cough last summer. The motions were extremely offensive, with an earthy odour, pale and yeasty. A great excess of indican was found in the urine. The transverse colon visibly projected the lower epigastric and upper umbilical regions; the projection being first increased by a "washing-out" enema, and then, after its action, completely removed. The stomach was very readily defined by splash after fluid had been swallowed. Under treatment by tonics and washing out the colon every other day the child had greatly improved in strength; but the temperature was still 100°. Possibly some caseous mesenteric glands existed.

CASES, ETC.

Cases, Pathological Specimens, etc., were shown by Dr. JACOB, Dr. ALLAN, Dr. GRIFFITH, and Dr. HELLIER.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

W. HUNTER, M.D., President, in the Chair.

Wednesday, December 20th, 1893.

SPECIMEN.

THE PRESIDENT showed the Dilated Œsophagus of a Horse, which had been under the care of Mr. Cave, veterinary surgeon. The chief symptoms were recurrent attacks of colicky pain. Obstruction seems never to have become complete, and the animal died of acute enteritis.

STRUCTURE OF CANCER.

Dr. CATTLE read a paper, by himself and Dr. MILLAR, on this subject. The microscopic appearances of the different kinds of cancer were illustrated by a series of thirty lantern photographs by Dr. Millar. After making allowance for differences of site, it was thought that the process was essentially the same wherever it occurred. The probable part played by protozoa in the causation of the disease was briefly referred to. The paper concluded with some remarks on the operative treatment of cancer, viewed in the light of structure. A discussion followed, in which the PRESIDENT, Drs. HANDFORD, RANSOM, and MICHIE took part.

ACETANILIDE AS A DRESSING.—Dr. F. W. Hassell states (in the *Medical News*, October, 1893) that he has found acetanilide (antifebrin) a very good dry dressing for lacerated wounds. It does not irritate the skin, causes no pain beyond a slight smarting for ten minutes after application, has no offensive odour, and does not produce general toxic symptoms.

REVIEWS.

On Gout as a Peripheral Neurosis. By Willoughby Francis Wade, M.B., F.R.C.P. London: Simpkin Marshall and Co. Birmingham: Cornish Brothers. 1893. (Crown 8vo, pp. 60. 2s. 6d.)

This is an interesting essay founded on careful clinical observation, carried out very largely by the author on himself. He considers that the prevailing view about gout is very inadequate to explain the symptoms; for instance, he points out that the great toe-joint is not further removed from the circulation than the joints of other toes, nor does it bear the weight more than other toe-joints. Dr. Wade states that the tenderness usually referred to the joint is not actually in it, but follows certain lines which he claims lie exactly over nerve branches. From this he concludes that the pain and tenderness are due to an affection of these nerves, made very conspicuous, if not actually caused, by pressure; and in the same way he believes that tophi in the ear are related to the pressure of lying on the pillow at night.

Many difficulties in the way of this theory cannot fail to strike the reader. One is why the attack in the great toe-joint comes on oftenest at night, when the pressure is least. Another point is whether races who do not wear boots suffer from gout in the great toe-joint. The essay is suggestive reading, and physicians must for the future observe whether the tenderness follows definite lines.

The Meaning and the Method of Life. By George M. Gould, A.M., M.D. New York and London: G. P. Putnam's Sons. 1893. (Demy 8vo, pp. 300. 9s.)

Dr. Gould, the distinguished editor of the Philadelphia *Medical News*, in this volume makes an incursion into regions not often nowadays traversed by the physician. He tells us that he has discovered God, or "Biologos" as he prefers to say, as a working, striving principle animating organised matter only, and seated in the living cell (p. 6). Therein is the "great incarnation process," "God can only reach incarnation through the cell," and thus: "He is very near indeed to everyone of us if happily we but search and find Him" (p. 7). The author found Him by means of the microscope, and says "the discerning eye can meet divinity face to face in amœba and worship Him there as in a cathedral" (p. 85). "Biologos" is not omnipotent by any means, and probably not omniscient. "He may Himself also be a divine victim of some struggle for existence." With "far less than omnipotent power" he might "have spared Himself much indirection, much misdirection and waste, and His creatures the awful poignancy of wretchedness" (p. 17). The author fears that "this process of finitizing the divine" may seem impious, but not so, he adds, "to the truly religious" (p. 19). Dr. Gould is an uncompromising dualist: nay, more, for he offers no explanation for the non-living world of mere "matter" in which God is not only invisible but positively non-existent, for He is Life itself. The dualism comes in then with protoplasm, and herein "all accurate knowledge is based upon the distinction of maker and material" (p. 14).

Dr. Gould's book is a vehement sermon on ontology, or theology, as he conceives it. We do not complain that his system springs from his own imagination, but we find it hard to reconcile this with his renunciation of "deduction theories clutched out of the air" at the very outset of his book. The meaning of the term "deduction" and its unavoidable function in reasoning seems to be imperfectly apprehended by him.

Dr. Gould's work deserves to be studied in a sympathetic spirit, for his aspirations are lofty. Some clever and a few fine things appear here and there in his volume, and we will quote the following from p. 38:—"In the hurried sweep of our little conscious being through the cycle of life's changes, interests, and duties, the majority can only look hastily about them, a little way before and after, catch here and there a maxim of wisdom, a cheering word, the glimpse of a precious example to follow, the hurt of a sin to avoid."

The Brighton Life Table. Based on the mortality of the ten years 1881-90. By Arthur Newsholme, M.D.Lond. Brighton: King, Thorne, and Stace. 1893. (Royal 8vo, pp. 40. Printed privately.)

The ever increasing competition of seaside places for visitors is useful in many ways. In the first place, it leads the local authorities to provide for the comfort and amusement of their visitors, and of late years more especially it has led to care being taken that the sanitary arrangements should be of the most approved character. Having done all that was possible to prevent disease, it is but natural that those who are more directly responsible for the health of the district should be anxious that the result of their labours should reach the public eye. It is probably to some such feeling as this that we are indebted for the careful health statistics that are from time to time published. Among the most recent is the *Brighton Life Table*, and Dr. Newsholme is to be congratulated on the excellent report he has written. His pamphlet starts with the data on which the tables are based. He rightly points out that "The migratory character of a large proportion of its population appears at first sight to throw doubt on the trustworthiness of the data forming the basis for a life table for Brighton."

He discusses at length various circumstances which more or less balance one another; for instance, the census enumerations in 1881 and 1891 were early in the month of April, when the population of Brighton is probably at its lowest ebb; against this is to be put a possible under-statement of deaths, due to the fact that the majority of domestic servants are drawn from rural districts, and that when they fall ill they go to their homes.

He then proceeds to describe the method of construction of a life table. This part of his pamphlet appeals more to the actuary than to the physician, and does not require any further attention on our part except to say that the method Dr. Newsholme has adopted "is not the analytical method usually employed, but the graphic method, which, as shown by Mr. George King, the Honorary Secretary of the Institute of Actuaries, was the method employed by Milne in the construction of his famous Carlisle table."

Dr. Newsholme draws attention in the following paragraph to a common error: "We may note here that the term 'mean duration of life' is sometimes used as synonymous with expectation of life (or mean after-lifetime), instead of signifying, as it strictly should, the present age in years *plus* the expectation of life. At birth the two terms are necessarily synonymous. At the age of 40 the expectation of life for males is 25.60 years: the mean duration of life for males of this age = 40 + 25.60 = 65.60 years."

The concluding part of the pamphlet is devoted to deductions from the *Brighton Life Table*, and is illustrated by numerous tables. The outcome of these tables is to show "that among males the expectation of life is considerably greater at all ages in Brighton than in Manchester. At the age of 5 the excess is 7¼ years, at the age of 10 it is nearly 6½ years, at the age of 20 it remains about 6 years, while at 40 it is 5 years, and at 60 between 3 and 4 years. Compared with England and Wales, the expectation of life among males is just 2 years greater in Brighton at the age of 5, at the age of 10 about 1½ year, at the age of 20 over 1 year, at the age of 40 over one-third of a year, and at the age of 60 half a year greater in Brighton."

The last four or five pages of the pamphlet are of especial interest to medical men, as they deal with an important question affecting the health of the community in general—namely, "Why has the improvement in probabilities of life at the earlier stages not been participated in throughout life?" It is impossible to give a satisfactory abstract of Dr. Newsholme's summing up of the factors concerned in the production of this state of affairs. We will here only direct attention to one—the tendency of the urban population to increase at the expense of the rural. Though improved sanitation has diminished the urban death-rate, it will be generally agreed "that the conditions which go to form the sum total of urban life are less favourable to a healthy adult existence than those of rural life."

It is much to be hoped that the medical officers of health

for other towns will follow the excellent example set by Dr. Newsholme.

A Treatise on Gynæcology, Clinical and Operative. By S. Pozzi, M.D., Professor in the Faculty of Medicine (Paris), Surgeon to the Lourcine-Pascal. Vol. III. New Sydenham Society. 1893. (Demy 8vo, pp. 520.)

Last spring we congratulated the translators, Dr. Lazarus-Barlow and Mr. Leonard Mark, on having brought out the second volume of the translation of M. Pozzi's work so soon after the first. That compliment may now be repeated. The work is now complete. The rapid consecutive issue of the three volumes is the more commendable since otherwise the division of a work published originally in one volume would have been a disadvantage. The single French volume has no doubt its conveniences, but a ponderous book is awkward to read, and the binding does not bear frequent use.

This third volume includes tumours of the appendages, tuberculosis of the genitals, extrauterine gestation, diseases of the vagina and vulva, pelvic hæmatocele and malformations, with the medical and surgical treatment of all those conditions. Hence this third volume is very important, as it includes ovariotomy, the keystone of abdominal section, and the yet graver subject of ectopic pregnancy. The treatment of these matters by the author need not be criticised, as we have already published a full review of the French edition. The translators have done their work admirably. The copious references and footnotes must have involved much painstaking labour.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

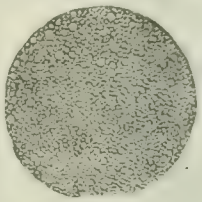
A PURE ALUMINIUM HYPODERMIC SYRINGE.

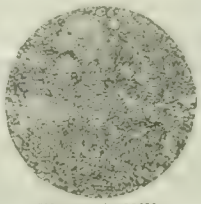
Messrs. Burroughs and Wellcome send us a sample of a new aseptic syringe, which is specially adapted for use with all solutions for subcutaneous medication, and is not affected by climatic conditions. The aseptic packing with which the syringe is fitted does not require any further lubrication than simply moistening with a little water, and when removed from the piston rod may be thoroughly cleansed and purified; the barrel after being rinsed out with absolute alcohol is rendered perfectly aseptic. The packing may be readily manipulated by adjusting the small nut situated directly beneath the knob of the piston rod. The glass barrel of the syringe is graduated on one side in minims indelibly marked in black, and on the other with metric scale—1 cubic centimetre divided into millimetres—in red. It is well protected by a unique sheath of pure aluminium, which renders the syringe absolutely incorrodible, and also less than half the weight of the usual heavily-cased instruments. It is also arranged as a dental needle.

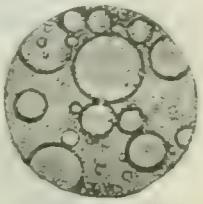
"VIROL."

This is a preparation which has been devised by the Liquor Carnis Company to supersede cod-liver oil, and also to supplement the heat-producing capabilities of oleaginous substances by the introduction of nitrogenous and bone-forming ingredients. Analyses give results which show that this object has been effected in the production of virol, with the result of furnishing fat, carbohydrates, albuminous material, and mineral salts, combined in an agreeable form, free from the objectionable character of cod-liver oil, and possessing considerable nutritive value. It is stated that in the production of "Virol" no preservative agents are introduced, and the analytical examination of the samples received from the manufacturers confirms that statement. For children and invalids requiring a supply of fat material in addition to their ordinary food, "Virol" appears to be well devised to serve a useful purpose.

"Virol" simply consists of beef marrow fat from marrow bones which are sawn in sections and the marrow scooped out. The marrow, when separated, is dissolved at a very low temperature, and afterwards combined with raw eggs, the shells of which are also brought into the preparation by the aid of lemon juice. To this is added the carbohydrate in the form of malt extract. So that the fats (marrow and eggs), the proteids (egg albumin), and carbohydrate (extract of malt) are arranged in proportions carefully calculated on modern physiological and dietetic data. That the emulsion is a very perfect one is shown by the appended microphotographs, all under power 250.


Virol.


Woman's Milk.


Average Emulsion.

"LIMONA."

The large number of prepared farinaceous foods in the market is sufficient proof of the fact that there is a considerable demand for such articles. "Limona" is a new preparation of this kind which is recommended as being nutritious and strengthening, while it also possesses the advantage of facilitating the digestion of milk, and is on that account especially suitable for persons requiring a milk diet and of feeble digestive power. It is a finely-prepared grain meal with addition of hypophosphites of lime, iron, and soda, and is very suitable for the preparation of puddings, biscuits, or porridge for children or invalids, under the conditions stated. "Limona" is manufactured by L. Rawsthorn, Green Bank Corn Mill, Preston.

"EIDERDON."

Messrs. Boyd and Co., the well-known makers of the "doctor's ulster"—a very convenient garment, specially arranged with capacious pockets, for the use of members of the medical profession—have sent us a sample of their "Eiderdon" rug, on which we are able to report favourably as an exceedingly light and warm covering for invalids. It is made of a light and fine woollen material, and is recommendable as a material for a coverlet, bed jacket, dressing gown, or cape for delicate people.

DISINFECTANT COAL TAR SOAP.

We have received a specimen of this soap from Messrs. Weston, Hunt, and Co., 39, Seething Lane, E.C. It is soap of good detergent quality, into which 10 per cent. of microbene, a coal tar derivative the properties of which were described in the British Medical Journal of December 2nd, 1893, p. 1220, has been introduced to give a disinfecting or microbicidal effect. The sample of this soap sent for examination appears to be rather highly alkaline, though in other respects its characters are such as to recommend it for use as a household soap, particularly under conditions where there may be any danger of infection being communicated.

IMPROVED SULPHUR FUMIGATING CANDLES.

Kingzett's sulphur fumigating candles have already been described in these columns. In the earlier pattern a fuse moulded in the form of a cone was set in or on a mass of sulphur moulded in a suitably-shaped vessel. The fuse in question consisted of sulphur in admixture with chlorate or nitrate of potassium or sodium. Further investigation by Mr. Kingzett has led him to the discovery that such a fuze may be altogether dispensed with, and he now employs in its place a strip or ribbon of Brussels net or other similar material, which is first of all coated with a thin layer of sulphur by passage through a bath of that substance in a molten state. The strips of material thus coated with pure sulphur are afterwards cut up into suitable lengths, bent

into circular form, and then inserted in the molten mass of sulphur forming the body of the candle. On application of a light to the prepared strip which stands up above the surface of the body of the candle, it immediately takes fire and burns with great rapidity, the molten sulphur running down on the surface of the candle and firing it immediately.

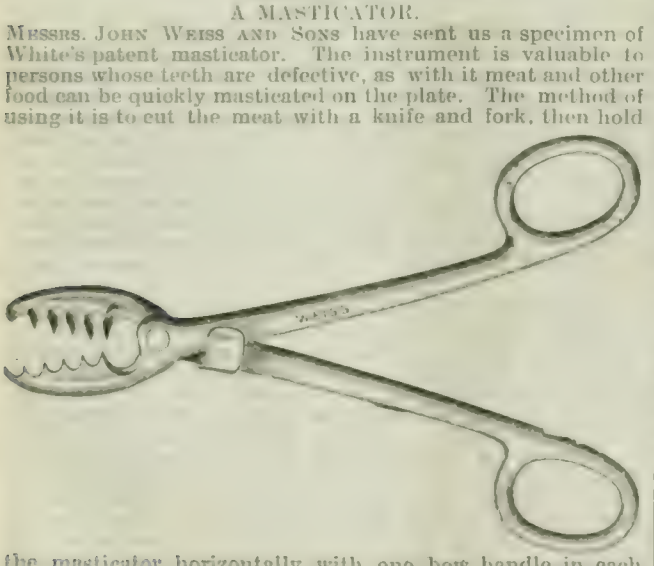


Mr. Kingzett finds that many materials may be employed, such as muslin and tissue paper, but Brussels net is better than all others, because it gives very little ash, and the air spaces in the fabric which are revealed immediately that it is ignited serve to feed the burning sulphur with a plentiful supply of atmospheric oxygen.

We are informed that Mr. Kingzett's sulphur candles in the two forms that we have now described have been adopted for use by many sanitary authorities in this country for the fumigation of infected rooms and dwellings, and they may be also very usefully employed for the extermination of insect pests; besides which they are suitable for use in many particular trades—thus, for example, by brewers for the fumigation of vats and tuns in order to free them from secondary ferments; they can be employed also for the purification of slaughterhouses and butchers' storerooms.

A MASTICATOR.

Messrs. John Weiss and Sons have sent us a specimen of White's patent masticator. The instrument is valuable to persons whose teeth are defective, as with it meat and other food can be quickly masticated on the plate. The method of using it is to cut the meat with a knife and fork, then hold



the masticator horizontally with one bow handle in each hand, and continue to open and close it until the meat is perfectly comminuted. It is well to warm the blades in hot water. The instrument is readily separated for cleansing purposes. The retail price of this invention, electro-plated, is 12s. 6d.

THE JENNER RELICS AT THE BRISTOL EXHIBITION.

In the very excellent Industrial and Fine Art Exhibition open at Bristol there was a collection of relics possessing great attraction not only for the medical visitor, but for anyone interested, as everyone should be, in questions of public health.

Notwithstanding the unreasoning opposition to the beneficent operation of vaccination, Jenner, its discoverer, is held in high honour by civilised mankind. Human nature as at present constituted loves to dwell on things associated with the life and work of its great benefactors and heroes. At the Naval Exhibition visitors, perhaps with a very pardonable curiosity, lingered before the shoe-buckles which had been worn by Nelson, and in sight of the letter-weight which he used for steadying his papers; and more recently, at the jubilee of the College of Surgeons Fellowship, members of a learned profession took delight in gazing into the looking-glass which many a time and oft had reflected the face of Jenner's teacher, John Hunter. So may it always be. The National Portrait Gallery is one evidence of a desire to know something of the personal appearance of those whose names are famous. The portrait may be idealised; it may greatly differ from other representations of the individual at about the same period of life, but it is something which seems to bring him closer to his admirers. We are therefore grateful to anyone who will show the interest and industry necessary for gathering together the things, unimportant, perhaps, in themselves, which seem to bring nearer home to us the personality of the benefactor to whom we are indebted.

In the case of Jenner this has to a considerable extent been done for us by Mr. Frederick Mockler, of Wotton-under-Edge. Those who are not able to see this collection will be glad to have some sort of pictorial idea of the things that are on view, and some short account of the more interesting of them.

Before making a special visit to examine the collection in detail, we had provided ourselves with an exhibition catalogue, in which we were surprised to find that the newly-awakened Bristolians had not given a general index to their exhibits. An industrious search was needed to find any allusion to the Jenner articles, and, when found, there was nothing but a meagre mention of the collection as a whole. This, however, is partly compensated for by a separate catalogue, which we were able to obtain on our arrival. It is a great pity that more attention was not paid to the preparation of this catalogue. Names of persons associated with Jenner's history are misprinted, and dates are wrongly given. The list of printed books and pamphlets is most disappointing. These should have been arranged chronologically, so as to have presented some sort of bibliographical record of the literature which came into being in connection with Jenner's discovery. Duplicates are mentioned in it far apart from one another, and the list presents no sort of order.

This collection of relics is by no means so complete as we, and, we daresay, Mr. Mockler, would desire, and, on the other hand, it contains many things which are out of place. With the exception of some family portraits, there is nothing to call to mind the early days of Jenner. It may be that none of these are obtainable, but as there is a certificate of his attendance on William Hunter's lectures in 1772, it would have been of interest to have had something showing the spot where Jenner spent his childhood, some associations of his school life, and of his first apprenticeship to Ludlow, the surgeon of Sodbury. And there are no evidences, manuscript or other, of the influence which John Hunter's scientific tastes must have had on Jenner's studies. During Jenner's residence as house pupil with Hunter, there must have been much opportunity for the exercise of this influence. We know from the collection of letters in the College of Surgeons


W. DAVIES DD.
EAST HURST
December 1807.
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No 4

and from other sources that there must have been a considerable correspondence between them. We also look in vain for anything in reference to Catherine Kingscote, whom Jenner married in 1788, and there is nothing perpetuating the memory of their three children.

It must not, however, be imagined, because we have pointed out these omissions, that we do not think Mr. Mockler's collection of great value. The portraits of Jenner in middle and late life are of much interest. There is an excellent oil painting by an artist whose name is not given, while the portraits by Hobday and Northcote are both represented, the former by a line engraving and the latter, the original of which is, we believe, in the National Portrait Gallery, by a mezzotint. The portrait by Sir Thomas Lawrence is represented in the frontispiece of the second volume of Baron's *Life of Jenner*. If there was a difficulty in getting representations of the Continental statues erected in honour of Jenner, there surely could have been none in procuring photographs of the bronze one now in Kensington Gardens and the one in Gloucester Cathedral with its eloquent inscription of the single word "Jenner."

The vaccination literature from 1801 to 1820 is well represented. A copy of the 1799 *Further Observations on the Cowpox* is in the collection, but is not named in the catalogue. We could not find the first edition of Jenner's first book on the vaccination question, and which he entitled *An Inquiry into the Causes and Effects of the Variolæ Vaccinæ*, unless some undated and abbreviated entries in the catalogue refer to it. The manuscript of it is, however, here, with a letter dated July 10th, 1747, written presumably to Dr. Parry, of Bath, to whom the book was dedicated upon its first appearance in 1798. Here, also, is the letter which Jenner wrote from Cheltenham to the Prince of Wales on October 1st, 1798, when he sent him a copy of the book. There is also a fair number of other letters written by Jenner, but they are mostly of a domestic character. An interesting exception is the note scribbled to his sister telling her of the second grant voted to him by Parliament in 1807.

The collection also contains some noteworthy original drawings of the vaccine vesicle, some of which were made for the inquiry.

Jenner's contemporaries had many opportunities of putting the value of his discovery to the test. The overwhelming evidence in its favour, so amply confirmed by later experience, naturally created amongst several public bodies a desire to do honour to him for his work. Some of the documents in which this desire was expressed are to be found in Mr. Mockler's collection. There were many more, as may be found from the list given in Baron's *Life of Jenner*. A pleasing evidence of individual appreciation, which also represents the general feeling, is to be seen in Miss Paytherus's well-designed and well-executed emblematic device, in which the first two letters of Jenner's name represent Æsculapius giving Hygeia a commission to carry the good news through the world; in the other letters are portrayed typical specimens of the inhabitants of the four quarters of the globe to whom the message is to be taken. Mr. Mockler also shows a certificate of the Royal Jennerian Society, which was founded in 1803 for facilitating the distribution of lymph, and which, when taken over by the Government in 1808, became the National Vaccine Establishment. There is, however, no documentary evidence of Jenner's reception of the Fellowship of the Royal Society, to which he was admitted presumably on the somewhat insufficient ground of his paper on "The Natural History of the Cuckoo," as in 1788, when he received it, he had not done any vaccination work. Neither do we find anything in reference to his degrees of Doctor of Medicine of St. Andrews and Oxford, the former of which he obtained in 1792, and the latter of which was given him in 1813. An interesting addition to the contemporary notices would have been the copy of, or at least a cutting from, Felix Farley's *Bristol Journal* of May 15th, 1802, in which appeared a note from Jenner written from 26, College Green, Bristol, and calling attention to the fact that the accidents which had happened in vaccine inoculation in Bristol were due to improper mismanagement, and soliciting for himself that patronage to which he considered himself entitled. It would not have been difficult to have included the volume of *Medico-Chirurgical Transactions* for 1809 containing Jenner's papers on "Distemper in Dogs" and on "Two Cases of Smallpox communicated to the Fœtus *in Utero*."

There are many things in the collection for which there was no necessity to find places. The documents referring to his nephew George, the large number of drawings by his nephew Stephen, and the apprenticeship indentures of John Clinch, to whom the Rev. G. C. Jenner was guardian, are some of the things that do not seem very appropriate.

But with all its faults of omission and commission the collection is a very important one, and we hope that some means will be devised by which, in conjunction with other mementoes of this man so worthy to be remembered, it will become the property of some public body and be made easily accessible to this and aftercoming generations. Such a combined collection would serve to stimulate workers of all ages to emulate the example of one who, in spite of tremendous opposition and of great ridicule, succeeded in impressing his scientific critics with the value of his work, and, by conferring untold blessings on humanity, in building up for himself a reputation rarely, if ever, equalled.

ADDENDUM.—The illustration on the preceding page is from a photograph of some of the relics as they appear in the exhibition. A few of the objects on the right as the reader looks at the picture are not clear, owing to a strong light coming through a side window.

The first portrait on the left in the top row is that of Thomas Jenner, D.D., who was President of Magdalen College, Oxford, from 1745 to 1768. The next three are those of his sister Elizabeth and his nieces Mary and Elizabeth. The fifth, unfortunately very indistinct, is of the Rev. Stephen Jenner, the father of Dr. Edward Jenner. The portrait below that of Mary Jenner is of Edward Jenner himself, and is the oil painting referred to above. The small picture on the left close to the large portrait is from a print which was issued by the Society for the Diffusion of Useful Knowledge. Other portraits of Jenner are below and to the left and right. That on the left is the mezzotint after Northcote, and the one on the right is the line engraving after Hobday. A miniature of Jenner, dated 1809, is the centre picture in the frame below the large portrait.

The second frame on the left of the doctor's large portrait contains decorated with an oval border, the document granting to Jenner the freedom of the City of Dublin. Next to it on the right is the document presenting him with the freedom of the City of London. This and the gold snuff-box given to him by the Corporation of London on the same day, August 11th, 1803, ought to be together. In the *Illustrated London News* of November 11th, 1893, are drawings of the top and bottom of the snuff-box, which a few weeks ago was sold by auction.

On the right of the large portrait the three frames which in the illustration seem to contain only white paper have documents from Harvard University and the Royal Medical Society of Edinburgh, and a collection of proxy cards given to Jenner for voting at meetings of the Royal Jennerian Society. Below the first of these frames is an address from the Physical Society of Guy's Hospital in 1802.

Next to the case which contains the miniature and on its left is the letter which Jenner wrote to the Prince of Wales when he sent a copy of the *Inquiry*.

Below the City of London document is an honorary diploma of the Royal Jennerian Society.

On the extreme left, and next to one of the cases containing the books, is an interesting collection of small articles which belonged to Jenner.

AUTOMATIC WRITING.

VI.

By WILLIAM W. IRELAND, M.D.

The Phenomena of Somnambulism and of Cumberlandism.—Hypnotism and Automatic Writing.

The explanation given by "Hypnos" is far from covering all the statements of the spiritualists. They give testimony more or less explicit that the minds of the mediums are acted upon by the spirits of deceased or living persons, and they insist that they sometimes receive revelations of events which could not by any possibility be the mere revival of things buried in their memory. Thus, "Hypnos," while explaining some of the statements of the spiritualists, would be obliged to reject others which his explanations do not cover. He tells us that La Fontaine wrote one of his fables "in a state of somnambulism and absolute unconsciousness." This shows the loose way in which he uses the word "consciousness," for somnambulism is not unconsciousness at all. The memory of events in the waking condition is cut off and the will power is weakened, but the somnambulist is quite conscious of what he is doing.

The explanation of "Cumberlandism" is, I think, also incorrect. The subject does not "simply lead the operator who holds his hand," but his overwrought consciousness leads him to make some subtle involuntary movements when the operator is approaching or going away from the object sought which the operator is quick to interpret.

When correcting the second edition of the *Blot upon the Brain*, I read some papers about automatic or unconscious writing by French physicians. I did not mention them in my book, as I was not satisfied that they had proved any such thing as unconscious writing. It seems to me that the physicians at the Salpêtrière can make their hypnotised and hysterical patients state and do anything that they desire: and could assuredly get them to say that they were conscious or unconscious, just as their speculative views prompted. That a person should execute so complex a movement as writing in a state of unconsciousness will always appear very hard of proof. Do people ever dream of writing? Very rarely, if ever. I do not believe in the story of the English officer hypnotised by Hansen, who suddenly began to speak a strange language, which turned out to be Welsh, if it be meant that a full knowledge of a language forgotten for twenty years was revived. There is an old story told by Coleridge of a woman who picked up Latin and Greek from hearing someone spouting in these languages. I have long thought that this much-quoted story must have been in the beginning most incorrectly stated, and that it would be more reasonable to expect a narrative from Coleridge, coloured by his imagination, than an exact and carefully sifted statement.

NOTES ON HEALTH RESORTS.

XV.—TANGIER AS A WINTER STATION.

By S. CARROLL WOOD, M.D.

I FEEL that pardon is due from medical men at large for having the claims of another winter station thrust upon them.

Tangier presents the following advantages as a winter residence: An extremely equal climate; a perfect change from the thoughts and occupations of European life: a healthful soil and small death-rate; and quick and ready access from England, together with constant postal and telegraphic communication, as well as every convenience in the way of shops, chemists, hotels, etc.

Climate.—The mean winter temperature, for the months of November to March inclusive, has been for the last five years 54.8° F., according to the records of H.B.M. Consul, Mr. H. E. White. The difference between summer and winter means is small, 16.2°. This renders Tangier not only possible, but desirable, as a residence the year round. Another and most important point is the absence of sunset chill, so dangerous in many otherwise good climates. The rainfall is divided into the lesser rains of September, lasting a few days or a week; the November rains, falling at intervals for a fortnight; and the heavy rains of January and February, lasting four or five weeks, and occurring mostly at night, leaving the greater part of the day fine. The average annual rainfall is 36 inches. In the intervals the weather is clear and brilliant, very like a fine English May. The climate may be described as sedative, but not relaxing, while in the interior every variety may be obtained up to the most bracing.

Social Attractions.—The life of Tangier is, strangely enough, more Oriental than that of the farthest East. The Moor, scorning Europe and her ways, holds to the past, and the very air is full of a curious unreality, an intangible charm, very difficult to shake off. Perhaps it is the sharp contrast. You may leave the Cadi, sitting in judgment at the gate, and in five minutes find yourself jogging to covert with a pack of foxhounds; or go from the narrow crowded lanes of the "City preserved of the Lord" to a gorgeous London drawing-room, blazing with electric light, and filled with smart people of every nation under the sun. Amusements are not lacking. Foxhunting, excellent pigsticking, racing, shooting, sea fishing, curio hunting tempt the energetic; while an introduction admits to a delightfully cosmopolitan society.

Route.—Tangier is reached by sea or overland. By way of Paris, Madrid, and Gibraltar the journey is performed in four and a-half days by the Sud express, leaving Paris twice a week; fare, first class, £12. Saloon carriages for invalids can be taken through from Paris. The more convenient and cheaper route is by sea from London by P. and O. line. The former leaves London every Friday, arriving at Gibraltar every Tuesday. The first-class fares are £10 single tickets, £16 returns, available for four months. A fast steamer, carrying the London mails, leaves Gibraltar on Tuesdays, Thursdays, and Saturdays, for Tangier, and does the journey in three hours; fare, 12s.

House and Hotel Accommodation.—Tangier hotels are numerous, and, as a rule, good. Perhaps the best is the "Continental," thoroughly well kept, and with every convenience for fitting out camping and shooting parties. The tariff is 12s. a day. There are, besides, the "Calpe" and the "Victoria," both very good, tariff 8s., the "Villa de France," the "New York," and many smaller ones. Good horses may be hired at reasonable prices, or, what is still better, bought at an average of £10.

Travel in the Interior.—An idea is prevalent that Morocco is a highly dangerous place to visit. As a matter of fact, during the late Melilla disturbance, which, by the way, is 350 miles away, we were obliged to look in the London papers to find out what was going on. Any place worth seeing can be visited with perfect safety, while Tangier itself is as tranquil as Bloomsbury.

Class of Cases likely to be Benefited.—Several years of experience have taught me that the class of cases most likely to receive benefit from a residence in Tangier are incipient or early phthisis, most forms of heart disease, and all sorts of nervous derangements. Indeed, of early phthisis I have myself had under my charge at least six cases in the last four years that have been completely arrested, and many others much benefited.

FIGURES FROM THE CENSUS.

HOUSES, TENEMENTS, AND OVERCROWDING.

THE last volume of the Census is an invaluable mine of information. In England and Wales there were (says a writer in the *Westminster Gazette*) altogether 5,451,497 houses, or 1 to every 5.32 of the inhabitants, in 1891, against 1 to 5.38 in 1881. Among the big towns the population per inhabited house is highest in London, with 7.84, and lowest in Norwich, with 4.53. Assuming that ordinary tenements with less than five rooms which have more than two occupants per room are "unduly overcrowded," there are 481,653 overcrowded tenements in England and Wales, and in these dwell 3,258,044 persons, or 11.23 per cent. of the total population; the average number of persons per room being 2.8. Speaking roughly, then, the submerged tenth is a phrase which may be applied not only to London but to all England and Wales.

The six great towns in which the percentages of overcrowded persons were highest were as follows:

Gateshead	40.78	Plymouth	26.27
Newcastle-upon-Tyne	35.08	Halifax	21.31
Sunderland	32.85	Bradford	20.61

On the other hand the six towns with the lowest percentages were these:

Preston	4.13	Derby	2.60
Nottingham	3.62	Leicester	2.22
Croydon	2.76	Portsmouth	1.74

THE RATIO OF MALE AND FEMALE.

The proportion of male and female now stands in England and Wales at 1,064 females to every 1,000 males, as against 1,055 to 1,000 in 1881. The male death-rate, which had been continuously increasing as compared with the female up till 1881, has in the subsequent decade been checked, and the increased preponderance of females is due to male emigration.

CONCEALMENT OF AGE.

The Census Commissioners have a rooted distrust of the accounts which individuals give of their ages. Women are great offenders, "owing to their desire for various reasons to be thought to be between 20 and 25 years of age." It is a curious phenomenon of each successive census that the number of women returning themselves as between 20 and 25 years of age is larger than the number of girls returned in the census of ten years earlier as being between 10 and 15; although the former are only the survivors, after a lapse of ten years, of these latter, and should therefore of necessity be fewer in number.

CENTENARIANS.

The number of persons returned in 1891 as being 100 or more years of age was 146, of whom 104 were women and only 42 were men. The numbers had been much the same in the

returns for 1881, when 141 persons, 97 of whom were women and 44 were men, were returned as entitled to centenarian honours. Although it is indisputable that now and then human life is prolonged to over a century, yet this is so rare an occurrence that it may be doubted whether the age of many of these reputed centenarians would stand the test of rigid investigation.

THE DIMINISHED PROPORTION OF CHILDREN.

One of the most remarkable features of the 1891 census is the decline of the children under 10 years of age. This decline was of course due to the extremely low birth-rates of the ten years 1881-90, during which period it only averaged annually 32.5 per 1,000 living, whereas the averages in the two preceding decennia had been respectively 35.2 and 35.4. The diminished proportion of children throws up the proportions at the later ages. The number of legitimate births registered in the three years 1890, 1891, and 1892 was 2,567,277, so that the average annual fertility of wives of reproductive ages in those three years is represented by 264 live births to 1,000 wives. Similar calculations made from the returns of 1881 and 1871 give annual fertilities of 286 and 292 per 1,000 wives; so that, so far as can be judged from these years, the annual fertility of married life appears to have been gradually diminishing, having fallen successively from 292 to 286 and then to 264 per 1,000 wives in the three past decennia. For this, no doubt, the falling off in the marriage-rate and the postponement of the marriage age clearly shown in the Registrar-General's returns are largely responsible.

MORTALITY OF THE UNMARRIED.

The census returns clearly point to the conclusions that bachelors and spinsters die earlier than husbands and wives. In both sexes, according to the report, the proportion of unmarried diminishes with each successive age period. Apparently no other adequate explanation can be given of this persistent weeding out of the bachelors and spinsters, even in advanced life, than by supposing that their mortality is higher than that of married persons of similar ages. If this be the case, it is a noteworthy fact. At the earlier ages doubtlessly the mortality of the single must be higher than that of the married, because the very unhealthy of either sex are likely to remain unwedded, but one would have supposed that, when the advanced age periods were reached, this cause of reduced proportion would have worn itself out, and ceased any longer to be operative; and, if so, we are left to the conclusion that married life must in itself be more favourable to longevity than the condition of celibacy.

COOKING AND HEATING BY GAS.

III.

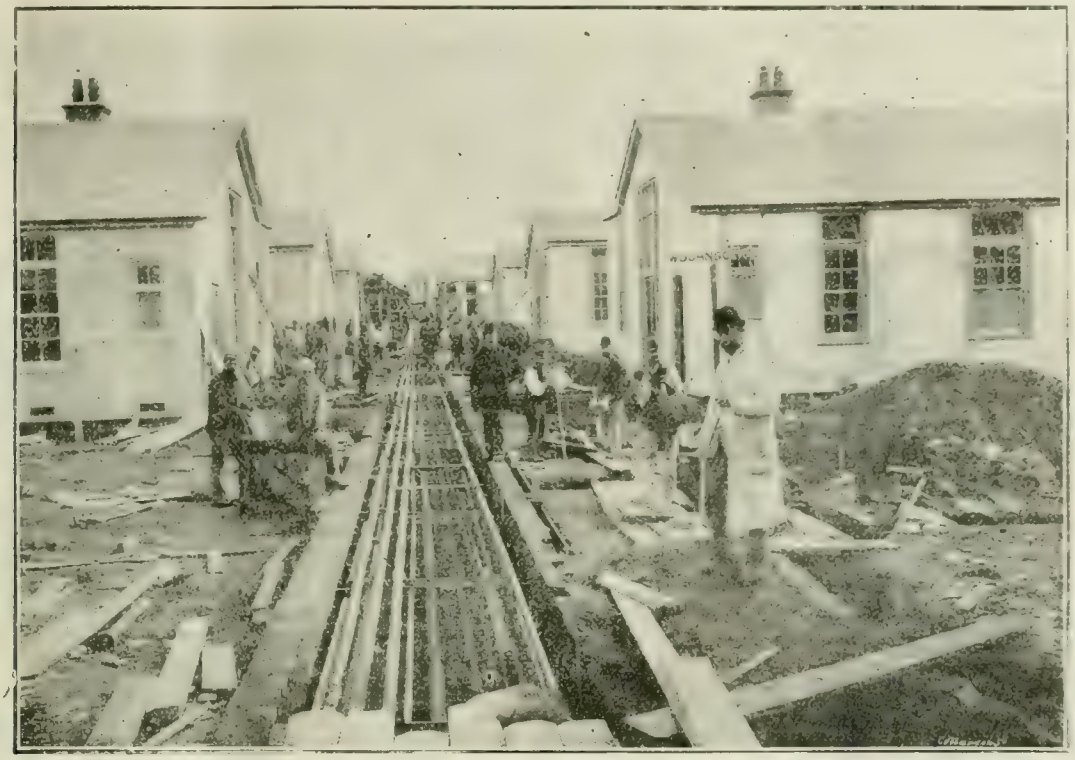
Critical Estimate of the Relative Value of Gas Stoves.—Waste of Heat.—The Problem to be Solved.

IN a previous article on the subject of heating by gas, a description was given of four varieties of what may be called the more ordinary type of gas-heating stove, that in which the gas is burned under such conditions as either to produce a visibly luminous flame or a non-luminous flame which is made to play on indestructible fuel, which is raised by the flame to an incandescent condition and thus satisfies in some degree the deeply-planted British instinct for a source of heat which not only gives warmth but which looks warm. It is necessary, however, to point out that three of these varieties of gas stove are very wasteful in their use, from the fact that, as is the case in the common fire, so much of the heat which they produce is wasted by being carried up the exit flue without doing what engineers call "duty." Hence they are very admirable devices for consuming gas, and are accordingly very popular with gas companies, who push them energetically, but the consumer, who is induced to fit them up and use them freely in his house, is apt to open his eyes when his next quarter's gas bill comes in. But, if he will have a "cheerful" gas fire, he must be prepared to pay for his hobby, for the production of a mass of luminous heat by gas, except in the form of simple luminous flame, necessarily involves more or less waste of fuel wherever the products of combustion are carried out of the room, as they should be in all cases where any considerable quantity of gas is used in a room through which there is not a free draught of air. There is indeed an exception to this statement in the second of the four classes of stove before described, the so-called "condensing" stove. But, as was pointed out in the description of this stove, the condensation only affects a portion of the watery vapour and sulphurous acid produced by the combustion of the gas in the stove, the whole of the carbonic acid escaping; so that practically no appreciable object is gained by burning gas in such an appliance as this beyond what would be obtained by burning it in the ordinary jets which are used for illuminating purposes. The same remark applies to the class of "reflector" stoves. They produce a make-believe appearance of warmth by reflecting a portion of the luminous rays from the flames in front of the reflecting surface, but they can obviously add nothing to the heat which the flames themselves directly diffuse.

The choice, therefore, which the purchaser of a gas-heating stove has before him is this: If he wants to heat a room in the cheapest manner possible, without regard to ventilation or the health of those who may have to occupy it, his simplest and most economical plan is to burn his gas in the ordinary burners which he employs for illuminating purposes. By this means the whole of the heat produced by the combustion of the gas is distributed through the room without loss of any kind, partly as radiant luminous heat, but mainly in the shape of heated gaseous products of combustion, which rapidly diffuse themselves through the air of the room, and thus raise its general temperature. To burn luminous flames from fuel of any kind, in an appliance of any sort, except for the purpose of collecting the products of combustion in order to carry them out of the room, is "a delusion and a snare;" since a flame which burns without obvious smoke or smell gives off the maximum amount of heat that can be obtained from the fuel that produces it; and nothing is gained by filtering it through metal, water, or any other medium, instead of allowing the heat to escape with a little impediment as possible directly into the atmosphere around.

If, on the other hand, the purchaser wants to burn his gas in such a way as to obtain the largest amount of useful heat from it, and at the same time to keep the atmosphere of the room pure, he must, as has been already pointed out, burn his gas in an appliance of some kind (a stove), which has connected with it a flue by which the products of combustion are carried off into the outer air. And here comes in the problem which ordinary gas-heating stoves make no attempt to solve—namely, of doing this with as little waste of heat, and consequently of gas, as is possible. The condition which has to be realised in the construction of a stove designed for this purpose is to seize upon the products of combustion directly they escape from the flame, and to rob them of as much of their heat as is practicable consistently with keeping up a draught through the exit tube by which they are carried off. This condition is obviously most easily satisfied in theory by making the exit tube of metal, and of such a length that as the heated products pass through it they shall give up to the metallic wall of the tube all their heat, except that which is necessary to carry them out of it. In practice, however, the problem is not so easy of realisation, since it is not possible, in most cases, to carry the flue of a gas stove meandering about the walls of a room; and some ingenuity, therefore, has to be exercised in devising an arrangement by which the heated products can be brought into contact with an extensive metallic surface packed into a size convenient for an ordinary stove. This object is sought to be attained in two forms of gas stove, each of which has been for some years before the public—George's gas "Calorigen" and the "Euthermic" gas stove, designed by Dr. Bond, of Gloucester. The object is achieved in a somewhat different way in these two stoves, and with somewhat different results; so that it is necessary to describe them separately, which we propose to do in our next article.

THE *London Gazette* for January 5th states that the Lord Chancellor has appointed Mr. J. D. Cleaton, M.R.C.S., to be Honorary Commissioner, in Lunacy, in the room of Mr. H. Tichborne Hinckes, resigned.



A HOSPITAL WHILE YOU WAIT.

THE architect, says *Black and White* (to whom we are indebted for this illustration) has never been famous in his matches against time, nor is the builder anything of a fast man—so far, at least, as bricks and mortar are concerned. But for once both have done great things. Nothing so expeditious has ever been effected in the way of building, even in this wonderful metropolis, where money or love will expedite anything, as the erection in nine weeks of the new Fountain Temporary Hospital, by the Metropolitan Asylums Board, on a bit of waste ground at Lower Tooting, with wards all complete, beds for 400 patients, every hygienic and sanitary appliance, corridors, kitchens, and consulting rooms. This hot haste was to enable the authorities to cope with the ever-increasing number of fever cases that are crowding in upon them. The hospital is, we understand, already quite full. This important building, so rapidly erected, is by no means a small one. Accommodation, apart from that for the 400 patients aforesaid, is provided for 40 "charge" nurses, 50 assistant nurses, and 76 female servants. The architect of this record-breaking building is Mr. T. W. Aldwinckle.

THE MEDICAL ASSURANCE SOCIETY AND INFLUENZA.

MR. ERNEST HART, the Chairman of the Medical Assurance Society, has had an analysis made of the influenza experience among the medical members of the last three years. The results of the investigation may be shortly summarised by saying that in the year ending June 30th, 1891, the sick claims from influenza were 33 per cent. of the whole number; in the year ending June, 1892, they were 50 per cent., and in the year ending June, 1893, they were 25 per cent.; or, in other words, the sick claims were increased by influenza in the first year under review by 50 per cent.; in the second year they were doubled, and in the third year increased by 25 per cent.

The number of weeks of sickness was not affected to the same extent. In the first year the influenza accounted for 158 weeks out of 990; in the second for 245 out of 1,085, and in the third for 116 out of 1,058. This is in each instance a much smaller proportion than is shown by the comparison of the number of claims; for those arising from influenza have been so far of short duration; and the chronic illness cases, members who draw fifty-two weeks' sick pay in the year, tell heavily on the other side. For the same reason the comparison between the amount of sick pay paid for influenza claims and that paid for the other claims shows a smaller proportion for influenza than that produced by comparing the numbers. In the first year the amount paid for influenza was £568 out of £3,260, about 18 per cent.; in the second year it was £891 out of £3,723, or 24 per cent.; and in the third year £443 out of £3,327, or 13 per cent.

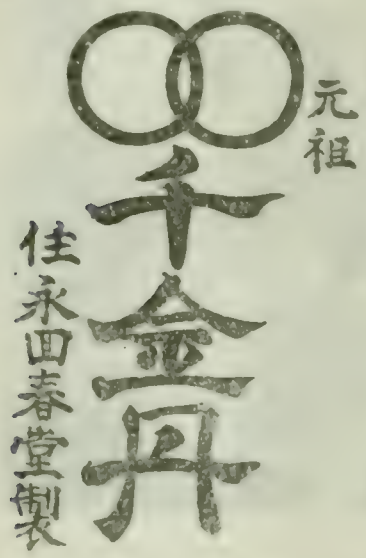
These figures are eloquent, and there is much reason for fearing that the influenza must be reckoned with for some time to come. It is, indeed, becoming a serious question for those who have to estimate the risk of sickness whether a permanent increase should not be assumed from this cause. At present there seems to be, from the actuarial point of view, no compensating circumstances connected with the influenza epidemic.

SENKINTAN, OR "THOUSAND GOLD MEDICINE."

ONE of the most popular nostrums of Japan, and one which has made its proprietor a wealthy man, is Senkintan, or "thousand gold medicine," which is made at Tokio by a quack named Nobuyama, of Osaka, who is a thorough believer in advertising, which he does in a rather unique manner. He has in his employ hundreds of young men, each of whom wears a uniform consisting of a handsome coat, an oiled paper cloak, leggings, high clogs, and an umbrella bearing the trademark of the manufacturer, two circles interlaced. The supplies of each of these pedlars are carried in a small portmanteau, also decorated with the interlaced circles. Each pedlar carries with him several dozen packages of the Senkintan, or "thousand gold medicine," as its name, literally translated, would read. The medicine itself is said to contain starch, catechu, thuja (arbor vitæ), liquorice, elecampane, camphor, peppermint, cloves. It is made into little cakes, covered with tinfoil, and each cake is divided into twenty portions, each portion being a dose. Minute directions accompany each dose, the medicine being used both externally and internally.

The accompanying illustration shows the label on each package, which may be translated as follows:

Sumi Nagn (Maker's name)	Trade Mark.	
Kwai (Made at)	Sen (Thousand)	Guwan So (Founder)
Shim (Factory)	Kin (Gold)	(Made in Tokio.)
Do (of Returning Spring)	Tan (Medicine)	
Sale (Manfactured)		



These pedlars travel on foot all over the empire of Japan in couples, chanting as they walk the virtues of their medicine as follows: "Ah! potent thousand gold medicine! the secret of which Nobuyama of Adzuchi Street, Osaka, has inherited. Ah! these are the properties of this medicine! Ah! it makes the stomach and the spleen strong! Ah! it is excellent for hoarseness and colds, pyrosis, and the result of eating decayed food! Ah! it cures headache, giddiness, and dizziness on awakening, and is valuable for children's diseases!"

THE SUPPLY OF NILE WATER.

IT is to be feared, from Sir E. Grey's reply to Mr. Pierpoint in the House of Commons, that the sanitary side is to be kept in the background when the question of Egyptian reservoirs is under discussion at Cairo next month by the International Commission. Should this surmise prove correct, and some scheme for impounding Nile water in the bed of the river itself be adopted, an incalculable injury will be inflicted on the public health, and consequently on the prosperity, of Egypt. It is an essential feature of all the "ponding-up" plans that the flood water would be allowed to flow away through the barrier. For six months after the river commenced to rise no attempt would be made to hold back a single drop of it, and when at length the sluices were partially closed about the month of January in each year, all the pure storm supply from the Abyssinian mountains would have long since passed away. The water collecting slowly inside the dams would come from the Equatorial branches of the Nile; from the swampy regions of Central Africa; and, during its period of stagnation at Philæ, Silsileh, Kalabshah, or wherever the reservoir might be, there would be ample time for the maturation and development of its noxious qualities.

That low Nile water is injurious to health when used as a beverage has been shown clearly enough on several occasions in the BRITISH MEDICAL JOURNAL and elsewhere; and, as it happens, additional and most striking confirmatory evidence has just reached us. On September 9th, 1893, we published the first half of the subjoined table; and on September 16th we wrote: "It is nearly always rash to prophesy unless one knows, but in this case it may safely be predicted that the returns of the present week will show, when they reach us, that in most of the towns considerable strides were made in the direction of the Damietta standard."

Our prophecy has been completely justified. During the week ended August 3rd, which was the last before the flood came down, there were 963 deaths in the nineteen towns of the Delta furnishing vital statistics. During the week ended September 14th, the period referred to by us, the number had fallen to 740, a diminution equal to 30 per cent. In every single town, with one exception, there was improvement more or less marked. The exceptional town was Damietta, where the deaths increased from 21 to 23, and the following week to 25. No case could be clearer than this. The week ending September 14th is not an exceptional one; the improvement has been maintained, as may be seen by the following table, where for convenience of comparison the period is divided into sections of five weeks. During the first two the Nile was at its lowest, and the mortality was consequently at its highest in Cairo, which may be taken as an index for the country in general. During the third section the imbibed poison was still in operation, but the amelioration is marked and progressive. The fourth section shows in the plainest manner possible the influence of a pure water supply on the bills of mortality. Instead of 932 infants dying per 1,000 born, the number is reduced to 521, and is evidently still diminishing. Nothing of all this is apparent on the Damietta side of the table, where during the second period of five weeks (the worst everywhere else) there was a slight improvement, and where the average infant death-rate for the entire period was only 302 per 1,000 born:

	Cairo.				Damietta.		
1893. Week Ending.	Percentage of Deaths under 1 Year.	Percentage of Deaths under 5 Years.	Deaths under 5 Years per 1,000 Births.	Height of Nile at Rodah.	Percentage of Deaths under 1 Year.	Percentage of Deaths under 5 Years.	Deaths under 5 Years per 1,000 Births.
				Metres.			
June 1	34.2	58.5	738	13.96	21.2	30.3	357
,, 8	34.4	63.0	752	14.02	11.5	34.6	225
,, 15	35.9	64.9	860	14.14	26.6	43.3	224
,, 22	30.5	64.7	859	14.10	20.9	55.8	727
,, 29	35.8	65.0	883	14.09	34.1	58.6	435
Approximate average	34.9	63.2	818	14.06	22.9	44.5	393
July 6	38.4	70.2	889	14.07	23.5	58.8	476
,, 13	33.7	67.9	938	14.09	23.8	61.9	448
,, 20	39.7	71.2	871	14.20	7.4	29.6	190
,, 27	40.3	69.4	1,048	14.40	32.1	42.8	218
Aug. 3	42.8	76.2	916	14.65	9.5	57.4	413
Approximate average	38.8	70.9	932	14.28	19.2	50.1	349
Aug. 10	35.0	71.4	882	16.34	0.0	23.5	114
,, 17	37.0	69.1	844	17.77	20.0	46.6	301
,, 24	39.1	69.1	766	17.86	27.5	41.3	244
,, 31	*	*	*	*	*	*	*
Sept. 7	35.8	67.4	745	18.13	17.6	17.6	163
,, 14	32.0	67.4	777	17.98	31.7	60.8	297
Approximate average	35.7	68.8	802	17.61	19.9	43.8	224
Sept. 21	29.8	64.7	636	18.18	32.0	56.0	311
,, 28	29.7	63.0	561	18.24	20.8	54.1	276
Oct. 5	26.6	64.1	461	18.38	10.5	57.8	323
,, 12	30.7	62.1	480	18.27	35.7	64.2	204
,, 19	28.6	63.0	459	18.53	18.7	37.5	107
Approximate average	29.8	63.0	521	18.32	23.5	53.9	244

* The return for this week failed to reach us.

We unhesitatingly maintain that in face of evidence like this the authorities would be culpably negligent if they omitted to have the sanitary side of the question duly represented on the forthcoming Commission.

REPORTS

TO THE

PARLIAMENTARY BILLS COMMITTEE AND THERAPEUTIC COMMITTEE

OF THE

BRITISH MEDICAL ASSOCIATION.

STATE AID IN RELATION TO PORT CHOLERA EXPENSES.

A Special Report by the Chairman to the Parliamentary Bills Committee of the British Medical Association.

THE question of State aid for our seaports, in connection with their efforts to prevent the introduction to England of cholera, is one which has been now for some time so strongly and so persistently brought before the public as to have led the Parliamentary Bills Committee to seriously consider whether the pros and cons of the matter could not be briefly set forth on evidence of a monetary character obtained from a variety of representative coast towns in respect of 1892 and 1893. So important were the bearings which the problem was seen to have in relation to the national safety that the desirability of having before them evidence of a detailed character from local sources was soon apparent, and proceedings were at once taken to procure the requisite facts.

To this end request was made of each of the properly-constituted port sanitary authorities of England and Wales, to the number of 60, and of certain authorities of districts which seemed to possess such amount of maritime trade as entitled them to be considered as places having concern for the country generally in the matter of seaborne disease. The request took the form of the following table:—

PORT SANITARY ADMINISTRATION.

Abnormal Expenditure (1893) Incurred and Anticipated in View of Threatened Cholera.

.....*Sanitary District.*

Objects.	A. Amount Recently Incurred.	B. Present Expenditure.	C. Sum Rendered Imminent (*e.g.*, by Infection of Coasting Traffic).
	£	£	£
1. Hospital Provision.			
a. Floating.			
b. Land.			
2. Ambulance Provision.			
3. Water Locomotion. (*Launches, etc.*)			
4. Disinfecting Apparatus.			
5. Water Supply to Vessels.			
6. Disinfection.			
a. Bilges.			
b. Cargoes.			
c. Clothing, etc.			
7. Staff.			
a. Medical.			
b. Non-medical.			
Other objects. (*Naming them.*)			
Totals			

OBSERVATIONS—

Signed.....

Date.....

A copy of this form was sent in August of the past year, so that the data might comprise the abnormal outlay of the authorities for both 1892 and 1893, and, as matter of fact, the term "recently" in the second column of the form has been generally held to have reference to 1892, whilst "Present Expenditure" has in like manner been regarded as covering the outlay of the past year (1893).

I have received 62 replies to the inquiries, comprising 42 properly-appointed port sanitary districts and 20 riparian areas, 16 being town districts and the remaining 4 rural districts with riparian parishes. Looking at the list of authorities finding place among these 62, I think I may confidently regard them as typically representative of the whole; and, while I could have wished to have had returns from the outstanding 18 port bodies, I am fortunate in respect of those that have so kindly and willingly complied with my request, and to whom I tender my sincere thanks for the assistance thus afforded.

I have arranged the data to hand in a summarised form in the following table, which contains headings corresponding to the several items specified in the form of queries. It will be seen that I have added a column wherein I have inserted the rateable value of the districts in question, and it will be well that I should hasten to explain that in the majority of instances the rateable value of the *port* districts as there stated is *below* the real amount, for the following reason: Many port sanitary districts have a littoral extending beyond the town, or urban, areas giving the name to the port. Thus, the Chepstow port sanitary district coast line includes parishes in the rural district; King's Lynn port sanitary district extends into the rural area of Freebridge Lynn; New Shoreham port sanitary district takes in Brighton, Hove, and part of the rural area of the Steyning Union. These examples suffice to show that rural sanitary districts enter largely into the composition of port sanitary districts, an exceptional and additional example being afforded by Milford, which not only extends to Milford and Pembroke towns, but also takes in parts of the rural portions of the unions of Haverfordwest, Pembroke, and Narberth.

Now in forming an estimate of the rateable value of the areas of jurisdiction comprised in the 62 districts from which replies have come, I have entirely omitted consideration of the figures in respect of *rural* riparian parishes, contenting myself in each instance with naming the sum which pertains to the towns involved, the result being that the values are never in excess of the actual, but rather, in many cases, an understatement of fact. Under these circumstances any calculations based on the rates will, whenever they are not exact, be *in favour of the ports*, since they will tend to show a larger ratio of expenditure than if full significance had been given to the contribution of rural parishes to the expenses. I have given prominence to this matter with a view of showing the desire to allow full credit to our port authorities in respect of their outlay on measures of cholera prevention.

Turning now to the table, and in the next place looking to the facts which it contains, I will discuss the headings and their data.

Rateable Value.—I have adopted, as the basis for rateable values, *Knight's Local Government Directory* for 1893, save in the case of London, for which I have taken the census figures of 1891; and proceeding on the lines just indicated I find that the sum total for the 62 districts, minus four rural areas noted in the table, reaches £13,450,588.

Total Abnormal (Cholera) Outlay in 1892 and 1893.—This is seen to be £43,709 12s. 3d. Such a sum looks a respectable amount to have been paid away on our littoral, for the single purpose of guarding our shores against invasion by seaborne cholera. But is it in reality such a handsome sum? What does it represent per pound of the aggregate of rateable values? Does it reach 2s. 6d.? or 1s. 6d.? or 6d.? Not so; the total cholera prevention expenditure of these 62 re-

Table showing the Abnormal Expenditure incurred in respect of Cholera-Prevention Purposes in (a) 1892 and (b) 1893

District.	Port, Urban, or Rural.	Rateable Value of Contributory Districts (1893)	Hospital Provision. Floating. A.	Hospital Provision. Floating. B.	Hospital Provision. Land. A.	Hospital Provision. Land. B.	Ambulance Provision. A.	Ambulance Provision. B.	Disinfecting Apparatus. A.	Disinfecting Apparatus. B.	Water Locomotion (Launches, etc.) A.	Water Locomotion (Launches, etc.) B.	Water Supply to Vessels. A.	Water Supply to Vessels. B.
East Coast:		£	£ s. d	£ s. d	£ s. d	£ s. d	£ s. d	£ s. d	£ s. d	£ s. d.	£ s. d	£ s. d.	£ s. d.	£ s. d.
Berwick-on-Tweed	U.	45,947	—	—	—	—	—	—	—	—	—	—	—	—
Belford	R.	*	12 0 0	—	—	—	—	—	—	—	—	—	—	—
Amble	U.	6,827	—	—	—	—	—	—	—	—	—	—	—	—
Newbiggin-by-Sea	U.	4,491	—	—	—	—	—	—	—	—	—	—	—	—
River Blyth	P.	88,685	—	—	900 0 0	600 0 0	15 0 0	15 0 0	—	—	—	—	—	—
River Tyne	P.	1,860,000	8 0 0	40 0 0	—	—	—	—	2 0 0	135 0 0	44 0 0	288 0 0	—	15 0 0
River Tees	P.	387,387	8,000 0 0	—	—	—	—	—	—	—	900 0 0	—	—	—
Redcar	U.	9,175	—	—	—	—	—	—	—	—	—	—	—	—
Whitby	U.	47,095	—	—	50 10 2	10 0 0	13 17 6	—	—	—	6 16 0	—	—	—
Hull and Goole	P.	606,161	—	3,641 0 0	—	—	—	—	—	159 0 0	—	813 0 0	—	—
Wisbech	P.	37,070	—	—	35 0 0	110 0 0	—	—	13 0 0	—	—	—	—	—
King's Lynn	P.	69,909	—	—	—	—	—	—	113 16 2	—	—	—	—	—
Great Yarmouth	P.	172,187	93 2 8	230 6 11	—	—	—	—	—	—	16 1 9	12 0 0	5 0 0	—
Lowestoft	P.	91,691	—	—	383 0 0	—	—	5 0 0	—	—	16 0 0	—	—	—
Walton-on-the Naze	U.	4,011	—	—	—	—	—	—	—	—	—	—	—	—
Colchester	P.	95,386	536 0 0	—	—	—	—	—	—	—	—	—	—	—
Maldon	P.	14,710	—	—	—	—	—	—	—	—	—	—	—	—
London	P.	3,981,285	—	—	—	—	1,829 0 0	—	500 0 0	—	259 0 0	250 0 0	—	—
Blean	R.	*	—	—	—	—	—	—	—	—	—	—	—	—
Faversham	P.	40,824	262 0 0	—	—	—	—	—	—	—	—	—	—	—
Deal	P.	26,039	—	33 17 0	—	—	—	—	—	—	—	—	—	—
South Coast:														
Folkestone	U.	162,000	—	—	—	—	—	—	—	—	—	—	—	—
Sandgate	U.	10,424	—	—	—	—	—	—	—	—	—	—	—	—
Newhaven	P.	12,907	—	—	—	—	—	—	—	—	—	—	—	—
New Shoreham	P.	962,397	—	—	18 0 0	23 0 0	8 10 0	8 10 0	—	—	—	—	—	—
Havant	U.	11,094	—	—	—	—	—	—	—	—	—	—	—	—
"	R.	*	—	—	—	—	—	—	—	—	—	—	—	—
Portsmouth	P.	615,889	394 16 4	—	—	—	—	—	—	—	7 10 0	—	0 15 0	—
Cowes	P.	66,791	332 0 0	—	—	—	—	—	—	—	—	—	—	—
Southampton	P.	243,353	286 0 0	3,000 0 0	357 0 0	—	—	650 0 0	—	—	139 0 0	—	—	—
Poole	P.	49,248	—	—	—	—	—	—	—	—	—	—	—	—
Weymouth	P.	88,942	—	—	—	—	—	—	—	—	—	—	—	—
Exeter	P.	232,177	—	—	—	—	—	—	—	—	—	—	—	5 0 0
Teignmouth	P.	34,866	—	—	—	—	—	—	—	—	—	—	—	—
Dartmouth and Totnes	P.	32,647	900 0 0	—	—	—	—	—	—	—	—	—	—	—
Falmouth and Truro	P.	58,666	—	—	—	—	—	—	—	—	—	—	—	—
Penzance	P.	41,811	—	—	14 18 6	—	—	—	—	—	—	—	—	—
West Coast:														
Hayle	P.	3,877	—	—	—	—	—	—	—	—	—	—	—	—
Padstow	P.	3,073	—	—	40 0 0	—	2 0 0	—	—	—	—	—	—	—
Barnstaple	P.	95,819	1,300 0 0	—	—	—	—	—	—	—	—	—	—	—
Bridgwater	P.	31,097	—	—	121 0 0	—	—	—	—	—	—	—	—	—
Bristol	P.	1,000,995	1,463 0 0	—	—	—	—	—	—	—	1,155 0 0	—	3 0 0	—
Gloucester	P.	135,315	—		—	—	—	—	—	—	—	—	—	—
Cardiff	P.	713,499	—	—	2,000 0 0	—	—	150 0 0	200 0 0	—	750 0 0	750 0 0	?	?
Barry and Cadoxton	P.	271,714	—	—	60 0 0	—	—	15 0 0	—	—	250 0 0	625 0 0	5 0 0	5 0 0
Swansea	P.	285,722	—	—	550 0 0	—	—	—	—	—	—	530 0 0	?	?
Llanelly	R.	*	—	—	61 0 0	—	3 0 0	—	—	—	—	—	—	—
Tenby	U.	21,700	—	—	—	—	—	—	—	—	—	—	—	—
Milford	P.	43,600	372 0 0	18 15 0	—	—	—	—	—	—	9 0 0	—	—	—
Cardigan	P.	17,480	—	—	—	—	—	—	—	—	—	—	—	—
Barmouth	U.	7,410	—	—	—	—	—	—	—	—	—	—	—	—
Criccieth	U.	3,808	—	—	—	—	—	—	—	—	—	—	—	—
Carnarvon	P.	20,481	—	—	—	—	—	—	—	—	—	—	—	—
Holyhead	U.	18,635	—	—	—	—	—	—	—	—	—	—	—	—
Beaumaris	P.	60,000	393 18 5	108 3 9	—	—	—	4 5 0	—	—	—	—	—	—
Chester	P.	250,000	—	—	—	—	—	—	—	—	—	—	—	—
Lancaster	P.	113,807	—	—	30 0 0	—	1 10 0	—	—	—	—	—	—	—
Fleetwood	P.	38,105	—	—	250 0 0	—	—	—	—	—	25 0 0	—	—	—
Barrow-in-Furness	P.	208,096	—	—	296 0 0	—	—	—	—	—	—	—	—	—
Workington	P.	67,800	—	—	—	—	—	—	—	—	—	—	—	—
Maryport	U.	23,763	—	—	—	—	—	—	—	—	—	—	—	—
Silloth	U.	34,135	—	—	—	—	—	—	—	—	—	—	—	—
		13,450,588	14,352 17 11	7,072 2 8	5,166 8 8	743 0 0	1,872 17 6	847 15 0	828 16 2	294 0 0	1,577 7 8	4,268 0 0	13 15 0	25 0 0
			21,425 0 7		5,909 8 8		2,720 12 6		1,122 16 2		6,845 7 8		38 15 0	

* As only portions of these Rural Districts

in 62 Port and Riparian Districts of England and Wales, with the Rateable Value of Constituent Urban Districts.

Disinfection: (1) Bilges, (2) Cargoes, (3) Clothing, etc.		Staff: (1) Medical, (2) Non-medical.		Other Objects.			Total Expenditure.		Grand Total.	Remarks.
A.	B.	A.	B.	Objects.	A.	B.	A.	B.		
£ s. d.	£ s. d.	£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
—	—	—	—	—	—	—	—	—	Nil	
2 0 0	—	—	—	—	—	—	14 0 0	—	14 0 0	Small herring shipping harbour only.
—	—	—	—	—	—	—	—	—	Nil	Land hospital under order (Sept., 1893).
—	—	—	—	—	—	—	—	—	Nil	
—	—	(1) 25 0 0	(2) 40 0 0	—	—	—	1,020 0 0	655 0 0	1,675 0 0	
		(2) 80 0 0								
9 0 0	10 0 0	(1) 107 0 0	(1) 52 0 0	Gratuities	111 0 0	—	316 0 0	563 0 0	879 0 0	To Sept. 25th, 1893; infection of coasting traffic would call for a further outlay of £671, principally for disinfecting-hulk purposes.
		(2) 16 0 0	(2) 9 0 0	Printing, etc.	19 0 0	14 0 0				
—	—	150 0 0	150 0 0	—	—	—	9,050 0 0	150 0 0	9,200 0 0	
—	—	—	—	—	—	—	—	—	Nil	
—	—	—	—	—	—	—	71 3 8	10 0 0	81 3 8	An additional £120 5s. 6d. spent in disinfecting privies, etc., and cleansing yards.
—	—	—	200 0 0	—	—	—	—	4,813 0 0	4,813 0 0	
—	—	(1) 6 0 0	(1) 20 0 0	—	—	—	54 0 0	140 0 0	194 0 0	Additional outlay of £325 rendered imminent by infection of coasting traffic.
			(2) 10 0 0							
—	—	(1) 130 0 0	—	—	—	—	143 16 2	—	143 16 2	
—	—	—	(1) 42 0 0	—	—	—	114 4 4	284 6 11	398 11 3	Additional £150 for disinfection and extra cleansing in the borough.
—	—	—	—	Miscellaneous	8 0 0	—	407 0 0	5 0 0	412 0 0	
—	—	—	—	—	—	—	—	—	Nil	
—	—	(1) 39 18 0	—	—	—	—	575 18 6	—	575 18 6	
—	—	—	—	—	—	—	—	—	Nil	
(1) 54 8 7	(1) 25 0 0	(1) 1,058 2 0	(1) 682 10 0	Boarding hulk	320 0 0	12 10 0	4,151 10 7	1,083 15 0	5,235 5 7	Water locomotion in 1893, £10 weekly.
		(2) 67 0 0	(2) 88 15 0	Postage and telegraphy	64 0 0	25 0 0				
—	—	—	—	—	—	—	—	—	Nil	
—	—	—	—	—	—	—	262 0 0	—	262 0 0	
—	—	—	(1) 50 0 0	Incidental	—	20 0 0	—	103 17 0	103 17 0	Joint hospital being erected (Aug., 1893).
—	—	—	(1) 31 10 0	—	—	—	—	31 10 0	31 10 0	
—	—	—	—	—	—	—	—	—	Nil	
—	—	—	—	—	—	—	—	200 0 0	200 0 0	Separate items not given.
—	—	(1) 5 0 0	(1) 20 0 0	—	—	—	76 10 0	111 10 0	188 0 0	
		(2) 45 0 0	(2) 60 0 0							
—	—	—	—	—	—	—	—	—	Nil	
—	—	—	—	—	—	—	—	—	Nil	
—	—	(2) 47 10 4	(2) 25 0 0	Fuel	7 10 2	—	458 1 10	25 0 0	483 1 10	
—	—	—	—	Hospital caretaker, etc.	—	30 0 0	332 0 0	30 0 0	362 0 0	
—	—	(1) 83 0 0	—	Disinfectants, printing, etc.	24 0 0	—	1,046 0 0	3,650 0 0	4,696 0 0	£1,000 granted by port authority for precautions against cholera during the ensuing year (Sept., 1893).
—	—	(2) 157 0 0	—							
—	—	—	—	—	—	—	—	—	Nil	
—	—	—	—	—	—	—	—	—	Nil	Coasting traffic infection would call for additional outlay of some 6 guineas weekly by port authority.
—	—	(1) 26 0 0	(1) 40 0 0	—	—	—	38 0 0	60 0 0	8 0 0	Prevalence of cholera would necessitate for hospital, £1,000: disinfecting apparatus, £50: other expenses, £90. Two former requisites in contemplation (September, 1893).
		(2) 12 0 0	(2) 15 0 0							
—	—	—	—	—	—	—	—	—	Nil	
—	—	—	—	—	—	—	900 0 0	—	900 0 0	
—	—	—	—	—	—	—	—	—	Nil	
—	—	—	—	—	—	—	14 18 6	—	14 18 6	
1 0	—	—	—	Printing	0 6 0	—	2 7 0	—	2 7 0	
—	—	—	—	—	—	—	42 0 0	—	42 0 0	
—	—	—	—	—	—	—	1,300 0 0	—	1,300 0 0	
—	—	—	(1) 20 0 0	Mooring station, etc.	—	16 0 0	121 0 0	66 0 0	187 0 0	
			(2) 30 0 0							
30 0 0	—	(1) 63 0 0	—	—	—	—	2,882 0 0	—	2,882 0 0	
		(2) 168 0 0								
—	—	—	—	Inspection of vessels by Bristol	100 0 0	900 0 0	100 0 0	200 0 0	300 0 0	Present expenditure approximate only
?	?	(1) 150 0 0	—	—	—	—	3,175 0 0	900 0 0	4,075 0 0	No estimate available for queried items.
		(2) 75 0 0								
9 0 0	10 0 0	—	—	—	—	—	324 0 0	655 0 0	979 0 0	Steam tug in 1893, £25 per week.
?	?	(1) 60 0 0	(1) 60 0 0	—	—	—	610 0 0	590 0 0	1,200 0 0	No estimate available for queried items
—	—	—	—	—	—	—	64 0 0	—	64 0 0	Steam tug in 1893, £20 per week.
—	—	—	—	—	—	—	—	—	Nil	No foreign trade. Permanent hospital about to be erected (September, 1893).
—	—	—	—	—	—	—	381 0 0	18 15 0	399 15 0	
—	—	—	—	—	—	—	—	—	Nil	
—	—	—	—	—	—	—	—	—	Nil	
—	—	—	—	Printing	1 5 0	—	1 5 0	—	1 5 0	
—	—	—	—	—	—	—	—	—	Nil	Infection of coasting traffic would call for outlay of £500.
—	—	—	—	—	—	—	—	—	Nil	
—	—	(1) 3 17 0	(1) 4 10 6	Hospital caretaker	12 10 0	5 0 0	545 11 5	143 1 4	688 12 9	
		(2) 61 17 9	(2) 15 0 0	Establishment expenses	73 8 3	6 2 1				
—	—	—	—	—	—	—	—	—	Nil	
—	—	—	—	—	—	—	31 10 0	—	31 10 0	
5 0 0	—	—	—	—	—	—	280 0 0	—	280 0 0	
—	—	—	—	—	—	—	296 0 0	—	296 0 0	New cholera hospital.
—	—	—	—	—	—	—	—	20 0 0	20 0 0	Items not separated.
—	—	—	—	—	—	—	—	—	Nil	Hospital costing £2,300 in progress, largely on account of possible cholera (August, 1893).
—	—	—	—	—	—	—	—	—	Nil	
		(1) 1,731 17 0	(1) 1,197 10 6							
111 9 7	45 0 0	(2) 804 8 1	(2) 467 15 0		740 19 7	328 12 1	20,200 17 —	14,288 15 3	43,709 12 3	£220 not allotted to separate headings
156 9 7		4,201 10 7		—	1069 11 6		43,489 12 3			

are riparian, no rateable value is ven.

presentative guardians of our country on its "first line of defence" for the two years together is *less than one penny in the pound!* Moreover, a rate of one halfpenny levied during the first of the years over the whole ground involved would have almost covered the outgoing money in respect of cholera; whilst a rate of a farthing would have achieved this result in 1893. This then, shortly stated, is that of which we have heard so much of late as calling for State aid. The help of the Imperial Exchequer has been invoked to enable port sanitary bodies to respond to this halfpenny rate.

This for the whole of the districts. If we now proceed to exclude from the calculation all those sending "*Nil*" returns, we find that they number 22, leaving 40, with a total rateable value of £12,724,810, on which the grand aggregate spent is still less than one penny in the pound for the two years. In 1892 something over one halfpenny would have been a rate sufficing to clear the districts, one farthing being again enough in respect of 1893. Thus it is seen that by taking only those areas which have admittedly done something to protect the country against cholera the matter resolves itself into a very insignificant "something."

With these facts as regards the total operations for safeguarding the ports and other coastwise districts, it will be unnecessary to discuss the question of rates generally for the other items in the table.

Hospital Accommodation.—A sum of £27,334 9s. 3d. has been spent, or better perhaps to say allotted, for the purpose of providing means of isolation called for by the existence of Asiatic cholera on the Continent. Whilst some of the cost has doubtless been paid out of current rates, much has been made matter of loan spread over a number of years, the accommodation provided being of a nature at least as lasting as the term of years for which loan has been granted. In these latter cases (as, for example, in the River Tees port) the provision will prove to be of permanent benefit to the locality, and consequently, notwithstanding the ostensible cause for its provision, the hospital will be useful long after that cause has ceased to operate. Under this single item of "hospital provision," it is seen, then, that we have more than half the total outlay accounted for in the table, that is for what ought to be permanently at the command of every sanitary body, either of their own, or as matter of joint action by neighbouring authorities.

Floating Hospitals.—These seem to have been favoured by our coast authorities so far as total outlay is concerned, though, oddly enough, sixteen bodies have chosen to expend money on each kind of hospital. The total expenditure for floating hospitals has been £21,425 0s. 7d. in the two years. Of this amount, £8,000 has been loaned by the River Tees port authority for an excellent hospital on the lines of that in the Tyne; £3,641 at Hull; £3,000 at Southampton; £1,300 at Barnstaple; and £1,463 at Bristol; five ports thus accounting for £17,404.

Land Hospitals.—In the sixteen districts just referred to in connection with land hospitals, the expenditure has reached £5,989 8s. 8d., of which £4,050 have been incurred in three port districts, namely, River Blyth, £1,500; Cardiff, £2,000; and Swansea, £550.

Ambulance Provision.—Twelve districts have made this provision at a cost of £2,720 12s. 6d. in the two years, the chief items being £1,829 in London port, the steam launch being also used for inspection purposes; £650 at Southampton; and £150 at Cardiff.

Disinfecting Apparatus.—A sum of £1,122 16s. 2d. has been incurred under this heading in the two years: £500 in London, £200 at Cardiff, and upwards of £100 in three other port districts, five districts in this way accounting for £1,109 16s. 2d., leaving only £13 to the port of Wisbech; no fewer than 56 districts making a *nil* return in this matter.

It will be seen later that up to this point we may regard the expenditure of the districts amounting to £31,177 17s. 11d. out of the sum total of £43,709 12s. 3d.—as having been incurred in respect of matters which, altogether irrespective of cholera, ought to be found in every port and every riparian district having foreign or coastwise traffic. And here for the moment I leave these matters.

Water Locomotion.—Fifteen districts have expended £6,845 7s. 8d. in this direction; London, £500, plus the share of the ambulance; Hull and Goole, £813; River Tyne, £332; River Tees, £900; Southampton, £139; Bristol, £1,155; Cardiff, £1,500; Barry and Cadoxton, £875; and Swansea, £530; these being the principal ports concerned.

Water Supply to Vessels.—The expenditure under this heading, and in accordance with the terms of the Cholera Order of September 6th, 1892, has reached only £38 15s., seven districts alone being involved; the heaviest individual annual outlay being £15.

Disinfection of Bilges, Cargoes, and Clothing.—A sum of £156 9s. 7d. has proved sufficient for purposes of disinfection in relation to vessels and their contents, including seamen's effects. As might be thought, London has paid away the largest amount, namely, £79 8s. 7d. in the two years; Bristol has paid £30 (1892); and River Tyne and Barry and Cadoxton, £19 each.

Staff: Medical and Non-medical.—This is an important feature in port sanitary administration, and deserves somewhat closer attention than many other points. I note that £4,201 10s. 7d. has been expended in the two years, £2,929 7s. 6d. being approximately the cost of the medical, and £1,272 3s. 1d. of the non-medical staff. As many as 40 districts have nothing to return under this heading, whilst of the remaining 22, the amount entailed in 10 ports totals to £3,601 7s., out of the aggregate of £4,201 10s. 7d.; namely, River Blyth, £145; River Tyne, £184; River Tees, £300; King's Lynn, £130; London, £1,896 7s.; New Shoreham, £130; Southampton, £240; Bristol, £231; Cardiff, £225; and Swansea, £120. Here then we see some evidence of the call made upon professional and non-professional officers of our coast bodies by the necessity arising for that extra careful and continuous inspection of shipping which has been called for by the proximity of cholera. I will revert to this matter a little later, but before passing from it for the moment, I would draw attention to the fact that Gloucester has paid (see under "Other Objects") a sum of £300 to Bristol port authority for the inspection of Gloucester bound shipping, since the local circumstances render it a matter of impracticability for Gloucester to inspect vessels, possibly cholera infected, in her own waters; whilst £111 was bestowed on gratuities in the River Tyne in 1892. I refrain from any mention of lack of abnormal expenditure in respect of staff in relation to the foreign and coasting traffic of one and another district; but I have facts before me which go to show a notable amount of shipping within the harbours of authorities whose extra-inspectional expenditure has been *nil*.

On "*Other Objects*" of a miscellaneous character £1,069 11s. 6d. has been paid away, including the £300 and £111 just mentioned. The table names the varied manner in which the several sums have been incurred. The "Remarks" in the table speak for themselves; and it may here be stated that, with the exception of what is said thereunder, I have received no information as to the sums "rendered imminent (for example, by infection of coasting traffic)." The question seems to have been too abstract; but River Tyne estimates £671; Wisbech, £325; Weymouth, £6 6s. weekly; Exeter, £90, in addition to £1,050 for hospital and disinfecting apparatus; and Carnarvon, £500, as being requisite with an infected traffic coastwise round our shores. Yet Exeter has already, if I mistake not, trade with the Baltic and France, in addition to America, though her coasting trade is certainly large.

Expenditure of 1892 and 1893.—There was a noteworthy difference between 1892 and 1893 in the matter of expenditure in relation to cholera prevention, as is here shown, omitting fractions of pounds.

Objects.	1892-93.	1892.	1893.
	£	£	£
1. Floating Hospitals	21,425	14,353	7,072
2. Land Hospitals	5,989	5,166	743
3. Ambulance	2,720	1,873	847
4. Disinfecting Apparatus	1,123	829	294
5. Water Locomotion	6,845	3,577	3,268
6. Water Supply	39	14	25
7. Disinfection	156	111	45
8. Staff, Medical	2,929	1,732	1,197
9. Staff, Non-medical	1,272	804	468
10. Miscellaneous	1,069	741	328
Totals	43,489	29,201	14,289

Splitting the above interesting statement into two parts, we have results as follow:

Objects.	1892-93.	1892.	1893.
	£	£	£
Nos. 1 to 4	31,177	22,221	8,956
Nos. 5 to 10	12,310	6,979	5,331

From this second comparison of the two years, we learn that the great difference lies in connection with those objects which we have regarded as proper to be provided by all seaside authorities having shipping trade. In respect of each of these the difference is striking, pointing to a laudable desire of the district authorities in the earlier year to place their harbours in a position to deal with imported cases of cholera. There can be little doubt, I think, that a stimulus in this direction was given by reason of the action of the Local Government Board, inspectional and by circular and local correspondence. Indeed there is evidence to this effect in the replies. Then, having expended sums of money in respect of these matters in 1892, the next cholera season found such districts without need for further outlay, whilst for other districts the novelty of the cholera scare had passed away, authorities who had not undertaken to safeguard their ports in the former year being still less inclined in the second. And then of course we must not lose sight of the fact that there are districts which already possessed the desiderata in question, some at great cost, when no cholera was about, and when no idea of State aid had been locally entertained.

With reference to the remaining "objects," the difference is still in the same sense, but in a much less marked degree. One of the greatest divergencies lies in the matter of staff, pointing to some lack of attention to inspection in 1893 as compared with 1892; and referable it may be to absence in 1893 of such an outburst as that at the great Continental shipping port of Hamburg in the former year. But we might have expected a larger measure of activity in the matter of inspectional staff in view of the renewed activity during the past summer of the Medical Department of the Local Government Board, whose Inspectors have done such praiseworthy work around our coasts. The general infection of coasting traffic would no doubt have led to equally general all-night watchfulness with increased outlay.

Of the total expenditure, £43,709, on all the points in the table, the three sections of England and Wales take credit as follows:

East coast,	21 districts,		£23,988
South	,, 16	,,	6,973
West	,, 25	,,	12,748

It may be questioned, seeing that the whole outlay is less than a penny in the pound for the two years, whether individual districts do not show something much greater than this average. Therefore let us examine the facts. Taking 28 districts having the largest total sums, we find as follows:

Including the expenditure on hospitals, the rates in the pound for each of the two years averaged approximately, in Blyth port, 2¼d.; River Tees, 2½d.; Hull, ¾d.; Gt. Yarmouth, under ¼d.; Colchester, ¾d.; Faversham, ¾d.; Newhaven, 2d.; New Shoreham, 1/10d.; Portsmouth, ½d.; Southampton, 2d.; Dartmouth and Totnes, 7d.; Padstow, 3½d.; Bridgwater, ⅜d.; Bristol, ½d.; Cardiff, ¾d.; Swansea, ½d.; Milford, 1½d.; Beaumaris, 1½d.; Fleetwood, 1d.; and Barrow-in-Furness, ¾d.

But if we exclude the single item of hospital provision we get facts even more ridiculous than the foregoing: the following rates being *average annual rates*, stated in pence and fractions of a penny.

	d.		d.
River Blyth	¼	Southampton ...	½
River Tyne	1/10	Exeter	1/10
River Tees	under ½	Dartmouth and Totnes	*nil*
Hull	½	Padstow	*nil*
Wisbech	½	Bridgwater	under ½
King's Lynn	½	Bristol	under ½
Gt. Yarmouth ...	1/10	Gloucester	½
Colchester	1/10	Cardiff	under ½
London	½	Barry and Cadoxton	1½
Faversham	*nil*	Swansea	½
Newhaven	2	Milford	1/10
New Shoreham ...	1/10	Beaumaris	½
Portsmouth	1/10	Fleetwood	½
Cowes...	1/10	Barrow-in-Furness	¾

The foregoing then, briefly stated, are the main facts of the case as they present themselves to us; and it now remains to apply them in an endeavour to solve the problem involved in the question: Should the Imperial Exchequer defray the expenses incurred at our ports in preparing to resist and in dealing with seaborne cholera?

In approaching this subject I would first restate my opinion that the three requisites of hospital accommodation, ambulance provision, and disinfecting apparatus should be excluded from any participation in aid from other than local rates. I say this with every desire to meet the wishes of the ports for a grant in aid, since I am most strongly of the opinion that these are essentials for each and every sanitary district to possess or to command when necessity arises. And this altogether outside the question of cholera. The existence of cholera is rare, but the danger arising from the importation of other infectious diseases is constant, and, if our coast authorities would but realise the fact, much more potent in the long run than the chance importation of cholera cases. That, then, which is called for by the ever-present exigencies of port sanitary administration can hardly be deemed proper for special treatment, because cholera, and not enteric fever or scarlet fever, has called it into being. The fact that the near approach of cholera found hospital accommodation to be lacking is *primâ facie* proof of previous deficiency in port defence against any and all infectious sickness occurring on shipboard, and should in no wise be put down as having caused expenditure for cholera purposes only. Moreover, a hospital worthy of the name, even allowing that threat of cholera necessitated its provision, will prove to be of benefit to a district long after the cause of its erection has ceased to operate. And, admitting this principle, any sanitary body has but to proceed to the provision of a hospital on proper lines to find the Local Government Board ready to sanction the floating of a loan extending over a term of years, thus relieving the current rates of much of the burden of paying for an institution which, while erected as a matter of the truest economy, will prove beneficial to succeeding generations. This Government sanction appears to me to be a substantial "grant in aid," seeing how greatly it removes from the shoulders of the present ratepayers their responsibility in having wisely defended themselves and their children for years to come against possible spread of death-dealing disease unchecked by early isolation of initial cases. And since no hospital can be deemed to be properly equipped without means of transit of patients and of disinfection of infected articles—as of bedding and clothing—so these accompaniments can be also made matters of loan, the whole sum being not infrequently borrowed at a low rate of interest.

Besides, where is the line to be drawn? How about those districts already in possession, at local cost, of hospitals when cholera appeared? Are they to come in for a share of the State grant, or is their wisdom aforetime to debar them? The reply is obvious. If the plea of a cholera scare is to relieve a backward district of the expense attaching to a compulsory response to irresistible demand for hospital provision made by cholera, a heavy premium is placed on sanitary deficiency. If all cholera-prevention expenses could, like those entailed for hospitals and cognate requisites, have been paid for in part during each of a score or so of years, we should probably have heard but little outcry for State aid.

But, speaking broadly, the above are the only matters of those in the table which have lasting benefit for a district. The remaining four are really called for to meet a pressing and passing need. For instance, in ordinary times ordinary inspection of vessels may suffice, or largely suffice, to safeguard our shores, even though such inspection takes place, as it frequently does, at the dock gates. But, when cholera is abroad, it requires that incoming vessels be intercepted and visited in such position that danger to docks and towns shall not arise by reason of the presence of cholera on board. Hence, steam launches, sailing boats, and other craft, with crew hire and so forth, are frequently of vital importance. Take the cases of Hull, Ipswich, London, Bristol and Gloucester, Cardiff, and Liverpool. So also replacement of

water supply to vessels whence the drinking water has been ordered to be emptied away because of suspicion attaching to it, and the requisite disinfection of infected ships, cargoes, seamen's effects, etc. Still more pressing, as a passing requisite, is the appointment of additional inspectorial staff, which would become, doubtless, a much more serious question in the event of general infection of our coasting traffic, necessitating, as it would in many cases, inspection of shipping by night as well as by day. So, too, with several items under "Other Objects." These are, in my opinion, the cause of expense entailed entirely by threat of cholera, and *pertaining only to cholera*, ceasing with cessation of that malady.

Turning to the table once again, I note that, of the 40 districts returning some expenditure, 6 are riparian and 34 are port districts. In the former the total expenditure was £488, of which £430, or six-sevenths, was on account of hospital provision; in the latter £43,222, of which £31,177, or some four-fifths, was for hospital accommodation and cognate matters. Now, granted some 60 riparian districts on our coasts having such shipping trade as to justify expenditure on precautionary measures against seaborne cholera, we shall be liberal, in view of the facts shown by the table, with its multiple *nil* returns, if we allow that £700 has been paid away thus in the past two years, *outside* the matter of hospitals. Similarly, by exclusion of hospitals, ambulances, and means of disinfection, we shall be generous in placing £19,300 against the 60 port sanitary districts; thus showing for 120 coast towns an outlay on account of the passing urgency of cholera prevention in the two years of £20,000, or £10,000 per annum. Now, let us go so far as to presuppose a general infection of our coasting traffic in 1894, and double the total expense accordingly for that year; we then see that £20,000 would be called for during the next summer, a sum not worthy of cavil. I could, indeed, wish to see it, if unhappily the circumstances arise, much increased by a better rate of remuneration of sanitary officers in their self-sacrificing endeavours to protect the ports, since, generally speaking, the salaries of health officers and inspectors along our littoral are a standing disgrace to a maritime nation putting so much faith in inspection of shipping.

Looking back now for a moment at the plain facts of the case, I would ask, Is it seriously considered necessary to press for State aid for the annual £10,000 (if indeed this sum has been spent)? If so, I assume some central Government acceptance of amounts claimed as falling within a defined category of cholera expenses would be requisite as a preliminary to Exchequer payment. But where would the line be drawn? Is it to be drawn at the coast towns, and, if so, shall it include those towns so far as shipping is concerned, or will it be claimed in respect of measures taken in those towns should stray cases of cholera get past the dock gates? This is a matter of some importance, since we have recently seen Grimsby, one of the foremost in calling for State aid for port cholera expenses, also claiming the same for *urban* measures of prevention under the Epidemic Regulations of the Local Government Board to the tune of £3,500 during last year. The basis of the claim lies on the belief of Grimsby that she has saved the country at large from a cholera epidemic. But has she, or are many of the scattered cases up and down England during the past autumn referable to infection derived at Grimsby? However this may be, it will doubtless be contended by Cleethorpes that their action also has saved the country; and why should not Hull lay claim to similar credit, and Rotherham also? In fact, there is no limit to the calls. Hull, with her intimate relations, by way of the Trent and its waterways, with inland places, can challenge comparison as a saviour of the nation with almost any town which may chance to be infected; and those inland places, with their numerous communications with neighbouring towns, could, without difficulty, make a case for themselves for example, Sheffield, Newark, and Gainsborough, with their water traffic. The whole of our inland waterways, indeed, would seem to stand in some relation to our ports, especially in any general infection of shipping. And again, cholera having once obtained a footing in our land, will not these numerous canals and rivers prove a grave danger to the spread of the disease if its poison revive this year?

If, then, it be seen that any hard-and-fast line drawn round our docks will not satisfy sanitary bodies, should not Imperial aid be refused altogether? Each district suffering cholera, and by good fortune limiting the disease to its area, undoubtedly does much for its neighbours and its country; but I would here say—and say strongly—that the self-interest of a district—whether port, riparian, or other—will be best served by striving to avoid all appearance of cholera within its precincts. It will be better to pay from local rates than, having waited for cholera or for cholera times, to claim recoupment of abnormal expenditure in the face of danger. It has been well said that all money spent in defence against cholera has been wisely expended, inasmuch as costs thus incurred will amply repay in resulting freedom from other infectious sickness, and consequent saving to the rates.

Now, in view of all that has gone before; in view, also, of the length of littoral which we possess, and the almost uniform distribution of port and riparian districts, will it not be best that all abnormal expenses on measures of cholera prevention should be met out of *County Funds?* We have some thirty counties having a sea border, and deriving in greater or less degree a measure of prosperity from maritime traffic above counties essentially "inland." Why not let the expenses in question be met by a County General Cholera Fund?—all districts contributing their quota, and all measures entailing abnormal outlay by port (and it may be considered to be thought well by all other) sanitary authorities within the county, requiring approval by the County Council and the Local Government Board; the first as soon as practicable, the second finally, with a view to repayment from such General County Fund. By this means each county would pay in some of its districts for the cost and trouble incurred in its less fortunate constituent parts by the presence of cholera or the measures adopted for keeping the disease away; and doubtless the slight individual contribution thus called for would be cheerfully paid in the face of exemption from the dreaded malady, whilst seaboard districts fighting to resist entry of cholera, and inland districts striving to repress it, would alike have, in the sympathetic help of the county at large, an incentive to make their endeavours successful.

I commend this scheme strongly and confidently to the authorities concerned—port, riparian, inland, county, and central alike.

THE German Emperor has conferred the Service Order of St. Michael, Second Class, with Star, on Professor Albert von Kölliker, of Würzburg.

DEGREES FOR WOMEN IN GERMANY.—The question of the admission of women to degrees in Heidelberg has recently been settled, as far as the philosophical faculty is concerned, by the admission of a lady, a daughter of the well-known jurist, Dr. Windscheid, to the degree of Doctor of Philosophy. The ancient university on the Rhine having thus opened its gates to female students, the other German universities will sooner or later, in self-defence if from no higher motive, it may be presumed, be compelled to follow suit.

PROSPECTS OF WOMEN AS DOCTORS.—Dr. Laskowski, Professor of Anatomy in the University of Geneva, gives a somewhat unfavourable account of the female medical students in that university. During the last seventeen years 175 women have been admitted to its medical faculty; of these 50 were natives of Poland, the remainder being of various nationalities, but drawn chiefly from the Russian Jews. Of the 50 Polish students only 2 have taken the doctor's degree at Geneva, and 2 others have gone to Paris to complete their studies: of the fate of the remainder nothing seems to be known. In the case of most of them poverty seems to have been a hindrance. Of the other 125 women only 10 have taken the doctor's degree, and of these 1 has died, 2 have married and given up practice, 4 earn a bare subsistence, while 3 have achieved a certain measure of success in their profession. No information is given as to the ultimate fate of the rest. We have no means of knowing whether Professor Laskowski's statistics are trustworthy, but if they are even approximately correct it would appear advisable for ladies wishing to enter the medical profession to consider well the prospects of ultimate success.

AN INQUIRY

REGARDING THE

IMPORTANCE OF ILL-EFFECTS

FOLLOWING THE USE OF

ANTIPYRIN, ANTIFEBRIN, & PHENACETIN

CONDUCTED BY

THE THERAPEUTIC COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION.

D. J. LEECH, M.D., F.R.C.P., *Chairman*.
WILLIAM HUNTER, M.D., *Honorary Secretary*.

SCOPE AND CHARACTER OF THE INQUIRY.

THE Committee have recently conducted an inquiry into the importance of the ill-effects which occasionally attend the use of the three chief antipyretic and analgesic agents phenazone (antipyrin), acetanilide (antifebrin), and phenacetin.

Since their introduction these drugs have had a very extended use at the hands of the profession; and so well have the merits of at least one of them (antipyrin) as an analgesic agent become known, that a large demand has arisen for it amongst the general public, independent altogether of medical recommendation or supervision.

An impression, however, has undoubtedly at the same time arisen that their use is frequently attended by ill-effects, and that these are of such a character and frequency as to limit very materially the general usefulness of these drugs. This impression is based on the numerous reports of isolated cases that have from time to time appeared in the medical press; and so general is the impression that it has sufficed to deter a certain number of practitioners from using the drugs at all. Considering the very widespread use which these drugs still continue to have, the Committee felt it to be important to obtain more trustworthy data regarding their alleged ill-effects than have hitherto been forthcoming.

In determining what form their inquiry should take, the Committee were guided by the following considerations. To obtain the necessary data it was important to have a certain variety as well as volume of experience represented. The experience of a few individuals, however large it might be, or that gained in hospital practice, even if available, was insufficient for their purpose. In hospital practice the drugs are only used for some very definite and immediate purpose—to control temperature or allay pain—under circumstances where their action can be carefully watched, and any ill-effects can be immediately observed and effectively combated.

In private practice, on the other hand, the sphere of employment of these drugs is a much more varied and extended one, corresponding to the wider and more varied demands that are there met with. A wider licence has necessarily to be given to the patient in using them; and ill-effects, if they arise, cannot be immediately recognised and dealt with, and become therefore more developed. It is under such conditions, then, that ill-effects are most likely to be met with; and it was therefore from the experience of private practice rather than from the narrower and less varied experience of hospital practice that the information sought for could best be obtained.

And here one of the chief difficulties of such an inquiry presented itself. It was obviously undesirable for many reasons to make the inquiry a general one. The drawbacks connected with the collective investigation method of acquiring information are too numerous and striking to require any setting forth here. As a method for the investigation of problems requiring accurate observation and sound judgment, the method is not only useless—it is positively misleading. It can at its best be only a record of impressions, and impressions can never prove a substitute for carefully observed facts.

In the present instance the inquiry was framed in such a way as to reduce this source of error to a minimum. It was directed not so much to elicit the nature of the ill-effects—a subject regarding which we already possess fairly definite information; still less to ascertain under what conditions and in which diseases such ill-effects are most frequently met with, though this is a subject of very great importance, regarding which we know as yet but little. Information on these and other collateral points would be interesting, but to be of value it would require to be based on careful comparative observations carried out by skilled observers over a large number of cases and diseases. The scope of the inquiry was, on the contrary, definitely limited. Its very object was to ascertain the "impression" which any ill-effects met with had made on the mind of the observer; in particular whether that impression was of such a kind as to prevent him using the drugs as frequently as he would otherwise have done.

To enable the Committee to gauge the relative value of these individual impressions each observer was asked to state (1) the amount of his experience in the use of the drugs, (2) the dosage he employed, and (3) the nature of any ill-effects he had observed, giving at the same time such details as might appear to him necessary having regard to the primary object of the inquiry.

And here, in passing, a word may be said regarding the field left open for such investigations. It is a very limited one, both as regards the drugs deserving the application of such a method of investigation to them, and still more as regards the kind of information to be sought for. So long, however, as new therapeutic agents of the character and potency of those now under consideration are introduced, so long will questions of the kind above indicated from time to time arise.

A drug cannot be potent for good in any specially marked degree, especially if its chief action be on the blood or the nervous system, without possessing necessarily great potentialities for evil if used too frequently or in excess. Notwithstanding this obvious consideration there is a great tendency on the part of a certain class of observers to push every new drug to the extent of producing ill-effects. Cases of this kind are at once recorded; and thus it may easily happen that an extensive literature may arise relating to the ill-effects connected with the action of a drug, while its beneficial properties pass without record. An exaggerated and possibly an utterly false impression may thus be created, which it may require some investigation of the kind here indicated to clear away.

In the case of the drugs now under consideration, the result has fully demonstrated the necessity which existed for such an inquiry; for the inquiry has supplied clear evidence that the frequency and importance of the ill-effects attending their action have been greatly exaggerated, to the extent, in the case of certain of them, of producing an entirely false impression. The results demonstrate further that in the very large majority of cases the ill-effects have been the direct result of injudicious and excessive dosage, so that the real fault lies not so much with the drug as with its mode of administration.

METHOD OF INQUIRY.

The following was the method of inquiry adopted: A letter was sent to the Secretaries of thirty-four Branches, describing the object of the proposed inquiry, and inviting them to furnish the Committee with a limited list of names of the members of their Branch to whom, in their opinion, such an inquiry might usefully be addressed.

In response to this, names were furnished by the secretaries of the following twenty-seven Branches, namely:

1. Aberdeen, Banff, and Kincardine.
2. Bath and Bristol.
3. Birmingham and Midland Counties.
4. Border Counties.
5. Cambridge and Huntingdon.
6. Dorset and West Hants.
7. East Anglian.
8. East York and North Lincoln.
9. Edinburgh.
10. Lancashire and Cheshire
11. Midland.
12. North of England.
13. Northern Counties of Scotland.
14. North of Ireland.
15. Oxford.
16. Perthshire.
17. Reading and Upper Thames.
18. Shropshire and Mid-Wales.
19. Southern.
20. South-Eastern.

21. South-Western.
22. [illegible]
23. [illegible]
24. Thames Valley.
25. West Somerset.
26. Yorkshire.
27. South Wales and Monmouthshire.

The following letter of inquiry was then issued:

The Therapeutic Committee is desirous of gaining information regarding the nature, frequency of occurrence, and importance of ill-effects following the use of the above drugs (antipyrin, antifebrin, and phenacetin).

There seems to be an impression that these effects are of such a character and frequency as materially to limit the usefulness of these drugs as antipyretic and analgesic agents.

The Committee wish to ascertain how far such an impression is well founded.

Would you kindly state for the information of the Committee, giving in such details as may appear to you necessary, having due regard to the object of the inquiry as above stated:

1. The amount of experience you have had in the use of these drugs, whether as antipyretic or analgesic agents.
2. The doses you habitually give.
3. The nature of any ill-effects you have observed.
4. Their comparative frequency.
5. Your opinion as to their comparative importance. Do they materially limit the usefulness of the drugs?

In the case of one Branch, the South-Wales and Monmouthshire, the inquiry was conducted independently by a local Therapeutic Committee, with Dr. D. R. Paterson as honorary secretary, acting in co-operation with the Central Committee. The terms of the inquiry were the same as those formulated by the Central Committee.

The Committee desire to acknowledge the help thus afforded them in the conduct of the inquiry by the secretaries of the various local Branches.

In reply to their circular, reports to the number of 220 have been received. These have been tabulated and carefully analysed, and the following is a summary of their chief contents.

It is particularly to be noted that throughout this report the sphere of usefulness of the drug is not touched upon. The value of the drug was a question purposely omitted from the inquiry. This was strictly limited to the question to what extent, assuming that the drug was a valuable one—as it undoubtedly is—this value was lessened by the occurrence of ill-effects.

PHENAZONE (Antipyrin).

The amount of experience with this drug represented in these reports is a very large one—very much larger, as might be expected, than with the other two.

Dividing the reports into two groups, according as observers state their experience to be (1) extensive, or (2) limited, it is found that 167 out of the 220 reports (67 per cent.) are to be referred to the first group.

As regards the purpose for which the drug has been employed, the great majority have used it both as an antipyretic and as an analgesic agent. In the early years after its first introduction it was used very largely as an antipyretic: but there is practically a consensus of opinion on the part of those who report, that its chief use, and in many hands its sole use now, is as an analgesic. As an antipyretic it has thus fallen somewhat into disfavour, while as an analgesic it has in recent years gained steadily in repute.

Nature of the Ill-Effects.

There is great unanimity amongst observers as to the nature of the ill-effects occasionally met with. The only difference of opinion is as to their degree—"slight," or "marked," or "alarming," or "dangerous," as the case may be. They range in severity from the mildest and most evanescent of rashes to the most alarming and even fatal collapse.

The rashes may be dismissed with a word. They are variously described as erythematous, measly, or urticarial in character, with or without considerable accompanying œdema. They have been met with by every observer who has had any extended experience of the drugs. In the great majority of cases they have been the result of idiosyncrasy on the part of the patient, independent altogether of the size of the dose or the nature of the disease. Thus, in one instance a 10-grain dose caused urticaria with salivation twice in the same patient: in another a dose of 3 grains caused an urticarial rash, with dizziness and loss of power in legs; in another, swelling of face with lividity and dyspnœa was always caused even by the smallest doses.

Only a few observers, however, take any special notice of the rashes; the large majority content themselves with merely noting their occasional occurrence. As an ill-effect they cannot properly be regarded. At most they occasion a little temporary alarm to the patient till their true nature is explained: or, if met with at the outset of a febrile illness, may lead to a little difficulty in deciding whether we are not dealing with the specific eruption of measles or scarlet fever.

The character of the ill-effects proper may be judged of from the subjoined table, in which is comprised the experience of twenty-two observers. Where stated, the dose which occasioned the ill-effect is also given: where it is not expressly stated, the usual dose employed by that particular observer is appended within brackets.

It will be noted that the ill-effects group themselves clinically into 2 divisions: (1) Those referable to an action on the nervous system, including the varying degrees of vasomotor disturbance, profuse perspirations, enfeeblement, cardiac depression and irregularity, nervous excitement and collapse, in exceptional cases such marked effects even as loss of power of speech, and complete mania; and (2) those referable to an action on the blood and circulation—namely, the breathlessness, varying degrees of cyanosis, and lividity.

The ill-effects described are, indeed, precisely of the character which one would be led to expect from a consideration of the physiological and therapeutic action of the drug. A drug capable of reducing febrile temperature with the rapidity and to the degree which antipyrin in many cases admittedly can—still more, one capable of relieving the intense neuralgic pains of functional disturbance with the rapidity and completeness with which antipyrin so frequently acts—must possess a very powerful action on the nervous system, and through it on the metabolic processes going on within the body.

Table I.

No.	Nature of Ill-Effect, as Specified by Observer.	Dose in Grains.
1	Weakness and shakiness	(20 to 40).
2	Serious collapse in a case of typhoid fever ...	30 twice.
3	Syncopal attack on one occasion	15.
4	Symptoms of collapse	20.
5	Enfeebling in its action	(5 to 20).
6	Depressant	(12 to 20).
7	"	(20).
8	Cardiac weakness and irregularity	15 every 4 hours.
9	Great depression	30 at hourly intervals.
10	" " and exhaustion	15 every 4 hours.
11	Alarming depression	45 in 8 hours.
12	Cyanosis and dangerous cardiac depression ...	20.
13	" " " " ...	20.
14	Depressant on heart	(15 to 20).
15	Excessive sweating, cyanosis, and partial collapse	(20).
16	Vasomotor pains, lividity, profuse perspiration, tendency to collapse, and to pneumonic congestion	(30).
17	Collapse and death in a case of rheumatic fever	80 in 5 hours
18	Alarming faintness in anæmic individuals ...	(15 to 20).
19	Languor and depression	(15).
20	Weakening effect in 10 per cent. of cases ...	20 repeated in an hour.
21	Serious collapse in a case of typhoid	2 doses of 30.
22	Loss of speech, lasting 24 hours, in a case of commencing meningitis which subsequently proved fatal	7½ repeated in an hour.
23	A condition of mania from long-continued use of the drug, recovered from when drug withheld	
24	Dyspnœa and much nervous excitement once out of many hundreds of cases ...	5.
25	Salivation with urticarial rash twice in same patient	10.
26	Dizziness and loss of power in legs	3.

Ill-effects of the above character may as naturally be expected to follow the administration of large doses of this drug as excessive stupor and twitchings that of morphine and strychnine respectively. Their occurrence in exceptional cases would not, therefore, *per se* prove the drug to be a dangerous one. For this it would be necessary to show that their occurrence was independent of the size of the dose administered.

The relation of ill-effects to dosage employed becomes thus an important consideration in estimating the harmfulness of a drug. This is a point which will presently be considered. In the case of antipyrin it will be found to be an interesting and instructive one.

THEIR COMPARATIVE FREQUENCY.

The mere list of ill-effects above noted is a somewhat formidable one, but it loses much of this character when their frequency of occurrence is considered.

Thus, out of 189 observers who report on antipyrin, no fewer than 138, or 73 per cent., have never observed any ill-effects at all worth mentioning.

Considering how large is the experience of the action of this drug represented in these reports, this large proportion of observers who have no ill-effects to record is very remarkable. Almost more than any other fact could do, it seems to testify to the comparative harmlessness of this drug when properly administered.

Further testimony, no less strong in the same direction, is borne by the experience of the remaining 51 observers (27 per cent.) who describe ill-effects; for of this number 17 expressly state that any ill-effects they had observed were of so slight and trivial a character, and only met with in isolated instances, or after injudiciously long-continued use of the drug, that they could not attach the slightest importance to them.

The number who describe ill-effects is thus reduced to 34, the character of these being indicated in the foregoing table. Of these only two venture to give their experience as to their frequency of occurrence in statistical form, one stating that he has met with them in about 1 per cent., the other in about 10 per cent. of cases. Two others state that ill-effects are comparatively frequent in their occurrence, one of these, who gives it in doses of 10 grains, stating that it causes "distinct lowering of the vital powers"; the other, who formerly gave it in 30-grain and who now employs it in 10-grain doses, describing the ill-effects as including "vasomotor pains, lividity, profuse perspiration, tendency to collapse, measly rash, and tendency to pneumonic congestion." The remaining 30 either state that the occurrence of ill-effects is extremely infrequent, or expressly state that any ill-effects they have observed have occurred as isolated instances in the course of many years' experience of the drug, and extending over many hundreds of cases. So rarely, indeed, have they met with any ill-effects, that they attach little or no importance to them, and have in no way been deterred from use of the drug by fear of them.

It is clear, then, if one may be allowed to judge from these reports, that ill-effects following the use of antipyrin are not only relatively but absolutely infrequent in their occurrence. One observer expresses his opinion that they are "rarer than the idiosyncrasies of the iodides or quinine;" and certainly so far as the above reports go, this would appear to be the case.

The impression to the contrary, which is widely prevalent, and which is testified to by one observer who states he has never observed any ill-effects himself, but has been deterred from its freer use by the fear of its depressing effect, receives therefore no support whatever from these reports.

THEIR IMPORTANCE.

The main object of the inquiry, as has been stated, was to ascertain how far the ill-effects occasionally met with were of such a kind as to limit the general usefulness of the drug. The answer given by these reports to this question has been already in great part anticipated by the consideration just given to their frequency. It has been indicated that ill-effects may naturally be expected to follow the injudicious use of so powerful a drug as antipyrin undoubtedly is. To what extent, then, are the ill-effects above recorded to be ascribed to this cause; or, on the other hand, are they directly traceable to the dangerous and uncertain action of the drug itself?

In answering this question, it becomes important (1) to ascertain what is the relation of ill-effects to the dosage employed; and (2) to consider the circumstances of each particular case in which ill-effects have been observed.

1.—*Relation of Ill-effects to Size of Dose.*

In estimating dosage, regard has to be had to the frequency of administration as well as to the size of the individual dose. Ill-effects may arise from small doses too frequently repeated as much as from larger doses. In estimating the influence of dosage, a considerable difficulty arises. Hardly any two observers administer the drug in the same way. It is difficult, then, for the purposes of such an inquiry as the present to tabulate the dosage. One observer employs a dosage of 5 to 10, another of 10 to 20, and a third of 20 to 30 grains. It would be possible to strike an average in each case, and to compare these with one another—to state that the average dose was $7\frac{1}{2}$, 15, and 25 grains respectively. Certain results might thus be got, but how far they would be trustworthy it is permissible to question. A more reliable method, as it seems to the Committee, is to have regard to the minimal dosage alone, to the exclusion altogether of the larger doses occasionally employed—and for the following reason.

The minimal dose employed by an observer is to a certain extent an important index as to the degree of care he is accustomed to exercise in beginning the administration of a drug. If one observer states that he uses a drug in doses of 5 to 10 grains, while another states that he habitually employs doses of 15 to 30 grains, it is clear that in the case of a powerful drug ill-effects connected with the size of the dose are more likely to be met with in the practice of the one who usually commences with 15, than of the one who habitually begins with 5-grain doses.

It is of interest, then, from this point of view, to compare the minimal dosage employed by the various observers. Out of 167 observers who record their dosage, 134, or 80 per cent., employ doses of 10 grains or under as their usual minimal doses of antipyrin—80 per cent. commencing with not more than 5 grains; while the remaining 33, or 20 per cent., habitually employ as their minimum doses ranging from 15 to as high as 30 grains. The interesting point, then, comes out that it is almost exclusively in the practice of the latter that ill-effects have been noted.

For among the 138 who have not met with any ill-effects, no fewer than 119—86 per cent.—habitually employ doses of 10 grains or under as their minimal dose; while on the other hand, out of the 51 who describe ill-effects, 37—73 per cent.—are in the habit of giving as their minimum doses as much as 15, 20, and 30 grains.

So far, then, as these reports are concerned, there would appear to be a close and direct relation between the size of the dose and the occurrence of ill-effects. The larger the initial dose the more frequent are ill-effects met with.

2.—*The Circumstances of each Particular Case.*

The accuracy of this conclusion is further borne out when we consider the circumstances of each particular case in which ill-effects have been noted. These have already been tabulated (Table I). It will be noted that, with only a few exceptions, the dose habitually employed by the observer who describes ill-effects, or the dose which produced the ill-effects in the particular case, was a large one—in certain cases, indeed, surprisingly so. For example, it need occasion little surprise that 30 grains of antipyrin administered hourly caused great cardiac depression, that weakness and shakiness were caused in certain cases by doses of 20 to 40 grains, or that 80 grains in five hours caused collapse and death in a case of rheumatic fever.

Of the 51 observers who record ill-effects, 17 expressly state that they were of such a slight character, or so rarely met with, as to be of no importance whatever. The remaining report cases such as the foregoing (Table I). It will be noted that in most of the cases the dose has been 15, 20, or 30 grains, repeated after an injudiciously short interval. A few describe ill-effects produced by doses of 10 grains or under; but, with a few rare exceptions, these have only been after frequently repeated administration of the drug. The exceptions referred to are obviously cases of idiosyncrasy such as are common with almost every drug. For example: (1) dyspnœa and much nervous excitement, reported in one instance out of many hundreds by a dose of 5 grains; (2) urticaria and salivation following a 10-grain dose twice in the same patient; (3) dizziness and loss of power in legs

following a 3-grain dose: (4) lividity, dyspnœa, and swelling of face caused by the smallest doses.

As regards the importance to be attached to these ill-effects, there is almost a consensus of opinion among the observers who have met with them—and that opinion is that they do not affect in any material way the general usefulness of the drug, more especially as an analgesic agent. Only a few express a contrary opinion. One observer, without, however, adducing any evidence in support of his statement, expresses his belief that the harm the drug has already done far outweighs any good it has ever done or will ever do in the future; another (No. 16, Table I) in whose experience ill-effects are comparatively frequent if dose be too large, who formerly used it in doses of 30 grains, is of opinion that in acute diseases the use of the drug lessened the patients' chances of recovery; another who gives it in doses of 15 to 20 grains to anæmic individuals, and finds that it produces alarming faintness, is of opinion that its usefulness is lessened on that account: another who gives it in doses of 10 grains, and who has observed a "distinct lowering of vital powers" in consequence, considers that the ill-effects are important, and distinctly limit the usefulness of the drug; another who gives it in 10 to 15-grain doses, but who for the last three years has ceased to order it as an antipyretic, considers the ill-effects a great bar to its usefulness. The only ill-effects he describes, however, are excitement and delirium in two cases of pleuro-pneumonia in which death occurred from heart failure. These six observers comprise the list of those in whose judgment the evil effects are of such a kind as to limit materially the drug's usefulness.

The remaining 214 observers express a contrary opinion. The large majority of them—73 per cent. have not observed any special ill-effects at all, other than an occasional slight rash, and as an ill-effect this cannot seriously be regarded. And even among those who have met occasionally and in isolated instances with ill-effects, with the exception of the six above noted, the opinion is general: that the usefulness of the drug is in no way affected by their occurrence; that the advantages accruing from its action far outweigh its possible and exceedingly infrequent disadvantages; that ill-effects, when met with, are due to abuse of the drug, either from too big doses or too long continued use.

It is clear, however, from the reports that the potency of the drug for evil is fully recognised, and the necessity for careful watching of its action and to be careful not to repeat it too frequently is insisted on by a number of observers. Among the precautions to be adopted the most useful and generally recognised one is to begin with small doses, not exceeding 10 grains. To give as a routine practice doses of 20, 30, or 40 grains, as some have been in the habit of doing, or, as in one instance, to give 30 grains every hour, must inevitably be attended from time to time with ill-effects, and that, too, of the gravest character.

Summary.

To sum up, then, in a few words, the results of the inquiry as regards antipyrin: When we consider

(1) The large experience of this drug represented in the reports, and, on the other hand, the comparatively small percentage of observers—28 per cent.—who have met with any ill-effects worthy of notice;

(2) That even when ill-effects are recorded, they have occurred as isolated instances out of many hundreds of cases;

(3) That in the large majority of these instances the dosage has been injudiciously high or too long continued—that, in short, there has been in most cases a very direct relation between the dosage and the occurrence of ill-effects;

The conclusion is warranted that, so far as the reports go, the ill-effects are not of the frequency or importance ascribed to them by a widespread impression. The large majority of observers agree in stating that they are of no importance whatever, and that with reasonable and judicious care they limit in no way the general usefulness of the drug as a therapeutic agent.

ACETANILIDE (Antifebrin).

The amount of experience with this drug represented in the reports is very much smaller than that with antipyrin. The reports regarding its action are generally much less complete. Beyond stating that they have had some experience of the drug, many observers say little or nothing with regard to it, sometimes even omitting to state the dosage they employ. The reason of this in most cases is that they have found either antipyrin or phenacetin more satisfactory: and their experience with one or other of these being correspondingly larger, they devote their report mainly to them. In no single instance is the experience with this drug stated to be large; indeed, in only 44 out of 100 reports (44 per cent.) relating to its use is it even considerable.

While this circumstance might appear at first sight to render the reports as to the action of this drug of comparatively little value, in another respect it actually serves to enhance their value when we consider the severity and the frequency of the ill-effects which observers have to record. As regards the purpose for which antifebrin has been employed, this has been mainly as an antipyretic, and to an altogether subsidiary extent as an analgesic. Even as an analgesic, however, a few observers speak of it as of value; but these are exceptions, and the majority have used it chiefly as an antipyretic, especially in the acute febrile affections of childhood.

Nature of Ill-effects.

The following is a list of the chief ill-effects noted by different observers. As before, when the actual dose which occasioned the ill-effect is not stated, the usual dose employed by the observer is given within brackets.

Table II.

No.	Nature of Ill-Effect as specified by Observer.	Dose in Grains
1	Alarming collapse more than once	(4)
2	Excessive sweating, cyanosis, feebleness of pulse, and partial collapse, comparatively frequent	(2 to 5)
3	Cyanosis after repeated doses	(5 to 10).
4	Cyanosis on two occasions	7 every 4 hours.
5	Cyanosis and collapse once after a double dose.	(10).
6	Collapse in two children	(6 to 10).
7	Cyanosis and collapse in one or two cases	Not stated.
8	Cyanosis and depression	(5).
9	" "	(10).
10	Cyanosis	7½.
11	Collapse and death	Not stated.
12	Collapse after continuous doses of 7½ grains	(5 to 10).
13	Collapse after 10 grains	(2 to 3).
14	Undue perspiration and depression	(5).
15	" "	(8).
16	Collapse	(8 to 10).
17	Depression	(6 to 8).
18	Palpitation and collapse	(2 to 20).
19	Great cyanosis after 2 doses of 10 grains each	(5 to 8).
20	Cyanosis once	(4 to 8).
21	Cyanosis, profuse perspiration, and partial collapse	(10).
22	Cyanosis and collapse	(8 to 10).
23	" "	(3 to 10).
24	" "	(5 to 10).
25	" "	(8 to 10).
26	Collapse in phthisis even after 2 grains	2.
27	Alarming collapse in a child by a second dose.	3.

When the characters of these ill-effects are compared with those described after antipyrin, an important difference is to be noted. With the latter mention was most frequently found of "depressant" and "enfeebling" action, only rarely of cyanosis, and still more rarely of collapse. With antifebrin, on the other hand, cyanosis, with or without collapse, but usually with it, seems to be the chief—almost the invariable—ill-effect noted.

The difference in the two cases is instructive; it points to a radical difference, not so much in the physiological action, for that is exerted in both cases chiefly on the circulation and the nervous system, as in the power of the two drugs. Antifebrin is a much more powerful drug than antipyrin—a fact very far from being generally realised if one may judge from the doses which many observers seem habitually to employ. Indeed, speaking generally, it may be said that 2 grains of antifebrin is, as regards its general therapeutic effect, equivalent to about 10 grains of antipyrin. It is this figure, rather than that of higher ones (4, 6, 8, and even 10), of which mention is so frequently made, that

should be borne in mind as the proper initial dose of this drug. It will presently be considered to what extent the dosage employed has, in the case of antifebrin, as in that of antipyrin, been accountable for the ill-effects noted.

THEIR COMPARATIVE FREQUENCY.

The list of ill-effects noted with antifebrin is not only a very formidable one in itself, but, unlike the case of antipyrin, it loses none of this character when we consider the frequency of their occurrence. In the case of antipyrin, notwithstanding a very large experience of the drug, only 27 per cent. of observers (37 out of 189) had any ill-effects to describe. With antifebrin, on the contrary, from a much more limited experience (not exactly estimable, but probably not exceeding one-hundredth), as many as 44 per cent. of observers (44 out of 100) have met with ill-effects. This fact must be regarded as pointing to the much more frequent occurrence of ill-effects with this drug than with antipyrin. It is probable that the recognition of this has to some considerable extent contributed to the preference which is given by most observers to antipyrin over antifebrin.

A further difference in the case of the two drugs is to be noted—namely, that while most of the cases in which ill-effects have followed the use of antipyrin have been isolated instances in the experience of the individual observers; with antifebrin, on the other hand, out of a much smaller experience, dangerous effects have been noted several times by the same observers.

So far, then, as these reports go, we must conclude that ill-effects following the administration of antifebrin are both absolutely and relatively more frequent in their occurrence than is the case with antipyrin.

THEIR IMPORTANCE.

The importance to be attached to them is also greater than we have seen to be the case with antipyrin. This is evidenced in several ways, both directly and indirectly, in these reports. In the first place, the ill-effects are of a more severe character and more frequent occurrence than with antipyrin; secondly, with but few exceptions observers are agreed that the action of this drug requires more careful watching; and, thirdly, there is the indirect evidence afforded by the preference which the great majority of observers give to antipyrin or phenacetin over antifebrin. This preference may, of course, be due to the greater range of usefulness of antipyrin as compared with antifebrin, and be independent altogether of their relative powers for evil. Be that as it may, it is clear from the list of ill-effects noted with antifebrin (Table II) as compared with that found with antipyrin (Table I) that so far as ill-effects are concerned the preference must be given to antipyrin. Notwithstanding these ill-effects, a few observers still give the preference to antifebrin. Thus one who had not met with any ill-effects from antipyrin, but had more than once observed alarming collapse with antifebrin, expresses his opinion that antifebrin is the most perfect antipyretic we have. Another, who observed great cyanosis after two doses of 10 grains, nevertheless considers that the ill-effects are of no importance. And a third even goes so far as to say that ill-effects are more common with antipyrin than with antifebrin. Most, however, consider that the liability to the occurrence of ill-effects does to a certain extent interfere with the usefulness of the drug, the chief drawback being its markedly depressant action.

We have now to consider the two points we have seen to be of importance in gauging the relative importance of ill-effects following the use of a drug, namely, the relation of these to the dosage employed, and the circumstances of each particular case.

1. *Relation of Ill-effects to Dosage.*—No such direct relation is here to be made out as was seen to be the case with antipyrin. The dosage employed appears to have been much the same with those who have observed ill-effects as with those who have not. In both cases the proportions are almost the same, 72 and 75 per cent. of observers respectively having used doses of 4 to 10 grains as their minimum. This difference in the case of these two drugs would be an interesting one if it could be clearly established. If it could be shown that the occurrence of ill-effects was to a certain extent independent of the largeness of dose, this fact more than any other would tend to prove that antifebrin was more inconstant in its action, and correspondingly more dangerous than antipyrin.

A powerful drug can be used with safety so long as its action is a fairly constant one, varying chiefly with the dose employed. Danger at once arises, however, if, along with the power of doing harm in over doses, the drug is found to be uncertain in its action. In the case of antifebrin, the evidence we are now considering would appear to point to its being less safe and less constant in its action than antipyrin. It is probable, however, that with more data to go on than are to be found in these reports it may appear that with it as with antipyrin ill-effects were generally brought about by injudicious dosage. A large number of observers do not state any dosage at all.

And, indeed, when we consider (2) *the particular circumstances* under which ill-effects are described (Table II), the conclusion is, perhaps, admissible that the dosage employed by observers in the case of this drug has been singularly injudicious. Similar large doses have apparently, however, been given by others without any ill-effects.

SUMMARY.

Notwithstanding the experience of many apparently to the contrary, the conclusion must be permitted that to give antifebrin in doses of 5, 6, 8, and even 10 grains, still more to repeat these after a short interval, is a highly injudicious procedure. Such doses are altogether excessive. They are equivalent to about 25, 30, 40, and 50 grains of antipyrin. The repute of the drug has probably suffered in the past from the circumstance that this fact of its greater strength has been overlooked. Indeed, the dosage employed has been so large as to lead one to surmise that in the minds of many observers antifebrin is regarded as a drug of the same strength as antipyrin.

PHENACETIN.

The amount of experience of this drug represented in the reports is about the same as that with antifebrin, if anything probably larger. It is apparently not so widely employed as the latter, only 80 observers reporting regarding it as compared with 100 who report regarding antifebrin. A somewhat larger proportion of this number, however, already possess a considerable experience of its action—namely, 55 per cent., as compared with 44 per cent. in the case of antifebrin. It has been used largely both as an antipyretic and as an analgesic, and apparently with equally good results. This drug appears to be in exceedingly good repute with those who have any extensive experience of it, more especially as an analgesic.

NATURE OF ILL-EFFECTS.

Out of a total of 80 observers, only 7 have any ill-effects to record

TABLE III.

No.	Nature of Ill-Effect, as specified by Observer.	Dose in Grains.
1	Collapse on one occasion	5 every 3 hours for 3 days.
2	Extreme weakness, cyanosis, and feebleness of pulse	(10 to 15 every 4 hrs.)
3	Cyanosis once	7 every 4 hours for 3 days.
4	Slight giddiness once	(5 to 10).
5	Depression, although not often	(5 to 10).
6	Lividity and diaphoresis	(10 to 20).
7	Subnormal temperature, coldness, shivering ...	(5 every 4 hours).

If we eliminate the last 4, in which the ill-effects described are obviously of slight degree and importance, there remain only 3 where the ill-effect was at all specially marked. And it was of the same character as that already noted with regard to antipyrin and antifebrin, namely, cyanosis and collapse. They were only met with on one occasion by each observer, and their presence is sufficiently accounted for by the dosage used, namely, 5 grains every three hours for three days, 10 to 15 grains every four hours, and 7 grains every four hours for three days.

FREQUENCY AND IMPORTANCE.

Ill-effects with this drug have thus, so far as the experience in these reports goes, been strikingly infrequent. As regards the importance attached to them when they have been met with, only one (No. 5) of seven observers who have noted them has been led on their account to prescribe the drug less frequently. The others expressly state that they are of no importance whatever, and affect in no way the great value of the drug. There is, indeed, striking unanimity amongst observers as to the great value of this drug, especially as an analgesic.

As regards the dosage employed, observers are about equally divided, one-half using 5 grains or less to begin with, the other half using doses of 8 to 10 grains.

The drug appears thus to have a notable freedom from injurious action. Doubtless, if used injudiciously, it would, like antipyrin or antifebrin, although possibly to a smaller degree, produce similar untoward effects.

GENERAL CONCLUSION.

As regards their freedom from ill-effects, so far as these reports show, the drugs may be placed: (1) Phenacetin, (2) Antipyrin, and (3) Antifebrin.

THE HEALTH OF THE PRINCESS OF WALES.

VARIOUS disquieting rumours have been current during the week regarding the health of the Princess of Wales. We have, however, excellent authority for the reassuring and satisfactory statement that Her Royal Highness is now progressing satisfactorily, and that there is no reason for alarm. We understand that, after passing through an attack of influenza, Her Royal Highness suffered a relapse which so seriously affected the throat that fears of diphtheria were entertained. Under these circumstances we believe that Sir William Broadbent was hastily summoned from London. These symptoms, however, quickly passed away, and since then there has been no reason for anxiety. Unfortunately, influenza is a malady which leaves considerable debility and demands care during convalescence—a necessity which has involved arrangements suggesting to some a present danger which we are happy to be able to state no longer exists.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE CITY OF LONDON LUNATIC ASYLUM.

ADMISSION OF PAYING PATIENTS.—From the last annual report we learn that the percentage of recoveries calculated on the admissions was 28.73. This low percentage is accounted for by the admission of a large proportion of incurable cases. In fact, at the close of the year 1892 there were only 11 patients in the asylum who were deemed curable. Post-mortem examinations were made in 32 out of the 35 patients who died, and the proportion of deaths to the total number under treatment was 7.02, or 1.17 per cent. below the average of similar institutions. We are glad to note that the Committee have availed themselves of the power conferred by recent legislation and have commenced to admit paying or private patients. This will prove a great boon to many a little above the pauper class who can afford to pay the reasonable charge of 21s. per week, and we are not surprised to find that in the first year of the experiment there were 26 private patients admitted. Dr. Ernest W[illegible] the medical superintendent, reports favourably of the change of dietary which has been effected during the year, with the result that the patients are healthier in appearance, and in most cases have gained weight. There were no cases of typhoid fever occurred, due probably to defective [illegible] drainage, and this is receiving the attention it urgently needs.

WESTERN OPHTHALMIC HOSPITAL, MARYLEBONE ROAD.

MR. HASTINGS NEALE forwards us the following extract from the minutes of a special general meeting of governors of this hospital, held on December 28th, 1893, with the request to our opinion thereon:

[illegible] to the hospital and to frame rules. [illegible] was carried by a large majority, there being no votes against, but two governors did not vote:

'That in future the hospital be absolutely free. That no single person whose income exceeds 30s. shall be eligible as a patient. No married persons whose joint income exceeds 5l. excepting where there are more than four children, when the limit is to be £2 15s. Unless an investigation should show any reason to the contrary, this rule to be rigidly observed.'

It was further unanimously resolved that the framing of rules to carry above resolution into force be referred to the committee.

We have much pleasure in giving publicity to the step which the governors of the Western Ophthalmic Hospital have taken towards freeing that institution from the incubus of the "hospital-letter" system. No doubt that system is one which is oppressive to the poor and unsatisfactory to the subscribers. The former, if deserving and really ill, are put to serious annoyance and hardship by the necessary search for letters, while the latter have really no means, and often no leisure, to discriminate between the deserving and undeserving applicants, the appropriate and inappropriate cases.

We have received several letters bearing on this matter published in a Birmingham paper, which testify to the fact that public attention is now becoming awake to the evils of this system. So far, therefore, the governors of the Western Ophthalmic Hospital have our hearty good wishes for the success of their efforts to convert their institution into a "free" hospital. But in this, as in most things, the method is of as much consequence as the aim. Hitherto the governors have merely resolved on the establishment of a wage limit. We feel rather doubtful whether this, though it is no doubt an important, ought to be the sole, consideration in fixing the eligibility of a candidate for hospital treatment.

It seems obvious that a person who requires long or expensive or difficult treatment is less able to pay for it than one of the same pecuniary position whose case is less grave; so that it seems to us to follow incontestably that the medical nature of the case ought to be taken into consideration as well as—and even, we should say, before—the patient's pecuniary circumstances. This can be done by requiring a medical certificate with all cases which are not urgent. We must again repeat that the vast majority of out-patients, ophthalmic and others, are suffering from diseases which are in no respect urgent, and in which a short delay for ascertaining their suitability for hospital treatment is of no consequence whatever; and further, that they are as able to pay for their medical treatment in ordinary exigencies as for any other necessary of life, and ought to do so, whether on the provident principle or otherwise. At the same time, if the disease is obstinate or complicated, the medical attendant may well wish to refer the case to a hospital either for an opinion or for treatment.

An inquiry, therefore, into the mere pecuniary condition of the patient seems to us unsatisfactory. Yet even this inquiry is by no means a simple matter. If insisted on, it must be made a reality, and can only be made so by means of some such machinery as is adopted by the Charity Organisation Society—and everyone knows how unpopular such methods are with the working classes. So that it seems to us that the governors of the Western Ophthalmic Hospital have undertaken a task the difficulties of which will become daily more and more apparent. Still, any honest effort to render medical charity more discriminating and more effectual deserves support, and we wish the present attempt all success.

FIRES AT LONDON HOSPITALS.

A FIRE broke out, early on the morning of January 5th, in the upper storey of the City of London Hospital for Diseases of the Chest, Victoria Park, E., which was not subdued until some considerable damage was done. One of the night nurses noticed a smell of burning in the attics, and opening the door discovered the corridor to be in flames. An alarm was raised, and the patients were removed under the supervision of the resident house-surgeon to a place of safety without any injurious effect. The firemen, who arrived soon after the alarm, extinguished the flames within an hour. The conflagration was confined to the upper floor and the roof. The origin of the outbreak is unknown, but it is thought to be due to a defective flue.

On January 6th a fire broke out at the Royal Free Hospital, Gray's Inn Road, but, owing to the prompt and energetic action of the officials of the institution, the outbreak was prevented from causing extensive damage. The room in which the fire occurred was one of the top isolated wards. It was much damaged, as was also an apartment below used as an isolated ward, and the board room.

EDINBURGH ROYAL INFIRMARY.

THE annual meeting of the contributors to the Edinburgh Royal Infirmary was held on New Year's Day, the Lord Provost presiding. From the report submitted, it appeared that the daily average of children in the hospital was 72, the great majority of whom were in the surgical wards. The daily average of adult patients was 690, the maximum at any one date 731, and the minimum 561. The average time under treatment was 28.4 days, as against 27.4 in the previous year; 4,133 patients were admitted from the country districts. The percentage of deaths to the whole of the medical and surgical cases under treatment was 7.09; deducting the deaths (142) that occurred within forty-eight hours after admission, the percentage falls to 5.40; 25,000 out-patients were treated. Till the projected larger extension of the hospital has been effected increased accommodation of a temporary kind had been provided in the property belonging to the Corporation in Lauriston Lane. The extension of the Convalescent House at Corstorphine had increased the accommodation by 40 beds, large day rooms, etc., and the home now contains a daily average of 77 patients.

METROPOLITAN HOSPITAL SATURDAY FUND

FROM the report of the Council of the Hospital Saturday Fund just issued, it will be seen that the receipts from the workshops to November 25th were £10,847 as against £11,215 in the corresponding period of last year; and the street collection this year amounted to £5,095 as against £5,684 in 1892. Even with a balance of £1,114 remaining from 1892 as against £240 reserved from 1891, the total income of the fund on November 25th was £17,056 as against £17,176 at the corresponding date last year. The diminution of receipts is mainly attributed to trade depression.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

SUBSCRIPTIONS to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, JANUARY 13TH, 1894.

MEDICAL FORTUNES.

IN *Dr. Chesterfield's Letters to His Son on Medicine as a Career*, recently published by Sir William Dalby, it is stated "that at the same time in London there are not more than four or five general physicians, and perhaps half-a-dozen surgeons who make more than five or six thousand a year." A study of the wills of eminent medical men leads to the conclusion that Sir William has here very fairly stated the chances of a young man as regards making a fortune by his profession. It is, however, not possible to draw any satisfactory conclusion from the amount of money left behind as to the professional success or non-success of any man. The keen man of business, with a sharp eye for good investments, will turn the receipts of a moderate professional income into a respectable fortune: whilst his neighbour, with a larger income but with no business capacity and an inclination to a more lavish expenditure, will not much more than just support himself in the style to which he is entitled.

Private liberality and charity during life must also be taken into account in estimating the pecuniary success of a man's career. The man who leaves a large fortune with liberal bequests to many charitable objects may have been greatly exceeded in good works by one of his fellows who, whilst living, distributed of his abundance as circumstances at the time dictated, and yet who left few bequests and no will of sensational magnitude.

In the comparison of the wills of medical men who have made large fortunes, a wrong impression is frequently formed through no notice being taken of the fact that the amounts under which the wills are sworn refer to personality only.

It has been said by an eminent surgeon of the present day, himself a great collector, that if you are acquainted with a professional man of note and have not yet found out that he is a collector you may feel sure that you do not yet know your man. If this be true, and there is every reason for believing it to be so, it is another difficulty in arriving at the professional earnings of a man from the amount of his will. For he, indeed, must be a successful collector whose collection at his death is valued at an amount in any way approximating to its original cost. Of this no better example can be adduced than John Hunter, to whom a new object for his museum was of more importance than the professional guinea about which he spoke so contemptuously to his friend Lynn. In the *Star* for October 26th, 1793, it is stated that "the late Mr. Hunter's practice is supposed to have produced him £15,000 in the last three years." His museum was purchased for £15,000, and his pictures, library, etc., fetched about £1,300: his family were in actual want until these amounts were realised, so greatly had he impoverished himself by his love for his museum.

Dr. Mead may also be taken as another example of the collector, though he also comes under the head of those successful men who have diminished their fortune by hospitality and generosity. His library and curiosities were sold for £16,000, and his other property for £35,000; after payment of his debts he left £20,000 to be divided amongst his children. Mead's income is said to have been between £5,000 and £7,000 a year. In comparing this with incomes of the present day the difference in the value of money then and now must be taken into account.

The dowry of a wife must not be overlooked in discussing a man's professional success by the light of his fortune, though this is not so openly stated as was formerly the custom. In *Lloyd's Evening Post* for July 30th to August 1st, 1770, we read that "Mr. Philips, surgeon, at Croydon, to Miss Mount, of Mitcham, with a fortune of £30,000, which was left her by an uncle, who died about a month ago."

The figures on a man's will are often no real indication of the part he has taken in the advancement of the healing art. Many instances might be brought forward of men who have materially increased our knowledge of diseases and their treatment, and yet who have died comparatively poor men. Their work is their monument, and is more lasting than the huge fortunes of their more successful brethren. The personalty of Sir Benjamin Brodie was sworn under £18,000, that of Sir William Lawrence under £40,000, and that of Dr. Murchison under £50,000, chiefly inherited. The will of Sir William Gull, which was sworn under £344,000, is generally quoted as the largest amount left by a member of the medical profession. This, however, was exceeded by Dr. Blundell, who died in 1877, and left a fortune of £350,000. Amongst other wills of six figures may be mentioned Sir Erasmus Wilson, £264,000; Sir Andrew Clark, £204,000; Sir Oscar Clayton, £146,000; Sir George Burrows, £104,628; Sir William Bowman, £103,948; and Sir C. Locock, £100,000.

Sir Astley Cooper must have made a large sum by his practice; his income is said to have been £15,000 for many years, and in one year to have reached £21,000: his will was sworn under £80,000.

Of the fortunes made by members of the medical profession very little has been left to institutions connected with that body. A notable exception to this stands out in the munificent bequest of Sir Erasmus Wilson to the Royal College of Surgeons, by which that corporation received £200,000; in addition to this bequest, Sir Erasmus left £5,000 each to several institutions and charities connected with the medical profession.

The name of John Radcliffe, too, must not be overlooked in this connection. By his will he founded what are now known as the Radcliffe Travelling Fellowships in the University of Oxford. The will declares that £60 shall be paid yearly to two persons to be chosen out of the University of Oxford and "entered on the physic line," the money to be for their maintenance for the space of ten years, the half of which time at least "they are to travel in parts

beyond sea for their better improvement." These conditions have now been so altered that there are three Fellowships, each of the annual value of £200, and tenable for three years. The condition of foreign travel still holds good. The Radcliffe Infirmary has also been erected by the trustees of the will. In addition to these the Radcliffe Library, now housed in the University Museum, which is one of the finest scientific libraries in the world, is entirely supported by the Radcliffe trustees. In the will there are no directions as to the character of the library; it is, therefore, owing to the trustees and to the successive librarians that so large a part of the library is devoted to the literature of Radcliffe's profession. Besides the Oxford liberality of Radcliffe, his trustees were enabled to make a grant of £2,000 towards the building of the home of the Royal College of Physicians in Pall Mall East; St. Bartholomew's Hospital has also come in for a share of the money accumulated under the trust. Much of the good done with Radcliffe's money is due to the fact that the trustees were left free to spend the surplus of the money not devoted to definite objects as they thought fit.

Another exception to this rule is the will of the late Mr. Brickwell, of Tottenham, who died during 1893, and who left the residue of his estate to the Society for the Relief of the Widows and Orphans of Medical Men. According to an article in the *Daily Telegraph* on the wills of 1893, this residue is likely to amount to £30,000. The ability to leave these large legacies comes to but few, and the main body of practitioners will agree with Socrates that "A physician is a ruler of bodies and not a maker of money."

POISONING BY MISADVENTURE.

III.

In considering the difficulties which have to be overcome in the endeavour to secure a more reasonable and efficient administration of the Pharmacy Act, the most important point to bear in mind is the intention of the Legislature at the time the Act was passed. Broadly, that intention was to provide for public safety in regard to poisons, as expressed in the preamble. That being the case, it is reasonable to infer that the more specific provisions of the Act were designed with the intention of efficiently securing the object there stated. Though the precise terms of those provisions were necessarily adapted—as in all Acts of Parliament—to existing knowledge of the circumstances to be dealt with, the object they were then intended to effect was made sufficiently clear to admit of the Act being construed in accordance with that object whenever questions arose as to particular details of its application. Thus, for instance, in the litigation relating to companies carrying on the business of chemists and druggists, the House of Lords decided that, though the terms of the Act implied only individual qualification, the safety of the public requires that every seller of poison must be qualified, whether he sells on his own account or as the servant of a company.

By a more recent construction of the Act it has been decided that a medicinal compound, containing among its ingredients one or more scheduled poisons, is subject to the provisions for labelling and for restriction of sale by which it was intended to protect the public against risk of accident. Mr. Justice Lawrance construed the existing statutory "exemption of such compounds as applying only to cases where there is the protection of having a person supposed to know how to deal with poisons;" as, for instance, in the supply of medicine by a duly qualified medical practitioner or pharmacist; and Mr. Justice Collins took the same view as to the intention of the Act.

That decision has been to a large extent accepted as applying generally to proprietary medicines containing poisons. But it was accompanied with an important qualification as to the amount of poison that is sufficient to bring a compound within the scope of the Act. Opportunity has thus been afforded for raising that question for the purpose of obtaining exemption for certain proprietary medicines. This is one of the grounds upon which grocers and others are opposing the steps taken by the Pharmaceutical Society to prevent the sale of proprietary medicines containing poison by unqualified persons. In a case tried at Manchester his Honour Judge Heywood decided that proof of the presence of poison was not alone sufficient to establish liability under the Act, and that evidence must also be produced to prove the presence of a substantial quantity of the poison. That decision was upheld by Justices Charles and Wright on appeal to the High Court. Our readers, who are acquainted with the mischievous consequences resulting from the indiscriminate sale of narcotic preparations such as soothing syrups, etc., will appreciate the difficulty thus created in regard to the administration of the Pharmacy Act. It is also evident that if this view be acted upon, serious responsibility will be incurred by judicial authorities who give it their support. The circumstances that would influence a suitable application of the principle *de minimis non curat lex* are so numerous and so variable that it would be far more consistent with the object of the Act to regard the presence of a poison—in any amount sufficient to make a medicinal compound subject to its provisions.

The common sense view adopted by Judge Bacon—that the whole mischief which was intended to be prevented by the Pharmacy Act would be allowed if it were once admitted that when poison is mixed with water or with anything else it ceases to be poison within the meaning of the Act—appears to be as reasonably applicable to preparations containing poison in small amount as it is in other cases. There is nothing in the Act which would admit of liability being determined on the basis of poisonous quantity of any one of the articles included in the poisons schedule, and if the application of the Act is to be limited by considerations of quantity a large number of preparations, such as those above mentioned, might be excluded although they are well known to be dangerous.

Another ground of opposition to the action now being taken by the Pharmaceutical Society in the administration of the Pharmacy Act, is the allegation that this action is instigated by the desire to create a monopoly in the sale of preparations to which the Act applies. This argument is sufficiently plausible to command some attention on that account. To a certain extent it is supported by the fact that more stringent application of the Act would also have the effect of confining the sale of many articles to registered chemists and druggists. But apart from the mere plausibility of the objection to that result it is impossible to recognise any better foundation for it. In fact, the restricted sale of the articles in question

must be inferred to have been within the intention of the Legislature, and the long continued disregard of that intention has only been made possible by concealing the presence of poison in proprietary medicines. It has been stated that the influence of the owners of those preparations was so considerable that they would have been able to prevent the passing of the Pharmacy Act if the exemption of "patent medicines" had not been intended to have a non-natural meaning. Such a view is strangely at variance with the known state of public feeling with regard to poisons at that time, and it appears very much more probable that if the presence of poison in proprietary medicines had been as well known then as it is now, the provisions relating to proprietary medicines would have been proportionately stringent.

But however that may be, the principle embodied in the Pharmacy Act has been found sufficiently plain to admit of being applied to the facts which have subsequently become known. We take credit for having shown that in a large number of cases the sale of proprietary medicines involved breach of the law, and we are gratified to find that some progress has been made towards regulating the sale of such articles with due regard for public safety. By proper labelling, and by confining the sale to properly qualified persons, that object may be attained, and we see no just ground for reproaching the Pharmaceutical Society with selfish motives for the course it is taking to that end.

It must, however, be remembered that a great length of time has been allowed to elapse without any attempt having been made by the Society to enforce the Act in regard to proprietary medicines. That does create some practical difficulty. The circumstances already referred to in the previous article are no doubt explanatory of the fact. The Council of the Society is, in regard to the body of members, so entirely an executive body, that its action must be considered as the exponent of their general feeling and opinion, influenced to some extent, also, by the tendencies of the larger body of the trade. But while adopting that view, as accounting for previous inactivity in the administration of the Pharmacy Act, the question whether that duty should be exclusively entrusted to the Society naturally arises.

Some years ago a proposition was made to transfer to the Privy Council the powers conferred upon the Pharmaceutical Society by the Pharmacy Act, and a Bill was introduced into Parliament with that object. It was strongly opposed by chemists and druggists generally, and was eventually withdrawn. There are, however, various reasons for thinking that a function of such public importance should not be left altogether in the hands of a voluntary society. It has been seen recently that the action taken by the Public Prosecutor, at the direction of the Treasury department, was discontinued, inasmuch as the power of further procedure was limited to action under one section of the Act, while the larger and more important power of regulating the sale of articles containing poison is vested in the Pharmaceutical Society. That fact, as well as the plausible nature of the objections which have been raised to the prosecutions instituted by the Society, and the successful result of some of those objections, are all circumstances which point to the desirability of placing the administration of the Pharmacy Act—as a measure of public interest—upon some different footing than that which it has hitherto held. Though chemists and druggists have long been officially recognised as members of a privileged body, they have hitherto shown but little capacity for self-government; the few who are desirous of promoting educational and general improvement being overruled by the inertia of the majority. External control, such as is exercised in Continental countries, would, therefore, probably be beneficial even in this direction.

As a consultative and advising body, the Council of the Pharmaceutical Society must naturally be in a position to render valuable service in promoting action to regulate the sale of poisons. Its assistance, in that capacity, may be considered indispensable, whatever altered arrangements might be adopted in regard to executive action. It is in this latter respect that there is reason to believe beneficial results might be secured for all concerned by a well-considered plan for the more effective administration of the law relating to the practice of pharmacy and all matters connected with it.

CONSULTANTS.

THE series of opinions of eminent consultants in London and elsewhere, recently published in our columns, have placed various aspects of the case before the profession, and it will not be inopportune to review some of the points which have been raised.

It is admitted that if not in all yet in most cases "physicians" practise as the family and personal attendants of those who care to employ them and to pay their fees, and it may well be said on behalf of the general practitioner that, this being the case, the "physician" is really no more a consultant than he himself is, seeing that a general practitioner of experience is not infrequently called in consultation by his brethren. Thus the consulting position given to certain practitioners in large towns is rather a matter of custom and convention than of a well-defined status. The only apparent determining condition is that a "consultant" must either be, or have been, or look forward to be on the honorary staff of a hospital. This condition does, of course, indicate an important qualification. The term "physician" has lost, and we think properly lost, any connotation of consulting rank. To confine this term to those practitioners who are or who might be Members and Fellows of the College of Physicians seems absurd. Every practitioner who has taken a qualification in "physic" properly calls himself a physician whatever else he may be, and is unwilling to be known as "the doctor" in common with the gentleman who attends upon the cows.

Nor, again, can we admit, either in reason or in fact, that to be of consultant rank implies the Membership or Fellowship of the College of Physicians. There are many distinguished physicians to whom the title of consultants in the ordinary sense is properly applied, who neither are Members of that College nor have any intention of becoming Members. The College of Physicians has certain prescriptive rights in London, which compel physicians who seek hospital posts to enter its ranks; this, however, is but a metropolitan matter, and does not determine the quality of the individual or of his kind of practice.

For our own part we are disposed to think that "consultants," surgical or medical, should not attend patients alone at their homes, and that patients should not be encouraged to call so continuously upon a consultant as

to make the calls an "attendance." A consultant, whether in his own house or at the patient's home, should, in our opinion, see the patient not regularly but occasionally.

There are many medical consultants who decline to visit alone, and who generally indicate to a caller who is seriously and persistently ill that it would be well to associate a general practitioner with the consultant in the case. In our view there is a twofold distinction between a consulting physician or surgeon and a general practitioner: first, that the consultant is a specialist; secondly, that he has had a different kind of education.

The consulting physician is a specialist in medicine proper, and we will not stay to prove that in a field so large as that which is covered by our profession there must be specialism, although we must be careful to see that the abuses of specialism, like the abuses of any other system, are prevented. A consulting physician or a consulting surgeon does not, as such, pretend to know any more than a general practitioner so far as quantity of knowledge is concerned, but by concentrating his attention upon certain parts of our calling he pretends to a profounder knowledge of these particular parts; for this reason he is a consultant, and not because he belongs to this guild or the other.

Secondly, the consultant has a different kind of education. This education is not of the schools, for although specialism in practice cannot be discouraged, specialism in the schools is abominable. The difference of education to which we refer begins after graduation; the general practitioner then throws himself into the multifarious practical duties of the day in order to gain readiness of resource, variety of experience, and the many little dexterities which are only to be attained by being thus incessantly versed in these uses. The consultant, on the other hand, for his immediate discipline and later advantage, has time upon his hands for five or ten years, in which he is able, if he be worth his salt, to enlarge his mind by copious reading and by scientific and clinical research. Thus he becomes not only a specialist in the narrower sense of the word, but also gains a scientific experience and a grasp of the theoretical or philosophic side of his subjects which are unattainable by one engaged in the urgent avocations of general practice, and to whom anything like continuous study or research is impossible.

A consultant and a general practitioner seem to us thus marked out by the bent of their lives for somewhat different duties, and as the kind of life which makes a first-rate family physician does not make a first-rate consultant, so, on the other hand, do we think that a consultant is not well adapted for the multifarious duties of a family physician.

The Conseil Général of the Seine Department has given 500 francs to the fund for the erection of a memorial to Charcot.

The Croonian Lecture of the Royal Society will this year be given by Dr. Ramon y Cajal, the distinguished Spanish physiologist, who has chosen for his subject "The Structure of the Nervous System."

The Saturday evening address at Toynbee Hall on January 20th will be given by Mr. Ernest Hart, who will deal with the subject of the Responsibilities of the Press, especially in respect to Quacks and Patent Medicines. Medical men will be welcomed.

We regret to announce the death of Dr. A. T. Myers, Physician to the Belgrave Hospital for Children, and late Medical Registrar of St. George's Hospital, which occurred at his residence, No. 2, Manchester Square, on the morning of January 10th. Dr. Myers, who was well known by his researches into medico-psychological problems, had been in failing health for many months. Dr. Myers was among our oldest and most valued contributors.

A course of practical psycho-physiology to be held during the Easter term has just been inaugurated at University College, to be conducted by Professor L. E. Hill. This is, we believe, the first course of the kind given in an English laboratory, and we gather from the syllabus that the ground to be covered is mainly that of the physiology of sensation. This portion of physiology is of the greatest importance to students of medicine, and only too liable to receive scanty attention in the ordinary physiological curriculum. We may notice further, to guard against any misconception of the prefix "psycho," that the matter treated of in Professor Hill's syllabus is not likely to prove attractive to students of "literary" psychology.

LEITH AND THE NOTIFICATION ACT.

At length there seems some prospect of Leith amending its ways in relation to public health. A serious proposal has been made to adopt the Infectious Diseases Notification Act at an early date. Leith has of late weeks been severely touched by small-pox: hence, doubtless, this move. Four new cases of small-pox were reported last week, of which three were admitted to the hospital. Three deaths were reported during the same period.

TYPHOID ON THE RIVIERA.

Travellers to the Riviera should be warned that near Ventimiglia, on the Italian-French frontier, a serious outbreak of typhoid fever has occurred, which, appearing first in the barracks of the Alpine troops at Pigna, has spread to the civilian population. The local health officers have traced the epidemic to the impure water supply. Water supplies are habitually impure and unreliable on the Riviera: indeed, throughout the Continent a traveller who trusts to them for his drinking water has great risk of typhoid or diarrhœal diseases.

VACCINATION AND SMALL-POX.

Mr. Charles E. Paget, the medical officer of health for Salford, has prepared a special report on the prevalence of small-pox in the borough during the years 1892-3. The report contains a number of instructive tables, the second of which shows that the greatest incidence of the disease was in both sexes, between the 15th and 40th years of life, when the protection given by vaccination in infancy had become partly worn out, and ought to have been repeated. Table III states that the percentage mortality among the vaccinated was 6.8 as against 34.3 among the unvaccinated, and 16.7 among those in whom vaccination was doubtful, that among the vaccinated under 20 years of age, none died, and that the mortality among them increased with their age above 20 years; and that, among the unvaccinated, all under 1 year of age died, and that above that age there were very high mortalities. It is very much to be hoped that the lessons taught by the Salford small-pox epidemic would become widely known throughout the borough, and would be taken to heart in real earnestness.

BRITISH PATIENTS FOR M. PASTEUR.

Recently five persons—one a servant girl aged 20, and four boys aged about 8—were bitten by a St. Bernard dog in Wavertree village, Liverpool. The dog belonged to a gentleman in Victoria Park. The cases have been under the care of Dr. Wearing. The dog was destroyed, and, after examination by Dr. Barron, of Rodney Street, was pronounced to

have been suffering from rabies. One of the boys, the son of a gentleman in Victoria Park, was sent to Paris on Saturday, January 6th, to undergo treatment at the hands of M. Pasteur. The rest followed, a fund having been rapidly formed for their maintenance and treatment whilst there.

A special meeting of the magistrates has been held at Prescot, and the muzzling order for dogs will come in force again in the West Derby district. Owing to two deaths having taken place at Renfrew from the bites of the mad dog in September last, the three men who were bitten by the dog have been sent to Paris to M. Pasteur's Institute. Two of them were bitten on the face a policeman and a workman.

THE NATIONAL LEPROSY FUND.

SIR JOSEPH FAYRER, Sir Guyer Hunter, and Mr. Jonathan Hutchinson, F.R.S., have been appointed a subcommittee of the National Leprosy Fund, to conduct such further investigations as to the nature and causes of leprosy as may seem desirable. They now announce that they are prepared to offer honoraria of 50 guineas each for the best reports on the following subjects :

1. On the facts as to the recent increase of leprosy at the Cape, and its present prevalence in South Africa.
2. On the history of the decline and final extinction of leprosy as an endemic disease in the British Isles.
3. On the extent to which leprosy prevails in Persia and neighbouring countries, and its supposed causes.
4. On the prevalence of leprosy in the Islands of the Pacific, and the supposed exemption of certain groups.
5. On the conditions under which leprosy at present prevails in China, Cochin China, Batavia, and the Malay Peninsula.
6. On the conditions under which leprosy has declined in Iceland and the extent of its former and present prevalence.
7. On the history of leprosy in Madagascar, and the conditions of its present prevalence.
8. On the reputed recent increase of leprosy on the Australian continent, its extent and possible causes.
9. Are there any islands in the East Indian seas wholly free from leprosy, and, if so, in what do their conditions differ from those in which it prevails ?
10. The best essay on any subject connected with leprosy. (The honorarium for this essay may, should the Committee think fit, be added to any one of the preceding.)

The reports must be delivered to the subcommittee, at No. 1, Park Crescent, Regent's Park, on or before December 31st.

THE AIR OF SCHOOLS.

It will not have been forgotten that a few years ago the late Professor Carnelly, of Aberdeen, with the co-operation of Dr. Haldane and Mr. Anderson, published the results of a systematic examination of the air of buildings. Before his lamented death Professor Carnelly, with the assistance of Mr. Foggie, had made a number of additional observations on the air of certain board schools, situated some in Aberdeen, others in small towns or in suburbs, and others quite in the country. The results have been published in the last number of the *Journal of Pathology and Bacteriology*. The cubic space "per person" was approximately the same in all, but it was found that the carbonic acid, and more markedly the organic matter and micro-organisms, with the exception of moulds, increased from the country to the town schools. The investigations, as a whole, show the great superiority of mechanical ventilation: in schools with this form of ventilation the carbonic was 12.3 per 10,000, the excess of organic matter (over the outside air) was 1.1 and the micro-organisms 18.5 per litre. In schools with hot pipes and natural ventilation the figures were 16.3, 6.0, and 7.8 respectively. The cleanliness of the children, and also of the school buildings, had a considerable influence on the number of micro-organisms present; clean children gave 63 to the litre, dirty 159: clean schoolrooms gave 85 to the litre, and dirty 139. Newly built schools contained fewer micro-organisms than the old, but this difference disappeared after a few years, and might even be reversed by want of cleanliness. Perhaps the most curious result was that the number of micro-organisms had an unmistakeable relation to the age of the children, the younger the children the larger the number of microbes—infants 167; Standard 1, 146; Standard 2, 106; Standard 3, 76; Standard 4, 69; Standard 5, 68; Standard 6, 51. This may, it is thought, be accounted for on the ground that the younger the child the dirtier and the more restless. The situation of the school had also a certain influence, the higher and more open sites giving much better results as to the number of microbes than the lower and less open. The effect of the weather was not very marked, but a cold, dry, calm day would seem to be one on which the number of micro-organisms is liable to reach a maximum.

EATING THE CHOLERA VIBRIO.

IT is evident, from the notices that still continue to appear in some of the technical journals, that the cholera bacillus has a strong hold on the attention of the educated public, and that Professor Stricker's experiments in Vienna appeal forcibly to the practical mind. This being the case, it is well that the results obtained by him should be carefully examined and their exact bearing on the question appreciated. It is not necessary at present, however, to do more than point out that these experiments, if they prove anything at all, prove that Koch's contention that the comma bacillus is the specific cause of cholera is accurate. Of six persons, each of whom swallowed a large number of comma bacilli contained in a fluid, only two remained unaffected by the dose: one suffered from some of the nervous symptoms that so frequently accompany this disease—headache, slight fever, and insomnia: two others had slight attacks of purging, also one of the symptoms of the disease: whilst the sixth suffered from nausea and vomiting, which apparently lasted several days after the dose had been administered. In face of these facts, it is difficult to see how Professor Stricker can feel much confidence in stating that the comma bacillus does not necessarily induce cholera, when it is borne in mind that during cholera epidemics some of the "slighter" cases are characterised by almost exactly the same symptoms and conditions above described. It is well that such facts should have their proper interpretations put upon them as soon as they appear. The results of these experiments are being constantly repeated in all quarters, and will by some be received as bearing out the non-infective nature of cholera unless the proper explanation of the facts is also repeatedly given.

THE VICTORIA CROSS.

WE last week intimated that Surgeon-Major Lloyd had been recommended for the Victoria Cross. We have now the pleasure of recording the official announcement that Her Majesty has signified her intention to confer the Victoria Cross on Surgeon-Major Owen Edward Pennefather Lloyd, for his conduct on January 6th, 1893, during an attack by Kachins on the Sima Post. The commanding officer, Captain Morton, was severely wounded while visiting a picket some eighty yards from the fort. When the news was brought back, Surgeon-Major Lloyd, accompanied by Subadar Matah Singh, at once ran out under a heavy fire to help him. On reaching the injured officer, the Surgeon-Major sent back his companion for further aid, and remained beside the captain with a bugler, who had been in attendance on his commander, until the Subadar returned with five men. During this time the enemy had been within ten or fifteen paces, and had kept up a fierce fusillade, killing three men of the picket. As the little party slowly fought its way back to their stronghold, the gallant bugler, who was helping the doctor to carry Captain Morton, was shot dead. Nor did the devotion of his men avail their unfortunate chief, who died a few minutes after reaching the fort. Subadar Matah Singh and the five Sepoys, who formed the rescue party, have been awarded the Order of Merit, a well-

deserved distinction. The roll of military recipients of the Victoria Cross, to which the name of Surgeon-Major O. E. P. Lloyd has just been added, now contains the names of fifteen living officers of the Army Medical Service who have been decorated with the V.C. since its institution in 1856. Of these, three won the cross in the Crimea, one in the Indian Mutiny, two in India in 1860 and 1861 respectively, two in New Zealand, one in the Little Andaman Island expedition in 1867, one in Zululand, 1879, two in South Africa, 1881, two in Burmah, 1889, and one, Surgeon-Major Lloyd, to wit, in Burmah, on January 6th, 1893.

OPHTHALMIA IN POOR-LAW SCHOOLS.

A STATEMENT, described as "startling," was this week made by Mr. Bridge to the Metropolitan Asylums Board to the effect that there were many cases of ophthalmia in the Poor-law schools. The statement was probably less startling to the members of the Board than to the newspaper reporters. The Poor law school which is free from ophthalmia has yet to be discovered, although the disease is much less prevalent than it was a few years ago. "My Board thought," Mr. Bridge continued, "that much might be done to stay the disease if there were proper provision for isolation." There is abundant testimony, of which Mr. Bridge's Board of Guardians must be aware, not only that much may be done, but that much has been done to stay the disease. The results obtained at the Hanwell schools by strict isolation of the cases of ophthalmia during the last few years should, we think, convince any one on this point.

THE HERMITE SYSTEM OF SEWAGE DISINFECTION.

THE Hermite system of disinfecting sewage by the addition to it of electrolised sea water will shortly be put to a practical test at Worthing. It is in the memory of all how cruelly this town suffered from the epidemic of typhoid this summer. The Town Council are determined that no stone shall be left unturned in order to allay the fears of the seaside visitor. At their last meeting they voted the sum of £200 in order to carry out the preliminary experiments with the system which has already been described in our columns. It has been arranged that a number of houses should be supplied with the electrolysed sea water, and their drainage fluids should be collected and submitted to chemical and bacteriological examination, under the direction of Sir Henry Roscoe and Dr. Ruffer, who have agreed to study the system and report on its value at some future date. The experiments will probably commence towards the end of this week, will be conducted under the supervision of M. Hermite himself, and will probably extend over a period of one month.

WHAT BECOMES OF PHYSICIANS' CASEBOOKS?

THE question has been recently asked, in terms of anxiety not unmingled with suspicion, What becomes of the casebooks of a consultant after his death? It is impossible for us, of course, to say what means have been taken to secure secrecy in all such cases, but we may safely infer the general practice from particular cases. The care which is taken by all physicians in large practice to protect their notes from curious persons is seen in such precautions as the private drawer and the padlocked cover. The disposal of such records after the death of the consultant is, no doubt, carefully regarded in all cases. Sometimes the records are made over to a son, or other successor in practice, either to be used for the benefit of the patients, who may return for subsequent consultations, or for the purpose of scientific investigation, as in the instance of the notes of the late Dr. Williams. In two other cases well known to us the notebooks were consigned to a medical friend for scientific uses, and in a third the volumes were consigned to the furnace of the plant houses by a member of the family. After all, it must not be supposed that these books contain much romantic matter. Large manuscript volumes, whose pages are made more forbidding by many ellipses and contractions, do not invite perusal. The details of consultations are, in the vast majority of instances, of a very prosaic kind, and such brief memoranda as "much anxiety" or "severe family trials" are probably the only indications on paper of painful events, which must at times, no doubt, be confided in some fulness to the physician, but which need no fuller memorial on his part. The invalid may still resort to his note-taking physician with no qualms about the security of his revelations.

THE CHARGES AGAINST DUBLIN HOSPITALS.

THE Governors of Sir Patrick Dun's Hospital have held an investigation into the circumstances attending the death of a woman who had been brought there by the police, and who was not admitted. They state that "the house-surgeon, being of opinion that the case was one requiring to be retained in the house, said to Dr. Brookes—one of the surgeons of the hospital, and whom the resident surgeon believed to be then on duty—'I suppose we should detain this woman.' Dr. Brookes did not hear the question; but, thinking at the time only of the state of intoxication under which the woman then appeared to suffer, said, 'the woman would be all right.' The governors entertain no doubt that the dismissal from the hospital was solely due to misapprehension of these words, which were accepted by the resident surgeon as a direction which he was bound to obey." They do not think the case one which merits an expression of censure for neglect upon any officials of the hospital.

THE INFECTION OF INFLUENZA.

DR. CALDWELL SMITH has done good service in again drawing attention to the undoubtedly infectious nature of influenza, and of the fact that infection in most cases takes place by the respiratory passages. The difficulties connected with the study of this disease have hitherto been enormous, and even now, when some knowledge of the etiology of the disease is being gained, the supposed etiological factor—Pfeiffer's bacillus—is so difficult to find, to stain, and to cultivate, that it will only be by most careful study, not only of this organism, but also of isolated cases of the disease, as well as those occurring during epidemics, that we shall be able to devise more perfect means of prevention than those which are known at present careful isolation, good nutrition, and thorough ventilation, with cleanliness and general hygienic precautions.

"MEDICAL MISSIONARIES."

THE letter from Dr. C. H. F. Routh, which we publish in another column, does not touch the real point. No one objects to missionaries having some medical knowledge, but when they pose as doctors, taking charge of hospitals and dispensaries, and doing all sorts of operations, it is quite another affair. The Zenana Medical College, after a two years' training of such a hybrid description that it will not qualify either as doctor or nurse, gives its pupils a "diploma," on the strength of which they are encouraged to commence medical and surgical practice as a profession. Dr. Routh's remarks about midwifery are entirely beside the mark. The pupils of the college do not go out to do midwifery but as general practitioners. The report states that one of these unqualified ladies had last year "performed over 300 operations, some of a very difficult nature"; it also speaks of another who has a large dispensary, a hospital where she does all sorts of operations, from cataract to ovariotomy, and a medical school. No one can pretend that this is anything short of the most responsible medical and surgical practice, and yet it is done on the strength of a private diploma given by a few unauthorised individuals, and accepted by the missionary societies, apparently for the sole reason that it is cheap. Dr. Routh says: "It certainly

would be an advantage if women could be trained for five years as medical women, but who is to find the women and the money?" This is the root of the thing; it is a matter of money. If the great missionary societies think it desirable to send out medical missionaries, they should pay honestly for their training. The arguments used in favour of the societies being supplied with sham medical missionaries would serve equally well in favour of supplying sham medical practitioners in every little ship, in every distant village, and all over the colonies, everywhere, in fact, where the people could not support a properly educated man.

PROSECUTION UNDER THE LUNACY ACT, 1890.

A case of some importance was tried at the Long Ashton Petty Sessions and concluded on January 5th. It was an action brought by the Commissioners in Lunacy against Mrs. Anderson, of Portishead, charging her with contravening Section 315 of the Lunacy Act, 1890. We believe this is the first prosecution that has taken place under this section of the Act, which is to the effect that any person who, except under the provisions of the Act, receives or detains an alleged lunatic, or for payment takes charge of one in an unlicensed house, shall be guilty of a misdemeanour, and liable to a penalty not exceeding £50. The fact of the admission of the patients into Mrs. Anderson's house was admitted, and the question turned upon the point as to whether the patients were lunatics or not. In the first instance five summonses were taken out, but three were not proceeded with. In the two cases relied upon by the prosecution the insanity of the patients was proved to the satisfaction of the Bench. The defendant pleaded guilty, and it was urged in mitigation of such punishment as the Bench might award that the offence had been committed by inadvertence, and was one which was entitled to the leniency of the court. The defendant was fined £10 in each case, with the costs of the court and witnesses. In the case of the three summonses not proceeded with an arrangement was come to for each side to pay their own costs.

POISONING BY MISADVENTURE: A NURSE'S FATAL MISTAKE.

At the North Kensington Infirmary Dr. Westcott held an inquiry concerning the death of William Haslett, aged 66, formerly a stonemason. Mr. John R. Lunn, the medical superintendent, stated that the man was admitted on November 17th last year, suffering from spinal paralysis, softening of the brain, and kidney disease. Witness prescribed a drachm and a-half of bromidia, "a kind of sedative medicine." He afterwards found him in a sleepy comatose condition, and learned that the nurse had made a mistake and given him an ounce and a-half instead of a drachm and a-half of the mixture. He died on Thursday, January 11th. The patients were generally given doses of medicine of one ounce and a-half, and it was very rare that one drachm and a-half was given. Clara Uridge, the head nurse, deposed that it was her duty to give the patients medicine which was usually in one or half-ounce doses. On Thursday she gave the man one ounce and a-half of his medicine, and the next morning she heard she had made a mistake. The jury returned a verdict of accidental death.

THE THESES DE PARIS.

In the Library of the British Medical Association there is now a series of essays which, we believe, is not to be found in any other institution in England, and the utility of which those only can judge who have had occasion to refer to them. We refer to the *Thèses* which have been submitted to the Faculty of Medicine of Paris. It is much to be feared that in some universities the time-honoured custom of sending in a thesis for the degree of M.D. is complied with in a more or less perfunctory manner. This cannot be said of Paris. The *Thèse* there is a carefully prepared pamphlet. In France the professors at the various schools to some extent make use of the *Thèses* of their students as a mouthpiece for the teaching of the hospitals with which they are connected. It thus happens that they become a mass of representative literature, indicating the latest bent of the leading workers in the Paris and provincial hospitals, and showing the line which the most recent investigators are following up. The *Thèses* submitted to the Faculty of Medicine do not, however, consist exclusively of those presented for the doctorate; when distinguished men are candidates for hospital appointments and professorships they again have to give proof of their attainments, and many of these essays are *Thèses d'Agrégation*, which have been sent in under such circumstances, and thus give a valuable summary of the most recent views of the younger physicians and surgeons who are at the present moment doing duty in the hospital service. During the past year, for example, 441 *Thèses* were sent in, 64 of which were written for hospital appointments. As they come to us they are in the form of quarto pamphlets, ranging from 50 to 300 pages, many of them illustrated, a large number containing a copious bibliography, some apparently supervised by the professors before being printed, and all containing what is a special and important advantage for those who wish to refer to them, namely, a page or so of "Conclusions," expressing shortly the author's leading idea, the thing which he wishes to impress upon his readers. When Mr. Hart was last in Paris he was able to arrange for the Library of the Association to receive the complete series of these essays as they appear (a matter of no small difficulty), and we have no doubt that they will prove of great utility alike to students and practitioners, showing as they do the latest developments of French practice and opinion in all departments of medicine and surgery.

MEDICAL WITNESSES BEFORE MAGISTRATES.

Some members of the medical profession in Liverpool have acted on the advice repeatedly given in these columns, and have declined to attend the police court to give evidence without first receiving their fee. This has raised the ire of the police magistrate and of the Liverpool press, who take up the position that any payment to a witness for attending to give evidence at a police court is made as a matter of grace and not of right, and, consequently, that a medical practitioner who insists on having his fee prepaid is acting not only wrongly but immorally. The law is that a professional witness who attends to give evidence for the prosecution in a case where an indictable offence is charged is entitled to a fee, in accordance with the antiquated and illiberal scale issued by the Home Office forty years ago, if the prisoner is sent for trial. In such cases the prescribed fees are payable for attendance at the assizes or quarter sessions, and also for the preliminary attendance at the police court. Where the case is dealt with summarily by the magistrates no scale of fees payable to witnesses has ever been issued by authority, and the officials at different petty sessions courts regulate their own practice pretty well as they think expedient. Generally it has been found advisable, in order to secure the due despatch of public business, to make some payments to witnesses for their attendance before magistrates, and this has apparently been provided for in Liverpool, but nothing is set apart for professional as distinguished from ordinary witnesses. The Liverpool stipendiary magistrate threatens to compel the attendance of medical witnesses under subpœna, when he says they must come on payment of their travelling expenses merely. With all deference to the learned magistrate this point is by no means so clear as he seems to think. A witness, whose attendance is required under subpœna, must at the time of its service, have paid or tendered to him a reasonable sum for his costs and expenses of attending to give evidence, and is liable to no ill consequences for not obeying the subpœna till such sum has been paid or tendered. The stipendiary apparently assumes that

this "reasonable sum" means merely a cab fare or something of that sort. The meaning of the term under this particular statute has never been expressly decided, but recent decisions on similar phrases of other Acts show that a professional man's time ought to be reckoned as well as his actual out-of-pocket expenses in determining what is a reasonable sum to pay him for his attendance as a witness. One would naturally think that the amount authorised by the scale for attendances before the same court in a case which is sent for trial, would be a reasonable sum to allow for attendance in a case with which the court deals summarily. If the Liverpool magistrate adheres to his expressed opinion, the present would seem to be a favourable opportunity for calling public attention to the injustice of the system, and for obtaining an authoritative decision as to the minimum amount to be paid for these costs and expenses. An appeal from the stipendiary could easily and cheaply be brought before the High Court on a test case, and so the question can be set at rest not for Liverpool only but for all magistrates' courts throughout the United Kingdom. A minor question has been raised by the Liverpool press that the medical practitioners chiefly affected hold appointments at hospitals or other public or quasi-public institutions, and ought therefore to expect no extra pay for giving evidence, that being incident to the public duties they have undertaken. This is altogether beside the real question. If the authorities -be they a committee, or a board of guardians, or anyone else -who make the appointments choose to make it a condition that their medical officers are always to be ready to attend the police court to give evidence gratis, they can of course do so; and any practitioner who has accepted an appointment on such terms should loyally carry them out. Where no such conditions have been imposed, the ordinary legal rights to remuneration remain; and no properly-minded governing body would wish to prevent its medical officers from asserting and insisting on their rights as they might deem advisable. Whether the test case should be raised in the name of a private practitioner, or of one holding a hospital appointment, matters very little. The whole profession are interested, and should combine to get the question settled.

CHAIR OF MIDWIFERY IN GLASGOW UNIVERSITY.

THE feuds concerning appointments of Crown professorships in Scotch universities have not been infrequent nor always moderate in tone. It is, indeed, seldom that any appointment is made by a minister which is not more or less the subject of hostile criticism. The appointment of Professor Murdoch Cameron to the Obstetric and Gynæcological Chair in the University of Glasgow has, however, risen to a height of public controversy which reminds one of the old days of rivalry between Syme, Simpson, and Hughes Bennett, when such appointments became agitating and public events. In the present instance, Sir George Trevelyan has been treated almost as a public malefactor, and roundly charged with betrayal of his public trust, in order to favour a political friend. The fact is, we understand, so far as politics are concerned a factor which certainly ought not and, we trust, did not in any way enter into consideration in the matter there appears to have been very little to choose between Dr. Berry Hart and Dr. Cameron. Both are understood to be pronounced Gladstonians in politics. Both are men of considerable achievement in their respective departments, and there is no ground whatever in this respect for alleging any superiority of one candidate over another so far as we can see and, indeed, all that is to be said on this point is that Dr. Murdoch Cameron, in the admirable work in more than one department of obstetrics, and especially in the rehabilitation of Cæsarean section, by his remarkable operative successes, added high professional grounds to his local claims for the appointment which has been bestowed on him. Had Dr. Berry Hart been appointed there would not have been a word to say against the appointment, either in respect of his professional achievement or of his polished and amiable personal character. The bitter personal animosity shown by a few influential persons to the appointment of Dr. Murdoch Cameron was so excessive in its manifestations as probably to go far to defeat its own end, and the subsequent letters which appeared so prominently in the public press are only *ipso facto* manifestations of the same excessive personal bitterness. We are assured by many Glasgow correspondents that the appointment is one which meets with very general approval, as, indeed, there appears to be no reason why it should not. Dr. Murdoch Cameron graduated at Glasgow in 1870, and since the beginning of his career has devoted special attention to midwifery and gynæcology. He has been assistant to the Professor of Midwifery in the University for the past ten years, and has carried on the whole work of the chair during Dr. Leishman's illness, up to the date of his resignation. He is University Lecturer in the department of Obstetrics and Gynæcology in Queen Margaret College. He has also held various posts in the Glasgow Maternity Hospital, from that of dispensary assistant to that of senior obstetric physician, which he now holds. It was his position on the staff of this hospital that gave him the opportunities of performing that remarkable series of operations for Cæsarean section by which he is best known to the profession at large.

ABUSE OF HOSPITALS IN PARIS.

IN view of certain gross cases of abuse of the benefits of hospitals by well-to-do persons which have recently come to light, the Paris Municipal Council has appointed a Committee of fifteen of its members to inquire into the organisation of the Assistance Publique. The Committee is instructed to devise some means of preventing the abuse of medical charities by persons able to pay for advice.

THE RECORDER OF LONDON ON THE REGISTRATION OF MIDWIVES.

IN charging the grand jury at the Old Bailey recently, the Recorder said that Mary Ann Baker was indicted for the wilful murder of Edith Oliver Banister, a young lady who had been discharging the duties of a secretary, by an alleged illegal operation. Having regard to the extreme gravity of the charge, the grand jury would probably be of opinion that, although the evidence against the accused was but slight, it would be better to have the whole of the facts inquired into before the petty jury. A woman named Sullivan, calling herself a midwife, was indicted for man slaughter, arising out of the most cruel and brutal neglect. It was to be greatly regretted that there was no registration of midwives, and he hoped that a Bill upon this subject, which had been before Parliament, would eventually become law. At present anyone, however incapable of properly fulfilling the duties, might call herself a midwife. In the interests of the poor it was absolutely necessary that there should be some kind of registration, so that when a midwife was called in there should be some kind of guarantee as to her capabilities.

THE NEW COMMISSIONER OF LUNACY.

DR. J. AUGUSTUS WALLIS, medical superintendent at Whittingham Asylum, has been appointed to the lunacy commissionership vacant by the resignation of Mr. J. D. Cleaton. The salary is £1,500 per annum. Dr. Wallis graduated as L.R.C.S.I. in 1866, and became a L.R.C.P.Edin. in 1867, and in 1883 took the degree of M.D.Aberd. He has held the following appointments: Medical Superintendent to the Hull Borough Asylum, Senior Assistant-Physician to the Durham County Asylum, and Assistant Medical Officer to the West Riding Asylum, Wakefield. Among his more important writings has been that "On the Therapeutic Value of Chloral Hydrate in Epileptic Convulsions," published in the *West Riding Asylum Reports*.

ANALYSIS AND REPORT
ON
ORIGINAL DOCUMENTARY EVIDENCE CONCERNING THE USE OF OPIUM IN INDIA.

[Furnished to the "British Medical Journal" by upwards of 100 Indian Medical Officers.]

The Conditions that Cause and Influence the Use of Opium (continued): (c) *Occupations;* (d) *Economic Conditions;* (e) *Opium in Childhood:* (f) *Opium in Old Age:* (g) *as a General Nerve Stimulant;* (h) *as a Luxury.*

The application of opium which we have next to consider affords a remarkable illustration of the absurdity of judging by our own standard the manners and customs of people living under conditions with which we are unacquainted. It seems strange to us, accustomed as we are to look upon opium solely as an anodyne and narcotic, that the natives of India should use it as a means of fitting them for hard work, and giving their nerves and muscles strength and endurance under the most unfavourable conditions, notably the want of food. It is a fact, however, that they do so, and in amounts that would make a European unable to walk farther than his door if they did not actually poison him.

Surgeon-Captain Lane, serving in the Punjab with a regiment which consists exclusively of Sikhs, says: "Men eating opium are capable of standing a great deal of fatigue. During camps of exercise or manœuvres, when they are only able to take their food in the early morning and in the evening, a small amount of opium stops all craving for food during the day. It is at these times, in my opinion, that some recruits learn the value of opium from old soldiers."

Dr. G. S. Thomson, writing from Guzerat (Bombay Presidency), has chiefly to do with the labouring class. He says: "Malaria prevalent, and a constant struggle with poverty and want. The use of opium enables a man to go without food for days. Many Bhils use it to stave off the cravings of hunger."

An empty stomach and hard work do not seem to be very reconcilable things in the eyes of a European, but we find them closely coupled in many—we may say too many—parts of the densely populated tracts of India.

A Surgeon-Colonel, who has had twenty-one years' experience in Rajputana, answers: "As ordinarily taken it appears to have no injurious effect either on the physical or moral condition; on the contrary, it enables a man with comparatively little food to go through prolonged physical exertion under exhausting conditions of sun and cold."

Surgeon-Lieut.-Colonel R. Caldecott writes from Malwa, in Central India: "A very large number of the soldiers are opium eaters, and I have never known it to affect their health. It is most known amongst the hardest and most active men. We have more opportunity of seeing the work they do, than they have in most regiments, as Central India has been one of the head quarters of big game shooting; and the men of the regiment go out in numbers with the officers during the hot weather, and go through the very hardest of work; their health never suffers: the only difficulty lies in getting them to take their pensions when their time comes."

Dr. T. Chaytor White, from Ajmer-Merwera, mentions in his answer that the native wrestlers use opium in the "Akara" and when training. Assuredly they would not do so if they were not convinced that it contributes to their strength and endurance.

From the same place we have received a letter accompanying the schedule of questions in which the following passage occurs: "These are my honest opinions after having spent twenty years in Central India; during about three years I have been in charge of the Central Hospital, at Indore, and during the rest of the time I have held charge of one of the regiments of Central India Horse, with charge of the Civil Hospital as well; so that I had good opportunities of observation among the native population of the province, one of the greatest of the opium growing centres.

"This is not a part of the country where famine is ever very pronounced, but the class of cultivators has at any rate a time of scarcity in most years, and at these times I think their use of opium goes a long way in alleviating their hardships, which are by no means fanciful ones. At the best of times they lead a hand to mouth life, and in some months of every year a large proportion of them exist on berries and such like.

"It is more in the regiment that one knows what their actual habits are, and it is amongst them that one sees men who are habitual consumers of opium who are active to a high degree in both mind and body up to a good age. There are several wonderful old men, civilians, given to woodcraft, about Central India, who have been confirmed opium eaters all their lives.....I have never known men capable of going through such an amount of labour and fatigue in the hottest of weather. They have always their little lump of opium, and one could see them taking bits of it from time to time throughout the day: so I can't believe that opium can have much deteriorating effect on the health of the native as a rule: that it has any tendency to shorten life I have never seen reason to believe."

From many other places and persons we have received information confirming the value of opium as a relatively cheap means of keeping soul and body together during periods of chronic starvation, which in some parts of India is not a rare occurrence. In view of such a fact, it would be not only impolitic but absolutely inhuman on the part of the powers that be to deprive the native of what he finds to be a real solace and help to him.

The next point to be considered is also closely connected with the economic conditions of India. It is a time-honoured and a general practice of Indian mothers to give their children, and especially their babies, opium simply as a sleeping draught. Papaver somniferum must take the place of lullabies and other sleep-compelling artifices simply because the mother has no time for such things. As one of our correspondents puts it: "In India the wife must work and the children sleep." Surgeon-Major H. Martin, from Bombay, writes: "Opium is given almost universally to young children also for teething and all intestinal troubles—hardly orthodox treatment, but seems to do little permanent harm; it is discontinued when the child is able to run about."

From Surgeon-Lieutenant-Colonel Kellrick M'Kay, Nagpur, we learn: "The children of the working classes are given small doses of opium daily up to three years. I have had inquiries made in the different hospitals and dispensaries under my charge (attendance 133,000 annually), and those in charge have rarely come across a case showing any ill effects."

Surgeon-Lieutenant-Colonel A. T. Waller Barrow, writing from Ahmednagar, in the Deccan, says: "In this part of the Deccan the labouring classes use small doses of opium constantly for their babies until they can eat solid food. They tell me they employ it to keep them quiet whilst the mothers work in the fields. They give them a small pellet, such as I send you (about $\frac{3}{4}$ gr.), and give them the breast at once, tie them up in a cloth, and hang them to the nearest post whilst they work. But I find it is also a common practice amongst the women of my Army Hospital Corps (native) here and amongst all the women of the men of Field Battery. Given in the amounts the women administer here, it does not seem to exert an unfavourable influence upon the physical condition of the children. They generally present a well-nourished healthy appearance."

At a different period of life the use of opium is believed to conduce to longevity. "The general impression," says a resident of Kashmir, "is that opium taken after the age of 45 secures a long life." A correspondent from the Punjab writes: "The drug is not used by the people at large, but those who use it are generally men of sedentary habits, of weak constitution, and in advanced age, generally after 40 years. The drug helps them at this age to some extent in keeping them fit to do something and to be able to eat and digest their food; but after a time that dose appears not to have the proper effect and then they are prone to increase it." By men of that age, and also sometimes by younger people, opium is used as an aphrodisiac. Several correspondents mention this application of the drug. The specific purpose for which it is taken is indicated by Surgeon-Lieut.-

Colonel E. Lawrie, as follows: "Among the higher classes opium is taken as an aphrodisiac. Its action in this direction is to prolong the act of copulation by delaying or postponing the orgasm." Undoubtedly, however, opium is most largely used for its properties as a general stimulant. The fact that every nation has one or more stimulants in constant use, and that as soon as they are made to abstain from one stimulant they have recourse to another, seems to indicate that the craving for such a stimulant is an indication of a physiological need. Among the natives of India opium takes the place which tobacco, alcohol, tea, and coffee, hold with us. The question cannot be put in an absolute form—Which is the best stimulant? but, Which stimulant is the best for a given people? If we judge of alcohol from its effects on the inhabitants of the East and of opium from its possible results on the English people we are led to an altogether erroneous conclusion."

The weight of the important mass of evidence before us—which coming as it does at first hand from those best qualified to speak on this subject must be accepted as conclusive on the point—goes to show that opium is a more useful and far less harmful stimulant for India than alcohol is for Europe. Dr. Templewright writes from Shahjahanpur (North West Provinces): "The poor man would far rather have a glass of country wine, "*sharab*" (whence "shrub," in English), but he cannot afford it; for it now costs ten annas per bottle of 24 ounces, and it takes half a bottle to 'put him forrard,' while he feels at peace with all the world after eating a piceworth—that is, a halfpenny worth—of opium." He goes on to say: "If the House of Commons is fool enough to abolish opium in India, it will throw out of work about half a million of quiet respectable cultivators; while many millions of natives, who take a bit of opium as a Briton takes a glass of beer, will be ready to mutiny." Dr. T. Ch. White, Ajmer Mewara, says: "Opium is used as a luxury to a small extent; abuse exists only in the same degree as occurs with spirituous liquors and tobacco. In my opinion it is no more harmful than the use of tobacco is." Another correspondent remarks that the workman who uses opium takes a pill of it after his hard work, just as the British workman lights his pipe or has a glass of beer.

The following extracts from answers we have received allude to the use of opium in certain ceremonies and customs of social life: "Opium is generally taken in Guzerat in the following way. It is cut up, and put in some such substance as cotton wool; on this water is poured, and the water thus impregnated with opium is drunk. This is called drinking 'Kasumbo,' and when persons who have fallen out become reconciled, the ceremony of drinking Kasumbo is gone through as a token and a bond of reconciliation. To abolish opium would be to do away with a kindly ceremony, which has probably been in vogue for generations, and is looked upon by many classes of people with superstitious reverence, and which among a people like the Rajputs may be not without its use in stopping quarrels; since, when once Kasumbo has been drunk with a man, it is against the rule of etiquette to do him an injury."

LITERARY NOTES.

THE late Dr. Samuel Guttmann is succeeded in the editorship of the *Deutsche medicinische Wochenschrift* by Professor A. Eulenburg and Dr. Julius Schwalbe.

Professor Landouzy is the Editor in Chief of the *Presse Médicale*, the most recent addition to the already formidable list of medical journals published in Paris. Among his collaborators are MM. Brun, H. Roger, Letulle, Lermoyez, and de Lavarennes.

A monthly journal devoted to hydrotherapy, electropathy, and mechanical treatment will shortly be published by Seitz and Schauer, of Munich. The editor is Dr. A. Krüche, who will have the advantage of the active collaboration of Professor Eulenburg of Berlin, Professor Rosenbach of Breslau, Dr. Barwinski of Elgersburg, and a number of well-known hydrotherapeutists.

The eighteenth volume of the *Annals of Surgery* contains much valuable matter, and forms a handsome book of some 700 pages. This periodical, which is published by Cassell and Co. in this country and by the University of Pennsylvania Press in America, is a truly international product, the editors being Dr. Lewis S. Pilcher, of Brooklyn, N.Y.; Dr. J. William White, of Philadelphia; Mr. Frederick Treves, of London; and Professor William Macewen, of Glasgow.

We have received the second volume of the *Reports of the Department of Pathology of University College, London*. The first volume was only published last August, and it is the intention of the editors, Mr. Victor Horsley, Dr. Rubert Boyce, and Dr. Vaughan Harley, to issue a volume thrice yearly in future, or even more often. The volume contains reprints of papers communicated to the Royal Society and to the BRITISH MEDICAL JOURNAL, and other periodicals by workers and students of the Laboratory.

The first number of the *Psychological Review* will be published this month by Messrs. Macmillan and Co., London and New York. It is to be edited by Professors J. Mark Baldwin (Princeton) and J. McKeen Cattell (Columbia). The new periodical is intended to contribute to the advancement of psychology by publishing the results of original research and critical essays.

A new periodical publication entitled *Forschungsberichte über Lebensmittel und ihre Beziehungen zur Hygiene, über forense Chemie und Pharmakognosie*, and dealing with the chemistry of alimentary substances in their relation to hygiene, and with forensic medicine, and pharmacognosy, has recently begun to appear in Munich under the editorship of Professors Emmerich, Hilger, and Göbel, *Privatdocent* Dr. L. Pfeiffer and Dr. Rudolf Sendtner, Inspector of the Station for the Examination of Food, etc., in Munich.

The sixteenth volume of the *Jahrbuch für practische Aerzte* (Hirschwald, Berlin) contains an excellent portrait of Dr. Paul Guttmann, and an appreciative notice of his life, by Albert Eulenburg. Guttmann was the editor of this *Jahrbuch* from its foundation in 1878 until his death in the early summer of 1893, and under his direction the annual has come to be known as one of the most useful of its kind. It has been particularly remarkable for the impartiality with which clinical contributions to English and American literature have been recognised.

Two new and considerable literary undertakings are on the carpet in the form of the issue of important and voluminous "systems of medicine." One is to be carried out under the editorship of Dr. Clifford Allbutt, the Regius Professor of Physic at Cambridge, and is due to the enterprise of Messrs. Macmillan and Co. This "system of medicine" is intended to be contained, if possible, in four volumes, and will aim at presenting each subject so as clearly to define the limits of ascertained positive knowledge in the matters dealt with, and the point at which empirical knowledge and the estimation of probabilities begin. Each department will be undertaken by writers who have worked at the special subjects of which they treat, and are able to state the results from their own knowledge. The responsibility of the writers will be indicated by signatures, initials, or notes. A similar undertaking is in hand by Messrs. Wood and Sons, of New York, but on a much greater scale. The contributors to this "system of medicine" will be cosmopolitan in character, and are being selected from among the leading authorities and original workers in medicine, not only in America but also, and largely, from Great Britain, France, Germany, and other parts of the European Continent. Active preparations are in progress for both undertakings, and numerous contracts have been entered into with distinguished writers.

THE FRENCH ACADEMY OF MEDICINE.—At the recent election of officers for the ensuing year at the Académie de Médecine, M. Rochard was chosen President, being succeeded in the office of Vice-President by M. Empis. M. Cadet de Gassicourt was elected Annual Secretary.

WE have received from Mr. John Moffat, photographer, 125, Princes Street, Edinburgh, a photograph of the Congress of the British Institute of Public Health, held in Edinburgh in July last. The portrait group is an admirable piece of work. Among the persons in the group we notice the Sheriffs of London, the Lord Mayor of Dublin, Councillor Pollard, Dr. Littlejohn, Sir Wm. Muir, Professor Armstrong, Sir Charles Cameron, Dr. W. R. Smith, Dr. Nasmyth, Sir Spencer Wells, Dr. Moore, Dr. Berry Hart, Dr. Vacher, Bailie Colston, and Bailie Gullard.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 17th day of January next, at 2 o'clock in the afternoon.

The following Committees will also meet:

Tuesday, January 16th, 1894.—3.0 P.M. Subcommittee on Voice Training.—3.30 P.M. Committee on Payment of Parliamentary Bills Committee Railway Fares.—4 P.M. Premises and Library Committee.—4.30 P.M. Branch Organisation Committee.—5.30 P.M. Subcommittee on Unqualified Assistants. *Wednesday, January 17th, 1894.*—11 A.M. Journal and Finance Committee.

FRANCIS FOWKE, *General Secretary.*

January, 1894.

NOTICE OF QUARTERLY MEETINGS FOR 1894. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on January 17th, April 11th, July 11th, and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, March 22nd, June 21st, and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. FRANCIS FOWKE, *General Secretary.*

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the Office.

BRANCH MEETINGS TO BE HELD.

OXFORD AND DISTRICT BRANCH.—The next meeting of the Branch will be held on Friday, January 26th, in the University Museum, Oxford, at 3.15 P.M. Professor Victor Horsley, F.R.S., has kindly consented to deliver an address on Diseases of the Middle Ear, and will illustrate it by lantern slides. Notices of motions, etc., should be sent to the Honorary Secretary, W. LEWIS MORGAN, 37, Broad Street, Oxford, on or before January 16th.

EDINBURGH, STIRLING, KINROSS, AND CLACKMANNAN AND BORDER COUNTIES BRANCHES.—A combined meeting of the above Branches will be held at Edinburgh on Friday, February 2nd. A medical congress of the members will take place in the University Surgical Theatre, Royal Infirmary, at 4 P.M., when a variety of patients, specimens, apparatus, etc., will be exhibited and discussed. Thereafter the members and their friends will dine together in the Waterloo Hotel, at 6.30 P.M., the president of the Edinburgh Branch, Professor Annandale, in the chair. Further information will be obtained from the Honorary Secretaries of the respective Branches.—R. W. PHILIP, 4, Melville Crescent, Edinburgh; C. T. LEWIS, Glebe Crescent, Stirling; and JAS. ALTHAM, Birbeck House, Penrith.

NORTH OF IRELAND BRANCH.—The winter meeting will be held in the Museum, College Square North, Belfast, on Thursday, January 25th, at 4 P.M. Gentlemen who wish to read papers, show patients, or bring any other business before the meeting, will kindly communicate as early as convenient with JOHN CAMPBELL, M.D., F.R.C.S., Honorary Secretary, 21, Great Victoria Street, Belfast.

DUBLIN BRANCH.—The annual meeting of this Branch will be held on Thursday, February 1st (by kind permission of the President and Fellows), in the Hall of the Royal College of Physicians; and at 7.30 P.M. on the same evening, in the College, the annual dinner.—JOHN MOLONY, Honorary Secretary, St. Patrick's Hospital, James's Street, Dublin.

METROPOLITAN COUNTIES BRANCH: HERTS DISTRICT.

A MEETING of this district was held at Woodford on December 13th, 1893, HENRY POWER, M.B., F.R.C.S., President, in the chair. Drs. E. H. Lipscombe, A. T. Butt, S. A. St. Leger, A. Maclean, and J. C. Fisher (Secretary) were present, and Dr. Ch. Heaton-Baker and Mr. Marmaduke Sheild were present as visitors.

New Members.—Dr. Cox, Dr. Maitland Thompson, and Dr. R. A. St. Leger were elected members of the Branch.

Next Meeting.—The next meeting was fixed for February 21st at Hatfield.

Supper.—A very pleasant evening terminated with supper.

A report of the scientific proceedings is published at p. 68.

SPECIAL CORRESPONDENCE.

PARIS.

The New Law concerning the Notification of Contagious Diseases.—A Medico-Legal Institute.—The Sanitary Conference of January.—Medical Honours.—A Statue to Charcot.—Dr. Guyot.—The Sanitation of Paris.—A New Chair of Microbiology.

THE Ministerial decree concerning the notification of contagious diseases, which has been so much clamoured for, has at last appeared, and causes much displeasure. Medical men are called upon to notify to the mayor and subprefect the cases of contagious diseases falling under their notice. The medical profession declares that notifying to one of these authorities would be sufficient. In Paris, where there are twenty mayors and two prefects, the notifications should be made at the Police Prefecture. Since July 12th, 1892, there is an inquiry office where the notifications of contagious diseases, whether ending in death or not, and asking at the same time for disinfection, are sent. At the head of this service is a permanent committee composed of delegates from the Conseil d'Hygiène et de Salubrité. Puerperal fever is only to be notified when the patient consents. Faint hopes are entertained that this new measure will bring good results. The *Progrès Médical* holds the only sure way of insuring public health with regard to contagious diseases would be to do as is done in England, and organise a system of officers of health and inspectors of nuisances.

Three years ago the Conseil Général of the Seine proposed to create a medico-legal institute. The Government was willing to pay half the expenses, the Chamber of Deputies approved, and the affair was apparently settled. At one of the recent meetings of the Conseil the project has been rejected; one member of the Council stated that an inquiry among medical men who had been in practice twenty or thirty years showed that not one among them had given medical evidence more than three times; he therefore concluded that the services rendered by the institute would be disproportionate to the expense.

The French Ambassador at Constantinople has officially invited the Porte to send delegates to the Sanitary Conference which will be held at Paris on January 24th.

Eight medical men have been named Chevaliers de la Legion d'Honneur, and several others have been promoted to a higher grade.

A committee has been formed for erecting a statue to M. Charcot. MM. Brouardel, Pasteur, and Gréard are presidents. M. Masson, 120, Boulevard St. Germain, is treasurer. The General Council of the Seine has given £20.

The Municipal Council has voted £80 towards the creation of a surgical laboratory at the Hôpital des Enfants Assistés.

Professor Guyot, having reached the age when the hospital regulations demand his resignation, has retired from hospital practice.

Among the measures to be submitted to the consideration of the Chamber of Deputies during the forthcoming session

is a Bill to authorise the city of Paris to issue a loan of 117,000,000 francs for the purpose of carrying out important sanitary works for the benefit of the capital. It is proposed to adopt the system of getting rid of all waste matter by means of the sewers, and to establish a sewage farm instead of turning the sewage into the Seine as heretofore.

M. Picqué has been elected secretary to the Perpetual Committee of the French Surgical Congress, to replace Dr. Pozzi, who has resigned the post, and has been elected honorary secretary.

The Municipal Council of Montpelier has created a Chair of Microbiology. A stipend of £240 is attached to it.

CORRESPONDENCE.

"A GIGANTIC MEDICAL ABUSE."

SIR,—Dr. Rushton Parker's letter opens up a question which I hope will not be allowed to drop without further discussion. What is true of the London hospitals is equally applicable to the provincial infirmaries. In Cardiff the Committee of the Glamorganshire and Monmouthshire Infirmary periodically make appeals to the public for assistance, and, in doing so, publish startling statistics about the number of out-patients who are treated at their institution. A year or so ago the public were informed that no fewer than 40,000 patients had been treated in the out-patient department! As there are only three medical officers deputed to attend to that department, each of these gentlemen would have to treat 13,000 persons in the course of the year, or an average of 128 for every biweekly visit. I need hardly say that what the officials of the infirmary meant was that the attendance of the patients amounted to 40,000. But to come to a more practical point. Two years and a-half since a committee was appointed to consider what measures should be adopted for the better organisation of the medical charities; and, after several meetings had been held, this Committee unanimously adopted the following recommendations:

1. With a view to prevent the abuse of the charity by improper objects a paid officer should be appointed to inquire into the circumstances of out-patients presenting governors' letters and applying for medical relief.

2. That a wage limit for all patients at the infirmary be adopted, the following being suggested as applicable to Cardiff:

Single man or woman	18s.	per week.
Man and wife	22s.	..
Each child	1s. 6d.	..

And that all applicants for outdoor medical relief whose wages shall be found on investigation to be in excess of this limit (unless for special reasons it seems to the out-patient medical staff desirable to retain them as patients) shall be referred to the Provident Dispensary or refused attendance, as the case may be.

There were other recommendations adopted, but the foregoing are the most important. It would be interesting to learn why these recommendations have never been carried out by the Committee of the infirmary. Perhaps some of the honorary medical staff will be good enough to throw a little light on this subject.

The Cardiff public are confronted with appeals for aid, and if it can be shown that the infirmary spends thousands of pounds every year on the relief of people who can well afford to pay for that relief, it is full time for the authorities to deal boldly with the question and endeavour to reduce their expenditure by relieving only those who are not in a position to pay for it elsewhere.—I am, etc.,

January 8th. A GENERAL PRACTITIONER.

SIR,—As a medical man who has been obliged to be a looker on at the play for nearly a year, may I be allowed to write a few words in connection with Dr. Parker's letter in your issue of January 6th. The abuses therein referred to can only be remedied by the united action of the British Medical Association and the General Medical Council. The British Medical Association, by its connection with so many members of the profession, can gauge opinion, condense it, and lay it before the General Medical Council, which body can place the matter in such form that a Bill can be introduced, and it is hoped passed, in Parliament for the better protection of professional interests. The introduction into our profession of competition and price cutting—in other words, of low trade expedients—is the cause of many abuses. The overcrowded state of the profession is another cause of them. The inclusion in its ranks of so many members whose conduct ranks them among the lowest and most degraded trading class is still another.

There must be:

Abolition of false charity, such as free attendance on non-pauper patients, either at hospitals or privately, by those who desire experience at the expense of their less fortunate brethren.

A settled scale of fees for private and club patients.

A much more strict mode of dealing with medical aid members, members who keep "shops," "medical halls," and "cheap dispensaries."

And, finally, the British Medical Association must act with real severity against such offenders by striking their names off its list; and by bringing such matters before the General Medical Council with a view to removal of names from the *Register* and heavy fines.—I am, etc.,

Belstone, Jan. 9th. EDWARD H. RYAN-TENISON.

THE PREVENTION AND CURE OF AGUE BY OPIUM.

SIR,—Under the above heading Dr. G. Thin, in the BRITISH MEDICAL JOURNAL of December 23rd, 1893, raises some question on the above subject, to which, with your permission, I will endeavour to reply. First as regards the Terai. This is probably, at certain seasons, the most malarious tract in the world, and as I have a personal knowledge of its peculiarities and climate I will give you my experience. First let me explain what the Terai is. Immediately below the outer range of the great Himalayan Mountains, which is commonly known as the "Sewaliks," runs a tract of forest averaging about five miles wide, called the "Bhâber;" this is practically a waterless belt, that is, there are no springs, and most of the hill streams and small rivers disappear into its soil soon after entering it. This is accounted for by the fact that the "Bhâber" is evidently the old shore of the sea which, in prehistoric times, washed up to the foot of the Himalayas, and is proved by the fact that for several hundred feet the ground is composed of rounded boulders, sand, shells, etc., into which the water disappears and percolates as far as the substratum of clay will allow. The Bhâber has rather a sharp fall towards the plains, which can be easily proved by observing the velocity with which the larger rivers run over it. At the lower edge of the Bhâber the Terai commences, and here, as the boulder tract ends, the water meets with clay and is forced to rise to the surface. It is very remarkable to see just above the Bhâber tract the small streams disappear into the soil, and below it to observe them issuing forth here and there, till at length the rivers re-form; in addition the ground for many miles becomes a waterlogged tract, averaging ten to twenty miles in width. This is the deadly Terai, the home of the tiger, and one of the few places now left in India where he can breed with tolerable safety from disturbance.

It will be understood from the above what a terribly deadly place this Terai tract is during and after the rainy season. Attempts are being made to induce natives from other parts to settle on this land, which is is exceedingly fertile, and some fairly good results have followed. I have travelled through it in many directions when shooting in the company of the late Mr. Macdonald, the Commissioner, to whose exertions are due any success that has attended these operations. One curious result of residence in the Terai is that in a few years nearly all of both sexes become barren, though, as far as I could ascertain, not

impotent. It is an undoubted fact that consumers of opium in the Terai find much benefit from the habit, and that it is to a considerable extent a prophylactic. So, indeed, is alcohol; and in the Terai much country liquor is consumed with excellent effect. Dr. Thin asks why do not the police magistrates and others in the Terai take opium? The reply is a simple one, namely, the European officials go up to the hills as soon as the rains commence, and do not return (except under most urgent circumstances) till the deadly season has passed, that is, about the middle of November. Again, if Europeans have to visit the Terai during the sickly season (which may be set down as from June 1st to November 15th), they are provided with suitable clothes, are well fed, take all the precautions that experience suggests, including quinine freely, and then—nearly always suffer from severe attacks of malarial fever, and not infrequently die. Indeed, it was the result of one of these flying visits to the Terai during the rains that killed the late Mr. Macdonald, who had been working continuously in the district since the mutiny.

Perhaps the actual prophylactic value of opium is not as high as that of quinine, but the comfort it confers on the fever-stricken native is immense. Give a man suffering from a severe attack of ague a grain or grain and a-half of opium (say 20 drops of the tincture), and what a relief it is! The hot stage comes on quickly, is much shortened, and the sweating stage soon follows, with intense comfort to the patient. The poor fever-stricken native looks on opium as his sheet anchor, his truest friend, and, from my experience, seldom takes it to excess. It is cheap, easily carried, and taken in the form of a pill.

I have lived for over twenty years in India, and have gone out of my way to see and investigate the condition of opium eaters. I had in my service for several years a cook who was a confirmed opium eater; about once in six months he exceeded his usual dose, and became stupid and careless for a day or two, but beyond that he did not seem to differ, and was an excellent servant.

I have frequently visited the "opium den" at Lucknow, which is so often quoted by the anti-opiumists. It certainly was an unsavoury place to the senses — a native house in a crowded bazaar, containing numbers of small rooms in which men and women lay in different stages of opium sleep, but they were quiet, happy, and harmless; and one public-house in Whitechapel would show more misery in a single evening than the "opium den" in Lucknow would in a year.

Dr. Thin asks why we do not prescribe opium for Europeans as a prophylactic. I answer, because we find quinine more suitable and more efficacious, and besides there is a sentimental objection to prescribing opium for this purpose which I consider perfectly justifiable. Why should we substitute opium for quinine and arsenic, both well known prophylactics? It may, then, be said, why not substitute quinine and arsenic for opium in India and other malarious places? First, however, there is the expense of quinine and the danger of arsenic in non-professional hands to be considered; but, as a matter of fact, the Government of India has done and is doing all in its power to bring quinine within the reach of everyone. Mixed alkaloids are sold at all post offices for one pice—equal to a little over a farthing—for a 5-grain dose. This is much used; still the native prefers his opium, which experience tells him not only acts as a prophylactic but gives him much comfort in other ways. It enables him to endure fatigue better, and, taken in moderation, has no evil effect on his physique or general health.

I cannot help thinking that Dr. Thin rather begs the question when he inquires why medical men do not prescribe opium more than they do for Europeans in malarious tracts; that is not the point at issue regarding the opium question.—I am, etc.,

J. B. HAMILTON,
Surgeon-Colonel A.M.S.

SIR,—As a contribution to this question so pertinently raised by Dr. Thin, I beg to offer a few remarks. Some years ago, when acting as medical officer in the P. and O. Company's service, I had the opportunity of observing cases of chronic malarial infection in Lascar opium eaters. The attack of fever usually occurred, or my attention was called to it, when the man's stock of opium was exhausted. The type was intermittent, generally quotidian, and always slight. Under the use of opium the fever disappeared, and the man was soon fit for work again, while without opium the case dragged on a little longer, and the debility was greater. It must, however, be pointed out that there was no malarial environment, and that non-opium eating members of the crew frequently had slight attacks of fever on the high seas, which got well with no other treatment than a few days' rest and an aperient. The opium eaters were well known to their companions, and despised by them, as they could not or would not take their fair share of work. On inquiring into their history, I learned that when living in malarious districts they had suffered from ague about as frequently as their non-opium eating neighbours, but they stated that their attacks were less severe. As the result of my observations and inquiries, I came to the conclusion that opium was no true prophylactic or specific, but that the symptoms were mitigated just sufficiently to form a popular and plausible excuse among an ignorant and short-sighted population for the continuance of a harmful habit. Some American authorities advise the use of morphine or opium as an adjunct to quinine in severe cases. The effect seems to be to lessen the discomfort of the cold stage, and possibly to render the patient more tolerant of large doses of quinine, but in other respects it appears to do harm.—I am, etc.,

Elvaston Place, S.W., Dec. 27th. NEVILLE WOOD.

MEDICAL MISSIONARIES.

SIR,—Some letters have appeared in the BRITISH MEDICAL JOURNAL animadverting, as I think, unfairly, not to say unkindly, on the Zenana Medical College for Women. Will you kindly permit me, as one of the oldest lecturers in the College, to refer to them?

First, I should say with us it is entirely a question of conscience. We do not profess to "qualify," but to make the lady missionaries as useful as possible by giving them a sound medical training as far as the time at their disposal and their pecuniary means will allow, and for countries where qualified men are not admitted to attend upon women, and where women may be qualified, and because non-missionaries are not the lady helps required. Moreover, in the parts where our trained ladies go—India, China, Africa, and Burmah—the natives care very little for qualified persons and know little of, and care less for, universities or colleges of physicians or surgeons.

It is urged that in two years our lady students cannot know much. Granted; but two years well employed will often do as much as three or four carelessly consumed, and that it is so every examiner knows and the number of persons plucked every year proves.

In olden times, when young men served an apprenticeship, it was always noticed that those who had been assiduous apprentices almost always carried away the prizes; they were so well grounded before they came to college. Will anyone maintain that the training of girls in a college where they are well taught can be other than a great good to a missionary woman, though she is not fully qualified?

Again, the Church Missionary Society and other missionary societies take care to teach their pupils a little medicine and surgery as well as cooking and carpentering, etc. It is not supposed that they are perfect in these departments, but can it be denied that the knowledge so acquired is of immense advantage to missionaries among ignorant heathen or savages? The Zenana Medical College undertakes to give medical, surgical, and midwifery, etc., instruction in a systematic manner.

Again, it certainly would be an advantage if women could be trained for five years as medical women, but who is to find the women and the money? Few wealthy ladies follow missionary life. Those who do adopt the medical profession do so as the great majority of medical men have done—as a vocation by which hereafter they shall be able to earn their living. If Miss Jex-Blake and her friends will provide the funds, doubtless more medical missionaries will be qualified. But personal poverty and the want of funds for this purpose among many societies preclude five years' maintenance and a five years' course of study in ordinary medical schools. More

than this. I am informed that the authorities at medical schools, even those managed by lady doctors, actuated by the narrow-minded principle that once prevailed in the London University, do not allow women to attend special courses unless attendance upon the complete course of study be given. If, as in the University of London, a woman might study anywhere without prejudice to some future examination, it might be different. Then why do not these discontented ladies seek to do away with this system of boycotting, which is at best an illiberal monopoly? There is, then, no alternative. The well-founded knowledge of medicine, surgery, midwifery, etc., obtained at the College is a great advantage to a lady missionary, and the result has proved it. Take the practice of midwifery. Even in England up to the present day, and for years, no "qualification" for women was necessary, nor is it yet so. The Obstetrical Society has done its best in this direction, but the number they qualify is a drop in the ocean. In China see the wonderful success of Miss Sugden, and that for years. There, if a patient cannot be delivered, they wait four days, and then the woman is left to die, or if a limb of the child can be got hold of, it is pulled out piece by piece.

Then consult those who have watched the progress of these ladies. Where assisted by qualified practitioners they have merited their entire approval, as well as that of high Indian and other authorities.

It was Miss Sugden who, when all Europeans had to flee to the "men of war" for safety at Hangchow, alone ventured amid the excited mob who had sought to murder the missionaries to her hospital to attend to the sick, and that mob, awed by her courage in facing danger, and touched by the recollection of what she had done for their wives and children, allowed her a free transit, the Governor himself sending a message to her that she would not be touched. Let me ask, of what avail would any medical "qualification" have been here?—I am, etc.,

Montagu Square, W., Jan. 4th. C. H. F. Routh, M.D.Lond.

QUACK MEDICINES AND THE CLERGY.

Sir,—The Rev. Howard Crawford, of Abercorn, opportunely points out a system of advertising quack medicines we have in Scotland—a system which has increased very much of recent years. Unfortunately many of the Scottish clergy of all denominations are simple men, apt to believe anything that is placed before them with emphasis, and delighted to give a testimonial. All the churches have weekly or monthly journals, which are distributed over the country, and which are in reality the only literature the dwellers in the glens and hillsides have access to. These journals live largely on quack advertisements, and but for these could not be sold at the money. By them whatever appears in the journals, whether it be a quack advertisement or a story of Babylon, is implicitly believed. It is little wonder that quack medicines have such a sale.

Now if religion in Scotland can only hold its own by such means—by in reality robbing the people of what should buy them food and clothes—then it should fall; but I do not believe it has such a slender hold on our people.

I blame the leaders of the churches, not the followers, for the present condition of things, and for much that Mr. Crawford complains of.—I am, etc., Scotland.

Sir,—I was very glad to see some short time ago that you had taken up this subject, and that recently a clergyman wrote on the subject. I am an M.D., but have no personal interests to serve, not being at present in practice. To my mind it is nothing short of disgraceful that respectable, so-called, papers admit these advertisements. They dare not admit advertisements as to safe methods of performing an illegal operation, but because the law cannot lay hands on them, these so-called respectable papers publish lies, for they can be called nothing else, as to the efficacy of certain remedies. I am by no means certain that a paper is not bound in law for the result of an advertisement. If the supposed paper published a leading article to the effect that so-and-so was safe, and death or injury resulted, in my humble opinion an action would be an awkward thing to defend. Would the fact of the publisher having received payment make a difference? I doubt it. The "religious papers" are really the worst of it. People, that is, ignorant people, possibly think these papers would not lend themselves to fraud.

How can a cause be expected to prosper which is supported by fraud? Not long ago my wife called on the wife of a carter whose son was dying of consumption, and found out that the parents were paying 30s. a month to a London quack for medicine, and, as it was expressed, "advice," unknown to the regular parish doctor attending the young fellow. This same carter, a tenant of mine, applied for a reduction of rent on account of a stable. He wanted £2 reduction and got £1, and yet he could squander £18 a year on a lying charlatan.

Of course they heard of this impostor by an advertisement. Possibly in a religious paper.—I am, etc.,

December 25th. An M.D. not in Practice.

P.S.—The son has since died and the carter saved £18, but he could not afford his rent.

"PROPRIETARY MIXTURES."

Sir,—In the British Medical Journal of September 23rd, 1893, p. 708, you published a letter from me on this subject, in which letter I showed that a certain mixture of bromides, offered to the profession with all the eloquent and ingenious puffery apparently inseparable from such enterprises, only contained 5s. 6d. worth of bromides, whereas these unconscionable pharmacists were actually demanding £1 7s. 8d. from the profession, or a profit of £1 2s., rather over 400 per cent.

And now another London firm of eminence are offering me another mixtures of bromides and other substances at 4s. 6d. per ½ lb., a mixture—as was the other—a product of the pharmaceutical and financial ingenuity and brazen assurance of a firm of manufacturing druggists in St. Louis, Mo., U.S.A. By consulting the price list of a leading London wholesale house I find that this ½ lb. of mixture contains not quite 5½d. worth of drugs, and as for this modicum the subvendors demand 4s. 6d., the profit again works out at 400 per cent. Does anyone deny that such imports as these could well afford to pay a 25 per cent. import duty, and a gigantic profit as well?—I am, etc.,

Blackpool, Dec. 26th. Wm. Hardman.

AUTOMATIC WRITING.

Sir,—Dr. Rayner's remarks on "automatic writing" are, of course, interesting, and deserving of serious attention, but they are slightly amusing to those who have been paying serious attention to the subject for, say, five and twenty years, and who well remember the old days when we were told that automatic writing was only an impudent fraud. It is amusing to see the indignant scoffers becoming alarmed believers. I am not referring to Dr. Rayner personally, but to the class of profession he so worthily represents.

Dr. Rayner deprecates the investigation of "the facts of automatic writing by persons unacquainted with physiology or psychology," and says that the discouragement should be accompanied "by careful teaching and explanation of the true significance of the phenomena." But he warns us betimes that his teaching and explanation will take the form of "that way madness lies," which, to many, will look like sheer obscurantism, and not enlightenment at all. It is little to the point to say that the practice of automatic writing has in one instance ended in insanity. I might just as well say that preaching of the doctrines of Calvin or of the Thirty-nine Articles has ended in insanity. What then? That may only prove the desirability of keeping your temper, and your head. Besides, if automatic writing is treated as something that has its root in mental breakdown, and its fruiting in insanity, the whole thing is turned into an abnormal and morbid channel, and the "poor victim" of it is likely to be made abnormal and morbid. But if we kept our heads and our tempers, and treated automatic writing as something interesting, to which we should be hospitable, the sensitives or mediums might be as much benefited as they are now depressed. And surely that is good science as well as good sense. But, as an old observer, I deny that automatic writing has any necessary

connection with morbid conditions. What if, after all, there are genuine messages from intelligent beings (good and bad) in the unseen? Is that suggestion also a sign of incipient or developed insanity?—I am, etc.,

South Norwood Hill, Christmas Day. J. PAGE HOPPS.

DIPHTHERIA IN THE HOSPITALS OF THE METROPOLITAN ASYLUMS BOARD.

SIR,—In your leading article in the BRITISH MEDICAL JOURNAL of January 6th you draw special attention to the high diphtheria death-rate during 1892 at the South-Eastern Hospital, contrasting it with the lower death-rate at the North-Western Hospital. You state—only to dismiss as untenable—the view that severity of type of disease might be a factor in raising the mortality here.

May I point out that you have omitted to take into consideration two very important points? And, first, as regards the ages of the diphtheria patients at the South-Eastern and North-Western Hospitals respectively. Everyone familiar with the treatment of diphtheria knows that the mortality at 10 years of age and under is immensely higher than it is over 10, and that diphtheria death-rates at different hospitals depend largely upon the average age of the patients under treatment. Had you given careful consideration to the statistical tables of the two hospitals, you would have noted that at the South-Eastern only 18 per cent. of the cases admitted were over 10, while at the North-Western 35 per cent. were over 10. As diphtheria is eight times more fatal under 10 than over that age, obviously this difference of age incidence of cases admitted into the two hospitals accounts for part of the difference in their respective death-rates.

Secondly, as regards the great severity of the cases admitted here. You ignore, if you have ever read, the statement made by me in my annual report, p. 60, of the Statistical Reports, that "the diphtheria cases were of an exceptionally severe type, and the mortality was consequently high—namely, 56.6 per cent.; 26 of the cases—that is, one-third of the deaths—died within forty-eight hours of admission." As additional evidence of the severity of the cases, I may state that 46 presented laryngeal symptoms on admission, half of which showed toxic symptoms in addition, 12 developed laryngeal symptoms afterwards, 20 others presented toxic symptoms on admission, and 3 others were of the hæmorrhagic type. To those familiar with diphtheria, the above particulars will show clearly the exceptionally severe type of disease with which I had to deal in 1892. I may here remark that none of the other medical superintendents note, in their annual reports, anything special regarding the severity of their cases.

In drawing your inferences as to the type of disease in the north-west and south-east parishes from the Registrar-General's mortalities per 1,000 living in these districts, you rather hastily assume that, because the death-rate in the south-east parishes was 0.28 and in the north-west parishes 0.4 per 1,000 living, the type of disease was more severe in the latter than in the former district. You entirely omit to take note of the fact that diphtheria was very much more prevalent in those north-west parishes which you enumerate than it was in the south-east ones, and that, too, relatively to the population. Assuming the diagnosis of all cases notified to be correct (a rather large assumption by the way, at least in the south-east parishes, as I will show presently), the diphtheria cases were about one-third more numerous relatively to the population in the north-west parishes than in the south-east (see table pp. 17, 18 of Stat. Com. Rep.). One would therefore have anticipated that the death-rate per 1,000 living would, supposing other things to be equal, have been higher in the north-west than in the south-east parishes, but the fact that it was higher does not prove, as you suggest, that the type of the disease was more severe in the north-west than in the south-east parishes. Perhaps some light may be thrown on this point from the diphtheria notifications and deaths in these districts during 1892. From the tables on pp. 17 and 18 of Stat. Com. Rep. you will note that, in those north-west parishes which you select, there were 1,503 notifications and 333 deaths, and in the south-east parishes which you select there were 648 notifications and 163 deaths. Therefore, assuming the diagnosis of the cases to have been correct, in the north-west parishes 1 out of every 4.5 cases notified died, and in the south-east parishes 1 out of every 3.9 cases notified died. Assuming the diagnosis of the cases to have been correct, the conclusion to be drawn from this is that the type of disease was more severe in the south-east than in the north-west parishes. But there is some reason to believe that the type of disease was in the south-east parishes even more severe than is indicated by these figures. If you refer to the diphtheria statistics and to the tables on pp. 104 and 105, you will note that of 650 cases certified to be suffering from diphtheria admitted into the North-Western Hospital, only 2, that is, 0.3 per cent., were wrongly diagnosed, while at the South-Eastern Hospital, of 192 cases similarly certified and admitted, 54, that is, 27 per cent., of the admissions were wrongly diagnosed, and the mortality of the incorrectly diagnosed cases at the South-Eastern Hospital was 18 per cent. If the diagnosis of the notifications in the south-eastern parishes was on a level with that of the cases certified for admission to the hospital—and it is, I think, only fair to assume this—it is permissible to infer that the type of diphtheria prevalent in the south-east parishes was even more severe than is shown by the death-rate as calculated from the notifications and deaths.

You also comment on the fact that only 1 case of albuminuria was noted in the complications table (diphtheria) furnished by this hospital. In my manuscript it was stated to be a case of nephritis, and the mistake is evidently a printer's error. I am in the habit of making a note at the bedside when albuminuria occurs in the course of a case of diphtheria, but I regard it as a symptom, not a complication, of the disease, and therefore I do not place it among the complications. As regards rhinitis, the same remark applies, and it is, I think, hardly of sufficient importance to be tabulated in the statistical tables.

I quite agree with you that the complications tables as they at present appear in the annual reports are anything but satisfactory, and I may say that the subject has been under the consideration of the medical superintendents for some months past, with the view of agreeing on some uniform basis of classification.

You draw attention to the difference in the mortalities of home and hospital treated cases of scarlet fever and diphtheria. In instituting a comparison between these it should be remembered that—

1. A case admitted into hospital and diagnosed as scarlet fever or diphtheria, as the case may be, must be accounted for, and if it die must take its place among deaths under the heading of the disease it proved to be on admission, although death may have been due at a late stage of convalescence to some constitutional or coincident disease, which would probably have been certified as the cause of death if the case had been treated at home.

2. A large proportion of the children of the poorer classes, among whom scarlet fever and diphtheria are very fatal, is sent to the Asylums Board hospitals; the better class people isolate their children at home.

3. In many instances the relatives of patients admitted into hospital inform me that they have detained their children at home until the patients became so ill that they were unable to give them the necessary care and attention; in other cases the parents state that they have only consented to the removal of a child to hospital on account of the severity of the disease, mentioning at the same time that some of their children had been treated at home for mild attacks of the same disease. Probably the experience of the other medical superintendents of the Asylums Board hospitals is similar to mine.

4. Cases of diphtheria with laryngeal symptoms, among whom the fatality is very great, are frequently detained at home till there is urgent dyspnœa, and are then sent to hospital for the purpose of having tracheotomy performed on them.

These are a few of the circumstances that influence the rate of mortality in the hospital treated cases.—I am, etc.,

JOHN MACCOMBIE,
Medical Superintendent.

South-Eastern Hospital, New Cross, Jan. 9th.

DIPHTHERIA AND DEFECTIVE DRAINAGE.

SIR,—A boy, aged 12, son of a medical man, was attacked in August, 1888, with severe diphtheria necessitating tracheotomy, and afterwards dying from pneumonia. Other members of the family were attacked, but recovered. The father had no diphtheria cases at the time, and there was no history of throat illness at the school he was attending. About a year previous the drains of the house had been thoroughly put in order, and Mr. Wynter Blyth, who kindly examined them after the boy's death, pronounced them all right, and found nothing in the house to cause the disease.

A possible (?) cause, however, existed in the stable, separated from the house by a garden, where a horse was ill with "malignant sore throat," and where the patient had been in the habit of going in and out to fetch straw, etc., for his pet rabbits. The horse, which was under the care of Mr. Broad, F.R.C.V.S., was shot and examined after death by that gentleman, who writes as to what was found as follows: "There was much destructive inflammation found around the glottis and pharynx, and the parts adjacent were found intensely inflamed and quite black in places, but I do not think there was anything like diphtheria exudation."

Against the theory that the horse's illness was the cause of the boy's illness is the fact that the coachman had a family of young children, who all kept perfectly well during the horse's illness; and another horse in the stable was not attacked. Of course, the coachman was cautioned, and was probably extra careful; and it did not come out till after the boy's death that he had been going in and out of the stable. I am, etc.,

Finchley Road, N.W., Dec. 21st, 1893. H. WILBE.

SIR,—The discussion in which my honoured teacher, Dr. Wilks (*Nihil non tetigit quod non ornavit*) has taken an important part is of great interest, especially to rural medical officers of health. May I make a suggestion? When we have a disease to deal with which is thought to be connected with some drainage defect, we first diagnose the disease—or cheat ourselves into thinking we have done so—and then we search for a definite insanitary condition. If we find one, we are quite satisfied. Now, I would beg observers to search for drainage defects in diseases which are not supposed to be filth-produced maladies, and I venture to say their experience will be what mine is, that insanitary conditions are by no means uncommon, and exist side by side with any variety of disease. It is, therefore, not a justly scientific conclusion to say that this or that nuisance is the cause, or the conveyance of the cause, of this or that case of diphtheria, because the defect and the illness are found side by side.—I am, etc.,

GEORGE H. DE'ATH,
Medical Officer of Health for Buckingham, etc.

Buckingham, Jan. 7th.

[We have received a number of other communications on this subject, for which we regret to be unable to find room *in extenso*:

Dr. John J. Eyre, writing from Rome, touches on the points raised by Dr. De'Ath, namely, the frequency with which sanitary defects may be met with in houses without any accompanying diphtheria, and points out that scarlet fever might with equal justice be attributed on similar grounds to sewer gas. He thinks that sewer gas has no direct relation to diphtheria, but that (1) the sewer may become specifically contaminated, and (2) that the presence of sewer gas, by lowering the general health and producing a catarrh of the throat, may render the inmates of the house vulnerable to the diphtheria organism should they come in contact with it.

Dr. E. P. Atkinson (Surbiton) also points out that since a sewage smell means a leaky sewer, diphtheria may be produced if the sewer becomes specifically contaminated.

Dr. C. M. Jessop (Redhill) dwells on the depressing effect on the general health of insanitary surroundings, which render the organism (which when in good health is able to resist infection) prone to contract it. In such a sense sewer gas may be reckoned a cause of diphtheria.

Dr. P. W. Marriott (Mentone) sends some interesting cases in which exposure to bad smells from waterclosets or other offensive collections was followed by diphtheria. He also refers to the marked predisposition to diphtheria (and enteric fever) which exists in some families. The escape of some, and the suffering of others, may sometimes be traced to this cause.

Dr. J. Bunting (Torquay) refers to the general injurious effects of sewer gas and other insanitary conditions, which render the individual susceptible to the attacks of disease germs. He illustrates his remarks by reference to the myroderma vini which is always to be found on the grape under whatever circumstances it be grown, unless it be covered. Pathogenic microbes may be equally ubiquitous.

Dr. G. Walter Steeves (Parkfield Road, Liverpool) states that in three instances he has had to deal with scarlatina following diphtheria in the same patients in the same house. There had been no exposure to scarlet fever, but the drainage of the houses was most defective. He thinks it probable that diphtheria and one form of scarlatina may have their origin from similar insanitary conditions. The doctrine of the "All-sufficiency of Infection" does not stand the test of public health experience.]

ST. JOHN AMBULANCE ASSOCIATION.

SIR,—Permit me to say a few words regarding the remark of Surgeon-Major Freer, expressed in the BRITISH MEDICAL JOURNAL of December 30th, 1893, that ambulance has been given up as a *dilettante* entertainment by the wealthier classes. With this I quite agree, and should expect a decrease of work in consequence. It is especially the case with ladies. Ambulance is now scarcely ever mentioned as far as I can observe; and the problem is how can we keep up the useful work of the Association among them.

My suggestion is that the rule of the Association which compels all female students to obtain the ambulance certificate before entering on the nursing course should be rescinded, and that it be optional for ladies to begin with the ambulance or nursing course as they prefer; to enter for the nursing course without having obtained the ambulance certificate. Ladies always take more or less unwillingly to ambulance, but very readily and attentively to nursing. Ambulance work does not directly concern ladies. Nursing, on the other hand, is a part of the life of every woman; her opportunities abundant, and the measure of her usefulness very great. It ought to be a part of the education of all women. To understand nursing does not require a knowledge of ambulance, and I do not find that ambulance knowledge makes a better nurse. At the same time it is my opinion that this alteration would extend the knowledge of ambulance among ladies, as many after the nursing course would go in for ambulance to increase their knowledge. Whereas, as matters now stand, many are deprived of both who would willingly take the nursing course, from the dislike of the preliminary unnecessary drudgery of ambulance.

In Liverpool one nursing class to which I lectured was the only one that could be got together for two years. On two other occasions I had the requisite number to form a class, but could not as they had not ambulance certificates. In fact I gave the course of lectures independently of the Association, and I know of another instance in which the same was done. This alteration I feel sure would popularise the Association among the women of the country, and greatly extend its benevolent work in the care of suffering humanity.—I am, etc., JOHN BUCHANAN, M.D.,

Examiner and Lecturer, St. John Ambulance Association.

Bow Road, E., Jan. 4th.

THE ST. JOHN AMBULANCE ASSOCIATION AND ITS UNPAID DOCTORS.

SIR,—In the BRITISH MEDICAL JOURNAL of December 30th I see a letter on the above subject. Feeling that I must in some way be responsible for the extraordinary digression from the original question which has shown itself in the last few letters, may I recall your readers' attention to the letter signed "Justice," which appeared in your issue of September 30th last.

The second and third paragraphs of this letter contain the whole question. In the second the writer says: "By a decision of the Central Committee the Association now require four gratuitous complete courses of lectures to qualify their medical officers to become honorary life members of the Association instead of two such courses, as was the rule unti

last month." The commencing of the third paragraph says: "The life membership of the Association can be obtained by any person who subscribes £5 or upwards." Nothing can be said to strengthen the letter save in the last paragraph, where, in my opinion, the writer failed. The treatment—or should I not rather say the insult—offered by the St. John Ambulance Association to its lecturers is not to the individuals, but to the whole profession.

If the medical profession has a spark of real self-respect it will, as a body, resent the insult and turn its back on the Association. Undoubtedly first aid to the injured should be taught to every young man and woman: the question is a national one, and not one of sentiment, and as such it should be treated. Sooner or later every county council will organise these classes and appoint properly paid lecturers.

In my opinion, in every profession or business, work is better done when paid for, and in medicine I am sure that people appreciate far more advice or teaching for which they pay than that which they receive gratuitously.

I regret, Sir, that the matter has not been taken up more vigorously, but if this letter helps to make medical men see the dangerous position the profession is slowly but surely drifting into I shall be satisfied.—I am, etc.,

GRIFFITH CHARLES WILKIN.

Weymouth Street, W., Dec. 30th, 1893.

AMENDMENT OF MEDICAL ACTS.

SIR,—With reference to Dr. Bernard O'Connor's letter on the above, I must ask to be allowed to make a few comments. I did not presume for one moment to imagine that my proposed substitute would cover all the necessary alterations; it was only thrown out as a suggestion, which it would be for the subcommittee to amend, accept, or reject, under legal advice. Dr. Bernard O'Connor writes as if I had quoted the opinion of the man Hamilton in reference to the case of Carpenter *v.* Hamilton. Unfortunately for the profession, the opinion quoted was the judicial and authoritative decision of Baron Cleasby and Mr. Justice Hawkins, who heard the appeal, and this decision has remained unchallenged ever since, and therefore must be taken as the correct reading of the clause of the Medical Act in question.

Dr. O'Connor also states that the matter of the penalties being paid over to the Treasurer of the General Medical Council is covered by the 42nd Section, and he implies that these penalties are not alienated in the metropolitan area.

This is not correct, as it is well known to all lawyers who have prosecuted cases in the metropolis that "almost all the penalties imposed at the metropolitan police courts under various Acts of Parliament are paid to the receiver for the Exchequer as some set off against the expense of the metropolitan courts," and "the penalties imposed under the Medical Acts (1858) do not stand in an exceptional position." I may remind Dr. O'Connor that a deputation of the General Medical Council attended upon the late Home Secretary (Right Hon. Henry Matthews) in July, 1891, to request that some amendment might be made in the Act so that the penalties might be recovered by the Council as the Act directed. The Home Secretary absolutely refused to accede to the request, and the penalties as heretofore are not paid to the Treasurer of the Council, but pass at once into the hands of the receiver of the police. *Hinc illæ lachrymæ.*

It is for this reason that my Union made the suggested alteration in the Act which would carry out the clause quoted by Dr. O'Connor, its intention being obvious in the original Act.—I am, etc.,

A. G. BATEMAN,

Honorary Secretary, Medical Defence Union.

Longridge Road, S.W., Dec. 30th, 1893.

LONDON AND COUNTIES MEDICAL PROTECTION SOCIETY.

SIR,—Will you allow me to call the attention of your readers to this Society, which during the past two years has economically and efficiently done so much to forward the cause of medical protection individually and collectively?

The President is Mr. Jonathan Hutchinson, F.R.S., whose name and character are so well known. The Council consists of a number of eminent London and provincial medical men, both consultants and general practitioners, elected for a limited term. A large number are *ex-officio* representative of important provincial centres, being divisional presidents; these hold office during the pleasure of their constituents.

The Council meetings are held frequently, and the Committees of Council empowered to act in emergencies meet sometimes as often as twice weekly. No loss of time occurs in dealing promptly with cases.

The Society is amply provided with funds, having a members' guarantee fund of about £1,000, and a special guarantee of £1,000.

The financial year ends April 30th, 1894, but members entering after March 1st are forwarded receipts entitling them to membership to May 1st, 1895. The Society does not refuse assistance to any member whose first receipt is dated within twelve months of the application. The fixed date on which subscriptions become due is adopted to enable us to comply with the statutory requirements.

The benefits of the membership commence immediately on election. No official of the Society receives any salary, but is repaid, on a very moderate scale, any expenses or payments actually incurred in carrying out the orders of the Council.

Any further information, papers, etc., may be obtained from Dr. Hugh Woods, 11, Archway Road, Highgate, N., or from—Yours, etc.

GEO. B. MEAD, L.R.C.P.

Mentmore, Newmarket, Jan. 8th.

HEATING BY GAS.

SIR,—When the BRITISH MEDICAL JOURNAL commenced a short time ago a series of articles on cooking and heating by gas, I hoped that we might be favoured with a comprehensive and exhaustive discussion of the subject, and especially of the methods available for heating rooms by gas, in regard to which the public are so ill-informed, and, consequently, so easily imposed on. Judge, then, of my surprise on finding that in the second article, published in the JOURNAL of December 30th, 1893 the whole subject of heating stoves is cut down to a very brief description of the four classes of gas stoves in which reflectors, "condensers," asbestos fibre, and "hollow balls" are respectively used, without a single word as to the existence of other types of gas stoves, and especially of stoves in which the heated products of combustion are made to communicate their heat through the medium of metallic surfaces, with which they are brought largely into contact before being carried out of the room in which the stove is itself placed. As the designer of a stove of this latter type, which thirteen years ago received the highest award at the Smoke Abatement Exhibition, which has been largely in use since, and which was specially designed with the view of obtaining the maximum amount of heat from the combustion of a given quantity of gas, consistently with burning the gas under conditions which satisfy sanitary requirements, I think that both I and those who have designed other stoves of this type have some reason to complain that the readers of the JOURNAL should be left under the impression that "the different forms of gas-heating stoves in the market" are confined to the four classes with which alone the article in question deals. I think that I may venture to go further, and to express my surprise that even in describing the four classes of stoves referred to, no reference should be made to the extravagant consumption of gas which is required in them to produce a given heating effect, or to the fact that in none of them is any attempt made to utilise the heat evolved by the combustion of the gas for the purpose of warming inflowing fresh air, and thus to carry out the first object which every domestic heating appliance should have in view, namely, the ventilation of a room by the same means by which it is warmed. If people will insist upon having a gas heating stove which presents the resemblance, however imperfect, of a coal fire, well and good: they must be prepared to pay for their fancy. But if they want to burn gas economically, and to the best advantage in the promotion of health, they certainly ought to be informed that there are other ways of doing so than those described in the article to which I have referred.—I am, etc.,

FRANCIS T. BOND, M.D.

Gloucester, Dec. 30th, 1893.

THE CHOICE OF AN ANÆSTHETIC FOR REMOVAL OF NASO-PHARYNGEAL ADENOIDS.

SIR,—In the last fortnight two more deaths have occurred from the administration of chloroform for the removal of adenoid growths from the nasopharynx.

In one case I have reason to know that the danger of this anæsthetic was pointed out and the alternative employment of nitrous oxide gas forcibly though unavailingly urged. Letters have been recently printed in the columns of the BRITISH MEDICAL JOURNAL and in those of its two weekly contemporaries from the pens of Mr. Wyatt Wingrave, Mr. Lennox Browne, and Dr. Dundas Grant respectively urging the complete safety and efficiency of nitrous oxide gas in these operations. All of these gentlemen are attached to the Central London Throat and Ear Hospital, where this anæsthetic has been employed during the last three years on about two thousand occasions with complete efficiency and without accident. I have myself been responsible for the administrations of nearly half this number as well as in two to three hundred other cases in private practice.

The long list of fatal results from chloroform is calculated to bring a valuable operation into disrepute, and I venture to say with all respect that in the light of the foregoing experience the word "misadventure" cannot much longer be properly applied to the verdict.—I am, etc.,

W. G. HOLLOWAY, M.D.Cantab.,
Registrar and Anæsthetist to the Central London Throat and Ear Hospital.

January 2nd.

NAVAL AND MILITARY MEDICAL SERVICES.

ARMY MEDICAL STAFF EXCHANGE.

The charge for inserting notices respecting Exchanges in the Army Medical Department is 3s. 6d., which should be forwarded in stamps or post office order with the notice. The first post on Thursday mornings is the latest by which these announcements can be received.

A SURGEON-CAPTAIN, who will fall to a Colonial station, probably Egypt or South Africa, wishes for an exchange with an officer who returned early in 1893, after completing a tour of foreign service. Apply "Surgeon-Captain," BRITISH MEDICAL JOURNAL Office, 429, Strand, W.C.

THE NAVY.

INSPECTOR-GENERAL EDWARD TOWNSEND MORTIMER has been placed on the Retired List, January 2nd. He was appointed Surgeon March 15th, 1848, Staff Surgeon April 25th, 1862, Fleet Surgeon December 7th, 1876, Deputy Inspector-General June 11th, 1884, and Inspector General May 3rd, 1889. From the *Royal Navy List* we learn that he served as Assistant Surgeon during the China War in 1857 to 1862; was specially mentioned in Commander-in-Chief's despatches for services at the capture of Canton, 1857 (medal and clasp); was present at the capture of the Peiho Forts in 1858 and 1860 (clasps); also at the attack on the same forts in 1859, on which occasion he was thanked by the Commander-in-Chief for his services to the wounded, and specially promoted. He was also in the *Daphne* during the Abyssinian War (medal), and was likewise at the capture, on the East Coast of Africa, of eighteen slavers, and the release of nearly four hundred slaves. He was specially promoted to Fleet Surgeon in 1876. As medical officer in charge of the Embassy, he accompanied Rear Admiral Gore Jones, C.B., on a diplomatic mission to the Queen of Madagascar. As Deputy Inspector-General in charge of the Royal Naval Hospital, Hong Kong, he received the thanks of the Governor and of Hong Kong for acting as Chairman of a Commission to inquire into the prevalence of fever in the colony; and was President of the Medical Society of Hong Kong in 1888.

Staff Surgeon F. R. M. LOFTIE is promoted to be Fleet Surgeon, December 30th. He was appointed Surgeon October 1st, 1872, and Staff Surgeon twelve years thereafter.

The following appointments have been made at the Admiralty:—ALFRED H. MILLER, Staff Surgeon, and HENRY E. TOMLINSON, Surgeon, to the *Edgar*, undated; ARTHUR E. KELSEY, Surgeon, to the *Howe*, January 5th; JOHN ACHESON, M.D., Staff Surgeon, to the *Spartan*, January 5th; WILLIAM H. LORY, Staff Surgeon, to the *Rover*, January 5th; EDWARD CHOLER, Surgeon, to the *Sandwich*, January 6th; HAROLD B. OSBORNE, Surgeon, to the *Howe*, January 6th; JOHN S. DOBBYNS, Fleet Surgeon, to the *Duke*, January 8th; THOMAS BROWNE, M.D., Deputy Inspector-General, to Haslar Hospital, January 8th; JOHN WATSON, Fleet Surgeon, to Yarmouth Hospital, January 8th; JAMES L. SWEETNAM, Fleet Surgeon, to the *Rodney*, January 8th.

ARMY MEDICAL STAFF.

SURGEON-COLONEL A. V. GORE will, on arrival in India, take over the Administrative Medical charge of Mhow District, Bombay.

Surgeon-Major-General T. N. HOYSTED is permitted to proceed to England on vacating, on January 11th, his appointment as P.M.O. of the Madras Army.

INDIAN MEDICAL SERVICE.

SURGEON-COLONEL C. P. COSTELLO, Bengal Establishment, Principal Medical Officer and Sanitary Commissioner, Assam, is permitted to retire from the service, from January 1st. He was appointed Assistant-Surgeon February 24th, 1864, and became Surgeon-Colonel from January 1st, 1889. He served with the 6th Punjab Infantry in the Umbeyla campaign in 1863-64 (medal with clasp); in the Jowaki Expedition of 1877-78 (clasp); in the Afghan War of 1878-80, first in charge of the Native Base Hospital of the Kooram Field Force, and afterwards with the 1st Goorkhas in the Khyber Line Force (thanked by the Governor-General and by the Commander-in-Chief in India in General Orders) (medal); was specially thanked by the Lieutenant-Governor of the Punjab for his services on the Punjab Frontier in 1886; and was with the Manipore Expedition in 1891 as Principal Medical Officer (mentioned in despatches) (clasp).

Surgeon-Colonel G. THOMSON, Bengal Establishment, Administrative Medical Officer and Sanitary Commissioner Central Provinces, and officiating Principal Medical Officer Lahore District, is directed to proceed to Calcutta, to officiate as P.M.O. of the Presidency District, *vice* Surgeon-Colonel L. D. Spencer, appointed to the Punjab Frontier Force.

Surgeon-Captain E. R. DA COSTA, Madras Establishment, in medical charge of the 20th Native Infantry, is promoted to be Surgeon-Major from April 2nd, 1893.

Deputy Surgeon-General ROBERT DEMPSTER, who died on December 12th, entered the Indian Medical Service at the age of 28. His first commission, Assistant Surgeon, dates from August 4th, 1855. Dr. Dempster served with various native regiments in India, and was present at an engagement with the rebel Meen Loung, in the Enzeeleen, Burmah, on January 27th, 1857, as Assistant Surgeon in medical charge of detachments 35th and 18th Regiments Native Infantry.

Mr. R. T. DARWIN died recently in the Rangoon General Hospital, Mergui, from blood poisoning. He entered the military service as Assistant Apothecary in 1877, and in 1889 joined the Burmah service, and was appointed Civil Surgeon of the Southern Shan States. He was attached to Mr. Ney Elias's Mission in connection with the Anglo-Siamese boundary, and he was then Civil Surgeon at Pokokku, and was lately posted to Mergui. Mr. Darwin was L.R.C.P., L.R.C.S., and L.M., of Edinburgh.

Surgeon-Colonel A. H. HILSON, M.D., C.I.E., Bengal Establishment, died at Upper Norwood on January 4th, aged 58. He was Assistant Surgeon January 29th, 1857; attained the rank of Surgeon-Colonel December 29th, 1888; and retired from the service April 1st, 1893. He was engaged in the Indian Mutiny campaign in 1857-59, being present at the engagements of Sohunpore, Phoolpore, Belwa, Amorah, Doomooreagunge, and Jugdespore, where he was severely wounded. He was mentioned in despatches, and received the Indian Mutiny medal. He was also with the Bhootan expedition in 1865-66, and received the Frontier medal with clasp. He was awarded a Distinguished Service Reward in 1891, and nominated a Companion of the Indian Empire in June last.

Surgeon-General GEORGE SAUNDERS, Bengal Establishment, retired, died at Ryde, I.W., on January 7th, from paralysis followed by influenza, aged 74. He entered the service as Assistant Surgeon July 8th, 1842; attained the rank of Deputy Surgeon-General July 20th, 1868; retired July 7th, 1871; and was granted the honorary rank of Surgeon-General November 25th, 1874. He had no war record.

Surgeon-Captain WILLIAM HENRY MARTIN INGHAM, M.B., Madras Establishment, died on January 8th at Sydenham, at the age of 30. He was the fifth son of the Hon. S. S. Ingham, of Bermuda. He was appointed Surgeon-Captain October 1st, 1887, and was transferred to the Half-Pay List on October 19th, 1893.

THE VOLUNTEERS.

SURGEON-MAJOR J. S. CUMMINGS, M.D., 1st Lanarkshire Artillery, is promoted to be Surgeon-Lieutenant-Colonel, January 6th.

Mr. LEWIS ERLE SHORE, M.D., is appointed Surgeon-Lieutenant to the 4th (Cambridge University) Volunteer Battalion the Suffolk Regiment (late the 2nd Cambridgeshire), January 6th.

Surgeon-Lieutenant C. K. MORRIS, 2nd Volunteer Battalion the Queen's Own Royal West Kent Regiment (formerly the 3rd Kent), has resigned his commission, which bore date November 10th, 1888.

Surgeon-Lieutenant R. J. BURNS, 3rd (Sunderland) Volunteer Battalion the Durham Light Infantry (late the 3rd Durham), is promoted to be Surgeon-Captain, January 6th.

Surgeon-Lieutenant-Colonel D. H. MONCKTON, M.D., the Maidstone Company Volunteer Medical Staff Corps, has resigned his commission, with permission to retain his rank and uniform, January 6th.

THE PRINCIPAL MEDICAL OFFICER OF ALDERSHOT.

SURGEON-MAJOR-GENERAL WADE, the Principal Medical Officer of Aldershot, has, we are informed, sent in his papers. As we understand that he has not applied for a medical board, we presume that he will have to retire on the pension of a Surgeon-Colonel. This is an instance of the hardship likely to be caused by the rule which compels officers to serve three years in an administrative rank before they entitled to the pension of such rank. Surgeon-Major-General Wade has been thirty-seven years in the army on full pay; of this long term of service twenty-five years were passed in the tropics. By the operation of the three years' rule this distinguished officer is now obliged to retire on a pension smaller by some £90 than that to which, under the warrant of 1879, he is entitled.

THE HEALTH OF THE NAVY.

THE statistical report of the Director-General of the Medical Department of the Navy, Dr. James N. Dick, C.B., upon the health of the Navy for 1892, has just been issued as a Parliamentary Paper. This states that the returns for the total force may, on the whole, be regarded as very satisfactory. The aggregate number of cases of disease and injury returned during 1892, furnished a ratio of 931.39 per 1,000 of the mean force, which is the lowest recorded since these reports were first published in their present form, in the year 1856. On the Mediterranean Station, in particular, the health of the squadron, as compared with that of the previous year, underwent considerable improvement, and especially was there a marked decrease in the number of cases of fever. The cases of sickness in the irregular force also materially diminished. There was, however, a great increase in malarial fevers on the West Coast of Africa and Cape of Good Hope Station, principally arising from the operations of naval forces on shore. The ratio per 1,000 of cases of constitutional syphilis shows a slight decrease when compared with the preceding year, but an increase is still observable when the figures of the last five

years are concerned. The total force in the service afloat, corrected for time, in the year 1892 was 58,330 officers and men, of whom 32,790, or 56.21 per cent., were between the ages of 15 and 25; 18,230, or 31.25 per cent., were between the ages of 25 and 35; 6,270, or 10.74 per cent., were between the ages of 35 and 45; and 1,040, or 1.78 per cent., were above 45 years of age. The total number of cases of disease and injury entered on the sick list was 51,503. The average number of men sick daily was 2,431.84, which was in the ratio of 41.69 per 1,000, and showed an increase, compared with the previous twelve months, amounting to 0.46 per 1,000, but a decrease of 0.52 per 1,000 in comparison with the average of the last five years. The number of days' sickness on board ship and in hospital in the total force was 890,055, which gives an average loss of service from disease and injury of of 15.25 days for each person, and shows an increase compared with the preceding year, to the extent of 0.2 day and a decrease of 0.16 day in comparison with the average of the last five years. The total number of persons invalided was 1,529; the number of deaths was 326. Of this number 263 were due to disease and 63 to injury; the death-rate from disease alone was 4.5 per 1,000, and from injury 1.08 per 1,000. The total death-rate was 5.58 per 1,000, which is a decrease of 0.59 per 1,000 when compared with the preceding year. Of wounds in action seven cases were returned, all of which occurred among the forces landed, for operations up the River Gambia. There were also two invalidings from the results of these injuries, and five of them proved fatal. There were seven deaths by suicide during the year—three from hanging, two from poisoning, and two from shooting. Details are given of the numbers of cases of various diseases that occurred during the year, and of the men who were attended on each of the naval stations, and a large number of tables are appended to the report.

SURGEON-MAJOR LLOYD, V.C.

A CORRESPONDENT, writing from Burmah under date December, 1893, draws our attention to the fact that a whole year has elapsed since the very gallant conduct of Surgeon-Major Lloyd was reported for reward. He well says that the Army Medical Staff are justly proud of the conduct of their brother officer and impatient of the delay in rewarding him. Our correspondent and his comrades in Burmah will, we are sure, specially share in the satisfaction of the profession and public at large that the gallant officer has at length been decorated with the Victoria Cross. Among the recipients of that splendid and rare distinction Surgeon-Major Lloyd will take prominent rank and prove once again to the world that the terms combatant and noncombatant in the army imply no distinction in personal heroism, courage, and self-sacrifice.

RANK AND TITLES.

SURGEON-LIEUTENANT-COLONEL (RETIRED) writes: Army medical officers are too invertebrate and not sufficiently self-assertive in their claims to military rank and titles. No matter what their gold is the rank is the guinea stamp, and until their coins are properly officially impressed they will not pass current. Schoolmasters, paymasters, and the Army Service Corps are not ashamed to use their titles and to make known they have risen in the service, and are medical officers less entitled? That we are so ashamed is surely the case when a correspondent actually speaks of the evil effects of "swamping society with titular rank," etc. We habitually address each other as we would not think of addressing a paymaster, and even our great friend the BRITISH MEDICAL JOURNAL still addresses some of us, retired but liable to recall, as surgeon-major, when our official rank is now surgeon-lieutenant-colonel.

*** We are very sorry and in future will have a care.

SOLDIERS ON FURLOUGH.

A CORRESPONDENT asks: A soldier on leave is taken suddenly ill with no money—who is responsible for medical advice and medicine, Government or the soldier?

*** We have answered similar questions before. All soldiers borne on the muster rolls of their corps are entitled to admission to a military hospital if sick while on furlough of any kind, but only those on sick furlough will be entitled to private medical attendance at the public expense where there is no military hospital. This would make the soldier himself, not the Government, liable for medical attendance under the question submitted. But the hard and fast rule might possibly be relaxed under very special circumstances, and if there then are such our correspondent should place them before the Under-Secretary of State for War.

MEDICO-LEGAL AND MEDICO-ETHICAL.

MRS. ANNA RUPPERTS'S "SKIN TONIC."

THE action brought by Mrs. Anna Ruppert to recover a sum of £13 4s. 5d. for goods sold and delivered was heard in the Westminster County Court on January 9th. The defendant was an advertisement agent, named Mrs. Nives, who became Mrs. Ruppert's agent at Bournemouth, with a commission of 50 per cent.

Mr. Harry Stimpson, manager to Mrs. Ruppert until March, 1893, was called and supported the claim. He stated in cross-examination that he did not know that her "Skin Tonic" contained poison of his own knowledge. He was not a chemist or druggist, and could not say whether or not anyone in Mrs. Ruppert's employ was entitled to sell poisons. He did not know the particular case which had been related in the BRITISH MEDICAL JOURNAL, and had not been able to trace it. He was aware that one of the tonics contained poison to some extent, but not all of them. It was submitted on behalf of the defendant that there was no case to answer. According to the Pharmacy Act no unqualified person was entitled to sell poisonous preparations. He had numbers of letters from various persons who had suffered in consequence of the plaintiff's treatment. Her own witness admitted that the preparation contained poison. She had, therefore, been guilty of an illegal act, and could not recover. It was submitted on behalf of the plaintiff that wholesale traders were exempt from the Act.

The defendant stated in evidence that she was not aware when she undertook the agency that the preparation contained poison, and that after the publication of the article in the BRITISH MEDICAL JOURNAL, the demand for the preparation ceased.

After some further evidence, his honour (Judge Lumley Smith, Q.C.) said that plaintiff's claim was in respect of twenty-four bottles of "skin tonic," which it was proved beyond all doubt did contain a poison; he did not consider that persons like Mrs. Ruppert were entitled to take advantage of Section 16 of the Act which was intended to apply to large wholesale dealers in drugs. The plaintiff could not recover for that portion of the articles supplied which contained poison, but could recover the price of the other articles. He therefore gave judgment for the plaintiff for £6 3s. 3d., and found against the defendant on a counterclaim for loss of business and credit, with costs in both instances. Stay of execution was, it was understood, granted pending notice of appeal, on condition that the debt and costs were paid into court.

The Pharmaceutical Society of Ireland has again brought Mrs. Anna Ruppert before the police magistrate in Dublin for having sold and dispensed a poison, not being a person qualified to do so according to law. A bottle of skin tonic was purchased on September 5th, and was found to contain 6½ grains of corrosive sublimate. Mrs. Ruppert was examined, and swore that since August, when there was a conviction against her, the corrosive sublimate was not allowed to enter the tonic. She gave instructions that no more of the old bottles were to be sold. Judgment was reserved.

MEDICAL ETIQUETTE.

A MEMBER writes: A. receives an urgent message to go to B.'s house, six miles away. A. always attends B.'s family, but B. himself is in C.'s club. On A.'s arrival he finds B. very ill, and, being attended by C., A. tells B. he can only see him in consultation with C.; but B. says he is so much worse, and since C. is a newcomer he must have another opinion at once, and that if A. will not see him he must send for someone else. It being impossible to arrange a consultation then and there A. examines B., and writes a friendly letter to C., telling him exactly how things stand, and requesting him to continue the treatment of the case. C. is much annoyed at this, refuses to see B. again, and throws up the case. C. says A. should never have seen the case save in consultation, which A. says was impossible owing to its urgency, so he did the best he could under the circumstances. Was A. right or not?

*** In relation to the above case we may note that, in so far as A. has conscientiously fulfilled the principle laid down in the following rule, he has acted rightly:

"When a practitioner is called in to, or consulted by, a patient who has recently been, or still may be, under the care of another for the same illness, he should on no account interfere in the case, except in an emergency, having provided for which he should request a consultation with the gentleman in previous attendance, and decline further direction of the case except in consultation with him. If, however, the latter refuse this, or has relinquished the case, or if the patient insists on dispensing with his services, and a communication to that effect be made to him, the practitioner last consulted will be justified in taking charge of the case, ere assuming which, however, he should satisfy himself that such intimation has been given by the patient or family, etc."—*Code of Medical Ethics*, chap. ii, sec. 5, rule 9.

A PENNY PAMPHLET.

W.D.H.—Comparatively useful to the industrial classes as may be the "Sick Diet and Applications" pamphlet issued by Mr. C., M.R.C.S., etc., at one penny each, and while abstaining from any critical opinion on the household receipts further than to observe that out of the 19 selected the instructions for two of the three for beef tea are inconsistent with the N.B. appended thereto, we cannot (in view of the assertion, personally vouched for by our correspondent, that it is openly circulated by a chemist and others) but concur that the real though not ostensible object is to obtain practice. If such be the case we need scarcely add that, medico-ethically, it would constitute covert unprofessional advertising, and justly subject him to severe criticism.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

ENGLISH URBAN MORTALITY IN THE FOURTH QUARTER OF 1893.

THE vital and mortal statistics of the thirty-three large English towns dealt with by the Registrar-General in his weekly returns are summarised in the accompanying table. During the three months ending December last 78,977 births were registered in these thirty-three towns, equal to an annual rate of 30.7 per 1,000 of their aggregate population, estimated at upwards of ten and a quarter millions of persons. In the corresponding period of 1892 the birth-rate in these towns averaged 31.6 per 1,000. In London the birth-rate last quarter was equal to 29.8 per 1,000, while it averaged 31.3 in the thirty two provincial towns, among which it ranged from 23.0 in Halifax, 23.3 in Huddersfield, 25.0 in Brighton, and 25.4 in Croydon, to 34.3 in Liverpool, 34.7 in Swansea, 34.8 in Sunderland, and 37.8 in Gateshead.

During the quarter under notice 58,298 deaths were registered in the

...small-pox in the thirty-three towns, which had been 23 and 141 in the preceding two quarters, rose again to 173 in the three months under notice, of which 42 were registered in London, 15 in Leicester, 13 in Liverpool, 12 in West Ham, 11 in Oldham, and 11 in Leeds.

The rate of mental disease in the thirty-three towns, as measured by the proportion of deaths registered during the quarter to the population, was equal to 0.43, and slightly exceeded the average in London. The rate of mental disease was 0.44 per 1,000, while it averaged 0.41 in the thirty-two provincial towns, among which it ranged from 0.27 in Portsmouth, 0.37 in Bolton, 0.38 in Gateshead, to 0.91 in Birmingham, 0.97 in Liverpool, 0.98 in Oldham, 0.225 in Wolverhampton, and 0.29 in Blackburn.

The causes of 1,537, or 1.8 per cent., of the 58,298 deaths in the thirty-three towns during the fourth quarter of 1893 were not certified, either by registered medical practitioners or by coroners. The proportion of uncertified deaths in London did not exceed 0.9 per cent., while in the thirty-two provincial towns it averaged 2.5 per cent. The causes of all the deaths in Croydon during the quarter were duly certified; in the other towns the lowest proportions of uncertified deaths were registered in Portsmouth, Plymouth, and Wolverhampton, and the highest in West Ham, Birmingham, Preston, and Leeds.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns, including London, 6,117 births and 1,567 deaths were registered during the week ending Saturday, January 6th. The annual rate of mortality in these towns, which had declined from 28.6 to 22.6 per 1,000 in the preceding four weeks, rose again to 22.8 last week. The rates in the several towns ranged from 11.2 in Halifax and 14.8 in Huddersfield to 37.0 in Norwich and 40.3 in Plymouth. In the thirty-two provincial towns the mean death-rate was 21.6 per 1,000, and was 2.9 below the rate recorded in London, which was 24.5 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.6 per 1,000; in London the rate was equal to 3.2 per 1,000, while it averaged 2.0 in the provincial towns, and was highest in Salford, Plymouth, and Birkenhead. Measles caused a death-rate of 1.5 in Salford, 2.0 in Birkenhead and 2.2 in Burnley; whooping-cough of 3.0 in Birkenhead and 3.6 in Plymouth; and "fever" of 1.1 in Sunderland. The 89 deaths from diphtheria in the thirty-three towns included 66 in London, 4 in Manchester, and 3 in Liverpool. Six fatal cases of small-pox were registered in Birmingham, 3 in Bradford, 2 in London, and 2 in Oldham. There were 94 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, January 6th, against 118, 100, and 93 at the end of the preceding three weeks; 15 new cases were admitted during the week, against 23 and 11 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,855, against

Analysis of the Vital and Mortal Statistics of Thirty-three of the Largest English Towns during the Fourth Quarter of 1893.

Towns.	Estimated Population (mid-year)	Births.	Deaths.	Annual Rate per 1,000 Living. Births.	Deaths.	Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-Cough.	Fever.	Diarrhœa.	Deaths of Children under one Year to 1,000 Births.	Rate per cent. of Uncertified Deaths.
	10,327,846	78,077	58,298	30.7	22.6	2.6	[illegible]	172	778	889	1,418	1,377	938	1,016	171	1.8
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	827	422	324	789	663	719	175	2.5
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1,[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.0	3,179	19	44	467	1,089	[illegible]588	278	[illegible]297	173	0.2
[illegible]	[illegible]	1,[illegible]	1,[illegible]	[illegible]	[illegible]	2.3	188	[illegible]	9	71	24	[illegible]	20	[illegible]	182	1.5
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.6	43		1	3	22	7	6	4	139	0.0
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.9	27			2	10	5	4	6	147	2.6
[illegible]	[illegible]	1,[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	62		6	11	11	5	17	12	127	0.5
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			7	3	37	1	6	164	0.2
[illegible]	[illegible]	1,[illegible]	1,[illegible]	[illegible]	[illegible]	[illegible]	122	15	4	21	19	43	2	30	161	0.8
[illegible]	[illegible]	1,[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		1	11	11	11	6	15	155	1.0
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24		1	7	-	3	12	10	163	2.0
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.1	30	1	11	17	2	2	9	[illegible]8	225	0.5
[illegible]	497,891	3,781	2,[illegible]	[illegible]	[illegible]	[illegible]	275	45	24	17	20	62	29	82	191	5.8
[illegible]	104,184	780	[illegible]	[illegible]	[illegible]	1.0	103	—	54	8	11	8	15	8	150	0.6
[illegible]	181,547	1,416	[illegible]	[illegible]	[illegible]	1.9	89	4	20	21	7	5	14	15	184	3.7
[illegible]	220,551	1,[illegible]	1,[illegible]	[illegible]	[illegible]	[illegible]	109	1	[illegible]	[illegible]	6	9	[illegible]	22	192	1.8
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	1	11	11	10	157	0.6
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	59		[illegible]	[illegible]	1	23	[illegible]	11	188	1.0
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2	[illegible]	[illegible]	24	[illegible]	98	62	197	4.1
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]		[illegible]	5	14	138	2.9
[illegible]	[illegible]	1,[illegible]	1,[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		11	[illegible]	[illegible]	[illegible]	45	84	181	1.3
Salford	221	1,731	1,[illegible]	[illegible]	[illegible]	[illegible]	139		[illegible]	7	15	[illegible]	40	39	189	2.6
Oldham	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	13	[illegible]	4	[illegible]	10	13	198	1.2
Burnley	102	721	[illegible]	[illegible]	[illegible]	[illegible]	68	[illegible]	13	19	4	20	6	13	190	1.7
Blackburn	105	887	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		2	[illegible]	7	[illegible]	229	4.0
[illegible]	25	914	[illegible]	[illegible]	[illegible]	1.5	11		1	7	1	2	1	[illegible]	177	0.3
[illegible]	143	567	[illegible]	[illegible]	[illegible]	1.2	28		[illegible]	[illegible]		[illegible]	7	[illegible]	141	3.3
Halifax	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12			1	1	[illegible]	[illegible]	[illegible]	137	3.8
Bradford	[illegible]	1,197	1,[illegible]	[illegible]	[illegible]	[illegible]	130	[illegible]	1	[illegible]	[illegible]	[illegible]	24	24	174	1.0
[illegible]	[illegible]	2,[illegible]	1,[illegible]	[illegible]	[illegible]	[illegible]	291		[illegible]	13	13	54	46	43	171	5.8
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		1	1	24	69	28	25	169	3.4
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12			[illegible]	9	[illegible]	33	28	182	3.4
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]	27	164	1.0
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	58		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	56		[illegible]	[illegible]	13	[illegible]	54	54	198	0.0

3,102, 2,993, and 2,988 at the end of the preceding three weeks; 210 new cases were admitted during the week, against 285 and 262 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday last, January 6th, 791 births and 613 deaths were registered in eight of the principal Scotch towns. The death-rate in these towns, which had declined from 23.0 to 21.8 per 1,000 in the preceding three weeks, further fell last week to 21.5, and was 1.3 per 1,000 below the mean rate during the same period in the thirty-three large English towns. Among these Scotch towns the death-rates ranged from 15.4 in Perth to 26.5 in Dundee. The zymotic death-rate in these towns averaged 2.7 per 1,000, the highest rates being recorded in Perth and Leith. The 298 deaths registered in Glasgow were equal to a rate of 22.6 per 1,000, and included 14 from whooping-cough, 3 from diphtheria, and 3 from "fever." Four fatal cases of diphtheria were recorded in Edinburgh, and 3 of small-pox in Leith.

PAUPERS' DIET AT NEWTON ABBOTT.

WE have several times of late drawn attention to the management of the Newton Abbott workhouse. It is interesting to add that a certain consistency characterises the treatment of the poor in that unfortunate parish. We pointed out how chary the guardians were of nurses for the sick, the *Western Daily Mercury* shows that they are equally chary of food for the healthy. The present cost of each inmate in the Newton workhouse appears to be 2s. 1d. per week, or something less than 3½d. a day. It was proposed to improve the diet to the extent of 1s.d. per week, or a little less than a farthing a day, but the motion was shelved! Unless living is wonderfully cheap at Newton Abbott, it is to be feared that these poor people are being very improperly fed.

DUBLIN WATER SUPPLY.

THE Dublin Sanitary Association has been considering the water supply of the city, and the circumstances attending the recent failure of the Vartry. They point out that while the amount used is equivalent to 45 or 50 gallons per head daily in Dublin, only 22 gallons are used in Liverpool and Manchester. What becomes of the other 23 gallons in Dublin? Elsewhere this waste has been found to consist in great measure of underground waste, and if 15 gallons a head per day are thus wasted, it may be roughly stated that it costs the city £30 a day to saturate the subsoil. They strongly advise that the Corporation should test over a limited area the efficacy of the Deacon waste water system of detection and localisation of leakage which has been adopted in Liverpool and elsewhere. The Corporation, in its panic, proposed to expend another £120,000 on waterworks, while the supply at present available is more than sufficient for Dublin and the townships at 22 gallons a head daily. The water waste is undoubted, and it certainly is a wise suggestion that the sources of this should be determined before the unhappy ratepayers—who already pay nearly 10s. in the pound—are burdened with further taxation.

FEES FOR NOTIFICATION OF INFECTIOUS DISEASE.

AT Clerkenwell, before Mr. Bros, the vestry of St. Luke's was summoned for the non-payment of a fee of 2s. 6d. to Dr. Evan Jones, of Goswell Road. On July 4th last, the complainant, under the Infectious Diseases Act, notified to the vestry a case of erysipelas. At the end of the year he sent in to the vestry a list of fees due to him for notifications, and the list was returned with a marginal note as to the case in question—"Not erysipelas." The vestry refused to pay the 2s. 6d. in this case. For the vestry, Dr. Yarrow, medical officer of health, was called. He stated that, on receiving Dr. Jones's notification, he called on the patient in question, and decided that there were no symptoms of erysipelas in the case. He thought she was suffering from a superficial abscess, or mere blister. Mr. Bros said the complainant had notified a disease in accordance with his opinion, and was entitled to his fee. The refusal to pay had cast a slur on Dr. Jones's character. He must be paid the 2s. 6d. for which he sued, and five guineas costs.

SCHOOL ATTENDANCE AND NOTIFICATION OF INFECTIOUS DISEASE.

NOTIFICATION encloses a copy of a new form of certificate under the Notification Act issued recently to practitioners in a northern suburb of London. He takes exception to two innovations, which he regards as putting upon the medical attendant a duty properly resting with the sanitary authority, and adds: "If it is in the interest of the public health I do not suppose that anyone would object, but I do not think it should come in the body of the certificate, which must be forwarded under a penalty." The items in question are as follows: "The patient has been attending ..... School, ... Road," and "I am informed that children from the same house are attending ..... School, ... Road."

*** Information as to school attendance is not required by the Act. The additions were no doubt meant to be simply suggestive, the blanks to be filled up or not at the discretion or convenience of the notifying practitioner. The value of early information of this sort to the medical officer of health is obvious, and in many instances a brief note of the kind could be inserted without trouble. But, as our correspondent urges, it would seem to be only reasonable to distinguish between the items that have to be notified as a matter of compulsion and those which are invited as a matter of courtesy and public spirit.

UNSOUND MEAT AND FISH.

VARIOLA writes: A few months ago I caused to be seized two pieces of fish which I certified to be unfit for the food of man. They were taken by my inspector before a justice of the peace at his residence, and an order obtained from him for their destruction, which order was promptly carried out. Two days later the matter came before the local board, and they decided not to take any further action than to call upon the owner of the fish to appear before them and admonish him. My views of the matter, which I explained to them, were that the local authority had no power to interfere with the ordinary course of procedure as indicated by the Public Health Act, Sections 116 to 119; but they answered that their authority was necessary before any legal proceedings could be instituted.

Will you kindly inform me of the usual mode of procedure in such a case, and whether I was right in my interpretation.

*** Section 117 of the Public Health Act, 1875, not only gives the justice power to condemn and order to be destroyed certain articles of food intended for the food of man if it appears to him that they are diseased, or unsound, or unwholesome, or unfit for food of man; but also power to punish the owner of the same by fine or imprisonment. Still, in practice an application is first made by the medical officer of health or inspector for an order to have the meat, etc., destroyed; and, if no complaint is made to the justice in respect of the exposure for sale, etc., the justice will not inflict a penalty. The medical officer of health reports the seizure of the food to his authority, and that an order to destroy has been obtained and carried out, and it ordinarily rests with the authority to decide whether further proceedings are taken or not. No medical officer of health or inspector would institute proceedings in such a case without the sanction of the local authority.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF LONDON.

ANNUAL COMMITTEE OF CONVOCATION.—The most important business at the meeting of Convocation on Tuesday next will be the presentation of the report of the Annual Committee, and a motion by Dr. T. B. Napier to the effect that the Committee be instructed to consider whether any enlargements and amendments of the constitution and functions of Convocation or the Annual Committee might usefully be effected; and, if so, to advise as to their nature. The report deals, among other matters, with the recent registration of a company called "The General Council of Safe Medicine," which has assumed the right of granting a degree—M.D.(Bc.). The report states that, pending the result of the action proposed by the General Medical Council, further action was postponed, but that the propriety of taking action against the company would be considered at the proper time.

UNIVERSITY OF EDINBURGH.

DURING the past year 1,641 students were enrolled in the Faculty of Medicine of the University of Edinburgh, and of these, 666 (or nearly 41 per cent.) belonged to Scotland, 557 (or nearly 34 per cent.) to England and Wales, 71 from Ireland, 79 from India, 229 (or nearly 14 per cent.) from British colonies, and 36 from foreign countries. During the same period the degree of M.D. was conferred on 60 gentlemen, the degrees of M.B. and C.M. on 277, the degree of D.Sc. on 8, and the degree of B.Sc. on 41. In the Faculty of Medicine the total annual value of the University fellowships, scholarships, bursaries, and prizes now amounts to £3,750. Since the close of last academic year a bequest of £5,000 by the late Mr. A. L. Bruce, to assist in the foundation of a chair of public health, has been intimated. During the last five years there has been a decrease in numbers amounting to 536, of which number 384 are students of medicine. Women students are not included in this calculation; 72 such have enrolled for the current session.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

THE following gentlemen passed the Second Examination of the Board in the subjects indicated.

Monday, January 8th:

Passed in Anatomy and Physiology.—E. Harding, Owens College, Manchester; H. R. C. Newman, University College, Bristol; A. P. Nixon, University College, Liverpool; P. S. White, Mason College, Birmingham; J. J. Day, Middlesex Hospital; J. A. Craig, Queen's College, Belfast; D. E. Evans, London Hospital and Mr. Cooke's School of Anatomy and Physiology; A. M. Cleghorn, Trinity College, Toronto, Canada.

Passed in Anatomy only.—S. Sugden, T. Boulton, and G. R. Smith, Owens College, Manchester; J. B. Hughes, University College, Liverpool and Durham University; T. MacDowell, Queen's College, Belfast; A. H. Gadsden, St. Mary's Hospital; R. N. Geach, St. Bartholomew's Hospital; E. Grant, King's College, London; H. C. Cooper and G. H. Ransome, St. George's Hospital; G. H. Alcock, St. Thomas's Hospital; J. W. Yorke-Davies, Charing Cross Hospital.

Passed in Physiology only.—W. H. Clough and C. H. Dearden, Yorkshire College, Leeds; F. E. Meade, Yorkshire College, Leeds, and St. Bartholomew's Hospital; F. M. Aldret, G. A. Parker, W. A. Pierce, and F. L. Augoir, University College, Liverpool; H. W. Dudgeon, Guy's Hospital; E. C. Hort, Cambridge University and Guy's Hospital; S. K. Vines, A. E. De Vall, C. H. Smart, Mason College, Birmingham; G. E. Palmer, Royal College of Surgeons, Ireland.

Eight gentlemen were referred in both subjects, 7 in Anatomy only, and 7 in Physiology only.

Tuesday, January 9th:

Passed in Anatomy and Physiology.—C. L. Chevallier, St. Thomas's Hospital; J. Ogilvie, Cambridge University and St. Thomas's Hospital; J. O. Garland and N. Y. Lower, Guy's Hospital; H. P. Turnbull, St. George's Hospital; H. R. Ellis, St. Bartholomew's Hospital; J. B. Wall, St. Mary's Hospital and Mr. Cooke's School of Anatomy and Physiology; T. B. Sellers, Middlesex Hospital; and T. B. Dakin, London Hospital.

Passed in Anatomy only.—S. S. Simmons and A. Brebner, University

College, London; H. G. Mallum, Oxford University and St. Mary's Hospital; N. Wetherell and F. Guy's Hospital; R. Kay, Owens College, Manchester and Guy's Hospital; J. J. Blayden, St. Bartholomew's Hospital and E. C. D. Bascombe, Middlesex Hospital; W. A. Kelly, Middlesex Hospital and Mr. Physiology; J. S. Mollish, St. George's Hospital; N. P. King, Charing Cross Hospital; and E. H. Hospital.

Physiology.—A. C. Fox and A. R. Todd, University College, London; W. T. Gairdner, Guy's Hospital, Durham University and University College, London; A. J. Wernet and P. J. Hospital; C. G. Prance and A. Woolcombe, St. Bartholomew's Hospital; J. H. Fergusson and W. B. Carter, St. Hospital; and L. J. Lock, London Hospital and Trinity College, Dublin.

Ten candidates were referred in both subjects, 2 in Anatomy only, and 7 in Physiology only.

Wednesday, January 10th.

Anatomy.—E. W. Croker, A. W. Tuke, and J. H. [illegible]; E. H. B. Fox, H. C. Manning, H. A. [illegible] St. Bartholomew's Hospital; W. D. Wiggins, St. Mary's Hospital; W. S. Aslett, C. L. Seccombe, and P. Burton, Middlesex Hospital; D. Rice, E. D. Hancock, C. R. Evans, and W. T. [illegible] Hospital; E. S. Langworthy and G. W. C. Hodges, St. George's Hospital.

Physiology.—C. P. Higgins and R. B. Sunavala, Guy's Hospital; [illegible] St. Bartholomew's Hospital.

Passed in Anatomy.—H. K. Palmer, St. Bartholomew's Hospital; F. [illegible] St. Bartholomew's Hospital and Mr. Cooke's School of Anatomy and Physiology; F. B. Mudd, Middlesex Hospital; G. B. [illegible] London Hospital and Mr. Cooke's School of Anatomy and Physiology; A. E. [illegible] St. George's Hospital; J. Gott, King's College, London, and Sydenham; T. G. Ransford, St. Mary's Hospital.

Nine candidates were referred in both subjects, 3 in Anatomy only, and in Physiology only.

SOCIETY OF APOTHECARIES OF LONDON.

PRIMARY EXAMINATION. PART I. January.—The following candidates passed in:

Chemistry.—T. Christie, Liverpool, and H. Whittaker, Birmingham.

Materia Medica, Botany, and Pharmacy.—W. H. Burnhill; M. S. S. Coghlan, Royal Free Hospital; J. Friend, Leeds; E. M. Henwood, Royal Free Hospital.

Materia Medica and Botany.—O. Hall, Durham.

Biology.—M. E. Bennett, Royal Free Hospital; E. S. Milestone, Royal Free Hospital; M. Pardoe, Royal Free Hospital.

PRIMARY EXAMINATION. PART II.—The following candidates passed in: Anatomy and Physiology.—D. A. Anderson, Belfast; T. N. Harrowell, London; E. M. Henwood, Royal Free Hospital; W. McCall, Charing Cross Hospital; C. A. C. Salmon, Guy's Hospital.

Anatomy.—E. M. Aikin, Royal Free Hospital; H. J. Brookes, St. Mary's Hospital; W. F. Chrispin, Leeds; M. P. Gabe, Middlesex Hospital; H. [illegible] Hospital; A. R. Mansell, St. Bartholomew's Hospital; H. C. M[illegible], London; J. H. Riches, Middlesex Hospital; E. M. W[illegible], Royal Free Hospital.

Physiology.—W. F. [illegible], Birmingham; G. W. J. Baker, Birmingham; H. C. [illegible], St. Bartholomew's Hospital; C. G. Etches, London; A. J. H[illegible], Middlesex Hospital; J. Jacob, King's College; H. H. M[illegible], King's College; H. K. Palmer, St. Bartholomew's Hospital; W. G. Piper, Westminster Hospital; T. W. Wakem, Charing Cross Hospital; R. P. H. Whitmarsh, St. Thomas's Hospital.

OBITUARY.

THOMAS MARSHALL WILKINSON, F.R.C.S.EDIN.

MR. THOMAS MARSHALL WILKINSON, whose premature death at the age of 50 took place recently at Grantham, was formerly, until his retirement from practice, one of the best known and most popular of the members of the profession in the city of Lincoln. The only child of his father, Mr. W. Wilkinson, late of Wanstead, who survives him, he was born in London, and received his medical education at St. Thomas's Hospital. He became house-surgeon to the Lincoln City Dispensary, and subsequently surgeon and consulting surgeon, and always took the greatest interest in the working of that institution. Soon after leaving the dispensary he entered into partnership with Mr. Charles Brooke, the partnership being dissolved only four years ago, when he retired on account of ill-health, and removed to Grantham. Becoming surgeon to the Lincoln County Hospital in 1877, he performed the duties of that appointment, as long as his health permitted, with the greatest care and punctuality, earning, besides, a high character as a well-read surgeon, skilful operator, and loyal colleague. In 1887 he was Sheriff of the City of Lincoln; he was also acting surgeon to the 1st Volunteer Battalion of the County, and a Freemason of distinction. Mr. Wilkinson, who took the F.R.C.S. Edin. in 1877, was a member of the British Medical Association, of the Royal Medical and Chirurgical Society of London, and other societies. Taking the greatest interest in all around, his bright genial manner made him much appreciated and sought after, not only by patients at home, but by others of whom his skill and judicious firmness afterwards made constant friends. There is universal regret at his death amongst those who knew him. Mr. Berry, of Grantham, was most considerate and unremitting in his attentions to him during his illness.

FRED. ELLIOTT RYOTT, M.D.ST.AND., J.P.

THE death is reported, at the age of 59, of Dr. F. E. Ryott, of Newbury. The deceased was the eldest and only surviving son of the late Mr. R. A. Ryott, of Newbury. Having been educated at the Newbury Grammar School he studied for the medical profession at the London Hospital, qualifying as L.S.A. in 1857, and M.R.C.S.Eng. in 1858. Shortly afterwards he commenced practice in Newbury. In 1870 he became F.R.C.S.Eng., and five years later M.D. of St. Andrews University. He was appointed a Justice of the Peace for Newbury in 1880, and also occupied positions in connection with several local institutions. He was elected as a member of the Berks County Council in 1888. At the opening of the Newbury Borough Police Court on December 27th, the Mayor, before proceeding to the business, referred to the sudden death of Dr. Ryott, and said the Bench desired the Clerk to send a letter of condolence to the relatives of the deceased.

ALEX. HARKIN, M.D.KING'S COLL. ABERD.

WE regret to record the death of Dr. Alex. Harkin, one of the oldest medical practitioners in Belfast. The deceased was born in Ballymoney in 1818, and became a member of the Royal College of Surgeons of England in 1840, when he began practice in Belfast. He took the M.D. (King's Coll. Aberdeen) degree in 1859. Dr. Harkin was appointed medical officer for the Belfast constabulary in 1864, and was made a magistrate in 1869. He was afterwards appointed also to the Commission of the Peace for the County of Antrim. He was one of the earliest medical officers appointed under the Poor Law at a time when the service received no reward. Dr. Harkin was a past president of the Ulster Medical Society, and Consulting Physician to the Mater Infirmorum Hospital, Belfast. He was the author of a number of able works on medical subjects. For some weeks the deceased has been ailing, and there was little expectation of his recovery owing to his advanced age and the general breakdown of his health. He continued to grow worse until January 4th, when he passed away.

DEATHS IN THE PROFESSION ABROAD.—Among the members of the medical profession in foreign countries who have recently passed away are: Dr. Merget, Emeritus Professor of Medical Physics in the Faculty of Medicine of Bordeaux; Dr. L. Krahmer, Professor of Pharmacology at Halle, and the Nestor of the teaching staff of that University; Dr. L. Favrat, of Madeira, a Swiss physician, who had already won distinction by his publications on leprosy, etc., aged 31; Dr. Peter Spiro, Professor of Physiology in the University of Odessa, and author of valuable papers on the spinal cord, the formation of bile, animal magnetism, etc., aged 49; Dr. Lellmann, Professor of Chemistry in the University of Giessen (of influenza); Dr. Josef Ritter von Mülleitner, Staff-Surgeon-General in the Austrian Army, aged 74; Dr. Germain Dupré, Emeritus Professor in the Medical Faculty of Montpellier, and formerly a member of the French Senate; Dr. Adolf Heider, *Privatdocent* and Assistant in the Hygienic Institute of the University of Vienna, aged 36; Dr. Samuel H. Olmstead, of Brooklyn, New York, formerly a member of the surgical staff of the Long Island College Hospital, aged 60; Dr. H. Fabius, a leading physician and epidemiologist of Amsterdam, and a member of the Netherlands Pharmacopœia Committee, aged 66; Dr. Napoleon Inschkewitsch, of St. Petersburg, a well-known specialist in diseases of women and children, aged 50; and Dr. Claudius Ulman, the oldest physician of Weimar.

MEDICAL NEWS.

Medical Magistrate.—Dr. R. Cronin has been appointed a Justice of the Peace for the County of Meath.

Dr. Léon Colin, Medical Inspector-General of the French Army, has been promoted to the grade of Grand Officer of the Legion of Honour.

The ordinary meetings of the Society of Arts will recommence on Wednesday evening, January 17th, when Mr. A. P. Laurie will read a paper on White Lead Substitutes.

We regret to learn that Dr. Cholmeley, F.R.C.P., has been compelled, by failing health, to resign his position as one of the medical officers of the Eagle Life Insurance Company.

A paper on the Aërial Convextion of Small-pox from Hospitals will be read by Dr. J. C. McVail, Medical Officer of Health for the Counties of Stirling and Dumbarton, at the meeting of the Epidemiological Society, on January 17th.

At the meeting of the Royal Meteorological Society on January 17th, Dr. C. Theodore Williams will deliver an address on the Climate of Southern California. The lecture will be illustrated by a number of lantern slides.

A quarterly meeting of the Forfarshire Medical Association was held at University College, Dundee, on December 22nd, when the chair was taken by Dr. Mackie Whyte. Papers were read by Professor Paterson, Dr. MacEwan, Dr. Stalker, and Dr. Kynoch.

The Pharmaceutical Society of Ireland has successfully prosecuted Messrs. Todd and Burns, general drapers in Dublin, for selling Fellowes' syrup without a licence. The defence was that the vendors did not know the preparation contained strychnine. The magistrate inflicted a fine of £5.

The Chapter of St. John of Jerusalem, with the sanction of the Queen, has conferred the Silver Cross of the Order upon Mr. William Fairbank, of Windsor, surgeon to her Majesty's household and Prince and Princess Christian, in recognition of his services in furthering the cause of the association by the establishment of railway and other ambulance classes for giving first aid to the injured.

The newly-formed Kidderminster Medical Society was inaugurated by a *conversazione* at the Infirmary, when the President, Mr. S. Stretton, delivered an address, in which he contrasted the present health conditions of the town with those which existed thirty-seven years ago. A vote of thanks was moved by Mr. N. Moore, seconded by Mr. E. H. Addenbrooke, supported by the Mayor, and carried unanimously. It is proposed to hold quarterly meetings.

Denholm Testimonial.—Mr. Richard Fletcher writes to inform us that Dr. Andrew Denholm of Chorlton-cum-Hardy, near Manchester, was recently presented with a testimonial in the name of a large number of subscribers. The testimonial was accompanied by a handsome silver salver, which bears the following inscription: "Presented to Andrew Denholm, M.D., C.M., by Sir Andrew Clark and other professional brethren who sympathise most heartily with him in the matter of his recent action at law with Mr. Lawson Tait, October, 1893."

Harveian Society of London.—The annual meeting and *conversazione* of this Society will take place at the Stafford Rooms, Titchborne Street, W., on January 18th, at 8 P.M., when the election of officers for 1894 will take place, the retiring President, Mr. Malcolm Morris, will deliver the Presidential address, and there will be, *inter alia*, an exhibition of methods of depicting disease. The following is a list of names of gentlemen proposed by the Council as officers of the Society for the year 1894:—*President:* *Dr. George Eastes. *Vice-Presidents:* Mr. Drew, Dr. Maguire, *Mr. Rayley Owen, *Mr. D'Arcy Power. *Treasurer:* Mr. Cripps Lawrence. *Hon. Secretaries:* Dr. Boxall, *Mr. Peyton Beale. *Council:* Dr. Gomer Davies, *Mr. Henry Davis, Mr. Dodsworth, Dr. Evans, *Dr. Charles Gross, Dr. William Hill, *Mr. Howard Marsh, *Mr. Malcolm Morris, *Mr. Roughton, Mr. Morton Smale, *Dr. J. Edward Squire, Dr. A. K. Willis. An asterisk is prefixed to the names of those gentlemen who did not hold the same office the preceding year.

Scientific Congress in South America.—A Congress convened by the National Academy of Medicine was held at Bogotá (Republic of Colombia) some little time ago. It was opened by the Vice-President of the Republic, and more than a hundred "medical men, naturalists, dentists, and veterinarians" took part in the proceedings. Among the subjects discussed were the fevers endemic in the country, and leprosy. A resolution was passed urging the Government to take steps for the compulsory isolation of lepers. Another matter which formed the subject of an animated debate was the better regulation of medical practice in Colombia; a resolution was passed inviting the attention of the Legislative Chambers to the imperative necessity of enforcing more thoroughly the existing laws relating to the practice of medicine. All the medical men of the Republic of Colombia are invited to attend the next Congress, which is to be held at Bogotá in 1898.

The Livingstone College.—On January 9th, the Livingstone College commenced work in its new home, 16, Mornington Road, Bow, with an address from Professor A. Macalister, F.R.S. The aim of this College is to give to those who definitely intend to become foreign missionaries such an amount of knowledge of practical medicine as may help them to meet the contingencies and accidents of missionary life. We understand that it is not the intention to give any form of diploma, or even certificate. Each student must sign a declaration that he will not describe himself as "a medical missionary," or give himself out as a qualified medical man. So long as this programme is adhered to, the scheme has our every sympathy. A missionary going into a deadly climate, far from all civilised help, should have some knowledge of what to do in the very probable event of his being struck down by illness. There are many things a missionary should know besides his gospel. His independence will be much increased by knowing how to sew his buttons on, even though he thereby is not made a tailor, and his utility will doubtless be enhanced by some knowledge of what is likely to be the matter with him when his teeth chatter, and what sort of dose he should take under such circumstances, even although he does not so become either a doctor or even a "medical missionary." It cannot be too strictly laid down that if a man is to make the practice of medicine his work in life he ought to be a properly qualified practitioner. So long as the Livingstone College restricts itself to giving such instructions in simple medical subjects as may be useful to missionaries "when they are in isolated stations far from any qualified medical help," they will be doing a good work. We somewhat trembled for the future, however, when we heard Professor Macalister speak about strangulated hernia, and describe how the first laparotomy mentioned in history was performed by a missionary, nor could we agree with him at all in his suggestion that the same sort of training should be extended to the home clergy. The very essence of the excuse for giving these missionaries a confessedly imperfect medical training is that they are going far from any qualified medical help, a reason which in no way applies to the clergy at home.

MEDICAL VACANCIES.

The following vacancies are announced:

ARMAGH UNION, Keady Dispensary.—Medical Officer. Salary, £120 per annum, with £20 yearly as Medical Officer of Health, together with registration and vaccination fees. Applications to Mr. Peter Campbell, Honorary Secretary. Election on January 17th.

BRADFORD INFIRMARY.—Dispensary Surgeon, doubly qualified. Salary, £100 per annum, with board and residence. Applications, stating age and experience, with testimonials, to the Secretary by January 23rd.

BUCKINGHAMSHIRE GENERAL INFIRMARY, Aylesbury.—Resident Surgeon and Apothecary, unmarried and duly qualified. Salary, £80, increasing £10 per annum to £100, with board, lodging, and washing. Applications and testimonials to Mr. George Fell, Solicitor, Aylesbury, by January 29th.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road, W.C.—House-Surgeon. Applications, with testimonials, to the Secretary, by February 5th.

CHELSEA, BROMPTON, AND BELGRAVE DISPENSARY, 41, Sloane Square, S.W.—Surgeon. Applications to S. M. Cox, Secretary, by January 18th.

[illegible] testimonials by January 15th, to Dr. [illegible]

CITY OF MANCHESTER [illegible] to the Lord Mayor, Town Hall, Manchester, by January 15th.

[illegible] AND DISPENSARY.—House-Surgeon, doubly qualified, unmarried. Salary, £[illegible] per annum, with board and lodging. Applications and testimonials to the Honorary Secretary, by January 27th.

[illegible] DISPENSARY, Bunhill Street, Goswell Road, E.C.—Physician. Salary £[illegible] per annum. Applications and testimonials to the Secretary by [illegible]th.

ISLE OF WIGHT UNION.—Medical Officer for the Ryde District. Salary, £[illegible] with usual extra fees. Applications to the Clerk, Union Workhouse, Newport, Isle of Wight, by January 17th.

KINGSTON [illegible] Medical Officer and Public Vaccinator for the Pembroke [illegible] District, at £[illegible] per annum, with the additional payment [illegible] Order of the Poor-law Commissioners. Applications to Anthony Temple, Clerk to the Guardians, [illegible], by January 16th.

LIVERPOOL [illegible] HOSPITAL FOR CHILDREN, Myrtle Street, Liverpool. [illegible] Salary, £85 per annum, with board and lodging. Applications by January 22nd.

LIVERPOOL [illegible] NORTHERN HOSPITAL. [illegible] Assistant House-Surgeon. Salary £[illegible] per annum, with maintenance in the house. Applications and testimonials to be sent to the Chairman of Committee [illegible].

ROYAL [illegible] DISPENSARY, Buckingham Palace Road, S.W.—Assistant Medical Officer [illegible] must reside in the district. Applications and testimonials to the Secretary by February 5th.

SALFORD ROYAL HOSPITAL.—House-Surgeon for the Pendleton Branch Dispensary. Double qualification. Salary, £80 per annum, with board and [illegible] apartments. Applications to Alexander Hay, Secretary, by January 16th.

UNIVERSITY COLLEGE OF SOUTH WALES AND MONMOUTHSHIRE.—Lecturer on Materia Medica and Pharmacy. Stipend, £50 per annum. Applications to Ivor Jones, Registrar, by January 27th.

VICTORIA HOSPITAL FOR SICK CHILDREN, Queen's Road, Chelsea, S.W. House-Surgeon and House-Physician to the In-patients. Honorarium, £[illegible] per annum, with board and lodging in the hospital. Applications to the Secretary by January 18th.

WREXHAM [illegible] SECONDARY AND DISPENSARY, Wrexham.—House-Surgeon. Salary, £[illegible] per annum, with board, furnished rooms, gas, coal, and [illegible]. Applications to Mr. George Whitehouse, 27, Regent Street, Wrexham, by January 24th.

MEDICAL APPOINTMENTS.

BRABBROOK, P. E., M.R.C.S.Eng., L.R.C.P.Lond., appointed Assistant House-Surgeon to the Royal Albert Hospital, Devonport, *vice* A. C. Festing Smith, L.R.C.P., L.R.C.S.Edin., resigned.

BULL, S. A., M.R.C.S., L.R.C.P., appointed Junior House-Surgeon to the [illegible] Hospital.

CAMPBELL, Murdoch, M.D.Glasg., appointed Professor of Midwifery at the University of Glasgow.

CRAWFORD, Dr., appointed Medical Officer for the Carlton District of the Worksop Union, *vice* Hunter C. Walker, L.R.C.P., L.R.C.S.Edin.

[illegible], M.B., C.M.Edin., M.R.C.S.Eng., L.R.C.P.Lond., appointed Assistant Surgeon to the Branch Dispensary of the Cheltenham [illegible].

FARR, [illegible], M.B. Lond.Univ., M.R.C.S.Eng., L.R.C.P.Lond., appointed Surgeon of the Board of Trade for the Port of [illegible] (vice Grange).

GIMSON, [illegible], M.R.C.S., L.R.C.P., appointed Medical Officer for the [illegible] District of the Chelmsford Union, *vice* [illegible], M.R.C.S., L.R.C.P., resigned.

GOVIER, [illegible], L.R.C.P.Lond., appointed Resident Assistant [illegible] Northampton and Staffordshire General Hospital, Weedon.

GRANGE, [illegible], M.D.Lond.Univ., D.P.H.Camb., M.R.C.S.Eng., L.R.C.P. Lond., appointed Sanitary Surveyor of the Board of Trade for the [illegible] (jointly with Dr. Farquharson); also Medical Inspector under the Privy Council.

HANN, Reginald G., M.R.C.S., L.R.C.P., appointed Resident Medical Officer to the [illegible] Dispensary.

HENRY, R. W., M.B., B.Ch.Dub., reappointed Junior House-Surgeon to the Birmingham and Midland Eye Hospital.

HILL, Charles Alexander, M.B., B.C., B.A.Cantab, M.R.C.S.Eng., L.R.C.P. Lond., appointed House-Surgeon to St. George's Hospital.

JAMES, W. Dale, M.R.C.S.Eng., L.S.A., appointed Surgeon for Skin Diseases at the [illegible] General Infirmary.

MCILROY, [illegible], B., M.A., M.B., C.M.Glasg., appointed Resident Medical Officer to the Hospital for Diseases of the Throat, Golden Square, W.

ROMILLY, Leonard, M.A., M.D.Cantab, M.R.C.P., appointed Assistant Lecturer on Obstetric Medicine, and Assistant Obstetric Physician to St. George's Hospital.

THOMPSON, S. R., M.R.C.S., L.R.C.P.Lond., appointed Medical Officer for the Parish Street Workhouse and No. 1 District of the St. Olave's Union, *vice* F. P. Wightwick, M.D.Durh., resigned.

VINCENT, Henry Bird, M.R.C.S.Eng., L.S.A., appointed Medical Officer of Health for the Milford and Launditch Rural Sanitary Authority, *vice* Frederic Bateman.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. R. Marcus Gunn: Clinical Examination of the Eye. Bacteriological Laboratory, King's College, W.C., 3 to 5 P.M.—Lecture: The Microscope and Methods of Cultivation. Practical work: Examination of Cultivations. London Throat Hospital, Great Portland Street, 8 P.M.—Mr. W. R. H. Stewart: Examination of the Ear.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr. Percy Smith: Hypochondriasis.

PATHOLOGICAL SOCIETY, 8.30 P.M.—Dr. F. J. Smith: Inflamed Vermiform Appendix. Dr. Wheaton: Cranial Deformity in Infants with Fusion of the Fingers and Toes. Dr. Kanthack: Pyæmic Form of Actinomycosis in Man. Dr. Voelcker: Aneurysm of Aortic Valve in a Child. Dr. Tooth: Two Cases of Ulcerative Colitis. Dr. Scholefield: Sarcoma of the Suprarenal Body in a Child. Mr. Jackson Clarke: Cyst of the Epididymis. Mr. James Berry: Passive Dilatation of the Sigmoid Flexure. Card Specimen.—Mr. Jackson Clarke: Distoma Crassum.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 1 P.M.—Dr. Payne: Erythema and Urticaria. Hospital for Consumption, Brompton, 1 P.M.—Dr. Maguire: Cases of Special Interest. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Quarry Silcock: Choroidal Diseases with Illustrative Cases.

EPIDEMIOLOGICAL SOCIETY OF LONDON, 8.30 P.M.—Dr. J. C. McVail: On the Aerial Convection of Small pox from Hospitals.

ROYAL MICROSCOPICAL SOCIETY, 20, Hanover Square, 8 P.M.—Annual meeting. Address by the President.

ROYAL METEOROLOGICAL SOCIETY, 25, Great George Street, Westminster, 8 P.M.—Ordinary meeting. 8.15 P.M.—Annual general meeting. Report of the Council. Election of Officers and Council. Dr. C. Theodore Williams: Presidential address on The Climate of Southern California, which will be illustrated by a number of lantern slides.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and the Epileptic, Queen Square, 2 P.M.—Dr. Tooth: Spinal Cord Anatomy. Hospital for Sick Children, Great Ormond Street, 3.30 P.M.—Dr. O. Sturges: Clinical Lecture. Central London Sick Asylum, Cleveland Street, 5.30 P.M.—Mr. John Hopkins: Cases in the Wards.

SOCIETY OF ANÆSTHETISTS, 20, Hanover Square, 8.30 P.M.—Dr. Dudley W. Buxton: A Note on Cardiac Asthenia under Chloroform.

FRIDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. Percy Kidd: Sputum.

SATURDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M.—Dr. Hyslop: Melancholia.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be remitted in postage order or stamps with the notice not later than Wednesday morning, in order to ensure insertion in the current issue.

MARRIAGES.

FULLER—BUCHANAN.—On Saturday, December 9th, 1893, at Mowbray, Cape Town, South Africa, by the Rev. A. Vine Hall, Edward Barnard Fuller, M.B., C.M.Edin., F.R.C.S.Eng., son of T. E. Fuller, Esq., M.L.A., of Cape Town, to Minnie, daughter of the Hon. Mr. Justice James Buchanan, late Judge President of the High Court, Kimberley, South Africa.

KERR—HENDERSON.—On January 11th, 1894, at Booterstown Church, co. Dublin, by the Very Rev. Dean Dickinson, D.D., assisted by the Rev. Professor Stokes, D.D.T.C.D., Norman Kerr, M.D., F.L.S., London, to Edith Jane, daughter of the late James Henderson, Esq., Belvidere Lodge, Newry, co. Down.

REDHEAD—BRIGGS.—At St. Mary's Church, Wilton Street, Hull, on January 2nd, by the Rev. Fr. Griffin, assisted by the Rev. Fr. McMahon, Thomas Joseph Redhead, M.B., C.M., Medical Officer H.M. Prison, Hull, to Mary Louisa Briggs, also of Hull.

DEATH.

JOHNSON.—On January 6th, at Waterloo House, Stoke, Plymouth, Marion, the beloved wife of Samuel Wellesley Johnson, M.B., Surgeon Royal Navy, predeceased on January 4th by a son (stillborn).

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

DR. A. H. FRERE asks for information from personal experience as to the nature and best treatment of duodenal dyspepsia.

C. F. R. has several loose teeth following an attack of neuralgia, with swollen gums; the attack lasted over three months. What can be done? The usual mouth washes have been applied *ad nauseam*.

GEO. ROBERTSON, M.B. (Insch, Aberdeenshire) asks if any reader can refer him to any exhaustive publication or treatise on the subject of rheumatism, chorea, and the allied skin disease.

W.N. asks what are generally considered the standard works on gastric catarrh and gastric congestion?

*** Ewald's *Diseases of Stomach*, Sydenham Society's Translation, will be found a very valuable guide to the subject.

CLUB CHEMISTS.

ENQUIRER writes: Can any of your readers inform me whether they have found it possible to arrange with a chemist to put up the medicines ordered for club and pauper patients at a fixed rate per annum arranged by contract, and, if so, has it been found satisfactory to both parties? On what calculation is the contract based?

INSTRUMENT MAKERS AND COMMISSIONS.

TALIPES writes: I should like to hear if it is the experience of members that after the payment in cash by a patient for instruments ordered for them the instrument makers return a percentage as commission? Such was offered to me the other day, and I, of course, at once handed it over to my patient.

*** We know of no such custom, and agree with our correspondent in reprobating any such understanding.

RECURRENT SORE ON FACE.

MR. CRAWFORD WARREN, F.R.C.S.I., etc. (Jalpaiguri, Bengal) relates the following curious case, as to the treatment of which he asks for advice: A gentleman, aged about 55, who has been in India for half a century, and who has enjoyed good health except for an occasional attack of malarial fever, has now had every year, for the past seventeen years, a sloughing sore on the right cheek, on a level with, and about an inch distant, from the angle of the mouth. The sore forms very rapidly, sometimes in twenty-four hours. The patient feels a little pain at the part, which becomes swollen and hard, a slough quickly forms, and comes away, leaving a more or less round excavation about two lines in depth, which has a punched-out appearance. The progress of the resulting ulcer is essentially chronic, taking on an average about two months before it is completely healed, leaving a depressed and puckered cicatrix. The discharge, which is at first copious, consists of ordinary pus, but it gradually assumes the nature of a coloured serous exudation, which forms crusts round the margin of the ulcer. At no time is there any surrounding induration, the glands are not enlarged, and the buccal mucous membrane is quite normal. The sore is usually at first about the size of a sixpence, but it increases during the first fortnight to more than double this size. This year the sore has been unusually large and slow in closing up. It comes on with wonderful regularity every year, just as the rainy season in this district is about ceasing, that is, about the middle of October. The patient attributes the first occurrence of the sore to his having forcibly pulled out a small cluster of very coarse hairs which he had in his beard. There is nothing worthy of note, either in his personal or family history. The position of the sore never varies, always occurring at the site of the old cicatrix, and it is remarkable that after such repeated and prolonged ulceration at the same spot there is not more loss of tissue and deformity. Endless remedies short of the knife have been tried for this affection from time to time, and the numerous medical men who have been consulted have not been able to express a decided opinion on the case.

ANSWERS.

LECTURER IN EMBRYO had better apply to the Secretary of the National Health Society, 53, Berners Street, Oxford Street, W.

VICTIM.—Our correspondent probably alludes to the Income Tax Repayment Agency, 25, Colville Terrace, Bayswater, W., which assists in cases of income tax difficulty.

DR. A. H. FRERE.—From Surgeon-Lieutenant-Colonel Crombie's paper in the *Practitioner* for April, 1893, we gather that he was led to use chloride of calcium in pneumonia by observing its beneficial action in "hot weather boils" in India.

L. W. P.—The late Director of the Egyptian Sanitary Department, Brigade-Surgeon Greene Pasha, has written a pamphlet on "Sanitary Administration in Egypt." Copies may be obtained from the author, Knaphill, Surrey, price 2s.

DIGNA SEQUAMUR.—Dr. Haffkine's method of anticholeraic inoculation was fully described in the BRITISH MEDICAL JOURNAL of February, 1893; by Dr. Haffkine himself in the issue of February 11th, p. 278, and by Professor Wright and Surgeon-Captain Bruce (of the Army Medical School at Netley) in the issue of February 4th, p. 227.

M.D. writes: "A Retired Ailing Medical Man" will find the information he requires at page 356 of *Tanner's Index of Diseases*, and under the heading "Ailments" there is considerable information regarding the feeding of invalids, and among other things directions for making a brown loaf.

CIDER, EVERGREENS, AND RHEUMATISM.

DR. FITZJAMES MOLONY (Porlock, Somerset) writes: In reply to "Rheumatic," who seeks advice on the management of a rheumatic case, and asks about the appropriateness of cider as a beverage, I would strongly advise rheumatic patients never to touch cider. I am aware that it has been recommended, but in this district—West Somerset—where cider drinking and rheumatism are both prevalent, cider is generally looked upon as a direct cause of rheumatism.

If a rheumatic patient lives in the country, with evergreen creepers up to the house and grass all round it, let him cut down the creepers, remove the grass, and lay down asphalte. The house will be less picturesque but much more healthy. Luxuriant vegetation and damp are synonymous, and usually mean rheumatism or malaria in some form or other.

STAINING WITH PICROCARMINE.

ENQUIRER.—Picrocarmine staining for celloidin specimens is always a somewhat difficult matter, especially when the picrocarmine is not of first-class quality. The celloidin sections have to pass through so many processes that the results are never good. The best plan of all, probably, is to stain them with some carmine stain in the first instance, and then separately in picric acid. This is not such a good stain as a pure picrocarmine stain when left unwashed, but it is infinitely better than a washed picrocarmine, such as one is obliged to get in specimens cut in celloidin.

GAS FIRES.

PERSEVERE.—The reply to the question "whether gas stoves are injurious in bedrooms to health, especially to children," depends upon what kind of stove is used. If the gas stove employed is so constructed and fixed that the products of combustion are carried out of the room, then it cannot be in any way injurious to health, but rather the reverse, as it affords a convenient means of maintaining an equable temperature in a bedroom—a matter of great importance in the case of children and delicate persons. If, moreover, the gas stove is so constructed that it can be used as a means of introducing fresh warm air into the room, and thus of promoting its ventilation, its advantage is obvious. Silver or other metals exposed to the action of the products of the combustion of gas gradually tarnish in consequence of the action on them of sulphurous acid, produced by the oxidation of a minute quantity of sulphur, which is always present in ordinary coal gas, and which is the cause of the gradual corrosion of all appliances in which gas is burned. A further article on heating by gas, which will probably give the hints on this subject which our correspondent desires, is published in another column.

NOTES, LETTERS, Etc.

THE name of one of the candidates who passed the recent examination of the Medico-Psychological Asssociation should have been given as J. Vincent Blackford.

IN a recent review of Miss Leffler-Arnim's book of *Figure Culture* the price was incorrectly stated. It should have been given as 7s. 6d.

FREE MEDICAL ADVICE.

DR. J. COOPER STAWELL, M.B., Honorary Secretary, South-Eastern (of Ireland) Branch of the British Medical Association (Bagnalstown, Co. Carlow), writes: Referring to a notice under above heading in the BRITISH MEDICAL JOURNAL of December 30th, 1893, p. 1455, I wish to state that at the November meeting of the South-Eastern (of Ireland) Branch of the Association, this matter was considered, and I was instructed to obtain from the gentleman in question an explanation of the advertisement. I wrote to him and he immediately called on me, gave me an explanation (in my belief) perfectly full and satisfactory, and expressed his great regret for the occurrence. This explanation, owing to an accident for which I am not responsible, was not considered at the December meeting of our Branch, as I was unfortunately unable to attend. It will be considered at our meeting this month, and I have no doubt will be deemed entirely satisfactory. I do not know who your correspondent "A." may be, but can scarcely think he belongs to our Branch. If he does, he acted entirely *ultra vires*, and if he does not, he surely ought to find out the whole story before he acts in a way calculated materially to damage the prospects of a young man trying to make his way.

THE RESPONSIBILITIES OF JOURNALISM.

A few weeks ago the following leader appeared in a paragraph on the [illegible] A [illegible] was [illegible] by the [illegible] of the [illegible] Medical Journal. The paragraph was [illegible] by [illegible] [illegible] [illegible]

A CLINICAL LECTURE
ON THE
DIAGNOSIS AND OPERATIVE TREATMENT OF ACUTE INTESTINAL OBSTRUCTION DUE TO BANDS.

Delivered at St. George's Hospital.

BY C. T. DENT, F.R.C.S.,
Lecturer on Practical Surgery, and Assistant Surgeon to St. George's Hospital.

ACUTE intestinal obstruction has occupied so much attention of late years, and the subject has become so large that I can only, within the compass of a lecture, limit myself to the consideration of a few points on one, but that a common, variety of the disorder.

Many cases of acute intestinal obstruction are highly difficult and complex. In numerous instances, too, the acute obstruction supervenes only on some chronic condition or on diseases of long standing in themselves obscure. With such I am not concerned. The complexity of the symptoms is often only due to delay in treatment, and a large number of these cases present symptoms at the outset that may be interpreted with ease and accuracy. The more knowledge we gain about these disorders the more does their mechanical nature in many instances assert itself; in other words a great proportion have a purely surgical aspect. I am far from asserting that many do not rightly fall under the care of the physician, but I think, in hospital practice at any rate, the rule that any case of intestinal obstruction should be seen at once by the physician and the surgeon together is a good one in practice.

I have selected for this lecture a class of cases which few will question fall directly within the province of the surgeon. It requires no long acquaintance with the clinical work of a general hospital to recognise that the disease, always formidable, is usually fatal. With a tendency, which I am afraid is not unknown in medical practice, to explain our own failures by throwing the blame on somebody else, we account too frequently for want of success (in less euphemistic phrase, the death of the patient), by the fact that the case came too late under treatment. Unquestionably, early recognition of the disease, if it leads to prompt treatment, is of paramount importance. Still these patients will, as cases of external strangulated herniæ do so often, come to hospital late. Improved diagnosis and improvements in operative procedure may still do much to counteract the serious drawback to success resulting from delay, and may extend the limit of time implied by the words "too late."

CAUSATION.

Into the causation of acute intestinal obstruction by a band I need not enter at any length. A very little reading on the subject will convince you that the variety of causes is tolerably large. I do not think that knowledge is advanced by the assumption that the exact nature of the band matters little. It may be some time yet before we can surmise with any reasonable certainty the precise form that will be found in an acute case. Already, however, we are often enabled to form a correct opinion. The more careful observations we have of the clinical symptoms and the more accurate records we have of these cases, the more diagnosis will improve. In a great number of instances the band or bands are due to old peritoneal adhesions. The history will lead you to suspect that an attack of localised peritonitis has occurred at some period previous to the acute disorder. Typhlitis, as it is commonly called, appendicitis as it really is, more frequently may have occurred. There may have been localised trouble after parturition, perimetritis, or the like, or a localised peritonitis may have been set up as the sequel of an attack of typhoid fever. It may safely be assumed that complete anatomical recovery does not take place after an attack of peritonitis sufficient to cause peritoneal adhesions. Slight adhesions are more likely to give subsequent trouble than extensive matting of the intestines. A tag of omentum glued to some remote peritoneal surface or the adhesion of the free extremity of an appendix epiploica to a stray loop of gut forms just the sort of condition most to be dreaded.

SYMPTOMS.

In acute obstruction from bands the onset of the attack is not usually so sudden as is supposed, though the warning probably is insufficient to give the patient much concern. Generally there are some prodromata. Sometimes the patients complain of having felt a little out of sorts for a few days. Often the attack is preceded by some little intestinal disturbance, ascribed to a chill, an attack of diarrhœa, or the like. Then suddenly the symptoms of strangulation occur. There may be two explanations of this state of affairs. Either the irregular movements of the intestine may lead a coil to thrust itself beneath a pre-existent but harmless band, as in an external hernia which descends for the first time and speedily becomes strangulated; or the loop may have lain for an indefinite period beneath a band without grave symptoms, when suddenly, owing to the intestinal disturbance, in itself trivial, undue distension takes place, and the gut, as it were, tightens the halter round its own neck. Thereupon ensues a train of symptoms to be described presently.

Let me cite briefly a short series of cases which have fallen under my care, and which will serve to illustrate how improved surgical methods and diagnosis may enable us to work through failures to success. The first is but a sketch of a typical case which, though seen many years ago, is still acutely fresh in my memory.

CASE I.—A man, aged 28, had enjoyed good health save for an attack of typhlitis about two years previously. He had been feeling a little out of sorts for a few days, but was able to pursue an active life. Shortly after being exposed to a cold wind while on a journey, he was seized with sudden intensely severe pain in the abdomen, and vomited almost immediately. The pain lasted for two or three hours, but diminished in intensity from the first onset. He vomited again several times. A short time after the first subsidence the abdominal pain recurred with great severity. Opium was now given; the severe attacks of pain were gradually subdued, and the vomiting ceased. From the first onset of the agonising pain to the end of the illness, ten days later, constipation was absolute. Some forty-eight hours after the first attack he complained of little beyond a feeling of abdominal discomfort. The pulse was fairly strong, the temperature about normal, respiration tranquil, the tongue clean and moist, and the mind perfectly clear. The expression showed but little distress or anxiety, and, indeed, in these cases what is called the "abdominal face" is prone to come on only at a stage when the chances of recovery are practically hopeless. Considerable quantities of opium and belladonna were taken. Foods of various kinds, stimulants, together with nutrient injections were given, and, if not digested and absorbed, at least tolerated. Enemata brought away, as usually happens, a few small fæcal lumps. The desire to pass a motion led him several times to suppose that he was about to do so. An occasional feeling of sickness occurred such as might result from flatus. About the sixth day the sickness returned, and a large quantity of fluid food which had been partly digested was thrown up; still the tongue remained clean and the mind clear. There was very little distension of the abdomen, and hardly any tenderness on pressure. Then, with a little increased pain, distension began and gradually became more and more pronounced. The pulse became weaker, the respirations shallow and hurried, chiefly owing to the inability of the diaphragm to descend. Vomiting occurred again once or twice with little, if any, retching, the face became rapidly sunken, and the tissues seemed to dry up and shrink, but the mind remained clear almost to the last, and it was not till a few hours before death that the tongue became dry and coated. Another few hours and slight convulsions occurred, and a life that might have been saved was thrown away. *Post-mortem* evidence of old typhlitis was found. Two bands, some distance from each other, due to stretched peritoneal adhesions, were found obstructing the small intestine. In this case the question of operation was not seriously mooted until distension had set in, and there was some evidence of peritonitis, and it was then thought, and beyond doubt wisely thought, that the patient's strength would not stand the operation. Below the obstruction the gut was completely collapsed and above it greatly distended. All the other organs were those of a man in sound health.

The appearances after death in this case showed that the disorder was a purely mechanical one, and could have been relieved perfectly and easily by operation; further, there can have been no reasonable doubt that if the obstruction had been so relieved at the outset of the attack, the patient's chance of recovery would have been good. At no time in the history of this case did the vomit become markedly stercoraceous. Operate early in cases of complete obstruction by bands was the lesson that this case taught in the most emphatic terms. The patient died because the diagnosis was hesitating, and his case occurred at a time when operation was usually considered a desperate because a last resource.

Case II.—The next case occurred in hospital now a good many years ago. The patient was a [illegible] previously in good health. The onset of the illness was sudden, as a chill while on duty. As in the previous case, he was seized with sudden severe pain, associated with immediate vomiting. He was relieved, as before, or rather rendered obscure by the administration of opium. During the intervals of pain he complained scarcely complained of even discomfort. [illegible] was insistent. Shortly after he first came under my care in the hospital [illegible] the vomiting was not frequent or very violent, it was decided, after consultation, to open the belly. As in the last case, delay had rendered the case almost hopeless. Still, with the [illegible] prevailed, it seemed almost audacious to [illegible] so severe a measure in the absence of any very grave physical symptoms. You must recognise that the serious nature of this case was shown rather by the history which was given us than by the [illegible] before our eyes. It is so easy to misinterpret or unconsciously distort the history a patient gives. The abdomen was opened, and in the region of the right sacro-iliac joint a band constricting the [illegible] was at once found. The band was divided with ease. The [illegible] seemed at once to pass its contents [illegible] as the collapsed gut enlarged a little. Matters looked hopeful, and, indeed, the symptoms were all relieved, save the constipation; but the man died.

I think that the operation in this case neither hastened nor retarded his end. It was a step in advance to operate when the symptoms were quiescent, but the right moment had gone by. There was no peritonitis or gangrene, or even ulceration of the gut, but the symptoms determined by the constricting band continued after its division as the result, we may suppose, of paralysis of the intestine. Here the obstruction had existed some five days, and death was due to the simple fact that the operation was too late. An operation, if it consists only in division of the constricting band, will generally be too late when the vomit has become at all foul and distension has commenced, for then the gut has become exhausted and powerless. Such cases may still be saved by other means, such as puncturing and draining the distended bowel. Owing to the late stage of the disease at which this patient was first seen, recovery by any operation was certainly improbable, but in the future more of such cases will be saved when neither ulceration, nor gangrene, nor peritonitis exist.

In the next case I need not detail to you the symptoms. They closely resembled in their early stages those I have already given: but I had come to see before this case came under my notice how essential it was to operate early; and I had come to recognise, also, by numerous other cases which I had myself seen or read of, that it was far better where the symptoms had such a definite character to run a risk which was little more than that of revealing by operation a mistaken diagnosis. The early sharp pain, the immediate occurrence of vomiting; the rapid subsidence, followed after an interval by recurrence of the same symptoms, pointed, as it seemed to me, now emphatically to a condition that could only be relieved by operation practised as early as possible. But it was some time before I had an opportunity of carrying this determination into practice: and one had to learn, also, that early operation, though an essential condition, was not the only one; other details had to be observed if the patients were to be saved.

Case III.—A young woman came into hospital with a history almost identical with those I have already given you. The symptoms had continued for some days. I operated no long time after her admission. A single band was found in the usual place, and divided. The constriction did not appear to be absolute, and the gut seemed to have a fair chance of recovering itself, and, when a few hours after the operation she had a free action of the bowels, there seemed at last a reasonable chance of a successful case. But evidence of peritonitis was seen at the time of operation, and the mischief had spread to some distance from the seat of lesion. The vomiting ceased, and all the symptoms were relieved, but the peritonitis increased and extended down into the pelvis, and in a day or two she died.

No doubt it would have been better if the operation had been done earlier and before any peritonitis was started. Yet this case, I am convinced, might have been saved. This happened some years ago, before I, at any rate, had realised the importance of drainage in these abdominal cases, and on thinking it over afterwards I was forced to the conclusion that, notwithstanding the exhausted condition of the patient, it would have been proper to have flushed out the peritoneal cavity freely and drained.

In the next case I determined, if the symptoms and conditions in any way resembled those of any of the patients I have described, to carry this practice into effect. It was some time before an opportunity occurred. Cases, indeed, of acute obstruction from other causes were numerous enough, but it was some time before one of acute obstruction from bands came under my care.

Case IV.—At the beginning of 1893 a woman came in who gave a history of symptoms similar to the others. She had vomited, but the matter was not offensive. I saw her first late at night. She was then sitting up in bed to all appearances perfectly well. It was hard to credit her account, and judging by the physical symptoms, I doubt if she would have consented to any operation at the moment, even if I had suggested it. Unfortunately I did not do so at the time, but it was determined that if vomiting occurred again we would at once cut down. The next day it did occur, and I at once opened the abdomen. The obstruction was soon found in the usual place, but deeply situated and so closely held down that I did not dare to attempt to raise up and bring out of the wound the affected portion of the bowel. The obstructing band proved to be a Meckel's diverticulum. No sooner had this been divided and the ends secured, than the imprisoned length of bowel, now completely released, rose up from its bed. As it rose up the rotten wall at the site of constriction gave way, and tore open as a piece of wet blotting paper might tear. A few drops of the contents of the bowel escaped into the cavity before the gut on either side of the ulceration could be compressed. Although the patient was rather exhausted, there seemed only one thing to do. Some 4 inches of the gut, including the lacerated portion in the middle, were excised, and the ends joined together. Rapidity seemed the first essential, and I used no plates or special clamps for the bowel, merely stroking the contents back, and constricting it on either side just beyond the point where it was cut through with a piece of indiarubber drainage tube passed through the mesentery and round the bowel, and held in position by a clip. The mucous membrane was united by a continuous suture, and the serous coats by a continuous blanket suture—a form of stitch that appears to me to answer admirably in these cases. We flushed out the peritoneal cavity, and hoped that we had done so sufficiently to get rid of every trace of fæcal matter. A glass drainage tube was put in. The patient went on well for a day or two, but then pelvic peritonitis started, and she died.

I do not know that in this case, even if I had correctly appreciated the condition, I could have prevented altogether the escape of some matter into the peritoneum, for the site of obstruction was very deeply situated. Although so short a time had elapsed between the first onset of the symptoms and the operation, the damage to the bowel was very profound.

Case V.—The next case was a little more complicated, but yet the symptoms seemed easy enough to read. The importance of believing implicitly in the truth of the symptoms was well illustrated. A man, aged 44, gave the following history, which I will condense to the utmost. While travelling abroad he was attacked, after exposure to cold, with a little intestinal disorder. The next day he felt out of sorts, but went out in the hot sun. He felt sick and faint, and had severe griping pain. After about two hours the attack faded gradually away, but recurred with less severity a few hours later, and was accompanied by slight diarrhœa. The next day he had merely some discomfort and diarrhœa, but no pain. Two days later he was well enough to journey home, and, though not feeling quite right, went about his usual avocations. A week after the first onset of the illness, being still a little uncomfortable and inclined to diarrhœa, he concluded to see a medical man. He called at the houses of two, but finding them both out gave it up, and it was not till nine days after the first attack that he consulted his own medical man, who found some localised tenderness in the neighbourhood of the cæcum. A good deal of pain occurred at times, and he kept his bed for two days, but then, as the diarrhœa was less and he felt better, he got up and went about again. Twelve days after the original attack there was a sudden onset of very severe pain in the abdomen, lasting the greater part of the night, and attended by severe vomiting. Opiates were given, but a further attack of vomiting ensued. Forty-eight hours after the second set of symptoms began the pain had subsided, but there was some oppression and hiccough. When I saw him the evidence of appendicitis was plain enough, for the mass could be felt: but added to this there was a second set of symptoms. It was clear from the history that the original lesion could not have been due to a band, and it seemed no less clear that the second train of symptoms was due either to a band or to acute kinking of a coil of small intestine which had become adherent in the neighbourhood of the typhlitis. I confess that I rather inclined to the latter view. Immediate operation was counselled, and the advice accepted. I found some localised peritonitis, due to a perforation of the appendix. A small fæcal concretion was lying loose in a little bed of lymph. A tense band, due to a drawn-out tag of omentum passing longitudinally, constricted about five-sixths of the lumen of the colon, and a coil of small intestine behind was pressed upon and partly occluded. The band was divided, and the concretion removed. No perforation could be seen, and the appendix was evidently concealed in the inflamed and thickened cellular tissue around the cæcum. A search for the appendix and its removal seemed to be a formidable proceeding, and appeared also, under the circumstances, unnecessary. The peritoneal cavity was most freely flushed and drained. The convalescence was retarded by divers complications, the chief of which was enormous and suddenly occurring distension five days after operation. This distension was caused by a great block of pasty fæcal matter high up in the descending colon, probably near the splenic flexure. A rubber tube was passed right up to the impacted mass, and a large enema injected. At the second attempt the mass moved on, and the danger, which for a time was very imminent, was averted. A similar attack occurred later on, owing to impaction in the sigmoid flexure. Again, the distension was extremely rapid, but was promptly relieved by the long tube. After this all went well, and the patient is now in perfect health.

Case VI.—The last case that I need trouble you with is that of a woman who was recently in the "Princess" Ward. Twelve years previously she had had some abdominal trouble, of the nature of which I am uncertain. Seven weeks before admission she was seized with abdominal pain; no vomiting. Her bowels did not

act for four days. The patient's health had otherwise been good. About sixty hours before admission she was seized with typical symptoms, which I need not here recapitulate. The pain passed away, and the usual deceptive calm followed. The patient was in domestic service, and I went down to see her at her own house, as she was unwilling to be persuaded that her condition was urgent, and that prompt measures were imperative. I found the woman with apparently little the matter, for it was one of the cases which I pointed out to you as having periodic renewals of the symptoms. The constipation was absolute. The abdomen was soft, and not distended. Just above the umbilicus, on the right side, I could make out something hard, though almost in the middle line. Here, if ever, it seemed to me a case in which the courage of one's opinions was needed. Within three hours of my first seeing her I proceeded to operate in the hospital, though no fresh symptoms had occurred. Seeing that something could be felt through the abdominal wall above the umbilicus, I made my incision over the region where the mass could be felt. This, as it turned out, was a mistake, and I should have done better to make the usual median incision below the umbilicus. In the neighbourhood of the right sacro-iliac joint after some search I found a very tight band. The intestine below was collapsed, while above it was a deep claret colour, moderately distended, and showing marked traces of the efforts it had made to overcome the constriction. The induration that I had felt proved to be only the tense border of the mesentery. The band was probably a stretched peritoneal adhesion. The abdomen was flushed out with hot boracic solution, and a glass drainage tube kept in for about twenty-four hours. The only drawback to an uninterrupted recovery was due to some suppuration about the stitches—an occurrence that frequently takes place if, as in this case, some distension follows operation. Profiting by the experience of the last case I have mentioned to you, I took care not to let the bowels remain too long inactive. The ordinary senna draught of the hospital succeeded admirably when other purgatives failed.

There are a few practical points arising out of these cases to which I desire to call your attention.

When is it Desirable to Operate?

On this point I desire to repeat, though it be for the hundredth time, that in cases where a band is reasonably suspected we cannot operate too early. After the first twenty-four hours the local condition of the part becomes infinitely worse than the general symptoms seem to indicate. During the interval between the severe attacks the intestine is but, as it were, resting and gathering force for fresh, but fruitless, endeavours to force the obstruction to yield. Picture to yourselves the commotion that must have taken place within the belly in these cases. A loop of gut is strangulated by a band. Immediately the most strenuous reflex efforts are made to overcome the obstruction, comparable almost to forcible taxis in hernia. The circulation in the intestinal wall is impeded and disordered. The vessels become injected, the whole wall of the gut gorged. More and more of the gut above the constriction is thrown into violent spasm. Ultimately the exhausted muscular tissue ceases its efforts, and the calm ensues. Meanwhile the gripped intestine, in its violent struggle to get free, probably drags down or displaces the mesentery, thus further hindering the circulation. The obstructed portion may shift its position, and further entanglement of the bowels ensue. After a while the serous coat becomes covered with lymph and neighbouring coils adhere together; and during all this time the wall of the bowel where constricted, at first bloodless and pale, becomes ulcerated, the mischief commencing in the mucous layer. What can drugs, be they opium or belladonna, or purgatives, what can enemata do to relieve such a condition? And what can delay do save convert a simple and hopeful case into a complicated and hopeless one?

In the great majority of cases the symptoms of band are really almost unequivocal. When they are so clearly marked it is mere fatalism to abstain from operating, and even if the symptoms, though due to a band, chance to be obscured by complications, operation will almost always be expedient, and invariably be justifiable. I am altogether of Mr. Greig Smith's opinion with regard to what are called "exploratory" operations. "No incision," he says, "ought to be merely exploratory; at the utmost it ought to be ultimately diagnostic in a case of extreme doubt and difficulty." As a means of obtaining information, when all else fails, it is occasionally right; as an aid to a slovenly diagnosis it is worse than wrong. While preparing for all eventualities, you should have a clear idea in your own mind of what you will probably find, and in the case of bands you will very seldom be wrong. You may not be able to tell the precise form of band, or distinguish between a tag of omentum or a peritoneal adhesion, but you can feel almost positive of the essential nature of the disease. If you keep a picture of the clinical progress of these cases in your mind, you will generally arrive at a just conclusion; but you must believe in the truth of the symptoms. Few cases have less misleading symptoms.

As to the Incision.

Make this, in the absence of very clear indications to the contrary, in the middle line and below the umbilicus. Through this opening you can easily reach the sacro-iliac joint, and you are more likely to be clear of any adhesions that may have formed. I believe it is better to cut through the rectus muscle just on one side of the linea alba, rather than keep rigidly to the very middle. Pass your finger at once to the right sacro-iliac joint. Almost any form of obstruction will reveal itself to the touch as an undue induration. If a little fluid gushes out when you first open the peritoneum, you may feel certain that you have to deal with an obstruction. If you do not discover the site of the mischief at once by these manipulations trace along the gut up or down: but be definite in your proceedings.

If there is collapsed gut as well as distended, begin with the former for choice, follow out its whole length first in one direction and then in the other, but do not hesitate and go first up and then down. Keep the intestine warm and keep it moist. Gentle irrigation with hot boracic solution is, perhaps, the best method. When you reveal the site of obstruction, try to raise it to the surface, and deal with it outside the abdominal cavity. Often it cannot be drawn up at all. Then the intestine around must be gently held back, and the nature of the band determined. If a peritoneal adhesion, be sure that it does not include a drawn out portion of the intestinal tube. Before dealing with the adhesion let the assistant grasp the intestine lightly between his fingers on either side of the constriction, lest ulceration having taken place escape of fæces follow the division of the band. The moment the band is released or divided the whole appearance will change quite suddenly. In many cases the cut ends disappear suddenly, and cannot be found again, and even the constricted portion of the gut may be hard to discover. Note if the circulation returns at once through the constricted portion. The collapsed gut may become fuller a little at once, and yet paralysis may prove fatal. If there is serious doubt, it is better I think to resect at once a large piece of the intestine.

Rapidity of operation is of cardinal importance, and any form of procedure, such as multiplication of sutures, is to be deprecated. With regard to rapidity in operating you can hardly approach too near the limit that separates speed from haste.

If a patient's condition is too bad to allow of resection, bring a coil of intestine out of the wound, secure it after Mr. Greig Smith's method, tie in a glass tube into the distended gut, and drain in that way. This is infinitely better than making an artificial anus. Nearly all the patients thus treated die. In most cases where you consider it desirable to flush, it is advisable to drain the peritoneal cavity. Instruct the nurse to turn the glass tube once completely round every time she draws the fluid out with the syringe, otherwise the openings in the tube will become choked, and when you take out the tube finally it will give pain, and, worse still, lead to a little bleeding, and probable subsequent trouble. Take the utmost care to prevent any sepsis from extending along the tube itself or by its side. Suppuration along the track of the drainage tube, though not of itself very serious, delays convalescence; though difficult to avoid, it is still preventable.

After-Treatment.

I am unwilling to lay down any formal rules. In general the principles are very simple. Opium is not usually necessary, and is, I think, to be avoided when possible. Do not keep your patient too long without any food by the mouth. Generally some must be given after the first twenty-four hours, and some is often desirable still earlier. In fact, you may give food, fluid of course, directly you think the stomach can bear it. Do not allow the bowels to remain inactive again too long. There is an extraordinary tendency in these cases to administer purgatives before the constriction is relieved, and to withhold them after. Both practices are constantly pursued to an injurious extent. If you believe that the colon is loaded injections must be trusted to mainly; the purgative mineral waters will often answer admirably.

If the small intestine is likely to be paralysed to some extent, the common black draught will answer excellently, or castor oil.

Flatulent distension occurring after operation may become a very formidable symptom, and is to be guarded against most carefully. Long injection tubes made of rubber are far safer to use than the gum elastic tubes ordinarily supplied by makers. Puncture of the bowel through the abdominal wall has been recommended, but I cannot say that I am in favour of the method. Other means short of laparotomy have been advocated by high authorities, notably by Mr. Jonathan Hutchinson. Manipulations, shaking, and even inversion of the patient pursued on a definite system have relieved cases presenting symptoms of obstruction, but not often, I fancy, the class of cases with which this lecture deals.

If it is a kink you may succeed; if it is an impaction of fæces causing an actual obstruction in itself, or producing one by pressure on another coil, you may succeed; and I doubt not in other of the less grave forms of obstruction the practice is not unreasonable. But if it is a case of band with such symptoms as I have described, such methods will fail in the huge majority, while in the exceptional case your laparotomy would have been absolutely justified. In some you will find an irremediable condition. In some there will be found disorder, which, though possibly amenable to milder measures than laparotomy, can yet be efficiently treated by that means. In some you can but make the diagnosis certain, as for instance in tuberculous peritonitis, but this may be a great gain. Of the two evils, indiscriminate operation would be far better than universal expectancy.

ON THE VALUE OF THE BACTERIOLOGICAL DIAGNOSIS OF ASIATIC CHOLERA.

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"Bacteriologically indistinguishable from Asiatic cholera" is an expression which, to some, will undoubtedly convey a feeling of doubt concerning the value of the bacteriological diagnosis, whilst for those who believe that the spirillum choleræ Asiaticæ is the cause of the disease, the same expression leaves absolutely no doubt as to the nature of the case; the presence of the comma bacillus "constituting an infallible diagnostic sign of the existence of the disease."[1] The diagnosis of cholera is by all acknowledged to be based on evidences of four kinds (1) clinical, (2) anatomical, (3) epidemiological, (4) bacteriological.

Clinical Evidence.

The clinical diagnosis presents serious difficulties, for (A) the symptoms, even of undoubted cases, vary much in intensity and in sequence. (B) Other illnesses may closely simulate Asiatic cholera: among them may be mentioned cholera nostras (English cholera, summer diarrhœa, infantile diarrhœa), perforation of the stomach and bowel, cold stage of remittent fever, poisoning by certain organic poisons (muscarin, croton oil, food poisoning), poisoning by certain inorganic poisons (arsenic, nitrites—the latter according to Emmerich and Tsuboi).[2] All the essential symptoms of Asiatic cholera—namely, (1) diarrhœa with rice-water stools, (2) vomiting, (3) cramps, (4) suppression of bile and urine, (5) pinched expression and lividity, (6) extreme prostration and collapse, (7) coldness of surface but not of rectum, (8) reaction or fever in cases not dying in the stage of collapse, (9) death in a certain proportion of cases—may be observed in severe cases of cholera nostras, in which, however, suppression of urine and bile are seldom seen. Unfortunately for the diagnosis, suppression of bile and urine may be absent in typical epidemic cholera. This difficulty is so great, that Koch[3] himself has said that when an epidemic of cholera has reached its acme, cases of acute diarrhœa, with vomiting and cramps, may be considered as choleraic without bacteriological analysis. (C) The difficulty is still further increased by the fact that some cases of alleged cholera, as diagnosed by the bacteriological method, show absolutely no symptoms.

Anatomical Evidence.

The anatomical diagnosis of cholera is still more difficult than the clinical. Typical lesions of the intestine, and even typical stools are found only in a certain proportion of cases.[4]

Epidemiological Evidence.

The epidemiological notion must evidently be combined with the clinical and the anatomical diagnosis, since it is only the occurrence of cases which points to the existence of an epidemic.

It is well known that in the absence of any evidence of the importation of Asiatic cholera many cases, which in time of epidemic would be attributed to malignant cholera, are called cases of summer or English cholera. When an epidemic is raging, on the contrary, such cases would be described as examples of epidemic cholera (see Koch's statement above).

That this is a source of great confusion is shown by certain occurrences. There have been epidemics of choleraic disease in which the evidence of importation from Asia or from an infected country has been doubtful; this was the case with the Paris epidemic in 1892; the absence of evidence of importation led the authorities at first to give the name of *diarrhée cholériforme* to these attacks; yet a bacteriological examination of several of these cases proved the presence of the cholera spirillum (Netter, Metchnikoff).

The difficulties in this respect are considerably increased by the occurrence of local outbreaks undoubtedly connected with the supply of impure water—London, 1866; Marseilles, 1884, 1892; Paris, 1892; Hamburg, 1892; for these are capable of more than one interpretation. Moreover, cases, apparently sporadic, seem to have increased of late years, since the bacteriological diagnosis has come into use.

From what precedes it is evident that before the bacterial method was introduced the diagnosis of cholera was based on a certain combination of evidences clinical, epidemiological, and to a certain extent anatomical; and that these were not always conclusive.

Bacteriological Evidence.

The bacteriological diagnosis is, according to Koch's latest publications,[5] to be obtained by means of the following tests:

1. Microscopical examination of the fæcal matter stained with a dilute solution of carbolised fuchsin.
2. Cultivation in salted, peptonised water, at 37° C.
3. Cultivation on agar at 37° C.
4. Gelatine plate cultivation at 22° C.
5. Testing for the presence of indol and nitrites in pure cultivations in peptonised water (cholera red).
6. Intraperitoneal injection of a minute dose of a 20-hours cultivation on agar in a guinea-pig weighing from 300 to 350 grammes.

But Koch justly remarks that several of these methods have a limited value in themselves. Thus the simple microscopical examination is only available in 50 per cent. of the cases, even in the hands of the most experienced observers.

The cultivations on agar are used chiefly for the purpose of getting bacilli for peritoneal injections, and the plate cultures for the purpose of separating the bacilli (for the rate of liquefaction has had to be abandoned as a diagnostic test).

When morphologically typical spirilla have been found to be present in the intestine of a patient, the only two tests which may be relied upon are (A) the indol-nitrous reaction (cholera red), (B) the virulence of the cultivations on agar to guinea-pigs; and the cholera-red reaction seems to be the more important of the two, for Koch has said, "None of the curved bacteria known until now does produce at the same time, when cultivated, indol and nitrous acid, and gives the characteristic reactions of cholera red."[6] So great is Koch's confidence in the bacteriological diagnosis based on these tests that he considers men apparently healthy, in the solid stools of whom cholera bacilli have been found, as genuine cases of cholera. Such persons, he avers, have always been exposed to the influence of infection.

Unfortunately the comma bacilli are not present or, at any rate, easy to demonstrate in cases where reaction has set in,

and Koch is also of opinion that in many cases where observers have failed to discover the presence of the bacillus this was the result of inexperience on their part, therefore he says, "The absence or non-discovery of the bacilli in a suspected case does not always prove that the case is not one of cholera."

It is evident from what precedes that the bacteriological diagnosis is the only one for which infallibility is claimed. All patients, in the intestine of whom the comma bacillus is found, are to be considered cases of Asiatic cholera. On the other hand, we have seen that the only feature distinguishing malignant cholera from certain diseases giving rise to the same symptoms is its epidemic character. If it were proved that the spirilla found in cases of true cholera were found commonly in a district in the absence of an epidemic or of any evidence of infection, then, however constant their presence might be in cases of true epidemic cholera, one would be inclined to doubt their value as absolutely positive proof of the existence of the disease. On the other hand, if it were found that the spirillum is present in a district only when there has been a distinct evidence of direct or indirect contamination, with products of undoubted Asiatic origin, the value of the bacteriological diagnosis would be much increased.

(The assumption that the disease has become endemic of late in many countries, and that the spirillum is now to be found permanently in many districts, would not make clearer to us the origin of the great pandemics, and would considerably alter the character of the question of differential diagnosis between cholera nostras and cholera Asiatica.)

The following observations have, I think, an important bearing on this subject:

I will first mention the result of observations in Manchester. At the time when there was a possibility of the town becoming affected with cholera Dr. Tatham watched for cases exhibiting suspicious symptoms, and found that in the second half of the month of September 4 patients were taken ill with choleraic symptoms. Of these, 3 died, 1 recovered. In two cases there seemed to have been no evidence of infection. (This is a part of the subject which will be dealt with by Dr. Tatham elsewhere.)

These cases were followed by no other cases. In one of the fatal cases no comma bacillus could be found; in that case the characters of the stools and of the intestine did not suggest in the least the existence of cholera. In the two other fatal cases and in the one that recovered the comma bacillus was found without any difficulty. In the first case that occurred in Manchester, in order to make absolutely certain that the results obtained by me would be comparable with those obtained by Dr. Klein, I sent him a specimen of the the material obtained from the intestine, and he most kindly examined it, and I had the satisfaction to find that Dr. Klein in London and myself in Manchester had obtained independently absolutely similar results, that is, we had obtained from that case spirilla in shape, size, and cultures, having all the characters of cholera bacilli, and giving the cholera red very well. In addition I found that small doses of pure cultivations of these spirilla on agar were very virulent to guinea-pigs. In the other two cases I found even more easily than in the first that comma bacilli were very abundant.

The characters of the organs were as follow:

In the first fatal case. Jejunum: Slightly congested; contents pale yellow, pappy, offensive fæcal smell. Ileum: Mucous and serous coats generally congested, but more specially so in patches; Peyer's patches indistinct; no hæmorrhages; contents very thick, mucous, very adhesive, partly yellow, partly bright green, containing a few whitish flakes.

Microscopical examination of the whitish flakes: Columnar epithelial cells abundant, large thick and long bacilli abundant, short straight or slightly curved bacilli abundant, micrococci abundant, some large toruloid organisms; curved bacilli having the characters of comma bacilli, but nowhere grouped typically.

The lungs were deeply congested and contained hæmorrhagic blocks, specially under the pleura. The liver was dark and congested. The kidneys showed typical cloudy swelling of the cortex, with small areas of congestion under the capsule. Intense congestion of the medulla (cholera kidney, so-called).

In the second fatal case the ileum showed hardly any change, except slight congestion of the serous coat. The contents were very thin, pale greyish brown, almost colourless, containing whitish shreds and clear boiled-sago-like masses of mucus. The smell was slightly fæcal.

Microscopically the contents were much poorer in cells and micro-organisms than in the first case. The comma-shaped bacilli were also present, but nowhere in typical groups.

The stools of the patient that recovered were thin, pulpy, pale greyish yellow in colour, and containing whitish curdy masses or flakes; they had a distinct fæcal smell.

Microscopically the whitish shreds contained a very few indistinct epithelial cells; a large amount of granular *débris*: long thin bacilli; short bacilli, which were abundant; streptococci; curved bacilli, resembling the comma bacillus, but nowhere forming typical groups.

Cultivation in this and in the other cases proved the presence of a large number of comma bacilli, indistinguishable from the cholera bacillus in shape, mode of growth, and chemical reactions. The bacterium coli commune was also found to be abundant.

The most interesting feature I noticed in connection with the spirilla obtained from one case was that by proper selection of colonies on the gelatine plate it was possible to obtain sports of the organism liquefying gelatine at various rates. I was able to maintain these cultural differences through several generations, but I cannot say yet whether they indicate the existence of permanent varieties. They tend to prove, however, that the rigid monomorphism, attributed at one time to the spirillum choleræ, was in great part due to judicious selection of specimens and to the production of almost invariable external circumstances.

As is well known, Cunningham[7] and Klein have demonstrated the existence of a large number of varieties of spirilla in choleraic dejecta. Cunningham's observations have not, perhaps, received yet the attention which they deserve.

The observations of Nicolle and Morax[8] are perhaps not so well known. These observers found that the comma bacilli obtained from various sources did not only show differences of size and shape, but that some had four cilia or flagella (Massaowah, Calcutta, Paris, 1884), some had only one cilium (Shanghai, Hamburg, Paris, 1892; Angers, 1892), and in one instance it was impossible to demonstrate the existence of any cilium (Indian spirillum coming from Dr. Koch's laboratory). It is interesting to note that the vibrios of Finkler and Prior, Deneke, Gamaleïa, and those found by Blachstein and Sanarelli in water have all only one cilium, like the second group of cholera vibrios mentioned above. Dr. Richmond, working in my laboratory, has not been able to demonstrate more than one cilium in any of the spirilla I have isolated from the Manchester cases. It must be remembered that the cholera red reaction is a test important only in connection with spirilla isolated from the contents of the human intestine. The vibrio Metchnikovi gives the reaction and is pathogenic to guinea-pigs.[3] It is even possible for the Finkler's spirillum to acquire this property (Bujwid).[10] These two facts I have been able to confirm.

Quite recently, Blachstein[11] and Sanarelli,[12] Neisser,[13] have described spirilla in water which are pathogenic to guinea-pigs, and give the cholera red reaction. Sanarelli's observations seem to be most complete, and are extremely interesting. His conclusions may be summed up as follows:

1. It is always possible to obtain from water contaminated with sewage spirilla having all the morphological, cultural, chemical, and pathogenic characters considered by Koch as diagnostic of the cholera spirillum. (Sanarelli obtained pathogenic spirilla from four different sources.)

2. The pathogenic water spirilla do not long retain their pathogenic properties, and they also lose the power of reducing nitrates.

3. It is possible to find in water spirilla morphologically similar to the cholera spirillum, but not pathogenic to the same extent; these are probably derived from the pathogenic spirilla found in sewage. (Sanarelli found spirilla in water from thirty-two different sources; four of these spirilla were the pathogenic ones alluded to above.)

4. The constant presence of pathogenic spirilla in sewage seems to indicate that they are derived from intestinal dejecta.

5. The close resemblance of the spirilla obtained from choleraic stools and of those found in water seems to indicate a common origin.

Metchnikoff[14] has found comma bacilli in the stools of a healthy person in the absence of any cholera epidemic. Rumpel[15] had made similar observations. Koch himself, in various places, admits the possibility of the presence of cholera bacilli in the stools of persons apparently healthy, but insists upon the necessity of their having been exposed to infection, and considers such cases as mild cases of cholera.

Lesage and Macaigne[16] have written a very interesting

paper, giving the results of a bacteriological examination of 198 cases of cholera. In these cases they found the bacillus virgula abundant in 20, moderately abundant in 107, in small numbers and difficult to find in 24, and absent in 45. In the 45 cases in which no comma bacillus was found, the bacterium coli commune was found alone in 15; associated with staphylococci, streptococci, or rarely the B. pyocyaneus in 30.

Protective inoculation might be said to have some bearing on the question of diagnosis, but the evidence obtained by the work of Ferrán, Gamaleïa, Haffkine, Klemperer, Klein, Metchnikoff, Pawlowsky, and Buchstab, etc., is of a nature which does not encourage reliance on such a method of diagnosis at the present time.

General Conclusions.

Although I am fully aware of the objections which Koch might offer, and has indeed offered, to some of the observations related above, it seems to me that the following conclusions can hardly be avoided:—

1. It is as yet impossible to speak dogmatically of the infallibility of the bacteriological diagnosis of cholera Asiatica.

2. All the more recent observations point to the importance of the contamination of water and soil with dejecta as a cause of outbreaks of cholera similar to Indian cholera.

3. These recent observations undoubtedly lend much support to the localistic views of Cunningham and of Pettenkofer, though in their details these views may have to be modified.

NOTE.—It is evident that until it is possible to speak more positively, the bacteriological examination will have to be conducted with even more care than it has been hitherto, as only in this way will it be possible to remove all the doubts that remain.

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REMARKS ON THE TREATMENT OF PERITONITIS BY DRAINAGE,

WITH ILLUSTRATIVE CASES,

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Professor of Surgery in Mason College, and Surgeon to the General Hospital, Birmingham.

DURING the last eighteen months a series of most interesting cases of peritonitis has fallen under my care, all of which were treated by drainage. They illustrate several points of importance in etiology, treatment, and prognosis. The cases, ten in number, include two of acute sero-purulent peritonitis, five of purulent peritonitis, and three which were tuberculous. Some of these have already been described in full[1] and only the main features will here be presented for the purpose of summary.

In reviewing these cases the first point of interest is to inquire if they throw any light upon the etiology of peritonitis. Cases I and II were so similar in their onset, in the ages of the patients, in the inflammatory material produced, and in the absence of a local lesion to explain the attacks, that they were both regarded as cases of acute peritonitis, such as is sometimes described as rheumatic or idiopathic in origin. The subsequent fatal seizure in Case II provided positive proof that acute inflammatory lesions of the vermiform appendix were the cause of both attacks of peritonitis in this patient. That this organ might be the starting point of the trouble was ever present to my mind, as I have been in the habit of pressing the importance of appendicitis on students in my classes for years. For this reason the presence of a local inflammatory collection in the right iliac fossa was especially sought for, but none could be made out, even under anæsthesia. This may have been due to the rigidity and distension of the abdomen, but it emphasises a point insisted upon in a paper of mine read at the annual meeting of the Association,[2] that not a few cases of acute perforative appendicitis are latent as far as the local lesion is concerned. The revelation of the cause of the peritonitis in Case II throws considerable doubt on the assumed idiopathic origin of Case I, although there was in this a definite exposure to extreme cold, which appeared to account for the seizure. Whilst willing to concede this as a probable example of perforative rather than idiopathic peritonitis, I am certainly not prepared to give up the latter term as mythical. Using the term in its ordinary sense to indicate that no definite local lesion can be recognised as the cause, such as perforation or hæmorrhage, nor any specific poison such as that of tuberculosis, I have no doubt that we have at times in the abdomen, as in the thorax, an acute catarrhal inflammation of the serous membrane, which, as in the thorax, may become purulent. Such a condition is illustrated, I believe, in Case III, and it is probable that in such the inflammatory process is initiated by exposure to cold and overfatigue, whilst the subsequent purulent change is due to the grafting of pyogenic organisms on to what was before a simple non-infective condition. The focus from which invasion takes place is not far to seek, seeing that the inflamed membrane is so intimately related to the intestinal tract. In Case IV it is probable that the long-standing sinus leading to the left iliac fossa was due to a caseating tuberculous gland, which, by bursting into the peritoneal cavity, set up a localised suppurative peritonitis. A definite thickening of small area was present here for some months, and curdy caseous material could constantly be squeezed out of the sinus.

The result of the treatment by abdominal section is, I think, satisfactory, despite the fact that four deaths have to be recorded after eleven operations. Case IX died within a week, of disease so extensive and generalised that relief by any treatment was hopeless. Case VI died at the end of a month after the second operation, and it is impossible to decide what part the operation had in causing the extensive and widespread suppurations in the abdomen, and which of these were due to the original peritonitis. My experience of suppurations below the diaphragm, but in the upper part of the abdomen, is that they are very anxious conditions to interfere with, and are peculiarly liable to end in septicæmia. The third case dying, No. X, was tuberculous in its origin, and several weeks after the abdomen was opened a fæcal fistula formed. This was the cause of the child's death, but it would not be fair to ascribe this without doubt to the abdominal section, as the same condition is recognised as a natural termination produced by the disease. It is, however, worth considering as a possible bad result of operative interference in tuberculous cases, seeing that the breaking down of adhesions, sometimes necessary, may weaken the intestinal wall, and that infection by ordinary pus cocci may take place, leading to more rapid spread of the tuberculous process. The remaining fatality, in Case II, was extremely disappointing. The first operation on this patient ended in apparent complete recovery, he having been at work for some months before his second attack of peritonitis. Four days before this came on he presented himself for examination, and seemed in robust health, and though at this time a careful examination was made of his abdomen no thickening or tenderness could be felt anywhere.

CASE I. *Acute Sero-purulent Peritonitis: Drainage: Recovery.*—N.N., male, aged 20, was first seen in consultation, January 28th, 1893, with Drs. Simon and Middleton. On January 21st he complained of feeling poorly, and this continued for three or four days, but on January 26th he felt so much better that he thought of resuming his work. Later on this day, however, he had severe griping pain in the abdomen, and on January 27th, the following day, he was seen for the first time by Dr. Middleton. His pulse was then 120, temperature 101°, he was vomiting, his abdomen was distended, rigid, and tender, his facial expression was bad; the bowels were constipated both for flatus and fæces. On January 28th, when I saw him, his condition was very much the same, except that the pulse was quicker and very small. The vomit was coffee coloured. A small quantity of fæces had been passed, together with fluid which had the character of urine, and which, as the patient positively declared it had not been passed *per urethram*, gave rise to the suspicion that there was a communication between the bladder and the rectum, which was

[1] *Birm. Med. Rev.*, Nov. 1893.

[2] BRITISH MEDICAL JOURNAL, vol. i, 1893.

the starting point of acute peritonitis. The subsequent history of normal urine and normal micturition in every way negatived this supposition, which was unsupported by examination of the rectum and of the bladder from within the abdomen. The only explanation offered for the onset of the illness was exposure to severe cold a day or so before its commencement.

The diagnosis of acute peritonitis, which was getting worse despite treatment, in face of the patient's critical condition, determined us upon immediate operation, and I opened the abdomen in the middle line below the umbilicus, and evacuated several ounces of fœtid sero-purulent fluid from the pelvis. No focus of disease or perforation could be detected, so the abdomen was irrigated and drained. The result of the operation was at first most satisfactory, there was improvement in all the symptoms, but at the end of a few days the wound gaped and looked as though it were about to become the seat of phagadæna, the quick pulse and the temperature returned. At this time another person in the house fell ill with severe facial erysipelas.

On February 14th a collection of pus in the right anterior lumbar region was evacuated through a tube introduced by the wound. At the same time double pleurisy being suspected from the physical signs, a needle was introduced into each side of the chest, but no fluid was obtained. Following this there was slow improvement until March 10th, when the temperature again ran up and there was pain in the belly.

On March 13th a further collection of pus was found on the right side of the abdomen, at the junction of the right iliac and lumbar regions. This was cut down on to and drained, after which there was steady convalescence, and the patient is now in excellent health, the abdomen being free from fluid, thickenings, or tumour.

CASE II. *Acute Sero-purulent Peritonitis, Drainage, Recovery.*—R. D., male, aged 19, was seen on February 27th, 1893, in consultation with Dr. F. Hues, of Handsworth. On February 20th the patient suffered severe pain in the abdomen, and this continuing he took to his bed on February 22nd, and was more or less of an invalid for the next five days. In addition to pain he had sickness, diarrhœa, and pain on micturition. He appears to have dieted very indiscreetly during this period. His history showed no exposure to cold, violence, or any kind of infection, but he believed that he had had attacks of pain of a similar kind before, with a swelling in the right iliac region; this in answer to a leading question. The patient's surroundings were so bad that there was little hope of treating him successfully where he was, so he was tranferred to hospital the same day.

The note of his condition on admission was, marked facies Hippocratica, pulse, 120, small; temperature, 101; respiration, 30; violent hiccough every third breath, vomiting of greenish offensive fluid at frequent intervals, one fluid motion passed. The abdomen was distended over the lower half, very tense and tender, and respiration was thoracic. On percussion an area of absolute dulness was found occupying the left iliac and the left half of the hypogastric region. No tumour mass or fluctuation could be made out. Emptying the bladder with the catheter made no difference to the dulness. The abdomen was opened in the middle line on the day of admission (February 27th), a little above the pubes, and a quantity of stinking sero-purulent fluid was evacuated. There was no free gas or fæcal particles in this, nor could any perforated organ or local focus be discovered as the starting point of the trouble. The abdomen was washed out with hot water and drained. Recovery steadily followed, though interrupted for a few days by mild delirium. At the present time the patient is quite well.

The preceding note was written after the patient was examined on October 12th. On October 17th he was readmitted to hospital with his former symptoms. He stated that he had been well until October 16th, when on getting up in the morning he had pain in the abdomen and was sick. He rested during the day, but vomited again in the evening, and his bowels acted freely three or four times.

October 17th. On admission late at night his abdomen was moderately distended, tender, fixed, and rigid; no special fulness or hardness could be felt in the right iliac fossa. Diminished resonance existed over the hypogastrium and both flanks; the bowels acted once. The pulse was 120, soft and dicrotic; temperature, 102.4°; facial expression bad; pupils dilated. Food by the mouth was prohibited, and nutriment was administered *per rectum*.

October 18th. When I first saw him in this attack the pulse was 120, soft; temperature, 98.6°. He had passed a very restless night, and had vomited several times, some of the vomit containing blood. The abdomen was described as less tender and tense, and the face as less pinched. The patient expressed himself as feeling better, and this was the opinion of those who saw him on admission. Under these circumstances, after consultation, it was considered advisable to wait before proceeding to open the abdomen.

October 19th. The condition was little changed, except that the facial expression was worse, and the vomiting had been very frequent, blood being present in considerable quantity in the vomit. The pulse was 114; temperature, 101.5. The tongue was dry and brown. The abdomen was now opened through the old incision. The omentum was found adherent here, and when this was broken through several ounces of stinking pus were evacuated. The fingers searched in the right iliac fossa for any thickening or other lesion, but none was found; so, after irrigation, a tube was placed in the pelvis.

October 20th. The patient had been very delirious and violent all night, getting out of bed once despite his attendant, and the drainage tube was displaced out of his wound three times. The pulse was 120, temperature 99.5°. The face looked very pinched, the abdomen was scarcely tender. Vomiting was much less frequent.

October 21st. Again there was an account of a delirious and restless night, with occasional vomiting. Rectal feeding had to be discontinued for a time. Temperature 99°, pulse 128, tongue very dry and brown, sordes on the lips. From the tube some drachms of stinking pus continued to be withdrawn. From this time the report is one of gradually failing strength, but the predominant features of the case were rather those of septic poisoning than those usually regarded as characteristic of advancing peritonitis. The patient died on October 22nd, three days after the operation. The *post-mortem* examination was made by Dr. Stanley, whose report is as follows: On section, considerable adhesion of the great omentum to the abdominal wall and to the intestinal coils beneath, and adhesions of the coils to each other. There was a large quantity of purulent fluid in the pelvis, and between the diaphragm and the right lobe of the liver, which was thereby displaced to the left. Round the cæcum and appendix there was considerable matting, and signs of old and recent inflammation; in this tissue, and partly attached to the appendix, was a small concretion, about the size of a pea, and here the appendix was buried in inflammatory tissue. Nearer the cæcum the appendix was distended, and contained another concretion twice as large as the first; this was free in the cavity of the appendix, and had not produced any ulcerative change around it, but the walls of the part were greatly thickened. The communication between the cæcum and the appendix was patent. The whole of the large intestine was loaded with fæcal accumulation, and part of the wall of the transverse colon was so thin, that it broke down on separation of the not very firm adhesions. In the pelvis to the left was a strong adhesion embracing the rectum, and causing a sharp bend in the bowel, above which there was a large amount of impacted fæces.

CASE III. *Suppurative Peritonitis: Drainage: Recovery.* (Summary).—Girl, aged 7, admitted to hospital May 3rd, 1892, after being ill for a month with fever, abdominal pain, occasional vomiting, and constipation. The illness came on after a long and exhausting walk. When admitted the abdomen was distended with fluid, the umbilicus was red and œdematous, the superficial veins were very distended. Drainage evacuated about four pints of pus, and an uninterrupted recovery followed. The child is now in robust health.

CASE IV. *Suppurative Peritonitis: Drainage; Recovery.* (Summary.)—Male, aged 16, admitted to hospital January 6th, 1893, after an illness of eighteen days, during which time there was fever of from 2 to 5 degrees, pain in the abdomen at times very severe, occasional vomiting, diarrhœa and constipation alternating, and, later, pain in micturition. At the time of the operation the lower part of the abdomen was rigid, tender, and dull; no tumour could be made out. Drainage let out 6 ozs. of fœtid pus, for which no exciting focus could be discovered. A sinus remained for nearly six months, leading to a small induration in the left iliac fossa. The boy is now perfectly well.

CASE V. *Localised Suppuration at the Upper Part of the Abdomen; Drainage; Recovery.* (Summary.)—Girl, aged 13, admitted to hospital May 3rd, 1892, after an illness of five weeks' duration, which consisted in abdominal pain, chiefly on the right side, vomiting, and constipation, with loss of flesh. When operated upon a fluctuating swelling presented in the umbilical region, but above the umbilicus. Temperature 102°. Incision let out several ounces of pus from a cavity bounded behind by the liver and great omentum. Some peritonitis followed for a few days, but eventually complete recovery ensued, though a sinus remained for nearly four months. The child is now well.

CASE VI. *Localised Suppurative Peritonitis presenting in the Epigastrium: Hepatic Abscess; Double Pyosalpinx, etc.: Drainage: Death.* (Summary.)—Female, aged 20, first admitted to hospital May 13th, 1893, with a fluctuating swelling presenting in the epigastrium, rigors, and high temperature a few days later. Several ounces of pus let out from a cavity bounded behind by the stomach and liver. A sinus resulted, which at the end of July caused her readmission, as there was free discharge of pus from it. A pus-containing cavity was then found at the bottom of the sinus beneath the diaphragm and at great depth from the surface. Further collections of pus were let out from the same region. Empyema formed, and the patient died on September 1st, the conditions above mentioned being found on necropsy.

CASE VII. *Suppurative Peritonitis, Tuberculous (?); Spontaneous Opening; Drainage; Recovery.* (Summary.)—Male, aged 8, very strumous in appearance, was admitted to hospital July 30th, 1893, very emaciated, with two sinuses at umbilicus discharging stinking pus, and with a collection of pus in the left iliac and lumbar regions. There was a history of eight weeks' illness, headache, pain in abdomen, vomiting, diarrhœa, swelling of the abdomen with œdema of its walls, and redness of the umbilicus, which eventually burst. The collection on the left side of the abdomen was drained on July 31st, and in a month the boy was well and rapidly gaining flesh. He is now in good health.

CASE VIII. *Acute Tuberculous Peritonitis: Drainage; Recovery.* (Summary.)—Female, aged 16, admitted to hospital October 10th, 1892, with a history of two weeks' illness. At the time of operation there was fluid in the abdomen, which was rigid and tender, and the general condition was markedly "typhoid." Pockets of viscid fluid were emptied, and tubercle was found widely spread. A slow convalescence followed, but the girl is now in perfect health.

CASE IX. *Suppurative Tuberculous Peritonitis: Drainage: Death.* (Summary.)—Male, aged 20, admitted to hospital March 16th, 1893, for pain in the abdomen and emaciation, following an illness supposed to be typhoid fever some months previously. When operated on he was vomiting, his temperature was hectic, his belly distended and tender. A quantity of stinking pus and free gas was let out from the abdomen, but the patient died of exhaustion on the fourth day. The necropsy showed generalised tuberculosis, but no perforation of the intestinal tract.

CASE X. *Tuberculous Peritonitis; Drainage; Fæcal Fistula eventually formed; Death.* (Summary.)—Female, aged 5, admitted to hospital July 20th, 1893, much emaciated, and with a history of a month's illness. The abdomen was distended and tender, and contained a considerable amount of free fluid. The umbilicus was red, œdematous, and prominent. Several ounces of clear serous fluid were evacuated from various pockets, and tubercle was seen on the intestine. Improvement followed, but early in September a fæcal fistula formed, and the child died in October.

The diagnosis of peritonitis is generally easy, but in a few cases it is extremely difficult. I have in mind a case of nephrolithotomy in the practice of a late colleague. Two days after the operation the patient was regarded as suffering from severe peritonitis; the abdomen was distended and tender; there was absolute constipation; the pulse was quick and hard; vomiting was frequent, and blood was present in the vomit; the facial expression was bad to a degree; there was no suppression: yet at the necropsy not

a trace of peritonitis was found, but an intense swelling and injection of the mucous membrane of the stomach and upper part of the small intestine, with minute hæmorrhages into the mucous coat.

The converse was seen in a patient of my own from whom a stenosed vermiform appendix was removed from an abscess cavity which to some extent had already infected the general peritoneal surfaces. In the first forty-eight hours after this operation there was marked improvement; but later the pulse quickened greatly, though it remained very soft; the face became flushed, not pinched; there was delirium; the abdomen was not distended; it was not tender when palpated, and the only conclusion one could arrive at was that the patient was dying of acute septicæmia, and that it was probably due to absorption from the abscess cavity which had been opened; at all events, there was nothing to justify a diagnosis of spreading peritonitis, and yet at the necropsy a general purulent peritonitis was found.

To sum up: instead of the constipation generally present there may be diarrhœa; instead of a hard wiry pulse we may have a soft and dicrotic one; distension and tenderness may be absent. The most reliable signs in my experience are the steadily increasing frequency of the pulse, often with a low or falling temperature, and the facial appearance, this being either pinched and anxious or flushed, and this latter is usually associated with delirium. In many cases the phenomena are those of septicæmia, which mask and obscure the symptoms immediately due to the inflammatory process in the peritoneum. These latter are pain, shock, paresis of the bowel, and hard pulse, and are mainly produced through the impression made on the widespread sympathetic plexuses of the abdomen by the inflammation which envelops them. It is worth noticing that the umbilicus seems to be the point at which inflammatory collections naturally find their way out, if they are general. In Case VII this actually happened, and it was threatening in Cases IV and X at the time they were drained.

With regard to treatment, there is not much to be said which the notes of the cases do not convey. Incision in the middle line, irrigation, and drainage, is a simple procedure and carries with it but little risk, and it is a question whether it is resorted to as often as it should be. The profession is, perhaps, fully alive to its advantages when a very acute onset, such as is due to perforation, can be recognised, but when the commencement is less acute and the symptoms less alarming in the early days, then I doubt if drainage is adopted as often as it is called for, in such cases, for instance, as Nos. I and II. When the inflammatory collection is localised, and more especially if this be in the upper part of the abdomen, it is well not to do too much. Simple incision and drainage suffices: anything like forcible irrigation or searching about with the fingers by disturbing limiting adhesions is likely to do harm. In such cases as No. II, in which the second attack of peritonitis was due to perforation of the appendix, drainage by median incision is insufficient to meet the case, as there is constant reinfection of the peritoneum through the perforation. If a perforative focus is discovered it should be dealt with directly, and in the case of such a lesion as perforation of the appendix an incision directly down over this organ should be made for its removal, and at the same time median section should be performed for irrigation and drainage of the general cavity.

What the future of my patients who recovered may be is to some extent a matter for anxiety, although at the present time they are all perfectly well. The necropsy obtained after the second operation in Case II emphasises a danger that may always follow recovery from peritonitis, whether requiring operation or not. In this case a firm band of adhesion so constricted the rectum as to interfere with the proper emptying of the colon, and it is probable that had the patient recovered, he would eventually have suffered from intestinal obstruction.

I am much indebted to my colleague, Dr. Simon, for the readiness he showed to adopt early surgical measures in several of these cases which in the first instance were under his care.

DR. R. CRONIN has been appointed a Justice of the Peace for the county of Meath.

NOTES OF ABDOMINAL SURGICAL CASES.

By J. CRAWFORD RENTON, M.D.,

Assistant to the Professor of Clinical Surgery in the University of Glasgow, Assistant Surgeon to the Western Infirmary, and Additional Examiner in Clinical Surgery in the University of Edinburgh.

GASTRO-ENTEROSTOMY.

IN March, 1891, I showed to the Medico-Chirurgical Society of Glasgow a patient on whom I had performed the operation of gastro-enterostomy for pyloric tumour causing obstruction of the pyloric orifice and dilatation of the stomach. Full details of the case were published in the BRITISH MEDICAL JOURNAL for January 9th, 1892. Two years after the operation, which was performed on November 16th, 1890, the patient was again shown to the Society, quite well.

In a second case of gastro-enterostomy for dilatation of the stomach due to chronic fermentative dyspepsia, the operation was performed on February 6th, 1892.[1] He is now quite well, and has no occasion to wash out his stomach, because the digested food gets out of it before fermentation takes place. The stomach is still dilated, but the organ is mechanically relieved by the anastomoses which has been formed between the stomach and jejunum or ileum.

The union in both the above cases was effected by means of Senn's plates of decalcified bone, which became absorbed in forty-eight hours, long enough time to permit of satisfactory union between the stomach and bowel.

The short time occupied in performing gastro-enterostomy is a very important factor in the success of the operation. Indeed, it may be laid down as a rule that in abdominal operations the shorter the time occupied in the doing of the operation and the warmer the patient is kept the better. This latter is generally effected by plenty of warm bags around the patient, or by a water bed filled with hot water, or by a large hollow tin pan on the operating table, which Professor Macewen kindly showed me in use in the Royal Infirmary.

PYO-NEPHRO-LITHOTOMY.

In the absence of Professor George Buchanan I was asked by Professor McCall Anderson to see C.D., who was a patient in his ward in the Western Infirmary during the summer of 1892. The medical report I have received from Dr. Bishop, resident physician in Dr. Anderson's wards:

C. D., aged 21, was admitted on June 8th, 1892, complaining of repeated vomitings and great weakness, of two months' duration; previous health good. She was confined on April 18th, 1892, and since then has had frequent vomiting. Three days after delivery a lump formed in the abdomen, and was easily detected on admission. It was the size of an ostrich's egg, in the right ilio-lumbar region, and since her admission had increased in size without there being any pain. There was a distinct deposit of pus in the urine but no frequency of micturition. On June 22nd Dr. Anderson and I saw her together, and we were quite satisfied that the symptoms pointed to some swelling in the renal region. The examination of the urine, while showing pus, did not, when tested by Dr. Buchanan, show any tubercle bacilli, and even in the absence of pain we were hopeful that there might be a renal abscess caused by a calculus, although of course we were quite prepared for the possibility of an abscess opening into the kidney or ureter without a calculus. The patient was transferred to Professor Buchanan's ward, and in his absence, on June 28th, I cut down on the kidney by the posterior incision, and found it occupied by a large fœtid abscess with a calculus in the ureter. The calculus was difficult to dislodge, and I regretted that I had not the bent forceps for the purpose which I believe Mr. Clarke of London advises. After extracting the calculus, the cavity was washed out, a drainage tube introduced, and the usual dressings applied. The case progressed favourably, and on August 5th she was dismissed well.

The point of interest in this case is the absence of pain. Generally there is severe pain in cases of calculus in the kidney, but from time to time we meet with complete absence of pain.

In a case in which Professor Buchanan had removed a stone from the bladder I removed one from the right kidney, and when he died, a year after, we found the left kidney full of calculi.

In another case which I dissected when a house-surgeon, and in which Dr. Heron Watson had successfully performed suprapubic lithotomy, I found the kidneys full of calculi. In this case there was pain in the renal region, but not to the extent that might have been expected. Consequently, we cannot dismiss the possibility of a stone in the kidney although there is no pain in the renal region, just as we cannot be certain that there is a stone although we have pain.

[1] Fully described in the *Glasgow Medical Journal* for December, 1892.

Recently, for severe pain in the renal region, I cut down and found no stone, but the patient has been well ever since, and this has been frequently noted by others.

Ovariotomy Twice Performed on the Same Patient.

In 1882, M. G., aged 43, was sent to me by Dr. Allan, suffering from an abdominal tumour, which we diagnosed as ovarian.

The patient was put under chloroform, and, assisted by Drs. Allan and Beatson, I removed the cyst of the right ovary, which was multilocular; the pedicle was tied. The other ovary appeared to be healthy. The case did well, and she went home in three weeks. In February, 1892, Dr. Allan wrote me that our old patient was again suffering from an ovarian tumour. She was admitted to the Blythswood Home, and on February 29th ether was administered by Dr. Garnet Wilson, and, assisted by Dr. Allan, Dr. Dudgeon, of Pekin, and Dr. Bryce, I removed the tumour, which was multilocular, adherent, and more difficult to deal with than the first. The pedicle was tied; the abdominal incision was made a little to one side of the former one, and it was interesting to note the firm line of union in the first. The patient did well, and went home in a month.

It is important in performing ovariotomy to examine the other ovary when the one affected is removed. I have had occasion once to find the other ovary affected by a cyst, and therefore removed it at the same time. Professor Buchanan records an interesting case in which he performed ovariotomy thrice on the same patient, no doubt in one case the cyst was parovarian.

Exploratory Incisions for Abdominal Tumours.

Mrs. G., aged 45, was sent to me by Dr. McLachlan, of Dumbarton. She complained of a swelling in the abdomen, and suffered from attacks of sickness, which were not typically pyloric in character.

The swelling in the abdomen was in the region of the stomach, between the umbilicus and the sternum, and our impression was that we had to deal with a malignant tumour in the anterior wall of the stomach. On March 3rd, ether having been administered by Dr. Bryce, Dr. McLachlan being present, I opened the abdomen, and found that the stomach was occupied by a large malignant tumour on the anterior wall not invading the pylorus and not limited, so that it was impossible to remove it. The patient had no discomfort from this operation, and was much more free of pain and sickness, and Dr. McLachlan, whom I saw recently, told me he was surprised at the amount of benefit the exploratory incision produced. It certainly in no way hurt her.

J. D., aged 53, was sent to see me by Dr. Lawrie. For a year he had been losing flesh, and for six months had felt a lump in his abdomen. On examination I found a swelling in the right hypochondriac region, which from its hardness, the patient's emaciation, his pallor, and age made me feel almost certain that it was a malignant growth. At the patient's desire an exploratory incision was made, and the tumour found to be malignant.

The man recovered from the operation, and was satisfied that every effort had been made to save him. The tumour might have been an abscess, it might have been removable, as we have seen in other cases, notably in the first case mentioned, where, after exploratory incision, operation was found possible, and the woman's life preserved.

Should an exploratory incision be performed? Yes, I think it should in any case of doubt. Some surprises will be met with, at the same time the patient will be satisfied that the best has been done, even although it may be impossible to do more than confirm the serious impressions formed of the condition by external examination. The safety of the operation is established, and with proper care there should be no trouble with the management of such cases.

ABDOMINAL HYSTERECTOMY WITH TREATMENT OF THE PEDICLE BY THE INTRA-PERITONEAL METHOD.

By A. W. MAYO ROBSON, F.R.C.S.,

Honorary Surgeon Leeds General Infirmary; Professor of Surgery in the Victoria University.

Although all operators have agreed as to the best method of treating the pedicle in ovariotomy, there is still considerable difference of opinion with regard to the treatment of the stump in suprapubic hysterectomy.

Undoubtedly great success has attended the use of Koeberle's *serre-nœud*, and during the past few years, since I have been careful to keep the pedicle dry by daily dressing, I have had no reason to complain of my success, but like most other operators I have always felt that this was a clumsy method, and would probably be superseded by some procedure like Schroeder's, which would avoid the prolonged convalescence with its attendant risks.

Schroeder was undoubtedly the pioneer, and on the same lines Milton, Sinclair, and others have worked with success, but in any new departure additional experience is always valuable, hence my reason for briefly mentioning the following cases.

Case I.—Miss P., aged 40, was seen at first with Dr. Dawson, of Headingley, on August 4th, 1893, in a state of profound anæmia, with a rapid pulse, distended abdomen, and threatened intestinal obstruction. There was a solid abdominal tumour extending to a point midway between the umbilicus and ensiform cartilage. Although three years' history of metrorrhagia was elicited, the abdominal tumour had only been noticed for seven months. There was rather serious mitral disease, and congestion of the base of the lungs. The patient was manifestly too ill for operation, but, after a few weeks' careful medical treatment at home she improved somewhat, and it was felt that operation was possible. She was admitted to the infirmary, and at the end of August hysterectomy was performed, the pedicle being treated by the intra-peritoneal method, no drainage tube being employed. Recovery occurred absolutely without an untoward symptom: the wound healed by first intention: the stitches were removed on the sixth day, and the patient returned home at the end of the third week.

Case II.—Miss H., aged 49, was seen in Scarborough, with Dr. Godfrey, November 4th, 1893, in a state of profound anæmia with water-hammer pulse, but free from organic disease, except myoma of the uterus, which was the cause of very great loss of blood at every period. When I saw her, she had just recovered from thrombosis of the right femoral vein, which had come on without any apparent cause except the anæmia and profound weakness. She gave the history of having suffered from metrorrhagia for five years. The tumour reached to 2½ inches above the umbilicus, and the sound passed 6½ inches into the uterine cavity. Hysterectomy was advised, and, as there was only a fortnight's interval between each period, it was arranged to perform it just before the next. The operation took place in Scarborough on November 11th, the incision extending from ½ inch above the pubes to 1 inch above the umbilicus, the pedicle being treated by the intraperitoneal method without drainage. The operation occupied a few minutes more than an hour, and was followed by little or no shock. There was an absence of vomiting, and the after-progress was like that of an ordinary ovariotomy. The temperature and pulse were normal throughout, and the wound healed by first intention.

The method employed in both these cases was the same. The incision in the middle line was made just sufficiently large to allow the tumour to be brought forward, when immediately a large flat sponge was placed over the intestines so as to avoid their exposure, and an elastic tourniquet applied around the base of the tumour as low as possible. A silk ligature was passed through the broad ligament close to the uterus on each side, and was tied firmly below the ovary, thus securing the ovarian arteries: the parts above the ligatures were then divided, leaving the ovaries and Fallopian tubes adherent to the tumour. The uterus was then removed by making anterior and posterior semilunar flaps, the anterior incision being prolonged downwards and backwards, the posterior one downwards and forwards, the two incisions meeting at the level of the internal os or just above it. Two wedge-shaped flaps were thus left, which were easily apposed. The uterine arteries and all other vessels which could be seen were then ligatured, after which the tourniquet was removed, and a few small vessels seized and tied. Iodoform was applied to the uterine canal, so as to fill the orifice completely.

By means of a curved sewing needle the uterine tissue was brought together by a series of buried sutures until the two surfaces were closely apposed. The peritoneal flaps were then sutured by a continuous suture commencing at one broad ligament and ending at the other. The operation in both cases was almost bloodless beyond what was actually present in the tumour at the time of the tourniquet being applied, and the peritoneum was so dry that in neither case was it thought needful to insert a drainage tube.

I happened to have a good opportunity of testing the difference in recovery after the intraperitoneal and extraperitoneal methods, as, on the same day that I operated on the first case in the infirmary, I performed hysterectomy on a private patient. In the former case the patient was convalescent at the end of a week and able to return home in three weeks; in the latter, although the progress was very satisfactory, the pedicle needed daily dressing, and the patient was unable to return home until the sixth week.

I think the method of intraperitoneal treatment will be applicable to a considerable number of cases of hysterectomy, but in any case it is easy to be prepared with the *serre-nœud* if it be found desirable to hasten the termination of the operation or should it be felt that the *technique* was unusu-

ally difficult owing to peculiarity in the development of the tumour.

My feeling is very distinct, in that in future I shall always commence the operation of hysterectomy with the intention of completing it in the way I have described, and I feel that I can safely recommend it to others as an operation well worthy of attention.

DILATATION OF THE STOMACH, WITH ENTEROPTOSIS.

By H. C. TWEEDY, M.D.Dub., F.R.C.P.I.,
Physician to Dr. Steevens's Hospital, Dublin; Examiner in Medicine Conjoint Board R.C.P.I. and R.C.S.I.

A LABOURING man from the west of Ireland, aged 35, was admitted to hospital under my care, suffering from stomach trouble of many years' duration. Examination disclosed enormous dilatation, with chronic gastric catarrh and paresis of the muscular coat. After about a week he died of exhaustion, and his death was preceded by several convulsive seizures. On opening the abdomen the stomach was seen to occupy the entire superficial space, the fundus reaching to the sixth intercostal space. The greater curvature occupied both iliac fossæ, and extended almost to the pubes. Nothing else could be seen save a wedge-shaped portion of the left lobe of the liver, which was inserted into a sort of sulcus corresponding to the lesser curvature. The capacity of the stomach was found to be 160 ounces. On raising the stomach the transverse colon was found immediately behind it, and in close apposition to it, forming a long curve with sharp angles at the hepatic and splenic flexures, and its lowest portion about two inches above the pubes. The ascending and descending portions of the colon occupied their normal positions. There was scarcely a trace of omentum, and the transverse colon was packed with hardened fæces.

It was evident that the dilatation had been caused in the first place by a diet consisting largely of potatoes, which by mechanical pressure weighed down the organ, causing stagnation of the stomach contents, and subsequent gastric catarrh and atony of the muscular coat. The dilatation[1] was further aided by the fact of the pylorus being dragged down, and thus causing traction on the first portion of the duodenum, which possesses tolerable freedom of motion, as it passes backwards and to the right before it turns sharply down to form the second portion which is firmly fixed, thus of necessity causing a stenosis by increasing the sharp bend between the movable and the fixed portion of the duodenum. The position of the transverse colon represented, though in an exaggerated degree, a condition described by Glénard[2] under the name of enteroptosis.

Glénard based his observations on the fact that the alimentary canal, from the stomach to the rectum, is suspended by ligamentary attachments at certain points; that at several of these fixed points sharp angles are formed, and that if any of the ligaments become relaxed or give way, it is attended with two results—first, a falling (ptosis) of that portion of the alimentary tract; secondly, in certain cases—for example, in the transverse colon—increased traction on the next fixation point, causing obstruction of the passage of ingesta, and even partial stenosis of the intestine itself.

Glénard believed that the condition is most likely to arise in the right portion of the transverse colon; that, owing to a relaxation of the colico-hepatic ligament, the ascending and transverse colon run obliquely from below upward across the abdomen to the splenic flexure, where the intestine is held firmly in its place by the phrenico-colic ligament, and that the acute angle produced at this point by the falling down of the other end of the transverse colon causes a narrowing of the lumen of the gut and consequent stoppage of its contents.

He details several physical signs as diagnostic of this condition, for example, splashing, pulsation of the abdominal aorta, movable kidney on the right side, all of which may be met with under other conditions; but the physical sign on which he lays most stress is "corde colique transverse," by which he means the sensation imparted to the hand on palpation as of a ribbon-like band, one centimetre in width, which he believes to be the displaced transverse colon, lying over the aorta above the umbilicus. His reason for believing this is that pressure in the right iliac fossa on the ascending colon produced rumbling sounds in the "corde transverse." In speaking of patients suffering from this affection, Glénard alludes to them as "nervous dyspeptics," and Ewald,[3] in writing of the disease, classifies it among neuroses of the stomach.

The case now described, although a true ptosis of the transverse colon, differs from Glénard's disease in the following particulars:

1. The patient could not be pronounced in any sense a neurotic subject.

2. The hepatic flexure of the colon was in its normal position, nor were any of the attachments of the bowel relaxed with the exception of the transverse mesocolon.

3. In Glénard's disease the transverse colon is the first part affected; then follows relaxation of the mesentery, and the small intestine descends into the pelvis. The stomach is then drawn down (gastroptosis), and subsequently there may be a falling of all the viscera, which he termed splanchnoptosis. In the case now described, however, the enteroptosis was distinctly secondary to the dilatation of the stomach, or, at least, coincident with it.

[1] Since the above was written, I notice that attention has been drawn to an almost identical condition as a cause of gastric dilatation by Sir Wm. H. Broadbent in his lecture published in the BRITISH MEDICAL JOURNAL, December 2nd.

[2] *Lyon Médical*, Mars, 1885, t. xlviii, p. 450.

[3] *Berlin. klin. Woch.*, 1890, No. 12, etc. An interesting paper on the same subject by Einhorn will be found in the *New York Post Graduate*, vol. viii., No. 2, 1893.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

CURE OF INTUSSUSCEPTION BY RECTAL INJECTION.

ON March 15th, 1893, M. A. G., aged 6 months, was brought to me by her mother, who stated that the bowels had not acted for three days, and that the previous day the infant became very ill, vomiting incessantly matter described as being like "what passed from its bowels" before it was taken ill.

The face was pinched and drawn, the eyes sunken, and the abdomen rather tense. A large sausage-shaped tumour could be easily discerned in the right ileo-colic region. The temperature was 97.8° F., and the surface of the body quite cold; the pulse was 110 and very weak; respirations 56. The child occasionally threw its arms about, screaming loudly, as if in pain, and twice vomited stercoraceous matter. It passed urine normally, but there was a great deal of bloody mucus upon the diaper, although rectal examination revealed nothing.

Having diagnosed intussusception, I proceeded to inject about half a pint of warm water, using steady pressure. After about twenty minutes I could no longer make out the tumour, and desisted with the enema. I administered a little weak warm brandy and water, and prescribed 2 minims of tincture of opium and the same quantity of tincture of belladonna in a teaspoonful of syrup and water every four hours and after six hours had elapsed from the time of the enema two ounces of milk and water every three hours. The child was then put to bed, and hot water bottles applied to it.

Next day I saw the child at 10 A.M., and the mother told me it had remained in about the same condition until 1 A.M., when it became much worse, being icy cold, refusing milk, retching incessantly, and passing much blood and slime after severe straining. The child was in a state of collapse; and, upon abdominal palpation, the tumour could be distinctly felt, and appeared to be much larger than before. The pulse was 120, the temperature 97° F., and the respirations 60.

I now determined at all hazards to forcibly inject warm water, as two previous cases I had attended both died. In

one of these I was subsequently able at the necropsy to reduce by injecting warm water in a more forcible manner than I had deemed advisable during life. The mother was averse to laparotomy, as she considered the infant too young, and so I felt justified in adopting this treatment. After persevering for half an hour, gradually increasing the pressure, there was a distinct feeling of something having slipped suddenly or given way, and the water passed onwards again. I now desisted in my efforts, but retained the water in the bowel, and, after a space of ten minutes, I relaxed the pressure and had the satisfaction of seeing the water, together with some bloody mucus, expelled from the rectum.

The child improved in a few hours, and next day took its food well; vomiting ceased, and a healthy stool was passed. The infant has remained well since, and is now a finely-developed and robust child.

Duncan J. Caddy, M.B., F.R.G.S.
Earl's Court Gardens, S.W.

A CONTRIBUTION TO THE TECHNIQUE OF THE "COLD BATH TREATMENT" IN TYPHOID FEVER.

In the report of a clinical lecture on the method of using the cold bath in typhoid fever, by Dr. William Osler, published in the *Medical News* of December 3rd, 1893, he draws attention to the difficulties of lifting the patient out of the bath. In the case he describes the patient was given as many as thirty-six baths.



I recently had under my care a strongly-built man suffering from typhoid fever, and even with the aid of two nurses I experienced the greatest difficulty in lifting him in and out of his bath. I therefore had fitted to the bed the apparatus shown in the illustration. The legs of the shears were tied to the foot of the bed, where they remained firmly in position. I attached—to use a sailor's expression—a "luff tackle purchase" to either end of the cross beam, and from the lower block of each purchase hooked the end of a common Indian hammock. By placing a sheet over the hammock, and spreading both out flat over the bed, the patient was able to roll on to it without inconvenience.

Now by the multiplication of power effected by the combination of pulleys, the patient was raised off the bed with the greatest ease to the position shown in the illustration, and when suspended was readily pulled over the edge of the bed and gently lowered into the bath. In raising the patient out of the bath the pulleys were of great use. The hammock containing the sheet and patient was raised clear of the surface of the water, and retained in this position for a few seconds to allow it and the sheet to drip into the bath until fairly dry; after which it was raised to the level of the bed, and gently pushed over the edge on to a rubber sheet. The patient, being rubbed dry, is rolled into his original place at the further side of the bed, and the macintosh and wet sheet were removed.

As these baths may have to be given frequently (that is, once in every three hours whenever the temperature is above 102.5°), it is very important to have some such means, in private, by which two nurses, or even one, can give the baths without much trouble. I therefore trust that in bringing this method of using the bath before the members of the medical profession a valuable therapeutic measure may be rendered easy in those details of its application which so often mean the difference between success and failure. Any carpenter can knock together the beams necessary for the two pairs of shears, and the whole can be placed in position within a couple of hours.

G. Caldwell Stephen, M.D.McGill College, Montreal, L.R.C.P.Lond.
Evelyn Gardens, W.

THE REMOVAL OF TUMOURS OF THE FEMALE BLADDER.

The removal *per urethram* of a tumour having a narrow pedicle can be easily accomplished: but when a villous tumour has a broad base this operation is tedious and not quite satisfactory, while the suprapubic method is severe and does not give very great facilities for manipulation. Experience of a recent case suggested to me the following plan:

Dilate the urethra and explore. If the pedicle is narrow or the tumour small it can be removed *per urethram*. If the tumour is large and the villi scattered over a broad base the vesico-vaginal septum should be incised to a sufficient degree to admit the left forefinger, which can be used to guide the forceps working through the urethra. In this way any tumour suitable for removal can be quickly, safely, and thoroughly dealt with. The advantage of working through two different openings is great.

John Campbell, F.R.C.S.,
Surgeon to the Samaritan Hospital for Women, Belfast.

GUNSHOT INJURY BY THE LEE-METFORD RIFLE.

A soldier, aged 24, on October 7th, 1893, shot himself with the magazine rifle. He had evidently attempted his life when in a standing position on a bare plot of ground behind the guard room by holding the rifle obliquely across the chest from right to left, with the idea of shooting himself through the heart. The length and weight of the weapon, and the difficulty of pushing the trigger back with the finger, in addition to the shock of the explosion, must have jerked the barrel outwards towards the left axilla, as the bullet passed through the skin and a few fibres of the pectoralis major, then through the arm from within outwards and a little backwards. His red tunic and flannel shirt were blackened and burnt by the explosion, and a few pieces of cancellous bone were found on the shirt near the hole of exit.

The wound of entrance situated on the inner side of the arm just below the great pectoral, and including some of the fibres of that muscle, was large, and irregularly rectangular in shape; in the long diameter it measured 1½ inch, in the short nearly 1 inch; the edges were inverted and lacerated, the skin around burnt and contused. The aperture admitted the finger freely. The patient being under chloroform, it was found that the bullet had passed right through the humerus, fracturing that bone transversely just below the surgical neck. The capsule of the joint had entirely escaped, and no comminuted fragments could be detected.

The wound of exit was situated on the outer and back part the arm, nearly 2 inches anterior to the posterior fold of the axilla, on a plane a little lower than that of entrance. It

was smaller and more circular in shape; the edges were everted and not lacerated. On exploring it no comminuted fragments could be detected.

The patient did not suffer much from shock; he had lost a quantity of venous blood, but neither axillary vessels nor brachial plexus were injured. Crepitus between the fractured ends could readily be detected. It was resolved to save the arm, so a drainage tube was inserted into the posterior wound, and antiseptic dressings applied, the arm being supported on a pillow. The temperature continued normal throughout, except on two evenings, when it rose a little. The wounds healed rapidly, and before the end of the seventh week he was permitted free movement of the arm. Ten weeks have now passed, and, except that he is unable as yet to lift the arm above the shoulder, which defect is rapidly disappearing, he appears to have recovered the other movements of the arm. There is absolutely no shortening of the limb.

The case is instructive as showing that this modern weapon, with greatly increased muzzle velocity, can at close quarters cause a fracture of the arm which, in the course of its union and ultimate result, bears little difference from a simple transverse fracture caused by a fall on the elbow.

GEORGE NELIS.
Surgeon-Captain, A.M.S.

Poona.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

F. W. PAVY, M.D., F.R.S., in the Chair.

Tuesday, January 16th, 1894.

APPENDICITIS.

DR. FRED. J. SMITH showed a specimen of diseased vermiform appendix removed from the body of a man, aged 40, in whom there was no history of any illness at all till last August, when he was admitted suffering from ordinary acute nephritis. This got practically well except for a trace of albumen. He returned in November with headache, hiccough, much sickness, and severe diarrhœa: general œdema was also very marked. Cheyne-Stokes respiration appeared, and he succumbed to what was taken to be acute uræmia. There were never any signs or symptoms pointing to the right iliac region as the seat of any mischief. *Post mortem* the kidneys were found enlarged, slightly mottled, and with somewhat adherent capsules. The stomach and intestines down to the colon showed patches of intensely red congestion but no ulceration: the vermiform appendix was very pale, about the shape, length, and size of an adult forefinger, curved on itself in a semicircle by the contraction of adhesions; in its mesentery was a dark black hæmorrhagic swelling about the size of a nux vomica seed. Dr. Smith remarked on the curious absence of symptoms or signs resulting from what was evidently a typical example of recurrent appendicitis; he also thought that the specimen threw light on the possible condition underlying many cases of acute appendicitis that got well under medical treatment only.

TWO SPECIMENS OF CRANIAL DEFORMITY IN INFANTS.

DR. S. W. WHEATON exhibited two specimens, nearly identical, in which there was marked antero-posterior shortness of the cranium from arrest of development of the base of the skull: all the fossæ, but especially the posterior, were diminished in the antero-posterior, though not in the transverse, direction; the skull in each case was almost perfectly globular. There were many perforations in the frontal and parietal bones. In both children the digits of the hands and feet were webbed, though the thumbs were distinct; and in one of the infants the great toes were similarly uninvolved. The author regarded the condition of skull as due to syphilis, since in both cases "snuffles" were present, and there was yellow discoloration and much wrinkling of the skin. After death, also, there was found fibrous thickening of the spleen. The occipital convolutions were little developed, and the brain evidently confined, as told by its marked bulging when the skull was opened.

ACTINOMYCOSIS IN THE HUMAN SUBJECT.

DR. KANTHACK and DR. HOWARD TOOTH reported the above case, which was of the rarer form, known as the "pyæmic." As a rule actinomycosis extended by direct continuity or by the lymphatics; its spread by the blood stream was unusual. As the organism was pleomorphic and assumed a coccus form, this mode of extension was not difficult to understand, for in this phase it was of small size. The disease involved the liver and the base of the right lung. There were smaller secondary foci in the right lung, as well as in the left, but the mediastinum was free. The main growth had involved, moreover, the right adrenal, and, beyond this, the kidney. There was an infarct-like focus in the spleen, and abscesses beneath the skin and in certain of the joints, the pus of all of which contained actinomyces. The author had used Gram's stain, the tissue being imbedded in celloidin; in such a case the decolorisation should be carried out not with alcohol, but aniline oil. In examining the pus, also, it was a useful plan to receive this into absolute alcohol, and imbed it subsequently in celloidin with the object of making sections. Clubs were absent, though they were faintly indicated in the liver and lung. The author did not regard the clubs themselves as of any diagnostic importance. In the yellow variety of mycetoma he had shown the presence of a fungus belonging to the same group as, though not identical with, actinomyces. The mycelium varied much in character in both diseases. Professor Crookshank had stated that in bovine actinomycosis the clubs were always present; but this was not so.

DR. HOWARD TOOTH observed that the scattered lesions in the lung were indistinguishable with the naked eye from the grey granulations of tuberculosis, and that the larger resembled those of yellow tubercle.

DR. WHEATON had reported a case of aspergillar mycosis of the lung, the absence of clubs being here an important diagnostic feature.

DR. RUBERT BOYCE did not consider the specimen of mycetoma (white variety), shown at the present meeting, as typical; there was an appearance of degeneration in the fungus; the identity of mycetoma and actinomycosis was not at present proved.

MR. S. G. SHATTOCK could say that at the present time Professor Crookshank did not hold to the statement that in the bovine disease the fungus was always clubbed, since he had himself seen preparations in Professor Crookshank's laboratory in which this was not so; the organs were sent from New Zealand.

DR. R. E. SCHOLEFIELD asked what relation Dr. Kanthack thought actinomycosis bore to the condition that had been found by Eppinger, in which mycelium existed without clubs, and in which pure cultures of the third generation produced lesions in rabbits in which mycelium also occurred without clubs.

DR. KANTHACK had observed absence of clubs in bovine actinomycosis, in preparations made from material received from New Zealand, possibly the same as that examined by Professor Crookshank. He did not profess to be able to relegate these fungi to their true botanical positions, but he regarded the fungus of mycetoma (yellow) as of the same class as actinomycosis.

ANEURYSM OF THE AORTIC VALVE.

DR. A. F. VOELCKER exhibited the heart of a child who died of capillary bronchitis, and in whom one of the segments of the aortic valve was the seat of a small aneurysm. He thought that the condition had probably ensued on fatty degeneration of the endocardium of the value.

DR. FYFFE had seen a similar aneurysm of the mitral valve due to ulcerative endocarditis, in which crowds of streptococci were present. He thought that possibly Dr. Voelcker's might have been of the same kind.

DR. WHEATON referred to a similar case of aneurysm of aortic valve that had been reported by Dr. Hadden: the valve was perforated and the seat of ulcerative endocarditis.

DR. VOELCKER observed that the other organs in his case were normal: the child had had measles, and was convalescent until three days before death.

TWO CASES OF ULCERATIVE COLITIS.

DR. HOWARD TOOTH said that the first case occurred in a

woman, aged 36, single, who was well until three weeks before admission to St. Bartholomew's Hospital; her illness she dated from the taking of some pills, since which she had suffered from constant diarrhœa, with blood-stained stools. Death occurred six weeks from the onset of the disease. The liver was "nutmeg," without abscess or metastatic foci. The cæcum, colon, and rectum were throughout the seats of extensive ulceration, small tumid islets of the mucous membrane remaining on the uninvolved muscular coat. Microscopic examination of the kidneys showed slight nephritis. In the second case, the patient, also a woman, dated the disease from getting wet through; pain and diarrhœa ensued; there was little or no blood in the stools. Death occurred ten weeks from the commencement of the illness. The abdomen was somewhat distended and tender. Temperature on admission 99°. There was general ulceration of the large intestine; the caput coli was perforated. Such cases as these he had recounted were to be found more frequent in females than in males, when a considerable number of such were collected. The patients' ages ranged between 20 and 35 years, and the onset was in all cases, almost, a simple diarrhœa. The duration of the disease varied from four to ten weeks; there was little fever, as a rule, and little pain; blood was commonly passed, but no visible sloughs. The ulceration was limited to the large intestine. Microscopic examination showed, in the two cases reported by the author, a general inflammatory condition of the submucosa, followed by necrosis of the mucous membrane; the solitary glands were certainly not the starting points of the ulceration. Dr. Hale White had insisted on the association of the condition with Bright's disease. The author showed a museum preparation of similar kind, obtained from a general paralytic, and Dr. Claye Shaw had stated it to be common among such patients.

Dr. Ormerod observed that in the two cases he had recorded the rectum was involved, and suggested that a surgical examination of this part might be of great diagnostic use, since it was usually extensively ulcerated under such circumstances.

Card Specimens.

Mr. J. Jackson Clarke: Distoma Crassum.—Dr. A. F. Voelcker: Healed and Cicatrising Ulcers of the Small Intestine.

CLINICAL SOCIETY OF LONDON.

J. W. Hulke, F.R.C.S., F.R.S., President, in the Chair.

Friday, January 12th, 1894.

Acute Phthisis following Destruction of the Mucous Membrane of the Stomach by Corrosive Fluids.

Dr. Soltau Fenwick related two cases. (1) A potman, aged 34, swallowed oxalic acid with suicidal intent. For six weeks afterwards he had constant pain in the epigastrium, and vomiting ensued on every attempt to swallow nourishment. With the systematic employment of lavage considerable improvement manifested itself. The patient steadily gained flesh, the vomiting was relieved, and the gastric pain lessened. Four months after the onset of the disease symptoms of acute phthisis manifested themselves, and death ensued within six weeks. The necropsy revealed caseous tuberculosis invading both lungs from apex to base, with a small vomica in the right upper lobe. The stomach was greatly dilated, and its lining membrane converted into a shining layer of fibrous tissue with numerous radiating bands. No trace of glandular structure could be detected with the microscope. (2) A gentleman, aged 32, accidentally swallowed some nitric acid. Three months later he was suffering from some dysphagia, with pain in the epigastrium and occasional vomiting. The stomach was subsequently washed out daily, and food administered regularly by the tube. Under treatment by washing out the stomach and regular feeding with a tube he rapidly improved. About seven months after the accident the patient began to suffer from cough, night sweats, and high temperature. These symptoms rapidly increased in severity, the gastric phenomena reasserted themselves, and the physical signs of progressive consolidation of the lungs became manifest. Death ensued from exhaustion at the end of seven weeks. At the necropsy the lungs were found to be the seat of acute tuberculous affection from apex to base. The mucous membrane of the stomach was completely destroyed, and was represented merely by a thin layer of fibrous tissue. The lower few inches of the œsophagus showed evidence of superficial cicatrisation of its mucous membrane, and at the pyloric end of the stomach a chronic ulcer was discovered, the contraction of which had caused stenosis of the pyloric orifice. In the *Bulletins de la Société Anatomique de Paris* M. Robert gives details of an almost precisely similar case. These cases are of interest from the fact that in each a corrosive fluid had destroyed the digestive activity of the stomach with a fatal issue after a few months from acute pulmonary phthisis, although there existed no family tendency to this disease. It would, therefore, seem that the sudden impairment of nutrition in these cases so diminished the resistance of the tissues as to render them peculiarly vulnerable to tuberculous invasion.

Dr. Fenwick, in reply to questions by Mr. Barker, Dr. Glover, Dr. W. J. Tyson, Dr. Longhurst, and Dr. Chapman, said he had used Günzburg's test for free hydrochloric acid. There was no phthisical history in either of the two cases. Whether raw meat juice had been given he knew not. Of cases of gastric ulcer, 15 to 20 per cent. were said to die of phthisis. He thought a man in previously good health, with ulceration of the stomach due to corrosion and resulting emaciation, was thereby rendered peculiarly liable to be attacked by tubercle.

Suppurating Hydatid Cyst of Liver Opened Through the Chest Wall.

Dr. W. J. Tyson read notes of this case. A laundress, aged 31, in 1888 suffered from a slight attack of jaundice, and again in January, 1892, and on February 8th following was admitted into the Victoria Hospital, Folkestone. On admission the liver was enlarged, extending below the ribs for 4 inches; the evening temperature was 101°. A week afterwards signs of pleuritic effusion into the right chest developed, and the liver reached the pubes; the evening temperature remained high. On February 27th, 23 ounces of serous fluid were drawn from the right chest; on March 3rd, the posterior part of the chest was again aspirated, and an ounce of puriform hydatid fluid escaped. On March 5th an incision was made into the eighth intercostal space posteriorly, 3 inches in length. As soon as the pleural cavity was opened about an ounce of fluid escaped; immediately an elastic swelling presented itself, the cyst wall of which was stitched to the external wound; the cyst was then laid open and 30 ounces of thick pus full of "skins" of all sizes escaped: the cavity was not washed out: a large india-rubber tube, 6 inches in length, was put in. External dressings of gauze and wool were applied. For the first three days after the operation about half a-pint of pus and "skins" passed, and the cavity was washed out with boracic acid solution through the tube. On March 13th the breathing became audible over the base of the right lung, and the liver dulness disappeared. The discharge gradually became less, but the tube was not finally removed until February, 1893. There was never any sign of the liver contents entering the thoracic cavity after the operation. In such liver abscesses as the one described the opening through the chest wall posteriorly seemed to be the proper route to take, as being more direct and better adapted to drainage.

Mr. F. C. Wallis said the cyst must have been in the convex surface of the liver, and he asked how the hydatid passed through the diaphragm into the pleural cavity. He thought it would have been better to excise a portion of one or two ribs, and thus deal radically with the hydatid.

Dr. Hale White referred to an almost exactly similar case under his own care. Mr. Lane took out a piece of the eighth or ninth rib in the axillary line, and found the right pleural cavity filled with dead hydatids. The liver at once bulged up into the pleural cavity; it was punctured, and pus escaped, but would not flow through the tube. The opening being enlarged, pus and more dead hydatids came away. The patient (an alcoholic subject) had acute bronchitis, and died. The right lung was then found to be compressed to the size of the fist against the upper part of the spine. The left lung was healthy. The diaphragm was so thin that it was lost over the convex surface of the liver, the whole right lobe of which organ was one vast hydatid cyst.

He would ask whether, when one lung was lost, it was not likely that a puncture through the diaphragm might interfere with the action of the diaphragm, and so throw the other lung out of gear?

Sir Dyce Duckworth asked whether the hydatid cavity in such cases should be washed out? He himself believed it better practice to leave it alone. He thought the majority of cases of hydatid cysts and empyemata did well when not washed out. There should be a large free opening, with good drainage, proper position, and surgical cleanliness.

The President alluded to the tendency of these cases for the abscess to burst upwards, and such cases might be divided into two classes—those in which the hydatid burst into the lung first and caused a second empyema, and those in which the rupture took place primarily into the pleura. In the first class there was risk in washing out, as the cases resembled an empyema communicating with a bronchus. In one case irrigated with solution of iodine traces of that substance were detected in the expectoration. He believed, however, the introduction of iodoform emulsion was without danger, and tended to keep the cavity sweet.

Dr. Tyson, in reply, said the first tapping emptied the pleuritic effusion, and the case was unique in being complicated with such an effusion. His case differed from that of Dr. Hale White, because the suppuration did not take place into the pleuritic cavity. His stitching of the edges of the hepatic cyst to the skin wound prevented the escape of pus into the pleural cavity.

Case of Membranous Inflammation of Throat during Scarlet Fever.

Dr. J. W. Washbourn read for himself and Dr. E. W. Goodall a description of a fatal case of membranous inflammation of the throat accompanied by a rash. The diagnosis rested between (1) severe scarlatina anginosa with membrane, (2) diphtheria with rash, (3) coexisting scarlet fever and diphtheria. Subsequent desquamation and an absence of diphtheria bacilli on a careful bacteriological examination proved that the case was one of scarlet fever with membrane. The difficulty of diagnosis was due to the remarkable toughness and thickness of the membrane. Such a condition was uncommon, although it was well known that a membranous inflammation of the throat indistinguishable from diphtheria was quite common during the acute stage of scarlet fever. This condition had been found not to be true diphtheria by various bacteriological investigators. The authors examined four cases of this nature, and failed to find diphtheria bacilli. Clinically, too, it was not diphtheria, for out of 123 cases seen by the authors only 2 developed croup and 2 subsequent paralysis. On the other hand, a membranous inflammation of the throat occurring during convalescence from scarlet fever was generally true diphtheria. In 4 cases examined by the authors they readily found diphtheria bacilli by cultivations, and they had notes of 11 cases in which the membrane spread to the larynx, of 3 cases which were followed by paralysis, and of 1 case in which the vulva became affected with diphtheritic inflammation. In 8 consecutive uncomplicated cases of diphtheria the bacilli were readily demonstrated. The conclusions drawn were that a membranous inflammation of the throat occurring during the acute stage of scarlet fever was generally not true diphtheria, but a similar condition occurring during convalescence was true diphtheria. These conclusions were in accord with the bacteriological examinations made by several investigators abroad and by Klein in this country.

Dr. Sidney Martin said that he had cultivations from two non-diphtheritic membranous cases: one gave only a large diplococcus, and the case readily yielded to local treatment with nitrate of silver. He regarded diphtheria as an acute infective disease, cultivation from the membrane of which gave a bacillus producing a poison the inoculation of which in animals produced paralysis. In a second severer case, that of a girl, aged 15, who had a red throat, with fever and enlarged spleen, and who died, there were found *post mortem* two patches of membrane, one on the rim of the epiglottis and the other on one of the tonsils, whilst micrococci had spread through the tonsil and epiglottis, contrary to true diphtheria bacillus, which never spread below the surface. He thought the membranous throats of scarlet fever were caused by micrococci and other organisms not diphtheritic.

Dr. Hale White asked how soon the membrane developed? He had that day seen a medical student who went to bed the previous night quite well, and at 4 A.M. had a rigor after exposure to scarlatinal and probably diphtheritic poison. That afternoon his temperature was 103° F., the throat was red, and small patches of membrane existed on the uvula, pharynx, and posterior pillar of the fauces.

Dr. Glover asked if the patient had been exposed to scarlet fever infection, and in what proportion of diphtheria cases was there a skin eruption.

After remarks by Dr. Benham and Dr. Turney,

Dr. Goodall thought it important to diagnose these cases, since, if they were diphtheritic, the placing of them in a ward of convalescent scarlatinal patients would give diphtheria to many such patients. When there was a membranous sore throat in cases of scarlet fever the membrane did not spread to the larynx, and when it once disappeared, it did not recur as was the case in diphtheria. Rashes were very uncommon in diphtheria; when they occurred they were almost always limited to the trunk, and were rather darker than the scarlatinal rash.

Dr. Washbourn, in reply, said that he believed that diphtheria might occur in the course of scarlet fever, but it was a very rare mishap. The only way of diagnosing between the two diseases was by bacteriological investigation. In forty-eight hours the result would show the nature of the disease.

REVIEWS.

A Plea for Practical Work in Anatomy. By Thomas Cooke, F.R.C.S.Eng. Longmans and Co. 1893. (Demy 8vo, p. 32.)

This pamphlet has evidently been written by the author whilst in a pessimistic mood. He takes the gloomiest views of the work and prospects of our present race of students. After a somewhat captious criticism of the subjects they learn, and the manner in which they are learnt, he explains how different it is from the honest practical work of but a few years ago. Now we claim to know something about the work of a few years ago, and we say emphatically that there is a difference, and one which is altogether for the better. At the present moment the students in well-ordered schools work harder and more intelligently, and, in our opinion, dissect as well as those who did that so-called honest practical work. Taking the students as a whole, the level of their attainments has immensely improved. The number of them who pass the higher examinations has increased, and is increasing, and, what is still more important, we believe that the level of skill and knowledge is steadily rising amongst those who enter practice.

Mr. Cooke also runs a tilt at that which he objurgates as "this scientific anatomy which," he says, "is taught, and can only be taught, by plates and diagrams." Surely Mr. Cooke cannot have seen the work which is done in any good biological laboratory, such as those in London, Cambridge, or Manchester, for the preliminary scientific examinations. There he would see students learning morphology from their own dissections and embryology from their own preparations. Plates and diagrams are, it is true, used, but only to explain the objects themselves. We wonder where the teachers can be who at the present day are themselves so unenlightened as to use plates and diagrams instead of insisting upon the students actually making their own preparations. But, if we follow Mr. Cooke rightly, he objects to biology altogether because it is supposed by him to interfere with dissection. It may do so if it is learnt at the wrong time; but it is to be remembered that, according to the curriculum, its rudiments ought to have been acquired before the student enters the dissecting rooms. This is certainly done by those who work for the examinations of the London University, and they come equipped with knowledge and habits of observation which give them great superiority over those who have not enjoyed similar advantages. It seems as if Mr. Cooke wished to make students learn mere anatomical facts without at the same time

learning the reason why. We believe the spirit of the age is against him. Our space does not permit us to enter fully into all the questions which Mr. Cooke has raised, but we cannot help thinking that many of his difficulties exist only in his own imagination. He imagines that biology is an abstract science taught with plates and diagrams, and, we almost expect him to say, conveyed by symbols; that students have ceased to dissect, and that cramming is rampant. In our opinion, the education of our students has improved and is improving; that the study of biology enlarges their minds and improves their mental grasp; and that they both dissect as well, and know their human anatomy better than ever before.

In his earnest desire to persuade students and teachers to dissect and to observe, Mr. Cooke has our fullest sympathy and support, also in his desire to make anatomy a training, but we protest in the friendliest way possible against any attempt to deprive it of its rank as a science.

A Handbook for Mothers. By Jane H. Walker, L.R.C.P., L.M., L.R.C.S., M.D.Brux. London: Longmans, Green, and Co. 1893. (Crown 8vo, pp. 206, 2s. 6d.)

This little book is a praiseworthy attempt to convey to middle-class women some plain and useful hints for their guidance in the care of their own health and that of their children during the momentous months before and after parturition.

Miss Walker abstains from the attempts at fine writing, the poetical quotations, and the banal disquisitions which disfigure the pages of many older manuals. When a woman buys a book of "advice to mothers" she wants plain common sense advice and simple information, not poetry nor theology. On the whole Miss Walker's book is good, sensible, and useful; but there are certain blemishes which ought to be removed from the next edition. For instance (page 17), why, in discussing the influence of maternal impressions, does she tell a ghastly story certain to leave an uncomfortable feeling, and probably to foster the class of beliefs which the author really deprecates.

The advice on the subject of clothing is good and careful; but we are rather surprised to find what is practically a hot-air bath recommended, so far as appears, merely as an ordinary routine practice. Nor do we like all the advice on the subject of diet. A regimen of "oranges, apples, lemon juice, and rice, with a very small quantity of meat or fish once a day," does not seem physiological; nor can we understand the influence Miss Walker appears to attribute to it over the course of labour.

In the section on miscarriage, which contains much excellent advice given in a terse, vigorous fashion, we are perplexed by finding "smallness of the pelvis" assigned as a cause of abortion. It does not spontaneously affect pregnancy, though it may impede or prevent delivery at full term. The chapters on labour and the puerperal period are clear and sensible; but perhaps the best part of the book is that which deals with the feeding of infants. The advice is judicious, and minute directions are wisely given for the preparation of the food.

The chapter on the minor ailments of infancy seems a little hurried, and will scarcely be found sufficiently detailed by anxious young mothers; but what there is in it is sound, and there is no unwise pandering to the modern craze for amateur doctoring, no prescriptions to be applied—or misapplied.

NOTES ON BOOKS.

Behandlung weiblicher Geschlechtskrankeiten. [Treatment of Diseases of the Female Genital Organs.] Von Thure Brandt. Zweite, vermehrte Auflage. (Berlin: Fischer's Medicinische Buchhandlung. 1893. Roy. 8vo, pp. 204, M. 6.)—The first edition of this book was published two years ago, and we noticed it at the time in these columns (vol. i, 1891, p. 1236). The additions which have been made in this, the second, edition do not alter the character of the book, nor our opinion of it. We find in it no scientific reason for thinking that patients are benefited by vaginal massage, and it does not make us anxious to see English medical men adopting this mode of treatment. The movements of the limbs which Thure Brandt has systematised with so much care no doubt are, like most gymnastic exercises, good; but, as applied to the treatment of diseases peculiar to women, we doubt their superiority to the modes of exercise which healthy English women at present take.

Précis de Médecine Opératoire Obstétricale. [Epitome of Operative Obstetric Medicine.] Par S. Rémy, Professeur à la Faculté de Médecine de Nancy. (Paris: J. B. Baillière et Fils. 1893. Cr. 8vo, pp. 388, 6 fr.)—This work contains a systematic and clear account of obstetric operations, but it is not a guide to practice. It supplies information as to the chief modifications in each operation, and the various instruments that have been devised for doing them, but it does not point out to the bewildered practitioner what is the thing that he should do. It practically tells him: "Here are various things you may do, various ways of doing them: make your choice." It does not say: "This is the way, walk ye in it." It is brief, and therefore does not comprise any exhaustive discussion of theory. We have pointed out its narrow limits; it remains to say that within these narrow limits it is very good.

Outlines of Obstetrics: a Syllabus of Lectures delivered at the Long Island Cottage Hospital. By Charles Jewett, A.M., M.D., Professor of Obstetrics and Pediatrics in the College, and Obstetrician to the Hospital. Edited by Harold F. Jewett, M.D. (Philadelphia: W. B. Saunders. 1894. Cr. 8vo, pp. 264. 2.00dols.)—This book, as its title states, is only a syllabus. It is intended as a framework upon which to classify further acquisitions: and it is hoped it may be of value as a work of reference to the practitioner. The form adopted prevents the author from giving reasons for his opinions, and therefore it is hardly fair to criticise his views. We should only say that we do not think all his statements and recommendations will command universal acceptance. The absence of detail lessens the utility of the book for practitioners. Still, there may be some readers who find food for thought in a syllabus, and to such this book will be suggestive.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

BRUT CHAMPAGNE.

The production of a perfectly *brut* champagne, absolutely free from sugar, yet ripe, light, and agreeable in taste, has long been a desideratum in medical practice, but has rarely, if ever, been successfully attained. Messrs. Laurent-Perrier and Co., of Bousy, near Rheims, have in specimens of their Grand Vin Brut, Champagne sans Sucre, submitted to us, succeeded, after, we believe, some years of trial, in producing a wine of a very high class, fulfilling these requirements; by keeping under control the second fermentation usual in the best vintage *cuvets*, they have produced a *brut* champagne of high quality and admirable flavour which is sugar free, and which has no added liqueur. It has long been the crux in dieting diabetic patients or rheumatic and gouty persons, or those tending to excessive obesity, to enable them to include in their dietary any form of champagne or other form of sparkling wine, many of which are heating and heady, and more or less loaded with partially fermented saccharine. The *champagne brut sans sucre*, of Laurent-Perrier and Co., which Messrs. Hertz and Collingwood, 4, Sussex Place, Leadenhall Street, have submitted to us, justifies its name under analysis, and is free from these defects.

THE REPORT
ON
ENTERIC FEVER IN THE TEES VALLEY.

A Supplement to the Twenty-First Annual Report of the Local Government Board, 1891-92.

The Tees and the Thames.

The almost simultaneous issue of the report of the Royal Commission appointed to inquire into the water supply of the metropolis, and the report of the Local Government Board containing Dr. Barry's completed account of the now notorious Tees epidemics, has brought out in strong relief the contradictory conclusions to which the same evidence has led two independent groups of scientific experts. On the one hand, the Local Government Board, which has among its medical staff the most able and distinguished etiologists of the present time, puts forward a report containing the results of a detailed and searching investigation into the circumstances of two brief but intense outbreaks of enteric fever which took place in the lower Tees valley in 1890 and 1891. The facts were collected and studied by an observer whose accuracy and impartiality are above suspicion, and the conclusion which he draws from them is that the Tees water was the principal means of diffusing infection. This conclusion is emphatically endorsed by the medical officer of the Board. The facts are published in detail, so that each reader can judge for himself, but, so far as names can carry convic-tion, the deliberate verdict of Dr. Thorne Thorne and Dr. Barry is likely to be accepted as the final and conclusive utterance of authorities second to none in this or any other country. On the other hand, the Royal Commission, numbering among its members men of the highest scientific eminence as engineers, statisticians, chemists, and geologists, having given careful study to the question of waterborne infection, and having had access to all the evidence bearing on the Tees epidemics, including Dr. Barry's report itself, find themselves unable to accept its main thesis as proved; and, while disclaiming any decision in either direction, they speak of it as "a hypothesis so startling, and so entirely unsupported by previous experience in other places, that it is fair to demand the most conclusive evidence before accepting it as proven." Such evidence, they add, has not been brought before them.

The death-rates, taken for obvious reasons over longer periods, are given in the next table:

Table A.—*Enteric Fever Attacks per 10,000 Population.*

	Registration Districts.	During 18 Months: Jan., 1890, to March, 1891.	During Two Epidemic Periods, each of Six Weeks, Collectively.	During First Six Weeks Period, Sept. 7th to Oct. 18th, 1890.	During Second Six Weeks Period, Dec. 28th, 1890, to Feb. 7th, 1891.
Three Registration Districts	Darlington	59.0	41.2	28.3	12.9
	Stockton	92.1	50.8	26.0	21.6
	Middlesbro'	117.1	59.4	31.4	27.9
Other Seven Registration Districts adjoining the above	Teesdale	2.9	2.4	1.4	0.9
	Auckland	11.2	5.4	4.7	0.7
	Hartlepool	18.3	5.4	3.6	1.8
	Northallerton	2.7	0.9	0.9	0.0
	Stokesley	7.2	4.5	1.8	2.7
	Guisbrough	14.5	8.0	4.3	3.8
	Richmond	8.7	1.6	1.6	0.0

Table B. *Enteric Fever Deaths per 10,000 Population.*

	Registration District.	During 13 Months to June 27th, 1891.	During 7 Months to March 21st, 1891.	During 38 Months to Dec. 19th, 1891.	During 38 Months to March 21st, 1891.
Three Registration Districts	Darlington	6.9	6.1	4.2	1.8
	Stockton	10.5	8.7	3.9	4.8
	Middlesbro'	12.7	9.9	5.5	4.8
Other Seven Registration Districts adjoining the above	Teesdale	0.5	0.5	0.5	0.0
	Auckland	5.0	4.0	2.8	1.2
	Hartlepool	3.6	1.7	0.9	0.8
	Northallerton	0.9	0.0	0.0	0.0
	Stokesley	0.9	0.9	0.9	0.0
	Guisbrough	2.7	1.7	0.5	1.2
	Richmond	1.6	1.6	1.6	0.0

The Questions at Issue in Teesdale.

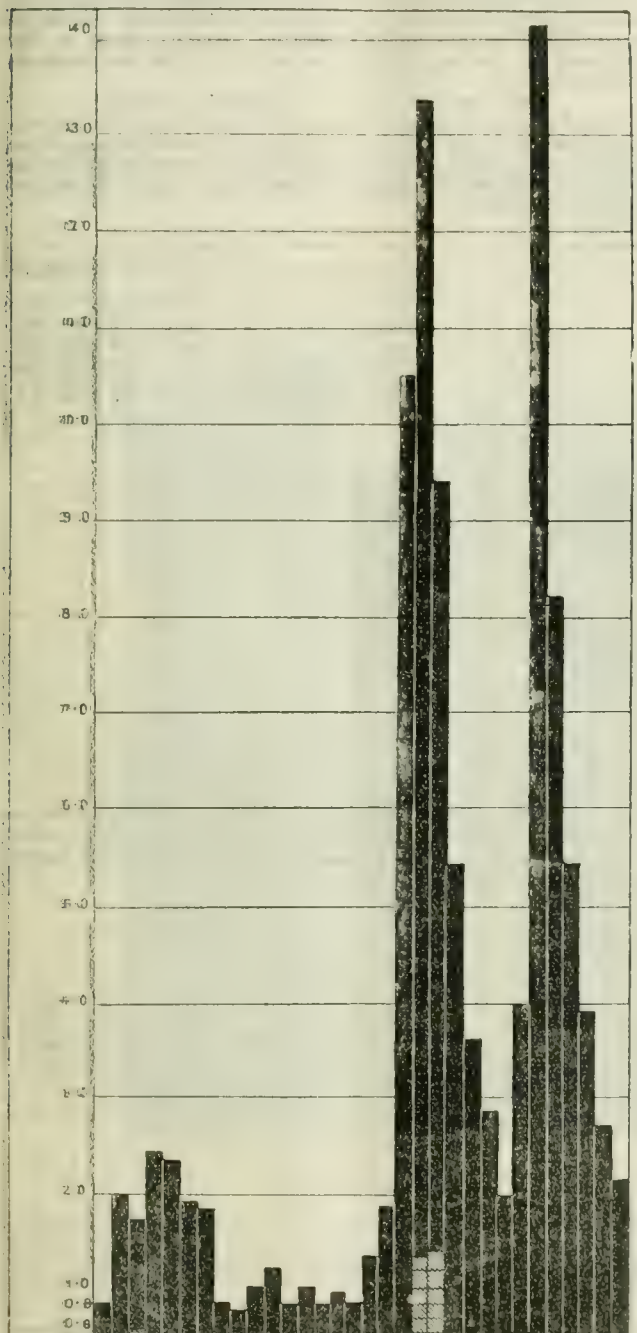
The questions at issue are far-reaching in their sanitary as well as their financial aspects. Is it or is it not true that in 1890-91 the Tees water companies distributed enteric fever along with the water supplied to their customers? If so, is it possible to find any certain means of preventing like accidents in future, and in what degree are consumers of the water of other rivers subject to like risk? If otherwise, in what light are we to regard the failure *qua* Tees of the methods of etiological research upon which we have been and still are relying in other investigations of the same kind? For it must not be forgotten that the same kind of evidence, worked out by the same authorities, is the sole basis for our

The suddenness of the outbreak is shown by the attack-rates in successive fortnightly periods:—

Table C.—*Enteric Fever Attacks per 10,000 Population during Fortnights Ending:*

		1890.											1891.					
		July.		August.		September.	October.		November.			December.	January.		February.		March.	
		12th.	26th.	9th.	23rd.	6th.	20th.	4th.	18th.	1st.	15th.	29th.	13th.	27th.	10th.	24th.	7th.	21st.	7th.	21st.
Three Registration Districts	Darlington	0.4	0.2	—	0.2	0.6	12.3	10.7	5.2	1.2	1.2	2.2	0.5	1.2	6.7	3.6	2.6	1.0	1.4	0.3
	Stockton	0.6	0.7	0.9	0.5	1.8	7.3	9.3	9.7	4.8	2.3	2.5	2.5	3.6	1.6	7.3	5.9	2.6	2.6	1.5
	Middlesbrough	0.9	1.0	0.9	2.0	1.9	9.4	13.9	8.1	6.3	4.5	2.7	1.7	1.2	14.9	8.3	4.6	4.6	2.9	2.6
Other Seven Registration Districts adjoining the above	Teesdale	—	—	—	—	0.5	0.5	0.5	0.5	—	—	—	—	—	0.5	0.5	—	—	—	—
	Auckland	0.1	0.3	0.1	0.2	0.1	0.2	2.6	1.9	0.5	—	0.2	0.3	0.5	0.2	0.2	0.2		0.1	0.1
	Hartlepool	0.8	0.9	0.5	0.8	0.3	0.9	0.8	1.9	0.9	0.6	0.5	0.6	0.8	0.6	0.6	0.6		0.8	0.8
	Northallerton	—	—	—	—	—	—	—	0.9	—									0.9	—
	Stokesley	—						0.9	6.9	—	0.9	—	—	—	1.8		0.9		—	—
	Guisbrough	0.3	0.3	0.3			0.6	1.5	2.2	—	0.3			1.0	1.5	1.5	0.8	0.5	—	—
	Richmond	0.8			0.8				1.6	—	1.8			0.8						
Ten Registration Districts		0.5	0.6	0.5	0.7	0.9	1.8	3.6	4.9	2.6	1.7	1.4	1.0	1.0	6.1	3.8	2.5	1.7	1.3	1.0
		First Epidemic											Second Epidemic							

present views as to the causation of epidemics of enteric fever at Caterham and elsewhere, views which the Commission themselves apparently accept without hesitation.



Enteric fever attacks, fortnight by fortnight, per 10,000 living. The attack-rates among Tees drinkers are shown by black columns, and the corresponding rates among the rest of the population by lighter squares inserted in the former.

THE TEESDALE EPIDEMICS.

The following may serve as a summary of the facts as stated by Dr. Barry. In September and October, 1890, enteric fever became epidemic in Stockton, Darlington, and Middlesbrough, and after falling off in November and December recurred in January and February with even greater activity. Dealing first with registration districts, Dr. Barry found the attack rates to be as indicated in Tables A and C.

The "other seven registration districts" are those which adjoin the three which were especially stricken by the epidemic. The attack-rate was based upon notification data where available, supplemented elsewhere by returns furnished by the medical officers of health, and by special lists obtained from the private practitioners. From these figures Dr. Barry concludes that "the rate, collectively and severally of enteric fever attack in Darlington, Stockton, and Middlesbrough, outrageously exceeded that of the other seven registration districts; that this excess of incidence on these three districts was more marked in the two six-week periods than in the whole sixteen months; and that it was most conspicuous of all in the second six-week period."

The next step was to ascertain the comparative incidence upon each of the separate sanitary districts included in the ten registration districts.

TABLE D.—*Enteric Fever Attacks per 10,000 Population.*

Registration Districts.	Sanitary Districts.	Population, 1891.	16 Months—January, 1890, to March, 1891.	Two Six-Week Periods Collectively.	First Six-Week Period—Sept. 7th to Oct. 18th, 1890.	Second Six-Week Period—Dec. 28th to Feb 7th, 1891.
Darlington	Darlington, U.†	38,060	64.4	45.7	32.6	13.1
	Darlington, R.†	11,452	41.0	26.2	14.0	12.2
Stockton	Stockton-on-Tees, U.†	49,731	124.8	70.6	34.0	36.6
	Stockton, R.†	11,961	96.2	49.3	33.4	15.9
	Sedgfield, R.	19,559	5.1	1.0	1.0	0.0
Middlesbrough	Middlesbrough, U.†...	75,516	120.0	61.6	31.5	30.1
	South Stockton, U.†...	15,476	134.4	57.6	25.9	31.7
	Ormesby, U.*	8,629	108.8	55.5	28.9	26.6
	Normanby, U.†	9,128	101.9	74.3	47.0	26.2
	Eston, U.†	10,695	112.1	44.8	31.8	13.1
	Middlesbrough, R.	1,769	0.0	0.0	0.0	0.0
Teesdale	Teesdale, R.*	16,622	1.8	1.8	0.6	1.2
	Barnard Castle, U.†...	4,341	6.9	4.6	4.6	0.0
Auckland	Auckland, R.§	62,893	9.2	6.0	5.2	0.8
	Bishop Auckland, U....	10,527	15.2	5.7	5.7	0.0
	Shildon, U.	9,537	6.3	1.0	1.0	0.0
	Spennymoor, U.†	6,041	33.2	5.0	3.3	1.7
Hartlepool	Hartlepool, U.†	21,521	23.2	5.1	3.2	1.9
	West Hartlepool, U.†	42,492	16.9	5.9	4.0	1.9
	Hartlepool, R.†	2,654	0.0	0.0	0.0	0.0
Northallerton	Northallerton, U.	3,802	5.3	0.0	0.0	0.0
	Northallerton, R.	7,490	1.3	1.3	1.3	0.0
Stokesley	Stokesley, R. *.....	11,119	7.2	4.5	1.8	2.7
Guisbrough	Kirkleatham, U.†	4,236	68.8	47.5	19.0	28.5
	Redcar, U.‡	2,818	7.1	36.	0.0	3.6
	Guisbrough, U.‡.....	5,623	0.0	0.0	0.0	0.0
	Skelton & Brotton, U.	11,842	16.0	7.6	5.9	1.7
	Saltburn, U.‡	2,232	0.0	0.0	0.0	0.0
	Loftus, U.‡	6,208	3.2	0.0	0.0	0.0
	Guisbrough, R.‡	7,054	8.5	2.8	2.8	0.0
Richmond	Richmond, U.†	4,216	7.1	2.4	2.4	0.0
	Richmond, R.†	8,419	9.5	1.2	1.2	0.0

(*) Ormesby, Stokesley, R.; Teesdale, R., Dr. Barry applied to every medical practitioner for returns of enteric cases from August 24th, 1890, onwards. (†) Compulsory notification. (‡) Voluntary notification. (§) Auckland Rural, enteric fever was epidemic in one village only, namely, Crook, and only during the latter part of the first "epidemic period." The Local Government Board called for a special report from the medical officer of health, so that most of the cases are probably recorded.

A similar analysis of the death returns yielded confirmatory results, except as regards Kirkleatham. The 29 cases in that district were all non-fatal. Details are given in the report as

to the incidence of [illegible] and deaths in each district, fortnight by fortnight, but it is not necessary to reproduce them here. The same remark applies to another series of tables, which show that as regards the three large towns of Darlington, Stockton, and Middlesbrough the excessive incidence of enteric fever was manifest in almost every one of their constituent wards during each of the two epidemic periods, whether measured by the attack-rate or by the proportion of houses invaded. The only exceptions were that some of the wards of Darlington escaped comparatively lightly in the second epidemic, with attack-rates of 4.1, 7.1, and 14.3. In the rural sanitary districts of Darlington and Stockton, however, the incidence was by no means general. Nine-tenths of the attacks occurred during the two six-week epidemic periods in only 4 of the 39 parishes included in the Darlington rural district, namely, Whessoe, Cockerton, Blackwell, and Middleton St. George; and in only 5 of the 16 parishes of the Stockton rural district—Eaglescliffe, Billingham, Cowpen Bewley, Norton, and Carlton.

SUMMARY.

From these and other preliminary data Dr. Barry infers that "there occurred in each of the two six-week periods at the end of 1890 and the beginning of 1891 excessive incidence of enteric fever on the urban sanitary districts of Darlington, Stockton-on-Tees, Middlesbrough, South Stockton, Ormesby, Normanby, Eston, and Kirkleatham, and on the rural sanitary districts of Darlington and Stockton; and that this excessive incidence of fever, though general throughout the large urban districts, was limited to certain portions only of the rural districts."

POSSIBLE CAUSES.

The next step was to pass in review the various conditions which may be thought of as causes of enteric epidemics, in order to find some common cause—possibly a group of causes operating during certain defined periods in certain defined localities, and operating not at all or in much less degree in other localities and at other periods.

Premising that milk may be dismissed from consideration, owing to the large number of separate sources several hundreds—and to the absence of any community of supply among the earlier fever cases, Dr. Barry proceeds to describe the sanitary circumstances of the districts which suffered from exceptional incidence of enteric fever. First comes a general description of each district, including topography, industries, and the condition of houses and their surroundings; then the arrangements for excrement and refuse disposal; next sewerage and drainage. In none of these respects does he find any community of circumstances at all sufficient to account for community in exceptional incidence of enteric fever. On the contrary, the stricken districts are shown to have differed widely in all material respects, both in the efficiency of their sanitary government and in the methods attempted.

THE EPIDEMICS AND THE WATER SUPPLY.

Last, but far from least, comes the question of water supply. Fourteen out of the 32 districts under consideration were supplied wholly or in part with Tees water, some by the Stockton and Middlesbrough Water Board, some by the Darlington Corporation.

TABLE E.

	Using Tees Water.			Not using Tees Water.		
	Estimated Population.	Attacks during the Two Six-week Epidemic Periods.	Attack-rate per 10,000.	Estimated Population.	Attacks during the Two Six-week Epidemic Periods.	Attack-rate per 10,000.
Darlington U.	37,458	172	—	602	2	—
Darlington R. ...	1,903	23	—	9,549	7	—
Stockton-on-Tees U. ...	49,731	351	—	0	0	—
Stockton R.	7,088	57	—	4,873	2	—
Sedgefield R.	5	0	—	19,554	2	—
Middlesbrough R. ...	75,516	165	—	0	0	—
South Stockton U.	15,476	89	—	0	0	—
Ormesby U. ...	[illegible]	48	—	126	0	—
Normanby U.	[illegible]	66	—	87	2	—
Eston U.	[illegible]	46	—	205	0	—
Middlesbrough R.	166	0	—	1,093	0	—
Kirkleatham U. ...	[illegible]	20	—	671	0	—
Stokesley R.	1,721	1	—	9,398	1	—
Guisbrough R. ...	180	2	—	6,874	0	—
Eight Urban Districts	[illegible]	1,257	60.3	3,072	6	19.5
Six Rural Districts	11,093	86	77.8	51,851	12	2.3
Total ...	219,435	1,343	61.2	54,923	18	3.3

So that in these districts the attack-rate during the two epidemics was 61.2. among Tees-drinkers (urban 60.3, rural 77.8), and among other persons 3.3 (19.5 urban, 2.3 rural)

TABLE F.—*Enteric Fever Attacks per 10,000 Population.*

Population.	During Fortnights ending 1890. July 5.	July 19.	Aug. 2.	Aug. 16.	Aug. 30.	Sept. 13.	Sept. 27.	Oct. 11.	Oct. 25.	Nov. 8.	Nov. 22.	Dec. 6.	Dec. 20.	1891. Jan. 3.	Jan. 17.	Jan. 31.	Feb. 14.	Feb. 28.	March 14.	March 28.	During 26 Months, Jan., 1890, to March, 1892.	During Six Weeks, Sept. 7th to Oct. 18th.	During Six Weeks, Dec. 28th to Feb. 7th.
Persons supplied with Tees water	0.8	0.9	0.8	1.2	1.8	1.0	13.4	9.1	5.1	3.7	2.8	2.0	1.0	14.2	8.2	5.1	3.8	2.7	2.1	[illegible]	[illegible]	[illegible]	28
Persons supplied from other sources	0.3	0.3	0.2	0.3	0.2	0.5	1.3	1.1	0.4	0.2	0.2	0.2	0.3	0.1	0.3	0.3	0.0	0.2	0.2	[illegible]	[illegible]	[illegible]	1

Annual Death-rate (per 10,000 Population) corresponding to Enteric Fever Deaths recorded during Fortnights ending:

Population.	1890. July 5.	July 19.	Aug. 2.	Aug. 16.	Aug. 30.	Sept. 13.	Sept. 27.	Oct. 11.	Oct. 25.	Nov. 8.	Nov. 22.	Dec. 6.	Dec. 20.	1891. Jan. 3.	Jan. 17.	Jan. 31.	Feb. 14.	Feb. 28.	March 14.	March 28.	April 11.	April 25.	May 9.	May 23.
Persons supplied with Tees water	3.3	2.4	3.6	7.1	3.0	[illegible]	22.5	23.7	21.3	23.7	22.5	15.4	3.6	18.9	42.6	35.5	5.9	9.5	[illegible]	[illegible]	7.1	1.2	[illegible]
Persons supplied from other sources	2.7	[illegible]	1.6	3.7	2.7	1.8	10.1	9.2	6.4	3.7	1.8	4.6	5.6	2.7	4.6	[illegible]	2.7	0.9	1.8	1.8	2.7	0.9	0.9	1.8

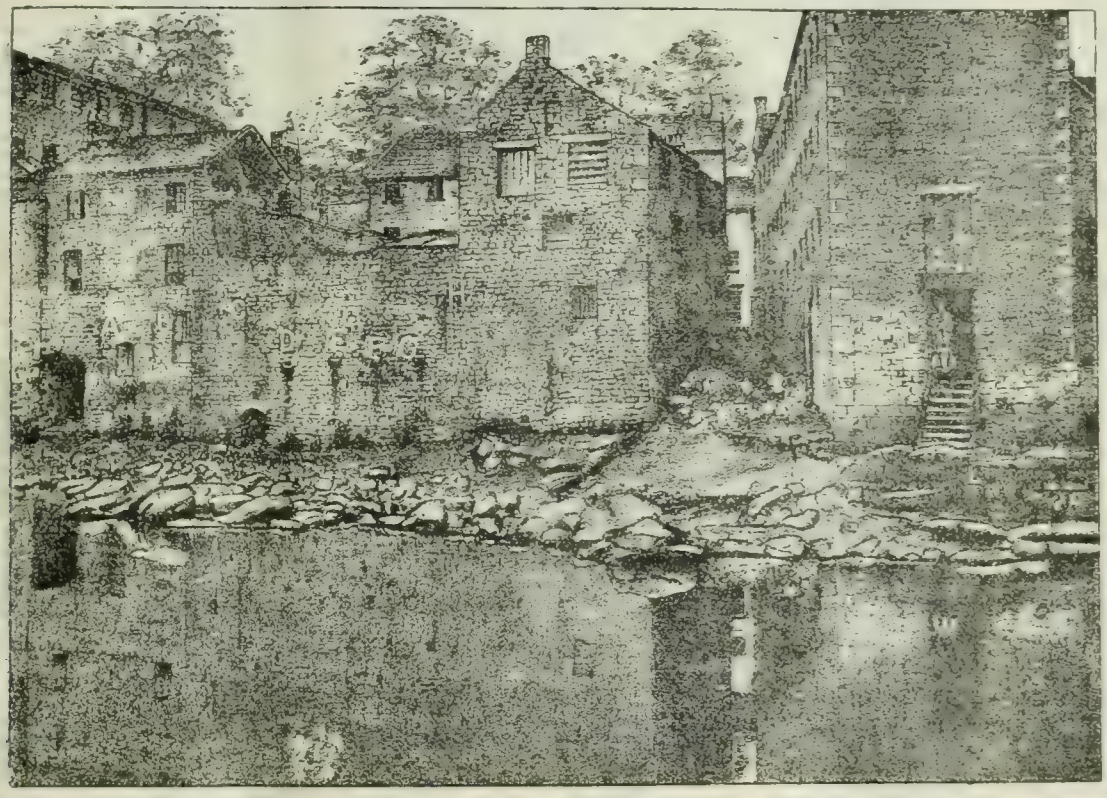
The remaining 18 districts, to which Tees water was not supplied, had a population of 229,258 (see Table D), of whom 98,058 lived in urban, and 131,200 in rural districts. Here the urban attack-rate during the two epidemics was 4.4, and the rural 4.5.

TABLE G.

Population.	Enteric Fever Deaths, per 10,000 Population, during 13 months ending June 27, 1891.	7 months ending March 21, 1891.	3½ months ending Dec. 13, 1890.	3½ months ending March 21, 1891.
Persons supplied with Tees water	12	10.3	5.4	4.9
Persons supplied from other sources	3	2.1	1.4	0.7

219,435 inhabitants (of the ten registration districts as a whole) to whom Tees water was supplied, and upon 284,181 others not using Tees water.

Dr. Barry gives the complete data, distinguishing the incidence upon users and non-users of Tees water for each sanitary district, as well as the summarised figures quoted above: and adds: "This much, then, is certain. Those of the thirty-two sanitary districts suffering exceptionally from enteric fever during the two well-defined periods just referred to were in the main districts getting, wholly or in part, water supply from the river Tees. Also there can be no doubt that in the districts getting this water there occurred exceptional incidence of enteric fever only on those of their inhabitants who actually consumed it. And, finally, it is beyond question that the districts, or parts of districts, thus suffering severely from enteric fever were destitute of community of conditions such as elsewhere has been found to disseminate that disease, except in the circumstances of their water supply." Broadly speaking, as Dr. Thorne Thorne points out, the incidence upon Tees-drinkers during the two epidemics



View of foreshore of River Tees at end of Kitchen's Lane, Barnard Castle—A and B, house drains; C, privy; D, E, F, G, yard drains; H, privy K, drain from cowhouse; L, slop drain; M, tip composed of house and midden refuse.

Tables F and G show from different points the contrast between the two sections of the population in relation to enteric fever.

Each of the nine parishes in the Darlington and Stockton rural sanitary districts, already mentioned as having suffered multiple attacks of enteric fever, received some portion of their supply from the Tees.

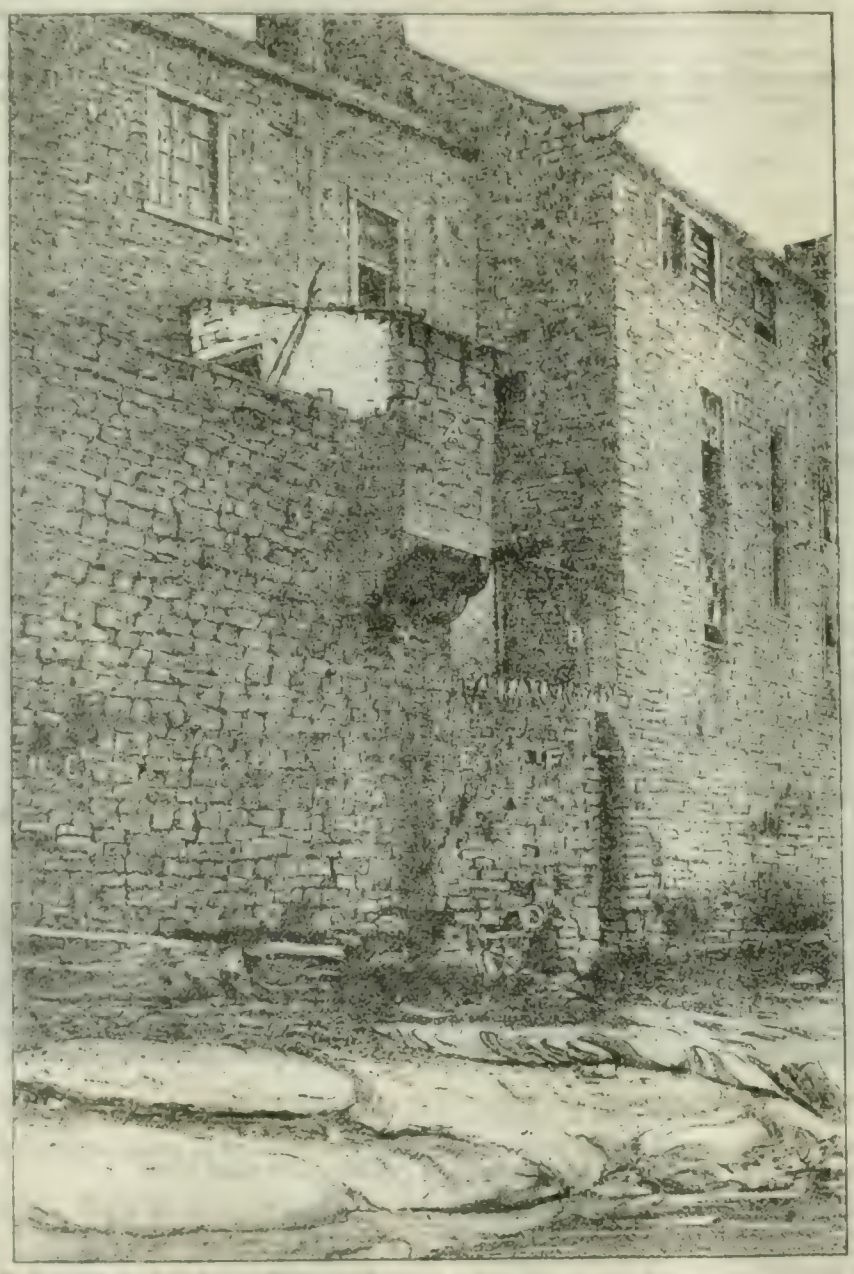
Table E shows in one way the parallelism between water supply and fever incidence, upon which Dr. Barry relies as indicating "community of circumstance to a large extent as regards water supply, whereas as regards any of the other commonplace conditions which have elsewhere been convicted of disseminating enteric fever they differed *inter se* in all variety of ways." It is seen even more plainly from another point of view in the following abridged table, obtained by a laborious calculation of the incidence of fatal enteric fever, fortnight by fortnight, respectively upon the was fifteen times as great as that observed among persons supplied with other water.

POSSIBLE SOURCES OF POLLUTION: BARNARD CASTLE.

But if the river Tees be thought of as the mediate source of mischief, whence could it have acquired its morbific quality? Here Dr. Barry finds an *embarras de choix*. The intake of both companies is situated about two miles above Darlington, at a point where the river is comparatively pure, in the sense that it has not yet received the drainage of large towns; but years ago the present manager of the Stockton and Middlesbrough water undertaking warned a committee of the House of Commons that this portion of the Tees was even then "an improper source, from the pollutions that go into the river;" and the detailed results of Dr. Barry's inspection of its course above the intake give precision to the indictment. Not to mention other minor sources of pollution, the Tees before

reaching the works receives the drainage of twenty different villages and hamlets, and of the town of Barnard Castle. Much of this, no doubt, is "only slop water," but it includes the drainage from many waterclosets and the overflow from cesspools. Nor is the pollution confined to liquid filth. Nightsoil, privy contents and refuse of all kinds are deposited in large quantities, and at many points, either directly into the stream or (more commonly) upon the foreshore, there to accumulate until the next flood carries them away. The chief centre of population, at Barnard Castle and Startforth (seventeen miles up the river), furnished abundant examples of each kind of pollution, and Dr. Barry ends his description of the locality by saying, "In the whole course of my experience as an inspector I had not before encountered, in comparatively small compass, such a mass of stinking abominations as was in existence at the time of my visit on the Barnard Castle foreshore." We reproduce two out of the six convincing illustrations given in the report. They are not of a character likely to increase the reputation of Barnard Castle as a mere pleasure resort, but may perhaps help to make it a favourite place of pilgrimage among devotees of sanitary science.

Evidently then the statements made in 1875 as to the pollution of the Tees have lost none of their force, and to that extent the condemnation already referred to still holds good.



View showing two [illegible] of houses abutting on foreshore of river Tees north of Barnard Castle Bridge Bridge End, Startforth—A, privy serving four houses; B, privy serving one house; C, D, E, F, yard and foundation drains; G, windows though which excrement and ashes are discharged from houses unprovided with drains, privies, or ashpits.

MEANS OF PURIFICATION.

The means adopted by the water companies for the purification of the water drawn from this tainted stream remain to be considered. With regard to this, it will suffice to say briefly that the whole supply, delivered by either company, is said to be filtered. From the intake the water is pumped into subsiding tanks, from which it passes to the filters. These consist of 2½ to 3 feet of sand with 3 to 3½ feet of gravel beneath. They are cleansed from time to time by scraping off the superficial layer of sand and washing it. The rate of filtration is stated to be about 3 to 4 inches per hour at the Darlington works, and 6 inches at the other. After filtration, the Stockton and Middlesbrough water is conducted to service reservoirs, but the Darlington service reservoirs merely receive the surplus water, and are only drawn upon when the pressure is insufficient.

RESULTS OF CHEMICAL, MICROSCOPICAL, AND BACTERIOLOGICAL EXAMINATION OF TEES WATER.

An appendix to the report contains the results of chemical and bacteriological examination of Tees water at various points and various times. A sample of the "normal winter flow" at the intake in November, 1890, contained broken human hairs, paper fibre, dyed cotton, and other ominous indications of domestic refuse. The results of chemical analysis varied considerably from time to time, the impurities being much increased in times of flood, and attributed by the analyst to filth washed down from Barnard Castle. The bacteriological observations made by Dr. Hare in 1887 confirm this: the pollution was found to be greatest during flood, and even after filtration the water gave indications to the same effect—"In low states of the river there is evidence of sewage contamination within the Darlington area of the river Tees, more than half (three-fifths) of that contamination being traceable to the addition of the Barnard Castle sewage to the water of the river. In flooded states of the river there is evidence of profound sewage contamination within the Darlington area. This profound sewage contamination is not present above Barnard Castle; it appears shortly below that town, and it persists in the water of the Tees at the pumping station for the Darlington town supply." All the reports (chemical, microscopical, and bacteriological) tend to show that material improvement in the purity of the water was effected by filtration.

THE EFFECT OF FLOODS.

The action of floods supplies Dr. Barry with the last link in his chain of evidence. He accounts for the epidemic explosions, on the hypothesis of waterborne infection, by the washing down of the accumulated stores of excremental filth from the upper reaches of the river, and he is able to show, by records of rainfall and by records of the condition of the Tees near the intakes, that floods did actually occur shortly before each of the epidemics in question, on August 13th and December 1st. On the former date nine million gallons were pumped from the Tees by the Stockton and Middlesbrough Water Board and one million and a-half by the Darlington Corporation, these quantities being about the daily average.

THE OBJECTIONS OF THE ROYAL COMMISSION ON THE METROPOLITAN WATER.

Such is the evidence which Dr. Barry has collected, and which the Royal Commission regard as inconclusive. Within a certain area there is a sudden outburst of enteric fever, affecting several portions almost simultaneously and leaving the rest comparatively untouched. Two months later a second outburst follows, invading the same districts as its predecessor, and those only. The only condition common to the stricken localities and not shared by those which escaped is the use of Tees water, filtered, but, nevertheless, taken from the river at a point where at times of flood there is chemical, microscopical, and bacteriological testimony to sewage contamination. Each of the two outbursts was preceded by a notable flood. Large quantities of excremental filth are habitually deposited in and near the river above the intake, and are washed away when the river is high.

As reasons for hesitating to accept this explanation the Commission state that some of Dr. Barry's data and inferences have been "traversed" by Mr. Wilson, the representative of the Stockton and Middlesbrough Water Board, and, apart from this, they regard the hypothesis "that the pollution on a given day of a river like the Tees, with a flow in time of flood of at least 1,000 million gallons in the twenty-four hours, by what must have been at most a very small amount of active enteric poison, at a point 17 miles above the intake, should so seriously affect the water that the admission of a certain limited amount of it into the reservoirs should produce, notwithstanding filtration, an extensive outbreak lasting for some six weeks," as startling in itself and unsupported by previous experience in other places.

There are other points in the report of the Commission not less startling. One is that upon etiological questions the views of the "representative of the Stockton and Middlesbrough Water Board" should be held to be of equal weight with those of the medical officer and the senior inspector of the Local Government Board. Another, that no mention is made of any opportunity being given to Dr. Barry to reply to the issues raised by Mr. Wilson, assuming them to have any weight.

OBJECTIONS CONSIDERED.

In their summary of the Tees report the Commission omit two important points, the confirmation of the attack-rates by the mortality-rates, and the almost identical behaviour of two successive epidemics. The rest are said to have been "traversed," but at present the evidence of Mr. Wilson has not been published,[1] and we have to rely upon the *précis* given in the report. He admits, it seems, that the fever was much more prevalent in the Tees-drinking than in the surrounding districts, but alleges that the difference has been exaggerated owing to the incomparability of attack-rates in notification and non-notification areas, and points to the unequal case mortalities in the two divisions, as shown by Dr. Barry's tables. It is not clear to which of the tables he refers as affording materials for the calculation of case mortality. In large water epidemics the case mortality is usually low, Caterham and Mountain Ash being notable instances, and it seems probable that Mr. Wilson is here unintentionally pointing out a circumstance tending to confirm the water hypothesis. Broadly speaking, the attack-rates were confirmed by the death-rates, and in a footnote to Dr. Thorne Thorne's introduction to the Tees Report (page 7) it is mentioned that in notification districts partially supplied with Tees water the attack-rate among 8,991 Tees-drinkers was 89 per 10,000, and among the other 14,442 inhabitants only 6.2. Mr. Wilson's next point is that some villages and hamlets supplied with Tees water escaped, and that the incidence coincided with faulty sewerage arrangements. If he is to be understood as referring merely to a few minor instances, the objection has no weight, but if it is suggested that the localities stricken by the two epidemics were as clearly and uniformly marked out from the rest by exceptionally bad drainage as they were by their exceptional water supply, we have direct conflict of evidence between Dr. Barry and Mr. Wilson, in a matter upon which the Commission could surely have satisfied themselves without much difficulty. In any case the neglect of drainage affords no security against water epidemics.

The Commission represent Mr. Wilson as advancing a curious argument, "that the Tees-drinking districts are almost exclusively urban, and the other districts almost exclusively rural; and that if the thirty-two sanitary districts dealt with in Dr. Barry's report be divided into urban and rural, without regard to water supply, it is found that the reported fever cases were four or five times as numerous in the urban as in the rural group, and that the conditions of urban life, with its common sewerage and its closer aggregation of inhabitants, are notoriously more favourable to the diffusion of disease than are the conditions of rural life." How the difference of nomenclature can be supposed to account for the enormous difference in incidence of fever it is difficult to conceive. It is true that enteric fever in general affects town more than country, but that is not quite the same thing as affecting all urban sanitary districts more than rural sanitary districts, nor is the difference of sufficient magnitude to account for a quarter of the disparity with which we are now dealing. Dr. Barry's point (see Table E) is that, taking the several districts either individually or collectively, rural as well as urban, the epidemics attacked and killed a far greater proportion of the Tees drinkers than of the rest of the population. Moreover, community of water supply is one of the conditions which occasionally contribute largely to the incidence of enteric fever upon the dwellers in towns.

Mr. Wilson's fourth and last point is that the flood of August 13th could only wash down such filth as had accumulated since the previous flood on July 1st, and that there is no proof of any case of enteric fever having occurred above the intake in the interval. Elsewhere he has urged that in the absence of compulsory notification the records are incomplete, and the Act was not in force in the Teesdale rural or Auckland rural district, both of which are drained by the Tees above the intake. All medical men are aware that there are slight cases of enteric fever which easily escape recognition, and, indeed, some so slight as to be scarcely recognisable. It is not an uncommon experience, even in well-marked water epidemics, to find no clear trace of enteric fever among the persons who have contributed excreta to the sewage polluting the water supply. But, apart from this, the medical profession at all events has come to recognise the possibility of the poison of enteric fever living outside the human body, and even the impossible demonstration of entire absence of enteric cases from a given area could not, in the present state of knowledge, completely establish Mr. Wilson's point. This consideration adds to the difficulty of accepting, as a logical necessity, the assumption that nothing could be washed down by one flood which had not been freshly deposited since the previous flood.

Unless the Commission have done injustice to the real strength of Mr. Wilson's position, it does not seem that his attack upon Dr. Barry's report affects it at any material point. We know from his statement to the House of Commons Committee in 1875 that he then regarded the Tees as a dangerous source, and as the pollution has since increased it is presumed that his objection has not lost its strength. But here, again, there is much obscurity; for if Dr. Barry's hypothesis is novel and startling, what is the precise nature of the danger which Mr. Wilson has in mind when he protests, in common with all other sanitarians, against the excremental fouling of streams from which water supplies are taken lower down? Is it not danger of enteric fever and

[1] The evidence has now been published, after this article was in print. It throws little, if any, further light upon the question.

cholera, and waterborne disease generally, and whom does the danger affect, if not the consumers of the water?

Nor do we reach much firmer ground in the arithmetical proposition put forward by the Commission. The amount of "active enteric poison" washed away by the flood of August 18th from various points along the course of the river may or may not have been small, but it is extremely unlikely that it was uniformly diffused through the whole of the twenty-four hours' flow of the Tees in flood. The first part of the flood would be fouler than the rest, and there are no means of fixing a maximum of impurity, even if the average were known. At the intake, at such times, there is enough sewage to give chemical, microscopic, and bacteriological proof of its presence. Why must we assume that enteric microbes never occur among the rest, and why regard this assumption, if made, as disproof of an apparent diffusion of enteric fever by water? There remains, of course, the further safeguard of filtration, to which all the water is subjected. Professor Koch's recent investigations[1] tend to show that the efficiency of sand filtration in removing microbes is dependent upon the observance of certain conditions. The rate of filtration must never exceed 100 millimetres per hour in any of the filters, nor can they be relied upon for some time after cleansing the surface. The filtrate from each bed should be examined bacteriologically, and not allowed to pass into the reservoirs if it contains more than 100 microbes per cubic centimetre. No assurance is given that any of these conditions were observed as regards the Tees water. On the contrary, it is stated that the *average* speed was from 3 to 4 inches (that is, 75 to 100 millimetres per hour) at the Darlington Corporation works; and about 6 inches (150 m.m. per hour) in the filters belonging to the Stockton and Middlesbrough Water Board.

The time has not yet come for detailed consideration of the work of the Royal Commission, except in so far as the instalment already published bears upon the Tees epidemics of 1890-91. All that can be said now is that their present report affords no adequate reason for setting aside Dr. Barry's conclusions, on the ground either of antecedent improbability or of doubtful evidence of fact. To borrow the concluding words of Dr. Thorne Thorne's introduction to the Tees Report: "Seldom if ever has the proof of the relation of the use of the water so befouled to wholesale occurrence of enteric fever been more obvious and patent."

ANALYSIS AND REPORT
ON
ORIGINAL DOCUMENTARY EVIDENCE CONCERNING THE USE OF OPIUM IN INDIA.

VI.

[FURNISHED TO THE "BRITISH MEDICAL JOURNAL" BY UPWARDS OF 100 INDIAN MEDICAL OFFICERS.]

Moderate and Excessive Use of Opium.—Moderation the Rule, Excess the Rare Exception.—Influence of the Habit on the Physical and Moral Condition of the Natives.—An Overwhelming Majority in Favour of Opium.—Results of Opium compared with those of Alcohol in Europe.

COMING now to two of the most important questions in our schedule—namely (*a*) "To what extent is opium used among the population under your observation, distinguishing between its use and abuse?" and (*b*) "Have you known many persons pass from taking it in moderation to taking it in excess?" it is astonishing to see how little variation is to be found in the answers of men whose experience has been gathered in such a variety of places among such a variety of races, climates, and all other circumstances of life. But the very uniformity in the answers is the best possible retort to those who have taken upon themselves the duty of "protecting" the native population from the "curse" of opium. It is difficult to imagine where these agitators can have gathered the "facts" for their crusade, if not in their own internal consciousness. One may open the documents supplied to us wherever one pleases, and one finds the most emphatic denials of the allegation that the people of India have fallen a prey to the excessive use of opium. Let our correspondents speak for themselves. Surgeon-Lieutenant B. Gordon Seton, Kohat, writes: "Several men in my regiment use opium, and in all the regiments I have had to deal with. On the contrary, I always maintain"—in answer to the question, If taken in moderation has it seriously affected their health?—"that the opium-eating Sikh is better than those of his own race who do not eat it. I have never met a case of excess, if by excess is meant an evidently poisonous quantity. It is when a man takes to *bhang*, etc., that he goes to the bad. One of the best gunners I know in my battery is an opium eater, and he is regarded as the best 'layer' of a gun in his battery."

To the question (*a*) the answers are usually short and precise. Thus, to quote a few of them; for example: "No abuse and no bad results from use." Surgeon-Major Youngerman (Bangalore) says: "Opium very extensively taken in small quantity; never taken in excess." Brigade-Surgeon-Lieutenant-Colonel George King (Calcutta) says: "Very few cases where opium is taken excessively." Surgeon-Lieutenant Jackson (Ahmednagar) says: "No cases of its abuse have come under my care." Staff-Surgeon Smithson (Allahabad, North-West Provinces): "It is at times abused as alcohol in England, but not generally so." Dr. Stevenson, Tatehgarh: "Its use in moderation is very common and abuse rare." Assistant-Surgeon Kali Nath Rai (Rawal Pindi): "Had a gaol containing 700 prisoners under me, and never that I remember saw a person that used opium in excess." Surgeon-Lieutenant-Colonel S. Deane (Bengal Medical Service): "The abuse of opium, if abuse be excessive indulgence, is the rare exception not the rule." Mr. M. C. Cubb (Ahmednagar): "They use opium habitually in the solid form, but I have not seen any habitual abuse of the drug." Dr. Stoker (Goorkha Rifles): "Abuse exists only in the same degrees as occurs with spirituous liquors and tobacco." Dr. S. Ch. White (Ajmere): "No cases of abuse of it have come under my notice." Mr. F. W. Charles (Collector of Belgaum District): "It is but seldom used to excess." Surgeon-Lieutenant-Colonel Coldcott (Malwa Political Agency): "Taken in moderation, as it is generally taken, I do not think any physical or moral deterioration results from its use." Mr. Kennedy, B.A.Oxon. (Montgomery): "It is not used to any excess." (Kashmir): "Its abuse is rather the exception." Dr. J. Mullane (Assam): "No instance of the abuse of opium, or of any suffering at all from its use, ever came under my observation." (Behar):

Only from one place, and that is from Burmah, we hear that "it is rarely, if ever, used without being abused." The Burmese are not to be reckoned amongst the races of India: their constitution, character, and the effect of opium on their race is much more like that which it produces on the Chinese. "Burmese, more especially, are pleasure-loving, thoughtless, excitable, exercising little forethought or self-control, and prone, especially under the influence of liquor or a drug, to deeds of violence, theft, and burglary. It weakens both their physical and moral stamina." We expressly quote this here in order to point out that the results of our inquiry, to be given later on, have no relation to Burmah. The race and the history of that country differ so widely from those of India proper, that the moral and physical constitution of its inhabitants cannot be treated on the same lines with those of India. As soon as we return to the frontiers of the latter country we learn quite different facts as to opium. "In Bengal it is very seldom taken in excess, and in my long service of over thirty-two years I cannot recall a single case of death from abuse of opium" writes a gentleman of authority from Calcutta, and from the Punjab we hear again of the fact, common in all parts of India, that "some, of course, both eat it and smoke it to excess, but such cases are very exceptional."

Having thus shown that in all parts of India the use of opium, though widespread, is almost always very moderate, we come back to the second question: How many go on from the moderate to the excessive use of opium? The answers to that part of the question are quite as satisfactory as to the first. "The practice usually ends in an increased amount being taken, but, as a general rule, 10 to 20 grains daily is not exceeded, and most men find all the good effects from

[1] BRITISH MEDICAL JOURNAL, July 1st, 1893.

this rather than from a larger quantity," writes Dr. G. S. Thompson from Deesa in Guzerat. Dr. Spencer, Rajputana, says: "I was nearly twenty-one years in Rajputana. For eleven years I was chief medical officer of that province. Living on friendly terms with natives of all classes, I was only once consulted with reference to a man whose life was being spoilt by excessive use of opium. I can only believe, therefore, that the abuse of the drug rarely occurs." Surgeon-Lieutenant Rattledge replies: "I have known very few instances of men passing from moderation to excess." "When opium is used in excess it does certainly injuriously affect the physical condition of the persons using it, but the number of such persons is not very great," says our correspondent from Mutton Central Gaol. Surgeon-Lieutenant Jackson writes: "Very few pass from the moderate use of opium to using it excessively." Staff-Surgeon Smithson writes: "I have not met with a case where moderation has passed into excess. The persons reported are poor, and this would probably have a retarding influence. However, if the tendency to excess were great, I do not think this would be a sufficient preventive."

Having thus established the fact that opium is generally taken in moderation and that excess is very rare, we come to the main question of our inquiry: What is the effect of its use on the health and the morals of the people? In order to avoid any great error in either direction, the words "as habitually indulged in by the population," were added to the question. It is clear that the right answer to this question cannot be got from results observed in cases of extreme abuse of the drug. Evidence based on what takes place in some dens of the outskirts of Calcutta and Bombay is clearly not relevant; the few poor wretches who have ruined and are ruining themselves by the abuse of opium cannot be taken as representing the hundreds of millions of working and healthy population of India.

Our correspondents, consisting of European and Native doctors and civilians, are the best and most authoritative witnesses on the question; and the overwhelming majority of them are decidedly in favour of the use of opium. The immense majority of our correspondents are strongly opposed to any interference with the use or cultivation of opium in India. So far from having been taught by their official experience that opium is the unmitigated evil which it is represented by well-meaning fanatics to be, they almost unanimously testify that it is a highly beneficial and useful stimulant, which could not be replaced by anything else without great damage to the health and general well-being of the natives. They express themselves in terms of strong but justifiable indignation as to the folly of those who are responsible for the artificial agitation which has led to the appointment of the Commission. We shall let them speak for themselves on this point later on. In the meantime we give answers received as to the effect of opium.

Surgeon-Lieutenant Gordon Seton, Kohat, writes: "From observing cases of men who admittedly eat as much as five grains daily, and have done so for years, I have come strongly to the conclusion that in physical and moral condition the opium eater is as good a man as any, and he is certainly free from malaria. It is the 'bhang' eater who suffers." Brigade-Surgeon-Lieutenant-Colonel George King says: "Its influence on the physical condition is excellent, on the moral perfectly harmless." Surgeon-Lieutenant Jackson says: "If the use of opium is moderate, it has a good effect on the physical and moral condition of the people of India."

Surgeon-Lieutenant-Colonel Bookey, Bhopal, Lahore, writes: "If taken moderately, it does not affect the physical condition, particularly if the person is well fed and clothed; if not, smaller doses must be taken, as the effect under these conditions seems more powerful. I have noticed no effect on the moral condition, except in cases of excess, when the moral tone is lowered, much as is the case with alcohol."

Surgeon-Lieutenant-Colonel E. Lawrie writes: "My experience and conclusions have led me to the opinion that opium taken habitually has no deteriorating influence on the physical or moral condition. I have had to treat patients for the effects of the sudden discontinuance of opium, and for opium poisoning, but I have never yet been called upon to treat, nor have I ever met with, a diseased or depraved state of the constitution due of itself to what is called the opium habit."

Brigade-Surgeon-Lieutenant-Colonel H. J. Hazlet, Madras, says: "The smoking of opium is decidedly injurious in both respects, but, when eaten and in ordinary doses, I think it does little or no harm."

Surgeon-Lieutenant-Colonel W. F. Murray says: "There is no doubt, if taken in excess, the moral and physical condition deteriorate; but, during a service of over twenty-four years, some of these years spent in the heart of the opium district, I have seen very few such cases; I do not think they would amount to a couple of dozen. Should such a case occur in gaol, I would gradually diminish the opium given, mixing it with catechu till I had finally brought the prisoner to do without it altogether. The cases in which natives are injured by the habit do not in the faintest degree correspond to the injuries induced by alcohol amongst the European population. I should say that more mischief was caused by strong drink in any large city in Great Britain in one day than is caused by opium through the whole of India in a twelvemonth."

Dr. Deane, Surgeon-Lieutenant-Colonel, was years in India before he knew that nearly every one of his servants either smoked or ate opium. "You cannot tell the man who uses opium, and uses it largely as servants do, from the man who never touches it, and no one can say that of alcohol drinkers. I have made hundreds of *post-mortem* examinations, and never once saw any lesion that could be at all attributed to opium."

Surgeon-Captain Crawford says: "On the one hand, I look on opium as a luxury to the rich, the same as alcohol in Britain. On the other hand, I look on it as a necessity to the poor man, enabling him on a minimum allowance of food to do a maximum day's work. It differs from alcohol in that alcohol is responsible for a certain amount of crime, whereas opium is not."

LIABILITY OF MEDICAL MEN TO DISABLING ACCIDENTS.

It has been argued that either every event must be an accident or no event can be an accident, but in practical life it is found necessary, or at least very convenient, to consider some events as accidents, and they are accordingly so classified in the books of the Medical Assurance Society. For instance, on January 9th the Secretary received the following letter:

—— Hotel, January 8th, 1894.

The Secretary.—Dear Sir,—Had severe accident last Friday, January 4th, was thrown from my horse, am completely disabled. Please send forms, and oblige.—Yours, etc., —— ——.

and this letter is one of more than twenty of its kind which are received by the Society every year.

The claims for sickness benefit which are treated as "accidental" may be roughly considered as belonging to two classes: (1) those caused by accidents of a kind similar to that referred to in the example given, and (2) those produced by accidents incurred in the actual work of the medical man.

In the first class the accidents are nearly all met with in riding or driving, and, as might be supposed, are usually suffered by country practitioners. At all hours of the day or night the country practitioner is liable to be called upon to mount his horse or get into his trap and go along the country lanes and roads as fast as he can. He is very often alone, and is liable to be thrown from his horse or, perhaps worse still, from his trap by all sorts of things which the practitioner in a city never experiences. The sleeping driver of a hay cart, a dozing tramp by the roadside, the village donkey which brays at the approach of the horse—any of these may "happen," and in a minute the country practitioner finds himself in much greater need of medical aid than most of those who send him urgent summonses.

The second class of accidents are mostly produced by cuts which cause blood poisoning in operations, necropsies, etc., and perhaps the numbers in this class would be appreciably increased if in all cases the causes of the illnesses producing sick claims were accurately known. In many cases of infectious disease the doctor has "caught" it from a patient, and this is as clearly an accident as a fall from a horse.

Speaking approximately, it may be said that about one-tenth of the total sick claims of the Medical Assurance Society arise from what are recognised as accidents, and the

aid given by the Society in such cases is invaluable. The doctor can claim no damages from the patient in whose service he may be injured, and if he be wise he will secure compensation in the cheapest of all ways—namely, by mutual assurance.

The total payments to members for accidents producing total disablement over a greater or less period of time amount to over £500 a year. The office of the Medical Assurance Society is at 38, Chancery Lane, W.C.

MEMORIAL TO SIR ANDREW CLARK.

Preliminary Meeting under the Presidency of the Duke of Cambridge.—Proposal of a Memorial.—Mr. Gladstone's Adhesion.—Public Meeting Arranged.

A meeting was held at the Horse Guards on January 11th in support of the proposal to create some permanent memorial of the great professional and public services of the late Sir Andrew Clark. The chair was taken by H.R.H. the Duke of Cambridge.

The Duke of Cambridge, in opening the proceedings, said that while the Royal College of Physicians might wish to have some personal memorial of their late President, probably a portrait, it was generally felt that some public memorial should be created. The London Hospital felt that it had a special interest in any such scheme. Sir Andrew Clark had been long the Senior Physician, and at the time of his death he was Consulting Physician to the hospital. His earliest association with London was through his appointment in 1853 to the post of Curator of the Museum, and thereafter his connection with the hospital had never ceased. The authorities of the hospital therefore felt that they might well take the lead in this matter, though they were anxious that it should not be regarded in any way as a local or special movement, but rather one in which it was desired to enlist the widest public sympathy. The hospital was in great need of isolation wards, and if a block could be erected for this purpose, and called "the Andrew Clark Wing," that would be a valuable addition to the usefulness of the hospital and a worthy memorial.

Canon Wilberforce, in moving the first resolution, said that he could speak as a representative of the tens of thousands who owed more to Sir Andrew Clark than it was in his power to express. He felt certain that the project had only to be known to receive wide support from the public. He referred to Sir Andrew Clark's devotion to the interests of his patients, and dwelt on the deep practical interest which he took in the welfare of the London Hospital. He concluded by moving:

That a fund be raised with the object of erecting a memorial to the late Sir Andrew Clark, and that such a fund be devoted to some object at the London Hospital, with which he was closely connected for so many years.

The resolution was seconded by Mr. J. H. Buxton (Treasurer of the London Hospital), who said that those who like himself were intimately connected with the London Hospital knew best the worth of the work done by Sir Andrew Clark, and were best able to appreciate his many works of self-denial. He was always ready to recognise the advantages he had derived from his connection with the London Hospital, and took a warm interest in the life of the East End.

Mr. Jonathan Hutchinson said that the movement had his most hearty sympathy, and that all he knew of his late colleague prompted him to wish it to be a thorough success.

Mr. W. Rathbone, M.P., said that he had been much struck by observing that Sir Andrew Clark dealt not only with the disease, but with the individual character; he would cure disease by curing habits, and by inspiring patients with the desire to work.

The resolution was adopted unanimously.

Mr. Ernest Hart, in moving the second resolution appointing a committee, with power to add to its number, to carry out the foregoing resolution, said that he had recently had the most indubitable proof of the very strong feeling which existed throughout the whole medical profession in favour of some important and enduring memorial of Sir Andrew Clark. It had been his lot to receive a considerable number of communications from various parts of the country suggesting that some memorial should be erected, and after consultation he had taken some preliminary steps to ascertain the extent of this feeling. The form proposed had been a National Clinical Institute, affording facilities for the study of curative methods in medicine, and for making analyses and investigations for diagnostic purposes. The inquiry he had made had elicited the fact that there was a widespread wish within the profession itself to see some memorial to Sir Andrew Clark. He would be able to hand in a list of some hundred and fifty of the most eminent and representative members of the medical profession in every city and university town, and in every great centre in the three kingdoms. He felt that it was undesirable that there should be two different schemes for a memorial, and he desired to express his adhesion to the proposal adopted by the meeting.

The motion was seconded by Mr. Carr Gomm (late Chairman of the House Committee of the London Hospital), who expressed his sincere pleasure at hearing that so strong a feeling in favour of a memorial existed within the medical profession. He thought that the efficiency of the London Hospital would be greatly increased by a reconstruction of the Blizard Wards, by the provision of isolation wards, and by remodelling of the *post-mortem* rooms. An Andrew Clark Wing, embodying these improvements, would be a worthy memorial.

Dr. Stephen Mackenzie, speaking as one of the active staff of the hospital, said that when the Committee had been formed an Executive Committee would be chosen, and he felt sure that the fact that their chairman on that occasion had consented to act as the chairman of the Executive Committee would contribute greatly to the success of the movement. A public meeting would be held, as to the date of which it would be necessary to consult the convenience of the Duke of Cambridge and of Mr. Gladstone, who had promised to attend and speak. The proposed new wing was essential to the safe working of the hospital, to the greatest advantage of the patients. From the time he came to London until the day of his death Sir Andrew Clark had been intimately connected with the London Hospital, and it was fitting that his memory should be perpetuated in connection with it.

The Chief Rabbi also spoke in support of the motion, referring to Sir Andrew Clark's deep interest in the hospitals of the metropolis, and in all efforts to alleviate the conditions of life in the East End.

A vote of thanks to the Duke of Cambridge for his presence in the chair was unanimously adopted, on the motion of Mr. E. Murray Ind, seconded by the Rev. J. F. Kitto.

Amongst those who have already joined the General Committee are the Duke of Cambridge (Chairman), the Earl of Iddesleigh, the Earl of Meath, the Bishops of Ripon and of St. Andrews, Cardinal Vaughan, the Chief Rabbi, the Right Hon. John Morley, M.P.; the Right Hon. C. T. Ritchie, the Lord Mayor, the Dean of Westminster, the Dean of St. Paul's, Sir James Paget, Sir T. Fowell Buxton, Sir William Broadbent, Sir W. A. Mackinnon, K.C.B., Director-General A.M.D.; Mr. Herbert Gladstone, M.P.; the President of the Royal College of Surgeons (Mr. J. W. Hulke), Mr. Rathbone, M.P., Mr. Jonathan Hutchinson, Mr. Ernest Hart, Dr. Thomas Barlow, Mr. T. R. Cobb, M.P., and Dr. Langdon Down.

Mr. Gladstone has promised a subscription of £100. Subscriptions will be received by Mr. J. H. Buxton, Treasurer, or by Mr. C. Q. Roberts, Secretary, at the London Hospital.

AUTOMATIC WRITING.

VII.

By JAMES RORIE, M.D.

An Old Story.—Reflex Cerebral Activities.

I quite agree with the explanation given by "Hypnos," of the phenomena so far as I have had an opportunity of considering their latest development. The whole subject, however, appears to me to be merely a revival of the old story of "spirit drawings," etc.,[1] which attracted attention thirty years ago, and which, to my mind, was satisfactorily explained by Drs. Laycock, Carpenter, and J. Hughes Bennett, as illustrations of ideo-motor cerebral reflex activities. These phenomena are very closely allied to the automatic utterances and

[1] *Spirit Drawings*, by W. M. Wilkinson, London, 1864.

writings, sometimes coherent, but at other times utterly incoherent, of the insane. The conclusions I have come to after a careful examination of the whole matter are very much those expressed recently by Mr. S. Laing,[2] namely, "that there is a good deal of evidence for the reality of very curious phenomena" (included under the terms thought reading, telepathy, psychism, and spiritualism), "but none of any real weight for their being caused by any spiritualistic or supernatural agency." But in so far as concerns the atoms and energies of the inorganic world "we know absolutely nothing of their real essence, and cannot form even a conception of what they are;" so in regard to the above phenomena we can only "trace their laws and manifestations under the conditions in which they are known to us, namely, those of association with matter and motion in the brain. But of their real essence or existence we know nothing, and it is as unscientific to affirm as to deny."

As I have said, these phenomena have been regarded by me for the last thirty years as satisfactorily explicable under the class of reflex-cerebral activities, but last July, in a presidential address which I gave to the Forfarshire Medical Association at Dundee, "On the Importance of the Individuality of the Organic Unit in Health and Disease," I suggested a further development in view of the recent discoveries of the individuality of the nerve cells by Retzius, Ramon y Cajal, etc. (described in *Brain*, Part lxii), which may be worthy of further consideration, namely, that as the total vitality of the organism represented the aggregate sum of the vitalities of the independent units of which it was composed, so the total mental activity and total consciousness of the individual represented the aggregate mental activities of all the ultimate units, and it will necessarily follow from this view that the amount of conscious, subconscious, or merely automatic activity present at any time, will be equivalent to the total activity of these units for the time being.

THE LOCAL GOVERNMENT (SCOTLAND) BILL, 1894.

I.

A New Departure: Proposed Scheme of the Bill.—Sir George Trevelyan's Communication to the Scottish County Councils.—Conference Convened in Edinburgh.—Our Suggestions as to Public Health Clauses.

SOMETHING of a new departure in legislation is in progress in connection with the Local Government Bill for Scotland, which is to be introduced at the commencement of next session. The Bill, it is understood, will run generally upon parallel lines with the English Parish Councils Bill, but will not be so distinctly a Parish Councils Bill. The Secretary for Scotland, accepting the apothegm that he who wears the shoe knows where it pinches, has with great wisdom invited the Scottish County Councils to furnish him with suggestions for the amendment of the local goverment system of Scotland as it at present exists. On the initiative of Mr. Renshaw, M.P. for West Renfrewshire, half a dozen gentlemen who are at once members of Parliament and members of county councils, recognising that the immediate result of Sir George Trevelyan's appeal would most probably be the production of an immense mass of incoherent suggestion, have formed themselves into a committee, and have convened a conference, to be held in Edinburgh, of representatives from all the Scottish county councils, to discuss matters submitted to them, and to endeavour to agree upon common representations to be made to the Secretary for Scotland. The agenda paper for this meeting, although yet incomplete, contains no fewer than sixty-two items of various sorts and qualities. Many of them deal with matters of administration and rating, which, although of considerable practical importance, are not of general interest. Certain of the items, however, deal with questions of public health administration, and we propose to refer to some of these very briefly.

Probably, at the instance of Stirlingshire, which has already distinguished itself by a futile crusade on the subject, there appears upon the paper a proposal that counties shall have "full control of their health officers," a euphemistic way of proposing the repeal of the section of the Scottish Local Government Act which secures all Scottish health officers from arbitrary dismissal. Now, with a great price was this freedom purchased: there is little chance, we believe, that the Edinburgh conference will adopt the proposal, but should that by any possibility occur, it will be our duty to organise an opposition to its further progress, which, with the support of the educated public opinion of the country at our back, cannot fail of success.

Another matter of some importance and difficulty is approached from two sides. There is a proposal, on the one hand, that the relation of county health officers to police burghs shall be more clearly defined—this, in consideration of the fact that while these burghs are assessed in respect of the salaries and outlays of county health officers, nothing is laid down as to the duties of these health officers in respect of such burghs. The other proposal is that all burghs with populations under 7,000 (and there are burghs having the designation "royal" whose populations fall far short of that number) shall form part of the "district of the county;" in other words, that all small towns shall, for public health purposes, be administered in common with the district of the county in which they are situated. The limit of population, 7,000, is the minimum under which the Local Government Act decreed that no town whatever should be permitted to retain a separate police establishment. There is no doubt that the incorporation of such a proposal in the Bill would imply a considerable measure of reform, for these small towns are in the meantime the dark spots in the sanitation of the country.

The question of the relation of the county medical officer to towns larger than these, with populations, say, under 20,000, is one of great difficulty. It would probably serve as a wholesome stimulus if, with some analogy to the case of towns in England with populations under 50,000, the medical officers of such towns were required to send copies of their annual reports to the county medical officer for review and report to the central authority. In these ways a greater degree of solidarity in public health administration over the county would be obtained without unduly trenching on the dignity of the small burghs.

It is proposed to amend and extend the Local Government Act of 1888 in various ways. That Act, illogically enough, left the parochial boards in possession as the local authorities under the Burial Grounds Act and the Vaccination Acts, and left the appointment of registrars in rural districts in the same hands: it is proposed to transfer these powers to the rural sanitary authorities—the district committees of the county council. Another proposition of immense social importance is that for the establishment of "village centres" or "special areas." The village at present lies under many disabilities as compared with the burgh. In the meantime no village can be provided with a public water supply or a main sewerage system without an initial requisition signed by ten inhabitants; now, in the most insanitary villages frequently no such ten inhabitants can be obtained and matters come to a deadlock. There is at present no statutory provision whatever for the scavenging and cleansing of villages, and there is no provision for public lighting. It is now proposed that the county council shall have the power of forming villages into special areas, within which the district committee shall have power, without any initial requisition, but subject to an appeal to the sheriff, to introduce a water supply or a drainage system, to make provision for scavenging and cleansing or for public baths and washhouses, and if necessary for a system of public lighting. Within these "village centres" the district committee would have power to compel owners to put private streets and courts and also the footways into proper condition. Further, if the suggestions of county councils are accepted, the district committee will have control over all new buildings over the county—so far, at least, as sanitary requirements are concerned.

There are great possibilities in the new Bill; it will be the duty of those interested in public health affairs to see that these possibilities are realised.

[2] *A Modern Zoroastrian*, by S. Laing, 1893.

THE name of Mr. T. R. Jessop, of Leeds, has been placed upon the Commission of the Peace for the West Riding of Yorkshire.

CREMATION.

REPORT OF THE SELECT COMMITTEE OF THE HOUSE OF COMMONS.

SOME of the objections which have been raised to the practice of cremation are purely sentimental, and about these we will make no remark; the practical objections mostly resolve themselves into questions of engineering and expense except in regard to one point, namely, the destruction by the process of all traces of poison, violence, or criminal neglect. This is the difficulty that has to be faced. The Select Committee on Death Certification took evidence on this point, and especially in reference to the precautions taken by the Cremation Society before a body is cremated by them. It appears that two special certificates of the cause of death are obtained in such cases, that one of these sets forth that "there are no circumstances connected with the death which could make exhumation of the body hereafter necessary;" that if these are inconclusive a *post-mortem* examination is ordered, and that if the relatives object, the Society refuses to cremate the body. Even if the body is eventually cremated, whenever there is anything doubtful about the case portions of the liver, kidney, and stomach are retained and preserved in spirit.

The Committee give their verdict on the subject very plainly. They "are of opinion that with the precautions adopted in connection with cremation as carried out by the Cremation Society there is little probability that cases of crime would escape detection; but inasmuch as these precautions are purely voluntary, your Committee consider that in the interests of public safety such regulations should be enforced by law." This is all that the Cremation Society at present asks for, that the practice should not only be recognised by law as a proper method of disposing of the dead, but should be so regulated and controlled as to prevent its falling into the hands of those who would bring it into disrepute.

In considering how far the destruction of the body by cremation might be an incentive to crime, we must not look upon the process as a mere irresponsible burning of the corpse, but must compare the entire proceedings for its disposal advocated by the Cremation Society with the ordinary proceedings at present accepted by those who have to arrange such matters, and a perusal of the facts detailed in the report of the Select Committee makes it obvious enough that crime would be far more likely to be detected under the system of the Cremation Society than under that at present in vogue.

Even where a medical certificate is obtained, such general laxity has entered into the proceedings that but little protection is thereby afforded to the public. While the medical man is bound to state what he believes to be the cause of death, he is under no obligation to make sure either that the patient is dead at all, or that, if dead, he died from the particular disease for which he was attending him. The various attempts to swindle insurance societies which arise from this condition of the law are often provocative of mirth, but a much more serious matter is the fact that, in consequence of this state of affairs, people suffering from chronic ailments such as phthisis and heart disease are left at the mercy of the poisoner with hardly a chance of detection. The law says that a practitioner attending a patient "during his last illness shall give a certificate stating to the best of his knowledge and belief the cause of death." The illness may continue for months, the doctor may see his patient only at long intervals, and yet he is bound to give a certificate.

An instance is given in the report of a man who suffered from heart disease dying suddenly. His doctor said: "I have been expecting his death for a long time," and was quite ready to give a certificate; and yet it turned out that the man had shot himself. Sufferers from such chronic ailments as are reputed to end suddenly are in constant danger, from the present state of the law, if they are in the hands of people interested in their death.

When one considers the imperfect inquests, the vagaries of coroners as to *post-mortem* examinations, the facilities which exist for getting rid of children's bodies by burying them in the same coffins with adults, and the ease with which a "queer" undertaker can retain a "burial certificate," and use it for the burial of any corpse which he may be asked to dispose of; the fact that there is no law to regulate the process of embalming, one by which all trace of poison may be destroyed; and the final fact that in ordinary pit burial it is simply impossible to identify a body after a short time, it is difficult to avoid the conclusion that, as between cremation and burial as practised at the present time, cremation gives infinitely greater chances for the detection of crime.

THE LOCAL GOVERNMENT BILL AND THE CONSTITUTION OF THE METROPOLITAN SANITARY DISTRICTS.

PRESUMING the Bill passes in its present shape, with a few amendments, it will without doubt profoundly affect the constitution of the local sanitary authorities. For the first time women will make their appearance on sanitary boards. The maintenance of health in a dwelling depends so much on domestic detail; the death-rate of a district is so largely influenced by infantile mortality, factors governed by the intelligence or the reverse of women, that it may be confidently expected the addition of women will be advantageous; the more so because those who are likely to be elected will not be average women, but a selected class of considerable force of character, and of good education, replacing the ordinary and average man. Another effect on the constitution of sanitary authorities will be the advent in larger numbers of representatives of labour: here again it is not likely that ordinary workmen of narrow views will stand a chance of election, but the more intelligent of the class. The labour candidates who have been returned to Parliament have undoubtedly been a success, and from this experience we may hope that equally suitable members will be returned to take part in the local legislatures.

If the chairman of each of the metropolitan vestries and boards under the new *régime* is to be destitute of the golden chain and flowing robes of the mayors of ancient boroughs, nevertheless he will have the solid dignity of being added, by virtue of his office, to the list of justices: a sufficient prize to attract a certain proportion of the best educated men of good social position to offer themselves for election.

Should any number of working candidates be elected, the meetings of the district councils in the metropolis will probably all take place in the evening, and where, as in a few instances, the hour of meeting has been fixed by local statute in the morning, efforts will be made to repeal these provisions, for it is obvious that a morning meeting involves loss of half a day's labour to those who live by daily work.

Lastly, there will be a more definite organic bond between the district county councils and the County Council of London, resulting in a more uniform activity of metropolitan sanitary government.

LITERARY NOTES.

THE first edition of Mr. Ernest Hart's book on *Hypnotism, Mesmerism, and the New Witchcraft*, published by Smith, Elder and Co., has been rapidly exhausted, and it has not been found possible to supply the American demand. A second edition is, however, withheld for a short time, pending the completion of a further chapter of "Confessions of some Professional Hypnotists: a Human Document," which is to be first published elsewhere, together with material details of similar frauds in so-called telepathic experiments conducted under the auspices of eminent "psychical researchers." Professor Benedikt, of Vienna, has just issued a work entitled *Hypnotismus und Suggestion*, a clinical and psychological study, which he dedicates to Mr. Ernest Hart, with the words: "*Propugnatori veritatis et justitiæ dedicat hoc opusculum* Mauritius Benedikt." "Hypnosis and suggestion," he writes in the dedicatory epistle, "have become fashionable: they now furnish the basis of a cheap renown, and are an approved bait for the capture of patients. Therefore we, independently of each other, took up arms against abuse and insanity, against error and misconception, in view of the danger which threatened that the scientific world itself, and, to a large extent, the educated lay public would be drawn into intellectual and moral error."

We understand that a new edition of the valuable and well-known work of reference known as *Quain's Dictionary of Medicine* is now in a very forward state of preparation. The letter U has gone to press, and the whole work has undergone final revision up to that point. Of the first edition, published in 1882, 33,000 copies have been sold, a success for a medical work of so large and expensive a character which must be almost, if not quite, without precedent, in this country at least. The new edition has been thoroughly revised and brought up to date, the work of revision having been entrusted to the authors of the original articles where this was possible, and where not to acknowledged authorities on the various subjects.

OBITUARY.

PAUL DIDAY, M.D.,
Lyons.

IN M. Diday, who died a few days ago at the age of 83, Lyons loses one of its leading surgeons and the medical profession in France one of its most distinguished members. Born at Bourg in 1812, he studied medicine in Paris, where he was a favourite pupil of Dupuytren, and afterwards of Ricord. Soon after taking his degree he became surgeon to the Antiquaille Hospital at Lyons, a post which he continued to fill for many years. It was largely owing to his influence that this institution was transformed from a mere special hospital into a school of scientific syphilography, where much work of the greatest value was done by Diday himself and his pupils.

Early in his career Diday was appointed General Secretary of the Lyons Société de Médecine. Into the duties of this office, which he held for thirty-four years, he threw himself with the greatest enthusiasm. He was one of the founders and the first editor of the *Lyon Médical*, and for twenty-five years he was a constant contributor to its pages. He also wrote largely, though anonymously, in the *Gazette Médicale de Paris*. His literary activity was extraordinary, and continued to the end, a paper from his pen on the expediency of subjecting a primipara, presumed to be syphilitic, to mercurial treatment having appeared in the *Lyon Médical* of December 24th.

Of his books the best known are the *Traité de la Syphilis des Nouveau-nés et des Enfants à la Mamelle* (1854), *Histoire de la Syphilis* (1863), *Thérapeutique des Maladies Vénériennes* (1876), and *Pratique des Maladies Vénériennes* (1886). At his best Diday was a brilliant writer, incisive, epigrammatic, and exquisitely lucid.

Diday had suffered for some time from an affection of the bladder, for which he was successfully operated on (a fact which he commemorated in verse only a few weeks ago). His death appears to have been due to a tumour of the chest wall which was discovered quite recently; it proved fatal by extension into the pleural cavity. He was buried on January 11th in the presence of an immense concourse of his professional brethren and friends, including all the academic and official notabilities of Lyons.

THE sudden death of Dr. J. A. Barton, of St. George, Bristol, took place on January 4th. He took the degrees of M.B., C.M. Glasg. in 1879, and for nearly fourteen years has been practising at St. George, Bristol, for which place he was medical officer of health. On January 4th the deceased, after attending his duties, sat down to tea before the fire and complained of being chilly. Just before 6 o'clock he went to his consulting room and attended to his patients. Two hours later a servant heard a noise, and, on opening the door, found the deceased staggering to a chair. Restoratives were applied, but without avail. The deceased was aged 37.

DR. JOHN W. BOYD, of New Ross, died suddenly while visiting a patient on January 6th. The deceased gentleman was said to have been the oldest dispensary medical officer in Ireland.

THE inhabitants of Cowfold, Sussex, on January 6th received with universal regret the news of the death of Mr. Thomas Gravely. He was born in the village of Cowfold, and lived there all his life. In 1840 the deceased became a M.R.C.S.Eng. and L.S.A.

DEATHS IN THE PROFESSION ABROAD. Among the members of the medical profession in foreign countries who have recently passed away are Dr. Eduard Strobl, Professor of Pharmacology and Hygiene in the University of Strassburg, aged 79; Dr. Nebinger, Chief Surgeon to the Municipal Hospital, Bamberg; Dr. Roswell G. Bogue, till he lost his eyesight ten years ago as the result of septic infection, a leading surgeon in Chicago and the first Professor of Surgery in the Women's Medical College of that city, aged 61; Dr. Arthur Ravara, Surgeon to the S. José Hospital, Lisbon, and to the King of Portugal, from the bursting of an aortic aneurysm while he was examining a patient before performing ovariotomy; and Dr. Van Beneden, for more than sixty years Professor of Zoology in the University of Louvain.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

CHEMICAL DEPARTMENT.—Mr. J. E. Purvis, of St. John's College, has been appointed Assistant to the Professor of Chemistry, in the place of the late Mr. H. Robinson, who for many years lectured on pharmaceutical chemistry and superintended the course of instruction in hygienic chemistry and physics for the diploma in public health.

PATHOLOGICAL CHEMISTRY.—Dr. J. Lorrain-Smith and Dr. F. F. Wesbrook (John Lucas Walker students) will give twice weekly during the Lent term a special course of lectures in pathological chemistry, including the chemistry of fever, gas analysis in connection with respiration, chemistry of morbid secretions, and bacteriological chemistry. The course will be held in Professor Roy's laboratory on Mondays and Saturdays at noon.

APPOINTMENT.—Dr. W. H. Gaskell, F.R.S., has been appointed a member of the Board for Biology and Geology.

ADDENBROOKE'S HOSPITAL.—Mr. Peckover, of Wisbech, the newly-appointed Lord-Lieutenant of Cambridgeshire, who is *ex officio* President of Addenbrooke's Hospital, has given a munificent donation of £1,000 to its funds, which have of late been in a depressed state. Considerably over £3,000 has been specially subscribed in the past year to meet the expense of reconstructing the drainage and reflooring the wards of the hospital.

UNIVERSITY OF LONDON.

A MEETING of Convocation took place at the University building on January 16th; Mr. Busk, Chairman of Convocation, presided.—Mr. W. G. Lemon, LL.B., presented the report of the Annual Committee, and moved its reception.—Mr. J. G. Joseph, LL.B., seconded the resolution, which was carried.—Mr. S. P. Thompson, D.Sc., moved a resolution asking the Senate to take steps to provide increased accommodation for the large number of members of the University and their friends who attended the ceremonial on presentation.—Mr. Septimus Moore, LL.B., seconded the resolution, which was carried.—Mr. T. B. Napier, LL.D., moved the following resolution:

"That the Annual Committee be requested to consider and report to Convocation whether any, and if any what, enlargements and amendments of the constitution and functions of Convocation of the Annual Committee might usefully be effected."

He said that the report of the Royal Commission on the University might be expected in the course of the next three or four weeks. Convocation worked under the charters of the University and their own by-laws. As to the former, the position of Convocation was fixed; but, as to the standing orders, they could be altered by Convocation to any extent, so long as there was no contravention of the provisions of the charters; and he thought many changes in the by-laws might be made, greatly to the advantage of Convocation. For example, that house should have the power of meeting oftener; they might revise the rules for the guidance of their debates; and the annual committee should have greater power to act for Convocation.—Dr. M. Baines seconded the resolution.—Mr. Tyler advocated reform with a view to increasing the powers of Convocation; particularly that the University should manage its own financial position.—Dr. Hart strongly opposed the resolution, which was framed to increase the powers of the Annual Committee.—Dr. John Curnow also opposed the projected increase of power of the Annual Committee. The resolution was, however, adopted, and the house immediately adjourned.

ROYAL COLLEGE OF SURGEONS.

A MEETING of the Council was held at the College on Thursday, January 11th. Mr. Hulke occupied the chair. The minutes of the last extraordinary Council were read and confirmed.

On the recommendation of the Museum Committee, it was resolved that the new edition of the *Teratological Catalogue*, which has been revised by Mr. B. T. Lowne, should be issued at the price of 5s.

A report was received from the Committee on the Regular Meetings of Fellows, in which it was recommended that the following be added as Section xxiii to the Regulations of the Council:

1. These meetings shall be for consultative purposes only, and can have no official or corporate character or efficacy.
2. Meetings shall be summoned by the Council at such times and for

such objects as may by the Council be thought desirable, either with or without a requisition from the Fellows.

3. Such requisition must be signed by at least thirty Fellows, and contain a statement of the object or objects for which the meeting is required.

4. Two meetings shall be held in each year on the following days, namely:

(a) The first Thursday in July, after the annual election to the Council on that day.

(b) The last Thursday in January.

5. The subjects to be considered shall be

(a) Matters referred to the meetings by the Council.

(b) Motions introduced by Fellows.

6. The motions introduced by Fellows

(a) shall be signed by the mover, or by the mover and other Fellows;

(b) must be received by the Secretary not less than 21 days before the meeting.

7. The President shall determine what motions are in order, and direct the arrangement of the agenda.

8. The quorum of each meeting shall be 30, and if at the expiration of 15 minutes from the hour for which the meeting has been summoned a quorum be not present the meeting shall not take place. If after the commencement of the meeting it shall be found upon a count that a quorum be not present the meeting shall be dissolved.

9. The President or one of the Vice-Presidents, or in their absence the senior member of the Council present, shall be chairman of the meeting, and the chairman's decision shall be final upon all points of order which may arise.

10. The Secretary, or his representative,

(a) shall act as secretary in relation to the business of the meetings;

(b) shall issue a notice of each meeting, together with the agenda, to each Fellow in the United Kingdom whose address is known to him not less than seven days before the meeting;

(c) shall keep minutes of the proceedings.

This report was approved and adopted.

Dr. G. S. Woodhead was re-elected Director of the Laboratories for the ensuing year.

The Council had under consideration four cases of unprofessional conduct on the part of Members of the College.

It was proposed by Mr. Tweedy, and seconded by Mr. Willett, that it be referred to a committee to consider and report to the Council on the desirability of again applying to the Home Secretary for an alteration of section XVI of the By-laws (relating to misconduct on the part of Fellows and Members), and if in their opinion it be desirable to further report on the form of such alteration. The following gentlemen were elected upon the Committee: Messrs. Bryant, Willett, Howse, and Tweedy, with the President and Vice-Presidents.

It was announced that the next Hunterian Oration would be delivered by Mr. J. W. Hulke in February, 1895.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

THE following gentlemen passed the Second Examination of the Board in the subjects indicated, Thursday, January 11th:

Passed in Anatomy and Physiology.—C. D. F. Burney, student of Charing Cross Hospital; R. J. Rowland and J. A. Glover, of Guy's Hospital; H. L. Lambert, of St. Bartholomew's Hospital; G. Perkins, of the Medical College, Madras; H. W. Trewby and C. Thomas, of Middlesex Hospital; J. L. Kirk, of Cambridge University; C. J. Taylor and J. A. McKinnon, of the University of Toronto, Canada.

Passed in Anatomy only.—L. Lloyd, of University College, London.

Passed in Physiology only.—W. E. Waymark, A. H. Finch, H. S. Desprez, L. T. A. Rowland, and B. Instone, of Guy's Hospital; T. B. Marshall and J. C. R. Robinson, of St. Thomas's Hospital; H. J. Godwin and A. E. Hodgkins, of St. Bartholomew's Hospital; S. R. Walker, of Westminster Hospital; and E. J. Parry, of St. George's Hospital.

Five gentlemen were referred in both subjects, 3 in Anatomy only, and 2 in Physiology only.

HOSPITAL AND DISPENSARY MANAGEMENT.

ABERDEEN ROYAL INFIRMARY.

IN anticipation of Hospital Sunday, the Infirmary Board of directors have drawn attention to the financial position of the hospital at the close of 1893. They anticipate a deficit of £1,800. They claim that the Aberdeen Infirmary may be classed amongst the most economically conducted hospitals in the kingdom. At the same time the expenditure must rather increase than diminish, owing to the large extensions.

ST. ANDREW'S HOSPITAL FOR MENTAL DISEASES, NORTHAMPTON.

PAYING AND ASSISTED PATIENTS.—The last annual report of this institution shows that the average daily number resident in 1892 was 831. The proportion per cent. of recoveries calculated on the total admissions was 58.78, but, excluding transfers from other asylums, it was 69.09. The death-rate was exceptionally low, being only 5.71, calculated upon the average number resident. Acting upon the recommendation of the Commissioners in Lunacy, the Committee removed from the asylum a number of chronic incurables, thus making room for the admission of curable cases, for which the hospital affords such excellent accommodation. The lowest remunerative payment for first class patients is 42s., and for the second class 28s. a week; for these sums respectively board, lodging, care and medical treatment are given. It must not be forgotten, however, that this is a charitable institution, and we find that in the first class 4 patients were given the full benefits of the asylum for sums varying from 1s. to 35s. a week, while in the second class 38 were so benefited for sums varying from 1s. to 15s. a week, and 20 from 15s. to 21s. In addition to these, 11 in the first class and 17 in the second class were treated for varying periods free of charge.

JAMES MURRAY'S ROYAL ASYLUM, PERTH.

DURING the twelve months covered by the sixty sixth annual report of this institution there have been admitted 31 patients, 28 were discharged, and 10 died. The total number of cases under treatment was 140, and the daily average number on the books was 107, whilst the number remaining on the books at the end of the year—that is, on March 31st, 1893, was 53 men and 49 women, giving a total of 102, and showing a decrease of 4 as compared with the previous year. The general health of the asylum has been good, though the epidemic of influenza referred to in last year's report left its mark upon the patients, resulting in lowered vitality and loss of bodily weight, and this took some time for readjustment. This is reported as having been overcome, and Dr. Urquhart states there is now a gain of 6 lbs. in the average weight of the patients since the beginning of last year. With regard to the class of cases admitted, Dr. Urquhart remarks that not one-half could be considered curable. At the close of the year, he adds, only two married men remained on the registers of the asylum, and the conclusion deduced from general statistics is that "celibacy is more likely to favour mental disease than the married condition." We are glad to note that although the minimum rate of board was £60 per patient, no fewer than 40 patients were kept in the asylum who were paying sums varying from £20 to £52, and that the sum of £3000 was thus expended.

DISTRICT NURSES OR COTTAGE HOSPITALS.

THE people of Pershore have a knotty point to decide. A legacy of £500 has been left towards establishing a cottage hospital, but bricks and mortar are an expensive luxury, and require maintaining when set up; the question, then, is whether it is best to build a little hospital, or to start a home for district nurses, with a room or two in which cases could be accommodated which require special care. Where money is plentiful and cases few, no doubt a cottage hospital is a most useful addition to the social organisation of a small community, but it is not always an unmixed advantage when impecuniosity leads to the beds being monopolised by so-called pay patients. If there be the chance of a bed or two for really urgent cases, there can be but little doubt that in country districts the greatest good is often done at the smallest cost by providing nurses who can go into the homes of the poor and help them there in their hour of need. An empty hospital is almost as expensive to maintain as is a full one, and the temptation always is to fill it, whereby its utility for emergencies is lost. It is not improbable that, in small country towns, a well organised system of home nursing, with a vacant room available for urgent necessity, will be found to yield a better return for the money spent upon it than a cottage hospital.

CORK HOSPITAL SATURDAY.

THE total sum collected at Cork on Hospital Saturday amounted to £753 12s. 9d., and deducting all expenses, and leaving £10 8s. 2d. for next year, a sum of £683 8s. 2d. has been left for distribution among the various participating hospitals. The following sums have been allocated: North Infirmary, £142; South Infirmary, £142; Mercy Hospital, £90; Women and Children's Hospital, £80; Fever Hospital, £80; Eye, Ear, and Throat Hospital, £50; St. Vincent's Hospital, £40; Lying-in Hospital, £35; and Cork Maternity, £35.

J. C.—A lunatic asylum seems the proper place for such a case, either as a voluntary patient or under certificate. No "home" will receive a melancholic with suicidal tendency without heavy remuneration, as the responsibility is very great.

INDIA AND THE COLONIES.

INDIA.

THE COUNTESS OF DUFFERIN'S FUND.—The fifth annual report of the United Kingdom Branch of the National Association for Supplying Female Medical Aid to the Women of India (The Countess of Dufferin's Fund), of which Susan Countess of Malmesbury is the hon. secretary and treasurer, states that the branch has undertaken to bear the expense of passages and outfits to and from India of all ladies who may be selected for service under the Association. The present income of the United Kingdom Branch is only £215 17s. 5d., while the requirements of the fund come to at least £1,000 a year, and it is hoped that by making the wants of the association as widely known as possible in this country there will be no difficulty in finding at least a thousand charitably disposed persons willing to subscribe £1 a year each towards its support. Owing to the efforts of the hon. secretary and treasurer, the income of the branch has been raised by over £180, while the expenses have been diminished by one half.

HIGH MORTALITY IN INDIAN PRISONS.—It is stated that in consequence of the insanitary state of Indian prisons, deaths were last year very numerous in those institutions. A total mortality of 116 per 1,000 was reached in one gaol in Sind, and at several other gaols it ranged from 50 to over 80 per 1,000. The statement that the high death-rate is due to insanitary conditions must be accepted with some caution. It is a well-known fact that in at any rate the majority of Indian prisons the greatest cleanliness and minute attention to the personal hygiene of the prisoners prevail.

NEW SOUTH WALES.

THE Honourable Dr. H. N. MacLaurin, Vice-President of the Executive Council, on October 5th introduced a Bill in the Legislative Council to regulate the practice of medicine and surgery, and for other matters connected therewith. This Bill in its essential features is the same as the one which was read a second time on October 6th, 1892, by 48 votes to 11. The Bill passed its third reading on October 12th, and was then forwarded anew to the Legislative Assembly.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

SUBSCRIPTIONS to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, JANUARY 20TH, 1894.

"THE SUPERIOR PERSON" AND THE JOURNALISM OF THE FUTURE.

MR. GREIG SMITH has recently favoured the medical world—or such part of it as forms the constituency of the *Bristol Medico-Chirurgical Journal*—with certain opinions on "Modern Medical Journals," being impelled, as he tells us, to unburden his soul on the subject, by the fact that he has had "something to do with medical journalism," that he has "done with it," and that he feels he has a message to deliver to his fellow-men about it which he thinks it would be wrong to keep *altâ mente repostum*. The announcement that Mr. Greig Smith has shaken the dust of medical journalism off his feet will, we are sure, be heard with concern, but partial compensation may be found in the fact that he leaves to those who are still held in bondage by the printer's devil a legacy of counsel for their edification and guidance. We lift the prophet's cloak thus dropped at our feet with due appreciation of the preciousness of the gift, but this is the age of experimental investigation, and the *Zeitgeist* must serve in some measure as an excuse if we proceed, with all reverence, to examine its fashion and texture.

Speaking of modern journalism in general, Mr. Greig Smith utters the following bitter cry:

> This is the age of the reporter, not of the scholar. The material of literature is news, not thought; gossip, not work..... This is also the age of advertisement. The desire of the writer is rather to be widely read than to write well. The unavowed aim of the writer is the avowed aim of the journal—a wide circulation. And the purpose of this wideness of circulation is not that knowledge may be diffused, but that advertisements may be caught—and money. Unknown men write to advertise themselves, known men are induced to write to advertise the journal. The chief end of journalism is to catch advertisements; the trail of the advertiser is over all.

Further on we are told that the majority of people being fools, an editor to be successful must "cater accordingly." Another count in the indictment is the ascendency of the advertiser. Mr. Greig Smith asserts that this enterprising person is not only the mainstay of the press, but that he controls editors and writers alike.

Proceeding from the general to the particular, Mr. Greig Smith implies, though he does not expressly state, that his description of the present condition of periodical literature applies to medical journalism. He is good enough to intimate that here the editor meets with difficulties which he is powerless to remove, and which he must accept. First amongst these, according to this very superior person, "is the deficient literary education of the average medical man;" pabulum of a kind suitable to the intellectual digestion of this inferior being must be provided, and the result is that "the literature of medicine at the present day is, as pure literature, either indifferent or positively bad. Scarcely a single issue of a journal is without a paper from which a man educated in ordinary literary methods could not extract abundant examples of errors in logic, in rhetoric, in composition, and even in humble grammar." Then, again, contributors to medical journals display "widespread ignorance of the history of medicine—recent and remote." Further, "there is ignorance not only of classics but even of class books. It would truly seem as if knowledge in our profession began to decay after five years, and was buried and forgotten after ten." So filled is Mr. Greig Smith with indignation at the "culpable ignorance of, or neglect of, the works of others" shown by that poor creature, the average medical writer, that it might almost be feared that personal instances in point are present to his mind, and that, perchance, some of his own admirable additions to surgical literature may not have received the amount of quotation which they deserve. After abusing the printing, paper, binding, and more especially the illustrations of medical publications of the present day, which we innocently thought better than ever before, our latter-day Jeremiah utters a lamentation over their abundance:

> And our journals! Look at these piles on our tables! Of the thousands and thousands of papers in them, how many are worth preserving? How many are worth reading? How many are worth only cursing?

Mr. Greig Smith has certainly this feature of the prophetic character highly developed; he curses freely. It may, however, be doubted whether any one of these freely-anathematised editors, contributors, readers, and advertisers are a penny the worse.

Happily Mr. Greig Smith is not, like too many prophets, content with anathemas: he not only indicates the nature of the disease, but prescribes a remedy. Editors must apply the muzzle. They must "silence the chatterer and make the worker talk. . . . . The best men and the best workers are silent and retiring; the editor must seek them out and drag them out, and make them speak"—apparently, as above stated, "to advertise his journal." But where are they to be found? for among the contributors especially objected to by Mr. Greig Smith are the "pushing clinician," who reports successful operations while his knife is yet wet with the patient's blood; the "pushing scientist," who not only, like Captain Cuttle, makes a note of everything when found, but insists on publishing it: the "pushing practitioner," who is always recording "wonderful cases." These and other varieties of "bores" and "fools" (*sic*) too numerous to classify must, Mr. Greig Smith urges, be ruthlessly thrust out, so as to leave room for the record of "good work by capable workers." His ideal of a medical journal is set forth: it is to be a publication which should be issued by an "Academy of British Medicine, whose Archives should contain all that is best of the work of the physicians and surgeons in Great and Greater Britain: whose Transactions should go forth to the whole world stamped with the authority of our real leaders and masters." These are not, then, the existing Transactions or Archives of the Royal Medical and Chirurgical, the Clinical, or the Pathological Societies—all which, it must be assumed, are preoccupied at present by "bores" and "fools"—but a monumental

journal, which should have no advertisements, but should be subsidised by the corporations, or in default of them by the British Medical Association, which we are led to infer has on hand £10,000 a year which might advisedly be placed at his disposal for such a purpose!

We have given prominence to Mr. Greig Smith's views, not so much on account of their intrinsic importance, as because his homily gives concrete embodiment to a number of misconceptions and positive delusions which float about in more shadowy form in the minds of other similarly superior but imperfectly-informed persons. Chief among these is the notion that an advertisement is *ex vi termini* an unclean thing which defiles any periodical to which it is attached. Mr. Greig Smith's dream of a journal conducted by superior persons for superior persons, and "existing beautifully" in the ethereal atmosphere of superior imaginations, "without taint of filthy lucre," would be most interesting if it were serious instead of being so deliciously comic and transparently fictitious.

Mr. Greig Smith quarrels with advertisements and proposes "Archives" untainted with filthy lucre, which must therefore be given away and not sold. He is, however, graciously pleased to tolerate the continued existence of the BRITISH MEDICAL JOURNAL expressly with the view that "it may get advertisements, and we [the superior persons aforesaid] may get the money"; in other words, let the BRITISH MEDICAL JOURNAL continue to earn the "filthy lucre" so that the scientific virtue of the modest man may profit by it! Surely the doctrine that the end justifies the means has rarely found cruder expression than in this *naïve* suggestion.

As regards the matter of advertisements, we cannot too earnestly impress on Mr. Greig Smith Dr. Johnson's advice to "clear the mind of cant." His theory that the advertiser rules is simple nonsense or worse; whatever the experience of the *Bristol Medico-Chirurgical Journal* may be, the advertiser has no more power or influence, direct or indirect, over the editorial pages of the BRITISH MEDICAL JOURNAL than the man in the street. As to circulation, a journal diffuses knowledge, exercises power, promotes reform, destroys abuse, assists in free discussion, weighs, concentrates and directs professional aims and aspirations, and influences opinion in proportion to its circulation. Even superior persons do not always care to waste their sweetness on the desert air, and Mr. Greig Smith's temple of journalistic virtue, however richly endowed, would, it may be feared, soon become, not a shrine, but a tomb for the unread and the unreadable, in which the would-be high priest would end by being little better than a sexton.

Even from the purely scientific point of view, is it quite sure that an organ entirely controlled by "our leaders" would necessarily be the instrument of progress? There is a good deal of human nature even in celestial minds of the hierarchy referred to. Mr. Greig Smith is presumably well acquainted with the history of ovariotomy and other episodes in the development of the healing art, and this may suggest to his mind some instructive "modern instances." Superior persons have not infrequently shown themselves obstinate enemies of progress. We venture to think that it is better to let the "pushing practitioner," so foolishly despised by Mr. Greig Smith, record his facts and observations—unimportant as they may sometimes seem—than that a single pregnant truth should be lost to the world. Meantime, monumental "Archives," to be contributed to only by the "modest" worker singled out by an editorial Mr. Greig Smith,[1] and circulated at the cost of a subsidy of £10,000 a year by the British Medical Association, will, we fear, remain a beautiful dream. There is, however, no reason why he should not favour us with his private list of retiring workers, to whom in the meantime the hospitality of our columns would be proffered, burdened though it be with the disadvantage of being widely read. Mr. Smith has dreamed a dream, and babbles of it in print, uttering his fine frenzy with much fire and flame. He should have shown more common sense.

THE GRANT TO THE UNIVERSITY OF WALES.

SOMETHING of a dramatic surprise attended the announcement made by the Chancellor of the Exchequer, on January 12th, of his intention to make a grant this year to the newly-founded University of Wales. With a rumoured deficit of over two millions in the Exchequer, and a prospect of a special call for four millions more for naval purposes, and with the memory still green of the Chancellor's reply to the English University Colleges not so many weeks since, we imagine that even the strongly-supported deputation which crowded the boardroom of the Treasury in support of the Welsh demand could scarcely have expected so ready an admission of the force of their arguments. And yet there were weighty reasons adduced in support of the claim.

The history of the Welsh education movement, as succinctly epitomised by Lord Aberdare, the *doyen* of the movement as well as the chief spokesman of the deputation, is a somewhat remarkable one. It is barely twenty years since the educational condition of the principality above the primary grade was such as would have disgraced the most backward State of the Continent. Wales had fallen to the ground between two stools. Politically united with England, it had shared in England's lack of a public system of higher and intermediate education, while at the same time it was without the ample educational endowments which enabled England itself to do without such a public system. From the deplorable educational destitution which is simply but graphically sketched in the report of the Departmental Committee of 1880-1, Wales has been rescued partly by the prevalence of more enlightened views on educational matters at Westminster and in Whitehall, but in the main by the persistent efforts of her own sons. The educational movement in Wales has been essentially a popular one. The quarrymen of Carnarvonshire and Merioneth contributed freely to the foundation of the colleges now flourishing at Aberystwyth and Bangor; the county councils of industrial Glamorgan and Monmouthshire have consistently backed up the interests of the South Wales College at Cardiff. The Technical Instruction Act of 1889 has been put in force in the great majority of the Welsh counties, and the residue under the Local Taxation Act of 1890 is in Wales universally applied to educational purposes. Under these two Acts, and under the special

[1] The *Bristol Medico-Chirurgical Journal* is published under the auspices of the Bristol Medico-Chirurgical Society. The number before us consists of 72 pages small 8vo. Its price is 1s. 6d; and it contains 31 pages of advertisements. Its opinion of silent and retiring workers is stated in the following motto on its title page, "Scire est nescire, nisi id me scire alius sciret," which being interpreted is—To know a thing is not to know it, unless my neighbour knows I know it.

Welsh Intermediate Education Act of 1889, the Welsh counties have already rated themselves to the extent of £64,000 a year for the support of education other than elementary; and it was stated by Lord Aberdare in his speech that, in addition, some £400,000 had been raised in the Principality from voluntary sources for the foundation of its university colleges and for other similar purposes since the year 1863.

In spite of these efforts, remarkable in a country comparatively so poor, and of the response they have met with from successive Governments since 1882, much still remains to be done. The neglect of six centuries is hard to repair in a single generation. Welsh educational funds, it was stated by the deputation on January 12th, and doubtless truly, are already strained to the utmost to bear the demands increasingly made upon them; the university colleges are even now appealing to the public for fresh sums for pressing objects; and it was without difficulty made obvious that unless the precedents set in the cases of Scotland and Ireland, and to a lesser extent in that of England itself, were in some degree followed, the grant of a university charter to Wales would be for many years to come a flattering but illusory compliment. The necessities of the situation were, however, frankly recognised by Sir William Harcourt in spite of the straitened circumstances of the Treasury, and an initial grant of £3,000 may be taken, notwithstanding official reserve, as an earnest of the future intentions of the Government not to leave their offspring penniless. Whether the Chancellor's criticisms of the estimates laid before him were well or ill founded is a matter we cannot pronounce upon without a fuller knowledge of the details than has been made public; but, on the whole, we incline to the belief that the Welshmen were well advised in wishing not to start their university upon too economical a scale.

There are some matters in which parsimony is misplaced. To the degrees of a newly established university a certain suspicion inevitably attaches, and anything that may seem to give colour to it should be at all hazards avoided. The safest means of ensuring prestige for a new university's degrees is doubtless for it to secure from the outset the services of a body of independent examiners of unquestionable position and repute. This, we understand, is what the promoters of the Welsh University are aiming at; and they appear also to know that first-class examiners, like any other first-class commodity, can be had only by paying an adequate price. The comparison which the Chancellor drew between the Welsh estimates and the expenditure of the Victoria University, stated by him to be only £3,600 a year, certainly deserves attention; but when we reflect that an income of £20,000 a year from public funds was assigned by Lord Beaconsfield's Government to meet the requirements of the Royal University of Ireland, a purely examining body, we feel that the comparison made by Sir William Harcourt hardly exhausts the elements of the question. The University of Wales will no doubt be wise enough to take the Chancellor's advice, and carefully reconsider every item of its anticipated expenses before again approaching the Treasury; but we, on our side, would give its members our advice, which is rather to delay the commencement of its work than to compromise the reputation which its degrees ought to have by conferring any except under conditions in every respect unimpeachable.

Professor Brouardel has been elected Chairman of the Committee formed to collect subscriptions for a monument to Charcot. M. Pasteur is the Honorary President of the Committee.

Small-pox does not abate in Paris, and vaccination has been much neglected. There is now to be general and obligatory vaccination in all the communal schools, primary and secondary.

The recent elections to the French Senate have resulted in the return of several members of the medical profession, among whom are Professor Cornil, Dr. Velten (Bouches du Rhône), Dr. Dellestable (formerly deputy for La Corrèze), Dr. Pitti-Ferrandi (President of the Syndicate of Bastia), and Dr. Gérente (Algiers).

The Misses Stokes, of Birmingham, who have already expended upwards of £9,000 on the Convalescent Home in connection with the Saturday Fund at Tyn-y-Coed, have recently presented the institution with the purchase money of the site, amounting to £2,000.

At a special meeting of the Aberdeen Town Council to elect an assessor to the University Court, Dr. A. T. Gordon Beveridge was unanimously chosen on the motion of the Lord Provost. The appointment is for four years. Dr. Beveridge has always taken an active and liberal view of university affairs, and he will be a distinct factor in the work of the University Court.

At the quarterly general meeting of the Metropolitan Board Teachers' Association held this week, Mr. Gilham moved: "That the Board be respectfully but strongly urged to appoint a female medical officer to conduct the medical examination of female *employées*." The resolution was seconded by a lady teacher and carried.

A special course of training lectures instituted by the National Health Society for the benefit of ladies who wish to qualify as teachers of hygiene under the county council, or for appointments as sanitary inspectors under vestries, begins this week. The candidates must either be already hospital nurses, or go through a period of instruction in sanitation, hygiene, elementary anatomy and physiology, etc. The lectures are delivered on Tuesday afternoons by Dr. J. E. Squire, at the Society's offices, 53, Berners Street. The course concludes on March 13th.

THE FEVER ON H.M.S. HOWE.

A naval correspondent, writing from Malta, states that Lieutenant Hamilton, the senior lieutenant of the battleship *Howe*, has been sent to Bighi Hospital suffering from the throat complaint that has been so prevalent on board the ship. The *Howe's* fever patients occupy a separate building in the hospital. The vessel herself continues to fly the quarantine flag; and her crew, who are bulked, are not allowed to land. The writer adds that it has been decided to renew the whole of the *Howe's* woodwork, as it is believed that owing to the vessel having been so long immersed, the wood gives out an effluvium which is the cause of the sickness that has broken out on board the ship.

ISOLATION HOSPITAL PAYMENTS.

Sanitary authorities are slow in learning that the truest economy lies in gratuitous treatment of hospital patients suffering from infectious disease. The Thornton Local Board have been troubled by a bill to the amount of £83, for the maintenance of patients in the joint fever hospital, and one member has gone so far as to question the necessity of the isolation in hospital of scarlatina cases. Needless to say, the health officer is favourably inclined to a free hospital at the cost of the rates, in common with, we think we

may almost say, the whole of his colleagues throughout the country. It is not only the care of the individual, but, much more largely, the safety of the community, for which hospitals are established, and the sooner local sanitary bodies come to recognise this fact, and to act upon it in a liberal spirit, the better will it be for the districts under their charge. A free hospital will often mean prompt and gladly accepted isolation of early cases, and the saving of the enormous expenses attendant upon an epidemic otherwise too frequently the result of inability to secure the co-operation of patients and their friends.

ACCIDENTAL POISONING AT THE EDINBURGH FEVER HOSPITAL.

Some two months ago a most unfortunate and, unhappily, fatal accident occurred at the Edinburgh City Hospital. A maid employed in the hospital had been suffering from what was believed to be indigestion; she was recommended by the lady superintendent to take "a dose of salts," but by some mischance carbolic acid was administered instead, and the girl died shortly afterwards. Apparently the bottle from which the fatal dose was given, though labelled "Poison," was in a place where it ought not to have been, and further, it was not in a bottle belonging to the hospital. At the meeting of the Public Health Committee of the Town Council held on Tuesday there was a long discussion on the accident, and we believe some very strong remarks were indulged in. The matter was ultimately remitted to the Law Committee, and we understand that Committee on Wednesday recommended that the maid's mother should receive £100 in satisfaction of her claim for damages and £25 as expenses.

EDINBURGH ROYAL INFIRMARY.

At a recent meeting of the Royal College of Surgeons of Edinburgh Dr. Argyll Robertson and Dr. John Duncan were elected representatives to the Managing Board of the Edinburgh Royal Infirmary in place of Dr. R. J. Blair Cunynghame and Dr. Francis Cadell. A good deal of friction, both in the College and in the Infirmary Board, has arisen. Drs. Duncan and Argyll Robertson are on the surgical staff of the hospital, and there has been in the past an understanding that no member of the staff should also be on the Managing Board. Further, Drs. Cadell and Blair Cunynghame were only elected last year, and although the election is made annually there is a sort of etiquette that the representatives should continue to serve for five years. It is also asserted, with what truth we are unable to say, that one reason for supplanting the two managers elected a year ago was that the College did not sympathise with the decided views held by these gentlemen regarding the admission of lady students to the infirmary. Meanwhile the Infirmary Board have sent a letter to the College calling attention to the fact that Drs. Argyll Robertson and J. Duncan are members of the staff, and they have also made their appointment as members of the staff an interim one until the whole matter has been discussed. Against the latter step the two gentlemen in question have entered a vigorous protest. The Committee of Contributors have expressed strong disapproval of the appointment as managers of any member of the staff. At the meeting of the Infirmary Board on Monday last the whole matter was remitted to the Law Committee for consideration and report. At this same meeting a motion was given notice of by the Lord Provost to the effect that the meetings of the managers should in future be open to the press.

THE MIDWIVES REGISTRATION ASSOCIATION.

The Midwives Registration Association, formed last July, has issued a circular letter stating the objects of its founders. These are to obtain such legislation as shall secure the proper education, registration, and supervision of midwives. Since a Select Committee of the House of Commons reported in favour of legislation to render compulsory the registration of midwives, the question has been brought within the sphere of practical politics, and it will be generally admitted that the education and supervision of midwives should be controlled by the medical profession. The Association consists of qualified medical practitioners, and its executive committee is formed of six consultants, six general practitioners, one representative from each of not more than six societies interested in the question, and the two honorary secretaries (Dr. Boxall, 29, Weymouth Street, and Mr. Rowland Humphreys, 27, Fellows Road, N.W., London). By a midwife is to be understood "a woman who attends or undertakes to attend a labour without the direct supervision of a medical practitioner." The revelations of the incompetence and presumption of ignorant midwives which are so frequently made in coroner's courts or to public health authorities, prove the existence of a crying evil, an evil which it is the duty, and also the interest of the medical profession, to bring to a speedy end.

LEPROSY IN FINLAND.

In 1891-92 the Medical Board of Finland caused statistics to be collected as to the number of lepers in that country. During the preparation of the report just issued 14 lepers died, namely, 8 men and 6 women. The total given is 52—33 men and 19 women. The oldest leper was born in 1824, and the youngest in 1889. The cases were most numerous in the southern and northern parts of the country, whilst the eastern, where the communication with Russia, where the disease is more common, is freest, is almost free from this malady. In Finland the disease appears everywhere to be declining; all those attacked belonged to the lowest classes, and lived under the most wretched sanitary conditions. In most cases the disease had existed for several years; only in a few was it in its initial stage. The leading medical organ, *Ugeskrift for Læger*, maintains that everything points to the disease being propagated by contagion, and that the sufferers should be isolated as in Norway. Dr. P. Souton, member of the Pasteur Institute, who is to be Father Damien's successor at Molokai, in the Pacific, has just paid a visit to Norway, in order to study the disease there. He is now on the way to his place of voluntary exile.

EXCESSIVE INFANT MORTALITY DUE TO FACTORY LABOUR.

In his annual report for 1892, Dr. Reid, Medical Officer of Health of the Staffordshire County Council, again calls attention to the excessive infant mortality in certain artisan towns where women are largely engaged in factory labour. The subject has recently attracted considerable notice in consequence of a paper which Dr. Reid read at the annual meeting of the British Medical Association in Nottingham, in 1892: and since then, it will be remembered, an inquiry on a large scale has been conducted by the Parliamentary Bills Committee, to whom the question was referred by the Public Medicine Section, the outcome of which was confirmatory of Dr. Reid's conclusions. The report from which we are now quoting gives the average infant mortality for the four years 1889-92 in the following three groups of artisan towns in Staffordshire: Group I, many women engaged in work; Group II, fewer women engaged in work; Group III, practically no women engaged in work. The deaths of children under one year per 1,000 registered births in the three groups respectively amount to 196, 173, and 160 rates which correspond very closely with those for the ten years period 1881-90, which formed the basis of the original paper. That the excessive infant mortality in many towns is attributable, among other causes, to the practice of mothers engaging in factory work there can be no question; and it would be interesting to know how other counties compare with Staffordshire in this respect. In those counties where

county medical officers of health were early appointed, this information might very easily be acquired, as, when the reports of the local medical officers of health for 1893 are presented, the figures for four or five years will be available, and it would only be necessary to arrive at a careful grouping of the towns (artisan only) in accordance with the relative proportion of married women workers, of course taking care that they were legitimately comparable as to the condition of the inhabitants, their sanitary surroundings, etc. This might easily be done by county medical officers, with the assistance of the medical officers of health of the various districts; and, when the classification was once settled, comparisons from year to year and for longer periods would be a simple matter. At present, unfortunately, in the case of towns of under 50,000 inhabitants, the census returns are not published in sufficient detail to allow of a more exact basis of classification than the somewhat empirical one adopted by Dr. Reid; and it is only those who have a knowledge of local conditions in the smaller towns who can advise as to their grouping. Such returns from a large number of small towns, and for a series of years, are more valuable for comparative purposes than those from large towns, where local conditions are too varied to allow of the above classification. It is to be hoped that the action of the Parliamentary Bills Committee of the British Medical Association will lead to some legislative enactment being passed which will have the effect of diminishing very much the mortality among infants attributable to the employment of women in factories; and any help medical officers of health can give in communicating facts relative to the subject will materially assist the movement.

CRIMINAL RESPONSIBILITY OF INEBRIATES.

AT a meeting of the Society for the Study of Inebriety, held on January 4th, Dr. Norman Kerr read a paper on Sir Henry James's statement of the law on inebriate criminal responsibility. Dr. Kerr contended that Sir H. James had ignored the remarkable evolution in judicial rulings in the reception of certain inebriate mental states as entitling to exemption from responsibility. His restriction of an inebriate plea to major offences was unsound, and Dr. Kerr quoted cases of minor character in which the plea had been made successfully. Further, he pointed out that the Departmental Committee had based a recommendation in favour of separate reformatory institutions for a certain class of criminal inebriates on a recognition of a diseased mental state in minor offences committed by inebriates. The view that drunkenness aggravated crime was now obsolete, and Dr. Kerr believed that the judicial recognition of inebriate states would be extended eventually to all states of intoxication and morbid inebriate impulse, temporary or permanent, and that inebriates would be treated as sufferers from a diseased brain, and not as criminals, unless it could be proved that they had planned the crime when sober and drank to nerve them for it. At the same meeting a reception was given to Dr. J. E. Usher.

ONE RESULT OF THE OPIUM COMMISSION.

THE Opium Commission seems likely, thinks a Calcutta paper, to have one result which its promoters hardly contemplated, namely, a largely increased consumption of opium in India. The abundant evidence given as to the exhilarating effects of opium, the improved appetite and increased capacity for work which it gives, would have brought a fortune to a patent medicine vendor, and will surely tempt many worn-out workers to seek relief from the drug. Hitherto the fame of De Quincey has made opium more or less a terror to Englishmen, but now it appears that his case is quite exceptional, that opium is more invigorating than alcohol, and more seductive than tobacco, and it can be discontinued with comparative ease whenever necessary. It is impossible to imagine the English becoming a nation of opium eaters, for before this could happen the whole English character would have to be changed; but it is most certain that the evidence given before the Commission will lead many persons to experiment with opium who would never have dreamt of such a thing before. The responsibility for these delinquents will be on the heads of these agitators who, without cause and without knowledge, made extravagant statements as to the ruin wrought by opium in India, in order to try to strengthen their case against the trade with China. The Opium Commission opened its inquiry at Benares on January 8th. Some of the medical officers in charge of the gaols and the lunatic asylums testified that the moderate use of opium was harmless. One native practitioner expressed an opposite opinion. A German Lutheran missionary deposed that he had never seen any bad effects produced by the habitual use of opium. Several planters and zemindars, who were also examined, said that the cultivation of the poppy was both popular and profitable. Colonel Cunningham, of the 13th Bengal Infantry, together with a soldier of the same regiment, stated that opium was largely used by the Sikh and Rajput sepoys, who would be prostrated without their usual dose, whereas with it they could endure great fatigue. Petitions, bearing the signatures of nearly 2,000 landowners, have been presented strongly protesting against the prohibition of the drug.

DENTAL ADVERTISING.

AT a meeting of the Medico-Chirurgical Society of Nottingham, on January 3rd, Dr. Tressider moved the following resolutions, of which due notice had been given:—"(1) That this meeting considered it unprofessional for registered medical men to give anæsthetics for unregistered or advertising chemists." "(2) That the Notts and Derbyshire Dental Association be asked to furnish every registered medical practitioner in the neighbourhood with a printed list of the local dentists whose names are an the *Register*, and who do not advertise." Mr. Anderson, F.R.C.S., seconded the resolution in a telling speech, and, by permission of the Society, Mr. Blandy, who had brought with him a large number of advertisements which had been exhibited to the General Medical Council, was allowed to address the meeting. Mr. Blandy expressed the hope that every medical society in the kingdom would follow the lead of Plymouth and Nottingham in this matter. The resolutions were carried with but one dissentient vote.

THE NOTIFICATION ACT IN LEEDS.

A MEETING of Leeds medical men was held on January 3rd in the Philosophical Hall, for the purpose of taking their opinion with respect to the advisability of adopting in the city the Notification of Infectious Diseases Act. Mr. Jessop presided, and amongst others present were Mr. T. Pridgin Teale, Mr. Scattergood, Dr. Trevelyan, Mr. E. O. Croft, Dr. Churton, Mr. C. J. Wright, Dr. Hellier, Mr. C. Richardson, Mr. H. Rowe, Mr. Lee Wells, Mr. R. H. Hall, Mr. H. Littlewood, Dr. Barrs, Mr. J. J. Pickles, Mr. R. N. Hartley, Mr. Pearson, Mr. A. W. Mayo Robson, Mr. H. Coleman, Mr. E. Robinson, Dr. Griffith, Dr. Dobson, Mr. Smeeton, Mr. Libby, Mr. Green, Mr. B. G. Heald, Mr. J. S. Loe, Dr. Henderson, and Dr. Murgave. Dr. Whitelegge, Medical Officer for the West Riding, attended for the purpose of giving any information on the subject that might be required. Letters of apology for non-attendance had been received from Dr. Chadwick, Dr. Cameron (Medical Officer of Health for the city), and Mr. Waite. The following resolutions were unanimously passed: Moved by Mr. Pridgin Teale, and seconded Mr. Charles Richardson. "That this meeting of medical men in Leeds hereby records its opinion that the early notification of infectious diseases is calculated to be a valuable adjunct in arresting the spread of epidemics, and in assisting preventive sanitary work." Moved by Mr. Dobson, and seconded by Mr. Holmes. "That this meeting would urge upon the City Council the desira-

bility of adopting the Notification of Infectious Diseases Act of 1889." On the motion of Dr. Hellier, seconded by Mr. J. S. Loe, a deputation was appointed to wait on the City Council to present the resolutions. The Hospitals Subcommittee of the Sanitary Committee of the Leeds Town Council have since unanimously resolved to request their committee to bring the matter of compulsory notification before the council, presumably as a result of their meeting.

DR. CORNELIUS HERZ.

DR. CORNELIUS HERZ has been an English prisoner, in custody of the English police, in Bournemouth, for a whole year. He was arrested just before midnight on January 19th, 1893, and has not yet succeeded in obtaining an investigation into the charges made against him. Our columns have recorded from time to time the reality and gravity of the cardio-aortic disorder, and other maladies, as certified to by unquestionable authorities. One naturally inquires, Is death to be the only release that the civilisation and legislation of England and France, at this late date in the nineteenth century, can afford to an accused person, who, according to the presumption of English law, is innocent, because he is too dangerously ill to be brought from his bedroom? We know that a Bill to meet the hardship demonstrated by this case was drafted, but could not be usefully introduced during the session of Parliament now concluding. It is a medical truism that to remove one in his condition for trial would be risking a judicial murder; to hold him indefinitely under arrest can scarcely be justified. We trust, therefore, that, unless another solution is found in the interval, one of the earliest Acts of the new session of Parliament will be so to amend the law that an accused person, if mentally capable of meeting criminal accusations, shall not, because too mortally sick to attend a London police court, claim in vain to have an official investigation conducted at his bedside.

DEATHS UNDER CHLOROFORM.

WE are indebted to Dr. William Bower, House-Physician to the London Hospital, for the following particulars of a case of death under chloroform in that institution. H. R., aged 41, cellarman, was admitted to the wards of the London Hospital on December 2nd, 1893, with bronchitis and signs of pleuritic effusion on the left side. He gave a history of one week's illness, during which he had been treated for bronchitis and pleurisy. There was a history of prolonged alcoholism. The patient was very fat, was somewhat cyanosed, respirations rapid and shallow, and the pulse feeble. On December 4th the left side of the chest was aspirated, and 50 ounces of thin purulent fluid were removed; this fluid was free from any fœtid odour. The patient did not improve, so on the evening of December 8th he was aspirated a second time, and 30 ounces of most fœtid fluid were withdrawn. On the following morning he was anæsthetised, in order that the pleural cavity might be freely drained. Chloroform was used. After 50 minims had been administered, and while the reflexes were still unabolished, he became suddenly very cyanosed; the inhaler was at once removed. The pulse was very feeble, and 3 ounces of brandy was injected. He then took four more somewhat shallow breaths, and then respiration ceased, while the pulse was still feebly beating. Artificial respiration was at once started and persevered with for twenty-five minutes, and gr. $\frac{1}{30}$ of strychnine was injected. *Post mortem* it was found that the heart muscle was pale and rather soft, but there was no obvious fat. The heart was uncontracted and very flabby and contained dark liquid blood on both sides. There was no marked distension of the right side. The endocardium was much blood stained. There were some small patches of atheroma in the upper part of the anterior flap of the mitral valve. The other valves were healthy. There were patches of atheroma in the abdominal aorta and some about the orifices of the coronary arteries. In the left coronary artery, about 1 inch from the origin, was a localised, whitish, slightly calcareous thickening of the inner coat, causing slightly narrowing.—We are indebted to Dr. George Heaton for the following account of death during chloroform anæsthesia: A. B., aged 11, a boy, to all appearances strong and sound, was anæsthetised on December 19th last for the removal of several carious molar teeth. Some strong soup was given him three hours before the operation. The anæsthetic—a mixture of three parts of chloroform and one of ether—was administered on folded lint, and the patient inhaled it without any struggling or retching. When he was ready for the operation the lint was removed and no more given at all. The teeth were successfully extracted, there was very little bleeding, and the patient's condition, both during the operation and for some minutes afterwards, was excellent. About four or five minutes after the completion of the operation, or some eight or nine minutes after the administration had been stopped, the pulse at the wrist, which had until then been full and strong, suddenly ceased. There was no retching or vomiting, no pallor of the face, and the respiration continued full and deep for several minutes after all pulsation at the wrist had ceased. The pupils dilated widely at the moment the pulse stopped. The patient was inverted: artificial respiration was tried for fifty minutes. Ether was injected subcutaneously, and nitrite of amyl applied to the nostrils, but the heart was never felt to beat again. A *post-mortem* examination showed the right cavities of the heart full of fluid blood, the left contracted and healthy. There was a slight excess of fat on the heart's surface, but otherwise the organ was perfectly healthy; the stomach was healthy. Duncan and Flockhart's pure chloroform was used, mixed with a fourth part of its bulk of ether. Four and a-half drachms of the mixture in all were used from the graduated drop bottle.

PASTEURISM IN HUNGARY.

PROFESSOR HÖGYES recently presented a report to the Hungarian Academy of Sciences, embodying the statistics of the Pasteur Institute of Buda-Pesth during the third year of its existence (April 15th, 1892, to April 14th, 1893). The total number of persons treated was 647. In 12 cases the development of hydrophobia was not prevented, but 6 of these came too late for effectual treatment, and should therefore be deducted. This leaves 6 cases of death in 641 treated, a mortality of 0.93 per cent. The mortality in the first year was 1.16 per cent., and in the second 0.56 per cent., so that the average mortality for the three years was 0.91 per cent. The total number of patients treated in the three years was 1,350, the total number of inoculations having been 13,010. Experience during these three years shows that in Hungary the largest number of cases of rabies occur in June, July, and August, and the least in November. In the whole of Hungary the total number of persons who died of hydrophobia in the three years was 103; of these only 17, or 16.5 per cent., had been properly inoculated.

TUBERCULOSIS IN DOGS.

DR. ARMAINGAUD, founder of the Anti-Tuberculosis League in France, states that consumption now carries off 5 per 1,000 persons in France, or 170,000 a year. In England the mortality has fallen to 2 per 1,000. At the Protestant Congress at Havre, held to study social questions in a practical manner, Dr. Gibert said that drunkards were particularly subject to consumption. Now, the habitations of inebriates are dirty and ill-kept, and cleanliness is a great obstacle to the spread of contagious diseases. In la Cité Havraise, or mansions built for working class tenants, the mortality from consumption was very high, notwithstanding the hygienic principles according to which the architect worked. There were 5 out of 12 deaths from consumption. This

might be explained from the tenants' habit of spitting about. A woman's dress that swept the sputa of a consumptive on the stairs picked up the germs, which she inhaled in brushing the garment. Dr. Gibert was for this reason against tenement houses for the poor. The shaking of clothes and bedding from the windows and balconies was another source of contagion. The subject of dogs as a means of propagating consumption was also gone into. A report of Professor Cadiat, of the veterinary school of Alfort, shows that they must often be a vehicle for spreading it. He had long treated dogs suffering from tuberculosis for cancer, but latterly the microscope showed him what their disease was. Between March 14th and April 7th, 1893, eight dogs died at Alfort of tuberculosis. From October 1st, 1891, to August 1st, 1893, he made 9,000 *post-mortem* examinations, and had found tuberculosis to be the cause of death in 40 cases. The disease originated in the intestinal mucous membrane, because dogs ate bones picked by tuberculous patients, and licked up what they left on plates. They also kept about them if attached to them, and in this way some get affected through the lungs. If the dog was often contaminated by the human patient, he in turn spreads the disease to other human beings.

MR. JUSTICE HAWKINS AND THE SMELLS AT NOTTINGHAM.

DR. BOOBBYER, of Nottingham, told an amusing story concerning Mr. Justice Hawkins at a meeting of Midland Medical Officers of Health, recently held at the Birmingham Council House. Justice Hawkins was at Nottingham on assize business, and at night he noticed a bad smell in his bedroom at the judges' lodgings. It annoyed him, and with characteristic promptness he got up, and had the quiet slumbers of the Clerk of the Peace disturbed in order that fresh lodgings might be found for him. The incident at the time was thought amusing by all except the gentlemen who lost their sleep, but its after-consequences were serious. On examining the room the drainage arrangements were found to be about 150 years old, and owing to a defective trap a cesspool ventilated itself into the room. Until then there had been no marked instance of disease arising from this state of things, but four members of the County Council died from disease contracted when inspecting the cesspool.

MISS COBBE AND BISHOP BARRY.

MISS COBBE has, like Bishop Barry, preserved a long and judicious silence since the exposure of the methods of controversy adopted by herself and some of her chief supporters in 1892. She now comes forward again, not, however, to apologise, as she and Bishop Barry promised to do. Her object seems mainly to appeal for funds. Her first point is a "lament," for she bitterly complains against the "kindly hand of death" in that of her leaders "the noblest and wisest have passed upwards from the field, while scarcely one of our opponents in England has gone to his account." The delicate phrase by which Miss Cobbe's supporters are made to pass upwards while her opponents are dismissed to their account is noteworthy. But even here there is a little *suppressio veri*, for while it is indeed most true that many of the "noble and wise" leaders of antivivisectionism are rapidly disappearing, many have happily done so without upward passage by the process of withdrawing themselves from her company. Thus her President, the Earl of Strafford, resigned last year when Miss Cobbe and the *Nine Circles* falsities were publicly exposed; Lord Justice Lopes had his name removed from her list, it having been placed thereon without his knowledge or consent; Mr. Mundella had his name removed for a like reason; the name of the Duke of Newcastle has also disappeared. It is difficult indeed to understand how any honest man who looks into the facts can now willingly identify himself with a cause and with representatives clearly convicted of deceit. It should be noted also that after clamouring for years that scientific research must be rooted out because, among other reasons, it is cowardly immorality for patients to profit in the treatment of their diseases by the light thus thrown on them, and after saying that any woman who should in any way countenance experimental investigation was a demon having "a tiger's heart wrapped in a woman's hide," Miss Cobbe now actually suggests that vivisectors may be consulted in special cases. In other words, she counsels her followers to continue the practice of personally and secretly profiting by the benefits of science while publicly vilifying and denouncing the source of that knowledge which is the healing power on which they rely. Finally, it should be added that this last effusion of Miss Cobbe is being circulated, together with a burlesque letter signed "Ernest Bell, Chairman of Committee," also appealing for funds—a letter which falsely details alleged abominable cruelties perpetrated in an "English laboratory," and in respect to which "no anæsthesia is referred to." No one need any longer be surprised to learn that in this case Mr. E. Bell has once more constructed what he calls an "abominable cruelty" by taking a description of a dissection *of a dead dog* (made to expose the vagus nerve), and serving it up as a blood-curdling instance of mangling the sentient animal. This is a disgraceful repetition of the old tactics. How long do Bishop Barry and the Bishop of Southwell intend to countenance and promote this propagation of falsehood?

SPECTACLED SCHOOL CHILDREN.

A QUESTION frequently asked by the laity is, Why do so many children nowadays wear spectacles? The more thoughtful follow this by another query, Is the proportion of children with defective eyesight on the increase? The latter question is one which, for lack of sufficient data, cannot be accurately answered. No systematic examination of the visual acuteness of children in this country is made at school or at home. The proportion of rejections of young candidates for the army and navy and mercantile marine, in consequence of defective sight, might help towards the elucidation of this point. Comparison of the numbers in present and former days would not, however, be of much value, for the tests and the methods of testing have altered within recent years, and moreover the figures concern only the male sex. In an article in the *Atlantic Monthly Magazine*, which has excited much attention and public discussion on both sides of the Atlantic, Mr. Ernest Hart maintains that the large and increasing number of spectacled children is fully accounted for by recent advances in the knowledge, not only of the errors of refraction in the human eye, but of the means of correcting these errors by suitable lenses. Although there is some evidence that certain forms of ametropia (especially myopia) are becoming more common, there are many reasons for the belief expressed in the article referred to. For example, the parent of to-day—and if not the parent, then the school teacher—is generally alive to the fact that backwardness in a child may be due to inability to see properly. Again, the prejudice against spectacles for the young is fortunately disappearing. The medical profession, too, has learnt that anomalies of refraction and accommodation may give rise to a train of symptoms which, not many years ago, were attributed to disease of almost every organ, except the organ of vision. It is a matter of everyday experience with ophthalmic surgeons attached to large hospitals to have patients sent to them by physicians, who have suspected that headache, giddiness, sickness, etc., in otherwise healthy individuals, may own an ocular origin; in many instances these suspicions prove to be correct. At the Newcastle meeting of the British Medical Association, Mr. Williamson, in the Section of Ophthalmology, made a proposition that every person, especially the young, should undergo an ophthalmoscopic examination, and tests as to

visual acuity, and errors of refraction. Although it may be long before this suggestion can be or will be carried out, it has much to commend it, and might be accomplished without much trouble and with decided advantage at schools and other educational institutions. It would probably increase the number of spectacled children, but it would save many an ambitious child from headache and distress at his or her inability to keep pace with classmates. One word of warning in reference to school children with defective sight, which will apply as forcibly to "children of a larger growth," seems urgently called for. It is a warning against the nineteenth century optician, who tries to add to his legitimate business the prescribing of spectacles "to suit all sights," and who, after testing the eye as though it were merely an optical machine, supplies his customer with glasses, which are sometimes correct, often useless, and occasionally harmful.

THE "MYSTERIOUS MALADY" OF NAPOLEON I.

Lord Wolseley has raised again the old discussion of the malady of Napoleon, which he believes to have influenced his failures in battle. The nature of the first and last illness of Napoleon Bonaparte is well known, but the precise character of the ailments from which he suffered between those two maladies remains a little uncertain. At the siege of Toulon in 1793 he undoubtedly contracted scabies when working at a cannon with a gunner who had that loathsome disease. The hero was unskilfully treated, and seems to have suffered from scabies for several years. In Egypt (1798) he had gastric catarrh, and Dr. Cabanès asserts that he was inoculated with scabies, then believed to be a counterirritant. When Napoleon was at the height of his glory he drank coffee very freely for the avowed purpose of keeping himself awake. He admitted to Dr. Arnott his partiality for coffee at St. Helena. During the later part of his reign he was tormented with haemorrhoids, and to those morbid products the failure of the Waterloo campaign has been ascribed. They worry the strongest constitutions, and may alone account for the declining energy to which Lord Wolseley refers in his recent article. It is very doubtful whether he was constantly subject to a definite nerve lesion, as has been often asserted. Epilepsy is frequently mentioned as his special disorder, but on very doubtful grounds. That disease in its chronic form is incompatible with the psychical and physical conditions which go to make up a great military chief. Napoleon certainly died of cancer of the stomach. Surgeon Archibald Arnott, who attended him in his last illness, and made the *post-mortem* examination, published a work in which the result of the necropsy is very carefully recorded. The stomach was covered with cancerous deposit, except near its cardiac orifice. The disease was most marked at the pylorus, which adhered to the liver. The intestines were free from disease. The specimen of malignant disease of intestine shown for many years at the College of Surgeons as taken from the body of Napoleon is now known to be spurious. As cancer of the stomach kills within a year or two, the legends that he suffered from the "germs of his last illness" when in Egypt (1798) and in Russia (1812) are absurdities.

A NEW UNIVERSITY FOR LONDON.

A certain body calling itself "The General Council of Safe Medicine, Limited," has registered itself at Somerset House under the Companies Acts, and on this singular commercial basis is taking upon itself the functions of a university, and issues to certain herbalists and others a so-called "degree" of "M.D.(B.c.) London." The General Medical Council at its last meeting resolved to take steps in the matter, and we understand that, after inquiry into various alleged instances of the use of this commercial "degree" as though it were a medical qualification, legal steps are now being taken to bring a test case into the courts, and it will probably be heard before many weeks are over in a northern county. If legal forms permit the merits of the case to be tested on the essential point, we imagine that it will be possible to arrive at but one decision. The fact, however, that a company with such an object should have succeeded in getting itself registered, and thus have acquired a certain legal status, affords another instance of the inadequacy of the means at the disposal of the Board of Trade officials.

THE MEDICAL DEGREES OF THE UNIVERSITY OF LONDON.

We understand that the representations made by the General Medical Council to the Senate of the University of London were again the subject of discussion at the meeting of the latter body on January 17th. Serious defects, especially in the nature and extent of the examination in surgery at the M.B., were pointed out in the recent report of the visitor and inspector of the Council, but similar defects were pointed out by the Council in 1885, and the complaint was repeated in 1887. Nothing however has been done until quite recently, when a Committee of the Senate was appointed. It is to be hoped that the report of this Committee will not be unduly delayed. The whole matter really lies in a nutshell. Academic discussions on the plan of the medical curriculum are quite out of place. The M.B. degree is a registrable qualification, and a statutory obligation thus falls upon the Senate to see that it fulfils certain conditions. The responsible officials have reported that it does not do this in a satisfactory manner. The conclusion is obvious.

BRITISH HELP FOR SIBERIAN LEPERS.

We learn from paragraphs in the daily papers that the lady—whose *début* in the realms of "Philanthropy" was, some few years ago, duly "boomed" *secundum artem* by a sympathetic interviewer of the *Pall Mall Gazette*—is still on the war-path, and that she is again on her way to help the lepers of Siberia. Her success in collecting funds from the charitable is said to have been very great, and no doubt her quondam friends in New Zealand and Australia feel edified, and are congratulating themselves that their *protegée* has been getting on so well. We doubt, however, if her success would have been so complete if the well-intentioned persons to whom she obtained introductions had taken the trouble to make inquiries, among other things, as to the needs of lepers in various countries. It has been more than once pointed out that the lepers of Siberia number but a mere handful; that provision for their succour had already been initiated by their own Government; and that if charitable persons really wished to aid poor persons afflicted with that terrible disease, there is an enormous field for such true philanthropy in our own dominions. Even in England there are poor lepers, some of whom have contracted the complaint in the service of their country in India and the Colonies, and who are in dire want of suitable homes and of kindly care.

THE WOUNDS PRODUCED BY THE MANNLICHER BULLET.

M. Chauvel has brought before the Académie de Médecine in Paris a communication by Dr. Demosthenes, describing the effects of small bullets of the Mannlicher rifle used in the Roumanian army. These bullets are 6.5 mm. in diameter, and 31 mm. long. Their penetrating power is said to be three times as great as that of the projectiles used by other European Powers. When five dead bodies were placed behind one another at half a metre apart it was not uncommonly found that three of them were traversed by the same ball, fired at a distance of 600 metres. On soft tissues the apertures of entry and of exit are both smaller than with the older style of projectiles, and the extent of the disorganisation perhaps less. The bones, on the other hand, were never perforated regularly. In all cases, and at every dis-

tance, the fractures both of long, flat, and spongy bones were splintered and shattered with great comminution. With the older bullets the arteries were more or less torn, and from that fact there very often arose an arrest of the bleeding due to the action of the bullet itself; by the new projectiles, however, the arteries were cut cleanly. Wounds of the lungs, even when not affecting any large vessels, yet set up formidable hæmorrhages, which certainly were not produced by the old bullets. In experiments on the horse, wounds of the intestines, when the animal had recently eaten, have shown a true bursting of the viscera, but the injuries were a little less marked when the intestines were empty. It should be added that it frequently happened that the ball separated in the midst of the tissues into very small fragments, which spread on all sides, and so increased the area of destruction. When these bullets were made to traverse a box of sulphur this was not set on fire. Meeting a small obstruction did not then make them hot, and there is no burning. The range of the weapon is from 3,500 to 4,000 metres; the dangerous zone is, therefore, considerably greater than before, and the difficulty of bringing help to the wounded, and of removing them out of range, will be proportionately increased, all of which makes it necessary to strengthen the ambulance service.

THE WORLD'S FAIR MEDICAL BUREAU.

THE report of the World's Fair Medical Bureau gives the following statistics as to its work during the Fair. During the construction period, that is, until the opening of the Fair, 11,853 cases were treated, of which 5,919 were new cases, and 5,934 patients who returned for further treatment. During this period 32 deaths are reported, and 1 birth at full term. During the six months from May 1st to October 30th, 18,299 patients were treated, of whom 11,602 were new, and 6,697 cases for retreatment; 11,047 were medical and 7,252 surgical cases; 12,352 male and 1,011 female employees were treated, and 2,641 male and 2,295 female visitors received attention at the hands of the staff. The entire number of patients treated was:—In May, 2,621; in June, 2,966; in July, 3,169; in August, 3,292; in September, 2,987; and in October, 3,264. The highest daily average was on Chicago day, when 253 patients were treated; the lowest on July 23rd, when only 23 cases were seen. The highest daily average was in August (106.19), the lowest in May (84.54). There were 36 deaths, of which 4 occurred in May, 7 in June, 15 in July (this includes the loss of 13 lives at the Cold Storage Buildings fire) 3 each in August and September, and 4 in October. In May and June 4 premature births occurred, 2 in each month, and in July and August 2 children were born at full term, 1 in each month. In September and October no births took place in the Exposition. The ambulance calls numbered 3,261, which were distributed as follows:—May, 315; June, 406; July, 581; August, 564; September, 605; October, 790. The work of the ambulance service was very satisfactory, thanks largely to the careful training which Dr. Gentles had given his men.

"SPECIAL" TREATMENT.

A CASE has been reported under this head in the public papers, which (assuming the accuracy of the particulars) will illustrate some of the drawbacks of our hospital system. A baby (newly-born we suppose) is recommended by the medical attendant to be taken to the Central London Ophthalmic Hospital, and is taken there by its nurse for five consecutive days. On the last visit it is discovered by the house-surgeon to be dead—the death being due to acute inflammation of both lungs, caught probably on one of its journeys to the hospital. The nurse had met the family medical attendant on one occasion as she was taking the child to the hospital, and begged him to save her the journey and the child the exposure, by undertaking the case himself; but he declined. We have no right to give any opinion as to the way in which this gentleman exercised his discretion especially as the facts are very loosely and vaguely described. But there can be no doubt that out-patients have to run considerable risks in their journeys to hospital and in their detention in the waiting room. The case also raises another interesting point. The coroner, seeing that the infant had been at the hospital each day up to the time that it was found to be dead, not unnaturally inquired whether any attention had been paid to its general condition, and was answered in the negative, as the hospital officer (described in the report as the house-surgeon) said he had to pay attention only to the child's eyes. This is carrying specialism rather too far. We have no wish to blame any person for an oversight which may be perfectly susceptible of explanation, but it is surely a caricature of medical advice to be prescribing some eye lotion for a child dying of pneumonia. The fact is obvious enough that much improvement is absolutely necessary in the way in which out-patients are seen, and that one of the most important elements of such improvement would be to allow a reasonable time to each patient.

THE PREVALENCE AND DISTRIBUTION OF VESICAL CALCULUS IN AUSTRALIA.

DR. J. B. NASH has recently published in the *Australasian Medical Gazette* the results of inquiries made during the past fourteen years on the prevalence of stone in the bladder in different parts of Australia. The tables on which this paper is based seem to indicate that stone is not a common affection in the Antipodes. These tables, however, are not very satisfactory, as many of the circulars sent out to the 182 hospitals in Australia and Tasmania remained unanswered at the time the paper was written. From New South Wales, for instance, where there are 80 hospitals, only 35 replies were received, and from 11 only of the 38 hospitals of Queensland was the required information obtained. Stone in the bladder, it is concluded, is met with over all parts of the Australian colonies, and there is an area in Victoria, in the neighbourhood of Sandhurst, Castlemaine, Kyneton, and Ballarat, in which this affection is especially frequent. It is most frequent in Victoria, where 18.75 cases are treated per annum, or 1 to 29,380.58 of the male population, and least frequent in South Australia, where 2.25 cases are treated per annum, or 1 to 75,424 of the males. In the treatment of stone in the bladder cutting operations are more favoured by Australian surgeons than lithotrity. Of 153 cases of operation, lithotrity was performed in 26, whilst perineal lithotomy was performed in 65 and suprapubic lithotomy in 62. Dr. Nash, whilst recognising the great advantages of the crushing operation—its low death-rate and the rapidity of recovery—points out that lithotrity has its disadvantages in Colonial practice. These disadvantages are: the trouble in obtaining reliable and suitable instruments where the demand for them is not great, and the difficulty of the operation in the hands of surgeons who only at wide intervals have the opportunity of practising the operation. It is to be hoped that with energy and perseverance lithotrity may find a wider scope and increased favour in Australia, for the mortality from the operation of suprapubic lithotomy which is so frequently performed there is high, being, according to Dr. Nash's tables, at least 5 per cent. in children and 18.18 per cent. in adults.

REPORT ON THE MENTAL AND PHYSICAL CONDITIONS OF CHILDREN.

A REPORT on the mental and physical condition of 50,000 children was prepared by Dr. Francis Warner, for the British Medical Association, in 1892, abstracts of which appeared in his Milroy Lectures and in various papers read before scientific bodies. The full report, with thirty-five statistical papers and a well arranged explanatory text, has now been published by the American Bureau of Education.

as a contribution of 137 pages in their Year Book. This is the first scientific investigation of the kind that has been made, and forms an important contribution to the study of abnormal children. A mass of detailed information has been arranged, bearing on many pathological questions, and the careful analysis made of the separate condition whose aggregate makes the child abnormal, already points the way to some means of improvement of the child population. Many social and educational questions are discussed in the light of observations recorded. In the clinical investigation of development in relation to brain, mental action, and nutrition, statistics showing the relative frequency and distribution of certain physical conditions among school children are necessary for finding out the causes of such abnormalities. This, as in all other investigations, is the first rational step towards prevention. Our only regret is that valuable work done in England should not have been published by our own Government. It is satisfactory to know that the work is being continued by a committee whose office is at Parkes Museum; we hope they will issue an English report in due course.

NURSING AT THE HATFIELD WORKHOUSE.

The little quarrel which seems at present to exist between the Hatfield guardians and Dr. Lovell Drage, their deputy medical officer, tends, as all official differences do, to drift off into side issues; but the real point, and the only point of more than personal interest, is as to whether the sick in the workhouse infirmary shall have the benefit of proper nursing or not. It would appear that there had long been trouble in the nursing department, and that on the death of the late master the occasion seemed to Dr. Drage an appropriate one for the introduction of a better system. Nor does it seem that on that point the guardians differed from him so far as theory was concerned, for in a letter from the clerk to the Local Government Board it is stated that "the guardians were unanimously of the opinion (endorsed by the medical officer) that it would be desirable that the matron should be an efficient nurse, and the candidates were so informed." The real practical difference arose as to what is meant by an efficient nurse. Dr. Drage wishes to see the sick in charge of a trained nurse, knowing by experience the difficulty, the danger, and the injustice to the sick involved in the attempt to do skilled work with unskilled labour. The guardians, however, though indignantly denying that they were any less anxious for the welfare of the inmates, seemed to go on the old-fashioned idea that training is a superfluity in such simple work as nursing, and appointed as matron a person who, however estimable she may be, is not a trained nurse. Perhaps their action was due to parsimony, perhaps to ignorance, may be to both; but at any rate Dr. Drage did perfectly right in at once drawing the attention of the Local Government Board to the whole matter. Hatfield has a separate workhouse infirmary with thirty-four sick beds, and although it probably is true enough that often only a small number of these beds are occupied, that makes the lot of those who are deprived of the benefit of skilled nursing none the less hard; and Dr. Drage's remark anent the frequency of bedsores gives ominous emphasis to this fact. The advice given by their medical officers to the guardians is that a competent and well-trained nurse should be engaged, that she should be allowed one nurse at least under her, and that the head nurse should be responsible to the medical officer and the board, but not to the matron in so far as the duties of her office are concerned. This is advice which we can heartily endorse, and which certainly falls in with the general policy lately adopted by the Local Government Board.

INDIAN PRISONS.

The Howard Association has, very properly, concerned itself with the condition, sanitary and otherwise, of Indian gaols. The mortality of these institutions 30.19 per 1,000 by the latest returns for the whole of India is no doubt, judged by English standards, appalling; but, as has been pointed out, there is no accurate record in existence of the real death-rate of the general population of India with which to compare it. So of the other matters broached by the Howard Association the selection of warders, the separation and classification of prisoners, the giving of money aid to discharged convicts, and the value of native public opinion on prison questions. The same article very reasonably contends that these things must be viewed from Indian and not English standpoints. The industrial, social, religious, and domestic habits of life and thought of the native of Hindustan differ *toto cælo* from those met with in any other part of the world; and prison management must depend upon knowledge and experience gained in India. That such knowledge and experience are being diligently and thoughtfully sought and utilised is beyond all question or doubt.

OUTBREAK OF TYPHUS AT THURSO.

A deplorable outbreak of typhus fever has taken place in Thurso, which has caused the death of a hospital nurse and has placed Dr. Asher in grave danger. There are at present about 15 cases in the town—a large number in a town of its size. The Burnside Hospital, which has only four beds, is quite inadequate for the treatment of the cases. The Thurso Commissioners and the county council have at last realised the danger, and have agreed to build with all speed a temporary hospital with twenty-four beds. It is to be hoped that no delay may take place in the somewhat slow executive machinery, otherwise a big epidemic may overtake the town with wide and fatal results. As it is, of three nurses who have already been sent from Aberdeen, one died and one had to return ill, while Dr. Asher is now lying ill of the fever, which he contracted in the unsparing and faithful discharge of his duties.

CHOLERA AND FISH.

We have received an interesting report of an outbreak of cholera in St. Petersburg, which is assumed to be due to the consumption of fish contaminated with cholera bacilli from infected water. At an orphans' institute, with the commencement of the fast a rapidly spreading epidemic appeared, which within a week attacked almost all the inmates, six out of 200 inmates remaining in good health. Although we are not in possession of all the facts, the appearance of the epidemic, or rather the increase of cholera synchronously with the commencement of the fast, would lead us to suspect the fish. Sporadic cases have occurred in England this summer at various centres where previously no cases of cholera have existed, while Grimsby was the chief centre of cholera. Some of these cases have been explained as being due to infection through contaminated fish, and no doubt the assumption is reasonable enough, and it gains some interest, if not actual confirmation, from the recent exacerbation of cholera in St. Petersburg. The latter outbreak, like last winter's epidemic in Nietleben, shows how resistant the cholera bacilli are to cold, a fact which experimentally has also been shown by Professor Uffelmann.

A NEW PHASE OF QUACKERY.

A correspondent sends further illustrations of the system to which attention was directed some weeks ago. Two advertisements appear in the *Scotsman* newspaper recommending cures for influenza and piles. One of them bears the name of a wholesale drug house in Edinburgh, and the other that of a registered chemist and druggist in a leading thoroughfare of that city. Our correspondent remarks that when chemists advertise in that manner it is not surprising that members of the medical profession think they exceed their proper function. Another correspondent sends a printed handbill purporting to be issued by a chemist in

Oldham, and having the heading in large type: "Physicians Prescriptions; Professional Remedies at Reasonable Prices." Under numbers the names of a dozen eminent physicians are given, with a statement of the various diseases for which the prescriptions are offered at the rate of one shilling per bottle. It is stated that these medicines have given relief to thousands of sufferers, and that they are preferable to the quack medicines of the day. This is obviously a most objectionable proceeding, to say the least, and it is calculated to cast discredit upon the pharmaceutical body. The practice of giving to friends copies of prescriptions is sufficiently objectionable, but if those who are entrusted with the dispensing of prescriptions take to making a trade of them in the manner indicated by the handbill now referred to, caution will have to be exercised to avoid those who lend themselves to such a practice.

THE COUNCIL AND THE FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

On another page will be found the report of the last meeting of the Council of the Royal College of Surgeons, in which a good deal of information is contained of interest to the Fellows of the College. In the first place, it will be seen that the Council has adopted the recommendations of its Committee with reference to the rules regulating the meetings of the Fellows. These rules are ten in number, and cannot be said to be wanting in comprehensiveness. Indeed, the simplest detail has received attention, and nothing seems to have been overlooked by the framers in the effort to safeguard the interests of the Council, while apparently granting a concession to the Fellows. The future only can show of what use to the Fellows these meetings regulated by these new rules will prove to be. It was never intended by the Council that any of the regulations respecting the meetings should go beyond the existing charter and by-laws, consequently it is quite easy to understand the full force of the clause which runs to the effect that "those meetings shall be for consultative purposes only, and can have no official or corporate character or efficacy." So far, therefore, as this matter is concerned, the Fellows are no better off than they were before. The power wielded by the Council is not one atom the less by reason of this "concession" granted to the Fellows, and the power of the Fellows is not one atom the greater. But the point, probably, which will strike the Fellows most in these new rules, is the number which has been fixed for the quorum of the meetings. "The quorum of each meeting," says clause 8, "shall be thirty; and if at the expiration of fifteen minutes from the hour for which the meeting has been summoned a quorum be not present, the meeting shall not take place. If after the commencement of the meeting it shall be found upon a count that a quorum be not present, the meeting shall be dissolved." Why the large number of thirty should have been determined upon it seems impossible to understand. Surely not more than fifteen would have been ample for the purpose. It is true that the members of the Council number twenty-four, and would be most likely to attend the meetings, but how easy it would be for them purposely to absent themselves, and thus imperil the holding of any particular meeting. Upon the whole, then, in reflecting upon these new regulations, it is evident that the Council might have done more for the Fellows, and yet have kept within the legal confines of the charter and by-laws.

THE MEDICAL CABBALA.

A recent writer has asked how much faith is concerned with therapeutics, and how much therapeutic means may lose if the associated faith vanish. He very fairly points out, not only that medicine took its rise in incantations, spells, precious balms, and other mysteriously blessed agents, but that no little of their quality has hung about the practice of medicine in more rational times, and is not yet wholly dispersed in legitimate circles, while it flourishes banefully among charlatans and faith-healers of all sorts in our own day. Some are disposed to regret the disappearance of the dog-latin phrases from our prescriptions, which have a potent effect upon the common imagination, and it would still have a prescription duly built upon the fourfold lines of Remedium, Corrigens, Adjuvans, and Menstruum; and so forth. Let not our prescriptions be readable by him that runs, for they will thus lose their ascendency over the patient. Again, we are truly told that an imposing manner and an effective way of putting things are invaluable aids to therapeutic success; and that no practitioner is less successful than the merely scientific and sceptical physician. Are we not, by our one drug and water prescriptions, and our formulas in the vulgar tongue, throwing away a legitimate means of doing good, or are we gaining in honesty what we are losing in impressiveness? Are we leaving our patients too cold to get up steam for their progress to health? It must be remembered that the "age of faith" is ending not for medicine only. The new order of things is advancing all along the line, and our ceremonial rags are getting as tattered and few as the rags of Ulysses; they are rather against us than for us. When the spirit has fled it is of no use to cling to the form; we must rather seek to endue ourselves with a change of modern raiment. While we fully agree that patients are to be impressed and "enthused" as well as convinced, yet we believe this must be done by new methods. Dog-Latin, like other dogs, has had its day; elaborate potions have had their day; oracular nods and airs of wisdom have had their day, yet patients will not thrive on cold advice; we must treat mind as well as body, whatever our reforms. To us it seems that the new "impression" is to be that of hope rather than faith. The patient must find in his physician "a good fighter," and learn to rely on his foresight rather than upon his divinations. A climber bent on a difficult ascent will start in better heart with Melchior Anderegg and a Dufour map than if he had the Veiled Prophet himself before him on the way.

THE SANITATION OF THE CUTLERY AND FILE TRADES.

Dr. Sinclair White, in a recent lecture at the Sanitary Institute, passed in review the special risks to health to which the workmen are exposed in the cutlery and file trades. Dry grinders are employed chiefly in grinding forks, gimlets, needles, etc. Before the introduction of fans for carrying away the dust of stone and steel, it was a cause of very excessive mortality, producing what is known as grinders' phthisis. Wet grinding employs a much larger number of men in Sheffield. In this process the grinding stones are constantly throwing off water, which soddens the floor and saturates the air of the grinding room. To this dampness, combined with the stooping, constrained posture usually assumed during grinding, and the lack of ventilation in the grinding room, must be ascribed the appalling mortality of grinders from phthisis and other lung diseases. The process of smoothing down, or "racing the stone," received in its rough condition from the quarry, is a large cause of dust, while the breaking up of the grinding stone is a common cause of injury and death. It is more generally the work in inferior material that is detrimental. Thus hafts in ivory and tortoiseshell work are generally smoothed by a file, with little dust; while common knife handles are shaped on an emery wheel, known as a "cutler's glazer," which produces clouds of dust. The introduction of the glazer has increased the unhealthiness of glazers as a class. The greater number of files are still hand made, though the use of machines for their manufacture is increasing. A block of lead is found indispensable as a firm bed, to place beneath the file, when using a chisel and hammer to produce the teeth of the file. With each stroke of the hammer a cloud of dust containing much lead rises. The effects of

lead poisoning are much slower in development in some workmen than in others, even with equal degrees of carelessness as to precautionary measures. Machine cutting of files appears to produce lead poisoning rarely. It is the opinion of Dr. White that the Legislature will have to fix on the individual who lets off rooms and power to workmen the responsibility for carrying out the provisions of the Factory Acts, in order to ensure the provision of efficient dust preventing machinery and its continued operation. The Factory Act of 1891 is defective in not making it obligatory on local authorities to provide efficient inspectors for workshops.

LEAD POISONING: A SUGGESTION.

On January 15th, at the Poplar Town Hall, Mr. Wynne E. Baxter, coroner, held an inquiry with reference to the death of Matilda Ashwell, aged 38. She had been working on and off at the Millwall Lead Works since August. On January 5th she was seized with slight fits. Dr. Debenham attended her till death, which occurred on January 11th. Dr. F. J. Smith, Lecturer on Forensic Medicine at the London Hospital, deposed that he had made a *post-mortem* examination, and found that death was due to cardiac failure and pulmonary œdema. The Coroner said that Dr. Debenham had pointed out to him a matter of some importance with regard to cases of lead poisoning. As medical officer of the works, Dr. Debenham found a great difficulty in getting at the facts in time, and he suggested that it was advisable to make it compulsory on all medical men to report any case of lead poisoning, just as they had to report all cases of infectious disease to some local authority. By that means skilled attendance would be immediately forthcoming. As matters stood at present, persons suffering from lead poisoning avoided the medical officer at the works, as he would prevent their further attendance at work until they were cured. Mr. A. P. Vaughan, Factory Inspector from the Home Office, said he thought the suggestion a very good one. The jury returned a verdict of "Natural Death," and, at the coroner's suggestion, added the following rider: "The jury desire the coroner to suggest to Her Majesty's Government that provision should be made compelling all medical men to report all cases of lead poisoning to some central or local authority, to prevent those suffering from lead poisoning avoiding examination by the medical officer of the works before continuing their occupation."

UNSOUND FOOD.

How necessary a careful and stringent supervision of food offered for sale is may be gathered from the fact that a few days ago the inspector of slaughter houses and meat discovered in the Central Poultry Market a number of turkeys of such uncommonly strong odour as to bring him to a standstill—to borrow the expression used by the *Pall Mall Gazette*. Four hundred and seventy-two birds were seized as being "a bit queer," or, to use the proper language, as being in a more or less advanced state of decomposition. These turkeys had come from Canada, and on arrival were known not to be fresh. It has also been pointed out that during the past Christmas season dealers in the poorer parts of London have disposed of delicacies (*sit venia verbo*) of this putrid description, and have done so without much difficulty. We have repeatedly pointed out that the poorer classes may easily be tempted to buy bad meat at a low price, and it is easy to convince ourselves that in the lower parts of large towns unsound meat is constantly offered for sale, without such fraud being detected or brought home to the offering salesman. Meat and food inspection is not carried out with sufficient rigour, and we are far behind Germany in this respect, where the large slaughter houses possess a skilled and large staff of inspectors. The inadequacy of our English system cannot be questioned. Butchers will take their meat to places where the inspectors are criminally lenient. Thus it has repeatedly occurred that meat condemned by the authorities of Birkenhead has been passed by those of Liverpool; and recently a carcass condemned in the latter city by skilled pathologists was pronounced to be sound food for human consumption by an ignorant or foolish inspector. The strictest supervision, moreover, should be exercised over imported meat or food. Reform is necessary in all directions, if we wish to protect the public health, and guard the poor classes against the temptation of buying food which only too often has death plainly written on it.

A DANTESQUE REGION.

The large audience attracted to the meeting of the Royal Meteorological Society on January 17th to hear the valedictory address of the retiring President, Dr. Theodore Williams, on the climate of Southern California, was first subjected to the dreary formalities of an annual meeting—report of Council, election of officers, votes of thanks, and so on. The recital of such domestic details as that the Society had five more Fellows on its roll, and some £26 more at its bankers' this year than last, occupied nearly an hour, but those who sat through this wearisome prelude were rewarded by listening to a most interesting address, thoroughly practical and well illustrated by photographic lantern slides. It dealt with a region, the physical and climatic features of which are little known in this country. After describing the entrance into California by Utah and Nevada, and sketching the horrors of the arid eastern part of Southern California, with its Death Valley, said to be the hottest and driest place on earth, surpassing even the Sahara in these qualities, Dr. Williams stated that the western portion between the Sierras and the sea possessed a climate presenting certain valuable qualities. Its characters were determined by the influence of the Pacific Ocean, and especially of the Kuro Siwo current, which plays in the Pacific a part similar to that of the Gulf Stream in the Atlantic, and by the protection afforded from northerly and easterly winds by mountains which also condensed the moist vapour-laden winds from the ocean. Particulars were given of the temperature and rainfall of Los Angeles, San Diego, Santa Barbara, and Riverside; and the general appearance and vegetation of these places were shown by lantern slides. Very enchanting were some of these views, and the contrast which their luxuriant gardens presented to the arid wastes out of which they had been created by irrigation was very striking. Oranges and lemons are the principal crops, wine is an important product, pine apples, almonds, olives, apricots flourish, and even the date palm fruits. Strawberries ripen all the year round and can be had in quantity at all seasons of the year except midsummer. The climate was described as warm and temperate, equable on the whole, moister than Colorado, and as one which permitted out-of-door life all the year round. Its chief drawbacks appear to be two: the frequent blowing up from the Pacific of cold fogs, which, however, last only a few hours or minutes, and the existence of mountain cog-wheel railways, which must tempt invalids to go aloft from the warm summer of the lower regions to wade in the snow drifts of the mountain heights. Prudent invalids, however, Dr. Williams averred, have regained vigour and health, and secured a competence at the same time, in the sunny atmosphere of Southern California.

Dr. W. Gibson Bott has been appointed by the Lord Chancellor to the Commission of the Peace for the county of London.

Medical Magistrate. Mr. John Ringwood, L.R.C.P., L.R.C.S.I., of Kells, has been appointed to the Commission of the Peace for the county of Meath.

Congress of French Alienists. The fifth French Congress of Alienists and Neurologists will be held at Clermont-Ferrand from August 6th to 11th, 1894. The following are the subjects down for discussion: 1, Relations between Hysteria and Insanity; 2, Peripheral Neuritis; 3, Assistance and Legislation relative to Inebriates.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1894. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on April 11th, July 11th, and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, March 22nd, June 21st, and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. FRANCIS FOWKE, *General Secretary.*

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the Office.

BRANCH MEETINGS TO BE HELD.

OXFORD AND DISTRICT BRANCH.—The next meeting of the Branch will be held on Friday, January 26th, in the University Museum, Oxford, at 3.15 P.M. Professor Victor Horsley, F.R.S., has kindly consented to deliver an address on Diseases of the Middle Ear, and will illustrate it by lantern slides. Notices of motions, etc., should be sent to the Honorary Secretary, W. LEWIS MORGAN, 37, Broad Street, Oxford, on or before January 16th.

EDINBURGH, STIRLING, KINROSS, AND CLACKMANNAN AND BORDER COUNTIES BRANCHES.—A combined meeting of the above Branches will be held at Edinburgh on Friday, February 2nd. A medical congress of the members will take place in the University Surgical Theatre, Royal Infirmary, at 4 P.M., when a variety of patients, specimens, apparatus, etc., will be exhibited and discussed. Thereafter the members and their friends will dine together in the Waterloo Hotel, at 6.30 P.M., the president of the Edinburgh Branch, Professor Annandale, in the chair. Further information will be obtained from the Honorary Secretaries of the respective Branches.—R. W. PHILIP, 4, Melville Crescent, Edinburgh; C. T. LEWIS, Glebe Crescent, Stirling; and JAS. ALTHAM, Birbeck House, Penrith.

NORTH OF IRELAND BRANCH.—The winter meeting will be held in the Museum, College Square North, Belfast, on Thursday, January 25th, at 4 P.M. Gentlemen who wish to read papers, show patients, or bring any other business before the meeting, will kindly communicate as early as convenient with JOHN CAMPBELL, M.D., F.R.C.S., Honorary Secretary, 21, Great Victoria Street, Belfast.

DUBLIN BRANCH.—The annual meeting of this Branch will be held on Thursday, February 1st (by kind permission of the President and Fellows), in the Hall of the Royal College of Physicians; and at 7.30 P.M. on the same evening, in the College, the annual dinner.—JOHN MOLONY, Honorary Secretary, St. Patrick's Hospital, James's Street, Dublin.

METROPOLITAN COUNTIES BRANCH: WEST MIDDLESEX DISTRICT.—The next meeting of the above District will be held on Wednesday, January 31st, at 8.30 P.M., at St. Mary's Hospital, Praed Street, Paddington. Dr. Montagu Handfield-Jones will read a paper on "The Diagnosis between Puerperal Peritonitis and the Morbid Condition due to Drain Poisons." All members of the profession cordially invited.—H. McD. PHILLPOTTS, Honorary Secretary, "Nuthurst," Ealing, W.

MEDICAL MARTYRS IN CUBA. The Academy of Sciences of Havana has placed over the door of the room in which it holds its meetings a memorial stone bearing the following inscription: La Academia de Ciencias a las Victimas de su Deber [The Academy of Sciences to the Victims of Duty].—Dr. C. G. Salazar, difteria (1861); Dr. A. Hernández Hevià, difteria (1861); Dr. M. Tagle, difteria (1864); Dr. M. J. Presas, difteria (1874); Dr. A. Arango, difteria (1883); Dr. P. Fernández Díaz, muermo (glanders) (1889).

SPECIAL CORRESPONDENCE.

PARIS.

Importation of Anthrax from China.—Murderous Attack on Dr. de la Tourette.—The Hôpital Boucicaut.—Honours to Medical Men.—Death of Dr. Quinquaud.—The Charcot Memorial.

AT a recent meeting of the Academy of Medicine M. Proust reminded his listeners that M. Chauveau some years ago suspected goat skins imported from China of being the origin of malignant pustule. A case of malignant pustule recently treated at the Hôtel Dieu seems to confirm this supposition. On examining the skins it was demonstrated that they contained the dermestes vulpinus in two stages of development. The bodies of these insects and their excrement contained the bacillus anthracis. Guinea-pigs inoculated with a maceration of these insects reduced to powder, or with their excrement treated in the same way, died from charbon. M. Proust proposes that, in the workshops where these skins are preserved, the workpeople should be directed to wear gloves and a mask made of india-rubber; that the skins be removed from place to place in a wheelbarrow; the face and hands should be washed with an antiseptic solution: before leaving the workshop clothes should be changed; the slightest scratch should be attended to immediately. If the countries from which the skins are exported refuse to adopt sanitary measures the skins must be prohibited.

According to some daily papers, Madame Kaempfer attacked Dr. Gilles de la Tourette because it was suggested to her by someone who owes Dr. Gilles de la Tourette a grudge. Evidently this theory shows ignorance of the facts and of the medical side of the question. Madame Kaempfer may be classed among the insane who, believing themselves to be pursued by the "police," "priests," "freemasons," etc., shout at influential people, frequently political personages, without any personal hatred. Her delirious talk about "*hypnotiseurs*" had no real foundation beyond that of her disordered mind. The *Journal des Connaissances Médicales* wisely observes: "Nevertheless, there is a lesson to be learned from this sad affair, which is that there is a real danger in extending the practice of hypnotism in the extra-scientific world."

The Hôpital Boucicaut will soon be in actual existence. M. Legros's plan has been accepted in preference to those of other competitors. The cost of the building will be £40,000. The hospital will consist of eight pavilions completely isolated from each other. A maternity department of 24 beds will be attached. Sixteen rooms will be reserved for the employees of the Bon Marché. The out-patient department will be really a dispensary. All the different buildings will be connected by underground passages. The site is 9,000 mètres larger than that of the Hôtel Dieu. It is bounded by the Rues de Vouillé, des Cevennes, de Lourmel, and Lacordaire.

The complete list of medical and scientific men in Paris and the provinces named Chevaliers de la Legion d'Honneur amounts to twenty-two. Among them we see Dr. Galippe, who is well known for his researches on copper salts, and the development and pathology of teeth. Dr. Dumas, the distinguished surgeon at the Bordeaux Medical Faculty, is promoted to the grade of officer. Dr. Millard, of the Beaugon Hospital, Paris, has received the same honour.

The medical world has sustained another severe loss by the death of Dr. Quinquaud, who died on January 9th, after two days' illness, from influenza. Dr. Quinquaud was one of the few medical men, if not the only one in Paris, who successfully solved the problem of reconciling the practice of medicine with laboratory research. As a pure scientist he ranks among the greatest; as a dermatologist he was sound in diagnosis and successful in treatment. In 1883 he became *agrégé* of the Medical Faculty. In 1891 he was elected by a considerable majority member of the Paris Academy of Medicine in the physiological and chemical section. The Institut awarded him the Prix Barlier and the Prix Montyon for experimental physiology, and the Academy of Medicine the Prix Beugnet. It is impossible to cite all his numerous publications on biological chemistry, physics,

pathological anatomy, pathology, experimental pathology, normal and pathological physiology, hygiene, toxicology, and clinical therapeutics. Most of them were of a high order of merit. Dr. Quinquaud was a Knight of the Legion d'Honneur, physician at the St. Louis Hospital, and editor of the *Medecine Scientifique*.

The sum of £128 has been collected by the *Progrès Médical* towards Charcot's monument.

MANCHESTER.

Death of Professor Marshall.—Medical Officer of Health.—Manchester Medical Society.

QUITE a gloom has been cast upon the reopening of the session after the Christmas recess by the untimely end and tragic fate of Professor Milnes Marshall. Students and colleagues alike deplore his loss, which will be felt, not only by the College, but also by the Victoria University, in which he took so lively and eager an interest. The extension movement in this University owed much to his firm, vigorous, and consistent support. As to who shall succeed him in the Chair of Zoology that is a difficult question. We believe that the Council will duly advertise the post as vacant, and invite applications, and that ample time will be given for candidates to apply. Meantime the work of the department will be conducted by Professor Marshall's assistant and friend, Mr. H. Hurst.

At last the city fathers have decided to offer something approaching an adequate remuneration to the medical officer of health. Not without much debate and several narrow divisions in the City Council has the annual stipend been fixed at £850. A very earnest attempt was made to make it considerably less.

At the recent annual meeting of the Manchester Medical Society the annual report was submitted, and from it we learn that the number of members on the roll is 268. The library has been increased during the year by 283, which figure includes 8 periodicals, the total number of volumes in the library being 36,000. The expenditure was £485. Dr. Dixon-Mann was elected President, and Drs. Owen, Railton, Sinclair, and Yeats, Vice-Presidents; Dr. Glascott, Treasurer; and Mr. Coates, Secretary.

CORRESPONDENCE.

A GIGANTIC MEDICAL ABUSE.

SIR,—The abuse of the hospitals out-patient department is an evil so gigantic that the tendency is to regard it, like certain glaring defects of our social system, as necessary, in the sense of being unavoidable, ignoring the fact that the abuse in question could never have attained its present dimensions had the general body of medical practitioners early realised its importance and taken concerted steps to check its further development.

The remedy remains in the hands of those who suffer most from the unfair competition of hospitals, and it is idle to appeal to the public or to the hospital authorities to modify a system which, if it be detrimental alike to the interests of the profession and of true charity, has much to recommend it from an official's point of view.

It is needless to "tinker" at an abuse of such magnitude. Nothing short of radical measures will suffice to place outside practitioners on a fair footing, and, judging from the general tenour of the frequently renewed and voluminous correspondence on the subject, the only reliable plan will be to put a stop once and for all to indiscriminate medical relief. The maxim for hospitals should be "*de minimis non curat medicina*." At present it is conceded on all hands that the great majority of patients applying for advice are suffering from simple ailments, the treatment of which calls for no special skill or ability. The result is that the out-patient department is crowded to suffocation by a large and increasing number of persons with trifling ailments, and the physician, overwhelmed by the host, has to gallop through his "cases" as best, but above all as quickly, as he can. The remedy I would suggest (though I claim no originality) would be to admit to the out-patient department only patients whose cases are certified by some medical authority or medical man to require special consideration. The general practitioner would thus be enabled to obtain a higher opinion on such of his private club or dispensary patients as he might think necessary.

The first thing is to discuss and decide upon the appropriate remedy, the next is to enforce it. Nothing is easier than this if only the aggrieved persons will co-operate. District committees might be formed, who would frame remonstrances addressed to the medical officers of particular institutions individually, calling attention to whatever was complained of, and asking for their assistance in putting matters right. Failing compliance with the terms of the memorial, it would be open to the signatories to boycott the medical officers of hospitals who declined to act in the general interest. Few, I imagine, would be found to resist such pressure, the more so because many of them are fully alive to the mischievous nature of the system of which they form parts, and would be glad of a valid pretext to assist in inaugurating a better era for their struggling brethren. I am, etc.,

A. S. V. G.

SIR,—Referring to that part of Dr. Rushton Parker's letter that deals with the abuse made by "well-to-do patients" in "seeking pauper relief," I think it only right to mention that we should not be unmindful of that class of patients who are "well-to-do," it is true as regards birth, position, and education, but are not by any means "well-to-do" in a financial sense.

Have not all of us, at one time or another, come across cases of ladies suffering from some chronic complaint, who, either on account of the unsuccessful treatment of their own medical practitioner, or their unwillingness to contract long bills, they are unable to meet, or yet again on account of their inability to pay (to them) heavy fees of a consulting physician or surgeon, have been obliged to get the specialist's advice they so hungered after, by mingling with the unsophisticated crowd at one of our general or special hospitals in London?

If a lady such as I cite be suffering from, let us say, psoriasis, and has been under the care of a local practitioner for many months without any improvement having taken place in her skin, what more natural thing is it for her than to seek the London specialist? His name is a magic word in the provinces. She at first feels the impossibility of getting his advice and treatment owing to her limited means, until it is suggested to her that she could see the doctor in question free of expense by going to the out-patient department of a certain hospital. The idea at first is revolting to her owing to her modesty and sense of independence; but at length her repugnance is overcome by her greater desire to become cured of her disease. If she live at a village some distance from London, she may be able to defray her travelling expenses to that capital but unable to pay the consultant's fees in addition to this.

Summing up, then, we are enabled to note how it is that at times we are enabled to note how it is that at times persons of education and respectability belonging to the middle class of society are found in the out-patient department of many of our London hospitals. First, the local practitioner may be not sufficiently skilled in the treatment of certain diseases that require special study, such as the skin, the throat, the ear, and the eye. Secondly, the patient may be sufficiently well off to meet certain travelling expenses that may be necessary to convey him or her to London but not have sufficient means to attend continually, week by week, a consulting room at Wimpole Street or Cavendish Square.—I am, etc.,

Ealing, Jan. 15th. T. WILSON PARRY, M.A.Cantab., etc.

SIR,—I have had my attention called to a letter in the BRITISH MEDICAL JOURNAL of January 6th, headed a "Gigantic Medical Abuse," and I trust you will kindly insert a line from myself, as chairman of this hospital, to

assure your readers that the Committee of Management have always endeavoured to prevent the abuse of the charity, and have now for some time had in daily attendance an inquiry officer (lately connected with the Charity Organisation Society), who has within the last four months refused the applications of nearly 100 persons. Of course one case may inadvertently escape him now and then amongst the very large clinic that are received here; but everything is done to prevent abuse of the charity.—I am, etc.,

CHARLES GORDON,
Chairman.

Royal London Ophthalmic Hospital, Moorfields, E.C., Jan. 16th.

THE PENSION FUND OF THE ROYAL MEDICAL BENEVOLENT COLLEGE.

SIR,—Under the will of the late Mr. Pugh, the Royal Medical Benevolent College has received £10,000 "to create pensioners without residence." This generous bequest in favour of the principle the Council advocate of giving larger pensions in place of residence within the College will encourage the governing body to persevere in their efforts to carry out this larger charity, and it is hoped that the example of the late Mr. Pugh and the large gift of Mr. Wakley (£1,000) will animate others to assist in this most important work—beneficial alike to the pensioners and to the College. The Council propose to create a certain number of Pugh Pensionerships of £30 a year each, to be balloted for at the next annual election. The liabilities of the Council to the existing pensioners will not be altered, but new pensions will be created and provided for out of the proceeds of this splendid legacy. The benevolent work of the College will be thereby proportionately enlarged.—I am, etc.,

Gloucester Place, W., Jan. 11th. C. HOLMAN, Treasurer.

BISHOP BARRY AND *THE NINE CIRCLES*.

SIR,—I would not for a moment yield place to Bishop Barry in desiring to put a restriction on all needless suffering inflicted on animals, but it seems to me one of the saddest spectacles of modern times to see such men as he and Archdeacon Wilberforce linking themselves with untruth, and denouncing men who are doing more a thousandfold than they ever could do for the relief of suffering humanity, which in their view apparently is *nil*, but also of the brute world, millions of which have been saved from virulent disease. As teachers of truth one would have thought it would have been their first object to dissociate themselves from its opposite. When the archdeacon so eloquently denounced doctors as "human devils," had he forgotten that Beelzebub was the Father of Lies?" Has one ever heard of these two dignitaries denouncing as "human devils" those who for sport, not science, "vivisect" hundreds of birds and animals on the days of big battues, which die in torture through the night, and are picked up next day? Has this reflection ever destroyed their appetite for a savoury roast? If they have not denounced the practice, why not?

But, Sir, there is even a sadder spectacle than that presented by these two. The Lord Chief Justice has withdrawn his name from the Society for Promoting Christian Knowledge because, as he alleges, they have determined to "support vivisection" by not withdrawing Professor Frankland's admirable book, *Our Secret Friends and Foes*, from circulation. It would have been an eternal disgrace to them if they had. One would like to know where Lord Coleridge finds ground for his untrue assertion, which only shows how "passion and prejudice" may warp even the judicial (!) mind.

Even Archdeacon Wilberforce's denunciation is "mellow bathos matched with this."—I am, etc., NINE CIRCLES.

EXECUTORS AND PRESCRIPTIONS.

SIR,—The late Sir Morell Mackenzie appears to be not altogether fortunate both in his executors and in his successors. A certain Mrs. Longshore Potts and a Dr. Harrison, of no uncertain notoriety, are announcing that they have taken his house for a time, but it is understood that the real lessees are the Royal British Nurses' Association, of which H.R.H. Princess Christian is President. One can only think that it has been by some extraordinary inadvertence that the Association could have sublet a portion of their premises to these tenants. As for the late Sir Morell Mackenzie's executors, the following advertisement, which appears to be sent out by a druggist of Barrow-in-Furness round his medicine bottles, speaks for itself:

SIR MORELL MACKENZIE.
The Great Specialist on
THROAT AND LUNG COMPLAINTS.

SIR MORELL MACKENZIE was the most distinguished physician of his age. Many valuable lives were saved, and in numbers of the worst cases life was prolonged under his skilful treatment, one of the most notable instances of this being the life of the late German Emperor. The great physician's services were recognised with gratitude by the Empress and the members of the English Royal Family, to whom the Emperor was related. Sir Morell Mackenzie's good offices were not, however, confined to wealthy and titled patients. He was equally successful and quite as painstaking with others not so well off, and though his services were valued at a high rate, they were at the disposal of many whose gratitude was his only reward. His death was a real loss to the country, and especialy to his profession. Although we have no longer this eminent physician among us, his labours have not been in vain. People are more and more appreciating the remarkable cures he effected, and are anxious to secure similar treatment. By kind permission of his executors we are able to supply this to a large extent, and have the honour of offering to the public a prescription of his, the efficacy of which was proved during his lifetime as the best remedy known for throat complaints. It is called

"THE MIXTURE"
(Sir Morell Mackenzie's Formula),
For the Prevention and Speedy Cure of Feverish Cold, Sore Throat, Catarrh, and Influenza.
Prepared by the sole authority of the Executors of the late Sir Morell Mackenzie.

Every genuine bottle bears the signature of ———, Nottingham,
Sole Agents for the Proprietors.
Price 2s. 9d.
London Agents: ———, and the leading Patent Medicine Houses.

Who the executors of the deceased physician may be I do not know, but surely so extraordinary and unprofessional a use of his name ought not to be allowed by his friends to pass unchallenged.—I am, etc.,

January 15th. MEDICUS.

SIR ANDREW CLARK MEMORIAL.

SIR,—At a recent representative meeting under the presidency of H.R.H. the Duke of Cambridge, it was decided that an appeal should be made to the large circle of friends and patients of the late President of the College of Physicians, and that the money subscribed should be applied to the London Hospital.

I venture to think this is another instance where the poverty and want which exists within the ranks of the profession are ignored—the opportunity of extending help, "especially to those of the household" of medicine, lost.

It is well the public should know the profession has its seamy side—that the rose-coloured prospects held out by introductory lecturers (whose addresses appear in the daily press) are by no means generally fulfilled, and that the amount of "personalty" left by specially successful consultants gives a very erroneous idea of the remuneration vouchsafed to the majority of the practitioners of medicine.

Let the public be made aware that through their want of appreciation of the value of medical service it is with difficulty that many hard-working doctors can make both ends meet, leave alone provide for their widows and children. There are at least two societies who would be only too glad to administer additional funds.

I hope those representative members of the profession who are on the committee of the Andrew Clark Memorial Fund will, at the public meeting to be held at the Mansion House shortly, bring forward some scheme whereby their less fortunate brethren may in one way or another be benefited.—I am, etc., CHAS. W. CHAPMAN, M.D.

Weymouth Street, Jan. 16th.

MEDICAL MISSIONARIES.

SIR,—I quite agree with you that Dr. Routh's letter in the BRITISH MEDICAL JOURNAL of January 13th "does not touch the real point." It may be safely left in your hands to vindicate the dignity and responsibility of medical practice, and the necessity that everyone (male or female) who is called a "medical missionary" should have the complete five years' training exacted by the General Medical Council. That such a course is best, both in the interest of medical women and of missionary societies, few doctors will doubt.

The one point on which I will ask leave to say a word is the plea of poverty on the part of women which Dr. Routh makes an excuse for a defective education and fraudulent pretence of efficiency. I can bear witness that many women wishing to study medicine, as missionaries or otherwise, cannot afford the necessary expenses of education; but I also know, and I wish that the public should know, that there is generally no difficulty now in getting the necessary help for women who wish to qualify as fully educated medical missionaries, as most of the missionary societies are willing to give scholarships to such students, and a good deal of money is also available for the purpose from private friends of the movement; so that I do not believe that any really capable woman willing to go through the whole course need be driven into the wretched makeshift which Dr. Routh seeks to vindicate.

Only to-day I have received a cheque for £100 from a lady who wishes it to be spent in giving a complete qualifying education to such a woman, and if Dr. Routh knows of anyone otherwise suitable who is debarred by poverty from taking a full medical course, I shall be glad if he will put her into communication with me, that this difficulty may be removed.

Both at the London and Edinburgh Schools of Medicine for Women the authorities will always be glad to hear from capable women desirous to become medical missionaries, and will generally be able to direct them to the proper quarters whence help may be obtained for the object in view.

I am glad to say that the missionary societies are becoming more and more fully alive to the necessity of a full and complete medical education, and in some cases more funds than students are forthcoming for the purpose.—I am, etc.,

SOPHIA JEX-BLAKE, M.D.

Edinburgh School of Medicine for Women, Jan. 16th.

INCOME TAX.

SIR,—At the present time, when a movement is on foot to secure a more equitable mode of raising the revenue of the country, and providing that they who have shall pay the lion's share, is it not a suitable occasion for us to look out for our own interests? Might not the Parliamentary Bills Committee have an eye to the coming Budget also?

It will be admitted that a "practice" is worth only about one year's purchase, whilst an owner of agricultural land possesses an income which is worth from twenty-five to fifty years' purchase: and yet the man whose total possessions in the world are only worth from one-fiftieth to one-twenty-fifth that of the landowner pays precisely the same sum in income tax. Is this just or not?

Let us put politics aside, and fight for self and the maintenance and education of our children. What do we want with an army and navy, when our capital is mainly in our own heads, and can for a few pounds be carried to another country, if necessary, and there brought into use at once? On the other hand, let the landowner pay for the protection of his "broad acres."

Our learned societies—Society of Medical Officers of Health, etc.—spend a vast amount of vital force in trying to improve the condition of other people by amendment of the law, and in other ways, but not one does anything for the profession itself. Even the Medical Defence Union exhausts the major part of its energies in protecting the public against quacks, whilst the police administration does absolutely nothing in that direction, though it might administer the same law at the public expense, and for the public benefit. Often do we hear of the self-denying character of medical men, but what do the public say in their hearts of us? Why, they call us fools for our pains.

Again, take the assessment to house duty. Whilst many of us, for the purpose of our occupation only, and not for any other reason, have to live in a large house erected on the most valuable land in the centre of the town, and consequently standing at a high rental compared to a house of equal size in a suburb of the town, have to pay house duty at the rate of from 3d. to 9d. in the pound, the tradesman who has a lock-up shop pays only from 2d. to 6d. in the pound; and for his house out in the country, standing at a low rental compared to a town house of equal size, he only pays 3d. or 6d. in the pound.

Why should not the doctor's house, which is neither more nor less than his shop, pay the same "house duty" as any other man's "shop?" Wake up, brethren, and agitate, for now is the time. I am, etc.,

January 16th. M.R.C.S., L.R.C.P.

MEDICAL ETIQUETTE.

SIR,—I read with much interest Mr. Ernest Hart's address delivered at the Pan-American Medical Congress at Washington, and published in the BRITISH MEDICAL JOURNAL of October 21st, 1893, particularly his reference to consultations, where he shows that it is not the consultant but the attendant who should communicate the result of a consultation, etc., to the patient. And I thoroughly agree with "G. M. P.," when he says in the JOURNAL of November 18th, that "the point is one of importance," as it is of the first importance to a patient that his confidence in his attendant should be increased rather than undermined by a consultation; and all consultants when communicating the result of a consultation to a patient do not leave as little cause of complaint as those named by "G. M. P."

In my address as Vice-President, in the absence of the President of the Leeward Islands Branch of the British Medical Association, at our inaugural meeting in January, 1891, I made the following observations on the point now under discussion:

A consultant should, "in a quiet, patient, and gentlemanly manner, investigate with the attendant every symptom and circumstance bearing on the case: and, after a careful consideration of these in private consultation with the attendant, settle on a line of treatment, etc., and then leave it entirely to the attendant to announce the result of the consultation, and the whole directions for carrying out the treatment." This has been my practice for years when acting as consultant; and I am very pleased to have the authoritative statement of Mr. Ernest Hart on the question. I believe, too, that the adoption of the course laid down by Mr. Ernest Hart for the conduct of consultations would be of the greatest advantage to the profession as well as the public.—I am, etc.,

A. G. MCHATTIE, M.D., F.R.C.P.Edin., etc.

Antigua, W.I., Dec. 26th, 1893.

THE TREATMENT OF ENLARGED CERVICAL GLANDS.

SIR,—In the BRITISH MEDICAL JOURNAL of November 25th, 1893, I have read with much interest the discussion on the treatment of enlarged cervical glands. I notice (page 1144) that Mr. Teale refers to the possible necessity of dividing the sterno-mastoid in order to reach glands underneath it. My own experience, which has been considerable, has convinced me that such a necessity could arise only in a most exceptional case—in fact, I doubt if it is ever necessary. I have lifted the sterno-mastoid in several cases from end to end, leaving the two ends attached, and thus readily dissected out every gland underneath it, without injury to the vessels and without the slightest subsequent trouble as to the function of the muscle; in fact, I have usually had the stitches all out in four or five days. Only recently I dissected underneath the sterno-mastoid, the jugular, and the carotid without great difficulty, following a chain of glands which reached to the trachea and œsophagus. Of course such procedures are only needed in cases of extensive disease, and may be usually effected by one incision along the posterior border of the sterno-mastoid. This allows the most extensive dissection in all directions, and the wound rarely is followed by any serious reaction.

As my experience has enlarged I have become more and more thorough in my operations. I am convinced that if we operate at all, our object should be to remove every perceptible gland in the region attacked—as we do in removing axillary glands in mammary carcinoma—for if not enlarged at the time of the operation, these glands will be almost certain to become diseased at a later period. Moreover, if I operate at all I always endeavour to do so prior to the formation of adhesions. I dislike very much to curette softened glands and leave any part of the sac, and still more any of the gland. Such a procedure is always an imperfect operation, as it does not remove absolutely all of the diseased tissue. In early operations nothing is easier than to shell the glands

out of the loose connective tissue. In late ones the dissection is often an extremely difficult one.

In doing these operations I have had two rather peculiar experiences; one a recent case, in which I have reason to believe that the thoracic duct was wounded while I was carefully dissecting out the glands in the angle between the left jugular and subclavian veins. I sutured the edges of the wound in the duct, and, in spite of the escape of several ounces of clear lymphatic fluid—the patient had fasted for eighteen hours prior to the operation—she recovered without incident and went home on the eighth day. I shall shortly publish the case, with two other similar cases I have found reported—Cheever and Boegehold. I should be very glad if any of your readers could give me references to any other cases.

In the other case the young woman, a medical student, had had several similar operations done, after each of which she suffered intensely from ether nausea and vomiting. She therefore insisted on the use of cocaine, and during a very extensive operation, in which I removed over thirty such glands from the carotid and subclavian regions, she was a most interested observer of the entire operation, which lasted nearly an hour, watching it in a hand-glass which she held up in her own hand. She declared that she suffered no pain at any time. The cocaine (4 per cent.) was first injected in the line of the incision, and a few drops were poured upon the surface of the wound three times during the operation.—I am, etc.,

Philadelphia, Dec. 29th, 1893. W. W. KEEN.

THE QUESTION OF THE INCREASE OF CANCER.

SIR,—I trust you will allow me space for a few comments on Mr. Roger Williams's criticism in the BRITISH MEDICAL JOURNAL of December 30th, 1893, of the paper on The Alleged Increase of Cancer, by Mr. George King, F.I.A., and myself, which was recently published in the *Proceedings of the Royal Society*. The statement with which Mr. Williams begins his letter, that "the proportionate mortality from cancer now is four times greater than it was fifty years ago," involves the assumption that the causes of death registered in the early years of civil registration can be accepted with as high a degree of confidence as those now registered. The certification of the cause of death by the medical practitioner attending during the last illness of a patient did not become compulsory until 1874, and yet Mr. Williams gravely compares the figures for 1840 with those for 1891.

Mr. Williams proceeds to say that "no other disease has manifested so great an increase as cancer." This is true, for as the cancerous nature of disease affecting various parts of the body has been more frequently detected, the natural result of the transference to cancer has been that other diseases previously confused have appeared to decline. This is strikingly shown by the death returns from "ill-defined and not specified causes." Comparing the three years 1866-68 with the three years 1885-87, in the former period the death-rate from "ill-defined and not specified causes" was 2.206, that from cancer was 393 per million living, while in the latter period ill-defined causes had shrunk to 762, and cancer had swelled to 449 per million living. If the deaths from ill-defined causes at the two periods were distributed equally among deaths from all causes, cancer among the rest, the apparent increase in the cancer mortality between the two periods would be only 7.8 per cent. instead of 13 per cent. But Mr. Williams evidently thinks that in any such redistribution not only would not cancer share proportionately to other registered causes of death, but that, quoting his words, the effect of increased accuracy has been that "many fatal internal diseases formerly attributed to this disease (cancer) are now almost invariably ascribed to other causes." How, on this supposition, does Mr. Williams account for the remarkable decline in the Registrar-General's returns under such headings as Debility, Tumour, Dropsy, Abdominal Disease, and so on? During the year 1889, 3,175 letters of inquiry were sent from the General Register Office to those doctors who had given imperfect or otherwise unsatisfactory death certificates. These letters led to the transfer of 421 deaths from indefinite headings to cancer. There were 25,466 deaths from indefinite causes during that year. Can it be seriously maintained that if the whole of these had been transferred to their proper heading the cancer returns would have shown a diminution?

Mr. Williams proceeds to say that our conclusions are entirely at variance with those obtained by Dr. Ogle and Dr. Grimshaw. Dr. Grimshaw has, so far as we know, advanced no opinion on the point at issue, and both he and Dr. Ogle are more thoroughly alive than Mr. Williams appears to be to the possibility of error arising from the steadily decreasing registered amount of cancer of undefined position. Not the least valuable part of the Frankfort figures is that the proportional number in the indefinite group in the years 1888-89 was identical with the number in 1860-66, thus in a large measure eliminating the effect of transference. This is not surprising when we know that a very much larger proportion of the total deaths occur in hospitals and are verified by necropsies in Frankfort than in England, and have been so verified for a long series of years; whereas in England the proportion of necropsies, particularly in hospital experience, has greatly increased during the last five or ten years.

It is next attempted to prove that a very high proportion of primary cancer in males is in "accessible" positions. As Mr. Williams elsewhere quotes Dr. Grimshaw, we may test his figures by the official returns for Ireland. Mr. Williams, as the result of an analysis of hospital cases, states that cancer of the skin, mouth, lips, and external genitalia in males forms about 40 per cent of all male cancer. Dr. Grimshaw's returns for the four years 1887-90 show that cancer of the head, face, jaw, lips, neck, hand, leg, and foot (all of which have been included to ensure that everything embraced in Mr. Williams's 40 per cent. shall be comprehended)[1] caused only 16.7 per cent. of the total male deaths from cancer. Even if we make a liberal allowance for cures by operation, and for the fact that the Irish figures do not separately state cancer of the external genitalia, it is evident that either Dr. Grimshaw's or Mr. Williams's results are untrustworthy. The fact is that Mr. Williams, in assuming that hospital experience in this country is a criterion of the experience of the whole community, is altogether in error. Hospital patients would include a disproportionate number of cases of cancer of "accessible" parts capable of an attempt at cure by operation. Had Mr. Williams checked the results obtained from hospital experience by similar results from the experience of workhouses (to which cases of recurrent, incurable, and "inaccessible" cancer are prone to gravitate) his "estimates" would have been more trustworthy. Even then it is doubtful if an analysis, based on samples taken from 10.7 per cent. of the total deaths which occur in hospitals and workhouses in England, could be regarded as giving conclusive evidence as to the relative amount of cancer in different parts of body in the remaining 89.3 per cent.

Then follows the objection that the total number of cases tabulated (in the Frankfort data) is too small to admit of correct averages. We carefully pointed out in our joint paper the paucity of the male data for Frankfort, and avoided drawing any deduction from them independently of other figures. This objection is not valid against the figures relating to female cancer; and we may add that a few carefully recorded facts (verified by necropsies) relating to an entire community, are more trustworthy than a much larger mass of figures, which are each year being artificially recruited from other groups.

We must add a few words in conclusion on Mr. Williams's objection to our statement that "males and females suffer equally from cancer in those parts of the body common to man and woman." To make this statement unambiguous when thus detached from its context, the words "taken together" must be added after "body." When thus stated, the truth of this assertion has been demonstrated in our paper; and it is perhaps the most important result obtained from our study of this intricate subject, by more accurate methods than have previously been employed. This statement is proved not only by the Frankfort figures, but also by those for Great Britain and Ireland. How otherwise will Mr. Williams explain the fact that the curves of corrected mortality shown in our paper for males and females in England, Scotland, and Ireland run parallel to each other through

[1] No separate entry is made of cancer of the skin either in the figures for Ireland or for Frankfort-on-Main.

a long series of years? If cancer had really increased, and the increase had, as Mr. Williams concludes, "involved all parts of the body, on the whole without any considerable disturbance of the normal proportionate ratios," then the difference, on Mr. Williams's own showing, between the cancer mortality in males and females ought to be a percentage of the total, and, in the words of our paper, "would increase at the same rate as the curves themselves rise, and consequently the curves for males and females would tend to widen their distance apart:" but the curves remain parallel, or, if anything, tend to approximate.—I am, etc.,

Arthur Newsholme, M.D.Lond., M.R.C.P.

Brighton, Jan. 1st.

THE PROPHYLAXIS OF INFLUENZA.

Sir,—One of the worst diseases which medical men have to contend with is influenza; other diseases are more dangerous to the patient, but none so dangerous to the physician. He is particularly liable to catch it, and one attack confers no immunity; nay, some say that one attack predisposes to another.

An attack of this vile disease means two or three weeks off work, and two to three or more weeks of debility, nervous prostration, bronchitic cough, and delicacy. Is there any prophylaxis we can adopt to ensure freedom from infection?—I am, etc.,

January 11th. Lancastrian.

TRANSFUSION AND SALINE INTRAVENOUS INJECTION.

Sir,—As the result of investigations commenced in 1882, I believed that in a case of acute anæmia not more than from 2 to 3 pints of saline fluid should ever be injected into the veins as a means of reanimation, that even 1 pint would generally be found fully adequate for the purpose, and if more than 2 or 3 pints of some fluid were needed upon dynamic grounds in a most severe case, that direct transfusion of blood mixed with saline fluid by means of my siphon apparatus—manufactured by Messrs. Kröhne and Sesemann—should be resorted to for the purpose of avoiding too great dilution of the blood in the patient's body by the infusion of too much saline fluid.

The amount of saline fluid which can be safely substituted for blood must hold a definite ratio to the quantity of blood in the body, and if, as appears from Dr. Horrocks's interesting communication to the Obstetrical Society, it has been clearly proved that 6 pints of saline fluid can be safely injected into the veins of an adult of average weight to take the place of blood lost by hæmorrhage, results have been obtained far beyond my expectations.

The importance of the subject and the circumstance that the conclusions derived from my own researches, which have already been published in detail, are in some respects antithetical to the views recently advanced at the Obstetrical Society, are my reasons for requesting attention to the various propositions which will be found in the third edition of my book on *Transfusion of Blood and Saline Fluids* (published by Messrs. Baillière, Tindall and Cox).—I am, etc.,

Seymour Street, W., Dec. 28th, 1893. Charles E. Jennings.

Sir,—Referring to "A. M.'s" inquiry (British Medical Journal, December 30th, 1893, p. 1,459) for the best and simplest instrument for transfusion and injection of saline solutions, I am not aware that there is any instrument adaptable for both purposes other than that invented by Dr. Jennings, of London. I am able to say that Dr. Jennings's method is quite reliable, because on October 8th, 1891, I assisted him in transfusing about 16 ounces of blood from a gentleman to a patient suffering from pernicious anæmia. The blood mingled in its passage with about 10 ounces of saline fluid, and about 16 ounces of saline fluid was infused into the donor's veins to replace the blood given. On December 25th, 1892, Dr. Jennings infused 20 ounces of saline fluid into the right anterior ulnar vein of another patient of mine, suffering from simple anæmia. Both operations were successful.—I am, etc.,

Parkstone, Dorsetshire, Dec. 30th, 1893. J. R. Philpots.

SALVATIONIST SHELTERS AND INFECTIOUS DISEASES.

Sir,—I note that the letter which Dr. Waldo has sent broadcast through the press has been published by you, no doubt under the impression that it was an original communication, and not a species of circular. I beg you will give me the necessary space to reply, as it is difficult to conceive anything more misleading than Dr. Waldo's statement of the decision in the case of Colclough *v.* Edwards. The facts as found by the magistrate hardly bear a resemblance to the facts as stated by Dr. Waldo.

(*a*) The magistrate found that a man had spent a night in a Salvation Army shelter, and left in the morning feeling ill, and that subsequently the appellant was informed that this man was suffering from small-pox.

(*b*) The magistrate found that in consequence of this intimation the usual disinfection and cleansing which takes place every day at the shelters was doubled, and that these additional extra precautions were used upon two days. The daily disinfection was not "alleged," as stated by Dr. Waldo, but was proved before the magistrate.

General Booth has been advised as to the disinfection of the Salvation Army shelters by medical men of large experience and undoubted reputation. These gentlemen have drawn up a code of rules for daily disinfection and cleansing of the shelters, which rules have been approved by more than one medical officer of health, and by your correspondent in the witness box upon oath. I have had considerable correspondence with Dr. Waldo in the *Standard*, and I do not therefore propose to answer him at any great length here. I thought, however, having regard to the circumstances connected with the persons among whom your paper is circulated, it was advisable, subject to your permission, to state so much. I would only add, for the information of your readers, that Mr. Colclough's appeal was allowed upon the point Dr. Waldo states it was dismissed.—I am, etc.,

A. W. G. Ranger, D.C.L.Oxon.,
Solicitor for the Appellant.

Queen Victoria Street, E.C., Jan. 3rd.

THE PRESENT EXAMINATION SYSTEM.

Sir,—"M.D.'s" letter in the British Medical Journal of December 30th, 1893, goes right to the root of a matter which is of great importance to the medical profession. The standard of several of the preliminary examinations that are accepted as sufficient by the General Medical Council is lamentably low, and as a result many youths are enrolled as medical students who are mentally unfitted for a professional career. Some of these, as "M.D." points out, after wasting much time and money, have to devote themselves to other pursuits, being unable to pass their later examinations. The rest, unfortunately, are "crammed" into the profession through its least strictly-guarded portals, and then bring discredit upon it by the methods they adopt to attract to themselves the patients of more able practitioners. A stringent entrance examination in Arts would not only have the desirable effect of weeding out the dunces, but would prove an excellent preparation for the arduous career to which it would form the stepping-stone.—I am, etc.,

January 1st. A Provincial Dentist.

CHLOROSIS.

Sir,—I am very unwilling to enter into any discussion upon this subject at present, and yet Mr. Alston will doubtless look for some reply to his well-meant criticisms.

In the first place, when I wrote in my brief report to the effect that chlorosis is not met with in boys, I had sufficient grounds for the statement. For eight years I have searched in vain for the record of any case of undoubted chlorosis occurring in a male, and without success. Neither have I ever seen such a case, nor heard of one from any of my friends. In chlorotic females the specific gravity of the whole blood not infrequently falls so low as 1036; but it never does so in males, unless there is grave organic disease of some kind. It would delight me if Mr. Alston's letter should be the means of eliciting any positive evidence, or if he can afford me information on the subject. What is needed is positive evidence—including necessarily the results of the examination of the blood—not the general impressions of any author.

Mr. Alston impresses upon me the importance of examining the urine and fæces. It is a matter which everyone would naturally think of at the outset of an inquiry into the causes of chlorosis, and I had not lost sight of it as Mr. Alston assumes, nor failed to follow the work already done by others, familiar no doubt to Mr. Alston.

Mr. Alston asks: (1) Whether the arterioles of the skin are contracted; (2) whether the diminution of the hæmoglobin is uniform in all parts of the vascular system; and (3) if the splanchnic nerves have been examined microscopically.

With regard to (1) I cannot say; (2) is partly dealt with in my previous papers; (3) I have never seen a fatal case of chlorosis.

Lastly, I did not use the word "astringent" in my paper, and certainly did not intend to convey the impression Mr. Alston has received. I am sorry if through brevity I rendered myself liable to being misunderstood. I carefully avoided expressing any opinion as to how iron may cause contraction of the gastro-intestinal vessels. Digitalis and strychnine do so, but they are not reckoned astringents. I had arrived at no positive conclusion upon the matter, and stated that it would be dealt with at some subsequent time.—I am, etc.,

Cambridge, Dec. 30th, 1893. E. LLOYD JONES.

MEDICO-LEGAL AND MEDICO-ETHICAL.

IRREGULAR VACCINATION CERTIFICATE.

AN inquest has been held at Sheffield on an alleged death due to vaccination. Dr. Luff attended the inquiry on behalf of the Royal Commission on Vaccination. The child was vaccinated on November 6th, and died on January 7th, aged 6 months. Two medical men gave evidence, one of whom had attended the child during life, and the other had made a *post-mortem* examination. They testified to the death having arisen from pyæmia resulting from the vaccination. The verdict was in accordance with this evidence. Neither of these gentlemen had performed the vaccination, and here we learn some interesting facts which should rightly form the subject of inquiry by the General Medical Council. The vaccination was performed by a William Alnwick, who gave evidence and stated he was assistant to a Mr. McDonnell, and that "he was an unregistered medical man in England, but had taken the degree of doctor of medicine at Yale College, New York." On being shown the vaccination certificate he admitted this latter was in the hand writing, and signed by one McDonnell as "being successfully vaccinated by me," although the said McDonnell had not performed the operation, or even been present, it would appear, when it was performed. The foreman of the jury observed: "Well, the certificate must be a lie." If we mistake not, the signature to the certificate we have just mentioned is the same attached to an "extraordinary" one which was also before the same coroner on December 2nd last. It ran as follows: "This is to say that C. Snake is dead, and I believe it is from a birth. E. McDonnell, L.R.C.P., 80, South Street Park."

MANSLAUGHTER BY A MIDWIFE.

SUSAN SULLIVAN surrendered and pleaded guilty to an indictment charging her with the manslaughter of Mary Ward. Mr. Horace Avory said that the prisoner was not a certificated midwife. For some time past she had been in the habit of attending her neighbours at Richmond during their confinements for a fee of 5s. She was undoubtedly the worse for drink when she attended the deceased, and failed to properly fulfil her duties. The magistrate, however, dismissed the charge, on the ground that, in his opinion, criminal negligence was not established. The prosecution did not wish to press the case unduly, but they desired that it should act as a warning to other persons who undertook such duties. Mr. Burnie said that the prisoner was a hard-working, respectable woman, who sometimes became very excitable. Mr. Justice Hawkins said she certainly seemed to have been so, for, according to the depositions, she danced about the room with the baby in her arms. Mr. Burnie said that the prisoner gave an undertaking not to renew the practice of attending confinements in the future. The prisoner was bound over in a recognisance of £50 to come up for sentence if called upon.

MRS. RUPPERT'S "SKIN TONIC."

MR. SWIFTE, police magistrate at Dublin, has fined Mrs. Anna Ruppert 20s. with £4 costs, for having sold a skin tonic containing corrosive sublimate.

HOMŒOPATH AND ANTIVACCINATOR.

J. M.—Ill-judged and professionally immoral as we cannot but regard the intervening advice of the homœopathic practitioner to J. M.'s patient to be, it should not deter the latter from, at a fitting opportunity, combating the dissuasive cant by which he induced Mrs. —, to recall her request to have her child vaccinated.

If solicited to reattend at her next accouchement, we fail to see any valid reason why he should not, other than his own personal objection.

AN ERRATIC PATIENT.

A.—Annoying as the incident in question would naturally be to A., nevertheless inasmuch as he was not in *de facto* attendance upon the son of Mr. B., the latter would medico-ethically be entitled to call in Dr. C., and although he (Dr. C.) would have acted in stricter accord with the true ethical spirit if he had impressively urged Mr. B. to consult A. as the usual family medical attendant, he would, under the circumstances related, be justified in accepting charge of the case, which moreover would not, as assumed by A., be governed by rule 9, chap. I, section 2, of the *Code of Medical Ethics*.

With reference to Mr. B.'s impugned procedure, he rightly observed, in replying to A.'s ill-advised note, that he was "entitled to seek professional advice from whom he chose," but infelicitously added that A. was not the first medical man he had consulted since he came to B., evidencing thereby his erratic tendency as a patient.

SALE AND RETURN.

DOUBTFUL writes: A. sells his practice to B. Would it be just or honourable for C., A.'s brother, to start in same locality as B., C. having never been in the place?

*** Although there is no medico-legal (unless such a possible contingency was foreseen and provided for in the deed of transfer) nor medico-ethical restraining rule in relation to the important point submitted by our correspondent, such an act as that alluded to would, in our opinion, be highly dishonourable and contravene the moral law of doing unto others as we would wish to be done by.

NAVAL AND MILITARY MEDICAL SERVICES.

ARMY MEDICAL STAFF EXCHANGE.

The charge for inserting notices respecting Exchanges in the Army Medical Department is 3s. 6d., which should be forwarded in stamps or post office order with the notice. The first post on Thursday mornings is the latest by which these announcements can be received.

A SURGEON-MAJOR, due to go abroad about October or November next, is desirous of effecting an exchange to remain at home with a surgeon-major home recently, or one home twelve months. Address, No. 206, BRITISH MEDICAL JOURNAL Office, 429, Strand, W.C.

ARMY MEDICAL STAFF.

BRIGADE-SURGEON-LIEUTENANT-COLONEL HENRY S. MUIR, M.D., is promoted to be Surgeon-Colonel, *vice* J. Y. Donaldson, M.D., retired December 23rd. Dr. Muir entered the service as Assistant-Surgeon March 31st, 1864; became Surgeon March 1st, 1873; Surgeon-Major April 28th, 1876; attained the rank of Lieutenant-Colonel March 31st, 1884; and was appointed Brigade-Surgeon-Lieutenant-Colonel from November 1st, 1888. He was in the Afghan war in 1878-80, and was at the engagement of Shahjui; was mentioned in despatches and received the campaign medal.

Surgeon-Lieutenant-Colonel GUSTAVUS R. RAE, F.R.C.S.I., is promoted to be Brigade-Surgeon-Lieutenant-Colonel, *vice* H. S. Muir, M.D., December 23rd. Brigade-Surgeon-Lieutenant-Colonel Rae's previous commissions are thus dated: Assistant-Surgeon October 1st, 1867; Surgeon March 1st, 1873; Surgeon-Major October 1st, 1879; and Surgeon-Lieutenant-Colonel from October 1st, 1887. He was in the Boer war of 1881.

Brigade-Surgeon THOMAS BASSETT REID died at Brussels on January 11th. He was appointed Assistant-Surgeon May 16th, 1851; Surgeon October 5th, 1858; Surgeon-Major May 16th, 1871; and was granted retired pay December 1st, 1881, with the honorary rank of Brigade-Surgeon. He served in medical charge of a wing of the 7th Bengal Native Infantry during the Santal insurrection; in the 53rd Regiment during the Indian campaign of 1857-58, including the actions of Chuttra, Gopalgunge, Khodgunge, and entry into Futteghur, affair of Shumshabad, storm and capture of Meangunge, siege and capture of Lucknow; on the staff in Oude during the compaign of 1859 (medal with clasp); and in the Ashanti war in 1873-74 (medal).

INDIAN MEDICAL SERVICE.

SURGEON-GENERAL ROBERT FAURE HUTCHINSON, M.D., late of the Bengal Establishment, died at 35, Clanricarde Gardens, on the 11th instant, at the age of 62. He was appointed Assistant Surgeon, December 5th, 1855; attained the rank of Deputy Surgeon-General, December 9th, 1882; and retired with the honorary rank of Surgeon-General, December 9th, 1887. He was engaged in the Afghan war in 1879, receiving the medal granted for that campaign.

MILITIA MEDICAL STAFF CORPS.

MR. JAMES TRACEY SIMPSON is appointed Surgeon-Lieutenant, January 13th.

THE VOLUNTEERS.

SURGEON-LIEUTENANT W. EASBY, M.D., 1st Northamptonshire Engineers, Fortress and Railway Forces, Royal Engineers, is promoted to be Surgeon-Captain, January 13th.—Surgeon-Major J. D. HARRIS, 1st (Exeter and South Devon) Volunteer Battalion the Devonshire Regiment, is promoted to be Surgeon-Major, and resigns his commission, retaining his rank and uniform, January 13th.—Surgeon-Lieutenant R. T. B. LORRAINE, M.B., Galloway Rifles, is promoted to be Surgeon-Captain, January 13th.—Surgeon-Lieutenant ANDREW GRAY, 2nd Volunteer Battalion the South Lancashire Regiment (late the 21st Lancashire), is appointed Lieutenant in the same corps, January 13th. Lieutenant Gray joined as Surgeon-Lieutenant July 4th, 1891.—The following gentlemen are appointed Surgeon-Lieutenants to the corps named, all dated January 13th: JOHN MUNRO MOIR, M.D., the Highland Artillery; WILLIAM TURNBULL, M.B., 1st Northumberland Artillery (Western Division Royal Artillery); HERBERT WOODLEY JOYCE, 2nd (the Weald of Kent) Volunteer Battalion East Kent Regiment; JOHN ARTHUR EYTON JONES, 1st Volunteer Battalion the Royal Welsh Fusiliers.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE TRUE DEATH RATES OF LONDON DISTRICTS DURING THE FOURTH QUARTER OF 1893.

In the accompanying table will be found summarised the vital and [illegible] of the various sanitary districts of the metropolis, based upon the Registrar-General's returns for the fourth or autumn quarter of last year. The mortality figures in the table relate to the deaths of persons actually belonging to the various sanitary districts, and are the result of a complete system of distribution of the deaths occurring in the institutions of London among the various sanitary districts in which the persons had previously resided.

The [illegible] registered in London during the three months ending December last were equal to an annual rate of 29.8 per 1,000 of the population [illegible] in the middle of last year. In the corresponding [illegible] three years the birth-rates were 28.8, 29.2, and 29.7 per 1,000 respectively. The birth-rates last quarter in the various sanitary districts showed, as usual, wide variations, owing principally to the differences in the sex and age distribution of the population. In Kensington, St. George Hanover Square, St. James Westminster, Hampstead, St. Martin-in-the-Fields, and City of London, the birth-rates were considerably below the average; while in St. Luke, Bethnal Green, Whitechapel, St. George-in-the-East, Mile End Old Town, St. George Southwark, Newington, and Bermondsey, the birth-rates showed a marked excess.

The 21,578 deaths of persons belonging to London registered during the quarter under notice were equal to an annual rate of 22.9 per 1,000, against 22.2, 20.2, and 18.1 in the corresponding periods of the preceding three years. The rate last quarter exceeded that recorded in the fourth quarter of any of the preceding eight years, 1885-92, during which the rate averaged 19.7 per 1,000. The lowest death-rates in the various sanitary districts were 14.7 in Hampstead, 16.5 in Wandsworth, 17.0 in Lewisham, 17.3 in St. George Hanover Square, 19.6 in Plumstead, and 19.9 in Paddington and in [illegible]. In the other districts the rates ranged upwards to 28.5 in Newington, 29.4 in Holborn, 29.5 in Shoreditch, 29.6 in Bermondsey, 30.1 in St. George-in-the-East, 33.3 in St. George Southwark, and 34.6 in Strand. During the quarter under notice 3,144 deaths were referred to the principal zymotic diseases in London; of these, 1,065 resulted from diphtheria, 588 from whooping-cough, 466 from scarlet fever, 446 from measles, 295 from diarrhœa, 258 from different forms of "fever" (including 1 from typhus, 258 from enteric fever, and 7 from simple and ill-defined forms of fever), and 18 from small-pox. These 3,144 deaths were equal to an annual rate of 2.9 per 1,000, which, with one exception, exceeded the rate recorded in the corresponding period of any of the preceding eight years, 1885-92. The lowest zymotic death-rates during last quarter in the various sanitary districts were 1.1 in Hampstead and in City of London, 1.2 in St. George Hanover Square, 1.4 in Lewisham, 1.7 in St. Martin-in-the-Fields, and 2.1 in Westminster and in St. Saviour Southwark; in the other districts the zymotic death-rates ranged upwards to 3.9 in Holborn and St. Luke, 4.0 in Limehouse, 4.3 in Shoreditch and in Bethnal Green, 4.5 in Newington, and 4.9 in St. George Southwark.

Eighteen deaths from small-pox of persons belonging to London were registered during the three months ending December last, of which 5 belonged to Kensington, 5 to Poplar, and 2 to Pancras sanitary districts. Measles showed the highest proportional fatality in Pancras, Holborn, Shoreditch, St. George-in-the-East, Limehouse, Lambeth, and Battersea; scarlet fever in Westminster, Clerkenwell, Bethnal Green, Newington, St. Olave Southwark, Wandsworth, Greenwich, Woolwich, and Plumstead; diphtheria in Hackney, Clerkenwell, St. Luke, Shoreditch, Bethnal Green, Battersea, and Greenwich; whooping-cough in Holborn, Clerkenwell, Shoreditch, Bethnal Green, Limehouse, St. George Southwark, Newington, and Bermondsey; and "fever" in Hackney and Holborn.

Infant mortality in London last quarter, measured by the proportion of deaths under one year of age to registered births, were equal to 172 per 1,000, and with one exception exceeded that recorded in the corresponding period of any of the preceding eight years, during which the mean

Analysis of the Vital and Mortal Statistics of the Sanitary Districts of the Metropolis, after Complete Distribution of Deaths occurring in Public Institutions, during the Fourth Quarter of 1893.

Sanitary Areas.	Estimated Population middle of 1893.	Births.	Deaths.	Annual Rate per 1,000 Living. Births.	Deaths.	Principal Zymotic Diseases.	Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-Cough.	Typhus.	Enteric Fever.	Simple and Undefined Fever.	Diarrhœa.	Deaths of Children under 1 year of age to 1,000 Births.
LONDON	4,305,551	31,995	21,578	29.8	22.9	2.9	3,144	18	446	466	1,065	588	1	258	7	295	172
West Districts.																	
Paddington	120,277	701	597	23.4	19.9	2.6	78		12	14	26	12	—	10	—	4	143
Kensington	167,038	905	863	21.7	20.7	2.6	108	5	15	13	28	21	—	13	—	13	172
Hammersmith	103,674	697	519	27.0	20.1	2.2	56		3	9	15	13	—	7	2	7	176
Fulham	103,075	868	512	33.8	19.9	2.8	73	1	—	9	28	12	—	9	—	14	158
Chelsea	98,114	647	498	26.4	20.4	2.2	53	1	4	5	22	6	—	6	1	8	130
St. George Hanover Square	75,825	383	327	20.3	17.3	1.2	22		1	3	8	2	—	7	—	1	141
Westminster	54,761	328	340	21.0	24.9	2.1	28	—	3	7	5	3	—	3	—	6	195
St. James Westminster	23,873	111	119	18.6	20.0	2.2	13	—	[illegible]3	—	3	3	—	3	—	1	207
North Districts.																	
Marylebone	139,546	1,040	869	29.9	25.0	3.1	107	—	18	22	32	15	—	9	—	11	160
Hampstead	73,949	362	271	19.6	14.7	1.1	21	—	—	8	5	2	—	6	—	—	116
St. Pancras	234,025	1,724	1,376	29.6	23.6	3.4	196	2	74	24	55	22	—	10	—	9	172
Islington	328,698	2,354	1,752	28.7	21.4	2.4	193	—	13	27	70	15	1	18	—	19	166
Hackney	240,177	1,707	1,250	28.5	20.9	3.3	197	—	20	21	81	33	—	27	—	15	155
Central Districts.																	
St. Giles	38,511	262	225	27.3	23.4	2.8	27		3	4	7	8	—	2	—	3	170
St. Martin-in-the-Fields	13,911	59	86	17.0	24.8	1.7	6	—	—	—	3	1	—	—	—	2	186
Strand	23,508	134	199	22.9	34.0	2.9	17		2	3	7	4	—	1	—	—	276
Holborn	32,646	217	239	26.7	29.4	3.9	32		9	3	4	8	—	7	—	1	226
Clerkenwell	65,163	499	458	30.7	28.2	3.8	61		4	11	22	15	—	4	—	5	176
St. Luke	41,406	449	276	43.5	26.6	3.9	40		7	4	17	9	—	—	—	3	102
London City	35,383	145	225	16.4	25.5	1.1	10	—	4	1	3	2	—	—	—	—	145
East Districts.																	
Shoreditch	123,425	1,049	907	34.1	29.5	4.3	132	—	37	13	42	30	—	3	—	7	218
Bethnal Green	120,625	1,120	836	34.7	25.9	4.3	140	—	16	23	44	31	—	13	—	13	183
Whitechapel	75,163	714	472	38.1	25.2	2.9	54	—	8	7	14	13	—	5	—	7	172
St. George-in-the-East	45,182	369	339	41.6	30.1	3.8	43		15	5	11	10	—	1	—	1	196
Limehouse	57,386	442	371	30.9	25.9	4.0	57	1	13	7	14	13	—	5	—	4	208
Mile End Old Town	108,006	1,010	667	37.5	24.8	2.8	75	1	16	11	19	11	—	9	—	8	160
Poplar	168,876	1,421	1,030	33.7	24.4	2.9	123	5	11	20	36	25	—	13	—	13	179
South Districts.																	
St. Saviour Southwark	26,823	198	180	29.6	26.9	2.1	14	—	1	4	4	4	—	—	—	1	197
St. George Southwark	59,952	521	498	34.9	33.3	4.9	74	—	10	7	18	28	—	3	—	9	234
Newington	117,430	1,054	837	36.0	28.6	4.5	131	—	7	20	32	56	—	4	—	12	209
St. Olave Southwark	12,816	102	88	31.8	27.4	2.8	9	—	—	4	4	1	—	—	—	—	137
Bermondsey	84,244	775	621	39.9	29.8	3.5	73	—	2	4	27	31	—	3	—	6	223
Rotherhithe	39,764	326	272	32.9	27.4	2.4	24	—	1	3	10	1	—	2	—	4	190
Lambeth	280,567	2,195	1,582	31.4	22.6	2.7	187	—	55	26	67	53	—	10	1	15	158
Battersea	169,033	1,210	859	30.2	21.5	3.6	144	1	38	10	61	12	—	9	—	13	182
Wandsworth	169,379	1,096	695	26.0	16.5	2.3	99	—	5	26	41	12	—	6	—	9	142
Camberwell	216,837	1,886	1,269	30.6	21.1	2.4	147	1	5	23	71	17	—	8	—	22	168
Greenwich	173,349	1,332	997	30.8	23.1	3.7	160	—	11	36	50	22	—	13	1	18	172
Lewisham	76,593	422	325	22.1	17.0	1.4	27	—	—	3	18	—	—	3	1	2	154
Woolwich	41,794	338	241	32.4	23.1	2.3	24	—	—	5	3	5	—	2	1	5	188
Plumstead	94,192	723	461	30.8	19.6	2.9	69	—	—	11	29	17	—	5	—	4	174

rate was only 14·8 per 1,000. Among the various sanitary districts the rates of infant mortality were lowest in Paddington, Chelsea, St. George Hanover Square, Hampstead, St. Luke, St. Olave Southwark, and Wandsworth; while they showed the largest excess in Strand, Holborn, Shoreditch, Limehouse, St. George Southwark, Newington, and Bermondsey.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns, including London, 7,117 births and 5,726 deaths were registered during the week ending Saturday, January 13th. The annual rate of mortality in these towns, which had been 22·6 and 22·8 per 1,000 in the preceding two weeks, further rose to 28·6 last week. The rates in the several towns ranged from 19·5 in Gateshead and 20·7 in Newcastle-upon-Tyne, to 55·7 in Plymouth and 60·2 in Norwich. The very high rates in the two last-mentioned towns were due to the fatal prevalence of influenza. In the thirty-two provincial towns the mean death-rate was 27·9 per 1,000, and was 1·6 below the rate recorded in London, which was 29·5 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2·7 per 1,000; in London the rate was equal to 3·4 per 1,000, while it averaged 2·3 in the provincial towns, and was highest in Sheffield, Salford, and Birkenhead. Measles caused a death-rate of 1·8 in Wolverhampton and 2·0 in Birkenhead; scarlet fever of 1·0 in Norwich, and 1·1 in Burnley; and whooping-cough of 2·3 in Sheffield, 2·4 in Plymouth, and 3·2 in Bristol. The 78 deaths from diphtheria in the thirty-three towns included 55 in London, 5 in West Ham, 4 in Manchester, and 3 in Cardiff. Three fatal cases of small-pox were registered in Bradford, 2 in Birmingham, and 1 each in London, West Ham, and Nottingham, but not one in any other of the thirty-three towns. There were 88 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, January 13th, against 100, 93, and 94 at the end of the preceding three weeks; 12 new cases were admitted during the week, against 14 and 15 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,736, against 2,993, 2,988, and 2,855 at the end of the preceding three weeks; 224 new cases were admitted during the week, against 262 and 210 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday last, January 13th, 925 births and 679 deaths were registered in eight of the principal Scotch towns. The rate of mortality in these towns, which had declined from 23·0 to 21·5 per 1,000 in the preceding four weeks, rose again to 23·8 last week, but was 4·8 per 1,000 below the mean rate during the same period in the thirty-three large English towns. Among these Scotch towns the death-rates ranged from 20·0 in Greenock to 37·6 in Perth. The zymotic death-rate in these towns averaged 2·7 per 1,000, the highest rates being recorded in Dundee and Perth. The 322 deaths registered in Glasgow included 22 from whooping-cough and 4 from diphtheria. Two fatal cases of diphtheria were recorded in Edinburgh.

THE BETHNAL GREEN WORKHOUSE.

Doubtless the workhouses of England are test houses for the elimination of that perennial nuisance, the [sturdy beggar; at the same time, they are the common almshouses and refuge in old age of a great multitude of honest people whose main sin has been that they have outlived their working days. It is interesting then to inquire how they are dealt with in this great city, this great centre of civilised philanthropy, from whence missionaries go out to all the world to teach charity and good will to man.

The Bethnal Green Guardians appear to have appointed a new master to the workhouse, who, after looking over his domain, has sent in a report on the condition of the house. Filth and overcrowding seem to be the points in which it principally excels, but it is to the treatment of its old and infirm inmates that we especially wish to draw attention. The number of women is given at 335, of whom only 89 are able-bodied. Of the remainder, 65 are women over 80 years of age, 10 totally blind, and 26 cripples. "Many others," the master adds, "are so feeble that if you had proper infirmary accommodation they would be under the doctor's care. As it is, there are 20 on medicine, which has to be served out to them by the labour mistress, thus casting upon her the duties of a nurse; and you are running the risk of a coroner's inquest through having extremely feeble women in a department in which they cannot possibly receive proper attention. To look after this number of women, you have one officer, namely, the labour mistress, who, in addition to the aforementioned duties, has to look after the receiving ward when the portress is on leave of absence. Such an accumulation of duties makes it utterly impossible for this officer to keep these women clean and wholesome." What have these poor feeble old people done that they should be left to live out their lives in such helplessness, dependent on a "labour mistress" for anything they may require? They want comfort and nursing and nice soft food that they can eat, not to be placed in charge of a "labour mistress." We have for long urged the necessity of providing nurses for the sick poor; this has to some extent been done in the metropolitan and some of the large provincial infirmaries, but still an enormous number of sick remain, both in sick wards in the workhouses and even in some separate infirmaries, nursed only by pauper helps. There is, however, in nearly all our workhouses an even lower depth, a stratum of monotonous wretchedness as yet almost untouched by philanthropy: feeble old men and women, cripples, blind, infirm, and hardly able to drag their tottering limbs about, and yet entirely without help except such as they can obtain from a "labour master" or "labour mistress" as the case may be—officials who may be kind, and we hope are, but whose primary duty is to set a task and see that it is done. It is a hard lot.

THE SMALL-POX EPIDEMIC.

Small-pox continues in our midst, its chief centres during December having been London, with 80 cases and 7 deaths; West Ham, 36 cases and 15 deaths; East Ham, 19 cases, with attacks in other parts of suburban London, as at Wimbledon and Dartford. Bristol and its surroundings had 70 or 80 cases, with 6 deaths in the city, and Aberavon had a limited outbreak causing some stir. In the Midlands, Walsall had over 100 attacks, Birmingham over 200, with 19 deaths, Leicester 6, 1 fatal; whilst Mansfield also suffered, and Wolverhampton had 70 patients under treatment at the close of the year. Small-pox again manifested itself in Oldham and Chadderton adjoining, and Bradford had about 60 cases with 9 fatalities. In county Durham, Leadgate cases only numbered 6, with few cases elsewhere; and in the whole of Yorkshire the disease generally showed marked decrease. In Leith some 80 attacks were recorded from November 9th, necessitating the provision of additional hospital accommodation.

SMALL-POX AT LEITH.

Four new cases of small-pox were reported for last week, ending on midday of Saturday. On Monday last a further outbreak occurred, no fewer than 7 further cases being reported, and 6 of the new patients were removed to the hospital. Thirty-four cases remain in the hospitals.

VACCINATION AND SMALL-POX.

The medical officer of health for Halifax has prepared and issued a report on the recent epidemic of small-pox which existed in Halifax during the nineteen months ending October 19th, 1893. In that period 513 patients were treated in the hospital. There had been 44 deaths, the mortality being 8·5 per cent. The mortality per cent. had 1·8 of the vaccinated cases and 40·9 of the unvaccinated cases.

THE LEICESTER SYSTEM.

The Leicester system of managing scarlet fever seems about as peculiar as its small-pox "system." Our readers may recollect that, in desperation over the spread of small-pox among scarlet fever cases in the hospital, and in unwilling acknowledgment of the terrible necessity which exists in Leicester for subordinating everything else to the efforts to prevent the spread of small-pox, all the scarlet fever cases were hurried back to their own homes, and the hospital closed against the disease, after which it naturally became very prevalent in the town. Now, however, scarlet fever, having apparently spent itself, is rapidly disappearing, and the Town Council is accordingly about to reopen the wards for its treatment, in order, we suppose, to stamp it out according to the Leicester system. Seeing the disease is dying out these efforts are likely to be successful, just as were the efforts to deal with small-pox when no small-pox prevailed; and a local journal of December 19th, 1893, notes that, "Side by side with this comes another of the long and lengthening roll of cases of small-pox contributed by Newfoundpool. Why this district is so painfully prolific of these notifications it is difficult to say; but it is certainly a disquieting problem, which should be made the subject of special and early inquiry." With this opinion we most heartily agree. Newfoundpool adjoins the small-pox hospital.

THE PROPOSED FEVER HOSPITAL AT SHOOTER'S HILL.

The General Purposes Committee of the Metropolitan Asylums Board have recommended the erection of a hospital at Shooter's Hill to accommodate 500 patients, at an estimated cost of £220,000, with 300 nurses attached to it. Mr. Brass moved, as an amendment, that the matter should be referred back to the Committee for further consideration. He characterised the sum they proposed to pay for its construction as unreasonable, it being at the rate of £440 per bed. The amendment having been seconded by Mr. N. Robinson—who ridiculed the idea that 300 nurses would be required to look after 500 patients, a large proportion of whom would be children and infants—Mr. Scovell, Chairman of the Committee, signified his willingness to take the report back for further consideration if it was the wish of the Board. With regard to the nursing staff of the proposed hospital, he asserted that children and infants required as much careful treatment as adults. After some further discussion, the amendment was adopted.

A MEDICAL OFFICER'S SALARY.

For months past the Local Government Board have been at loggerheads with the Shoreditch Vestry over the amount of salary to be paid to their newly-appointed medical officer, and ultimately they have refused to sanction the election unless £500 per annum be paid. Accordingly the vestry have decided to issue advertisements for fresh candidates. After an unsuccessful attempt to postpone the matter for six months, the vestry have instructed the committee which will have to deal with the fresh applications to verify the testimonials of all selected candidates.

INCREASE OF SALARY.

Subject to the approval of the Local Government Board, the Merthyr Local Board have granted their medical officer an additional £50 per annum in salary, consequent upon the increased work cast upon him by the extension of the district through the inclusion of the Llanfabon area.

LEAD PROCESSES SCHEDULED AS DANGEROUS.

Under the Factory and Workshop Acts the Home Secretary has scheduled as dangerous to health certain stages in the manufacture of red, orange, and yellow lead, in lead smelting, the tinning and enamelling of the hollow ware, and various processes adopted in electric accumulator works in flax mills and linen factories. The officials charged with the enforcement of the Acts are now empowered to serve notice on employers for the adoption of measures which shall meet the necessities of the case.

THE CANAL BOAT POPULATION.

In the report of Mr. Brydone, the Government inspector under the Canal Boats Acts, just issued, it is very satisfactory to note that the improvements mentioned in previous reports (as resulting from a careful administration of the law) are recorded as having still further developed in the course of last year. On former occasions it had been matter of complaint that local sanitary authorities have failed to strictly supervise the

canal boats passing through their districts. This neglect is being rapidly remedied, and the local authorities are giving much closer attention to their duties. As to the general condition of the canal population, the inspectors' reports that ten assessed overcrowding in the cabins have been lessened. Formerly it not unfrequently happened that men, unmarried women, and children herded together in the boats. Now Mr. Brydone says these cases are "as rare as they used to be general. There is, indeed, no reason to believe that these evils are now present on the canal boats in any greater degree than in homes on shore." That, obviously, is an enormous gain in regard to health, decency, and comfort. It may also be noted as a striking testimony to the value of the Act, and of inspection under it, that cases of infectious disease on board canal boats are now rarely met with; and that when they do occur they are promptly dealt with by the removal of the patients, usually children, to the hospital of the district in which the infected boat happens to be. When such cases are found and removed, care is taken to disinfect the boat before it is allowed to proceed on the voyage. As a striking illustration of progress in this direction, Mr. Brydone mentions that, notwithstanding the great prevalence of scarlet fever and small-pox in Lancashire and Yorkshire, "there was not a single instance of either disease on the canal boats in Yorkshire, and only one case of scarlet fever and one case of small-pox in the whole of the county of Lancaster."

CENSURE OF MEDICAL OFFICERS BY A COMMITTEE OF BOARD OF GUARDIANS.

PALINURUS, who we assume is a poor-law district medical officer, writes to say he received a private note, asking him to call at a house where he had not previously attended, the people there were not paupers, and no medical order was presented. On arrival he found that another medical man had been in attendance on the case (influenza), but that now our correspondent's attendance was desired gratuitously. He declined to take up the case without a medical order, and left the house. The mother of the patient subsequently wrote to the guardians, and he was formally required to attend a meeting of a committee of the board, which he did, and though he pointed out that the guardians had no jurisdiction in the matter, the Committee (as we understand) passed a vote of censure on him. He asks for our opinion on the case, and whether he has any remedy against the Guardians.

*** In our opinion the guardians had no authority for action in this case, as no medical order was presented. Moreover, we cannot understand how any committee of guardians could have ventured to pass a vote of censure under any circumstances, as this could only be properly done by the board itself. We fear, however, that there is no remedy for this absurd action. It is possible that "Palinurus" might get a different decision on the case if he could get it fully considered by the whole board.

TENURE OF OFFICE OF POOR-LAW MEDICAL OFFICERS.

E. W. B. writes to say that in a certain district, with a population under 2,000, the two appointments of medical officer of health and district medical officer are held by a man who is L.A.H.Dub. only. He wishes to know, if a doubly qualified man settles there, whether the authorities are bound to give these appointments to him if he applies.

*** We believe the said authorities are not bound to do anything of the kind, and we consider that if by any hard and fast rule they were so bound great injustice might be done to the present official.

THE NOTIFICATION OF DISEASE.

LOCAL BOARD.—The proposed arrangement, being incomplete and terminable at any moment, is by no means satisfactory. Still, it is better than the present still more unsatisfactory system, and, according to the experience of other places, usually leads to the full adoption of the Act. Before long, too, the matter will cease to be optional, and, moreover, the board will be reconstituted as a district council. For the sake of present requirements, therefore, the compromise might be accepted as a temporary provision.

NOTIFICATION OF WORKHOUSE INFECTIOUS CASES.

M. O. H.—Seeing that it is the sanitary district in which the workhouse is situate that will benefit by prompt notice of the existence of infectious sickness therein, we should regard the cost of notification as properly falling on that district.

NOTIFICATION CERTIFICATE FORMS.

DR. A. R. BARNES.—It is the duty of the sanitary authority to supply forms for notification to every duly qualified medical man practising in their district. The omission to do so on the ground that a practitioner is not resident within the district is absurd. We are not prepared to say that their deliberate default relieves him from his responsibility under the Act, but they would find difficulty in persuading any Bench of the reasonableness of their action, in the event of proceedings being taken for non-notification. It would be well to forward a copy of the correspondence to the Local Government Board.

NOTIFICATION FEES.

M. O. H writes: In the course of my duties in the investigation of epidemics of notifiable diseases (notifiable) I frequently came across cases of the disease which have not been seen or attended by any medical man. I am in general practice, but many of these cases occur in villages many miles from my residence in which I do not practise; shall I, as medical officer of health, be required or entitled to notify (to myself) these cases as if they occurred in my own practice?

*** It certainly seems contrary to the policy of the Act that any medical officer of health should be entitled to extra payment in addition to his salary for making a note of a case for which he would be entitled to no payment if notified by some other practitioner. If he is entitled to anything, probably it is not the 2s. 6d., but at most the shilling payable to the medical officer of a public body, which term must include a sanitary authority. If it is desired to obtain a legal decision on the question, it ought not to be difficult to do so; sanitary authorities are generally very ready to resist payment of fees, and a test action could easily and speedily be brought in a county court and an appeal be taken from thence to the High Court. The decision in both tribunals will probably be adverse to the claimant of fees under such circumstances.

NOTIFICATION BY HOUSEHOLDERS.

R. B.—Whatever may be thought of the wisdom of enforcing the notification by the parents of a case already notified by the medical attendant, there can be no doubt that the householder notification ought to be insisted upon where no medical man has been called in. The plea of ignorance is always urged, but it is upon the discretion of the Bench rather than upon amendment of the law that we must rely to prevent its misuse being accepted too easily. Under the circumstances described, the parents having spoken of scarlatina as a reason for not going to school, proceedings ought to have been taken.

DR. ED. J. SLADE-KING (Medical Officer of Health, Ilfracombe) sends the following questions:

1. Are public elementary schools in any way exempted from the operation of the Public Health Act of 1875?

2. Are they exempted from the operation of the by-laws made and confirmed under that Act?

3. Would a charge of overcrowding in public elementary schools be best supported by evidence as to the average attendance of children during a limited period, say, of one week or one month, or must the evidence of such overcrowding extend over every time the school is open during the educational year?

*** 1. and 2. Schools are expressly included in the definition of "house" under the 1875 Act. Presumably, therefore, they are subject to all by-laws which have reference to houses, unless the by-law is self-evidently absurd as applied to schools. 3. It would be quite unnecessary to prove overcrowding on every occasion that the school meets. Particulars with reference to certain dates ought to suffice; but an average of a period, as suggested, would strengthen the evidence.

TENANTS' COMPENSATION FOR INJURY TO HEALTH FROM DEFECTIVE SANITARY ARRANGEMENTS.

DR. H.—The question asked by our correspondent is of general importance, and may be advantageously answered in detail, for the information which he seeks has not been thus far compiled.

It is well settled that, according to common law, there is no implied contract by the landlord of an unfurnished house or of land that they are fit for occupation (see Hart *v.* Windsor, 12 M. and W., 68; Keats *v.* Earl Cadogan, 10 C. B., 591; and Sutton *v.* Temple, 12 M. and W., 52), nor is there an implied covenant that the landlord of a house or land will do any repairs to cause such to be healthy or otherwise more tenantable (see Arden *v.* Pullen, 10 M. and W., 321; Gott *v.* Gandy, 2 E. and B., 845), and the aforesaid case of Keats *v.* Earl Cadogan. It has also been held in the case of Surplice *v.* Farmsworth, 7 M. and G, 576, that if the landlord is bound to do repairs, there is no implied condition that if not done the tenant may quit the premises. To entitle him to do so should be the subject of an express stipulation, as in the case of Furnival *v.* Grove, 1 C. B. N. S., 400.

Although several cases have been reported in which claims for rent have been resisted for unfurnished houses (not coming under the category of those mentioned in the Housing of the Working Classes statutes) in consequence of defective sanitary arrangements, there appears to be only one instance in which a tenant succeeded in getting a judgment whereby not only was she held to be not bound to pay the rent sued for, but was entitled to recover damages for the insanitary condition of the house occupied by her. This case was that of Bunn *v.* Harrison, notified in vol. ii of the *Times Law Reports*, and was decided by the Court of Appeal on December 2nd, 1886. An action was brought for the recovery of a quarter's rent due by the defendant for a house at Sydenham. This claim was opposed by her because she was induced to become tenant on the faith of a representation and warranty that it was in a sanitary condition, and that the drainage, water supply, and ventilation were all perfect, but she ascertained that the dwelling was in such an unhealthy condition as not to be fit for habitation, and that the drains, water supply, and ventilation were defective, as the plaintiff well knew; and, on discovering its insanitary state, she left the house before the expiration of the quarter, and refused to carry out the agreement for tenancy, and she counterclaimed for damages.

The action was tried before Mr. Justice A. L. Smith, without a jury, when he found that the house was in an unhealthy state, that before the defendant took the house Mr. Webb, the plaintiff's agent for letting it, gave the warranty relied upon at an interview with the defendant, and that the latter left within a reasonable time. He therefore gave judgment for the defendant on the claim and counterclaim, and that the damages were to be assessed. This decision was affirmed by the Court of Appeal. In delivering judgment the Master of the Rolls said that "there was no colour or pretence for saying that Mr. Webb stated what he knew to be false. The learned judge did not find it as a fact, and there was no ground for alleging it. The contract here was not in writing, and it was made by the plaintiff's agent, so that it bound the plaintiff. When a statement was made at the time of a verbal contract, and for the purpose of the contract, that statement must be taken to be part of the contract. Therefore what Mr. Webb said here was part of the contract. He stated that the house was in a perfectly sanitary condition. Not only, therefore, was there a warranty ordinarily so-

called, but a warranty which went to the whole root and condition of the contract. It was a condition. There was, therefore, a condition and a warranty. The condition upon which the defendant was to take the house was broken, and she was not bound to pay the rent, as she did not take the house, but left within a reasonable time. There was also a breach of warranty upon which she could recover damages." This case is not mentioned in the regular law reports, which include: (1) *The Law Reports*: (2) *The Law Journal Reports*: (3) *The Law Times Reports*: (4) *The Weekly Reporter*: and (5) *The Justice of the Peace*.

In letting a furnished house the landlord impliedly promises that it is fit for occupation, and this fact was used as an argument by counsel for the defendant in favour of a similar law as regards unfurnished houses.

COUNTY MEDICAL OFFICERS OF HEALTH.

J. H.—Health officers have been appointed by the County Councils of Derby, Durham, Lancaster, London, Stafford, Surrey, Worcester, North and West Riding, Essex, and Glamorgan; and in addition there are health officers having large combined sanitary areas in the counties of Hertford, Kent, Shropshire, Sussex, Westmorland, Anglesey, Carnarvon, Hereford, and Leicester, though not strictly county health officers.

QUARANTINE RELATIVE TO INFECTIOUS DISORDERS.

F.R.C.S. writes: Will you allow me to ask, through the medium of the BRITISH MEDICAL JOURNAL, if there are any residences in England, as distinguished from hospitals, where persons may voluntarily undergo quarantine on probation? If there are not, and no satisfactory suggestions are forthcoming relative to the illustrations I will briefly mention, I think they should be provided and encouraged as part of our sanitary system.

1. A lady with a large family of small children pays a visit to a friend similarly circumstanced—whilst staying in the house a case of small-pox or scarlet fever occurs, with which the visitor is unknowingly brought in contact. What is the latter to do? Is she to remain with the additional risk of catching the disorder, or possibly infected, to return home to her own family, or, not liking to do this, to go to an hotel, a lodging house, or another friend's house? If her conscience, or our laws, interdict these alternatives, where is she to go and serve such a period of probation without legal risk to herself or detriment to others, should she prove to be infected? What, in the absence of proper provision for the latter, would be her reflection if she proved the means of being the death of a husband, a child, or a friend, all along knowing that such an event might have been avoided by her willingly submitting to a process which she found was impossible to obtain?

2. The master of a ship arriving at a port in this country is conscious that he may be the victim of scarlet fever or small-pox by reason of his having been in recent contact with a case about which there was a grave suspicion. What is he to do before this point can be positively decided? Is he to go to his house full of young and susceptible persons in the enjoyment of excellent health, or to an hotel, whilst at the same time he himself is desirous of undergoing a period of probation, but does not know where to obtain it. How are we to advise him?

3. A boy leaves a school where scarlet fever is prevalent, and may probably be a victim. Who may receive him during the necessary period of probation and possible infection, and what are his friends with healthy children to do under the circumstances?

These and many similar positions which may easily be imagined and actually occur in practice where voluntary quarantine seems desirable.

A fever hospital is clearly not the place for the purpose, though it should be at hand, if it proves to be necessary, rather than an uninfected household. The name of such an institution is a sufficient deterrent for objects of this kind. These are only intended for persons who are proved to be infected, and not for those who desire to ascertain that they are intact. This is an aspect of the sanitary question which for my own information I should like to see discussed by those who are more competent than I am.

*** This suggestion is a further development of the plan already in operation in a few of the large provincial towns, where in case of small-pox at all events the inmates of infected houses are kept under observation in quarantine places provided for the purpose. For the country generally the still greater need of means of isolation for persons actually suffering from infectious disease claims priority, but the value of quarantine stations as supplementary to isolation hospitals is obvious, and will doubtless become more generally recognised in the immediate future.

FEE FOR FRACTURES UNDER POOR LAW.

H. E. T. writes to ask if he can recover the sum of £2 from a board of guardians, who have paid him a fee of £3 for a fractured leg, when he considers the fee ought to have been £5, because a wound formed at the site of the fracture some days after the original injury.

*** Our correspondent does not say positively that the case was one of compound fracture, but if he can establish this fact he is undoubtedly entitled to the higher fee.

ANÆSTHETICS IN POOR-LAW PRACTICE.

ANÆSTHESIA writes to ask if a board of guardians has power to pay a special fee to a medical practitioner for administering an anæsthetic in a case of operation.

*** We doubt whether a board of guardians has this power, and think it probable that any such charge on the union fund would be disallowed by the auditor.

SCHOOL CLOSURE ON ADVICE OF HEALTH OFFICER.

D. C.—The recommendation of a health officer to his authority for closure of a school in the presence of infectious disease must be regarded as of the nature of advice "to prevent the extension of the disease" required of him as part of his "duties." We have never known a fee to be paid or claimed therefor.

BRADFORD SMALL-POX HOSPITAL.

OTTAWA.—Our latest knowledge of the success or otherwise of the experimental small-pox ward at Bradford is that contained in vol. iv of Burdett's exhaustive work on the *Hospitals of the World*. He states, in relation to the methods of treatment of the infected air, that "at least 7,500 cubic feet of air per hour per patient *pass through the ward and out into the open*..... The working of the apparatus and system has been tested (of course without patients), and *has been found to give* over 9,000 cubic feet per hour per patient." On the face of it, this statement bears the interpretation that in a day of twenty-four hours there would be some 36,000 cubic feet of air *per patient* unaccounted for as regards its manner of exit from the ward. The italics are our own.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.

Legislation on Hours of Labours.—Mr. JOHN BURNS asked the Home Secretary whether, considering that the Chemical Works Committee of Inquiry in their recent report strongly recommended the adoption of eight-hour shifts in the alkali and dangerous trades, he would, failing its adoption voluntarily by the firms engaged, take steps to legally enforce a reduction of hours from twelve to eight.—Mr. ASQUITH expressed a hope that this important recommendation would be voluntarily acted upon by the firms who had not yet adopted the system of eight-hour shifts, and added, amid some cheering, that next session he would himself propose legislation giving the Secretary of State power to deal with unreasonably long hours of labour. The right hon. gentleman said that the whole question, as affecting young lads and other persons not at present protected by the Factory Acts, would be considered. He informed Mr. W. Allen that steps had already been taken to give effect to the proposals of the Committee of Inquiry for rendering the conditions of labour in the potteries more healthy.

Habitual Drunkards.—Mr. WHARTON asked the Secretary of State for the Home Department if he proposed to bring in a Bill in the next session dealing with the recommendations of the Departmental Committee on Habitual Drunkards.—Mr. ASQUITH, in reply, said that he hoped to be able to introduce such a Bill.

MEDICAL NEWS.

PROFESSOR HEUBNER, of Leipzig, has accepted a "call" to succeed Professor Henoch in the Chair of Children's Diseases in the University of Berlin.

MR. O. LOWSLEY, Public Vaccinator, Reading, has received from the Local Government Board the sum of £67 18s. for efficient vaccination for the years 1892 and 1893.

M. LAVERAN, whose researches on the etiology of malaria have earned him a well-deserved reputation, was elected a Member of the Paris Académie de Médecine on December 26th.

DR. DOKICS, formerly Prime Minister of Servia, who recently died at Abbazia, was a member of the medical profession. He studied at Vienna, where he took his degree in due course.

A NEW Swiss *Pharmacopœia* will be issued shortly. It will come into force on July 1st, 1894, as the official *Pharmacopœia* of the whole Swiss Republic, with the exception of Glarus Canton.

THE pupils and admirers of Professor Ernst Haeckel, of Jena, intend to present a marble bust of the distinguished biologist to the Zoological Institute of that University, on the occasion of his 60th birthday, which falls on February 16th.

ROYAL INSTITUTION.—On Tuesday, January 16th, Professor Charles Stewart, the newly appointed Fullerian Professor of Physiology in the Royal Institution, commenced a course of nine lectures on "Locomotion and Fixation in Plants and Animals."

DR. GEORGE ROSE has been elected by a majority to the post of Junior Surgeon to the Aberdeen Sick Children's Hospital. The appointment was made owing to the resignation of Dr. John Gordon, who has had extra university duties given to him.

Mr. William Hasling Sissons, J.P., of Barton-on-Humber, has been appointed Deputy-Lieutenant of the county of Lincoln.

University of Utrecht.—Of a total of 800 students now on the register of the University of Utrecht, 326 belong to the medical faculty. In 1893 the degree of Doctor of Medicine was conferred on five candidates.

A Society for the Healthy Education of Youth has recently been founded in Berlin. The committee include the names of some prominent medical practitioners, and Dr. Schwalbe is the Chairman of the Society.

Herr von Gautsch, formerly Austrian Minister of Public Instruction, has had the honorary degree of Doctor of Medicine conferred on him by the University of Innsbruck, in recognition of his services to medical education.

Professor Ernesto Tricomi, of the University of Padua, recently removed the entire left lobe of the liver for cancer in the presence of a large number of doctors and medical students. No details are given beyond the fact that the patient was a young man and that the operation was successful.

Dr. Lassar, the dermatologist, who, it will be remembered, was General Secretary to the International Medical Congress in Berlin in 1890, has had the title of Professor conferred upon him; and three other members of the medical profession, Messrs. Gueterbock, Remak, and Winter, have been similarly distinguished.

The late Sir George Elvey, organist to the Queen and to St. George's Chapel, Windsor, who died in December, bequeathed £300 each to the Sussex County Hospital for Sick Children, and Convalescent Home, Dyke Road, Brighton, and the Hospital of St. Cross, Rugby.

The late Mr. Algernon Peckover, for many years the leading citizen of Wisbech, has bequeathed £1,000 to the North Cambridgeshire Cottage Hospital of Wisbech. This exceptionally well appointed institution, by the way, can now be called a "cottage hospital" only by a stretch of "the pride that apes humility."

Clinical Teaching in Spain.—As a good deal of dissatisfaction has from time to time been expressed by the Spanish medical journals and by students of medicine (the protests of the latter having more than once taken the form of "strikes"), as to the inadequate provision for clinical instruction in the medical schools of the Peninsula, the Minister of Education has commissioned Dr. Amalio Gimeno, Professor in the Medical Faculty of the University of Madrid, Senator of Spain, and lately Inspector-General of Public Health, to make an official inquiry into the matter.

German Dermatological Society.—The German Dermatological Society will hold its fourth Congress this year at Breslau, on Whitsun Monday, May 14th, and two following days. The following subjects are on the programme: Modern Attempts at Systematisation in Dermatology, to be introduced by Professor Kaposi, of Vienna; and the Present Position of Our Knowledge as to the Dermatomycoses, to be introduced by Professor Pick, of Prague. A large number of communications have also been promised. An exhibition of casts, preparations, drugs, and instruments will be held in connection with the Congress.

Bequests.—The late Mr. Robert Hymers, of Stokesley, has left a legacy of £1,000 each to the North Ormesby Cottage Hospital and the North Riding Infirmary, Middlesbrough. The late Mr. Robert Arthur Kinglake, of Taunton, has by his will left directions that all his books should be sold, and that the proceeds of the sale should be given to the Taunton Public Hospital. If the testator's children should die without leaving issue, the residuary estate is to be transferred to the West of England Sanatorium (Weston-super-Mare), the Taunton and Somerset Hospital, and the Weston-super-Mare Hospital.

In a lecture on diphtheria delivered last week at the Sanitary Institute, Dr. Thorne Thorne, C.B., observed that the death-rate from it was nearly three times as large as in 1872. It was most prevalent during the school age (3 to 10). He held that all causes, such as damp, cold, and sewer gas, which produced sore throat were predisposing conditions of diphtheria by rendering the individual susceptible to the specific infection. Whenever diphtheria appeared all children with sore throat should be excluded from school. This would probably be found more effectual than closing the school.

Physiological Psychology at Cambridge.—We noticed in the British Medical Journal of January 13th that Professor Hill intends to give a course of lectures at University College on psycho-physiology, and we were under the impression that this would be the first course of the kind given in an English laboratory. We are glad to be reminded that a similar course was given by Dr. Rivers, of St. John's College, during the last Michaelmas term in the Physiological Laboratory at Cambridge. Dr. Rivers's lectures were addressed to advanced medical students, and the practical work in connection with them was very efficiently carried out, much new apparatus for the study of psycho-physiology having been recently added to the laboratory. Dr. Rivers will lecture during the Lent term on The Physiology of Sensation in relation to Psychology, and intends this course chiefly for candidates for the Moral Sciences Tripos.

Odontological Society of Great Britain.—The following members have been elected officers and councillors:—*President:* Frederick Canton. *Vice-Presidents*, Resident: R. H. Woodhouse, Ashley Gibbings, A. W. Barrett. Non-Resident: F. H. Balkwill (Plymouth), W. E. Harding (Shrewsbury), George Henry (Hastings). *Treasurer:* S. J. Hutchinson. *Librarian:* W. A. Maggs. *Curator:* Storer Bennett. *Editor of Transactions:* Edward Lloyd-Williams. *Honorary Secretaries:* Cornelius Robbins (Council), J. F. Colyer (Society), Clayton Woodhouse (for Foreign Correspondence). *Councillors*, Resident: John Ackery, Arthur Underwood, Harry Rose, C. D. Davis, C. E. Truman, W. R. Humby, W. B. Patterson, Harry Baldwin, John Gartley. Non-Resident: H. C. Quinby (Liverpool), D. W. Amoore (St. Leonards), Wilson Hogue (Bournemouth), G. G. Campion (Manchester), J. McKno Ackland (Exeter), J. H. McCall (Leicester), T. Arkovy (Buda-Pesth), A. W. W. Baker (Dublin), F. E. Huxley (Birmingham).

A Chemical Congress.—The International Congress of Applied Chemistry in Brussels will be opened on Saturday, August 4th, by M. de Bruyn, Minister of Agriculture and Industry, and will extend over the whole of the following week. The organisation of the Congress is in the hands of an influential local Committee, of which Professor Hanuise, President of the Belgian Chemical Society, is Chairman, and M. F. Sachs, Rue d'Allemagne 68, and Professor H. Van Laer, Rue de Hollande 15, Brussels, are Secretaries-General. There will be four sections, dealing respectively with (A) Sugar, (B) Agricultural Chemistry, (C) Food and Public Hygiene, and (D) Biological Chemistry. In this last section the first topic put down for discussion is the establishment of a review of reviews of applied biological chemistry, to be published periodically in several languages. The other subjects for discussion in this section have to do chiefly with fermentation in its practical aspects. In Section C an interesting discussion ought to take place as to the conditions under which the bacteriological examination of drinking water should be made. Some of the meetings of the Congress will be held at Antwerp, where at that time a universal exposition will be open.

Laryngological Society of London.—The annual meeting of this Society was held on Wednesday, January 10th, at 20, Hanover Square. In the absence of the President, Sir George Johnson, M.D., F.R.S., the chair was taken by Dr. Felix Semon. The report of the Council showed that the progress of the Society, since its foundation in March last, had been very satisfactory, not only in respect of the work done but also in regard to the number of members and the state of the finances. The inclusion of many hospital physicians and surgeons, and general practitioners in the ranks of the members, had had the salutary effect of widening the area of discussion and of keeping the work of the Society from following too narrow a groove. The following were elected as officers and Council for the ensuing year. *President:* Felix Semon, M.D., F.R.C.P. *Vice-Presidents:* P.

McBride, M.D.; W. McN. Whistler, M.D. *Treasurer:* H. T. Butlin, F.R.C.S. *Librarian:* F. de Havilland Hall, M.D., F.R.C.P. *Secretaries:* E. Clifford Beale, M.B., F.R.C.P.; Scanes Spicer, M.D. *Council:* E. Cresswell Baber, M.B.; Adolf Bronner, M.D.; J. Dundas Grant, M.D.; Mark Hovell, F.R.C.S.Ed.; C. J. Symonds, F.R.C.S. The annual dinner of the Society was subsequently held at the Café Royal, Regent Street.

THE AFTER CARE ASSOCIATION.—At the annual meeting of the "After Care" Association for Poor Female Convalescents on Leaving Asylums for the Insane, held on January 15th, it was estimated that there were about 30,000 women of various callings and conditions of life in lunatic asylums in England and Wales. Of those a large number are discharged recovered in the course of the year; many very poor, and some friendless, but capable and anxious to earn their own living. The present Association was formed to assist such by obtaining for them when needful an interval of change of scene and air, by placing them in a convalescent home, and by boarding them out in the country when thought desirable, under proper care and supervision, by giving them grants of money and clothing, and by assisting them to obtain suitable employment. The report stated that the Association was the only one of its kind in this country. In the year ending December, 1893, the number of cases was 82, as against 84 in 1892; in addition, several cases, both male and female, not coming under the rules of the Association had been assisted in other channels. The total receipts of subscriptions and donations amounted to £400 a year. Since the last annual meeting a small convalescent home had been opened in Surrey, and had fully realised the expectations of the council. It had been decided to open a fund for the "after care" of men.

AMERICAN JOTTINGS.—The annual meeting of the New England Cremation Society was held in Boston on December 19th. The principal speaker was Bishop Lawrence, who expressed the opinion that cremation is a reverent, proper, and healthful method of disposing of the remains of the dead.—What is said to have been the most successful "electrocution" yet carried out took place in the Sing Sing Prison, New York, on December 4th, when a murderer named Delfino suffered the extreme penalty of the law. The apparatus was in perfect working order, and death was instantaneous. For four seconds a current of the strength of 1,760 volts was employed, and it was then reduced to 160 volts, and so maintained for forty-six seconds.—The *Journal of the American Medical Association* of December 9th states that, on November 21st, Mr. James O'Brien, a student of Manhattan College, New York, died of peritonitis resulting from injuries received at football. It was ascertained that the diaphragm had been ruptured. During the month of November no fewer than six young Americans were killed in playing football, and a seventh—John White, of Farmington, Conn.—had his spine fractured. The Philadelphia *Medical News* gives the following list of injuries sustained by football players in the United States during the "season just closed:" Fracture of leg, 6; double fracture of leg, 1; fracture of thigh, 1; fracture of arm, 1; fracture of collar bone, 1; dislocation of shoulder, 1; dislocation of patella, 1; very severe injuries, 5; sundry disabling injuries, 119—a butcher's bill which should be sufficient to satisfy the greatest advocate of muscular Christianity, even without the trifle of eight deaths not numbered in the above list.

MEDICAL VACANCIES.

The following vacancies are announced:

BARTON REGIS UNION.—Medical Officer for the No. 6 District. Salary, £70 per annum, with extra fees allowed by law. Applications and testimonials to the Clerk to the Guardians by January 24th.

BRADFORD INFIRMARY.—Dispensary Surgeon, doubly qualified. Salary, £100 per annum, with board and residence. Applications stating age and experience, with testimonials, to the Secretary by January 23rd

BUCKINGHAMSHIRE GENERAL INFIRMARY, Aylesbury.—Resident Surgeon and Apothecary, unmarried and duly qualified. Salary, £80, increasing £10 per annum to £100, with board, lodging, and washing. Applications and testimonials to Mr. George Fell, Solicitor, Aylesbury, by January 29th.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road, W.C.—House-Surgeon. Applications, with testimonials, to the Secretary, by February 5th.

CITY HOSPITAL FOR INFECTIOUS DISEASES, Newcastle-upon-Tyne.—Resident Medical Assistant for one year, subject to re-election for a second year. Salary, £50 for first year if reappointed, £70 for the second year, with board, lodging, and washing. Applications and testimonials to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne, by January 17th.

CITY OF SHEFFIELD.—Assistant Resident Medical Officer of the two City Hospitals for Infectious Disease; doubly qualified. Salary, £120 per annum, with board, lodging, and attendance. Applications endorsed "Assistant Medical Officer" to J. W. Pye-Smith, Town Clerk's Office, Sheffield, by January 27th.

DARLINGTON HOSPITAL AND DISPENSARY.—House-Surgeon, doubly qualified and unmarried. Salary, £100 per annum, with board and lodging. Applications, with testimonials, to the Honorary Secretaries, 88, Northgate, Darlington, by January 27th.

FINSBURY DISPENSARY, Brewer Street, Goswell Road, E.C.—Physician. Honorarium of £40 per annum. Applications and testimonials to D. W. Williams, Honorary Secretary, by January 27th.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, Bloomsbury, W.C.—Assistant House-Surgeon (non-resident). Appointment for six months. Salary £20. Applications, with not more than three testimonials, to the Secretary, by Tuesday, January 30th.

LIVERPOOL INFIRMARY FOR CHILDREN, Myrtle Street, Liverpool.—House Surgeon. Salary, £85 per annum, with board and lodging. Applications and testimonials to be sent by January 22nd.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney Road, N.E.—Resident Clinical Assistant. Appointment for six months. Applications and testimonials to the Secretary, 27, Clement's Lane, E.C., by January 26th.

ROYAL PIMLICO DISPENSARY, Buckingham Palace Road, S.W.—Attending Medical Officer; must reside in the district. Applications and testimonials to the Secretary by February 5th.

ST. GEORGE'S HOSPITAL.—Physician and Assistant-Physician: must be F. or M.R.C.P.Lond. Applications to the Secretary by January 26th.

SWINDON NEW TOWN LOCAL BOARD.—Medical Officer of Health. Must hold D.P.H. certificate. Salary, £100 per annum. Applications to Henry Kenneir, Clerk to the Board, by January 29th.

UNIVERSITY COLLEGE OF SOUTH WALES AND MONMOUTHSHIRE.—Lecturer on Materia Medica and Pharmacy. Stipend, £50 a year. Applications to Ivor James, Registrar, by January 27th.

WREXHAM INFIRMARY AND DISPENSARY, Wrexham.—House-Surgeon. Salary, £80 per annum, with board, furnished rooms, gas, coal, and attendance. Applications to Mr. George Whitehouse, 27, Regent Street, Wrexham, by January 24th.

MEDICAL APPOINTMENTS.

BREW, Richard Hugh, L.R.C.P., L.R.C.S.Edin., appointed Medical Officer and Public Vaccinator for the Chew Magna District of the Clutton Union, *vice* W. R. Edmond, M.B.Edin., resigned.

FRANKISH, T., M.B., C.M., and B.Sc.Edin., appointed Resident Medical Officer to the National Sanatorium for Consumption and Diseases of the Chest, Bournemouth, *vice* S. Leonard Clift, M.D.

GODWIN, A. H., M.R.C.S, L.R.C.P.Lond., appointed House-Surgeon to the Wallasey Dispensary, *vice* G. H. Griffiths, M.R.C.S., L.R.C.P., resigned.

GRIFFITH, John, M.R.C.S. and L.R.C.P., appointed Clinical Assistant to the Royal Westminster Ophthalmic Hospital.

HUDSON, A. R. Kocke, late District Medical Officer for the Upper Widnes District of the Prescot Union, appointed Medical Officer to the Anglo-Chilian Railway and Nitrate Company Limited, Jocopiela, Chile: Medical Officer to the Compania Salctrera de "Santa Fé," Joco: Medical Officer to Messrs. Sloman, Donah, and Co., Oficina "Bueno Esperanza," Joco: and Medical Officer to the Nitrate Railways, Joco.

MARSON, F. H., M.B., B.S.Durh., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Staffordshire General Infirmary. (This appointment was incorrectly given in the BRITISH MEDICAL JOURNAL of December 30th, 1893).

MODLIN, J. Gibson, M.B., B.S.Dunelm, L.S.A.Lond., appointed Medical Officer for the Monkwearmouth East District of the Sunderland Union, *vice* L. Blumer, resigned.

PRESTON, J. R., M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Surgeon to the Jessop Hospital for Women, Sheffield.

PROBYN, Percy J., M.R.C.S. and L.R.C.P., appointed Clinical Assistant to the Royal Westminster Ophthalmic Hospital.

WALLIS, F. C., M.B.Cantab., F.R.C.S., appointed Surgeon to the Orthopædic Department at Charing Cross Hospital.

WEATHERBE, L. J., M.B. and C.M.Edin., appointed Medical Officer for the Kimberworth District of the Rotherham Union.

WILEY, Arthur Ormsby, L.R.C.P.Edin., L.R.C.S.I., appointed Medical Officer of the Workhouse of the Knaresborough Union, *vice* M. Cass Sweeting, L.R.C.P.Edin., M.R.C.S.Eng., resigned.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. W. Lang: Lachrymal Affections. Bacteriological Laboratory, King's College, W.C., 3 to 5 P.M.—Lecture: Examination of Air, Soil, and Water. Practical work: Plate Cultivations. London Throat Hospital, Great Portland Street, 8 P.M.—Dr. Edward Law: Examination of the Throat and Nose.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Clinical Evening. Mr. Pearce Gould: A Case of Epithelioma of the Tongue removed from the Floor of the Mouth. Mr. Ballance: Two Cases of Fracture of the Patella. Mr. Lucas: Two Cases of Removal of Necrosed Condition of the Metatarsal Bone. Mycosis Fungoides. (*b*) Tuberculous Ulcer of Skin. Mr. George Turner: Case of doubtful Intussusception of Bowel. Mr. Harry Fenwick and Mr. Heywood: Removal of entire Mucous Membrane of Bladder. Dr. Goodhart: A case of Perforation of the Soft Palate, for discussion. Mr. Carless: A case of Ectopia Vesicæ.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr. Corner: Hysterical Mania and Delirious Mania.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M.—Dr. Kenneth McLeod: On Nerve Stretching and Splitting in localised Interstitial Neuritis, Leprous and otherwise. Mr. J. Greig Smith: On the so-called Spontaneous Disappearance of Solid Abdominal Tumours, with three cases.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 1 P.M.—Dr. Payne: Eczema; its varieties. Hospital for Consumption, Brompton, 4 P.M.—Dr. Maguire: Cases of Special Interest. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Stanford Morton: Retinal Affections.

POST-GRADUATE COURSE.—West London Hospital, Hammersmith, W., 5 P.M.—Dr. Hood: The Symptoms of Acute Pneumonia.

HUNTERIAN SOCIETY, 8.30 P.M.—Clinical Evening.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and the Epileptic, Queen Square, 2 P.M.—Dr. Beevor: Cerebral Localisation. Hospital for Sick Children, Great Ormond Street, 3.30 P.M.—Mr. J. H. Morgan: Caries. Central London Sick Asylum, Cleveland Street, 5.30 P.M.—Dr. George Harley: Gout in Relation to Liver Disease.

NEUROLOGICAL SOCIETY OF LONDON, 20, Hanover Square, 8.30 P.M.—Annual meeting. Election of officers. Presidential address by Professor Ferrier, F.R.S., on Recent Work on the Cerebellum.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM, 8.30 P.M.—Living and Card Specimens at 8 P.M.—Dr. Ernest Clarke: A case of Pulsating Exophthalmos in a Child. Dr. E. C. Kingdon: Case of Symmetrical Changes at Macula Lutea in an Infant. Papers:—Mr. Jonathan Hutchinson: School Ophthalmia. Mr. Hill Griffith: Some cases of Orbital Tumours.

FRIDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. Percy Kidd: Cases of Cardiac Disease.

CLINICAL SOCIETY OF LONDON.—Living specimens at 8 P.M.—Mr. Eve: Modified Excision of Elbow. Mr. Pearce Gould: A case of Thoracoplasty. Dr. Francis Hawkins: Displacement of the Heart in a Child due to Fibroid Phthisis. Dr. Sidney Phillips: Rheumatic Nodules in an Adult. Mr. Turner and Dr. Penrose: A Peculiar Form of Muscular Atrophy. Dr. Sansom: A case of Aphasia. Dr. Mott: (*a*) Bulbar Paralysis after Thrombotic Necrosis; (*b*) Paraplegia following Typhoid Fever. Papers at 9 P.M.—Mr. H. H. Clutton: Three cases of Endosteal Sarcoma of Radius. Mr. John D. Malcolm: Nephrectomy for Malignant Tumour in a Patient under 2 years of age. Mr. Arbuthnot Lane: (*a*) Acute General Suppurative Peritonitis secondary to Appendicitis: Removal of Appendix: Recovery; (*b*) Multiple Epitheliomatous Growths developing in Psoriasis treated with Arsenic more than Thirty Years.

SATURDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M.—Dr. Percy Smith: Acute Mania.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTHS.

BARNETT-BENTLIF.—On January 11th, 1894, at 50, David Place, St. Heliers, Jersey, the wife of P. Barnett-Bentliff, M.R.C.S.Eng., L.S.A.Lond., of a daughter.

DODSON.—On the 3rd inst., at Hughenden, Earlsfield, the wife of Arthur E. Dodson, M.R.C.S., of a daughter.

FRASER.—At Bellfield, Bridge-of-Allan, on the 10th inst., the wife of John Hosack Fraser, M.B.Edin., of a son.

SMITH.—At 52, Camden Square, London, N.W., the wife of J. Burnett Smith, M.B., of a daughter.

MARRIAGES.

MOSLEY—INGLIS.—On January 4th, at Christ Church, Burbage, Buxton, by the Rev. Canon Mitchell, Vicar of Prescot, Lancashire, Reginald [illegible] Mosley, B.A., M.B. Univ. Dub., of Newtown, Waterford, son of the late [illegible] Mosley, to E. Constance ("Con.") Inglis, youngest daughter of the late John Inglis, M.D., H.M. Bengal Army.

VICARS—HASKETT-SMITH.—On January 10th, at St. Mary's Church, Cadogan Square, S.W., Frederic George Vicars, M.R.C.S., L.R.C.P., son of the late Colonel W. H. Vicars, to Eugénie Matilde, daughter of Captain Haskett-Smith, late Cameronian Highlanders.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

COUNTRY MEMBER.—The county lunatic asylum would be the most suitable place for such a patient if she is dangerous to herself in the outbursts of passion.

F. L. desires to know the experience of any medical man who has given lectures on elementary human anatomy or kindred subject under the arrangements for technical education.

N. C. S. wishes to know where a candidate, working for his final examination in the country, can obtain on loan a sufficient number of microscopical slides of pathological subjects for the examination in pathological histology?

A. J. asks to be recommended a suitable home for a female who is afflicted with an aggravated form of hysteria.

*** If insane she should be sent to an asylum. If not certifiable she might go to one as a voluntary boarder, if the friends can afford to pay.

COCAINE.

DR. H. S. PURDON (Belfast) asks whether ill-effects—especially as regards the heart—have been noticed from the use of cocaine when used by the hypodermic method for producing anæsthesia.

ANSWERS.

ALBERT WILSON, M.D. The department of "Memoranda: Obstetrical, Surgical, etc.," was opened some years since expressly for the use of general practitioners for records of short cases.

UNIVERSITY OF BRUSSELS.

BROOKLYN.—Particulars as to the conditions under which the degree of M.D. is granted to British medical practitioners will be found in the Educational Number of the JOURNAL (September 2nd, 1893), pp. 538-9.

EXAMINATION FOR D.P.H.

CANDIDATUS.—Corfield and Parkes on *Sewage Disposal*, and Reid on *Practical Sanitation*, would cover the point named (sanitary engineering). For the rest, it would be well to adhere to the works specified in the Syllabus.

MEDICAL INSPECTORSHIPS.

A. S. (Caversham).—Our correspondent might apply to the President or Secretary of the Local Government Board, Whitehall or Dublin, or of the Board of Supervision, Edinburgh, asking that his name may be placed on the list of candidates for medical inspectorships, sending evidence of qualification for the post and any recent testimonials. In England the salaries range from £500 to £800; in Ireland from £500 to £700. Such posts carry retiring allowances, but we know of no differences of duty in the three countries. Whole time service is required.

INSURANCE FEES.

A MEMBER.—The question of the fee to be paid for medical reports in life assurance cases is constantly cropping up. For the assurance of sums under £300 a fee of half a guinea is paid by most offices, and if medical examiners were to stand out for a guinea in all cases, it is quite possible that the office would have to dispense with a medical examination of applicants assuring for £50 or £100. "A Member" has not stated the amount of the assurance, but if it were under £300, he was probably hardly well advised in refusing half a guinea as the fee.

NOTES, LETTERS, Etc.

MR. EDWARD EAST (Honorary Secretary, British Medical Benevolent Fund), writes: I have pleasure in informing you that a unanimous vote of thanks was accorded you at our general meeting on January 12th for the kindness shown as heretofore in opening your columns to our needs.

PHOSPHORUS POISONING.

THE law in Germany affecting proprietors of match factories now provides that the rooms in which the phosphorus is prepared must be so arranged that there is a continual change of air, sufficient to remove all phosphoric exhalations. The preparation of the phosphorus may only take place in closed air-tight vessels, the mouth of which is so contrived as to serve at the same time as a safety valve. Vessels containing phosphorus are to be kept constantly covered.

WHITE LEAD RESPIRATORS.

M. F. S. writes: I would suggest that a thin packing of undyed camel's hair wool would be found advantageous. I have used it in an ordinary respirator (Jefferey's make), where in damp, foggy weather, the outer covering became wet. The layer of hair underneath strained off the wet dirt, and was appreciated by the wearer. Messrs. Jaeger were kind enough to send me the sample I used. The layer of animal wool should be removed each day and washed.

PREVENTION OF INFLUENZA.

DR. H. J. TOWLSON (Barrowden, Stamford) writes: I have frequently prescribed sulphur as a prophylactic for influenza during the last six weeks, and have not during that time had a single case of influenza in a person who was taking the sulphur, although exposed to the infection and in some cases occupying the same bed as an influenza patient. My method of prescribing it is three tabloids (manufactured by Messrs. Burroughs, Wellcome, and Co., Snow Hill) daily.

CASE OF BRONCHOPNEUMONIA SIMULATING ACUTE PULMONARY TUBERCULOSIS.

DR. P. CALDWELL SMITH (Wandsworth, S.W.) writes: The above case, reported by Dr. Keser, was in my opinion one of influenzal bronchopneumonia. I have had a large number under my care with very similar symptoms, in persons of all ages, the young generally recovering, but those in middle-aged and old persons were all fatal. I feel certain that if the sputa had been specially examined for Pfeiffer's bacillus, it would have been found in large numbers. The history of the case would also serve to confirm the above opinion.

DR. T. DILWORTH (Fermoy) writes to suggest that this case was an example of typhus fever with pulmonary complications.

THE CHOICE OF AN ANÆSTHETIC FOR REMOVAL OF NASOPHARYNGEAL ADENOIDS.

MR. GRIFFITH CHARLES WILKIN (Weymouth Street, London) writes to express the opinion that nitrous oxide anæsthesia can be reckoned on to afford sufficient time for the removal of adenoids. He adds that chloroform has been the anæsthetic used for the past seven years in the London Throat Hospital, and that in that time there has been only one death which in any way could be attributed to the anæsthetic.

DR. F. W. STORRY (Stroud) writes to say that he invariably uses ether as an anæsthetic for the removal of adenoids, administered by means of Clover's inhaler. There may be more hæmorrhage with ether than with chloroform, but this is less than the danger which attaches to the inhalation of chloroform.

COLLIERY WORKMEN AND THEIR DOCTOR.

IT will be remembered that a few days ago Dr. F. J. Davies, the medical officer of Abercarn Colliery, resigned his position in consequence of the unremunerative salary paid for his services. Hitherto the doctor was paid 2d. in the pound in the wages earned by each man, and this rate, Dr. Davies complained, was utterly inadequate for the services he was called upon to perform, but, at the same time, he made an offer that if such pay was increased to 3d. in the pound, he would continue the position. For the purpose of discussing the matter, a general meeting of the colliers was held at the Public Hall on January 11th, when, on a ballot being taken, 204 voted for acceding to the doctor's request as against 69 to reject it.

DIURETIC ACTION OF CASCARA SAGRADA.

MR. MILNES HEY (Hornsey Lane, N.) writes: Some little time ago I noticed after taking some cascara sagrada increased frequency of micturition. I could then find no cause for this. Shortly after I again took this drug, and again noticed the same effect. As I could find no reference to its action as a diuretic, I began to watch its action on any of my patients who might be taking it, and in the majority of cases I found it to act as a diuretic, a few only not noticing any difference. In one case, a Mr. D. H., the effect was marked, as the patient himself complained of the number of times during the day he was obliged to micturate. I analysed his urine, and found it to be quite healthy. On stopping the cascara he ceased to be troubled. One of my medical brethren told me that he also had noticed this same effect of this drug upon himself. The cascara sagrada that I use, and have always used, is the liquid extract of Parke, Davis, and Co. I should be interested to hear if this diuretic action has been observed by others.

HYPERPYREXIA IN EPILEPSY.

MR. E. HAY (Victoria Dock Road, E.) writes: On January 8th I was called to see E. W., aged 28. She was subject to epilepsy from childhood. The fits became somewhat rarer latterly, but I was informed she had five fits during the last night, and had not regained consciousness. On examining the patient I found her temperature 102.5° F., the pupils reacting to light, and reflexes well marked. On auscultation the heart and lungs were found normal. The other systems, so far as could be ascertained, were healthy. I prescribed some potassium bromide, and did not see the patient until 9 P.M. next day. I then found her breathing stertorous, lips cyanosed, no radial pulse, and cardiac sounds feeble. The patient was perspiring freely, and, on taking her temperature in the axilla, I found the index stand at 107.5°. Although stimulants were freely administered, the patient died at 10 P.M. the same evening. Between my first and second visits she did not have any fits, but she never regained consciousness.

A PLEA FOR CREMATION.

Let cleansing fire haste well the change
Our mortal part must undergo,
Free vapours fit the air to range,
And leave the ashes pure below.

Why should corruption's ferment vile
With poison taint the kindly soil,
The earth's fair water springs defile,
And air's salubrity despoil?

Why germs of pestilence, we fear,
Be blindly treasured with our clay;
The foes, that slew the victims dear,
Be nursed to lurk for further prey?

Does not its tale of actions bad
Suffice for each departed soul,
Or must the lifeless body add
Another record to the roll?

Nor should affection's hope be strained
If heat resolves the outward man;
The fire is but a slave, ordained
To work within the Master's plan.

Flame sped the martyrs blest on high;
It lent a chariot for the seer.
And surely Faith cannot deny
It may become a Christian bier.

J. F. COBB, M.R.C.S., Fitzroy, Melbourne.

SUGAR AS A FOOD.

DR. V. HARLEY has published in the current volume of the *Proceedings of the Royal Society* a research on the influence of sugar as a food in the production of muscular work. The conclusions of his experiments, which were performed on himself with Mosso's ergograph, are the following: (1) Sugar when taken alone is a muscle food; 500 grammes (17½ ounces) of sugar increased the amount of muscular work done on a fasting day from 61 to 76 per cent. (2) The muscle energy producing effect of sugar is so great that 200 grammes (7 ounces) added to a small meal increased the total amount of work done from 6 to 30 per cent. (3) That when sugar was added to a large meal it increased the total amount of work done from 8 to 16 per cent. (4) That the work done during a period of eight hours can be increased from 22 to 36 per cent. by taking 250 grammes (8¾ ounces) of sugar. (5) That when sugar is taken at 3.30 P.M. it not only obliterates the normal diurnal fall in the muscular power, which usually occurs at 5.30 P.M., but even causes an actual increase in the total amount of work done.

URTICARIA FOLLOWING UPON THE EATING OF PERIWINKLES.

DR. JOHN C. GALTON, M.A. (Oxon), F.L.S. (London) writes: I was consulted recently by a messenger boy, aged 18, for an erythematous eruption on the front and back of the chin. This eruption was in general characters and the evidences afforded by numerous finger-nail scratches of intense irritation plainly nettle rash. It appeared on Christmas Day and gradually faded away without any special treatment in about a week's time. At first I could get no evidence of the boy having eaten anything, excepting the usual indigestible fare of the period. After, however, a second questioning the boy said, "On Sunday"—the day preceding the outbreak of the rash—"I ate some winkles to my tea." The probable cause was at length found. Although the textbooks mention, *inter alia*, as provocative of urticaria, shell fish, under which term both crustacea and mollusca are unscientifically jumbled together, I have never seen or heard categorically mentioned the periwinkle as a cause of this disease. The periwinkle, of which there are several species, usually eaten is the *Littorina littoria*, which is oviparous, while the *L. rudis*, which is viviparous, is stated to be uneatable, owing to the gritty taste of the shells of the embryos still retained within the oviduct of this mollusc.

STERILISATION OF WATER BY HEAT.

A DESCRIPTION of the Siemens apparatus for sterilising water by boiling is given in the *Berliner klinische Wochenschrift*. This apparatus has been recently improved, the inflow of fresh water being now automatically regulated so that the temperature may always be maintained at boiling point. The water entering the heated vessel passes through a coiled tube, which is surrounded by the outflowing stream, by which means the former is appreciably heated before entering the boiler, whilst the sterilised liquid is somewhat cooled. It is stated that 30 litres an hour of sterilised water may be thus obtained at a cost of less than 2s. per 1,000 litres for the gas consumed. Experiments were tried with dirty water, and with water highly polluted with cholera and typhoid bacilli, and when the temperature of the water was not raised above 80° C. it is reported that the results were in every way satisfactory.

THE GREEN YULE.

A CONTEMPORARY points out that in spite of the proverb about a green Yule making a fat churchyard, the more accurate statistics of the Registrar-General tell a different story. So far from cold being healthy even to the moderately robust, it is scarcely second to fog in its powers of destruction. It kills off the young, and the feeble, and the old; and if the strong enjoy it and feel braced up with the thermometer below the freezing point and the wind in the north-east, this is simply a case of the fittest surviving. The doctors have an entirely different tale to tell of the remainder. Indeed, with the country at this moment in the midst of another epidemic of influenza, one dreads to hear of the mortality which is sure to follow the late frost from the sequelæ of pneumonia and other lung diseases. In reality, no Yule is so healthy as a green one. The idea to the contrary seems to have originated in a day when the plague, cholera, or other terrible scourge was a familiar visitant, which began to abate with the cold weather, and, if the weather kept frosty, very frequently stayed its course about Christmas. That feast, however, it must be remembered, was, in the age when this

unwise saw was current ten days later than now. This may explain the conventional "Father Christmas" being a hoary-bearded, frosty garmented visitor. The persistence of the snowy Christmas picture had so misled us as to produce a mistaken notion that the season was changing, and the weather all the time and—in England—exceptionally dry. Nature, it is a simple proposition, kindly comforters of the agricultural mind, is not to be pinned down to dates. The weather goes in cycles they tell us. The poet says it is "past—past," the farmer with his grass burnt up as past to think, with regrets, while also he and the splendid ploughing which the soil received last summer will tend to produce the heavy crops of long ago. This is agreeable, but as a matter of fact there is little in it beyond mere hallucinatory theory. The soundest meteorologists make their heads over all this talk about cycles. In fact, we find that our climate is—we owe our vigour and our versatility to its proverbial changes—one year with another, fairly average. In the third week of December we had the lowest barometer on record for many years past, and on the 26th of the same month the mercury went up higher than had been recorded for about an equal span. Wet and dry, cold and hot keep up their means, and unless the old painters had their snowy Christmas suggested by the Dutch masters, or found their model in January instead of December, there is no ground for believing that snow falls later in the winter than it used to do. An examination of Howard's monumental volumes on the London climate, published sixty years ago, proves conclusively the erroneousness of this popular theory, for the great storms he records were nearly all after the New Year.

"HORSE BEEF."

THE late M. Geoffroy Saint Hilaire, speaking of the contempt in which horseflesh is held as food for human beings, used to denounce the waste of millions of kilogrammes of good meat, which might be given to millions of people sadly in want of it. Since his day things have changed considerably. Horse beef is slowly but surely triumphing over prejudice, in Paris at least. Every year sees an increase in the number of those butchers shops with the sign of a horse's head, where that commodity is retailed. It was in 1866 that the first was opened. In 1867, 2,132 horses were devoured by the Parisians. In 1891 the number had risen to very close on 20,000. During the siege the consumption was even larger, but that, of course, was owing to altogether exceptional circumstances. The wholesale market for dead horses is in the Boulevard de l'Hôpital, where a public functionary decides which horses are fit for food, and which are not. The former are worth from £3 to £8, the latter not more than £2. The horses killed accidentally in the streets, or which have to be killed owing to the breaking of a limb, furnish a considerable proportion of the supply of horse beef. Recently a dinner of dainty dishes made exclusively from this viand was given by an enthusiast. Connoisseurs declare that old horse is more tender than young horse.

SOUTHERN HEALTH RESORTS.

DR. F. ST. GEORGE MIVART, M.R.C.S., M.D.Lond. (London) writes: There is one grave objection to Alassio which will, I fear, prevent the place from ever becoming a winter resort. To the west rises a towering hill, which, jutting out into the sea, cuts off all the sunshine at a very early hour, and plunges the town and its surroundings in shade. What the seashore may be like I cannot say. During a very brief stay I endeavoured only once to take a walk on the "plage," but was driven away by the filth and stench. A long line of houses standing along the beach, and turning their backs to it, does not conduce to its salubrity. I have not been at Alassio in very cold weather, but in early spring I found it particularly airless, a condition I attribute to its being so closely hemmed in by hills on three sides. The little town is squalid, and not even picturesque.

I remember Rapallo very well, and agree with Dr. Haughton that it is one of the loveliest spots on the Riviera del Ponente. I can say nothing of its climate from personal knowledge. I also heartily endorse what Dr. Haughton says as to the difficulty of finding walks at Nervi, and, indeed, everywhere on both Riviere, except at Nice, where short-breathed invalids are able to enjoy a sheltered stroll in the sun, and now they can for three sous be carried right out into the country by tramway to start with. Moreover, the opening of the two new lines of the Chemin de Fer du Sud, namely, to Puget, Theniers, and to Grasse, has brought within reach of a day's excursion at a trifling cost some of the finest and wildest scenery of the maritime Alps.

HOSPITAL REFORM.

H. E. B. writes: Some utility questions seem to me to crop up for settlement. One akin the "living wage," and the example set of rising prices here, in America, and in most places; which should lead to the increase of our scale of charges to our patients; especially amongst the lesser oracles who are consulted on medical matters, the different medical officers, and the official ("police," "Poor-law," etc.) fees, obsolete since the more expensive methods of dealing with cases pertain, and are becoming general; together with a higher tariff of payment to hardly-earning assistants and house-surgeons. Another question is the desirability of opening up or thoroughly developing existing recognised registers, at our teaching hospitals, under terms and fees [illegible] to such principals and assistants, etc. Even to the supersedence of agencies, whose profits depend from competitive work amongst themselves—in screwing out ill-spared premiums and percentages. In conclusion, it seems to me a pity that out of the strong development of our London hospital resources, inaugurated by the Post Graduate Course of Lectures, there does not exist as a sequence any facility for obtaining a doctorate degree for London diplomates other than attending for the M.D. Brussels.

COW-POX AND SMALL-POX.

DR. WM. HAELMAN (Hackney) writes: Dr. Edwin Rickards may or may not be right in his views of the very commonly held belief that cow-pox is the cow in [illegible] small-pox," but his position is in no way shaken by the facts adduced by Dr. McFeely, in the BRITISH MEDICAL JOURNAL of December 9th, p. 1271. No one disputes that small-pox is inoculable from cow to cow, and that the [illegible] is strongly borne out by Dr. McFeely's observations. Therefore why might it not have originated from a case of real human small-pox at some anterior time? The fact that it appeared suddenly in Dr. McFeely's district is not against it. Cattle are bought and sold and moved about a great deal, and dealers and others in contact with them also move about much. Some cow may have easily been introduced into the district with the seeds of the disease in it, or someone may have come in who had either had the disease or been in contact with it to such an extent as might be sufficient to cause the disease. Then, because the cattle belonging to a farm house are a long way from the cattle in another farm house it does not follow the disease appeared spontaneously in either. There is no such thing as an isolated farm. Every farm is conterminous with many other farms. It was summer when the epidemic noticed by Dr. McFeely occurred, the cattle would be turned out all day and night and would communicate freely with cattle in neighbouring farms. Horses and cows in one field constantly are seen to hold communion over the hedge or wall with cattle in an adjoining field. I have lately investigated an epidemic of strangles in this neighbourhood in which the disease was obviously communicated in this way.

LETTERS, COMMUNICATIONS, ETC., have been received from:
(**A**) Professor Clifford Allbutt, Cambridge; Alex.; Dr. McCall Anderson, Glasgow; Dr. J. W. Anderson, London. (**B**) Professor J. Benedikt, Vienna; Mr. F. Blackley, London; Messrs. Beaumont and Co., London; Mr. J. Bark, Liverpool; Mr. W. G. Bott, London; W. A. Buchan, M.B., Plymouth; Brooklyn; Mr. P. L. Booth, Barrow-in-Furness; R. C. Buist, M.B., Dundee; Mr. A. Barry, Mentone; Mr. T. B. Browne, London. (**C**) Dr. W. Campbell, Liverpool; Mr. A. Chawner, Clay Cross; Messrs. T. Cook and Son, London; Dr. C. W. Chapman, London; Mr. W. B. Colquhoun, London. (**D**) Mr. J. P. Doyle, Dublin; Dr. T. Dilworth, Fermoy; D.D.; Dr. W. Donovan, Erdington. (**E**) Enquirens. (**F**) Dr. E. Farkas, Buda Pesth; Free Lance; Filtration; Dr. H. Fox, London. (**G**) Mr. W. A. Greet, London; Messrs. Charles Griffin and Co., London; Mr. A. Godson, Cheadle; Dr. J. F. Goodhart, London; Mr. L. G. Griffiths, Clifton; Dr. E. Giampietro, Paris. (**H**) E. Hay, M.B., London; H. R. Hunt, M.B., London; Mr. E. C. Hodgkinson, London; Mr. B. Hunter, Clifton; H. E. B.; Messrs. Hensman and Marshall, London; Dr. H. Harvey, Wavertree; Messrs. Halford and Sons, London; Mr. W. H. Heygate, Cosham; W. Hardman, M.B., Blackpool; T. Hamilton, M.B., London. (**I**) Dr. R. W. Inkster, Edinburgh. (**J**) J. F. Jordan, M.B., Birmingham. (**K**) W. S. Kerr, M.B., Sheffield; Mr. C. R. Kelly, Liverpool. (**L**) Dr. W. Lake, Teignmouth; Messrs. Leslie and Co., London; Mr. W. B. Lewis, Wakefield; Dr. S. Little, Mooltan; Mr. O. Lowsley, Reading; Mr. C. Legg, Stamford; Mr. P. G. Lee, Cork; Liquor Carnis Company, London. (**M**) Medicus; J. McNidder, M.B., Hull; Member; Dr. E. Mackey, Brighton; Mr. W. Marshall, Southsea; Messrs. E. Macdonald and Co., London; Mr. E. H. Moore, Falmouth; Mr. G. H. Makins, London; Mr. R. Musgrave, Kendal; Mr. R. Menstead, London; M.D.; Dr. R. B. Macpherson, Glasgow. (**N**) Mr. F. G. Nasmyth, Cupar Fife; B. S. Nicholson, M.B., Paisley; Nine Circles. (**O**) H. Owen, M.B., London; Mr. J. L. Owen, London; Messrs. Oliver and Boyd, Edinburgh; Dr. B. O'Connor, London. (**P**) Miss E. Pitcairn, London; Mr. F. Pettit, Droitwich; Mr. A. M. Parker, London; Dr. F. W. Pavy, London; J. J. Pringle, M.B., London; Dr. H. S. Purdon, Belfast; Dr. J. Parker, Glasgow; Mr. J. N. Preston, Sheffield; Puzzled. (**R**) J. S. R. Russell, M.B., London; Dr. J. W. Roe, Ellesmere; Mr. N. B. Robinson, Hambledon. (**S**) Dr. F. Semon, London; Subscriber; J. A. Scott, M.B., Edinburgh; Mr. J. D. Shapland, Exmouth; Dr. F. Smith, London; Mr. W. H. Sissons, Barton-on-Humber; Dr. J. Swain, Clifton; Messrs. Street and Co., London; Mr. R. C. Smith, London; Mr. F. W. Storry, Stroud; Dr. H. Smith, London; Dr. A. Sheen, Cardiff. (**T**) Mr. H. J. Towlson, Barrowden; Mr. R. S. Thomas, London; Dr. H. H. Tooth, London. (**W**) Dr. A. E. Wright, Oakhurst; Dr. F. Warner, London; Dr. A. Wilson, London; Mr. J. M. Wilson, Doncaster; Messrs. F. Walker and Co., London; Mr. T. M. Watt, Hovingham; Dr. J. J. Welply, Baudon; etc.

BOOKS, ETC., RECEIVED.

The School Calendar and Handbook of Examinations, Scholarships, and Exhibitions, 1894. London: Whittaker and Co. 1894. 1s.

The Open-air Treatment of Phthisis. By Dr. W. B. Thorne. London: J. and A. Churchill. 1894. 6d.

The Student's Dictionary of Medicine and the Allied Sciences. By Dr. A. Duane. London: Longmans, Green and Co. 1894. 21s.

Headache and other Morbid Cephalic Sensations. By Dr. H. Campbell. London: H. K. Lewis. 1894. 12s. 6d.

Monte Carlo considered as a Health Resort. By Dr. T. H. Fagge. Monte Carlo. 1893.

An Introduction to Midwifery. By Dr. A. Donald. London: Charles Griffin and Co. 1894. 5s.

Western Australia in 1893. By Francis Hart. London: Bruton and Co. 1893.

*** In forwarding books the publishers are requested to state the selling prices.

A CLINICAL LECTURE ON MEDIASTINAL TUMOURS.

Delivered in the Western Infirmary, Glasgow.

BY T. McCALL ANDERSON, M.D.,
Professor of Clinical Medicine in the University of Glasgow.
[REPORTED BY WM. R. JACK, M.B.]

THE case which I am about to bring under your notice is one of exceptional interest from the point of view of diagnosis. The disease from which the patient suffered is very unusual in so young a woman, yet the evidence for its existence in this case appears to be practically conclusive, although it was unfortunately impossible to verify the diagnosis by *post-mortem* examination. The patient, a young woman of 20, has been seen by some of you during life. She was admitted on October 20th, 1893, complaining of swelling of the feet and legs, accompanied by palpitation and breathlessness. These symptoms had developed four weeks before she came to the hospital. Her family history threw no light upon the case, as, with the exception of her mother, who died in childbed, all her relatives are alive and well. With regard to her personal history, but for measles in childhood she was never unwell, until two years ago, when she began to suffer from palpitation. This never became so prominent as to unfit her for work, nor was it accompanied by dyspnœa before the present illness began. She had never had either rheumatism or scarlet fever.

Her present illness began somewhat suddenly—a month, as has been said, before her admission to hospital. The first symptom was a general swelling of the face, arms, body and lower limbs. She was unable to assign any definite cause for it, but remembered having been overheated in the washing-house on the previous day. The swelling was at first very marked, but diminished considerably under the treatment she received at home. At the same time she began to suffer from breathlessness. This was associated with a very irritating cough, which was worst at night, and was accompanied by a slightly bloodstained expectoration. Throughout the illness she passed less urine than usual, and its colour was markedly dark.

Such was, in brief, the history of the patient up to the time of her admission to hospital. When we turned to the physical examination, it was observed that there was great dropsy of the lower extremities, but, at the time of her admission, the swelling had disappeared from the face and arms. The urine was reduced in quantity, only 9 ounces being passed in twenty-four hours; it was muddy, and contained a copious deposit of urates. Albumen was abundant, but no tube casts could be found. The liver was enlarged in a downward direction, and tender to pressure. It measured 5½ inches in the mammary line, and extended 1½ inch below the costal border. There was marked lividity of the lips, cheeks, and finger nails, and, on inspecting the chest, the superficial veins were seen to be dilated in its upper regions, and still more dilated in the neck. This dilatation was especially conspicuous upon the right side.

On examination of the lungs, the breath sounds were found to be equal on both sides, and accompanied by some bronchitic *râles*, especially at the bases. The left base was somewhat hyper-resonant. On October 30th it was noted that the quantity of blood in the sputum had increased, and that it was not unlike a pneumonic sputum, but that the blood was of a brighter red. There was no fever in the course of the case.

On October 28th the right arm became considerably swollen, and on the 29th the right chest wall became somewhat œdematous. On the 30th the feet, ankles, and legs, from which the swelling had, since admission, almost disappeared, again became extremely swollen and œdematous. The right upper arm measured 10½ inches in circumference, the left only 7½ inches. On November 1st the right radial pulse was noted to be distinctly weaker than the left.

These symptoms pointed clearly to obstruction within the chest. It remained to determine the cause of the obstruction; and, on examination, a cone-shaped dulness was found over the upper part of the sternum, merging below in the cardiac dulness. It extended above from the inner end of the left clavicle, 2 inches to the left of the sternum, to a point just to the right of the right border of that bone, and it broadened slightly as it passed downwards (see diagram). With regard to the nature of this dulness, it was thought by some who examined the case that it might be due to pericardial effusion, but the following points seemed decisively to contradict that view. The apex beat, which was quite distinct, was found 3 inches below and 1½ inch to the left of the mammary line. There was no bulging of the intercostal spaces. There was no cardiac murmur and no pericardial friction sound. The second sound was accentuated in the aortic and pulmonic areas, and reduplicated, but there was a complete absence of indistinctness of the heart sounds.

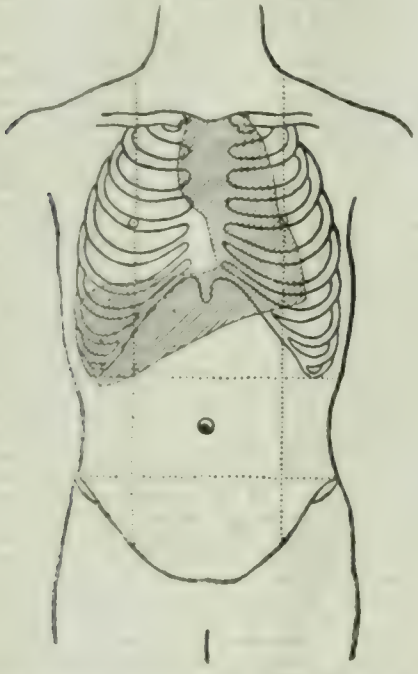
The diagnosis turned then upon the following points: The feebleness of the pulses, especially on the right side, the marked lividity, the engorgement of the veins on the right side of the chest and neck, the œdema of the right arm and right side of the chest, the downward displacement of the heart, and the compression of the left lung, indicated by the distinct hyper-resonance near its base. Pericardial effusion, due to renal disease, and pericarditis were equally excluded by the condition of the heart, and there seemed to be no lesion that could give rise to such a chain of symptoms with the exception of a mediastinal tumour. The patient died on the morning of November 8th, but, unfortunately, a *post-mortem* examination was refused. The diagnosis, however, appeared, apart from it, to be established with comparative certainty, and if we compare this case with others which have occurred in my wards you will see that similar symptoms are common to them all.

The first is the case of an iron-moulder, aged 44, who had been healthy until a year before his admission on November 11th, 1874. At that time a slight cough set in, accompanied by an increasing amount of expectoration. Six months afterwards he caught a severe cold, the cough became violent, and the sputa streaked with blood; and after that time he frequently brought up small quantities of blood. Three months before admission giddiness and oppression began to follow muscular exertion, stooping, or lifting heavy weights, but passed off on resting. At the same time the neck became slightly puffy, and, as he got worse, he stopped work three weeks before admission. Throughout the illness he felt a dull pain, sometimes of a burning character, shooting from the right breast to the scapula; this was aggravated by exertion. Latterly, on carrying his hand backwards towards the shoulder, a pain set in in front of the upper arm below the shoulder, which prevented him from completing the act. His general health seems to have been above the average. On examination we found restricted movement of the upper part of the right side of the chest in front, and marked dulness, not limited to the area of the lung, but extending across the sternum a little to the left. Over the whole of the dull space the vesicular murmur was absent. These signs, together with the following four symptoms, led to the diagnosis of mediastinal tumour: (1) The pulse at the right wrist was much more feeble than at the left: (2) there was marked dilatation of the superficial veins of the arms, head, neck, and top of the chest, especially on the right side: (3) there was distinct œdema of the neck; (4) the breath sounds at the right base were much feebler than those at the left.

Some years ago there was admitted under my care in the Royal Infirmary a ship carpenter, aged 31, who gave the following account of himself: In the month of February, while at sea, he was a good deal exposed, sometimes having his clothes wet for a whole week. About this time he began to cough a little, and the cough never left him, although he improved a good deal under treatment during the summer months. In April shortness of breath set in, with general pain over the front of the chest, shooting through to between the shoulders. At this time, too, the veins of the right side

of the neck and chest became distended, and the face gradually assumed a swollen and dusky appearance. During the spring he fainted three times at intervals of some weeks, on each occasion after drinking a cupful of cold water. All the above symptoms had been on the increase for three months previous to his admission. He was unable to lie upon his back, but breathed pretty freely sitting up or upon either side, especially the left.

On examination, besides the usual signs of a bronchial catarrh, it was found that there was dulness over the whole of the sternum, especially marked above. This extended to either side of the bone, but more to the left (2 inches) than to the right. The sternum was prominent in its upper part. Vocal fremitus was defective, and the breath sounds were scarcely heard over the dull area. Besides what has been mentioned, the following points were of importance in the diagnosis: (1) the breathing was decidedly louder on the right side than on the left; (2) the left pulse was weaker than the right; (3) there was marked enlargement of the veins of the face, neck, chest, and abdomen (especially the two last), and this was accentuated upon the right side; (4) there was great dyspnœa, especially when the patient lay on his back with his head low; (5) there was hoarseness, espe-



cially marked when he turned his head to the left. When he lay on his back with his head low the voice became extremely husky. There was congestion of the vocal cords, but no paralysis. These symptoms and physical signs pointed to the conclusion that there was a tumour in the anterior mediastinum.

The third case is that of a blacksmith, aged 51, who was admitted on February 9th, 1883, complaining of breathlessness and of swelling of the upper extremities. About four months before admission, after an unusually hard day's work, he got a chill, and suffered from "shivers." He seems to have been feverish during the night, and the next day his cough became very troublesome, and continued so afterwards. From the onset of this last attack shortness of breath was increasingly complained of, until at last he was unable to lie down in bed. Two months before admission his hands and arms became swollen, but no other part of his body; and latterly he rapidly lost flesh, strength, and colour.

On examination of the chest it was found that the lower part of the manubrium sterni was prominent, and dull to percussion, and the dulness extended into the right infraclavicular region, and 2 inches to the left of the middle line. Over this area the vesicular murmur was inaudible. For these and the following reasons the case was diagnosed as one of mediastinal tumour: (1) The right radial pulse was weaker than the left; (2) there was marked distension of the veins of the head, neck, arms, chest, and abdomen; (3) there was œdema of the arms and hands, especially on the right side; (4) there were the usual signs of a pleuritic effusion on the right side, with distinct fulness.

As regards the nature of the tumour, we came to the conclusion that in all probability it was malignant (1) because this is the most frequent form of mediastinal tumour; (2) because of the age and sex of the patient, such disease being more frequent in males and in persons who have passed middle life; (3) on account of the rapid development of the symptoms; (4) because of the signs of pleuritic effusion, malignant tumours being very apt to excite inflammation within the chest; and (5) because of the great loss of flesh and strength, and the cachectic appearance of the patient.

This patient died on February 18th, and we were fortunately able to obtain a necropsy, which completely verified the diagnosis. The mediastinum was occupied by a bulky tumour, which extended considerably more to the right than to the left side: taking rough measurements, it may be said that the tumour in its thickest part extended four inches from before backwards, and five inches from side to side. The main mass of the tumour was in the fork formed by the bifurcation of the trachea, and more behind than in front; but the mass which involved the great veins was somewhat separated from the main mass, and was almost equal in size. On opening the pericardium it was seen that all round, at the place of issue of the great vessels, the pericardium was involved in the tumour, whose whitish-grey tissue had replaced it, and projected into the sac in lobulated masses. There was no considerable extension to the heart itself, but at the auricles the tumour tissue approached very near to, and on the left side did involve slightly, the wall of the auricle. The superior vena cava on the one side, and the pulmonary veins on the other, had their walls infiltrated and their calibre somewhat encroached upon by the tumour tissue. The resulting contraction was greater in the case of the superior cava and right pulmonary than in the left pulmonary vein. The wall of the superior cava from its orifice to its division was completely occupied by tumour tissue, and its continuation upwards into the right innominate and internal jugular was similarly involved. The left innominate and right internal jugular were entirely occluded by thrombi. The right subclavian could not be traced to its junction with the innominate, its wall being converted into tumour tissue, and its calibre filled up. Beyond this the vein was occupied for a short distance by a thrombus. The left branch of the pulmonary artery was not involved in the tumour mass, but the right branch passed through a considerable thickness of it, and its calibre was obviously narrowed; but it was not determined whether its wall was actually involved or not. The aorta was not affected. The left phrenic nerve, in passing down in front of the root of the lung, was impinged on by a projecting piece of the tumour, and partly involved in its tissue. The extreme lower part of the trachea and both main bronchi had their walls partly replaced by tumour tissue, which presented itself internally in the form of rounded whitish nodules. The right main bronchus was much more involved than the left, and for a certain distance its wall was indistinguishable from the main tumour, which also extended a short distance into the lung, along the bronchus and its primary branches. On examining the arteries it was found that the right subclavian, carotid, and innominate lay for the most part behind the mass of the tumour. The subclavian was nearer, and would be more pressed on, but it was not embedded in the mass. A microscopic examination showed that the tumour was a lymphosarcoma.

You see then that these illustrative cases present a striking similarity to that which is the subject of this lecture, and tend to confirm the diagnosis. One or two points remain to be noted, which are worthy of special emphasis. Such tumours are very apt to involve the venous system, as you have seen recorded in the necropsy just quoted. They tend to do so somewhat unequally. One side of the body is usually more affected than the other, so that you

have greater distension of veins and more marked œdema on that side. The same is true of the air passages, which are also very frequently involved, and you may find that the compression of the lung, on the side towards which the tumour is lying, gives rise to diminished intensity of the breath sounds. Over the tumour itself the lung may be absent, having been pushed aside, so that in the dull area there is no respiratory murmur to be heard. In most of these cases cough is a prominent feature. It may or may not be accompanied by expectoration, and when this is present it is very frequently stained with blood. The colour of the blood is usually very bright red. The sputum often resembles that of pneumonia, but it is not rusty, as in the characteristic sputum of that disease. The blood in fact looks very much like red currant jelly, as was well brought out in our patient.

With regard to the origin of these tumours, they may arise from almost any of the structures contained in the mediastinum. You may have them originating in the bronchial glands, in the vestiges of the thymus gland, in the fat or connective tissue of the mediastinum, in the pericardium, or in the periosteum of the sternum. Their nature, as has been said, is usually malignant, and they generally attack middle-aged or elderly people, preferably males. It is extremely uncommon to find a young woman of twenty the subject of such a tumour. The most frequent form is the round celled sarcoma, or they may be true carcinomata. Occasionally they are syphilitic. In our case there was absolutely no suspicion of syphilis, and, having regard to the age, we may probably exclude carcinoma. The tumour then was most probably a lympho-sarcoma.

NOTE ON THE INTERNAL TREATMENT OF VESICULAR ECZEMA.

By LESLIE PHILLIPS, M.D.Brux.,

Surgeon to the Birmingham Skin and Lock Hospital.

However satisfactory the modern topical treatment of eczema may be, there are met with in practice numerous cases of the vesicular form of the disease in adults which have a marked tendency to spread or relapse; and after all the indications for treatment, including gastro-intestinal and diathetic, have been followed, there unfortunately still remain in many cases both a temptation and a reason to seek a remedy which we hope may have some specific or direct action in modifying or restraining the morbid tendency. I have, during the last two years, given some care to observing the effect of remedies and the results may be briefly summarised.

The marked influence of calcium sulphide on the nutrition of the skin in scrofuloderma seemed to justify its persevering employment in eczema, and it was used in a large number of cases, but in every case with a disappointing result.

Ichthyol (in pills) in one or two cases seemed to have a slight modifying influence, and in one case of relapsing vesicular eczema of the arms and hands the patient believed that the drug was of more benefit than any previously-used remedy.

The recent reports on the power of calcium chloride to increase blood coagulability suggested its use in the disorder under consideration, and it was employed in a large number of cases, but with entirely negative results.

Tartarated antimony has appeared to me to be very helpful in not a small proportion of cases, as was long ago pointed out by Mr. Malcolm Morris. I give sensible doses—namely, one-tenth to one-sixth of a grain thrice daily, and am in the habit of continuing it for long periods, it being seldom found needful to discontinue the drug on account of ill-effects.

My experience of thyroid gland feeding in vesicular eczema has been negative.

The hypophosphites appear to be occasionally useful.

Dr. Howard W. Acheson, of Farnham Street, Cavan, has been presented with a purse of sovereigns on his retirement from the appointment of medical officer of the Killenagh Dispensary District.

REPORT

ON

ASEPTIC AND SEPTIC SURGICAL CASES, WITH SPECIAL REFERENCE TO THE DISINFECTION OF SKIN, SPONGES, AND TOWELS.[1]

By C. B. LOCKWOOD, F.R.C.S.,

Assistant Surgeon to St. Bartholomew's Hospital; Surgeon to the Great Northern Hospital.

I.—Disinfection of the Skin of the Patient.

The following is a continuation of the work upon the disinfection of the skin. In the last report, which was published in the British Medical Journal on May 28th, 1892, the difficulties of the subject were mentioned, and the following instance of them was given. Before removing a chronic mammary tumour from the breast of a young woman, the usual attempt was made to disinfect her skin. After a hot bath it was scrubbed with soap and water until, as the sister said, she almost cried. Next the skin was rubbed with carbolic lotion 1 in 20, and, finally, it was enveloped in an antiseptic dressing for eighteen hours before operation, and at the operation it was rubbed and washed again with perchloride of mercury lotion 1 in 1,000. It will be allowed that strenuous efforts had been made to disinfect this skin, but, nevertheless, I grew from it the bacillus epidermidis, a streptococcus with as many as fifteen elements in a chain, staphylococcus albus, and many diplococci. These cultures were obtained by simply removing a piece of the skin at the operation, and dropping it into the usual sterilised broth, which was afterwards kept for some days at summer temperature in an incubator.

Here it is necessary to meet an obvious objection to the method of investigation which I have pursued. To introduce the skin or materials into the broth, they were cut off with sterilised scissors, and dropped into it wet with perchloride of mercury or carbolic lotion. It might reasonably be said that this lotion was sufficient to account for the absence of growth in some of the experiments. However, this is, I think, negatived by the result of the following simple experiment: Six ordinary broth cultures received from a fine pipette 2, 4, 8, 16, 24, and 32 drops of perchloride of mercury lotion, 1 in 1,000, and were afterwards inoculated with a cultivation of micrococci grown from one of the bits of skin. On the following day, after having been kept at summer temperature for twenty-four hours, each contained an obvious growth, and this afterwards increased until all the broth was turbid. Now I should estimate that never more than two or three drops of lotion were introduced in any of the other experiments with skin or materials.

In passing, it may be remarked that the above is rather a striking instance of the inefficacy of the chemicals which we are accustomed to use. The cocci grew luxuriantly in a mixture of broth and perchloride of mercury, the strength of which I should estimate to have been 1 in 5,000.

A similar experiment done with carbolic acid gave similar results. Six broth tubes were mixed with 10, 20, 30, 40, 50, and 60 drops of carbolic lotion, strength 1 in 20, and then inoculated with the same culture of skin bacteria. In seventy hours the first four were turbid, and contained abundant growth, and before the end of the week the others followed suit, the one with 50 drops becoming turbid before the one with 60.

Thus I think we may safely infer that in none of the experiments was sufficient of the chemical introduced with the skin or other material to mar the result.

At the beginning of this year other experiments similar to the first were done with the same result. A piece of the skin of a girl's neck, from which I was about to remove a cervical exostosis, was prepared in the same way as the woman's breast. The broth into which a portion of it was placed soon contained cocci, diplococci, and strings of from four or five cocci.

[1] Two previous reports on this subject have appeared in the British Medical Journal (October 25th, 1880, and May 28th, 1892).

This wound healed by first intention. Also the ordinary carbolic lotion failed to disinfect the skin of a woman's chest from which I removed a fatty tumour. Diplococcus epidermidis albus grew in the broth. The wound healed by first intention under a single dressing.

Again, the skin of the breast was prepared in the same manner for the removal of a large tumour, which proved to be a carcinoma. From this a rather large staphylococcus was grown. This bacterium I have often met with in cultures inoculated with skin, or scrapings from the skin. It grows in small white circular colonies upon the surface and in the depth of the agar agar, and merely lowers the melting point of gelatine so that it is fluid at summer temperature but solid at that of the room. At first these cultures had a very strong, offensive, cheesy odour, such as is perceived when uncleanly people remove flannel vestments. This wound did not heal by first intention but had slight secondary subacute suppuration.

Under some circumstances, however, ordinary watery solutions of chemicals may suffice for the disinfection of the skin. For instance, before I performed resection of the knee upon a girl of 15, Mr. W. B. Jones, the house-surgeon, prepared the skin by scrubbing it with soft soap and water and a nail brush, washing with ether, and afterwards with carbolic lotion (1 in 20), and wrapping in an ordinary carbolic dressing soaked in 1 in 40 carbolic lotion. The operation was done on July 15th, 1893, and a piece of skin dropped into broth then is still sterile and unaltered. This girl's knee had been resected before, and the piece of skin which was taken was part of the old scar, and contained no glands or hair follicles. Part of my wound, however, failed to unite by first intention, and although there was no pain or rise of temperature, a small collection of thin pus was found under the upper part of the flap when the dressing was removed on the fourteenth day. However, this soon got well, and did not lead to the extrusion of any of the thick silver sutures which had been inserted, and the ultimate result was very satisfactory. The cause of the suppuration was not clear, but it was probably due to an ill-applied outside dressing. I had unwisely included the back splint in the dressing—always, I think, a risky proceeding. Failure also attended our efforts to disinfect the skin by other methods.

Before operating for the radical cure of a femoral hernia I have the skin prepared as is done in the gynæcological wards of the Johns Hopkins Hospital.[2] Overnight Mr. Armistead, the house-surgeon, washed it thoroughly for several minutes with soap and hot water, and scrubbed it well. Next it was soaked with warm saturated solution of permanganate of potash. This was removed with a saturated solution of oxalic acid. The patient said this was the most painful part of the process. The oxalic acid was washed away with sterilised water, and then washed with perchloride of mercury lotion, 1 in 500, and covered with the usual dressing soaked in 1 in 2,000 perchloride of mercury solution until the operation. At the operation a bit of skin was removed and dropped into broth. In six days it contained the usual bacteria of the skin: monococci, many diplococci, long slender bacilli, and minute oval ones. The growth of these was unaccompanied by odour.

At the operation the skin was decidedly red and inflamed, and there were large vesicles upon the abdomen. The patient complained of pain, and the wound was dressed forty-eight hours after the operation. The next dressing was done a week later, when the wound was healed. It was quite dry, without redness or swelling, and cultures inoculated from it remained sterile. As far as I can judge, the directions for cleansing the skin were thoroughly carried out. However, I am not aware that the method has ever before been subjected to such a severe test as mine.

My friend Mr. Steedman informs me that at Leeds benzine is extensively used for cleansing the skin, and seems to give excellent results. Before removing a large exostosis from the humerus of a youth, the skin was washed with soap and hot water and scrubbed; next, it was rubbed with benzine, which was washed off with carbolic lotion (1 in 20), and a dressing applied. The cultures inoculated with this skin contained diplococcus epidermidis albus. The wound healed by first intention. The next trial was made in the same way, but with a mixture of equal parts of benzine and rectified spirit and sublimate 1 in 1,000. The spirit was used to dissolve the sublimate. The skin contained staphylococcus pyogenes albus and staphylococcus citreus, but the wound healed by first intention, and cultures inoculated from it grew nothing.

The other failures which I have had shook my confidence in the ordinary methods of skin disinfection. At the same time the fault could hardly lie in the chemicals which were used, because their efficacy is acknowledged. Evidently the error lay in the manner of their application. Now anyone can, by merely applying some ordinary lotion to the skin, satisfy himself that watery solutions of chemicals, even of carbolic acid, must be inefficacious for its disinfection. Even when they are applied to skin which has been cleansed with soft soap and hot water, so much grease remains that they collect in drops, and, to use a homely phrase, run away like water off a duck's back. Also, as I pointed out in the previous report, the bacteria of the skin reside, not only upon its surface, but also in its depths; concealed in hair follicles, sebaceous glands, and sweat ducts. Thus the bacteria of the skin are not only situated in rather inaccessible places, but they are also protected from ordinary lotions by the greasy substances by which they are surrounded. I therefore began to remove as much of the fat as possible with ether, and afterwards wash the skin with chemicals dissolved in alcohol. The last, however, seemed unsuitable for the dressing, which is usually applied for some hours before the operation, and, therefore, glycerine was used. This drug has the merit of not only dissolving the disinfectants quickly and well, but it also seems to have considerable power of penetrating the skin, and, as it absorbs moisture, there is no fear of its evaporation.

Our first essay in applying these new expedients excited our most sanguine expectations. At the beginning of the year I was about to remove the breast and axillary glands of a woman for carcinoma. Before the operation she had the usual bath, and the house surgeon, Mr. Murrell, to whom I am much obliged, prepared the skin in the following way: It was thoroughly scrubbed with a nail brush, soft soap, and hot water, and then with soft soap and carbolic lotion, 1 in 20. Next it was thoroughly washed with ether, and covered with carbolic gauze, which had been soaked and saturated with a solution of perchloride of mercury in glycerine, strength 1 in 2,000. This remained in contact for twenty-four hours, and caused no eczema or blistering. A bit of the skin was put in broth, and is now quite sterile and almost quite unaltered, although more than nine months have elapsed. The wound in this case was very extensive, and was brought together with some tension; it healed, however, by first intention, and cultures inoculated from it remained sterile.

The skin was also sterile in another case, which was prepared in almost the same way. Before operating for the radical cure of an inguinal hernia, with transplantation of a misplaced testis into the scrotum, the skin was shaved, scrubbed with soft soap and a nail brush, rubbed with ether, scrubbed again with soft soap, rinsed with carbolic lotion 1 in 40, and covered for twenty-four hours with carbolic gauze soaked in sublimate glycerine 1 in 2,000. This case healed by first intention under the dressing, and nothing grew in culture media which was inoculated from it.

But our next attempts to disinfect the skin with solutions of carbolic acid and with sublimate glycerine were unsuccessful. Before operating upon a youth for the radical cure of inguinal hernia the skin was prepared by shaving, washing, and scrubbing with soft soap and water, washing with carbolic lotion, and covering with sublimate glycerine 1 in 2,000 for nearly twenty-four hours before the operation. This skin grew diplococcus epidermidis albus, and a bacillus which grew upon the surface of the broth with a greyish-white pellicle. Perhaps this was the ordinary bacillus epidermidis. This wound was one of the few radical cures which has suppurated, and the pus contained the same bacillus and also staphylococcus aureus. Whence the latter came I do not know, but contradictory results have been common in this investigation and are faithfully recorded.

The skin of a boy's knee was also treated in the same way with sublimate glycerine for the final application. The ordinary staphylococcus pyogenes albus was grown from

[2] Wm. H. Welch, *American Journal of the Medical Sciences*, November, 1891.

this skin, and there was subacute secondary suppuration in the wound. This can hardly be said to have made the boy ill, but it made it necessary to remove the thick silver wire sutures which I had inserted. It is but right to say that another cause for the suppuration might have been found in the disturbance of his limb and dressings owing to his extreme restlessness upon the night of the operation. But Mr. Murrell, who had to renew and replace the dressings, performed that duty with extreme care.

These failures were disappointing and seemed to be due to some fault in the perchloride. Being aware that Sir Joseph Lister claims great penetrative and germicidal powers for carbolic acid I determined to try that drug by itself for the attempted disinfection of the skin. Therefore Mr. W. B. Jones, the house-surgeon, who has been most assiduous in carrying out these experiments, prepared the skin by shaving and washing in soft soap and water in the usual way, scrubbing with a nail brush, washing with ether, rinsing with carbolic lotion (1 in 20), and finally by covering it with a dressing of carbolic gauze soaked in glycerine of carbolic (1 in 40).

This plan was successful in the case of a boy upon whom I operated for reposition of a misplaced testicle into the scrotum with subsequent suture of the inguinal canal. The operation was done on September 2nd, 1893, and the skin, which was then placed in broth, is still unaltered. Mr. Jones says that this skin was very easy to clean, being devoid of hairs and very smooth. The wound healed by first intention and under a single dressing.

Also the skin of the groin of a young woman was aseptic after having been prepared with carbolic lotion and carbolic glycerine. The operation was done for a congenital hernia of the ovary, and the wound healed by first intention under a single dressing. This skin was likewise white and easy to clean, although studded with many hairs.

Our success has not been the same with integument which presented greater difficulties. The rough, coarse, neglected skin of a man who was operated upon for an irreducible femoral epiplocele grew staphylococcus pyogenes albus and diplococcus epidermidis albus, but his wound healed by first intention under a single dressing.

When removing two very large diffuse lipomata from a man's neck I had an opportunity of seeing what could be done for the disinfection of the scalp. Mr. Furnivall applied the carbolic method, with the addition of a rinsing with 1 in 500 watery solution of biniodide of mercury after the ether. However, in spite of this extra precaution, the broth became infected with staphylococcus albus. The extensive wounds both healed by first intention under a single dressing.

I attributed this failure mainly to the inefficacy of watery solutions, and, therefore, Mr. Furnivall kindly prepared some skin in the same way as the scalp, but used a 1 in 500 solution of biniodide of mercury in rectified spirit after the washing with ether. This skin was aseptic, but it came from the groin and not from the scalp. Mr. Furnivall said that this mode of preparation caused great pain, and kept the patient awake all night. Nevertheless, there was no blistering or eczema at the operation, which was one for the radical cure of hernia, and the wound healed by first intention under a single dressing.

In another case our failure to disinfect the skin seems to have been the direct cause of the suppuration of the wound. The patient was a delicate girl, who was prepared for the operation of radical cure of a congenital inguinal hernia. The skin was prepared by the carbolic acid method, and before the application of the glycerine of carbolic (1 in 40) was rinsed with 1 in 4,000 lotion of biniodide of mercury. The skin looked quite natural at the operation, but I grew from it a pure culture of staphylococcus aureus, as was proved by plate cultures.

The fifth day after the operation this patient's temperature rose, and she had slight pain in the wound; and when, at a later date, the dressing was removed, it was found to have suppurated. The pus contained staphylococcus aureus and a common green mould. This is the first time that I have grown staphylococcus pyogenes aureus from the skin, and it seems reasonable in this case to attribute the suppuration to it. Out of fifty-two operations for the radical cure of non-strangulated hernia, I have had five cases which had suppuration which led to the extrusion of the deep sutures, and three which had very slight superficial suppurations.

Evidently the solution of carbolic acid in water or in glycerine, whether used alone or supplemented with other chemicals, only gives aseptic results in less than half the cases. Of late I have been using biniodide of mercury for the cleansing and disinfection of sponges during operations. It is claimed for this drug that it is a powerful disinfectant, and it has the further advantage of not precipitating albumen. A mixture of blood and biniodide lotion remains quite translucent and clear. It was thought reasonable, therefore, to apply a solution of biniodide in glycerine to the skin in place of carbolic acid or sublimate. Therefore the skin of the groin of a boy who was about to be operated on for radical cure was washed with soft soap and water, scrubbed, rinsed with biniodide of mercury lotion (1 in 4,000), and covered with a dressing of carbolic gauze soaked in glycerine of biniodide (1 in 4,000). This skin was aseptic, and the wound healed by first intention under a single dressing. However, the experiment was performed under very advantageous circumstances, as the skin was white and clean, and obviously easy to disinfect.

A similar experiment, in which the biniodide glycerine was applied after the skin had been washed, scrubbed, treated with ether, and rinsed with carbolic lotion (1 in 20), resulted in the growth of staphylococcus albus from the piece dropped into broth. This patient was a young man upon whom I operated for the radical cure of both inguinal and femoral herniæ. Both wounds healed by first intention, and under a single dressing. Exactly the same method was used for the skin of the legs before an operation for the excision and ligature of varicose veins. This skin was somewhat blistered by preparation, and although the small wounds did well at first there was subsequently some slight suppuration.

Twenty-one experiments upon the disinfection of the skin have now been mentioned, and of these seven were successful. In six of these cases the wounds healed by first intention, and without the slightest pain or constitutional disturbance. There was very slight, delayed, secondary suppuration in one—the resection of the knee—but this was probably due to a fault in the dressing, and led to no ill consequences. In the other fourteen cases the skin was septic; nine of these healed by first intention, and five suppurated. In none of these was the suppuration severe or prolonged. The worst case was that in which the skin was infected with staphylococcus aureus.

Plate cultures of gelatine and agar agar were used to ascertain the kinds of bacteria grown from these bits of skin. Staphylococcus aureus was present once; staphylococcus pyogenes may have been present in some, but was not isolated; bacilli occurred twice. This is interesting because, although cocci are commonly met with in antiseptic wounds, bacilli are comparatively rare; indeed, in both of these cases they were mixed with micrococci. Staphylococcus pyogenes albus occurred seven times, diplococcus epidermidis albus thrice, staphylococcus aureus once, and the coccus with the cheesy odour twice; and once albus mixed with citreus. It is probable that several species are included under the term staphylococcus pyogenes albus, but I have included none but those which fulfilled the usual conditions, and which liquefied gelatine rapidly. I regret that experimental evidence has not been obtained as to the pathogenic properties of these bacteria. However, during the past year we have had such mortality amongst the animals that any attempts seemed sure to be fallacious.

II.—Disinfection of the Hands.

A few experiments have been done to ascertain how far the skin of the hands can be disinfected. These have been conducted upon similar lines. After the cleansing and disinfecting, a bit of skin was removed with scissors and forceps, as in Reverdin's method of skin grafting, and dropped into broth. The mode of preparation was as follows: The nails were cut as close as possible and the hands thoroughly scrubbed with hot water and soap. The nail brush used for this purpose ought to have been sterilised by steaming for at least half an hour. This was seldom done, but soaking in carbolic lotion (1 in 20) for many hours was tried instead,

but is probably quite ineffectual. Next the hands were rinsed with hot water and soaked in ordinary sublimate lotion (1 in 500) for a minute or a minute and a-half. This method gave aseptic results on two occasions. When a watery solution of biniodide of mercury (1 in 1,000) was used instead of sublimate the result was different and staphylococcus pyogenes albus grew in the broth. The nails were rather long when this test was applied to the skin, so a scrap was cut off and dropped into broth: cocci in twos and short chains were the result.

Of late a solution of sublimate in rectified spirit has been used for disinfecting the skin of the hands, and seems to promise the most reliable results. The nails have been removed as usual, the skin thoroughly scrubbed with soap and hot water and a nail brush, and the hands soaked for a minute in a 1 in 1,000 solution of sublimate in rectified spirit. In three experiments the skin was aseptic after this treatment, and in one it grew staphylococcus albus. Twice the assistant left his nails long enough to supply a scrap to put into broth; once this grew a rather large lemon-yellow coccus, which grew on the surface and in the depths of gelatine, and slowly liquefied it, and once it grew an ordinary white mould. I am inclined to think that the spirit and sublimate method is the simplest and most reliable for the hands. Those who are interested will find various other methods in Sternberg's excellent *Manual of Bacteriology* (New York, 1892). The nails are clearly harder to disinfect than the skin. I do not believe it is possible to disinfect them except by cutting them as short as possible. In my previous report, an attempt at their disinfection was mentioned, which resulted in the subsequent growth of a streptococcus, probably streptococcus pyogenes.

Although these experiments upon the disinfection of the skin of the patient and upon the skin of the hands are few and incomplete, yet they seem to favour the assumption that glycerine or alcohol are better than water for the dilution of the chemicals. They also exemplify the extreme difficulty of the problem, and the rashness of those who talk about disinfection without having applied appropriate tests.

Disinfection of Towels.

I have always felt distrustful of the towels which are now generally used to surround the field of operation. They are usually handed to the surgeon after having been dipped for a longer or shorter period in carbolic lotion. Nurses or sisters seldom use sublimate for this purpose, because it causes so much discoloration. Sixteen towels were examined in the usual way by cutting a scrap off and dropping it into broth. The results of attempts to disinfect with carbolic acid were as follows: Out of four which had been soaked for two hours in 1 in 20 carbolic lotion one was aseptic; the other three infected the broth with staphylococcus pyogenes albus, with cocci singly and in pairs and in strings of seven or less, and with a white mould.

Another towel, which had been kept in carbolic lotion 1 in 25 for twenty hours, grew a bacillus with a strong sebaceous odour, and it might be expected that towels would contain bacteria derived from the skin. A towel which had been kept in 1 in 20 carbolic lotion for twenty-four hours was aseptic. For reasons already given, mercurial preparations were seldom used for the disinfection of towels, but one which had been in 1 in 2,000 sublimate solution for some time contained bacillus subtilis, whilst another, which had been immersed for three hours in a solution of the same strength, was sterile. A towel which had been prepared by soaking for some hours in a weak solution of biniodide of mercury, 1 in 4,000, was also sterile. As it was clear that carbolic acid and other chemicals could not be relied upon to disinfect towels, we began to steam them for half an hour in an ordinary steam steriliser and in the operation theatre steam steriliser. The first attempt was a failure. Although the towel had been steamed for half an hour and soaked in 1 to 20 carbolic lotion for more than half an hour, it grew staphylococci, cocci in chains of six, and a spore-bearing bacillus, such as I have often seen in cultures inoculated with skin scrapings. I attributed this failure to the circumstance that the towel had been placed in the steriliser tightly folded up. In five other trials we had taken the precaution to open out the towels, and the result was aseptic in every instance. It seems as if this mode of preparation can be relied upon, the towel, of course, being soaked in an antiseptic after leaving the steriliser and whilst in use.

Disinfection of Sponges.

The sponges used at operations have been tested twelve times by thoroughly squeezing out as much lotion as possible, cutting a piece off and dropping it into broth. Obviously a certain amount of chemical must have been introduced each time into the broth, but the experiments mentioned at the beginning of this report show that it could have had no effect upon the ultimate result. The sponges were prepared and used as follows: The plan is most like that which Mr. Thornton[3] recommends in his article upon ovariotomy. If new, the sponges were well shaken to get rid of all sand and left in a solution of hydrochloric acid (℥j to Oj) for twenty-four hours, to remove the bits of coral and of shell. Next they are thoroughly washed and squeezed out in warm water, temperature 100° F., which has been boiled and left to cool in a covered vessel to ensure its sterility; from this they are transferred for half an hour to a warm solution of ordinary washing soda (℥j to Oj water) for the removal of any fat or albumen. Sponges full of blood, fat, and albumen may require several repetitions of this part of the process. The soda solution is removed by again rinsing in warm sterilised water, temperature 100° F., and the sponges immersed in cold solution of sulphurous acid (1 in 5) for twelve hours for a final bleaching and sterilisation. During this stage a plate is placed over the sponges to sink them in the solution, otherwise they are apt to become discoloured. Lastly, they are squeezed as dry as possible, and placed in carbolic lotion (1 in 20) ready for the operation, at which they are handed to the surgeon or his assistant in a bowl of lotion. As carbolic acid evaporates, it is most important to have well-stoppered jars and to change the lotion not less than once a fortnight. The results of the twelve tests of this method showed that in every instance but one the sponges were aseptic. This does great credit to Nurse Duffus, who carried out the process. The failure occurred when she was away, and when an inexperienced nurse did the preparation. In this instance, the broth grew a micrococcus which had all the characters of staphylococcus pyogenes albus. Generally speaking, these experiments show that asepsis is with the greatest difficulty obtained with chemicals, but once obtained with either heat or chemicals, dilute solutions of chemicals suffice for its continuance.

Harveian Society of London.—At the annual meeting and *conversazione* of this Society, held on January 18th, the reports of the Council and Treasurer for the past year were read, and both showed the Society to be in a flourishing state. Votes of thanks to the retiring members of Council and to the Treasurer were passed; and the Treasurer, Mr. Cripps Lawrence, replied. Another vote of thanks to the retiring Secretary, Mr. Roughton, was moved by the President, and carried with acclamation. The retiring President (Mr. Malcolm Morris) read the address published at page 179. A very hearty vote of thanks to Mr. Morris for his services as President during the year, and for his address, was moved by Dr. Farquharson, M.P., seconded by Dr. James E. Pollock, and carried by acclamation. The President replied; and then declared the result of the ballot for the election of officers. The gentlemen whose names were published in the British Medical Journal of January 13th, at p. 113, were unanimously elected to the various offices. The new President, Mr. G. Eastes, M.B., thereupon assumed office, and thanked the members for the honour conferred upon him. A *conversazione* was afterwards held. A very large collection of drawings and photographs of skin affections, accompanied by some models, from many hospital museums, with similar contributions from several members of the Society, and specimens of chromolithography, electrotyping, the collotype process, photogravure prints, etc., were exhibited. Mr. F. E. Ives, of Philadelphia, showed his photochromoscope by which his "chromograms" (three positive photographs of an object on glass, containing the colour record) are blended and seen in the actual colouring of the original. A selection of music by the Prince's band was played during the evening. There was a large attendance of members and visitors.

[3] Heath's *Dictionary of Practical Surgery*, vol. ii. p. 159.

PRESIDENTIAL ADDRESS
ON
THE DERMATOLOGY OF TO-DAY.

Delivered before the Harveian Society of London.

By MALCOLM MORRIS, F.R.C.S.Ed.,
Surgeon to the Skin Department of St. Mary's Hospital.

After some introductory remarks Mr. Malcolm Morris proceeded as follows:

I propose to pass rapidly in review before you the principal advances recently made by labourers in the dermatological vineyard which, if comparatively small, is not one of the least fruitful corners of the field of medicine. In no sphere of human activity is the old order passing away and giving place to the new more conspicuously than in medicine. In this general advance of the healing art dermatology has not lagged behind. No one comparing the position of that department of medicine with what it was fifteen years ago can fail to be struck by the change which has come over it, not merely in details, but in fundamental principles of treatment. This change is the result of the new light which experimental pathology has thrown on the nature of disease processes in general, and on the factors concerned in their production in the skin as in other organs.

Microbes and Skin Diseases.

Bacteriology, that "Open Sesame" which is unlocking the doors of so many secret caves of pathology, has revealed to us the true causes of several affections of the skin. Thus lupus, scrofulodermia, *post-mortem* warts, and certain forms of lichen and erythema have been shown to be the progeny of the tubercle bacillus; impetigo, sycosis, boils, and all suppurative conditions are recognised to be the result of invasion by micro-organisms. The precise microbic agents which produce leprosy and glanders are as well known as the itch mite, and although the specific micro-organism which is the cause of syphilis has not yet been identified its existence is generally accepted as an article of scientific faith, and in fact is taken as the basis of a practical rule of therapeutic conduct. It is not only as primary causes, however, that the importance of the part played by micro-organisms in the genesis of skin diseases has come to be acknowledged; the effects of their activity as secondary causes are now seen to be still more far-reaching. In general terms, it may be said that wherever there is a lesion of the skin—whether it be an abrasion, an inflamed patch, a dilated follicle, or a puncture or burrow made by a pediculus or acarus—there microbic invasion may take place. If it were possible, in such affections as scabies, acne, eczema, or lupus erythematosus, to separate the primary process from the secondary complications grafted on to it by the action of micro-organisms, it would be seen that often the lesions due to the former are almost insignificant compared with those which are the result of the latter. Illustrations of this will no doubt occur to all of you who have had occasion to see eczema, for example, in its typical uncomplicated form as an inflamed surface dotted with minute vesicles or in the "weeping" stage, with the same disease when scab formation is going on. In scabies, again, the secondary lesions are frequently so severe as altogether to overshadow those which are essential to the disease. The confusion arising from this cause has been the source of much of the faulty classification which has been the opprobrium of dermatology, and is still largely responsible for the difficulties in diagnosis which vex not only the general practitioner but the specialist. It is a proof that we are in the right way, and an assurance of more rapid progress in the future, that in dermatology, as in other departments of medicine, we are learning to distinguish the accidental from the essential, and to look in all cases for the primary characteristic lesion. How great a step forward this is in itself is too obvious to need dwelling on.

Vegetable Fungi.

The action of vegetable fungi in causing diseases of the skin need only be mentioned. The parasitic origin of ringworm, favus, and pityriasis versicolor is now so fully established that it is curious, and almost pathetic, to think that so acute and persevering a student of cutaneous pathology as Erasmus Wilson should to the end of his life have refused to believe that ringworm is caused by a fungus. The researches of Sabouraud have now shown us that there are several distinct species of trichophyton, and that the various forms of tinea in man are due to various forms of fungi, some being much more difficult to kill than others.

The Use of Antiseptics in Dermatology.

In the domain of practice the teachings of bacteriology have borne fruit in the extensive use of parasiticide agents in the treatment of skin diseases. Such remedies have an exceptionally wide field of usefulness in dermatology, for, as as has been said, affections of the integument, however they may begin, are especially liable to become complicated by results of microbic action. There is, therefore, hardly a case of skin disease in which at some period or another of its course antiseptic and antiparasitic remedies are not indicated. It must not be inferred from this that the therapeutics of the skin can be packed up into this general formula, Use antiseptics. That, no doubt, is a sound rule of practice as far as it goes, but it is in the application of the rule to the particular case that the secret of successful treatment lies, and this is by no means so easy as it may seem to the inexperienced. It is not enough to "mow down" microbes with the therapeutic Maxim guns which chemistry has placed at our disposal. Some regard must also be paid to the *macrobe*, to borrow a phrase of the late Professor Peter's. The art of treating diseases of the skin to a large extent consists in feeling one's way; not only have the nature and intensity of the process which one has to deal with to be taken into account, but the idiosyncrasy of the patient's skin must also be carefully studied. Where active inflammation exists, this must first of all be subdued. To attack such a case at once with powerful antiseptics is as if one should attempt to extinguish a fire by pouring paraffin on it.

We must proceed cautiously step by step, beginning with the mildest applications, and increasing the strength of our remedies in proportion to the tolerance of the skin. This varies greatly not merely in different individuals, but in the same person at different times, so that in no province of medicine is a close attention to every detail of each particular case more necessary than in dermatology. The dermatologist's rule should be: Avoid setting up irritation. There are indeed conditions—as in certain forms of ringworm—in which we deliberately excite irritation (by means of croton oil, chrysarobin, etc.), with the object of getting rid of the fungi mechanically by causing exfoliation of the integument in which they are. This, however, is a somewhat rough measure, to be reserved for cases in which milder medication has failed.

It would be impossible in the short time at my disposal to discuss in detail the relative merits of the various parasiticides in ordinary use. In dermatology, as in other departments, each practitioner has his own preferences, his own "fads" if you will; and in the large number of remedies of the kind which we already have, and which is almost daily being added to, we have a wide range of choice. For myself, though ready to try all things in this field, I generally find myself driven back to the use of remedies such as boracic acid, salicylic acid, sulphur, mercury, carbolic acid, tar, and resorcin, my trust in which is confirmed by increasing experience. The ideal antiseptic still remains to be discovered, but in the meantime I am tolerably satisfied with those I have named. I have so often found the latest products of the chemical laboratory fail to come up to the expectations I had been led to form of them that I can only conclude that the power of a substance to destroy or check the growth of micro-organisms in a test tube is no measure of its therapeutic potency when applied to the human skin.

Improvements in the Means of Applying Remedies to the Skin.

It is not so much in the discovery of new remedies as in

the improvement in the means and manner of applying those already known that progress has chiefly been made in recent years. The superfatted soaps introduced by Unna, the salve and plaster muslins which we owe to the inventive genius of the same specialist, the glycerine jelly or varnish suggested by Pick of Prague, the pastes introduced by Lassar and others, the cocoa butter sticks suggested by Brooke of Manchester, are all additions of the greatest value to the therapeutic resources of the dermatologist. These methods of applying medicaments to the skin are as superior to those used by our predecessors of not many years ago as the Henry Martini's and magazine guns of the present day are to the muskets with which Wellington's battles were won. I do not say that we are better men than those who have gone before us, but assuredly we are better armed.

Insufficiency of "Diathetic" Treatment.

These improvements in the weapons with which we combat skin diseases are the direct outcome of the much greater importance now attached to local medication than was the case not many years ago. As long as the influence of the older French school, represented by Rayer and Bazin, was in the ascendant, each skin affection was believed to be the outward and visible sign of a particular "diathesis," and, as a strictly logical consequence, it was against *this* that the therapeutic artillery was mainly directed, the local treatment being altogether secondary, and, so to speak, incidental. This superstition is by no means entirely extinct even now; distinct traces of it still linger in the profession, more particularly in the shape of theories as to diet which lead the patients being subjected to totally unnecessary restrictions in the matter of food and drink. It is a gratifying sign of progress that scientific dermatology is now almost wholly purged of the antiquated and often mischievous delusions as to the necessity and predominant importance of constitutional treatment in every case of eczema or psoriasis. I do not wish to be understood as denying that constitutional treatment is ever required in affections of the skin. On the contrary, I believe it to be of the greatest service when definitely indicated, and when combined with suitable local medication. I am only protesting against the superstitious notions that what you have in all cases to do is to treat the (often hypothetical) "diathesis," as it it were a fetich to be propitiated, while leaving the lesions to take care of themselves.

The Supposed Danger of Curing Skin Lesions.

Another superstition, which still survives sometimes in quarters where one would least have expected to find it, is the notion that by curing skin lesions—especially those of eczema—too thoroughly or too quickly, you expose the patient to all kinds of "morbid determinations" to internal parts. I always try to cure my patients as rapidly as I can, and I have never seen the slightest ill result that could be traced to the cure of the lesions. Nor, in fact, do I believe that we have such a power of controlling the lesions as ever to make it in the least dangerous to exert the full force of our therapeutic resources against them. I confess I have often been tempted to believe that the notion as to the serious consequences likely to follow the "driving in" of eruptions, which is so firmly implanted in the public mind, was invented by some ingenious practitioner as a convenient excuse for the powerlessness of his art.

Principles of Local Treatment.

To return to local treatment: not only have we better vehicles, but we have better remedies, and I think it may be added we apply them with a better adaptation of means to end. In the application of local treatment to lesions of the skin there are two essential conditions of success: First, as already said, the strength of the remedy must be carefully tempered to the violence of the disease; and, secondly, the application must be not only thorough, but continuous. The success with which we are able to deal at the present day with many affections that used to baffle the skill of our predecessors is due to the means of fulfilling the latter of these conditions which we now have in the salve muslins, jellies, etc., that have been referred to. Among the drugs which prove most useful in my own hands I may mention ichthyol, which is especially valuable in reducing hyperæmic conditions of all kinds; chrysarobin, which is the sheet anchor in the treatment of psoriasis, ringworm, and some forms of seborrhœic eczema; and pyrogallic acid, which properly used is equally serviceable as a stimulant and as a caustic. From the chemical laboratories have come new drugs—dermatol, aristol, europhen, losophan, gallanol, and a host of others—each of which has certain advantages which make it especially suited to meet some particular indication.

Massage.

Massage, if it is not quite the panacea for all the ills that human flesh is heir to, as some enthusiasts would have us believe, has yet won for itself a definite place in dermatological therapeutics. There can be no doubt of its efficacy in improving local circulation, promoting the absorption of infiltration and soothing vasomotor disturbance. It is undoubtedly of service in thickened conditions of the skin, as in sclerodermia and elephantiasis; it is useful in œdema, and it has been employed with success for the relief of prurigo. Wherever there is effusion that cannot find an exit on the surface; wherever there is pain from pressure of imprisoned fluid or thickened tissues on the nerve ends; wherever there is stagnation of the blood stream, there massage is likely to be useful by its mechanical action on the parts to which it is applied. That, however, is the limit of its therapeutic virtue.

Electricity.

Electricity has been used with a certain measure of success in pruritus, and other conditions in which functional disorder of the nervous system is a prominent factor: and electrolysis has given good results in certain cases of telangiectasis, angiokeratoma, and cheloid. The exact uses of the electric current in affections of the skin, with its possibilities and limitations, are, however, among the problems which further experience and investigation must solve for us.

General Medication.

Passing now from the subject of local treatment, there is very little improvement to be noted in the matter of general medication. There is no fundamental alteration to be chronicled in the treatment of leprosy, syphilis, or tubercle. Tuberculin has, indeed, been to a very slight extent rehabilitated, or perhaps it would be more accurate to say that some cause has been shown why it should not be considered so utterly useless as it was thought to be. In some cases of lupus under my own care it certainly seemed to have modified the disease in some way so that it was more amenable to ordinary local treatment than it was before. Thyroid extract, which in the hands of Byrom Bramwell seemed almost to give promise that a specific for psoriasis had been found, has already fallen from its high estate as far as skin affections are concerned. Brown-Séquard's elixir has been tried and found wanting, nor has that newest birth of experimental science, "serotherapy" (used by Tommasoli in lupus) been more successful.

Influence of the Nervous System on the Production of Skin Diseases.

Almost the only distinct evidence of progress apart from local treatment to which I can point, is the fuller recognition which has been arrived at of the influence of the nervous system in the production of skin affections. Schwimmer and others have shown us how many diseased conditions of the skin are demonstrably, or probably, traceable to suspension or diminution of the nervous influence regulating nutrition, and Leloir has taught us how often nerve lesion underlies skin lesion. The skin is in fact not only a mirror in which passing emotions are reflected, but a sensitive plate on which the effects of nerve disorder are "fixed," and, as it were, photographed. The knowledge of the intimate pathological connection between the nervous system and the skin gives the key to the successful treatment of many cases of dermatitis herpetiformis, eczema, lichen planus, etc., which defy all local measures.

The Work and the Workers.

I cannot conclude this rapid survey of the field of dermatology at the present day without saying a word as to the

men to whose labours such progress as is being made is due. Among those deserving special mention are Unna and his disciples, constituting the new German school; to them we are indebted for much light as to the influence of micro-organisms in the production of skin affections, and in particular for a careful and suggestive study of the relations between seborrhœa and eczema. Among the members of the younger French school a prominent place must be assigned to Brocq, whose work on the treatment of skin diseases is the most exhaustive on the subject. In our own country, which may be called the birthplace of dermatology, the torch held aloft by Willan, Bateman, Erasmus Wilson, and Tilbury Fox has been handed on to Liveing, Crocker, Colcott Fox, Payne, Thin, Stephen Mackenzie, Pringle, Jamieson, and Brooke. In the hands of such men there need be no fear that the glorious heritage left us by our predecessors will suffer diminution, or that the traditional lustre of English dermatology will be dimmed.

AN ACCOUNT OF BACTERIOLOGICAL OBSERVATIONS IN AN INDIAN DAIRY.

AN OBJECT LESSON.

BY E. H. HANKIN, M.A.,

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From the Government Laboratory, Agra, India.

A REGIMENTAL DAIRY IN INDIA.

By the kind permission of the officer commanding the East Surrey Regiment, I am enabled to publish the following account of observations that I made in the regimental dairy, which I venture to think are of some scientific interest, and which will illustrate the great difficulties that sanitation has to deal with in India.

At first sight the dairy appears to be admirably situated and the working arrangements capitally planned. The building is clean, well built, and in an isolated position, on a large open space, on which are other buildings devoted to various regimental purposes, and which is completely free from native houses. The native milk contractor is under the immediate supervision of a warrant officer especially appointed for the purpose. The milk cans are each provided with a lock and key, and have to be scalded out every day. The cows are brought to the dairy to be milked, and are only allowed to drink filtered water. An excellent well, known as the filter well, is situated about a hundred yards to the south of the dairy, and most stringent regulations have been issued that only water from this well should be used in the dairy.

ITS WATER SUPPLY.

My attention was first drawn to the dairy by the following circumstance: I happened to be investigating the regimental soda-water factory, and was desirous of learning something about the well water that was used, and also about that which I was assured was never by any chance used in that factory. My attention was specially attracted by a well, which I may briefly call the east well, from the circumstance that it was situated a few yards nearer to the factory than any other. I entered into conversation one day with a few natives that were clustered round. One man told me the name of his profession, and pointed out another, carrying two buckets, as his son, who apparently was in the same profession and now engaged in fetching water. I then went on to ask him if the water was good, and whether it was used in the soda-water factory. The son immediately appeared to "smell a rat," and, saying something about filtered water, he went off in the direction of the filter well. This appeared to me to be a case of conscience, so I at once asked the father to show me his business. On this he took me to a dairy, which I soon learnt belonged to the East Surrey Regiment.

THE DAIRYMAN AND HIS MILK.

The dairyman apparently took it into his head that I had been sent by Providence to be corrupted by him into getting him the contract for butter to be supplied to the fort garrison. He was much surprised that I took more interest in the thousands of flies that had committed suicide in his milk pans than in his dirty testimonials, and pointed out to me the east well as the one from which the water used in the dairy was obtained. He qualified this statement, when I next came to the dairy in company with an official that he knew, and protested that he only used the water from the east well for drinking purposes, and that filtered well water was always used for cleaning the dairy. I visited the dairy a few days later for the purpose of taking away samples of their water and milk. The dairymen saw me in the distance, and immediately began to empty the milk cans, which were on a table outside the dairy, and to wipe them dry. I arrived just in time to seize the last milk can, in which I found about a teaspoonful of water. The head dairyman explained to me that the water had been boiled, but was now cold. They were apparently scalding out the milk cans. As I afterwards found that this water contained about 88,480 living microbes per cubic centimetre, I have no doubt that it had been cold for a considerable time. I took away samples of every liquid I could find in the place, and examined them bacteriologically with the following results:

		Microbes per c.c.
Water in a galvanised iron pail, stated to have come from the filter well	contained	1,000
Boiled water above noted from the milk can	,,	88,480
Water in which the butter had been kept since the preceding day	,,	435,200
Water found in an earthen chattie used for cleaning the floor	,,	10,280
Water in which to-day's butter had been placed	,,	215,680
Freshly boiled milk. A fly had fallen into the sample (about 5 c.c. taken away for examination, tested within two hours of boiling)	,,	2,300
Water from a well bucket used for drinking purposes	,,	7,320

On the occasion of another surprise visit a few days later, I obtained results of a similar nature as follows:

		Microbes per c.c.
Water from a ladle taken out of the hand of a coolie who was washing the floor	contained	13,440
Water from a pail that was being used by the same coolie	,,	8,000
Water with which the pot used for boiling the milk was washed out	,,	38,880
Water in a large pan used for cooling the milk	,,	8,800
Water from another pan used for the same purpose	,,	31,840
Filter well water (?) in a large chattie	,,	12,800
Buffalo milk examined about four hours after milking. They said it had been boiled	,,	73,600
Water that had been placed in large earthen vessels for the cows to drink	,,	156,800
Water taken by myself from the filter well	,,	11

Taking it as inevitable that harmless microbes should get into the milk and reproduce there, the question arises whether there is any chance of the entry of dangerous microbes. Obviously harmless and dangerous ones can get in or be kept out by the same means, and the presence of the first-named is, within limits, only objectionable in that it suggests the possibility of the presence of the latter. On investigating, I soon found that there was this possibility.

TYPHOID EXCRETA AND THE WATER.

A track passed within a few yards of the dairy, and on this I met a soil cart carrying the refuse from the station hospital. I also found out that the soil carts, when not in use, are kept behind a disused latrine situated about 60 yards due north of the dairy. Instead of going by the road, the drivers of these carts—that carry typhoid dejecta from the hospital—take a short cut across the grass and so habitually pass within a few yards of the dairy. I think I am safe in assuming that as a rule during the last six months these soil carts have contained living typhoid bacilli. It is also probable that the outside of these soil carts are at least not bacteriologically clean. At any rate, as I was looking at them behind the latrine I noticed a cloud of flies buzzing over them. Flies are known to carry infection. The dairy is not far off; at that time there were no means of closing its windows, and hundreds of flies are to be found drowned every day in every milk-pan in the dairy. Here, then, is an obvious way in which typhoid bacilli may get into the milk and, what is perhaps more important, as it stays longer in the dairy, into the butter.

CHOLERA AND THE WATER.

The water of the east well, situated about 50 yards from the

dairy, is, I presume, used by the dairyman whenever he can do so without risk of detection. This well is quite exceptionally dirty; it is more or less surrounded by puddles of black, stinking mud and stagnant water. The well is much used by the inhabitants of the neighbouring syces lines, who consider its water to be very good, and consequently it contains between 1,600 and 2,000 microbes per cubic centimetre. Adjoining this well is a small masonry tank, about 10 or 15 feet square, in which is stagnant water containing 23,000 microbes per cubic centimetre. From this water I isolated what I believe to be the cholera vibrio by means of peptone cultures. This microbe, besides the characteristic form, showed the characters of growth of the cholera microbe, including the peculiar delicate smell possessed by its agar cultures, which resembles that of the vibrio Metschnikovi. It also gave the "cholera-red" reaction. As much of the culture as could be picked up on a platinum needle was injected into the peritoneum of a guinea-pig. The animal showed the symptoms characteristic of this form of cholera infection. Its temperature fell 6° F. in as many hours, and it died ten hours after infection. The *post-mortem* appearances (peritoneal exudation containing quantities of the vibrio, etc.) were also identical with those produced by cholera injection.

It is noteworthy that cholera broke out in the syces lines last year. The level of the water in this tank has been so low this year, owing to the intermittent and rather deficient rainfall, that one has to reach down rather a long way to get at the water. Probably if the rain had been sufficiently continuous to raise the level of the water in this tank to such an extent that it would have been easier to take its water than to draw water up from the well, we should have had another cholera outbreak in the syces lines.

[As a sort of control experiment I may mention the fact that I have used the same method with negative results when looking for the cholera microbe in other samples of Agra water. In the well water of one house in which the whole family had suffered from diarrhœa I found a vibrio resembling that of cholera, but which differed from it among other respects in the peculiar and rather disagreeable smell given out by its cultures. The owner of the house was under the impression that he only drank boiled and filtered municipal water, and was rather surprised when I found that water that I took from his filter contained 11,280 microbes per cubic centimetre.]

Some Indian Wells.

In view of the fact that water from the east well is or has been used in the dairy, it will be interesting to inquire into the chief sources of its contamination. From this well the water is raised entirely by hand. I have seen natives at this well with the small brass vessels (or *lotas*) used for drawing the water that they use after defæcation. The most objectionable part of this process is that, after completing their ablution, they return to the well, take up a handful of mud, which they mix with the water remaining in the *lota*, and then use it to rub both their hands and the vessel. They then clean off the mud by lowering the *lota* once or twice into the well. In this way they ensure the contamination of their water supply, especially with such microbes as inhabit the human intestine. In the case of most wells the water is chiefly raised by means of bullocks. A rope attached to the large leather bucket passes over a pulley wheel to the bullocks. These raise the bucket by walking down a long inclined plane. As soon as they get to the bottom the bucket is caught and emptied by an attendant. As they walk up the inclined plane the rope is rubbed along the earth of which the plane is built. When they turn and commence the descent, the rope, which is now for the greater part of its length hanging in the well, having the strain of the refilled bucket at the end, is suddenly tightened with a jerk that shakes off all the adhering dirt, which then falls either into the bucket or into the well. This adhering dirt partly consists of the droppings of the animals, which inevitably fall on the inclined plane during their long day's work. These droppings are apt to contain dangerous microbes, for a very curious reason, that has been pointed out by Surgeon-General Sir William Moore.[1]

The natives do not give their cattle enough salt. They consequently eat all sorts of offal for the sake of the salts present. Owing to the high percentage of salt present in human and other ordure they are particularly fond of these substances. It is very probable that some of the microbes thus obtained can pass unharmed through their intestines, and so, as above described, get into the well water. A well from which water is raised by bullocks is situated a few yards to the west of the filter well. Its water contains 2,900 microbes per cubic centimetre.

The case of the three above-mentioned wells, which are situated so close together, is interesting. One (the filter well) is completely closed in, and its water is raised by a pump worked by bullocks. Its water contains about 11 microbes per cubic centimetre. The other two are open and contain at least 1,600 and 2,900 microbes per cubic centimetre respectively. I attribute this difference entirely to the fact that the first-named well is closed in and its water is therefore protected from contamination. Koch gives 100 microbes per cubic centimetre as the limit of safety for drinking water, and the above considerations will show the advisability of closing in other wells in India where a municipal water supply is not available. Though it is easy to make such a suggestion, great difficulties besides that of expense would be found in carrying it out. While some low castes refuse to drink any water that has not been raised from a well in a leather bucket, high caste Hindus would refuse water that had been raised by a pump having a leather valve, and if they could be satisfied that there was no leather in the pump they would still regard the water as "unfit for potable purposes" if the fire that heated the engine that worked the pump had been poked by a lower caste man than themselves.

[I may perhaps be allowed to diverge from my subject to mention a fact about the municipal water supply of Agra. The pipes are not led into the houses, but go to stand pipes in the streets. When first sent out some of the stand posts had on them a representation of a lion's head, out of whose mouth the water flowed when the tap was turned on. This made it impossible for the water to be used by Mahommedans. However, this little difficulty has been remedied by means of a cold chisel. Overflow water from these stand pipes falls on to the ground, and as there is no surface drainage system it is apt to accumulate and make a puddle, which is stagnant and smelling. I have, not once but several times, seen women ladling up water from such puddles in their hands and putting it into their chatties instead of taking the trouble to stand up and take the water direct from the tap.]

The Remedies Suggested.

To return to the subject of the dairy. As a result of the above described discoveries, I made several suggestions, which have been carried out, so far as lay in their power, by the officers concerned with most commendable promptness.

It must be remembered that Agra is a place where the soldiers have to be confined to barracks till 6 o'clock in the evening for a considerable part of the year to prevent their getting heat apoplexy. Consequently it is not easy to increase the European supervision in a dairy like the one in question, which is so small that a large part of the work has to be carried on out-of-doors. Neither did I think that the suggestion that the East Surrey Regiment should be packed out of Agra bag and baggage till the municipal water supply arrives would be well received, as I am informed that no typhoid epidemic exists, but merely a succession of cases. I believe that there are 17 in hospital at present, and that Agra is no worse than other Indian cantonments. I did, however, venture to suggest that a ditch or a wall should be built near the dairy in such a position and of such a nature that the most agile dairyman would be unable to bring water from the east well. This, however, I am told would be objectionable, in that it would spoil what would otherwise be a good alternative parade ground. I suggested that the soil carts should be moved, and they are now stabled behind another latrine situated about 300 yards to the west of the dairy. A large iron vessel has been provided which is filled with water and heated every day. The milk cans are dipped into it when it is boiling, taken out with a pair of tongs, and placed bottom upwards to drain. After all the cans and utensils have been scalded, every cloth and rag in the place is boiled in the water for some time. "Chicks," or blinds made of split bamboo or gauze, have been fitted to the windows and doors to keep out flies, and gauze covers have been provided for the dishes in which the butter is kept. At the instance of the warrant officer in charge, certain dirty-looking ladles made of half a cocoanut and a piece of stick have been replaced by ladles made of tin, which can be scalded with the other utensils.

[1] *Transactions of the Seventh International Congress of Hygiene and Demography*, vol. xi, p. 28.

THEIR STULTIFICATION.

But after all this trouble had been taken, a discovery was made, by Surgeon-Major Milward, of a fact that nullifies any precautions that have hitherto been taken. He happened to notice a man carrying a large chattie or earthen vessel on his head going past the Station Hospital, in the direction of the dairy. Surgeon-Major Milward followed the man into the dairy, and found that the chattie was full of milk. On inquiry it turned out that the dairyman was in the habit of supplementing the deficient supply yielded by his own cows by buffalo's milk brought from the bazaar. He says that though all the milk used for drinking is milked at the dairy, the buffalo's milk which has to be used for making butter is principally obtained from a bazaar contractor. I have been told that this contractor really represents about thirteen owners, and I suppose that this means that he keeps a chattie into which any residue of buffalo's or goat's milk are thrown, and that when it is full it is smuggled into the regimental dairy. It is obviously not worth while to investigate the conditions under which milk is thus obtained in the bazaar. The sanitary precautions are likely to be of a kind that would have been out of date on Noah's Ark, and, what is more to the point, any suggestions that I could make to the native owners would most certainly be disregarded as soon as my back was turned. I have strongly represented the desirability of changing this state of affairs, but owing to circumstances beyond the control of the regimental officers concerned this has not as yet been done.

Although I have mentioned the typhoid fever that has been going on in the East Surrey Regiment, I should like to point out that the work described in this paper must not be regarded as an attempt to find out the origin of this outbreak. I have merely attempted to bring a little bacteriological knowledge to bear on the dairy, and I think some of the things I have noted would be regrettable if the regiment were in the best of health. There may or may not be a connection between the dairy and the typhoid. It is, however, not only possible, but probable, that there is, in spite of the padlocks on the milk pails. The typhoid has attacked both officers and privates. So far as I know, the only articles of diet of common origin that go to the officers' mess, and are also used by the privates, are the butter, the milk, and the soda-water. The soda-water is, I believe, now unexceptionable, and no officers have had typhoid since the officers' mess gave up taking butter and milk from the regimental dairy.

ARTIFICIAL FEEDING IN ACUTE MELANCHOLIA.[1]

BY JAMES NEIL, M.D.,
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IN the management of a case of acute melancholia, with refusal of food, we must bear in mind that we are treating, not a so-called "lunatic" merely, but a person suffering from a bodily disease of an urgent and formidable kind. In many cases there is constant and exhausting motor excitement. There is loss of rest at night, and, frequently, hypnotic drugs procure only a short period of troubled sleep. The secretions of the alimentary canal are dried up. The bowels are constipated; the gullet and mouth are dry; the tongue and lips brown, parched, and cracked; and the breath is fœtid. The patient loses weight rapidly, and this loss of weight, the expression of tissue waste, tells us that the one important measure is to supply abundant nourishment. The state of the alimentary canal does not contraindicate feeding. The repugnance to food, the constipation, the dry mouth, and the foul breath, are symptoms of deficient innervation, and they disappear when the nutrition of the nervous centres is restored. The best proof of the correctness of this view is that food, although administered forcibly and rapidly in large quantities, does not cause sickness or vomiting, and that the alimentary organs gradually return to their healthy condition under a course of abundant alimentation only, without any treatment for "dyspepsia."

A melancholiac should be carefully weighed once a week, and, if the weight is falling, too little nourishment is being taken. When refusal of food is absolute, and wasting is rapid, one entire day of fasting is all that should be allowed. In cases where some food is taken, but not enough, we should not temporise, but boldly resort to forcible feeding.

Many methods of feeding forcibly have been practised, but here it will be most useful to select some one plan, and describe it in detail. I do not claim perfection for the operation selected, but, after having performed it several hundreds of times, and compared it with three or four other procedures which I have also practised, I can recommend it as a very good operation.

(*a*) The food must be liquid; custard of egg and milk is a very good and convenient food. But it is desirable, especially if the feeding has to be kept up for any length of time, to have some variety, and to introduce the vegetable element. We begin by giving a couple of eggs in a quart of new milk, morning and evening. For dinner about the middle of the day, a ration of meat pounded fine in a mortar, with two or three good-sized potatoes, and added, along with a couple of eggs and cupful of cream, to the liquor in which the meat was boiled, the whole being made into a smooth *purée* with all solid particles strained off. If this last point is not attended to, the feeding tube will be choked, and an awkward interruption to the operation caused. It will be observed that all the elements of the meat are retained, which is not the case with ordinary beef-tea. The potatoes should be cooked by steaming, or boiled in their skins, so that the vegetable salts are not lost. To each of these three meals a dose of cod-liver oil should be added, gradually increased to a tablespoonful. If symptoms of exhaustion are at all marked, from half an ounce to an ounce of brandy should also be added. If, after a week of this regimen, the body weight is still falling, another egg must be added to each meal.

(*b*) The room in which the operation is performed must be well lighted. Place a mattress on the floor, in the full light of the window, and lay a pillow on the end of the mattress farthest from the window. Have a yard all around the mattress clear of furniture.

(*c*) Instruments.—1. A feeding tube. It should be of flexible material, as thick as a smallish finger, and soft to the very tip. No part should be hard or rigid. An accident can hardly happen with such a tube. It is too large to enter the larynx, and too soft to perforate the stomach or œsophagus. It is best to have the cup for receiving the food made in one piece with the tube, and of the same material. 2. A screw gag of plated metal, thin at the tips, and serrated to prevent it from slipping off the teeth. 3. A small bottle of olive oil. 4. A counterpane folded double. A counterpane is better than a sheet, because being thicker and softer, it lies more closely to the patient's body, and prevents movements more effectually. 5. A towel. 6. The food, in a jug with a handle and spout; not a basin. If a basin is used, much of the food will be spilled as it is being poured into the funnel.

(*d*) To prepare the patient. Take off the boots, and loosen the clothing about the body and neck. In the case of a woman, direct the nurse to unfasten the stays and slacken the petticoats.

(*e*) The operation. Four assistants are required: one at the head, one at the feet, and one at each side. The patient is made to stand on the mattress, near the window end, with his face to the light. The chief assistant stands close behind the patient, and puts his arms through the armpits of the latter. Those at the sides grasp the arms of the patient at the wrist with one hand, and at the elbow with the other. The assistant at the feet, standing at one side, puts his arms round the patient's ankles and snatches his feet from under him, while the others, especially the chief assistant, support the body and let the patient gently and quickly down on the mattress on his back, the feet being towards the window and the head on the piliow. The light must fall on the patient's face. The operator throws the doubled counterpane across the patient's body, covering him from the shoulders to the waist, the arms being under the counterpane and close to the sides. The chief assistant takes the head firmly between his knees, kneeling behind the patient, the back of whose head rests

[1] Abridged from a paper read before the Oxford Medical Society, November 10th, 1893.

on the pillow. The second assistant kneels astride the patient's legs, and, grasping the knees with his hands, presses them downwards. Those at the sides kneel on the loose ends of the counterpane close to the patient's body, grasp the elbows with one hand and the wrists with the other through the counterpane, and press downwards on the mattress. In this way the patient is completely controlled in a few seconds, and a prolonged struggle, causing terror and exhaustion, is impossible. The chief assistant tucks the towel under the chin to prevent the clothes being soiled.

Here a caution must be given. The assistants must on no account kneel on the patient nor grasp the bare wrists. That must be done through the counterpane or the sleeve of the coat or dress. The chief assistant who holds the head must not squeeze the ears between his knees. The need for these precautions will be evident when it is remembered how easily many of the insane are bruised.

The operator now kneels at the right hand side of the patient's head, and places the instruments and vessels on the floor at his own right hand. He oils the tube, and lays it across the patient's chest, on the towel, to be ready. The oil should not be omitted, for, as has already been said, the œsophagus is in a dry condition, the secretion of mucus being in abeyance. Then he inserts the gag between the molars, and opens the mouth widely with the screw. If the patient clenches his jaws, there are, in most cases, irregularities or gaps between the teeth that will admit the gag, or the nostrils may be pinched between the finger and thumb, when the patient will probably open his mouth for a moment to breathe, or he may be surprised into speaking by asking him a question suddenly and sharply. If these means fail, we can generally slip the gag in gradually by keeping a steady moderate pressure with it for some time. When the mouth is well opened, the operator passes the gag to the chief assistant, who holds it in position with his right hand, taking care that it does not turn round, or slip forward out of the mouth. The operator then takes the oiled tube with his left hand near the cup end, and with his right about 8 inches from the point. Introducing the point into the pharynx he guides it gently down the gullet into the stomach. The stomach is known to be reached by the feeling of resistance ceasing, and by a puff of gas that comes through the tube with a slight gurgling sound. The ear should be inclined towards the tube to catch this indication. Occasionally the point hitches against the back of the pharynx, the tube doubles forward at its weakest part, where the eyes are pierced namely, and, pressing against the larynx, causes violent dyspnœa. This is apt to happen when the head of the patient is too far extended, causing the cervical vertebræ to bulge forward. Withdraw the tube, and direct the chief assistant to flex the head. Reintroduce the tube, and, with the right forefinger in the pharynx, guide the point into the œsophagus. Sometimes there is a spasmodic action of the gullet, and the tube is grasped by it. Hold the tube against the obstruction for a few seconds, when the spasm will relax and the tube will pass down. Then, holding the tube upright with the left hand, with the right pour the food into the cup as fast as it will go down. If the flow is checked, it is because the eyes of the tube are closely applied to the gastric mucous membrane and are thus blocked, or because the tube is doubled in the stomach. Withdraw the tube for a couple of inches, and the food will flow. In some cases there is much regurgitation of food, causing troublesome, or even alarming, symptoms of suffocation. Lay down the jug, and suspend the administration of food by pinching the soft stem of the tube with the right forefinger and thumb till the regurgitation subsides, then go on again. It may be necessary to do this two or three times in the course of the operation. When all the food is given, withdraw the tube gently, keeping it, while doing so, towards the roof of the mouth to avoid tickling the epiglottis. The patient is then released. It is usual to allow him to lie for a short time to lessen the risk of vomiting, but that accident rarely occurs.

The operation now described can easily be performed, when the assistants are expert, in four and a-half minutes from the time the patient is placed standing on the mattress till the moment he is released. This is an important point in favour of the method, for, in the most favourable case, the mind and the muscles of the patient are held in a state of painful tension, and when there is exhaustion, regurgitation of food, and alarming symptoms of choking, forcible feeding is a disagreeable and anxious operation. It is almost as much so in fact as the giving of an anæsthetic, and the more quickly it can be performed the better. It is with the view of conducing to expedition that I have gone so fully into details which, I would venture to hope, have not appeared trivial or tedious.

PARALYSIS OF THE SERRATUS MAGNUS AND DISLOCATION OF THE SCAPULA.

By J. ERNEST MOORHOUSE, M.A., B.Sc., M.B., C.M.

J. B., a miner, aged 44, was treated in July by my *locum tenens* for pain in the region of the deltoid muscle and right side of the chest. At that time he was off work for a fortnight, and the pains gradually ceased. He came to me on September 20th, complaining of the same pain, and that his "shoulder blade was growing out." This condition had been present since the beginning of August, and had gradually become worse.



On examining him I found that the pain was now localised in two places—one behind the deltoid muscle, corresponding to the position of the circumflex nerve, and the other to the inner side of the biceps. The pain was only marked when he held the forearm out between pronation and supination. He could not keep this position long, and pressure on the two points caused severe pain.

With the arms hanging at the side, the lower angle of the right scapula was half an inch nearer the spine than the left. With the arms stretched out in front, the right scapula came out like a wing to such an extent that the dorsal border was 2 inches from the chest wall. The distance between it and the spine was only 2¼ inches, as compared with 5 inches on the left side. He could stretch out the left arm 1½ inch further than the right, and, in trying to push, the affected arm was very weak. The curious thing was that when I supplied the place of his serratus magnus and pushed the scapula forward against the chest wall he suffered no pain in any position of the arm.

The right shoulder was lower than the left, and the deltoid considerably atrophied. On examining the chest the digita-

tions of the serratus magnus were well seen and felt on the left side, but on the right could not be recognised either by sight or touch. With the arms grasping the back of a chair, the right half of the chest moved much less than the left on forced inspiration. All the movements of the arm requiring the assistance of the serratus magnus or deltoid were much interfered with.

It would seem that there was some affection of the circumflex and posterior thoracic nerves accounting for the pain in July, the paralysis of the posterior thoracic having brought about the characteristic dislocation of the scapula. The comparative rarity of the condition has induced me to write this note on the case.

As to the cause he could give no hint. He was accustomed to hard work and carrying heavy weights, but I could not trace any definite lesion or find any on examination. A tight belt round the scapula enabled him to work fairly well. In addition fly blisters were applied over the origin of the posterior thoracic nerve, and the affected muscles rubbed with a stimulating liniment.

Mr. Cotterill, who kindly saw the patient for me at the Edinburgh Royal Infirmary, recommended also the hypodermic injections of strychnine into the substance of the muscle, and the use of the interrupted current.

The patient made a complete recovery in two months.

NOTES AND QUERIES ON SMALL-POX.[1]

By CHARLES PORTER, M.D., D.P.H.Camb., M.R.C.S.,
[Medical Officer of Health for the County Borough of Stockport.

As regards the question, Is compulsory vaccination necessary? few medical men will, I think, be found to answer it as it stands otherwise than affirmatively. A possibly more debatable point to my mind is raised by the query, At what age is compulsory vaccination most beneficial? Although the first decade of life is by no means the most favourable for contracting small-pox, the protective influence, and therefore the desirability of infantile vaccination (as shown by the enormous and universal preponderance of small-pox deaths amongst unvaccinated as compared with vaccinated children) cannot be successfully disputed. On the other hand, until revaccination be made compulsory during the third quinquennium, it seems open to doubt whether the single vaccination which is now compulsory might not be with advantage postponed until that period is reached. The protection then afforded would be effected at a more susceptible age, its duration would be more permanent, and much of the existing objection to vaccination traceable to a sentimental, but natural, dislike to inflict suffering on very young and, perhaps, weakly children would be obviated. In addition, the abandonment of infantile vaccination would render inapplicable the cogent excuse which vaccination in infancy appears at present to afford many adults for refusing revaccination after exposure to infection.

As regards the value of revaccination of families in the presence of small-pox, no one who has had to deal in a preventive capacity with this disease can have failed to have been impressed with the striking protective results of the operation, and the disastrous consequences of refusal to submit to it. In the district for which I act, several cases of this kind occurred of so convincing a nature, that the authority ordered the particulars to be circulated in handbill form in the neighbourhood in which the sufferers lived, with a fairly good temporary result as regards increase in the number of those seeking revaccination.

Under these circumstances, and also as regards all tramps, I believe that revaccination should certainly be compulsory, and that, when not performed by the medical officer of health or his special deputy, a certificate of strict compliance with Government requirements might, with great advantage, be insisted upon. An official school register of vaccination marks would undoubtedly be a step in the right direction, as at present schoolmasters appear unwilling, for fear of giving offence, to facilitate the acquisition of information by the medical officer of health as to their scholars' condition in regard to vaccination.

An easy method of estimating the size of vaccination marks is desirable. I am aware that it has been suggested to mark them with an aniline-blue pencil, and take an impression therefrom on paper, but this result is not sufficiently easily expressible in accurate terms of ordinary measurement.

Before quitting the subject of vaccination I desire, with your permission, to formulate the following queries:

1. Are the effects of primary vaccination performed during the second decade of life to be regarded as permanent?

2. Can the protective influence of revaccination be annulled by severe constitutional illness? I am disposed to believe that it can, because I have successfully revaccinated two individuals who since their previous revaccination had suffered from a severe attack of typhoid fever and acute rheumatism respectively.

3. If a patient suffering from an apparently well marked attack of small-pox is successfully vaccinated whilst so suffering, are we therefore to conclude that his illness is not small-pox? In the early part of 1893 I noticed in the British Medical Journal (Feb. 11th, p. 291) a communication from Dr. Gornall, of Warrington, in which this conclusion was apparently adopted, the case in question being one in which there had been a traceable exposure to the infection of chicken-pox, but no known exposure to that of small-pox. Questioning the soundness of this apparent conclusion, I shortly afterwards vaccinated, at the time of their admission to hospital and on the fifth day of the disease, two pit sinkers suffering from well-marked small-pox and with a history of recent exposure to small-pox infection. In both cases the result was successful, and followed a fairly typical course. I have nevertheless not a shadow of doubt that the disease from which these men were suffering was true small-pox.

Adverting now to the appearance of small-pox in the scarlet fever wards of the Westhulme Hospital at Oldham, I may give the following details of a somewhat similar occurrence at Stockport, and of the causes to which it was traced:

On January 13th, A. B. was admitted to the Isolation Hospital suffering from scarlet fever. On February 15th this child presented a papular eruption, which rapidly became typically variolous. As minute precautions had been ordered and adopted to prevent communication between the scarlet fever and small-pox pavilions, a searching investigation was made into the occurrence, and it was elicited that a nurse had secretly kept a cat in the scarlet fever pavilion, and that this cat had been seen at the small-pox end. This vehicle of infection was effectually eliminated, the ward thoroughly cleansed with corrosive sublimate solution, and fumigated while damp with SO_2. On February 28th, however, a second case of small-pox occurred in the same scarlet-fever ward, from which the patients were again immediately removed, and the disinfecting process repeated. Happening at this time to go into the ward (then empty) of the small-pox pavilion, which is nearest to the scarlet fever end, a smell of sulphur was distinctly perceptible, and on examination a large aperture was found in the floor at one end of the ward, through which the hot-water pipes made their exit, a similar opening existing in the floor of the scarlet ward. By getting beneath the floor, and placing lights beneath each of the apertures referred to, the existence of a subterranean passage communicating with both pavilions was established, and on pouring oil of peppermint and boiling water through the aperture at the small-pox end, its odour soon became strongly perceptible at the scarlet fever end. Evidently the higher temperature of the scarlet fever ward which was in use had aspirated infected air from an empty ward of the small-pox pavilion, through this underground passage for the hot-water pipes, to the scarlet fever end. This structural defect having been remedied, no further cases of secondary small-pox have since occurred.

Finally, as regards our safeguards, I am unable to agree with the view that thorough disinfection of houses in which small-pox has occurred is uncalled for. Surely, if the germs of this disease can retain their virulence after a passage of hundreds of yards through the open air, they are doubly likely to do so in the close atmosphere of ill-ventilated houses, and if that be so, it certainly behoves us to leave no stone unturned to remove or purify all possible formites.

In discussing our safeguards no reference has, I think, been made to the nightly inspection of common lodging-houses. In Stockport the disease was so repeatedly reintroduced by vagrant lodgers at these places, that a nightly inspection between the hours of 9.30 P.M. and 11 P.M. of every lodging-house in the town was organised with excellent results. My committee, at my suggestion, also authorised a young medical man to accompany the inspector for each one of the four sanitary subdistricts every fourth night, supplied him with lymph, and paid him 2s. 6d. for every vaccination he effected.

[1] Read before the N. W. Branch of the Society of Medical Officers of Health on October 13th, 1893.

In this manner over eighty of the permanent *habitués* of these lodging-houses, who are specially liable to contact with infected strangers, were by vaccination protected themselves, and thereupon to a considerable extent ceased to constitute a standing menace to the health of the inhabitants at large. This nightly inspection led, in addition, to the early detection and prompt removal of several cases, and kept the lodging-house deputies on the alert.

As regards the apparently healthy inmates of infected houses, I may state that since the recent completion of our present very perfect steam disinfecting chamber and baths, it has in several instances been found easily practicable to remove these individuals at once thereto, and while they are bathing and being revaccinated to disinfect their clothing. When discharged thus purified, they were at once permitted to resume their ordinary avocations, but kept under sanitary surveillance for a fortnight. In consequence, to some extent at any rate, of these and other measures, and notwithstanding 22 fresh introductions of the disease, Stockport has since remained comparatively unscathed in the midst of a sea of small-pox, the whole number of cases which have occurred being only 29. Of the 22 fresh introductions, 10 were tramps, 3 were inmates of a common lodging-house in constant contact with tramps, 1 was a travelling music-hall singer, 2 came from a house in Ardwick where small-pox had broken out, 1 had attended a funeral thirteen days before in a village where the disease was then prevalent, 1 had been delivering beer at infected houses in other districts, and 1 the remaining 4 could not be satisfactorily traced. Of the 7 secondary cases reported, 1 was revaccinated six days after first exposure, the attack being greatly modified; 5 (of whom 2 died) had refused revaccination, whilst to 1 sufferer revaccination was not specially offered, as she was not known to have been exposed to infection till her own case was reported.

As regards the system of quarantine in small-pox, I have seen it very successfully applied by Dr. M. K. Robinson, of East Kent, during a limited outbreak in Dover in the spring of 1892, and I am inclined to believe that in small communities it is applicable with a fair prospect of success, unless there be a large number of practically simultaneous occurrences of the disease.

TREATMENT OF PSORIASIS (SYPHILITIC) BY THYROID EXTRACT.

By JOHN GORDON, M.D.,

Assistantt o the Professor of Materia Medica, Aberdeen University; Physician, Aberdeen General Dispensary.

THAT there is a profound alteration in the nourishment of unhealthy skin by thyroid feeding may at once be granted, but as yet our knowledge of the how or the wherefore is but vague and tentative. It is possibly too early to speculate whether the thyroid acts through the glandular systems, or by alterations set agoing in the character of the nutritive properties of the blood, or in the modification of nerve energy at the affected parts. But the ultimate generalisation of the actions will be helped by reports of cases in which therapeutic action has been observed. As a contribution to this end the following case is recorded:

A woman, aged 49, appeared in the month of July, 1893, at the Aberdeen General Dispensary, complaining of an ulcerated mouth. Examination revealed an ulcer on the inner side of the left cheek, about half an inch from the angle of the mouth. Iritis was also present, and the post-cervical glands were shotty. The ulcer was cauterised by nitrate of silver, and iodide of potassium was given internally. The ulcer rapidly healed, and the iritis disappeared. The iodide of potassium treatment was continued till the end of September. At this date she first noticed an eruption on the skin. It was diagnosed psoriasis. It was well marked on the palms of the hands and on the soles of the feet. Five minims three times a day of the alkaline solution of arsenic were ordered, in addition to the iodide of potassium. Chrysophanic acid ointment was also prescribed. She continued under this treatment till November 4th, 1893. There was only a very slight improvement during this time. But on some parts of the body there was undoubtedly an amelioration of the condition.

It was resolved to give thyroid extract a trial. All treatment was stopped for a week. On November 11th, on which day the thyroid extract was first given, the following notes were taken by Mr. Thomson, one of my clinical clerks: "There was a well-marked eruption of psoriasis all over the body—scalp, face, trunk, upper and lower extremities; a few spots were also visible on the palms of the hands and soles of the feet. The eruption involved the flexor as well as the extensor aspects, but was more marked on the extensor aspects. The eruption was discrete, the spots showed dirty-grey-looking scales on a hyperæmic and infiltrated base. They averaged from a quarter to half an inch in diameter, and were not more than an inch apart on the arms and trunk, but on the legs they were somewhat more widely scattered. On the extensor aspects of both elbows, over the upper part of both scapulæ, and on the nape of the neck were large confluent desquamating patches. There was an ulcerated patch on the buccal aspect of the left cheek near the angle of the mouth." At this date she was ordered to take 20 minims daily of Brady and Martin's thyroid extract.

November 18th. Appearance of the eruption little changed: the bases of the patches seemed somewhat less hyperæmic and more clearly defined. The intervening skin looked healthier and more elastic to touch.

November 25th. A most marked improvement: the scales have almost entirely disappeared: the hyperæmia of the bases much diminished; the skin between the patches smoother and more elastic. Patient expressed herself as feeling ever so much better in her general health; her own expression was that "she felt ten years younger."

December 3rd. The scales and hyperæmia have quite gone. There is left a tawny brown pigmentation where the patches of psoriasis were. The whole skin has a soft, well-nourished character.

December 7th, on which evening she was exhibited at the Medico-Chirurgical Society, she had still maintained the improvement.

December 20th. Thyroid extract stopped. No return of the psoriasis. The treatment by iodide of potassium resumed. The general improvement has not continued. She complained of a feeling of *malaise* and pains in the arms and legs.

There is no doubt that this was a case in which syphilis was present; and at first it was a moot point whether syphilitic psoriasis was a suitable case for thyroid treatment. So far as the psoriasis is concerned it gave highly satisfactory results, and in the first weeks of treatment the whole aspect of the patient greatly improved. Whether the thyroid extract had any controlling influence on the specific poison beyond the increase of vitality which accompanies its treatment is difficult to say.

It must also be remarked that she was under the influence of arsenic for a considerable time, and that this drug has a potent influence on the nutrition of the skin. It is also granted that a slight improvement had occurred before the thyroid treatment was initiated; but the active set of changes that took place, and which led to the complete removal of the psoriasis between November 11th and December 3rd, forms a marked contrast to the slow alteration that was visible from the previous treatment. It may be possible that the condition had just reached the point at which it was to resolve under the effects of the iodide and arsenic, or that some hindrance to their action was removed by the thyroid treatment. And this might indicate that in cases in which psoriasis did not yield to thyroid treatment alone, alternate administration of arsenic might be employed. On the whole, however, I am inclined, keeping in recollection the well-marked action of the thyroid treatment on the nutrition and function of the skin, to claim for it a therapeutic value in this case.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

SPORADIC CRETINISM.

MOST of your readers were probably, like myself, much interested in Dr. Bramwell's graphic description of his case of sporadic cretinism in the BRITISH MEDICAL JOURNAL of January 6th. As bearing on the question of the benefit derivable from thyroid feeding in such cases, I would beg the space for a few remarks on an interesting example of the disease that came under my notice previous to the days of such treatment.

Some years back I was asked if I objected to seeing a young man aged 24 amongst my out-patients at the Shadwell Children's Hospital. My intention to refuse was forestalled by the entrance of the patient himself. The man of mature age presented the appearance of a child of about 2 years old, was somewhat under 3 feet in height, and entered the room with one hand clasped in his mother's and the other clutching a doll. On inquiry, I found that my patient possessed both a melancholy and historic interest. He was E. D., the first of the four patients brought before the Royal Medical and Chirurgical Society in the paper that originally brought the subject of sporadic cretinism into prominent notice in this

country by Dr. Hilton Fagge, who had only recently died at the time of my seeing the patient. A portrait of the patient at 8 years old, and a full description of his condition at that age, are given in the *Transactions* of that Society, vol. liv, and I need not deal with them. I found, however, that his anterior fontanelle was widely patent, the size of a florin—a fact not noted by Dr. Fagge. His posterior fontanelle, too, was easily demonstrable. This patency of the anterior fontanelle I found in another cretin; but, except in Dr. Bramwell's case, I do not remember its recordance in any others, or mention of it in the ordinary textbooks. Dr. Fagge noticed, too, that the child at 8 years old retained all his temporary teeth, and at 24 I found they were still all present and perfect, although discoloured.

In the sixteen years that had elapsed since his case was published, I could find but little change in the patient. He had gained about a couple of inches in stature, but the exact amount I cannot give, as I have mislaid the notes of his case. This increase in height was practically the only change in him. His mental condition remained exactly as described by Dr. Fagge, that of a backward child aged 2. His genitals were still of the infantile size and development.

These brief notes of the after-condition of a well-known case may be of interest to your readers. They serve to point out the hopelessness of any expectation of improvement in cases of sporadic cretinism from the mere course of time, and to emphasise by contrast the benefits of thyroid feeding over any other known treatment, should further experience confirm them.

Upper Berkeley Street, W. J. A. Coutts.

INFANT FEEDING.

In the Epitome of the British Medical Journal for January 20th, 1894, I see that M. Budin, in November, 1893, has stated that systematic weighing of infants is the best test of their nutrition. The conclusions he has arrived at were advocated by me as far back as 1876, when I published papers of original work on this subject.[1]

Table showing the Normal Weight for Height of Children Born at Full Term of Forty Weeks from Birth.

Age.	Stature.	Mean Weight.
	ft. in.	st. lb.
Birth	1 8	0 8
6 Months	2 0½	1 2
1 Year	2 5	1 10
18 Months	2 8½	2 0
2 Years	3 0	2 4
3 ,, ...	3 4	2 8½
4 ,, ...	3 6	2 13
5 ,, ...	3 8	3 3

My table shows that an infant should double its weight in six months and treble it in a year if its nutrition is in every way satisfactory. The weighing and measuring should be conducted monthly, and the practical point is this: If a child does not increase at the rate of 1 lb. a month during the first year of life, and 12 oz. a month during the second year, its nutrition is not satisfactory. If a child does not grow nearly ¾ inch every month during the first year of life, and ½ inch a month during the second year of life, it is not satisfactory. The latter is, of course, not of the same importance as the former. A nurse should cease nursing if the result does not come near to this proportion with regard to increase of weight. Clearly premature children would not be so large, though they should increase at the same ratio.

Seymour Street, W. Percy Boulton, M.D.

ACCIDENTAL CURE OF HOUSEMAID'S KNEE.

A housewife, aged 42, came complaining of a swelling over the right knee-joint, which had existed for five weeks. She had been doing a great deal of kneeling. She was found to be suffering from enlargement of the bursa patellæ—"housemaid's knee." A simple cold-water bandage was applied, and she started to go home. Just as she arrived in her garden she stumbled over a washtub and fell with all her weight upon the right knee. She experienced great pain after the fall, and the whole knee became greatly swollen.

On my arrival, some hours after the accident, I found that the tense swelling over the patellar tendon had quite disappeared, and the fluid out of the sac was displaced into the tissues around the knee-joint. The principal part of the fluid was situated over the insertion of the vastus externus. The whole knee was very much swollen, hot, tender, and discolored.

An evaporating lotion was applied, and she rested the leg for three weeks. No bad symptoms developed. The swelling entirely disappeared, and three weeks after the accident she was going about her work as usual.

Hugh C. Roberts, M.R.C.S.Eng., L.R.C.P.Lond.
Melton Mowbray.

SHOULD TWO LIGATURES BE PLACED ON THE CORD?

Under this heading in the Epitome of January 6th, M. Trépant is quoted as objecting to the two ligatures. Having often thought that the second ligature was unnecessary, I determined on reading the above that at my next labour I would only tie in one place, and watch the result.

Next morning I was called to a confinement. The head presented, and the child was born. I placed one ligature on the cord, and divided it. About half a dozen drops of blood oozed out of the distal end, and then the flow ceased. On placing my hand upon the uterus, I discovered that there was a second child. Now, remembering Playfair's warning, that in case of twins care should be taken always to tie the cord of the first child for fear of vascular communication between the placentæ, I thought it expedient now to put a ligature on the cord I had cut, and accordingly I did so. The pain being slight, and no progress being made with the labour, I ruptured the membrane, and a second head presented, and shortly afterwards the child, another girl, was born. I then expressed the placenta; to find that, though there were two separate sacs, there was only one placenta, and that a large one, with two cords separately inserted.

Of course, the fact of there being only one placenta is not worth recording, but the strange thing is that, seeing there was only one placenta, yet on division of the first cord, without a second ligature being put on it, there was no hæmorrhage. Is it not, therefore, still less likely that there would have been any hæmorrhage had there been two placentæ even with some communication between them?

Sherborne. T. Reuel Atkinson.

A CASE OF RAYNAUD'S DISEASE.

R. D. is a boy, aged 19 months, well nourished and robust, and of healthy parents. About the middle of August, 1893, his mother noticed that at times the last joints of the fingers of his left hand turned white and cold while the palm became burning hot. During the attacks he cried as if in great pain and held his wrist with the other hand. A few days later the pain increased to such a degree that he would grasp the hand tightly and scream with agony. These attacks of pain, attended with pallor and coldness of the terminal joints, generally lasted about an hour, recurred periodically—chiefly at 8 A.M. and 8 P.M.—and were followed by intense congestion, the digits assuming a dark blue or almost purple colour. The child's sleep was broken and restless; otherwise between the attacks he would appear comparatively well and happy, and play about, but it was noticed that he did not use the affected hand so readily as the other. His appetite was fairly good, but he was troubled with constipation. An examination of the urine revealed nothing very abnormal: specific gravity 1020, feebly alkaline with slight deposit of phosphates, no albumen.

In the beginning of September—about three weeks from the commencement of the disease—a small pustule appeared at the end of his left forefinger, increasing to the size of a split pea, and later on similar pustules formed on the extremities of the other fingers, which became very sensitive and tender. Towards the middle of September his right hand became similarly affected, and subsequently pustules developed on the right fingers. On September 24th the pustules on both hands had become purple in colour, which

[1] British Medical Journal, March 4th, 1876; and *Lancet*, October 16th, 1880.

on pressure did not disappear. The fingers were extremely sensitive, but were not so pale during the attacks, which had been less frequent and less severe of late.

On October 6th it was noted that during the last few days there had been a steady improvement; the boy had eaten better, gained in weight, and the attacks had been less frequent and milder. The pustules on the left hand had dried up, and now resemble very thick parchment; the purple discoloration was gradually disappearing, having gone through the same changes as an ecchymosis; those on the right hand were also drying up. On October 24th the fingers had almost recovered their normal appearance, the parchment-like skin having peeled off, but they were still very tender. The attacks of pain were few and slight. On November 1st the boy was practically well, save that the ends of the fingers were more sensitive than usual. The duration of the disease had been nearly three months.

With regard to the treatment, a great many drugs were tried without any very marked effect. Quinine in 2-grain doses, three times daily, seemed to mitigate the pain for a time. Phenacetin, acetanilide, nitro-glycerine, and salicylate of soda were all tried without perceptible effect. Electricity was also used, and a weak faradic current gave more relief to the attacks than anything else.

Motueka, New Zealand. HENRY O'B. DECK, M.B.

ACETOUS VAPOUR IN DIPHTHERIA.

I HAD been long convinced in practice that the routine treatment of laryngeal diphtheria or croup offered no success; in fact, that a membrane in the larynx, whatever its nature, was nearly always fatal. True, tracheotomy saved some, but still the fact remained that one was obliged to give otherwise a fatal prognosis, generally verified in a few days. I will state one case shortly (leaving out the reasons by which I was led on to this treatment). I was called on to see a patient, a girl, aged 5 years, who had been under other treatment for the previous four days. Everything had been done according to the present book routine, and the case had been given up as hopeless. I found the child with embarrassed breathing and blue lips, a membrane on the palate and right tonsil, and laryngeal stridor. The child was so ill that I advised tracheotomy as a last resource, but the parents declined; therefore I initiated the following treatment, which I had been evolving some months: I caused the father to procure a quart of malt vinegar, which was placed in a steam kettle on the fire, and which soon poured a stream of acetous vapour in the room. I had the child covered by an umbrella, which focussed the steam, and this was carried on all night. I also sent for 2½ ounces of brandy, and with a throat brush painted the tonsils and pharynx about every two minutes until the child coughed, and afterwards seemed drowsy. The patient, who previous to this treatment seemed dying from asphyxia, roused up first with the strong acetous vapour, and secondly with the stimulating and after-soothing effect of the alcohol, coughed strongly, and brought up what seemed pus. The breathing became better, and the condition so improved that the child slept for seven hours. The next morning I found the breathing still improving, which continued from day to day, and the child is now, after seven days, able to be dressed. The relief afforded to the breathing by the acid vapour and alcohol, and its subsequent re-embarrassment on its cessation and relief again, were both very marked.

I have chosen the worst case of all, the membrane in the larynx: but if the treatment cures some of these, how much more a simple pharyngeal case? The treatment I have advocated may possibly relieve, but cannot make worse.

Vernon Square, W.C. W. A. GREET.

HANDICRAFT SPASM IN A STONEMASON.[1]

J. P., aged 45, a stonemason, whose family history was good, enjoyed good health until May, 1893, when he complained of shaking of the left hand, pain, and inability "to govern his chisel." After resting a few days he continued his work but under great difficulties, and in October his complaint became so bad that he was obliged to give up work.

On examination the grasp of the left hand was found to be markedly weakened. The left hand was steady in most positions, but as soon as he tried to grasp his chisel, as when at work, there was at once set up great shaking of the hand, which he was quite unable to control. There was no wasting, no painful points: hearing, taste, smell, and vision were perfectly good; the ophthalmoscope revealed nothing abnormal. The chief symptoms when at work were:

1. *Tremor.*—The chisel would "dance in his hand."

2. *Cramp* only on three occasions, and each time confined to the little finger, probably because at times he would grasp his chisel with the ring and little fingers only. These attacks passed off in a few minutes, when he was able to resume work.

3. *Pain.*—This has come on at certain points, and has been progressive in character, very much as follows.

(*a*) In the carpal joint of the thumb, which felt "as if it were broken."

(*b*) Between the metacarpo-phalangeal joints of the first and second fingers.

(*c*) About the centre of the forearm, on the radial aspect.

(*d*) Centre of upper arm in front.

(*e*) Lastly in the shoulder along the biceps tendon.

The pain in the forearm was at times so severe that he was quite unable to grasp with the thumb, or the first and second fingers; at such times he would extend these digits and grasp the chisel with the ring and little fingers only.

The shaking of the hand; the adoption of various devices in order to continue his work; the bringing into play, in order to steady the hand, of various muscles, each of which have in their turn "given out;" and the progressive character of the disease, all point very strongly to an analogy to writers' cramp. Under rest, massage, and small doses of arsenic, as suggested in a paper by Dr. Poore,[2] he has shown marked improvement.

Menston. A. HANBURY FRERE, M.B.

[1] Shown at the Leeds and West Riding Medico-Chirurgical Society, December 15th, 1893.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, PLYMOUTH.

A CASE OF CHOLECYSTOTOMY.

(Under the care of Mr. LUCY.)

[For the report of this case we are indebted to Mr. R STANLEY THOMAS, late House-Surgeon.]

M. J. S., aged 49, labourer's wife, was admitted on April 18th, 1893, complaining of constant pain in the right side, which at times was very severe, and quite incapacitated her from work. She frequently felt sick, but never vomited; appetite was very poor. She had never been jaundiced. Two years ago she was laid up for ten weeks, having broken her right leg.

On admission there was marked tenderness in the right side beneath the ninth costal cartilage; the pain was confined to this area also; nothing could be felt on deep palpation. The bowels were regular, the motions normal; there was no trouble with micturition; urine acid, sp. gr. 1018; no albumen. She was put on milk diet and given bismuth and afterwards iron, but she did not improve, pain beneath the costal cartilage on the right side was a constant symptom, so she was recommended to undergo an operation.

On June 9th chloroform was administered, and an incision was made 3 inches long on the right side from the tip of the ninth rib downwards: the peritoneal cavity was opened. The gall bladder and ducts were examined: the former contained two stones the size of dice. There was a stout adhesion between the gall bladder and the anterior abdominal wall; this was divided. The gall bladder was then opened,

[2] BRITISH MEDICAL JOURNAL, February 26th, 1887.

the calculi removed, and the edges were sutured to the subperitoneal fascia. A drainage tube was placed to drain the bladder, and the rest of wound was closed with silkworm gut sutures. A dressing of carbolic gauze and wood-wool wadding was applied.

On June 11th she was doing well. Eleven drachms of bile had been collected from the drainage tube.

On June 13th the motions were light and offensive. The urine was normal. The drainage tube was removed.

On June 16th the salivary glands on left side, especially the parotid, were enlarged and tender.

On June 23rd the motions were normal in colour.

On July 1st the fistulous opening had apparently closed.

The patient left the hospital quite well on July 20th.

REMARKS.—The long rest in the recumbent position for nearly three months in 1891 probably accounts for the formation of the calculi. How much of the pain was due to the presence of the calculi, and how much to the adhesion which existed between the anterior parietes and the gall bladder, it is difficult to say. It is interesting to note the enlargement of the salivary glands on the left side of the face, which took place on the seventh day after the operation.

PUBLIC HOSPITAL, KINGSTON, JAMAICA.

BONY OVERGROWTHS OR EXOSTOSES IN THE WEST INDIAN NEGRO.

(By HENRY STRACHAN, Senior Medical Officer to the Hospital.)

A MARKED prominence of the naso-maxillary region is by no means an uncommon feature in the West Indian negro, and



in some cases this prominence gives place to a decided bony ridge. In connection with this I give brief notes of a recent case:

W. R., aged 3 years, was brought by his mother, who desired for cosmetic reasons the removal of two bony masses—one on each side of the nose—which disfigured the little boy's face. These masses were congenital, and had only grown with the child's growth, and not apparently more rapidly than the bones of which they proved to be internal portions. They were hard, smooth, bony masses, somewhat of the shape and size of an elongated pigeon's egg, springing from the nasal process of the superior maxilla and nasal bones. There was no nasal constriction or pedicle, and they encroached somewhat on the anterior nares. The skin was not attached. The left was somewhat larger than the right. They were removed through a skin incision along the longer axis by the chisel. They proved to be chiefly overgrowth of the superior maxilla (nasal process), and to a less degree of the nasal bone, and consisted of compact tissue externally with a cancellous core, each continuous with the corresponding tissue of the parent bone.

I have previously seen two similar cases, and have often noted the "ridge" I have already mentioned as occurring in the same locality, and, in thinking over the probable pathology of this curious condition, my attention is forcibly attracted by the observations of Surgeon-Major J. Lamprey, who, in the BRITISH MEDICAL JOURNAL for December 10th, 1887, p. 1273, reports three cases (with drawings illustrating them) of "bony growth or exostosis of the infraorbital ridge" occurring in negroes who were from various parts of West Africa. He apparently regarded this condition as a racial peculiarity, and discussed it in connection with the so-called "horned men" of Africa. His drawings show a striking resemblance in the condition he describes to that of the case I am now recording.

I have been led by this paper of Dr. Lamprey's to entertain the idea that such cases occurring in West Indian negroes may possibly be illustrative, more or less, of "atavism"—



throwing back to ancestral peculiarities—for, as is well known, the West Indian negroes are descended from the West African tribes.

The structure of the masses (not outgrowths but integral portions of the bones), their development *pari passu* with that of the bones, and their innocent nature, seems to lend support to this view. (They give no trouble beyond the disfigurement occasioned, or unless they markedly encroach on the

anterior nares.) The nasal process of the superior maxilla takes by far the larger share in their formation.

The woodcuts on the preceding page are from photographs of the child taken before the operation, which will be of interest when compared with Dr. Lamprey's drawings, and also one taken after the boy had recovered, and was supposed—at least by his mother and friends—to have been made "beautiful for ever."

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

HENRY POWER, F.R.C.S., Vice-President, in the Chair.

Tuesday, January 23rd, 1894.

SO-CALLED SPONTANEOUS DISAPPEARANCE OF SOLID ABDOMINAL TUMOURS, WITH THREE CASES.

MR. J. GREIG SMITH, in this paper, said that three cases were recorded, the common leading features in which were the presence of a solid tumour in the abdomen, absence of pyrexia, clinical evidence of malignancy on abdominal section, and ultimate disappearance of the tumour, with complete restoration to health. Case I was a young man, aged 25, in whom intestinal obstruction existed, due to a solid tumour as larger as a cocoanut, situated in the lower abdomen. The tumour being, on inspection, diagnosed as malignant, and being adherent to intestines, was not disturbed. Enterostomy was performed for the obstruction. The tumour slowly diminished in size, and six months later, when the abdomen was opened for the performance of enterorrhaphy, it was found to have disappeared. The patient, after four and a-half years, continued in good health. Case II was a lady, aged 55, in whom the tumour lay in the umbilical region, and was adherent at and around the umbilicus. It was globular in shape, and as large as a child's head at birth. On abdominal section the intestines were found to be adherent to its surface on one side. Diffusing malignancy was diagnosed, and no attempt at removal was made. A small collection of muco-pus at the umbilicus was evacuated; a slight discharge from a fistula which formed there continued over two years. The tumour disappeared, the sinus closed, and the patient was now quite well. Case III was a girl, aged 19; here the tumour was as large as an eight months' pregnancy, filling and distending the upper and right abdomen, but not dipping into the pelvis. On abdominal section the tumour was diagnosed as malignant and unremovable. A fæcal fistula formed; the tumour gradually diminished in size and ultimately disappeared. The intestinal opening was closed by operation, and the patient was now in good health. Comparative observations were made on solid tumours of myomatous, tuberculous, and inflammatory nature, which, in Mr. Smith's experience, had been found to disappear after operation. An explanation as to the origin of the tumours in question was made to rest on the process of phagocytosis and the heaping up of embryonic protective cells around a minute fistulous opening communicating with intestine. Cure was accidental but not spontaneous, depending in one case on a diversion of intestinal contents, and in the two others on an external opening of the fistula.

THE CHAIRMAN suggested that these cases might be due to inflammatory changes in connection with Meckel's diverticula.

MR. ALBAN DORAN said that the paper dealt with the very delicate subject of doubtful or erroneous diagnosis in connection with abdominal tumours. Adhesions of intestines, especially after the inflammatory condition was of long standing, frequently simulated tumours very closely. He had seen masses of tuberculous deposit to which coils of intestine adhered, which looked extremely like tumours. In exploratory operations the conditions were very different from *post-mortem* examinations, and it was frequently impossible to make out exactly what the conditions were. In all doubtful cases he thought the right course to pursue was to keep the patient in bed under careful watch for a week or two before any operation was undertaken, and he referred to two cases which had been originally thought to be ovarian cysts, but which turned out to be inflammatory masses to which intestines were adherent, and which finally disappeared.

MR. BLAND SUTTON had since 1891 had four cases parallel to, though not the same as, those described in the paper. The first was a boy, who, after an attack of inflammation, during which the temperature rose as high as 103° F., had signs of intestinal obstruction. Mr. Sutton explored, and, after liberating a drachm of pus from the subperitoneal tissue, opened the peritoneum, and found a large mass completely encircling the bowel for a considerable extent. The abdomen was closed, and a bad prognosis given, but the lad made a complete recovery, and the mass disappeared. The second case was that of a woman, aged 50, who for some weeks had had difficulty with her bowels suggesting obstruction. On examination a large tumour was found in the pelvis, which was diagnosed as an impacted myoma. An abdominal section was performed, which revealed an enlarged uterus, to which the colon and sigmoid flexure were adherent. The conditions looked like those of carcinoma of the sigmoid flexure. A bad prognosis was also given in this case, but the patient made a perfect recovery. The other two cases were very similar to the above. It was noteworthy that in each case the tumour was associated with the bowel, and he had come to the conclusion that the operation had so altered the arrangement of the parts as to allow a free current of the fæcal contents, and that the source of irritation being no longer present, the tumour had disappeared. Mr. Sutton did not believe in the disappearance of carcinomata or of connective tissue growths, and thought that certain myomata, which had been supposed to disappear, were probably tumours of the nature of those mentioned in the paper, an exception being made in the case of myomata shrinking in size at the menopause.

MR. A. E. BARKER related the case of a lady, aged 32, with a tumour in the neck. It was deeply seated under the right angle of the jaw. There were no signs of malignant disease elsewhere. At the operation he found a very vascular tumour attached to the transverse processes of the vertebræ, and contained within a thin capsule. On perforating this capsule dark blood flowed out easily, and he came to the conclusion that the tumour was a vascular sarcoma. He did not attempt to remove it, but closed the wound, and gave a bad prognosis. The patient, however, made a good recovery, and although it was now four years since the operation the lady was quite well, and the tumour was very much smaller, although it had not entirely disappeared. Even now he could not say what the nature of the tumour was, so firmly convinced had he been at the time of the operation that it was a sarcoma. He asked Mr. Greig Smith whether the source of the tumours in his case could have been actinomycosis.

SIR WILLIAM PRIESTLEY referred to the well-known fact that myomata frequently shrivelled up at the time of the menopause. He had always believed that when tumours in the breast or elsewhere had been considered to be malignant, yet had disappeared, a mistaken diagnosis had been made. He believed that whenever a tumour of the pelvis disappeared it was always of inflammatory origin. It seemed to him that the probable explanation of Mr. Greig Smith's cases was that put forward by the author, that some perforation of the bowel or other irritating cause had produced inflammatory changes, which, after the removal of the irritant, had subsided.

MR. BARWELL asked if the pus found in Mr. Greig Smith's case was odorous? He recalled several cases of peritoneal perforation with localised peritonitis, in which the temperature was only slightly raised above the normal to 99° F. or 100° F.

MR. GREIG SMITH, in reply, said that in his cases there was never any question as to the tumour being perforated by or surrounding the intestine. In Case II the tumour was solid from periphery to centre, and the section showed a hard, white, glistening surface. These cases were quite distinct from cellulitis such as was not infrequently found in the broad ligament, or occasionally in the mesentery. In Case II the pus was odourless, and really consisted of mucus. There was no pus in either of the other cases. The question of actinomycosis had been considered and discarded. He thought that the Chairman's suggestion of Meckel's diverticula was a very probable one. A Meckel's diverticulum which leaked and became surrounded by phagocytes or protective cells would produce

exactly the conditions described, and the positions of the tumours were quite compatible with the starting point of the mischief being a Meckel's diverticulum. After the necessity for phagocytes had been removed they would naturally disappear. He thought that Mr. Bland's Sutton's cases were most interesting, but they were not the same as those described in the paper, which were movable; they were not pierced by gut and were not under the peritoneum surrounding the gut. He suggested that the question of the spontaneous disappearance of tumours had been advanced a step by the discussion, which had shown that the disappearance occurred under a perfectly natural process, and that they did not spontaneously disappear as an effect of the exploratory operation.

MEDICAL SOCIETY OF LONDON.

SWINFORD EDWARDS, F.R.C.S., Vice-President, in the Chair.

Monday, January 22nd, 1894.

CLINICAL EVENING.

REMOVAL OF FOREIGN BODY FROM THE BLADDER.

MR. A. PEARCE GOULD showed a piece of rubber tubing which he had removed with the lithotrite from a young man's bladder. Its position having been made out by the aid of the cystoscope it was seized by the lithotrite and withdrawn without much difficulty.

The CHAIRMAN and Mr. HURRY FENWICK referred to similar cases in their own experience.

TWO CASES OF WIRING FOR FRACTURED PATELLA.

Mr. BALLANCE showed two men on whom he had operated for transverse fracture of the patella by Lister's method. He made a lateral incision in order not to leave a cicatrix over the front of the joint. He did not employ a drainage tube as originally suggested. The result in one case was excellent. In the other the situation of the wire could be made out and the movements were less free, probably because the patient had been afraid to bend the joint. He hoped to restore the freedom of movement shortly. Every step of the procedure should be carried out by the operator himself in order to reduce the chances of suppuration to a minimum. Passive movements might be begun at the end of ten days, when the splint might also be discarded. The patients were able to walk about the ward in a month.

Mr. TURNER approved of the lateral incision and suggested that something better than wire might be found for the sutures. He had tried kangaroo tendon, but this lacked the requisite strength.

Mr. WATSON CHEYNE hoped that now wiring the patella for fracture was becoming more general, students who suggested this procedure at the College of Surgeons would be better received. Of the cases in which he had seen the joint opened he did not remember one in which the fragments could have been brought together by a subcutaneous operation or indeed by any operation short of laying open the joint.

Mr. BRUCE CLARKE did not approve of movements before six weeks had elapsed.

Mr. L. BIDWELL did not think the splint ought to be kept on more than a fortnight.

HORNY GROWTH ON THE PENIS.

Mr. BRUCE CLARKE showed a man who was circumcised in the out-patient department seven months ago. Since that time a horny growth had formed on the glans penis which now measured nearly two inches in length. The patient dated the growth from the time of the operation.

Mr. SHEILD pointed out that such a growth was probably the result of the implantation of epithelial cells at the time of the operation.

CAST OF THE MUCOUS MEMBRANE OF THE BLADDER.

Mr. HURRY FENWICK showed a specimen from a patient operated on by Mr. Heycock for acute cystitis. Perineal cystotomy was performed, and the entire mucous membrane of the bladder was withdrawn through the perineal opening, as a white phosphatic necrotic mass, on the outside of which strands of the muscular layer of the bladder coats could be seen. There had been difficulty of micturition for twenty-five years, but no stricture or enlarged prostate could be detected. The patient made a good recovery. The case showed that large portions of the mucous membrane of the bladder might be removed with safety in operations for the removal of vesical tumours.

OPERATION FOR ECTOPIA VESICÆ.

Mr. CARLESS showed a lad, aged 11, on whom he had operated for ectopia vesicæ on September 23rd, 1893. A bridge of scrotal tissue was first dissected up by making two parallel incisions below the redundant prepuce. Under this the penis was passed, and subsequently secured by uniting the margins of the gap by a row of sutures. An incision was made vertically upwards on either side of the exposed mucous membrane, and united above by a horizontal cut, so that a quadrangular flap sufficient to cover in the defect could be turned down. The free end of this flap was passed under the scrotal bridge and sutured to it, while the sides of the flap were very accurately united to the skin left on either side of the exposed mucous membrane. Two rows of sutures were here inserted, one to unite skin to skin, and another to cover the edges of the skin with subcutaneous tissue. Special care was directed to the suturing of the corners of the flap under the scrotal bridge, so that no exposed portion of subcutaneous tissue should be left. The abdominal integuments, which had been previously raised, were now drawn over and secured by three deep button sutures on either side, by a continuous suture in the middle line, and by interrupted sutures to the upper border of the scrotal bridge. A large tube was inserted into the new bladder, and arrangements made for draining off the urine. Unfortunately the superficial abdominal flaps broke away from the newly-formed bladder, and considerable suppuration ensued. No urinary extravasation, however, occurred, and, as soon as healthy action was established, the exposed granulating surfaces were grafted by Thiersch's method, with on the whole a satisfactory result.

CASES.

Cases were also shown by Dr. MORGAN DOCKRELL, Mr. TURNER, and Dr. W. PASTEUR.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF PATHOLOGY.

Professor J. ALFRED SCOTT, President, in the Chair.

Friday, January 5th, 1894.

LOCOMOTOR ATAXY, WITH SPECIMEN OF CHARCOT'S DISEASE.

DR. NUGENT read a case of locomotor ataxy, and showed a specimen of Charcot's disease. An army pensioner, aged 49, admitted to the Whitworth Hospital, December 28th, 1892, complaining of swelling in the right knee and general difficulty of walking. No history of syphilis, excess of any sort, or heredity. About three years before admission he began to suffer from weakness and difficulty in walking, accompanied by lancinating pains and slight bladder trouble. Three months before he came under observation he fell off a vehicle, striking his right knee against the ground, and at that time felt something give. The knee rapidly swelled, but was almost painless. It increased or diminished in size from time to time, and in about six weeks after the accident commenced to bend backwards. His symptoms while in hospital were as follows: His voice was impaired from paresis of the adductor muscles of the larynx, and speech thick from apparent deficient tongue moment. Pupils markedly myotic; Argyll-Robertson phenomenon well developed; and slight ptosis of both upper eyelids. Severe pains in the stomach, and constipation. Frequent micturition, especially at night—urine containing large quantity of pus and sometimes a little blood—and occasionally incontinence. Ordinary sensation diminished and distinctly delayed to a smart prick of needle. Slight paresthesia, such as tingling, etc., and occasionally allocheiria. Knee-jerks lost, and plantar reflexes diminished. He could only progress with extreme difficulty with the aid of two sticks, and when he rested the weight of his body on his right leg, the retroflexion of his right knee was so great as to cause apprehension of the condyles of his femur, which projected strongly backwards, bursting through the skin. The knee in circumference measured 4in. or 5in.

more than that of the opposite side, and this increase, due chiefly to fluid effusion, would considerably subside after some days' rest in bed. The veins over the joint were considerably distended, and the ends of tibia and fibula could be felt to be enlarged. The patient ultimately sank from urinary complications, and died in April, 1893. On *post-mortem* examination it was found that the muscles in the neighbourhood of the joint were well developed. Capsule greatly thickened, especially on either side of the ligamentum patellæ. External lateral ligament thickened. On the joint being opened the synovial membrane was found much thickened. Numerous small bands passed across at the angle of reflexion. Small pedunculated bodies, hard to the touch, projected into the joint cavity. Near the patella the membrane was roughened, and had a warty appearance. The lower end of the femur was greatly enlarged, the cartilage covering the articular portion eroded in parts, and eburnated bone shone through. The patella was transversely enlarged. The spinal cord, examined by Dr. Alfred Scott, presented the usual appearances found in locomotor ataxy.

Remarks were made by Dr. CHANCE, Dr. NIXON, Dr. O'CARROLL, and Dr. DOYLE; and Dr. NUGENT replied.

STRICTURE OF THE COLON.

Dr. DOYLE read a paper upon stricture of the colon.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

T. S. CLOUSTON, M.D., President, in the Chair.

Wednesday, January 17th, 1894.

CASES.

DR. BYROM BRAMWELL showed a case of Ichthyosis. When the patient was first admitted to the hospital she had a peculiar smell, like that of a corn on a horse's leg. She was treated by large doses of thyroid extract, and a very marked improvement had taken place.—Dr. W. STEWART showed a case of Compound Subastragaloid Dislocation of the Foot, towards the inner side. The patient could now use his foot with some freedom.—Dr. W. ALLAN JAMIESON showed a case of Lupus Erythematosus resembling the telangiectatic variety, in a young woman of 20.

CRETINISM.

Dr. JOHN THOMSON showed photographs and read notes of progress of a case of cretinism. The patient (a boy), after having remained stationary for fourteen years, had in the last twelve months grown 4½ inches. He was being fed on raw thyroid. He had never, save once when he had an overdose, been confined to bed, or even to the house.

SPECIMENS.

Dr. HERBERT LITTLEJOHN showed specimens from two cases of Suicide, with the view of illustrating the determination of suicides.—Dr. A. BRUCE showed a Brain, with a Cholesteatoma in the choroid plexus of the fourth ventricle.

PULSATIONS IN THE VEINS AND LIVER.

Dr. JAMES MCKENZIE (Burnley) read a paper on this subject. He detailed certain alterations he had had made in sphygmographs for the purpose of investigating venous and liver pulses, and he showed a series of diagrams comparing the jugular and carotid pulses, the radial and jugular, the jugular and the apex beat, and the liver pulse (ventricular and auricular types) with the carotid pulse.

Drs. GEORGE GIBSON and D. NOEL PATON made remarks.

CANCER OF THE SPLEEN.

Dr. BYROM BRAMWELL read notes of a case of cancer of the spleen and other organs. The patient was admitted to the hospital in January, 1893. Cancer first developed in the breast. In October, 1892, she observed new lumps in the breast. In the end of that month spasmodic twitching commenced in the right eye, and she began to see objects double. Some time before admission she had been seen by Dr. W. Allan Jamieson, who believed her condition to be one of multiple cancer. The paralysis of the eye as well as the enlargement of the liver were due to secondary deposits of cancer. The left femur was infiltrated with cancer, the lumps being easily felt. The patient had no optic neuritis, and no sickness or headache. The lumps in the breast varied from the size of a pea to that of a walnut. The patient died on May 1st. At the necropsy the spleen was found to be infiltrated with small nodules of cancer; so also were the kidneys and suprarenals, and there were some nodules in the pancreas and one or two in the intestine and stomach.—Dr. R. F. C. LEITH gave an account of the microscopical examination.

Dr. STILES said probably the cancer cells passed by the lymphatics to the thoracic duct, then to the veins and the heart, and were disseminated by the blood, and, secondarily, by the lymphatics.

Drs. BRUCE and RUSSELL also made remarks; and Dr. BRAMWELL replied.

Hunterian—*Jan. 10th*—Mr. F. GORDON BROWN, President, in the chair.—Dr. FLETCHER BEACH read a paper on sporadic cretinism, founded on an analysis of 116 cases, including 16 which had been under his care. The influence of consanguinity, intemperance, phthisis, inherited mental disease, neurotic inheritance, and fright of the mother during pregnancy, in the production of the disease, was described. The lowest age at which patients had been treated was six months, and the highest 42 years; the symptoms were first noted in 15 cases at or soon after birth, and from that time up to the age of 18 months 25 were seen. With regard to the sex, in sporadic cretinism there were not quite twice as many females as males, a different proportion from that found in myxœdema in which females were four times as many as males. Sporadic cretinism was due to absence or disease of the thyroid gland, for in some few cases bronchocele had been found to be present. The same fibrous changes which occurred in the tissues of the monkeys operated upon and kept alive by Horsley were present not only in myxœdema and cachexia strumipriva, but also in sporadic cretinism. The diagnosis, prognosis, and treatment of sporadic cretinism were touched upon.—Remarks were made by Dr. WALTER ORD and Dr. SHUTTLEWORTH, and Dr. FLETCHER BEACH replied.—Mr. OPENSHAW, with Mr. Waren Tay's permission, read the notes of twenty-two consecutive cases of amputation of the mamma for carcinoma, all of which had united by first intention.

Sheffield Medico-Chirurgical—*Dec. 21st, 1893*—Mr. RICHARD FAVELL, President, in the chair.—Dr. KNOX showed a bowel with congenital atresia of the small intestine.—The PRESIDENT showed a fibroma of the labium.—Dr. BURGESS showed (1) the heart of a boy, aged 15, in which the membranous portion of the septum between the ventricles was not closed, and the aorta arose from the right ventricle; (2) the large bowel from a case of severe ulcerative colitis.—Dr. WILKINSON showed a sarcoma of the uterus, and microscopic sections of the growth. The patient died from secondary deposits in the lungs two months and a-half after hysterectomy had been performed by Dr. Laver. Attention was drawn (1) to the rarity of sarcoma of the uterus, only eighty-one cases having been recorded; (2) to the similarity of the temperature chart to that of pyæmia.—Dr. ARTHUR HALL introduced (1) a woman with a supernumerary nipple, which had secreted milk after each lactation except the first; (2) lupus erythematosus in a woman, aged 60, which began five years and a-half ago, after a visit to the seaside; (3) chronic Hodgkin's disease in a young woman; (4) a boy, aged 9, with cerebellar tumour. An attack of brain fever six months before admission into the public hospital was followed in a few weeks by difficulty of walking, headache, and vomiting. His gait on admission (February, 1893) resembled the movement of a man balancing on a tight rope, with a weight fixed to the back and left side. There was optic atrophy, and the field of vision was very small. In October, 1893, the difficulty of walking had disappeared, and the field of vision had largely increased. He still suffered from some headache, and had occasional fits.

Northumberland and Durham Medical *Jan. 11th*—Dr. D. DRUMMOND, Vice-President, in the chair.—Dr. H. H. AITCHISON showed a patient operated on for fracture of the spine. The injury affected the lower dorsal and upper lumbar vertebræ. The region was exposed, the spines and lamiæ removed, and some spicules of bone taken out. The cord looked healthy. Next day sensation was improved, and in two weeks motion began to return. Now, 8 months after the operation, he was able to walk fairly well, and sensation was good.—Drs. HARDY, D. DRUMMOND, and HIND gave experience of similar cases they had met with.—Mr. WILLIAMSON showed (1) case of keratitis consequent on paralysis of the fifth cranial nerve; (2) three cases of acute osteomyelitis successfully treated by operation.—Dr. HUME showed two cases of thyroidectomy in Graves's disease. In one, operated on in 1891, the patient (a miner) was still anæmic, possibly due to his employment, but his general health had immensely improved, the breathlessness was gone, and the pulse rate was normal. In the other, operated on six months ago, the patient, a girl, no longer suffered from breathlessness, and the general health much improved. The cases seemed of interest when considered in connection with the views expressed lately by Professor Greenfield.—Drs. MURRAY, J. DRUMMOND, D. DRUMMOND, ROBERTSON, and LIMONT made remarks.—Dr. HARDY showed a case of perityphlitic abscess following typhoid fever; a fæcal fistula followed, was treated by drainage, and rapid healing resulted.—A discussion on typhlitis was opened by Dr. D. DRUMMOND, who, with regard to the morbid anatomy, said there might be (*a*) simple adhesions; (*b*) enlargement of lymphoid tissue with or without cystic changes; (*c*) the same with pin-hole perforations, resulting probably from small follicular abscesses; (*d*) large perforations either from inflammation and sloughing following pin-hole perforations, or from concretions setting up inflammation; (*e*) diffuse suppurative peritonitis either from pin-hole perforations, causing abscess which ruptured, or from rapid infection of the peritoneum, the rupture caused by concretions. The clinical varieties of typhlitis were as varied as the

morbid conditions. Pain was not always confined to the right iliac fossa. The great majority of cases of sudden inflammation of the abdomen were due to appendicitis. In treatment, he was strongly opposed to the use of purgatives. Almost without exception cases of diffuse suppurative peritonitis died after operation, but it was the only chance. Cases of localised suppuration should be merely drained.—Dr. HUME said the important point was to know when to operate. In deciding as to the presence or absence of pus, he would depend on the temperature and general progress of the case. If he diagnosed pus he would incise and drain freely. An early symptom of typhlitis might be pain in the bladder with a feeling of retention. In all cases where he was not morally certain that the patient was going to get well he would operate. He had found a perforation in all but one of the cases he had operated upon, and believed that it occurred in every case worth regarding as serious.

Leeds and West Riding Medico-Chirurgical—*Jan. 12th.*—Mr. T. KILNER CLARKE, President, in the chair.—Dr. BRAITHWAITE read a paper on the effect of insufficient animal food in the production of diseases of the female generative organs, such as flexions, prolapse, and menstrual subinvolution.—Remarks were made by Mr. W. HALL, Mr. E. O. CROFT, and Dr. JACOB.—Mr. SECKER WALKER read notes of two cases of extraction of steel from the interior of the eyeball by the electro-magnet. In the first case a sclerotic incision was made between the inferior and external recti, the electro-magnet point introduced, and the steel withdrawn at the first attempt. Primary union occurred. Three months later the cataract was removed, the vitreous found opaque, and vision was only perception and projection of light. In the second case the magnet point was introduced through a new corneal incision, and the steel removed. Only slight iritis followed. Vision was now normal. —Mr. JESSOP read a paper upon appendicular colic, laying particular stress upon those cases of obstruction of the vermiform appendix due to stricture chiefly, but also to lymph deposits, impacted foreign bodies, fæcal concretions, and the like. The symptoms in these cases resembled accurately those of the disease usually known as "simple typhlitis," but one of the main points insisted upon was that the origin of such cases lay in no case in the cæcum proper, but invariably in the appendix. Cases were quoted.—Remarks were made by the PRESIDENT, Dr. CHURTON, Dr. BRAITHWAITE, Mr. ATKINSON, Dr. GRIFFITH, and Mr. L. KNAGGS. —Cases, pathological specimens, etc., were shown by Dr. JACOB, Mr. MAYO ROBSON, Mr. LITTLEWOOD, and Dr. GRIFFITH.

Manchester Clinical—*Jan. 16th*—Mr. E. STANMORE BISHOP, President, in the chair.—The PRESIDENT showed three cases of hernia treated by radical cure—acquired scrotal, acquired femoral (in a boy aged 8), and congenital strangulated. They represented the results of three distinct operations—Ball's, Watson Cheyne's, and Bishop's. The results in all were perfect. The President referred to the necessity in all cases, except those which were strangulated, of previously eliminating the efficient cause before any operation was attempted.—Mr. BAIN read a short note on the treatment of enteric fever.—Dr DONALD mentioned some cases of tubal abortion and tubal rupture.—Dr. WILD gave a short account of piperazine, including the results of a number of experiments upon its pharmacological action. Deposits of urate of soda in tissues of gouty patients were removed in less than twenty-four hours, when pieces of the tissues were placed in a solution of 1 part of piperazine in 500 of water, both at 15° C. and at 37° C. The histological characters of the tissues were uninjured on microscopical examination. Crystals of pure uric acid were only partially dissolved, and uric acid calculi little affected by the same solution. On the living tissues a solution of 1 in 1,000 normal saline solution always caused marked contraction of the arterioles when artificially circulated through the vessels of a frog; the same solution was harmless to the muscles of the frog, which gave good contractions after soaking for twenty-four hours in the solution. A 1 in 100 solution was, however, very irritating, causing immediately an increased contraction and death of the muscle in thirty to forty minutes. The indications for the drug were those conditions of uric acid diathesis attended by deposits of urates in the tissues. In renal and vesical calculi, rheumatism, or rheumatoid arthritis, benefit was much less likely to be derived. As a raiser of arterial tension piperazine appeared to be a vascular diuretic somewhat comparable to digitalis. The drug ought to be given in a large quantity of water, and not used subcutaneously on account of the irritant action of strong solutions.

Nottingham Medico-Chirurgical—*Jan. 3rd*—Dr. WALTER HUNTER, President, in the chair.—Mr. KINGDON showed a baby suffering from a rare and fatal form of infantile disease, in which muscular weakness was a prominent sign, associated with symmetrical changes in the muscular regions of the eyes. He also showed a drawing of the fundus. —Dr. HANDFORD showed a rectal polypus which had had a peculiarly long pedicle; it was removed by Mr. Waring.—Dr. W. B. RANSOM showed (1) renal adenoma, (2) malignant adenoma of cervix uteri, (3) blood of pernicious anæmia, (4) a new form of inhaler devised by himself, by means of which substances could be vaporised but inhaled dry.—Dr. CATTLE showed a microscopical specimen of the eggs of bilharzia.—Dr. RANSOM read notes of two cases of pleuropneumonia associated with hemiplegia, in one of which the paralysis was caused by a small patch of softening in the crus demonstrated at the *post-mortem* examination, and in the other by abscess. The brain (which was shown) was riddled with abscesses.—Messrs. ANDERSON, HANDFORD, COLLINS, CATTLE, WATSON, and the PRESIDENT spoke, and Dr. RANSOM replied.

Bradford Medico-Chirurgical—*Jan. 9th*—Mr. JOHN APPLEYARD, President, in the chair.—Mr. HORROCKS read notes of a case of mammary hypertrophy in a young unmarried girl. Histologically there was great increase in the connective tissue with relative decrease in the glandular structures.—Dr. HERMANN BRONNER narrated the case of a primipara in whom the last stage of labour had to be completed with instruments. The child was in the dorso-anterior position, and the right arm was fixed across behind the occiput by two turns of the cord; the left arm being crossed beneath the chin, with the left elbow opposite the right ear, had prevented flexion of the head and descent of the occiput.—Mr. ALTHORP read a paper on auricular fistulæ, and dealt generally with developmental abnormalities in that region.—Messrs. APPLEYARD, JOHNSTONE, and HORROCKS discussed the paper.—Dr. MAJOR read a note on grave cerebral symptoms arising in the course of rheumatic fever. No *post-mortem* evidence of cerebritis or of meningitis was ever found, and these symptoms—arising often when the patient appeared to be improving, when pain in the joints had gone—were to be taken as an indication of hyperpyrexia.—Drs. JOHNSTONE, KERR, SHIACH, ARNOLD EVANS, and WOOD joined in the discussion.

REVIEWS.

INTRODUCTION TO THE STUDY OF THE MOULD FUNGI PARASITIC ON MAN (Edinburgh University Thesis). By H. LESLIE ROBERTS, M.D. Liverpool: (Printed for private circulation.) 1893.

THIS essay, a thesis presented for the degree of doctor of medicine at Edinburgh, is the fruit of investigations during five successive years in England and abroad. It attempts to advance our knowledge of the vegetable fungi that live on the human skin, both from the side of comparative morphology and biology, and by a study of the changes which they undergo by cultivation. Dr. ROBERTS agrees with the views of those recent observers who have described several varieties of trichophyton, and the frontispiece of his essay represents in colour the appearances of what he describes as the French, English, and the Austrian trichophyton vulgaris when grown in flasks.

The thesis is, we hope, preliminary to some larger and more detailed work which would be comprehensive enough to describe in detail the experiments on which many of the statements are based. Some of these statements are interesting and important. Dr. Roberts has found it possible for trichophyton to attack hair when detached from the body. It is unnecessary to remark that a description of the actual experiments on which this statement is founded is very desirable. A similar remark applies to the statement that trichophyton gains an entrance into the interior of the hair by dissolving an aperture in the sheath of the shaft.

Many of the views expressed in this essay are highly suggestive and ingenious, but some of them are not likely to secure general assent. The standpoint from which the author regards these questions may be appreciated when we consider that he is disposed to include in the group of trichophyton, microsporon furfur, which he places in the species of which trichophyton vulgaris is the type.

Much information is given regarding methods of cultivation, and workers in this field will do well not to neglect Dr. Roberts's essay. In his cultures he found that trichophyton fungi are best reared in media in which potassium is the prevailing base, and phosphoric acid in combinations the prevailing acid.

With M. Sabouraud, Dr. Roberts attributes the different degrees of inflammation produced on the heads of children by trichophyton to the special variety of fungus with which they happen to be attacked. In Liverpool he has observed specimens which would spread in an agregarious fashion over the whole scalp, while others were gregarious and localised in the damage they occasioned.

Whilst, as we have already remarked, Dr. Roberts would do well to give some of his experiments in more detail, we would suggest that it would be satisfactory if he would take some opportunity of demonstrating some of them to competent observers. His statement that the spores of trichophyton and of favus germinate in spring water at a temperature of 25° to 30° C., is one that must take by surprise many of those who have worked at this difficult subject, and without questioning in any way the accuracy of Dr. Roberts's results, we cannot resist the inclination to state that proof that the fungus can grow in spring water would not be superfluous.

As pathogenic mould fungi are supposed to be modified in their passage through different hosts, he advances the hypothesis that natural selection through countless generations might end in determining a new species, and he believes that achorion has become differentiated from trichophyton in this way, both being derived from a common ancestor. In connection with M. Sabouraud's recent paper, it is interesting to note that Dr. Roberts considers that classification

based on the size of the spore in trichophyton and achorion and their varieties is unsatisfactory. A curious statement is made respecting the black variety of trichophyton (the Austrian) to the effect that it very seldom attacks the hair of children in Vienna, although its power of attacking English hair is not a whit less than that of other varieties, and that its vegetative energy and powers of enduring heat are far beyond any English or French variety which he has studied. Surely this would suggest that it is possible that the small ratio of cases of ringworm of the scalp in Vienna may be due to other causes than the variety of trichophyton.

The essay is illustrated by six plates, showing various microscopic appearances of trichophyton under cultivation, and shows evidences of very extensive reading, much thought, and a great amount of labour. As we have already suggested, its value, should it be published for general circulation, would be greatly increased if it were prefaced by a simple clear statement of the experiments which the author has made and of the results at which he has arrived, leaving the more general speculations on comparative morphology and variation and classification to form a separate series of chapters.

Atlas of Electric Cystoscopy. By Dr. Emil Burckhardt, late Assistant Surgeon to the Surgical Clinic of the University of Bâle; and E. Hurry Fenwick, F.R.C.S.Eng., Surgeon to the London Hospital. London: J. and A. Churchill. 1893. (Super royal 8vo, 34 plates with letterpress, 21s.)

Messrs. Burckhardt and Fenwick have produced an *Atlas of Electric Cystoscopy* which is at once a handsome and a useful book. For some years Dr. Burckhardt has, it appears, been desirous of collecting in a connected form his drawings and illustrations derived from the examination of the bladder by Nitze's method. He has waited till now to put this plan into operation from the desire to obtain the necessary experience, and he has taken the opportunity of strengthening the book by securing the assistance of Mr. Hurry Fenwick. All the drawings are by Dr. Burckhardt, with the exception of one from a case of Nicoladoni. The authors have divided their book into several parts; they show normal bladders, then cases of acute and chronic cystitis, urethro-cystitis, and hypertrophy of the prostate, cases of tuberculosis and tumour, and foreign bodies introduced accidentally into the urinary apparatus; and after showing some lesions and fistulæ produced by surgical proceedings, they conclude the series by an illustration of a patient with tuberculous pyelitis. All these pictures are very good, and the short text that accompanies them suffices to make them very comprehensible, so that practitioners and students will undoubtedly learn much from studying this *Atlas*. The first figure represents the fold of the mucous membrane beyond the neck of the bladder; illustration 3A draws attention to an error which may easily be committed. The upper part of the field is occupied by congested rugosities which imitate, in a way which may easily mislead, the edge of an excrescence. In renal hæmaturia the simple folds of relaxed mucous membrane are embarrassing, because little blood crusts attach themselves to the summits. This error may be avoided by fully distending the bladder and turning the prism round. Illustration 3B relates to the existence of enlarged mucous glands scattered around the base of the bladder at the trigone. The author admits that they are developed by the concentration of the urine, and that their presence may be regarded as a sign of the efforts of the mucous membrane to lessen the irritation produced by the secretion. Several illustrations are devoted to showing the orifices of the ureters, seen close at hand, or far off in front, or in profile. Figure 8A represents the urethral cone seen from the side. The presence of this cone denotes ordinarily an insufficient distance of the ureter or the existence of irritation near the corresponding urethral orifice. The next drawing shows a cause of hæmaturia which it would have been difficult to diagnose without the help of a cystoscope. The blood is seen flowing from the ureter. Figure 9 displays the anterior superior wall of the bladder, stained with a drop of blood which has oozed from it. It is an example of blennorrhagic cystitis of eight days' duration, and was treated by internal medication until the symptoms of irritation disappeared, and then by antiseptic and astringent injections. Figure 12 relates to a case of acute cystitis. Ulceration of the vesical wall is seen on the left side; local treatment effected a cure. There are several illustrations from cases of chronic cystitis and urethro-cystitis which deserve special mention, as also some very distinct and curious examples of prostatic hypertrophy.

Tuberculosis of the bladder has been investigated with special care by Messrs. Burckhardt and Fenwick, who show a deep well-defined ulcer of the anterior wall near the internal orifice of the urethra, and a large ulcer at the same region covered with necrotic portions of tissue, partly floating in the liquid. The clinical history accompanying this illustration adds to its interest. Subsequent illustrations relating to calculi, foreign bodies, and fistulæ of the bladder are equally well selected and executed with the greatest care.

Der Bau des Menschen als Zeugniss für seine Vergangenheit. [The Structure of Man as Evidence of His Past.] By Dr. R. Wiedersheim, Professor at the University of Freiburg. Second edition, completely revised and much enlarged. With 109 Illustrations. (Freiburg and Leipzig: J. C. B. Mohr. 1893. Royal 8vo, pp. 198, 4 m. 80 pf.)

Dr. Wiedersheim states that the original edition was a treatise for his pupils, but as the limited number of copies was widely circulated, he concluded that the work was suited for its purpose, and accordingly prepared the present edition.

The book is, as its complete title implies, an elementary manual of evolution as far as man is concerned. It is analytical in style, being a short systematic anatomical treatise. Each part of the human frame is briefly described in relation to its morphology. Like most German manuals it is prepared with extreme care, whilst in clearness of demonstration it is above the average. Vestigial relics receive full attention. Perhaps the best passages relate to the practically useless muscles of the outer ear, their homologues being in active service in the lower animals. On the other hand, the author speaks not only of retrograde muscles in other parts, but also of "progressive muscles" which reach their highest development in man.

The chapter on the genito-urinary system is important, but the morphology of that tract is fairly known. The circulatory organs are also well described in respect to evolution. *Der Bau des Menschen* is likely to prove of service to demonstrators of human anatomy, to members of our profession who write on special subjects, and to students of general biology, who often lack a sound knowledge of human anatomy.

Der venerische Katarrh, dessen Pathologie und Therapie [Venereal Catarrh, its Pathology and Treatment]. Von Professor Dr. Eduard Lang, K. K. Primararzt im allgemeinen Krankenhause in Wien. Wiesbaden: J. F. Bergmann. 1893. (Demy 8vo, 186 pp., 9 illustrations, M. 4.80.)

Die Blennorrhoe der Sexualorgane und ihre Complicationen [Blennorrhœa of the Sexual Organs and its Complications]. Von Dr. Ernest Finger, Docent an der Universität in Wien. (Dritte Auflage). Leipzig und Wien: F. Deuticke. 1893. (Super royal 8vo, 360 pp., 7 lithographic plates and 36 woodcuts.)

These two works, though differing in title, deal with one and the same subject—namely, gonorrhœa. Professor Lang's work forms the last of a series of three volumes containing lectures on the pathology and treatment of venereal diseases, the other two portions—on syphilis and venereal ulcer respectively—having been previously published. In the eleven lectures of which the present volume is made up Professor Lang gives an excellent account of gonorrhœa and its various complications. His description of the symptoms and stages of the disease is clear and to the point, his views on treatment are decided, and the reader is not left in doubt as to which of several methods the author considers best. The various formulæ mentioned in the text are numbered and placed together at the end of the book. Full references are

given to the works of authors quoted in the lectures, and the presence of page headings is a welcome feature too often omitted in German medical literature.

Of Dr. FINGER's elaborate work we spoke favourably in these columns in reviewing the second edition, and as that was but little more than two years ago the mere fact that a third has already been required is sufficient evidence of the value of the book. The present edition, which is some thirty pages larger and contains two more plates than its predecessor, has been carefully revised, and the section on the pathological anatomy of chronic urethritis has received large additions owing to exceptional opportunities for *post-mortem* examinations afforded to the author by Professor Weichselbaum.

In comparing the two books it must of course be remembered that Dr. Finger's is more than twice as large as Professor Lang's. While the style of the latter is lucid and concise, that of the former is decidedly diffuse, and the consequent size of Dr. Finger's book will perhaps alarm many of those who are not specially interested in the subject. It must also be remarked that, by those who are specially interested in the subject, the want of references will probably be considered a somewhat serious defect. In the matter of references, as also in that of heading his pages, Dr. Finger would do wisely in his next edition, to follow Professor Lang's excellent example.

As regards the views of the two authors, we have only space to say that though both agree about the etiology of gonorrhœa—namely, that the micro-organism called the gonococcus is the essential cause of the disease—they differ widely as to its treatment; for while Professor Lang attacks it with nitrate of silver solutions of considerable strength from the beginning, Dr. Finger deprecates all local interference until the acute inflammation has passed its acme.

DIE PSYCHIATRIE IN WÜRZBURG VON 1583 BIS 1893. [Psychological Medicine in Würzburg from 1583 to 1893]. Bearbeitet von Dr. CONRAD RIEGER, Professor der Psychiatrie. (Würzburg. 1893.)

THE records of the asylum at Würzburg take us back 300 years. In 1576 the foundation of the Julius Hospital was laid by the Prince Bishop Julius Echter; it was finished in 1580. In 1583 the first insane patient was admitted. The records of admissions from 1589 to 1628 are still preserved. They became irregular during the Thirty Years' War. The first patient on the roll whose name is given was Erhard, Count of Muhlerstadten, a poor scholar, somewhat out of his mind, admitted on February 11th, 1589. It is recorded that he left the hospital with gratitude. It is often noticed whether the patients who left were grateful or otherwise. Sometimes the overstrained expectations are a little unreasonable. It is recorded of one who came in deprived of reason that he went away from the hospital unconscious (ohne Bewusstsein) with no gratitude. A little later, perhaps as the result of experience, they begin to distinguish (Dankbarkeit) gratitude from the expression of gratitude (Danksagung). In 1596 there is an allusion to medical treatment. A woman suffering from melancholia came to be treated with purgatives and soporifics for a month, and then returned to her friends. Sometimes we are told that the patients have been bewitched or possessed by evil spirits when clergymen came to exorcise them. From the printed notes of dismissals of patients we gather that during the twenty years which elapsed from 1590 to 1610 (missing out 1598, in which the record fails), out of 1721 patients admitted 10 died, 38 were dismissed recovered, 46 dismissed not recovered, and 10 escaped; 9 of the escapes are in the last four years. In some cases it is noticed that the lunatic escaped in his chains. Although a large proportion of the patients are returned as melancholic, there are only two suicides. The editors have not tried to compare these statistics with those of modern asylums, probably because they do not think them sufficiently trustworthy. In four years, dating from 1596, there were 332 admissions, but no deaths are recorded.

The actual organisation of the present asylum has now lasted 150 years; the Institution for Epileptics has lasted for 120 years; and the Clinic for Psychiatry has been continued for 60 years. We hope that they will continue to flourish along with the Medical School of Würzburg, in which so much good work has been done.

NOTES ON BOOKS.

Chirurgie des Voies Urinaires [Surgery of the Urinary Passages]. Par Dr. E. LOUMEAU, Bordeaux. 2nd Edition. (Bourdeaux: Feret et Fils. 1893. Super royal 8vo, pp. 300. 6 fr.)—This book, which has reached a second edition, is a record of the experience of the author. The subjects of the clinical studies have been published previously in the Bordeaux journals; their range comprises congenital phimosis, hydrocele, stricture, stone, prostatic congestion, and a few examples of other routine urinary diseases. The baldness of this collection of cases is somewhat redeemed by three interesting and important records. The first details a left-sided perinephritic abscess which opened into the left bronchus. The second is the history of a large urethral calculus, over half an ounce in weight, and in shape like a finger; but the chief value of the work lies in the history of a female from whom the author removed matted and inflamed appendages. The roof and part of the back of the bladder was unwittingly resected during the separation of the adhesions, and the mutilation was discovered only when the patient was replaced in bed. The defect was filled to a great extent by bringing up the uterus, and causing its anterior surface to take the place of the posterior part of the gap. The peritoneum was so stitched at the sides of the opening of the bladder as to cover it all, except a hole into which a vesical drainage tube was placed. The patient recovered, but committed suicide some months after.

Grundriss der geburtshülflichen Operationslehre für Aerzte und Studirende. Von Dr. OTTO VON HERFF, Privat-docent. Halle. (Berlin: Fischer's Medicin. Buchhandlung. 1894. Crown 8vo, pp. 384. M. 8.)—It will be seen from its title that this is intended as an elementary manual for students and practitioners. Although it has many merits, it hardly seems to us to be exactly what the classes of readers referred to need. It does not contain any references to the literature of the subject, so that the student who may wish to know where to look for fuller information receives no help in this task. It is not a guide to practice, for it summarises indications for treatment, modes of treatment, etc., somewhat in the style of the answer to an examination paper, but does not give the practitioner the practical points for diagnosis of the case and choice of treatment which he wants. It is still less suited to English readers, for on some points English authorities would differ from the author's view. We must add that we cannot commend the illustrations. Considered as a student's textbook, the author seems too much content with stating things, but not explaining why. From an English point of view, we should think its chief use would be to teachers, who might find it useful as a synopsis, systematising what they have to teach, and guarding them from omissions.

The Student's Handbook of Gynæcology. Specially Designed to Assist those Commencing the Study of Diseases of Women. Illustrated with 49 engravings. (Edinburgh: E. and S. Livingstone. 1893. Crown 8vo, pp. 178. 5s.)—With unusual modesty the author of this work does not publish his name. The *Handbook* is a fair synopsis of gynæcological science and art. The compiler's skill is seen in subjects like "Malformations" (p. 86), where the distinctions between the different forms of double uterus are well expressed in a very few words. Of course, the notes on operative measures are of necessity elementary. Under the heading "Electrical," under "Treatment of Fibroids," the author wisely teaches that "this treatment does not cause disappearance of the tumours; it only relieves symptoms." The drawings are mostly good, being taken from the works of leading authorities. A few more diagrams would be desirable.

The Transactions of the Edinburgh Obstetrical Society, vol. xviii, Session 1892-93. (Edinburgh: Oliver and Boyd. 1893.

Demy 8vo, pp. 323).—This is a volume full of good matter. Among its contents we may particularly mention a paper by Dr. W. Nagel, on turning by the leg, which is a careful study of the natural mechanism of delivery when a leg is brought down. A perusal of it will show how imperfect our knowledge of the mechanism of labour still is. A case of scarlet fever in pregnancy, with infection of the fœtus, is recorded by Drs. Ballantyne and Milligan, and accompanied by a full bibliography of the subject. Dr. Ballantyne also contributes several scholarly papers on deformities and diseases of the fœtus. There are some important contributions by Dr. Berry Hart, among them being the instructive address on placenta prævia with which Dr. Hart opened the discussion on that subject at the recent International Congress of Obstetrics and Gynæcology; also a valuable monograph on the extra-peritoneal form of extrauterine gestation. The latter paper is peculiarly interesting because in it Dr. Hart has reprinted the original paper of Dezeimeris on this subject, a paper which is much quoted, has an historical interest, and yet is in this country almost inaccessible to the student. Those interested in the subject will be grateful to Dr. Hart for this, even were the rest of the paper less valuable than it is.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

THE FRENA CAMERA.

The Frena camera is a hand camera, which carries forty flat films, upon which the photographs are taken. By turning a handle at the side of the camera the film upon which the exposure was made is deposited in a dark chamber, ready to be taken out when required for development, and another film is left in position for the next exposure. The films are of about the thickness and consistency of a visiting card, and are placed in the camera like a pack of cards. They can be put in or taken out even by the novice, and no technical knowledge is needed in order to produce really good pictures. The simplicity of manipulation of the Frena camera makes it especially adapted to the use of the medical man and will be likely to recommend it largely for clinical use. With this very efficient and simple machine, which does not presuppose any technical knowledge, it is easy for every medical man or hospital officer to keep pictorial records of his cases. It is indeed somewhat surprising that this is not more generally done. The fact of the Frena camera holding such a large number of sensitive films prevents the necessity of frequent recharging. It is always ready, and can be used at any opportune moment. Heavy glass plates having been replaced by celluloid films, the whole apparatus is extremely light, and is easily carried in the hand, and an exposure can be made without the subject knowing that a photograph is being taken. Pictures can be taken with great rapidity, so that a number of exposures can be made of the same subject in the course of a few minutes.



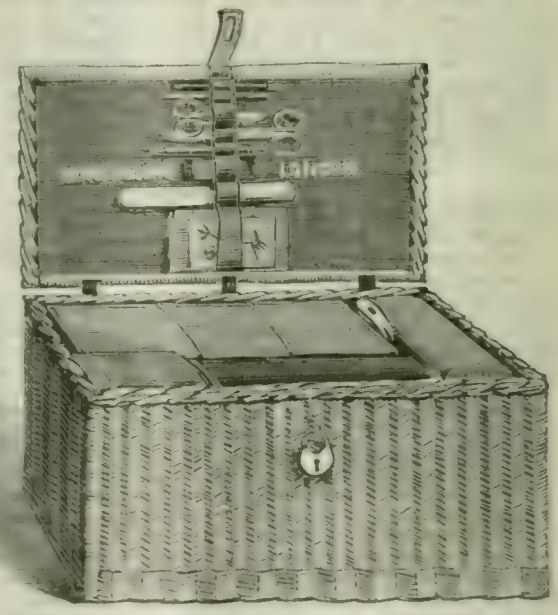
A new system of bringing near objects into focus has been adopted, which has done away with the difficulty of focussing, and it enables the operator to produce a sharp picture of objects either close to or at a distance. This camera is also suitable for a very extensive scope of work, and pictures may be taken of anything, from a small curio to a distant mountain.

The use of films instead of plates minimises the weight necessary to be carried; and what would be pounds if glass were used, becomes but ounces where films are employed. Another advantage of the use of a camera which carries films instead of glass plates is that the negatives, when obtained, are not liable to fracture, and can be stored away in envelopes or books. From these negatives, of course, any number of pictures can be made.

The lens is made by the well-known manufacturers of microscopes, Messrs. R. and J. Beck, which should be a guarantee of its quality. The price for the lantern plate size is £5 5s., for the quarter plate size £8 17s. 6d.

PRIVATE NURSES' HOLDALL.

A private nurses' holdall, designed by Miss Marian C. Pincoffs, of Minehead, and called by her the "Minehead Holdall," has been produced by Messrs. Arnold and Sons, 31, West Smithfield, London. The holdall is a basket provided with a lid, which can be fastened by a padlock and key for travelling. It contains a large number of articles likely to be needed by a nurse suddenly summoned to a serious case in the country, but not likely to be found in an ordinary private house, such as throat brushes, bandages, materials for making poultices or fomentations, tow, lint, temperature chart, expectoration cup, glass measure, enema syringe, bath thermometer, boracic and carbolic lotions, materials for supplying peptonised food, scissors, and many other materials or appliances to the number altogether, according to the list before us, of ninety. The idea is a good one, and has been well thought out. The holdall basket is not only likely to be valuable to nurses, but would be a useful possession in most country houses.



GLYCERINE PASTILLES.

Messrs. Cleave and Sons (of Crediton) forward samples of glycerine pastilles in two varieties; these glycerine pastilles are made of gum arabic and redistilled glycerine, slightly sweetened. The eucalyptus pastilles are made from a fine quality of the essential oil of eucalyptus with glycerine and gum arabic. The materials are evidently of excellent quality, and the pastilles are well made and likely to be found useful for the purposes indicated by their composition, as well as agreeable.

LIST OF AUTHORS AND OTHERS WHO HAVE PRESENTED BOOKS TO THE LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

TWENTY-FOURTH LIST.

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AUTOMATIC WRITING

VIII.

By CHARLES MERCIER, M.B.

Intellect and Emotion.—Epileptic Automatism.—Somniloquence.

The narratives of Mr. Stead upon this subject are of some interest, not so much in themselves—for his experiences are in no material respect different from those of scores of his predecessors—but as illustrations of the inefficacy of the acutest intellect to reach sound conclusions, unless the intellect rests upon a foundation of character stable enough not to be shifted about by the waves of emotion. Mr. Stead has taken to champion the cause of worn-out superstitions, and we shall expect to find him ere long producing experiences of witchcraft, and testifying to personal attendance at a witches' sabbath.

In the article by "Hypnos" an explanation of automatic writing has been given, which, allowing for the colloquial inaccuracies necessary to bring the matter home to the lay mind, is very fairly accurate. The nervous mechanism of automatic writing has its nearest ally in that of *petit mal*. In the latter affection the highest nerve regions are placed suddenly out of action, and their subordinates act without the guiding action of the superiors, stimulated and directed by peripheral impressions only. In this condition the patient will do whatever he has been in the habit of doing, provided that some more or less appropriate peripheral stimulus is provided; but the action, being unguided by the highest nerve regions, will fail in appropriateness to surrounding circumstances. Thus, if a woman is seized with *petit mal* when she is cutting bread and butter, she will continue to use the knife, but will use it inappropriately—will cut, as in one case, her arm; or, as in another case, her child's throat. A soldier, thus seized, finding his rifle in his hands, will load and discharge it. A clerk so seized, with a pen in his hand, will continue to make more or less intelligible marks on paper.

In automatic writing the essential condition for success is that the operator should, in Mr. Stead's words, "make his mind passive," must "disconnect his hand from his conscious brain." In other words, he produces artificially that removal of the control of the higher nerve regions over the lower, which, in *petit mal*, is produced by disease. Those lower nerve regions which actuate the movements of writing being thus uncontrolled, and being stimulated by the presence of the pencil in the hand, proceed to act, and produce marks upon the paper, more or less intelligible, as in the former case. What actual words shall be written depend upon a variety of quasi-accidental circumstances precisely similar to those which determine the character of dreams—circumstances with which we are at present not fully acquainted, though we know enough of them to be sure that they are not supernatural. But the mystery which poses Mr. Stead, the mystery that his hand writes things of which he knows nothing, is not more mysterious than that he dreams things of which he has had no previous experience. Somniloquence is not commonly considered evidence of demoniacal possession; and if not, there is no reason why somniscribence should be considered evidence of possession by spirits. In automatic writing, the relation of the highest nerve regions towards the regions actuating the movements of writing is substantially the same as is their relation in somniloquence to the regions actuating articulatory movements. In neither case is there need nor room for the agency of spirits, and the invocation of such agency is the sign of a mind not merely unscientific, but uninformed.

IX.

By W. J. MICKLE, M.D., F.R.C.P.

The Writing Spook.—Suggestion.—The Hypnotic Production of Automatic Writing.

I think we may agree with the general drift and conclusions of the recent article by "Hypnos," on "automatic writing," in the *Pall Mall Gazette*. The introduction of the subjects of "unconscious movements" and of "the laws of suggestion" are particularly relevant to the discussion; and especially to be commended is the conclusion that there is no necessity whatever for the intervention of an external force or spirit to explain the phenomena of automatic writing; the intelligence thus shown being innate, or, more accurately, existant, in the person writing, and being part of him. Nevertheless, I do not think we can by any means fully accept the argument by which the conclusions are reached, or, more precisely, some of the details which are intercalated in that argument. For example, the sentences in which the "laws of suggestion" are formulated; and the statements immediately following those, and relating to insanity, are open to grave objection. But neither the one nor the other of these sets of statements need be accepted in order that we may arrive at the same general conclusions.

In fact, this subject of automatic writing is one that must be looked upon in the light of what is known as to suggestion, hypnotism, unconscious acts or movements, and the groups of facts concerning the sensory and motor outcome of activities ordinarily carried on, or in process, beneath the threshold of consciousness, but which thus ordinarily latent, may, under certain conditions, become manifest; in some individuals far more readily than in others; at some times with much greater facility than at others: and become thus manifest because of their emergence from below to above the threshold of consciousness. And somewhat analogous are the groups of phenomena summarised under the generic names of *chromatisms* and *phonisms*.

The hypnotic production of automatic writing is quite sufficient to afford a rational explanation as to the production of automatic writing, independently of an outside spirit influence. And the facts admitted by the writer in the *Gazette*—namely, those of the usually nonsensical or trivial, and in one case the "Steadese" (if one may use the word as an adjective) character of the automatic writing (although it is not intended to imply that these qualifying terms are necessarily synonymous), also tell against a productive outside spirit influence. But, indeed, their help is not needed. The whole notion of an outside agent or force—angel, demon, spook, or spirit—directly bringing about the production of automatic writing, and of analogous phenomena, is an absurdity negatived by every scientific consideration, and unsupported by any.

OPIUM IN HYDERABAD STATE.

THE following is a *précis* of the evidence given by Surgeon-Lieutenant-Colonel Edward Lawrie, Residency Surgeon, Hyderabad, before the Royal Commission on Opium on January 4th:

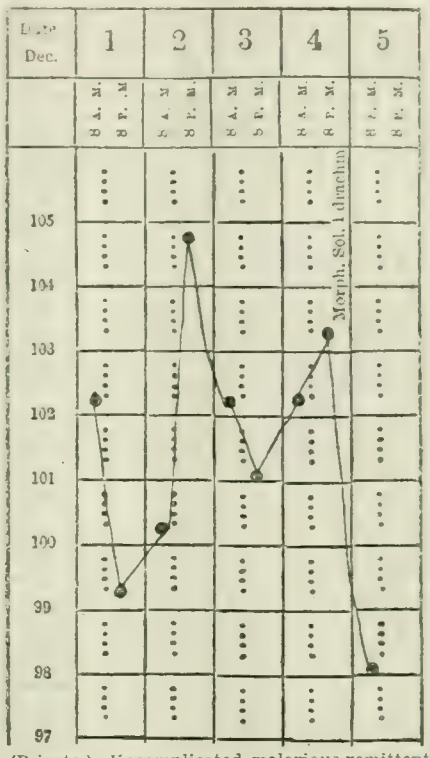
1. *Length of Service.*—I have served in India for twenty-one years, during the last eight years of this period in Hyderabad.

2. *Personal Prejudice against Opium.*—I was strongly prejudiced against opium, even as a remedy, when I came out to India in 1872. I regarded all opium eating and smoking as vice, and hardly dared to employ opium at all in diseases of children. The opinions I now hold are founded upon facts and circumstances which have come under my own observation.

3. *Personal Experience of Opium in Medicine.*—My experience of opium as a remedy is probably the same as that of hundreds of other medical men. At first I was much astonished to find that opium in full medicinal doses does not necessarily produce sleep. I then discovered that, though it does not produce sleep in cases where it is intended to do so, its general effect is almost invariably beneficial. The third stage in my personal experience of opium consists in the employment of the drug in bowel complaints, such as diarrhœa, enteritis, dysentery, and cholera, in which diseases its advantages are universally acknowledged, and also as a prophylactic and curative agent in certain forms of malarial disease. The statement which has been put forward of late—that opium is of no use in malarious fever except to relieve the pains of the disease—is incorrect. Fact takes precedence of opinion in a question of this kind, and the following facts disprove it: Malarious remittent fever was usually prevalent in Hyderabad during the last three months of 1893, and the clinical charts which are here reproduced form part of the record of two recent cases in which this disease was arrested by one of the alkaloids of opium.

In the first of these cases the patient had been ill for five days, and in the second for three, before coming under my observation. Both were characterised by intolerable headache, which prevented sleep, uncontrollable vomiting, and the absence of any intermission of the fever. All the known remedies had been tried without relief. In each case a full dose of morphine was given at about 9 P.M. The effect was that the headache disappeared, refreshing sleep was obtained, and both patients woke up next morning free from fever.

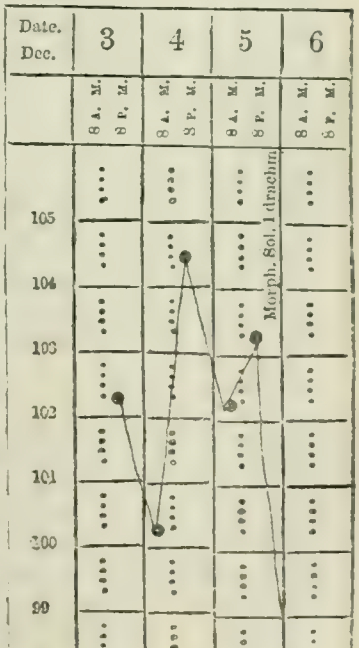
4. *Medicinal Use of Opium by the People.*—Opium is employed as a domestic remedy by all classes of people in India; it is given to Indian children from the age of a month up to 2 years—by the poor to keep them quiet, and by poor and rich alike as a prophylactic against the bowel complaints, fevers, and others diseases which are incidental to dentition. It is taken by adults in Hyderabad to protect them against



CASE I.—(Private.) Uncomplicated malarious remittent fever. Mrs. P., aged 29.

cholera, of which they stand in great dread, as well as against fever, diarrhœa, and dysentery. Personally, I believe that opium does afford very efficient protection against bowel disorders, such as acute enteritis in children, and diarrhœa, dysentery, and cholera in adults. I have proved above that it exercises a curative action in malarious disease, and it is not unreasonable to suppose that it may have a prophylactic effect in the case of both bowel disorders and malaria, if only by protecting the system against chills.

5. *The Opium Habit.*—In India the opium habit (*adat*) is generally contracted on the advice of friends or of hakims (*doctors*), much in the same way as the alcohol habit is in England. I may state at once that in Hyderabad the ordinary opium eater, whether male or female, is entirely above the suspicion of vice. Though the use of opium is frequently begun as a prophylactic after attacks of cold or bowel complaint, or as a remedy in painful



CASE II.—(Hospital.) Malarious remittent fever, with complications. Miss H., aged 21.

diseases it is taken by regular opium eaters and smokers as a stimulant or exhilarant—never as a narcotic. Among the higher classes it is very occasionally employed by young married men as an aphrodisiac. Its only alleged value in this respect is to postpone or delay the orgasm. Opium eaters begin by taking a small quantity once or twice a day, and as soon as they become accustomed to it they increase the amount until they arrive at an average or habitual dose, which they seldom exceed. As a rule, opium eaters accustom themselves to a dose, which varies from 2 to 8 grains, taken twice a day before their principal meals. But the regular dose may go far beyond this, and many opium eaters take from 30 to 40 grains of solid opium twice a day every day of their lives. The reason of this apears to be that when the opium habit is acquired the individual derives so much benefit from the drug that he increases the quantity under the impression that the more he takes the better he will be. A small number of people take the average or habitual dose three times a day, and a still smaller number take it whenever they feel inclined. The latter class are to a certain extent objects of ridicule, and go by the name of "yad-aphim" (*yad*, memory; and *aphim*, opium). The ordinary mode of taking opium in Hyderabad is either alone as a pill, or made into a pill with sweet almonds. A few people smoke it in the form of *madduck* or *chundoo*.

6. *The Effects of the Opium Habit.*—I have had to treat patients for opium poisoning, and in two instances (one native and one European)[1] for the effects of sudden discontinuance of large doses of opium; but I have never yet been called upon to treat, nor have I ever met with a diseased or depraved state of the constitution due to the opium habit: and during the time I have had charge of the Afzul Gunj and Residency Hospitals in Hyderabad 671,595 patients have passed through my hands. There is no indication that I know of whereby an opium eater can be recognised as such, and opium most assuredly does not produce emaciation. My experience and conclusions have led me irresistibly to the opinion that opium taken regularly—in no matter what dose, provided the habit has been fully acquired—has no deteriorating effect on the physical or moral condition. On the contrary, I am firmly convinced that the habitual use of opium is beneficial. No doubt at first, and sometimes afterwards, it causes disagreeable constipation, and therefore possibly drowsiness and *malaise*; but when once the opium habit is confirmed—and it is surprising how quickly this state is arrived at—these unpleasant results, as a rule, completely wear off. The constipating effect is no longer discernible, as the opium now merely prevents looseness and irregularity of the bowels, and this is unquestionably one of the actions of the drug which is most highly prized in India. But there is a great deal more than this to be said for the opium habit. Opium eaters assert, and I am persuaded they are right, that opium conduces to the regularity of all their functions: regularity of meals, regularity of sleep, and of digestion; and that it keeps them cheerful, contented, happy, and well. The opium eater takes his pill, or pills, of opium half an hour or so before his early meal at 7 or 8 A.M., and again before his afternoon meal or dinner at 2 or 3 P.M.; the drug digests slowly with his food, and, instead of feeling drowsy or heavy after meals as non-opium eaters often do, that is invariably the time when his mind is most active and his body most vigorous. The popular or prevailing notion that opium produces sleep, lethargy, or sloth in the habitual opium eater is an entire delusion, and such terms as "drowsy," "stupor," "heavy," "drugged," "narcotised," and "sleeping off the effects of the opium," etc., applied to the opium eater are altogether unmeaning and misleading. The opium eater can sleep at normal times like anybody else, but he probably sleeps less than people who do not take opium, and he never takes opium as a hypnotic.

7. *The Effect of Sudden Discontinuance of Opium.*—The result of sudden complete cutting off of opium depends on the amount to which the individual has been accustomed. If the amount has been small and the health good it is insignificant. The results of suddenly stopping opium which has been taken in large quantities may be stated as follows:

(*a*) Opium delirium tremens.
(*b*) Pains all over the body.
(*c*) Disorders of digestion.
(*d*) Diarrhœa and bowel complaints.
(*e*) Coma and convulsions.

Opium delirium tremens is the name given to the condition of melancholia and moroseness, with loss of appetite and sleeplessness, which occur when the opium habit of large doses is suddenly checked. If the opium eater is suffering from very acute and high fever or inflammatory disease the sudden discontinuance of his opium while in this state may be followed by coma and convulsions. The opium habit can be dropped suddenly with impunity under all circumstances if a dose of belladonna, proportioned to the amount of opium the patient has been in the habit of taking, is substituted for it at the accustomed times, and continued in diminishing doses for a week or ten days after the stoppage of the opium.

8. *Comparison of the Effects of Opium and Alcohol.*—There is no comparison between the effects of the opium habit and the habitual use of alcohol. The dietetic use of alcohol is of doubtful benefit, and even when employed in moderation it may lead to excess. The excessive use of alcohol means the tendency to drunkenness and chronic alcoholism or the production of insidious effects on the general health which destroy numerous lives in Europe every year, and would do the same in India if the alcohol habit were to become general. On the other hand the use of opium is always beneficial, the largest habitual quantities of opium never produce degrading or disastrous results; and there is no such thing as excess if the opium habit has been fully acquired. Finally, my experience in Hyderabad, where habits of drinking are doing infinite harm, has taught me that the one chance of inebriates of escaping from disgrace and ruin lies in the substitution of the opium habit for the abuse of alcohol. If this is so in India, why not in England? Surely it would be much better to inquire fully into the assured advantages of the substitution of the opium habit for alcoholism in England, than to attempt to interfere with the ancient custom of opium eating in India, about which the very least that can be said is that it has done more good than harm.

9. *Is the Opium Habit to be Recommended?*—I have no hesitation in recommending the habitual use of opium in European children during the period of dentition; and whereas formerly many children used to die in my practice from enteritis, which is the scourge of European infant life in India, now I rarely if ever lose a case from this disease. As regards adults, I believe it is likely that the habitual use of opium in Europe would save or prolong many of the lives which end in acute and chronic lung diseases, and that it would promote longevity and happiness just as it does in India. In the case of people in arduous and responsible positions in England, such as engine drivers and railway signalmen, it would appear to be a legitimate subject for investigation whether the opium habit would not tend to keep their minds clear and on the alert while on duty and prevent the drowsiness which, as is well known, so often leads to accident and loss of life.

It is difficult to publish one's honest opinion on the advisability of recommending the opium habit without laying oneself open to misrepresentation. My deliberate opinion formed, as stated above, by conviction and experience in the face of previously conceived and almost inveterate prejudice against the drug, is perfectly clear and definite—that, if stimulants are to be taken at all the opium habit may be consistently recommended on the ground that opium is the only stimulant which does no harm whatever and at the same time may possibly do a great deal of good.

[1] The case of the European was that of a young man who arrived in Lahore, where he was not known, and the chemist refused to supply him with the enormous doses of laudanum—four ounces daily—to which he had been accustomed.

The Danish Parliament has voted a sum of £168 for the expenses of a medical mission to Iceland for the purpose of studying the extent to which leprosy still prevails on that island. The mission, which is to consist of Drs. Ehlers and J. Ulrich, of Copenhagen, with an Icelandic physician as interpreter, will make its investigation in July and August of the present year.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

SUBSCRIPTIONS to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, JANUARY 27TH, 1894.

STUDIES IN THERAPEUTICS.

I.—CHEMISTRY AND THERAPEUTICS.[1]

DURING the last thirty years the experimental researches of pharmacologists have accumulated a large number of more or less isolated facts regarding the influence of the chemical constitution of substances on their physiological action. The subject has attracted able investigators in every civilised country, and although recently progress has been more rapid, and some practical benefit has resulted to the art of healing, yet on taking a wide view of the whole question it must be admitted that little more has been accomplished than to break ground here and there. Our accumulated knowledge is not yet sufficient to enable us to formulate any general laws governing the relationship, and the practical value to clinical medicine of all the labour expended is seen only in a few directions. The ideal goal to be attained has been apparent from the very outset—namely, that certain desired physiological actions being given, the chemist will be able to manufacture a substance having these actions purely, and not endowed with any of the poisonous or unpleasant effects which at present characterise many of our most useful remedies.

When we reflect on the enormous multiplicity of possible chemical compounds and the labour involved in investigating the physiological actions of even a few members of a single series it is not to be wondered at that exact knowledge accumulates slowly or that general principles are difficult to lay down. Take, for example, such simple bodies as the pentyl alcohols, of which amylic alcohol is the best known, and we find that there are no fewer than eight isomeric pentyl alcohols, all having the same ultimate formula but differing in chemical properties and constitution and to a considerable extent in physiological action. The comparatively simple hydrocarbon C_6H_{14} has, theoretically, eighteen possible isomers, and when we come to derivatives of benzole, quinoline, or other even simply constituted members of the aromatic series the amount of experiment required to establish a knowledge of their actions becomes simply overwhelming.

Scientific research regarding the relationship between chemical constitution and physiological action has so far started from two standpoints. In the one case the investigations have been carried out with very simple bodies not known or supposed to have any therapeutic virtues, and have a purely scientific interest in so far as they have been undertaken, not so much to discover any new or improved remedy as to elucidate the general question. It is quite possible, however, that in these papers buried in scientific journals there lie, neglected and overlooked, valuable therapeutic discoveries, just as the local anæsthetic action of cocaine had been accurately and minutely described in *Pflüger's Archiv* years before anyone thought of making practical application of it. The other class of investigators have started from some drug of recognised value, and have sought to improve or modify its action in certain directions by making alterations in its chemical structure. Thus, a morphine which would not disturb digestion, or a quinine which was non-depressing, are desirable objects of attainment; but the attempt to attain them seems hopeless so long as we are ignorant of the chemical constitution of both alkaloids, and in too many cases similar defective chemical knowledge is a bar to progress. Many others of our most trusted and valuable medicines have certain untoward, disagreeable, or poisonous subactions, which are well recognised, and which we constantly keep in mind when administering them. Some of these are, no doubt, inherent in the kernel or molecule of the substance, and possibly cannot be got rid of; but others are dependent on outlying or, as it were, accidental molecules, and could be removed or modified greatly by judicious chemical alteration had we but an intimate acquaintance with the chemical structure of the original substance.

It is impossible to discuss here the more abstract side of such a far-reaching question, but we may instance a few examples of chemical change which have proved of practical clinical utility, not to mention the discovery of wholly new remedies which have been made by workers on this subject. Take, for example, the alkaloids atropine and homatropine. The former is a combination of the base tropine with tropic acid, the latter a combination of the same base with oxytoluylic acid, a very simple change in chemical constitution, but sufficient greatly to weaken the action of atropine in every respect while retaining essentially its characteristic effects. This weakening of action makes homatropine useless for controlling perspiration and for many other purposes, but leaves it quite powerful enough to dilate the pupil, while the advantage is gained that the dilatation passes off in about one quarter of the time required after atropine, a considerable boon to a fairly large class of patients.

A similar example, which we find ready to our hand in Nature, is seen in the case of morphine and codeine. The latter differs chemically from the former in having the radical methyl (CH_3) replacing an atom of hydrogen, a change which can be very easily made artificially. It thereby becomes practically useless as a narcotic or astringent, but it has the inestimable advantage of not causing constipation or disturbance of the liver, while retaining sufficient narcotic power to deaden the nervous system to slight irritation, such as often gives rise to cough. On these grounds it has, with advantage, largely replaced morphine or opium as a constituent of sedative cough mixtures. Further, the virtues of caffeine (trimethylxanthine) as a cardiac stimulant and diuretic are now fully recognised, but it has been objected that it is apt to over-stimulate the nervous system, and cause sleeplessness. Experiment on animals showed that theobromine (dime-

[1] New series.

thylxanthine), while equally satisfactory as a diuretic, had not these drawbacks in anything like the same degree, and hence it is rapidly superseding caffeine in certain cases.

Such instances can be multiplied in the newer remedies almost without end. During the last decade a very large number of antipyretics have been brought before the notice of the profession, most of which have rapidly passed out of use owing to various defects, but to illustrate our present subject let us consider aniline ($C_6H_5.NH_2$) and some of its derivatives. The base itself depresses the nervous system and lowers temperature, but it is dangerously depressing, and by an action on the haemoglobin causes marked cyanosis. In short, it has proved useless in medicine. By replacing one of its hydrogen atoms with acetyl (C_2H_3O), acetanilide (antifebrin) is obtained, a substance which has proved useful as an antipyretic and analgesic. Its action is similar in kind to that of aniline, but it is much less poisonous. Its poisonous effects are, however, still marked, and many cases of collapse and cyanosis have been reported after its use. In phenacetin, where OC_2H_5 replaces a hydrogen atom of acetanilide, the toxicity of the original aniline nucleus has been still further reduced, without in any way impairing its analgesic and antipyretic properties. It may be confessed that none of these new substances are ideally satisfactory as remedies, but they constitute an advance on what we had previously; and as they are all, chemically speaking, of simple structure, we may be allowed to hope that further modification may alter them for the better.

Substances used as hypnotics furnish us with instances of the same kind. Many of these have much the same composition and action as alcohol, but it is as a rule undesirable to prescribe alcohol for sleeplessness. The closely allied aldehyde (C_2H_4O) is much too irritating, but paraldehyde ($C_2H_4O)_3$ has proved of great value. The introduction of chlorine into the aldehyde molecule, as seen in chloral (trichloraldehyde C_2HCl_3O) greatly strengthens the hypnotic action, but introduces the dangerously depressing effects of chlorine on the heart, and to combat this various combinations with cardiac stimulants have been attempted, of which the well-known hypnotic chloralamide is a successful example.

It is not always necessary that the alterations in chemical structure should be made outside the body, for probably many substances only exercise their characteristic effects after being modified by the tissues. A striking example of this in every-day use occurs in the case of nitro-glycerine. This substance is trinitrate of glyceryl, and when injected into a vein in large amount has a convulsant action peculiar to itself and in no way related to the action of nitrites. When given by the mouth, however, in therapeutic doses it is reduced to nitrite, and exercises a typically nitrite action. As the chemical change takes place gradually its action is much more persistent and less violent than that of nitrite of amyl, and hence it is advantageously used when we wish the prolonged but gentle maintenance of a low arterial tension.

These few examples may indicate partially what has been already done or attempted, but very large groups of remedies have remained wholly untouched by research in this direction. We are completely ignorant of the chemical structure of the whole class of cardiac tonics—in fact, in many cases the active principle has never been obtained pure from the crude drug. It seems certain that some of these are much less cumulative and dangerous than others, but until we know on what differences in chemical constitution their physiological peculiarities depend it is unlikely that any advances of permanent value will be obtained. The same is true of purgative medicines. By experience we have acquired a considerable amount of empirical skill in the use of both classes of remedies; but more than this we can scarcely claim—certainly not a high degree of scientific knowledge.

THE SANITARY OUTLOOK IN INDIA.

MR. HANKIN'S paper, giving some results of bacteriological investigations conducted in the dairy of the East Surrey Regiment at Agra, which appears on another page, together with a communication by the same author on "Microbes in Soda Water" published in the December number of the *Indian Medical Gazette*, constitute an interesting example of the application of modern methods of research to the solution of Indian health problems, and indicate how attempts to secure the exclusion of dangerous elements from drinking water, milk, butter, and aërated drinks are, under the circumstances of Indian cantonment life, extremely difficult or almost impossible. Here we have presented to our view the dairy of an English regiment "admirably situated and the working arrangements capitally planned." The building is "well built and clean, in an isolated position on a large open space;" the arrangements under the supervision of a warrant officer told off for the purpose; the milk cans provided with lock and key, scalded with boiling water daily; the cows brought to be milked, allowed to drink filtered water only, and an excellent well, furnished with a cover and appliances for drawing water in a state of purity, and yielding only 11 microbes per c.c.—well within Koch's limit of safety, namely, 100 microbes per c.c.—is set apart for watering the cattle and general use in the dairy. And yet observe the conditions, perilous to health in the highest degree, which Mr. Hankin actually discovered. The soil carts, containing typhoid excreta, passed within a few yards of the dairy. They were accompanied by clouds of flies, and thousands of these were seen to have "committed suicide" in the milk pans. The water with which these milk cans were being "scalded" was found to contain 88,480 microbes per c.c.; freshly boiled milk 2,300 microbes per c.c.; water in which butter had been kept yielded 435,200, and water in which butter actually lay 215,680 microbes per c.c., and various specimens of water found in the place gave from 1,000 to 156,800 microbes per c.c. Finally it was discovered that bazaar buffalo or goat's milk collected from a variety of sources was smuggled into the dairy for the purpose of making butter, which, on account of the necessity of storing it, is more liable to dangerous contamination than even milk.

What is the explanation of this curious result? How comes it that water containing at its source only 11 microbes per c.c., yielded, when taken from the dairy, and presumably after boiling, such startling proportions of micro-organisms? The explanation is simply this, that a dirty open well and still dirtier tank, the latter yielding a vibrio presenting on cultivation and injection into the peritoneal cavity of a guinea-pig all the characteristics of the cholera

vibrio, lay some fifty yards nearer the dairy than "the filter well," and the ignorant, lazy, and utterly unreliable native underlings, to save themselves a little trouble, drew water from the nearer and filthier, in place of the more distant and cleaner, source.

The story of the soda water manufactory reveals the same tale of carefully devised and closely supervised arrangements defeated by the almost criminal misbehaviour of the native coolies employed. The water used for manufacturing the soda water contained only 11 microbes per c.c., while the manfactured liquid was found to contain 4,800. Why? Simply because the empty bottles were washed with fluid drawn from the well and tank already mentioned, which was found to contain 26,400.

These revelations are at once surprising and disheartening, and if such conditions obtain under the most favourable circumstances for preventing them which it is possible to command or conceive in India, what must the case be elsewhere in the absence of the intelligence, contrivance, and discipline which govern the sanitary arrangements of a crack English regiment? When we consider that the members of the more enlightened and progressive races (European and American) constitute, according to the latest census of India, a proportion of but 1 to 2,591 of the Asiatic element in the population of Hindustan, and that the former are mostly collected in large cities; when, further, we reflect that these Asiatics are for the most part an ignorant and obstinate class, dominated by ancestral notions and habits, many of them the very reverse of salutary, inspired by suspicion, bigotry, and fatalism, and very hard to move off the beaten track of custom, the prospect of achieving even such a simple and elementary reform as the use of pure water appears to be distant and doubtful.

This is all the more grievous, inasmuch as this reform takes a cardinal rank among sanitary improvements, especially in India. On general grounds the purity of water holds a very high place among sanitary desiderata; but the evidence in favour of the view that water constitutes a common—probably the most common—medium and agent in the dissemination of cholera and typhoid fever has now attained great bulk and power. This evidence, as supplied by observation and experience in England, France, Italy, Spain, Russia, Germany, Egypt, and India was presented in an address on "Waterborne Cholera," by Mr. Ernest Hart, delivered at a meeting of the American Medical Association held at Milwaukee on June 7th last, which has been extensively reprinted and circulated. True, it is mostly of an inferential and constructive description; but it is also cumulative, and the facts leave no doubt that foul water and cholera are somehow associated as cause and effect.

Even if we accept these organisms as merely a sign and measure of organic impurity, their detection and estimation constitute a valuable indication of the safety or danger of water; for they attend upon, and probably minister to, those earlier stages in the return of the recently living organic to the inorganic; and it is precisely in these stages that virulent products are apt to be formed, whether through the agency of microbes or not does not materially signify; because, if they are not the agents of the production of these materials, they are the evidence of their existence, and the greater their number and variety the larger the amount of the noxious stuff which it is probably the end and object of their life to produce or reduce. From this point of view the microbic test of the purity of water is entitled to great importance and reliance. And if there are dangerous or pathogenic microbes, the probability of the presence of these increases in direct proportion to the possibility of entrance of microbes in general into any fluid, be it water or milk.

How difficult it is in India to effect the exclusion Mr. Hankin's observations indicate in a novel and very striking manner. There is one lesson which his shrewd observations loudly proclaim, namely, that it is not enough to provide the Indian with pure water within easy reach, he must also be deprived of all opportunity of obtaining impure water. If the latter is easier of access than the former, or if its use is commended by custom or prejudice of any sort, it is quite certain that he will resort to it.

It was this conviction that sustained Drs. Payne, McLeod, and Simpson in the persistent crusade which they undertook against the foul tanks and wells of Calcutta. The Agra experience now recorded by Mr. Hankin simply affirms on a smaller scale, and with more scientific precision, the necessity of rendering the use of impure water physically impossible, while supplying a purer substitute in sufficient quantity and in such manner as to satisfy all reasonable requirements.

We cannot and must not look for early or brilliant success in the battle which we have to wage in India against habits and conditions detrimental to health, which are, unfortunately, the heritage and motive of a custom-bound and passive population. But, none the less are we bound to proclaim and enforce those truths which growing experience and advancing science are yearly rendering more clear and binding.

PRESCRIBING CHEMISTS.

A RECENT inquiry before the Lambeth Coroner into the death of a child, aged 15 months, affords a further illustration of the necessity which exists of providing some stringent remedy in cases where chemists persist in usurping the functions which, properly speaking, only belong to the qualified medical practitioner.

We commented recently on this branch of unqualified practice in a leading article and pointed out, as concisely as possible, the present condition of the law in this respect, the mischief, and the remedy. Until some practical steps are taken which may result in bringing about a better state of things, we shall continue to insist upon the imperative necessity for obtaining an amendment of the law.

In the case in point, according to the report we have read, from the evidence given by the mother, it appears that the child being in bad health and getting worse, she went to a "doctor," whom she recognised in court. The "doctor" asked her to bring the child, as he had a bad foot and could not visit it. She took the child, and the "doctor" saw it in a room at the back of his shop. He said it had got measles, and called to his boy to make it up some medicine.

The "doctor" in question it appears was a chemist. He charged 6d. for the medicine, telling the mother that he would not charge for advice. She went to him twice on the following day, being that on which the child died.

The medical evidence was to the effect that the cause of death was exhaustion from double pneumonia, and that

there was no sign of measles. A verdict of death from natural causes was returned.

There is not much need for comment in such a case as this; it speaks for itself. It is of course seldom, if ever, that the death is proved to be directly attributable to improper diagnosis and ignorant treatment; but the fact cannot be concealed that it is possible such a disastrous result might have been avoided if proper medical aid had been resorted to.

It is the poor in general who experience such regrettable consequences; but, from the correspondence which we recently received on the subject of prescribing chemists, we are led to believe that the richer classes are not averse to receiving advice from the chemist, which, from ignorance of his want of qualification, they consider him competent to give, and which he, it appears, is always ready to afford. To curtail or control, if not effectually to stamp out, this branch of unqualified medical practice is a great desideratum in the interests of the public and the profession: and this is the end we have in view. To achieve it we suggest the co-operation of all classes of the medical profession.

MRS. ANNA RUPPERT'S SKIN NOSTRUMS.

IN the BRITISH MEDICAL JOURNAL of December 23rd, 1893, we commented in an article under the title of "The Gentle Art of Beauty" on the lecture delivered by Mrs. Anna Ruppert at the Lyric Theatre on the 14th of that month, and alluded to the airy manner in which she endeavoured to explain away the fact of her having been fined by the Irish courts for vending her poisonous compounds. Last week we had to chronicle two appearances of Mrs. Ruppert in the law courts. In the one case she had to answer a charge brought by the Pharmaceutical Society of Ireland of an alleged infringement of the Pharmacy Acts. In the second case, Mrs. Ruppert was herself plaintiff in an action for the recovery of a sum of £13 4s. 5d. for goods supplied to a Mrs. Nives at Bournemouth to sell in her business. A claim of £30 for books was withdrawn as they had been returned. There was a counter claim by the defendant for £50 for alleged loss of business and damages sustained owing to her having sold the plaintiff's preparations.

His honour (Judge Lumley Smith, Q.C.) in giving judgment, said that plaintiff's claim was in respect of twenty-four bottles of "skin tonic," which it was proved beyond all doubt did contain a poison; he did not consider that persons like Mrs. Ruppert were entitled to take advantage of Section 16 of the Act, which was intended to apply to large wholesale dealers in drugs. The plaintiff could not recover for that portion of the articles supplied which contained poison, but could recover the price of the other articles. He therefore gave judgment for the plaintiff for £6 3s. 3d., and found against the defendant on the counter-claim for loss of business and credit, with costs in both instances. Stay of execution, it was understood, was granted pending notice of appeal, on condition that the debt and costs were paid into court.

The decision in question appears to be a most important one, inasmuch as it decides the point that Mrs. Ruppert is not a wholesale dealer within the meaning of the Act. The Pharmacy Act of 1868, Section 15, prohibits the sale of or keeping an open shop for retailing poisons by any person not being a duly registered chemist; but Section 16 provides that nothing in the Act before contained shall extend to or interfere with the business of wholesale dealers in supplying poisons in the ordinary course of wholesale dealing. Section 17 prescribes special regulations to be observed in the sale of certain scheduled poisons, and also provides that the provisions of the section which are solely applicable to poisons in the first part of Schedule A to the Act, or which require that the label shall contain the name and address of the seller, shall not apply to sales by wholesale to retail dealers in the ordinary course of wholesale dealing.

We refer to this somewhat particularly as we are under the impression that Mrs. Ruppert is taking advantage of these provisions to sell her nostrums to chemists and others for resale to the public, thinking by so doing to bring herself within the saving clauses.

It would be interesting to know whether Mrs. Ruppert in so selling the compounds in question discloses the ingredients, otherwise the retailer may, if he is not aware of the fact of the articles containing poisons, render himself liable to a prosecution under the Pharmacy Acts for not complying with the conditions prescribed.

In the course of the proceedings against Mrs. Nives, which we have mentioned above, the defendant stated in evidence that she was not aware when she undertook the agency for Mrs. Ruppert that the preparations contained poison, and that after the publication of the article in the BRITISH MEDICAL JOURNAL the demand for the preparation almost entirely ceased and she accordingly returned what she had left to Madame Ruppert in London. She stated that she had received several complaints from ladies to the effect that the skin tonic had caused great irritation and had rather done them harm than good.

The article in question was probably that which appeared in the BRITISH MEDICAL JOURNAL of April 29th, 1893, which was supported by the report of Mr. W. H. C. Staveley, F.R.C.S.Eng., and Mr. R. Denison Pedley, L.D.S., F.R.C.S. Edin., on the case of a lady who, it was stated, had suffered from acute periostitis of the jaw from mercurial poison, as a consequence of the use of Mrs. Ruppert's so-called "remedies."

We may have occasion to make further comments on Mrs. Ruppert's skin tonics, and in the meantime we feel it incumbent on us, in the public interest, to warn persons from resorting to so-called remedies, which, from the instances we have quoted in the JOURNAL, appear at that time to have been of so dangerous a character.

THE Queen has appointed Sir Henry Roscoe, M.P., LL.D., D.C.L., F.R.S., to the vacancy in the Senate of the University of London caused by the death of Sir William Smith.

THE Liverpool City Council has confirmed the resolution of the Health Committee to the effect that Dr. Stopford Taylor should retire from the office of medical officer of health at the expiration of three months.

MEDICAL EDUCATION OF WOMEN.

A LADY much interested in medical missions has offered two scholarships, of the value of £100 and £50 respectively, to women who desire to educate themselves for medical work

in the mission field. These scholarships are tenable at the Edinburgh School of Medicine for Women; and particulars can be obtained from the Secretary of that school, Surgeon Square, Edinburgh.

THE LATE PROFESSOR JOHN MARSHALL, F.R.S.

THE numerous friends and former pupils of the late Professor John Marshall will doubtless be greatly intersted to learn that a stained glass window to his memory has been placed by Mrs. Marshall in Ely Cathedral. His early connection with the city, and the fact that he is buried at Ely, render the selection of this site for the commemoration of his distinguished career especially appropriate.

TUBERCULOSIS IN 1892-93.

A RETURN has been issued as a Parliamentary paper, showing the number of carcasses seized during the year ending March 25th, 1893, by medical officers of health and inspectors of nuisances in England and Wales, under Section 116 of the Public Health Act, 1875, and Section 47 of the Public Health (London) Act, 1891; and of the numbers of such carcasses condemned by justices, distinguishing as far as is practicable the number so condemned in consequence of the animal having suffered from tuberculosis. Altogether 3,322 were seized during the year, 382 by metropolitan sanitary authorities, 2,779 by town councils of county boroughs.

CREMATION IN ENGLAND.

THE practice of cremation is making steady progress in this country, and seems especially to find favour amongst the educated classes. Among the persons of note who have during the last few years, in virtue of the testamentary dispositions, undorgone cremation after death are the following: George Hawkins, one of the founders of the Society; John Henry Wellington Graham Loftus, fourth Marquis of Ely; James Nasmyth; Sir John Walter Huddleston; Francis Charles Hastings, eighth Duke of Bedford; Madame Helen Blavatsky; F. S. Leighton; Lady Bramwell; Lord Bramwell; Earl of Northesk; Lord Calthorpe; Lady Catherine Northcote; Sir Henry A. Clavering, Bart.; Dowager Duchess of St. Albans; Sir Samuel White Baker.

THE LEPERS OF INDIA.

THE following order has been passed by the Government of Madras: "The report of the Leprosy Commission, and the conclusions as to the disease which are embodied in it, form, in the opinion of the Government, sufficient ground to warrant the refusal to assent to any measures of compulsory segregation, or of isolation and supervision of lepers in their homes, such as are advocated in the proceedings of the Committee of the National Leprosy Fund. His Excellency in Council approves of legislation for carrying out proposals (*a*), (*b*), and (*d*) made by the Commissioners, and for removing any obstacles in the existing law to the employment of local or municipal funds in the establishment and maintenance of leper asylums. But, while removing any such obstacles, this Government would not make provision for these purposes in any way compulsory, or exercise any pressure in that direction upon local bodies. Considering the very infinitesimal danger of contagion and inoculation, and the apparent decrease of the disease, and considering also the imperfect provision for general medical relief, and for other objects of equal consequence, which the state of their funds enables local bodies to make, this Government would leave the provisions of asylums for lepers mainly to private charity."

CLASS LONGEVITY.

THE report of the sanitary inspector of Leek for the month of November, 1893, contains some unexpected and interesting statistics. Mr. Farrow is a veteran in the public health service, whose connection with the town dates back many years; indeed, he speaks, apparently from personal experience, of the sanitary state of Leek before 1860. At all events, he contrasts the conditions prevailing in 1851-60 with those of the years since 1860, and shows that the improvement has been attended with lowered death-rate and increased duration of life. The mean age at death, he states, has increased from 24.8 to 32.9 years, and the mean duration of life from 29.3 to 43.6 years. He quotes from Sir Edwin Chadwick and the Registrar-General some particulars with regard to class, based upon the Leek statistics of thirty years, from which it seems that the "mean value of life among gentlemen and professional men" remained almost stationary, while it increased among tradesmen and shopkeepers from 30 to 36, among artisans from 26 to 31, and among workers in silk from 22 to 30. The precise meaning of these figures is not clearly defined, but it is evident that the working class have shared most largely in the increased longevity -a truth which voters of that class would do well to take note of.

THE LORD CHIEF JUSTICE AND THE S.P.C.K.

WE had occasion to congratulate the Society for Promoting Christian Knowledge a fortnight ago on their reasonable and straightforward course in refusing to be cowed by Lord Coleridge's arrogant demand for the withdrawal of Professor Frankland's very valuable little work on bacteriology. It now turns out that Lord Coleridge—the highest justiciary in the kingdom—has confessed that he never read the book he so violently condemned, but saw only two or three sentences from it. The Lord Chief Justice of England ought hardly to have to confess having committed the grave offence of condemning unheard, and practically unseen, a matter brought before him for his judgment. The Secretary of the Society for the Promotion of Christian Knowledge shows that this is the case in the present instance. We trust that this sharp lesson may lead Lord Coleridge to a more moderate and just course than that which he has adopted in this controversy. Right thinking people will be glad to hear that two or three gentlemen—supporters of the Society—have supplied the few guineas lost by the resignation of Lord Coleridge and his little following.

GLANDERS IN LONDON.

THE report of the chief officer of the Public Control Department of the London County Council shows that the adoption of measures under the glanders order of 1892 has, in the past year, been followed by a reduction of over one-third of the number of reported cases of glanders in London. The Council has not adopted the payment of compensation for which the order permissively provides, and as without this little fresh power was acquired, the improvement must be attributed to greater efficiency in carrying out pre-existent powers. The effect is highly favourable, but, as Mr. Spencer remarks, "with no power to slaughter—other than by the costly one of compensation—with limited powers of inspection, with no power to require that horses should be kept under healthy conditions, and in the absence of any requirement upon veterinary surgeons to notify cases of the disease, the efforts of the Council must be more or less ineffective." In the report evidence is adduced to show that by strict observance of precautions several large studs—one comprising 2,500 horses—have been kept free from glanders during the period under review, while by adoption of some of the measures essential to success the London General Omnibus Company—the largest horse owners in the metropolis—have reduced their losses from 232 in the six months April to September, 1892, to 67 in the corresponding period of 1893. Mr. Spencer says, "Complete success depends on converting horse owners, especially the large horse owners, to the conviction that their own interests are identical with the public interests," and, further on, that "the present law

is inadequate to effectually deal with the disease." The report is a valuable contribution to the history of glanders in the metropolis, but the history of all diseases of this class should tell the Council that owners are not likely to be convinced of the economy of slaughter at their own expense—primarily a costly expedient to them, too—unless they are afforded some protection from the animals of others not so convinced. We venture to hope that the revision of the order or alteration of the law indicated as essential by Mr. Spencer will be acquired by the Council.

THE SHOOTING CASE IN THE CITY.

By the courtesy of Mr. Hepburn, House-Surgeon of St. Bartholomew's Hospital, we are able to give the following particulars concerning the victims of the recent shooting case in the City. Mr. G. Saunders Jacobs and Mrs. Lindus were admitted to St. Bartholomew's Hospital on January 10th, about 12.15 P.M., suffering from pistol shot wounds. The male patient was much collapsed, with rapid, catchy, breathing. He had a bullet wound on the right side of his chest, in the fifth intercostal space, close to the sternum. During the day he remained in a very serious condition from collapse, and fears were entertained that he would not live. Later on he was found to have a hæmothorax on the right side, reaching up to the angle of the scapula behind. During the night there was considerable restlessness, but the next day he was somewhat better. In the evening of the 11th, however, he had acute pain in the right side, low down behind. This came on in paroxysms, but after about two hours it passed away, and ever since then he has continued to improve. His breathing now is quite regular, but there still is some collapse of the right lung. The bullet has not yet been extracted. The female patient was never in a serious condition, and on admission did not appear to suffer much from the injury she had received. There was a single bullet wound in the back, situated on the right side of the spine, on a level with about the eighth or ninth dorsal vertebra. The position of the bullet was not apparent, nor could it be discovered with the probe. On January 14th, after examination, it seemed justifiable to search for and remove the bullet, which was successfully done. It was found 2 inches from the surface, and a little higher up in the back than the external wound, lodged between the spinous and transverse processes of the vertebra. Since then the patient has been rapidly recovering.

THE ROYAL COMMISSION ON UNIVERSITY EDUCATION IN LONDON.

WE are able to state that the report of the Royal Commission on University Education in London has now been completed and signed. It is understood to be unanimous in recommending the retention of a single university in London, and in advising such alterations in the constitution of the existing university as may be necessary to convert it into a teaching university, having intimate organic connection with the existing colleges and medical schools. It is understood that the reforms proposed follow in general principles the scheme approved by the Senate of the University but rejected by Convocation. Certain notes are appended by individual Commissioners, mentioning alternative schemes without committing the Commission in any way to recommending their adoption. The scheme of the Senate, it may be recollected, proposed that University and King's Colleges should be constituent colleges in all the faculties, and the medical schools in the faculty of medicine. It proposed also the formation of Boards of Studies, consisting of representatives of the faculties, of the examiners, and of Convocation; these Boards would have power to make reports to the Senate. The faculties, by whom the Boards would be mainly elected, would consist of the teachers of the constituent colleges. The Senate would consist of members nominated by the Crown, members elected by Convocation, members elected by the faculties, and representatives of the medical corporations, and possibly of certain London and provincial colleges. The scheme also proposed to enter into an arrangement with the Conjoint Board of the Royal Colleges in England for the conducting of the examinations in medical subjects, the medical degrees of the university being granted to candidates who had passed this special Conjoint Board upon conditions to be determined by the university. Power was also taken to make such modifications in the mode of conducting the matriculation examination as might, after consultation with the constituent colleges in arts, be found advisable. It is a scheme of this nature which in its broad principles the Royal Commission is understood to be prepared to recommend.

THE HEALTH OF DUBLIN.

THE Dublin Corporation had before it on January 22nd the report of the Public Health Committee on the means proposed for the prevention of recurring outbreaks of typhoid fever. A proposal with reference to subsoil drainage was referred to the Main Drainage Committee. It was agreed to have a full survey of all the main sewers, a work which was recommended two years ago and never carried out. Other recommendations regarding the testing of house drains and the laying of all cross drains to the mains according to an improved plan were also adopted. A clause providing for the daily cleansing of the dairy yards at a cost for plant of £7,420 was rejected. A correspondent sends us the following observations on this subject. The report, he says, as it stands, with all its remedies, is in reality a strong indictment against the Public Health Committee. It is admitted that thousands of drains are bad, and that dairy yards, from which the milk supply of the city is largely taken, are not alone filthy, but are built against fever hospitals. Who is responsible for neglect of the ordinary sanitary precautions, and of the enforcement of the law against offenders? Now Dublin finds itself legislating in a panic upon a dozen different subjects, and the result is not likely to be very satisfactory. There will be a lavish expenditure of money, and the ratepayers, who already pay over 9s. in the pound, will find a considerable addition before long. Let the Corporation do all that is necessary to secure the health of the city by all means, but it has powers which it has failed to exercise, and which would do much to diminish the death-rate of Dublin if they were put into operation. The Public Health Committee does not at present stand well before the citizens, and a thorough reorganisation of the whole department seems to be desirable.

QUARANTINE BY "BOARDING OUT."

IT seems that until recently the Stourport Local Board have adopted a somewhat unusual course in reference to the isolation of cases of infectious disease. They have borne the cost of "boarding out" the healthy members of an infected household. It has been decided to discontinue this practice, arrangements having been made with the Kidderminster authorities for the reception of infectious cases into their hospital. Against the abandonment of the boarding out system the medical officer of health has protested strongly, pointing to instances in which removal to hospital could not be enforced, and in which removal of the rest of the family afforded the only means of safety. It would be interesting to know more of the Stourport experience in this matter, and of the details of the method adopted. Removal of the patient to hospital is clearly the most thorough and effective plan, houses of the humbler class being ill adapted for even temporary use as isolation wards. Quarantine of those exposed to infection is a valuable auxiliary, the importance of which is gaining in appreciation, but the expression "boarding out" carries with it an ominous suggestion of danger of planting infection in other households receiving quarantined guests, a danger

which was no doubt recognised and duly guarded against in some way. In cases where hospital isolation is for any reason impracticable, the Stourport plan might perhaps afford a useful hint, if fuller details were available than those appearing in the report which the *Kidderminster Times* gives of the proceedings of the local board.

INQUEST OR PUBLIC INQUIRY?

MR. THOMAS TROTTER, LL.B., advocate, delivered an address to the Leith Liberal Club, on January 13th, on the proposal to have a public inquiry into cases of sudden death in Scotland. Mr. Trotter, in the course of his speech, said that he was not sure that such a proposal, which was to institute the coroner's system in Scotland, even if accepted, would be beneficial to the country on the whole. The office of coroner existed in Scotland at a very early period, but had fallen into desuetude before the Jurisdiction Act, 20 George II. Mr. Trotter then stated certain objections—he would not say they were fatal—that were made against the proposal. First, it was a costly system. It would involve a large additional expenditure of money. Then it was cumbrous system. Jurors would be required to be cited, and a large number of other legal formalities would have to be gone through. He wished his audience to note specially that these cumbrous and costly proceedings would require to be conducted in every case of sudden death, no matter whether it were a case of suicide, heart disease, or apoplexy. Cases like the latter were more for a private *post-mortem* examination by a medical man than for a public inquiry. Lastly, he said that it might be urged that its chief recommendation of publicity only opened a door for the guilty to escape. In conclusion, Mr. Trotter said that the controversy lay in the question, Which was more beneficial, a public inquiry into sudden deaths or a private one like the present? There were advantages in both; but his leaning was towards the present system, though he confessed the question was a difficult one. He however thought the present system could be improved by having the *post-mortem* examination made by an expert medical jurist. Mr. Trotter was awarded a hearty vote of thanks on the motion of Mr. Hogg.

HOARSENESS AND LIFE INSURANCE.

IN lecturing before the monthly meeting of the Insurance and Actuarial Society of Glasgow on the significance of hoarseness for life insurance, Dr. John McIntyre has done good service. The fact on which he principally insisted, namely, that even slight hoarseness may point to the existence of disease directly threatening life and thereby seriously jeopardising the interests of the company to which the patient is applying for insurance, is too obvious to need further mention; but one might go one step further and ask for a routine examinatien of the larynx in all cases of contemplated insurance. Since Dr. Semon first pointed out that in progressive organic affections of the motor laryngeal nerves the abductor muscle became first affected, that the initial paresis and even paralysis of this muscle frequently is unaccompanied by any phonatory or respiratory signs which would draw attention to the larynx, and finally that this latent paralysis may for a long time remain the only sign of such life-threatening diseases as tabes, aneurysm of the aorta, cancer of the œsophagus, etc., Dr. M'Bride, of Edinburgh, has shown what far-reaching importance these facts possess for life insurance companies. The more frequently laryngoscopic routine examination, even if nothing points to the existence of laryngeal disease, is undertaken in future by the insurance physician, the more frequently will the company be saved what may be severe losses. Individual instances illustrating this fact have probably occurred in the practice of most busy insurance officers.

FAREWELL DINNER TO DR. TATHAM.

ON Thursday last Dr. Tatham, medical officer of health for Manchester, and Lecturer on Hygiene in Owens College, was entertained at a farewell complimentary dinner on the occasion of his leaving Manchester to undertake the duties of Statistical Superintendent of the Registrar-General's Office, Somerset House. Principal Ward presided, and there was a large and representative gathering of medicals and non-medicals at the dinner. Dr. Tatham, in reply to the toast of his health, stated that he had received most gratifying resolutions, addresses, and leave-takings from most of the public and private bodies with which he had been associated so long. We understand that there are between sixty and seventy applicants for the medical officership of health in Manchester. The post of lecturer on hygiene in Owens College is also vacant. As the lecture course does not begin until May, there is no pressing reason why the College Council should fill up the post just yet.

DEGRADED VACCINATION.

A DESIRE has of late not been wanting in some quarters to see the work of public vaccination degraded to the quality of the "sixpenny doctor"—the one-mark vaccination, of poor and oftentimes questionable value, which has in the past done so much to discredit vaccination generally. We can only express the hope that public vaccinators will do their utmost to uphold the standards which have been fixed for them, and which alone ought to be universally adopted. It is only some eight months since the Royal College of Surgeons expressed their belief that "the instructions of the Local Government Board for public vaccinators are well designed to secure the greatest efficiency in vaccination," and, for our part, we would gladly see them made binding on all medical practitioners. To give public vaccinators a free hand in the hope that they will conform to the desire of misguided individuals to secure for their children such inadequate measure of protection as would satisfy the letter of the law may be the wish of those whose interests are served by antivaccination agitations and by the bad name which poor vaccination must ever obtain, but whilst the Vaccination Acts remain on our Statute Book the aim of all right thinking persons must be to maintain that efficiency of administration best calculated permanently to safeguard the health of the community.

"MEDICAL PRACTITIONERS" IN SCOTLAND.

THE last issued volume of the Census of Scotland, 1891, dealing with the "Occupations of the Inhabitants," gives a summary of the "Medical Profession" which is, to say the least, comprehensive. Not only physicians, surgeons, and general medical practitioners, but dentists, veterinary surgeons, sick nurses, midwives, and invalid attendants are ranked in the "Medical Profession:" and when the total figures are quoted, as they sometimes are, they convey the erroneous idea that Scotland, with a population of 4,025,647, has no fewer than 7,709 medical practitioners, or 1 to every 522 inhabitants, whereas the medical men proper only number 2,595, or 1 to every 1,550 inhabitants. According to the summary, more than half of the 7,709 persons returned as engaged in the medical profession are women. But nearly all these women are engaged in nursing. Only 12 lady doctors were to be found in all Scotland at the census of 1891. Tables are given showing the number of medical practitioners to population (1) in each county, and (2) in each burgh having a population of not less than 10,000. In Scotland we meet with the extraordinary range of from 650 to 3,400 inhabitants to each medical practitioner, the former figures being for the city of Edinburgh, and the latter for the burgh of Kinning Park.

EDINBURGH ROYAL INFIRMARY.

AT the last weekly meeting of the Board of Managers it was resolved, by ten votes to eight, that representatives of the press should henceforth be admitted to the meetings. The motion for was made by the Lord Provost, while that against was made by the Professor of

Physiology in the University of Edinburgh. At the same meeting the managers had under further consideration the difficulty regarding the appointment of two members of the staff to be representatives of the Royal College of Surgeons on the Board. A report from the Law Committee, while pointing out the inexpediency of having members of the staff also on the managing Board, expressed the opinion that, on legal grounds, the election of Drs. John Duncan and D. Argyll Robertson was perfectly valid. After some talk it was agreed to let the report lie over till the next meeting.

LENT LECTURES OF THE NATIONAL HEALTH SOCIETY.

THE National Health Society has arranged for the delivery of a series of lectures on domestic and personal hygiene by well-known specialists during Lent. The first lecture will be given by Dr. C. E. Shelly, M.O.H. Haileybury College, on February 14th; the subject will be the Feeding of Boys and Girls at School. Subsequent lectures will be given as follows:—On February 21st, by Dr. Arthur Newsholme, M.O.H. Brighton, on Diphtheria in the Home; on February 28th, by Dr. George Reid, M.O.H. Staffordshire, on Infant Mortality; on March 7th, by Dr. Solomon Smith, Consulting Surgeon to the Halifax Infirmary, on Home Precautions for the Prevention of Consumption; on March 14th, Sir Douglas Galton, on House Sanitation; on March 21st, Mr. Ernest Hart, on Afternoon Tea, After Dinner Coffee, and Morning Chocolate. The lectures will be given on each day at 4 P.M. Full particulars will be forwarded on application by Miss F. Lankester, Secretary of the National Health Society, 53, Berners Street, Oxford Street.

THE PRESS, THE QUACKS, AND THE PUBLIC.

AN address on this subject was delivered on Saturday evening at Toynbee Hall, E.C., by Mr. Ernest Hart. After referring in a general way to the growing power of the press, its accumulating responsibilities, and the admirable manner in which on the whole they were fulfilled, Mr. Hart turned to certain phases of journalistic responsibility which more especially came under his notice as a medical editor. He cited a considerable number of instances in which untold harm was effected at the present moment by the facility with which a considerable number of journals of high position and large circulation placed their columns at the disposal of a large class of persons who habitually practised open falsehood and palpable deceit, and worked untold harm among the more credulous sections of their readers. The vast circulation of the daily and weekly press, growing in importance, made this subject one of daily increasing moment, and he openly and directly charged a large proportion of the newspaper press of this country with sacrificing their duty, the honour of their calling, and the public interest to the inducement of palpable quacks and vendors of either dangerous or insidious wares, offered at preposterous prices under palpably false pretences. The health of the people was being undermined, their morals were being sapped, and they were being robbed wholesale by unscrupulous vendors of secret medicines; worse than this, a great proportion of religious papers and provincial papers sold their columns to persons who openly traded upon the weaknesses, the sins, and the fears of the married and unmarried of both sexes. The quack and patent medicine impostor of olden times had a limited sphere of mischief; he had his cart or his stall in the market place, and for the most part he was more ridiculous than harmful, but now limited companies were formed, syndicates were established, and great financial operations were undertaken to carry out an extensive system of preying upon the public with the aid of the vast publicity sold by the newspapers. Mr. Ernest Hart then read correspondence which he had had with the managers of some of the leading newspapers, in which several of them had frankly recognised their responsibilities in the matter, and described the precautions by which they protected their advertising columns from becoming the medium of such wholesale deceptions of the public. He referred, however, to the details of the Harness system of advertising, and to the advertisements and editorial puffs afforded quite recently to dangerous adventurers, free lances in irregular medicine, and spoke of the career of the Anna Ruppert skin lotions and to some of the results of the public medical lectures, freely reported in the daily papers. He asked that something of the same censorship should be exercised over the advertisements and editorials in the papers in dealing with medical matters as was admittedly exercised in ordinary advertisements relating to law, to commerce, and financial affairs. Advertisements putting forth evidently unfounded and impossible statements as to banking, or lotteries, or giving racing tips or gambling incitements, were not admitted into respectable papers. Why should the monstrous, dangerous, and palpably false statements and delusive promises put forward by the exploiters of secret medicines be alone accorded the unrestricted publicity of newspapers, great and small? Mr. Hart proceeded to say that the worst offenders were papers often full of religious pretension and social philanthropy. The evening papers, even in London, were great offenders, and the Sunday papers from some of which he read extracts. Some Sunday and evening papers of the metropolis were setting the abominable example of publishing the monstrous statements of the quack advertiser as editorial articles in ordinary type; this was sinking to a lower depth of degradation than was customary, even in the lower types of British journalism, and was quite unworthy of papers having otherwise many claims to consideration. It was an example of the Americanisation of our journalism in the worst sense of that word. Speaking generally during the last few years, during which he had more than once brought this matter to the notice of the managers and editors of the British press, Mr. Ernest Hart said that while it might be observed with satisfaction that the highest class of newspapers had steadily proceeded in the process of purification and expurgation, a large proportion of the newspaper press were treading the downward path: and that for the sake of the hundreds or thousands of pounds dangled before their eyes by the companies, syndicates, and individual proprietors of patent medicines, they were prostituting their advertisement columns in an increasing degree to the service of a dangerous and often wicked class of impostors.

POISONING BY MISADVENTURE: OPINIONS OF THE PRESS.

MANY of the metropolitan and provincial newspapers refer to the subject of accidental poisoning as requiring the adoption of energetic measures of protection. The points chiefly insisted upon as requiring to be dealt with are the extension of the poison schedule and the compulsory use of distinctive bottles for poisonous preparations. As to the former, there can be little doubt that it is needed, and the large number of deaths caused by carbolic acid furnishes a striking illustration of the fact. The precaution of using distinctive bottles for poison is now so generally observed by duly qualified chemists and druggists that it may be doubtful whether there is any great necessity for making that practice compulsory. But there are a great number of cases in which the sale of poison or of preparations that are dangerous because they contain poison is carried on in a manner inconsistent with the object of the Pharmacy Act, and it is mainly in respect to that kind of trade that the provisions of the Act require to be more stringently applied. We refer to the sale of secret remenies and the so-called patent medicines. Until the Chairman of the Parliamentary Bills Committee directed attention to the impropriety of this trade and to the danger attending it there had been much neglect in the application of the law, but now that secret remedies are held to be subject to the Pharmacy Act

it is clearly the duty of the Pharmaceutical Society to enforce the Act stringently. The statement made by the advocates of unrestricted sale of secret remedies that the action taken by the Pharmaceutical Society is instigated by interested motives is disproved by past experience, and the Society is really more open to the charge of not having enforced the Act with sufficient vigour. Now that the propriety of doing so has been proved by judicial construction of the Act the Society has no alternative but to proceed against unlawful sellers of secret remedies, and there is no ground for the charge that it is seeking to establish a monopoly. It is in this direction as well as by further additions to the poison schedule that energetic action is necessary for public safety. The restriction of the sale of poisons to the hands of competent persons is the first requisite for securing that object, since they can alone be depended upon to observe the precautions which are needed. This view of the matter is very properly appreciated by the *Echo* in the remark that "though we cannot, for the sake of would-be suicides, stop the sale of poison, it is advisable to surround the sale with rigid restrictions." To a very great extent the provisions of the existing law having that object have been less strictly observed than they should be, and we trust that the Pharmaceutical Society will not relax its efforts to enforce compliance with them in a manner more consistent with the intention of the Legislature and the necessities of public safety.

LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

THE following are the arrangements for lectures during 1894 at the Royal College of Surgeons of England: On February 5th, 7th, and 9th, Dr. Ernest H. Starling (Arris and Gale Lecturer), on "Physiology of Lymph Formation;" February 12th, 14th, and 16th, Professor C. B. Plowright, on "The Fungus Kingdom;" February 19th, 21st, and 23rd, Professor E. Treacher Collins, on "The Anatomy and Pathology of the Eye;" February 26th and 28th, March 2nd, 5th, 7th, 9th, 12th, 14th, and 16th, Professor Charles Stewart on "The Physiological Series of Comparative Anatomy in the Museum of the College;" May 3rd, Mr. S. G. Shattock, F.R.C.S. (Morton Lecturer), on "Cancer and Cancerous Disease;" May 28th and June 1st, Mr. J. H. Targett, F.R.C.S. (Erasmus Wilson Lecturer), on "Some Interesting Additions to the Pathological Department of the Museum; June 4th, 6th, and 8th, Professor Raymond Johnson, on "Tumours of the Breast;" June 11th, 13th, and 15th, Professor William Thorburn, on "The Surgery of the Spinal Cord and its Appendages;" June 18th, 20th, and 22nd, Professor T. Pickering Pick, on "Diseases of the Ends of the Long Bones in Children." All the lectures will take place at 5 P.M. precisely.

THE TRAINING OF NURSES IN WORKHOUSE INFIRMARIES.

ON January 24th an interesting ceremony took place at the Mile End Infirmary, when Sir Henry W. Acland, Bart., Regius Professor of Medicine in the University of Oxford, presented certificates of efficiency to those nurses who, after their training in the wards of the infirmary, had passed the prescribed examination. The chair was taken by Mr. Edwin H. Kerwin, Chairman of the Board of Guardians, and there were present Dr. Bridges, Mr. Percy Dean, who had acted as examiner, Dr. Glover, and a considerable company of people interested in the subject. It would appear that there are about 500 patients in the infirmary, with 37 nurses and probationers, under a superintendent who is herself a trained nurse. The training of nurses in workhouses is a natural outcome and development of the reformation in the treatment, and especially in the nursing, of the sick poor which has taken place in the majority of the workhouse infirmaries in the metropolis. There are considerable disadvantages in the staff of an infirmary being drawn from a variety of training schools. There is much reason to believe that in many institutions even where trained nurses are required, the character of the nursing is not always such as would be accepted in the larger general hospitals, and that this to a considerable extent arises from the extremely variable conception of the meaning of a training. We cannot then have the slightest hesitation in approving to the full the action of those boards of guardians who have decided to train their own nurses and to know something of the character and the antecedents of those to whom they intrust the care of their sick. It is to be hoped that before very long some practicable means will be discovered of enabling the public to know what they are getting when they pay for a trained nurse, and whenever that day arrives we may be quite sure that these nurses will be at a premium. Hence it is that the great workhouse infirmaries will probably in future find it an actual economy to give the poor the benefit of the best of nursing, for comparatively small wages will draw to them a class of probationers whose real reward will be the opening given them to a comparatively well paid profession. Every credit is due to Dr. Robinson, the Medical Superintendent of the infirmary, for his insistance on the necessity of proper nursing, and for the unrewarded labour which he has given to the inception and development of this training school for nurses, and we were glad to note that of this point the speakers on the occasion were not unmindful.

THE HOSPITAL SATURDAY FUND.

ALTHOUGH the amount collected during the year 1893 was only £19,301, against £20,129 collected in the year 1892, the Council of this Fund distributed on January 20th amongst the hospitals £17,778, being an increase of upwards of £700 for the year. The report is not yet issued, and it is impossible, therefore, to state whether the extra sum given to the hospitals represents economy in the management or not. It is to be regretted that, despite the energy of Mr. R. B. Acland, the Chairman of the Council, the Hospital Saturday Fund makes no progress in London. The receipts this year are less than they were in 1891, and the most friendly observer must recognise that some alteration of system leading to increased receipts of the Fund is very desirable. We would strongly counsel Mr. Acland and his colleagues to place themselves into communication with the committees of the great hospitals with the view of associating the hospitals directly with the workshops. This plan has answered admirably in the great provincial towns, and it is the only system likely to prove successful in the metropolis.

CONSULTANTS.

SOME surprise has been expressed that in our article on "Consultants" we made no reference to "giving up midwifery." That this negative qualification should make a consultant could surely never be asserted save in respect of some technical rule of a particular corporation. The fact is that if it were ever possible to have a thorough knowledge, both practical and scientific, of the whole sphere of our profession, that time is long past. A consultant may have a special knowledge of, say, one-third of this sphere, divided as he may find convenient; not only so, but he must also have a theoretical as well as a practical knowledge of his department: that is, he must not only possess the current skill of the day, but he must have some command of "the institutes of medicine." Now, attainments of this order are only possible to men who have had some time for reading and research in the earlier years of their professional life. If it be replied that such an one is, if not an ideal consultant, at any rate one to be found only in very large towns; and if it be asked by what rough exterior features a consultant is to be known anywhere, we should be disposed to indicate him thus: "A 'consultant' is a practitioner in some branch of medicine who is called in as a consultant by his medical brethren; whose interviews with patients,

whether alone or in consultation with a colleague, are occasional rather than regular; whose fee on each occasion is charity, of course, apart—not less than one guinea, and whose fee is usually paid at the time."

OSCULATION AND ADJURATION.

THE ignorance and stupidity which have manifested themselves over the very simple question of the administration of the oath in the Scotch form with uplifted hand keep on breaking out in fresh places. Recently there was a report of an inquest at Brixton, in which it was said that one of the jurymen had complained that a doctor was not sworn because he had not "kissed the book." The juryman seems to have been quite furious upon the subject. He first declared that it was "most reprehensible and irreverent," and when the coroner tried to soothe him, he exclaimed in horror: "You infer that it is not necessary for us to 'kiss the Bible.'" Strange to say, although this is well known to be true, the coroner immediately backed down and said he did not suggest anything of the kind. The coroner's officer weakly suggested that he thought the doctor had kissed the book after all, which everybody said was not the fact. Finally, the sapient juryman declared that "doctors were too fond of that kind of thing, and supposed that they were afraid of contagion." He meant this no doubt as an imputation of cowardice, and one would have thought that the coroner would have felt it his duty to point out to him at once, not only the indecency but the absurdity of his remark; but he seems to have said nothing. As it happened that the doctor had already left the court before this storm in a tea-cup arose, the little exhibition of ignorant wrath was of no great consequence to anyone; but Mr. Coroner Wyatt's apparent ignorance of the plain law suggests to us that as the metropolitan coroners are now in a close relationship to the London County Council, it might be well that that energetic body should send them copies of Mr. Asquith's circular, and otherwise bring home to their minds, if it were only in the interest of the public health, that nobody need kiss the book nowadays unless he likes. Why anyone should suppose that the osculatory method adds to the decency or reverence of the oath we have never been able to see. As a matter of fact, we have always been of opinion that, as the ceremony is commonly carried out, it is not reverent, and often not decent. But even those who choose to think the contrary had better recognise that their fellow citizens are perfectly entitled to their opinion, not only in reason but in law.

INFECTION AND RED-TAPE.

THE ancient dispute between sanitary authorities and boards of guardians as to the responsibility for the isolation of cases of infectious disease among the pauper class has worked mischief in many places. From a report in the *Dudley Herald* it appears that a case of this kind occurred at Sedgley recently, and that a patient suffering from small-pox was lodged in a small room ventilated by means of a broken window in lieu of a chimney. The local board had in unreadiness a temporary hospital which could be prepared for the reception of patients in about a day, but it was decided to do nothing. The guardians, it may be assumed, had at their command no place for isolation other than the workhouse; at all events, they emulated their *confrères* of the local board in leaving the case at home. No one has hitherto gone so far as to suggest that pauper cases of small-pox are one whit less infectious than the wealthiest, or that pauper homes are of a kind conducive either to isolation or to the well-being of the patient. The public safety would best be consulted by the removal of every case, pauper or not, to the efficient hospital which the sanitary authority ought to have provided and maintained in constant readiness. Whether the one authority or the other ought to bear the cost of maintaining a given patient in hospital is a comparatively trifling issue which ought not to be allowed the ridiculous but disastrous precedence often given to it. Theoretically, perhaps, the guardians ought to pay; but the bill must in any case be paid ultimately out of the pockets of not very different ratepayers.

A LARGE FEE AND ITS USE.

A STORY recalling a characteristic trait of the late Sir Andrew Clark is told by a correspondent of the *Daily News*. The correspondent writes in reference to the statement in the *Strand Magazine* that "as regards fees, Sir Andrew Clark always took what was offered." This statement, says the correspondent, conveys a false impression. Sir Andrew always took what was offered when it was less than his ordinary fee, but not when it was more. Then an illustrative case is mentioned with regard to the physician's visit to Cannes some years since. On returning to London the patient he went to see sent him a cheque for £6,000, which Sir Andrew returned, saying he could not accept it, as it was excessive, his fee being £750, not an excessive sum, considering it took him away from his practice for a week. The patient paid the fee and returned the first cheque, asking Sir Andrew to employ it for the benefit of the suffering sick poor, a wish which, needless to say, was faithfully carried out.

COMPETITION AND UNDERSELLING.

THERE is much of truth in the letter by Dr. Hooper which we published on December 23rd, 1893. No doubt the profession is being degraded and grievously injured by the curse of competition and underselling; so much the more important does it seem to us that there should be some authority able and willing to check such practices. The root of it all appears to us to lie in the reckless way in which gratuitous medical aid is thrust on the public. We are not concerned to question the perfect freedom from abuse of the dispensaries with which Dr. Hooper is connected, but no one doubts that amongst the multitudes who receive free attendance at hospitals and dispensaries, a large proportion are in no sense fit subjects for charity, and a large proportion of the remainder are proper subjects for the Poor Law. The whole subject is vastly too large to be settled by private discussion, and, as we have said on a previous occasion, ought to be brought, by public and concerted action, to a point at which a plan can be formed which could be put in the hands of the united Colleges to carry out. Meanwhile, the ventilation of the undoubted grievances of private practitioners cannot but do good in calling public attention to the vices of the present system.

ANTIRABIC VACCINATIONS IN RUSSIA.

WYSOKOWICZ, in the *Annales de l'Institut Pasteur*, November, reports that, during 1891 and 1892, 543 persons were treated at the Pasteur Institute at Charkoff. Only 9 of these arrived at the institute on the day when the bite was inflicted, 377 during the following week. The animals inflicting the bites were: wolves, 29; dogs, 457; cats, 37; horses, 2; pig, 1; sheep, 2. Among the 543 persons treated there were 8 deaths, 2 of these having been bitten by dogs and 6 by wolves. As the treatment appeared to have been insufficient in some of these cases, the vaccinations were repeated after a month's interval during last year, and no death has occurred among 84 persons who have undergone the double vaccination. Diatroptoff states that during the past year 644 persons underwent antirabic vaccination at the bacteriological station at Odessa. The animals inflicting the injuries were: wolves, 6; dogs, 593; cats, 32; horses, 2. The cases were divided into three categories, according to the severity of the injuries: very grave, 57; serious, 376; mild, 200. Among the 640 persons who underwent a complete course of treatment there was not a single death. Out of the total 644 persons treated, 4 died before the completion of the treatment; 4 untreated persons died at the hospital, have developed hydrophobia before their admission.

MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

The Year's Operations.—One Hundred New Members.—Reserve Increased to £71,000.—Total Payments for Sickness, £23,000.

AT the quarterly meeting of the Medical Sickness, Annuity, and Life Assurance Society, on January 17th, Mr. ERNEST HART, the Chairman, presided, and there were also present Dr. M. Greenwood, Mr. F. Wallace, Dr. W. Knowsley Sibley, Mr. J. Brindley James, Mr. Edward Bartlett, Dr. J. Pickett, Dr. J. W. Hunt, Dr. A. S. Gubb, and Mr. F. I. Allan.

The nature and extent of the Society's operations for the year 1893 were reported. During the twelve months the number of effective members was increased from 1,290 to 1,386. The new members have come from all parts of the United Kingdom and from every branch of the medical profession, and the letters which accompany the applications for membership show that the usefulness of the Society is becoming widely known. During the last three months of 1893, fifty members, all over five years' standing, have taken advantage of the recent alterations in the rules, and largely increased the amount of the benefits for which they had originally assured with the Society. In every case a stringent medical examination was passed. The fact that so many old members have increased their insurances in the Society is one on which the management may be congratulated, for it affords evidence that the Society is satisfying its members and doing the useful work for which it was founded ten years ago. The expenditure on the management is still less than 5 per cent. of the premium income, and this economy, combined with the care exercised in the investigation of new applications, has produced satisfactory results. The funds now amount to £71,323, while the total annual income of the Society is £15,624. During the year no less than £8,773 was added to the reserve; over £4,000 has been paid in the same period to the members in respect of sickness and accidents of all kinds. Since the foundation of the Society in 1884 the total amount paid to the members in respect of sickness and accident claims is £23,000. The business of the Society is now being valued, and the results will shortly be announced. A stringent method is being adopted, but it is believed that even under the most ample reservations a substantial surplus will be shown.

Prospectus and full particulars on application to the Secretary, Mr. F. Addiscott, 33, Chancery Lane, London, W.C.

BRITISH MEDICAL BENEVOLENT FUND.

THE annual general meeting of subscribers to this fund was held on January 12th at the residence of the Treasurer, 84, Brook Street, Grosvenor Square, W., at 4 o'clock P.M. Amongst those present were the President, Sir JAMES PAGET, Bart., F.R.S., in the chair; Sir W. H. Broadbent, Bart., Treasurer; Dr. Felce and Mr. France, Vice-Presidents; Dr. Phillips and Mr. Edward East, Honorary Secretaries: Drs. Baines, Bowles, Ince, and Eastes, and Messrs. Aikin, Byam, Churchill, Kiallmark, Lynch, Morgan, Page, and Parker-Young.

The Treasurer's financial statement and the report of the Committee were submitted to the meeting and from them it appeared that during the past year the relief afforded by the fund had, as is usual, been given in the form of money grants to approved cases and as annuities. Income: Income during the year had amounted to £4,748: from investments, £2,073; an increase of £9; donations, £471 14s.; and subscriptions, £1,023 17s.; a total of £1,495, as against £1,561 in the previous year, the donations in that year being £300 and the subscriptions £1,261, a regrettable decrease in annual subscriptions. Legacies produced £1,180—£1,000 from the estate of the late Miss M. Johnstone and £180 from that of the late Charles Hawksley, M.D. Expenditure: Grant department—£1,866 was distributed in grants varying from £5 to £20 amongst 170 applicants, chiefly in instalments, through honorary local secretaries or through the agency of the Cheque Bank. Annuity department: The sum of £2,140 was divided amongst 103 annuitants, 100 being £20 annuitants, 8 at £26, 2 "Dunlop Gift," and 1 "John Morgan." The recipients of annuities are members of the medical profession, or their widows or daughters, of more than 60 years of age, and are selected by a special committee, meeting twice a year to decide which are in the more urgent need of permanent assistance. A great number of the cases are well known to members of the committee, from having previously come to the fund for temporary relief, and have been placed on the list of annuitants as age has rendered them eligible, and in the case of very many of the annuitants the annuities they receive are all that stands between them and parish relief. The annuities are £20 each, though eight of them have been increased to £26 a year through the special fund established in 1873. They are derived from the income of invested property, and, owing to the large number of legacies which have come to the fund during the last few years, the relief afforded in the form of annuities has greatly increased. Thus, during the year 1883, the number of annuitants was 51, and they received £1,062, and the number has increased year by year until, during the past year—1893—the number of annuitants was 103, who received the sum of £2,140. Amongst the annuities which were continued was the "John Morgan" annuity. As was stated in the report for 1892, this fund received and invested in that year the sum raised in memory of the late Mr. John Morgan, F.R.C.S., and the income derived from it (£36 in amount) came, during the past year, at the disposal of the Committee, and was continued to the widow of a medical man with children to educate, as desired by the subscribers to the memorial.

Notwithstanding the large increase in the number of persons receiving annuities, the applications from others in need of immediate relief have been much in excess of those for many years, and, unfortunately, the funds available for this purpose, derived from donations and annual subscriptions, have fallen far short of the needs of the Committee, for of late many old and liberal supporters of the fund have died, and others, in all parts of the country, have been unable to keep up the amount of their subscriptions. At the meeting in May, the Committee were compelled to borrow £200 from the annuity department, and at the meeting in October there were absolutely no funds in hand. An appeal by the Treasurer brought in £190, but this, added to the donations and subscriptions, was not enough to meet the urgent cases and repay the amount borrowed. Both grants and annuities are given, as usual, by instalments, which the Committee has found from experience to be the only satisfactory method.

The Committee are pleased to congratulate the Treasurer, Sir W. H. Broadbent, Bart., upon the well merited honour lately conferred upon him, and have to deplore the loss of one of their Vice-Presidents, in the person of Sir Andrew Clark, Bart. Three vacancies occurred upon the Committee, and Drs. George Eastes and J. Lowe were elected to supply them. The resignation of Dr. John Bright was received with regret, and he and Dr. Brett were elected Vice-Presidents of the charity. Votes of thanks to the Chairman of Committee, Auditors, Treasurer, and Honorary Secretaries, the medical press, and Sir James Paget were accorded and suitably acknowledged.

The Committee, in drawing attention to the deficiency of funds, mentioned above, would observe that the entire work of the charity is voluntary, only printing and stationery costing anything, collector's commission excepted. Every penny subscribed is available for the services of the fund, and they would draw the attention of the profession to the work and utility of the charity, and solicit a corresponding increase in subscriptions, instead of the falling off the Committee so greatly deplore.

Subscriptions and donations should be sent to the Treasurer or Honorary Financial Secretary, Dr. Sidney Phillips, 62, Upper Berkeley Street, W.

THE Fylde Medical Society, which is doing a very useful work in the district, held its annual meeting at Blackpool in December, when Dr. F. A. Heslop, of Blackpool, was elected President, Dr. A. M. Eason, of Lytham, Vice-President, and Dr. Kingsbury, of Blackpool, Honorary Secretary and Treasurer. At the January meeting, Dr. Percy H. Day related the case of a multipara in whom delivery occurred 329 days after the last menstruation, "quickening" having taken place four months and a-half after that date.

A FURTHER INTERNATIONAL SANITARY CONFERENCE.

The Date of the Conference.—The Attitude of Turkey.—The Complexity of the Problem.—Young Islam and the Mecca Pilgrimage.

THE French Government has lost no time in fulfilling the promise given at Dresden that another conference should be called together to consider what measures ought to be taken to regulate the pilgrim traffic in the Red Sea and Persian Gulf, with the view of preventing the importation of cholera to Mecca, and its dissemination thence along the track of the returning Hajjis.

We hear from an authoritative official source in Paris that the date of the International Sanitary Conference in Paris, originally fixed for January 24th, has been necessarily postponed to a later date, the foreign Powers invited only having given in their adhesion in succession and with much delay. The last acceptances of the invitations have now been received, and at the last meeting of the Consultative Committee of Public Health on January 22nd it was decided that the Congress should assemble on February 7th. The date seems appropriate enough, as there are obvious advantages in such a discussion taking place at a time when the nations involved are free from the disturbing influence of an epidemic. The place chosen is, however, a matter of somewhat different omen, and one would have been glad to hear of the Conference meeting in Constantinople if by such a step the adhesion of Turkey could be assured.

The reported refusal of Turkey to send a representative, and the doubt as to the attitude of Persia, are matters much to be regretted, since the efficacy of any decision which may be arrived at will depend largely on the willingness of these countries to participate in its execution. It may be doubted in fact whether a mere expression of opinion on the part of Western Europe will produce much effect, and any attempt at concerted pressure by the West upon the East would be so fraught with political perils as to be out of the question.

The problem, indeed, is full of complexity. Mr. Ernest Hart has sufficiently proved that the objective part of all radical reform is Mecca. France, like all other ill-drained countries, thinks that at all hazards, and at whatever expense to the rest of the world, no case of cholera must be allowed to enter the basin of the Mediterranean: England, with a calm born of superior sanitation, looks upon this point as not quite so urgent; while Turkey not unnaturally asks, Who is to pay? To this latter question the whole Christian world says: Tax the pilgrims. The Mohammedan world, however, does not see things in the same light, and may refuse to have its religious observances interfered with. Those who do not dwell in the Hedjàz reasonably enough think that Mecca and the district around, which lives by the profit it derives from the annual pilgrimage, should pay for its own sanitary reformation, whereas the dwellers in that holy region say the place is good enough for them, and that if Europe wants anything better it must pay the bill. Then France, Spain, Turkey, and such like countries, which are not overburdened with carrying trade, are not averse to a little interference with traffic, whereas we fret and fume at an hour's delay. All Europe again, except ourselves, looks upon India, and through India England, as the main sinner in the matter, and as more culpable in originating cholera than twenty Meccas in distributing it. Europe would readily unite in declaring that India's first duty is to root out cholera from its endemic home, to which India answers with a cool *non possumus*, and will continue to do so while its official staff remains as tinged as it still is with the thoroughly exploded delusion that the diffusion of cholera is a matter of winds and seasons, monsoons, and atmospheric pressures.

The interests involved are diverse enough, even if all were properly and amicably represented; but if those who hold the very key to the position stand aloof, we fear the Conference will be of small avail. The play will be there indeed, but where will be the Hamlet? Even the *personnel* of the Conference is a matter of the greatest importance, and so far as England is concerned we may expect that the result will largely depend on whether our delegate be representative of English or of Indian views as to the nature and diffusion of cholera.

It must never be forgotten, however, that in this Meccan business the Porte is the central figure, and that whatever any conference may decide will be of but small avail so long as the Sultan remains passive.

For any real progress we must look to the self-interest of the Mohammedans themselves. Perhaps in all ages, but certainly at the present time, there is a tendency among would-be pilgrims to boil their peas, and make their journey as easy as may be; and it is not to be wondered at that intelligent and educated Mohammedans should be filled with indignation that, by the mere passive perversity of the proprietors of Mecca, their pilgrimage should so often mean a useless and aimless death at the hands of a disease the origin and nature of which is repugnant to every cleanly principle inculcated by their Prophet. The suppression of Mecca as a cholera centre is not to be forced on the Mahommedan world by a Conference sitting in Paris; but, as was pointed out by Mr. Ernest Hart in his address on the Sources of European Cholera, at the recent Congresses at Edinburgh and in America, it is much more likely to result from pressure brought to bear upon the Sultan by intelligent co-religionists, smarting under the sacrifice which the present system involves upon them. If we wish to prevent Mecca remaining a danger to Europe, we must prove to young Islam, as we can easily do, that Mecca can be prevented from being a danger to itself.

COOKING AND HEATING BY GAS.

IV.

Principles of Economy of Heat in Gas Stoves.—The Calorigen.—The Euthermic.—Close Stoves and Open.

THE constructor of an economical gas stove, that is, of a stove which shall give the largest amount of effective heat in proportion to a given amount of gas burned, has before him, as was indicated in the previous article, the problem of how to rob the products of combustion of their heat before they escape out of the stove in as large a degree as is consistent with maintaining sufficient current in them to ensure their exit from it. If this latter result were not kept in view the stove would, of course, be speedily extinguished by the accumulation within it of the chief product of combustion, namely, carbonic acid gas. Now, the way in which this object can be most effectively achieved is by bringing the heated products into contact with an extended metallic lamina so arranged that the heat which is absorbed by one surface of the lamina shall be given off into the room to be heated, either by direct radiation or by the conducting influence of a stream of air which is carried over it. For obvious reasons the form which this metallic lamina must in practice assume is that of a tube or cylinder, the heated products of combustion being brought into relations with either the inside or the outside of the tube according to the plan on which the stove may be constructed. In connection with this aspect of the problem two points have to be noticed: first, that, *cæteris paribus*, the larger the area of the tube with which the products of combustion are brought into contact, the more readily will they be deprived of their heat; and, secondly, that the thinner the wall of the tube, the more rapidly will the heat pass through it. It will also be obvious that the efficiency of the stove, merely considered as a heating appliance, will be much promoted by carrying a stream of cold external air through it, so as to facilitate the removal of heat from it by convection; whilst such an arrangement has the further recommendation of distinctly promoting the ventilation of the apartment in which the stove may be placed. This latter result will be further promoted by enabling the stove to draw the air necessary for its combustion, as well as the surplus air which is bound to escape up every chimney or flue into which products of combustion are passed, directly from the room. With these points well in view, the reader will be able the better to appreciate the construction of the two stoves which we shall now describe, as well as the differences between them.

The gas stove which is known under the name of "George's Patent Calorigen," of which a drawing, combining a vertical

plan and an elevation, is annexed, consists essentially of a cylindrical metallic body, D, connected with which are two pipes, F, E, the upper of which is intended for carrying away into the outer air the products of combustion, and the lower one for bringing a supply of external air into the interior of the stove to supply combustion, for the body of the stove is closed at the bottom as well as at the top when it has been lighted, which is done by pulling the burner, I, out through the door, J, which is then closed again. Through the interior of the stove passes a tube, G, the upper end of which is open at H, whilst the lower end is carried through the outer wall, either above or below the floor, to some point from which an appropriate supply of fresh air can be obtained. The action of the stove will be evident. The heated products of combustion, before they pass out of the upper flue, will come, more or less effectually, into contact with the inner surface of the cylinder, D, and with the outer surface of the tube, G, the area of which is increased by giving it two coils during its passage through the stove. The heat absorbed by D will be entirely distributed into the room, partly by radiation and partly by convection of air coming into contact with the outer surface of the stove. The heat absorbed by G will be carried into the room by the air passing through it from

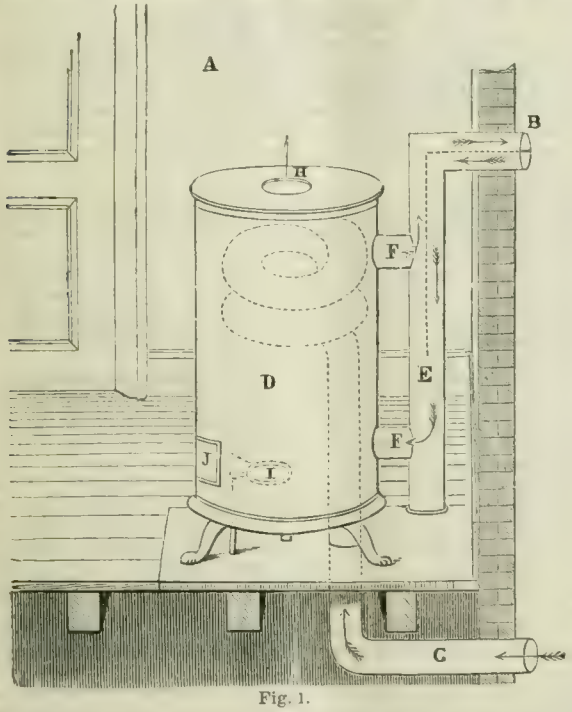
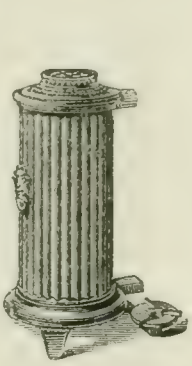


Fig. 1.

without, which thus becomes warmed. But here it must be noted that the efficiency of this part of the arrangement will be largely dependent on the rate at which the air passes through this tube, and that this will in its turn be dependent upon the conditions which exist in the room itself for allowing a free passage of air into and out from it. In proportion as the room is closed the current of air through G, and, consequently, the efficiency of this part of the stove as a heater will be diminished; and if the room were absolutely closed there would be no current at all, and the tube would then cease to have any value for heating purposes. Again, as the tube G is of cast iron, and therefore necessarily of some thickness, its conducting power is comparatively much lower than it would be if it were of thin sheet iron. It is evident, however, that the general plan of construction is good, except in one respect, in which it must be considered radically defective, and that is in the closure of the body of the stove at the bottom, necessitating, as it does, a special tube for supplying air for the sole purpose of maintaining combustion. Why the designer of the stove should have adopted this arrangement is inconceivable. Not only does it entirely neutralise the efficiency of the stove as a ventilating agent—for the reason given above—but it exposes it to the risk of a serious accident if by any chance there should be an escape of gas into the interior of the stove and an explosion should then take place. In such a contingency the stove would become a veritable bomb, and the explosion might produce results of a very disastrous nature.

The Euthermic stove, designed by Dr. Bond of Gloucester, of which an elevation is annexed, consists of a corrugated cylinder, which, as in the case of George's Calorigen, forms the body of the stove. As in the latter appliance also, there is an exit tube for carrying off the products of combustion, an


Fig. 2.

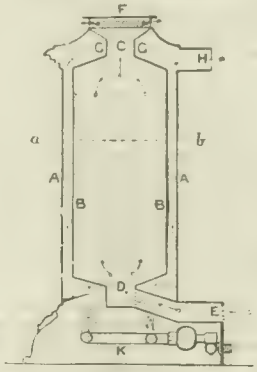
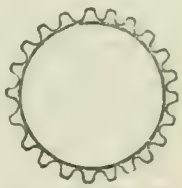


Fig. 3.


Fig. 4.

inlet tube for bring fresh air into the body of the stove, the upper end of which is open to allow of the air which is heated in its passage through the stove escaping into the room. But, apart from these general features, which must be common to any stoves constructed on this type, all resemblance between the two stoves ceases. The reason for this statement will be seen on examining the annexed drawings, which represent respectively a vertical section of this stove and a transverse section through the line *a b*. Here A is the external body or shell of the stove, made of thin corrugated iron, attached to a cast-iron foot, and carrying a cast-iron crown, out of which at H the products of combustion escape. Inside this corrugated cylinder is fitted tightly a cylindrical drum B, of thin sheet iron, perfectly closed except at the bottom D, through which it it is supplied with fresh air, and at the top C, through which the heated air escapes by grooves in the side of a loose cover, F, into the room. It will be seen from the horizontal section that the effect of this combination of a drum inside a corrugated cylinder is to convert every corrugation into an effective tube, and thus to bring the products of combustion, as they rise from the burner K, into contact with a very large area of thin metal, by which the products of combustion are rapidly robbed of their heat as they pass up the tubes, part of the heat being given off at once into the room from the outer surface of the corrugations, and the rest distributed from the inner surface of the drum to the air within it. Two other features in this stove which distinguish it from the Calorigen remain to be noticed: one is that it is open at the bottom, so that if any explosion should occur it would be free from danger, as the exploded gases would have unimpeded exit at the bottom of the stove; and the other, that the burner is so constructed that it can be drawn from beneath the stove, and used for heating water, or other similar purpose. The open bottom, also, obviously makes the stove a real ventilator, inasmuch as the air required for combustion, as well as a good deal which necessarily accompanies it but is not actually burned, has to be drawn from the room itself, and therefore necessitates a continuous current through it.

Now, the real and only test of the efficacy of stoves of the type of those which we have described is to be found in a comparison of two factors, namely, the quantity of gas burned per unit of time, and the temperature of the outgoing products of combustion; or, if the same quantity of gas be burned in each stove in the same unit of time, then the relative temperatures of the outgoing products will by themselves give a measure of the relative efficiency of the stoves as heaters, since it is clear that all the heat which does not

escape with the products of combustion into the outer air must be effective in warming the room. We have no means of forming an opinion as to the efficiency of George's stove when tested in this way, as no information is given on this point in the description of the stove issued by the makers, which we have before us; but we observe that in the pamphlet which describes Dr. Bond's stove the following statement is given in illustration of the quantity of heat which it claims to effect:

Temperature of air of room in all cases	56° F.			
Quantity of gas burned in cubic feet per hour	8 feet	12 feet	15 feet	20 feet
Temperature of gases issuing from flue	166° F.	171° F.	182° F.	192° F.
Temperature of gases issuing from drum	216° F.	246° F.	270° F.	302° F.

It will be observed from the above numbers that the temperature of the products of combustion as they issue from the flue is in all cases lower than that of the heated fresh air as it escapes from the drum, and that the difference steadily increases in favour of the heated air as the amount of gas burned increases from 8 to 20 feet an hour. Assuming that these numbers are fairly correct, which anyone can easily test for himself, if he wishes to do so, by fixing a thermometer in the exit flues of the stove and at the same time noting the amount of gas burned, it is evident that the economy of gas effected in such a stove as this must be very different from that of the gas fires described in our second article. In regard to this as well as to other points, it may be well to quote the results of the experiments made by the Committee of the Smoke Abatement Exhibition, under the chairmanship of Mr. Ernest Hart, and the personal supervision, as testing engineer, of Mr. Kinnear Clark. The Committee estimate that not more than one-third of the total heat produced by the combustion of gas in the ordinary forms of gas fires is made available for heating purposes. With reference to gas-heating stoves of the type above described, the Committee say, "this latter class claim special attention, as being calculated in an eminent degree to promote sanitation. A ventilating stove, when properly constructed and put in action, may be made to secure a constant ingress of warmed fresh air, and thus any desired temperature may be maintained in a room without sensible variation for almost any length of time, and without the trouble of attendance and regulation. At the same time the products of combustion are carefully got rid of, a point of great importance, and upon which it is impossible to lay too much stress, especially as it is a condition which may in all cases be satisfactorily fulfilled without much waste of heat." As the Committee of this exhibition, in which, as they observe, "almost every conceivable form" of gas-heating arrangement was exhibited, awarded Dr. Bond's "Euthermic" stove the highest premium, it may be assumed that the numbers given above represent the best results attainable in the economic consumption of gas for heating purposes.

We have described the construction of these two forms of economic gas stove at some length, because it has enabled us to lay before our readers a general idea of the principles upon which alone economy in the use of gas for heating rooms can be effected, and because they are, probably, better known than any others. One thing is certain, that if anyone who is desirous of heating a room with gas, at the same time economically and in accordance with the most elementary sanitary requirements will compare the results obtained with a stove of this type with those obtainable from the open gas fire, he will have little doubt as to which form he should choose, unless he is determined at all costs for seeing his gas burning, as well as for feeling the heat which it produces.

Before concluding, it may be well to say a few words in regard to a common superstition which prevails as to the supposed unhealthiness of metal stoves (coal as well as gas), in consequence of their being assumed to "burn the air." Now it is an unquestionable fact that a room in which a metal stove is burning, or, for the matter of that, which is heated by metallic pipes conveying steam at high pressure, often has a close, stuffy smell. This may be due, in the first place, to dust on the metallic surfaces of the heating appliance being heated to charring, and thus producing a disagreeable smell. Or, in the case of a gas stove, it may be caused by a trifling escape of gas through bad fitting; or it may arise from escape of the products of combustion into the room, through defect in the construction of the stoves; or (in the case of a gas stove) from burning more gas in it than it was intended to consume. What is perfectly certain is, that it is not due to the effect of metal in "burning" the air. Iron, even when heated to a red heat, gives no appreciable smell, but copper does, and for this reason is not adapted for stove purposes where any very high temperature is involved. But the true remedy for any perceptible defect of this kind, such as may arise in the case of any stove when it becomes hot, from the charring of dust as explained above, is to ventilate the room freely, and this is best done by bringing a free supply of air into the room through the stove itself. Considering how easily this may be done, and how, at the same time, the nuisance of draughts of cold air may in this way be entirely abolished, it is remarkable how few gas ventilating stoves, constructed upon really scientific principles, are in use at the present day—ten years after their merits have been so fully demonstrated by the Committee of the Smoke Abatement Exhibition.

LITERARY NOTES.

DR. P. J. KOWALESKI, Professor of Psychiatric Medicine in the University of Kharkoff, is about to start a medical journal to be published in that city.

Dr. William F. Waugh has resigned the editorship of the Philadelphia *Medical Times and Register*, in consequence of his removal to Chicago. He is succeeded by Dr. F. S. Parsons.

Professor Alfredo Rubino has resigned the editorship of the *Riforma Medica*, a daily medical paper published at Naples, which he has held for nine years. He has been succeeded by Professor Gaetano Rummo.

The Physician's Magazine is the title of a new publication described as "a monthly chronicle of the advances of the medical sciences," which made its first appearance on the journalistic stage on January 1st. It is edited by Dr. Robert C. Keaner, and is published at Louisville.

A COLLECTED edition of the works of Maurice Schiff is to be issued in three volumes by Benda in Lausanne. The publication of these papers in a collected form is intended to celebrate the fiftieth anniversary of the doctorate of the well known physiologist.

The first number of a new medical journal, entitled *Il Policlinico*, has recently appeared in Rome. The new periodical, which is published fortnightly, appears under the auspices of Professors Guido Baccelli and Francesco Durante. Its object is said to be "to gather together all the productive forces" of Italy as far as appertains to medicine and surgery.

The *Pacific Medical Record*, published at Portland, Oregon, has transformed itself into *The Medical Sentinel*, the reason given for the change of name being that "there is but one *Medical Record* in the United States, and that is the one published in New York City." Dr. Henry W. Coe still occupies the editorial chair.

The *Gazzetta Medica Lombarda* begins its fifty-third year of existence with a change of management, Professor Strambio, the director, and Dr. Colombo, the editor, having both resigned. The new editor is Dr. Amilcare Nascimbene. The *Gazzetta* has absorbed the *Corriere Sanitario*, and as a consequence more prominence than heretofore will be given to sanitary matters. No exception can be taken to the contents of the journal in its new form, but we cannot honestly say that we think it has improved in appearance.

Dr. A. Marius Wilson has published a small volume on *Myxœdema* (the Scientific Press, 1894, 2s.) in which he gives a brief sketch of recent experiences as to the nature and treatment of the disease, and makes the suggestion that the sensation of cold of which myxœdematous patients complain is "merely an expression of diminished resistance to external influences." In support of this he quotes a myxœdematous patient of his own who, while residing at the Cape, complained much of heat. The climatic conditions at the Cape, Dr. Wilson adds, "practically amount to hot air bath during a great part of the year."

The latest number of the *Strand Magazine* contains some interesting personal reminiscences of Sir Andrew Clark by Miss E. H. Pitcairn. The lady with whom Sir Andrew was discussing some charitable scheme in his consulting room when he was seized with the illness which proved fatal was, it appears, the Hon. Miss Boscawen. An account of his career and an appreciative estimate of his character are given, and the article is profusely illustrated with portraits of the deceased physician and the present baronet, views of the grave in Essendon Churchyard, of Sir Andrew's country house at Essendon, of the College of Physicians, the London Hospital, and of the nurse who ministered to him on his death-bed. We could wish, however, that certain extracts from our own columns had been credited not to an indefinite "*Medical Journal*," but to the BRITISH MEDICAL JOURNAL. We venture to doubt also whether the distinguished physician to the Secretary of State for India in Council will recognise himself as "Sir Joseph *Phayres*."

Messrs. William Wesley and Son have issued a catalogue of the Paracelsus Library of the late Dr. E. Schubert, of Frankfort. This is the most complete bibliography of Paracelsus ever put together. The library contains 194 editions of the writings of Paracelsus, 548 works whose contents partly or chiefly treat of him, descriptions of his time, and of the places where he lived and worked, publications of his friends and of his opponents, and, lastly, a selection of 351 works on Alchemy. The British Museum, according to the preface to Messrs. Wesley's catalogue, contains eighty editions less than the collection now offered for sale. It is to be sold in one lot, and not in separate items.

ROYAL COLLEGE OF PHYSICIANS.

THE quarterly Comitia of the Fellows was held on Thursday, January 25th; J. RUSSELL REYNOLDS, M.D., F.R.S., President, in the chair.

The PRESIDENT briefly proposed a vote of thanks to Dr. Pollock for his services as Pro-President.

The PRESIDENT announced that Dr. T. Lauder Brunton would be the next Harveian Orator, and that Dr. Thomas Barlow would give the next Bradshawe Lecture. He also announced that the Swiney Prize had been awarded to Mr. T. G. Holland, D.C.L.Oxon.

The REGISTRAR announced that Lady Clark had offered to the College such books in the medical library of the late President as might be deemed suitable; and on his proposal, seconded by Dr. MUNK, the offer was cordially accepted, and a vote of thanks accorded to Lady Clark.

The following gentlemen were elected Members: F. E. Batten, M.B.; E. H. Biddlecombe, M.B.; G. F. Blacker, M.D.; T. W. Eden, M.D.; G. F. Johnston, M.B.; F. W. Tunnicliffe, M.D.

The Licence of the College was granted to 123 gentlemen, of whom only 3 did not present themselves under the conjoint cheme.

Diplomas in Public Health were granted conjointly with the Royal College of Surgeons to the following gentlemen: E. W. Adams, A. Bolton, R. K. Brown (Deputy-Inspector-General R.N.), H. A. Close, H. P. G. Elkington (Surgeon-Captain, Army), F. D. Harris, H. L. Hatch, J. T. Henderson, C. R. Illingworth, W. F. Oakeshott, F. S. Toogood, W. Thompson, and J. R. Watson.

Communications were received from the Royal College of Surgeons relating to matters of joint interest to the two Colleges.

A copy of the collected works of the late Sir W. Bowman, Bart., was presented by his widow, and the thanks of the College were returned to her for her gift.

The Honorary Secretary of the Michael Foster Portrait Fund presented a photogravure of the portrait of that gentleman painted by H. Herkomer, R.A.

Sir W. PRIESTLEY proposed, and Dr. GEORGE HARLEY seconded, that the College should send delegates to the meeting of the International Medical Congress at Rome, and Sir Dyce Duckworth and Sir W. Priestley were nominated by the PRESIDENT as delegates.

Drs. R. Liveing, Duffin, Thorne Thorne, T. L. Brunton, and F. T. Roberts, were elected Councillors.

Dr. Bastian was appointed one of the Curators of the Museum in place of the late Dr. Wegg.

The PRESIDENT addressed the College on the subject of some memorial being instituted in the College to the memory of the late President. Sir R. Quain, Dr. Pollock, Sir W. Priestley, Dr. Blandford, Sir Dyce Duckworth, Dr. C. T. Williams, with power to add to their number, were appointed a Committee to consider the matter.

The President was appointed to represent the College on the Council of the University College, Bristol, in place of Sir Andrew Clark, Bart., deceased.

It was resolved that no change should be made in the date of the Harveian dinner.

A report was received from the Representative of the College on the General Medical Council.

The quarterly report of the Finance Committee was received and adopted.

The annual report of the Examiners for the Licence was received and adopted.

Reports from the Committee of Management and the Laboratories Committee were received and adopted.

Dr. G. S. Woodhead was re-elected as Director of the Laboratories for another year.

The thanks of the College were returned to the donors of books during the past quarter.

ASSOCIATION INTELLIGENCE.

BRANCH MEETINGS TO BE HELD.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this District will take place at Maidstone on Tuesday, March 6th, Dr. Joyce, of Cranbrook, in the chair. Members desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary, Dr. GROUND, 1, Ashford Road, Maidstone, not later than February 12th.

BATH AND BRISTOL BRANCH.—The third ordinary meeting of the session will be held in the Medical Library of University College, Bristol, on Wednesday, January 31st, at 7.30 P.M., Dr. Shingleton Smith, President. The evening will be devoted to a discussion on Appendicitis, which will be introduced by Dr. James Swain.—E. MARKHAM SKERRITT and W. M. BEAUMONT, Clifton, Honorary Secretaries.

EDINBURGH, STIRLING, KINROSS, AND CLACKMANNAN AND BORDER COUNTIES BRANCHES.—A combined meeting of the above Branches will be held at Edinburgh on Friday, February 2nd. A medical congress of the members will take place in the University Surgical Theatre, Royal Infirmary, at 4 P.M., when a variety of patients, specimens, apparatus, etc., will be exhibited and discussed. Thereafter the members and their friends will dine together in the Waterloo Hotel, at 6.30 P.M., the president of the Edinburgh Branch, Professor Annandale, in the chair. Further information will be obtained from the Honorary Secretaries of the respective Branches.—R. W. PHILIP, 4, Melville Crescent, Edinburgh; C. T. LEWIS, Glebe Crescent, Stirling; and JAS. ALTHAM, Birbeck House, Penrith.

DUBLIN BRANCH.—The annual meeting of this Branch will be held on Thursday, February 1st (by kind permission of the President and Fellows), in the Hall of the Royal College of Physicians; and at 7.30 P.M. on the same evening, in the College, the annual dinner.—JOHN MOLONY, Honorary Secretary, St. Patrick's Hospital, James's Street, Dublin.

METROPOLITAN COUNTIES BRANCH: WEST MIDDLESEX DISTRICT.—The next meeting of the above District will be held on Wednesday, January 31st, at 8.30 P.M., at St. Mary's Hospital, Praed Street, Paddington. Dr. Montagu Handfield-Jones will read a paper on "The Diagnosis between Puerperal Peritonitis and the Morbid Condition due to Drain Poisons." All members of the profession cordially invited.—H. McD. PHILLPOTTS, Honorary Secretary, "Nuthurst," Ealing, W.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE fourth meeting of the session, 1893-94, was held at the Medical Institute on January 11th. Dr. SAUNDBY, F.R.C.P., in the chair.

New Member.—Mr. Thomas B. Carlyon, of Tenbury, was elected a member of the Branch.

Wound of Axillary Artery and Division of Musculo-Spiral Nerve.—Mr. BARLING showed a young man who was admitted to the General Hospital on May, 1893, with a stab wound in the posterior fold of the axilla. The wound was so deep that

it seemed inadvisable to search for any bleeding vessel at the bottom of it, and the third part of the axillary artery was therefore exposed from the front, and was found to be about two-thirds divided. A ligature was placed above and below the opening, and the artery cut through between them. The next day it was found that the patient had paralysis of all the muscles supplied by the musculo-spiral nerve. The artery healed well, but the musculo-spiral group remained paralysed for some time. At the present time the paralysis had entirely passed away, and the patient had resumed work.

Porro's Operation.—Mr. JORDAN showed a uterus and placenta removed by Porro's operation from a woman, aged 30, suffering from cancer of the rectum. The operation was performed on December 14th, 1893, and the patient's condition had distinctly improved. Unfortunately, the cancer was too high up for removal. The child, an 8 months' one, lived only a few minutes.

Complete Separation of the Shaft of the Tibia from the Upper Epiphysis.—Mr. F. MARSH showed this specimen taken (*post mortem*) from a youth, aged 17, who had been caught in the belt of a machine, and received very extensive injuries. Separation at the line of the epiphysis was complete, the left knee-joint was uninjured, and the left fibula was intact. Mr. Marsh pointed out the extreme rarity of the specimen, and the difficulty in this instance, the fibula being intact, of satisfactorily explaining the mechanism of the separation.

Papers.—Dr. E. N. NASON read a paper on the Antiseptic Treatment of Typhoid Fever, and Mr. JORDAN LLOYD then read a paper on Primary Cancer of the Floor of the Mouth. He showed two cases on which his paper was based. —Mr. LUDHAM GREEN showed a Splint for Excision of the Ankle. It is a modified "Esmarch," the difference being that whereas Esmarch's splint stopped short of the knee, Mr. Green's was carried on to the groin. The knee was further fixed by a back splint of "Gooching."

SPECIAL CORRESPONDENCE.

PARIS.

Professional Secrecy.—Native Doctors in Algeria.—Dangers of Heating Carriages by Briquettes.—Influenza at Marseilles.—The Sanitary Conference.—M. Pasteur.

ACCORDING to the new medical law the *secret professionel* includes not only the nature of the disease but also the special or exceptional circumstances which attend it. In cases where these impose secrecy the medical man is justified in omitting to notify the case.

The Council of the Academy of Medicine will propose to the Minister of Public Instruction to create two new assistant professorships, one of dermatology and syphilitic affections, the other of ophthalmology.

A committee appointed by the Governor of Algeria proposes to frame a law permitting natives to practise among other natives, but not to treat foreigners: Two classes of native doctors will be recognised: one with a degree corresponding to that of an *officier de santé*, forbidden to practise medicine beyond the native territory; the other will comprise the native medicine men, who will practise among the tribes. Both classes will be placed under the direction of French medical men, and and the administrative authority reserves to itself power to deprive them of the right to practise.

The Seine Conseil d'Hygiéne has several times pointed out the danger of heating public carriages by "briquettes," and has urged that this practice should be discontinued. Their advice has not, however, been followed, and a death has recently occurred from carbonic oxide poisoning. A coachman resting inside his cab fell asleep, and was found dead in his cab. An eminent doctor and member of the Medical Academy, during a very short drive in his carriage, was seized with vertigo. On reaching his destination, he was too ill to leave his carriage unaided. All the symptoms of poisoning were present, and the effects lasted ten days. The number of deaths from poisoning resulting from the use of "briquettes" is about from six to eight a day. The Academy of Medicine is taking up the question, and soon will take steps, probably in concert with the Conseil d'Hygiéne.

There is a severe epidemic of influenza at Marseilles; the *personnel* of the custom house and the tax offices are severely attacked, likewise the vendors in the central market.

The following are the delegates for the Paris Sanitary Conference which will take place at Paris: For France: MM. Barrère, Hanotaux, Brouardel, Proust, Monod. For Germany: MM. von Schoen and Moritmann. For Austro-Hungary: Count Kuefsten, Dr. Hagel, Dr. Karlinski. For the United States: Drs. Edward Sakespeare, Stepton Smith, and Preston Bailhache. For Greece: M. Criésis, and M. Vafiader. For Italy: The Marquis Malaspina, and Dr. Pagliani. For Portugal: M. Navarro. For Sweden and Norway: M. Due. For Turkey: Turkan Bey, Nouri Pasha, Bonkowski Pasha, Dr. Haindy Bey. For Persia: A delegate nominated by the Minister of the Shah in Paris. For Egypt: Achmet Choukry-Pacha, M. Mieville, and Sedky-Pacha.

M. Pasteur has been awarded the Grand Cordon of the Order of St. Maurice and Lazare by the King of Italy.

CHICAGO.

Health Statistics of Chicago.—Low Rate of Mortality.—Decline of Typhoid Fever Mortality.—Milk Inspection.—Small-pox and the Mortality of the Unvaccinated.—Professor Senn's Gift to Newberry Library.—The Conviction of Prendergast.—Deaths of Drs. R. G. Bogue and W. M. Tanquary.

THE report of Health Commissioner Reynolds for the year just ended contains some exceedingly interesting facts. The report first mentions the low mortality rate of Chicago as compared with other cities, and then gives an opinion touching the cause of such condition as "due without doubt to our fortunate location between the broad prairie on one side and Lake Michigan on the other, giving free play to the breezes that dilute and sweep away the impurities of the air." The total number of deaths for the year 1893 was 27,059, which is a rate of 16.91 per 1,000, "the lowest rate, with one exception, in fifty years."

This very favourable statement abundantly sustains the views expressed by your correspondent in a former letter touching the light demands upon the profession during the past year. One possible cause for this generally low mortality is the vigorous age of the majority of our inhabitants. Thus it is stated that a younger and hardier element has migrated to this rushing city from all points of the globe, leaving the aged and infirm behind; and that Chicago is not yet old enough to have a large retired list of those who have worn out in the "battle of life," and whose constant falling away is no inconsiderable element in the mortality lists of older municipalities. Dr. Reynolds points out, however, that if this is so, it must be admitted that between the ages of 20 and 45 is the most fertile period of life, and that consequently there would be more than the usual proportion of children whose span of life is short; and he supports this statement with figures which show that 12,207 deaths, almost one-half of the total number, were of children under 5 years of age, while 5,952 were under 1 year of age. As to the various diseases resulting in death, pulmonary affections, of course, occupy the chief place; the number carried away by these diseases being 6,102. There were 3,170 cases of scarlet fever, with 336 deaths; and 2,600 cases of diphtheria, with 959 deaths. The railroads are charged with having caused the death of 399 persons.

The typhoid fever mortality rate is of interest, especially when compared with the record of the previous year. For instance, in 1893 the death list was 667, while in 1892 it was no less than 1,489. The cause of this change in the prevalence of typhoid fever is the provision of better drinking water and better sewerage, in both of which directions there has been very considerable improvement. It is not at all likely that the city of Chicago will ever again be compelled to use water from a source which could be counted as reasonably questionable, thus exposing its inhabitants, or really forcing them, to ingestion of the poisonous elements of such diseases as typhoid fever.

A highly important addition to the Health Office during the year was the establishment of a Bureau of Milk Inspec-

tion, and although its fullest usefulness yet remains to be achieved, yet, during the past twelve months, no fewer than 11,310 samples of milk were taken and subjected to analysis, with the result, however, unstated.

Small-pox has given us a scare this winter, although but 130 cases have developed, causing 19 deaths. A significant statement is made in the report, which may well be quoted in full: "Without exception all those who died had not been vaccinated, while all who were vaccinated in youth, and a few who were not vaccinated at all, recovered." It is surprising to note the number of free vaccinations made under the charge of the Health Office. The number for the year is given as 112,910, while of this number 60,000 were done during the month of December. Some idea of the work and its importance may thus be gathered from these numbers. A long line of bare-armed children, brawny men, and different types of women, may be seen any day leading out of the door of the Health Office and down the corridor of the City Hall.

The Health Commissioner also has under his care the examination of new buildings, of all workplaces, of defective dwellings (on complaint), of catch basins which may become foul, of sewers, of general plumbing and ventilation, of privy vaults (some still existing), and of yards and premises. The enforcement of the smoke ordinance, and the law against "sweat shops" also devolves upon this department.

Dr. Nicholas Senn, Professor of Clinical Surgery at Rush Medical College, has recently given a large part of his very valuable medical library to the public by placing it as a part of the great Newberry Library. Dr. Senn has conferred an honour upon Chicago by his generosity, and given her at once no inconsiderable advantage, for now the medical department of Newberry Library contains some 30,000 volumes, there being few duplicates and a large number of complete sets. In the massive new home of the Newberry Library this interesting collection of medical works will find safety and good keeping, and will be accessible, at all reasonable hours, to all students of medicine or others interested in medical research. Most of these books given by Dr. Senn came from Heidelberg a few years ago, where they had been gathered in a private collection by the late Dr. Baum, and the late owner was always pleased to refer to his possession as the "Baum Library." Dr. Baum, as is well known, devoted a lifetime to the picking up of these volumes and rounding-out the sets; it was the work nearest his heart, and he succeeded well in his undertaking. After his death it was found necessary to part with the library, which was purchased by Dr. Senn. Upon adding all these books to those gathered by Dr. Senn, it was found that he probably had the largest and most valuable private medical library in this country, aggregating upwards of 20,000 volumes. It is now a portion of this great book gathering that has been given to the Newberry Library for the benefit of the profession; it is to be known as the "Senn Collection."

The libraries of the Chicago Medical Society, of the Chicago Medical College, and of the Chicago Medical Library Association were some time since given to the Newberry Library, and now it is announced that the many volumes belonging to the American Medical Association are to be transferred from the Smithsonian Institution, at Washington, to be a part and parcel of this our Chicago collection. If this is done, it will fix here the permanent home of the Association.

The trial of Prendergast for the assassination of Mayor Harrison has resulted in the conviction of the murderer, which in effect means that he is declared to have been sane in the eyes of the law—that he possessed a sufficient knowledge of right and wrong to be held responsible for the crime committed. As predicted, there was considerable difference of opinion among medical experts, and probably the most convincing evidence in this connection was given by one who confessedly is not an expert alienist, but who occupies an exalted position as a general practitioner. The case can hardly be said to have reached final adjudication, as a motion for a new trial has been entered, which will be determined upon some time during the month. Interest has centered upon the determination of the legal responsibility and psychological classification of the class of "cranks." Society here—and throughout the civilised world, for that matter—is more or less at the mercy of those misled, mistaken, or intentionally vicious individuals; yet a morally corrupt mind is not a diseased mind *per se*, and the medical profession has a duty to perform in not excusing moral obliquity and placing it beyond the infliction of punishment.

Dr. Roswell G. Bogue, at one time one of the leading consulting surgeons of Chicago, passed away on December 7th, 1893. He was always a dignified and courteous gentleman, and from the possession of these traits, and his skill as a surgeon, he commanded the respect of all. For the last ten years Dr. Bogue had lived in almost absolute retirement, owing to a most deplorable result of septic infection—the total loss of vision. Dr. Bogue was one of the founders of Cook County Hospital, and long served upon its surgical staff. He was also the first professor of surgery of the Woman's Medical College, besides honorably filling other surgical appointments. Dr. Walter M. Tanquary, Professor of Anatomy at the College of Physicians and Surgeons, was suddenly stricken on the evening of January 3rd with total unconsciousness, and died in a few hours. He had just finished some college work, and started for his residence but a short distance away. He was found in a condition of coma close by the Post-Graduate School, and at once carried to its hospital, where every attention was rendered. He rapidly succumbed to what appeared to be hæmorrhage at the base of the brain. Dr. Tanquary was an uncommonly bright and promising young man, was markedly cordial in all relations with his fellows, and seemed to have a bright future before him.

CORRESPONDENCE.

A GIGANTIC MEDICAL ABUSE.

Sir,—Although my letter which appeared in the British Medical Journal of January 13th has given rise to an interesting number of articles in the local press, yet, strange to say, none of the gentlemen who were responsible for the drawing up of the scheme for the reform of the out-patient department have considered it necessary to inform us why that scheme was never put into operation. I can only conclude that they are not able to advance any good argument or reason for relegating the result of their prolonged consultations to the waste paper basket.

In an interview with a reporter, the secretary of the infirmary stated that he generally inquired into the circumstances of the out-patients, and that he was satisfied that the charity was not abused. That the secretary does occasionally look into the out-patients' department I am not prepared to deny, but that he makes inquiries into the wages and general condition of the patients I am prepared to deny in the most emphatic way.

There are two other points which the profession would much like to have information about. Is a register of the attendances of the medical officers kept regularly? I know from my own personal knowledge that out-patients are very frequently seen by the house-surgeons. In one case a poor fellow suffering from acute phthisis saw the medical officer once out of six attendances. From what I have heard the same irregularity exists with respect to the attendance of the indoor staff. For many years past patients have complained of the poorness of the dietary of the infirmary, and it is a notorious fact that large quantities of food are smuggled into the institution by the friends of the patients. Perhaps the medical staff will not consider it beneath their dignity to enlighten their brethren on these two important points.—I am, etc.,

Cardiff, Jan. 22nd. A General Practitioner.

AMENDMENT OF MEDICAL ACTS.

Sir,—In reply to Dr. Bateman's letter, dated December 30th, 1893, I may say that I am well acquainted with Carpenter against Hamilton, and that the paragraph (page 1222, col. i, December 2nd) "Dr. Bateman states that the words added, 'name, style, title,' etc.....addition given in the diploma" caused me to write the words "I do not think that the opinion of the man Hamilton, referred to by Dr. Bateman, will be regarded as an authority," which words Dr. Bateman,

taking *au sérieux*, seems to invest with a meaning which they scarcely warrant. To say that Hamilton "clearly gave out to the public" that he was "duly qualified" by the name, style, etc., is to beg the whole question; to ignore the fact that a medical practitioner is "duly qualified" or "recognised by law" only after and because he has been "registered," and to assume as a fact that at the present moment the use of such a title, etc., as Doctor in Medicine, etc., is a giving out to the public that he is "duly qualified," etc. For these reasons I say that Section 40 of the Medical Act, 1858, and Dr. Bateman's proposed "amendment" thereof are equally insufficient. The cause of all the difficulty is the presence of the word "implying." There was in Hamilton's case nothing that "implied" that he was "registered," and the term "Anti-registered Surgeon" would sufficiently "imply" that Hamilton was not only well aware of, but that he also respected, the 40th Section. It is the title, etc., and not the holder of the title, that "implies" the qualification. Dr. Bateman (p. 1222, col. ii, December 2nd) appears to me to urge that if a quack wrongfully assumes the title of Doctor in Medicine, for example, the quack thereby "implies" that he is "duly qualified." What is required in order to meet the case is something similar to Sect. 27, Subsect. 2, of the 1884 Bill, referred to in my last letter, which should go as far as to penalise the assumption, without qualification, of any title or description which suggested the idea of any kind of medical or surgical practice by the person assuming it.

Dr. Bateman also states that I "imply" that the penalties referred to in Section 42 are not, in the Metropolitan Police area, alienated from the General Medical Council. What I said was that "the point raised on the 42nd section as to the destination of these penalties is one which does not present the difficulties sometimes supposed," and my reason for so expressing myself was that at the time I wrote I had in my mind not only (1) the case of the Receiver of the Metropolitan Police against Bell, in which it was held that the payment to the police of the sums in question did not apply to penalties recovered before two justices under 3 and 4 Vict., c. 84, sect. 6, acting for a place within the Metropolitan Police District not assigned to a police court (thus including what may be regarded as greater London), but also (2) the language used by Lord Campbell when giving judgment in the case of Wray against Ellis (brought by the Metropolitan Police receiver, and based upon Section 47 of the 2 and 3 Vict., c. 71), in which it was contended that the police receiver should have one-half of the penalty under Section 8 of the 17 and 18 Vict., c. 38 (the Act for the Suppression of Gaming Houses), though that statute enacted that one-half should go to the informer and the other half to the overseers of the parish. The question was, Whether, in relation to the application of the penalty, the later statute repealed the former one? Lord Campbell said: "Without any express repeal, if a subsequent enactment is contrary to and inconsistent with a prior enactment, the prior enactment is repealed. Whether the two enactments in this case are contrary and incompatible must depend upon whether the second does or does not impliedly contain the exception, 'unless recovered or adjudged before the police courts in the metropolis.'" Lord Campbell, although hinting at the view that the Legislature, without actually introducing any repealing words, had, by necessary implication, repealed the section of the earlier Act, assumed the insertion of the above exception in that particular case, and gave judgment for the plaintiff.

There is a wide difference between the force of the language in the Gaming Act and that of the terms of the 42nd section of the 1858 Act. The former does not specify any particular destination; it simply refers in general terms to overseers, whereas the latter expressly and specifically overrides the 47th section of the Police Act quoted by naming the Treasurer of the General Medical Council. I am strongly of opinion that no successor of Lord Campbell would, if the point were properly raised, assume, in the very deliberately expressed 42nd section, the insertion of such words as "unless recovered before the police-courts of the metropolis."

Concerning the deputation in July, 1891, to the then Home Secretary for the purpose of asking him (practically the head of the Metropolitan Police) to yield up some of the spoil which the 42nd section does not give to him, I stated at the time that nothing could have been more ill-advised. I am, etc.,

New Square, W.C., Jan. 15th. BERNARD O'CONNOR.

THE ROYAL BRITISH NURSES ASSOCIATION AND MRS. LONGSHORE POTTS.

SIR,—Your correspondent "Medicus" states in the BRITISH MEDICAL JOURNAL of January 20th that the Royal British Nurses' Association is "understood" to be the lessee of the house lately occupied by the deceased Sir Morell Mackenzie, and to have sublet portions of the house to tenants "of no uncertain notoriety."

Allow me to state that the very small amount of inquiry which would have been necessary to verify that assertion would have elicited the fact that the Association have leased no more than one storey in the house in question.

It is scarcely necessary for me to point out that the Royal Corporation of Nurses cannot possibly exercise any control over any portion of the house of which they are not the legal occupiers, nor accept any responsibility for its disposal.

I am, etc.,

January 22nd. W. BEZLY THORNE, Hon. Sec.

*** The shorthand notes of a recent lecture delivered at St. James's Hall by Dr. T. C. Harrison, describing himself as "Doctor of Medicine, of Bennett Medical College, Chicago," ran as follows: "Mr. Harrison concluded his lecture, 'Is Life Worth Living?' by stating that he had taken, in conjunction with Mrs. Longshore Potts, No. 19, Harley Street, the residence of the late Sir Morell Mackenzie, and that they now intended, for some time at least, to make London their home." We cannot quite accept the theory that the matter of joint occupation of a house is one of indifference to a public body of repute.

VIVISECTION OF DEAD ANIMALS.

SIR,—As I see in the BRITISH MEDICAL JOURNAL of January 20th that I am accused of "disgraceful" conduct in quoting as an instance of cruelty an operation which your informant says was made on a dead dog, I must ask you, in justice to me, to print the quotation referred to, that any of your readers who may be interested in the vivisection question may judge whether I was not justified in judging that the experiment in question was performed on a living animal. I give the description here word for word as it appeared in the *Journal of Physiology*:

"We do not seem to possess any experimental knowledge of the functions of the roots [of the vagus], though they are not beyond reach in the living animal. If the lower jaw of one side be dislocated and removed, and the muscles attached to the skull on that side be cut away—vessels being carefully ligatured—the base of the skull will be exposed, and the large tympanic bulla will be our guide. With bone forceps or trephine remove the cranial bones above the bulla, and then cautiously clip off bit by bit the bony wall of the jugular canal. In such a dissection the roots may just be visible, and for experimental purposes it may be advisable to remove the basi-occipital bone, and in doing this the easiest plan is to cut the nerve roots on one side. When the dissection is completed the nerve roots on the intact side are readily accessible. *It need scarcely be said that the operation is laborious and extremely apt to be fatal.*"—*Journal of Physiology*, vol. xiv, No. 6, p. 469, June, 1893.

If the sentence which I have italicised does not imply that the operation had been done on a living animal I shall be glad to be informed in what sense it is to be read.—I am, etc.,

Hendon, Jan. 22nd. ERNEST BELL.

*** Mr. Ernest Bell is not merely accused of the discreditable course referred to, he is convicted (not for the first time), and his letter aggravates his offence. For in writing it he has suppressed the fact that he took the extract from an anatomical paper in which no experimental work is described. Further, that on the opposite page to that from which he copied the paragraph the author, Dr. King, states that the dissections were made partly on recently dead animals, "fresh specimens," and partly on carcasses that had been cut in half and preserved in "spirit or Müller's fluid."

Further, he suppresses the fact that the description of the dissection which forms the matter of his extract is to show that by means of the proposed operation the vagus roots can be exposed in the living dog, of course anæsthetised. Mr. Ernest Bell says that the last line justifies his disgraceful statement that his "abominable cruelty" was perpetrated "in an English laboratory by a man licensed under the English law" without anæsthetics being used. That the "operation is laborious" is obviously true, and is equally so on the dead as on the proposed living animal. This, therefore, does not help Mr. Ernest Bell. That the operation when it needs to be performed is "extremely apt to be fatal" is equally obvious to anyone who considers the dissection required, but such an obvious consideration does not justify Mr. Ernest Bell's false statement, so widely disseminated. Finally, Dr. King was not licensed under the English law in such a way that he could have done the experiment alleged by Mr. Bell. This Mr. Bell knows well, since he possesses, and frequently comments upon, the inspector's report, which gives full details of the licences and permits. It deserves to be remembered that Mr. Ernest Bell is the same person who is responsible for innumerable like performances to the above, not the least notable of which was the publication in pamphlet form of the vile falsehoods of the *Nine Circles*, after publicly professing to have withdrawn that notorious work.

BISHOP BARRY ON ANTIVIVISECTION.

SIR,—It is proverbially a hopeless task to contend with an editor in the columns of his own newspaper, where he has always both the first and the last word. I content myself, therefore, with observing on your note to my last letter that it entirely fails to meet my statement that your first notice gave a completely erroneous idea of my circular, to which it referred. It has been, and will always be, my endeavour to see that all errors in statements of fact shall be corrected as soon as they are pointed out. But my main argument on the subject is untouched by these, so long as experiments without anæsthetics are largely licensed and practised in England.

I will only add that, before I went "travelling about," I made precisely the same statements which I have made now as to the regret and withdrawal of erroneous statements within the columns of the *Times*, and at a public meeting in St. James's Hall at the end of October, 1892, which was fully reported and commented on in the public press.—I am, etc.,

Mentone, Jan. 15th. ALFRED BARRY.

*** Bishop Barry is well aware that he is under no disadvantage, and that our columns are always open to everyone who will state facts in support of a correction. He, however, contents himself with informing the medical profession again that all errors in statements of fact *shall* be corrected as soon as they are pointed out. It is true that he also made the same promise in the *Times*—namely, that he and his *would* regret and "withdraw" false statements. We are weary of the future tense. If Bishop Barry is sincerely anxious for the truth, why, as we asked on January 6th, were falsehoods from the *Nine Circles* republished in pamphlet form? Why are not the whole mass of the falsehoods in pamphlets of Bishop Barry's Society withdrawn? Why does Bishop Barry support all the old slanders by maintaining his connection with this discredited Society, by approving of the second edition of the *Nine Circles*, which also is full of falsehood? And still again, why, even after a year and more has passed, does Bishop Barry not clear his character in these respects? What does he say to the last circular of Mr. Bell and its new false charges, which we pointed out last week?

MEDICAL MISSIONARIES.

SIR,—Your correspondent Dr. Jex-Blake seems to have forgotten that vituperation in the mouth of an educated medical lady is not argument. To charge medical men and clergymen of known integrity with aiding and abetting "defective education and fraudulent pretence of efficiency" is really puerile. A college patronised by a duchess and duke of the Royal family, by an archbishop, and a large number of bishops and distinguished clergymen and medical men, the managing committee with Sir Richard Temple as its President and consisting of distinguished clergymen of all denominations is not likely to support or to be actuated by fraudulent motives.

First. I deny *in toto* that either the committee or the ladies themselves give out that our ladies are fully qualified medical women. *Imprimis*, these ladies are missionaries, and would continue so even if ignorant altogether of medical subjects. But by what adjective are we to distinguish them from other missionaries? As I understand English, the word "medical" does not imply full qualification, and unless it does I do not see why Dr. Jex-Blake should wish to teach us another English. Medical does not describe always a full-fledged medical practitioner, else why are students studying medicine called medical students? Not two-thirds of these, it is true, succeed in qualifying, but they are not the less medical students. I suppose Dr. Jex-Blake would wish to see our lady missionaries called "inefficient and fraudulent missionaries."

Secondly. About this offer of £100 to educate a medical missionary completely, so generously offered by one of her lady friends. Does Dr. Jex-Blake believe this would suffice to defray the expenses of education of even one of the many women who, wishing to study medicine, cannot afford to do so? Why, the very fees for the lectures and hospital practice (let alone the expenses of the diplomas) would entirely absorb this amount, and how is this poor creature to get board and lodging for five long years? The idea is preposterous, even if all the missionary societies gave scholarships in aid, which they could never do with the means they possess for any period like five years consecutively. And it is not one but thousands of female medical missionaries that are wanted, especially in those heathen nations where millions are suffering and dying and men are not permitted to attend them, even if the best qualified in Europe. Does Dr. Jex-Blake think that the ignorant Chinese and Indians would understand or refuse to be attended by any but qualified M.D.'s or surgeons? At this moment there is a remarkable example in Uganda proving the contrary. The surgeon of the mission has been compelled to leave from illness. One of his friends, and a fellow missionary, a Mr. Leakey, whose whole medical knowledge was acquired by a six months' attendance at the Leicester Hospital, is left alone to do all the medical duty, and he does it well, performing amputations and other operations. Unqualified as he is, the heathen love him and call him blessed, yet our medical ladies have an advantage over him, studying for two years. When among our Zenana medical missionaries we find such women as Miss Sugden, Miss Sharp, Mrs. Pratt, Miss Adie, Miss Rainsford, Miss Proctor, Miss Höl, and others who have done their duty so well that they have gained the goodwill of the people and the praise of the English writers, we rejoice and are truly thankful; and we will persist in the course we believe to be right in the eyes of God and unprejudiced men and women, doing all we can in this work in the face of vituperation and misrepresentation, and we know we shall prevail in the end.—I am, etc.,

Montagu Square, W., Jan. 23rd. C. H. ROUTH, M.D.

THE ALLEGED INCREASE OF CANCER.

SIR,—I think it will be granted that of all neoplasms the cancerous or epithelial, attacking, as they do, exposed surfaces and ducts, are those most closely allied to the factors termed "chronic irritative;" they are, in other words, more closely related to a local and demonstrable cause than any other class of malignant tumour. I refer by contrast to the sarcomata. The researches of Thiersch, Schuchard, Volkmann, Hutchinson, Butlin, Hauser, Bucher, and hosts of others have placed this relationship beyond dispute. They have convinced us of the frequent occurrence of cancer in long standing lupoid and syphilitic inflammation. They have shown the connection which exists between the often multiple cancers of the skin and the irritation caused by the dirt in tar, paraffin, and soot workers. They have likewise shown the association of lip and mouth carcinoma with the clay pipe, and have given numerous other striking illustrations. In the gall and urinary bladders stone and cancer is common. In the stomach, pharynx, larynx, mouth, and uterus, precancerous (chronic irritative) conditions very com-

monly precede the malignant growth. A similar sequence may be observed in the glandular organs.

The association of epithelial neoplasis with the presence of animal parasites is well established. For instance, a distoma in a bile duct may give rise to duct cancer, and hepatic adenomata be in some way related to the presence of coccidia. There is no reason to believe that scarlet fever, small-pox, lupus, leprosy, or bad forms of syphilis are on the increase. Our knowledge tends quite the other way, and shows most conclusively that we are checking those infective processes which are bound up with filth, crowding, bad food, ignorance, etc. And if we are successfully combating infection, is it not likely that this success tells upon cancer, which, as we have seen, is related to the chronic irritative processes? In the same way the improved treatment of the bladder, of the stomach, and of the uterus and other organs, in warding off chronic inflammatory conditions, cannot fail to have a preventive action on cancer.—I am, etc.,

Rubert Boyce.

Pathological Department, University College, London, Jan. 1st.

PHYSIOLOGY OR CLINICAL MEDICINE.

Sir,—The following two questions in physiology out of six were given in the written examination of the Conjoint Board at the beginning of this month in London:—

5th Question.—"Explain the terms myopia, hypermetropia, and astigmatism. How would you correct these errors?"

6th Question.—"Describe the appearances of the interior of the larynx as seen by the laryngoscope. What changes are noticed on phonation and expiration, and how are they brought about?"

If the 5th question is supposed to be one of physiology, then I must confess to having a very erroneous idea of the meaning of the word; and as regards the 6th, I would ask the name of any professor of physiology who teaches his pupils the use of the laryngoscope. To my mind, these questions are most unfair to put to a second year's student, and as physiological ones, and considering that "at least four out of the six" must be answered, or the candidate will "not be allowed to proceed with his exam.," a failure in any of the preceding ones entails rejection. No wonder, then, that such a large number of second year's men are rejected, and that they complain, and to my mind rightly, that the examinations are not a fair test of knowledge. It appears to me that all written questions should be revised by a committee before they are allowed to be put.—I am, etc.,

An Honours Man in Professor Sharpey's Class.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

Staff-Surgeon Michael Fitzgerald has been promoted to be Fleet-Surgeon, January 6th. He was appointed Surgeon, April 1st, 1873; and Staff-surgeon twelve years thereafter. While Surgeon of Malta Hospital he received the expression of the satisfaction of the Lords of the Admiralty at receiving the report of his efficient performance of his duties during the operations in Egypt in 1882.

Deputy Inspector-General Charles H. Slaughter is promoted to be Inspector-General, January 2nd. His previous commissions are thus dated: Surgeon, October 17th, 1856; Staff-Surgeon, December 7th, 1867; Fleet-Surgeon, August 21st, 1877; and Deputy Inspector-General, November 14th, 1885.

Fleet-Surgeon Albert C. Queely has been placed on the retired list, at his own request, January 20th. His commissions date as follow: Surgeon, October 1st, 1872; Staff Surgeon, October 1st, 1884; and Fleet-Surgeon, December 24th, 1893. He was Senior Surgeon of the *Triumph* (flagship) during the Chili and Peru war of 1879-81, and was detailed for duty in the hospital at Lima to aid the sick and wounded during the [illegible]. He received the approval of the Admiralty for the services rendered, and of the Chiefs of the Provisional Government of Peru.

Surgeon John E. Webb, M.B., has been placed on the retired list of his rank, December 24th. He was appointed Surgeon, February 18th, 1886.

ARMY MEDICAL STAFF.

Surgeon-Major-General T. N. Hoysted is placed on retired pay, January 13th. Appointed Assistant-Surgeon, September 28th, 1855; he became Surgeon, February 4th, 1871; Surgeon-Major, March 1st, 1873; Brigade-Surgeon, October 2nd, 1881; Surgeon-Colonel, April 3rd, 1886; and Surgeon-Major-General, March 24th, 1892. He was at the capture of Canton in 1857 with the 59th Regiment (medal with clasp); in the Indian Mutiny campaign, with the 4th Regiment, at the last advance into Oude under Lord Clyde in 1858, including the capture of Fort Ameethe (medal); and in the Afghan war in 1878-79, when he was present at the capture of the Peiwar Kotal (medal with clasp).

Surgeon-Colonel J. B. Hamilton, M.D., now Principal Medical Officer in the Home District, has been selected for appointment to the staff of General Sir William Cameron, commanding at the Cape of Good Hope.

Surgeon-Colonel J. Davis, recently returned from India, becomes entitled to promotion to Surgeon-Major General on the retirement of Surgeon-Major-General Hoysted; Brigade-Surgeon-Lieutenant-Colonel J. W. Maxham, M.D., gets a step, *vice* Surgeon-Colonel Davis.

Surgeon-Major-General F. W. Wade has also quitted the service on retired pay, January 24th. His commissions are thus dated:—Assistant-Surgeon, September 28th, 1857; Surgeon, October 5th, 1872; Surgeon-Major, March 1st, 1873; Brigade-Surgeon, February 1st, 1883; Surgeon-Colonel, December 31st, 1887; and Surgeon-Major-General, December 15th, 1892. He has no war record in the *Army Lists*.

INDIAN MEDICAL SERVICE.

The retirement from the service of the following officers, all of the Bengal Establishment, has received the approval of the Queen from the dates specified:—Surgeon-Colonel C. P. Costello, January 1st, 1894; Brigade-Surgeon-Lieutenant-Colonel E. A. Birch, M.D., October 4th, 1893; and Surgeon-Lieutenant Colonel E. R. Johnson, January 2nd, 1894.

Surgeon-Major D. R. Ross, M.D., Bombay Establishment, has also retired, with the Royal sanction, December 25th, 1893.

THE VOLUNTEERS.

Surgeon-Major R. Patrick, M.D., 9th Lancashire Artillery, is promoted to be Surgeon-Lieutenant-Colonel, January 20th.

Surgeon-Lieutenant F. M. Mackenzie, the Highland Artillery, has resigned his commission, which dates from April 18th, 1889.

Surgeon-Lieutenant J. W. Dawes, M.B., 1st Volunteer Battalion the Prince of Wales's North Staffordshire Regiment (late the 2nd Staffordshire), is now appointed Second Lieutenant in the same corps, January 20th. Second Lieutenant Dawes joined the regiment as Surgeon-Lieutenant April 22nd, 1893.

Erratum.—In our last week's issue it was stated that Surgeon-Major J. D. Harris had been promoted to be "Surgeon-Major," instead of "Surgeon-Lieutenant-Colonel." In other respects the paragraph is correctly printed.

VOLUNTEER MEDICAL STAFF CORPS.

Mr. John Francis Butler-Hogan is appointed Surgeon-Lieutenant to the London companies, January 20th.

MEDICAL ORGANISATION IN THE FIELD.

Referring to the garrison class for Volunteer medical officers mentioned in District Orders No. 3 of November 15th, 1893, we are informed that Brigade-Surgeon-Lieutenant-Colonel G. J. H. Evatt, A.M.S., will give four lectures to the class on medical organisation in the field on the following dates: Wednesdays, January 24th and 31st, February 7th and 14th. The lectures will be given at the headquarters of the Volunteer Medical Staff Corps, Calthorpe Street, Gray's Inn Road, commencing each evening at 8 P.M. All Volunteer medical officers and non-commissioned officers of bearer companies and ambulance sections are permitted to attend.

THE NEW TITLES.

Surgeon-Lieutenant-Colonel, I.M.S., writes from India Is it not a significant fact, as showing the new rank is merely departmental and not army, that I, in common with all other army surgeons, have not received the commission of surgeon-lieutenant-colonel although two years in the rank, as was the case of that of assistant surgeon on my entering the service, and subsequently surgeon-major, both of which latter commissions are in my possession. As a proof of my contention, my chief, who is a colonel in the army, and well aware I am styled surgeon-lieutenant-colonel, yet will never admit it, or give me more than the title of surgeon-major. This is a matter for a question in the House of Commons. The sooner the new titles are abolished the better.

"*" The first commission of a medical officer is now that of surgeon-lieutenant, and every subsequent step from surgeon-captain to surgeon-lieutenant-colonel should, we imagine, involve a fresh commission, stamp and all; otherwise there is an important departure from the usages of the service; we quite agree it is a matter the Secretary of State for War should be called upon to clear up. It was a recommendation of the Camperdown Commission (page 8) that "The military rank.....of a medical officer should be stated on his commission,' which, of course, is impossible if fresh commissions are not granted with each promotion. That the rank of surgeon-lieutenant-colonel is attained through "promotion" is stated in Article 339A of the Medical Warrant, "A surgeon-major shall, if he be recommended by the Director-General, be promoted to the rank of surgeon-lieutenant-colonel on completing twenty years full-pay service." As for the vagaries of our correspondent's chief, they merely show him to be a poor narrowminded creature, even although possessed of the rank of "colonel in the army."

MILITARY SURGERY AND THE NEW RIFLE.

Under the somewhat exaggerated title of The Impending Revolution in Military Surgery caused by the new Infantry Rifle, Andrews[1] discusses the surgical needs of future wars. After considering the recent changes in the armaments of the armies of the present day and their consequent influence upon the fighting methods of civilised warfare, he points out the salient features of the surgical tactics to be observed in the general management of the wounded on the field of battle, as well as the operative treatment likely to be required by the peculiar wounds made by modern firearms.

[1] *Journal Amer. Med. Assoc.*, No. 28, vol. xxi.

As to surgical tactics, Andrews, in the main, follows the line adopted by British and other European writers upon ambulance work and the organisation of first aid to the wounded, very properly insisting on the important fact that in all future wars the numbers of wounded will be not only much greater than in former campaigns, but also be scattered over a greater area and front, necessitating the employment of large numbers of surgeons and skilled dressers. Stress is laid upon the work to be done in this direction by the privates drawn from regimental companies and previously trained in "first aid" service. This appears to be a new idea in the United States; it has been tried for some years in the British army and found to be not altogether satisfactory, as, when the time comes for fighting, few commanding officers are able, even if willing, to spare these so-called trained men from the fighting line. British experience indicates the need rather of increasing the strength and autonomy of the medical corps and thoroughly training them in their duties than relying upon men lent from regimental units which, at the time of need, may not be forthcoming. Some drawings and descriptions are given of injuries inflicted by the new American rifle—the Krag-Jorgensen. They differ in no material feature from those caused by the Lee-Metford rifle. The author rightly thinks that the field surgery of the future will be more scientific, embracing a greater variety of operations than formerly, and as such promises the avoidance of many amputations and excisions which hitherto have been deemed necessary, as well as holding out hopes of a diminished mortality among the wounded.

ADMINISTRATIVE MISMANAGEMENT OF THE ARMY MEDICAL DEPARTMENT.

WE understand that the following changes in the administrative staff of the Army Medical Department are likely to take place in consequence of the retirement of Surgeon-Major-General Wade, Principal Medical Officer of Aldershot. Surgeon-Colonel Colohan, Principal Medical Officer at the Cape, will come home on promotion, on the retirement of Surgeon-Major-General Collis, Principal Medical Officer of Ireland, in April. Surgeon-Colonel J. B Hamilton, now Principal Medical Officer of the Home District, will succeed Surgeon-Colonel Colohan at the Cape. Surgeon-Major-General Paterson has been recalled to England after a few months' service at Malta, where, as it may be remembered, he was stopped on his way home from Hong Kong, in consequence of an official muddle. He is thus brought home a considerable time before the completion of the five years' tour which was the official pretext for sending him to Malta. We also hear that Surgeon-Major-General Inkson, who returned from India only last summer after a completed tour of five years, and who is now Principal Medical Officer at Portsmouth, is under orders to proceed at once to Malta, where he can remain only about eighteen months. Altogether the management of the Army Medical Department as regards the administrative ranks may be said to combine the maximum of inconvenience to individual officers with the least possible amount of advantage to the public service.

MEDICO-LEGAL AND MEDICO-ETHICAL.

THE PUFF INDIRECT.

BE the transmitter who he may—author, friend, or patient—of the reprint from the *Provincial Medical Journal* of the paper on "Præphthisis" by Dr. W. H. Pearse, for insertion in the *Western Daily Mercury* of January 15th, we are constrained to hold the latter ethically responsible for the regrettable deviation from the well-known rule of the faculty—by the exceptional contravention of which he not only justly subjects himself to severe criticism and reproof, but will doubtless and deservedly fail to enhance his local professional status, by a proceeding which is a more or less covert mode of unprofessional advertising. As a medical text for serious consideration, we would refer him to Rule 3 of the *Ethical Code* chap. 2, sect. 1.

THE HARNESS CASE.

THE hearing of the charge against Mr. C. B. Harness, Dr. J. M. McCully, and Mr. C. B. Hollier, of conspiring to obtain money by false pretences from divers persons, has now occupied part of the time of the Marlborough Street Police Court on fourteen occasions.

On January 17th and 22nd, witnesses were heard for the defence. Among those who gave evidence as to the benefit derived from the treatment received were the Rev. H. M. Villiers, vicar of St. Paul's, Knightsbridge; Mr. Cecil D. Greenwood, M.R.C.S., who, according to the report in the *Times* from which we quote, had given a testimonial speaking highly of the beneficial results which he had experienced from using the belt, and had recommended about twelve patients to use the belts; Mrs. Sophia Middleton, who stated that she had been cured of neuralgia by using a belt and spine band; the Rev. E. F. Shaw, who had found the belt of benefit to his throat, which was tender; Miss A. J. Beattie, a member of the Royal British Nurses' Association, who stated that Dr. Heywood Smith had recommended her to go to 52, Oxford Street; Miss Jessie Bond, the actress, who had been treated by Mr. Harness on her first and one or two subsequent visits, but had been under treatment, on and off, for twelve months, with, she stated, great benefit; and Mrs. Jane Crawshaw, who had suffered from nervous prostration, and had been cured.

Dr. McCully made an appeal to the magistrate to liberate him on the ground that there was no evidence.

Mr. Hannay, the magistrate, said that he could not accede: probably the whole charge would be disposed of at the next hearing, and he would give his decision.

The further hearing of the case was adjourned until January 31st.

TIBBITS v. TOYE: ACTION FOR LIBEL: VERDICT.

(Before Mr. JUSTICE HAWKINS and a Special Jury.)

THIS case was partly heard on January 21st, and the hearing was continued on January 22nd. The plaintiff, Dr. Tibbits, had been connected with various hospitals and other institutions, and the defendant was the proprietor of the *Charity Record*. The plaintiff advertised "to the benevolent" for the loan of £200 to prevent the close of a "charitable institution," which for seven years had done an immense gratuitous and philanthropic work for the suffering poor; 515 per cent. was offered, with security upon the furniture. In defendant's paper an article commenting upon these and other matters appeared, and this article the plaintiff now sued upon as being libellous. The defendant pleaded that what was complained of was fair comment upon matters of public interest, and he also pleaded that the alleged libellous statements were true. Mr. R. A. Germaine and Mr. G. A. Scott were for the plaintiff, and Mr. Horace Browne for the defendant. Dr. Herbert Tibbits, the plaintiff, was cross-examined by Mr. Horace Browne as to what he had stated during his examination in the Bankruptcy Court. He said the bazaar that he got up was called "The Coming Race Bazaar," and unfortunately it was not a success. The Queen held a Court, and all the great ladies went to the Court instead of to the bazaar.—Were you drunk two days at the bazaar? I think that I went almost every day to the bazaar, but I certainly was not drunk there. He was, he added, present at a committee of the hospital in April, 1891, but there was another one which had previously been held behind his back. The committee of the hospital held an inquiry into his conduct, but they had held one before behind his back.—Mr. Justice Hawkins, complaining of the voluminous way in which the witness answered questions, said that he should adjourn the case rather than allow time to be wasted. The witness, in continuation, said that he had admitted, but without prejudice, that the meeting had been properly convened, but he also admitted, but still without prejudice, that they had power after inquiry to dismiss him. He refused to resign. He said most distinctly that the report which had been made as to what took place was a false report. Mrs. Brown, the matron, gave evidence in his presence, but not upon oath.—Did she say that you were very drunk, and that you called the nurses and ladies hell cats? She said that I called them hell cats, but she said nothing about drunkenness: that never took place; it was false altogether.—You cross-examined her at the time, and you asked her about the term hell cats. Did you say you used the words by way of joke in reference to all women? Possibly.—What is a hell cat? A cat that lives in hell, I suppose. I cannot define it. It was never said as to any particular woman. It was used when there were women squabbling.—You meant lady cats, not tom cats? I do not know. It was not meant offensively. Henry Savill, the porter, did not say that witness was very drunk at the hospital, and Miss Thompson did not say that he was drunk at the bazaar, nor did she say that he had called the ladies and nurses hell cats. The dispenser did not in his presence say that witness was so drunk that he would not allow him to lecture. He only said that he thought that witness had had too much at the bazaar at the Albert Hall. The witness denied that some other imputations of drunkenness had been made against him. He thought that the committee concluded their inquiry in May, 1891, and they passed a resolution saying that they had carefully considered all the evidence they had had before them in reference to the charges against their senior physician, and they recorded their full conviction with regard to the great irregularities which had existed; they also referred to the valuable services he had rendered, but said that the committee would remove him summarily from his charge at the hospital should the improper conduct disclosed upon the inquiry be repeated. The witness, continuing, said the bazaar ended in a great loss; he was responsible for the money, and he never asked the hospital to become responsible. In July the committee dismissed him from his position as senior physician. He brought an action against them, upon the ground that they had no right to dismiss him After the failure of the bazaar he became bankrupt. He had not applied for his discharge; he had no money to do so. In 1893 he brought an action against the *Electrical Review* for libel.—Did Mr. Harness, the Medical Battery man, pay the costs of the action?—No, he did not; the Battery Company paid it, and they were now suing witness. Harness was only the manager of the company. They discounted certain notes for him, and they were now trying to recover the money. He himself was fully responsible for the hospital in Weymouth Street, and there was no other committee than that of the governors, who did not meet.—The witness was also further cross-examined as to the various passages, which occurred in a book which he had published.—Re-examined: There had been no accusation against him before the College of Physicians of Edinburgh that he had been guilty of drunkenness. He had appealed against their decision, and the matter was not yet closed.

The jury, before the re-examination had proceeded, said they thought they had heard enough of the case, and were prepared to give their decision.

Mr. Germaine, after communicating with his client, said he did not propose to carry the case any further.

There was a verdict and judgment for the defendant, and his Lordship certified for a special jury.

THE LONDON AND COUNTIES MEDICAL PROTECTION SOCIETY, LIMITED.

AT a meeting held on January 12th at the Limes, Atkins Road, Clapham Park, the following gentlemen were elected officers of the Clapham, Brixton, and Streatham Division of the London and Counties Medical Protection Society, Limited:—*President:* Dr. Field Sutton, Balham Hill. *Vice-Presidents:* Dr. Barkwell, Dr. Oliver Field, Dr. C. J. Knight, Mr. Lewis Lewis, Mr. F. Mitchell, Dr. A. J. Rice-Oxley, and Mr. George Braithwaite Wall. *Council:* Mr. J. Busfield, Mr. C. D. Davis, Dr. G. D. Knight, Mr. W. McMullen, Dr. Needham, Dr. F. Pollard, Mr. Alfred Pocock, and Dr. J. Reynolds. *Honorary Secretary:* Mr. Arthur Graham, The Limes, Atkins Road, Clapham Park, S.W.

A MISLEADING ADVERTISEMENT.

H. R. H.—Our correspondent "H. R. H." draws our attention to an advertisement which recently appeared, requiring a "medical man with double qualifications to undertake sole charge of a small practice." On inquiry he ascertained that the medical man in question was really required for a friendly society having about 700 members, who paid one penny per week for advice and medicine; the society guaranteeing £75 per annum in case the subscriptions fell off; and our correspondent

not unnaturally complains of the apparent misleading character of the advertisement, and inquires if something cannot be done to protect the profession from matters of that kind. We can only express our opinion that there would not appear to be any remedy. We wish there were.

TESTIMONIAL TO LECTURERS.

Member B.M.A. Ceylon.—We have received the card forwarded by our correspondent containing an advertisement of lectures to be delivered by a lady describing herself as "M.D.," of the "Women's Medical College of Philadelphia," on the subject of Hearths and Homes, or Is Marriage a Failure? and by a gentleman describing himself as "M.D., Graduate of two leading Universities of the United States," and containing a testimonial of a highly eulogistic character in favour of the lecturers, purporting to have been given by, among other persons, a leading medical officer of the district. Our correspondent draws particular attention to the last-mentioned fact, and asks for our opinion on the subject. We need hardly point out that advertisements are very properly repudiated by the whole medical profession; and in our opinion it is contrary to this well-defined principle for testimonials of the kind to be given by medical men and advertised in the way described. It may, however, be probable that the testimonial was not published with the consent of the medical officer referred to, or even signed by him, and it would be well to draw his attention to the subject, and ask for an explanation. If no satisfactory reply is forthcoming, the card in question might be sent to the General Medical Council.

LUNACY LAW.

Puzzled writes: A patient of mine is suffering from pregnancy melancholia with a strong suicidal tendency. Her husband has removed her to her father's house, where, owing to her mental condition, her personal freedom is very considerably curtailed. Are any legal formalities necessary under the above circumstances?

*** We believe the answer to this question to be No; that is, so long as the patient is under proper care and control, and is not cruelly treated or neglected. Of course, it is the duty of the medical attendant to see that proper attendance is provided to secure prevention of suicide.

A PENNY PAMPHLET.

Dr. F. W. Cory (Bournemouth) writes: I much regret that pressure of work has prevented me reading the British Medical Journal of January 13th, or I should have noticed and replied to earlier an inimical attack in a paragraph on page 109, which has just been brought to my notice. As the author of the pamphlet in question I would at once assert that neither I nor the chemist referred to are parties to the "open circulation" of this pamphlet. The fact is that several years ago I asked this gentleman to keep some copies for the use, more particularly, of my poorer patients, who would, at my request, apply for them instead of their having to travel a mile further to obtain them from my printer. If others are circulating them, it is entirely without my knowledge, and simply on the merits of the publication itself. I have no desire to tout for patients, as my practice is already as much as I can manage, and I should utterly disdain to increase it by such methods as your anonymous correspondent is most anxious to impute to me, for reasons well known to myself and others. In regard to this accusation I am willing to court the fullest inquiry.

METEOROLOGICAL REPORTS AND PROFESSIONAL ADVERTISEMENTS.

L., who practices in a watering place, proposes, with the approval of the other practitioners there, to keep careful records of the meteorological data; to publish them in the weekly local papers, in the *Monthly Record* of the Royal Meteorological Society, in a yearly pamphlet, later in a paper in a medical journal, and ultimately in a book. L. proposes to attach his initials to the weekly report and his name to the pamphlet, but a friendly practitioner objects that this would savour of advertising.

*** The publication of name or initials appended to such reports in a local paper would undoubtedly savour of advertising. The publication of an annual pamphlet for the use of the general public under the circumstances named, bearing the name of one practitioner in the place, is also open to objection. A way out of the difficulty would be for the medical men of the town, who are all on friendly terms, to form themselves into a committee, and appoint our correspondent secretary. The yearly report might then be issued with the imprint "prepared by (or for) the Medical Committee," or a list of that committee.

THE SCHOOLMASTER AS ADVERTISER.

Preterite writes: May I ask you to be so kind as express some opinion on the following? A laudatory paragraph (enclosed) appeared in a provincial paper concerning my brother, referring to his previous success, and stating that he had passed some final examination in medicine and surgery. I wrote to the editor, asking who had prompted the insertion, and said that inasmuch as it referred to the professional part of his career it was open to be an advertisement and extremely distasteful to the family. The reply was that it had been inserted by the head master of the school, related to his educational honours, and was for the good of the school.

*** Natural as would be the desire of the head master of the school in question to enhance its academic repute by recording the honours obtained by a more or less gifted pupil, still the paragraph to which our correspondent justly takes exception should have been withheld from the lay press unless the assent of the family had been obtained. It is, however, only reasonable to infer that the head master, being ignorant of the essential etiquette of the faculty, erred unwittingly.

A SIXPENNY DISPENSARY.

With the view to deter others from pursuing a like course, and in the hope that the Royal College of Surgeons, of which this practitioner is a member, may be induced to take cognisance of the procedure in question, we append a copy of the tariff of charges issued by Mr. Bevan:

Surgery and Dispensary,
17, Burdett Road, Mile End, E.
Mr. Bevan,
Surgeon, etc.
Hours of Attendance:
Morning, 9 to 12. Evening, 6 to 10.

Fees: Advice and Medicine at Surgery	6d.
Visits (before 6 P.M.)	1s. 0d.
Attendance, per week	from 3s. 0d.
Midwifery	„ 10s. 6d.

Vaccination.

N.B.—Patients are expected to provide their own bottles, etc.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

Experimental Physics.—Mr. J. W. Capstick, Fellow of Trinity, has been appointed Assistant Demonstrator at the Cavendish Laboratory, in the room of Mr. W. D. C. Whetham, who has been elected to the Clerk Maxwell Scholarship in Experimental Physics.

Agricultural Physiology.—Mr. A. Eichholz, Fellow of Emmanuel, will this term give a course of instruction in Physiology for Students of Agriculture in Professor Foster's Laboratory.

Degrees.—The following medical degrees were conferred at the Congregation on January 18th:—*M.B.* and *B.C.*: Robert Sevestre, B.A., Trinity; William Bragg Addison, B.A., Caius; William Frank Colclough, B.A., Caius. *B.C.*: Gerard Charles Taylor, B.A., Christ's.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

The following gentlemen passed the First Examination of the Board in the subjects indicated under the "Four Years" Regulations at the quarterly meeting of the examiners, namely:

Chemistry and Chemical Physics.—A. J. Andrew, St. Bartholomew's Hospital; E. O. Balleine, King's College, London; D. L. Beath, St. Bartholomew's Hospital; C. S. Brookhouse, Guy's Hospital; L. D. B. Cogan, Guy's Hospital; E. P. Du Heaume, private study; G. K. Dury, Owens College, Manchester; A. E. Farndon, St. Mary's Hospital; C. Franks private study; J. C. Furness, Charing Cross Hospital; F. G. Gardner, Mason College, Birmingham, and St. Bartholomew's Hospital; E. Gray, Queen's College, Cork, and London Hospital; P. O. Gruber, Cambridge University and St. Bartholomew's Hospital; T. C. Harmer, London Hospital; A. Holden, Owens College, Manchester; A. F. Holman, Cambridge University and St. George's Hospital; F. E. Hutchinson, private study; B. Isaac, Guy's Hospital; S. James, Surgeons' Hall, Edinburgh; C. J. H. Mann, Guy's Hospital; C. J. Marsh, University College, London; W. E. Morgan, Charing Cross Hospital; W. P. R. Newth, St. Thomas's Hospital; W. Parkinson, Firth College, Sheffield, and Yorkshire College, Leeds; D. L. K. Prichard, University College, London; H. R. Rice, Mason College, Birmingham, and London Hospital; A. H. Safford, King's College, London; C. V. Smith, University College, London; H. Spinks, Owens College, Manchester; A. K. D. Tomkins, Mason College, Birmingham; S. Wellby, Oxford University and St. Thomas's Hospital.

Materia Medica and Pharmacy.—G. P. Ambrose, Westminster Hospital; W. N. Barron, St. Bartholomew's Hospital; H. E. M. Baylis, St. Bartholomew's Hospital; D. B. Beecroft, Charing Cross Hospital; J. Bennett, Owens College, Manchester; C. W. Booker, Guy's Hospital; A. Brebner, University College, London; H. Clapham, Firth College, Sheffield; A. A. W. Cook, University College, London; E. J. E. Coop, Mason College, Birmingham; H. M. Cooper, St. George's Hospital; P. J. Dempsey, Catholic University, Dublin; E. J. A. Dodd, Yorkshire College, Leeds; H. N. N. Dodd, St. George's Hospital; A. J. Eastcott, St. George's Hospital; J. Eddy, Middlesex Hospital; A. Emlyn, University College, London; C. Franks, private study; E. Fryer, Guy's Hospital; F. G. Gardner, Mason College, Birmingham, and St. Bartholomew's Hospital; C. R. Gayer, St. George's Hospital; C. J. P. Gibbons, London Hospital; H. J. Godwin, St. Bartholomew's Hospital; H. Green, Charing Cross Hospital; J. E. Griffith, St. Bartholomew's Hospital; H. A. Günther, University College, London; T. T. Harratt, Middlesex Hospital; A. W. Hayles, King's College, London; S. J. Hayleck, St. Mary's Hospital; J. G. Heath, St Mary's Hospital; E. G. Hill, St. Mary's Hospital; R. A. L. Hill, St. Thomas's Hospital; W. E. Hills, Guy's Hospital; T. Hood, St. Bartholomew's Hospital; W. K. Hopkins, St. Bartholomew's Hospital; H. Hughes, University College, Liverpool; F. E. Hutchinson, private study; S. James, Surgeons' Hall, Edinburgh; F. A. Johns, London Hospital; D. G. Kennard, Westminster Hospital; E. G. Klumpp, St. Bartholomew's Hospital; E. B. Laurence, St. Bartholomew's Hospital; M. M. Lowsley, Charing Cross Hospital; P. Macaulay, Yorkshire College, Leeds; A. R. McCullagh, Charing Cross Hospital; R. C. Martin, St. George's Hospital; E. Maynard, London Hospital; U. W. N. Miles, King's College, London; C. G. Moffitt, University College, London; E. G. Moon, St. Mary's Hospital; G. E. Palmer, Royal College of Surgeons, Dublin; A. C. B. Pierson, Yorkshire College, Leeds; E. G. D. Pinco, University College, London; J. P. Prell,

London Hospital; D. C. Rees, Charing Cross Hospital; J. H. R. Robinson, London Hospital; T. O'N. Roe, University College, London; A. E. Seller, London Hospital; D. C. G. Sinclair, St. Mary's Hospital; O. Smithson, Yorkshire College, Leeds; J. Spencer, Yorkshire College, Leeds; T. Spencer, Yorkshire College, Leeds; H. Spinks, Owens College, Manchester; P. G. Temple, Guy's Hospital; J. T. Vulliamy, St. Thomas's Hospital; C. E. Walker, St. George's Hospital; W. W. Walker, Yorkshire College, Leeds; W. W. Walker, St. Mary's Hospital; A. J. Wernet, Guy's Hospital; F. White, St. Thomas's Hospital; S. W. Williams, University College, Liverpool; C. H. Wilmer, St. Bartholomew's Hospital; G. H. L. Wright, University College, Bristol.

Elementary Anatomy and Elementary Physiology.—A. R. Adams, Guy's Hospital; W. R. Battye, University College, Bristol, and London; W. Beckton, St. Bartholomew's Hospital; W. B. Bennett, University College, Liverpool; G. H. Blasson, Guy's Hospital; L. Bradstock, Mason College, Birmingham; F. Brickwell, St. Bartholomew's Hospital; W. W. Claridge, Middlesex Hospital; F. C. Dudley, Westminster Hospital; A. E. Elliott, St. Thomas's Hospital; A. E. Farndon, St. Mary's Hospital; T. H. Gardner, King's College, London; A. H. Gibbon, Edinburgh University and St. Thomas's Hospital; P. O. Gruber, Cambridge University and St. Bartholomew's Hospital; A. R. Hoare, St. Thomas's Hospital; W. A. L. Jackson, Mason College, Birmingham; S. James, Surgeons' Hall, Edinburgh; F. E. Manning, University College, London; J. M. A. Manning, St. George's Hospital; A. E. Maturin, Guy's Hospital; H. Morris, St. Bartholomew's Hospital; H. L. W. Norrington, University College, Bristol; J. Ogilvie, Cambridge University and St. Thomas's Hospital; J. E. H. Parsons, Guy's Hospital; J. B. A. Treusch, Guy's Hospital; W. P. Walsh, Oxford University and Middlesex Hospital; J. H. Yearsley, St. Thomas's Hospital.

Elementary Anatomy only.—J. K. Bell, University College, Liverpool; J. Micklethwait, Firth College, Sheffield.

Elementary Physiology only.—B. F. Carlyle, St. Bartholomew's Hospital; A. Holden, Owens College, Manchester; W. I. Weldon, St. George's Hospital.

SOCIETY OF APOTHECARIES OF LONDON.

PASS LIST, January, 1894. The following candidates passed in

Surgery.—C. E. Brooks, Manchester; G. A. Child, St. Thomas's Hospital; H. Harvey, London Hospital; R. L. Jones, University College; F. Morris, Birmingham; W. E. Pain, Guy's Hospital; F. L. F. E. Pfaff, Wurzburg; F. Romer, St. George's Hospital.

Medicine, Forensic Medicine, and Midwifery.—P. Best, University College; J. H. Jolley, London Hospital; J. D. Small, Bombay; J. J. Spears, London Hospital; W. H. Symons, St. Bartholomew's Hospital; G. H. Tomlinson, Birmingham.

Medicine and Midwifery.—F. Clarke, St. Bartholomew's Hospital; R. J. Hughes, Durham; G. E. Williams, London Hospital; J. R. M. Richmond, King's College.

Medicine.—E. C. B. Ibotson, Guy's Hospital.

Forensic Medicine and Midwifery.—E. F. Jamison, Belfast; H. Litherland, Manchester; H. Richardson, Manchester.

Forensic Medicine.—A. Marshall, St. Thomas's Hospital; W. H. Reed, King's College.

Midwifery.—C. G. Mathews, St. Bartholomew's Hospital.

To Messrs. Jolley, Marshall, Mathews, Morris, Pain, Pfaff, and Tomlinson was granted the diploma of the Society entitling them to practise Medicine, Surgery, and Midwifery.

OBITUARY.

ARTHUR THOMAS MYERS, M.A., M.D.CANTAB., F.R.C.P.

ARTHUR THOMAS MYERS, whose death we notice with great regret at the early age of 42, was born in 1851, at Keswick, his father being incumbent of St. John's Church in that town. He was educated at Cheltenham and Trinity College, Cambridge. A scholar of Trinity, he finished his university career by taking a first class in the Classical Tripos and a second in the Natural Science Tripos. He obtained his Doctor of Medicine degree in 1881, and was made a Fellow of the College of Physicians in 1893. At St. George's Hospital the late Dr. Myers had a meritorious and distinguished career. He filled the office of house-physician, and was registrar in the medical wards for several years. He fulfilled the laborious duties of the latter post with singular patience, minuteness, and fidelity, and invented a system of indexing which has since proved of great value.

He was a member of the various Medical Societies, and physician to the Belgrave Hospital for Children. He wrote in the leading journals, and contributed various papers of interest, among which may be mentioned the Nervous Sequelæ of Small-pox, and a Case of Raynaud's Disease. His studies were of late years particularly directed towards abstruse problems connected with nerve diseases, and the subject of hypnotism as a treatment for disease—studies, perhaps, not the best suited for his own mental and bodily health.

Dr. Myers was a distinguished athlete. At Cheltenham he was in the eleven, and played in the public school racket matches. At Cambridge he was captain of the Trinity eleven, and played in the tennis match against Oxford. Nature had, indeed, worthily designed him as one of those good "all round men" who are the glory of our public school education; but destiny thought fit to inflict upon him that terrible and inscrutable nervous malady which occasionally harassed him in early youth, and of late years advanced with relentless tread, baffling the most devoted medical skill, and ultimately involving a fine intellect in ruin and confusion. There can be no doubt but for this Myers would have obtained the highest medical distinction.

His misfortune prevented his attaining to a post in the medical staff of a teaching hospital, and this sad disappointment, intolerable to most men, was borne by him with singular patience. Even those who had the privilege of knowing him intimately never heard him repine, and in the intervals of illness he devoted himself energetically to his studies and to various athletic pursuits. After leaving the universities he was indeed known as an enthusiastic climber and skater, no mean cricketer, and an adept at tennis.

He had much subtlety and delicacy of intellect, and belonged to a family of intellectual distinction and literary culture; his bent was largely towards psychological study, and the investigation and discussion of the more recondite phenomena of mind. By family relations, as well as by personal study, he was much interested in some of the problems which the "psychical researchers" aspire to solve. But his medical training led him to distrust many of their conclusions. To his sympathetic yet cautious pen are due some of the articles on these topics and incidents which have from time to time appeared in our columns. He was particularly happy as a reviewer, and in that capacity we were often indebted to his just, kindly, and suggestive work.

He was a devoted son, and in private life he was of a singularly kind and amiable disposition, given much to acts of hospitality and goodness to others. The slight brusqueness of his address, sometimes remarked by his juniors, was largely due to his infirmity, and he is mourned at the University and St. George's by a large circle of friends. His history is tinged with a touch of melancholy, yet we can reflect that he has not lived in vain, for he has shown us the example of a brave man struggling against an unhappy fate, and there are many with all the advantages of intellect and physical health who have done less good work in the world than Arthur Myers.

HENRY JAMES PAINE, M.D.St.And., M.R.C.S.Eng.

WE deeply regret to announce the death of Dr. H. J. Paine, of Cardiff, which took place on January 15th. The deceased became M.R.C.S.Eng. and L.S.A. in 1839, and took the degree of M.D.St.And. in 1862. He interested himself in the Glamorganshire and Monmouthshire Infirmary, and in 1865 was elected an honorary physician, an office he held until 1882, when he resigned, and was appointed consulting physician. Dr. Paine was born in Canterbury, but had been resident in Cardiff for nearly sixty years. In 1840 he was appointed Medical Officer of Health for Cardiff, and he held that office for forty years. More than a quarter of a century ago he was elected a Justice of the Peace for Glamorgan, and he discharged the duties of this office with devoted zeal, integrity, and independence.

ROLPH LESLIE, M.A., M.D.Toronto.

THE numerous friends of Dr. Rolph Leslie will learn with sincere regret the news of his most unexpected death, which took place on the steamship *Orient* whilst cruising in the West Indian Islands. After graduating at Toronto University in the year 1876, Dr. Leslie left his home in Canada and came to London, where he subsequently made headquarters. On the outbreak of the Turco-Servian war in 1876 he volunteered for service, and went through both that and the subsequent Russo-Turkish war (1877-78). Shortly after returning to England on the outbreak of the Zulu war, he was appointed Civil Surgeon, and went to South Africa, where he remained until the close of the campaign. After a year or two spent in Trinidad, he received an appointment from the International African Association, and spent three years (1883-86) on the Lower Congo whilst it was being opened

up by Stanley, and organised by Sir F. De Winton. On his return he published *Hints to Travellers in the Tropics*, embodying his experience of the more severe forms of African fevers. Subsequently his time was spent for the most part in travelling with patients in search of health, and it was whilst engaged in a trip of this kind that he met with his untimely death. Besides numerous testimonials of a private character, Dr. Leslie received, in recognition of his services, the Russo-Turkish and Zulu war medals, the Order of the Medjidieh, the Order of Leopold, and the Congo Star.

Deaths in the Profession Abroad.—Among the members of the medical profession in foreign countries who have recently passed away are Dr. Ritter von Madurowicz, Professor of Midwifery and Gynæcology in the University of Cracow, at the age of 62; Dr. Horace Hollister, of Scranton, Pennsylvania, a great authority on local archæology, and the possessor of one of the finest collection of aboriginal relics in the United States, aged 70; Dr. F. Minot Weld, of Jamaica Plain, Mass., some time Superintendent of New York Hospital, aged 53; Dr. J. G. Gishizki, one of the leading alienists of Kieff, aged 60; and Dr. Archinard, the oldest practitioner of Lyons, aged 90.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns, including London, 6,756 births and 4,651 deaths were registered during the week ending Saturday, January 20th. The annual rate of mortality in these towns, which had increased from 22·6 to 28·6 per 1,000 in the preceding three weeks, declined again to 23·2 last week. The rates in the several towns ranged from 15·2 in Halifax and 15·7 in Leicester to 38·0 in Plymouth and 42·4 in Norwich. The high rates in the two last-mentioned towns were due to the fatal prevalence of influenza. In the thirty-two provincial towns the mean death-rate was 22·9 per 1,000, and was 0·7 below the rate recorded in London, which was 23·7 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2·5 per 1,000; in London the rate was equal to 2·9, while it averaged 2·2 per 1,000 in the thirty-two provincial towns, and was highest in Salford, Plymouth, and Birkenhead. Measles caused a death-rate of 1·5 in Salford and 2·5 in Birkenhead; scarlet fever of 1·1 in Burnley and in Huddersfield; whooping-cough of 2·0 in Salford, 2·2 in Bolton, and 5·3 in Plymouth; and "fever" of 1·5 in Sunderland. The 74 deaths from diphtheria included 18 in London, 4 in Salford, and 3 each in Birmingham, Liverpool, Leeds, and Sheffield. Six fatal cases of small-pox were registered in Birmingham, 4 in Bradford, 3 in Bristol, and 1 each in West Ham, Leeds, and Hull, but not one in London or in any other of the thirty-three towns. There were 82 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, January 20th, against 93, 91, and 82 at the end of the preceding three weeks; 14 new cases were admitted during the week, against 15 and 12 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,645, against 2,988, 2,855, and 2,736 at the end of the preceding three weeks; 240 new cases were admitted during the week, against 210 and 224 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, January 20th, 893 births and 616 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had been 21·5 and 23·8 per 1,000 in the preceding two weeks, declined again to 21·6 last week, and was 1·8 per 1,000 below the mean rate during the same period in the large English towns. Among these Scotch towns the death-rates ranged from 12·5 in Greenock to 31·7 in Paisley. The zymotic death-rate in these towns averaged 2·1 per 1,000, the highest rates being recorded in Paisley and Leith. The 291 deaths registered in Glasgow included 13 from whooping-cough, 6 from diphtheria, and 5 from scarlet fever. Two fatal cases of small-pox were recorded in Leith.

SMALL-POX IN EDINBURGH.

During last week three cases of small-pox were reported, and the patients were at once removed to the Canongate Hospital. A fourth case [illegible] was discovered to be infected, and the family of one of the three patients [illegible] to the rigid quarantine. Of these three cases one was a [illegible] employed in Leith, and the other two occurred in that portion of Edinburgh which lies nearest to Leith. One of the three patients has since died.

SMALL-POX AT LEITH.

During last week 17 [illegible] cases of small-pox were reported to the "public health [illegible]" of these 17 were admitted to the hospital; 9 patients died in the hospital and 10 were discharged. The number of cases since the outbreak of the disease is now 110.

LIABILITY FOR INSANITARY PREMISES.

A novel cause of action has been discovered and held by Baron Pollock to be well founded, in an action of Caven *v.* Arno, recently tried by him at the Guildhall. The plaintiff claimed damages from his landlord—not as his landlord but as the owner of neighbouring premises—for allowing a drain on them to remain in a dangerous condition, in consequence of which the health of the plaintiff's family was injured. Such acts of carelessness occur only too frequently, and it is strange that the liability for damages of persons responsible for them has not been declared by a court of law before now. The maxim "sic utere tuo ut alienum non ledas" is old enough, and an owner of property who causes or allows a nuisance to be on his own land has frequently been held responsible for the consequences of so doing. Mere neglect to clean out a drain seems, however, never to have been treated as a cause of action. It undoubtedly may cause a very offensive and very dangerous nuisance, and where it does so, and injury ensues, it certainly seems right that the person injured should be able to obtain compensation. In such cases it is generally very difficult to prove that the injury sustained is the direct result of the carelessness or misconduct of the defendant or his agents. Unless the plaintiff can establish that such injury was caused by some negligent or wrongful act or omission of the defendant, his case fails, and he has to pay a probably large bill of costs, in addition to the injuries he has already sustained. People are, therefore, no doubt averse to bringing actions in such cases, however strongly they may feel that they have a good moral claim to compensation. In the recent case before Baron Pollock the jury only gave the plaintiff £25 damages, though he alleged that two of his children had died, his wife's health was seriously impaired, and a business which she managed was consequently destroyed. It was probably impossible to show that these were all matters for which the defendant was responsible. Still, the man who has sustained such losses probably thinks £25 a very poor solatium. He has not lost his case, and has no costs to pay, and he has successfully vindicated an old legal principle in a new form; but his success does not seem likely to encourage many others to follow his example. Owners of insanitary premises are shown to have a further liability beyond what has hitherto been generally recognised; but the risks and difficulties attendant on the attempt to enforce that liability by means of an action for damages are such as to make it unlikely to be often used.

AN INSANITARY AREA IN SOUTHWARK.

The question of the desirability of dealing with certain courts and alleys which lie on the west side of the Borough High Street is again to the fore. The late Dr. Waterworth called attention to the need of improvement in this neighbourhood, and an inquiry was held in reference to what is known as the Falcon Court area by an inspector of the Home Office, but Dr. Waterworth did not succeed in carrying his ideas into execution. During the past few months Falcon Court has been the subject of much attention in Southwark, and though closing orders have been obtained for several houses in this locality, it has been realised that nothing short of demolition and rearrangement of portions of the area can effectually remedy the existing evils. Delegates from the vestry of St. George the Martyr, Southwark, were recently invited by a committee of the London County Council to attend a conference for the purpose of considering the advisability of dealing with Falcon Court, and adjoining courts and alleys, by a scheme under the Housing of the Working Classes Act. Dr. Waldo, the medical officer of health of St. George the Martyr, has now presented a report to his authority, in which he draws attention to views expressed at this conference, and suggests a comprehensive and radical treatment of the area, or, failing this, an alternative method of dealing with it in two sections. He points out the need of open space in the district, and expresses the opinion that abundant accommodation for persons of the artisan class, who would be displaced from the insanitary courts and alleys, could be provided on various building plots which are lying idle in the neighbourhood.

AN INFIRMARY "WITHOUT COMPLAINT."

The Wolverhampton Guardians have at last taken a small step towards improving the condition of their workhouse. There are considerably over 200 sick beds in the house, and to attend to their unfortunate occupants there is one nurse. The guardians have just decided, however, that they will make the munificent provision of four probationers in addition, at salaries not exceeding £10 each. This is, indeed, an advance, and we hope it may be the thin end of a very large wedge, but, as it stands, the granting of one probationer to each fifty or sixty beds, and one nurse thrown in for the lot, is surely a very small modicum of righteousness to make a fuss about, and the fact that this little measure of justice was not carried without a protest, nearly a quarter of the guardians voting against it, prepares one to accept without surprise the statements made by Mrs. Hatton and Dr. Totherick as to the lamentable condition of affairs which has hitherto prevailed. The odd thing, or what would seem odd if we did not know somewhat of Poor-law ways, is that men are to be found who will state that they have been guardians for years, and that during their time of office there have been no complaints. What must be the mental or moral condition of a man who, as he goes week after week through these wards, does not perceive that there must be a scandalous system of terrorism rampant in them to make it possible for 200 sick people, with only one nurse among them, to be without complaint. There are people to whom sick people, even on their dying bed, will not complain, and we cannot but fear that in many cases of such are the guardians of the poor. It is essential that independent visiting committees should be appointed to all workhouses, and that the free light of publicity should especially enter those wards where the sick and the helpless have to live out their lives, every day and all day at the mercy of pauper helps.

The adjourned meeting of the Epidemiological Society of London for the further discussion of Dr. McVail's paper on the aërial convection of small-pox from hospitals will be held on January 31st at 8 P.M.

MEDICAL NEWS.

DR. C. THEODORE WILLIAMS has celebrated his term of office as President of the Royal Meteorological Society by presenting the sum of £100 to form the nucleus of a research fund.

MR. THOMAS PUGH, whose munificent bequest of £5,000 to the Medical Benevolent College has just been announced, was some few years ago the Master of the Merchant Taylors' Company. His father and two brothers were highly respected medical practitioners in the city for many years.

DR. ROWLAND HILL COOMBS, President-Elect of the South Midland Branch of the British Medical Association and Physician to the Bedford General Infirmary and Fever Hospital, has been placed on the Commission of the Peace for the borough of Bedford.

SOME idea of the magnitude of the work which the St. John Ambulance Association is doing owing to the help generously given by the medical profession may be gathered from the fact than in the twelve months ending Michaelmas, 1893, it issued no fewer than 30,761 first-aid and nursing certificates.

OPHTHALMIA AT THE CARDIFF WORKHOUSE INFIRMARY.—At a monthly meeting of the Visiting Committee of the Cardiff Workhouse a report was received from the medical officer to the workhouse infirmary, relative to the number of cases of ophthalmia at present under treatment, and the consequent overworking of the nursing staff. The committee agreed to act upon the medical officer's recommendation, to make use of the isolation wards, and engage an additional nurse. We are glad to note that "it was also agreed to suggest to the Schools Committee that the time was now opportune when the general question of providing for such cases at the schools should be investigated."

THE first annual dinner of the British Gynæcological Society was held at the Holborn Restaurant on January 18th. The chair was taken by the President, Mr. Bowreman Jessett. Dr. Ligertwood, of the Royal Hospital, Chelsea, acknowledged the toast of "The Navy, Army, and Reserve Forces." The toast of the evening was given by Dr. F. W. Pavy, who congratulated the Society on its vigorous activity and its steady growth, until it now numbered some 500 members. The toast of "The Kindred Societies" was given by Dr. Leith Napier, and acknowledged by Dr. Hare; and that of "The Guests" by the Master of the Apothecaries' Company and Dr. Dawson Williams. "The Health of the President" was given by Dr. Thomas Savage, and was cordially received.

THE MEDICAL DEFENCE UNION.—The importance of mutual combination for purposes of defence and for attacking quackery, is now, we feel convinced, becoming well understood by the profession. We are very glad to learn that the Medical Defence Union has now over 3,000 members. Considering that but a very few years ago it numbered but a few hundreds, this rapid growth cannot but be most beneficial to the profession. The efficiency of a union of the kind is, when the management is judicious and experienced, in direct proportion to its income. We hope, therefore, that in no short time every member of the Association, and, indeed, of the profession, will see that it is his duty not only to protect himself, but to help in protecting his colleagues by subscribing to what is a most valuable form of insurance.

AMERICAN JOTTINGS.—Rush Medical College, Chicago, has just opened its new laboratories. The building is 50 by 100 feet, five storeys high, and cost nearly 100,000 dollars.—The *Boston Medical Journal* states that a house in that city contains five full generations—the great great-grandfather and mother, both over 90 but well and active; the great grandmother and her husband, the grandmother and her husband, the mother and father, and the daughter nearly 2 years old.—The Detroit Medical Association has adopted the following scale of charges, which is "intended to guide rather than govern members." The maximum and minimum figures have reference to the degree of responsibility and time consumed in a given case rather than to the circumstances of the patient, which may justify a lower or a higher charge. All bills are to be considered due when services are rendered; statements should be rendered monthly. For an ordinary office prescription the fee is fixed at from 1 to 5 dollars. Other fees range from 2 to 5,000 dollars. The last (equal to £1,000) is the maximum for an operation for the removal of stone from the bladder. Three thousand dollars (£600) is the maximum fee for Cæsarean section, ovariotomy, cœliotomy, hysterectomy, abdominal and vaginal hysterorraphy, and amputation through the hip-joint.—The following statistics (from the *Cleveland Medical Gazette*) show the proportion of homœopathic physicians to orthodox practitioners in the various cities of the United States: Cleveland, Ohio, 139 out of a total of 627, or 20 per cent.; Cincinnati, 53 out of 723, or about 7 per cent.; Columbus, 20 out of 359, or about 6 per cent; Indianapolis, 12 out of 320, or nearly 4 per cent.; Chicago, 348 out of 2,700, or 12 per cent.; Detroit, 59 out of 482, or 12 per cent.; St. Paul, 26 out of 200, or 13 per cent.; Minneapolis, 46 out of 328, or 14 per cent.; Pittsburgh, 54 out of 383, or 14 per cent.; Allegheny, 17 out of 150, or less than 11 per cent.; Philadelphia, 340 out of 2,380, or 14 per cent.

MEDICAL VACANCIES.

The following vacancies are announced:

AXMINSTER UNION.—Medical Officer for four Districts. Salary, £72 16s. 8d. per annum; midwifery and surgical operations extra. Applications to W. Forward, Clerk, by February 7th.

BRIGHTON THROAT AND EAR HOSPITAL, 23, Queen's Road, Brighton.—House-Surgeon; non-resident. Salary, £52 per annum. Applications to the Secretary by February 5th.

BUCKINGHAMSHIRE GENERAL INFIRMARY, Aylesbury.—Resident Surgeon and Apothecary, unmarried and duly qualified. Salary, £80, increasing £10 per annum to £100, with board, lodging, and washing. Applications and testimonials to Mr. George Fell, Solicitor, Aylesbury, by January 29th.

CARRICKMACROSS FEVER HOSPITAL.—Medical Officer. Salary, £50 per annum. Election on February 6th, when candidates must personally attend.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road, W.C.—House-Surgeon. Applications, with testimonials, to the Secretary by February 5th.

CITY OF SHEFFIELD.—Assistant Resident Medical Officer of the two City Hospitals for Infectious Disease; doubly qualified. Salary, £120 per annum, with board, lodging, and attendance. Applications endorsed "Assistant Medical Officer" to J. W. Pye-Smith, Town Clerk's Office, Sheffield, by January 27th.

DARLINGTON HOSPITAL AND DISPENSARY.—House-Surgeon, doubly qualified and unmarried. Salary, £100 per annum, with board and lodging. Applications, with testimonials, to the Honorary Secretaries, 88, Northgate, Darlington, by January 27th.

DENTAL HOSPITAL OF LONDON, Leicester Square, W.C.—Assistant Dental Surgeon. Applications to J. Francis Pink, Secretary, by March 12th.

FINSBURY DISPENSARY, Brewer Street, Goswell Road, E.C.—Physician. Honorarium of £40 per annum. Applications and testimonials to D. W. Williams, Honorary Secretary, by January 27th.

GREENWICH UNION INFIRMARY.—Second Assistant Medical Officer; unmarried. Salary, £80 per annum, with board, lodging, and attendance. Applications to Samuel Saw, Clerk to the Guardians, Union Offices, Greenwich, by February 5th.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, Bloomsbury, W.C.—Assistant House-Surgeon (non-resident). Appointment for six months. Salary £20. Applications, with not more than three testimonials, to the Secretary, by Tuesday, January 30th.

KILBURN, MAIDA VALE, AND ST. JOHN'S WOOD DISPENSARY.—Vacancy on the Honorary Medical Staff. Applications to the Secretary, 13, Kilburn Park Road, by February 14th.

MOUNTMELLICK UNION, Clonaslee Dispensary.—Medical Officer. Salary, £100 per annum, with £20 as Medical Officer of Health, together with registration and vaccination fees. Applications to Mr. Robert Dunne, J.P., Honorary Secretary, Brittas, Clonaslee, King's County. Election on January 29th.

NEW HOSPITAL FOR WOMEN, 141, Euston Road, N.W.—Lady Dispenser. Salary, £90 per annum. Applications to the Secretary by February 17th.

OWENS COLLEGE, Manchester.—Professor of Zoology. Applications to the Council of the College, under cover to the Registrar, by April 3rd.

PARISH OF LAMBETH.—Assistant Medical Officer and Dispenser for the Infirmary, Brook Street, Kennington; doubly qualified. Salary, £125 per annum, with board, apartments, and washing. Applications to W. B. Wilmot, Clerk, Guardians' Board-room and Offices, Brook Street, Kennington Road, S.E., by January 30th.

RAMSGATE AND ST. LAWRENCE ROYAL DISPENSARY AND SEAMEN'S INFIRMARY.—Resident Medical Officer; unmarried; doubly qualified. Salary, £120 per annum—£10 allowed for substitute for annual holiday—with furnished apartments, gas, firing, and attendance. Applications to the Secretary by February 6th.

ROYAL PIMLICO DISPENSARY, Buckingham Palace Road, S.W.—Attending Medical Officer; must reside in the district. Applications and testimonials to the Secretary by February 5th.

ROYAL SOUTH LONDON DISPENSARY, St. George's Cross, S.E.—Surgeon in Ordinary. Honorarium, £30 per annum. Applications to the Committee of Management by January 31st.

SWINDON NEW TOWN LOCAL BOARD.—Medical Officer of Health. Must hold D.P.H. certificate. Salary, £100 per annum. Applications to Henry Kennedr, Clerk to the Board, by January 29th.

UNIVERSITY COLLEGE OF SOUTH WALES AND MONMOUTHSHIRE.—Lecturer on Materia Medica and Pharmacy. Stipend, £50 a year. Applications to Ivor James, Registrar, by January 27th.

WEST DERBY UNION.—Resident Assistant Medical Officer for the Workhouse; doubly qualified. Salary, £100 per annum, with first-class rations and apartments. Applications to Harris P. Cleaver, Union Clerk, Brougham Terrace, Liverpool, by February 6th.

WESTMINSTER HOSPITAL MEDICAL SCHOOL.—Lecturer on Bacteriology. Applications to the Dean, Mr. Spencer, by February 6th.

MEDICAL APPOINTMENTS.

BARBER, Mr. W., appointed Medical Officer for the Kilburn District of the Parish of St. John Hampstead.

CROPPER, John H., L.R.C.P., L.R.C.S., appointed Clinical Assistant to the Royal Westminster Ophthalmic Hospital.

DAVIS, Norman, M.D., B.S.Dunelm, appointed Medical Officer to the Bracknell District and Workhouse of the Easthampton Union, *vice* A. M. Barford, L.R.C.P.Lond., M.R.C.S.Eng., resigned.

DORMAN, Dr., appointed Medical Officer for the Keady Dispensary District, *vice* John Gower Allen, L.R.C.P., L.R.C.S.I., resigned.

FOWLER, C. J., L.D.S.R.C.S.Eng., appointed Consulting Dental Surgeon to the Birmingham Children's Hospital.

GIBSON, E. Arthur, M.B., C.M.Glasg., appointed House-Surgeon to the Paddington Green Children's Hospital.

GRAVELY, William Homewood, L.R.C.P.Lond., M.R.C.S.Eng., appointed Temporary Medical Officer for the Cowfold District of the Cuckfield Union.

HODGE, William T., M.R.C.S.Eng., D.P.H., appointed Medical Officer for the Middle District of the Ellesmere Union.

JACKSON, C., L.R.C.P.Edin., L.F.P.S.Glasg., appointed Medical Officer for the North District of the King's Lynn Union.

LEACH, John, M.A., M.B., C.M.Aberd., appointed House-Surgeon to the Manchester Southern Hospital for Women and Children; also House-Surgeon to the Manchester Maternity Hospital.

LILLEY, James Harris, M.A., M.D., M.R.C.S., appointed Honorary Medical Officer of the Provident Branch of the Hereford Dispensary.

LYLE, Thomas, M.D.Glasg., appointed Surgeon to the Newcastle Throat and Ear Hospital, *vice* John Burdwood, L.R.C.P., L.R.C.S.Edin., resigned.

MODLIN, J. Gibson, M.B., B.S.Dunelm, L.S.A.Lond., appointed Honorary Surgeon to the Monkwearmouth and Southwick Hospital, Sunderland, *vice* W. Percy Blumer, resigned.

MONTGOMERIE, Hugh, M.D.Edin., reappointed Physician to the West Cornwall Dispensary and Infirmary.

MONTGOMERY, James B., M.D.Glasg., F.R.C.P.Lond., reappointed Consulting Physician to the West Cornwall Dispensary and Infirmary.

MOORE, Henry Cecil, M.R.C.S.Eng., L.S.A., appointed Honorary Medical Officer to the Hereford Infirmary.

NAPIER, Dr. T. A. W., appointed Medical Officer for the Sixth District of the Birkenhead Union.

NORTH, Dr. T., appointed Medical Officer for the High District of the Longtown Union.

ROBERTS, Hugh C., M.R.C.S.Eng., L.R.C.P.Lond., appointed Deputy Surgeon to the Great Northern Railway, Melton Mowbray.

ROBERTSHAW, Walter M., M.B., C.M.Univ.Edin., appointed Medical Officer of Health to the Stocksbridge Local Board, Yorkshire, *vice* G. Browning, M.R.C.S., resigned.

SYMONS, John, M.R.C.S.Eng., reappointed Surgeon to the West Cornwall Dispensary and Infirmary.

THOMPSON, Alfred, L.R.C.P.Lond., etc., appointed Medical Officer and Public Vaccinator to the Barford District of the Cosford Union, *vice* J. J. Reynolds, L.R.C.P.Lond., etc., resigned.

TIPPING, H. Hubert, M.R.C.S., L.R.C.P.Lond., appointed Resident Medical Officer to the Birmingham Workhouse Infirmary, *vice* W. Selby, M.R.C.S., L.R.C.P., resigned.

THAQUAIR, James H., M.B., C.M.Edin., appointed Junior Assistant Medical Officer to the Staffordshire County Asylum, Burntwood, Lichfield.

WELCH, John B., M.B.Lond., M.R.C.S.Eng., appointed Honorary Consulting Physician to the Birmingham Children's Hospital.

WEATHERBE, Lewis Johnstone, M.B., C.M.Edin., appointed District Medical Officer of the Rotherham Union.

WILLS, W. A., M.D.Lond., M.R.C.P., appointed Physician to the North-Eastern Hospital for Children, Hackney.

DIARY FOR NEXT WEEK.

MONDAY.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. Frederick Treves: Peritonitis. (First Lettsomian Lecture).

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. W. Lang: Conjunctival Affections. Bacteriological Laboratory, King's College, W.C., 3 to 5 P.M. Lecture: Anthrax and Malignant Œdema. Practical work: Staining Sections. London Throat Hospital, Great Portland Street, 8 P.M.—Dr. Edward Woakes: Nasal Neuroses.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr. Hyslop: Delusional Insanity; Paranoia.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 1 P.M.—Dr. Payne: The Treatment of Eczema. Hospital for Consumption, Brompton, 4 P.M.—Dr. Green: Bronchitis and Emphysema. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Quarry Silcock: Myopia, with Illustrative Cases.

METROPOLITAN COUNTIES BRANCH: WEST LONDON DISTRICT, St. Mary's Hospital, 8.30 P.M.

POST-GRADUATE COURSE, West London Hospital Hammersmith, W., 5 P.M.—Mr. Keetley: Ankylosis and Stiff Joints.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and the Epileptic, Queen Square, 2 P.M.—Dr. Buzzard: Cases in the Hospital. Hospital for Sick Children, Great Ormond Street, 3.30 P.M.—Dr. Barlow: Cases in the Wards. Central London Sick Asylum, Cleveland Street, 5.30 P.M.—Mr. Thomas Bryant: Cases in the Wards.

HARVEIAN SOCIETY OF LONDON, 8.30 P.M.—Dr. W. J. Gow: Eight Cases of Vaginal Hysterectomy for Cancer. Dr. W. R. Dakin: Modern Methods of Treating *Post-partum* Hæmorrhage.

FRIDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. Green: Cases in the Wards.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY, West London Hospital, 8 P.M.—Pathological specimens will be shown by Dr. Clemow and Mr. J. R. Lunn. Mr. Alban Doran: The Feeding of Patients after Abdominal Sections. Mr. Lenthal Cheatle: Complications in certain Ear Diseases and their Treatment.

WEST KENT MEDICO-CHIRURGICAL SOCIETY, the Miller Hospital, S.E.—Dr. Bantock: The Diagnosis of Abdominal Tumours and Intumescence.

SATURDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M.—Dr. Corner: Stupor; Catalepsy; Katatonia: Dementia.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTH.

FARQUHARSON.—On December 30th, 1893, at Lucea, Jamaica, the wife of W. G. Farquharson, M.R.C.S., L.R.C.P., of a daughter.

MARRIAGES.

DICKS—MACQUIFFAN.—On January 18th, at Aberdeen, by the Rev. G. Webster Thomson, B.A., Ernest White Dicks, "Lynn Hurst," Market Harborough, Leicestershire, eldest son of the late Thomas Dicks, Ecton Manor, Northamptonshire, to Isabelle Monro, eldest daughter of C. M. MacQuiffan, M.D., J.P. No cards. At home after February 8th.

GWYNNE-HUGHES—MANDY.—On November 6th, 1893, at St. Paul's Church, Sydney, New South Wales, by the Rev. B. Boyce, Devereux Gwynne-Hughes, L.R.C.P., L.R.C.S.Edin., City Health Officer, Sydney, and son of the late Rev. R. J. Gwynne-Hughes, M.A Oxon., Tregit, South Wales, to Isabel, youngest daughter of the late Henry Charles Mandy, Esq., Solicitor, Richmond-on-Thames, England.

O'KELL—ACTON.—On January 20th, at St. Andrews, Nottingham, by the Rev. L. H. Gwynne, Vicar of Emmanuel Church, Nottingham, John Bathurst O'Kell, M.R.C.S., L.R.C.P., of 3, Magdala Road, Nottingham, to Frances Mary, only child of Charles B. Acton, of Pietermaritzburg, Natal.

PINKERTON—STANLEY.—On January 23rd, at St. John's, Upper Norwood, by the Rev. W. F. La Trobe Bateman, Vicar, Robert Lachlan Pinkerton, M.A., M.D., Harlesden, formerly of Paisley, to Eliza Ann (Lilie), youngest daughter of Edward Stanley, Sandon, South Norwood, and adopted daughter of William Ford Stanley, Cumberlow, South Norwood.

SULLY—HEATH.—On October 26th, 1893, at Sydney, by the Rev. John Vaughan, Albert Max Sully, M.R.C.S.Eng., L.R.C.P.Lond., Riverstone, N.S.W., Australia, son of Geo. B. Sully, J.P., C.C., of Bridgwater, England, to Emmie, eldest daughter of Thomas Heath, of Nottingham and Burton-on-Trent, England.

DEATHS.

DAVIDSON.—On January 23rd, at Uxbridge, Anne Aglionby, wife of John Davidson, M.B.Lond., aged 37.

OLIVER.—On January 23rd, at 2, Kingsland Road, N.E., "Lulie," the infant daughter and only child of Hewitt and Gertie Oliver, aged 11 months.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

DR. T. M. WATT (Hovingham, near York) is anxious to know of a home which would take in a boy, aged 3, who has paraplegia and incontinence of urine and fæces. His father is an agricultural labourer.

A MEMBER asks for advice in the treatment of a middle-aged, stout teetotaller, who is troubled by an acrid, coppery taste in the mouth, only temporarily relieved by aperients.

SILKWORM GUT SUTURES.

M.D. asks how long the above take to be absorbed when deeply placed, as in perineorrhaphy, and how long they are likely to be a source of inconvenience to patient if left in place for an indefinite time.

*** Silkworm gut is never absorbed, but it causes very little irritation if left in.

COLORIMETRIC TEST FOR THE PRESENCE OF LEAD IN URINE—QUALITATIVE *v.* QUANTITATIVE.

DR. R. R. RENTOUL (Liverpool) writes: Will you please give, in the next issue of the BRITISH MEDICAL JOURNAL, the most reliable test by which lead can be detected in the urine—qualitative test and also quantitative test?

*** Evaporate 50 cubic centimetres, or a little less than two fluid ounces of urine to dryness; ignite the residue, extract the lead from the residue by means of a small quantity of dilute hydrochloric acid. Precipitate the lead sulphide by means of sulphuretted hydrogen or ammonium sulphide. Compare the coloration thus obtained with that given by a lead solution of known strength.

ANSWERS.

J. L. M.—A private solicitor should be consulted.

W. H., Blackpool.—Our correspondent should in the first instance communicate with the makers.

A. S.—A question with regard to nocturnal incontinence was inserted in the BRITISH MEDICAL JOURNAL not long ago, and our correspondent might consult the answers in the JOURNAL of November 11th, p. 1,087.

D. S.—The following works on the disposal of sewage will be found useful: Corfield's *Treatment and Utilisation of Sewage*, 3rd edition, edited by the author and Dr. Louis Parkes (Macmillan); *Sewage Disposal Works*, by Santo Crimp, *Sewage Treatment and Disposal*, Thomas Wardle (John Heywood).

J. H.—Health officers have been appointed by the County Councils of Durham, Essex, Derby, Lancashire, the West and North Ridings of Yorkshire, London, Stafford, Surrey, Worcester, and Glamorgan. In addition, some Councils, we believe, employ health officers of standing for special purposes; and large combined districts officered by one man exist in, and practically embrace, many counties—for example, Kent, Sussex, Salop, Gloucester, Hertford, Leicester, Westmorland, and Carnarvon.

CREASOTE IN PULMONARY TUBERCULOSIS.

IN reply to questions from several correspondents as to the mode of dispensing creasote in solution with glycerine and chloroform for use in the treatment of pulmonary tuberculosis, as recommended by Carasso (EPITOME, December 9th, 1893, No. 478), we are informed by Mr. W. Martindale that creosote prepared from beechwood contains much guaiacol, and is freely miscible with glycerine. It is much more soluble in water than creasote prepared from pinewood, which consists principally of cresols. This will mix freely with alcohol, but is thrown out of solution when mixed with water, whereas beechwood creasote is not so thrown out. Pinewood creasote is not miscible with or soluble in glycerine, but it mixes freely with oils and fats. It is probably a more powerful antiseptic. We are informed by a correspondent that he has prescribed creasote as follows: Creasote m xv, alcohol ʒss, glycerine ʒij, chloroform mxx. This gave a clear solution, of which the patient took 40 drops twice daily in a tablespoonful of sugar-water after meals.

PROPHYLAXIS OF INFLUENZA.

DR. J. J. L. RATTON (Blackheath) writes: In answer to the inquiry of "Lancastrian" in the BRITISH MEDICAL JOURNAL of January 20th *re* the prophylaxis of influenza, let me bring to his notice a bactericide snuff that I have used for the past twelve months with excellent effect. Though very liable to severe colds and to influenza, it has preserved me free from them since January, 1893. It consists of salol gr.iv; morphine gr.iv; salicylic acid gr.xx; boracic acid ʒj; bismuth. carb. ʒjss. A pinch morning and evening.

HOSPITAL SURGEON writes: In my experience, and in that of many friends and patients to whom I have recommended it, a most pleasant, valuable, and effective preventive of influenza has been found in the use of boraline, a compound consisting essentially of boracic acid and lanoline, pleasantly perfumed and put up into convenient tubes by Messrs. Burroughs and Wellcome. This valuable antiseptic preparation is simply injected into the nostril by pressing on the bottom of the soft tube, or may be introduced on the tip of the finger; smearing the mucous membrane of the interior of the nostril by a simple act of inhalation, it is carried up into the air passages of the nose, and renders them antiseptic. Although surrounded by influenza, neither I myself, nor any of my household, nor any person who has adopted its use on my recommendation, has contracted the malady. Thus far it has seemed to act as a most complete, although, of course, I would not say an infallible, prophylactic; but in circumstances and under conditions where the spread of influenza was much to be expected from contact with numerous sufferers, the use of this boracic compound has proved effectual, and has seemed to confer complete immunity. I had myself been troubled for some years with almost constant chronic catarrh, assuming the troublesome and chronic post-nasal form, with much headache and neuralgia, and pain in the frontal cells. Since I have taken the precaution of smearing the interior of the nostril before going out into the air and at night when retiring to bed with this compound, I have been completely cured, and have for the last twelve months enjoyed immunity from catarrhal attacks, such as I had not previously known. I think, therefore, it is likely to be found very useful as a preventive of nasal catarrh generally, and as treatment of it in the early stages.

EUREKA writes: In reference to the letter of "Lancastrian" on this subject in the BRITISH MEDICAL JOURNAL of January 20th, I would strongly advise him to make use of a saturated solution of camphor in pure terebene as an inhalant. Of this a small bottle can be carried about while visiting cases of the disease. A few drops on a silk handkerchief will be found quite sufficient if the handkerchief is held close to the nose during the inhaling process. In most cases there is no difficulty in doing this in the presence of the patient, but if postponed until the termination of the visit it would, I think, be equally efficacious. The drops retain their potency on the handkerchief for a considerable time. They should be renewed when the sniffing and inhaling process fails to elicit the peculiar but not disagreeable response in the nose and throat.

DR. JAMES PARKER (Glasgow) writes: I would suggest to your correspondent "Lancastrian" to try the triple valerianate of quinine, iron, and zinc as a prophylactic in influenza. I can assure him he will find a dose of two pills three times daily put any influenza patient on his feet in ten days or a fortnight; such has been my experience, and whatever else I may have tried in the first instance the results have always been so slow and convalescence protracted that I have resorted in the end again to the above combination with the happiest result.

NOTES, LETTERS, Etc.

THE INTERNATIONAL MEDICAL CONGRESS AT ROME.

OWING to the fact that the International Medical Congress in Rome is to be held immediately after Easter, it is anticipated that very great pressure will be caused on the hotel accommodation. Our Roman correspondent writes that a new Grand Hotel, situated between the Piazza S. Bernardo and the Piazza dei Termi, one of the highest and healthiest parts of the city, has just been opened. The building, which is owned by an English company, is well built, and fitted with modern sanitary appliances, will accommodate a large number. Intending visitors, however, ought not to leave the matter to the last moment. Messrs. Thomas Cook and Son (Ludgate Circus, E.C.), have undertaken, at the request of the Central Committee, to organise the arrangements for rooms, but all applications must be received by them not later than February 15th. The same firm has made arrangements to supply railway tickets by various routes to and from Rome, and to issue them at the reduced rates allowed by the various railway companies. They have also arranged for a personally conducted party to leave London on March 27th, arrive in Rome on March 29th, to leave Rome on April 7th, and to arrive in London on April 10th.

SUBLIMED SULPHUR IN DIPHTHERIA.

DR. R. J. LEEPER, late Surgeon to the Condobolin Hospital, N.S.W. (Lithgow, N.S.W.) writes: I am afraid that my experience differs a good deal from Dr. Frazer's treatment of croupous diphtheria.[1] Two years ago I had the misfortune to have an epidemic of croupous diphtheria raging in the town I was practising in, and though I used iron in large doses internally, and blowing sublimed sulphur constantly on the affected parts of the throat, I had to give it up as it had not the slightest effect. What I found of most use was the sulphurous acid internally in 10-minim doses every hour in a wineglass of water, and a spray of the same used often, along with a liberal supply of stimulants and fluid nourishment concentrated.

[1] BRITISH MEDICAL JOURNAL, November 4th, 1893, page 992.

Church Sanitary Association.

The Rev. F. Lawrence, Honorary Secretary (Weston Vicarage, York) writes: I shall be much obliged if you kindly permit me to make known to your readers that summaries of the papers read during the past year at the Church House, under the auspices of the above named Society, can be had on application. They include papers upon the following subjects: "Sanitation as Taught by the Mosaic Law," "Work and its Dwellings," "Non-poisonous White Lead," "Prevention of Cholera," "Ventilation," "Cremation," "The Smoke Nuisance and How to Remedy it," "The Prevention of Consumption amongst the Poor," and "Sanitary Bakeries."

Choice of an Anæsthetic for the Removal of Adenoid Vegetations from the Naso-pharynx.

Mr. E. S. Grant Morris, F.R.C.S., M.R.C.P.(Lond.), Anæsthetist to the Dental Department of St. Thomas's Hospital, thinks that chloroform should be preferred to nitrous oxide, as it allows the operator to proceed with deliberation to remove all the growths. For the last three years and a half he has given chloroform regularly for the removal of adenoids in the Ear and Throat Departments of St. Thomas's Hospital, where the following precautions are always observed, besides for very many cases at Great Ormond Street Hospital for Children and in private practice, without but one accident.

First.—Position: The child should be on its back, with its head hanging over the end of the table. The blood then collects in the naso-pharynx, as in a cup, and overflows through mouth and nose, none getting into the larynx; thus one of the chief dangers of the operation is entirely obviated. In this position, too, the hæmorrhage can be easily and effectually controlled by the pressure of a mounted sponge in the naso-pharynx against the base of the skull.

Second.—The anæsthetic should never be pushed, and the cough reflex must not be abolished; neglect of this precaution, I am sure, adds very greatly to the risk.

Erratum.—The sense of the first sentence in Mr. C. G. Wilkin's note on page 171 was inverted by the accidental omission of the word "not." It should have read "nitrous oxide cannot be reckoned on," etc.

"Consultants."

Dr. W. W. Hardwicke (East Moulsey) writes: Your article on the above subject in the British Medical Journal of January 13th is well timed. The different branches of the profession have been for a long time in a very chaotic state, and the public have had great difficulty in discriminating between and understanding our different grades, orders, titles, etc. Consultants proper, we may say, have ceased to exist. I am not aware of a single practitioner who reserves himself for strict consulting practice, for no one can be a pure consultant who receives patients independently of a general practitioner. It comes to *this* therefore: We all become for the time being consultants when called in by a brother practitioner. If we want a second opinion, we either obtain it from a brother practitioner, or send for a "specialist," one who has now taken the place of the older "consultant." We may consider, therefore, the profession to be made up of (1) specialists and (2) general practitioners. Members of the first order may be described as consisting of those who have made a particular study of a certain branch of the profession; for instance, surgery, midwifery, phthisis, skin diseases, etc., these generally hold university degrees, are Fellows or Members of one of the Colleges, and usually hold a hospital appointment. Members of the second order are sufficiently described by their title.

New Tests for Albumen in Urine.

From time to time a new acid is recommended in place of the time-honoured nitric acid as a precipitant of albumen in urine. A year or so back a paper by Professor MacWilliam was published in the British Medical Journal, in which he recommended salicyl sulphonic acid as a delicate test. More recently trichloracetic acid has been suggested, and has been highly spoken of by Dr. Mortimer Granville in the *Lancet* and Mr. E. J. Millard in the *Pharmaceutical Journal*, 1893, p. 532. These observers state that it does not precipitate peptone; hence its special value. It is quite true that it does not precipitate true peptone, but it must be remembered that the so-called peptone of peptonuria is usually a proteose or albumose, and these substances are precipitated partially by trichloracetic acid in the cold, but the precipitate dissolves on warming.[1]

Urticaria following the Eating of Periwinkles.

Dr. Herbert T. Sells (Northfleet, Kent) writes: I am surprised at the letter of Dr. John C. Cullen, respecting periwinkles as a cause for urticaria. I have seen numerous cases, certainly half a dozen or more, within the last two years, and I have now a two patient just recovering. In all these cases periwinkles was the cause. In fact so common have I found this, that I never trouble to record any particulars of such cases.

The Temperance Movement in Germany.

A meeting was held at Munich in the early part of January with a view to the establishment of an association against the abuse of spirituous liquors. The meeting was presided by Dr. Brendel, and among those present were Professor von Pettenkofer, Professor Voit, Dr. Ballinger, and Professor Munk. The association is to be a branch of the German Association against the Abuse of Spirituous Liquors.

The Identification of the Unclaimed Dead.

A Horsham jury has made a sensible suggestion. After a stormy night a man, unknown, was found in the road in a dying condition. No clue to his identity was discovered, and he was buried. Why, said the jury, should he not have been photographed? The coroner appears to have no power to order any expenditure in this direction, but the jury were strongly of opinion that something ought to have been done to preserve a better record of his appearance than would be given by the description of his clothes, and the coroner promised to forward their representation to the chief constable.

[1] Compare C. J. Martin, *Journ. of Physiology*, vol. xv, part 4.

LETTERS, COMMUNICATIONS, Etc., have been received from:

(A) Professor T. Clifford Allbutt, Cambridge; Dr. W. S. Abrahams, London; Mr. P. T. Adams, Maidstone; A.D.; Asranius; Mr. T. R. Atkinson, Sherborne; A.G.M.; Achilles; Messrs. Arnold and Sons, London. (B) Mr. F. Bennett, Eastbourne; L. Buchanan, M.B., Arragh; Mr. E. C. A. Baines, Henley-on-Thames; Mr. E. H. Brannan, Southport; Mr. G. G. Bullmore, Newquay; Messrs. A. and C. Black, London; B.; Dr. F. Boulton, London; Mr. E. Bell, London; Messrs. Blackett and Co., London; Mr. L. A. Bucknell, London. (C) Mr. F. W. Cory, Bournemouth; Dr. F. C. Coley, Newcastle-on-Tyne; J. M. Cotterill, M.B., Edinburgh; Dr. E. Crossman, Hambrook; Dr. R. H. Coombs, Bedford; F. W. Clark, M.B., Lowestoft; Dr. A. H. W. Clemow, London; Messrs. T. Christy and Co., London; Messrs. Cassell and Co., London; J. A. Coutts, M.B., London; Circumspicions; Dr. W. A. Gardiner, Lincoln; A. G. Cunningham, M.B., Bristol; Mr. R. P. Connell, Clonmel; Mr. E. Clark, London. (D) Mr. H. P. Dunn, London; Mr. D. L. Dickinson, London; Dr. N. Davis, Bracknell; Mr. J. Dicks, London; Messrs. Digby, Long, and Co., London; Mr. R. Dawson, London. (E) Mr. E. East, London; Eureka; Dr. F. R. England, Montreal. (F) Dr. D. Ferrier, London; Mr. J. E. Farkas, Buda-Pesth; Mr. E. F. Flynn, London; Dr. A. Fyfe, Hayes; Dr. D. A. Fraser, Totnes; Ferment; Forutx; Mr. C. Forbes, London. (G) Dr. H. R. Green, Knaphill; Messrs. Goteh and Gomme, London; Mr. A. J. Garland, Oamaru, New Zealand; General Practitioner; Mr. A. Graham, London; Mr. P. A. Green, Kimberley. (H) H. V. C.; Dr. A. Hill, Birmingham; Mr. W. Hartigan, Hong Kong; Mr. W. W. Hardwicke, East Moulsey; Mr. R. R. Hardwicke, London; Messrs. J. Haddon and Co., London; Honoris; H.H.S.; (I) Dr. J. Ince, Swanley. (J) J. S. (K) Dr. G. C. Kingsbury, Blackpool. (L) H. Lund, M.B., Manchester; J. Leach, M.B., Manchester; Mr. M. Lawrie, London; Rev. F. Lawrence, York; J. Limont, M.B., Newcastle-on-Tyne; L.R.C.S.I.; Mr. J. Lawrence-Hamilton, Brighton; Mr. H. Littlewood, Leeds. (M) Mr. W. Marriott, London; E. H. G. Morris, M.B., London; Mr. E. Mortimer, Halifax; Messrs. Mowbray and Co., London; Member B.M.A.; M.D.; L. G. Modlin, M.B., Sunderland; J. R. Morison, M.B., Newcastle-on-Tyne; M.O.H.; Mr. F. J. McKintosh, London; Mr. E. H. Moore, Falmouth; J. L. Martin, M.B., Chelmsford; Medicus; Mr. T. Murtagh, Brighton. (N) Dr. T. G. Nasmyth, Cupar. (O) Dr. J. Oliver, London; Dr. B. O'Connor, London; Dr. T. Oliver, Newcastle-on-Tyne. (P) Mr. W. E. Pitman, Bromley; F. L. Pochin, M.B., London; Mr. R. W. Pendleton, Brighton; P. B.; Practitioner; Mr. W. H. Pearce, London; Dr. J. Parker, Glasgow; P. T. (R) Dr. Rentoul, Liverpool; Mr. H. C. Robarts, Melton Mowbray; Dr. G. Robertson, London; Dr. J. Ratton, London; R. Roxburgh, M.B., Weston-super-Mare; Mr. L. Rawthorn, Preston. (S) Mr. C. H. B. Shears, Liverpool; Lord Sandhurst, London; Sapoo; Mr. R. R. Sleman, London; Mr. H. Shubi, London; Mr. R. W. Stewart, Glasslough; Mr. J. Smith, London; Mr. W. Sterne, Johannsburg; Dr. E. M. Skerritt, Bristol; Dr. H. Simpson, Manchester; Mr. G. Stevens, Bury St. Edmunds; Mr. H. T. Sells, Northfleet. (T) Dr. W. B. Thorne, London; Dr. L. B. Trotter, Coleford; Turned of Fifty; Mr. W. Thacker, London; Tyro; Dr. C. L. Tuckey, London; J. H. Traquair, M.B., Lichfield. (V) Veritas. (W) Dr. W. A. Wills, London; Dr. F. J. Waldo, London; Messrs. M. Ward and Co., London; Mr. G. C. Wilkin, London; Mr. W. R. Williams, Preston; Mr. J. H. Worrall, Sheffield; Mr. R. C. Worsley, Uxbridge; Mr. T. M. Watt, Hovingham; W.W.; Mr. A. Wiglesworth, Liverpool; Dr. E. Walford, Cardiff; Mr. M. A. Wardle, Bishop Auckland. (Y) Young Practitioner, etc.

Books, Etc., Received.

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Transactions of the Royal Academy of Medicine in Ireland. Vol. XI. Edited by William Thomson. Dublin: Fannin and Co. 1893.

An Epitome of the Law and Practice connected with Patents for Inventions. By James Johnson and J. H. Johnson. Second edition. London: Longmans, Green, and Co. 1894. 2s. 6d.

Common Neurosis, or the Neurotic Element in Disease and its Rational Treatment. By Dr. J. F. Goodhart. Second edition. London: H. K. Lewis. 1894.

The Technique of *Post-Mortem* Examinations. By Dr. L. Hektoen. Chicago: The W. T. Keener Co. 1894.

Electricity in Diseases of Women and Obstetrics. By Dr. F. H. Martin: Chicago: The W. T. Keener Co. 1893.

The Fauna of the Deep Sea. By S. J. Hickson. London: Kegan Paul, Trench, Trubner, and Co. 1894.

Infectious Diseases Notification and Prevention. By Dr. L. C. Parkes. London: H. K. Lewis. 1894. 4s. 6d.

The Students' Dictionary of Medicine and the Allied Sciences. By Dr. A. Duane. London: Longmans, Green, and Co. 1894. 21s.

Stricture of the Urethra. By G. F. Lydston. Chicago; The W. T. Keener Co. 1893.

*** In forwarding books the publishers are requested to state the selling prices.

THE LETTSOMIAN LECTURES
ON
PERITONITIS.

Delivered before the Medical Society of London, January, 1894.

By FREDERICK TREVES, F.R.C.S.,

Surgeon to, and Lecturer on Surgery at the London Hospital; Examiner in Surgery, University of Cambridge.

Lecture I.—The Nature of Peritonitis.

I HAVE ventured to select peritonitis as the subject of these lectures not only on account of the fact that the diseased conditions known by that name still occupy a terrible prominence among the causes of death, but because the present time appears to be peculiarly convenient for reviewing the clinical and pathological aspects of this fatal trouble, and for criticising opinions which the custom of years has endued with a spurious appearance of accuracy.

By peritonitis is understood an inflammation of the peritoneum. From the limited standpoint of morbid anatomy no exception can be taken to this definition, but when it is assumed that the various clinical phenomena which are classed together under the title of "peritonitis" are due, either solely or in the main, to an inflammation of the great serous membrane, then the definition becomes to some extent misleading. It may almost be said that peritonitis, clinically as well as pathologically, has comparatively little to do with inflammation of the peritoneum, and it would be erroneous to state that the majority of those who die of what is called peritonitis die of a peritoneal inflammation. In order that this very fundamental matter may be fully discussed, it is necessary that two questions should be considered. The first concerns itself with the general nature of inflammation, and the second with the relation peritonitis bears to that process.

I.—The Purpose of Inflammation.

If one may judge from the terms and expressions which are in common use respecting inflammation, and if deductions may be drawn from those ready criticisms of the process which are uttered without fear of scientific cavillings, then inflammation is still the dread thing it was many centuries ago, when phlegmon was a ruthless fetish, and when the antiphlogistic regimen was the only means of propitiation. Inflammation is still referred to as a calamity, as a thing that is violent, as an utter evil, and as an ill wind that can blow no other than ill. It is spoken of as "breaking out," and made comparable with a riot which lays waste a peaceful city. It is often said that the patient "did well until inflammation set in," or that "his progress towards recovery was cut short by a fatal attack of inflammation." The treatment which should be directed against this evil is commonly assumed to be of the same heroic type as are the drastic measures which may be taken to arrest the progress of fire and pestilence. Inflammation was represented in the literature of the past as the great enemy of mankind, and even in the popular science of the present it retains no little of its satanic disposition.

This view of the inflammatory process needs to be amended, and a very brief survey of some examples of the process should quite justify such amendment. A man, let it be supposed, receives a lacerated wound of the hand in dissecting the body of a patient who has died of puerperal fever. He becomes thereby inoculated at the wounded point with what is practically a culture of pus-producing cocci. Now, as the human body is an excellent medium for the cultivation of bacteria, the micro-organisms begin forthwith to settle down and multiply. But here steps in the process of inflammation. Under its ægis the cells of the body rise in their millions against the invaders, and there takes place at the point of the outbreak a battle which—if the account of Metchnikoff and others is to be accepted—is without a parallel in the very deadliest warfare imagined by man.

It is by the inflammatory process that the poison is destroyed, and the growth of the parasite is arrested. But for inflammation a man who is accidentally inoculated with a septic micro-organism becomes at once little more than a test tube, prepared for the favourable development and culture of the particular coccus or bacterium. In malignant pustule can be well seen the desperate struggle which takes place in the tissues between the invading bacillus and the aroused and active cells of the body. This conflict is a representation of the inflammatory process, and the beneficent purpose of the change is splendidly obvious. But for this inflammation, which has been so much condemned, a human being may be regarded as an organism not far raised above the level of a peculiarly shaped mass of intelligent agar-agar.

In a case of tuberculous phthisis it is generally assumed that a destructive inflammation of the lung is the chief cause leading to the patient's death. It is not the inflammation which is to blame, but the bacillus which has caused it. How long it would take for the non-resisting lung to become wholly occupied by this particular bacterium it is impossible to say, but it is safe to assert that the inflammation of the lung prolongs the infected man's life, and that his prospects of improvement and recovery depend almost wholly upon it. How many lives and limbs have been saved for a reasonable span by that process in a joint called tuberculous disease—a process which, after many centuries of unjust ignominy, is now servilely imitated by the surgeon in his operation of arthrectomy! In the familiar "white swelling" is represented the often successful attempt of the organism to rid itself of the tubercle bacillus by means of the inflammatory process. In this, as in other invasions, the enemy is not repelled without loss, but it is the loss of a part as against the loss of the whole.

The philanthropic busybody who, after contemplating the death roll ascribed to inflammations of the lung and brain and kidney, could succeed in ridding the earth of the process of inflammation, would see a result which hardly a pessimist could regard as kindly. It may be assumed that within a month or so of the disappearance of inflammation from the business of the body the human race would become extinct.

Inflammation is distinctly not a malignant energy working only for evil; it is a process with a purpose, and that a beneficent one. Its object is protective, and its end is shown by the freeing of the body of noxious organisms which lead to death, and upon which may well be bestowed the anathemas lavished on what is, in its primary purpose, a curative process.

That inflammation may be excessive in individual cases, that it may be attended by certain disasters, and that it may fail to some degree in its purpose, are evident facts. It is also clear that the process of inflammation may be assisted and modified by treatment, especially if it be in the direction of removing from the tissues those irritants which have not only caused but have maintained the inflamed state. Treatment having for its object the abrupt arrest of inflammation and the vigorous stamping out of its manifestations has not been attended with conspicuous success.

What has been said of inflammation in general applies equally to inflammation within the great serous cavity of the abdomen. Peritoneal inflammation is not a purposeless calamity; that which has caused it is the thing which is wholly ill. It is by the process of inflammation that the advance of certain deadly irritants, which have gained access to the cavity, can be arrested. The purpose of peritonitis is towards the saving of life, and not towards the destruction of it. What is seen within the abdomen at the necropsy on a case of peritonitis represents the results of an attempt on the part of the organism to avert a too potent cause of death. It does not represent, as is too commonly assumed, the reckless and fanatical destruction wrought by a wholly evil-tending process.

II.—The Relation of Peritonitis to the Inflammatory Process.

In the larger proportion of examples of fatal peritonitis the leading symptoms are those of poisoning and not of inflammation, and death is due rather to toxæmia than to

inflammation of the serous membrane. This view of the subject was advanced by Wegner,[1] nearly twenty years ago.

There is about the patient who is dying of peritonitis every suggestion of a poisoned man. He lies back in bed prostrate, with gaunt cheeks and sunken eyes. There is a look of unceasing anxiousness in his face, and a sense of hopeless unquiet in his movements. The hands, which wander with pathetic restlessness over the bedclothes, are cold and damp. The tongue is that of a man who is dying of thirst. There is constant vomiting. The breathing is laboured, and accompanied by faint sighs and groans, and the countenance is ashen and livid. Such a picture makes a reality of the metaphor of "the shadow of death." So far as the aspect of the patient goes, he might be dying from snake bite or from the poison of cholera, while there is little to suggest an inflammation so intense as to be ending fatally in a few distressful days.

When the patient dies and the abdomen is opened, the amount of inflammation discovered is out of all proportion to the phenomena which preceded death. In one case there may be merely some injection of the peritoneum with loss of its polished surface, and in its place a general stickiness and a few frail and insignificant adhesions. In another there may be an ounce or so of thin greenish pus around the cæcum, an exudation looking ill-conditioned enough to the surgical eye, but still a mere scanty mixture of pus and turbid fluid, and not the kind of formidable effusion which would be expected in a case of death from inflammation. As a matter of fact, the contrast between the phenomena before death and the degree of inflammation found afterwards may be still more marked, as the following case will show:

A woman of 62 came into the London Hospital with a femoral hernia which had been strangulated four days. Herniotomy was at once performed; some omentum was removed, and the purple-coloured gut was reduced. For the rest of the day and during the day after the patient vomited with little cessation, her abdomen became swollen and painful, her pulse failed, and her strength declined. She passed into the condition already described, and on the morning of the third day she died. Throughout the temperature had never risen as high as 99°. The necropsy revealed an operation without a flaw, and an abdominal cavity showing no morbid change but a faint injection and a fainter dulling of the lower districts of the peritoneum.

Such a case may be rightly described, in accordance with ancient usage, as one of death from peritonitis, but it can hardly be spoken of as death from inflammation. A further aspect of the case may be illustrated by sundry experiments upon animals.

If a certain dose of a particular septic matter be introduced into the peritoneal cavity of an animal, peritonitis follows, of which the animal dies in three or four days, and there are found at the necropsy the characteristic changes in the serous membrane. If a smaller dose of the same poison be used, symptoms of peritonitis follow, from which the animal may recover with or without the previous development of an encysted intra-abdominal abscess. If a larger dose be employed, the animal may die within twenty-four or thirty hours with symptoms which are at least suggestive of peritonitis, and yet exhibit after death a peritoneum either devoid of any evidences of inflammation or displaying the most insignificant changes.

A similar order of circumstances would appear to hold good in the human subject. In some of the most rapid cases of death after such a lesion as is known to be capable of causing peritonitis, no inflammatory changes are found within the abdomen. The patient is said to have died of shock, and the cause of that shock would appear in the majority of instances to be due to the profound nerve irritation caused by the sudden spreading of noxious micro-organisms or their products over a wide and sensitive surface. In the next series of cases the patient lives for three or four days, he exhibits the features of acute peritonitis, and after death the serous membrane is found to show but the early manifestations of inflammation. In other instances recovery follows after a more or less desperate illness, and this may be effected with or without the development of encysted suppuration.

In the human subject, as in the laboratory experiments, it must be remembered that where the question of sepsis is concerned, not only must the dose be considered, but also the power of resistance of the individual.

In further support of the statement that in the larger proportion of examples of fatal peritonitis the leading symptoms are those of poisoning and not of inflammation, and that death is due rather to toxæmia than to inflammation of the serous membrane, the following points may be adduced.

It is noteworthy that the cases in which suppuration is the most pronounced are among the most favourable examples of peritonitis, and that, on the other hand, the most acute and unfavourable cases are found with those which show the least inflammatory changes.

I shall have to refer later on to a collection of 100 cases of peritonitis obtained from the records of the London Hospital. Out of this number 70 died. If there be excluded from these fatal cases 13 in which the cause of the peritonitis was either never discovered or was due to cancer or tuberculosis, there remain 57 examples of death. In only 15 of these was the exudation found to be purulent; in 11 it was described as sero-purulent; in the remaining 31 examples there was no suggestion of pus. This is hardly what would be expected in a disease the leading phenomena of which are inflammatory.

In not a few instances of puerperal peritonitis the cases, if regarded pathologically, are merely examples of septicæmia in the most ordinary sense. In addition to the usual constitutional signs of that condition, there are certain local symptoms which indicate a disturbance within the peritoneum.

For example, a woman, aged 31, developed some three weeks after her confinement the signs of peritonitis. She died in four days. During that time she continued to vomit, although not severely, and in those four days she had three well-marked rigors, and her temperature ranged from 100° to 105°. So apparent was it that there was some peritoneal effusion that an exploratory puncture of the abdomen was made on the day before death, but without result. The necropsy revealed some localised non-suppurative peritonitis around the uterus, which was fixed. The general peritoneum was quite sound. There was commencing pleurisy of the left side.

Then, again, the surgical treatment of acute diffused peritonitis as a purely inflammatory affection has not been very successful, and has, indeed, been comparatively unsuccessful. This treatment consists of incision and the evacuation of the effusion. It answers admirably in suppurative inflammation of the pleura, and in cases of localised purulent peritonitis, as met with in the pelvis and about the cæcum, and in the tuberculous variety, but in the form of peritonitis now under consideration it is comparatively useless.

It may be also incidentally mentioned that the mortality attending the operation for strangulated hernia does not appear—except in connection with umbilical hernia—to have been greatly improved since the introduction of aseptic measures in surgery. These measures, if complete, are assumed to reduce the risks of inflammation in an operation like herniotomy to a minimum. But even in cases in which neither gangrene nor perforation of the gut occurs, it is evident that there is something besides mere inflammation which is leading to death. It must not be assumed in a contrary direction that inflammatory phenomena are wholly subordinate in peritonitis. In many instances, such as those consequent upon troubles in the pelvis or in the vermiform appendix, the signs of inflammation are paramount. There may be an initial rigor, the fever is high, the pain and tenderness are intense, and the production of aggressive pus is often early and vigorous. Moreover, in tuberculous peritonitis the leading symptoms more usually belong to the category of chronic inflammation, and the patient not infrequently dies of suppuration and its consequences. One cannot avoid repeating that these cases represent the more favourable aspects of peritonitis, and that they respond well to those general operative measures which are applicable to inflammation.

In concluding this part of the subject, it is only fair to say that other views of the mode of death in peritonitis are held by many competent authorities, and in illustration of this I cannot do better than refer to the very thoughtful and original monograph on this subject by Dr. John Malcolm,[2] who contends that to nervous disturbances must be referred many of the conditions which have just been discussed.

The Peculiarities of the Peritoneum.

It is obvious that there are phenomena attending a lesion of the peritoneum which a reference to like disturbances in other serous membranes cannot explain.

Both pleuræ may be violently inflamed, and that inflammation may run on to suppuration, and yet the condition has not the gravity of a case of peritonitis in which the evidence of inflammation may be slight, and in which the exudation, if collected, may only amount to a few ounces of seropurulent fluid. Even when the necessary allowance is made for the greatly different extent of surface in the two cavities, an explanation of the differences in the relative prospects of death is not forthcoming. It will be said that the gravity of the two cases depends, not upon a damage to the serous membranes, but upon a resulting disturbance of function in the viscera they cover. From this point of view peritonitis may be considered to be more aptly compared with inflammation of the meninges of the brain. But even this comparison is not entirely satisfactory. That death must follow a gross interference with the functions of the brain is obvious, but it is not so evident that those who die of peritonitis die because the functions of the abdominal viscera are gravely disturbed. We do not encounter in peritonitis such fatal functional disturbances as suppression of bile or suppression of urine. In a case of acute peritonitis ending in death in four days, we have for that time the following evidences of abdominal disorder. There is constant pain and frequent vomiting, and absolute constipation, and the ingestion of no food. But a patient may be in pain for four days, and may be starved for four days, and may vomit for four days, and have no action of the bowels for four days, and yet live. So far as functional disturbance of the viscera within the belly is concerned, it is safe to say that in many cases of severe lead poisoning which end in recovery, the visceral disorders are more considerable than they are in some examples of peritonitis which end fatally in a few days.

Then, again, septic matter often finds its way into the pleural cavity. It is true that serious symptoms may follow, but they are by no means of necessity fatal, and are certainly not to be compared in gravity and deadliness with the results of introducing a part of the same septic matter into the peritoneal cavity.

The following points may be noted with regard to the peritoneum:—

1. Its surface is very considerable, and is probably, as Wegner[3] states, as great as that represented by the whole integument of the body.

2. The membrane possesses remarkable powers of absorption, as shown by the manner in which milk, blood, peptones, etc., are taken up. It is said to be capable of absorbing an amount equal to from 3 to 8 per cent. of the body weight. It is noticed that septic intoxication occurs more quickly in peritoneal infection than in any other. Dirt, pus, fæcal matter are more dangerous to life when introduced into the peritoneal sac than when brought into contact with any other like cavity.

3. The peritoneum offers a limited resistance to septic organisms and their products. Experiments upon animals and clinical experience in man show that it can safely dispose of a certain quantity of septic germs. The precise process by which this is effected is a matter of some doubt. There is evidence to show that the resistance of the peritoneum varies within wide limits, and is affected by age, and by such enfeebling disorders as chronic liver or kidney disease. The peritoneum of the rabbit appears to be remarkably sensitive to sepsis, whereas that of the dog has comparatively high powers of resistance. The intestinal mucous membrane affords an infinitely less sensitive medium for septic infection than does the serous covering of the bowel.

4. No tissue in the body provides more favourable conditions for healing than does the peritoneum.

5. The peritoneum does not show the same degree of vulnerability in all parts, nor are all portions of it alike in the manner in which certain lesions are responded to. The part which is apparently most sensitive to infection, and which is most prone to rapidly spreading and diffuse inflammation, is that which covers the small intestine.

The parietal peritoneum has certainly not so high a degree of susceptibility, and is not so apt to assume the diffuse and low form of inflammation. The morbid changes in peritonitis are more marked and more advanced on the visceral layers and omentum than upon the parietal part of the membrane, and this circumstance is not always to be accounted for by the point of origin of the trouble.

Terillon[4] showed that the effect of irritation of the peritoneum is comparatively feeble over the parietal layer or over the liver, while it is violent and intense when the membrane covering the intestines is involved. Localised forms of peritonitis and encysted exudations are comparatively uncommon in the large area occupied by the small intestine.

Localised peritonitis is met with in those regions which are more or less unoccupied by the coils of the lesser bowel—namely, in the subphrenic district between the dome of the diaphragm above and the transverse colon below, in the region of the cæcum, and especially in the outer side of that region, and lastly in the pelvis. If a list be drawn up of cases of peritonitis which have either been recovered from spontaneously or have been relieved by operation, the great majority will be in one or other of these three districts. It is certain that localised purulent collections are uncommon except in these situations. It is remarkable, moreover, what extensive progress peritoneal inflammation may make in the region of the liver or within the pelvis without inducing very alarming symptoms, and it is interesting also to note how wholesome is the type of the inflammation in many cases, and how substantial are the adhesions produced. Of the localised troubles in the cæcal region, the same can be said only in a modified degree.

The fatality of injuries of the intestine is well known, and the attendant peritonitis spreads like fire. Lesions of the liver and of the bile passages are, on the other hand, often followed by a peritonitis which is slow and moderate, and which may end in recovery.

In making these comparisons it must not be forgotten that in the bowel lesion there will be greater opportunities for septic infection than in the case of a limited injury to the biliary passages, although in many instances of death from wound of the gut there has been no appreciable extravasation of its contents.

Mikulicz[5] speaks of the transverse colon as if it were a barrier to prevent the spread of peritonitis downwards, and suggests that the comparatively simple character of pelvic peritonitis may be due to the dependent position of the pelvic basin.

6. The peritoneum appears to be possessed of great sensitiveness—a matter of moment in the production of shock. This sensibility is evidently peculiar and is not quite comparable to that possessed by the skin. Certainly the peritoneum does not feel pain as does the skin. The twisting of a hernial sac and the securing of it with a tight ligature are seldom followed by much distress, and yet the same process carried out on integument of equal extent would assuredly be attended by considerable nerve disturbance. The pain which may accompany the injecting of a large hydrocele with iodine is noteworthy.

The handling of perfectly normal peritoneum is attended with more or less distress in conscious patients. This is illustrated in iliac colotomy performed without anæsthesia, in the reduction of prolapsed coils of intestine covered with unaltered peritoneum, and especially in the removal of gauze tampons.

I have several times had occasion—especially in operations upon the liver—to place a tampon of iodoform gauze upon normal peritoneum, and the removal of this within twenty-four hours is intensely painful. On one occasion a portion of unaltered omentum escaped with the plug, and the replacement of that tissue caused great distress.

When the surface of the serous membrane has become inflamed and covered with lymph, the ordinary sensibility appears to be dulled or lost. This is noticed in the decrease of pain and tenderness, which is not uncommon as a plastic peritonitis advances, and also by the fact that in iliac colotomy or gastrotomy carried out in two stages, the cutting of the gut or of the stomach when once it has become covered with lymph, is more or less entirely painless.

The irritant which of all others appears to affect the peritoneum the most acutely is that represented by the invasion of the surface by certain bacteria or by their products.

The disproportion between the intensity of the pain and

the comparatively small area of infection is often to be well seen in cases of disease of the vermiform appendix.

7. One matter of great interest, although of some obscurity, concerns the condition of pressure within the abdominal area, and the effects which follow upon the disturbance of it.

It has been many times pointed out that there is no cavity of the abdomen, and that the term, the sac of the peritoneum, is a misnomer. "Every practical anatomist," wrote Benjamin Travers nearly a century ago, "has a familiar illustration of the non-existence of an abdominal cavity in the operation of laying open the abdomen."[6]

In performing laparotomy, the surgeon is constantly reminded that he is cutting into a vacuum and is exposing what is merely a potential cavity. This appears to be more noticeable when the operation is quickly done. I have the impression that when the serous membrane is fully exposed and yet undivided, air may pass through it into the potential space. Some invisible damage may have been wrought by the forceps in some of the more striking instances. Sometimes, especially in a child, a loop of gut may be seen through the peritoneum to be lying in the very closest contact with it. A minute prick is made, and the gut seems to fall away from the membrane and a cavity is revealed.

One would imagine that the disturbance of pressure relations of this kind could not be without effect upon the sensitive tissues and thin-walled blood vessels within the abdominal parietes. The effect of a mere incision into the abdomen is often entirely remarkable. In not a few cases of tuberculous peritonitis a simple laparotomy has been performed, the fluid within the abdomen has been allowed to escape, and the wound has been hastily closed. Yet to the surprise of the operator this elementary proceeding has been followed by complete cure.[7] What explanation is there to give?

The examples in which complete and quite unexpected relief of abdominal troubles has followed the mere opening of the peritoneal space are numerous. Many remarkable instances have been collected by Professor William White, of Philadelphia, in an interesting paper on the curative effect of operations *per se*.[8] If all those cases of cure by simple incision be excluded in which a neurosis may have been the foundation of the trouble, there still remain many instances in which the assumption is very strong that considerable physical changes within the abdomen must attend the mere opening of the cavity. Two such instances are afforded by the following cases.

A middle-aged man had all the symptoms of stricture of the pylorus, and was suffering considerable distress. There was some doubt as to the cause of the stenosis. I opened the abdomen, discovered a malignant growth at the [illegible] and closed the wound immediately. The parts were in no way disturbed. The patient at once improved, the vomiting ceased and the dilatation of the stomach diminished. The improvement was maintained for no less a period than six weeks, and before the completion of that time the patient had returned to his easy duties as a gate porter. In due course all the symptoms reappeared, and the case followed the ordinary course of cancer of the pylorus.

The second case was one of suppurative pylephlebitis, and represents, so far as I can ascertain, the only instance in which this grave condition has been treated by operation. The case was under the care of Dr Frederick Parsons, of Shrewsbury, to whom I am indebted for permission to publish the brief preliminary account. The patient was a young lady of 18, who was attacked on September 17th, 1892, with typhlitis. There was previously history of constipation and of indiscretions in diet. Poultices were ordered, and in spite of prompt treatment by [illegible] and enemata, continued to pursue an acute course. On September 21st the patient had a severe rigor. From this date until September 17th she went from bad to worse. Her temperature rose from 97° to 105°. She had a very severe rigor almost every day, without any definite regularity. The abdomen remained [illegible] vomiting was distressing, the wasting was rapid, and delirium supervened. On September 30th, pain was first experienced in the back on the right side and just below the last rib. Later on, tenderness was noticed over the liver, and that organ became considerably enlarged. There was at no time jaundice or ascites.

The case had certain points of resemblance to malarial fever, and the account of suppurative pylephlebitis given with much detail in Pepper's *System of Practical Medicine* may have been founded upon this individual case.[9] The patient was seen by Sir William Broadbent, and it was advised that an exploratory incision should be made over the liver. This I carried out on October 17th. The following conditions were revealed. There was no peritonitis: there were a few adhesions about the cæcum; the appendix was normal. The gall bladder contained about half an ounce of bile. The liver was greatly and evenly enlarged, and was as soft as a lung. It was dotted all over, so far as its surface could be exposed, with minute yellow specks which were of the size of a hole made with an ordinary pin. These specks could be seen but not felt. On actual measurement three were counted in one square inch. After having made the inspection I closed the abdomen. From this day forth the child made an uninterrupted recovery; the rigors were never repeated; the vomiting ceased, and the temperature gradually sank to normal. She is now in perfect health. The case shows that typhlitis does not always depend upon mischief in the appendix, but that it may be due, as was apparently the cause in this instance, to a stercoral ulcer in the cæcum. Dr. Bartholow, the writer in Pepper's *System of Medicine*, states that "the most frequently occurring cause of pylephlebitis is ulceration and suppuration of some part of the intestinal tube; and hence the most common result is multiple abscess of the liver." Another sentence from the same monograph may be added. "The termination is death, doubtless invariably."

I cannot help thinking that an explanation of this different result will be forthcoming when something more is known of the pressure conditions within the abdomen.

There are certain other points in connection with intraperitoneal pressure which remain to be mentioned. In the first place, gravity does not appear to follow the usual lines within the abdomen. One would expect that any effusion which is free within the cavity of the belly would find its way into the pelvis as the most dependent part, and that this would take place even in patients who are lying in bed. It is quite obvious that adhesions must greatly influence this matter. At the same time, the great frequency with which this action of gravity appears to be inoperative, or at least imperfect, is so marked as to call for some explanation. In the second place, the frequency with which escape of fæces fails to take place in spontaneous perforation of the intestine and in punctured wounds of that viscus is somewhat remarkable. Travers[10] lays especial stress upon this, and gives several illustrative cases. He is of opinion that the explanation is to be found in the state of pressure within the abdomen.

Ziegler[11] states that in fifteen cases of laparotomy for wound of the intestine, fæcal extravasation was found to have taken place in six instances only. He also considers that this is to be accounted for by pressure, and alludes to the observation of Klemm,[12] who asserts that the idea that the wound in the bowel is blocked up by prolapsed mucous membrane is fallacious.

8. The last point concerns the possibility of the peritoneum acquiring some degree of immunity from septic infection. It has been shown by Reichel[13] and others that in dogs an immunity from peritoneal infection from pyogenic cocci can be produced artificially. A small dose of septic material is introduced into the abdominal cavity, and after the animal has recovered from the disturbance produced a large dose is injected. This process is repeated at intervals with increasing amounts of the poison, until at last no symptoms are induced by an amount which, in a control experiment, would cause death within twenty-four to thirty-six hours.

A not unlike invulnerability appears to be possible in the human subject. Other things being equal, an operation carried out within the abdomen of a person who has had chronic peritonitis, or who has exhibited repeated subacute attacks, and whose peritoneum presents substantial adhesions, is likely to be attended with better results than when the peritoneum is found to be wholly undisturbed. In the operation for removal of the vermiform appendix in cases of relapsing typhlitis, the little disturbance which follows extensive procedures occupying as long as one hour and a-half can, I think, be explained only by an immunity acquired by the peritoneum after repeated attacks of inflammation. Moreover, in advanced cases the disproportion which is often noted between the constitutional disturbance and the local condition discovered at the operation appears to be capable only of the same explanation.

I have reported[14] the case of a woman with a fæcal fistula, due to the destructive suppuration of a dermoid cyst of the ovary. I opened the abdomen for the purpose of closing the fistula. The tract led down to a hole in the sigmoid flexure, which was firmly fixed in the left iliac fossa. As the bowel could not be brought to the surface, and as the opening could not be sutured *in situ*, there was nothing to be done but to leave it and to pack the area between the hole in the bowel and the parietal wound with iodoform gauze. Very extensive adhesions existed, and for some twelve months previously there had been a smouldering peritonitis. The patient did well, and the good result was probably to no small extent due to the immunity the peritoneum had acquired during the twelve months of inflammatory turmoil.

In looking over the records of laparotomy performed for perforations in the stomach or bowel it is impossible not to

be struck with the fact that in many of the successful cases there had been long antecedent visceral or peritoneal trouble.[15]

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TWO CASES OF SUBPHRENIC PYO-PNEUMOTHORAX,

WITH REMARKS UPON THE RELATION OF THAT CONDITION TO GENERAL PERITONITIS WHEN CAUSED BY PERFORATING GASTRIC ULCER.

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The name "pyo-pneumothorax subphrenicus" given by Leyden to circumscribed collections of gas and pus in the peritoneal cavity immediately beneath the diaphragm is open to objection on account of its inaccurate though pictorial character, and, philologically, as regards the adjective. However, the best name is that which indicates clearly the situation of the pus and its association with gas, and Leyden's term satisfies these requirements more nearly than any hitherto proposed, and, besides, is suggestive of complications truly thoracic. To call such peritoneal collections of pus abscesses is to confuse them with abscesses as ordinarily understood, such as those in the retroperitoneal tissue, which may be equally subphrenic. It is, perhaps, better to describe all collections of pus in a previously existing cavity as empyemata, but when their essential characteristic is association with gas, the term empyema is clearly insufficient.

The causes of subphrenic pyo-pneumothorax are perforations from various lesions of air-containing viscera—stomach, duodenum, or other parts of the intestine—but by far the most frequently perforations of simple gastric or duodenal ulcers. In the case of the stomach, the gas and pus collect generally beneath the left wing of the diaphragm, limited on the right by the falciform ligament. In the case of the duodenum the result is a similar collection, generally to the right of the falciform ligament.

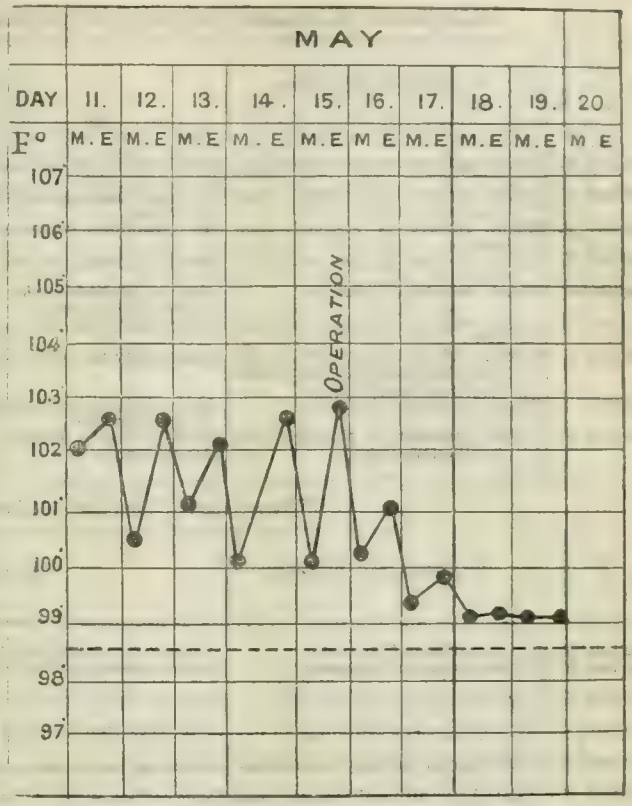
Of the various causes, perforation of the stomach is so much more frequent than the others, that in dealing with the records of but one hospital, I thought it best to confine my analysis to perforation of this viscus and of the duodenum, the latter being included because the majority of simple duodenal ulcers are similar pathologically to those of the stomach, and, whether perforated or not, are not easily distinguished clinically.

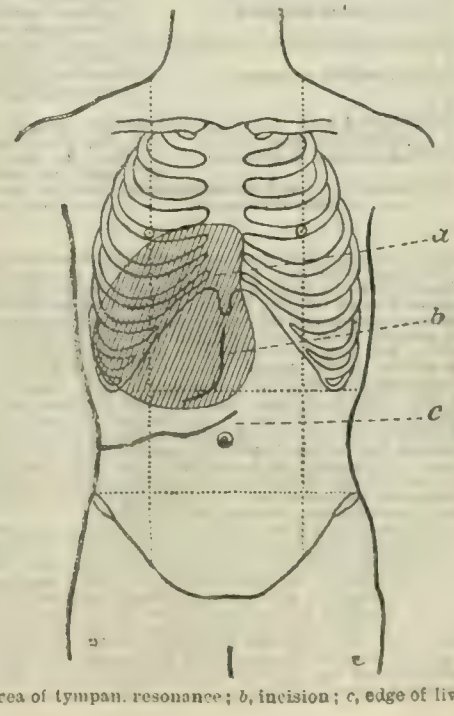
The first of the two cases related was an exquisite example of subphrenic pyo-pneumothorax. Its origin, which happily remains uncertain, was probably an unusual one; but perhaps the chief claim of the case to be recorded is that its treatment was completely successful, certainly a rare termination to such a condition.

The second case was less remarkable, but was a characteristic example of its kind, with a characteristic complication to which the death of the patient was due. This case is included in the table given below.

CASE I.—B. E., aged 42, a bricklayer at a silver refinery, was admitted into St. George's Hospital on May 11th, 1893, and came under the care of Dr. Owen. He stated that he had been liable to dyspepsia and constipation for most of his life, more especially the last five months, during which he had been constrained to sedentary habits by a scald of one of his feet, barely healed at the time of admission. For three weeks before admission he had been suffering from painfulness and increasing prominence of the upper abdomen. On the evening of May 3rd he was attacked by severe pain like colic in the lower abdomen and at the navel, with which he was "doubled up for two hours." During the following week he kept his bed, having much sweating though no rigor.

When admitted on the afternoon of May 11th he was found to be a thin, wiry-looking man, feverish, and complaining chiefly of pulmonary symptoms. He was short of breath, with some cough and scanty unstained expectoration, and at the base of the right lung behind were dulness and tubular breathing. The upper abdomen presented a tympanitic prominence, tender on percussion, the nature of which was not at first quite clear. In the course of the next three days the abdominal swelling increased, as did also the embarrassment of the right lung, while the patient acquired a dull aspect and complained of much discomfort. Respiration 42, pulse 94.





a, area of tympan. resonance; *b*, incision; *c*, edge of liver.

Nine Cases of Incompletely Circumscribed Peritoneal Suppuration associated with General Peritonitis.

No.	Year.	Sex.	Age.	Situation of Perforation.	Description of Peritonitis.	Thoracic Complications.
278	1845	F.	46	Ant. and post. walls of stomach	Hypochondria and epigastrium circumscribed by adhesions	Pleurisy and red hepatisation at bases of both lungs.
225	1869	M.	61	Ant. surface of stomach near small curvature	Grumous fluid especially in front of left lobe of liver (apparently encysted)	—
278	1877	F.	33	Ant. surface of stomach near cardia	Left hypochond. converted into cavity holding over Oij	—
101	1888	F.	24	Scar of ulcer on post. surface of stomach	Abscess between stomach and diaphragm; foul pus (Oj)	Pericarditis.
355	1888	F.	23	Ant. surface of stomach	Imperfectly closed cavity (Ojss) between left lobe of liver, diaphragm, spleen, and stomach	—
48	1889	M.	42	Ant. surface of stomach near pylorus	Incompletely closed cavity between left lobe of liver and stomach	—
201	1889	F.	38	Ant. surface of stomach just below small curvature and three inches from pylorus	Abscess between left lobe of liver, stomach, and diaphragm	Adhesions at base of left lung.
190	1891	F.	21	Ant. surface of stomach	Abscess between cardiac end of stomach, spleen, left lobe of liver, and diaphragm	Lower lobe of left lung collapsed; pleurisy at base of right lung.
107	1893	F.	19	Post. surface of stomach and small curvature	Abscess close to pylorus; ragged cavity behind stomach (recent laparotomy)	—

Fifteen Cases of Completely Circumscribed Peritoneal Suppuration.

No.	Year.	Sex.	Age.	Situation of Perforation.	Description of Peritonitis.	Thoracic Complications.
12	1842	F.	25	Ant. surface of stomach	Abscess (fœtid pus) left hypochond., limited by falciform ligament	Pericarditis and left pleurisy.
87	1843	F.	20	Post. surface of stomach	Large abscess between right lobe of liver and diaphragm	Communication with bronchi of right lung.
71	1879	F.	16	Small curvature of stomach	Large abscess in left hypochond.; thin pus Oij—iij	Ulceration of diaphragm and pleurisy at base of left lung.
50	1856	F.	19	Œsophageal end of stomach	Large collection of pus in left hypochond.	Diaphragm perforated; empyema of left pleura.
153	1861	M.	36	Duodenum just beyond pylorus	Abscess (grumous pus), upper and lower surfaces of liver, right	Diaphragm perforated; right lung adherent to diaphragm.
98	1861	F.	61	Small curvature of stomach near pylorus	Large collection of air limited to upper abdomen	—
90	1865	F.	21	Near cardiac end of stomach	Vast collection of pus, whole left side of abdominal cavity	Adhesions between left lung and diaphragm; lung somewhat compressed.
186	1878	F.	61	Near small curvature of stomach	Abscess in left lobe of liver; subcutaneous abscess beneath xiphoid	Both wings of diaphragm perforated; broncho-pneumonia at base of right lung.
366	1887	F.	24	Post. surface of stomach	Abscess between diaphragm and liver, limited on right by falciform ligament	Left pleurisy.
104	1890	F.	22	Post. wall of stomach	Abscess between left lobe of liver, diaphragm, spleen, and ant. abdominal wall	Empyema of left pleura.
1	1891	F.	18	Ant. wall of stomach near cardia	Abscess (air and pus) between diaphragm, spleen, left lobe of liver, and ant. abdominal wall; ragged abscess in spleen	Turbid effusion in left pleura.
389	1891	F.	21	Ant. wall of stomach	Cavity bounded by falciform ligament, upper surface of left lobe of liver, and ant. surface of stomach (recent operation)	Fibrinous pleurisy on left side and collapse of lower lobe of lung.
65	1892	F.	21	Puckered spot at cardiac end of stomach on ant. wall	Sinus from operation wound (six weeks), over left lobe of liver to branching abscess around spleen	Diaphragm perforated; abscess in lower lobe of left lung.
104	1892	M.	40	Post. surface of stomach	Abscess, bounded by falciform ligament, diaphragm, spleen, stomach, and ant. abdominal wall (recent operation)	Left pleurisy; lower lobe of left lung collapsed.
328	1893	F.	27	Cicatrix on small curvature and post. surface of stomach	(Operation seven weeks before); abscess cavity (left) contracted; stomach adherent to left lobe of liver	Empyema of left pleura.

By May 14th the physical signs had become very pronounced, and were as follows. The upper abdomen was bulged out by a rounded swelling occupying chiefly the right hypochondrium and epigastrium, extending across the middle line to the left, limited below by a transverse line of hardness, which was evidently the edge of the liver displaced downwards. A tympanitic percussion note and exquisite bell sound were obtainable over the swelling, and over the normal area of hepatic dulness as high as the nipple, as shown in the figure. There was no amphoric breathing. The thoracic movements were exaggerated, the right chest moving as freely as the left. The heart's apex was but little displaced, being in the left nipple line and fourth interspace. At the posterior base of the right chest breath sounds were absent and fremitus nearly so: above this was an area of dulness and tubular breathing extending nearly as high as the scapular spine. A few *rdles* were heard in the left axilla, but the back of the left lung was normal. From these signs it was clear that the condition to be dealt with was not a true pneumothorax, but a collection of gas below the diaphragm compressing the right lung.

On May 15th a consultation was held, and an operation agreed upon. Accordingly, late same afternoon, chloroform was given, and Mr. Rouse operated with the assistance of Mr. Dent. The abdominal wall was divided by the incision indicated in the figure, giving vent to a large quantity of foul gas, upon the escape of which the swelling immediately collapsed, and subsequently to about two pints of thin pus mixed with flakes of lymph. These were the contents of a large circumscribed cavity between the right lobe of the liver and the diaphragm, from which a track led downwards over the edge of the liver to an indurated spot below the umbilicus, suggesting that the mischief had originated about the appendix cæci. There was, however, no present communication with the appendix or other part of the intestine. A glass drainage tube was passed down to the indurated spot, and a long rubber was placed over the liver.

After the operation the patient did remarkably well. He was propped up as much as possible so as to favour drainage, but the discharge was never very foul or abundant, and by June 5th it had ceased. The right lung rapidly recovered, and on June 11th the physical signs were normal in both chest and abdomen. At the end of the third week of June he began to leave his bed, and on July 25th he was sent to the Convalescent Hospital at Wimbledon. At this time he was in very fair health, complaining only of some discomfort in the right hypochondrium, probably referable to adhesions forming about the liver. On October 4th he was seen at St. George's, free from the discomfort mentioned above, slightly dyspeptic, but practically well.

Case II. (From clinical notes by Dr. Cyril Ogle, medical registrar.)—M. McL., aged 27, a housemaid, was admitted on July 18th, 1893, under the care of Dr. Whipham. There was a history of old anæmia and dyspepsia. Fourteen days before admission she had been attacked by sudden severe pain at the epigastrium with vomiting, and, a week later, by symptoms of pleurisy on the left side. On admission a subphrenic abscess in connection with a perforating gastric ulcer was diagnosed, there being a tympanitic prominence in the epigastrium, the tympanitic note extending to the left and upwards as high as the nipple, besides which there were signs of left pleural effusion with compression of lung. In the course of three days these signs increased and extended, and a modified bell note became obtainable over part of the tympanitic region.

On July 22nd Mr. Pick opened the abdomen above the umbilicus, finding a circumscribed cavity beneath the diaphragm, into which the left lobe of the liver projected, containing foul gas and pus mixed with

fatty food. The perforation in the stomach was not found, being probably closed. On August 12th an empyema of the lower part of the left pleura was opened, giving exit to pus which was very foul, although there was no perforation of the diaphragm. The abdominal wound was healed by August 28th, and for nearly a fortnight afterwards the patient made good progress; but then diarrhœa and other symptoms of septic poisoning set in, and she succumbed on September 15th.

The necropsy was made by Dr. Rolleston, who found that there had been no general peritonitis, and that the subphrenic abscess had entirely contracted. There was a cicatrised ulcer on the small curvature and posterior surface of the stomach adherent to the pancreas, the neighbouring part of the stomach being adherent to the under surface of the left lobe of the liver. In the upper part of the left pleural cavity was a small quantity of pus. The lower part of the cavity, where the empyema had been originally, was partly closed by adhesions.

With the view of comparing the frequency of general peritonitis and limited peritoneal suppuration or subphrenic pyo-pneumothorax, as results of simple gastric and duodenal ulcers, I have examined the *post mortem* records of St. George's Hospital, which extend over a period of more than fifty years, having been begun with the year 1841. These records contain 37 examples of perforation of simple gastric or duodenal ulcers into the general peritoneal cavity without any or with but slight attempt at limitation, 25 of which were gastric, 12 duodenal. Of the duodenal ulcers one was the acute sequel of a burn.

The examples of more or less completely circumscribed peritoneal suppuration from the same causes are 24 in number, 23 of which were due to gastric perforation, one to duodenal. These are given in the tabular form.[1] Nine were incompletely circumscribed, 15 completely. Many of the latter must from their origin in perforation of an air-containing viscus, and situation immediately beneath the diaphragm have been of the nature of subphrenic pyo-pneumothorax, though it is in a small proportion only that the presence of gas in the cavity is mentioned in the *post-mortem* description, or, as having been recognised during life, in the accompanying clinical history.

As regards the stomach, this analysis of forty-eight cases of perforation into the peritoneal cavity may be taken as giving a fair representation of the chief results of such perforation, perhaps warranting a generalisation.

The most important point brought out is that in a large proportion (in the present analysis nearly half) of the cases of gastric perforation, no matter in what part of the stomach the perforation may be, the extravasation and peritonitis are more or less limited at first. In most cases where general peritonitis is found at the *post-mortem* examination the inflammation is most intense in the subphrenic region, perhaps the more solid of the extravasated gastric contents remaining here in a cavity half closed by adhesions; while sometimes the extravasation has clearly taken place into a cavity so circumscribed that the peritonitis became generalised merely by the rupture of an adhesion some days after the perforation. In fact there are all degrees of transition between a perfectly unlimited peritonitis and a typical subphrenic pyo-pneumothorax.

The practical importance of this point has been illustrated by the formation of a subphrenic collection of pus after laparotomy for general peritonitis, the site of the earliest extravasation from the stomach having probably escaped thorough cleansing at the operation,[2] and by the recent experience that secondary suppuration in the chest is to be feared even after the abdomen has been opened for general peritonitis of but a few hours' duration.[3]

The table, amplified as it is from a previous paper, further substantiates other points to which attention was there directed, such as the partiality of subphrenic pyo-pneumothorax for the left side of the abdomen with boundaries which are in many cases very similar, and the frequency and nature of the thoracic complications which add so seriously to its fatality.

Among the more recent publications dealing with the subject of subphrenic pyo-pneumothorax or the treatment of perforating gastric ulcer to which reference has not been made either here or in the papers quoted are the following:

R. F. Weir, Laparotomy for Perforating Round Ulcer of the Stomach, *Internat. Med. Mag.*, February, 1892; S. Pozzi and E. Ricklin, De l'Intervention Opératoire dans les Cas de Perforation d'un Ulcère Simple de l'Estomac, *Rev. Intern. de Thérap. et de Pharm.*, January 15th and 30th, 1893; J. W. Taylor, On the Surgical Aspects of Peritoneal Perforation, *Practitioner, Med. Journ.*, May, 1893; Clifford Allbutt, A Clinical Lecture on Sub-diaphragmatic Abscess, *Clin. Journ.*, June 7th, 1893; R. A. Stirling, Case of Perforating Ulcer of the Stomach, Laparotomy, etc., *Austral. Med. Journ.*, June 15th, 1893; C. Vaulair, Contribution à l'Etude des Abcès Sous-diaphragmatiques Gazeux, *Rev. de Médecine*, July 10th, 1893; A. L. Mason, Subphrenic Abscess, with special reference to those Cases which simulate Pyo-pneumothorax, *Trans. Assoc. Amer. Phys.*, 1893; W. F. Haslam, Some Points in the Surgical Treatment of Simple Ulcer of the Stomach, British Medical Journal, November 11th, 1893.

[1] Ten of these cases have been already published by Dr. Penrose and myself, *Clin. Soc. Trans.*, vol. xxvi. In this paper the same question was considered, but on less wide a basis.

[2] Taylor, *Birm. Med. Rev.*, 1888.

[3] Kriege, *Berl. klin. Woch.*, Dec. 5th, 1892; Haward and Dickinson, *Clin. Soc. Trans.*, vol. xxvi.

A CASE OF ENTERECTOMY FOR GANGRENOUS BOWEL.

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Surgeon to the Liverpool Royal Infirmary.

The following case, together with one reported by Dr. Horrocks, of Bradford, disposes of an objection which has been urged against my operation, namely, that it would not always be possible to invaginate the enlarged proximal end of the bowel into the distal shrunken end, and that in such cases it would therefore be useless. I was quite aware before by experiments that it was apparently as safe to invaginate against the flow of the fæcal current as with it in healthy dogs; but I was far from sure that the same would prove to be the case under the different conditions associated with strangulated bowel, and I did not intend to practise invagination upwards in the human subject until it was absolutely necessary to do so. There are now two cases in which the operation has been done in this way, and both have made a rapid and complete recovery, and it may therefore be conjectured that it is practically unimportant which way the bowel is invaginated, though I think the downward method should be preferred when feasible.

S. R., aged 51, came under my care at the Royal Infirmary on June 20th, 1893. She was a rather delicate-looking woman, had never been very strong since she suffered from spinal curvature as a child of 11. Early in December, 1892, a week after lifting a heavy weight, she first noticed a lump in the left groin; it was soft and painless, and had remained there ever since. For a few months she had been subject to attacks of vomiting near the menstrual period, but they had not been accompanied by any change nor pain in the lump. One of these attacks commenced very suddenly on June 14th, and continued on the two following days. On June 17th she was put under medical treatment, and the vomiting remained in abeyance until June 19th, when it returned and was inclined to become stercoraceous. There had been no movement of the bowels nor passage of flatus since June 14th.

When the patient was first seen on June 20th the abdomen was slightly distended; there was severe umbilical pain, absolute constipation, and vomiting, together with a small femoral hernia, tense but painless. Her general condition was quiet, pulse under 90, temperature 98.2°. She was at once taken to the operating theatre, and placed under the influence of chloroform. When the sac was opened the small knuckle of bowel exposed looked recoverable, but, upon releasing the constriction, and drawing down a little more bowel for inspection, it was found that on the proximal side there was a line of ash-grey slough, through which the contents began to ooze. The entire length of constricted bowel was 1½ inch, and on the distal side there was no distinct slough. An incision was next made in the median line of the abdomen between the umbilicus and the pubes, and a sponge was introduced and placed beneath the inner opening of the hernial sac. Then, after cleansing the bowel in the sac, it was reduced with the left hand outside, and rapidly withdrawn from the abdomen with the right hand, previously placed inside to receive it. The peritoneum was not at all soiled in the process. The bowel was then clamped above and below, the injured part quickly cut out with scissors, the bleeding points tied, and one of my bone tubes (1 inch by 1½ inch), sutured into the upper end. In this case, however, the upper end was very dilated and thickened, and it proved impossible to invaginate it into the shrunken lower end. The tube was therefore changed for a smaller one (⅝ inch by 1½ inch), which was sutured into the lower end. The traction thread was passed, the cut ends attached, and invagination performed as described in a previous case.[1] The only difference—a marked one—being that the bowel was invaginated upwards instead of downwards, a variation which was not found to increase the danger in the original experiments on dogs. As the traction thread had been passed through distended and, perhaps, partially paralysed bowel, the needle puncture was secured with a single Lembert suture. Very fine green catgut was used for all internal sutures, and fishing gut for the abdominal wall. The abdomen was closed without drainage, after sponging out of the peritoneal cavity a little blood-stained serum which was present before the operation. The hernial wound was only closed above, the lower part being left open for drainage. The entire operation, including the administration of chloroform, lasted 1¼ hour.

The patient soon recovered from the shock of the operation, which was

[1] *Clinical Society's Transactions*, 1892.

but [illegible] ... progressed very favourably ... after ... appeared ... was ... left the hospital ... two ... Third day, the same. Fourth day, the same, with a small cup of tea and more beef-tea. Sixth day, two rusks allowed. Eighth day, food lessened. Tenth day, increased again. Twelfth day, sherry whey added. Thirteenth day, arrowroot and rusks. Then gradually put on to [illegible]

Bowels.—Flatus passed freely after the operation, but the bowels were first moved with glycerine enema on the seventh day; next naturally on the sixteenth day, and subsequently at intervals of every two or three days, often with the help of an enema. No trace of the bone tube could be discovered in any motion.

I think from the three cases which are now on record that it may be conceded that the operation is rapid, safe, and successful, and that the ultimate condition of the bowel is, so far as we can judge, perfect. This patient is now, six months after the operation, in as good health as she has enjoyed for many years, and is at work daily as a nurse amongst poor people. This makes the third time I have done the operation. The first patient recovered as well and more rapidly than this. The second was a "too late" case of intestinal obstruction, and died in thirty-six hours, but with a water-tight union. I have previously been careful, and still wish only to recommend this operation for the small intestine; most parts of the large intestine are too fixed to permit of a sufficiently free manipulation of the bowel, and are, therefore, unsuitable for it.

EXCISION OF INTESTINE FOR MALIGNANT DISEASE: CIRCULAR ENTERORRHAPHY BY PAUL'S METHOD.

By WILLIAM HORROCKS, M.B., F.R.C.S.,
Honorary Surgeon to the Bradford Infirmary.

The choice of operation in the following case was determined by its suitability to maintain the continuity of the bowel, without increasing the number of intestinal wounds. As was anticipated, the gut above the stricture was more dilated than that below. On this account it would have been difficult to invaginate the upper into the lower bowel. In this case, and in one of Mr. Paul's cases just recorded, the lower was invaginated into the upper without ill-effect. The tearing of the mesenteric attachment is one of the difficulties of the operation. It was avoided by the use of a small-sized tube, which fitted easily into the intestine, and by the application of two stitches along the mesenteric attachment to prevent tearing or stretching. The invagination of the intestine required care, and was accomplished, partly by pushing the bone tube, partly by drawing the intestine over it.

I must express my thanks to Mr. Paul for the useful information which he promptly gave me.

C. H., a married woman, aged 38, was admitted to the Bradford Infirmary on August 29th, 1893, with obstruction of the bowels. She had been an in-patient in October, 1892, with similar symptoms, which were relieved by starvation and opium. She suffered almost constantly from severe abdominal pain, shooting round the loins to the back. The pain was spasmodic, sometimes lasting several hours, and when very severe caused emesis. The bowels were usually relaxed, but during and after the severe attacks of pain they were confined, sometimes for several days. She had had four children, the youngest being 14 years old. Menstruation was painless and regular. She was a spare woman, who showed no signs of general wasting. A systolic *bruit* was heard at the apex of the heart, which was not displaced.

The abdomen was somewhat full at the lower part, with the umbilicus everted, and the skin marked with atrophic scars. The percussion note was normal over the abdomen. Above Poupart's ligament on the right a solid tumour was felt: it consisted of two parts, divided by a vertical groove.

By vaginal examination the uterus was found displaced downwards, with the cervix pointing towards the sacrum. Occupying the right fornix, and extending in front of the uterus, was a rounded swelling, which was continuous with the tumour felt above the pubes. This mass felt hard. It was divided into two parts by a groove, and moved independently of the uterus.

Operation.

On September 29th an exploratory abdominal operation was performed to ascertain the nature and connections of the growth. As the tumour was found to implicate a considerable portion of the small intestine, the wound was closed. This operation was performed by Dr. Rabagliati, gynæcologist to the infirmary. The wound healed without complication.

On October 19th, at the request of the patient, I operated with the assistance of Dr. Rabagliati, Mr. Althorp, and Dr. Wood. The operation lasted an hour and twenty minutes with anæsthesia by chloroform during the first twenty minutes, by ether for the remainder of the time. The incision, 3 inches in length, was made in the median line rather above the umbilicus. The tumour was adherent to the abdominal wall, along the line of the old scar, which was below the fresh incision. These adhesions were partly broken down, but the most adherent part of the abdominal wall was cut away with the growth. The tumour was then drawn out of the abdomen, and the opening packed with antiseptic cloths. The intestine beyond the growth on each side was emptied, and an elastic tube was passed through the mesentery around the gut. A V-shaped piece of mesentery, containing enlarged glands, was separated, and the bleeding vessels tied. The bowel was now cut across transversely on each side of the growths, and the implicated intestine with its attached mesentery removed. A Paul's bone tube was now inserted into the open end of the intestine of smaller lumen, and the free margin of the bowel stitched to the end of the tube with continuous silk suture. The thread was passed through the holes in the tube and the muscular and peritoneal coats of the intestine. Additional stitches were inserted at the mesenteric attachment. The other cut end of the bowel was now brought into apposition, after the threaded needle, connected with the tube, had been passed through the intestinal wall from within out, about 3 inches from the incised extremity. The two ends of the bowel were now stitched together by a continuous Lembert silk suture. By traction on the thread and manipulation of the bone tube the bowel was invaginated for about three-quarters of an inch. It was fixed in this position by a continuous silk suture, which included only the peritoneal and muscular coats. The needle was now cut from the traction thread, which was drawn into the gut. The margins of the mesentery were stitched, partly by interrupted, partly by continuous sutures. The extremity of the vermiform appendix was inflamed and adherent to the tumour. The appendix was ligatured near its proximal end, the distal end removed, and the stump closed in by three silk sutures. The abdomen was cleansed and a glass drainage tube inserted with its lower end reaching the bottom of Douglas's pouch. The abdominal wound was closed with silkworm sutures, the end of the drain projecting at the lower end of the wound.

Description of Gut Removed.

The intestine removed was about 39 inches long. At two places its wall was invaded by growth. The larger mass of growth was about the size of a large orange, consisting of tumour and convoluted intestine, fixed by firm adhesions. The lumen of the intestine at this part was much narrowed, and the mucous membrane ulcerated. There was a second growth of smaller size, separated from this by healthy intestine. The mesentery showed several enlarged and infected glands. The growth was a large round-celled sarcoma, growing from the submucous tissue.

After-History.

The patient rallied quickly from the operation. The pulse shortly after her return to bed was 76, good and regular. The wound healed without trouble, and the patient was discharged on November 23rd, 1893.

Bequests and Donations.—The Royal Hospital for Diseases of the Chest, City Road, E.C., has just received a donation of £500 from a lady who takes a keen interest in its work, but does not wish her name to be known.

ACUTE INFLAMMATION OF THE LEFT ANTRUM OF HIGHMORE AFTER INFLUENZA.

A Personal Observation

By FELIX SEMON, M.D., F.R.C.P.,

Physician for Diseases of the Throat to St. Thomas's Hospital and the National Hospital for Paralysed and Epileptic; President of the Laryngological Society of London.

At the commencement of December last I had an attack of influenza, the third within two years. The acute stage was slight and only lasted two or three days, but was followed by a very general and rather severe catarrh of the air passages. Whilst in this condition I had to go to Berlin. The journey did not seem to have aggravated the catarrh, and, apart from rather severe spasmodic cough with little expectoration and considerable coryza with watery discharge from both nostrils, I felt well, and was able to go about as usual. On the 27th, however, in the evening, suddenly a sensation of fulness, which rather rapidly increased, made itself felt in my left cheek, at first unaccompanied by pain and strictly limited to that region. I happened to spend that evening with my friend, Dr. B. Fraenkel, the well known professor of laryngology at the University of Berlin, and jokingly remarked that I wondered whether I was in for empyema of the left antrum. I did not think then that the joke was about to be so quickly realised as it turned out to be. After my return in the evening to the hotel, the sensation of fulness steadily increased, and soon amounted to a sense of almost intolerable distension of the zygomatic region. The skin over the part became distinctly swollen and reddened, and was very tender to the touch. Every effort by means of which the air in the nose and adjacent cavities would be condensed, such as blowing the nose, and especially coughing, was felt as most acutely painful, and about 11 P.M. my temperature was 100.5°. During the whole time, however, there was none of that frontal neuralgia which is so characteristic of the chronic forms of inflammation of the maxillary sinus. I spent a sleepless night, mostly in efforts at dislodging, by blowing my nose, what I was convinced must be an accumulation of fluid in the antrum, but although all the time there was an enormous discharge of watery fluid from both nostrils, such as I had had before the onset of the acute symptoms on the left side, no relief was experienced.

On the following morning, the condition had become, if possible, worse, when suddenly, during a violent effort at blowing the nose, a large quantity (certainly not less than half an ounce) of turbid greenish sero-purulent fluid streamed out of my left nostril. This was followed by an immediate sense of great relief. I concluded that probably a pellet of mucus or purulent matter which had stopped the hiatus semilunaris had become dislodged, thereby allowing of an escape of the fluid accumulated in the antrum. To prove this further, I held my head downwards inclined to the right side, so that the opening of the antrum would be in the most dependent position, when a further smaller discharge of the fluid above described occurred.

I went and saw Professor Fraenkel, who, after cocainisation of the left nostril, did not find any matter in the middle meatus or indeed in the nose. On transillumination of my face, the two antra were both translucent, but my left pupil remained dark, a symptom to which of late attention has been prominently drawn in connection with affections of the antrum. For three to four hours after this I remained free from pain and inconvenience, then gradually a fresh accumulation began to take place with a recurrence of the symptoms above described. In the afternoon a second discharge occurred, again followed by relief; during the evening the fluid accumulated for the third time, and when discharged at bedtime was distinctly bloodstained. After this the acute complication seemed to have disappeared as suddenly as it had arisen, and I had almost forgotten it when, two days afterwards, on blowing the nose again, a large quantity of greenish fluid, this time of a distinctly mucoid character, was discharged. This signalised the end of the affection.

Whilst it is now agreed that chronic empyema of the antrum of Highmore is anything but a very rare affection, acute inflammations of that cavity must be exceedingly rare. Little will be found about them even in the special text-books, and whilst I myself am constantly seeing a large number of cases of chronic empyema of the maxillary sinus, I have never actually seen a case in the acute stage, although in one instance of bilateral chronic empyema now under my care the disease also originated in a very acute form after influenza. My Berlin friends (Professor Fraenkel, Drs. Landgraf and Rosenberg) tell me that they have seen a few instances of the acute form, all of them after influenza, and that, as in my own case, all these had spontaneously recovered, with one single exception in Dr. Rosenberg's practice, in which the antrum had to be opened from an alveolus in order to give exit to the distending fluid. This was also necessary in the case under my care just mentioned.

The points to which I would draw particular attention are: (1) The sudden and violent increase in the pain during sneezing or coughing; (2) the limitation of the pain to the affected region.

Finally, it may not be uninteresting to state, as a contribution to the particular tendency of influenza to single out the locality of its sequelæ in the most capricious manner in different individuals, that my first attack was followed by an equally violent inflammation of the pulp of a previously healthy canine tooth, which Messrs. Sewill and England, after extraction, pronounced to be of an almost gangrenous character. Thus in both these attacks the sequelæ observed occurred in the domain of the fifth nerve.

A NOTE ON CERTAIN IMPROVEMENTS IN THE METHOD OF DETERMINING THE CONDITION OF BLOOD COAGULABILITY FOR CLINICAL AND EXPERIMENTAL USES.

By A. E. WRIGHT, M.D.Dub.,

Professor of Pathology, Army Medical School, Netley.

In July, 1893, I described in the British Medical Journal a method by which determinations of blood coagulability could be made for clinical purposes. The method which I proposed consisted in filling a series of capillary tubes with blood obtained by puncturing the tip of the finger and in ascertaining the condition of coagulability by blowing down the tubes at different intervals. I was not at the time aware that C. H. Vierordt[1] had already described a method of determining the condition of coagulability for clinical purposes, and that he, and afterwards Hasebroek,[2] had employed this method[3] in the investigation of certain points with regard to blood coagulation, notably in the investigation of the accelerating influence of stagnation[4] on blood coagulation.

Having thus disposed of this question of priority, I desire to indicate certain improvements in the method of determination as recently proposed by myself. The conditions which I referred to[5] as favourable to the accuracy of the determinations were: (*a*) the employment in each tube of a column of blood of approximately equal length (proposed standard of length 5 centimetres); (*b*) the employment of capillary tubes of equal calibre (proposed standard diameter 0.25 mm.); (*c*) the relaxation at frequent intervals of any ligature which may be applied round the finger. I now find that three other points must be attended to: (*d*) the aspiration of the blood some little distance up the tube (this is designed to prevent any desiccation of blood at the orifice of the tube); (*e*) the warming of the tubes to blood heat before filling them in; and (*f*) the maintenance of this temperature until coagulation is complete. Without these two last precautions blood coagulation determinations which are made on days when the temperature is appreciably different cannot profitably be compared. The fallacies which are introduced by these differences of temperature are, how-

[1] *Archiv für Heilkunde*, 1878.

[2] *Zeitschrift für Biologie*, 1882.

[3] The method consists in receiving blood into a single capillary tube, and in observing the deposition of fibrin on a chemically cleansed white horsehair which is very slowly pushed through the tube.

[4] In the ligatured finger and the hemiplegic arm.

[5] British Medical Journal, July 19th, 1893.

ever, easily eliminated by conducting all blood coagulation determinations at the normal blood temperature.

The illustration which is subjoined (Fig. 3) shows an easy

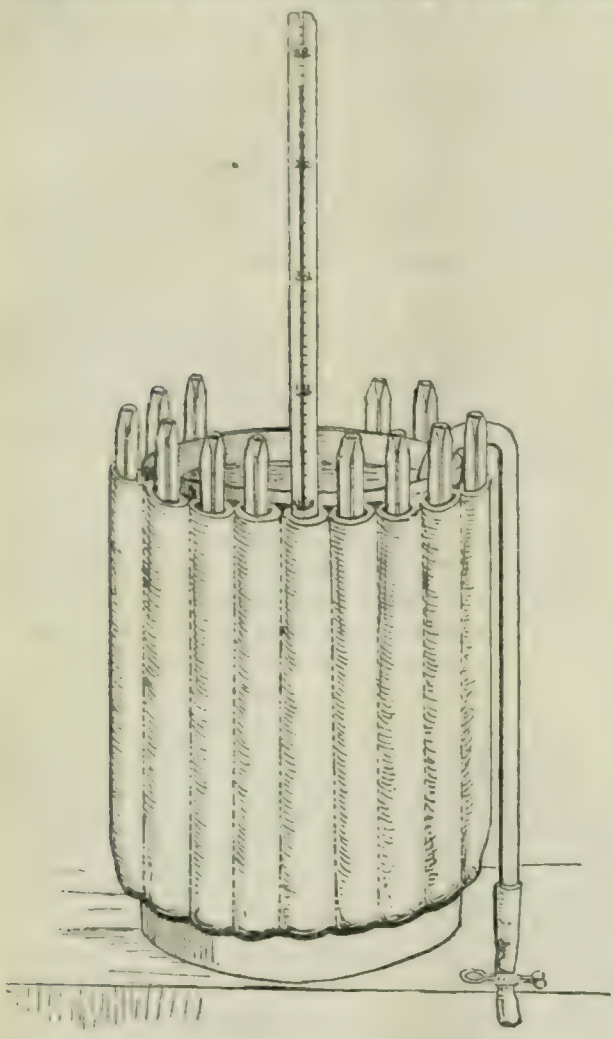


Fig. 3.—The tubes arranged round the water tin.

method of conducting the coagulability determinations under the correct temperature conditions. The apparatus is easily constructed by sewing together several thicknesses of flannel bandage in such a manner as to leave a series of pockets (of just sufficient size to admit a coagulation tube) between the layers of flannel bandage. One of these pockets is reserved for a thermometer, and the remaining pockets are charged with coagulation tubes.

The flannel bandage, with the thermometer and the tubes, is now tied tightly round any small tin (a cocoa tin serves admirably). The tin is then filled with hot water until the thermometer in the pocket of the flannel bandage registers 37° C. This temperature remains practically constant for the few minutes which are occupied by an ordinary coagulability determination. When the temperature is to be kept up for longer intervals, it is convenient to provide the tin with a siphon. The water can then be drawn off at intervals, and be replaced by warmer water.

With respect to the coagulation tubes themselves, I may perhaps be allowed to mention that tubes of the proposed standard size (*vide* Fig. 1) are now supplied by Mr. A. E. Dean, jun., 73, Hatton Garden, E.C. Mr. Dean has also, at my suggestion, manufactured tubes which are supplied with a mixing chamber (Fig. 2). These latter tubes are designed to facilitate the study of the effect of making various additions to blood. To examine the effect of such additions, it is only necessary to prime these tubes (say up to the first[a]

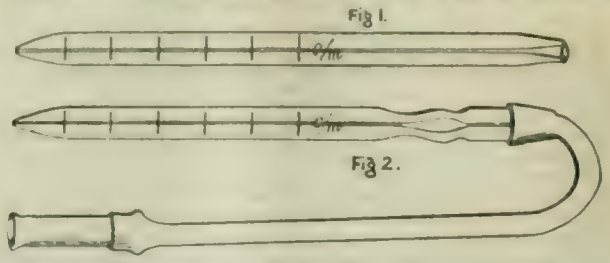


Fig. 1.—Ordinary tube. Fig. 2.—Tube with mixing chamber.

division marked on the stem) with any fluid whose effect on coagulation it is desired to elicit. The tube is then to be filled in with the usual column of blood. Mixture of the fluid with the blood is effected by aspirating the whole contents into the mixing chamber, and then blowing them down in an unbroken column into the stem of the capillary tube. The coagulation time elicited for this mixed blood is to be compared with the coagulation time as previously elicited for the unmixed blood. It is evident that these tubes may be employed in this manner to test the efficacy of any proposed physiological styptic. They may also be employed to demonstrate the more important facts which have been elicited in connection with blood coagulation. The effect, for instance, of neutral salts, or decalcifying salts (like oxalates or citrates), or of leech extract in preventing coagulation can readily be demonstrated with the minimal quantities of blood which are employed in these tubes.

SOME POINTS BEARING ON "MALINGERING."

By TENNYSON PATMORE, M.R.C.S., L.R.C.P.,
Medical Officer, Wormwood Scrubbs Convict Prison.

So important to every class of medical practitioner is the timely recognition of feigned disease in its multiform aspects, and so frequently are even the best informed led astray in their diagnosis by the malingerer, that it would seem that sufficient stress is, perhaps, not laid upon the necessity of remembering always on approaching an obscure case to include deceit amongst the conditions to be eliminated when proceeding to unravel systematically the skein of symptoms and trace out the *origo mali*.

Malingering of the grosser kind is not likely to be often overlooked by the observer who brings common sense, cultured information, and ordinary observation to the task before him; as in Sauvage's well-known case, where a young lady, after secret communication with the slaughterhouse, was suddenly seized with blood vomiting; or where a recruit, under orders for some unpleasant station is, the night before his regiment is to embark, stricken by double blindness or "paralysis."

Again, few medical men would be deceived by a thief who stated that he had fits, and that "just when he was coming to he was afflicted with an unconquerable impulse to seize the nearest gold watch he could come at," and went on to add, "it is a funny thing, but I never fancies the baser metals when I'm took bad." But if this worthy were actually to assume a "fit" before the eyes of the average successful and well-esteemed doctor, the actor would very probably succeed in, for a time, baffling the diagnosis, unless the observer had specially directed his attention to cases of the kind, and, at the same time, was possessed of all his wits and of some accurate powers of discrimination. Moreover, perhaps the most perplexing phases of malingering are seen where a substratum of real disease is intermixed with and obscured by feigned features, as where a real diabetic patient appears to have advanced well towards recovery, and suddenly presents a urine loaded with sugar; in this case it is not every physician who

[a] The accurate measurement of these additions is facilitated by the addition of a trace of any indifferent colouring substance, such as eosin, to the solution which is to be tested.

has the energy and ready resource which are needed to trace that cane sugar to the grocer's shop!

The difficulty to be overcome becomes greater in proportion as the real disease is more serious, and so tends to mask the unreal. Thus a labouring man, in working for his employers, receives an injury to his knee which leads to synovitis; he is laid up, and perhaps finds himself in receipt of a special grant of wages during disablement, as being considered a specially deserving man; his club also pays a useful weekly sum; he appears to recover to a certain point, and is about to be sent back to work by the doctor who watches his master's interests, when suddenly an angry pustule appears outside the patella, and the bursa begins to enlarge. It is only after time wasted, and some suspicion being suggested to the attendant by an outside and chance remark, that the source of the second effusion is found to have been the introduction of a fine and rusty wire into the part!

Criminals undoubtedly appear to graduate with highest honours in malingering, which is not surprising considering what they have to gain by a successful exhibition, which may procure for the "insane" adept the genial luxuries of asylum life with its tobacco, cricket, dances, and so on; for the "rheumatic" expert rest from the treadmill and the crank; for the "dyspeptic" juggler white bread in place of brown, and cocoa instead of "skilly;" not to speak of the Elysian delights of the prison infirmary, where an undetected "paralytic" scamp may lie in ease and luxury; the possession of an ulcerated leg, if extensively successful in his artifice, may enable another to read half the pious literature of the year while his lesion is being healed.

The numerous little subterfuges practised by what used to be called "the weaker vessels" amongst our patients, it would be absurd to stigmatise as malingering, Regarding these very distant cousins of malingering, all that is needed is that the practitioner shall recognise the ruses of his playful patients and not be actually misled by them.

There is yet another view of the subject; our patients repose in us a sacred trust, and rely upon us not only to guard them from and to alleviate the results of real suffering; but by an unspoken compact, they also look to us to stimulate them to activity when disease has abdicated its throne, but may have left behind morbid disinclination to meet the daily routine of business and the renewed struggle for existence. It is for us to regulate these returning powers; to even forcibly dispel the clouds which retard them, and often delay the recuperative result of a return to the battlefield of life, which is itself the best tonic; and in so doing we are, in one more sense, combating what, if not dispelled, may degenerate into a something which might become first cousin to malingering, that is, fanciful incompetence for duty.

The foregoing remarks and illustrations will, to many readers, appear perhaps trifling in their obviousness, but so frequently have cases occurred where medical reputation and credit have been sacrificed, where that sacrifice could easily have been avoided, that the subject appears to be one which can well bear comment. Trifles grow into successes, and trifles expand into calamities quite as readily in the practice of medicine as in the practice of war; and, as has been said of the greatest generals, so may we say of the greatest physicians, they are those who make fewest mistakes.

As it is better to respite a thousand really guilty murderers than to hang one innocent victim of miscarried justice, so in dealing with this subject let us remember that a single case of genuine illness mistaken for malingering and treated wrongly, will not be outweighed, in point of honour, by a whole cohort of impostors detected. Hence, let our axiom be: "Be ready for malingering by all means; but first look for real disease; and, having found malingering, still look for real disease, as the two may coexist." This course alone will prevent blunders far worse than our being stultified.

Dr. J. Hawtrey Benson has resigned the senior physicianship to the City of Dublin Hospital.

Longevity in Finland.—Official statistics relative to Finland show that in 1892, in a total population of 2,431,753, no fewer than 208 persons died over 90 years of age. Of these 69 were men and 139 women. Of these aged females 3 were centenarians, their respective ages being 100, 101, and 105.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

EPIDEMIC JAUNDICE.

About October 19th, 1893, I was called to see a young lady who had been residing in Edinburgh, and a day or two before coming to Melrose had developed symptoms of what appears to have been influenza. She was going about, but was decidedly weak. On October 22nd she was jaundiced, the conjunctivæ were yellow, skin dark and irritable, urine like porter, and fæces pipe-clay. The tongue was coated with a thin white fur. Bismuth and magnesia were given until the tongue cleaned, and thereafter nitro-muriatic acid and nux vomica until the symptoms disappeared.

This lady's younger sister, who had been complaining of "neuralgia," began to say she was weak, and in a few days afterwards developed well-marked jaundice, with all the symptoms more accentuated and of considerably longer duration than in the previous case.

About the same time a cousin of these ladies residing here, but not in the same house, and who had not been in communication with them at all, suffered from what was considered a chill, but, as she afterwards was excessively weak, we concluded it must have been influenza. About ten days after this illness she developed well-marked jaundice, with all the symptoms. Under treatment she improved gradually. About a month afterwards it was noticed that a little sister, and later a little brother, were not quite in their normal condition. They ate quite well, but they were disinclined to run about and "do lessons." After ten days of this slight *malaise*, jaundice developed. In these two little children there was very great irritation of the skin, with attacks every second day or thereabouts of well-marked nettle-rash, limited mostly to the arms and legs. They are gradually improving now, but there still remains some discoloration of the conjunctivæ.

I have attended within the last six weeks other two cases. In one, a lady aged 45, the onset was slow, with no history of acute illness; in the other, a boy aged 9, the attack began with sharp vomiting, but there was no fever nor other symptom.

In September, 1893, I attended a young girl aged 15, residing in a village three miles distant, where she was staying on holiday from Edinburgh, but in her case there was an acute attack of hepatic colic, put down as gall stones.

Excluding this last, I have had seven cases of jaundice in young people within a period of six weeks. I am sure I have not had so many in the previous six years. In three of these there was a history of something like influenza. If the attack were such, are we to consider the jaundice as one of the sequelæ of influenza? If so, I have not previously heard of it. But what about the four who had no history of influenza? Did they have it in a very attenuated form, so attenuated as to show no acute symptoms, and thereafter suffer from depression, with the sequela of jaundice ultimately showing itself? If this "epidemic" jaundice is not a *post*-influenza manifestation, what is its origin?

Melrose, N.B. W. Hall Calvert, M.D.Edin.

MATERNAL SMALL-POX: INFECTION OF INFANT AFTER BIRTH.

A woman—E. C.—gave birth to a child on November 5th, she being then seven or eight days gone in the incubating stage of small-pox. The eruption appeared upon her on November 11th or 12th, and the child also sickened, but did not show the eruption until seventeen days after birth It is evident that the infant was not infected *in utero*, nor from the milk upon which it was suckled during the first two or three days; in fact, it did not catch the disease from its mother at all, but probably from an elder sister, who sickened on November 9th.

It may also be worth noting, although it only exemplifies a well-known law, that the infant, having been vaccinated five days after infection, developed, concurrently, five fully-formed vaccine vesicles and a copious attack of small-pox, slightly, if at all, modified.

I have recently had under observation five other examples of a precisely similar sequence. All were vaccinated, for the first time, five days, as nearly as could be calculated, after infection. In two the cow-pox took well; and these also suffered severely from unmodified small-pox. In the other three the vaccination produced more or less imperfect results, and the small-pox was mild and, perhaps, somewhat modified.

Edward Casey, M.D.
Medical Officer of Health, Windsor.

RECRUDESCENCE IN SCARLET FEVER.

The following is another instance:

W.D., aged 15, was seen on October 16th, 1893, with typical scarlatinal symptoms—sore throat, "strawberry tongue," etc.—followed by the characteristic rash. Temperature 100°F. He was removed to the City Fever Hospital, where the disease ran a mild course with desquamation. He was discharged on December 5th.

On December 9th, 1893, he was again seen suffering from tonsillitis, the soft palate scarlet, with a suspicious rash on the knees, and next day the diagnosis was confirmed. Temperature 103°F. Owing to the throat condition the patient complained of discomfort in the ears and more especially the right; this he accounted for by assuming that an ear plug of cotton wool had passed through this ear into his throat.

He certainly brought up a plug of wool, which probably had been left in his throat during his residence in hospital, where it is used in making applications to the throat, and which, perhaps, afforded a nidus for the contagium vivum inducing the recrudescence.

Glasgow. Henry L. G. Leask, M.D.

LACERATION OF ABDOMINAL WALL: "RECIPROCATING VITALITIES."

In August, 1867, F. D., a fine healthy boy, aged 14, was gored by a bullock, and a laceration about 3½ inches long made in the abdominal wall a little to the right of the umbilicus. Many feet of small intestine immediately protruded. He was placed in bed, carefully covered, and so remained about two hours until my arrival. The uninjured bowel was returned without difficulty, and the sides of the wound brought together in the usual way by pins, and other support carefully applied. The young patient's alarm was soon soothed by kindly attendance. No drug was given. The injury was done shortly after a midday meal, consisting of animal food and two kinds of vegetables. At 2 o'clock next morning he vomited twice, ejecting what had been taken at the dinner spoken of, all the several articles of which were not only distinguishable, but were without alteration beyond that caused by mastication. During the seventeen hours between my first and second visit he had suffered no pain beyond momentary griping. In the first four days after the injury there was complete absence of both hunger and thirst; there was no aversion, but simply no desire during this long period to take either food or fluid. The bowels moved without medicine on the fourth day, and in the latter part of that day ordinary appetite returned. The pins were removed on the fifth day. Sleep during the first night after the injury was broken, but after that quite natural, and throughout the case there was no evidence of constitutional disturbance. The curious and highly interesting feature in this case is, that with all the absence of food and pain, and with sleep natural, there should still be in this growing lad no hunger during the several days when the necessary movements of a digestive process would have interfered with the progress to recovery. How much this case shows the reciprocal vital sensibilities; and seeing that animal life, when fairly typical, is an embodiment of reciprocal congruities, would it not be well if we viewed many forms of disease more in that light, making treatment less ready, and causes more carefully sought?

Milverton. Geo. Cordwent, M.D.

EXPERIENCES WITH ANTIPYRETICS IN THE TROPICS.

In the report on antipyrin, etc.,[1] it is stated that "the rashes . . . in the great majority of cases have been the result of idiosyncrasy on the part of the patient, independent altogether of the dose." This opinion does not coincide with my experience, which is fairly large. In treating tropical fevers where the drug has been regularly given during two or three days in 15-grain doses four times in twenty-four hours, a rash, generally urticarial, is met with in fully 50 per cent. of cases. This is no doubt partly produced by the diaphoresis. Once only have I seen alarming symptoms follow the use of antipyrin, namely, extreme depression, dyspnœa, slow and irregular heart's action, with subsequent muscular twitchings, in a rather delicate Japanese girl, aged 20. This was undoubtedly caused by an overdose, 15 grains having been given with such good effect that the friends repeated the dose twice at one hour intervals, 45 grains in three hours.

In consultation with Dr. Cantlie I have seen alarming collapse following two 5-grain doses of phenacetin given at two hours' interval to a strong man; and in a patient (seen with Dr. Cowie) taking 5 grains of phenacetin every three hours, after the fourth dose the urine passed was very scanty, highly-coloured, and semi-solid, half the test tube being filled with a yellowish gelatinous, shiny deposit, something like gum mastic, insoluble by heat or acid. The phenacetin was stopped, and the deposit disappeared after twenty-four hours, reappearing when the medicine (5 grains only) was repeated on the third day. No albumen, sugar, etc., was present. We made a microscopic examination, but I do not remember the result. The medicine produced also considerable depression. In one of my own cases I found a similar deposit. The drug was examined and pronounced "pure."

I saw one case in which dangerous collapse and cyanosis followed a 5-grain dose of antifebrin used for pyrexia in phthisis. Antipyrin is perfectly safe where the initial adult dose does not exceed 10 grains. The initial dose for phenacetin ought to be under 5 grains; of antifebrin I have practically no experience.

William Hartigan, M.D.Brux., D.S.M.
Leinster Gardens, W.

[1] British Medical Journal, January 13th, 1894.

HYPODERMIC INJECTIONS OF BRAIN EXTRACT IN MENTAL DISEASES.

The material was prepared by Messrs. Brady and Martin, and sent fresh twice weekly; it was called by them "cerebrine alpha." The injections began on August 20th, and were given twice daily for fourteen days to six patients. The arms were in all cases the seat of injection, and each was given under antiseptic precautions. The doses began at 5 minims, and were gradually increased to 15 minims.

The following complications resulted: Case B, the temperature rose 1° after each injection. An attack of syncope followed in the case of E on the tenth day, and a slight erythema followed the second injection in Case A. The pulse in each case was quickened, but no change was observed in respiration.

Case A (recurrent melancholia with fixed delusions) expressed himself after the sixth injection as "feeling much brighter." He conversed in a rational manner, went on improving, and was discharged recovered on November 2nd. In the remaining five cases the result was negative, and, beyond the above complications, nothing of interest transpired. There were two cases of chronic melancholia, two of primary dementia, one of acute mania.

R. P. Ryan, L.R.C.S., L.R.C.P.I.,
Assistant Medical Officer, Norfolk County Asylum.

DILATATION OF THE STOMACH AS A CAUSE OF DEATH.

A very interesting case of dilatation of the stomach in which there was sudden death and a *post-mortem* examination immediately afterwards, which fell under my observation, may be of interest in connection with the statements in regard to that subject in the British Medical Journal of December 2nd, 1893, at page 1194.

The patient, a large fleshy woman, past middle life, had been subject to dyspeptic troubles, which were not regarded as serious, the most prominent symptom being occasional attacks of pain after eating. Upon the occasion of her death she had just eaten a hearty dinner, and made no complaint whatever of being ill in any way, but left the house without making any remark of any kind in order to feed some poultry

at a distance of a few rods. Her husband followed, as he states, in less than a minute, and found her sitting on the threshold of the poultry-house dead.

A *post-mortem* examination was made within a few hours, and the stomach was found to be so largely distended by food and gases as to compress the heart, which was weak and flabby, so perfectly that it was incapable of containing any blood whatever, and, as a matter of fact, was entirely free from any trace of blood clot. No other cause of death was discovered save this compression of the heart, although careful search was made. It was a condition new to the physicians present, and was admitted to be the cause of death with some hesitation.

Lyons, New York, U.S.A. M. A. Veeder, M.D.

REPORTS
ON
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

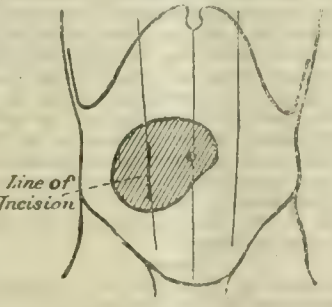
BRISTOL GENERAL HOSPITAL.

LARGE INTRA-ABDOMINAL ABSCESS FROM A FOREIGN BODY WHICH HAD PERFORATED THE BOWEL: DRAINAGE AND RECOVERY.

(Under the care of Charles A. Morton, F.R.C.S., Surgeon to the Hospital.)

T. C., aged 29, was admitted at 7 P.M. on May 20th, 1893, with great abdominal pain. He was sent to the hospital by Dr. Aubrey with a view to operation. Nine days before admission, when at work, he was attacked with cramp-like pain just above Poupart's ligament on the right side, and this pain persisted, passing more over to that side of the abdomen. He continued his work as a mason until two days before admission, but during the last two days the pain had much increased, and he had been compelled to remain in bed. There was no vomiting at any time during his illness. During the first few days he was purged after castor oil. He first discovered a swelling in the abdomen two days before admission.

When admitted he had a very anxious expression, and was every now and then attacked with severe pain in the right side of the abdomen. There was no vomiting. A tender swelling was to be felt and seen in the position indicated in the diagram.



The margins were well defined, except externally. The iliac fossa below was quite free, and not tender; and the upper limit was clearly differentiated from the liver; nor was there an impulse on palpation in the renal region behind, or any tenderness there. No distinct fluctuation could be made out in it. The rest of the abdomen was normal. The swelling could not be felt *per rectum*. The breathing was rapid and shallow, and nearly wholly thoracic. Urine normal. There was marked aortic regurgitation. A hypodermic injection of morphine did not relieve his abdominal pain much. His temperature 101°, pulse 96, respirations 40.

On May 21st, when seen at 10 A.M., he was much more exhausted. The condition of the abdomen was the same. He was anxious to be operated on as the pain was so severe, and at 11.30 A.M. I opened the abdomen in the right semilunar line, over the swelling. A little serous fluid escaped. The swelling was found to consist of a smooth, red mass, with well-defined outline, of the form represented in the chart. It was only very slightly adherent to the abdominal wall in front, here and there, by delicate recent bands. Below and above was small intestine, but towards its outer side the edge of the liver just overlapped the top of the swelling, and the swelling seemed loosely connected with its under surface. It moved very freely with respiration. It seemed to occupy the lateral flank, and I could not get behind it here. With one finger on the swelling and the other on the abdominal wall over it, fluctuation could be made out. An exploring syringe was then introduced into the exposed swelling, and thick pus withdrawn. The needle and syringe were retained in position, whilst with fine silk I stitched the edge of the parietal peritoneum to the surface of the mass, the tissue of which was so friable that several stitches cut out. Whilst this was being done the patient vomited several times, and pus was forced out around the needle. A little of this must certainly have run into the peritoneum, but most was swabbed up with sponges, and then a very small fragment of sponge in forceps was held against the puncture, and this prevented further leakage during the suturing. After this had been completed, the sinus forceps were passed along the side of the needle, and as several ounces of offensive thick pus escaped, it was washed out of the wound by boracic irrigation. The opening was then enlarged with scissors and the finger introduced; the new junction to the parietal peritoneum showing no signs of giving way. The finger detected a large, rough fasciculated cavity, going upwards towards the under surface of the liver, and some of the loculi seemed to pass towards the spine, and had well-defined ring-like openings. There was no extension into the iliac fossa. A fine fish bone about an inch long was felt lying loosely in the floor, and removed easily with sinus forceps. The cavity was then well irrigated with boracic solution, and a very large sized india-rubber drainage tube, which very closely fitted the opening, put in. He was considerably shocked, but took ether better than the condition of his heart led us to fear. In the evening he was much easier than before operation, and breathing quietly. There was no general abdominal pain or tenderness. After a hypodermic injection of morphine he slept nearly all night, and was quite easy when I saw him on the morning of May 22nd. His temperature never reached 101° after the operation, and in a few days fell to normal, and he made an uninterrupted recovery, the cavity rapidly filling up with granulation tissue, so that by the end of the month the tube had to be left out, and he was discharged well on July 2nd.

Remarks by Mr. Morton.—The first point of interest in this case is the position of the abscess. Possibly the fish bone penetrated the ascending colon, and the pus formed around it under the colon, pushing it and its peritoneal attachment on the inner side upwards, so that the abscess would lie behind a kind of mesocolon, which may have been the tissue (greatly thickened) I stitched to the parietal peritoneum and then opened. Another point of interest is the escape of some of this stinking pus into the peritoneum at the time of the operation without any symptoms of peritonitis following. It shows the danger there would have been in puncturing with an exploring syringe before opening the abdomen, as a considerable quantity of pus might thus have been forced out into the peritoneum and diffused there had he vomited in taking the anæsthetic or moved about much. In some cases, perhaps, we must puncture before operating on abdominal swellings, but where we clearly ought to operate, whether an exploratory puncture reveals pus or not, surely we are incurring a needless risk in an exploratory puncture.

Bequests.—The late Mr. James Jardine, of Manchester, who died in September last, has, by his will, bequeathed £1,000 to the Ardwick and Ancoats Hospital and Dispensary: £1,000 to the Northern Counties Hospital for Incurables: and £500 each to the General Hospital and Dispensary for Sick Children, Pendlebury, the Royal Eye Hospital, Manchester, St. Mary's Hospital and Dispensary, Manchester, and the Clinical Hospital for Women and Children, Manchester.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

J. W. HULKE, F.R.C.S., F.R.S., President, in the Chair.

Friday, January 26th, 1894.

ENDOSTEAL SARCOMA OF RADIUS.

MR. H. H. CLUTTON described three cases: (1) A myeloid sarcoma of the head and neck of radius in a man, aged 28, who had noticed a swelling for two years. The tumour was successfully removed by resection of the upper third of the radius. He died eighteen months after operation from kidney disease, but without any return of the new growth in the radius. (2) A man, aged 58, had an endosteal growth of the lower end of the radius, subsequently proved to be a myeloid sarcoma. It was treated by resection of the part affected. A corresponding portion of the ulna was removed at the same time to avoid any lateral deviation of the hand. He had now (January, 1894) a very useful hand, and with a gauntlet could hold a pot of paint weighing 9 lbs. He was a painter by trade. [Shown to the Society.] (3) A round-celled sarcoma of the lower end of the left radius in a woman, aged 34. The tumour was thought to be parosteal or periosteal, and was therefore removed by amputation. The specimen showed that it was an endosteal growth, and might possibly have been successfully removed by resection without loss of the hand. But considering its microscopical character it was, on the whole, more satisfactory that amputation had been performed. She had had no return of the disease.

MR. GOULD remarked that the malignancy of endosteal sarcoma varied within wide limits. Mr. Clutton had been fortunate in having no recurrence in his cases. Under such circumstances might not the tumour be simply shelled out and the limb left otherwise unimpaired?

The PRESIDENT alluded to other cases of myeloid sarcoma. One was in the lower jaw of a woman, aged 25, treated by removal, and after each of two recurrences again scraped out. In another case the patient, a male, after removal of the lower jaw, remained free of the disease for ten years, when there was a recurrence.

MR. CHARTERS SYMONDS asked why Mr. Clutton had preferred to remove part of the ulna in addition to the radius in his second case. In a girl, aged 11, excision of the upper jaw for sarcoma did not quite remove all the disease; this was, however, scraped, and had not returned eight years afterwards.

MR. EVE said the less malignant cases of sarcoma expanded the bone only; the more malignant ones broke through the bone, and became irregular in outline. In Mr. Clutton's third case the disease had already lasted nine years before operation, showing it was not malignant. He had excised an eye for proptosis, and found behind it a pulsating tumour with myeloid cells.

MR. CLUTTON, in reply, said that if the ulna were not excised equally with the lower end of the radius the hand was left at right angles to the forearm to the radial side of the ulna, and was thus rendered useless.

MR. BLAND SUTTON remarked that if the lower end of the ulna only was taken away the patient had afterwards a useful hand, but if the lower end of the radius and none of the ulna was removed the hand remained useless.

NEPHRECTOMY FOR MALIGNANT TUMOUR IN A PATIENT UNDER 2 YEARS OF AGE.

MR. MALCOLM related the case of a child, 23 months old, of good family history, and well developed. She was said to have had a "full belly" when a year old, and a definite "lump" in her side had been noticed six months later. This lump had steadily grown till it formed an elastic, oval, well-defined tumour, painless, and scarcely movable. It filled the right loin, extending down towards the pelvis and just beyond the middle line below the navel. She was anæmic, but her general health was good, and there was nothing abnormal in the urine. On November 15th, 1892, the abdomen was opened through the right linea semilunaris, the kidney on the other side was examined and found apparently healthy, and the tumour was removed through an incision in the posterior layer of the peritoneum immediately to the outer side of the ascending colon, which passed in front of the growth. The greatest care was taken not to open the capsule of the kidney, which also included the tumour, but some of it was inadvertently separated during the enucleation of the deeper part. When the growth was got out of the way, the remaining shred of its capsule and a mass of glands and fat surrounding the right renal vessels were also carefully removed. The divided end of the ureter was brought outside the skin, and the wound closed without drainage. By the end of a week fever was gone. The wound healed well, and, except for a little albumen in the urine the first night, there was nothing important to record. A year later the urine was examined and nothing abnormal detected in it. On January 25th, 1894, Dr. Marshall, of Barnes, reported that the child "is in perfect health." The tumour was oval, measuring 6 by 4 inches. The posterior half of the kidney substance was apparently healthy. The anterior half was partly replaced by, partly expanded for a short distance over, the new growth. The tumour was described by Mr. Targett as a "malignant adenoma," separated from the kidney by a capsule of dense fibroid tissue, and consisting of tubes lined by epithelial cells with a scanty delicate stroma, but with strands of connective tissue dividing the field into large loculi. Examination of the glands did not show conclusive evidence of secondary deposit. The records of nephrectomy for neoplasm in children showed an immediate mortality of over 50 per cent., while those that survived the operation had all died within a year, only one exception[1] having been found in which the patient survived for eighteen months. The operator therefore scarcely hoped for complete success in his case, although the patient had lived more than fourteen months after the operation, and was free from signs of recurrence. Attention was directed to the advice of Mr. Godlee[2] that operation should be performed in a number of cases of small tumour, at an early date, before they decided whether nephrectomy in children was unjustifiable; the records did not indicate that the removal of small tumours had been specially successful. Mr. Malcolm hoped future observations might enable us to differentiate beforehand those cases in which it might be expected that life could be prolonged by operation. He thought the specimen was scarcely a connective tissue neoplasm, and that it was not exactly similar to any hitherto removed during life and described. In some peculiarity of structure in the tumour might be found the explanation of the immunity from recurrence; the method of operating, however, was of the greatest importance, and careful removal of the glands when practicable was recommended. He opposed the advice of Mr. Morris and Mr. Sutton that solid tumours of the kidney should be removed from within their capsules. To cut as widely of the disease as possible was the only way by which the results of the operation could be improved in future. He advocated the bringing of the cut end of the ureter outside the skin, as recommended by Mr. Thornton. He considered this as important from the view of the antiseptic surgeon, as removing the capsule was essential from the view of the pathologist.

On the motion of Mr. BLAND SUTTON, the discussion was postponed until next meeting.

CASES.

Cases were shown by Mr. EVE, Mr. GOULD, Dr. SIDNEY PHILLIPS, Dr. PENROSE, and Dr. MOTT.

[1] Hicquet quoted by Bruce Clarke, *Surgical Diseases of the Kidney*, p. 54.
[2] *Clin. Soc. Trans.*, 1884.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

D. ARGYLL ROBERTSON, M.D., F.R.S.E., President, in the Chair.

Thursday, January 25th, 1894.

SCHOOL OPHTHALMIA.

MR. JONATHAN HUTCHINSON called attention to this form of ophthalmia as having lately become very prevalent in a class of schools which had hitherto been free from it. It did not appear to differ in nature from the ophthalmia which had been long known to exist in workhouse schools. The affec-

tion in its first stage was characterised by a very mild and transient congestion of the eye; this was so slight in many cases as to be unnoticed. This stage was followed by an enlargement of the papillæ of the conjunctiva, which gave no trouble, and might remain unnoticed until the lids were markedly granular, and true trachoma or granular lids became established. In some schools only 5 per cent. of the children were affected; in others as many as 40 per cent. or 50 per cent. It spread rapidly to the healthy, and had been known in one case to have spread in the family to which one of the pupils had returned in the holidays. It occurred under circumstances where no gross hygienic faults could be found, where all reasonable precautions had been taken except isolation, and where boracic acid had been used for the eyes. The characteristic feature of the affection was the very mild congestive stage, and the rapid taking on of the characters of trachoma with sago-grain bodies in the lids. The important question was one of diagnosis. Papillæ were constantly present in the conjunctiva as part of its normal structure, and the question of their enlargement was a difficult one to be sure of; the only safe rule in an epidemic was to treat all suspicious cases as real ones. Contrasting this disease with catarrhal ophthalmia, it would be found that the latter was never epidemic. It occurred in families, and might attack all the members of one family; it might attack another family by direct infection of one member of it, but its manifestations were very obvious; there was great redness of the eyes and discharge, and no schoolmaster would allow a child suffering from it to associate with other children. It was generally over in seven to ten days, and there was an end of it. In school ophthalmia it would be found that, notwithstanding repeated assertions to the contrary, crowding or other faulty hygienic surroundings did not predispose to its spread, except from their increasing the risk of direct contagion. It appeared to spread especially in bedrooms, and more particularly between individuals occupying the same bed, suggesting direct contact, or possibly the intervention of flies. Without entering into the question of the alleged special micro-organism of trachoma, it might safely be said that school ophthalmia was due to a specific contagion conveyed from patient to patient; it was identical probably with military ophthalmia or Egyptian ophthalmia. These two latter were nothing but a severe type of granular lids. It was met with very infrequently in private practice, except in the Hebrew and Celtic races. If the disease were uncured it would continue to be communicated to others. No patient should be allowed to return to his fellows while a suspicion of the disease remained; this might mean in the severest cases isolation for the remainder of school life, as the disease was very tedious in its progress. The treatment should be complete isolation in separate schools, in which the instruction should be mainly oral: isolation of all suspicious cases from the first, fresh air, healthy surroundings, and a general tonic treatment should be prescribed in order to enable the patient to resist the advance of the disease; locally the application of mercuric chloride or silver nitrate. The school need not be broken up. Apart from the risk of conveying the disease home to others, probably better treatment would be secured by the patients all being treated by one skilled hand.

Mr. Sydney Stephenson said that out of 11,000 children in the metropolitan pauper schools, 2,000 required treatment for ophthalmia four years ago. At that time an isolation school to contain 400 children was erected, and he (the speaker) was placed in charge of it; in June, 1893, the number admitted was reduced to 100, so children from other districts were admitted, but the space was too limited to provide for all those requiring isolation and treatment in the metropolitan area. At first he regarded follicular disease as an early stage of trachoma, but he found he was mistaken: cases of follicular conjunctivitis did not develop. He had examined 14,000 children in different schools, excluding pauper schools, and found that 94.5 per cent. showed more or less follicular bodies in the lids, only 5 per cent. being free, while only 0.5 per cent. showed true trachoma.

After some remarks from Mr. Rockliffe, Mr. Nettleship said he did not consider there was a serious amount of disease of the lids in children attending the higher schools. In the best and oldest schools outbreaks of mild ophthalmia did occur, but these were not serious, and did not indicate that trachoma was making way in the country. Much of the apparent increase in this as in other diseases was due to the higher standard of health required, and to a more systematic examination of eyes, resulting in the discovery of cases which were formerly overlooked. It was often very difficult to say whether a lid was healthy or not; to determine this it was necessary to look out for variations in the condition; one of the most reliable signs, he thought, was the presence of a slight sticky discharge on the lids in the morning.

The discussion was adjourned.

EPIDEMIOLOGICAL SOCIETY.

J. F. Payne, M.D., F.R.C.P., President, in the Chair.

Wednesday, January 17th, 1894.

Aërial Convection of Small-pox from Hospitals.

Dr. J. McVail read a paper in which he referred to his own experience of a fever hospital outside Glasgow in which 20 of the 100 beds were given up to small-pox cases adjoining a board school, and opening into a high road opposite a number of miners' cottages. The regulations were by no means strict, but neither aërially nor by personal communication was infection conveyed in a single instance. He admitted that spot maps almost always showed an incidence of small-pox on the surrounding population increasing as the proximity to the hospital. They did not, however, distinguish between aërial and human agencies, nor indicate the existence of outside foci; and by careful local inquiry one would often be able to trace a large proportion of the cases to sources other than the hospital; but there was always a residuum which could not be accounted for otherwise than on the hypothesis of aërial convection, which seemed also to be favoured by still foggy weather. At Fulham in 1884, when a portion of the hospital was devoted to small-pox patients, though the regulations were most stringent and, with the exception of the medical officer, the staff were entirely separate, fever patients contracted small-pox, but in no instance did scarlatina reach the small-pox wards. Numerous facts were adduced from the evidence given before the Royal Commission, and the reports of medical officers of health, for and against the theory of aërial convection. One of the most remarkable was the entire absence of any extension of the disease at Fulham, when the hospital was occupied by convalescents only; or at Darenth, when no fewer than 600 such were congregated there. He considered that aërial convection and personal intercourse concurred in almost every instance; circumstances connected with the period of the epidemic, the character of the population, the season and weather, and, above all, the position and arrangements of the hospital determining which factor should be the stronger.

Dr. Coupland, in all the towns that he had visited, had found the same concentration of cases around the hospitals: but it was ascribed to either cause, according to the bias of the medical officers.

Dr. Savill said that when at Warrington, the small-pox cases were after the middle of September transferred from the old to the new hospital, the distribution of the disease in the town seemed to follow the change; but it bore no relation to the distance from the hospitals or to the prevailing winds, and there was ample evidence of personal agencies in its spread, while no fewer than 67 cases were never isolated at all. In the workhouse adjoining the old hospital, among 700 inmates, many of them unvaccinated, there was but one primary case, traced to personal contact, and seven directly infected from it. In a brewery close to the new hospital several cases occurred among the 364 men within four days after the opening of the hospital, and therefore unconnected with it.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Surgery.

Sir W. Stokes, M.D., in the Chair.

Friday, January 12th, 1894.

Fibrous Stricture of the Œsophagus treated by Gastrotomy and Dilatation from Below.

Mr. Kendal Franks read this paper. A lady, aged 24, had suffered from dysphagia ever since she had had scarlatina

when 7 years of age. Symptoms had during the past two years been progressively worse, and she was reduced from 8 stones to 5½ stones in the last twelve months. Bougies introduced showed a practically impermeable stricture 3 inches above the cardiac orifice. On July 6th, 1892, the abdomen was opened in the middle line from the xiphoid cartilage downwards. The stomach, very contracted, was opened for about an inch, cleaned out, and the finger introduced. Otis's dilating urethrotome, without the blade, was passed along the finger through the stricture, and the stricture was dilated first antero-posteriorly and then laterally. A bougie passed through the mouth emerged in the stomach, and by its means strong silk drawn up the œsophagus to the mouth. A plug of gauze tied to this, with another silk ligature at the other end, was drawn backwards and forwards through the stricture, and was finally left in the stricture, the lower ligature being cut off. The stomach was immediately closed, returned to the abdomen, and the external wound sutured. The plug was withdrawn in six hours. The patient made an uninterrupted recovery, and was able to go out on the twenty-first day. Two months later the stricture readily admitted a medium-sized bougie. Dilatation, supplemented by electrolysis, was carried on at intervals. The patient, eighteen months after operation, was in perfect health, and had increased in weight from 5½ to 8½ stones. The author exhibited a table he had prepared of all the cases hitherto published which he could find; they numbered 21. Eight of these had been done by the immediate method, as in the case recorded. In the remainder a gastric fistula had been first established, and, from one to four months subsequently, retrograde dilatation of the œsophagus, either by Hagenbach's or some other method, had been carried out. The author argued in favour of the immediate method in all cases of impermeable fibrous stricture, except after extensive injuries involving a great length of the tube, when immediate dilatation would be impracticable. The operation was devised and first performed by Loreta in 1883.

The paper was discussed by the Chairman, Mr. T. Myles, Mr. F. A. Nixon, Mr. Tobin, Mr. Wheeler, and Mr. M'Ardle; and Mr. Kendal Franks replied.

Some Interesting Cases of Gunshot Wounds.

Mr. Austin Meldon related the following cases. A boy was accidentally shot, the bullet entering the abdomen to the right of the sternum at the lower end. Peritonitis and escape of bile followed. The fistula closed, and he was discharged in a month. A woman was shot in four places. One bullet passed through the muscles of the right arm; the second lodged in the wrist; the third entered between the umbilicus and the spine, and was removed from the groin; the fourth entered to the right of the sternum, passed through the lung, and was found in the muscle on the left side. She recovered. In the next case a man accidentally shot himself. The bullet entered on the right side of the thorax above the nipple, and passed into the lung. He recovered.

Other cases were mentioned by Mr. Myles, Mr. Tweedy, Mr. Wheeler, Mr. F. A. Nixon, and Mr. Kendal Franks.

Medical Officers of Health—*Jan. 15th*—Dr. Woodforde, President, in the chair.—Dr. Armstrong opened a discussion on the [illegible] of cholera by vagrants. From May, 1891, when small-pox first began [illegible] at Dewsbury, to December of that year 15 towns were [illegible]ed, and to May, 1893, no fewer than 108 of the 117 notifying districts, the weekly number of cases having reached 360, and the total number 5,600. Seven of the 8 authorities from whom he received replies in the first, and 37 of the 63 in the latter year, ascribed the introduction of the disease to tramps, while in 7 this had been repeated from 9 to 25 times, every infected casual ward or lodging house proving a focus, until in Halifax and Warrington the cases rose to 360 and 593 respectively.—Dr. Sergeant, in a note on small-pox in Lancashire during the years 1892-3, stated that 1,612 cases had been reported from 101 sanitary districts, in nearly 40 per cent. of which it was ascribed to tramps. Section 83 of the [illegible] Act, and nothing short of a system of [illegible] with [illegible] powers of arrest and detention would [illegible] Dr. Whitelegge, Dr. Newsholme, Dr. Parkes, Dr. Sykes, Dr. Reid, and the President took part, Dr. Sergeant, in reply, said that the power of arrest should be extended to "any public place." Resolutions were adopted and referred to a [illegible] for presentation to the Local Government Board as a [illegible] also the dissemination of infectious disease [illegible] compelling them to register, and to report their move[illegible] to the local authorities, as they deem expedient, to [illegible] all persons on admission to casual wards; to enter common lodging houses at all hours, and to inspect and, if necessary, detain for medical examination, disinfection, and, in certain cases, for quarantine all persons exposed to infection or "vagrants found in any public place."

Liverpool Medical Institution—*Jan. 18th*—Mr. Chauncy Puzey, President, in the chair.—Mr. W. Thelwall Thomas showed a boy who had completely recovered from a compound depressed fracture of the skull; the overhanging edge of bone had been chiselled away, and the depressed portion levered into position.—Mr. Thomas also showed a girl, aged 19, who had suffered for eight years from ankylosis of the lower jaw. Nine months ago the condyle of the jaw was divided, and since then the mouth had been widely opened under an anæsthetic on several occasions. The patient could now move the jaw well from side to side, and the aperture between the upper and lower teeth was now ¾ inch.—Dr. Burton related a case of uterus bicornis, with retained menstrual fluid in the right horn. This was ligatured and removed, and the patient made a good recovery.—Dr. Carter had given a full trial to the subcutaneous injection of spermine in cases of sclerosis of the spinal cord. There had not been the slightest benefit in any single instance.—Dr. Carter made some remarks on the administration of piperazine in renal calculus. In two recent cases the stone had been discharged in fourteen and four days respectively, and the pain had been immediately relieved or mitigated. It seemed to give more satisfactory results when the urine was kept alkaline during its administration.—Dr. Caton related a case of tumour of the left occipital lobe, with hemiplegia on the same side. During life the symptoms pointed to a tumour in the right occipital lobe. On *post-mortem* examination a large syphiloma was found occupying the left occipital lobe, pressing upon and greatly displacing the left crus. Dr. Caton attributed the hemiplegia on the same side to irritative inhibition dependent on stimulation of the sensory tract.—Dr. Dickinson had reported a case in full in the *Liverpool and Manchester Medical and Surgical Reports* for 1878.—Professor Gotch suggested that in this case both the large lesion and the general condition would combine to inhibit the activity of all the sensori-motor centres in both hemispheres, and that some special agent might then contribute further to block the feeble flow of nervous impulses from the right hemisphere. This he thought might be the distortion which the tumour, pressing as it did on the dorsal portion of the left crus, necessarily caused in the position of the ventral fibres of the right crus.—Mr. Thomas, Dr. Carter, Mr. Paul, Dr. Macalister, and Dr. Permewan also made remarks.

Manchester Medical—*Jan. 24th*—Professor Dixon Mann, President, in the chair.—Mr. G. A. Wright showed two children in whom he had removed the astragalus and erased the ankle-joint by the anterior transverse incision recommended by Mr. Holmes. The patients could walk well; the feet were sound and not unshapely, and there was some mobility. By this operation, or by tarsectomy in more extensive disease, the operations of Syme and Pirogoff had been in his practice almost entirely superseded.—Dr. Thomas Harris exhibited a man, aged 55, who for the last three months had had shortness of breath, and in whom a deep expiration was accompanied by marked stridor, the inspiration being also very slightly stridulous. The larynx of the patient exhibited to the Society was perfectly healthy, and presented no paralysis of the abductor or other muscles. The man showed very well-marked tracheal tugging, also very slight pulsation over the manubrium sterni, which was only visible at the end of expiration, and a markedly accentuated second aortic sound. Dr. Harris mentioned two other cases of expiratory stridor: in both cases a sacculated aneurysm of the aorta was found, which markedly compressed the trachea. Dr. Harris regarded the present case as probably due to a similar cause. The cause of the expiratory stridor was probably a consequence of the aneurysm being so placed that greater pressure was exerted on the trachea, and greater stenosis caused during expiration than during inspiration.—Mr. Andrews related a fatal case of purpura hæmorrhagica in a young man, aged 22, and the illness ran a rapidly fatal course in nine days.—Dr. Wild gave a short account of a number of experiments upon the deodorising and disinfectant properties of charcoal. The result showed that wood charcoal was an effective deodoriser, whether dry or thoroughly rubbed up into a paste with distilled water; purified animal charcoal was much inferior, and ordinary animal charcoal was nearly inert. In preventing putrefaction of a fresh meat broth, wood charcoal in the proportion of 1 to 4 of the fluid was only partially successful in taking away the smell, the growth of organisms being unaffected; smaller proportions of charcoal were quite inert. Inoculation experiments upon agar-agar and nutrient gelatine showed that charcoal had no influence whatever upon the vitality of putrefactive germs. Charcoal obtained from ordinary bottles always contained germs, and, when introduced into a gelatine tube, growths of mould fungi and other organisms were obtained, so that it was necessary to carefully sterilise the charcoal before its disinfectant properties could be tested.

Sheffield Medico-Chirurgical—*Jan. 18th*—Mr. Richard Favell, President, in the chair.—Mr. Snell introduced a boy, aged 12, with a small field of vision; the perimetric chart showed that it was confined to the point of fixation. It had existed for years, but the lad had nevertheless pursued his studies successfully; V=⅙ in each eye; the discs were white, and suggested antecedent neuritis; there appeared to have been meningitis in infancy.—Mr. Pye-Smith showed a young man whose left eye had been penetrated a month previously by a chip of steel which had gone through the cornea, iris, and edge of the lens on the inner side of the eye, and had struck and perhaps passed through the sclerotic at the equators on the inner side, where a white scar was now visible; V=1/60.—Mr. Lockwood gave particulars of a case of fracture of the larynx and showed the specimen. He also read notes of an unusual case of obstructed labour.—Dr. Sinclair White related particulars of a case in which he had removed the vermiform appendix for relapsing appendicitis in a waitress, aged 22. Her first attack occurred in December, 1892. During the succeeding four months she had three relapses, each of which occurred on attempting to take solid food. She was operated on in May, 1893. The appendix was very much thickened

and its apex adherent to a coil of ileum deep in the pelvis. There were no concretions and no pus. The patient made a good recovery.—Dr. Wearne Clarke, Dr. Keeling, and Mr. Pye-Smith made remarks.—Specimens were shown by the President, Dr. Hunt, Dr. Porter, Dr. A. Hall, Dr. Waters, and Dr. Burgess.

Glasgow Obstetrical and Gynæcological—*Jan. 24th*—Dr. Robert Pollok, President, in the chair.—Drs. Lindsay and Jardine showed two anencephalous fœtuses.—Dr. Jardine read his "Report of the Year's Work at the West End Branch of the Maternity Hospital." Five hundred and forty cases had been attended at full time, 25 prematurely, 18 abortion; total 583. There were 10 cases of twins. Operative cases: forceps 29, version 1, craniotomy 1. Abnormal presentations: breech 13, hand and breech 1, feet 7, face 3, cord 1. There were two cases of pseudocyesis. *Post-partum* hæmorrhage occurred 3 times, the worst being in a case of placenta prævia four hours after delivery. Placenta and membranes were adherent 14 times. There were 2 cases of puerperal fever; 1 was infected from a case of erysipelas, the other from a drain which had been opened in the close two hours before she fevered. She was removed to the Fever Hospital, but died there. The first one also died. These were the only deaths. There were 3 cases of placenta prævia, 1 central and 2 marginal. Dr. Jardine dilated and delivered each by bringing a foot down; all recovered. Accidental hæmorrhage occurred once at full time, caused by the patient over-reaching herself. There were two cases of contracted pelves; craniotomy was done in one, and forceps used in the other. Three face cases, 2 delivered with forceps, and the third by turning. The latter child weighed 10 lbs. The arm was displaced behind the head, and the humerus broke, but it united well. The largest child delivered weighed 12 lbs. No cases of eclampsia.—The paper was discussed by Professor Cameron, Drs. Gunn, Marshall, Richmond, Grey, Howie, Black, and the President; and Dr. Jardine replied.

Midland Medical—*Jan. 17th*—Dr. A. H. Evans, President, in the chair.—Dr. Malins showed a spleen weighing 2 lbs. 5 ozs., removed on January 2nd from a woman, aged 32, who had an abdominal tumour reaching from the right hypochondrium to the left of the pelvis, some peritonitis, a high temperature, and quick pulse. The abdomen was opened in the middle line, and the tumour found to be the spleen twisted for half a revolution on its axis; the vessels on the distal side were thrombosed and the spleen discoloured and congested. A single silk ligature was tied round the proximal side of the obstruction and the spleen removed. The patient recovered without bad symptoms, and left the hospital at the end of three weeks, saying she was better than she he had been for many months past.—Mr. George Heaton showed a uterus removed by Porro's operation for rupture during labour. There was no more hæmorrhage, but the patient died of shock. The specimen showed a rent on the right side of the uterus anteriorly, 6 inches in length, and extending from the external os up towards the fundus. The rupture involved all the coats of the organ, the peritoneum being torn for a considerable distance beyond the muscular coat. The patient was a multipara, aged 25, and the rupture appeared to have been caused by unsuccessful attempts at version in a shoulder presentation.—Dr. Douglas Stanley showed two cases of aneurysm.—Mr. Jordan Lloyd read a paper on appendicitis.

Nottingham Medico-Chirurgical—*Jan. 17th*—Dr. Walter Hunter, President, in the chair.—Dr. Hunter read a paper for Dr. Stewart on Eustachian obstruction. The most prominent symptom was deafness, temporary or permanent. The chief causes were: Catarrh of the middle ear, which might be dry, mucous, or suppurative; vegetations in the naso-pharynx, or polypoid or other obstruction of the nose. Stress was laid on the frequency with which ear troubles followed the zymotic diseases, especially scarlet fever. The diagnosis of the various causes of Eustachian obstruction was described, and also its treatment by the catheter, bougies, inflation, nasal washes, sprays, and gargles. For vegetations Dr. Stewart proposed to have the patient lightly anæsthetised, and to remove the growths by the curette. A discussion followed, in which the President, Messrs. Cattle, Gibbs, Belcher, Watson, Few, Wood, Blurton, and Heelis took part.—Dr. Cattle showed for Mr. Anderson 76 gall stones, removed from a man aged 55. He had had numerous attacks of biliary colic, but had not had jaundice, nor could the gall bladder be felt by palpation. The patient made a good recovery.—Dr. Cattle also showed for Mr. Anderson a mulberry calculus weighing 10 drachms, removed from the bladder of a man, aged 19, by lateral lithotomy. The man was discharged well three weeks after the operation.

Society for Relief of Widows and Orphans of Medical Men.—The Court of Directors of the Society met on Wednesday, January 10th, Sir James Paget, President, in the chair. It was resolved to distribute a sum of £1,226 among the fifty-five widows, nine orphans, and four orphans on the Copeland Fund now in receipt of grants. A fresh application for assistance was read and a grant made. The expenses of the quarter were £75 19s. 6d. Two new members were elected, and the deaths of five reported. A sum of £791 had been received from the trustees of the late Mr. John Robinson Peile. The directors determined to call a special general meeting, and to recommend that a grant of £50 should be made at it to the daughter of a deceased member. After Ladyday next the offices of the Society will be at 11, Chandos Street, Cavendish Square, W.

Medical Magistrate.—Mr. Alfred Godson, M.A., M.B., M.C.Cantab., of Cheadle House, Cheshire, has been appointed Commissioner of the Peace for the county of Chester.

REVIEWS.

THE OXFORD MUSEUM.[1]

The old order changeth, and the whirligig of time brings with its mutations revenges which are strangely like consolations. This delightful volume revives with picturesque detail and vivid simplicity memories of a controversy which was chronic and continuous during the last half century, and of which the later phases were lit up by many flashes of anger. In this gentle and sympathetic narrative, the evolution of the modern scientific teaching of the University is outlined and suggested rather than debated in the spirit of a large philosophy which gains rather than loses by a certain vagueness of expression, and by an impressionist sense of the value of the art of leaving out. It is in a literary sense a counterpart of the art work of a Tanyû of the seventeenth century, or of a Whistler of to-day. As a delightful word picture and a true rendering of the most picturesque incident of modern university history, it is a study which has unique interest, and which presents a perfect and delightful harmony evolved out of a general sense of colouring rather than a record of the outlines and details of the upbringing and housing of the science side of Oxford of to-day. Working side by side and in close fusion of intellectual, moral, and artistic sympathies, Acland and Ruskin gave the first impulse to the creation in the ancient seat of arts and letters of a department for the study of the facts and laws of natural science. Their conception was of the largest—astronomy, geometry, experimental physics with their mathematics, chemistry, mineralogy, geology, zoology, anatomy and physiology, medicine—all these were to be housed in a building for which only £30,000 could then be granted. The object and the method of carrying it out were alike violently opposed in the University. "Every grant was carried in Convocation by a narrow majority. That for the gaspipes for lighting the court, for instance, was carried; that for the burners was lost by two."

It is characteristic of the groundwork of this opposition that a young teacher of science in the University is reported as having asked of Dr. Pusey "whether it was to be counted a danger and an evil if he sought faithfully to discharge the duties committed to his care." The answer was happily encouraging, but the question was characteristic of the prevailing belief that science was antagonistic to religion as conceived by theologists and tends to infidelity, and that biology is the mother of scepticism.

The art history of the museum runs through these pages concurrently with the thread of the story of the purposes which it was intended to fulfil and the difficulties with which considerations of economy, not to say parsimony, surrounded the progress of the architecture and decoration. Mr. Ruskin's letters are jewels which enrich the narrative, and Dr. Acland's story of the enthusiam with which Dante Rosetti, Morris, Alexander Munro, Millais, Holman Hunt, Pollen, and Woolner aided every step, is vivid and touching. Several painted—unpaid he tells us—historical designs on the large roof of the Union Library which Woodward built. Munro executed four of the five statues most generously given by the Queen. A family of Irish art workmen carved the capitals illustrating the natural order of plants; friends gave the polished shafts, more than a hundred in number, to illustrate British rocks; and, unfinished as it still is, the museum is the chief laboratory of the University for research. But the conceptions of the founders were too large and general to enable them to realise all that was meant in practice by the revival of scientific study and teaching in the University. In spite of the beautiful roundness and far-seeing completeness of the system conceived, there were evidences that the outline lacked vitality. Although medicine remained as a name in the University curriculum, it was but a *caput mortuum*: and in 1880 a medical student was truly said to be rare as a dodo in the streets of the University, while for a medical student to ask to receive clinical instruction in the hospital

[1] *The Oxford Museum.* By H. W. Acland, M.D. and John Ruskin, M.A., Honorary Students of Christ Church. From original Edition, 1859. With additions in 1893. London and Orpington: George Allen. 1893. (Small post 8vo, 4s. net, 148 pp.).

was resented as an impertinence. The lectures of the Regius Professor of Medicine were represented only by a few lines in a nominal and academic syllabus. Then arose Mr. Ray Lankester in his might, and waged a fruitful war before the University Commission: in that battle we lent our little aid, and the "Lost Medical School" became a frequent and a fruitful theme in our pages, and was transferred to every day discussion in the public and university press. "The Editor of the BRITISH MEDICAL JOURNAL says what he pleases, and the Regius Professor of Medicine does what he pleases," was passed round as a pleasant university epigram. But when that distinguished and able man, Professor Rolleston, passed away, the lectures in "Anatomy and Physiology" ceased to be largely tinctured with "Saxon interments and prehistoric pigs." A subdivision of the two vast subjects were effected. Dr. Burdon Sanderson was appointed Professor of Physiology. Mr. Moseley, and subsequently Mr. Lankester, was appointed Professor of Zoology, and a new professorship of human anatomy was added. A violent concerted opposition was organised to the construction of the physiological laboratories. Old residents were brought up from all parts of the country, and a scene ensued in the Sheldonian Theatre such, says Sir Henry Acland, as in the last half century has but once before been witnessed. The attack was led with intense earnestness by the late Professor Freeman. The objection was the practical recognition of vivisection, of which Professor Sanderson was a founder, expert, and author of an important manual thereon, but the grant was carried. Mr. Ruskin resigned his Professorship by a formal letter to the Vice-Chancellor. The preface to this reprint is, however, written by Sir Henry Acland in Mr. Ruskin's house, and it is adorned by an interesting photograph of Sir Henry Acland and Mr. Ruskin sitting in the garden at Brantwood, and concludes with a characteristic message of benediction from Ruskin to his friends in the Oxford Museum; and so ends happily a most picturesque and moving record of a great incident in the history of the University of Oxford. For our especial part of the record, it is pleasant indeed to be able to note that in agreement with our requisitions the Medical School of Oxford is not only restored, but constituted on a basis at once wide and secure; that its scientific departments are administered with vigour and efficiency by men not only of eminent scientific achievement, but fully alive to every-day requirements of preliminary medical teaching; that an eye is kept on the practical demands of the General Medical Council, and that the curriculum is one which every medical student in the land may follow with advantage, and without losing count of his courses, for final examination purposes. Abstract science and humane letters are thus reconciled: the institutes of medicine take their fitting place in the University system; and it is pleasant indeed to add that in all this Sir Henry Acland has been a moving spirit, and is well satisfied with the result. Needless to say how much cause for gratification and congratulation this happy consummation affords to the BRITISH MEDICAL JOURNAL, or with how much interest we have read this delightful and sympathetic sketch of a movement which has passed through all its controversial phrases without leaving scars even where it inflicted wounds; and in the result of which all parties alike find pleasant reminiscence and hopefulness. The little book will be largely read and greatly treasured for its philosophic reach, the charm of its style, for the delight of Ruskin's inimitable letters, and for the few but noteworthy illustrations which adorn its text.

A MANUAL OF DISEASES OF THE NERVOUS SYSTEM. By W. R. GOWERS, M.D., F.R.S. Second Edition. Vol. II. London: J. and A. Churchill. 1893. (Demy 8vo, pp. 1,085, 182 illustrations, 20s.)

As the first edition of this work has been already reviewed in the BRITISH MEDICAL JOURNAL, it will be necessary only to point out the additions and alterations which have been made in the present edition. The additions involve an increase of 100 pages. Amongst the new matter we find, in the section on the relation of the cortex to the skull, a description of Horsley's Rolandometer. In the section on the cortical centres a diagram is given in which the centres found to exist in the bonnet monkey are transferred direct to the human brain. It would have been better to have transferred the results which have been obtained by stimulating the cortex of an orang outang, and a photograph showing the results in this animal has been published by the same authors from whose work the centres of the bonnet monkey were taken.

The section on nuclear palsies has been rewritten, and besides other additions there is a paragraph on peripheral ophthalmoplegia. In the chapter on neuralgia the question of treatment of epileptiform neuralgia of the fifth nerve is discussed, and the operations of Horsley for dividing the nerve between the pons and Gasserian ganglion, and of Rose for the removal of this ganglion are given. The pathology of exophthalmic goitre in the light of the effects produced by removal of the thyroid gland is discussed, but Dr. GOWERS is inclined to look upon the disease as a neurosis, a disease of the nerve elements themselves the nature of which is beyond our range of scrutiny.

A fresh chapter is introduced on diseases of the nervous system after influenza, and Martin's recent researches on the toxic albumoses of diphtheria are introduced. Dr. Gowers remarks that it is probable that more facts will have yet to be discovered about this "toxin," and that the differences in the structures which suffer suggest that the material varies.

In the chapter on hysteria Dr. Gowers has reproduced Richer's characteristic drawings of the different phases of hystero-epilepsy; as this form of the disease is so very rare in this country, it has been thought by some that the accounts were overdrawn, but anyone who has seen the actual attacks at the Salpêtrière will know that they are absolutely correct.

The account of neurasthenia has been increased by several pages, and a section on treatment added, but, although rest and massage are recommended, the complete Weir-Mitchell treatment, in which isolation plays so prominent a part, is not mentioned.

There is one point which has not been altered in the present edition, namely, the description of the paralysis of those ocular muscles which move the eyeball upwards and downwards. For instance, on page 178, in the case of paralysis of the superior rectus, the defect of movement is said to be upwards, especially upwards and *outwards*—or, in other words, that the action of this muscle is to draw the eye upwards and outwards; but, on page 169, it is stated that "the superior and inferior recti, in consequence of their origin being nearer the middle line of the body than is their attachment to the eyeball, tend to turn the eyeball inwards." The diplopia in paralysis of the superior rectus is said to be crossed (p. 178), but when the images are crossed the axes of the eyes prolonged forwards are not crossed, but diverge (p. 175): and so in this case there must be a divergent squint in looking upwards. Therefore, according to the account of the defective movement, as given above, the eye cannot be carried upwards and outwards when the superior rectus is paralysed, and yet the consequent diplopia proves that the eye is carried outwards on attempting to look up; or, in other words, the eye is carried in the same direction when the muscle is paralysed and when it is in action. So, in the case of the inferior oblique, which acts with the superior rectus, the defect of movement is said to be *inwards* and upwards instead of outwards and upwards. In the same way the paralysed inferior rectus is described as having the defective movement downwards and *outwards*, and the superior oblique as having the movement defective chiefly downwards and *inwards*: yet, a few lines lower down (p. 179) we are told, with regard to the superior oblique, that "strabismus exists only below the horizontal plane, and is convergent by the unopposed *inferior rectus causing deviation inwards*." The italics in every case are not in the original, but they show that the last few words are in direct contradiction to the action of the inferior rectus as quoted above. These are, of course, only slips, but the action of the ocular muscles being so complex, and the accurate detection of their paralysis being probably more difficult than that of any other muscles in the body, it is all the more necessary that the description should be exact. In every other part of the work the accuracy of description fully maintains the high reputation achieved by the first edition. The diagrams of double vision

after Woinow have been simplified by a footnote; in the first edition it took some time to make out why the diagrams expressed the images as seen by the patient, the right eye being placed on the left side of the page, but we still think that it is less confusing to have the representation of the patient's right field on the right side of the page, as in the diagrams for hemianopia.

The Year-Book of Treatment for 1894. A Critical Review for Practitioners of Medicine and Surgery. London: Cassell and Co. (Crown 8vo, pp. 500, 7s. 6d.)

The new issue of this well-known annual will maintain the reputation earned by previous volumes for accuracy and completeness. Its compact form, early appearance, and practical plan gives it a distinct place among periodicals of the kind, of which not many are published in the English language. The present volume resembles its predecessors, and in the majority of cases the writers of the several articles are the same as last year, but it is pointed out in the preface that two new articles have been added. The first of these, on medical diseases of children, on which there has been no separate article since the issue of 1890, is by Dr. Dawson Williams; the increasing literature, the preface continues, "especially with regard to the artificial feeding of infants, is sufficient reason for a special article being introduced again." The other new article, on bacteriology in relation to treatment, has been entrusted to Dr. William Hunter, than whom no better selection could have been made. The first article in the volume, on diseases of the heart and circulation, by Dr. Mitchell Bruce, is well arranged, readable, and thoroughly practical, and the same may be said of Dr. Markham Skerritt's essay on diseases of the lungs and organs of respiration. The article on diseases of the nervous system, by Dr. Ernest Reynolds, is largely concerned with the new hypnotics, especially chloralose, and with the treatment of disease by injections of animal extracts. The articles on diseases of the digestive system, by Dr. Maguire; on the kidneys and diabetes, by Dr. Ralfe; on gout and rheumatism, by Dr. Archibald Garrod; and on the infectious fevers, by Dr. Sidney Phillips, will be found most useful for reference. General surgery is treated by Mr. Stanley Boyd, diseases of women by Dr. Herman, and midwifery by Dr. M. Handfield-Jones, in articles which, as befits the extent and importance of the subjects dealt with, occupy rather more space than the average. The number of articles by specialists is altogether considerable. Thus Mr. Malcolm Morris contributes an excellent summary of recent work in dermatology, Mr. Henry Power one on ophthalmology. Mr. Field writes on diseases of the ear, Dr. Barclay J. Baron on diseases of the throat and nose, Mr. Ernest Lane on venereal diseases, Mr. Alfred Cooper on diseases of the rectum and anus, Mr. Reginald Harrison on genito-urinary diseases, Mr. Edmund Owen on the surgical diseases of children, and Mr. Walsham on orthopædics. A brief article on anæsthetics, by Dr. Dudley Buxton, will be found to be of much practical value, but hardly as much as can be said of Dr. Corfield's short article on public health. The concluding article is the customary excellent summary of the therapeutics of the year, chiefly in reference to new remedies, by Professor W. G. Smith, of Dublin. The volume is provided with a double index (authors and subjects), and altogether will be found a most useful *vade mecum*.

Lectures on the Comparative Pathology of Inflammation. Delivered at the Pasteur Institute in 1891. By Elias Metchnikoff, Chef de Service à l'Institut Pasteur. Translated from the French by F. A. Starling and E. H. Starling, M.D. London: Kegan Paul, Trench, Trübner, and Co. 1893. (Cr. 8vo, pp. 220; 3 coloured plates and 65 woodcuts. 12s.)

The publication of an English translation of Metchnikoff's lectures in the autumn of the year in which the centenary of the death of Hunter has been commemorated is appropriate, for it is certain that Hunter would have been deeply interested in this brilliant application of the method of comparative pathology to the study of the great central problem of pathology—the nature of inflammation—a subject to which the great British pioneer himself devoted some of his best energies. The lectures contain, to quote from the preface dated April, 1893, written for the English edition, a history of the evolution of the process of inflammation from the unicellular organisms, through the metazoa, to the vertebrata.

The book is one which should be read, for no summary can convey the force of the argument, which resides not in dialectic, but in the orderly arrangement of facts observed, in very many instances, by Metchnikoff himself. The task of reading it, moreover, is easy, the drawings are really illustrative of the text, extremely clear and well described, and the translation is excellent. The main or guiding motive of the lectures is that the old controversy as to whether the tissues of the vessels play the most important part in the process of inflammation in warm-blooded animals can never be settled by observations on the vertebrata, since it is never possible altogether to eliminate the influence of the circulation. An answer must be looked for in the reaction to injury or infection of organisms which have no circulatory system. The first question is, therefore, Are the unicellular organisms subject to traumatic and infectious maladies? Having given evidence answering this question in the affirmative, Metchnikoff proceeds to describe the nature of the reaction which occurs, and then passes on in subsequent lectures to describe the course of events in multicellular organisms rising gradually in the scale until those possessing a rudimentary circulatory system are reached. The scheme of the work involves a pretty full discussion of phagocytosis, and in an appendix Metchnikoff meets some of the objections which have been brought against his theories. The interest of the book, however, for the general reader resides not in the polemics, but in the singularly clear and succinct account of a novel field of inquiry. A great deal of the matter is drawn from sources not easily available, even to the medical reader, and the book is one which we would warmly commend to everyone who is interested. And who is not so interested in the present position of the theories of inflammation and of phagocytosis?

Traitement de la Syphilis. [The Treatment of Syphilis.] Par Alfred Fournier, Professeur à la Faculté de Médecine, etc. Paris: Rueff et Cie. (Demy 8vo, pp. 600, 15 fr.)

In this book M. Fournier deals exhaustively with most of the numerous and complex questions concerned in the treatment of syphilis. At the outset the necessity for systematic and prolonged treatment in every case, no matter how mild the symptoms may be, is strongly insisted on. The author then proceeds to review in succession the various methods of treatment in use at the present day, including the so-called abortive treatment by excision of the primary sore. The subject of mercury is of course considered in detail, and the various modes of introducing it into the body are fully described and discussed, namely, (1) inunction, (2) fumigation, (3) subcutaneous injection. This method is dealt with at considerable length, and the effects of soluble and insoluble preparations are described and compared. Lastly, (4) administration by the stomach, which is the method employed by M. Fournier in all ordinary cases, receives due attention; but the circumstances in which the other modes of administration find their place are also fairly and fully stated. The iodides and the modes of administering them, both without and with mercury, as well as the various disorders known under the name of iodism are all adequately treated, and then M. Fournier describes his own "méthode des traitements successifs ou traitement chronique intermittent." This plan of treatment is one extending over several years, for the details of which the book itself must be consulted.

The author concludes his work with some remarks on general management and hygiene, with special reference to those who suffer from affections of the nervous system, which system, according to M. Fournier, is more frequently attacked by tertiary syphilis than any other part of the body.

The book is in all respects an excellent one, and so far as we know nothing approaching the amount of information on the treatment of syphilis which it contains has ever before been available within the covers of a single volume.

NOTES ON BOOKS.

Anæsthetics: Their Uses and Administration. By Dudley W. Buxton, M.D. Second Edition. (London: H. K. Lewis. 1892. Cr. 8vo, pp. 280, price 5s.)—Those who became acquainted with the first edition of Dr. Buxton's handbook will not be surprised to learn that a second edition is soon demanded. The book deals with its subject in a thoroughly practical spirit, and the new edition is a distinct advance upon the first. The whole of the matter has been recast, and the work will now be found to be very complete. In addition to the chapters on the three great anæsthetics, there are notes on anæsthetic mixture, on the choice of an anæsthetic under special circumstances, on the management of accidents, and on the treatment of after-vomiting and other discomforts.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

COATED PILLS.

We have received from Messrs. Arthur H. Cox and Co., St. Martin's Place, Brighton, some samples of their coated pills. We find that when any of these pills are placed in water at 100° F., the coating in a short time cracks and peels off, and the contents soften and break down. The quinine and phosphorus pills have been specially examined, with the result that the drugs have been found to be present as stated, the phosphorus being in an active unoxidised condition. The pills are well made, and their appearance and finish most excellent.

HARROGATE WATERS IN BOTTLES.

To facilitate the use of the mineral waters of Harrogate, so well known for their medicinal properties, the Corporation of Harrogate are now supplying the waters from several of the principal springs in bottles. Those obtainable in this form are the strong and mild sulphur waters containing alkaline sulphides, the magnesian water containing carbonate of magnesia, Kissingen water, plain and aërated, and the Alexandra chalybeate, both containing carbonate of iron. The bottles are of two sizes, 24oz. and 12oz., and the price ranges from 4s. 6d. to 8s. 6d. per dozen. Further information can be obtained from Mr. T. R. Collins, the General Superintendent at the Victoria Baths, Harrogate.

NEW ANTIDOTE CASE.

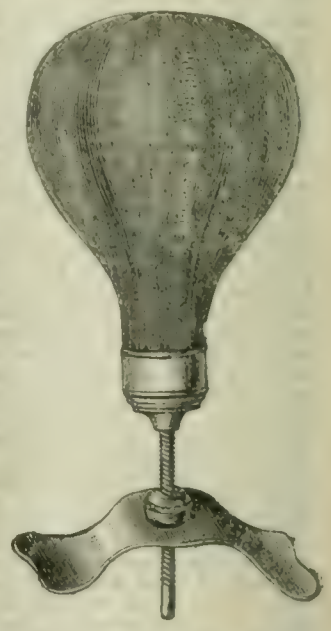
Mr. Herbert A. Smith desires to call the attention of the profession to a new antidote case, made (at his suggestion) by Messrs. Burroughs, Wellcome, and Co. It is made of teak, with brass fittings; both the well of it and the removable tray are marked off into compartments for one-ounce bottles, etc. All the antidotes likely to be needed by the general practitioner are represented in tabloids, hypodermic and other forms. It contains, in addition thereto, a stomach siphon, a hypodermic syringe, needles, mouth gag, catheter, pestle and mortar, and vaporoles. Instructions (in tables) are attached inside. The size is 13 inches by 7 inches, the weight 3¾ lbs., and the price 25s.

PORTABLE DISPENSARY.

Messrs. Burroughs and Wellcome have submitted to us an improved and expanded medicine bag, especially designed for the use of country practitioners and for the colonies and abroad. It contains an assortment of 90 medicines, consisting of tabloids and concentrated food extracts. The bag has metal partitions and a metal framework. Each bottle is carefully stoppered with ground glass, and the case is covered with cow hide, riveted, and screwed. The front flap is so arranged that it fits on to each row of bottles so that no bottle can be displaced. The hollow part of this flap may be used for storing lint, plasters, bandages, etc. When closed the external frame of the case forms also another roomy compartment for instruments, closed with spring bolts and locks. The bag when closed measures 13½ × 5¾ × 11 in., and weighs 8½ lbs. It has the appearance of an ordinary dressing or travelling bag. For colonial and foreign use an outer metal case is supplied, when enclosed in this it measures 22½ × 11 × 15 in., and weighs 49 lbs. The price of the bag when fitted complete is £20, empty £15. This case is in fact a complete dispensary, and would undoubtedly be found of considerable value for all the purposes for which it is designed, especially for practitioners in remote parts of the country, and for colonial and foreign practitioners, while it may be strongly recommended for use by the officers in the army and navy medical departments, in India and all the British dominions abroad. It is also extremely valuable for use on shipboard, and might with advantage be adopted on steamship lines and in merchant vessels. The convenience of having so excellent an assortment of portable medicines, each dose already accurately measured and ready for dispensing cannot be overestimated, while the extreme portability and lightness would undoubtedly be a great saving in transport.

AN EAR SYRINGE GUARD.

At the suggestion of Professor Lund, of Manchester, Messrs. C. Wright and Co., of New Bond Street, London, have designed a very useful guard for protecting the interior of the ear from injury when it is to be syringed. A shield is placed across the external ear, one end resting on the temple in front, and the other over the mastoid process. The point of the tube of the syringe can then be passed through an aperture in the shield, and moved about freely in any direction. A piece of metal of globular form is made to travel along the tube by a screw action, so that while this movable screw-nut rests against the hole in the shield the tube can only pass through it to the exact length previously arranged. The shield should be held firmly across the ear, and there fixed by pressure of the thumb and one of the fingers of the left hand, the right hand being used in acting upon the syringe. In syringing the ear of a young child, or with an irritable patient, there is always a danger lest, by some accidental movement of the patient, the nozzle of the syringe should be suddenly pushed in too deeply, with the risk of touching some sensitive part of the meatus, or even the tympanic membrane itself. This simple contrivance will probably be found very serviceable in some cases.



A MODIFIED AURAL SPECULUM.

This speculum consists of a silvered-glass lining, covered, as in Fergusson's vaginal speculum, with hard rubber. The advantages claimed are greater reflective power, ability to use caustic through a bright speculum without injury to the surface, and, with a good direct light, to be able to do without a reflector. They are to be had in three sizes, and of the same shape as Politzer's. They have been made, from the design of Mr. H. Lake, by Messrs. F. Walters and Co., 29, Moorgate Street, City.

A hygienic laboratory has been established in the University of Bonn. The new institution will be under the direction of Professor Finkler. There is now no university in Prussia without a hygienic laboratory.

HYPNOTISM AND SUGGESTION.[1]

Difficulties of Investigation of Hypnotic Phenomena.—First Introduction to Hypnotism.—Charcot and Virchow.—A Physiological Test of the Cataleptic State.—"Artificial Catalepsy."—Clairvoyance.—The Nancy School.

[First Notice.]

Professor Moriz Benedikt, of Vienna, who is well known to the medical profession of this country by his valuable contributions to neurology, has recently published what may be described as a "profession of faith" on hypnotism and suggestion, which forms an important addition to the literature of the subject. The work consists of a series of essays strung together on a thread of intellectual autobiography, in which the author traces the growth of his opinions on hypnotism, and clearly defines his position with regard to the phenomena connoted by that term.

He begins by pointing out the great difficulties which surround the investigation of such phenomena. "The most difficult researches," he says, "in the whole range of natural science are those on living human beings, and the acme of difficulty is reached when the success of the investigation depends on the statements of the persons experimented on." Not only do the subjects deceive the investigator intentionally or through ignorance and lack of intelligence, but our own senses often mislead us. There are abnormalities of consciousness analogous to astigmatism, and more fallacious than that, inasmuch as the source of error cannot be so definitely ascertained. Even the man of most cultivated intellect sees a phenomenon through the spectacles of his school and training. Statements and affirmations are insecure foundations for scientific truths; objective observations and objective proofs are required. Experiments must be carried out under conditions more rigorous than those necessary when animals are the subjects, as man is a much more complex organism than these. Another necessary condition is that the experimenter himself shall be ethically and intellectually trustworthy. Further, neither the investigator nor the subject must be exposed to any psychical pressure; for instance, the latter must not be under police control, nor must the latter have the fear of public opinion before his eyes. Examples are given of the scientific terrorism which the "Pharisees" of the medical profession have brought to bear on investigators with sufficient independence of mind to look at these things through their own eyes instead of through the orthodox spectacles prescribed by these "superior persons."

Professor Benedikt's first acquaintance with mesmerism was made in his student days, when a book on the subject by Ennemoser fell into his hands. This book seemed to him to bear the stamp of honest conviction, and his interest in what is now known as hypnotism was further stimulated by Reichenbach's *Odisch-magnetische Briefe*. He says he had an instinctive feeling that the "Pharises" had dealt harshly and unfairly with these men and their labours. The question of hypnotism, however, first presented itself to him in a concrete form at the meeting of German scientists at Frankfort in 1867, when Gerlach showed him some preparations of the spinal cord, which made him, to use his own words, feel the anatomical basis of neuropathology, as it was then taught, crumble away under his feet. This led him to the conception that the nervous filaments transmit their impulses to the central elements not by direct conveyance but rather by "induction and influence." At Frankfort, Lasègue told Benedikt of some experiments he had made on the possibility of inducing a cataleptic condition in nervous women by making them close their eyes. On his return to Vienna he himself made similar experiments in Oppolzer's clinic, and in suitable cases he succeeded, but his researches were soon stopped as savouring of "animal magnetism."

Benedikt does not seem to have given any further attention to hypnotism till the appearance of Charcot's work, *La Grande Hystérie*, recalled Lasègue's researches on "transient catalepsy" to his mind. It should be stated here that Benedikt is anxious to see scientific nomenclature purged of such words as "hypnotism," and "hypnotisation," which he suggests should be replaced by "Mesmerism," "Braidism," or, best of all, "artificial catalepsy." He uses the word "catalepsy" with a wider connotation than is usually attached to it, making it include all pathological or artificially induced dreamlike conditions such as lethargy, catalepsy, somnambulism, etc., and the motor conditions connected therewith.

Looking about for a more effective remedy for the irritative forms of hysteria than any then at his disposal, Benedikt, in the latter half of 1870, bethought himself of Lasègue's method of inducing artificial catalepsy, and tried it with complete success. He noticed, however, that this mode of treatment made so deep an impression on the patients and led them to regard the physician with such mystical awe that it might very easily be abused. He took this as a warning not to carry hypnotic experiments too far, as they had a demoralising influence on the intellect, will power, and psychical independence of the patients. He also observed that by repetition of the experiments the patient's susceptibility was increased, so that "artificial catalepsy" resembled narcotic drugs in giving momentary relief at the cost of subsequent injury. About the same time Benedikt, at the suggestion of Maggiorani of Rome, began to make experiments with metallic magnets, and convinced himself that these might usefully replace hypnotism in the very rare cases in which it was indicated.

In 1878 Benedikt took part in the Anthropological Congress in Paris. Meeting Virchow there, the latter asked him if he knew who was the professor of pathological anatomy in Paris, and was "not a little surprised" when informed that it was Charcot. Virchow asked Benedikt to introduce him, and they were both present at some of Charcot's demonstrations on *la grande hystérie* in the Salpêtrière. Virchow was "astounded and amazed," but both he and Benedikt had "the fullest conviction—the same full conviction that Charcot himself had"—that the facts were unequivocal. Benedikt confesses to a feeling of malicious pleasure at Virchow's being compelled to acknowledge the genuineness of phenomena which it had shortly before been the fashion among the leaders of the scientific movement in Berlin to deride. Benedikt, however, recognised an element of error in Charcot's researches in his use of hysterical subjects for his experiments. In such cases the experimenter is apt to excite the phenomena instead of merely observing them as they occur. Charcot asked Benedikt whether he knew of any objective test, besides increased excitability of the muscles, by which the reality of the mesmeric state could be scientifically proved. Benedikt told him of the researches of Meissner, of Göttingen, on electrostatic tension on the surface of the body, which had not received the attention they deserved, because they were not in agreement with those of Dubois-Reymond, "and in Germany it is often not arguments, nor the results of research, that are made the standard of judgment, but the degree of *priviness* of the Privy Councillor." Benedikt believes that in the mesmeric state artificial tensions are present, and that this would form an objective test of the reality of the condition if an instrument sufficiently delicate to record them were at our disposal. "As soon as an instrument for the measurement of biomechanical tensions shall have been found, the so-called hypnotic phenomena will come within the compass of the exact sciences." There is one instrument of the kind already in existence, and that is the hysterical individual. This instrument, however, works so erratically that we cannot control it, and it is at present almost useless for accurate research.

With regard to the physiology of "artificial catalepsy," Benedikt points out that the motor and sensory disturbances, and the double consciousness with its associated double memory, which in Mesmer's day were so mysterious, are now known to depend on corresponding conditions of the brain. The abnormal movements, sensations and ideations may also be the result of reflex stimulation. Similar phenomena are sometimes seen in cases of partial destruction or injury to the brain. Benedikt cites as an illustration the famous case reported by Mesnet of the soldier wounded in the head in the war of 1870,[2] who leads an absolutely double life—

[1] *Hypnotismus und Suggestion: eine klinisch-psychologische Studie.* Von Professor Dr. Moriz Benedikt. Leipzig und Wien: M. Breitenstein. 1894. Price, 2 marks.

[2] An interesting abstract of this remarkable case is given by Huxley (*Science and Culture*, London, 1881, p. 223). The original report appeared in the *Union Médicale*, July 21st and 23rd, 1874.

one in which he is a normal man, another in which he is an automaton, whose nervous machinery can be played upon by external impulses, as if it were an instrument. Referring to the cases in which ignorant persons have, while in abnormal nervous conditions, recited passages of authors whom they had never heard of, in languages of which they knew nothing, Benedikt says the brain is a phonograph, which not only receive auditory impressions unconsciously, but under certain conditions reproduces them. The brain is also a photographic plate as regards visual impressions. This is the key to the mystery of clairvoyance. So far from the memory and other psychical faculties being exalted in these conditions, the opposite is the case; "the function is morbidly intensified, but the functional energy is diminished. This psychical activity has as yet discovered no instrument, revealed no law of nature, executed no permanent work of art, elucidated no problem. The utterances of somnambulists may amaze us; but amazement does not advance mankind." Benedikt ridicules the simple faith with which the prophecies and diagnoses of clairvoyantes are often believed in even by persons who should know better. That they are occasionally right is not to be wondered at; it would be surprising if a person constantly "prophesying" did not once in a way hit the mark, especially in circumstances where a knowledge of natural laws enables one to forecast an event with more or less probability. One hit makes more impression on ignorant people than a thousand misses. In some cases clairvoyantes may, owing to the exaltation of sensibility in all parts of the body which is a characteristic of the somnambulistic state, be able to indicate the seat of a disease from which they are themselves suffering, or they may take such an opportunity to disclose some secret trouble. The so-called "transference of special sense" (for example, seeing with the fingers) is considered by Benedikt to be analagous to the exaltation of the sense of touch which is seen in the blind. The absence of any recollection of what was said or done in the somnambulistic state is paralleled by similar phenomena observed in insanity, epilepsy, and alcoholic excitement.

Benedikt is very severe on the Nancy hypnotists, and ridicules their pretension to be considered a "school." "Facts," he says, "which are entirely unamenable to scientific control and scientific observation cannot possibly form the basis of a school." From the first he says he recognised in the Nancy doctrines "a colossal heap of errors, delusions, and charlatanic imposture, with a tiny kernel of truth." He classifies the "matadors of this movement" as (1) ingenious but fantastic enthusiasts; (2) *poseurs*, who saw in hypnotism a field where laurels, which they despaired of winning by legitimate means, could be gained cheaply; (3) weak-minded scientists; and (4) quacks *pur sang*, who simply used hypnotism as an advertisement. The most dangerous among these are those belonging to the third category, because their honesty and often their intellectual achievements impress the public mind. Such persons have a "brand of Cain" by which they can be recognised in the form of a "solemn narrowness of mind"—*priggishness*, in fact, if the expression may be allowed. Benedikt says it is surprising how many of the fanatical devotees of hypnotism bear upon them this "brand of Cain."

The Bengal Branch of the Pasteur Institute was successfully inaugurated on January 30th in the presence of a large company. After the ceremony subscriptions to a considerable amount were promised.

Clot Bey and the Cairo Medical School.—An interesting ceremony recently took place at Cairo, when a bust of Clot Bey was presented to the school he founded by his son. Several Ministers were present, and also numerous representatives of Cairene learning. After some laudatory words from Riaz Pasha, Dr. Lortet pronounced a lengthy oration, in the course of which he recommended the introduction of a European language, and the creation of laboratories for bacteriology and parasitology. Dr. Ibrahim Pasha Hassan, the Director, having replied, the proceedings terminated by an inspection of the important museum attached to the school.

ANALYSIS AND REPORT
ON
ORIGINAL DOCUMENTARY EVIDENCE CONCERNING THE USE OF OPIUM IN INDIA.

[Furnished to the "British Medical Journal" by upwards of 100 Indian Medical Officers.]

VII.

The Moral Effects of Opium compared with those of Alcohol.—Opium and Crime.

Coming now to the moral effects of opium, let us examine how far the allegations of the antiopiumists are confirmed or otherwise by our correspondents. One of the questions in the schedule which we sent out was the following: Have you reason to think that the use of opium as habitually indulged in by the natives has injurious consequences in any way corresponding in degree to those produced by the use of alcohol in the European population? Many of our correspondents deal with the moral effect of the drug in replying to this question.

Mr. Frank C. O. Beaman, Judicial Assistant in Kashrawad, writes: "I can only deal with one aspect of this question, namely, the connection between opium eating and crime. As judge of the chief court I have had to deal with every sort of crime, I have of course had to try murderers who murdered under the influence of ganja; but I have never known any crime of violence attributed or remotely attributable to opium. Can the English judges say as much for alcohol? Generally speaking, I should say that, taken as the majority of opium eaters take it here, opium has no marked ill effects physically and most certainly none morally. I use the latter word as a judge should use it. I am not, of course, concerned with men's consciences, nor with any fads whatever. I only regard morals (in connection with this controversy) as illustrated by conduct. The opium eater never hurts his neighbours or troubles the police. A man who besots himself with opium naturally becomes imbecile, but at the worst he is a harmless imbecile." To the special question whether opium is as harmful as alcohol, the same judge replies: "Most emphatically not. No one who has lived as I have in an opium-eating country for many years could possibly suggest such a parallel. Whatever bad effects follow upon the abuse of opium are concentrated in the opium eater. The sin punishes the sinner, and does not revenge itself, as alcohol does, on all surrounding society." Another judge, writing from Lower Bengal, replies to the same question as follows: "Certainly not. On this point I can speak with authority. In the thirty years I have been employed in the administration of justice I have not seen one solitary instance of crime produced by opium."

Mr. J. Whitmore, who has had twenty years' experience, first as magistrate and then as civil and sessions judge, writes: "There is absolutely no comparison. I have never known any crime whatever directly attributable to the use of opium. Some time back I consulted a very able police official of about the same standing as myself in the public service upon this subject. I found that his experience coincided with my own, and I may add that it is an experience common to all officials versed in criminal administration with whom I have from time to time discussed the subject. On the other hand, English judges attribute nine-tenths, or even nineteen-twentieths of English crime to alcohol. The percentage, also, of lunacy cases attributable to the opium habit is extremely low: whereas I understand that half the idiocy and a third of the lunacy in England is due to alcohol."

Mr. Parsons, Head Assistant Collector, Krishna District, Madras, writes: "The evil done to the natives by using opium is infinitesimal as compared to the injury resulting to both Europeans and natives from the use of alcohol. The two hardly bear comparison."

Dr. G. T. Calvat, Chittagong: "I wish here to state my unbiassed conviction, which I deny the ability of any unprejudiced observer to dispute or contradict, that there is no comparison between the injurious consequences following upon the consumption of opium in this country and those

produced by the use of alcohol amongst the people of Great Britain. I have never seen any person in the street thoroughly under the influence of opium, nor witnessed any crime or brutality following its use whilst in this small port. I have seen European sailors maddened and brutalised by drink."

Dr. James Jackson writes: "The prejudicial effects, if any, are infinitesimal compared to those produced by alcohol in Europe. A Mahratti or Sindi ryot, drowsy with opium, is a god compared to the drunken beast of the English gin shop and Irish public house."

The same question, that is, comparison of opium with alcohol, has roused a cry of indignation from all our correspondents:

Surgeon-Major Willis, Quetta, replies: "Most certainly not; quite the contrary."

Surgeon-Major Bourke, Parundar, near Poona, writes: "Certainly not. One native proposed the introduction of opium to England, with a view of stopping the abuse of alcohol."

Surgeon-Lieutenant Gordon Seton, Kohat, says: "Absolutely not to be compared. The nearest parallel is to tobacco; and whereas nothing is known for certain of the prophylactic powers of tobacco, experience of my own and of my commanding officer leads me most strongly to believe in those of opium."

Surgeon-Major Keays, Tatehgarh: "None whatever. I believe the use of alcohol is infinitely more injurious."

We could go on quoting answers of a similar character for a long time. But it is not at all necessary to do so. What we wished to prove was, first, that opium is very seldom used in excess; secondly, that as it is used—that is, in moderation—it does no harm, either physical or moral; and, thirdly, that its effects cannot be compared with those following the excessive use of alcohol. These several points have been conclusively established by the authoritative evidence we have been able to produce. There remain still to be considered the consequences—physical, moral, and political—which the cutting off of opium would have on the population of India. These consequences are of the highest importance, and have an imperial interest.

THE LOCAL GOVERNMENT (SCOTLAND) BILL, 1894.

II.

Conference of County Councils.—Security of Tenure of Office.—"Overlapping" and the Board of Supervision.—Small Burghs and District and County Control.—Powers of District Councils.

Wednesday, January 24th, was a notable day in the history of Local Government reform in Scotland. On that day there was gathered together in Edinburgh such an assemblage as has probably not been seen since Scotland had a Parliament of its own. From Caithness in the North to Wigtown in the South there came representatives of all the county councils in the land to attend a Conference, convened, as described in a former article, to focus the suggestions which the various county councils had formulated, in response to Sir George Trevelyan's request for suggestions for the amendment of the existing Local Government Act. The Scottish press are loud in praise of the manner in which the difficult and involved business of the meeting was conducted, and the sixty-two items on the agenda paper disposed of, in the course of a single day. The credit of this is largely attributed to Mr. Bine Renshaw, M.P., in organising and preparing the business of the meeting, and to Lord Balfour of Burleigh for the tact and urbanity which he displayed in the chair. Amongst those present were Mr. Marjoribanks, M.P., Mr. Parker Smith, M.P., Captain Hope, M.P., Mr. W. J. Maxwell, M.P., and a number of the most notable public men in Scotland. So successfully was the business of the meeting conducted, that newspapers of various shades of opinion united to greet the meeting as "the shadow of a Scottish Parliament," the germ out of which a body with large powers might be evolved. All which is very satisfactory.

We have already discussed, in brief fashion, the principal items on the agenda paper, which were of special interest and importance from the public health point of view. We purpose now very shortly to refer to the manner in which these matters were dealt with by the Conference. The most important proposal, it may be remembered, was one to abolish the security of tenure of office which all health officers in Scotland enjoy under the Local Government Act of 1888. It was hardly anticipated that a body of the calibre of the Conference would adopt this proposal, but it was felt that, disguised as it was in the phrase, "That county councils shall have full control of their public health officers," a sentiment of *esprit de corps*, coupled with a feeling of resentment with respect to the injudicious interference of the Board of Supervision between county councils and their medical officers of health (presently to be alluded to), created certain elements of risk. It was also felt that if such a proposal were adopted and statutory effect given to it, in these days of "popular control" it would seriously militate against the adoption of the principle of security of tenure in the prospective Public Health Bill for England; while, on the other hand, the rejection of the proposal by an influential body of popularly elected representatives, engaged in the administration of the Public Health Acts, would be a most important factor in the final settlement of the question. It is understood that, in view of these considerations, the Council of Scottish Society of Medical Officers of Health determined to leave nothing to chance, and addressed all the more influential members of the Conference, personally and by circular, on the subject, pointing out that this was no mere personal matter, but one involving the efficiency of the public health service.

A good deal of discussion with respect to this proposal took place, with the final result that the resolution was negatived without a division. Curiously enough there was inserted in its place a resolution "that county councils have power to define the duties of their officers of health so as to prevent overlapping." This sounds somewhat mysterious, but a perusal of the report of the proceedings shows that it has reference to a matter which has given rise to much heart-burning in public health circles in Scotland. When the Local Government Act came into operation, the newly constituted bodies—county and district councils—had not had time to become familiar with the provisions of the Act, and had had no experience in general public health administration. At this juncture the Board of Supervision—the national board of health—for reasons which can only be guessed at, laid it down as a general principle (extraordinary as it may appear), that the medical officer and sanitary inspector were co-ordinate officers, each independent of the other. At the same time the Board sent to all county and district councils copies of model regulations for medical officers and sanitary inspectors, based upon this general principle.

In these by-laws the duties of the sanitary inspector were made almost coextensive with those of the medical officer. Thus, for example, the sanitary inspector was required to prepare a monthly table of infectious diseases and to report at large. Most county and district councils accepted the circulars and by-laws of the Board as having the force of law and in this way there arose the overlapping of duties of which county councils now complain. Too late in the day, after the great majority of the county health appointments had been made, did it become known that, despite the Board of Supervision, it was perfectly open to county and district councils to constitute the medical officers head of the health department, and that the Board's by-laws were of no validity save in the case of certain regulations with respect to annual reports. In the light of this explanation the relevancy of the resolution as to overlapping becomes apparent. The action and by-laws of the Board of Supervision have caused endless friction and have materially hindered the efficiency of the sanitary service. We therefore welcome this resolution with respect to overlapping of duties and shall take care that the matter is not lost sight of when the Bill comes up for consideration.

The proposal to place all burghs with populations under 7,000 (of which there are a goodly number in Scotland) under the district councils, although pressed by Lord Overtoun was

unfortunately not adopted. No progress was made in dealing with the question of the relation of county medical officers to burghs further than that the Secretary of State has been asked formally to define these relations. Powers were demanded for the compulsory purchase of land (including water) for various purposes, including those of the administration of the Public Health Acts. It was unanimously agreed the powers which constitute the Poor-law local authority the authority for the execution of the Burial Grounds and Vaccination Acts should be transferred to district councils, and that the appointment of registrars of births and deaths should be placed in the same hands. Altogether the reforms advocated in our columns a fortnight ago have met with a very fair amount of support.

HEATING AND COOKING BY GAS.

V.

Cooking by Gas: Its Rapid Spread: Its Sanitary Aspects.—Dr. Stevenson Macadam's Investigations.—The Characters of Meat Cooked in a Gas Stove.—Description of Cooking Stove.

It may not be uninteresting to recall the fact that the use of the gas oven for domestic cookery has only become popular within the last dozen years. It is true that in isolated cases gas ovens, more or less crude in form, were in use fifty to sixty years ago, but so strong are the forces of prejudice that it is only within the limited period we have named that gas cookery has assumed a thoroughly popular form.

It is a singular fact that public education in this direction had its origin in the first electric light scare, when gas companies and corporations, alarmed at the advent of a rival lighting agent, at once set about the education of their consumers with reference to the merits and advantages of gaseous fuel. This education was greatly facilitated by a series of cookery lectures and practical demonstrations given in every part of the country, and by the wise course pursued by the gas companies in hiring out to their consumers at moderate rentals gas apparatus of every description. When we mention that one London gas company has 60,000 stoves out on hire, our readers can form some idea of the extent to which the public have appreciated the advantages of gaseous fuel.

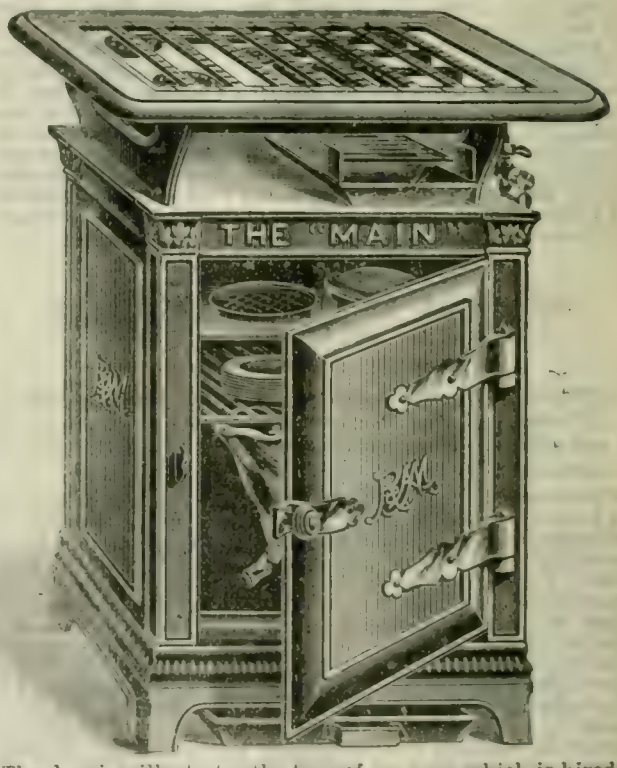
It is only right that we should also acknowledge the great services rendered by the gas oven in the development of the teaching of cookery in our country. After years of astonishing neglect our Education Department awoke to the fact that cookery ought to form part of every woman's education; and the results of this regular and systematic training are bound to be most beneficial. The gas oven greatly facilitates the work of the teachers.

It is of the utmost importance that the sanitary aspect of gas cooking should receive due attention and be thoroughly understood; whilst the cleanliness and general handiness of the gas oven are patent to all, there remains the important question of the wholesomeness of meat cooked by means of gas, and on this point a good deal of misunderstanding and not a little prejudice have existed.

Fortunately we have some very clear and definite data to go upon, as this aspect of the question was carefully investigated some years ago by Dr. Stevenson Macadam, F.R.S.E., F.C.S., Lecturer on Chemistry at Edinburgh.[1] Dr. Macadam investigated the nature of the products evolved during the combustion of coal gas, the effect of such on the meat undergoing the process of cooking, the wholesomeness of the cooked meat in retaining all its proper juices and elements, in evolving all the vapours of a noxious nature produced during the cooking, as well as in the meat not absorbing noxious or deleterious elements, and the digestibility of the cooked material.

The results of an investigation conducted upon such comprehensive lines could not fail to be other than of great interest, and whilst our space forbids any lengthened extract, we feel sure that the general conclusions arrived at by Dr. Macadam are well worthy of careful perusal and consideration. He says: "The wholesomeness of the meat cooked in the gas oven must be regarded as beyond doubt. The mere impinging of the spent gases produced during the combustion of the coal gas upon the meat in the process of cooking cannot lead to the impregnation of the meat with any noxious matter. These spent gases and vapours are simply carbonic acid and water vapour, with minute proportions of sulphuric acid, and are the same as those evolved from a common coal fire during the grilling of a chop or steak. Moreover, during the process of cooking the meat is always exuding vapour from itself, and hence is not liable to absorb other vapours which may surround it. The influence upon the meat of this atmosphere saturated with moisture not only keeps the meat more moist, but also hinders the escape and evaporation of its juices, retaining the osmazone or flavouring matter, so that the meat is more juicy, more palatable, and more easily digested, and yet free from those alkaloidal bodies produced during the confined cooking of meat, which are more or less hurtful and even poisonous."

An important point to be borne in mind is that the cooking of meat in a gas oven yields a larger return of cooked meat than in the coal oven. It has been found, and amply demonstrated by various independent authorities, that while a joint cooked in the coal oven lost 40 per cent. of its weight in the process of cooking, the same class of joint lost only 25 per cent. of its weight in the gas oven. The difference (15 per cent.) is accounted for by the meat being constantly surrounded by the aqueous vapour derived from the combustion of the gas, as indicated in Dr. Macadam's statement just given. The result is very considerable economy, especially in hospitals and other large institutions where quantities of meat are roasted.



The drawing illustrates the type of gas oven which is hired out by the gas companies: the body of the cooker is constructed with an inner and outer casing, filled with non-conducting material between, to retain heat and economise gas: it is heated by Bunsen burners placed on either side at bottom of oven, the products of combustion being carried off by a flue pipe; on top of oven there are boiling and grilling burners arranged for boiling, stewing, frying, grilling chops, steaks, toasting bread, etc.

It is very essential that all utensils used in gas cookers should be kept entirely free from soot, as it not only acts as a non-conductor, but causes objectionable odours. Also that they should be kept scrupulously free from fat, which is often

[1] The results were published in a pamphlet entitled the *Sanitary Aspects*

the cause of the objection made to gas cooking stoves, on the ground of smell.

In a concluding article we shall touch upon the question of economy of gaseous fuel for cooking, as compared with coal, and deal with some other points of general interest in this connection.

OCCUPATION AND MORTALITY.

I.

The increasing attention which is being paid to industrial hygiene has found a practical expression in the course of lectures on the Sanitation of Industries and Occupations which has been arranged by the Council of the Sanitary Institute. The syllabus of the lectures does not cover the whole range of this subject; but as a preliminary to a more comprehensive course to be subsequently given, they will serve to draw attention to essential points, and direct inquiry into questions the issues of which are of great importance to the public health.

The first lecture, recently given by Dr. Newsholme, Medical Officer of Health for Brighton, on Mortality and Occupation, forms an appropriate introduction to the whole course. The lecturer began by expressing regret that the hygienic conditions under which one-third, or even one-half, of each week-day is spent by workmen have received so little investigation. Notwithstanding the multiplicity of legislation, however halting, the record of medical inquiry into the diseases of occupation was very scanty. A large proportion of the investigations undertaken by French and German hygienists must be accepted with hesitation, because the elaborate statistics on which their conclusions were based had been defective or fallacious in one particular or another. In this country similar almost insuperable difficulties beset statistical inquiry into problems of industrial hygiene. Correct occupational statistics involve an accurate knowledge of the number engaged in an occupation at given ages, as well as of the number ill or dying at the same ages. Owing to the ambiguity in the nomenclature of occupations, the occurrence in the same individual of double occupations, and the difficulty in the separation of classes, these requirements were very difficult to secure.

Even when the data were correctly arranged, the results might be improperly expressed. Many eminent investigators in the past had trusted to the mean age at death in different occupations as a test of their relative salubrity. Some recent illustrations of the improper use of this test were given by Dr. Newsholme; among others that in an inquiry made by the Collective Investigation Committee of the British Medical Association, it was found that among teetotallers the mean age at death was only 51.2 years as compared with 59.7 years among careless drinkers. It need hardly be said that the use of these figures as a test of the relative longevity of the two groups was never intended by the Committee in question, and that any inferences drawn from such a comparison are valueless, except the obvious inference that the group of teetotallers was composed of younger men than that of careless drinkers. To contrast the two groups in the way suggested above would be as fallacious as to contrast the mean age at death of curates and bishops or of apprentices and masters.

Similarly the use as a relative test of the death-rate at all ages of those engaged in two occupations may lead to fallacious results. Thus Dr. Farr found that the death-rate of all farmers over 20 years of age was 28, of all tailors 20 per 1,000; but when the persons living and dying in each of these occupations were split up into groups of ages, the death-rate among those living at each age-group was lower among farmers than among tailors.

When these breakers thus briefly indicated have been safely passed, there remains a further difficulty, which has been clearly stated by Dr. Ogle. Many occupations require great muscular strength. They can, therefore, only be undertaken by picked men, who, when they become weakly or disabled, are drafted into lighter occupations, the death-rates of which are thereby swelled. This difficulty must always to some extent diminish the value of all calculations of the death-rate in different industries; though, after ascribing to it its true weight, it is still true that occupational statistics, when carefully and honestly collated, on a sufficiently large scale, furnish valuable indications of the relative salubrity of different occupations. Small differences may be accidental, but large differences must be taken as representing real differences of healthiness in the occupations in question. From a hygienic standpoint, a vitally important classification of occupations is into outdoor and indoor, and into rural and urban. The relative mortality under these varying conditions was clearly stated by the lecturer. The rapid increase of our urban population, with its corresponding increase of indoor occupations, was regarded as the inevitable cause of deteriorated health and increased mortality, unless the evils were combated by efficient hygienic arrangements of shops, workshops, and factories, and by improved and cheaper transit of workmen to extraurban homes.

Consumption is a disease *par excellence* of indoor occupations. A disease causing nearly 21 per cent. of the total mortality among males between 20 and 55 years of age, as compared with only 5.6 per cent. from bronchitis and 11.7 per cent from pneumonia, is worthy of more active preventive measures than have hitherto been attempted. Consumption occurs more commonly in sedentary indoor occupations than in those involving more active work. It is still commoner in those occupations involving the inhalation of irritating dust, which carries with it the specific infective material derived from desiccated sputa. The relative immunity of coal miners from phthisis has been explained on the supposition that coal dust exerts some inhibitory influence on the development of this disease. A more probable explanation lay in fact that the scattered work of a coal mine gave fewer opportunities for the inhalation of infective dust.

Passing over the questions of occupational cancer and of accidents connected with industries, the next question dealt with was that of alcohol and occupation. The fact that the death-rate among publicans between 20 and 45 years of age was about four times as high as among clergymen of the same age could only be explained by the effects of chronic alcoholic poisoning. The increase of the death-rate from intemperance among the general population from 40 per million in 1858-60 to 56 per million in 1886-90 was believed by the lecturer to be due to more accurate certification of deaths—a conclusion which was confirmed by the reduction in mortality due to diseases of the liver and ascites from 394 per million in 1858-60 to 325 per million in 1886-90. It was, however, impossible to expect an accurate certification of deaths from alcoholism or from syphilis until it became obligatory on the medical practitioner to send the death certificate direct to the registrar instead of handing it to the nearest relative.

The last subject touched was that of excessive or too protracted work. The stern economical doctrine of unlimited "freedom of competition"—which not infrequently meant organised overwork for the workman—was being gradually broken through, and the belief was expressed that the interests of masters as well as of servants would probably, in the long run, be best conserved by diminishing to a reasonable extent the hours of labour, especially in those occupations in which carelessness or overfatigue might endanger the lives of others. The gradual development of the sense of responsibility on the part of masters and workmen, and the removal from the minds of workmen of that callousness and indifference which often prevented them from taking the necessary precautionary measures in dangerous occupations, can only be secured by a gradual process of education and enlightenment.

THE MERCHANT SHIPPING BILL.

II.

In a former number of the British Medical Journal[1] we referred to an article written some years ago by Captain Dawson upon the legal insecurity of life at sea. The Missions to Seamen, of which he is the secretary, is one of the most active and influential benevolent societies in the kingdom; and, by the direction of his committee, Captain Dawson has quite recently addressed a communication to the Secretary of the Board of Trade upon the same subject. He gives an extract from a letter recently received, quoting instances of men employed in the North Sea fishing boats out of Lowestoft, who had been swept overboard and lost at sea

[1] British Medical Journal, September 9th, 1893.

without the knowledge or cognisance of anyone on board, until the unfortunate man or boy is found to be missing, and suggesting a means whereby such accidents may be avoided. But the interest that this communication mainly possesses for us and our readers arises not so much from the reference that he makes to the accidents on the North Sea fishing boats as from the statements that he makes in the name of his Society as to certain very grave defects in the system of certifying seamen's deaths. The committee request the "serious attention of the Board of Trade to the general absence of ordinary legal security of life at sea, such as the common law of England affords to every person dying on land;" and we suppose that this applies to a certain degree to passengers as well as to seamen.

There can be no doubt whatever that the seaman's health and safety are very much imperilled by the impossibility, except on the rarest possible occasions, of obtaining a coroner's inquest in the event of death. As detailed by Captain Dawson, an ordinance was made in the reign of Edward III., who, by-the-bye, has been called the "Father of English Commerce," to supply this deficiency by means of an inquiry in the Admiralty Court, but this appears to have degenerated into an inquiry made by the Superintendent of Mercantile Marine, who cannot be supposed to have much knowledge of the subject. The object of the institution of the coroner's court undoubtedly was to obtain direct and immediate evidence as to the circumstances of the case in which the inquest (or "inquisition") was held, whether it was a case of arson, of shipwreck, or of culpable homicide, so as to secure the immediate apprehension of the guilty parties, or of those who were presumably guilty, and thus avoid "the law's delay," as well as to furnish the court above with details of the case, which without such an inquiry would be quite unobtainable.

The institution even of a modified form of coroner's inquest on board ship would be quite out of the question, and might even tend rather to defeat the ends of justice and humanity than to assist them. It is therefore a relief to turn to the Report of the Select Committee on the Certification of Death, and to find that at least one of the recommendations applies with special force to the case of deaths on board ship, and practically coincides with the suggestion made some years ago by Captain Dawson, and repeated in his letter to the Board of Trade. It runs thus: "The Committee recommend the appointment of a public medical certifier of the cause of death in cases where a certificate from a medical practitioner is not forthcoming."

If the Employers' Liability Bill becomes law, it seems more than probable that some arrangement of this kind will become necessary, and Mr. Mundella need have no scruples about inserting a provision to this effect in the Bill for consolidating the laws of merchant shipping, since it certainly involves no principle that is new.

PROPOSED OUT-PATIENT SCHEME AT BIRMINGHAM.

WE are much pleased to see that the difficulty which has been experienced at Birmingham (as it is beginning to be felt everywhere) in managing the out-patient departments has at last resulted in something better than mere complaints or protests that "something must be done," that is, in a definite scheme for doing something. The account of this scheme reaches us through the *Birmingham Post* of January 22nd, and is extracted from *Forward*, "the monthly journal of the Hospital Saturday movement;" and we may refer our readers to one of those journals for a fuller account of the proposal than our space permits to-day. The essence of it, however, may be stated briefly thus. Two dispensaries are to be established in connection with the two hospitals of the town—the General and Queen's Hospitals—the staffs of these dispensaries being "entirely stipendiary," by which term we hope is implied that they are to be paid really remunerative salaries. Admission to these dispensaries is to be obtained by means of tickets, which are to be sold at a rate to be hereafter fixed to subscribers who will dispense them to the persons whom they recommend, or use them themselves if they are poor. Regulations would obviously be required to provide for the exclusion of applicants other than those entitled to the benefit of cheap advice and treatment. Admission to the out-patient departments is only to be obtained through these dispensaries, except in the case of accidents and of former in-patients. When a case seems to the dispensary physician or surgeon to require it, he will give an order entitling the applicant to consultation, and, if necessary, to treatment for three weeks. The medical officers of the dispensaries would, of course, be quite independent of the staff of the hospital.

We have read this article with the greatest satisfaction, believing that the scheme sketched out in it would effect much towards the reformation of an intolerable abuse. Its main principle, namely, that out-patients should only be received on a medical recommendation specifying their need of hospital treatment, has been often advocated in the BRITISH MEDICAL JOURNAL, and must, as we believe, underlie any successful effort. The details do not seem very difficult to arrange, if the committees of the two hospitals are serious in wishing to establish a working union for the purpose. The provident principle could be easily engrafted on the proposed ticket system, a certain periodical payment, in health and disease, being accepted in lieu of the subscription for tickets, so that the provident subscriber would be in possession of a perpetual ticket. The proposal to make these dispensaries parts of the hospitals and erect them on the premises of the hospital, seems to us quite superfluous. It would be far better, we think, to have local dispensaries in each district of the town. However, this is a detail which an experienced and businesslike committee could easily settle. It is not quite so easy to form a scheme for the exclusion of improper applicants; though with good local committees for each dispensary this might, perhaps, be compassed. At any rate, the abuse could not be so great as at the present dispensaries, and it would hardly touch the hospitals at all. Regarded in every point of view—that of the hospital, of the medical school, of the patients, and of the public—the new scheme seems to us most promising, and we hope soon to hear of an earnest effort to formulate its details and set it in action.

ARCHÆOLOGICA MEDICA.

V.—THE ARMY MEDICAL SERVICE ONE HUNDRED YEARS AGO.

THE organisation and army position of the medical service a century ago must possess more than mere antiquarian interest to many of our readers; and we are, therefore, glad to be able to satisfy curiosity in that respect, in reviewing a small limp volume, now very rare, entitled outside, "Regulations for Improving Regimental Hospitals," and inside, "Regulations from the Army Medical Board to Regimental Surgeons, etc."

This pamphlet-like book contains, we believe, the first consolidated medical regulations, and is entirely devoted to duties in peace. It was issued in September, 1799, by "Harry Calvert, Adjutant-General," under orders of the Commander-in-Chief (H.R.H. the Duke of York). The preamble enjoins "Commanding officers of regiments of every description, and all regimental surgeons, to govern themselves in their respective duties, touching the care of sick soldiers, and the management of regimental hospitals, in strict conformity thereto." In another paragraph it is enjoined that the conduct of the hospitals shall be "according to fixed rules and instructions, etc." Such imperative injunctions had become necessary, because the hospitals hitherto had not been administered according to uniform rules; but probably more in accordance with the views and interests of commanding officers and surgeons, who to a large extent farmed them. Nevertheless, they were already subject to departmental supervision; for an inspector-general of hospitals, as well as a medical board, figure in these regulations.

The Medical Board then consisted of three gentlemen, by name "L. Pepys," "T. Keate," and "J. Rush," who sign these regulations without appending military rank or medical qualification. They doubtless possessed both, but even that would not give certain assurance of their being seniors who had worked their way up in the service; for in those days of devious patronage civilians were sometimes

nominated for high army departmental positions quite irrespective of previous service in the junior grades. But if the above gentlemen really drafted the regulations they sign, then, however acquired, we must credit them with intimate knowledge of army and regimental life.

Between the Medical Board and the Inspector-General, and the mass of regimental surgeons, we find no mention of either administrative or executive intermediate grades. The regulations, if sometimes quaint in diction and archaic in spelling, are always terse and lucid, and take the form of general instructions grouped in loose chapters, and not divided into numbered paragraphs.

Each regiment had a surgeon and one or more assistant surgeons, who, we remark, are never styled medical officers. The military status of these officers can be easily inferred from many indications: the regimental surgeon in an army sense was evidently quite subordinate, yet in his own sphere possessed such considerable initiative powers as must have conferred no little regimental importance, if not independence. In these respects he was probably much the superior of his successor in immediate pre-Crimean days. His professional and regimental efficiency were estimated as follows: "The reports of the visiting officers and of the surgeon will afford such information to the commanding officer as will satisfy him, with the help of his own occasional visits, that the sick are diligently attended and humanely treated." Again, "The journals kept by the surgeon will be undeniable proofs of his diligence and the best evidence of his professional ability."

The effects of the stress here thrown on such documentary evidence lasted many a day, and led to the writing of voluminous and more curious than valuable hospital records. To show requisite "diligence" some surgeons essayed to write remarks on every case, however unimportant, every day; and the story is handed down of one, driven to desperation in the fulfilling of such a futile task, who gravely recorded of a gonorrhœal patient that he had "relished his barley water."

In the management of his hospital, and inasmuch as he usually farmed it, the surgeon must be said to have had a free hand. It was laid down: "All regimental hospitals are under the immediate direction of their respective surgeons, subject, nevertheless, to the general directions of the Inspector of Regimental Hospitals," etc. But although strictly regimental in *personnel*, equipment, and immediate conduct, they were thus subject to departmental criticism and even ultimate control.

The inspector mentioned possessed plenary powers, not surpassed, if equalled, by corresponding officers of our own day, for he was to see that the regulations were duly observed; to ascertain wants and defects; to listen "to just complaints of the men" (probably with reference to the purveying); and beyond all, when necessary, to advise not merely the surgeons, but also commanding and divisional officers. Following these broad regulations come more specific instructions, of which the first relates to provision of hospital accommodation. In this we discover a fundamental weakness sufficient to imperil the best superstructure of regulations, for there were no special or separate hospital buildings connected with barracks, and only such barrack rooms as available allotted for wards by the "barrack-master-general." The unsuitability and grave inadequacy of such improvised hospitals might be inferred, were it not historical; chronic overcrowding was capped by utterly defective ventilation; wards noisy and cold; order and regularity impossible to be enforced; no privacy, and only such isolation as a suspended blanket could afford; sloppy washhouses; night stools and urine tubs in corners and passages, with the alternative of dirty latrines right out in the cold barrack yard; in short, an absence of that comfort, convenience, decency, and general sanitation which we now consider an essential matter of course.

In those days, however, troops were often not in barracks, but scattered in barns and billets over the country. Under such circumstances "every regimental surgeon, or, in his absence, the assistant-surgeon, is to provide an airy, roomy, and healthily situated regimental hospital, where good water can easily be procured:" or, should they be encamped, "a hospital tent is allowed in aid of an hospital, but, except in cases of absolute necessity, it is not to be the sole hospital."

On the care of wards specific and very good instructions are given, relating to ventilation by window opening; to scrubbing; whitewashing; and disinfection by fumigation. Similar excellent instructions are laid down for the airing, heat disinfection, steeping and washing of bedding and clothes. The fumigation recommended is by "the nitrous vapour," especially when "contagious or putrid distempers prevail." The isolation of infectious cases in separate buildings or tents is enjoined; and among these itch is specially mentioned, which must then have been a very common affection. Also, we read in these latter days, with mixed feelings, "Punished men should be placed in a separate ward, and their linen and bedding frequently changed;" doubtless a humane and necessary order, for flogging parades and the subsequent treatment of raw backs were duties constantly falling to the lot of the surgeon.

There is, of course, no mention of the then unknown factors of cubic space and superficial area; yet it is somewhat oddly laid down. "The hospital is never to be crowded; every man to have at least the space of five feet allotted to his bed, and every man a bed to himself." This is the only hint of ward appropriation.

The chapter on Subsistence reveals the surgeon in the character of a purveyor. The system of hospital farming by the medical officer, like that of tailoring by the colonel, was unquestionably fraught with potential abuses, and calculated to sow distrust among the men. For the munificent sum of four shillings weekly, deducted from the pay of each sick soldier, the surgeon purveyor had to provide a hospital dietary, "with every reasonable comfort and indulgence that can be afforded," of which the finest wheaten bread and fresh meat are specified; but the diet table, to which reference is made, has unfortunately been torn from the volume. How he managed all this on about sevenpence per head per day is unrevealed. Every article purchased, to the minutest particular, was entered in a book, opposite the allotted diets, and the whole balanced and checked weekly by the commanding officer and paymaster. Hospital dietary was thus entirely defrayed by stoppages, for it is emphatically affirmed that it should so be, "without any additional charge to Government." But it was otherwise with wine and malt liquor extras (spirits not mentioned), which were paid for by Government either directly, or indirectly, through money allowances. Needless to say, the ordering of such extras was made as difficult as possible; they were only to be given when "indispensably necessary," and no longer than required; and administered "by the surgeon or assistant surgeon himself, unless previously mixed by them with medicine, food, etc." The ridiculous impossibility of personal administration, led to the alcoholic liquors being nearly always mixed with such horribly nauseous potions that the veriest dipsomaniac would have turned from them with disgust.

The next two chapters, headed Duties of the Surgeon and Particular Instructions to Regimental Surgeons of the Line, are somewhat mixed and overlapping. We gather that hospital equipment, servants, medicines, and material were sometimes furnished directly by Government—how not stated; and sometimes provided by the surgeon through money allowances. Whichever way, the hospital beds were to be provided for 4 per cent. of strength, or 40 for a normal battalion of 1,000 men. The items of ward equipment do not call for special remark; but the detailed tables of an "Army Dispensatory" and a "Regimental Medicine Chest" are characteristic curiosities. Drugs are usually named in their crude state, and classified according to real or supposed therapeutic virtues thus—vomitum cientia, urinam cientia, sudorem cientia, cathartica, sedativa, soporifera, roborantia, emplastra, etc.

Concerning vaccination, which was only publicly introduced in 1796, there is, of course, nothing; but inoculation of recruits was permitted, when convenient, but never in barracks or hospital.

A few leading rules for the examination of recruits are given; but the thoroughness of the inspection hitherto may be inferred from the instruction that no recruit is to be certified fit "who has not at his examination been stripped of all his cloathes" (*sic*). Standard measurements, stethoscopes, vision test dots were all unknown; only apparently sound

recruits were accepted, and only those presenting obvious disease or disability rejected. But defective artificial selection was soon remedied by natural weeding in a very heavy rate of death and invaliding; soon only the stalwarts were left, and these were the splendid soldiers of Peninsular days.

The chapter on the Duties of the Serjeant might still be well applied to the modern war master. The hospital "serjeant" was carefully selected by and appointed on the recommendation of the surgeon; his essential qualifications were sobriety, steadiness, and good education; and this invaluable man received an addition to his pay at the rate of sixpence a day, cunningly paid half yearly in arrear.

The "orderly man" was a well conducted and trustworthy soldier who received an additional fourpence a day.

It will surprise many to learn that the final chapter is on the duties of the Nurse, not then called a sister, but a "decent, sober, woman nurse." How she was obtained—regimentally or otherwise—is not stated, but she received one shilling a day. Her duties were scarcely that of a nurse proper, or bedside attendant, but, "to prepare slops and comforts for the sick, and occasionally to assist in administering medicines, cooking victuals, washing, etc.—such female work, in fact, as considered uncongenial to a man.

Such is a brief account of these old regulations, which did not become obsolete, but retained much force for more than half a century. Although issued when wars were frequent, there is nothing concerning duties on the field. If, compared with modern regulations, they are sadly lacking in precision and elaboration, yet they display practical common sense, and were quite abreast of the hygiene and sanitation of the day. They present an army picture, which, in many features, scarcely altered down to Crimean days; it was only from that time that the true and forward evolution of the army medical service began, and which still continues. What will it lead to a century hence?

MR. GLADSTONE.

The rumour is again revived, but this time in a more positive form, that Mr. Gladstone has determined to take a well-earned rest from the stress of his Ministerial and Parliamentary duties; and that, in doing so, he is yielding not only to personal and political considerations, but deferring also to the urgent advice of his late friend and physician, Sir Andrew Clark, and of those around him. On a former occasion, when these rumours were being persistently and positively published, we took occasion to communicate [with Sir Andrew Clark, and in the course of a long personal interview, which we were freely authorised to use, Sir Andrew Clark expressed his views on the subject clearly and freely. "It is quite untrue," he said, "that I have ever urged Mr. Gladstone to withdraw from public work, and quite unlikely that I ever should do so. In the first place, the responsibility would be far beyond what any physician would be justified in assuming, unless in the case of an imminent breakdown, of which Mr. Gladstone shows no signs whatever; and, in the second place, Mr. Gladstone is a man of marvellous physical, as well as mental endowments; and, notwithstanding his advanced years, he has in many respects still all the freshness, elasticity, and vigour of youth. His muscular and arterial systems are both extraordinarily well preserved, and the force, energy, and versatility of his nervous powers are far beyond those of an ordinary man in the prime of life. Above all, he has the inestimable power, acquired partly by long habit and partly the result of admirable balance of the nervous system, of sleeping long and well throughout the night, however agitating the events of the day may have been. Even after the rejection of the Home Rule Bill, and the great crisis which followed, Mr. Gladstone's sleep was unimpaired, and his physical condition uninjured. It was only at times, when he has suffered slightly from insomnia, that there has been any ground for anxiety. To Mr. Gladstone work is not exhausting, but restorative; it is his true stimulus, and keeps him young and vigorous." "I," said Sir Andrew, "would never advise him to relapse into inactivity, even to prolong his life. I do not think that it would have such an effect, but rather the opposite. On the other hand, I have seen reason, and I have felt it my duty to urge the Premier to limit the hours of his attendance at the House, and to be sparing in his acceptance of social or public engagements, and especially to avoid exposure to severe weather and fluctuations of temperature. Whether it is compatible with his best interests to continue to undergo the fatigue of the leadership of the House of Commons together with those of Prime Minister is a matter as to which I shall express no opinion to you, and one in which Mr. Gladstone must be guided by the views which I have expressed to him personally and, by other than physical considerations, which are always likely to weigh with him." "Now," added Sir Andrew Clark, "you can make any use you like of this, publish it or not. I doubt whether there is any need to publish it at the present moment, for facts will speak more strongly than words, but I will correct the notes of the statement which I have made to you, and they can remain with you for publication at any moment when you think it advisable in the public interest." These notes thus corrected have remained in our portfolio until the present moment, when circumstances seem to render it desirable that they should be published.

CHOLERA IN EUROPE.

The fact that we have cholera as a close neighbour comes to our notice in the pages of the *Journal Officiel* of France under date of the 22nd ultimo. There we learn that during the past month and up to the date named there were 22 cases of the disease in the Department of Finistère, 7 deaths having resulted, distributed as follows:—2 at Beuzoc-Conq, 1 at at Quimper, 2 at Concarneau, 1 at Brest, and 1 at Treboul. What may have been the antecedents of these cases does not appear, but their existence is not without significance, not that any alarm need be felt at this recrudescence of cholera in France, if only England be kept informed of the progress, if any be made, of the disease. We know that it lingered for many months in the same neighbourhood, especially at Lorient, during the autumn of 1892 and the spring of last year, without harm accruing to this country. Nevertheless the news of this early developments of vitality in districts so near our shores will not be an unmixed evil if it tend to renewed activity in preventive measures at home and abroad, and sanitary authorities will be well advised if they profit by the occurrence.

Other cholera news coming to us is to the effect that an epidemic is now prevailing at Namur in Belgium; it is supposed to be the outcome of numerous cases which occurred last autumn at Charleroi, the river Sambre having been, it is alleged, polluted and germs carried down the river.

In certain Russian provinces the disease still lingers, many attacks and fatal cases being recorded. In St. Petersburg there were 250 cases and 120 deaths in the three weeks ended January 21st.

LITERARY NOTES.

Of the 234 medical journals published in the United States 52 are issued in New York.

Dr. George R. Mather, of Glasgow, announces as nearly ready for publication *Two Great Scotsmen, the Brothers William and John Hunter*. The book will contain five etchings by D. Y. Cameron, four portraits, and many other illustrations.

The latest addition to the large number of "systems" is one entitled *Specielle Pathologie und Therapie*. The editor, Dr. Hermann Nothnagel, is assisted by a large staff which contains the names of some of the most eminent German authorities. It is proposed to complete the work in about 22 vols., and the publisher (Hölder, of Vienna) hopes to get these all out in about three years.

We have received the eighth volume of the *Transactions of the Association of American Physicians* containing the papers and addresses read at the session held in Washington in May-June, 1893. The volume contains many interesting papers, to some of which reference has already been made elsewhere, but we may mention in particular a series of papers on Myxœdema and Cretinism by Drs. Kinnicutt, Putnam, Starr, Gilman Thompson, and Osler.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

Subscriptions to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, FEBRUARY 3rd, 1894.

IS SEWAGE GOOD TO DRINK?

Dr. Barry's report on Enteric Fever in the Tees Valley, to which we referred at length on January 20th, is a document of great interest to the inhabitants of London. For years back London has been increasingly conscious that its future depends on its obtaining plentiful and pure water, and increasingly doubtful whether, even for present purposes, its existing sources of supply are to be depended on. It is felt by many that, whatever may be said to the contrary, it must be wrong for a great city to drink the water of rivers which act as drains to large districts with nearly a quarter of a million of inhabitants. People have maintained that to drink sewage-polluted water in any form is an abomination, and that at all hazards, and at whatever cost, the first duty of a civilised city is to provide itself with pure water. Others, however, have been found who maintain that we need not trouble about the water's origin; that all we have to do with is its condition as it flows from the tap; that as a fact London is a very healthy city, and its water very good; and that with rivers at hand containing a plentiful supply (such as it is) it is folly to pump, and bore, and build long conduits, and make excursions into Wales and similar damp regions in search of a better article. The difference is radical and irreconcilable; and those who object to drinking sewage, however sparkling it may be, were not unnaturally horrified and shocked in no small degree at the report of the Water Commission, which, if acted on, condemns London for the next forty years to drink the drainage of the valleys of [the Thames] and Lee. Here comes in the importance of Dr. Barry's report on the Enteric Fever in the Tees Valley, which shows definitely [and undoubtedly that typhoid fever was spread broadcast by a water supply drawn from a sewage-polluted river; for the whole gist of the Water Commission's report hinges on the impossibility, or the infinite improbability, of such an event happening. It is obvious enough that before they could condemn London to continue the use of Thames water they had to be thoroughly satisfied that no danger would accrue, even though the river should become polluted with disease-producing organisms. Now Dr. Barry's report directly traverses this Utopian idea, showing that this very thing did occur, and that the use of water from a polluted river did produce an outbreak of disease; and no impartial critic can deny that the credit of the Commissioners' report hinges largely on their mode of dealing with the facts elicited by his investigation; for if the Tees could sin so greatly, how could they take for granted that the Thames would always remain immaculate? Dr. Barry and the Commissioners cannot both be right.

The Commissioners seem to have been led astray by a curious mental slavery to arithmetic. The way they tackle questions of etiology is somewhat thus: Estimate the total number of typhoid cases per year in the Thames watershed above the intake and the total yearly quantity of water passing down the river; divide the one into the other, and that gives the amount of Thames water per case, or the amount of water with which the excreta of each case of typhoid must get diluted before it can reach the consumer. The Commissioners make this to be 294 millions of gallons. The object of all this calculation being to prove that, considering the filtering and one thing and another done to the water, no one could get a sufficient dose to do him any harm. Unfortunately, in Darlington, Stockton, Middlesbrough, etc., they did get enough, and they did suffer harm for all that the water was reckoned to be filtered. Who can say that the known and recorded cases of enteric fever ought not to be doubled in order to form an estimate of the true total, even in ordinary times; and what becomes of the arithmetical evidence of extreme dilution in times of epidemic? London water consumers are not concerned so much with averages as with maxima—maxima of pollution, maxima of convection, and maxima of inefficiency in filtration—and it can comfort them but little to be assured that if their drinking water is liable to contain too much filth and too many bacilli now and then, the balance will be restored later on by a corresponding deviation in the direction of excess of purity. The exceeding littleness of infective particles almost passes comprehension, and when the Commissioners even mention the question of the difference in size between a cholera and a typhoid bacillus allowing the one to pass through a sand filter more easily than the other, we may fairly doubt whether this minuteness has been fully appreciated. In any case, so long as we admit that there is a measurable risk in living within a quarter of a mile of a small-pox hospital, this demand for an estimable countable quantity of infecting material is quite beside the mark, and this sort of arithmetical *reductio ad absurdum*, propounded by the Commissioners, is not to be admitted for a moment. What view would they have taken of the *antecedent* probability of the Lausen or Caterham epidemic?

This hunger for proof absolute of things which never can admit of more than probability, and concerning which we have to work on probabilities all our lives, is the besetting sin of the Commission. If London is to drink water so filthy that it can in each case be proved to be the cause of the resulting fever, before steps are taken to improve the supply, we might as well let things alone for a hundred years. In this attitude, then, the Commissioners approached the report of Dr. Barry, who showed first that the river was abominably contaminated, and then that the incidence of the fever corresponded with the distribution of the water drawn from this infected source. As the *Times* says: "Dr. Barry states facts which appear to be absolutely incontrovertible." We will not enter into details beyond saying that he shows that, taking the two consecutive epidemics together, and calculating the proportions on the same basis, for every person who contracted enteric among those who

did not use Tees water, fifteen took it among those who were supplied from that source. This is a difference far too striking to be explained by any small or local causes, and the one influence which was common to all the districts which were affected by the high mortality, districts widely separated in the area investigated, was that they were supplied with water from the river Tees, the befoulment of which had already been so graphically portrayed.

In the presence of facts like these one might have expected a Commission, with the future of London in its hands, to hesitate, and, if there were any uncertainty, to give the water drinkers of the metropolis the benefit of the doubt; instead of which they apparently accepted the ideas of a representative of the Stockton and Middlesbrough Water Board as of equal value with the report before them, and, after attempting to sum up the "arguments," as they politely term the facts and demonstrations in Dr. Barry's report, and, after admitting that it was "out of the question" for them to decide between these "conflicting opinions," and therefore refraining from expressing any judgment on the origin of the outbreak, they then, with these unexplained outbreaks of fever among the users of Tees water staring them in the face, proceeded to act as if the report had taught no lesson. Dominated apparently by their arithmetical ideas of etiology, utterly unable to conceive the possibility of an infection 17 miles up the river causing such havoc as it had done, and actually presuming to doubt even the existence of infection in this abominable river, because, forsooth, there had been found no traceable case of fever above the intake between the two periods of flood referred to, and, further, relying on evidence given by various medical men that they had never been able to trace London fever to London water, as if they were likely to be able to do so, they gave judgment for the river, and, so far as they are concerned, London now stands condemned to drink the Thames water for forty years. It is needless to say that a conclusion such as this, in face of such evidence, throws doubt upon all the proceedings of the Commission. It is all very well to prove by fantastic arithmetic that the amount of infection which can get into a river must be insufficient to cause disease in those who draw their water supply from it, but the single fact that the users of a polluted water did suffer from typhoid—man for man—fifteen times as much as those who drew their water from other sources ought to have shown that their calculations were beside the mark. It is of course evident that the conditions as regards volume and flow are different in the Thames and in the Tees. It is even conceivable that the differences in this and other respects may be such as to render it impossible in the former, though possible in the latter, for the enteric fever poison to be conveyed from the intake to the mains. But, if this be so, the etiological bearings of these differences are of a kind of which little is yet known with any degree of certainty, and in which the Commission themselves seem to have had scanty faith, since they find themselves constrained to rely mainly on the alternative justification of Thames and Lee supplies, namely, the assurance of the Tees water companies that the Local Government Board have still to learn how to conduct etiological investigations. It is well, however, that Londoners should understand that this decision cannot be permitted to be final. The medical officer to the Local Government Board—the head of a staff which has for years been engaged in the consideration of this particular class of facts has definitely thrown down the gauntlet and proclaimed that "seldom, if ever, has the proof of the relation of the use of water so befouled to wholesale occurrence of enteric fever been more obvious and patent" than in this case of the Tees, the bearing of which on the purity of the London water supply the Commissioners have refused to admit.

CARE OF THE WOUNDED IN WAR.

SOME assert that those who have been calling attention to the deficiencies in the official preparations for the care of the wounded in case the country should become involved in European warfare have been creating needless alarm. Persons who make the assertion must be either ignorant of the strong feelings of uneasiness that prevail on the subject among officers who are quite competent to form a judgment on such questions, or for some reason or other must be desirous that our stated unpreparedness should not be made a matter of critical inquiry. Every right-minded person must earnestly hope that whatever conflicts may take place on the Continent of Europe, the armies of this country may not be mixed up with them, and we feel confident that none desire this more heartily than those who have made themselves acquainted with the means there would be at hand for the care and treatment of the wounded who would be its first victims. There is no need to dwell upon the terrible aggravation, mental as well as bodily, of the sufferings of men who have been rendered helpless by wounds inflicted in war, when their necessities are left unattended to for lengthened periods after they have fallen. Vivid descriptions of the tortures so endured have been given in the published autobiography of M. von Tilling, and in other works of a similar nature. Careful attention appears to have been given to the subject of the care of the wounded in war on the Continent: the organisation for the purpose has been tested by practical trials, the provision made for meeting the needs of the wounded has been increased, and the expertness of the men charged with the duties of removing them from the field to the stations of surgical aid has been promoted by systematic exercises and reviews. In this country very little instruction appears to have been given beyond what is necessary for hospital attendants who have to carry, transport, and attend upon the sick and perform ward duties, while such training as would be derived from assembling and practising in co-operation the whole establishment of a company of bearers, including the stretcher-carriers from the reserve, with their regulated equipment, transport vehicles, drivers, and other details as specified in the tables of establishments for war service, has never been attempted. It might well be supposed that the exercise of a complete bearer company would have been a matter at least of annual practice.

The Secretary of State for War recently stated in the House of Commons, in reply to a question put by Mr. Plunket, that steps would be taken next summer to afford a fortnight's instruction of a practical character in the field duties of the medical staff. It may be presumed that the practical instruction alluded to is intended to include the working of a bearer company in its entirety, as well as moving, unpacking, and packing the various constituents of

a field hospital with the needful alacrity. It was not mentioned in the reply whether the practice would take place n conjunction with the summer manœuvres of the troops, or whether the medical establishments would be exercised separately.

So far as the bearer company is concerned, we feel assured that to get full advantage of the exercise it ought to be carried out with the troops at the time of their manœuvres. No reasons can be advanced for exercising a field hospital with the troops, but there are many service reasons why a bearer company should be. All the officers and men of the army are interested in seeing what provision is made for their early assistance in case they should be injured while on active service against an enemy, and in learning the manner in which the assistance is to be afforded, and how speedily it can be accomplished. Moreover, it seems to be generally admitted that no reliance can be placed on the plan of obtaining the services of men from the ranks, for their military functions cannot be dispensed with while an action is in progress. The only plan, then, that remains for bringing speedy relief to the wounded is that a certain proportion of the men of the bearer company should move with the troops, as well as some allotted portion of their conveyances. There is nothing in the nature of a bearer company that necessitates its moving in a compact body as a field hospital ought to do. The men and conveyances of a bearer company, in the discharge of their duties during an action will be scattered over a wide area, from the ground of conflict to the position of the field hospital; the establishment of the field hospital must keep together, that it may be ready to discharge its special functions whenever required.

The medical regulations direct that the bearer company and field hospital are to move together, and that a certain association should be established between them. When the fighting is over and all the wounded have been collected, attended to, and removed to the field hospital, if the force is not moving onwards and is not exposed to the risk of fresh attacks, there can be no reason why a bearer company should not fall back to the position of a field hospital and render any help at the hospital that it can give, for its work in the field will be for the time accomplished. But, under other conditions, the troops will require it to move with them. When a force is moving in an enemy's country the troops marching in advance may be suddenly fired upon, and men and officers be wounded, and should the advanced guard have to fall back upon the main body, the services of the bearers will be needed to carry back those who are badly wounded. Similar necessities will at once arise if any other part of the force, or the whole force, is attacked. Should the engagement prove to be a considerable one, the portions of the bearer company which have not moved in company with the troops will have enough to do with transport duties, in the establishment of the dressing station, in receiving and attending to the wounded who may be brought to it, and other such duties. It must not be forgotten, too, at what very extended distances the ranges of modern weapons will cause the several stations of the bearer company to be placed. It is laid down in the regulations that dressing stations are to be beyond the range of rifle fire, and that the field hospitals are not only to be beyond the range of artillery fire, but are, if possible, to be established in villages or towns near the scene of hostilities. During the war of 1870 71 in France the field hospitals were often several miles away from the actual positions of the troops engaged, sometimes in villages over five miles away, and the distances of the help stations apart are not likely to be lessened in any future wars in Europe. This sufficiently indicates the wide range over which the duties of bearer companies will extend. Surely these considerations involve questions which cannot be determined merely on paper. The same reasons which hold good for the practical training of troops in the use of the weapons carried by them, and in military movements, may be urged with a like force when regard is given to the training and movements of the body to whom is entrusted the serious responsibility of the primary care and removal of the officers and men who are wounded. It is, indeed, difficult to comprehend how commanding officers who may in the future become charged with the wellbeing of large numbers of troops on active service, or how any officers whose personal interests are concerned in the readiness and adroitness of the men who would have to look after them if wounded, can have been reconciled to so little being done as has been done hitherto in the direction of practical exercise, on a complete scale, of bearer companies in their field duties. We hope for better things now that the Secretary of State for War has again promised that attention shall be given to the subject.

THE FRENCH FREE MEDICAL ASSISTANCE ACT.

The debate in the Senate on the "second reading" of this measure, which is analogous to a combination of the two stages of "report" and "third reading" in English parliamentary procedure, was opened by the Reporter of the Bill, M. Théophile Roussel, who reminded the House that the object of the present proposal was to give practical effect to an existing enactment, passed in 1851, which conferred upon all sick persons the right to receive free medical attendance either in their homes or at the nearest hospital. He recited the considerations, strikingly socialistic in character, and concluding with a reference to "social peace" as the goal of their endeavour, which formed the basis of the proposals of the Government, and pointed out how these had already been endorsed by the Senate in referring the Bill to a Committee, every member of which regarded it with favour, whilst the Committee in its turn had recommended the adoption of the Bill in the form in which it had come up from the Chamber of Deputies. The rhetorical tone of the report from which the speaker quoted, with its reference to "the soil of Republican France," offers a curious contrast to the measured and colourless propriety of an English parliamentary paper.

The main provision of the Bill, which is contained in the first clause, throws the burden of assistance either on the *commune* (parish), the department, or the State, according to the domicile of the patient, in cases where he can be treated at home; otherwise he is to be admitted to a hospital. This proposal was challenged by M. Lesouëf, who argued that it conflicted with the provisions of the Act of 1851, which expressly disregards all questions of domicile, and confers an absolute right of admission to a hospital. In the former case he contended that a right of recourse existed against the domicile of the patient, whilst in the latter there was none. It was, however, asserted by the

Commissioner of the Government that there was no such conflict as had been alleged, since the object of the Bill was to diminish existing charges on the hospitals by transferring a portion of the burden to the communes; and he pointed out that it was the cost of the first ten days only of treatment which the *communes* would have to bear. This explanation was declared by M. Lesouëf to be wholly unsatisfactory, but the point was not pressed. The same Senator attacked a further provision of the clause, which extended the benefit of the Bill to indigent foreigners wherever a treaty of reciprocity should have been made with the countries from which they came. He was sceptical, he remarked, as to the feasibility of such treaties: and amongst other instances he referred to the case of England, where the hospitals are private foundations and absolutely independent of the State. But on this point the Government Commissioner retorted effectively that England by her Poor-law system had actually set a precedent in the matter, and that nothing would be easier than an arrangement between the two countries.

Before the clause was adopted, it was made the subject of criticism from another point of view, which drew forth a remarkable declaration. M. Hervé de Saisy called attention to the fact, which he deplored, that the Bill did not include within its scope the aged or sufferers from incurable disease. By this omission, he protested, the Government had departed from the recommendations of the International Congress of 1889, and he appealed to them in eloquent language not to exclude these cases from the scope of their legislation. This appeal, as it happened, fell on willing ears. The Reporter at once rose and assured the speaker that a measure dealing with these classes of cases had been prepared, and would be introduced in due course. Considerations of finance, he added, were alone responsible for the present postponement.

Having thus determined the scope of the Bill, the Senate proceeded to consider the intricate question of the right of recourse. By the 2nd clause this right was made exercisable by the *commune*, the department, or the State against all persons who were liable to render medical assistance to anyone becoming chargeable under Clause 1. M. Lesouëf desired to extend this right to the hospitals, but it was conclusively shown that they already possessed the right both under the Act of 1851 and the present Bill, and also at common law. The senator proposed further to extend the right so as to reach those who owed any "indemnity" to the patient, with the view of including employers who maintained insurance funds and insurance companies. His contention was that if this were not done, the door would be opened wide to fraud. To these arguments, the official reply was that such a provision would inevitably fail for vagueness, and the proposal was dropped.

At this point perhaps the most remarkable speech of the debate was delivered by M. Chovet, who asked the Senate to make the right available against all persons who were liable for the support of the patient, a somewhat but not greatly larger class than that which was liable for medical assistance, and further to include brothers and sisters (both by blood and "in-law") in proportion to the needs of the patient and the fortune of the contributory. With great power and cogency the senator developed his argument, appealing to the House not to increase the burdens of the State and asserting in uncompromising terms the doctrine that the State owes assistance to those only who have no other source from which to claim it. He estimated that the proposed contributions, though slight when regarded singly, in the aggregate would be considerable. This view was contested, though in no convincing fashion, by the Reporter, who evaded altogether the main argument of M. Chovet, and took up the rather safe and strong position that it was out of the question to propose any amendment which amounted to a modification of the *Code Civil*. This *non possumus* not unnaturally prevailed with the Senate, and the amendment was lost. But it is of the greatest importance that the doctrines of M. Chovet should find so vigorous and capable an exponent, and much interest will attach to the future occasion when they come to be discussed and dealt with on their merits.

The third clause of the Bill fixes the relations between the *communes* and the hospitals, and provides that all cases which cannot be treated at home shall be admitted to the latter. These, it was contended by M. Hervé de Saisy, would be by far the greater number. Accordingly additional hospitals were required at once, and they need not, he thought, cost very much. But unless they were provided the Bill, which merely made a show of providing the poor with free attendance under conditions which would frustrate its beneficent effects, would be nothing but a mockery of their needs. The arguments of the eloquent senator once more prevailed. The Reporter defended the Bill as a good measure so far as it went, but he added that the Government contemplated the establishment of infirmaries and dispensaries, and he assured M. de Saisy that they would do all they were able in the direction that he desired.

The following clauses dealt almost exclusively with subsidiary questions of management and detail, and the discussion possessed little external interest until the 20th clause was reached, whereby it is provided that, in the absence of domicile, the *commune* must bear the cost of the attendance which it supplies for the want of an available hospital. The equity of this arrangement was challenged by M. Lesouëf, but the Government Commissioner was able to point out that it was borrowed from the Act of 1851, and was thus, in fact, part of the existing law. M. Lesouëf also assailed the next clause, which imposes the cost of the first ten days of treatment under the preceding clause upon the *commune* absolutely. This, he contended, was a direct incitement to fraud. He proposed to confine the provision to cases where the patient had been resident for a month. And M. Sébline expressed the opinion that ten days would ordinarily cover the entire period of treatment, with the result that the clauses establishing the principle of domicile would be virtually annulled. In reply to these criticisms the Reporter argued that the clause was perfectly consistent with those which preceded it, and which made the *commune* the basis of the principle of the Bill. The *commune*, moreover, where the patient fell sick would often be responsible for his condition, and it would be good policy to make it to the interest of the *commune* to restrict the duration of the assistance. If the proposal were not adopted, the charge would have to fall upon the State. M. Sébline replied that some steps were necessary to rid the country of vagabondage; and the Government Commissioner, in closing the discussion, contended that since the

patients would in most cases be countrymen who had travelled to the towns, the rejection of the proposal would have the result of throwing heavy burdens upon the villages, which were ill able to bear them. The effect of this argument was somewhat disturbed by an interjection to the effect that in the towns there were hospitals to receive the patients. But the interruption was ignored. The amendment was then rejected. The rest of the debate exhibited scarcely any features of interest.

As a whole, the debate was hardly satisfactory, for few of the clauses were discussed upon their merits. In view of the impending general election, the Bill had to some extent acquired the character of an electioneering manœuvre, and this remark is especially just, as more than one amendment was expressly opposed on the ground that it would involve the loss of the Bill if it had again to go to the Chamber of Deputies. But even in the course actually taken there was an abundant revelation of the contending views and forces which prevail and are at work in France to-day in connection with social problems, and their development will deserve an attentive and sympathetic observation.

The King of Italy has conferred the Order of SS. Maurice and Lazarus on Sir Joseph Lister, M. Pasteur, and Professor Rudolph Virchow.

The Lord Mayor of Manchester recently presided over a public meeting which adopted a memorial to the Home Secretary, urging him to bring into Parliament during next session a Bill embodying the recommendations of the Departmental Committee on the subject of legislation for habitual drunkards.

We understand that the Subcommittee appointed by the Lancashire Asylums Board on the January 22nd, to select a successor to Dr. Wallis, as medical superintendent of Whittingham Asylum, met yesterday, but owing to the limited number of applicants who presented themselves, they decided to postpone for a fortnight the filling up of the vacancy.

EDINBURGH ROYAL INFIRMARY.

Drs. John Duncan and Argyll Robertson, the newly-elected representatives of the Royal College of Physicians, appeared at the weekly meeting of the Board of Managers of the Edinburgh Royal Infirmary on Monday last, and took part in the business, apparently without challenge. The meeting was for the first time open to the press.

THE JENNER RELICS AT THE BRISTOL EXHIBITION.

We have received a letter from Mr. Mockler referring to our article of January 13th on his collection of Jenner relics. He sends us a supplemental list of things of interest in connection with Jenner, some of which, he says, space did not allow him to show at the Bristol Exhibition. He is desirous of seeing the whole collection housed in some public institution in London, and asks us to assist him in securing that this should be done. He would suggest that either the British Museum or the College of Physicians would be an appropriate home for the collection.

THE BITTER CRY OF PORT CHOLERA AUTHORITIES.

The Cardiff Port Sanitary Authority have during the two years 1892-93 expended something under £1,800 in connection with the cholera scare, and of this sum £150 were spent on a crematorium, a permanent improvement, and £61 on expenses in attending London port sanitary conferences. But the authority seem ill-content to pay the money out of their own rates despite their enormous rateable value. We fear they have but little chance of Government aid from what passed last year and would commend to their consideration Mr. Ernest Hart's suggestion to the Parliamentary Bills Committee as to a county cholera fund, discussed in the British Medical Journal of December 13th, 1893. But, after all, has not Cardiff escaped cholera and its attendant dislocation of maritime trade very cheaply?

OPIUM IN PERSIA.

The following quotation is just now of interest in connection with the evidence regarding the use of opium in India. The quotation is from *Persia As It Is*, a book written by a member of the medical profession (Dr. J. C. Wills). "Nine out of ten of the aged take from 1 to 5 grains of the drug daily. It is largely used by the native physicians. It does not appear that the moderate use of Persian opium, in the country itself, is deleterious. Opium eaters there are, but they are few. Opium smoking is almost unknown, and opium when it is smoked is, as a rule, smoked by a native doctor's prescription. The opium pill box—a tiny box of silver—is as common in Persia as the snuff-box was once with us. Most men of 40 in the middle and upper classes use it. They take from a grain to a grain and a-half, divided into two pills, one in the afternoon and one at night. Travellers, too, almost invariably take it." Dr. Neil, who sends us the above, observes that Dr. Wills gives a detailed description of the cultivation of the white poppy in Persia and of the manufacture of opium therefrom. He states that Persian opium contains much less morphine than that grown in India. The entire account of opium in Persia contained in Dr. Wills's interesting and pleasant book is well worth reading. The amount of alkaloids appears to vary greatly with climate, soil, and mode of cultivation, and this fact may go some way to account for the conflicts of evidence regarding its effects.

FEES OF MEDICAL WITNESSES.

The comments which recently appeared in this and other journals on the reported deadlock between the stipendiary magistrate and the medical profession in Liverpool seem to have been based to some slight extent on a misapprehension of the facts. A report and comments on it appeared in the Liverpool papers, according to which the magistrate had undoubtedly asserted his power and intention to enforce the attendance of medical witnesses at his court, without payment of anything beyond their out-of-pocket expenses, if they demurred to accepting such sums as the police authorities chose to offer. A minor point in the dispute was as to the obligation of a medical practitioner who had professionally attended an injured person to give the police a certificate of the nature of the injuries before the case came into court. Mr. Stewart, the learned magistrate in question, has now written disclaiming any intentional discourtesy to the medical profession or wish to work otherwise than harmoniously with them. But he does not allude in any way to, much less qualify or withdraw, the serious part of his reported statement, and there is therefore no occasion to modify the comments on it which this Journal recently published. If a magistrate or anyone else in a prominent and responsible position seriously asserts that medical witnesses are bound to attend police or other courts without any fee, the sooner the matter is brought to a crisis and authoritatively decided the better for everyone. If the claim is not pressed the profession can only protest against its being put forward, but if any attempt should be made to act on it a legal decision on its validity should be obtained as speedily as possible. As regards the question of giving a certificate, this is comparatively unimportant. Mr.

Stewart likens it to a potential witness giving a proof of his evidence to a solicitor. The analogy is sufficiently accurate for the purposes of the argument. A witness is not bound to give a proof of his evidence, and may decline to give it altogether, or may stipulate for payment as a condition of giving it: so a medical witness may decline to give a certificate to the police, or may decline to give it without a fee. It is, of course, convenient for those who have to conduct a prosecution to know beforehand what their witnesses will say, just as it is for those who have to conduct any other case. But this convenience gives them no right to obtain the time and trouble of the witnesses for nothing. The labour involved in giving a certificate may not be very serious, and medical practitioners may consider it not worth while to refuse generally to give certificates in criminal cases. As long as it is recognised that they do so as a matter of grace, and, in fact, make a present to the public when they do so, there seems to be no harm in their so far complying with the wishes of the authorities in Liverpool. The danger is that what is conceded voluntarily may presently be claimed as of right. Officials and the public are disposed to be grasping, and the medical profession must take care that its rights are recognised.

MIXED MILKS.

It would appear from a case at the Westminster police court last week that the action of the Home Secretary in urging sanitary authorities to increased vigilance in regard to the adulteration of milk, has been met by a new move on the part of the dealers. These ingenious gentry certainly seem to live quite as much by their wits as by their milk. Finding that fines and costs detracted somewhat from their profits, they have hit upon the brilliant idea of taking the profits themselves and leaving the fines and imprisonments to be borne by the milk carriers. It appears, from the account given, that after Mr. Asquith's circular certain masters straightway discharged their men, but told them they could sell the milk on their own account. The men then hired the company's barrows, each carrying an attractive name in large letters, well calculated to lead the public to imagine that the milk was being sold by the said company. For these they paid 1s. 6d. per week, and, buying milk at 2s. a gallon and skim at 1s. 1d., mixed them in such proportions as they thought their clients would accept, and took upon themselves the risks of pains and penalties, which, to men of straw, were not prohibitive. It will be well then for buyers to bear in mind that the name painted on the side of a milk barrow does not necessarily mean more than the name of the barrow's owner, and gives no guarantee regarding the milk in the cans. This will be a mixture of milk and "skim" in such proportions as, from a careful study of the good nature and carelessness of his customers, the milkman thinks will be accepted on his beat.

COMPULSORY NOTIFICATION OF LEAD POISONING.

A few days ago the Coroner for East London held an inquest on the death of Matilda Ashwell, aged 38 years, a white lead worker. The husband stated in evidence that his wife had worked in the factory only since August of last year. On January 5th she was seized with convulsions, and was attended in her fatal illness by Dr. Debenham. At the inquiry Dr. F. T. Smith, of the London Hospital, who made a *post-mortem* examination of the deceased, stated that her death was due to cardiac failure and pulmonary œdema, probably the result of influenza. There was no proof, he maintained, that death was due to lead poisoning, but whilst advancing this he would not swear that the occupation followed by the deceased was not the cause of her death. The coroner intimated to the jury that Dr. Debenham had experienced great difficulty in obtaining information of illness when it occurred amongst the hands at the lead works, and suggested that it should be compulsory on all medical men to report cases of plumbism to some local authority, as is done in the case of infectious diseases. The jury thereupon desired the coroner to suggest to Her Majesty's Government that provision should be made to render such a proceeding compulsory. There is no doubt that such a step would be highly advantageous to both parties, employers as well as employed. The recommendation transmitted through Mr. Coroner Wynne Baxter is exactly that which was made by the Whitelead Commission appointed by the Home Secretary to inquire into industrial plumbism. On page 22 of their report, under the heading Recommendations, 85, are the words: "The Committee recommend that it be the duty of all occupiers to report to Her Majesty's Inspector of Factories and to the certifying surgeon for the district any case of lead poisoning, in the same way as they would at present report an accident." It must be gratifying to the Home Secretary's Committee to observe that a gentleman of Dr. Debenham's experience amongst lead workers has expressed an opinion upon this point similar to that which is a recommendation in their report. The importance of this recommendation is still further emphasised by the fatal cases reported this week from the Greenwich Infirmary.

OUR SAILORS' TEETH.

The announcement is repeated that no man is now eligible for admission to the Royal Marines who has defective teeth. The rule to which allusion is made is not altogether a new one, and is as follows: "Persons of whatever class or age are to be considered unfit for entry into Her Majesty's service if they have seven teeth deficient or defective (unless official authority is obtained from the Admiralty), or if the biting or grinding capacity be seriously impaired owing to a smaller number of absent or unsound teeth, for instance three or four incisors or four molars in the same jaw." "The examining officer is also directed to take into account the condition of the teeth generally and the probability of their lasting." The Admiralty some eight years ago made an arrangement with the Dental Hospital of London providing that for a small annual payment the teeth of all recruits should be put in good repair. It is time that all recruiting stations and headquarters of regiments should have a dentist to take care of the teeth not only of recruits, but also of soldiers who are quite unable to pay a fee. Inasmuch as they use the servants of the nation, the Government should provide soldiers and sailors with properly-qualified dental surgeons to pay periodical visits at barracks, or dentists be appointed in all towns where depôts are found to receive the men at the dentist's residence. The Navy has moved in the right direction by not only formulating the above rules, but also requiring of naval surgeons some knowledge of dental surgery, and instructing them at Haslar on this subject. This can only be tentative, and nothing short of the appointment of dental surgeons at the various depôts, training ships, and barracks can be really satisfactory.

DEATHS FROM POISONING BY CARBOLIC ACID.

Without being disposed to offer any disparagement of the value of carbolic acid as a disinfectant, it is, nevertheless, difficult to perceive what possible justification there can be for the fact that the constant recurrence of fatal accidents with this material, and its frequent use as a means of suicide, have been persistently ignored by the State department which has power to give effect to the recommendation that this article should be added to the poison schedule of the Pharmacy Act. The number of deaths due to carbolic acid poisoning have now become so numerous, and accidents occur so frequently, that a serious responsibility is incurred through the obstructive action of the Privy Council in withholding its approval of the resolution passed by the Council of the Pharmaceutical Society several years ago, that carbolic acid should be deemed a poison within the meaning of

the Pharmacy Act. If carbolic acid were the only disinfectant in existence, it would not follow that its useful application for sanitary purposes must be accompanied by a constant tribute of human life by accident and suicide. Other disinfecting agents, such as corrosive sublimate, for instance, are made subject in their sale to the provisions of the Act, and without entailing inconvenience to those requiring to make proper use of them, or hindering their useful application, while due precautions are taken to prevent accident or misuse. We cannot conceive any circumstance which calls for an opposite course of action being followed in the case of carbolic acid; and the appalling array of victims to the past neglect of proper regulations as to the sale of this dangerous article calls for an immediate and effectual provision against the continuance of such preventable disasters.

UNWHOLESOME PORK.

The fears recently expressed by the President of the Board of Agriculture as to the possible spread of swine fever have, unhappily, been justified. Many reported instances of outbreaks have compelled the Board to add to its staff in Whitehall, and telegrams are being received daily from all parts of the three kingdoms with particulars of suspected cases. It is well, therefore, that the public should be warned that just at present pork, as an article of diet, is best avoided. Pigs killed in the earlier stages of the disease show very little indication of being infected, and there is no rigid system of meat inspection to prevent the carcasses being bought and sold in the meat market in the usual way. Provided infected meat be bought, the most thorough cooking is not always to be trusted to get rid of all risk. In the well-known cases of poisoning from baked pork at Nottingham, in 1881, some of the persons taken ill complained that the meat was over-cooked. It is also important to note that carcasses even slightly infected do not "take the salt" well, and are therefore disposed of as fresh pork or sausages. This disease, though it spreads so rapidly among swine, is not believed to be transmissible to man, but all good authorities hold that it renders the flesh unfit for human food. There is, indeed, a peculiar sickly odour about the flesh that may sometimes serve to discover it. The symptoms which may be looked for do not differ materially from those manifested in many of the less severe cases of sewage poisoning—that is to say, epigastric pain, headache, nausea, loss of appetite, faintness, chilliness, and possibly purging and vomiting.

MR. BALFOUR ON "SPOOKS."

In his presidential address to the Society of Psychical Research the other day, Mr. Arthur Balfour spoke more in the tone of a politician than of a philosopher. He too evidently had the fear of the reporter before his eyes, and carefully guarded himself against the possibility of his words being brought up against him at some future time. He performed his egg dance not ungracefully, and avoided committing himself to any definite opinion with a skill worthy of the most accomplished logical acrobat. His whole argument—if such it may be called—resolves itself into the time-worn formula that "there are more things in heaven and earth than are dreamt of in our philosophy." The same plea might with much greater relevancy be advanced for the great sea serpent. Mr. Balfour apparently invites us, if not absolutely to swallow telepathy and the other "phenomena" of "spookism" as solid intellectual nutriment, at least to take them as a kind of spiritual condiment. Treat these beliefs tenderly, he seems to say; they may be dreams, but they are such beautiful dreams. Surely this is an attitude not so much of "philosophic doubt" as of fantastic sentiment. Granting, for the sake of argument, that there may possibly be a poor pennyworth of truth in the monstrous deal of fiction and imposture which composes the subject matter of "psychical research," human life is too short and too much concerned with more important objects to allow of time being wasted on such dilettante trifling. What have telepathy, clairvoyance, and all the rest of it done for mankind that deserves even the passing attention of sensible men? Have they added a single truth to our store of "gained knowledge"? taught us how to lessen the suffering or increase the happiness of mankind? inspired any great work of art? or led any single man or woman to a higher and nobler life? So far from their having done any of these things, they are merely a snare and a delusion—an intellectual poison and not a food. Flirtation with the mysterious is the mark of the intellectual fribble; closer intimacy in time demoralises the character. The only advantage discoverable in "spookic" manifestations is that they furnish an argument against suicide. As Huxley said long ago, the most wretched life is more endurable than to be called back after death and made to speak ungrammatical twaddle for the edification of simpletons and the profit of scoundrels.

SO-CALLED MEDICAL MISSIONARIES.

We are not altogether surprised to find that medical men are inclined to agree with Dr. Jex-Blake rather than with Dr. Routh in the correspondence which has taken place on this subject. Dr. Routh says: "I deny *in toto* that either the committee or the ladies themselves give out that our ladies are fully-qualified medical women." But surely this is rather a splitting of hairs, for the very essence of the report of the Zenana Medical College is that not only are they fully capable of doing medical work of the most responsible character but that they actually are doing it. As to Dr. Routh's argument that the students could not afford the fees for a proper medical education and that therefore they must practise without it, that is only another way of saying that if one cannot afford to do right one must do wrong. The fault, however, does not lie with the students. Not one of them would go through this partial training did they not know that the missionary societies would employ them. It is childish to suggest that these rich societies could not afford to give their missionaries a proper education; if they cannot they should employ fewer. They are under no compulsion to send out medical missionaries at all, but they are under an obligation to avoid even the appearance of a false pretence, and if they cannot afford the luxury they should go without it. Rumour says, however, that there is an even lower reason for the employment of these unqualified ladies as medical women. It is whispered that they are easier to manage, that qualified women can set up for themselves, but that these are helpless, except under the sanction of the societies, and therefore cannot desert. For the same reason unqualified assistants are popular among certain classes of practitioners. But the public conscience does not approve nor would it in the case of these societies but for the sanction of the duke, duchess, archbishop, bishop, and distinguished clergymen who, Dr. Routh appears to think, can do no wrong.

ALCOHOL IN INFANCY AND CHILDHOOD.

Dr. Henry Koplik has uttered a very necessary warning against the abuse of alcohol in the treatment of various diseases, but especially in acute gastro-intestinal disorders. As he says,[1] parents are directed to give small quantities of brandy or whisky, and "the mothers, in their helpless ignorance, overdose their children, adding the condition of alcoholic stupor to the weakness resulting from the effects of illness." For, short of producing actual stupor, the alcohol may yet have a most injurious influence, for infants and young children bear it badly. It produces a condition of mingled apathy and restlessness—apathy to surrounding circumstances, and a dislike to food, combined with constant peevishness and ceaseless shifting of position, whether in bed or in the nurse's arms. Alcohol here, then, has the effect of increasing the exhaustion which it is intended to

[1] *Medical News*, II, 1893, p. 481.

relieve. Its withdrawal is often followed by immediate alleviation and the child sinks into a quiet sleep. The habitual use by children of alcoholic beverages is also much to be deprecated. It is capable of producing in them precisely the same injurious effects on the viscera. Many cases of cirrhosis of the liver are on record in quite young children, and Jakob has recorded recently [2] the case of a boy 5 years old, who had been in the habit of drinking a great deal of wine and beer, latterly at least two litres a day, and who was the subject of acute alcoholic neuritis. He was attacked with rapid paresis of the inferior extremities, and on examination the ilio-psoas, quadriceps, adductor femoris, and glutei were found affected on both sides. Simple atrophy existed without the reaction of degeneration being detected. From the commencement there was an absence of general and cerebral symptoms, but there was very sharp pain in the legs, so that movement and direct pressure gave rise to great pain. With rest and nursing he recovered in twelve weeks. At the age of 2 years the child had had an attack of ascites from which he rapidly recovered.

THE DOWNING PROFESSORSHIP OF MEDICINE, CAMBRIDGE.

THE retirement is announced of Dr. P. W. Latham from the office of Downing Professor of Medicine, which he has held for twenty years. The duties of the office are not strictly defined at present, but the next Professor will be under the new statutes of the University, and possibly some special department in the Medical School will be assigned to him. The emoluments include a stipend from the University of about £300. The appointment lies in the hands of a special board of electors, consisting of the Vice-Chancellor, Dr. Hill (Master of Downing), Sir George Humphry, Professor Michael Foster, Professor G. D. Liveing, Professor Alexander Macalister, Dr. Donald MacAlister, Sir Richard Quain, Dr. Lauder Brunton, and Dr. Sidney Ringer.

EXTENDED CHOLERA SURVEY.

WE are pleased to learn that the Local Government Board have decided upon an extension of the period of employment of the inspectors temporarily added to their medical department. We do not doubt that this means continuance of the sanitary survey which has now for a year been carried on round our coasts, and also of inland districts, with a view of securing the adoption of measures adequate for the prevention of the entrance and spread of cholera. The four inspectors hitherto engaged have been one and all reappointed -namely, Drs. Horne, Wheaton, Maclean, Wilson, and Mr. Evan Evans. Great as has been the amount of ground gone over in the past year, much more, needless to say, remains to be done; and it will be well for those districts yet to be selected for survey if they profit by the advice tendered as the result of inspection by the central medical staff, seeing that, if happily cholera remain absent, all sanitary measures aimed at prevention of that disease will be potent for safeguarding the district against other filth diseases.

THE SOLDIER'S FOOT.

AT the Royal United Service Institution on January 26th, Surgeon-Captain W. C. Beevor, Scots Guards, delivered a lecture on "The Soldier's Sore Foot." Major-General Lord Methuen, commanding the Home District, presided. Surgeon-Captain Beevor said that perhaps the most serious of the troubles encountered by those responsible for the marching power of a force of men was the condition of their feet. The history of all wars, ancient and modern, abounded in records of suffering amongst the men, and disappointment and troubles amongst their leaders, on account of the unfortunate soldiers falling out of the ranks, and in many cases utterly breaking down, from their feet becoming so painful from one cause or another that they had found it impossible to march further. In peace manœuvres, also, much suffering was gone through and much loss to the fighting standard of a force was experienced from the same cause. Observation had led him to the conclusion that the most potent cause of the ailment was to be found in the equipment the soldiers wore, the fashion of folding a voluminous portion of trouser within a non-porous leather box, such as the legging represented. He condemned this fashion, and advocated an arrangement whereby all undue pressure might be obviated, and a more or less free current of cool air be encouraged to play in the space between the leg and its covering. This plan should be arrived at practically without expense, and without adopting any new or radical change of equipment. The regulation boot at present in use did not fulfil the requirements of Nature, and he infinitely preferred a strong shoe with a spat. He strongly urged a voluntary trial of foot cloths instead of socks, and that men should be allowed to wear socks or go without, as they liked. For hardening the feet he recommended common salt or saltpetre. Strict attention to cleanliness and the facility for the men to cool their feet on the march were necessary. At the close of the lecture there was a discussion, and the usual complimentary votes were accorded.

WATERBORNE FEVER.

A REPORT of great interest on an outbreak of typhoid fever caused by polluted water has just been issued by the Local Government Board. It relates to a prevalence of the disease in Atherstone, a town of 5,000 population. From May 21st to September 5th of last year, 63 cases were notified, with 7 deaths: and up to October 8th, 136 attacks had been heard of, 24 being in surrounding villages. Outside a single notification in May, from mid-June to early August, 30 cases occurred, 83 per cent. being in the "epidemic" area; thence to September 5th other 83 per cent. occurred in the same area; but thenceforward to October 8th only 43 per cent. of the attacks in Atherstone took place in that area. All the known methods of dissemination of the fever in its earlier manifestations were able to be set aside except water, and here Dr. Wheaton found the cause of the mischief. Whilst the chief source of supply is a deep well three miles from the town, and showing no likelihood of contamination, there is a second supply entitled "Outwoods," derived from the surface drainage of a piece of common land, and subject to pollution by animal ordure, the mud of a large pond, etc., whilst the vicinity of the tank in which the water is collected is "much used as a defæcating place by tramps." This water was drawn at a public fountain in the "epidemic" area, and was also nightly turned into the mains, owing to scantiness of supply, from May 20th until July 15th, when it was discontinued owing to complaint of muddy colour. It still continued, however, to be drawn at the public tap. The local circumstances were such that the implicated "Outwoods" water would be turned on into practically empty pipes, whilst the lie of the northern area, chiefly affected, was such as to lead to flow of the water to the invaded dwellings, with but little chance of flow of the water—on account of levels -to the loops of mains in the south of the town, where the fever was practically absent during the period when the influence of the Outwoods water was at its height, namely, from June to August, on account of its nightly use. Continued prevalence of the fever hereafter was to be thought of as having relation with the midden system, although it may be referable, at least in part, to use of the Outwoods water at the public tap, and the repeated pollution of water in the mains by reason of lodgment of Outwoods supply in a depression in a long pipe having a dead end. Apart from Atherstone, the cases in the villages round were all referable to infection from the town.

[2] *Jahrbuch für Kinderheilkunde*, xxvi, 1889.

WINDOW CLEANING ACCIDENTS.

Two inquests have been held this week at one hospital in London (St. Bartholomew's), on people who had met their deaths in cleaning windows. In one case the deceased was standing on a window ledge when he suddenly fell backwards to the ground, a distance of 60 feet. It is stated that there are about 100 fatal cases a year from this cause in the kingdom, and of injuries not leading to speedy death from 400 to 500. This is a serious loss from an absolutely preventable accident. Clearly, windows should be made so that they can be cleaned from inside. It has been suggested that the Employers' Liability Act, making the employers pecuniarily responsible for such accidents, will very much lessen their frequency, but this is doubtful. It provides compensation, but it does not prevent the mischief happening, and a very large proportion of householders would be quite unable to pay the damages for a life-long injury, even if they were awarded. Section 28 of the Towns Police Clauses Act imposes a penalty for allowing people to stand outside windows either for cleaning or painting, but that clause has not been adopted in London, and even in towns where it has been adopted it is said not to be very actively enforced; the police, in fact, have too much to do to keep their eye on every window. The only effectual remedy for the evil seems to be the one adopted by the Glasgow Corporation, who by a by-law have enacted that all window sashes above the ground floor shall be hinged or constructed so as to admit of the outside of the window being cleaned from the inside of the room.

THE ABUSE OF MEDICAL CHARITIES IN EDINBURGH.

Speaking at the annual general meeting in connection with the Edinburgh Royal Public Dispensary on Saturday last, Professor Struthers directed attention to the excess of medical charity in Edinburgh, and the entire want of regulation of it. In the year 1889 the total number of patients outdoor and indoor treated at the hospitals and dispensaries was 103,095, while the population was something like 236,000. Doubtless a number of these patients were from country districts, but making all due allowance for these, the figures gave an overwhelming proportion of the population receiving gratuitous medical advice. Further, he thought there had been of late years a perfectly unnecessary increase in the number of special dispensaries. He did not think that the interests of the public or the interests of medical education had been promoted by that development. He thought it was far better to support the old-established and well-tried institutions. If an association or committee of competent gentlemen were formed, the matter might be looked into, the public advised as to which deserved support, and thus a great public service be rendered, and a waste of public money prevented. Commenting on Professor Struthers's speech, the Lord Provost of Edinburgh said he had always had a terror of there being in Edinburgh such an abuse of medical charity as existed in London. How to restrain the growth of institutions whose existence was dictated rather by private interests than public need was a problem not easily solved: but if they had a powerful board or committee to examine into the claims of these institutions, and recommend those which deserved support, then the end might be accomplished. The time had certainly come when they must do something in Edinburgh in the way of codifying the medical charities of the city.

AS OTHERS SEE US.

In a recent number of the *Revue Bleue*, M. Max Leclerc describes the various gateways through which admission is gained to the medical profession in England. His general conclusion as to our own and other profes ions in this country as compared with France is that with us the successful man owes infinitely more to practical experience and to his own personal efforts than to general education and theoretical preparation, while with our neighbours the converse is the case. Throughout the article the information given is of a fulness, and especially of an accuracy, which are by no means common in French writers on things English. Almost the only slip we have found is an allusion to Sir *R.* Paget, for which the "printer's devil" may be responsible: at any rate, it is a very distinct advance on the "Sir Paget" of the ordinary French journalist. M. Leclerc has evidently taken great pains to "get up" his subject, and to obtain his information at first hand, as is evident from the sketches he gives of the careers of actual practitioners who have by their own efforts raised themselves from the ranks. According to M. Leclerc, the medical profession in England is self-governing, but has not yet won its title of nobility. It still has, in the words of Falstaff, to "purge and live cleanly as a gentleman should do." It does not guard its portals against illiteracy with sufficient strictness. It has not a sufficiently high conception of the place of the physician in modern society; it is too much engrossed in the struggle for existence. While in France the medical practitioner is expected to be a man of science and not a tradesman, in England he still often finds himself compelled by public opinion to be a vendor of drugs. This state of things is mainly due to the competition between the various licensing bodies. M. Leclerc admits, however, that the influence of the General Medical Council is gradually bringing about a reform in the status of the profession. We are pleased to note that he also recognises the importance of the work done by the British Medical Association, and the influence wielded by that body and by its Journal, which he describes as "the most widely read and the most important of the medical journals published in the English language."

CHOLERA IN TENERIFFE.

The Rev. T. Gifford Nash, resident English chaplain at Port Orotava, Teneriffe, writes under date January 8th: "The outbreak of cholera in Santa Cruz was severe but, happily, short, thanks to the energetic measures taken directly the real nature of the illness was declared. These measures reflect great credit on the doctors and others with them charged with the sanitation of the town and relief of its poorer inhabitants. A few villages on the southern side of Teneriffe have also suffered, but in them too the disease was stamped out promptly. Unreasoning dread of cholera existed through the island. One good result of this epidemic will be to show that it can be dealt with better than was hoped. Here, in our valley of Orotava, the authorities took active measures of precaution from the first. Not only has no case appeared in it, but the whole northern side of Teneriffe has been exempt. There seems no reason now why English people should fear to come, for almost no one of the well-off classes suffered in Santa Cruz, while, so far as I know, not an English person was attacked. This outbreak is another proof that cholera is a filth disease. Let me add that if to some the former letters published seem to suggest danger to the English living here, no one can be so qualified to witness to the courtesy and kindness always shown to us as I am. After six years' experience of it, and especially through this last anxious period, while serving with my Spanish neighbours on the sanitary committee of their town, I am glad to give expression to our English people's gratitude."

THE FORTHCOMING INTERNATIONAL MEDICAL CONGRESS.

The following is a list of the addresses to be delivered at the general meetings of the forthcoming International Medical Congress at Rome: Adaptation of the Organism to Pathological Changes, by Professor Nothnagel, of Vienna: The Function of the State in Relation to the most Recent Results of the Study of Infectious Diseases, by Professor Babes, of Bucharest; Growth and Regeneration of the

Organism, by Professor Bizzozero, of Turin; Clinical Medicine in its Relations to Pharmaco-therapeutics and Materia Medica, by Professor Stokvis, of Amsterdam; Morgagni and the Anatomical Concept, by Professor Rudolph Virchow, of Berlin; The Struggle against Epidemics, by Professor Brouardel, of Paris; Idiopathic Hypertrophy of the Heart, by Professor Laache, of Christiania; Morphology of the Nerve Cells, by Professor Ramon y Cajal, of Madrid; *Non Nocere*, by Professor Jacobi, of New York; The Biological Action of Phosphorus in its Organic Combinations, by Dr. Danilewski, of St. Petersburg. Several other men of light and leading in the profession, including Professor Michael Foster, of Cambridge, and Professor Kocher, of Berne, have been invited by the Committee to deliver addresses, but the subjects which they have selected have not yet been made known.

ANDERSON v. GORRIE.

With reference to the case of Dr. R. B. Anderson, which was brought before the Parliamentary Bills Committee of the British Medical Association at its meeting on January 10th, 1893,[1] we notice that an opposed motion was heard in the Queen's Bench Divisional Court on January 29th, before Mr. Justice Mathew and Mr. Justice Collins, in the case of Anderson *v.* Gorrie and others. It was an appeal from a decision of Mr. Justice Bruce in chambers, refusing to strike out certain interrogatories addressed to the defendants, and which it was urged were unreasonable. Of the three defendants named in the action, which was brought to recover £10,000 for malicious prosecution, one, Sir John Gorrie, Chief Justice of Trinidad, is dead, and the remaining two are late judges of the High Court of Trinidad—Chief Justice Lumm and Mr. Justice Cook—the latter having been removed by order of the Queen in Council. The claim for damages related to certain judicial acts of the judges in 1891, the plaintiff being brought before the Court of Trinidad in respect to an alleged unsatisfied debt of £42. Mr. Justice Cook appeared to have thought he was trifling with the court, and he held the plaintiff to bail in £500, following the order by committing him to prison, where he remained for eight days. The action was based upon the contention that the judges had exceeded their legal jurisdiction, and that the acts complained of amounted to false and malicious prosecution. The appeal was dismissed with costs, their lordships holding that the interrogatories should be answered to the best of the defendants' skill and knowledge.

MEDICAL OFFICER OF HEALTH FOR LIVERPOOL.

The Liverpool Health Committee has agreed to recommend that Dr. E. W. Hope, the present port sanitary medical officer, be appointed medical officer of health for the city at a total salary of £1,000 a year, in succession to Dr. Stopford Taylor, whose retirement takes place in April. This is a step that will give satisfaction to the members of the medical profession and, we believe, also to the general public in Liverpool, whose confidence Dr. Hope enjoys. Dr. Hope, though still a young man, has established a reputation as an authority on matters relating to public health beyond his own locality, and has shown tact and courtesy in his public duties, as well as scientific and administrative ability. He received his medical and scientific education at the Royal School of Mines and the University of Edinburgh, and he holds the degrees of M.D. and D.Sc. of the latter. For several years he held the post of house-physician to large and important hospitals, including one year at the Liverpool Fever Hospital, and in 1883 was appointed assistant medical officer of health to the city of Liverpool, which has a population of upwards of 500,000, and is the most populous sanitary district in the kingdom. He held the position of physician to the City Infectious Hospital from 1884 to 1888, when increasing duties caused him to resign it. He has held the offices of President of the North-Western Branch of the Society of Medical Officers of Health, Vice-President of the parent Society, and Vice-President of the Liverpool Medical Institution, and he is a Fellow of the Sanitary Institute, Lecturer on Public Health and Hygiene, and examiner in these subjects in the Victoria University. Among his writings are papers on the "Latent Period, Infectiousness, and Mortality of Typhus, based upon 1,100 cases,"[1] and on the "Etiology of Infantile Diarrhœa," both quoted in the annual reports of the Local Government Board, and of the article on the "Administration of Abattoirs" in Stevenson and Murphy's *Treatise on Hygiene and Public Health*.

[1] British Medical Journal, January 28th, 1893, p. 201.

BRITISH REPRESENTATIVES AT THE INTERNATIONAL CHOLERA CONFERENCE IN PARIS.

We announce elsewhere the names of the British delegates to the International Conference on the prevention of cholera which begins its sitting next week in Paris. Mr. Phipps is, of course, on the diplomatic staff of the British Embassy. Than Dr. Thorne Thorne no more efficient or able representative could be selected, although it seems anomalous that while all other countries are sending persons officially related to their Foreign Office, and having direct communication with their respective Governments as their medical or diplomatic advisers, Dr. Thorne Thorne holds no such position in this country, but is only medical officer to the Local Government Board, lent for the purpose, apparently, to the Foreign Office. It is characteristic of the parsimony and disorganisation of the medical departments of our Government that there is no such person in this country as medical adviser to the Government. Surgeon-General Cuningham represents the India Office. We wish to speak with reserve on this subject, but it is impossible to see such an appointment made without an expression of profound regret and dismay. This experienced and distinguished officer is precisely the head and front in offending in respect to Indian cholera theories, and he has long been an exponent of the exploded theories of the diffusion of cholera by air currents, and by mysterious local causes, and quite ignores modern knowledge of the etiology of cholera. The Secretary of State for India has at his disposal officers such as Brigade-Surgeon McLeod, member of the Indian Council, and scores of others equally capable, who perfectly recognise the modern established facts as to the propagation of cholera along the lines of travel by railway communication and by direct commercial traffic. Surgeon-General Cuningham is still nursing the astounding delusion that the course of cholera has no relation to railway lines or to river traffic, and is altogether a determined opponent of the new sanitation by medical inspection and of the modern methods of limiting the extension of cholera. Under these circumstances, and with the well-known disinclination of the Government of India to make any outlay which is avoidable, the presence of this able but ill-selected representative will, we fear, prove a serious obstacle to practical results from the Conference. Let us hope, therefore, that the facts which will be elicited at the Conference will overcome opposition, and that British India will not appear either as indifferent to its vast responsibility in this matter, or unwilling to take the necessary steps for the thorough isolation and medical inspection of pilgrims before leaving the Indian ports, for the appointment of an adequate travelling sanitary staff with pilgrim ships, and for the necessary steps for the sanitation of Indian fairs and of the Meccan pilgrims.

[1] British Medical Journal, 1885.

The late Miss Margaret Macfarlane, of Monkshaw, Paisley, has left legacies of £2,000 to the Paisley Infirmary, and £3,000 to the Glasgow University for bursaries.

THE APPROACHING CHOLERA CONFERENCE AT PARIS.

The Extinction of Cholera.

M. Hanotaux, Minister Plenipotentiary, Director of the Consulates of France, and delegate of France at the forthcoming International Cholera Conference at Paris, has stated to a representative of the French press, in an interview published in the *Eclair*, of which copies have been forwarded to us, the precise object and anticipated results of this Conference. The Conference, he states, will occupy itself with tracking the cholera to its seats of origin—that is, Asia and India, dealing especially with the Meccan pilgrimage; the principal question laid before the Conference is "the examination of the Asiatic origin of cholera, and the measures to be taken relating to the defence of Europe against this scourge." Without prejudging the results, M. Hanotaux has reason to hope that the Sultan and the Shah of Persia will assist in arresting the development of cholera at its Asiatic ports of entry and posts of reinforcement. "The English," he observed, "are especially interested, since they hold both ends of the inlet and outlet, India and Egypt." M. Hanotaux continues as follows: "The Conference builds largely upon the assistance of Great Britain, for one of the most brilliant English hygienists, Mr. Ernest Hart, has denounced Mecca as a main centre from which European cholera spreads, in an address of widespread influence. He has pointed out that Hagar's well, where the Mussulman pilgrims wash and drink, is nothing better than sewer water; in one day (June 26th, 1893) there were 500 deaths at Mecca from drinking this water. Let the pilgrims die for the glory of Mahommed, that is their affair, but they spread the cholera to the rest of the world, and they must be prevented from making us that present. The Paris Conference will mainly occupy itself with this object; it will not be far from agreeing with the English sanitarian, Mr. Ernest Hart, in saying that the extinction of epidemic cholera in Europe may be secured without great difficulty. There are two ways of attaining this result: to ensure everywhere perfectly pure drinking water, and meantime put an end to the cause of insalubrity of the Meccan pilgrims. It will agree with him that 'outside of this all measures are illusory; fumigations, railway and frontier quarantines, powderings and antiseptic fluids, are only vain ceremonies, simple sacrifices to popular ignorance, the idolatrous homage which dirt pays to cleanliness. The prime focus of cholera is India; its gates of invasion are the Indian fairs and the Meccan pilgrimage. Mecca is the reinforcing station of cholera between the Gulf of Bengal and Europe; it is there especially that the chief danger lies.'"

The measures, therefore, which the International Conference on Cholera at Paris will be called upon to resolve are, M. Hanotaux announces, those indicated by Mr. Ernest Hart in his addresses at Edinburgh and in America, and at the Newcastle meeting of the British Medical Association. At the latter meeting, it will be remembered, after the delivery of the address "On the Cholera and the Pilgrims at the Hardwar Fair," the following resolution was passed by the Public Medicine Section, and was confirmed by the general meetings, and has been referred by the Council to the Parliamentary Bills Committee:

That it be referred to the Parliamentary Bills Committee to take such steps as may be desirable to approach the British and foreign Governments with a view to obtain their intervention in securing measures for the suppression of cholera at the Hardwar and other Indian fairs, and at the Meccan pilgrimage, and that for this purpose also due submission of the facts be made to His Majesty the Sultan.

"We shall undoubtedly instal medical posts and posts of inspection at two points," M. Hanotaux continues, "which Mr. Hart points out as the most important to be watched—Thor and Camaran. Every ship and every caravan of pilgrims will be accompanied by a medical staff furnished with all that is necessary for the purification and disinfection of the sick. The Conference will consider resolutions as to the necessary reorganisation of the sanitary service of India, the regulations of the great fairs of that country, the organisation, as suggested by Mr. Hart, of a system of inspection of the pilgrims before leaving the Indian ports, and the curatorship of the sacred wells in which the Mussulmans bathe and drink at the same time." To carry out this, M. Hanotaux concluded, "will be to win a decisive victory over cholera; such a battle is well worth waging."

The delegates for the Paris International Conference on the Prevention of Cholera by its arrest at the gates of India and the sanitation of the Meccan pilgrimages are, for Great Britain, Mr. Constantine Phipps, of the British Embassy in Paris, and Dr. R. Thorne Thorne, C.B.: for British India, Dr. J. Cuningham, C.S.I., Surgeon-General and late Commissioner with the Government of India. For France: MM. Barrère, Hanotaux, Brouardel, Proust, Monod. For Germany: MM. von Schœn and Mordtmann. For Austria-Hungary: Count Kuefsten, Dr. Hagel, Dr. Karlinski. For the United States: Drs. Edward Sakespeare, Stephen Smith, and Preston Bailhache. For Greece: M. Criésis, and M. Vafiadez. For Italy: The Marquis Malaspina, and Dr. Pagliani. For Portugal: M. Navarro. For Sweden and Norway: M. Due. For Turkey: Turkan Bey, Nouri Pasha, Bonkowski Pasha, Dr. Hamdy Bey. For Persia: A delegate nominated by the Minister of the Shah in Paris. For Egypt: Achmet Choukry-Pasha, M. Mieville, and Sedky-Pasha. For the Netherlands: Dr. Ruijsch.

ASSOCIATION INTELLIGENCE.

BRANCH MEETINGS TO BE HELD.

South-Western Branch.—An intermediate meeting of this Branch will be held at the Athenæum, George Street, Plymouth, on Wednesday, February 14th, at 2.15 P.M. Luncheon will be provided at Risdon's, 38, George Street, at 1.30. Notices of papers to be read, cases, specimens, etc., to be shown, to be sent to the Honorary Secretary, if possible, by February 7th, in order that a notice of agenda may be sent out. Members intending to be present are requested to give notice of their intention to the Honorary Secretary not later than February 13th.—Wm. Gordon, Honorary Secretary, Barnfield Lodge, Exeter.

Metropolitan Counties Branch: South London District.—The next meeting will be held at the Camberwell Infirmary, Havil Street, S.E., at 4 P.M., on Friday, February 9th. A demonstration will be given by Dr. Hector Mackenzie, Vice-President of the District, on cases of diseases of the nervous system, and other cases of clinical interest from the wards of the infirmary will be shown.—H. Betham Robinson, Honorary Secretary, 1, Upper Wimpole Street, Cavendish Square.

Glasgow and West of Scotland Branch.—A meeting of this Branch will be held in the Western Infirmary on Tuesday, February 6th, at 3 P.M.—F. Fergus, 3, Elmbank Crescent, Glasgow.

Staffordshire Branch.—The second general meeting of the present session will be held at the Swan Hotel, Stafford, on Thursday, February 22nd. The President, Mr. H. M. Morgan, will take the chair at 3.45 P.M.—Geo. Reid, Honorary Secretary, St. Mary's Grove, Stafford.

South-Eastern Branch: West Kent District.—The next meeting of this District will take place at Maidstone on Tuesday, March 6th, Dr. Joyce, of Cranbrook, in the chair. Members desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary, Dr. Ground, 1, Ashford Road, Maidstone, not later than February 12th.

NORTH OF IRELAND BRANCH.

The winter meeting of this Branch was held at Belfast on January 25th. Dr. J. Campbell Hall, President, in the chair. The attendance of members was very large.

Confirmation of Minutes.—The minutes of the autumn meeting were read and confirmed.

Death of Dr. M'Guckin.—On the motion of the President, seconded by Dr. M'Alister, of Carrickfergus, the Secretary was instructed to send a letter of condolence to the family of the late Dr. J. K. M'Guckin.

Communications.—Dr. M'Caw showed a case of Diphtherial Paralysis in a boy, and made some remarks on the causation of the affection.—Drs. MacCormac and Calwell discussed the case.—The President read a paper on the Treatment of Spasmodic Asthma, giving his views as to the best method and illustrating them by notes of several successful cases. Drs. Fraser, Kevin, J. A. Lindsay, and Bingham, took part in the discussion which followed, and the President replied.—Dr. Dempsey read notes of a case of Parovarian Cyst in a tuberculous subject successfully operated on. After removing the cyst he had taken away several enlarged glands from the abdominal cavity.—Dr. J. S. Morrow showed (1) a Heart showing Aneurysm of the Mitral Valve with a Perforated Ulcer in the Aortic Valve: (2) a Dissecting Aneurysm of the Ascending Part of the Thoracic Aorta; (3) a Sacculated Aneurysm of the Abdominal Aorta Undergoing Spontaneous Cure by Clotting.—Dr. M'Kisack read notes of a case of Peritonitis Caused by a Perforating Gastric Ulcer, and exhibited the Stomach. The perforation had occurred in the anterior wall of the stomach, and there was evidence of old ulceration on the posterior wall.—Dr. John Campbell showed a Villous Tumour which he had successfully removed from the bladder of a woman. Microscopic sections of the tumour were also shown.

New Members.—Dr. Elizabeth Gould Bell, of Belfast; Dr. John Wallace, of Portglenone; and Dr. R. Jackson Munn, of Mountpottinger, were elected members of the Branch.

OXFORD AND DISTRICT BRANCH.

A general meeting of this Branch was held on January 26th. Mr. Iles, President, was in the chair. A large number of members and visitors were present.

Confirmation of Minutes.—The minutes of the last meeting were read and confirmed.

Disease of Middle Ear.—Mr. Victor Horsley gave an address on Diseases of the Middle Ear and their operative treatment, illustrated by lantern slides. Mr. Horsley showed on the cadaver the steps of the operation of opening the mastoid antrum. A discussion followed. A vote of thanks was passed to Mr. Horsley for his address.

New Members.—Dr. Boyd, Dr. Kennish, Dr. Atcheley, and Mr. Gowring were elected members of the Branch.

Medical Associations.—Dr. Griffin moved "That in the opinion of this Branch medical men ought not to meet in consultation medical officers of medical aid associations (as defined by the Committee of the General Medical Council). This was seconded, and after a discussion was carried. Mr. Doyne moved as a rider "That the matter be brought by the Branch Council before the Central Council, and that they (the Central Council) be urged to bring it before the annual meeting of the Association." This was carried.

Medical Hydrology in France. The chair of hydrology, founded three years ago by the Minister of Public Instruction at Toulouse, has been occupied from the first by Dr. F. Garrigou. The courses of instruction have been well attended, not only by medical and pharmaceutical students, but also by architects and engineers. The theoretical instruction is varied by an annual tour to some of the watering places; in this way, Cauterets, Baréges, St. Sauveur, and Bagnéres de Begorre, among other baths, were visited last year.

PROCEEDINGS OF THE COUNCIL.

At a meeting of the Council, held in the Council Room of the Association at 429, Strand, W.C., on Wednesday, January 17th, 1894:

Present:

Dr. J. Ward Cousins, President of the Council, in the chair.
Dr. G. H. Philipson, D.C.L., President.
Dr. E. Long Fox, President-elect.
Mr. Henry T. Butlin, D.C.L., Treasurer.

Dr. M. Beverley, Norwich.
Dr. T. Bridgwater, LL.D., Harrow-on-the Hill.
Mr. Langley Browne, West Bromwich.
Dr. J. S. Cameron, Leeds.
Mr. Andrew Clark, London.
Surg.-Gen. W. R. Cornish, London.
Dr. H. R. Crocker, London.
Dr. E. H. Dickinson, Liverpool.
Dr. J. L. H. Down, London.
Mr. George Eastes, M.B., London.
Dr. W. A. Elliston, Ipswich.
Dr. J. H. Galton, Upper Norwood.
Dr. C. E. Glascott, Manchester.
Dr. Bruce Goff, Bothwell.
Dr. W. Gordon, Exeter.
Dr. O. Grant, Inverness.
Dr. H. Handford, Nottingham.
Mr. J. H. Hemming, Kimbolton.
Dr. C. Holman, London.
Mr. T. V. Jackson, Wolverhampton.
Mr. T. R. Jessop, Leeds.
Mr. Evan Jones, Aberdare.
Mr. Jordan Lloyd, Birmingham.
Sir W. Moore, K.C.I.E., London.
Dr. W. Withers Moore, D.C.L., Burgess Hill.
Mr. R. H. B. Nicholson, Hull.
Mr. C. H. W. Parkinson, Wimborne Minster.
Dr. C. Parsons, Dover.
Dr. F. M. Pope, Leicester.
Dr. J. Rolston, Stoke.
Dr. R. Saundby, Birmingham.
Dr. E. Markham Skerritt, Clifton.
Mr. Noble Smith, London.
Mr. H. Stear, Saffron Walden.
Mr. J. Taylor, Chester.
Dr. J. Roberts Thomson, Bournemouth.
Dr. T. W. Trend, Southampton.
Dr. A. R. Urquhart, Perth.
Mr. T. J. Verrall, Brighton.
Mr. F. Wallace, London.
Mr. Joseph White, D.C.L., Nottingham.
Mr. W. L. Winterbotham, Bridgwater.

The minutes having been printed and circulated, and no objection having been received, were signed as correct.

Read letters of apology for non-attendance from Dr. F. Bateman, Dr. James Barr, Dr. Barron, Dr. Batten, Dr. J. Mackenzie Booth, Dr. Drummond, Mr. Fowler, Mr. Harries, Dr. Sandford, Dr. Sheen, Mr. Thomson, Dr. Wade, Mr. Winkfield, Mr. Williamson; also from Mr. Wheelhouse, who had been seriously ill.

Moved by the President of Council, and carried by acclamation:

"That the Council desire to express their great regret on learning of the serious illness of Mr. C. G. Wheelhouse, whose assistance has been so valuable to them for many years. His services as President and as President of Council are very gratefully remembered, and the Council desire to express their warm hope that his health may soon be restored, and that he may again resume an active interest in the affairs of the Association."

Read memorial from the Bristol Hospital for Sick Children, asking for the appointment of a Section on Diseases of Children.

Resolved: That a Section for Diseases of Children be added to the programme of the annual meeting.

Read letter from Mr. Herbert Malley:

21, Kildare Street, Dublin, 2nd Nov., 1893.

Memorial to the late Surgeon-Major Thomas H. Parke, A.M.S.

Gentlemen,—I am directed by the Executive Committee of the above fund to inform you that a project is on foot in this city to raise a fitting memorial to the memory of the above distinguished and heroic gentleman, and that a subscription list has been opened for this purpose. Subscriptions will be received at above address by

Yours truly,
Herbert Malley, Hon. Sec.

The British Medical Association.

Resolved: that this Council are quite willing that a subscription list should be opened for all who think proper to take part in it.

Read letter from the Secretary-General to the International Congress to be held at Rome, acknowledging the receipt of letter with the names of delegates to the International Congress.

Resolved: That the 141 candidates whose names appear on the circular convening the meeting, together with the additional 42 candidates on the Supplementary List, be and they are hereby elected members of the British Medical Association.

Read letter of application from Dr. Childs, Honorary Secretary to the Anæsthetics Committee, for a further grant.

Resolved: That the minutes of the Journal and Finance Committee of to-day's date be received and approved, and the recommendations contained therein carried into effect.

The minutes of the Journal and Finance Committee contain the particulars of the accounts for the quarter ending December 31st last, amounting to £7,368 17s. 11d.; the auditors' report of the amount received for the twelve months; the recommendation that £100 be paid to the Committee on School Board Children without further conditions; and £100 to be granted to the Anæsthetics Committee.

Resolved: That the minutes of the Premises and Library Committee of January 16th be received and approved, and the recommendations contained therein carried into effect.

The minutes of the Premises and Library Committee contain a report on the completion of the new drainage, and the report of the architect and sanitary inspector stating that the drains are now complete and satisfactory. An application from St. Martin's Vestry, for permission to erect a ventilator to the new sewer being constructed in the yard next the premises of the Association, and an agreement that the application be allowed upon certain conditions, and that the proposed ventilating pipe be carried 8 feet above the party wall; also the report of the honorary librarian on the attendances and books bought during the quarter.

Resolved: That the minutes of the Inebriates Legislation Committee of October 30th and December 20th last be received and approved, and the recommendations contained therein carried into effect.

Resolved: That the minutes of the Branch Organisation Committee of January 16th be received and approved, and the recommendations contained therein carried into effect, and that the proposed new Branches for British Columbia, Brisbane and Queensland, therein named, be recognised, and the by-laws as revised be approved.

Resolved: That the Council of the British Medical Association desire to record the pleasure with which they welcome the addition of an important Branch of the Association in British Columbia, and their congratulations to the members of that colony upon the succesful formation of the Branch.

Resolved: That the Council have much pleasure in recognising a Branch of the British Medical Association for Brisbane and Queensland, and desire to offer their earnest congratulations to the members of that Branch upon the successful formation of so important an addition to the Association, and trust that the union will prove of mutual advantage.

Resolved: That the revised by-laws of the Melbourne and Victoria Branch, as amended, be received, approved, and confirmed.

The consideration of the minutes of the Committee appointed to consider the question of unqualified assistants was postponed.

Resolved: That the minutes of the Subcommittee of January 16th on Voice Training be received and adopted.

SPECIAL CORRESPONDENCE.

PARIS.

Hospital Reform.—Cholera Contagion.—Bacilli on Playing Cards.—Doctors and Landlords.

Hospital organisation, both of the indoor and outdoor departments, is being discussed in the daily papers. The Assistance Publique and the Municipal Council have the subject under consideration, and reforms, it is said, will soon be effected. The aim will be to ensure hospital medical treatment to all needy and suffering applicants, and to prevent those able to pay for medical advice from encumbering the hospital wards, and crowding out the pauper invalids at the free consultations. It is also probable that in all Paris neither the *internes* nor the *chefs de service* will examine the patients who attend the gratuitous consultations of whom a certain number are always admitted as indoor patients. This change is suggested because "interesting cases" are always sought out, and frequently convalescent patients are retained in the wards until the consultation day in order to have a certain number of beds for these "interesting cases." That science and not humanity may be served by this very natural piece of manœuvring is the feeling of those not directly interested in "interesting cases." Medical men unattached to the hospital but qualifying to become *chefs* when a vacancy occurs will give the consultations in the outdoor department, and thus it is supposed the hunt after "interesting cases" will be less keen; charity will gain the day if science suffers.

The *Journal des Connaissances Médicales* publishes some interesting details concerning the epidemic of cholera of 1893 at Villars-sur-Var. The place was perfectly healthy and free from cholera until July 13th, 1893. On that day a working man arrived from another locality. He had just recovered from an attack of cholera. On arriving at Villars he immediately went to see his father-in-law. The two men dined together, and afterwards, in company with a third, drank a bottle of vermouth which the man who had recovered from cholera had brought with him. They had one glass between them, and sometimes drank direct from the bottle. The father-in-law and the friend died from cholera after a few hours' illness.

Dr. Rappon, of Nantes, has succeeded in detecting bacilli on playing cards. He examined packs of cards used in phthisical wards, and perceived that Koch's bacillus was present more abundantly on the thumb-mark, a circumstance which he attributes to the bad habit of players moistening their thumbs before dealing the cards. On other packs used at cafés and in private houses bacilli were detected, but they were non-pathogenic.

A medical man recently proceeded against his landlord because a brother practitioner hired a flat in the house he inhabited. He lost his cause, and was condemned to pay costs. The Seine Medical Syndicate considered that the plaintiff had justice on his side, but the law makes no provision for such cases.

PHILADELPHIA.

Compulsory Notification of Tuberculosis.—Proposed Notification of Houses in which Tuberculosis has Occurred.—Infection from Houses.—Relative Immunity of Hospital Officers.—The Influence of Heredity.—The Value of Disinfection.—The Influence of General Insanitary Conditions.

A long and interesting debate, which, however, wandered somewhat from its immediate topic, took place at the College of Physicians on the evening of January 12th. Some months ago the Philadelphia County Medical Society—which may be called the popular organisation of local physicians, as against the more "select" College, although the Fellows of the College are almost all members of the County Society as well—passed a resolution petitioning the Board of Health of the City of Philadelphia, which, under the laws of the Commonwealth of Pennsylvania, has exclusive jurisdiction in such matters, to include tuberculosis among diseases officially declared contagious. The effect of this would be to require every case of tuberculosis to be reported to the Board of Health by the attending physician, under penalty of a fine of 50 dollars. Some members of the County Society appeared before the Board of Health to protest against this action, and claimed that the vote of a majority at a meeting of but 49 members did not represent the sentiment of the 600 members of the Society. The formal business of the College was to pass upon a resolution, reported by the Council, opposing the recommendation of the County Medical Society—a position likewise taken by the President of the College (Dr. Weir Mitchell) in his annual address.

Dr. Lawrence Flick, who has been the prime mover in the agitation for registration, spoke at length in favour of an amendment offered by him to the resolution of the Council. He so far modified his original proposition—the one adopted by the County Medical Society—as to ask for the registration

of the houses in which cases of tuberculosis occurred, instead of the names of the patients. He also proposed the establishment of a municipal hospital exclusively for tuberculosis, and the prohibition of the admission of tuberculous patients into general hospitals. In support of these propositions he cited especially his investigations into the distribution of what he terms "infected houses" in the fifth ward of Philadelphia, and similar studies made by Dr. De Forest in Newhaven. He contended that these studies showed that tuberculosis was transmitted from family to family through successive occupancy of houses which had become infected, and that therefore registration and official disinfection of such houses would go far to prevent the disease.

The principal speaker on the other side was the Vice-President of the College, Professor Da Costa. Among other things, he argued that the conclusions drawn from Dr. Flick's maps were open to several sources of fallacy; and principally from the fact that the antecedents of the persons successively dying from tuberculosis in the same houses had not been traced. It would be necessary to show that they had not inherited the disease, or acquired it before occupying the houses in question. He doubted whether the tubercle bacillus remained potentially pathogenic in a certain room, for the length of time—in some instances ten years—intervening between case and case in some of the so-called "infected houses." The close proximity of the houses suggested the action of some general cause incident to locality, perhaps subsoil water, as shown by Bowditch and Buchanan. Admitting the contagious nature of tuberculosis, it was nevertheless so feebly contagious, that to rank it in the same category with diphtheria, small-pox, and typhus fever would be to excite an unnecessary alarm in the community, and to render the unfortunate subjects of the disease objects of aversion and suspicion. In addition, the wide distribution of the bacillus of tubercle rendered it impossible to take practical measures of protection against it, unless all tuberculous persons were forcibly segregated. He had made careful studies of his own records in cases in which he had been able to keep families and houses under observation for long periods—for twenty-five years in some instances—and no instance to support Dr. Flick's contention had come under his notice, while he cited many to the contrary. He likewise found strong grounds against the contagion theory of the transmission of tuberculosis, in the life histories of the resident physicians and nurses of the Pennsylvania Hospital, which he had been able to trace partly from records and partly from personal knowledge for a period of nearly seventy years. The precautions against infection proper and possible to be taken were so simple that each physician could and should constitute himself health officer, and the most efficient health officer too, in the case of his own patients. The one measure most of all calculated to stamp out tuberculosis was to prevent the marriage of tuberculous persons, but he feared that was as yet impracticable.

Professor Osler, of Johns Hopkins University, a Fellow of the College, was present at the special request of the President of the College. To the surprise of many he expressed himself almost as strongly as Professor Da Costa in favour of the view of the heredity of tuberculosis. He believed that in many cases the disease remained latent for long periods to break forth suddenly. On the other hand, the facts proving infection from case to case, and the duration of infection in houses, seemed to him to warrant the opinion that registration, coupled with efficient disinfection, would tend to diminish the spread of the disease, and he therefore favoured the propositions of Dr. Flick.

Dr. Abbott, of the Laboratory of Hygiene of the University of Pennsylvania, thought that the ubiquity of the tubercle bacillus was much overestimated, and that measures of disinfection might be made efficacious. To him the question was one of practicality simply, and he favoured the experiment. If it proved impractical it could be abandoned.

Professor Tyson thought that the long duration of cases and the impossibility of following the patients continuously would render nugatory any attempt to limit the spread of infection by police measures. With other speakers he would rather emphasise the necessity for the physician in attendance to teach his patients how to carry out proper prophylactic measures.

Other speakers called attention to the generally bad condition, from a sanitary standpoint, of the district, and of the people concerned in Dr. Flick's studies. If these factors could be altered for the better the spread of tuberculosis and other infections would be checked more readily than by fumigations. Overcrowding, bad drainage, poverty, personal filthiness, and vice could not be remedied by reports to the Board of Health, and these were potent causes of that liability to infection, without which the bacillus of tubercle might be comparatively harmless. Civic authorities should be roused to a proper appreciation of the subject from that standpoint, and individuals taught the laws of personal hygiene.

Dr. Flick, in concluding the discussion, made an earnest and eloquent appeal for what he termed the salvation of the poor. He admitted that among the rich in comfortable cleanly dwellings the case might be otherwise, but he affirmed that among the poor the disease was spread by permanent infection of rooms and houses, while only through legal compulsion would landlords take efficient measures to disinfect such dwelling places.

The College, by a large majority, adopted the resolutions reported by the Council, which declare against registration, and petition the Board of Health "to take no action except the insisting upon proper disinfection of the rooms in which consumptives have lived and died when it appears that such disinfection will not be otherwise carried out."

CORRESPONDENCE.

THE LATEST DEVELOPMENT OF A GIGANTIC ABUSE.

Sir,—What the *Times* describes as an experiment of some importance has just been tried, after a preliminary flourish of trumpets in the local papers, at the Western Ophthalmic Hospital in Marylebone Road. This institution, after an existence of nearly forty years, close to a very poor part of London, has only succeeded, according to the *Medical Directory*, in attracting to its waiting rooms some 47 in-patients and 2,718 out-patients annually. Its consulting physician and consulting surgeon are men of the very first rank in the profession, and have held or are holding high office in our Association. The members of its ordinary surgical staff are, however, not so well known as ophthalmic specialists, though one of them comes all the way from Windsor or Slough (both addresses being given in the *Directory*) to assist in carrying on the work of this little London hospital of twenty beds.

Our contemporary, authorised no doubt by the hospital managers, reports that feeling convinced the usual hours for seeing out-patients, from 9 till 1, were in many cases inconvenient to the latter and caused them to lose work and money, they (the managers) have opened the hospital every Thursday evening at 6 o'clock for the benefit of those who do not desire their visits to the hospital to interfere with their daily employment, and that this new move has proved so successful that it will henceforth be a permanent feature of the hospital. Whether the medical staff have been consulted on the subject we are not told, and it would hardly astonish us to learn that this latest extension of what has been well described as a gigantic abuse has been decreed without asking the formal consent of either the consulting or ordinary staff.

That hospitals originally founded and ostensibly carried on for the relief of the poor should be permitted thus openly to bid for and seek to attract the working classes while in receipt of full pay in order to pauperise them, is a scandalous abuse; that members of our profession, whether residing at Queen's Gate or Windsor, should assist in perpetuating the abuse is greatly to be deplored; but that the heads of professional bodies, to whom we naturally look for examples of something better, should lend their names in support of it—

this, were it not so common in all professions, might well cause us to despair of effecting any reform.

> In law, what plea so tainted and corrupt,
> But being seasoned with a gracious voice,
> Obscures the show of evil? In religion,
> What damned error but some sober brow
> Will bless it, and approve it with a text?

The whole subject is one which, as your correspondence columns seem to indicate, must soon be taken up seriously by our Association, and it should then be made clear to all members of the profession aiding and abetting in the extension of this great fraud that their conduct is opposed to the best interests of the profession generally, and will, if continued, be held sufficient reason for excluding them from office in the Association, and for not calling them in in consultation if it can be avoided.

The failure of the Lords' Committee on Metropolitan Hospitals to procure the slightest reform of the abuses which were proved before them renders it all the more incumbent on us as an Association of medical men deeply interested in the question, to give effect to the protests which have been appearing in the British Medical Journal for over a quarter of a century.—I am, etc.,

F.R.C.S.

VIVISECTION OF DEAD ANIMALS.

Sir,—I thank you for printing my letter in your last issue, and also for your contributor's reply. This latter contains several misstatements, and seems a little more abusive than the occasion requires; but I can easily forgive the writer, for I see he concedes the main point in stating that "the operation when it needs to be performed is extremely apt to be fatal." This, I think you will allow, is an admission that the operation in question is one which really is performed by physiologists on the living animal. This clears the ground so far. Will your contributor now tell me equally candidly what anæsthetic is used, and how it can be effectively applied in a lengthy operation on an animal thus dreadfully mutilated?

I apologise if I have wrongly attributed to Lim Boon Keng, the Chinese vivisector, an operation which was in reality done by his English friends, while he was guilty only of describing, approving, and recommending it.—I am, etc.,

Hendon, Jan. 29th. Ernest Bell.

*** Mr. Bell's proclivity to misstatement and evasion of apology are again conspicuous. Our criticism on his letter does not contain a single misstatement, nor does he venture to indicate one. He now asks what anæsthetic can be effectively applied for a lengthy operation such as that suggested. He knows as well as anyone that various anæsthetic agents—chloroform, ether, morphine, etc.—are effective for this purpose. He now adds to his former misstatements by making an insolent "apology" to Dr. Keng, whom he calls a "Chinese vivisector," but who is a British subject, a Queen's scholar, and an Edinburgh medical graduate. He has to apologise for having circulated a series of falsehoods in his circular appealing for funds, the chief of which are that Dr. Keng's proposed experiment (1) was an "abominable cruelty" that (2) it was done in an English laboratory (3) under licence from the English law (4) without anæsthetics. When Mr. Ernest Bell has publicly, in a similar circular addressed to all those papers and persons who received the first, retracted the falsehoods which are now being repeated and widely circulated in provincial papers, and when he has amply apologised to Dr. Keng, then he may partly redeem his character for sincerity and truth.

Sir,—In the British Medical Journal of January 20th instant there appears the following statement: "Thus her president, the Earl of Strafford, resigned last year when Miss Cobbe and the *Nine Circles* falsities were publicly exposed; Lord Justice Lopes had his name removed from her list, it having been placed thereon without his knowledge or consent; Mr. Mundella had his name removed for a like reason. The name of the Duke of Newcastle has also disappeared."

I am directed to request you to explain that this statement is erroneous—that the Earl of Strafford is still a member of the Society, subscribing liberally to its funds; that all the vice-presidents of the Society must know when their names are on its list, as they are printed in the *Zoophilist*, which is regularly supplied to them; that Lord Justice Lopes and Mr. Mundella gave their names as vice-presidents, and did not have them removed because they had been placed in the list without their consent; and that the name of the Duke of Newcastle was removed by the Society itself.—I am, etc.,

Benj. Bryan, Secretary.

*** On the very paper on which Mr. Bryan's letter is written is the proof that the Earl of Strafford has resigned his Presidency, as we stated. Lord Justice Lopes and Mr. Mundella have personally stated that their names were placed on or kept on without their knowledge or consent, and that they ordered their removal. Mr. Bryan's "explanation" is only equalled by his attempt to claim credit for removing the name of the Duke of Newcastle, which, as we indicated, had disappeared.

THE QUESTION OF THE INCREASE OF CANCER.

Sir,—In reply to my letter on this subject, Dr. Newsholme makes the surprising statement that, because compulsory death certification did not come into vogue until 1874, therefore mortality statistics collected prior to that date are practically worthless. This is a most unwarrantable assertion, and, so far as I know, it is unsupported by any evidence. The most careful examination of the mortality statistics for a long series of years fails to reveal any break in their continuity or any serious discrepancies in the inter-relations of the data at about this period, such as certainly would be obvious had any serious error been introduced owing to the cause alleged. Moreover, if this statement were true, it would invalidate all Dr. Farr's statistical data, which are based on the returns for this period: and so the statistical edifice would be reduced to a heap of ruins. I maintain that this objection is devoid of any solid basis. It certainly is so as far as cancer is concerned, and this is proved by the uniformity of the variations in the increments of increase in the long succession of years.

With regard to Dr. Newsholme's proposition that males and females are equally liable to cancer of those parts of the body common to both sexes, I wish to point out that, on making an analysis of 7,297 consecutive cancer cases (M. = 2,669; F. = 4,628), I have found the sex distribution in the localities to which he refers to be as follows:

	Males.	Females.
Tongue and mouth	703	101
Skin	381	190
Stomach	222	130
External genitalia	182	158
Lower lip	326	3
Œsophagus	144	35
Bladder	43	16
Larynx	34	4
Anus	17	10

In the face of these facts, I maintain that Dr. Newsholme's proposition is absolutely untenable.—I am, etc.,

Preston, Jan. 20th. W. Roger Williams.

Sir,—It should not be matter for surprise that, while many diseases have become less prevalent and years have been added to the total sum of life, cancer has shown a marked increase. The latter fact is, partly, at least, a consequence of the former one. If fewer die young of preventable disease, a greater number must survive to become the subjects of non-preventable disease at more advanced periods of life. There is, moreover, a further reason why, in the absence of any obvious cause for its decrease, we might expect an increased mortality from cancer. Whatever may be the ultimate cause of cancer, the liability to it is often hereditary; according to some of the best authorities, heredity may be traced in about one-third of the cases. Compare it, then, with phthisis, which also shows a hereditary tendency. Besides being to some extent a preventable disease, which cancer, with our present knowledge, can scarcely be said to be, phthisis affects chiefly the weaklings of the race, and it carries off a large proportion of its victims before they have begun to propagate their kind. Cancer attacks very frequently the robust—those who have been among the fittest in the struggle for existence—and it does not, generally speaking, claim its victims till they have gained their position in life, and raised families more or less tainted, perhaps, with the fatal tendency. Yet, though men and women will often avoid marrying into a "consumptive" family, no such considera

tion affects families in which cancer has declared itself. Often, indeed, the family is married before the disease shows itself in the parent. If, then, we admit that there is such a thing as hereditary constitutional tendency to cancer; that this involves no disability in the struggle for existence or the reproduction of its kind, and that the diminution of preventable disease is leaving a freer field for the evolution of the cancer-bearing destiny, we need not be astonished if we live to see a still greater prevalence of the fatal malady.—I am, etc.,

January 23rd. CIRCUMSPICIENS.

EXECUTORS AND PRESCRIPTIONS.

SIR,—The letter of "Medicus" in the BRITISH MEDICAL JOURNAL of January 20th was the first intimation I had of the matter to which he calls attention. Will you allow me to say I am not an executor of my brother, the late Sir Morell Mackenzie, and am unable to say whether the statements made are accurate.—I am, etc.,

Cavendish Square, W., Jan. 30th. STEPHEN MACKENZIE.

AMENDMENT OF THE MEDICAL ACTS.

SIR,—If the Medical Acts be amended to the utmost perfection, where is the machinery for enforcing them? The General Medical Council is neither willing nor competent to undertake it. The following appears to me a simple and thoroughly efficacious method of suppressing quackery. Let there be an Inland Revenue licence required, costing not more than £1, from every person practising medicine. Let these certificates be granted only to registered medical practitioners, and let every person practising without a licence be liable to penalties just as for keeping a dog or carriage without a licence. This would bring in a revenue of over £25,000 a year, and the medical profession would be amply compensated by the suppression of unqualified practice. We should have the services of the Inland Revenue officers enlisted in the cause, and the zeal they display in detecting unlicensed dogs, etc., leaves little doubt that the days of quackery would be numbered when this regulation was made.—I am etc.,

Highgate, N., Jan. 29th. HUGH WOODS.

PROPOSED NEW ORDER OF MIDWIFERY PRACTITIONERS.

SIR,—As a "Midwives Registration Association" has been established for the purpose of creating a new order of midwifery practitioners,[1] I wish to call attention to some very important points connected with this momentous proposal. In the "rules" issued by the above Association, Rule 4 is as follows: "That the following be the definition of a 'midwife.' 'A midwife is a woman who attends or undertakes to attend a labour without the direct supervision of a medical practitioner.'" This means that the proposed midwifery practitioner can attend all labours, normal and abnormal; use forceps and turn. If it does not mean this, will Drs. Bloxall and Humphreys state what penalties they propose for the punishment of those who conduct labours other than "natural?" I wish also to ask Drs. Bloxall and Humphreys if they intend to make it illegal for these new midwifery practitioners to vaccinate? I do so because I note that by Article 4 of the French Medical Act, 1892, it is enacted as follows: "Midwives are authorised to practise vaccination and revaccination against small-pox." If they are to be so authorised to vaccinate, this will be a serious loss to medical practitioners and a great danger to infants. Again, I would ask Drs. Bloxall and Humphreys if they intend to make it an offence if these "midwives" (What's in a name?) practise medicine or dispense and supply medicines? If so, what penalty is proposed, and how do they mean it to be enforced? Because in such cases most "midwives" would be certain to plead poverty, and so be unable to pay a fine.

An answer to these questions will facilitate a truer grasp of this very strange proposal, which in fact strikes at the meaning of our Medical Acts. I would also ask why is it proposed to confine the proposed benefits to women? Have not the Medical Acts expressly stated that women shall be admitted to the *Medical Register*? If so, why refuse to qualify men to act as midwifery practitioners under the proposed legislation?—I am, etc.,

[1] See BRITISH MEDICAL JOURNAL, January 20th.

Liverpool, Jan. 28th. ROBERT R. RENTOUL.

CHEMISTRY AT THE CONJOINT BOARD.

SIR,—On December 15th last a certain medical student presented himself at the terminal examination of the chemistry classes in this College. He knew nothing at all. I gave him 5 per cent. of marks *pro formâ*. As an example of his answers, this is what he wrote about ammonia: "Ammonia is prepared by heating in a glass retort a mixture of potassium nitrate and a hydrogen acid, $KNO_3+3HCl=NH_3+KClO_3+Cl_2$; the gas is given off and collected under warm water, as it is soluble in cold. Ammonia has an intensely penetrating odour. Reaction neutral." This student appeared before the Conjoint Board in London on January 2nd—that is, a fortnight later—and passed!

As you are aware, the Colleges of Physicians and Surgeons have jointly issued a syllabus of subjects in chemistry, which is supposed to represent the range of the examination in this department of science, instruction in which is to be given in their first year to students in the medical schools. I have reason to believe that the case of which I have given you an account is by no means an isolated or accidental one. What are the teachers of chemistry in the medical schools to understand? Is the syllabus issued by the Colleges intended to impose upon the public the idea that all medical students are required to learn the rudiments of chemistry, while at the same time private instructions have been issued to the Board that the examination in chemistry is to be a farce? Or are we to believe that the examiners in chemistry are systematically neglecting their obvious duty? I cannot perceive a way of escape from these alternatives.

I will not now criticise the syllabus, neither do I think it necessary at this moment to enter upon the question of the utility of chemistry as a subject of instruction in the medical curriculum. The question which concerns me and all the other professors of chemistry connected with the medical schools of England is simply this: Do the Royal College of Physicians and the Royal College of Surgeons of England, in the exercise of that monopoly with which they have been entrusted, practise systematic deceit towards the public, or do they not? If not, let them instruct their examiners to do their duty, and to reject all unqualified candidates, in no matter what subject, so long as that subject is a recognised element in the curriculum. And as to "standard," I imagine that the greatest advocate of leniency in examinations will hardly maintain that a youth who thinks ammonia is a neutral substance, possesses a stock of chemical knowledge adequate to any practical purpose whatever.—I am etc.,

WILLIAM A. TILDEN.

Queen's Faculty of Medicine, the Mason College, Birmingham, Jan. 29th.

INTESTINAL RESECTION.

SIR,—"A New and Easy Method of Performing Intestinal Resection" was the title of a paper read by me in the Surgical Section of the British Medical Association at the Newcastle meeting. A few days ago Dr. James N. Barton, of Philadelphia, sent me notes of an interesting case, in which to quote from his paper:

> I removed 3 inches of the intestine, including the diseased portion, and immediately introduced Dupuytren's enterotome into the ends of the remaining bowel, namely, one blade into the ileum, and one blade into the cæcum; the two blades were then brought together, and the screw run down firmly. To prevent the escape of fæces during the subsequent manipulations, a heavy ligature was placed around the two ends of the bowel, including the enterotome; after the abdominal wound was closed this ligature was cut, leaving a temporary artificial anus to act while the enterotome was cutting its way through the two contiguous layers of bowel, which it did in eight days.

The operation was performed on November 1st, 1887, and the notes published in the *Journal of the American Medical Association* for May 5th, 1888.

It is obvious that the principles of Dr. Barton's and my operation are identical, and I would not have ventured to describe mine as "new" if I had known of Dr. Barton's case.—I am, etc.

Newcastle-on-Tyne, Jan. 22nd. RUTHERFORD MORISON.

LUNACY LAW.

Sir,—In the "Medico-Legal" columns of the British Medical Journal of January 27th, p. 222, under the heading of "Lunacy Law," you reply succinctly in the negative to a correspondent who asks whether any legal formalities are necessary in the case of a father taking charge of his insane married daughter. Your reply is correct but not quite sufficient, seeing that it omits any statement of the new enactments which bear upon this important and rather puzzling question.

The old statute gave no power to anyone, relative or not, to detain a lunatic, except under order and certificates, if he derived a profit thereby. So that a mother detaining her son as a lunatic had to do so under order and certificates if she derived a profit from payments made by her son's trustees. Under the Lunacy Act of 1890 this enactment has undergone the important alteration of "profit" being changed into "payment." So that if the husband of the insane lady referred to makes any payment to her father for taking charge of her, receiving her to board or lodge or detaining her, the father will be guilty of a misdemeanour, and also be liable to a penalty, unless he complies with the enactments as to order and certificates, of not less than £50.

The only enactment I find which (sec. 315) ameliorates this statute in favour of a relative or friend is the 22nd section of the Lunacy Act of 1890, which provides that, "in the case of a lunatic, as to whom a summary reception order may be made (for improper treatment or neglect), nothing in this Act shall prevent a relation or friend from retaining or taking the lunatic under his own care, if a justice having jurisdiction to make the order, or the visitors of the asylum in which the lunatic is, or is intended to be placed, shall be satisfied that proper care will be taken of the lunatic."

A father may therefore retain the care and custody of an insane child under these conditions, even if he has not heretofore provided proper care and treatment, but the conditions do not abolish the need of order and certificates if he receives payment for taking charges for board and lodging or detention.

The case of a father having undertaken the charge, etc., of an insane married daughter for whom he receives no payment (which is probably the case under consideration), is governed by Section 206 of the Lunacy Act and its four subsections. Under this section the Commissioners may require a report from the father, or they may themselves visit and report to their Board, and the Board may report to the Lord Chancellor, who may make orders of removal. This section, however, commences with the words: "If it comes to the knowledge of the Commissioners, etc.;" from which it may be inferred that no responsibility of reporting the charge of a lunatic without payment is laid upon the person who has undertaken such charge; neither is there any section in the statute which imposes such responsibility. Neither is it the duty of the medical attendant to report, even if there be a medical attendant, which however is not a legal necessity. I would therefore suggest that your answer to your questioner should be No, if there be no payment, but if there be a payment the legal formalities as to order and certificate required by the Lunacy Act of 1890 are necessary. The relationship of the person in charge to the lunatic makes no difference.—I am, etc.,

Bournemouth, Jan. 21st. John Charles Bucknill.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

The Downing Professorship of Medicine.—Dr. P. W. Latham, who has occupied the Downing Chair of Medicine since 1874, has resigned the office. His successor will come under the new statutes governing the professorships of the University, and will have a stipend of £300 a year, with a lodge and certain emoluments from Downing College, of which he becomes a member of the governing body. The appointment is in the hands of a board of electors, and the election must take place within six weeks.

University of Adelaide.—The Council of the Senate propose that matriculated students of this University who have spent two years in the study of arts, law, science, or medicine, and have passed certain specified examinations, shall be admitted in Cambridge as affiliated students. They will thereby be exempted from the previous examination, and may proceed to a degree at the completion of two years' residence in the University.

Appointments.—Dr. Laurence Humphry, Assistant Physician at Addenbrooke's Hospital, has been appointed an additional member of the special board for Medicine. Mr. S. Skinner has been recognised as a teacher of Physics and Mr. A. Ivatt as a teacher of Pharmaceutical Chemistry for Medical and Surgical degrees.

Matriculation.—On January 27th thirty-three additional matriculations took place, bringing the number of freshmen so far admitted to the University for the current year to 894.

Shuttleworth Scholarship.—This scholarship, offered to medical students of the University of not less than eight terms' standing, will be filled up in March next. The subjects are Botany and Comparative Anatomy, and the value £55 for three years. Candidates, if not already members of Caius College, must join it if elected. They are to send their names and testimonials to one of the tutors of Caius before March 1st.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

The following gentlemen having conformed to the by-laws and regulations and passed the required examinations were, at the quarterly meeting of the College, on January 25th, admitted Licentiates:

Allen, W. H., Cambridge and St. Thomas's
Appleyard, F. E., Cambridge and St. Thomas's
Austin, J. H., Toronto
Axford, S. B., Charing Cross
Bannerman, G. D. K., London
Barrow, A. S., Middlesex
Barrow, G. A., Manchester
Bennett, J. H., London
Brooke, B., King's College
Burrow, T., Guy's
Clarkson, G. A., St. George's
Colby, F. E. A., Cambridge and St. Bartholomew's
Coleman, J. G. B., Guy's
Collcutt, A. M., Cambridge and St. Thomas's
Cooper, F. B., Sheffield
Corbould, V. A. L. E., Charing Cross
Cory, C. G., St. Bartholomew's
Cutting, E. B., St. Bartholomew's
Dalby, J. L. J. B., St. Bartholomew's
Davies, S. H. R., St. Thomas's
Denny, A. W., Charing Cross
Dickens, C. H., St. Thomas's
Dobson, A., St. Thomas's
Duffett, H. A., Guy's
Dunstan, C. H., London
Ellerton, H. B., St. Mary's
Elliot, E. E., St. Bartholomew's
Emerson, H. B., Middlesex
Fagge, R. H., Guy's
Farnum, C. M. S., King's College
Fenwick, P. C., St. Thomas's
Fisher, R. W., St. Bartholomew's
Fosbery, F. C., Bristol
Frend, E. C., St. Bartholomew's
Gittens, A. B., Glasgow and London
Grünbaum, A. S. F., Cambridge and St. Thomas's
Gurney, A. C., St. Bartholomew's
Halliwell, T. O., St. Thomas's
*Hawes, G. C. B., St. George's
Hayes, J., McGill and Middlesex
Henderson, W. D., St. Thomas's
Hickman, H. R. B., Oxford and St. Thomas's
Hoare, E. S., Guy's
Hovenden, G. S., Guy's
Hoyten, W. J., Manchester
Hudson, J. S., St. Thomas's
Huskinson, H., St. Thomas's
Hutley, W. C., St. Bartholomew's
Jackson, R., London
Jenkins, H. T., University College
Jones, C. A., London
Jones, W. D., University College
Kennington, E., St. Bartholomew's
Kerswell, H., St. Bartholomew's
Kirton, R. G., London
Lawrence, G., Cambridge and Guy's
Lawson, K., Middlesex
Leete, A. H., Guy's
Lindsey, C. D., St. Mary's
McCardie, W. J., Cambridge and Birmingham
McCone, J. F., California and St. Bartholomew's
Marsh, J. H., Manchester
Meakin, H. B., St. Bartholomew's
Meggs, T. H. E., Westminster
Miles, H. P., University College
Mitchell, J. E. H., Leeds
Oldfield, H. E., Charing Cross
Orme, W. B., University College
Park, W. C. C., Guy's
Passmore, J. E., London
Peake, F. E., Bristol
Pereira, J. A. W., Bombay and Charing Cross
Philps, F. G. M., Guy's
Pinniger, W. A., London
Pollard, W. H., St. Bartholomew's
Powys, H. L., London
Reid, E., Guy's
Ridsdale, A. E., St. Thomas's
Roche, R. J., Dublin
Romer, H., Oxford and St. Thomas's
*Rubel, J. L., King's College
Russell, C. H., Charing Cross
Rutherford, A. E. R. Bristol
Ryall, C., Westminster
Shaw, A. P., Manchester
Simpson, F. H., Guy's, Durham, and Birmingham
Smith, R. N., Westminster
Snowman, J., London
Stewart, C. H., St. Thomas's
Storey, P. A., University College
Strand, A. C., Middlesex
Sutter, R. R., Aberdeen and St. Thomas's
Symons, R. F., St. Thomas's
Symons, T. H., Charing Cross
Taylor, A., Glasgow
Taylor, E. C., Guy's
Taylor, J. W., Bristol
Terry, J., St. Thomas's
Thorp, A. E., St. Thomas's
Todd, L. B., Leeds
Tomlinson, L. P., St. George's
Tuck, E. S., Guy's
Twemlow, W. A. F., Westminster
Wakeling, T. G., St. Bartholomew's
Walker, A., Manchester
Wallace, L. A. R., Oxford and St. Thomas's
Warren, C. F., St. Mary's
Watson, C. H., Middlesex
Way, W., Middlesex
Weston, A. E., St. George's
*Whelpton, E. S., Cambridge and St. Thomas's
Whichello, H., St. Thomas's
Whittingham, G. M. Y., Manchester and St. Mary's
Wilkinson, G., Camb. and St. Mary's
Willway, F. W., Bristol
Winter, E. S., St. Bartholomew's
Witham, H., Westminster
Wonnacott, R. R. H., London
Wood, W. C., St. Mary's
Wrangham, J. M., Cambridge and St. Bartholomew's
Wray, W. T., Leeds and Middlesex
Wrinch, E. P., Durham and St. Thomas's
Wyllys W., St. Bartholomew's

* Candidates who have not presented themselves under the regulations of the Examining Board.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

The following gentlemen passed the First Examination of the Board, in the subjects indicated, under the "Five Years' Regulations" at the quarterly meeting of the Examiners:

Part I. *Chemistry and Physics.*—H. Aspinall, University College, Liver-

pool; V. Bateson, Yorkshire College, Leeds; D. Bellilios, St. Mary's Hospital; C. D. Bishop, Charing Cross Hospital; A. E. Cardwell, London Hospital; C. S. Cato, Westminster Hospital; J. E. Collins, London Hospital; F. Cox, University College, Bristol; T. S. Davies, University College, Bristol; T. H. Davies, Middlesex Hospital; E. P. Dawson, King's College, London; C. M. Evans, University College, Liverpool; T. H. Evans, King's College, London; J. Gardner, Firth College, Sheffield; W. R. Green, Guy's Hospital; W. W. Halsted, St. Thomas's Hospital; W. H. Harland, Middlesex Hospital; J. B. Harrison, Firth College, Sheffield; J. O. Harvey, Mason College, Birmingham; W. J. S. Harvey, Guy's Hospital; R. S. F. Hearn, St. Bartholomew's Hospital; F. H. R. Heath, Guy's Hospital; G. H. Herbert, London Hospital; W. T. Jackson, Owens College, Manchester; N. J. Kendal, Mason College, Birmingham; A. Kinsey-Morgan, Guy's Hospital; T. Leah, St. Mary's Hospital; C. T. Lewis, King's College, London; E. A. Longhurst, Guy's Hospital; C. A. Lower, Guy's Hospital; B. S. O. Maunsell, St. Bartholomew's Hospital; A. Mercer, University College, London; E. R. Millar, University College, London; E. B. L. Moore, The College, Epsom; C. C. Morgan, St. Bartholomew's Hospital; R. E. Mounsey, St. George's Hospital; W. Mussellwhite, private study; R. F. N. Overton, St. Mark's Hospital; E. F. Palgrave, St. Bartholomew's Hospital; J. Phillips, University College, Bristol; J. H. Robinson, Charing Cross Hospital; E. H. Ross, St. Thomas's Hospital; C. Shepherd, Guy's Hospital; C. S. Smith, Mason College, Birmingham; G. H. Spencer, London Hospital; B. H. H. Tripp, St. Mary's Hospital; H. S. Turner, School of Science and Art, Stoke-on-Trent; C. G. Watson, St. Bartholomew's Hospital; B. F. Wingate, St. Mary's Hospital

Part II. *Practical Pharmacy.*—F. Atthill, Charing Cross Hospital; C. E. Blackstone, Middlesex Hospital; F. A. Coates, University College, Bristol; R. W. Collum, Charing Cross Hospital; F. Cox, University College, Bristol; T. S. Davies, University College, Bristol; E. S. Edwards, University College, Bristol; J. Gardner, Firth College, Sheffield; J. B. Hall, Yorkshire College, Leeds; J. O. Harvey, Mason College, Birmingham; G. C. Hobbs, St. Bartholomew's Hospital; R. R. Horley, Middlesex Hospital; A. Johnson, University College, Liverpool; W. T. Milton, Guy's Hospital; R. G. Murray, St. George's Hospital; A. H. Parker, Charing Cross Hospital; J. Phillips, University College, Bristol; F. H. Rose, University College, Liverpool; G. H. Spencer, London Hospital; J. W. Watson, University College, Bristol.

Part III. *Elementary Biology.*—A. T. Abadjian, London Hospital; H. C. Adams, Middlesex Hospital; R. H. Allport, St. Thomas's Hospital; W. Andrus, London Hospital; A. G. H. Anthouisz, University College, London; J. A. Archer, Mason College, Birmingham; E. C. P. Barnes, London Hospital; E. H. Barrett, St. Mary's Hospital; G. L. Bates, Charing Cross Hospital; F. Bawtree, St. Thomas's Hospital; F. S. G. Bayley, St. Thomas's Hospital; S. Beley, St. Thomas's Hospital; D. Bellilios, St. Mary's Hospital; V. C. Bensley, St. Mary's Hospital; F. M. Bingham, St. Thomas's Hospital; J. F. E. Bridger, St. Mary's Hospital; V. E. J. Bristowe, St. Thomas's Hospital; R. Brooks, Westminster Hospital; E. K. Brown, London Hospital; E. W. Browne, St. Thomas's Hospital; M. C. Caley, St. Mary's Hospital; A. E. Cardwell, London Hospital; A. F. Carlyon, Middlesex Hospital; E. A. S. Cawston, Guy's Hospital; L. S. Daly, Middlesex Hospital; L. J. L. De Pavillet, St. Mary's Hospital; K. H. Douglas, London Hospital; P. C. Douglass, St. Mary's Hospital; G. W. H. Edgelow, London Hospital; A. G. Eldred, London Hospital; P. Foster, Charing Cross Hospital; C. L. Francia, St. Bartholomew's Hospital; F. A. French, St. Mary's Hospital; A. S. Gardiner, St. Mary's Hospital; H. C. Garrod, University College, Bristol; S. Gaster, London Hospital; C. M. Goodbody, St. Thomas's Hospital; A. G. Graham, St. Thomas's Hospital; E. S. Graham, St. Mary's Hospital; W. R. Green, Guy's Hospital; L. V. Hakansson, St. Mary's Hospital; S. W. Hanbury, St. Thomas's Hospital; F. H. Hand, St. George's Hospital; R. J. Harris, St. Thomas's Hospital; W. B. Harris, St. Mary's Hospital; S. Harrison, Guy's Hospital; J. H. Hart, St. Thomas's Hospital; F. Hasler, London Hospital; H. S. Hawes, St. George's Hospital; G. H. Herbert, London Hospital; W. G. F. Higgins, Middlesex Hospital; B. F. Howlett, St. Thomas's Hospital; A. W. D. Hunt, Middlesex Hospital; G. A. Hutchinson, St. Mary's Hospital; T. Jones, Middlesex Hospital; N. J. Kendal, Mason College, Birmingham; E. C. Lambert, Westminster Hospital; T. Leah, St. Mary's Hospital; O. E. Lemin, London Hospital; H. S. Libby, St. Thomas's Hospital; J. H. Lightfoot, St. Mary's Hospital; W. J. Lord, University College, Bristol; A. L. Lowe, London Hospital; A. M. Macintosh, St. Mary's Hospital; F. P. Mackie, University College, Bristol; J. F. McClean, St. Thomas's Hospital; H. T. Mann, St. Mary's Hospital; B. S. O. Maunsell, St. Bartholomew's Hospital; H. J. May, London Hospital; I. L. Milburn, Middlesex Hospital; F. M. Morris, London Hospital; I. L. Morris, St. Bartholomew's Hospital; J. I. W. Morris, St. Mary's Hospital; E. E. Nicholl, St. Thomas's Hospital; J. C. S. Oxley, St. Thomas's Hospital; G. Pairman Mall, London Hospital; M. G. Pawle, Guy's Hospital; T. Pearson, Charing Cross Hospital; N. Pern, St. Thomas's Hospital; C. R. Pike, London Hospital; W. G. Porter, Charing Cross Hospital; J. B. Reade, St. Thomas's Hospital; H. S. Roch, King's College; D. Samuel, St. Mary's Hospital; C. Shepherd, Guy's Hospital; I. S. Shoesmith, St. Mary's Hospital; S. J. Snooke, Westminster Hospital; C. S. Smith, Mason College, Birmingham; E. P. Smith, Middlesex Hospital; G. H. Spencer, London Hospital; C. H. Straton, St. Mary's Hospital; B. H. H. Tripp, St. Mary's Hospital; A. W. Tuxford, St. Mary's Hospital; P. Vosper, King's College; N. B. Warde, St. Thomas's Hospital; A. J. Watson, St. Mary's Hospital; J. G. Watt, Guy's Hospital; G. H. R. Welsh, London Hospital; W. F. Willis, St. Mary's Hospital; H. T. C. Wilson, King's College; G. D. Winston, St. Mary's Hospital.

Part IV. *Elementary Anatomy.*—F. G. Aldrich, Charing Cross Hospital; M. R. Barker, St. Mary's Hospital; G. L. Bates, Charing Cross Hospital; J. W. Brown, Charing Cross Hospital; C. G. Catterall, Yorkshire College, Leeds; C. L. Francia, St. Bartholomew's Hospital; C. H. Francis-Williams, St. George's Hospital; A. W. H. Grant, Charing Cross Hospital; F. Hannah, Owens College, Manchester; F. Hasler, London Hospital; I. H. S. Hawes, St. George's Hospital; H. F. Hine, Middlesex Hospital; C. E. Hogan, St. Bartholomew's Hospital; J. E. Howroyd, Yorkshire College, Leeds; A. Johnson, University College, Liverpool; H. S. Langdon, Middlesex Hospital; O. E. Lemin, London Hospital; C. T. Lewis, King's College, London; W. McIlroy, Guy's Hospital; L. Milburn, Middlesex Hospital; C. G. Meade, St. Bartholomew's Hospital; W. Meade, St. George's Hospital; E. R. Millar, University College, London; R. Milnthorp, Yorkshire College, Leeds; C. R. Pike, London Hospital; H. S. Roch, King's College, London; H. C. Ross, St. Thomas's Hospital; W. J. Schuller, London Hospital; C. S. Smith, Mason College, Birmingham; E. Symes, University College, Bristol; T. W. Tetley, Yorkshire College, Leeds; P. Vosper, King's College, London; and F. E. Wayte, Owens College, Manchester.

CONJOINT BOARD IN SCOTLAND.

The quarterly examinations in Edinburgh for the Triple Qualification took place in January with the following results:

First Examination.—Four Years' Course—Of 20 candidates, the following 11 passed: M. O'B. Owen, P. J. Pugh, W. Craig, A. S. Marr, J. J. Ring, R. H. Ross, A. Smith, F. E. Richardson, M. F. Leyden, B. B. Vora, and J. E. O'Ryan. Three candidates entered for the respective divisions and passed. Five Years' Course—Of 5 candidates, the following 4 passed: J. Cotter, T. J. O'Donovan, R. Mackie, and A. Gairn. Eleven candidates entered for the respective divisions and passed.

Second Examination.—Of 59 candidates, the following 31 passed: R. H. Ross, J. McKeague, P. J. Pugh, J. S. D. MacCormac, A. T. Anderson, W. Raleigh, C. A. Francois, H. W. Macdonald (with honours), C. O'C. Parsons, J. M. Beattie, R. W. West, J. F. Sutcliffe, C. H. B. Adams, W. Daly, W. J. Roughan, D. Vilicsid, Mary Harriet Simson, J. B. Voortman, D. F. O'Kelly, J. K. Gibson, A. Young, W. F. Macfarlane, W. H. Thomson, S. Booth, P. J. Sheedy, Elizabeth Henderson, H. Reid, J. L. Pinchin, L. Williams, J. A. Gilmore, and L. H. Hutchins. Of 21 candidates who entered for the respective divisions, 9 passed.

Final Examination.—Of 115 candidates the following 61 passed and were admitted L.R.C.P.E., L.R.C.S.E., & L.F.P. and S.G.: A. A. Pim, H. Bond, J. C. Atkinson, J. Cameron, G. W. Anderson, W. Finlay, J. Cheetham, C. H. van Straubenzee, T. Messenger, A. H. Porter, T. Hopps, E. H. Thomas, L. F. Conway-Hughes, J. J. Anderson, J. Larwill, L. Tyrer-Jones, P. A. Winckler, W. Fitzpatrick, F. J. Flavin, A. E. J. Ward, J. M. Rendall, G. Lane, T. W. Smyth, G. H. de Saram, U. L. Desai, Mary Frances Sinclair, J. Elliot, G. D. Backhouse, C. Bayley, Annie Florence Mary Cornall, W. M. Fox, J. McKeague, W. H. Griffith, J. H. Saunders, A. F. S. Pearcey, C. Holding, C. H. H. Cazalet, A. E. White, R. H. Wilson, H. A. C. Davidson, D. H. Dantra, W. H. Andrews, T. Murphy, L. J. Quigley, J. Scott, J. E. L. Pollard, J. Wishart, A. P. Stinson (with honours), H. F. Bawa, G. F. Jackson, W. Rock, A. H. Collins, J. R. Crease, H. M. Woodhead, H. E. Davis, S. Booth, J. E. Foley, J. Mackintosh, A. Johnston, A. C. Baca, and J. A. C. Park. Of 30 candidates who entered for the respective divisions 15 passed.

Erratum.—In the list of Diplomates of Public Health under the Conjoint Board, on p. 215 of the British Medical Journal for January 27th, Mr. Richard K. Brown should have been described as B.S., M.B., instead of Deputy-Inspector-General, R.N.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

The following appointments have been made at the Admiralty: Edward C. Ward, Surgeon, to Chelsea Hospital, January 24th; Robert Walker, to be Surgeon and agent at Clovelly, January 24th; Ernest J. Finch, Surgeon, to the *Victory*, additional, temporarily, January 24th; Robert W. Biddulph, Fleet-Surgeon, to the *Vernon*, February 14th; Charles C. Godding, Fleet-Surgeon, to the *Centurion*, February 14th; Anthony Kidd, Staff-Surgeon, to the *Leander*, January 29th; Edward Ferguson, Staff-Surgeon, to the *Victor Emanuel*, January 29th; Henry Harris and Ernest A. Shaw, Surgeons, to the *Centurion*, February 14th; Basil R. Clarke, Surgeon, to the *Melita*, February 14th; George Edmunds, Surgeon, to the *Victory*, February 14th; Arthur S. Nance and Alfred T. Rimell, Surgeons to Hong Kong Hospital, January 29th; Edward H. Meaden, Surgeon, to the *Alacrity*, January 29th; Reginald J. Fyffe, Surgeon, to the *Alexandra*, lent, January 29th; William R. M. Young, Surgeon, to the *Caroline*, January 29th; George McShane, Surgeon, to the *Linnet*, January 29th; Samuel W. Johnson, M.B., Surgeon to the *Pembroke*, additional, January 27th.

Deputy Inspector-General Thomas Somerville died at Strathview, Lanark, on January 23rd. He was appointed Surgeon, May 18th, 1837; Staff-Surgeon, January 10th, 1846; Fleet-Surgeon, August 5th, 1861; and Deputy Inspector-General, October 15th, 1861, on which date he retired from the service.

Deputy Inspector-General Alexander Fisher, M.D., died at Newcastle-on-Tyne on January 24th. He entered the service as Surgeon, August 25th, 1851; became Staff-Surgeon, May 23rd, 1861; Fleet-Surgeon, May 24th, 1872; and Deputy Inspector-General on retirement, November 30th, 1879. He served in the *Bellerophon* in the Black Sea in 1854-55, and had the Crimean and Turkish medals, with a clasp for Sebastopol.

ARMY MEDICAL STAFF.

Surgeon-Colonel A. C. Gaze, who is serving at Bangalore, in the Madras Command, has been appointed Honorary Surgeon on the personal staff of the Governor-General of India.

Surgeon-Colonel T. Walsh is gazetted Principal Medical Officer of the Madras Army, from January 11th.

INDIAN MEDICAL SERVICE.

Surgeon-Lieutenant-Colonel A. J. Willcocks, M.D., Bengal Establishment, has been appointed Honorary Surgeon on the personal staff of the Governor-General.

Surgeon-Major Nathaniel Hopkins, late of the Bombay Establishment, died at Wimbledon on January 24th, aged 60. He was appointed Assistant-Surgeon May 28th, 1858; was made Surgeon-Major twelve years therefrom; and retired from the service, January 24th, 1883.

THE VOLUNTEERS.

Brigade-Surgeon-Lieutenant-Colonel W. J. Shone, 1st Bucks Rifles, resigns his commission as Surgeon-Lieutenant-Colonel, January 27th. Brigade-Surgeon-Lieutenant-Colonel Shone has also resigned his commission in the Home Counties Brigade of Volunteer Infantry, with permission to retain his rank and uniform.

Surgeon-Captain J. Hedley, 1st Volunteer Battalion the Durham Light Infantry (late the 1st Durham Rifles), has also resigned his commission, January 27th.

PRIZES AT NETLEY HOSPITAL.

Sir Alfred Lyall on January 31st distributed the prizes at Netley Hospital on the occasion of the close of the sixty-seventh session of the Army Medical School. The Principal Medical Officer, Surgeon-Major-General Broke Smith, presided, and there was a distinguished company present. The following is the list:

British Medical Service.

Surgeons on probation of the Medical Staff of the British Army who were successful at both the London and Netley examinations. The prizes are awarded for marks gained in the special subjects taught at the Army Medical School. The final positions are determined by the marks gained in London added to those gained at Netley, according to the list which follows:

Prynne, H. V.	4,736	Cameron, K. M.	3,980
Master, A. E.	4,635	Henry, C. M.	3,717
Dansey-Browning, G.	4,327	Fox, A. E.	3,657
Clark, E. S.	4,073	Green, S. F.	3,628
Barrett, K. B.	4,051	Tibbits, W.	3,185
Boyle, M.	4,015		

Indian Medical Service.

Lamb, G.	5,634	Bennett, H.	4,385
Burden, H.	5,188	Harris, A.	4,318
Leumann, B. H.	4,802	Berry, A. E.	4,304
Fisher, J.	4,578	Macleod, E. C.	4,282
Peck, E. S.	4,479	Thomson, C.	4,045
Evans, C. H.	4,119	Fraser, H.	4,032

Dr. Lamb gained the Herbert Prize of £20, with the Martin Memorial Gold Medal, the Parkes Memorial Bronze Medal, and Montefiore Second Prize, and a prize in pathology presented by Professor A. E. Wright, M.D. Dr. Burden gained the Montefiore Medal and prize of 20 guineas and the prize in clinical medicine presented by Surgeon-General W. C. Maclean, C.B., and gained the De Chaumont Prize in hygiene. Dr. Berry gained a prize in pathology presented by Dr. A. E. Wright, being of equal merit with Dr. Lamb.

OBITUARY.

T. CRANSTOUN CHARLES, M.D., M.Ch., M.R.C.P.Lond.

We regret to announce the death, under distressing circumstances, of Dr. T. Cranstoun Charles, Lecturer on Practical Physiology at St. Thomas's Hospital Medical School.

The deceased, who was in his 45th year, was born at Cookstown, co. Tyrone, and was the son of Dr. David Charles, a well-known practitioner of that place. He received his preliminary education at the Cookstown Academy, and subsequently proceeded to Queen's College, Belfast, where he had a very distinguished career. He took all the prizes open to him, and finally graduated with first-class honours and the gold medal in 1869. He then became associated with Dr. Andrews, Professor of Chemistry at Belfast, with whom he did much good original work, and he acted for some years as Assistant Lecturer on Chemistry and Chemical Physics. On the occasion of the visit of the British Association to Belfast, he acted as secretary to the Chemical Section, and he spent some time as Resident Physician to the Belfast Fever Hospital. He had previously gained the University Peel Prize essay on two occasions, for an essay on ventilation in 1867, and on anæsthetics in 1868.

During the Turco-Servian war in 1876 he acted as medical officer, and took a large part in organising an ambulance service for the sick and wounded, and, on coming to London, he was appointed Demonstrator on Physiology and Medical Registrar at St. Thomas's Hospital. He was afterwards appointed Joint Lecturer on General Anatomy and Physiology, and subsequently became Lecturer on Practical Physiology, a post which he held at the time of his death. He was long engaged in scientific researches, especially in relation to physiological chemistry, and in 1884 he published a *Handbook of Physiological and Pathological Chemistry*, a second edition of which appeared in America in 1887.

He was also an active contributor to the press, and we had frequently the advantage of his co-operation, especially in the reviewing of books dealing with physiological chemistry, and in the preparation of the Annual Report upon Physiological Chemistry, which, before the establishment of the Epitome, appeared at the end of every year in the columns of the British Medical Journal.

Dr. Cranstoun Charles, who was a man of ardent temperament and a most industrious literary worker, appears to have overtaxed his strength, and to have suffered for some time from insomnia, for which, it is believed, he had recourse to morphine. For some days he appears to have suffered severely from insomnia and from headache, which, it is thought probable, marked the onset of influenza, and it would appear that on the evening of January 23rd, being then in great pain, he took a dose of some anæsthetic. During the course of the night his son, a boy of 13 years, who slept in the room, was aroused by his father's heavy breathing, but did not obtain assistance, and on the morning of January 24th Dr. Charles was found to be dead in his bed.

The inquest, which was held on January 25th, was adjourned for a month to permit of an analysis of the contents of the stomach. It was stated that Dr. Charles some time last year met with a carriage accident, which may possibly have had some influence in determining the headache from which he suffered.

Dr. Cranstoun Charles was a member of a distinguished family. His eldest brother, Dr. J. J. Charles, is Professor of Anatomy and Physiology at the Queen's College, Cork; another brother, Dr. Havelock Charles, is Professor of Anatomy in the Lahore Medical College, and Surgeon to the Mayo Hospital, Lahore; and a third brother is the Rev. Robert Charles, of Oxford, who is a distinguished Arabic scholar.

Professor AUGUST HIRSCH, M.D.,

Berlin.

We regret to have to announce the death of Professor August Hirsch, of Berlin, who died on January 28th, at the age of 77. He was another example of a man who, after spending many of the best years of his life in general practice, subsequently attained, as the result primarily of investigations conducted during this period, a position of world-wide renown. His reputation was made on the publication of his *Handbook of Geographical and Historical Pathology*. The first volume of this great work was published in 1859, and in 1863 he was called from the comparatively limited sphere of a general practitioner in Dantzig to a chair in the University of Berlin. At the time of his death he was Professor of Special Pathology and Therapeutics and of the History of Medicine.

He was a member of several scientific Commissions appointed by the German Government to inquire into epidemic outbreaks. Among these inquiries was that on cerebro-spinal meningitis in West Prussia (1863), the German Imperial Cholera Commission (1873), and the Commission on the Plague in Astrakhan (1879). He represented the German Government at the International Sanitary Conference at Vienna, and had charge of an ambulance during the Franco-Prussian war. But, as he himself said, a great part of his life was in the *Handbook*. An excellent translation of this, from the second edition (1881-4), by Dr. Creighton, was published by the New Sydenham Society in three volumes, which appeared in 1883, 1885, and 1886 respectively. This monumental work broke ground which was almost entirely new. The first volume dealt with the acute infectious diseases—influenza, dengue, sweating sickness, small-pox, measles, scarlet fever, malaria, yellow fever, cholera, plague, typhus and typhoid fevers, and relapsing fever. The second volume was devoted to the chronic infective, toxic, parasitic, septic, and constitutional diseases—leprosy, syphilis, yaws, goitre and cretinism, ergotism, pellagra, scurvy, scrofula, gout, etc. The third volumes contained articles on the diseases of organs and parts—lungs, heart, nervous system, skin, rickets, etc. Hirsch's classification is already to some extent out of date, but the

book is a storehouse of information which does not grow stale, and the multitude of references alone render it an indispensable part of every library of reference.

DR. M. J. TURNBULL, of Coldstream, who has just passed over to the majority, to the great regret of a very large circle of friends, was one of the best known and most justly popular practitioners in the south of Scotland. He became L.R.C.P. Edin. in 1845, and took the M.D. degree in the following year. He was a J.P. for Berwickshire. He was a living testimony to the power of judicious dieting to reduce obesity. The story, which is an interesting one, was told by Dr. Allan Jamieson in the *Edinburgh Medical Journal* in December, 1890. In 1889 Dr. Turnbull weighed 22 stone. In June of that year he changed his mode of life with a very satisfactory result. The following is his own account of the reducing process: "I breakfasted at 9 as usual; took an egg, half a slice of toast, and a small cup of tea. At 2 a small basin of soup, with a piece of toast. Dinner was at 8, when I had a little fish, the wing of a chicken, or an equivalent in mutton with some green vegetables, and a very small bit of cheese with biscuit. After dinner I had half a glass of whisky in half a tumbler of water, and one cigar; partook of no soup nor pudding of any kind with dinner under this system. I steadily lost weight, so that on December 5th last I found that I weighed 17 st. 10 lb. I gave up drinking any fluid during the day, and my weight at present—in the middle of September, 1890—is 15 st. 7 lb.; thus I have lost, in the course of about fifteen months, 6 st. 7 lb."

THERE passed away at his residence, 17, Chaucer Street, Nottingham, on January 13th, EDWARD CHARLES BUCKOLL, M.R.C.S., L.S.A., one of the oldest medical practitioners in Nottingham. He was born at Brighton in 1829, and was educated at Neuwied, Germany. Having completed his general education he was apprenticed to the late Dr. Rugg, of Brighton. He studied medicine at King's College, and was a dresser to the late Sir Wm. Ferguson. On qualifying as M.R.C.S., L.S.A., in 1851, he was appointed Resident Surgeon to the Nottingham General Infirmary, a post which he relinquished at the end of three years, on being appointed a medical officer under the Poor-law Union, he continued to hold the office for thirty-three years, when he received a superannuation allowance in consideration of his long and faithful service to the guardians. He was for over thirty years local medical officer to the Great Northern Railway, and for the same period a member of the British Medical Association. For many years he took an active interest in the Robin Hood Rifles, being one of the first to join the ranks on the formation of that corps; he retired a few years ago with the honorary rank of major, and was awarded in 1893 the Victoria decoration for Volunteer officers. By those who knew him best he was deservedly regarded with esteem. During his illness, which extended over two years, he was never heard to murmur or complain. His wife and daughter (an only child) devotedly nursed him throughout his long illness.

DR. FRANCISCO ALONSO RUBIO, of Madrid, the leading obstetrician in Spain, has just died at an advanced age. He was Professor of Obstetric Medicine in the University of Madrid, and was formerly Physician to the Court, but resigned his post when the present Queen Regent of Spain insisted on having a German physician to attend her in her first confinement. In this decision Rubio had the support of the whole medical profession in Spain. Soon after his resignation the Government, by way of making some amends for what he looked upon as the affront that had been put upon him, appointed him Vice-President of the Royal Council of Public Health, of which body he was afterwards President. He was also President of the Royal Academy of Medicine, perpetual President of the Spanish Gynæcological Society, and a life Senator of Spain. He was the author of various works on difficult labour and other obstetrical subjects.

WILLIAM GEORGE DAVIS, M.R.C.S., L.S.A., who recently died at Heytesbury, in Wiltshire—where he had practised for nearly fifty years—at the age of 74, was a specimen of the best type of country practitioner—ready for any emergency, and succeeding by the quiet unostentatious discharge of duty in gaining the esteem and regard of all who knew him. He will be much missed, especially by the poor, by whom he was greatly loved. Mr. Davis was a warm supporter of the British Medical Association, and a prominent figure for many years at all local meetings, taking to the last a keen interest in everything which concerned the welfare of the medical profession.

WE regret to have to record the death of Mr. GEORGE BOLTON, of Sunderland. The deceased took the diploma of M.R.C.S.Eng. in 1867, and in 1868 became L.R.C.P.Edin. and L.M. After qualifying he served in the 4th Durham Light Infantry as an ensign. He ultimately returned to Sunderland, and joined the 1st Durham Artillery Volunteers on April 17th, 1867, passing to the rank of Acting Surgeon on July 16th, 1873. In 1888 he was promoted to the rank of Surgeon, and in December, 1889, was appointed Surgeon-Major. In November, 1892, he was presented with the volunteer decoration for service.

DR. E. F. SCOUGAL died at his residence in Marsh Wood Road, Huddersfield, on January 14th, at the early age of 38 years. He took the diploma of L.R.C.S.Edin. in 1878, and in 1889 the degree of M.D.Edin. For some time the deceased had been laid aside by cancer of the stomach, but he bore his sufferings with great fortitude, and was present as secretary at the annual dinner of the Huddersfield Medical Society on December 19th, 1893. He was a most enthusiastic member of the Huddersfield Choral Society, and last year was elected president in recognition of his services.

THE death is reported of Dr. H. M. LEPPINGTON, of Great Grimsby. The deceased, who was about 87 years of age, was one of the oldest practitioners in Grimsby. He qualified as M.R.C.S.Eng. in 1831. He was a Justice of the Peace, and in 1860 and 1861 was Mayor of the Borough of Grimsby.

WE regret to have to record the death of Dr. G. J. HEARDER on January 24th, in his fifty-fifth year. He took the diploma of L.R.C.S.Edin. in 1862, and in the same year he became an M.D. of the St. Andrews University. The deceased has for more than a quarter of a century held the post of Medical Superintendent to the Joint Counties Lunatic Asylum, Carmarthen. Dr. Hearder had been ailing for some weeks from a severe attack of influenza, which was followed by inflammation of the lungs. He leaves a widow and a family of twelve children.

THE death is reported of Dr. JOHN MURRAY, of Forres. The deceased took the degree of M.D.Mar.Coll.Aberd. in 1837. He was 82 years of age.

DEATHS IN THE PROFESSION ABROAD.—Among the members of the medical profession in foreign countries who have recently passed away are Dr. Felix Ehrendorfer, physician to the Wieden Hospital, Vienna, aged 46; Dr. Salem Pasha, formerly assistant director of the Cairo Medical School; Dr. M. J. V. Dellicour, of Verviers, Belgium, a Knight of the Order of Leopold, aged 63; Dr. De Witt Clinton Paterson, Coroner of Washington City, aged 67; Dr. M. Frari, formerly Professor of Obstetric Medicine in the University of Padua; Dr. A. Quaglino, Emeritus Professor of Ophthalmology in the University of Pavia; and Dr. Paolo Rossi, surgeon to the Vicenza Hospital, formerly assistant to Vanzetti at Padua, author of publications on anæsthetics, ovariotomy, etc., and a bold and successful operator, aged 50.

DR. GEORGE STEVENS, public vaccinator of the Stow Union, Suffolk, has been awarded, for the ninth time, the Government grant for efficient vaccination.

THE Duke of York has consented to take the chair on Saturday, May 5th, at the Hôtel Métropole, where a dinner will take place in aid of the Hospital for Sick Children, Great Ormond Street, Bloomsbury.

MEDICO-LEGAL AND MEDICO-ETHICAL.

LIBEL ACTION AS TO AN INSANITARY HOUSE.

Before Mr. Justice Hawkins and a jury, the libel action Woodhouse *v.* Fenhoulet was heard. Mr. Murphy, Q.C., who, with Mr. Thomas, was for the plaintiff, said that his client was a London gentleman who had some property at Herne Bay, and lived there part of the year. The defendant was a medical man at that place, and it was stated in 1892, after attending a member of plaintiff's family, a dispute arose between them as to the amount of Dr. Fenhoulet's bill. In April, 1893, plaintiff found that the defendant had written to the sanitary inspector of Herne Bay Local Board about Oxenden Cottage, a dwelling house, the property of the plaintiff, which was let by him to a tenant. This letter appeared in connection with the proceedings of the board in the local paper. It ran as follows: "April 10th, 1893. Dear Sir,—I have to inform you that the habitation known as Oxenden Cottage is, in my opinion, unfit for human habitation, and that anyone continuing to live there is running considerable danger." A verdict was given for the defendant.

THE HARNESS CASE.

At the Marlborough Street Police-court on Wednesday, January 31st, further witnesses were examined who testified to the advantages which they conceived themselves to have derived from the use of Harness's belts, and of the apparatus purchased in Oxford Street.—Other evidence of a similar character having been given, Mr. Hannay said: Have you many more witnesses to call, Mr. Avory?—Mr. Avory: Yes, sir.—Mr. Hannay: Then I don't think that I need trouble you to call them. I should like, however, to give Mr. Terrell an opportunity of saying how he thinks the evidence for the defence affects his case.—Mr. Terrell held that there was a *primâ facie* case for a jury. Mr. Harness, he said, represented himself to be an electrician, and that the belts he sold were electrical contrivances that would cure. He maintained that it was untrue that Mr. Harness was an expert electrician, that it was untrue that the belts were electrical contrivances, and that the defendants must have known that the representations made were untrue. Moreover, he contended that the business was not carried on in a *bonâ-fide* manner, and that people were induced to go to the establishment for the purpose that large sums of money might be obtained from them on representations that were not true.—Mr. Hannay, in giving his decision, said that after giving much time and thought to the case he had come to the conclusion that if sent for trial no jury would convict. He had been anxious that the full facts should be put before him. He should not have allowed the case to go on for such a long period had it not been that there was a great deal in the conduct of the business which no honest man could approve. The practice of extracting large sums of money from persons who went to consult Mr. Harness was most reprehensible, for although the management at Oxford Street had some reason to believe in the value of their appliances, they must have known that they could not be successful in every case. The two main circumstances upon which a jury might have been asked to draw an inference of guilt were the manner of conducting the business by exacting large sums of money down, and, secondly, that the actions against *Science Siftings* and the *Electrical Review* were settled without going into court. He could well believe that there were points in the conduct of the business which the management was most unwilling to have exposed to the full light of day. He must remark that several of the witnesses called by the prosecution were indifferent witnesses, as their memory appeared to have failed them. For the defence a number of witnesses of education and good sense were called, who stated that the treatment they received cured them. To make a case indictable there must not only be knowledge but a guilty knowledge. These people at Oxford Street received numerous testimonials from persons who said they were benefited by the treatment they received, and in the face of that how was it possible to ask a jury to say that the defendants knew all the time that these things were valueless. That was the real issue in the case. A regular record of the payments received appeared to have been kept; there was no sort of concealment about the amount of the money received, and they invited medical men, the Royal College of Physicians and the Royal College of Surgeons to visit the establishment and inspect the appliances. He would just like to say one word as regarded the chances of conviction. It was remarkable that, although they daily saw advertisements of quack medicines to cure all sorts of diseases, yet no action had been taken by the Director of Public Prosecutions against the persons who issued such advertisements. He thought, if he saw his way clear to get convictions, the Public Prosecutor would have undoubtedly intervened in such cases. What was still more remarkable was that in Scotland, where there was an effective public public prosecutor in every district, no prosecution of the kind had ever been instituted. The only case like the present one was the recent prosecution of the Indian oculists, which did not result in a conviction. The learned magistrate then discharged the defendants.—Mr. Terrell asked that he should be given twenty-four hours to consider whether his clients should be bound over to prosecute under the Vexatious Indictments Act.—Mr. Avory said that he had not nearly finished the evidence he proposed to call. He had scientific witnesses who were ready to swear that the belts were electrical. In the event of the prosecution being bound over, he asked that the recognisances should be fixed at a sum of not less than £1,000. He should like to know who the real prosecutor in the case was.—It was eventually arranged that Mr. Terrell should be allowed a week to consider whether proceedings would be taken under the Vexatious Indictments Act.

"HOW ARE YOU?"

In response to the numerous protests we have received on the subject of the *Cable* and its "Health Column" under the heading of "How are You?" it is scarcely necessary to note that the false position in which Mr. A. Harbord, L.R.C.P.Edin., M.R.C.S.Eng., has involved himself personally and indirectly the profession by consenting to answer in the "Health Column" of that paper "medical questions which readers of the *Cable* may address to him," is deserving of the severest condemnation, constituting as it does a flagrant system of unprofessional advertising, irrespective of the serious risk run by prescribing for ailing people without the essential personal interview and examination. We can only venture to express a hope that the licensing authorities above referred to will be induced to intervene and vindicate the honour of their respective colleges.

CONDENSED MILK.

Two very interesting facts were disclosed on January 24th in an appeal from a conviction under the Food and Drugs Act. It was first of all established that "condensed milk" sold in tins may have had as much as 80 per cent. of the nourishment extracted before it is put in the tins; and in the second place, that a microscopic announcement printed on the label to the effect that the contents are "skim milk" will be sufficient to meet any cause of complaint on the part of the customer.

LIABILITY FOR FEES.

Practitioner attended the wife of a drunkard in her confinement. He was summoned by the woman's father, in whose house she resided, and the fee was paid by the father. On a second occasion our correspondent was summoned by the husband, but this confinement also took place in the father's house. The father refused to pay; he has since died, and his executors repudiate any liability.

*** On the facts stated we do not think our correspondent would succeed in an action against the executors of the father for recovery of the fees in question. He might have a better chance of success against Mrs. H. (as she is stated to have means), but this is not free from doubt.

UNQUALIFIED ASSISTANTS.

M.B., C.M. writes: Dr. H. keeps an unqualified assistant who attends outdoor cases, the patients believing him to be qualified. Dr. H. never sees any but the most serious and likely to be fatal cases, presumably to enable him to "cover" the assistant. Is not this a most unprofessional behaviour on Dr. H.'s part?

*** Indefensible and professionally regrettable as we hold to be the persistence of practitioners in employing unqualified assistants in face of the General Medical Council's emphatic condemnation, we are further impelled to regard it as a flagrant injustice to the community, in so far as the uninformed public naturally assume that the doctors to whom their ailments and their lives are entrusted are duly qualified: and if, in the case in which our opinion is especially solicited, it can be proved that the patients in question have been induced to accept the alleged unqualified assistant's professional attendance under the erroneous impression that he is a legally qualified practitioner, it would, as we view it, be tantamount to obtaining money under false pretences. With reference, moreover, to such cases, it cannot be too generally known that a registered practitioner cannot recover any charge in a court of law for professional services wholly rendered by an unqualified assistant, in relation to whom we feel constrained to ask if an unlicensed curate would be permitted to administer to the cure of souls in the Church, or a non-admitted law student to practise in the law courts? Why then, *a fortiori*, should unqualified assistants be allowed to tamper with the bodily ailments of suffering humanity chiefly for the pecuniary benefit of the more or less unconscientious principal? It is a blot upon the escutcheon of the faculty of medicine, and should, in the true interest of the public and of the profession, be effaced therefrom.

ADVERTISEMENT OF REMOVAL.

R.P.C.—The publication of an advertisement in the local press, stating that our correspondent has changed his address, is quite contrary to the traditions of the profession, and, as savouring of personal advertisement, would subject him to censure.

CLUBS AND PRIVATE PATIENTS.

Young Practitioner.—If the "Butcher, Dealer, Grazier, and Publican" is a member of a club of which our correspondent is the surgeon, he has entered into an implied contract to attend him, and is not at liberty to arbitrarily refuse to do so "as a club patient." The fact that our correspondent informs a well-to-do club member that he will not attend him as such does not either cancel the privilege or obligation: and our correspondent is not entitled to recover from him fees for private attendance.

LECTURES ON HOME NURSING.

Etiquette.—We think such lectures very proper, and we do not see in the article quoted in the *St. George's Parish Magazine* anything in the nature of the puff direct or indirect. A mean jealousy in these matters is as much to be deprecated as the careful sense of professional honour is to be commended.

CLUB APPOINTMENTS.

Veritas.—Since it is understood that the appointment is subject to annual election, and since the nomination of another or second surgeon is the only means by which any member or members can take steps to secure for themselves a surgeon of their selection, we advise our correspondent not to take hasty objection to what we believe is not an unusual occurrence.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

ZYMOTIC MORTALITY IN LONDON.

The accompanying diagram shows the prevalence of the principal zymotic diseases in London during each week of the fourth quarter of last year. The fluctuations of each disease during the period under review, and its fatal prevalence compared with that recorded in the corresponding weeks of recent years, can thus be readily seen.

Small-pox.—The deaths referred to small-pox, which had been 100 and 40 in the preceding two quarters, further declined to 19 during the three months under notice, the average number in the corresponding periods of the preceding ten years, 1883-92, being 41. Of these 19 deaths, 5 belonged to Kensington, 5 to Poplar, and 2 to St. Pancras sanitary districts. The number of small-pox patients under treatment in the Metropolitan Asylums Hospitals, which had been 371 and 71 at the end of the preceding two quarters, were 52 at the end of December last; 289 new cases were admitted during last quarter, against 1,309 and 377 in the preceding two quarters.

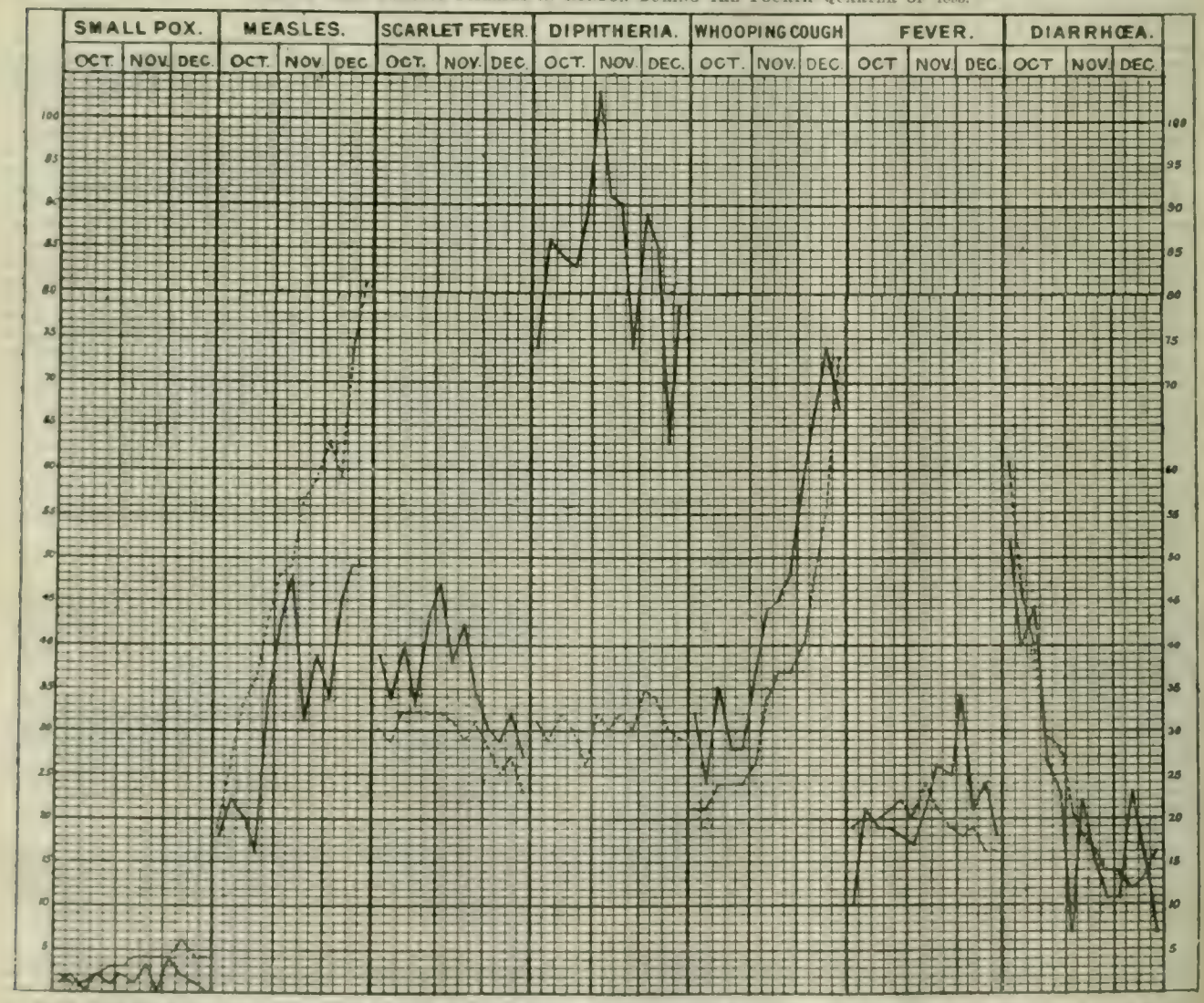
Measles.—The fatal cases of measles, which had been 317, 349, and 459 in the first three quarters of 1893, were 446 during the three months ending December last, and were 203 below the corrected average number. Among the various sanitary districts of the metropolis, the highest proportional fatality of measles was recorded in St. Pancras, Holborn, Shoreditch, St. George-in-the-East, Limehouse, Lambeth, and Battersea.

Scarlet Fever.—The deaths referred to this disease, which had been 335, 336, and 458 in the preceding three quarters, further rose to 467 during the three months under notice, and exceeded by 85 the corrected average number in the corresponding periods of the preceding ten years. Among the various sanitary districts this disease showed the highest proportional fatality in Westminster, Clerkenwell, Bethnal Green, Newington, St. Olave Southwark, Wandsworth, Greenwich, Woolwich, and Plumstead. The number of scarlet fever patients in the Metropolitan Asylums Hospitals, which had been 1,938, 2,653, and 2,659 at the end of the preceding three quarters, had further risen to 2,873 at the end of December. The number of cases admitted to these hospitals, which had been 2,725, 3,548, and 4,059 in the preceding three quarters, further rose to 4,303 during the three months ending December last.

Diphtheria.—The fatal cases of diphtheria in London, which had steadily increased from 328 to 859 in the preceding seven quarters, further rose to 1,089 during the three months under notice, a considerably higher number than in any quarter on record, and nearly three times the corrected average. Among the various sanitary districts diphtheria caused the highest proportional fatality in Hackney, Clerkenwell, St. Luke, Shoreditch, Bethnal Green, Battersea, and Greenwich. The cases of diphtheria admitted into the Metropolitan Asylums Hospitals, which had risen from 648 to 1,841 in the preceding four quarters, declined to 824 last quarter, and 283 remained under treatment at the end of December last.

Whooping-cough.—The deaths referred to this disease, which had increased from 170 to 619 in the preceding four quarters, declined to 588 during the three months ending December last, but were 125 above the corrected average number; the highest proportional fatality of whoop-

Deaths from Zymotic Diseases in London during the Fourth Quarter of 1893.



Note.—The black lines show the *recorded* number of deaths from each disease during each week of the quarter. The dotted lines show the *average* number of deaths in the corresponding week of the preceding ten years 1883-92.

ing-cough was recorded in Holborn, Clerkenwell, Shoreditch, Bethnal Green, Limehouse, St. George Southwark, Newington, and St. Olave Southwark sanitary districts.

Fever.—Under this heading are included deaths from typhus, enteric fever, and simple and ill-defined forms of fever. The deaths referred to these different forms of "fever," which had been 105, 122, and 219 in the preceding three quarters, further rose to 273 during the three months under notice, and were 19 above the corrected average. Of these 273 deaths from "fever," 1 was certified as typhus, 265 as enteric fever, and 7 as simple and ill-defined fever. Among the various sanitary districts the highest mortality from "fever" was recorded in Hackney and Holborn. The Metropolitan Asylums Hospitals contained 103 enteric fever patients at the end of December, against 37, 86, and 104 at the end of the preceding three quarters; the new cases admitted into these hospitals, which had been 122, 152, and 230 in the preceding three quarters, were again 230 during the three months ending December last.

Diarrhœa.—The 297 fatal cases of diarrhœa recorded in London during last quarter were 30 below the corrected average number.

In conclusion it may be stated that the 3,179 deaths referred to the principal zymotic diseases in London during the fourth quarter of 1893 were 665, or more than 26 per cent., above the corrected average number in the corresponding periods of the preceding ten years, 1883-92. This excess was mainly due to the epidemic prevalence of diphtheria. Among the various sanitary districts the lowest zymotic death-rates were recorded in St. George Hanover Square, Westminster, Hampstead, St. Martin-in-the-Fields, London City, St. Saviour Southwark, and Lewisham; the highest rates in Holborn, St. Luke, Shoreditch, Bethnal Green, Limehouse, St. George Southwark, and Newington.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

The Registrar-General has just issued his return relating to the births and deaths registered in England and Wales during the fourth, or autumn, quarter of last year, and to the marriages during the three months ending September last. The marriage-rate was equal to 15.6 per 1,000 of the population, and was 0.6 above the mean rate in the corresponding quarter of the preceding ten years, 1883-92.

The births registered in England and Wales during the three months ending December last numbered 218,637, equal to a proportion of 29.2 per 1,000 of the population, estimated by the Registrar-General to be rather less than twenty nine and three-quarter millions of persons. This rate was, with one exception, the lowest on record, and was 1.7 per 1,000 below the mean birth-rate in the corresponding quarters of the preceding ten years. The birth-rates in the several counties during the quarter under notice ranged from 23.6 in Westmorland, 23.7 in Sussex, and 23.9 in Dorsetshire, to 33.3 in South Wales, 33.4 in Staffordshire, and 34.9 in Durham. In thirty-three of the largest English towns the birth-rate last quarter averaged 30.7 per 1,000, and was 1.5 per 1,000 above the general English rate. In London the birth-rate was 29.8 per 1,000, while it averaged 31.3 in the thirty-two provincial towns, among which it ranged from 23.0 in Halifax, 23.3 in Huddersfield, and 25.0 in Brighton, to 34.7 in Swansea, 34.8 in Sunderland, and 37.8 in Gateshead.

The births registered in England and Wales during the quarter ending December last exceeded the births by 69,580; this represents the natural increase of the population during that period. It appears from returns issued by the Board of Trade that 40,227 emigrants embarked during last quarter from the various ports of the United Kingdom at which emigration officers are stationed. Of these, 22,467 were English, 3,398 Scotch, and 5,366 Irish. Compared with the mean proportions in the corresponding periods of recent years, the proportion of emigrants from each of the three divisions of the United Kingdom showed a considerable decline.

During the fourth quarter of 1893 the deaths of 149,057 persons were registered in England and Wales, equal to an annual rate of 19.9 per 1,000 of the estimated population; this rate was 1.0 above the mean rate in the corresponding periods of the preceding ten years. Among the urban population of the country, estimated at about nineteen and a quarter millions of persons, the rate of mortality during the quarter under notice was 20.9 per 1,000; in the remaining and chiefly rural population of about ten and a-half millions it was 18.2 per 1,000. These rates were respectively 0.7 and 1.4 per 1,000 above the mean rates in the corresponding quarters of the preceding ten years. Among thirty-three of the largest English towns the mean death-rate was 22.6 per 1,000; in London the rate was 23.2, while it averaged 22.2 per 1,000 in the thirty-two provincial towns, and ranged from 15.0 in Halifax, 15.6 in Croydon, and 17.5 in Huddersfield, to 24.7 in Salford, 26.4 in Wolverhampton, and 28.1 in Liverpool.

The 149,057 deaths registered in England and Wales during the three months ending December last included 3,077 which resulted from diphtheria, 2,591 from whooping-cough, 2,491 from diarrhœa, 2,490 from "fever" (including typhus, enteric, and ill-defined forms of continued fever), 2,098 from scarlet fever, 2,007 from measles, and 515 from small-pox. In all, 15,069 deaths were referred to these principal zymotic diseases, equal to an annual rate of 2.01 per 1,000, against an average rate of 2.06 in the corresponding quarters of the preceding ten years. The mortality from diphtheria, whooping-cough, and "fever" showed an excess, while that from each of the other zymotic diseases was below the average. Of the 315 fatal cases of small-pox, 86 occurred in the West Riding of Yorkshire, 68 in Staffordshire, 45 in Warwickshire, 23 in Gloucestershire, and 19 in London.

The rate of infant mortality, or the proportion of deaths under one year of age to registered births, was equal to 151 per 1,000, and was slightly above the mean rate in the corresponding periods of the preceding ten years. In London the rate of infant mortality was 173 per 1,000, while it averaged 175 in the thirty-two provincial towns, among which it ranged from 127 in Portsmouth, 137 in Halifax, and 139 in Gateshead, to 198 in Oldham, 225 in Wolverhampton, and 229 in Blackburn.

The mean temperature of the air during last quarter at the Royal Observatory, Greenwich, was 44.8°, and was 1.0° above the average in the corresponding periods of 122 years; it showed a marked excess in September and December, but was below the average in November. The rainfall amounted to 8.2 inches, which was rather more than an inch above the average amount.

CONVEYANCE OF FEVER PATIENTS.

The attempt of the sanitary authority of Govan to secure conviction against a medical practitioner in the case of a fever patient conveyed to hospital by cab, though successful before the Provost, has been set aside on appeal. A leather-lined cab having been used, and the owner informed of the nature of the "fare," the Lord Justice Clerk held that no offence had been committed by the medical attendant, inasmuch as the conveyance of an infectious patient from his lodging to a hospital cannot be construed as an "exposure" within the terms of Section 49 of the Public Health Act, 1867. We entirely agree with the decision thus given in the Justiciary Appeal Court of Glasgow, though of course no one will deny the great importance of steps being taken to secure that a public vehicle which has been used for the conveyance of a person suffering from an infectious disorder shall be disinfected to the satisfaction of the sanitary authority prior to further use. This, however, is not for the private medical attendant to see to. It is scarcely necessary to add that better still would be entire disuse of public conveyances for such cases in favour of proper ambulances provided by the authority.

THE PREVENTION OF DIPHTHERIA.

A report by Dr. R. D. Sweeting to the Local Government Board on the recent fatal diphtheria prevalence in and around Alton raises important questions of notification of the disease in relation to its spread. From April to July, 1893, there were 25 "notified" cases of diphtheria in the parish of Chawton, from which parish the disease spread by means of personal importation and of school attendance to 5 other parishes, 59 cases and 20 deaths occurring in all. In Chawton school attendance was the dominant feature; but the school, after closure on April 25th, was reopened on June 5th, "when the disease was fully established in the parish." Apparently no strict inquiry was made as to disease of a diphtheritic nature in the families of scholars, and "the existence of minor phases of diphtheria" was not even suspected. The health officer would seem to have discouraged notification of all cases outside unmistakable diphtheria; and hence it looks as though the malady had been kept going for lack of prompt recognition and early notification of those cases of throat complaint which, during the prevalence of the major malady, do so much to disseminate infection. We are pleased to see Dr. Sweeting's recommendation for notification of "all cases of throat complaint" during an outbreak of diphtheria.

SMALL-POX IN EDINBURGH AND LEITH.

One fresh case of small-pox was reported in Edinburgh last week, and 1 death. In Leith 7 new cases and 3 deaths.

DUTIES OF M.O.H. UNDER THE NOTIFICATION ACT.

A. G. C.—It is not a part of the duty of the medical officer of health to examine the patient; and it is—as we have repeatedly stated before—ethically undesirable that he should do so without the consent of the notifying practitioner, save under quite exceptional conditions. But it is certainly within the sphere of his duty to inspect the premises to such extent as he may consider necessary.

LIABILITY FOR ALLEGED INCORRECT NOTIFICATION.

Medicus writes: If a medical man notifies a case, say, of small-pox, and it is returned from the hospital as "not small-pox," can the patient or his friends legally claim compensation for the trouble and any expense they may have incurred by the removal of the patient?

*** Although we are not aware of any authority directly in point, we are advised that it is probable that a claim for compensation for trouble and expense incurred could be successfully maintained, and that it would be desirable to come to some arrangement with the parties if a reasonable sum representing the actual loss of time and expense were named. Of course we assume that the incorrectness of the notification could be duly established.

SMALL-POX AND VACCINATION.

The records of the medical officer of the Aston Manor Small-pox Hospital during the past year are highly favourable to vaccination. Of 113 admitted cases, 6 proved fatal, a rate of 5.3 per cent., made up of 97 vaccinated patients, of whom 1 died, a rate of 1 per cent., and 15 unvaccinated patients, of whom 5, or 33.3 per cent. died. No fatality occurred among 61 cases bearing three or more vaccination scars, and no revaccinated person was admitted.

OBLIGATIONS OF MEDICAL PRACTITIONERS AS TO DEATH CERTIFICATES.

Achilles asks: What is the shortest length of time that elapses between your last visit to a patient and his death that will legally entitle you to refuse death certificate? If asked for death certificate by registrar are you bound to make a journey to patient's late abode and find out particulars, or are patient's friends bound to come to you at your consulting hours? Or is registrar bound to give you name in full, age, and duration of illness.

*** In England there are no definite regulations on the subject. If the medical practitioner does not consider that he was "in attendance" during the last illness, he need not give any certificate of the cause of death. He is certainly not bound to make any journey, either to obtain or to give any information; it is the duty of the "informant" of the death to obtain a certificate from the medical practitioner, to be delivered to the registrar when registering the death. The only necessary information in the medical certificate is the name of the deceased and the cause of death; any other particulars as to age, etc., are inserted merely for identification, and for the purposes of registration should be obtained by the registrar from the proper "informant" of the death.

EXTRA FEE FOR ATTENDANCE IN *POST-PARTUM* HÆMORRHAGE.

G. R. P. writes to ask whether we consider he could properly charge the guardians £2, as extra fee, for attendance on a case of violent *post-partum* hæmorrhage which necessitated attendance for a fortnight afterwards.

*** We consider that in this case the fee of £2 would be properly charged, as *post-partum* hæmorrhage, when severe, is one of the most grave complications of midwifery.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns, including London, 6,536 births and 4,156 deaths were registered during the week ending Saturday, January 27th. The annual rate of mortality in these towns, which had been 28.6 and 23.2 per 1,000 in the preceding two weeks, further declined to 20.7 last week. The rates in the several towns ranged from 14.8 in Derby and 14.9 in Leicester to 30.1 in Salford and 31.1 in Norwich. In the thirty-two provincial towns the mean death-rate was 21.4 per 1,000, and exceeded by 1.6 the rate recorded in London, which was only 19.8 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.4 per 1,000; in London the rate was equal to 2.5 per 1,000, while it averaged 2.4 in the thirty-two provincial towns, and was highest in Birkenhead, Bristol, and Burnley. Measles caused a death-rate of 2.5 in Birkenhead and 3.2 in Burnley; scarlet fever of 1.1 in Derby and in Burnley; whooping-cough of 2.7 in Swansea, 2.8 in Bristol, and 3.6 in Plymouth; and "fever" of 1.7 in Gateshead. The deaths from diphtheria included 52 in London, 4 in Manchester, 3 in Salford, and 3 in Bristol. Seven fatal cases of small-pox were registered in Birmingham, 3 in Bradford, 2 in Bristol, and 1 each in West Ham, Nottingham, Liverpool, and Halifax, but not one in London or in any other of the thirty-three towns. There were 78 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, January 27th, against 94, 88, and 82 at the end of the preceding three weeks; 17 new cases were admitted during the week, against 12 and 14 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,533, against 2,852, 2,733, and 2,645 at the end of the preceding three weeks; 235 new cases were admitted during the week, against 221 and 246 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, January 27th, 925 births and 599 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had been 23.8 and 21.6 per 1,000 in the preceding two weeks, further declined to 21.0 last week, but slightly exceeded the mean rate during the same period in the thirty-three large English towns. Among these Scotch towns the death-rates ranged from 18.1 in Leith to 22.3 in Glasgow and in Dundee. The zymotic death-rate in these towns averaged 2.8 per 1,000, the highest rates being recorded in Perth and Leith. The 294 deaths registered in Glasgow included 28 from whooping-cough and 4 from diphtheria. Four fatal cases of small-pox occurred in Leith and 1 in Edinburgh.

INDIA AND THE COLONIES.

INDIA.

SANITARY WORK IN INDIA.—The Calcutta *Englishman*, in an excellent article on "Sanitation in India," reviews the summary of sanitary proceedings issued by the India Office for the year 1891, and shows the great advantage that local self-government has conferred, and is likely to confer, in promoting undertakings for improving the public health. The following is a sketch of the principal sanitary works, completed, in progress, or contemplated: In the Punjab, the Peshawur and Abbottabad waterworks were completed and handed over to the respective municipalities. The Delhi waterworks were approaching completion. Water-supply schemes for Dalhousie, Kohat, and Murree were sanctioned and commenced. A similar scheme for Amritsar had received sanction, and a project for increasing the water supply of Simla had been prepared and forwarded to the Government of India. Then rapid progress was being made with the drainage schemes of Faridabad, Peshawar, Gujranwala, and Kohat. In the North-Western Provinces and Oudh, the most important schemes of water supply undertaken or completed were those at Allahabad, Benares, Cawnpore, Lucknow, and Naini Tal. Of the drainage schemes, that for draining the important tract of country lying between the Burhganga and the East Kali Nadi, which had long suffered from waterlogging, and which has now been practically reclaimed, was making rapid progress. The new drainage and sewerage project at Naini Tal was on hand. Much activity was also shown in the execution of minor sanitary works on which the municipalities are reported to have spent a fair proportion of their income. In Bengal there was the construction of waterworks at Nasirabad, the extension of the waterworks at Dacca, improvements of drainage at Serampur and at Puri, and the consideration of various schemes, among which is to be noted the water supply for Howrah. Two years have now passed, and Howrah has not yet received its promised water supply. On the whole, the record is a satisfactory one, considering the difficulties under which the several local governments labour.

SURGEON-COLONEL W. GRAVES and the officers of the Army Medical Staff in the Meerut District, India, gave a ball in honour of His Excellency the Commander-in-Chief and Lady White's first official visit to Meerut. Some 250 people were present to meet their Excellencies.

MEDICAL NEWS.

A CONGRESS of Polish medical men and scientists will be held at Lemberg on June 18th and the three following days.

MR. EGERTON BAINES, of Henley-on-Thames, has received the extra grant for successful vaccination.

DR. GRAF, of Elberfeld, who has for many years been President of the German Medical Association, has been elected second Vice-President by the Prussian Chamber of Deputies.

THE Municipal Council of Montpellier has voted a sum of 6,000 francs towards the establishment of a municipal chair of microbiology.

M. PASTEUR and Professor Billroth have been elected honorary members of the Military Medical Academy of St. Petersburg.

PROFESSOR LUIGI LUCIANI, of Florence, has been appointed to the Chair of Physiology in the University of Rome, in succession to the late Professor Moleschott.

DR. MORIZ HAY, the head of the vaccination service in Vienna, has been named an Imperial Councillor by the Emperor of Austria.

A WOMAN, named Mary McCusker, died at Carrigallen, co. Leitrim, at the remarkable age of 112 years. She was ill only two days, and was sensible to the last.

THE German Emperor has conferred on Professor Henoch, the author of the classical work on children's diseases, the Order of the Red Eagle, Second Class, with the crown and oak leaves.

ON January 29th Dr. Karl Grossmann, of Liverpool, gave an interesting address before the Royal Geographical Society on a journey across Iceland. The address was illustrated by over a hundred photographic lantern slides.

EDINBURGH ROYAL SOCIETY.—At the ordinary meeting on January 29th Dr. W. G. Aitchison read a paper on "The Rate of Fermentation of Sugars." Various experiments were detailed, results given, and the bearing of these on various kinds of dyspepsia indicated.

THE CHALMERS HOSPITAL, EDINBURGH.—Miss Agnes E. Bourne, of St. Mark's Hospital, London (and formerly of St. Bartholomew's), has been appointed matron of the Chalmers Hospital, Edinburgh, in the room of Miss Mabel Hastings, who has resigned.

PRESENTATION.—Dr. James Nicol, of Llandudno, was on January 24th presented by his friends with a cheque for £390, which he handed over to the trustees of the Sarah Nicol Memorial Hospital in aid of the funds of that institution. A tablet is to be erected in the hospital to commemorate the presentation and Dr. Nicol's generous gift.

THE MEDICAL PROFESSION IN SWITZERLAND.—The Swiss Statistical Bureau gives the following particulars as to the medical profession in Switzerland: In 1890 the total number of medical practitioners was 1,530, being a proportion of 5.2 per 10,000 of the population; in 1891 the number was 1,557, or 5.3; and in 1892, 1,634, or 5.5 per 10,000 inhabitants. In 1893 the total number of doctors was 1,656, or 5.5 per 10,000 of population.

HYDROPHOBIA FROM THE BITE OF A CAT.—On Saturday, January 27th, the coroner for Central London and Middlesex held an inquest on the body of Albert Paul Koenig, aged 33 years. Louisa Koenig, the widow, deposed that the deceased, on December 19th, 1893, told her that a strange cat which he stroked had bitten his left thumb and scratched his hand. The wounds healed up in a few days. On January 18th the deceased complained of severe pains in his side and back, and died on January 24th. Dr. S. H. Craig stated that on January 19th he was called to see the deceased, who showed decided symptoms of hydrophobia. Death was due to exhaustion from hydrophobia following the bite of a cat. The jury returned a verdict in accordance with the medical evidence.

INTERNATIONAL CONGRESS OF HYGIENE AND DEMOGRAPHY.—As already announced, a Tropical Section has been constituted in connection with the eighth International Congress of Hygiene and Demography to be held at Buda-Pesth, under the patronage of the Emperor-King, on September 1st to 9th of the present year. Surgeon-Major Duka, M.D., F.R.C.S., of the Bengal Army (retired) has been appointed President of the Section, and Dr. Isambard Owen and Mr. S. Digby have undertaken to act as honorary secretaries. The subjects specially proposed for discussion are: Cholera in the Tropics, Dysentery and Specific Diarrhœa, Malaria, Yellow Fever, Leprosy, Tropical Affections of the Liver, Elephantiasis, Beri-beri, Yaws, the Influence of Tropical Climates on Persons of European Descent, Tropical Colonisation, Tropical Dietetics, the Use of Alcohol in the Tropics, the Effects of Opium and other Narcotics used in Tropical Countries, and Tropical Sanitation in General. The Indian and other tropical Governments, as well as a number of public bodies in India and elsewhere interested in the above questions will, it is expected, send special delegates to the Congress.

OBSTETRICAL SOCIETY OF LONDON.—The election of officers for 1894 will take place at the annual meeting to be held on February 7th. The following is the balloting list recommended by the Council:—*President:* G. E. Herman, M.B. *Vice-Presidents:* A. Doran, E. Hollings, M.D., P. Horrocks, M.D., H. S. Webb (Welwyn). *Treasurer:* J. B. Potter, M.D. *Chairman of the Board for the Examination of Midwives:* F. H. Champneys, M.A., M.D. *Honorary Secretaries:* W. Duncan, M.D., *W. Dakin, M.D. *Honorary Librarian:* *J. Phillips, M.A., M.D. *Other Members of Council:* *T. R. Adams, M.D. (Croydon), F. Beach, M.D. (Sidcup), *R. Boxall, M.D., A. Brown, M.D., E. Clapham, M.D., A. Donald, M.A., M.D. (Manchester), *L. Drage, M.D. (Hatfield), *W. Furner (Brighton), W. J. Gow, M.D., W. S. A. Griffith, M.D., *G. S. Harper, M.B., *J. D. Malcolm, M.B., C.M., *L. Remfry, M.A., M.D., J. H. Salter (Kelvedon), *J. B. Sutton, E. S. Tait, M.D., J. S. Turner, *J. Williams, M.D. Those gentlemen to whose name an asterisk is prefixed were not on the Council, or did not fill the same office last year. At the same time the usual business of the annual meeting will be transacted, including the delivery of the annual address by the President.

THE annual meeting of the Scottish Association for the Medical Education of Women and the Medical College for Women was held on January 16th at the Royal Hotel, Edinburgh, Sir Alexander Christison presiding. The report presented stated that the managers of the Royal Infirmary had made new arrangements for the clinical education of women, giving accommodation rather in excess of the demands made by the Triple Qualification Board. A sum of £300 had been raised and presented to the infirmary in recognition of the fact that women students have been admitted to qualifying clinical instruction in the wards of the Royal Infirmary. Graduation in Medicine had been put within the reach of the Association's students by the University of St. Andrews. The University of Edinburgh still hesitated to open its medical classes to women, and the Association hoped that the experience gained in the art classes and the fact that the opening of the Royal Infirmary to women students had not, as was expected by some, caused any decrease in the number of male students, would encourage the Senatus to make the necessary arrangements. The present number of students was 37. There were at present 25 ladies from the College in regular attendance at the Royal Infirmary. The income for the year had been £787, and the expenditure £858.

MANCHESTER MEDICO-ETHICAL ASSOCIATION.—The number of ordinary members of this Association is 165. The Committee reports that there has been a spirit of great activity in the work done by the Association during the past year; the meetings have been well attended, an average of fifty-two members and visitors having been present at each meeting. The following are some of the subjects that have been brought forward and freely discussed: "The Proper Limits of Gratuitous Professional Work," "Public Health and its Medical Officers," "The Notification of Infectious Diseases not attended by Qualified Practitioners," and "The Lunacy Laws." The *Medical Tariff and Scale of Fees*, having gone out of print, has been revised and reprinted by the Committee. A recommendation has been made to the Select Committee of the House of Commons upon the Registration of Death and Still-births. Also a memorial has been presented to the Corporation of Manchester and Salford praying "that in consequence of the high mortality from measles, that this disease shall be placed on the list of compulsorily notifiable diseases." And lastly, the President and Secretaries signed a petition by the desire of the Committee, to the General Medical Council *re* the granting of diplomas to midwives. The following gentlemen have been elected as office-bearers and Committee for the year 1894: *President:* William Walter, M.A., M.D. *Vice-Presidents:* Hugh W. Boddy, M.D., John A. Palanque, A. H. Stocks, John Watson, M.D. *Treasurer:* D. Lloyd Roberts, M.D. *Secretaries:* F. H. Collins, M.D., John Ferguson. *Committee:* Richard J. Dearden, Joseph Foster, Alfred Godson, M.D., James Holmes, M.D., Walter E. Husband, T. N. Kelynack, M.B., E. T. Milner, M.B., W. E. S. Scott, M.D., Charles G. L. Skinner, M.D., J. P. Stallard, M.D., Alexander Stewart, M.D., R. Wallace.

MEDICAL VACANCIES.

The following vacancies are announced:

ALNWICK INFIRMARY.—House-Surgeon, unmarried. Salary £120 per annum, with furnished apartments, attendance, coals, and gas. Applications to W. T. Hindmarsh, Honorary Secretary, 26, Bondgate Without, Alnwick, by February 16th.

AXMINSTER UNION.—Medical Officer for four Districts. Salary, £72 16s. 8d. per annum; midwifery and surgical operations extra. Applications to W. Forward, Clerk, by February 7th.

BRIGHTON THROAT AND EAR HOSPITAL, 23, Queen's Road, Brighton.—House-Surgeon; non-resident. Salary, £52 per annum. Applications to the Secretary by February 5th.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road, W.C.—House-Surgeon. Applications, with testimonials, to the Secretary, by February 5th.

DENTAL HOSPITAL OF LONDON, Leicester Square, W.C.—Assistant Dental Surgeon. Applications to J. Francis Fink, Secretary, by March 12th.

GREENWICH UNION INFIRMARY.—Second Assistant Medical Officer; unmarried. Salary, £80 per annum, with board, lodging, and attendance. Applications to Samuel Saw, Clerk to the Guardians, Union Offices, Greenwich, by February 5th.

KILBURN, MAIDA VALE, AND ST. JOHN'S WOOD DISPENSARY.—Vacancy on the Honorary Medical Staff. Applications to the Secretary, 13, Kilburn Park Road, by February 14th.

LIVERPOOL HOSPITAL FOR CANCER AND SKIN DISEASES.—Honorary Assistant Surgeon. Applications to Mr. A. N. Talbot, 3, Rumford Street, Liverpool, by February 20th.

MANCHESTER INSTITUTION FOR DISEASES OF THE EAR.—Honorary Assistant Surgeon. Applications to the Honorary Secretary, Mr. T. C. P. Gibbons, 33, Mosley Street, Manchester, by February 17th.

NEW HOSPITAL FOR WOMEN, 141, Euston Road, N.W.—Lady Dispenser. Salary, £90 per annum. Applications to the Secretary by February 17th.

OWENS COLLEGE, Manchester.—Professor of Zoology. Applications to the Council of the College, under cover to the Registrar, by April 3rd.

OXFORD EYE HOSPITAL.—House-Surgeon. Appointment for one year. Salary, £50, with board and lodging. Applications to Mr. B. H. Baden-Powell, Honorary Secretary, 29, Banbury Road, Oxford, by February 24th.

PARISH OF ST. LEONARD, Shoreditch.—Medical Officer of Health. Salary, £500 per annum; must reside within one mile from the boundary of the parish. Applications on forms to be obtained of the Clerk marked "Medical Officership," to be sent to H. Mansfield Johnson, Solicitor and Clerk, Shoreditch Town Hall, Old Street, E.C., by February 13th.

RAMSGATE AND ST. LAWRENCE ROYAL DISPENSARY AND SEAMEN'S INFIRMARY.—Resident Medical Officer; unmarried; doubly qualified. Salary, £120 per annum—£10 allowed for substitute for annual holiday—with furnished apartments, gas, firing, and attendance. Applications to the Secretary by February 6th.

ROYAL PIMLICO DISPENSARY, Buckingham Palace Road, S.W.—Attending Medical Officer; must reside in the district. Applications and testimonials to the Secretary by February 5th.

ROYAL SURREY COUNTY HOSPITAL, Guildford.—House-Surgeon. Salary, £80 per annum, with board, lodging, and laundry. Applications to the Honorary Secretary by March 10th.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY, 60, King Street, Regent Street, W.—Physician. Applications to St. Leger Bunnett, Secretary, by February 14th.

SALFORD ROYAL HOSPITAL.—House-Surgeon, doubly qualified. Salary, £100 per annum, with board and residence. The Junior House-Surgeon is a candidate, and in the event of his being appointed the post of Junior House-Surgeon will be vacant. Salary, £50 per annum, with board and residence. Applications to the Secretary by February 15th.

SOUTH-EASTERN HOSPITAL FOR CHILDREN, Hackney Road, N.E.—Physician to Out-patients: must be Fellows or Members of the Royal

College of Physicians of London. Applications and copies of testimonials to the Secretary, F. Glenton-Kerr, by February 10th.

WEST DERBY UNION.—Resident Assistant Medical Officer for the Workhouse; doubly qualified. Salary, £100 per annum, with first-class rations and apartments. Applications to Harris P. Cleaver, Union Clerk, Brougham Terrace, Liverpool, by February 6th.

WESTMINSTER HOSPITAL MEDICAL SCHOOL.— Lecturer on Bacteriology. Applications to the Dean, Mr. Spencer, by February 6th.

WHITECHAPEL UNION DISPENSARY.—Assistant Medical Dispenser, not more than 30 years of age. Salary, £90 per annum, increasing £5 yearly to £100 per annum. Applications, on forms to be obtained of the Clerk, to William Vallance, Clerk to the Guardians, Union Offices, Baker Row, Whitechapel, E., by February 3rd.

WYNAAD PLANTERS ASSOCIATION.—Medical Officer for an Indian planting district. Salary, 450 rupees a month; married man preferred. Applications to J. Williams Hockin, Honorary Secretary, U. P. A. Medical Fund, Vayitiri, Malabar, India.

MEDICAL APPOINTMENTS.

ACTON, C. J., M.R.C.S., L.R.C.P., D.P.H., appointed Medical Officer and Public Vaccinator of Eighth District, Blything Union.

BALDWIN, Francis A., L.S.A., appointed Medical Officer to the 7th District of St. Saviour's Union, Walworth.

BEAMAN, Dr., appointed Medical Officer for the Misterton District of the Gainsborough Union, *vice* Thomas Stone, L.R.C.P., L.R.C.S.Edin., resigned.

BROWN, C. Granger, L.R.C.P.Edin., M.R.C.S.Eng., appointed Honorary Medical Officer to the Goole Cottage Hospital.

BUTLER, George Hy., L.R.C.P.I., L.R.C.S.Edin., appointed Medical Officer for the Wealdstone District of the Hendon Union.

CHEYNE, W. Watson, M.B., F.R.C.S., appointed Consulting Surgeon to the North London Hospital for Consumption, Hampstead and London.

DE BUTTS, Stanley B., M.D.Brux., M.R.C.S., etc., appointed Anæsthetist at the London Lock Hospital, Dean Street, W.

ENGLEBACH, Frederick George, L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer for the Newtonhampstead District of the Newton Abbott Union.

FISCHER, E. C. M.B., C.M.Edin., appointed House-Surgeon to the Royal Ophthalmic Hospital, Moorfields, E.C.

FITZGIBBON, Henry, M.D. T C.D., Medical Officer to the General Post Office, Dublin, appointed Secretary in Ireland to the British Postal Medical Officers Association.

GIMSON, Wm. Douglas, M.R.C.S., L.R.C.P.Lond., appointed Medical Officer for the Third District of the Chelmsford Union.

GORDON, John F., M.D.R.U.I., appointed Medical Officer of the Branch Workhouse at Msghull of the Parish of Liverpool.

LLOYD-WILLIAMS, E., M.R.C.S., L.R.C.P., L.S.A., L.D.S., appointed Dental Surgeon to the Dental Hospital of London, *vice* George Gregson, M.R.C.S., L.D.S., resigned.

MCGILLIVRAY, Angus, C.M., M.B.Aberd., appointed Joint Ophthalmic Surgeon to the Dundee Royal Infirmary.

MARRIOTT, E. D., L.R.C.P.Edin., L.F.P.S.Glasg., appointed Medical Officer for the No. 5 District of the Nottingham Union, *vice* Dr. Bailey, deceased.

MEADE-KING, R. Liddon, M.B., B.S.Durham, M.R.C.S., L.R.C.P., appointed Assistant House-Surgeon to the Devon and Exeter Hospital.

MUIR, Mr. David, appointed Medical Officer for the Holmworth District of the Highworth and Swindon Union.

NEWBY, Thomas, M.D.St.And., M.R.C.S.Eng., reappointed Port Medical Officer of the Grimsby Town Council.

RAMSAY, Frank Winson, M.D.Dunelm, M.S., F.R.C.S.Edin., appointed Honorary Surgeon to the Royal Victoria Hospital, Bournemouth.

ROBINSON, H. Betham, M.S., M.D.Lond., F.R.C.S., appointed Assistant Surgeon to St. Thomas's Hospital.

STEPHENS, William J., M.R.C.S.Eng., L.R.C.P.Lond., appointed Second Assistant Resident Surgeon to the General Dispensary, Nottingham.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. A. Stanford Morton: Affections of Eyelids. Bacteriological Laboratory, King's College, W.C., 3 to 5 P.M.—Lecture: Tuberculosis and Leprosy. Practical work: Staining Sputum and Sections. London Throat Hospital, Great Portland Street, 8 P.M.—Mr. G. Charles Wilkin: Clergyman's Sore Throat.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN, 8 P.M.—Inaugural Address by the President, and Casual Communications.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. Harrison Cripps: Ovarian Cysts Communicating with the Rectum and the Bladder. Dr. J. G. Garson: A Case of Penis Splitting.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr. Percy Smith: Puerperal and Lactational Insanity.

ANATOMICAL SOCIETY OF GREAT BRITAIN AND IRELAND, University College, 4.30 P.M.—Proposed Committee on Anatomical Nomenclature. Papers by Professor Cunningham, Professor Macalister, Mr. W. Anderson, and Mr. Keith.

PATHOLOGICAL SOCIETY OF LONDON, 8.30 P.M.—Dr. Scholefield: Sarcoma of the Suprarenal Body. Mr. J. Berry: Dilatation and Rupture of the Sigmoid Flexure without Obstruction. Mr. Jackson Clarke: Cyst of the Epididymis. Dr. Pye-Smith: Granular Kidneys from a Young Child. Mr. Edgar Willett: Transverse Hermaphroditism in an Adult Male. Mr. Cecil Beadles: A Case of Multiple Malignant Growths. Card Specimen:—Dr. Turney: Thrombosis of the Veins of the Cortex.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 1 P.M.—Dr. Payne: Impetigo and Contagious Suppuration. Hospital for Consumption, Brompton, 4 P.M.—Dr. C. Y. Biss: Cases of Special Interest. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Quarry Silcock: Glaucoma, with Illustrative Cases.

OBSTETRICAL SOCIETY OF LONDON, 8 P.M.—Specimens by Dr. Probyn-Williams, Dr. Boxall, and others. Dr. Robert P. Harris (Philadelphia): A Plea for the Practice of Symphysiotomy, based upon its record for the past eight years (communicated by Dr. Lewers). Annual meeting. Election of Officers and Council. The President (Dr. Herman) will deliver the annual address.

POST-GRADUATE COURSE, West London Hospital, Hammersmith, W., 5 P.M.—Dr. Ball: Demonstration of Throat Cases.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and the Epileptic, Queen Square, 2 P.M.—Dr. Charlton Bastian: Selected Cases. Hospital for Sick Children, Great Ormond Street, 3.30 P.M.—The Surgical Registrar: Pathological Demonstration of Surgical Specimens. Central London Sick Asylum, Cleveland Street, 5.30 P.M.—Sir William MacCormac: Cases in the Wards.

BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M.—Specimens: Dr. Heywood Smith: Uterus and Appendages Completely Removed for Fibroma. Mr. Jessett: (1) Uterus Removed per vaginam for Malignant Disease; (2) Uterus Removed per vaginam for Multiple Fibroma. President's Address.

SOUTH-WEST LONDON MEDICAL SOCIETY, Bolingbroke Hospital, Wandsworth Common, 8.30 P.M.—Mr. T. Bryant, F.R.C.S.: On Some Subjects of Public and Professional Interest.

NORTH LONDON MEDICAL AND CHIRURGICAL SOCIETY, Great Northern Central Hospital, 8.30 P.M.—Cases and specimens by Drs. Day, Wight, and Walker, and Messrs. Lockwood, Kendall, and others.

FRIDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. C. Y. Biss: Cases of Special Interest.

CLINICAL SOCIETY OF LONDON, 8.30 P.M.—Adjourned discussion on Mr. John D. Malcolm's case of Nephrectomy for Malignant Tumour in a patient under two years of age. Mr. Arbuthnot Lane: (1) Multiple Epitheliomatous Growths developing in Psoriasis treated with arsenic more than thirty years; (2) Acute General Suppurative Peritonitis secondary to Appendicitis; Removal of Appendix; Recovery. Dr. Lauder Brunton and Mr. Watson Cheyne: A Case of Intestinal Obstruction due to Constriction of the Bowel after Appendicitis. Mr. John R. Lunn: Fungating Growth of the Penis lasting nineteen months.

METROPOLITAN COUNTIES BRANCH (SOUTH LONDON DISTRICT): Camberwell Infirmary, Havil Street, S.E., 4 P.M.

SATURDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M.—Dr. Hyslop: Developmental Insanity; Circular Insanity.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTHS.

ALLISON.—On January 6th, at Fort St. George, Madras, the wife of Surgeon-Lieutenant-Colonel H. Allison, M.D., I.M.S., of a son.

ATKINSON.—On January 29th, at 216, Camberwell New Road, S.E., the wife of Walter A. Atkinson, M.B., B.S., of a son.

EADES.—On January 30th, at 58, Carr Street, Ipswich, the wife of S. O. Eades, L.R.C.P., L.R.C.S., of a daughter.

MARRIAGES.

BROWN—HOLTTUM.—On January 17th, at the Church of St. Nicholas-at-Wade, by the Rev. F. R. Allfree, M.A., Vicar of the Parish, assisted by the Rev. J. Thomas, Vicar of Wood Green, Surgeon-Captain E. Harold Brown, M.D., Indian Medical Service, Bengal, to Maud Bedford, only daughter of G. B. Holttum, Esq., of Evernden House, St. Nicholas-at-Wade, Birchington, Kent.

DICKS—MACQUIBBAN.—On January 18th, at Aberdeen, by the Rev. G. Webster Thomson, B.A., Ernest White Dicks, "Lynn Hurst," Market Harborough, Leicestershire, eldest son of the late Thomas Dicks, Ecton Manor, Northamptonshire, to Isabelle Monro, eldest daughter of C. M. MacQuibban, M.D., J.P. No cards. At home after February 8th.

DEATHS.

CLARKE.—On January 26th, John Clarke, M.R.C.S., L.S.A., of Kenilworth, aged 69.

FISHER.—On January 24th, at 32, Osborne Road, Newcastle-on-Tyne, Alexander Fisher, M.D., Deputy-Inspector-General, R.N. (retired).

STEDMAN.—On January 28th, at Flushing (late of the Croft), Great Bookham, Surrey, Arthur Stedman, M.R.C.S., L.S.A., aged 60.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

Communications for the Current Week's Journal should reach the Office not later than Midday Post on Wednesday. Telegrams can be Received on Thursday Morning.

Communications respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the Journal, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the Journal be addressed to the Editor at the Office of the Journal, and not to his private house.

Authors desiring reprints of their articles published in the British Medical Journal are requested to communicate beforehand with the Manager, 429, Strand, W.C.

Correspondents who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

Correspondents not answered are requested to look to the Notices to Correspondents of the following week.

Manuscripts forwarded to the Office of this Journal cannot under any circumstances be Returned.

Public Health Department.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* British Medical Journal *are devoted will be found under their respective headings.*

QUERIES.

A. R. would be glad of references to standard works wherein hiccough is treated of.

M.B., C.M., asks for advice in the treatment of a case of gleet of twelve months' duration. Injections of zinc sulphate, iodine, and silver nitrate, iodoform bougies, blistering the perineum, and the passing of instruments have been tried without benefit.

Recurrent Acne Rosacea.

Member would be glad to hear of suitable treatment of above in lady, aged 38. Congestion of the face occurs during or immediately after dinner, lasting some hours; it is greatly aggravated by cold or well diluted wines; the skin of the whole body very irritable; catamenia regular. Treatment adopted—careful diet, tonics, antidyspeptics, lead—has completely cured eruption but only to recur.

Colonial Degrees in the British Isles.

B. D. T. inquires whether a medical graduate of the Melbourne University could sign a medical certificate of death in England.

*** No certificate of the cause of death given by a medical practitioner, whatever his qualifications may be, is recognised unless his name be on the *Medical Register*

ANSWERS.

Medical Aid Societies.

Fornix.—The Hallbankgate and District Medical Society, whose documents our correspondent forwards, is one of the new ones which are springing up in all parts of the country. The result of their establishment can only be disaster alike to the best interests of the public and the profession; for, on the one hand, it substitutes the inadequately remunerated labour of a wage-paid dependent medical servant for proper medical attendance; and, on the other, reduces to comparative poverty the members of a generous profession. The licensing bodies generally cannot, in our opinion, long abstain from following the clear lead of the Royal College of Physicians of Ireland and the Royal College of Surgeons of England in forbidding their Licentiates and Members from holding offices in these "middlemen's practices."

Venereal Disease and D.T. in Club Practice.

D. T.—All friendly societies specially refuse liability for sick claims arising from venereal diseases. This is always laid down in their rules, and if the medical officer of the society is called upon by a member to attend him for any such disease he is entitled to charge his ordinary fees for the same. In laying down this rule is must not be understood to include attendance for the remote effects of venereal disease; for, if this were so, a member of a friendly society, who had once contracted syphilis, might never afterwards be able to avail himself of the services of the society medical officer. With regard to delirium tremens, the case is not so clear. If it arose immediately in consequence of a drinking bout, strictly speaking, according to the rules of most friendly societies the medical officer would not be expected to attend the member in his official capacity; but this disease so often occurs in connection with other ailments, and is so bound up with chronic alcoholism, that in most cases it would be impossible for the medical officer to refuse to attend, for a large proportion of the disease he is ordinarily called upon to attend is chiefly caused by excess of alcohol.

NOTES, LETTERS, Etc.

Erratum.—In the case of Tibbits *v.* Toye, reported in the British Medical Journal of January 27th, p. 221, column 2, line 4, for 515 per cent., read 15 per cent.

The Balneological Congress, which was to have been held in Berlin this Easter, has at the suggestion of the President, Professor Oscar Liebreich, been postponed, in order that it may not clash with the Balneological Section of the International Congress at Rome.

Prizes.

The Turin Academy of Medicine has awarded the "international prize" of 10,000 lire to Professor Camillo Golgi, of Pavia, for his researches on Malaria. The Medical Faculty of the University of Würzburg has unanimously awarded the Rinecke prize of 1,000 marks and a silver medal to the same investigator for his work in Neurology.

Beer in Jaundice.

Dr. A. J. Garland (Oomaru, N.Z.) sends a note of the case of a business man, aged 56, who, in December, 1891, had an attack of biliary colic, and slight attack of jaundice in January, 1893. These two attacks occurred at times when he was suffering much anxiety. A fortnight after the last attack he became jaundiced suddenly, with foul tongue, bile pigments, and acids in the urine, and clay-coloured stools. The treatment adopted produced no effect until he began to drink "beer in the fermenting stage." Improvement began in a few days, and in three weeks he was quite well. The brewer who recommended the use of the beer states that its value has been known to his family for many years.

Instantaneous Cure of Housemaid's Knee.

Dr. Wm. Rushton Parker (Kendal) writes: Mr. Hugh C. Roberts's report of the cure of a case of housemaid's knee by an accidental fall upon it reminds me of the treatment ordinarily adopted by the late Mr. Hugh Owen Thomas, of Liverpool, which I have often seen him successfully practise. Bending the patient's knee, he gave a sharp blow upon the swollen bursa with his fist, thus breaking the sac and dispersing the fluid subcutaneously; he then strapped the knee for a few days in order to keep up enough pressure to cause the absorption of the dispersed fluid.

Physiology or Clinical Medicine.

M.D.Edinburgh writes: Your correspondent who signs his name "An Honours Man in Professor Sharpey's Class" takes umbrage at what I consider to be two extremely fair questions which were given at the last examination of the Conjoint Board, and he says he would like to know the name of any professor of physiology who teaches his students the use of the laryngoscope. When I studied under Professor Rutherford at Edinburgh in 1879 every member of the class of physiology was taught the use of the laryngoscope, not on models, but on the living subject. In my opinion, a student who cannot answer such fair questions as the ones complained of deserves to be referred for at least six months.

Public Health Appointments.

Filtration writes: One can agree with Dr. Armstrong's suggestions as to the appointments in the future for the post of medical officer of health, "that the aspirant for the office should have some experience as an assistant to a medical officer of health of some county or large district." And one feels "immensely" grateful to the General Medical Council for raising the registration fee for diplomates in Public Health to £2, in order to "increase the status of holders of such in public and professional esteem." But one cannot see the good of these arguments when a candidate for a health appointment who is a graduate in Hygiene gets thrown against a rival candidate—I believe all the other candidates were the same non-diplomates—who has neither a degree nor a diploma in Public Health. One begins to ask, Where does the "pecuniary advantage" come in of a candidate having a diploma in Public Health over another that has not? Does the Local Government Board accept such men in preference? In conclusion, I would go further than Dr. Armstrong or the General Medical Council, and suggest "that all men appointed to the post of medical officer of health must possess a degree or diploma in Public Health irrespective of population." Then men who have spent time and money in obtaining the same will have a chance of obtaining posts they are fitted for against "practically the unqualified."

"Save me from my Friends."

We offer the following to *Mr. Punch* as an interesting addition to his collection of "Things that might have been expressed differently." A certain Chicago clergyman is said to have recently announced from the pulpit that "our dear sister Mrs. X. is suffering from a serious and painful illness; she is being cared for by our dear brother Dr. ——. *Let us all pray for her safety!*" We do not know whether the reverend gentleman had a grudge against the practitioner in question, or whether the mention of his name in this artless manner was intended as an advertisement. If the latter, it may perhaps be thought to have brought its own Nemesis.

The Scientific Uses of Liquid Air.

Amongst the crowded audience that assembled to hear Professor Dewar's lecture at the Royal Institution on January 19th were many prominent members of the medical profession. Many flasks filled with liquid air (which is transparent like water), cooled to about — 200° C., were hanging in front of the lecturer. These flasks were of spiral construction, to prevent extraneous heat from reaching the liquid at the centre, and consisted of two glass flasks, one surrounded by the other, with a vacuum intervening. It is found that convection is annihilated by a vacuum. Similarly an electric spark can scarcely be made to pass in a high vacuum at — 200°, and at — 274° the passage of the spark would probably be absolutely impossible, except by an enormous increase of its voltage; but the magnetism of the magnetic needle is increased at a temperature of — 180°. The conductivity of metals is increased at these low temperatures, also the tensile strain. The breaking strain of iron, for instance, is nearly doubled, the force of cohesion asserting itself with greatly increased power. The colours of various bodies—iodine and vermilion, for example—are much changed at a temperature of — 180°, but blues and organic colouring matter of all tints are very little affected. At the end of the lecture some of the liquid air was solidified. In reference to this experiment a curious point was observed. Oxygen by itself will not solidify, but can be made to do so

when mixed with nitrogen, as in atmospheric air; but in liquid air the nitrogen easily boils off, leaving the oxygen so nearly pure that it will not solidify. It was found that a specimen of liquid air that had been in the room during the lecture could not for this reason be solidified. Some fresh air from the lecture room was, therefore, filtered, liquefied, and eventually frozen. After the lecture Professor Dewar froze a soap bubble by holding it just above the liquid air in one of the flasks, and then floated it on the surface of the liquid air. Unlike almost all other substances, gutta-percha expands at a temperature of —180°. A drop of liquid air, if kept in the spheroidal state on the skin, does no harm, but if for a moment it comes in contact with the skin it utterly and at once disorganises the part touched. The problems connected with the properties of matter which such researches may solve are many and vastly important, but their solution must be a work of time, as the method of research involved is difficult and tedious.

ANTISEPTICS IN THE TREATMENT OF ENTERIC FEVER.

DR. WILLIAM DONOVAN (Erdington) writes: In the BRITISH MEDICAL JOURNAL of January 13th Mr. Teevan speaks in too hopeless a tone. The so-called "antiseptic treatment" of enteric fever is no doubt a hopeless task; still, with an antiseptic which continues an antiseptic in its passage through the intestinal canal, we can largely modify and shorten an attack. Sulphur is the only drug I know of which acts as an antiseptic or germicide all along the tract. A short time since I had four cases of enteric fever under my care, all of which I treated with 20 minim doses of sulphurous acid, 2 grains of quinine, and 2 ounces of aqua chloroformi every three hours. Whether the type was milder than usual I cannot say; all I can say is that as soon as the sulphurous acid, in the doses referred to, was given the symptoms became rapidly milder and the stools less offensive, and the whole type of the disease became altered and, one might say, aborted.

A PILL IN THE TRACHEA.

DR. REGINALD C. WORSLEY (Iver, near Uxbridge) writes: The following may be of some interest. I am a bad pill taker, generally experiencing some reflex spasm of the pharynx when swallowing the pill, unless a very small one. A day or two ago I was in the act of taking a 2½ grain sugar coated pill, and tilted the head backwards with a mouthful of water; after swallowing the latter I thought the pill was "gone," but immediately felt it enter the glottis, causing a choking sensation, with coughing. I next distinctly felt the pill at the lower part of the trachea, about the bifurcation of the bronchi, and though breathing purposely with the most shallow respiration (fearing to cough it up into the larynx), at each slight inspiration I felt it move and cause the sense of irritation and inclination to cough which a plug of mucus excites in bronchitis. While considering whether to keep quiet or to try to expel it the matter was decided by an involuntary cough, which, probably taking the larynx by surprise, expelled the body like a bullet into my hand. Had the pill been larger I might have had difficulty in getting rid of it so easily. It is probable that the pharyngeal muscles, in contracting after the water was swallowed, pushed the pill forward beneath the epiglottis.

CHRONIC DYSPEPSIA: PERFORATIVE PERITONITIS AND DEATH.

DR. E. F. FLYNN (Clapham Common, S.W.) writes: Mrs. G., aged 37, a most neurotic woman, ten years married, with two children, the first, born seven years after marriage, came under my care, suffering from the usual dyspeptic symptoms. Her husband informs me that she suffered from dyspepsia for ten years. Last July she vomited blood for the first time (slight streaks), and suffered great pain after food. She was then confined to bed for seven weeks, and treated with milk diet, the only other thing allowed being Benger's food and the usual gastric sedatives. After this she resumed her usual household duties, but still suffered from dyspepsia and obstinate constipation, which she relieved with liquorice powder and castor oil. On the evening of November 24th she took half an ounce of castor oil, which acted several times; and on the morning of November 25th she took a strong seidlitz powder in a tumbler of cold water, which had no effect. Her diet on that day was: breakfast, bread and butter, egg and tea, something light in the afternoon. Her husband returned from business at 5.30. Mrs. G. was in the best of spirits, and had just finished her music lesson. She went into her bedroom, and shortly called out in great pain. On her husband coming to her, she stated she had violent pain in the abdomen, and said she felt as if something had given way in her inside. She was at once removed to bed in a state of collapse, and hot fomentations applied to the stomach and hot water bottles to the feet.

I saw her immediately, and found her lying on her back, with the knees well drawn up; the abdomen was considerably distended, and she could not bear any examination of it; she was suffering intense pain. The face was anxious, the complexion a pale dusky hue; pulse 140, weak and thready. She was ordered champagne in small and frequent quantities, and half teaspoonful doses of Valentin's meat juice, and ½-gr. morphine hypodermically. I saw her next at 5 A.M., the pulse was failing. The intense agony was relieved by hypodermic injections of morphine. At 10 A.M. she was free from pain, but begged for morphine; the pulse was barely perceptible; she was evidently sinking rapidly. At 7 P.M. no pulse could be felt at the wrist, and she died at 11.45 peaceably.

A curious feature in this case is that when pregnant she enjoyed the best of health and her dyspepsia vanished. Her youngest child is 16 months old. No *post-mortem* examination was allowed.

LETTERS, COMMUNICATIONS, ETC., have been received from:

(**A**) Mr. C. J. Acton, Wangford; A. Aiken, M.B., Hanley. (**B**) A. E. Booth, M.B., Liverpool; Mr. A. E. Barker, London; Dr. J. Barr, Liverpool; Messrs. Brown, Mitchell, and Page, London; Dr. Jex Blake, Edinburgh; Mr. E. Bell, Hendon; Messrs. J. Brown and Son, London; Brigade-Surgeon-Lieutenant-Colonel; Mr. C. G. Brown, Goole; R. K. Brown, M.B., London; Dr. W. Brown, Bristol; Mr. T. B. Browne, London; E. C. Baber, M.B., Brighton; Mr. B. Bryan, London; Mr. A. Butcher, Birkenhead; Professor C. Baumber, Freiburg; Mr. M. R. J. Behrendt, Scunthorpe; Messrs. David Bryce and Son, Glasgow; Mr. H. C. Burdett, London; Dr. Bond, Gloucester. (**C**) J. M. Cotterill, M.B., Edinburgh; Cutis; Dr. J. Cagney, London; Dr. Cabanes, Paris; Dr. F. H. Collins, Manchester. (**D**) District Medical Officer; Dr. S. B. De Butts, London; Dr. A. Duke, Cheltenham; Messrs. W. Durrant and Co., London; D. T. (**E**) Enquirens; Emeritus; Messrs. Eyre and Spottiswoode, London; Dr. M. G. Evans, Cardiff; Epidemiological Society, the Secretary of the, London; Dr. T. R. England, Montreal. (**F**) Dr. R. F. Frazer, London; E. B. Ffennell, M.B., Kimberley; C. Forbes, M.B., London; Messrs. Funk and Wagnalls, London; Dr. A. F. Fergus, Glasgow; Mr. W. Frew, Walmer. (**G**) Messrs. Goodman and Young, London; A. R. Gunn, M.B., Glasgow; Dr. L. M. Griffiths, Clifton; Dr. J. Galloway, London; Mr. D. Garnett, Southport; Dr. A. B. Griffiths, London; R. R. Giddings, M.B., Nottingham; Mr. G. G. Griffith, London; Dr. E. G. Gilbert, London; G. R. P. (**H**) Mr. F. Harris, Southport; D. Hardie, M.B., Brisbane; An Honours Man in Professor Rutherford's Class; Mr. J. A. J. Howell, London; Mr. Nelson Hardy, London; Mr. J. Harris, London; Messrs. George Hill and Sons, London; Mr. F. T. Hindle, Askern. (**J**) Dr. R. Jardine, Glasgow. (**K**) Dr. T. N. Kelynack, Manchester. (**L**) L.R.C.P.; Dr. T. G. Lyon, London; Mr. J. Lawrence-Hamilton, Brighton. (**M**) M.R.C.S.Eng.; M.B.; M. F.; Mr. W. L. Morgan, Oxford; M.D.; Dr. A. C. Munro, Paisley; Professor J. McK. Cattell, Garson-on-Hudson; M.D.Edinburgh; Mr. E. Murphy, Southsea; Dr. G. B. Mead, Newmarket; Dr. J. H. Mackenzie, Edinburgh; A Member; R. L. Meade-King, M.B., Exeter; Mr. A. Maude, Westerham; Mr. R. Morison, Newcastle. (**N**) N.; Mr. W. B. Norcott, Heidelburg; Dr. J. Neil, Oxford; Dr. A. Newsholme, Brighton. (**O**) Dr. G. Oliver, Harrogate; Odontological Society of Great Britain, the Secretary of the, London. (**P**) Practitioner of nearly Twenty Years; Pruritus; Mr. F. R. H. Potts, Amersham; Mr. W. R. Parker, Kendal; Dr. A. Puller, London; Mr. J. Pollard, Wakefield. (**R**) Royal College of Physicians, the Secretary of the, Edinburgh; Dr. R. R. Rentoul, Liverpool; J. A. Robertson, M.B., London; Dr. H. B. Robinson, London; Dr. J. W. Ramsay, Bournemouth; Dr. A. Robertson, London; Royal Microscopical Society, the Secretary of the, London; Dr. B. Rake, Trinidad; Royal Ear Hospital, the Secretary of the, London. (**S**) Dr. F. F. Schacht, London; Surgeon; Mr. R. D. Sedley, London; A. J. B. Squire, M.B., London; Mr. W. J. Stephens, Nottingham; Mr. C. H. Shears, Liverpool; Mr. R. V. Sutton, Newport; Mr. W. J. Stephens, Brighton. (**T**) Professor Tilden, Birmingham; Mr. E. A. Toms, London; Mr. W. H. G. Tilt, London; Mr. F. Treves, London; Mr. F. H. Turner, East Bergholt; Mr. B. D. Taplin, Dorrington. (**V**) E. S. Vint, M.B., Long Sutton. (**W**) Dr. R. T. Williamson, Manchester; Dr. J. Watson, Southsea; Mr. G. L. Williams, London; Mr. T. H. Williams, Oswestry; W. A. S.; Dr. A. E. Wright, Southampton; Mr. W. R. Williams, Preston; Mr. E. W. Wallis, London; Dr. H. F. Waterhouse, London. (**X**) X. Y. (**Z**) Dr. Zehender, Munich; etc.

BOOKS, ETC., RECEIVED.

A Manual of Practical Hygiene. By W. M. L. Coplin, M.D., and D. Bevan, M.D. London: Kegan Paul, Trench, Trübner, and Co.

Modern Gynæcology. By Dr. C. H. Bushong. London: Henry Kimpton. 1894. 7s. 6d.

Atlas der Krankheiten der Mundhöhle des Rachens und der Nase. Von Dr. L. Grünwald. Band IV., München: J. F. Lehmann. 1894. M. 6.

Bericht über die dreiundzwanzigste Versammlung der Ophthalmologischen Gesellschaft Heidelberg 1893. Redigirt durch W. Hess und W. Zehender. Stuttgart: F. Enke. 1893.

Mechanical Aids in the Treatment of Chronic Forms of Diseases. By G. H. Taylor, M.D. New York: G. W. Rodgers. 1893.

La Moelle Épinière et l'Encéphale avec Applications Physiologiques et Médico-Chirurgicales et suivis d'un Aperçu sur la Physiologie de l'Esprit. Par Ch. Debierre. Paris: Félix Alcan. 1894.

Anesthésie Physiologique et ses Applications. Par Dr. Raphaël Dubois. Paris: Georges Carré. 1894. Fr. 4.

Précis de Prophylaxie Pratique. Par Dr. M. Delamare. Paris: Georges Carré. 1894. Fr. 9.

Traitement Chirurgical des Abcès du Foie des Pays Chauds. Par G. Zancarol. Paris: G. Steinheil. 1893.

Clark's Civil Service Annual and Calendar for Candidates and Officials. London: Civil Service Book Depôt. 1894. 2s.

The Ophthalmoscope. By G. Hartridge. London: J. and A. Churchill. 1894. 4s. 6d.

A Textbook of Physiological Chemistry. By Olof Hammarsten. Authorised translation from the second Swedish edition and from the author's enlarged and revised German edition by J. A. Mandel. New York: John Wiley and Sons. 1893. 20s.

*** In forwarding books the publishers are requested to state the selling prices.

PRESIDENTIAL ADDRESS
ON
THE INFLUENCE AND DUTIES OF THE BRANCHES OF THE BRITISH MEDICAL ASSOCIATION.

Delivered before the Dublin Branch of the British Medical Association.

By J. W. MOORE, M.D., F.R.C.P.I.,
Physician to the Meath Hospital and co. Dublin Infirmary; Professor of the Practice of Medicine, R.C.S.I.

Gentlemen,—I tender you my hearty thanks for the honour you have done me in unanimously electing me President of the Dublin Branch of the British Medical Association.

The Dublin Branch.

To fill this chair is a distinction of which anyone might well be proud, and when I recall the names of those who have preceded me in this high office, I am all the more sensible of the compliment you have paid me.

From the list of Presidents of this Branch one honourable name is absent—that of George Frederick Duffey. I regret that this should be so, because to Dr. Duffey this Branch owes much. In the early days of its existence he safeguarded its interests as Honorary Secretary in such a way as to merit the fullest and most grateful recognition of his services. Many of my hearers remember with what conspicuous success the Branch, under the able guidance of Dr. Duffey, at that time its ex-Honorary Secretary, played the part of host to the great Association of which it forms no insignificant part, in the summer of 1887, when, after a lapse of twenty years, the British Medical Association met for the second time in the Irish capital. At the close of that, the fifty-fifth annual meeting of the Association, it was moved by Sir Walter Foster, M.P., seconded by Dr. Dempsey, of Belfast, and unanimously resolved: "That the most cordial thanks of the members be given to Dr. George Duffey for his energetic and able organisation of this most successful and brilliant meeting."

At the same time it is a matter for congratulation that no slight has been intended, for it is an open secret that it has long been the wish of the Branch that Dr. Duffey should preside over its fortunes. With characteristic self-effacement, however, he has declined to be put in nomination for the chair, and his *nolo episcopari* has so far deprived us of the services of one who would prove a disinterested, able, and most courteous President were he to accept office at our hands.

The Irish Branches and Unattached Members.

In the penultimate number of the British Medical Journal for 1893 will be found the usual annual list of members of the British Medical Association, arranged in branches and districts. That list includes five Irish branches. These are, in alphabetical order, the Cork and South of Ireland Branch, comprising the province of Munster, except the co. Clare (members of Branch, 32; members unattached, 164); the Dublin Branch, its district comprising the province of Leinster (members of Branch, 140; members unattached, 222); the Londonderry and North West of Ireland Branch, its district comprising the counties of Donegal, Fermanagh, Londonderry, and Tyrone (members of Branch, 42; members unattached, 29); the North of Ireland Branch, its district comprising the counties of Antrim, Armagh, Cavan, Down, and Monaghan (members of Branch, 228; members unattached, 82); the South-Eastern of Ireland Branch, its district comprising the counties of Wicklow, Carlow, Kilkenny, and Wexford (members of Branch, 20).

Now, these figures relating to Branch membership are not altogether satisfactory, particularly as regards this metropolitan Branch. The Ulster Branches have attracted a far larger proportion of members to their ranks than have the Leinster and Munster Branches. In the North of Ireland Branch the membership reaches 73.5 per cent.; in the Londonderry Branch it is still as high as 59.2 per cent. On the other hand, Cork attracts only 16.3 per cent. of the resident members, and Dublin only 38.7 per cent. The number of unattached members resident in the district of the South-Eastern of Ireland Branch is not stated, so it is not possible to give the percentage of membership.

The West of Ireland district, comprising the province of Connaught and the County of Clare (for some unassigned reason separated on this occasion from its province of Munster), has no Branch, although as many as fifty-five members of the British Medical Association are resident within its borders.

It may be worth while briefly to consider the questions: Have the Branches in general a *raison d'être?* What are the actual and potential achievements of the body in which we are personally more especially interested, namely, this Dublin Branch? And why is it not better supported and its membership more prized?

The Value of Branch Organisation.

Have the Branches in general a *raison d'être?* To this query I answer without hesitation and with emphasis, "Yes." According to the sixty-first annual report of the British Medical Association, which was submitted to the first general meeting of members at Newcastle-on-Tyne on Tuesday, August 1st, 1893, the total numbers of the Association at that date was 14,703; the total revenue for the past year had been £34,143, while the expenditure had been £29,122; leaving a balance for the year of about £5,000; the investments to date amounted to £37,000, and the total excess of assets over liabilities was £50,735. I quote these facts to show how vast is the numerical and financial development of the Association; it has extended with giant strides both in the United Kingdom and in the Colonies. In the year 1892-93 no fewer than 996 new members had been elected, of whom 237 resided in the Colonies. In the same year 175 members died and 385 resigned, but there remains a net gain of 436 members in one short twelve months.

But what has this to do with the question of the Branches? Much every way. So mighty an Association would soon become unwieldy and inactive were it not for the local organisations of its component parts, which they call district Branches. As the annual report itself admits in a subsequent paragraph: "Much of the life of the Association is in the Branches, and your cordial thanks are due to the honorary secretaries for their able, courteous, and unselfish labours in the interests of the Association, both at home and in the Colonies."

Think for a moment of the constitution of the central governing body—the General Council of the Association. Outside the list of the official vice-presidents it consists exclusively of representatives of the several Branches at home and abroad. A representative is assigned to every 200 members affiliated to a Branch. In this way the largest and most active Branches secure the fullest representation on the General Council—for example, the great Metropolitan Counties Branch, numbering 1,235 members, has six representatives on the Council.

What is the result of this arrangement? Why, an opportunity is afforded for bringing under the notice and consideration of the General Council every matter of local interest and importance to the medical profession. At the hands of the Council each local question so brought forward receives a patient and attentive hearing, and has full justice done to it. If the matter successfully runs the gauntlet of professional opinion thus brought to bear upon it, at once the great influence of the powerful British Medical Association is enlisted in its favour, an influence which not once or twice in recent years has prevailed with public opinion on the one hand and with the Government or the Imperial Parliament on the other. Incidentally I may remind this meeting that the appointment of Sir Walter Foster, M.P., as Parliamentary Secretary to the Local Government Board of England, on the accession of the present Government to power, was no doubt in some measure due to his connection with and his services to the British Medical Association. The influence of this unparalleled professional organisation has been felt by successive Governments, and has left its impress upon the legis-

lation of successive Parliaments. The Public Health Acts, which now form a sanitary code for each division of the United Kingdom, the Local Government Acts for England and Scotland, the Notification of Infectious Diseases Act, and recent Army Warrants are all instances which illustrate the far-reaching influence of the Association and its numerous Branches in developing and moulding public opinion on matters of supreme national and imperial interest.

If this is so—and who will be found to deny it?—it is essential that the members of the Association resident in Ireland should form themselves into Branches, and fall into line with their brethren in Great Britain and the Colonies. Unless this is done, speedily and heartily, it is to be feared that Irish professional interests will suffer, and some true Irish grievances will go unredressed. The unsatisfactory status and emoluments of the Poor-law medical officer; the defective, nay the chaotic, condition to which the sanitary organisation of our country is reduced; the beggarly remuneration doled out to the profession for services rendered to the State in connection with the registration of births and deaths, the filling up of vaccination certificates, the notification of infectious diseases, the drawing up of sanitary reports—all these, and other like grievances, cry aloud for redress with no uncertain voice. In the British Medical Association and its Branches we have ready at our hand a potent weapon with which to do battle for the welfare of the people and our own just rights. Shall we hesitate to grasp that weapon, and to wield it with a hearty good will?

The Work of the Association and its Dublin Branch.

I know it is objected that the existence of a Dublin Branch is unnecessary, because the profession possesses in the Royal Academy of Medicine in Ireland a body which fosters and promotes its interests from the scientific side; and in the Irish Medical Association, again, a body which does battle for the rank and file engaged in the Poor-law Medical Service of this country. Such an objection is not well founded, and can be advanced only by those whose knowledge of the facts is at least imperfect, if not inaccurate.

On behalf of the Dublin Branch I disclaim—and I can do so with truth—any rivalry with either the Royal Academy of Medicine or the Irish Medical Association. I am happy to think that these important professional bodies are on the friendliest terms with our Branch, and that on many occasions of the first importance to medical and public interests all three bodies have stood shoulder to shoulder with the view of advancing these interests to the utmost. What has happened in the past will happen again.

Let anyone who is interested in the question take the trouble to refer to the minute books of the Branch, to the published accounts of our annual meetings, and he will find that this statement is correct.

The first subject which engaged the attention of this Branch after the eminently successful meeting of the Association in Dublin in 1887, was the teaching of pathology in the medical schools of Dublin. On January 6th, 1888, the Council received the report of a committee appointed to consider the question at the previous general meeting of the Branch, and it was then unanimously resolved that, "The Council of the Dublin Branch strongly recommend that steps should be taken to establish chairs of pathology in the respective schools of medicine in Ireland."

In the Session of 1889 the "Poor-Law Union (Ireland) Officers' Superannuation Bill" engaged the anxious attention of the Council of the Branch. On March 2nd in that year a very powerful letter, on the subject of the serious grievances under which the Poor-Law medical officers of Ireland suffer in consequence of the very unsatisfactory state of the law which deals with their superannuation allowance, was addressed to the Right Hon. A. J. Balfour, M.P., then Chief Secretary to the Lord Lieutenant, by the Council of the Irish Medical Association and by the Council of this Branch, acting conjointly. In the following year these two bodies took part in a deputation to the Chief Secretary on this same subject.

In reference to this topic, the report of the Parliamentary Bills Committee, presented to the annual meeting of the Association at Newcastle-on-Tyne last August, contains the following paragraph: "The grievances of the dispensary doctors in Ireland still remain unredressed. Two Bills, one dealing with superannuation, and the other with general reforms, have been introduced in the present Parliament by the Irish Medical Association, acting in concert with the Chairman and other representatives of the British Medical Association. The Bills have been 'backed' by members of all shades of political opinion, and much support has been promised. But the demands upon the time of Parliament by the Home Rule Bill have led to the practical exclusion of all other subjects, and we do not think that any progress will be made this year in the direction of ameliorating the condition of these badly-treated public servants."

In 1890 the Council of the Branch joined in an emphatic protest with the Irish Medical Schools' and Graduates' Association against the exclusion of the holders of Irish degrees and diplomas from hospital appointments in England. At the general meeting of the Branch, on January 29th in that year, a resolution was adopted, on the motion of Dr. Thornley Stoker, to the effect that: "This Branch of the British Medical Association is of opinion that the diplomates of the Irish Universities and Corporations should possess the same privileges in respect of public appointments as are enjoyed by diplomates of the other divisions of the kingdom."

This matter, of such vital importance to Irish graduates and diplomates, was not lost sight of. On July 15th, 1891, the following resolution was unanimously adopted, namely—"Resolved: That the Council of the Association be instructed to communicate with the authorities of the various hospitals and infirmaries which exclude Irish diplomates from their medical and surgical appointments, inviting their attention to the unjustifiable nature of such restrictions, and requesting them to take such steps as are necessary for their removal."

The President of the Branch for the time being, Dr. Walter G. Smith, now President of the Royal College of Physicians of Ireland, subsequently attended the annual meeting of the Association at Bournemouth for the express purpose of supporting this resolution. This he did with excellent and telling effect, and it is but fair to add that he was ably seconded in his efforts by Dr. Farquharson, M.P., who said that, as a Scotchman, he was glad to join with the mover of the resolution in an emphatic protest against what he might call a narrow and illiberal policy. He added that "he was very glad that this strong body"—the British Medical Association—"had taken up this question, and he hoped the effect of their influence would be that this injurious and absurd restriction would be swept away before long."[1]

This question of the non-admission of Irish and Scotch diplomates to certain appointments connected with medical charities in England was considered by the Council of the Association time after time, in the most painstaking and persevering manner. To the last annual meeting, held at Newcastle-on-Tyne in August, 1893, the Council made what may be regarded as a final report on the subject, to the effect that out of 270 medical charities applied to, 187 have no restriction, while only 17 appear to have decided rules against the admission of Irish and Scotch diplomates, and decline to alter their rules.

Another great work in which the Dublin Branch has borne no inglorious or inactive part within the past few years is the attempt to secure redress for the grievances and disabilities under which the Army Medical Service has too long laboured.

On June 3rd, 1890, it was unanimously resolved that the Council of the Dublin Branch of the British Medical Association should address a letter to the Right Honourable E. Stanhope, then Secretary of State for War, strongly urging that the recommendations of Lord Camperdown's Committee referring to the Army Medical Service should be carried out. A circular relative to the Departmental Committee, presided over by the Earl of Camperdown, for the purpose of improving the status of army medical officers was subsequently sent in the name of the Council to the members of Parliament for the City, County, and University of Dublin.

The letter to the Secretary of State for War is worthy of quotation. It runs as follows:

[1] British Medical Journal, August 31st, 1891.

College of Physicians, Kildare Street, Dublin,
June 5th, 1890.

From the President Dublin Branch, British Medical Association.
To the Secretary of State for War, War Office, London.

Sir,—With reference to the enclosed resolution which was unanimously adopted at a meeting of this Council, held at the College of Physicians, on the 3rd instant, I am directed to inform you that this Council, representing members of the British Medical Association, begs strongly to urge on you the necessity that exists for allaying the present state of discontent prevailing among the officers of the Medical Staff of the Army.

This Council considers this can best be done by adopting in their entirety the recommendations made by the Parliamentary Committee presided over by Lord Camperdown.

I have also to point out that the Parliamentary Committee in question having heard the evidence, not only of the officers of the medical staff, but also of "your miltary advisers," were thus able to form an unbiassed opinion, which opinion should not, this Council considers, now be lightly set aside. In conclusion I beg to inform you that the feeling of unrest and discontent engendered in the minds of officers of the medical staff, a result of the uncertainty of their prospects and ill-defined position in the army, is fast spreading to the medical schools in this country, the consequence of which will be an almost certain falling off in the number and quality of candidates for the Army Medical staff.—I have the honour to be, etc., John Kellock Barton,
President, Dublin Branch, British Medical Association.

The representations on this subject made to Government culminated in the reception of influential deputations by Ministers, on May 15th, 1893. The deputations consisted of old and distinguished army medical officers, as well as of civil representatives of the profession, headed by Mr. Ernest Hart, Chairman of the Parliamentary Bills Committee of the British Medical Association. They were received by Mr. Campbell-Bannerman, Secretary of State for War, and by the Right Hon. the Earl of Kimberley, Secretary of State for India.

The subjects particularly urged on the War Minister were: The formation of a consolidated medical corps, with revision of titles, a change in itself which would cover many of the disabilities under which the medical service labours, and would undoubtedly greatly enhance efficiency; reversion to three and five years' tours of foreign service, as it is found that six years' tours in India are operating most disastrously on the health, mortality, and consequent efficiency of the officers; revision of the rules of retirement in the higher grades, the three years' service in a rank before pension can be claimed causing stagnation and disorganisation in the administrative ranks; the financial extension of warrants to India—a matter most pressing, not merely in view of the alarming depreciation of the rupee, but on its own merits of justice and good faith, which cannot be long denied or delayed without affecting the popularity of the medical staff, on which the pressure of the Indian service is telling severely. The details of medical officers for service in India, study time on full pay, exchanging, and other matters, were also touched on. On the Indian Secretary the subjects more closely affecting his department immediately were naturally urged.

The replies of Ministers, if not entirely satisfactory, were generally sympathetic, and the broad results of the deputations were such as to lead to anticipation that the revision, at least of some of the conditions complained of, will not be long delayed.

Another topic which has engaged the attention of this Branch was the registration of midwives. At the annual meeting in 1891 the following resolution was adopted on the motion of Dr. Atthill: "Resolved, that, in the opinion of this Branch, the registration of midwives, as proposed in Parliament, will not tend in any marked degree to render more efficient the nurses practising as midwives, unless steps be first taken to improve their education; that the question of registration should be postponed till it is shown that facilities exist for the education of such women as may desire to practise as midwives; and that the proposed registration of all women as midwives would be a most dangerous proceeding."

It will be remembered that, as the outcome of the agitation on the subject, a Select Committee of the House of Commons was appointed early in the session of 1892 to take evidence relating to the registration of midwives. On May 3rd of that year Dr. Atthill was requested to give evidence before that Select Committee as representative of this Branch, and this he afterwards did.

The Council of the Branch has also heartily co-operated with the Therapeutic Committee of the parent Association. On November 12th, 1891, the Council appointed a Therapeutic Subcommittee, consisting of the President (Dr. Walter G. Smith), Dr. Duffey, Dr. Finny, Dr. Conolly Norman, and Dr. Tichborne.

At a meeting of the Subcommittee, held January 7th, 1892, the schedules forwarded by Dr. Martin, Secretary to the Central Therapeutic Committee, relating to the action of nitrites on dyspnœa were considered, and Dr. Tichborne undertook to report on the nitrites in question.

The foregoing record of work done or in progress should, I think, satisfy the most captious critic that there *is* a reason for the existence of a Dublin Branch.

Why, then, is not our Branch better supported, and its membership more prized? Considering the work which has already been done, directly or indirectly, through the agency of the Branch, the answer to this question is not easy; and I will not try to answer it. Rather would I appeal to the 220 unattached members of the Association, who live in or near Dublin, to enrol themselves without delay in the ranks of this Branch, which should be the largest and most flourishing in Ireland. By so doing, they would at once double the representation of the Branch on the General Council of the Association, and so double its influence in its struggle for the rights and privileges of the profession in Ireland. Surely, the trifling annual subscription need deter no member from affiliation to the Branch. At the same time an addition of upwards of fifty pounds a year to the funds would enable the work in which we are engaged to be done with more completeness and effect.

Shall I appeal in vain to the *esprit de corps* of those members of the British Medical Association who are at present unattached? The interests of our noble profession are at stake; the status of our brethren of the Army Medical Staff is not yet assured; the grievances of the overworked, underpaid dispensary medical officers of our country cry aloud for redress, immediate and complete—but enough. I would like to close with a quotation from one of the many addresses to students delivered by the late Sir Andrew Clark. Opinions may differ as to the actual niche which his name should occupy in the temple of fame, but that he was ardently devoted to his profession no one can deny. Medicine, according to him, was "the metropolis of the kingdom of knowledge." We may all pay heed when he says to us: "You have chosen one of the noblest, the most important, and the most interesting of professions, but also the most arduous and the most self-denying, involving the largest sacrifices and the fewest rewards. He who is not prepared to find in its cultivation and exercise his chief recompense has mistaken his calling and should retrace his steps."

EXTRACTS FROM AN INAUGURAL ADDRESS ON THE OPPORTUNITIES FOR RESEARCH IN TRINIDAD.[1]

By BEAVEN RAKE, M.D.Lond.,
Medical Superintendent of the Leper Asylum, President of the Branch.

Malarial Disease.

In Trinidad we live in a rich and comparatively unexplored storehouse of pathology. Many questions arise with reference to the malarial affections of this island. It is now well known that malarial fever is associated with a polymorphic protozoon called the plasmodium malariæ, discovered by Laveran in Algiers, and afterwards found by Marchiafava and Celli in Rome and by Councilman in Baltimore. The organisms occur in various forms within the red corpuscles, or as free crescentic bodies. The intracorpuscular pigmented bodies are specially characteristic of the acute forms of malaria, and are readily affected by quinine. The crescents occur in the more chronic varieties, and often persist even while the general health is improving. Osler missed the plasmodium in only 8 out of 70 cases examined by him, and 5 out of these had taken quinine, so that we may fairly conclude that it is always present in malaria. It is, therefore, evident that the search for the plasmodium plays a most

[1] Delivered before the Trinidad and Tobago Branch of the British Medical Association.

important part in the diagnosis of all doubtful cases. Detailed records of observations in the many and various cases of headache, neuralgia, and other chronic affections, so often ascribed to malaria in this colony, would be of the greatest value. Again, we all of us know the controversy which arises from time to time as to the difference between hæmorrhagic malarial fever and true yellow fever. Here, again, a series of observations on the plasmodium would be most interesting. If a careful series of examinations in cases of yellow fever failed to show the organism, we should be driven to admit a specific difference between this disease and the worst forms of malarial fever.

Typhoid Fever and Dysentery.

Another fever which has been much in evidence during the past year is typhoid. This disease is certainly less common the West Indies than in more temperate climates, and also presents greater difficulties of diagnosis, especially in the dark-skinned races in whom the eruption is not easy of detection. Another difficulty arises from the frequency here of the malarial fevers. In this connection, again, the discovery of the plasmodium ought to be of great assistance in diagnosis.

The distribution of typhoid in Trinidad has been remarkable. The investigations of the committee appointed by the Board of Health showed that nearly all the cases occurred in Port of Spain; and that, though certain parts of the town were more affected than others, the epidemic did not travel in the direction of the water supply, nor was it more prevalent in the water sewage district. Here we are faced by a new difficulty. We cannot now accept Murchison's theory that typhoid fever is pythogenic, or simply produced by filth without the agency of a specific organism. Failing water as a carrier of the germ, we must appeal to dust, as in the case of tuberculosis. The summer months, however, during which the epidemic was most marked, were very free from dry dusty days. It is evident that, in connection with typhoid epidemics in this colony, weather reports are most important, such reports to include not only temperature, rainfall, and the other data usually given, but also an account of the amount of wind and dust prevalent.

Another disease which presents many problems is dysentery. Sporadic cases are always present here, as in other tropical colonies, but how are we to explain the epidemics which occasionally occur? It almost seems as if there might be some ground for admitting the epidemic constitution of Sydenham. What is especially wanted in dysentery is a series of careful bacteriological observations in sporadic cases of the disease, and a similar series made during an epidemic. In the last great epidemic which proved so fatal in 1888, and which attacked all sorts and conditions of men and women, irrespective of their surroundings or habits of life, the disease had a most erratic distribution. I found some of the earliest and most severe cases on the peaks of the northern mountains, many hundred feet above the sea level, and in localities apparently free from the risk of water contamination. Again, some of the low-lying districts would escape entirely, while others close by would be almost decimated by the disease. No definite distribution of cases along the lines of water supply was traced. If the epidemic depended on the dissemination of a specific germ, this was probably airborne, mixed with dust.

Kidney Disease.

In spite of the statement in Hirsch's *Handbook*, as to the rarity of Bright's disease in certain West Indian colonies, there can be no doubt that it is very common in Trinidad. Hirsch points out that by only a few of the authors referred to by him is a connection traced between renal disease and malaria. He further states that the intense centres of malaria, such as Lower Bengal, China, and Guiana, are the regions least affected with kidney disease. To the last of these statements, however, exception must be taken, for recent reports from British Guiana show that kidney disease is very common in that colony.

In Trinidad I have shown that Bright's disease is much commoner in lepers than in persons free from leprosy. The records of deaths in the Colonial Hospital showed a percentage of 7½ cases of kidney disease, while similar records at the Leper Asylum give 32 per cent. It is probable that this greater frequency is explained by the damage which is done to the sweat glands and ducts in leprosy. We have yet to learn whether the interference with the functions of the skin which takes place in malarial fever is sufficient to produce kidney disease, or whether this may also be caused by the arrest in the kidneys, in common with other organs, of pigment which has escaped from the disintegrated blood corpuscles in the spleen.

Ainhum.

Ainhum is another ill-understood disease which we meet with in Trinidad from time to time. Eyles, of the Gold Coast, has studied the changes which take place at the site of amputation, but we are badly in want of careful dissections of the nerves which supply the affected toe. Ainhum not being a fatal disease, it is very difficult to get opportunities of making such dissections, for patients are soon lost sight of after the toes have been amputated or have dropped off. From the analogy of cases in the Leper Asylum, where a condition resembling ainhum is not uncommon, not only in little toes, but also in other toes and in fingers, it seems to me very probable that ainhum is a trophic disease dependent on neuritis, and that when the groove has once formed its further extension and deepening are due to the constant movement and injury to which the toe is necessarily exposed. In an anæsthetic leper at the asylum, most of whose fingers were gone or ankylosed, I found a groove-like ainhum in one of the remaining fingers. This finger, the patient told me, he was in the habit of pressing against his thumb in order to hold his cup or knife. It is probable that such intermittent pressure would act as an irritant, and give rise to epidermal hyperplasia, and consequent deepening of the groove.

Yaws and Syphilis.

The subject of yaws has lately been brought to the front again by Numa Rat, of the Leeward Islands, who has written a careful monograph on the subject. Hutchinson, who at the request of the author wrote some prefatory remarks, confessed his inability to accept from the data furnished the view usually held in the tropics as to the non-identity of the disease with syphilis. Towards the elucidation of this long-vexed question Trinidad can contribute valuable material. Necropsies should be made on all bodies which have been the subject of yaws at any time during life, and gummata should be carefully searched for. Exact observations as to the primary lesion in yaws will also be of great value, also as to the tonsils and pharynx in the secondary stage, and, further, as to the protection afforded by syphilis against yaws and *vice versâ*. It may be as well, perhaps, to state here that after a more or less close acquaintance with yaws extending over a period of ten years, I have failed to see anything to suggest its identity with syphilis beyond the fact that both diseases yield to the same drugs. This argument is evidently fallacious, for it is well known that the same drug may occasionally cure two entirely different diseases, as in the case of arsenic, which cures pemphigus and some forms of malaria.

Ascaris Lumbricoides.

Ascaris lumbricoides is very common here as in other West Indian colonies. To what extent these round worms are responsible for the convulsions which so often prove fatal is still a matter for controversy. In spite of the statements of Henoch and others, it seems to me that the experience derived from necropsies in cases of sudden death in Trinidad strongly supports the belief that round worms very often cause convulsions. On looking through my notes of medico-legal necropsies, I find the following record as regards round worms:

In 9 cases the *post-mortem* examination showed only such lesions as could be attributed to the presence of worms in the intestine. In 2 more cases round worms were found associated with other conditions, once with malarial fever and once with pregnancy and dilated heart. In one case death was due to asphyxia caused by the impaction of a round worm above the epiglottis. In one of the 9 cases first mentioned a volvulus was discovered in the ascending colon; in another, cerebral effusion was found—a result mentioned by Eichberg. In the other 7 cases there was nothing beyond the presence of the round worms to account for death. One of these cases was most remarkable. The patient, aged 13, a boy in the reformatory, was suddenly seized with con-

vulsions. Santonin and calomel were given; but the fits recurred, and he died in thirty-three hours, after having upwards of thirty fits. At the necropsy all the viscera were carefully examined, but nothing was found to explain the convulsions except two round worms in the small intestine.

Further exact records of the condition of the viscera in fatal cases of convulsions associated with worms are much needed. It is possible that violent and prolonged convulsions may in some cases produce such conditions as cerebral effusion or volvulus. Be this as it may, we cannot ignore the great importance of a thorough knowledge of the pathology of ascarides in the tropics.

Ankylostoma Duodenale.

Though the valuable researches of Lutz have cleared up many points in the life history of this worm, we have still much to learn as to the pathology of the symptoms which it induces. For example, is the intense anæmia, which is the chief characteristic of ankylostomiasis, the result of a simple drain of blood from the intestine by the worms, or is it, as William Hunter contends, the result of excessive blood destruction in the portal circulation effected by the action of certain poisonous agents absorbed from the intestinal tract through breaches of surface made by the worms? Analysis in four cases of ankylostomiasis, which Mr. Casmody and Mr. Tate have been kind enough to make for me, have shown far less iron in the liver than is usually found in cases of pernicious anæmia. So far, then, the theory of a simple drain of blood is supported, but I am waiting for more cases before summarising my conclusions. Another very important question is the relation of dirt eating to the presence of the parasite. Lutz regards geophagy as a symptom of ankylostomiasis, but it must also be admitted that fresh parasites may be introduced into the intestine with the earth. Again, severe and fatal cases of earth-eating are sometimes met with in which no ankylostomata are present. On this point many more observations are needed.

AN ADDRESS

ON THE

TREATMENT OF CANCER OF THE BREAST.

Delivered before the Harveian Society of London.

By W. WATSON CHEYNE, M.B., F.R.C.S.,

Professor of Surgery in King's College: and Surgeon to King's College Hospital.

I think that this subject cannot be too often brought before the notice of the medical public. First, because the disease is common, at any rate in certain regions, and seems to be becoming more so. Secondly, because the necessary operation is looked on as a very simple one, and is now done by many practitioners, even by those who do not undertake the more serious operations of surgery. Following the description found in most textbooks of surgery, all that is thought necessary is to enclose the nipple and areola in an elliptical incision extending from the inner to the outer side of the prominent part of the breast, dissect the skin off the rest of the breast till one thinks that one has got beyond it, then deepen the incision to the muscle all around, and, seizing the breast, pull it off the muscle quite regardless as to whether the pectoral fascia comes with it or not. Further, it is often taught that if no glands are felt in the axilla it need not be opened, or if glands are felt the finger should be introduced and the enlarged glands pulled out. I do not of course mean to imply that this is the common practice with surgeons at the present time, but it was so till quite recently, and has been and is so taught in some textbooks. This method is wrong in every particular, and this leads me to the third reason why it seemed desirable to bring the subject forward, namely, that researches have been made within quite recent years, notably by Heidenhain, Stiles, Raymond Johnson, and others, which have given us much more precise knowledge as to the amount of tissue which ought to be removed in these operations, and it is well that these researches should be kept before the medical public and not be lost sight of.

Object of Operation.

What is the object of operation in cases of cancer of the breast? Some still look on cancer as a constitutional disease, and therefore only operate with the view of taking away the local manifestation and prolonging life, and they reckon that by operation twelve to eighteen months are added to the patient's life. They expect recurrence as a matter of course, and therefore do not pay very great attention to the exact details of the operation. Others look on the disease as essentially local, and therefore operate in the hope of ridding the patient of it entirely—in fact, of producing a cure. There are, I think, very few at the present day who do not adopt the view that the disease is essentially local in the first instance, and that distant parts become attacked as the result of direct infection from the primary growth. We know from pathology that malignant epithelial growths only begin in epithelial structures, and cannot commence in lymphatic glands, cellular tissue, etc.; and, therefore, recurrences taking place in these tissues after operations on the breast cannot mean a fresh manifestation of a constitutional disease, but must imply the growth of portions which have been left behind at the time of the operation. And, further, we know clinically that these local recurrences usually occur within a short period after the operation—six to eighteen months as a rule—and that if a patient remains free for a longer period, there is a very considerable probability that she will remain free permanently. As a matter of fact, the relation of the constitution to cancer is, I believe, practically the same as its relation to tuberculosis—namely, that there are certain persons in whom the disease will spread more rapidly and readily than in others, but that in all there must be some point of commencement, where the disease is in the first instance purely local. The chief argument in favour of the constitutional nature of the affection is the occurrence of cases where the second breast becomes the seat of disease after the commencement of the disease in, or the removal of, the first. Recent researches have, however, shown that in some persons, especially those with extensive mammæ, the lymphatic systems of the two breasts intercommunicate, and hence a direct spread of the infective material from one to the other is quite possible; and, as adding support to this view, is the fact that in these cases the primary growth is generally situated towards the sternal side of the breast first affected.

Further evidence of the local origin of cancer is furnished by the results of operation. Even with the older methods of operating a certain number of cases taken in hand at an early period of the disease remained free from recurrence, and more recently the number has increased in correspondence with the greater completeness of the operation, so that a very general estimate of 10 to 15 per cent. of permanent recoveries is given. Since the publication of Heidenhain's researches, however, surgeons who have acted on his facts produce better results, and in the recent French treatise on Surgery statistics are given where in one case as many as 22.5 per cent. were free from recurrence after three years. It must be noted, however, that this does not show the full recent improvement, because some of these were operated on several years ago, and I believe better results ought really to be obtained. Success must essentially depend on operation at the earliest possible period and on the thoroughness with which this operation is carried out.

Early Operation.

Early recognition of the disease and early operation cannot be too strongly insisted upon. Unfortunately, cases are too often watched and treated with various useless remedies till the infection has spread to such an extent that the possibility of getting beyond it by operation has become very doubtful. This is generally, no doubt, the fault of the patient, or her misfortune, in that she has not happened to notice the growth, and it cannot be a matter of surprise that, especially with the ordinary limited operation, recurrence should so frequently take place. Where one is certain that the disease is cancer and that the case is suitable for operation, delay is naturally objectless and unjustifiable, and of course it is only cases in which the diagnosis is doubtful which are watched.

The chief difficulty in diagnosis at an early stage is from chronic lobular mastitis, either simple or tuberculous; it is not often that the other tumours cause much difficulty. In the case of mastitis, the swelling is not usually so hard; it is distinctly tender; its enlargement is sometimes more rapid than cancer, especially when tuberculous; the enlargement of the axillary glands occurs earlier and is often greater and the glands are tender, and it is often a direct sequela of a pregnancy or a lactation. In the case of cancer the skin tends to wrinkle over the region of the tumour, when the breast is pushed to one or other side in a way which does not occur in mastitis till the inflammation has progressed considerably.

I do not propose here to go into the differential diagnosis of scirrhus of the breast. The question I wish to ask is, Why watch a lump in the breast if one has any suspicion that it may be cancerous? If it should turn out to be a cancer, then precious time has been lost, and it is of essential importance, from the point of view of permanent cure, that a decision should be come to without delay. What is no doubt in the practitioner's mind is that it would be a great pity to excise a breast and then find that after all it was only inflammatory; but the question of excision does not really come into play; an exploratory incision will usually settle the question. Cut into the swelling and remove a slice, and if it is scirrhus it can generally be recognised at once with the naked eye; if there still remains a doubt, the part removed can be submitted to microscopical examination. As a matter of fact, I should advise, if the lump is small, to remove it altogether rather than a slice of it; if it is a cancer there is none of the juice left in the wound, and if it is inflammatory the disease is taken away. Is there any objection to the exploratory incision? None whatever. If it turns out to be inflammatory a free incision is the best method of treatment, while if it be cancer the diagnosis is made at once. If done antiseptically the small wound does not give rise to any trouble, and the scar left need not be large.

Method of Removal.

If now we have to do with a cancer of the breast, ought we to be content with the incision I referred to at the beginning, and either leave the glands alone, or only pick out those which are enlarged? The answer is No, because the study of the nature and mode of extension of the disease shows that by such a method of operating we must, unless in cases which are early and very limited, leave material which has almost certainly become infected already. Cancer of the breast begins as an epithelial proliferation in the acini or ducts of the breast, but the growing epithelium very soon bursts through the wall of the tube and gets into the lymph spaces and lymphatic vessels, and the history of its further spread is intimately bound up with the anatomy of these vessels, for having once got into the lymphatic system portions become broken off, and are carried on with the lymph stream forming emboli either in the course of the vessels, or in the nearest lymphatic glands. Now, according to Sappey, the lymphatic vessels of the breast commence as a fine plexus around the acini, from which they run along the ducts, forming a plexus around them, to the nipple. From thence they pass into the fat, and a large plexus is formed under the areola, which is joined by lymphatics from the skin, and is called by Sappey the subareolar plexus. From thence three or four large lymphatic vessels pass to the axillary glands. Since Sappey published his researches, it has been found that this is by no means the only route which the lymph takes from the breast. In cases where the cancer is situated in outlying lobules, or near the deeper surface, it gets into the lymphatic system of the pectoral fascia, which also goes to the axillary glands. Further, from the sternal end lymphatics apparently run to the sternum and sometimes to the other breast, and, at any rate if the growth has become adherent at the inner end, they also run, I believe, to the mediastinal glands. Again, lymphatics run from the breast to the skin in the bands of fascia which connect the two—the suspensory ligaments of the breast. It must also be borne in mind that the pectoral fascia is intimately connected with the surface of the pectoral muscle, and can hardly be removed thoroughly without taking away also a thin layer of the surface of the muscle. Now, as the infective material may have passed along the lymphatics at an early period of the disease, it is necessary, in order to give the best chance against recurrence, to remove as far as possible the whole lymphatic area up to and including the nearest lymphatic glands, that is, the axillary glands, and that whether the disease in these parts is large enough to be felt or not. To remove the growth or even the breast alone may be sufficient in a few cases, but we know from clinical experience that it is not so as a rule. To remove the breast and the enlarged lymphatic glands is also not sufficient, because the vessels leading to these glands may be, and are very often, also infected. To remove the enlarged lymphatic glands and leave the fat and other glands which are not enlarged is also not sufficient, because in the fat lymphatic vessels run which may be infected, and once one gland is attacked the disease quickly extends to the others, which may be diseased although not yet enlarged. Hence, as I have said, the whole lymphatic area should be excised in all cases. It is not the visible disease which is the difficulty; we have here, as in aseptic treatment, to contend against the invisible, and, just as in aseptic treatment, our results will be good in accordance with the care with which we act against the invisible.

Therefore in excising the breast for cancer, we must, in the first instance, remove the whole breast, and in this connection we must bear in mind the facts which have been admirably demonstrated by Mr. Harold Stiles that the breast is a much more extensive organ than has been supposed, and that if only the prominent breast is removed, a ring of lobules will be left all around which may contain infective material and subsequently give rise to disease. In order to remove the whole breast, which extends over the greater part of the front of the thorax, it is necessary, or at any rate advisable, in all cases to remove the skin coextensive with the prominent part of the breast. No definite skin incisions can be described, because skin must never be dissected from over a tumour on account of the fibrous bands running to the skin to which I have already referred; where tumours lie towards the edge of the breast, special incisions must be made, not only to take away the skin over them, but for a considerable area around them. Further, the pectoral fascia must be removed coextensive with the breast and this is readily done by taking a thin layer of the muscles along with it. Then, lastly, the fat and fascia leading from the breast to the axilla, and the whole of the fat and glands in the axilla, should be dissected, not pulled, away in all cases. I do not propose here to go into the question of what should be done in advanced cases, but I may say that when the tumour is at the inner end of the breast, the incision should be carried well over the sternum, and the fat and fascia extensively removed in that region. In the great majority of my cases, I have been able to stitch up these wounds completely after undermining the skin, and using button and wire sutures; if any small area is left, it can be readily covered by a few skin grafts.

Results and General Considerations.

My remarks are not founded on mere theory, they are based on well-ascertained pathological facts, and the results which have been obtained fully bear them out. I have not myself a large number of cases to bring forward, but I shall mention the results of the first 20 cases on which I have operated in this thorough manner. I take the first 20 because the remainder have been operated on too recently to be of value. I began operating in this thorough manner in the beginning of 1890, and the first 20 cases in which I did the first operation (I am not referring to operations on cases of recurrence operated on in the first instance by other surgeons) bring me down to near the end of 1892. Thus, in all over a year and in some from three to four years have elapsed since the operation. Of these 20 cases, 14 remain well, and 6 have recurred. But it will be better to consider only the cases operated on in 1890 and 1891, that is to say, cases in which more than two years has elapsed since the operation. Of these there are 15, of which 10 remain well, and 5 have recurred and the patients have died of the recurrence. This would give a percentage of over 66 per cent. of cases remaining well for over two years. I may mention the length of time which has elapsed in each of these 10 cases: 4 years; 3 yrs. 8 mos.; 3 yrs. 3 mos.; 2 yrs. 11 mos.; 2 yrs. 10 mos.; 2 yrs. 3 mos. (2 cases); 2 yrs. 2 mos.; 2 yrs. 1 mo. (2

cases). In the cases which recurred, the disease reappeared in a year or less, except in one case where nearly eighteen months elapsed before internal cancer was diagnosed. Now, I do not for one moment mean to say that all of the 10 cases still free from disease after two years or longer will permanently remain so, nor that 66 per cent. is anything like the proportion of permanent recoveries that can be hoped for, but between 66 per cent. and 10 per cent. there is a great interval, and several of these cases might recur and still leave a better percentage than that got by the older methods of operating; in fact, only one need survive to give a result very much like that obtained by the old method, and I do not think I am too sanguine in thinking that more than one will remain free from disease. We know that where local recurrence takes place it usually does so within the first year, and Volkmann has formulated the following law, founded on his experience: "When, after an operation, a whole year has elapsed without recurrence one may hope for a permanent cure; after two years this cure is probable; at the end of three years it becomes almost certain." Of these 15 cases, 5 were operated on more than three years ago, and of these 3, or 60 per cent., remain well, and come under the third part of Volkmann's law which says that cure is almost certain. I would further remark, with regard to these cases, that none of them were early cases; in all the axillary glands could be felt enlarged before the operation and were found to be diseased at the time. I may, however, remark that in some of the cases the disease had been progressing slowly. As local recurrences are always due to disease left behind it is only what we should expect that the freer the operation the more likely one is to have removed all the disease. Of course, if the infection has passed beyond the axillary glands no extent of operation will remove the disease, and that, of course, brings us back again to the advisability of early operation. It seems to me that the pathological and clinical facts being as I have stated, even those who adopt the constitutional view, and who only operate with a view of prolonging life, must also adopt the more thorough operation.

The objections which are mentioned against the complete operation are mortality and interference with the freedom of movement of the arm. As regards the question of mortality, if the operation is performed aseptically the mortality will be very small, and may be neglected. In all my cases of excision of the breast, which, including extensive recurrences and some not so complete as above described, number about 50, I have only lost one case. This was a lady operated on a year ago for very extensive and immediate recurrence after excision on the old lines by another surgeon. I had not only to remove the greater part of the skin from the side of the chest, but also the pectorals, all the axillary fat and glands, and some glands from the neck; in fact, had I had any idea before I began that the disease was so extensive, I would not have operated. She developed pneumonia on the side operated on immediately after the operation, possibly as the result of the exposure in the cold weather, and died in a week. Allowing for accidents such as this, I do not believe that the mortality after the complete operation ought to be more than 2 or 3 per cent. if proper antiseptic precautions are taken. As regards the movement of the arm, there is no doubt a certain amount of restriction of movement after thoroughly clearing out the axilla, but all my patients can at least do their back hair afterwards, and I think if a patient understands that this operation gives her a much better chance of permanent recovery, and that she will be able to do her back hair, very few will think that a little restriction of movement is worth considering.

Cases Not Suitable for Operation.

With our present knowledge we can no doubt operate on more extensive cases than formerly with a fair prospect of success. At the same time I doubt if those very extensive cases in which the pectorals have to be removed or the clavicle divided are really suitable, and I should not myself advise operation in cases in which enlarged glands could be felt above the clavicle, in which several nodules can be felt in the muscles, in which there are numerous scattered nodules in the skin, or in which there is œdema of the arm, with pain down the arm, implying adhesion to the structures in the axilla. As to atrophic cancer, I see no reason why it also should not be removed unless the patient is very old and feeble.

The following is an abstract of the ten cases previously referred to, which remain well after more than two years. I may say that all of these cases were undoubtedly scirrhus as confirmed by microscopical examination.

1. Aged 52, operated on in January, 1890. Nipple had been retracted for about two years; tumour size of hen's egg, close to nipple, involving the skin; numerous small, hard glands to be felt.
2. Aged 38, operation, May, 1890. Tumour noticed two months, size of small orange, only slight puckering of skin, breast moves freely on muscle, a number of small, hard glands.
3. Aged 50, operation, October, 1890. Eczema of nipple for two years, lump noticed in breast for six months, close to nipple, several enlarged glands.
4. Aged 47, operation, February, 1891. Swelling noticed for two years, size of hazel nut, involving skin, glandular enlargement slight.
5. Aged 52, operation, March, 1891. Pain and a little swelling for nearly two years; tumour size of walnut, close to nipple, skin adherent and ulcerated, only slight glandular enlargement.
6. Aged 41, operation, October, 1891. Noticed lump and retraction of nipple for six months. Tumour size of orange, several glands, one of them large.
7. Aged 63, operation, October, 1891. Retraction of nipple noticed for eighteen months; small but diffuse scirrhus; a number of small, hard glands.
8. Aged 56, operation, November, 1891. Nodule first noticed three years ago, growing rapidly for last three months, size of hen's egg, glands considerably enlarged.
9. Aged 49, operation, December, 1891. Noticed lump for ten months, size of pigeon's egg; skin puckers markedly, glands small but hard.
10. Aged 62, operation, December, 1891. Lump noticed for three years, skin adherent but not ulcerated; numerous small, hard glands.

THE TREATMENT OF OVARIAN AND EXTRA-UTERINE CYSTS COMMUNICATING WITH THE RECTUM.[1]

By HARRISON CRIPPS, F.R.C.S.,

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With an experience of over 100 cases of ovariotomy, the four recorded below are the only instances of a fistula between the cyst and the rectum that I have met with, and it would be of interest to learn from more experienced operators whether this complication is as common as it has unfortunately been in my practice.

Case I.—M. A., a nurse, aged 28, was invalided from the hospital in June, 1892, on account of persistent pyrexia (night temperature ranging from 101° to 102°). She complained of no pain, and the pelvis was not examined. Two months later she had considerable pain in the left iliac fossa, and soon afterwards noticed an enlargement. The pain increased, and became very severe during the first week in October. A sudden discharge of over a pint of pus then took place *per rectum*. Two days later, on examination, the abdomen was found distended and very tender over the left iliac fossa. No distinct tumour could be felt from above. *Per vaginam* the cervix was pushed over to the left. In Douglas's pouch a nodulated swelling could be felt, but not very clearly defined. *Per rectum*, at a distance of 4 inches from the anus and just within reach of the finger tip, a small opening with ragged edges could be felt in the front wall. This obviously led into the swelling mentioned. For some days the patient was much relieved, but after that time the discharge was less, and the cavity appeared to be only partly drained. Pyrexia reappeared, and the swelling could be more distinctly felt *per vaginam*. During Dr. Champneys's temporary absence the patient came under the care of Dr. Griffith. After consultation, and on grounds to be presently considered, it was determined to drain the cyst or abscess cavity by puncture through the vagina. This was accordingly done, and a glass tube inserted. The result was satisfactory, the discharge diminishing, and the pyrexia disappearing. The patient left the hospital at the end of November, with no discharge from the rectum and scarcely any from the vagina. She was readmitted two months later. She had had no pain since leaving the hospital, the temperature being normal. She had passed no pus by the rectum, but had always had a slight discharge by the vagina. Her general health had greatly improved. On examination an elastic swelling could be felt on the left side, reaching nearly to the navel. No opening could be felt by the rectum, but there was a hole admitting a probe in the posterior quarter of the vagina

Assisted by Dr. Champneys I performed abdominal section. On the abdomen being opened a thin-walled cyst presented itself, spreading up to the left side and behind the posterior layer of the broad ligament. The cyst was tapped, and two pints of clear fluid were let out. At the bottom of the cyst, after evacuation, another cyst with very thick walls could be felt firmly embedded in the pelvis, between the uterus and rectum. This second cyst was tapped through the broad ligament cyst which had already been opened. A considerable quantity of gas and from 3 to 4 ounces of greenish pus escaped. The pus being thoroughly washed out, both cysts were removed. The removal of the lower cyst was very difficult. After some separation it was possible to drag it up from the deeper part of the pelvis. It was then found to be attached by

[1] Read before the Medical Society of London.

firm adhesions to the vaginal wall, and to the posterior part of the uterus. The knife had to be freely used in separating it from the vagina, where the communication existed. After separation the opening into the vagina would admit the finger tip. This was closed by fine sutures. The back part of the cyst was now found attached to the rectum, over an area of about 2 inches in diameter. This adhesion was carefully separated, till a portion somewhat less than an inch remained. This was obviously the site of the old communication, and its complete separation would have opened the rectum. The cyst was cut off, leaving this portion attached to the bowel. Its surface was scraped with a Volckmann spoon, and touched over with the actual cautery. The abdomen was flushed and a glass drainage tube inserted. The patient recovered.

Case II.—C. P., aged 32, was admitted into Martha Ward, under the care of Dr. Champneys, September, 1893. Had one child two months ago. For fourteen days she was feverish and ill. She had some blood-stained discharge three weeks ago. Since that time she has had pain and difficulty in passing water, and the urine was discoloured. Two weeks ago something broke and a quantity of matter escaped from the rectum, and has since continued. There is also considerable pus in the urine. Present condition: Is much emaciated and looks ill; tongue dry and cracked. Extending nearly to the navel, 4½ inches broad, is a fixed elastic tender mass; on the left side of the upper part of the iliac fossa are some small, oval, freely movable masses.

Per Vaginam.—Cervix fixed; behind and on the right side is a fixed indurated mass occupying the whole space on the left side. The part feels œdematous, but no certain elasticity can be felt. Bimanually the tumour has a more elastic feel. The patient was kept absolutely at rest in bed for a month. After a fortnight pus was no longer passed by the rectum, and that from the bladder decreased considerably; the temperature, however, was variable, and always above normal. Operation. On opening the abdomen a cyst was found apparently in the broad ligament, but since everything was universally adherent its exact relations were difficult to make out. The cyst contained about a pint of greenish-white sweet pus; it was adherent to the bladder and rectum. On separating the rectal adhesion there was a ragged-looking spot, but no actual hole could be seen. The suspicious-looking spot on the rectum was inverted and closed with four fine sutures. The bladder was distended by injecting water, but the site of the communication could not be found. The cyst was removed entire, and there was no pedicle. The opened broad ligament was partly stitched up, and a drainage tube inserted. A glass catheter was left in the urethra. Nothing occurred till the sixth day, the discharge through the drainage tube being slight and quite sweet. On account of some irritation the wearing of the catheter was discontinued. Twenty-four hours later urine to the extent of several ounces was passed by the drainage tube. The catheter was again kept in continuously for ten days. No more urine ever passed by the wound. A fine india-rubber was substituted for the glass drainage tube. The patient convalesced without constitutional disturbance, and she was discharged from the hospital seven weeks after the operation. There was still a small sinus at the lower angle of the wound, but nothing came through it.

Case III. *Tubal Gestation communicating with the Rectum.*—C. E., aged 30, was admitted into St. Bartholomew's Hospital in July, 1893. She had menstruated on March 27th, and continued to lose a blood-stained discharge till April 27th, when she was seized during the night with cramp-like pain in the abdomen. The pain was very severe and the abdomen tender on pressure. Three weeks later she had a similar attack, and on May 29th a third attack. On June 2nd she was examined by Dr. Champneys and the following note was made:

"Healthy looking, not anæmic, breasts not enlarged, areolæ pigmented, abdomen flat, some resistance below navel with tenderness. The whole pelvic excavation except the right posterior quarter is occupied by a round, smooth, tender, elastic swelling. Bimanually the swelling is nowhere more than an inch and a-half in thickness."

On July 13th she had considerable pain and tenderness. The temperature was 103°, and the swelling considerably increased in size. Assisted by my colleague, Mr. Bruce Clarke, I opened the abdomen and found a portion of omentum glued to the tumour, and this was separated with comparative ease. The tumour was bright red on the surface and very vascular. Over its upper and outer surface there were 3 inches of Fallopian tube, thickened and firm, and 1 inch in diameter, looking at first like intestine. The sac was adherent to the rectum behind and at the outer side, and to the bladder and uterus to the right and in front. The adhesions were easily separated with the finger, and there was considerable hæmorrhage. The chief blood vessels appeared to enter the cyst just below the fimbriated end of the tube, which was adherent to the broad ligament. The finger could be passed round the cyst on the left side, so that the thickened tube and what appeared to be a portion of the broad ligament formed a kind of pedicle 2 inches broad and ¾-inch thick. This was transfixed, tied, and divided, when the hæmorrhage to a great extent ceased. After division of the pedicle the finger tips were quickly passed round the whole of the cyst, which came away almost entire, leaving only a portion of old firmly-adherent clot at the bottom of Douglas's pouch. The cyst, on removal, was the size of a large fist. A fœtus 5 inches long and 1⅞ oz. in weight was found lying in Douglas's pouch, probably extruded from the cyst in process of extraction. After removing the cyst the boundaries of the cavity were very clearly seen. Behind was the rectum, on the inner side the uterus, and it seemed clear that the cyst was intraperitoneal—namely, actually bounded by the structures mentioned, and that the lid of the cavity was formed by the omentum.

At this period of the operation a small speck of fæcal material was discovered in one of the sponges. Upon investigation, a small circular opening, which would admit a large probe, was found in the rectum low down in Douglas's pouch. The tissue of the rectum in this neighbourhood was converted into a soft yellow-looking material, in the centre of which was the opening mentioned. The tissue was very friable, but two stitches were eventually passed across the opening, and the edges inverted and approximated. The cavity was well flushed out, and a drainage tube inserted reaching nearly to the bottom of the cavity. After the operation the patient was much collapsed, there was troublesome vomiting, and much abdominal pain and tenderness for some days, and her life was in considerable danger. The fluid which was drawn out through the tube at frequent intervals was at first watery and blood stained. After a while it became purulent; it was never much in quantity, but from time to time had a distinct fæcal odour, bubbles of gas coming through. After three weeks the discharge again became sweet, and a fine india-rubber tube was substituted. She left the hospital eight weeks after the operation, and there was still a small sinus, but nothing came through it but a drop or two of opaque serum in the twenty-four hours.

Case IV.—Patient, a lady, aged 30, married, and with no children was sent to me by Dr. MacVicker, of Almondsbury, with the following story: Eighteen months ago she had had an attack of what was supposed to be peritonitis. On recovering from this she felt pain in the lower part of the abdomen from time to time. At this period she consulted an eminent specialist, who informed her she had a tumour the size of an apple low down in the right side of the pelvis, and an exploratory operation was recommended. This advice was disregarded. During the last six months there had been only occasionally slight pelvic pain, but the evening temperature has been persistently raised, often as high as 104°, with profuse night sweats and great loss of flesh. Two months ago she had a sudden discharge of a large quantity of extremely fœtid pus by the rectum, and up to the present time this has been continued to a slight extent; some days she would be free from discharge, on others there would be half an ounce of pus.

On examining the abdomen no tumour could be detected. By the vagina an elastic swelling could be felt, low down behind the uterus, chiefly on the left side. The same swelling could be felt in the rectum, but the finger could detect no communicating opening. After consultation with Dr. Champneys, an operation was decided upon. On opening the abdomen, the small intestine and omentum were found matted together over the pelvic opening. After separating these the apex of the swelling was reached. The tumour was in the broad ligament, which was expanded nearly horizontally over it. It was bounded above by the Fallopian tube, in front by the uterus, and on the outer side by the rectum. The expanded broad ligament was opened by a 3-inch incision. The tumour was situated so deeply and the parts were so rigid, that the separation had to be done almost entirely by feel. At the commencement this was very difficult, but when the fingers once got in to the right layer, the greater portion of it was shelled out with comparative ease. The tumour, however, was very rotten, and a portion which had extended behind the rectum, the size of a small egg, broke away. This portion gave great trouble, but eventually was removed. An opening which would just admit the finger tip could be distinctly felt behind the rectum, where it was uncovered by the peritoneum. It was impossible to see the opening, but a careful endeavour was made to close it by sutures with a cleft palate needle. The hole was closed in a sort of fashion, but precision and neatness were impracticable. A glass drainage tube was passed into the bottom of the cavity. The incision in the broad ligament was then accurately closed by fine sutures, with the exception of the place through which the drainage tube passed; this, however, fitted quite tightly. Owing to the depth it did not seem practicable to draw the open layers of the broad ligament to the parietal peritoneum and skin. The operation was prolonged, and the patient suffered much from shock. For three days she held her own, and nothing came through the drainage tube except a small amount of bloodstained serum. On the fourth day some fluid fæculent material was drawn from the tube. By twenty-four hours the quantity had considerably increased, and it became extremely difficult to keep the patient clean, the discharge being very fluid and fœtid. The repeated dressings seemed to exhaust the patient, and she gradually sank, and died on the seventh day after the operation. No *post-mortem* examination was obtained, so the question of leakage by the side of the tube and peritonitis was not ascertained.

Cases in which an opening has been accidentally made during the course of a complicated dissection are not here referred to, but only such as have existed by suppuration and softening prior to the operation, or where the discharge of pus from the bowel showed sufficiently clearly the nature of the case. In considering these cases two questions seem to arise—first, as to the propriety of abdominal section whilst there is still an open communication between the cyst and the rectum: and, secondly, if an operation is performed, as to the best means of dealing with the opening. In considering the propriety of abdominal section the diagnosis becomes an important factor. In a considerable number of instances the previous history and a careful examination will make the nature of the pelvic swelling, which is discharging into the rectum, nearly certain; but occasionally there must arise an uncertainty in the diagnosis as to whether the pus proceeds from a simple pelvic abscess, or whether it is due to a suppurating ovarian tumour.

The first case recorded came under this category, and the treatment adopted was partly on the hypothesis that a simple pelvic abscess had to be dealt with. If the case is known to be a suppurating cyst, the danger of ovariotomy is doubtless increased, for after the tumour has been removed there remains an open communication between the intestine and the abdominal cavity, while its exact situation and the possibility of accurate closure cannot generally be ascertained until the operation has been completed. In Case I the facts were carefully considered by Dr. Griffith and myself in consultation. From the hectic symptoms, and the manner in which the patient was going down hill, it was obvious that something had to be done to drain more effectually the suppurating cavity. Three courses were open—to enlarge the opening in the rectum and insert a drainage tube, to drain by

the vagina, or to perform abdominal section with a view either to suprapubic drainage if a simple abscess had been found, or removal of the tumour if it should prove a suppurating ovary or tube. The first course was abandoned on the grounds not only of the extreme mechanical difficulty of keeping any tube inserted through the rectum in position, but also from the uncertainty of diagnosis, for if the swelling should prove to be a cyst ultimately requiring removal, it was of great importance if possible to get the rectal opening closed. Of the two remaining alternatives, drainage by the vagina was selected for the following reasons: (1) That the swelling could be felt projecting prominently into the vagina, whereas, being so deeply situated, it could not be felt above the pubes. (2) That if the swelling should prove to be a suppurating cyst, it would be a great advantage to allow time for the recto-cystic fistula to spontaneously close, which we thought might be accomplished by temporary drainage. This hypothesis fortunately proved correct, for no sooner was the vaginal drainage established than the pus ceased to be discharged by the rectum, and when abdominal section was performed some weeks later the opening was found completely closed. The risk to the patient's life when the operation was performed was doubtless considerably less than if the rectal opening had still existed, for it was so low down that its effectual closure would have been extremely doubtful.

It is open to discussion whether in a similar case temporary drainage might not be better and more safely established by abdominal section. The propriety of such a procedure would probably be determined by the situation of the swelling. In our case it would have been very difficult to have got at the cavity from above, and if it had proved to have been an abscess, it would have been nearly impracticable to have fixed the edges of the opening to the parietal peritoneum, and anything short of this would have been highly dangerous, from the nature of the pus. On the other hand the abscess was almost pointing into the vagina. If the tumour had been situated high up in the pelvis, primary abdominal section with a view to removal or drainage would probably have been the right course.

The remaining cases recorded were simpler in their nature, inasmuch as the diagnosis was clear. There was no doubt that the tumours were suppurating cysts and not simple abscesses, and from the fact that no opening could be felt within 4 inches of the anus, there seemed a fair chance of the fistulæ being sufficiently high for effectual closure after removal of the tumour. In two of the cases the openings were found in an accessible position and accurately closed by suture; but unfortunately in Case IV the position of the hole right behind the rectum made its accurate closure impracticable.

As regards the details of the proceedure in the circumstances of this case, in which there was no guarantee that the opening into the rectum was effectually closed by suture, there may be some difference of opinion. The tumour, owing to the way in which it had extended beneath the broad ligament was practically extraperitoneal, and had it been possible the edges of the opening in the broad ligament through which it had been shelled out should have been raised and stitched to the lower angle of the abdominal incision, and drained. The only other feasible plan other than that which was adopted would have been to have entirely closed the opening in the broad ligament *in situ*, trusting that the cavity would have drained through the hole in the rectum, and eventually have closed up.

After carefully considering the facts in the case recorded, should I have the misfortune again to meet with a similar condition, I would, in the event of its being impracticable to raise the edges of the open broad ligament to the lower angle of the abdominal wound, prefer completely to close the broad ligament *in situ*, and trust to rectal drainage rather than run the risk of suprapubic drainage through the peritoneum.

Poisoning by Misadventure.—It is understood that at a meeting of the Law Committee of Edinburgh Town Council, on January 17th, the mother of the young woman Swan, who was accidentally poisoned at the Fever Hospital some weeks ago, intimated her acceptance of £100 in satisfaction of her claim for damages, together with £25 for expenses.

ACUTE YELLOW ATROPHY OF THE LIVER.

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AND
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Cases of acute yellow atrophy are so rarely met with, that it seems desirable to give as full and explicit a report of the following one as the circumstances will admit of. Unfortunately, at the time the patient entered the hospital the burden of work was so excessive, on account of the epidemic of influenza then prevailing, that it was impossible to give the case the attention which it merited.

E. V., aged 21, admitted to the Toronto General Hospital, under Dr. McPhedran, January 31st, 1890.

History.—A domestic servant, unmarried. In infancy she had a slight attack of infantile paralysis, from which resulted some talipes varus of the right foot; since then she has been healthy. Her father, a brother, and a sister died of phthisis; her family history otherwise contained nothing of note. Her present illness began about January 1st with a cold from exposure. Two or three days later she took influenza, and the skin was noticed to be yellowish. She had some attacks of free epistaxis. She gradually grew worse, the jaundice deepening, and the stools becoming slate coloured and offensive, soon acquiring a clay colour. She complained of pain in the hepatic region. Her appetite was capricious, but that was attributed to pregnancy, which was supposed to be of about five months' duration. There was occasional vomiting of her food, with some slightly bile-stained mucus. Her mental condition was clear till near the end of January, when she began to grow apathetic and dull of comprehension. She continued to work until after the middle of the month.

Present Condition.—She is very deeply jaundiced, fairly nourished, evidently between five and six months pregnant. The only answer that can be gotten to any question is "the last three weeks." Her pupils are small but active. There is some brownish, sticky mucus adhering to the lips and teeth. She lies quietly, taking notice of nothing; takes liquid nourishment when offered. Temperature in the axilla 97.4° F., pulse 76. The abdomen is somewhat distended and tympanitic, except over the pregnant uterus. The area of hepatic dulness terminates an inch above the margin of the ribs; seems tender to pressure over it, and to pressure upward under the ribs. Area of splenic dulness extends to margin of ribs. Heart and lungs present nothing abnormal. Urine normal in quantity, dark, acid, specific gravity 1023. Tests readily give evidence of presence of bile pigments. Quantity of urea not estimated. On microscopic examination crystals of leucin and tyrosin are easily found; bowels constipated; considerable nausea, with vomiting of bile-stained mucus.

February 1st. The hebetude has deepened to semi-coma, with muttering delirium. She vomits everything that is given, also much dark, grumous fluid. The pulse continues slow, and the temperature subnormal.

February 2nd. Comatose, with occasional muttering. Pupils small, but respond to light. Grumous vomit continues at intervals. Liver dulness still further diminished. She died at 9 P.M.

Necropsy, eighteen hours after death. Body fairly nourished; rigor mortis well marked. General surface and mucous membranes deeply jaundiced. Pupils dilated. No cutaneous hæmorrhages. Pericardium bile stained, and contains one ounce of bile-stained serum. Endocardium bile-stained, also *ante-mortem* clot in right ventricle. Condition of muscles not noted. Pleuræ: numerous hæmorrhagic patches in right; recent adhesions in left. Lungs deeply congested. Peritoneum bile-stained. Spleen large and soft. Kidneys: capsule slightly adherent: cortex enlarged. Liver had receded under ribs; weighed 25 ounces; very flaccid, rather than friable; mostly red, but with some yellow patches; surface wrinkled. Gall bladder not noted. Stomach distended with gas, and contained much grumous fluid. Intestines contained much flatus; hardened fæces in colon. Uterus contained a five-month fœtus, which had been dead some days. Unfortunately, the pathologist who conducted the necropsy only preserved the liver for examination.

Pathological Histology.

A small piece only of the liver came for examination, and from what lobe this was taken could not be ascertained. It was hardened in alcohol, whereby the fixation was so complete that even the minute details of karyokinesis are readily and clearly seen in the hepatic cells. A part of the piece was stained *in toto* with hæmatoxylin and eosin, embedded, by means of the chloroform process, in paraffin, and sectioned to the thickness of 10 μ and under. These sections were fastened to the slide by means of the clove-oil-collodion mixture, and mounted in the usual way in benzole-balsam. We were forced to adopt the cementing of the sections to the slide, since without this the removal of the paraffin entails loss of many of the important elements necessary to determine the extent of the change in the tissue.

We had no opportunity of examining microscopically the liver in the fresh state, but this, we think, is a matter of regret only as regards the pigments of the areas affected with red atrophy, which have been removed, apparently, from the tissue by the alcohol.

So extensive here is the condition known as red atrophy that one of the authors at first concluded that the sections exemplified this condition alone. Fully nine-tenths of each section show no trace of hepatic cells at all, and these are present mainly directly under the capsule (Fig. 1). The

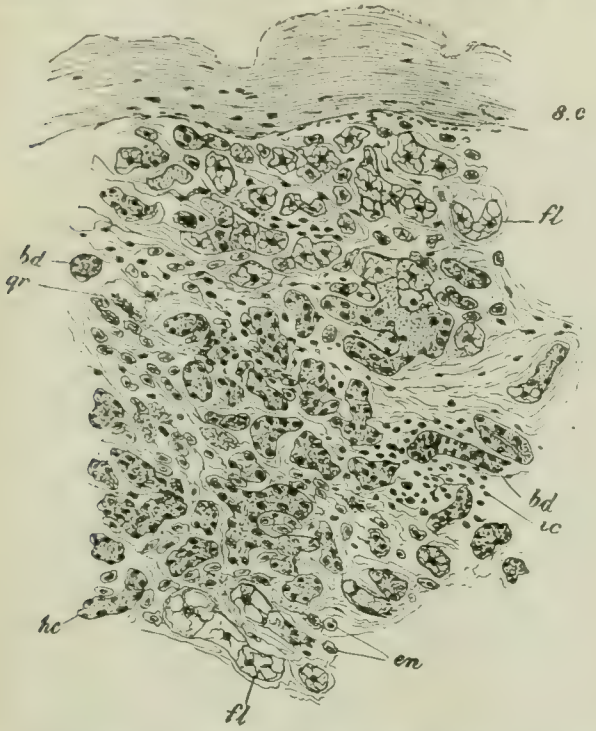


Fig. 1.--Represents a portion of the yellow area immediately under the serosa. In this part there was inflammatory infiltration, an occurrence not usual in the sections; *s c*, serous covering; *h c*, hepatic cells; *f l*, liver cells distended with fat globules; *b d*, bile duct; *en*, endothelial cells; *i c*, inflammatory cells; *gr*, granular deposit derived from disintegrated liver cells. ×110.

outlines of the original lobules can be made out roughly by the distribution of the biliary ducts, which are very abundant here—so much so that in the smaller interlobular canals as many as twelve and more have been often counted. The circulation of the blood in these lobules must have been greatly impeded during the progress of the disease, since in the great majority of cases all traces of venulæ centrales have disappeared.



Fig. 2.—A group of nearly normal hepatic cells with a blood capillary, from the yellow area; *a*, hepatic cell with nucleus in the process of division; *en*, endothelial cells, enlarged; *f ct*, fibrillar connective tissue in the vascular wall; *lc*, leucocytes in the interior of a liver cell. ×1,000.

Frequently in the lobules so roughly outlined in the sections small bile ducts can be seen, and sometimes these are continuous with those at the margin of the lobules. The origin of these, as well as of some of the interlobular ones, has been variously interpreted. Waldeyer, Zenker, Winiwarter, and others regard them as derived from the original bile ducts by proliferation of their cells, and consider that a regeneration of the hepatic parenchyma obtains through this process; while Klebs and Perls believe that the atrophying liver cells arrange themselves in rows which simulate bile ducts. Apparently Dreschfeld holds that a combination of both views is the true explanation.

We cannot subscribe to any one of these views; for, if the cells of the bile ducts multiply by division, some evidence of this ought to be present in our preparations. Not one single case of karyokinesis was observed in the great number of ducts examined, and this could not be due to faulty methods of treatment, since the same sections readily show a number of hepatic cells in division. On the other hand, it is scarcely possible that atrophy of a lobule would proceed so far as to leave only two or three parallel rows of cells, which, approximating, would form the ducts in question. Why should degeneration and death overtake all the other hepatic cells and leave only parallel rows here and there?



Fig. 3.—From the yellow area; *a*, liver cell with nucleus undergoing division; *h c*, hepatic cells; *b c*, enlarged bile capillary; *f ct*, fibrillar connective tissue of blood capillary wall; *end*, endocyte, in an endothelial cell; *en*, enlarged endothelial cells of blood capillary. ×1,000.

Goodhart's view that the apparently greater prevalence of biliary ducts is due to the contraction of the hepatic tissue and the resulting crowding together of the ducts in the interlobular canals, is, we think, correct; but it does not account for the larger than average size of the cells constituting these ducts nor for the presence of large-celled ducts within the lobular areas. It seems to us that the true explanation is as follows: In the normal condition the ducts of the interlobular canals are lined with epithelial cells of various sizes, and of shapes from columnar and cubical to the flat or scale form. The scale form is chiefly found in those finer ducts which are on the point of entering the lobules. The cells of all these ducts in acute atrophy increase in size, and this is due to the same condition which is responsible for the large size of the endothelial cells in the adjacent tissues. What this condition is is doubtful, although we believe that on the degeneration and death of the liver cells the resulting proteids and other compounds set free are absorbed by the surviving cells. Indeed, at times one can see in the endothelial cells pigmented granules which could only have come from the liver cells. The increase in the amount of the protoplasm of the cells of the ducts, its finely granular, and, to a certain extent, its eosinophilous character, are evidences that these cells are degenerating also or that the cells are absorbing the remains of degenerated or broken-down cells. The absorption of chromatin is shown by the large lobulated nucleus and its deeply staining contents in a few of these cells (Fig. 8, *a* and *b*). It is of course inside the margins of the original lobules that one can at times detect the transformation of the flat lining cells into the large cubical cells. Both the cell body and the nucleus of each of these are rich in chromatin, and this is so manifestly over-abundant at times that one is forced to the conclusion that it is derived through diffusion and ab-

sorption from the *débris* of destroyed liver cells. It is in such cells that one should expect to see cell division. Why it is absent when the cell is at least so nourished as to increase in size is puzzling. Sometimes these cells surpass the liver cells in size and then the nuclei are usually lobulated, as in the lymphoid cells of the spleen, bone medulla, or as in old leucocytes. The condition which underlies these nuclear phenomena is the abundance of chromatin, for which the lymphoid cells act as storehouses.

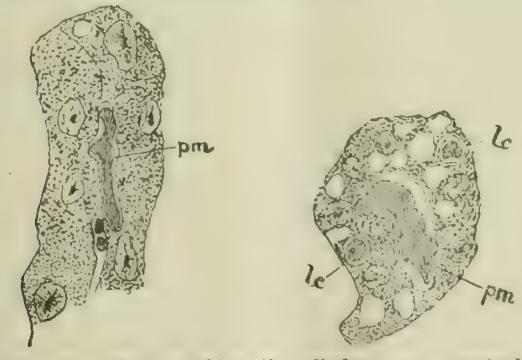


a. *b.*

Fig. 8.—*a* and *b* represent cells of the bile ducts in the red area, with lobulated nuclei and enlarged cell body. ×1,000.

As already remarked, the condition known as red atrophy is very marked in extent. Before describing the structure of the tissue exemplifying it we will treat of the part manifesting the yellow atrophy first, since, on the ground that the red is a later stage of the yellow condition, the nature of the changes in the former will thereby be rendered clearer.

The hepatic parenchyma remains only immediately under the capsule. The average appearance of the lobules is represented in Fig. 1. The number of liver cells left in a lobule varies, it sometimes being a little less than normal, while, again, it may be sufficient only to constitute a small group. Where, however, the number and condition of the cells appear normal, the vascular channels between them are enlarged in calibre, and even at the margin of such lobules hepatic cylinders may be separated by large areas of connective tissue, endothelial cells, and leucocytes. The first change from the normal is manifested by the coarse granulation, or the fatty vacuolation, which appears in that part of the cell next the blood capillary. The enlargement of the bile capillary is another feature of this change, although it may be secondary to changes in the immediately adjacent cells, since it is probably due to obstruction of the bile capillaries by protoplasmic masses placed there by the cells themselves, in which these are also seen (Figs. 5 and 6).



Figs. 5 and 6.—Portions of hepatic cylinders. *p m*, protoplasmic masses in the bile capillary; *l c* leucocytes. In Fig. 6 the cells have undergone fatty vacuolation.

With further change the fat droplets become larger, the granulation much coarser, and the nucleus loses its structure and becomes more or less homogeneous. In cells which are coarsely granulated, but from which fat is absent, the membrane only of the nucleus may be detected, all else having vanished. In the enlarged cells in which fatty degeneration alone is prominent, the fat is collected in large droplets, separated from each other by protoplasmic septa, in which the granules are collected. In such the nucleus is of irregular shape, situated near the bile capillary, in the vicinity of which the bulk of the granular protoplasm is collected. The lumen of the bile capillary is then greatly enlarged (Fig. 7).



Fig. 7.—A group of liver cells greatly distended by vacuolation. The lumen of the bile capillary, which is enlarged, is occupied by protoplasmic masses. × 1,000.

Examples of cell division amongst the nearly normal hepatic cells are sufficiently abundant to warrant the conclusion that, just as there is atrophy in one part, there is regeneration of the hepatic parenchyma in another. One might search for a long time in sections of the normal liver without finding as many cells dividing as we saw amongst the remaining cells of a few of our sections. It might be possible in this way to explain the cases of recovery from attacks of acute atrophy which have been reported.



Fig. 4.—From the portion where atrophy is more advanced. It serves to show the difficulty of distinguishing in some cases between the hepatic and endothelial cells. *hc*, a part of a hepatic cylinder; *end*, endocytes, the one to the right being in an hepatic cell; *fl c*, the liver cells in a state of fatty degeneration; *en*, endothelial cells; *gr*, granular remains of disintegrated hepatic cells. × 1,000.

Returning now to the consideration of the more normal portions of the liver, we find that, in addition to enlargement of its calibre, the intralobular blood capillaries present other changes. In some cases these may be very slight, and may consist in such a disposition on the part of the endothelial cells to stain deeply with eosin; but in other cases, where the changes are further advanced concurrently with

the degenerative ones in the hepatic cells, the endothelial cells are greatly enlarged in every direction, so that they sometimes appear to fill the lumen of the vessel. At the same time, their protoplasm becomes granular, and imbibes the eosin as readily as the neighbouring liver cells. The latter qualification, considered in connection with their sometimes coarsely granular protoplasm and elongated form, seems to be responsible for the view expressed by Winiwarter, that liver cells in acute atrophy are converted into connective tissue. The cells are sometimes so large that they rival the liver cells in size, and, indeed, in some cases are not distinguishable from them (Fig. 4).

At the same time that these changes are brought about in the endothelial cells, the connective tissue outside them and in the vascular wall becomes more coarsely fibrillated, and therefore apparently only increased in quantity. This fibrillar tissue stands out prominently where marked fatty degeneration is present, and here one can see between the fibrillæ the granular *débris* of the destroyed liver cells.

If, now, we pass to the areas where red atrophy is present, we find the condition just described markedly prominent. A liver cell is to be found here and there inflated with fat droplets, but the tissue is typically made up of fibrillæ running in every direction in a mesh form, and enclosing between them granules, some of them pigmented, and leucocytes, while the spaces in the meshwork are occupied by endothelial cells of various sizes, irregular shapes, and granular protoplasm. Had one no means of studying the development of these endothelial cells, they might be considered as persistent liver cells. Each cell may have more than one nucleus, which is usually irregular in shape, and the nuclear chromatin is deposited on the interior surface of the membrane. The cells contain sometimes refracting granules and pigment which, presumably, are derived from the degenerated liver cells. The few leucocytes present may be easily overlooked in the abundance of endothelial elements.

In some parts of the section the spaces of the meshwork of fibrillar tissue are smaller than those represented in Fig. 9,

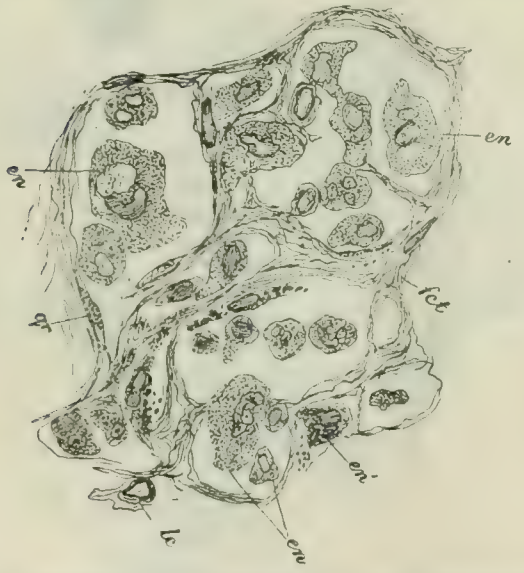


Fig. 9.—Portion of a section showing the structure of the lobules in the red area. *f ct*, the fibrillar connective tissue of the original walls of the intralobular blood capillaries; *gr*, the granular remains of the disintegrated liver cells; *lc*, leucocytes; *en*, endothelial cells; *en'*, endothelial cells with pigment granules. × 1,000.

and then the endothelial cells are compressed closely together, and appear as lymphoid elements.

The endothelial cells of some of the intralobular veins and venules are also enlarged, granular, and readily stained with eosin. They may lie free in the lumen of the vessel, and they present identically the same appearance as the endothelial cells of the lobular areas, except that the latter are of greater size.

We can compare these endothelial cells only with those of the maternal capillaries of the placenta in the rabbit and cat. In the latter animal the enlarged eosinophilous endothelial cells point, on the one hand, to abnormal or excessive nutrition, and, on the other, to degeneration. This is probably true of the endothelial cells in acute atrophy, and this is supported by the fact that not one example of karyokinesis was observed in them.



Fig. 10.—Examples of endocytes and other intracellular bodies. In *a* *e* leucocytes are enclosed within the cell; in *f* are protoplasmic masses; in the remaining ones are endocytes; *f* and *h* only are hepatic, the others representing endothelial cells. × 1,000.

Some of the larger interlobular veins were filled with red blood corpuscles, but the latter were entirely absent from the other parts of the preparations, in spite of the greatest care taken to preserve their existence in the sections. In some way the lack of blood supply is connected with the atrophied condition, for nearly all the central venules of the lobules are obliterated, and, when present, possess very much thickened walls, while the more normal hepatic parenchyma is found directly under the capsule, where the normal circulation is freer than elsewhere.

We have now to describe structures which we believe have not been referred to before as occurring in this affection. As they are cellular elements in the interior of the hepatic or endothelial cells, they may be brought into the class of bodies termed endocytes—a name proposed by the junior author to designate conveniently, and without prejudice for any particular view as to their nature, the intracellular bodies of the affected epithelial cells in Paget's disease of the nipple, regarded by Darier and Wickham as psorosperms. These endocytes are absent from the areas of red atrophy, and are abundant in some parts of the margins of atrophying lobules. They are far oftener found in the enlarged endothelial cells than in the liver cells. They vary somewhat in their contents, but their shape is constant, being nearly spherical, and their protoplasm strongly eosinophilous. The latter character readily reveals them under the microscope. The protoplasm may be slightly and uniformly granular, or strings of granules may stretch through it, leaving the meshes filled with a homogeneous, easily-staining substance. Sometimes a nucleus can be readily seen, but it may be chromatolysed or so far degenerated that only the membrane can be seen. The endocyte is separated from the enclosing cell by a free zone usually, and the opposing surfaces of both are sharply outlined. The protoplasm of the enclosing cell is sometimes reduced to a thin membrane covering the endocyte, and the nucleus is then pushed to one side, and appears crescent shaped, the concavity of the crescent being turned toward the endocyte.

We take these bodies to be leucocytes which have entered the hepatic or endothelial cells and thrive at the expense of the latter, but eventually share in the decay of the surrounding cells. We found leucocytes in both classes of cells, but

the majority of those in the hepatic cells were more or less disintegrated, and it is probable that the protoplasmic masses in the interior of many of the liver cells are derived from them. Of course, with a limited quantity of tissue to study, and this in the most advanced stage of the affection, it was not possible to determine all the stages of the transition from the ordinary enclosed leucocyte to the endocyte.

We have considered the question whether these elements are parasitic or endogenously formed. We have rejected both hypotheses, because it seems to be a matter of the last resort to call them parasites, and because no definite examples of endogenous cell formation is known to occur in the animal kingdom; till such is found it is well to base explanations on well-grounded facts only.

Crystals of leucin and tyrosin were not observed. We used Loeffler's and Gram's methods for staining bacteria in our preparations, but could find no trace of bacilli or micrococci, and our experience in this matter agrees with that of Dreschfeld, who obtained negative results in preparations from the livers of two cases of acute atrophy.

General Remarks.

There are some aspects in this case which may serve as a basis for consideration of some of the clinical features and symptoms of cases of acute atrophy in general. The facts obtained from the study of one case scarcely suffice, perhaps, for the purposes of generalisation, the less so since these facts do not coincide uniformly with those observed in other cases of acute atrophy. Many of these cases however have, we believe, been imperfectly studied as regards the structural changes in the organs affected, and this together with the rarity of the disease tends to postpone to the future the chances of obtaining the facts necessary for accurate conclusions. Theories and criticism are the great incentives to the collection of facts, and we are therefore encouraged to comment as we do now, on the ground that such a course will call for a fuller histological study of all the organs in future cases of acute atrophy, a performance which we regret the circumstances attending the necropsy in our case did not permit.

For the sake of convenience we will treat the points of our comment in the following order:

1. The nature and mode of production of the jaundice.
2. The etiology of the disease.
3. The cerebral and other symptoms.

1. Since catarrhal jaundice is of comparatively frequent occurrence, and cases of acute atrophy extremely rare, and, further, since obstruction of the bile ducts in any form has not been observed in the great majority of such cases, it seems superfluous to postulate the existence of catarrh in acute atrophy. Occupying this position, we do not think it necessary to hesitate between the hæmatogenous and hepatogenous origin of the jaundice. Even if we believed in the existence of the hæmatogenous variety, there would be no demand for the exercise of the belief in accounting for the jaundice, although on first thought it may appear that rejection of the catarrhal origin of the disease entailed a resort to such a theory. There are two ways in which resorption of the secreted bile may be brought about without the occurrence of obstruction due to catarrh, and these are: (1) the destruction of the finest bile capillaries between the liver cells at the periphery of the lobules, and (2) the plugging of all the remaining bile capillaries of the lobules. We maintain that our case illustrates both conditions. In the preparations the peripheral hepatic cells of the few remaining lobules have all disappeared, and it seems that this is the usual occurrence in acute atrophy. With the destruction of the liver cells all connection between the fine intralobular bile capillaries and the interlobular bile ducts is lost. It is true that some histologists[1] have claimed an existence for the finest bile capillaries independent of the adjacent liver cells, and it might therefore be argued that destruction of the liver cells does not entail disappearance of the bile capillaries. The views as to the independent formation of bile capillaries have not been supported by the work of other observers, and they are in direct opposition to what we know of the liver from its functional and embryological aspects. With the peripheral bile capillaries destroyed, it is obvious that the secretion of the more centrally placed glandular cells must pass into the spaces previously occupied by the liver cells, and from them to the blood capillaries, whose endothelial cells are so seriously affected, as described above. Hence the jaundice. Now, in the remaining bile capillaries there is in our preparations more or less plugging by the protoplasmic masses, and this must assist, though in a minor degree, in the resorption of the formed bile constituents.

The question which follows the statement of these views is: How is the destruction of the periphery of the lobules brought about so that acute atrophy supervenes? The answer to this is the consideration of the second item of comment, the etiology of the disease.

2. The destruction of the liver cells and the fatty degeneration of renal tissue all point to the presence of a poisonous element as a cause of the disease. What this poisonous element is, whether due to pathogenic micro-organisms, or to abnormalities in the digestive processes or products in the intestine, cannot be determined. The fact that bacteria have been observed in only a few cases does not decisively exclude their agency in the production of the trouble, although it warrants us in looking for some other ascertainable cause. All things considered, we incline to the view that the poisonous element is of the nature of a chemical compound, probably an abnormal albumin, resulting from deranged or putrefactive processes in the intestine, absorbed by capillary radicles of the portal vein, and carried to the liver, where it first meets the hepatic cells at the periphery of the lobules, bringing about their destruction. The destruction once begun is continued in the remaining cells of the lobules more or less affected by the poison, and assisted by the resorbed secretions, and the impossibility of the liver cells in some cases throwing their secretions into the already over-distended bile capillaries.

That the digested products of impure food, when absorbed into the system, may produce acute atrophy, is shown by the cases described by West,[2] of two children, one of which had the disease, while the other is reported to have manifested its symptoms before death. Both children were supposed to have eaten, a few days before their illness commenced, something thrown out of a herbalist's shop. Here bacterial organisms may be suspected as the prime cause of the trouble, as well as in those cases described as occurring simultaneously in the crews of vessels, or appearing successively in the same family or in the same household. In such the germs may influence the constitution of the proteids in the digestive tract, producing abnormal albumoses or like compounds, which, when absorbed by the portal system, affect the liver in the way described. We may explain cases in which the hæmorrhages are confined to the portal blood vessels by ascribing the changes in the vascular walls which permit the hæmorrhages, to the poisonous action of the absorbed elements first acting on the vessels removing them from the intestine.

Pregnancy is one of the most common conditions predisposing to acute atrophy, and it is possible that in this condition the constipation enhances the chances of unusual putrefactive processes occurring, and, on the other hand, weakens the defensive functions of the absorbing organs. It might be possible in future cases of acute atrophy, in which the condition of pregnancy is present, and in which the fœtus is jaundiced, to test, in a way, the view that the disintegration and death of the liver cells is brought about by a diffusible poisonous compound, for then the fœtal liver and tissues generally ought to show changes similar to those found in the maternal tissues. Some cases of acute atrophy cannot be ascribed to this agency, or rather another cause may appear to be more probable. Such are those brought about by the swallowing of a large quantity of concentrated alcohol, or by excessive indulgence in alcoholic beverages, and may be referred to a specific action of the alcohol on the liver cells less prominent and less certain than that produced by phosphorus.

3. An analysis of the cerebral symptoms in this disease can only be made on the ground of guess-work. Whether they are due to diminished nutrition of the brain tissue, as Traube believed, or to a toxic compound, is equally consistent with clinical facts. It may be pointed out, however, that in the

[1] Heidenhain and Peszke: See Hermann's *Handbuch der Physiologie*, vol. v., pt. 1, p. 220.

[2] *Trans. Path. Soc. of Lond.*, vol. xxxi, p. 116.

case of starvation in animals the brain does not diminish in weight, while the other organs are considerably reduced in volume and weight, and that even after very long periods of fasting in the human subject no unusual nervous symptoms may appear. Traube's view, therefore, appears less tenable, the more so as in some cases of acute atrophy the delirium and stupor came on early in the course of the disease, when a sufficient time had not elapsed for the brain to fall into the condition of inanition. In the great majority of the cases, moreover, the body appears well nourished.

If the nervous system constitutes the master tissue of the body, as starvation experiments show, it must have the power of rejecting as well as selecting the various compounds in its vascular fluids. One sees no reason why this power of rejection should not be as readily exercised against toxic elements as against an abundance of a single constituent in diet. The constant exposure to, and attack by, toxic compounds must, however, weaken this capacity until it does not excel that of any other organ of the body, and, when this point is reached, the action of the poison immediately becomes manifest in the cerebral symptoms. Thus we may explain the more or less sudden onset of uræmic coma and convulsions, the delirium, the convulsions, and the stupor of acute atrophy. This, of course, does not mean that the poison in both cases is the same. In acute atrophy the products of the disintegration of the liver cells may constitute the injurious element, and, if so, they are not likely to be similar to the products of a somewhat disordered metabolism retained in the system in other diseases.

The hæmorrhages are probably due to vascular changes, such as those described as occurring in the liver in our case. The observations of other authors on this point are very defective, and no generalisation can, therefore, be made, but we must accept this explanation, or turn to some such a one as that offered by Denys for the occurrence of purpura hæmorrhagica—the inordinate disintegration of blood plaques, and the consequent arteriole and capillary thrombosis.

PERNICIOUS ANÆMIA—SUCCESSFUL TREATMENT BY ARSENIC.

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SINCE Dr. Byrom Bramwell[1] published his three cases of recovery from this disease a number of cases have been recorded in which the administration of arsenic, as recommended by him, has been followed by successful results. In this country alone the number of cases thus treated successfully has been considerable.[2] I think that this case should be added to the list:

J. T., aged 58, a man of average height, fairly nourished but intensely pale, first came under my care as an out-patient at the Metropolitan Hospital on January 14th, 1892, complaining of shortness of breath, swelling of his legs and face, an intense burning sensation in the rectum, and great weakness.

History.—He was unable to say how long he had been getting pale, but had noticed his face becoming puffy for three months before he came to the hospital; it was always worse in the morning and subsided by the evening. The swelling of his legs was only of five days' duration, but during that time they had become rapidly worse. Shortness of breath was of some weeks' duration and had been steadily increasing so that at the time when he came under observation it was a very distressing feature of his illness. For some time his mouth and tongue had felt dry and rough, and his food did not taste natural; he suffered from nausea, but there had been no actual vomiting. Three weeks before I saw him he had had an attack of diarrhœa and ever since then he had been subject to an intense sensation of burning in the rectum, which was a source of great discomfort to him. This sensation was not constant, it only came on from time to time and was not in any way related to the act of defæcation. He also suffered from a scalding sensation along the urethra when he passed water, but there was no urethral discharge nor had there been any. The patient had formerly enjoyed excellent health. He denied having had syphilis and no history of this affection could be elicited except that his wife had had five miscarriages and no children. No history of phthisis or malignant disease in his progenitors could be ascertained.

State on Examination.—The patient was evidently very ill. He was exceedingly pale, but there was in addition a distinct lemon-yellow tinge of the face. Pallor of the lips and mucous surfaces was marked. The conjunctivæ were yellowish in colour, and might easily have been mistaken for jaundice, as, indeed, had evidently been the case; for he had been under treatment for "congestion of the liver" for a month before he came to the hospital. His face was very puffy, and the œdema of his feet and legs was so great that he was no longer able to wear his boots; it was most marked about the ankle joints, but the skin pitted very distinctly over the tibiæ along the front of the legs. No subcutaneous or other hæmorrhages could be detected, and the most careful examination failed to discover any abnormal pigmentation such as is met with in Addison's disease. There were no glandular enlargements.

Blood.—I very much regret that I had not the means of estimating the percentage of hæmoglobin before the treatment was commenced. The corpuscles ran badly into rouleaux; the red cells were greatly diminished in numbers, while the white cells were relatively increased. The red cells were variously altered in shape, many of them tailed, and others in process of disintegration. Large nucleated red cells were present.

Heart.—The cardiac action was regular, though rapid; no thrill could be felt over the præcordia, and the apex beat was not displaced. The cardiac dulness was not increased; no murmur was audible at the apex, but a systolic murmur accompanied the first sound over the pulmonary area. The pulse was rapid, but regular.

Lungs.—No abnormal physical signs could be detected in either lung. Breathing was rapid, and the slightest exertion increased the dyspnœa.

Abdominal Viscera.—The abdominal organs presented no abnormal features. The liver and spleen were not enlarged, and no abnormal mass, glandular or otherwise, could be detected in the abdomen.

Rectum.—The bowels acted regularly, but the patient was troubled greatly by a burning sensation in the rectum. Nothing could be found on digital exploration to account for it.

Urinary Organs.—There was intense scalding on passing water, but no evidence of urethral discharge. Micturition was not frequent, and the urine was not excessive in amount; nor did it contain albumin or sugar.

TREATMENT AND PROGRESS.

Such was the clinical history of the case, which appeared to me to justify but one diagnosis, namely, that of pernicious anæmia; but it was of course necessary to exclude the possibility of intestinal worms being responsible for the anæmia, though it was highly improbable that those forms most likely to cause intestinal hæmorrhage would be found in a man who had never been out of this country. Anthelmintic treatment was combined with the treatment of the anæmia, which consisted in the administration of arsenic and iron; but no intestinal worms or their products were evacuated. Four minims of liquor arsenicalis and 15 grains of the ammonio-citrate of iron were administered three times a day, and while the dose of the iron was only once increased throughout the time that the patient was under treatment, the arsenic was increased gradually until the patient was taking 12 minims three times a day, five weeks after the treatment was commenced. This amount of arsenic continued to be well borne until March 11th, 1893, when irritation of the eyes became so troublesome that it was discontinued, and the amount of iron increased to twenty grains three times a day. There were no other symptoms of arsenical poisoning, and this one improved rapidly under local treatment with boracic lotion, after the arsenic was discontinued. During the time that the patient had been taking arsenic there was steady and rapid abatement of his symptoms; but, when it was discontinued, he began to relapse slightly, so that, on March 25th, I ordered 4 minims of liquor arsenicalis in combination with the original dose of iron. The arsenic was subsequently increased to 6 minims, but it never became necessary to exceed this amount, and the treatment was discontinued altogether at the end of May. A fortnight after the treatment was commenced there was distinct improvement, and by the end of a month he felt strong and better in every way; he could walk farther without becoming short of breath, and the œdema had subsided considerably. In fact, a week later, he could wear his usual boots with comfort. By the beginning of March he had lost much of his pallor, his appetite was greatly improved, the abnormal sensations of his tongue and mouth no longer troubled him, his food tasted natural; the burning and tenesmus of the rectum had ceased a fortnight before; there was only very slight œdema of the ankles. A week after the arsenic was first discontinued the patient complained of a creeping sensation in his skin all over, the face and scalp included. He had been subject to this a year or two before, and it had troubled him off and on since; it always commenced when he got warm in bed. By the end of April the patient was practically well, but treatment was continued a month longer. By the end of this time he looked and felt extremely well; not one of the symptoms from which he formerly suffered persisted, and his cheeks were quite rosy.

SUBSEQUENT HISTORY.

He continued in excellent health until September, when he consulted me again owing to irritation and creeping sensations in his skin, which had returned, as had the scalding along the urethra during the act of micturition. I ordered

him 5 minims of liquor arsenicalis, with 10 grains of the ammonio-citrate of iron, three times a day, and in three weeks increased the arsenic to 12 minims three times a day. The burning in the rectum from which he formerly suffered returned soon after the treatment was commenced, but all the symptoms disappeared in a few weeks, and he has since been perfectly well. He has taken no arsenic or iron since the middle of October. I have just seen him, a year after he first came under my care, and he looks and feels perfectly well; none of the old symptoms having returned.

Remarks.—When the term "pernicious anæmia" is used, most of us associate it with a definite clinical picture; and I venture to think that few who read the report of this case will have any doubt that it belongs to this category. If it be granted that we are dealing with a case of pernicious anæmia, then we may with all fairness claim it as an additional example of the efficacy of arsenic in the treatment of this disease. In support of my belief that the arsenic and not the iron was responsible for the patient's recovery is the fact that when the arsenic was discontinued, owing to the irritation of his eyes, his symptoms relapsed in spite of the increased dose of iron which was substituted for the arsenic.

Although there are cases which do not respond to arsenic, and others which improve on iron after arsenic has been unsuccessful, yet that arsenic is of signal advantage in the treatment of pernicious anæmia must be patent to all who care to compare the results of the treatment of this affection before and since Dr. Byrom Bramwell called attention to the value of this drug in its treatment. From the few cases of this disease which I have seen in which arsenic has been tried and has not averted the fatal termination, I feel convinced that this result was due partly to the late stage in the disease at which the treatment was commenced, and partly because the amount of arsenic given was not increased rapidly enough. Of course there are cases in which the irritability of the stomach is so great that large, or even moderate, doses of arsenic cannot be borne; in such it is well to give minute doses of the drug repeated frequently as has been recommended, since it may be tolerated in this way when the other method has failed.

In those cases in which the disease is so far advanced as to make it probable that there is not time for arsenic to act, where the drug is not tolerated owing to irritability of the stomach, or toxic symptoms coming on early, or where it has been well borne but has failed to arrest the progress of the disease, the results of transfusion[3] are sufficiently encouraging to make it our duty to advert to this form of treatment as a last resource, but before it is too late to allow of reasonable hope of good resulting from its performance. The results recently obtained by Brakenridge[4] and Affleck[5] are particularly encouraging in this connection; and Duncan,[6] who performed the operation in these cases, is of opinion that the corpuscles as well as the serum of the blood should be injected.

In all supposed instances of recovery from pernicious anæmia it is important to follow the subsequent history of the case, as cases have been too hastily recorded as cured, which have afterwards relapsed and died,[7] while others which improved at first under some particular form of treatment afterwards followed a similar unfavourable course[8] as those which were supposed to be cured in the first instance.

References.

[1] Byrom Bramwell, *Ed. Med. Journ.*, November, 1877. [2] Lockie, British Medical Journal, 1878; Finny, *ibid.*, 1880; Broadbent, *ibid.*, 1880; Withers Moore, *ibid.*, 1881; Pye-Smith, *Guy's Hosp. Rep.* xli., 1882; Padley, *Lancet*, 1883; Willcocks, *Practitioner*, 1883; Wilks, *Lancet*, 1885; Brakenridge, British Medical Journal, 1892. [3] Pye-Smith, *loc. cit.*; Brakenridge, British Medical Journal, 1892; Affleck, *ibid.* [4] Brakenridge, *loc. cit.* [5] Affleck, *loc. cit.* [6] Duncan, British Medical Journal, 1892. [7] Loveland, *Philad. Med. Times*, 1886. [8] Haddon, *Ed. Med. Journ.*, xxiv, 1878; Pye-Smith, *loc. cit.*

Bequests to Dublin Hospitals.—Mr. Gervas Taylor, who died at Dublin last week, has, we understand, left £5,000 to the Meath Hospital, £5,000 to the Adelaide, £5,000 to Sir Patrick Dun's, £1,000 to St. Vincent's, £1,000 to the Mater Misericordiæ, and smaller sums to other charities. We are informed, also, that to his former medical attendant, Dr. Lambert Ormsby, of the Meath Hospital, he has bequeathed £3,000.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

A SUCCESSFUL CASE OF PORRO'S OPERATION FOR CANCER OF THE RECTUM.

I first saw Mrs. D., aged 30, of Birmingham, on October 27th, 1893, in my out-patient room at the Women's Hospital. She had been married ten years, and had had six children, the youngest being two years old. Menstruation had been perfectly regular, and free from pain. She had had no miscarriages. She complained of having had a discharge from the rectum for the last seven months. In August, 1893, she had great difficulty in opening her bowels, being constipated for some days, but since then she had had no trouble whatever with them. She thought she had been getting thinner for the last few weeks. On examination I found a cancer of the rectum, the size of an orange, two to three inches above the anus; soft and broken down on the surface, and projecting irregularly into a large cavity, which did duty for the rectum; its upper limit I could not feel. She was between six and seven months pregnant. Thinking that abortion, if brought on, would result in a smashing of the cancer, I advised her to wait till full term.

On December 14th, at 5 a.m., she was seized with labour pains, which were strong and painful all the morning. I saw her at 11.30 a.m., and found her in great pain. From the vagina I could not reach the cervix; the vagina was narrowed enormously by the pressure of the carcinoma, and the uterus was evidently pushed completely up into the abdomen for the same reason. I had her removed at once to a private hospital near, and early the same evening, with the assistance of Dr. Martin Young, I performed Porro's operation upon her. An incision, 5 inches in length, was made rapidly in the abdominal wall, and the uterus being well pushed from each side into the wound, I quickly divided it in the mid-vertical line for 4 inches, and although the amniotic fluid was profuse in quantity, Dr. Young so firmly pressed the abdominal walls against the uterus that none of it entered the peritoneal cavity.

After removing the child (which was badly nourished, about the eighth month, and only lived a few minutes) I pulled the uterus outside the abdomen and applied Lawson Tait's clamp with wire, and tightened it; before doing so I enclosed in the wire of the clamp the parietal peritoneum, according to the new method which Mr. John W. Taylor devised, and which curiously enough he was first making known to a meeting of the Gynæcological Society on that very night. The blood which poured from the uterus as it was being amputated was prevented from entering the peritoneal cavity just as we prevented the entry of the amniotic fluid. The peritoneal cavity was dry from end to end, not a spot of blood or amniotic fluid entering it. I sewed up the wound above the stump, and thus completely shut off the peritoneal cavity. No antiseptics of any kind were used, and if it had been necessary to flush the peritoneum I should have done it, as I have in other cases, with plain water.

Although she was entering upon the cachectic stage of malignant disease, she has made an uninterrupted recovery: the highest temperature recorded since the operation being exactly 99° F.; the abdominal wall was soft to wobbling all the time. Since it is a rapidly growing, easily breaking down cancer, obstruction of the bowels has not supervened, nor do I think it will. That an operation in this case has caused less discomfort and been less harmful to the patient than abortion I am convinced. The sad part of the case is the cause; a cancer in a young woman too far up the rectum and too extensive to hold out the slightest hope of removal.

J. Furneaux Jordan, M.B., F.R.C.S.,
Surgeon to the Birmingham and Midland Counties Hospital for Women.

RUPTURE OF UTERUS DURING LABOUR: HYSTERECTOMY.

On December 28th, 1893, Mrs. S., aged 42, who had had nine children, and had now reached full term, slipped and fell,

striking the lower part of the abdomen against a projecting stone. Though a good deal hurt she did not lie up, and even when some bleeding from the vagina occurred on December 29th, did not send for assistance, but continued at her usual household work. On January 2nd, a somewhat free bleeding having come on, she was put to bed. Bleeding ceased, and labour pains began between 1 and 2 A.M. on January 3rd. By 10 A.M. the head could be felt through the membranes quite near to the outlet, though not yet distending the perineum. Completion of the labour was shortly expected, when the patient suddenly became pale and collapsed, the pulse almost disappeared, the presentation could no longer be reached, and the pains ceased. Rupture of the womb, with escape of the fœtus into the abdominal cavity having been diagnosed by the medical attendant (Dr. Davy), Mr. Hindle, of Askern, and Dr. A. Christie Wilson, of Doncaster, were hastily summoned, with a view to removal of the fœtus by what seemed to the medical attendant in charge to be the only way of effecting delivery—namely, by Cæsarean section. Mr. Hindle and Dr. Wilson concurring, the operation was undertaken about four and a-half hours after the rupture took place, Dr. Wilson operating.

The fœtus and placenta, enveloped in the membranes, which had not ruptured, were found in the abdominal cavity, having quite escaped from the uterus through a large rent in the lower part of its anterior wall. This rent was so low down that it could not well be got at to suture it, and as it was undesirable to leave the torn womb, extirpation of the organ was there and then performed. The patient bore the operation well. On recovery from the chloroform sleep signs of collapse showed themselves, but under brandy and opium she rallied. The following is a brief summary of the subsequent notes of the case:—

January 4th. Temperature 97.3°, pulse 152 and very feeble; hands and feet, which had been cold, warm. Patient said she "felt better." Vomiting is her "chief trouble."

January 5th. Temperature 98.4°, pulse 108, patient cheerful, vomiting less.

January 6th. Temperature 97.7°, pulse 128; only complains of the vomiting, which distresses her greatly, but the countenance looks anxious, and the eyes somewhat sunken; an unsatisfactory, failing pulse.

January 7th. Temperature 98.4°, pulse 140; vomiting of food persists, with general signs of failure. She died on January 8th at 4.30 A.M.

The large hæmorrhage which occurred before the labour began tended to the anæmia and exhaustion ushering in death. The state of the wound and of the peritoneum were satisfactory throughout; in fact, healing took place by "first intention." There was slight sanguineous discharge from the vagina.

Askern. F. T. HINDLE, M.R.C.S.Eng., L.R.C.P.Lond.

A CASE OF STRYCHNINE POISONING.

RECENTLY I attended a strong, healthy man, of 21 years of age, who, save for an occasional severe attack of toothache, had enjoyed good health. I found him breathing stertorously, cyanotic, and unconscious, and upon taking his wrist he was seized with a general muscular clonic paroxysm, commencing in the muscles of the forearm, and then becoming general throughout the body. These tetanic muscular contractions passed into tonic contractions, and were most marked in the muscles of the hands, forearms, thorax, and face. Tonic spasm continued. Dyspnœa became rapidly worse, owing to the fixity of the respiratory walls and muscles.

With a few clonic contractions of the facial muscles of a hideous grinning character, and screwing together of the mouth by the orbicularis oris, the man died. Opisthotonos slight when first seen only.

Post-mortem examination made the following day. No wounds or marks of violence. Muscles of the upper extremities, jaws, and eyelids firmly contracted. Right side of heart and pulmonary vessels filled with dark venous blood; left side empty. Some fluid from stomach was placed in a shallow porcelain basin, to which concentrated sulphuric acid was added to excess. This mixture was slightly dusted over with finely powdered potassium bichromate; the characteristic strychnine reaction (namely, rose colour to purple) was distinctly visible. Several teeth much necrosed. Larynx and trachea empty. Lungs dark from venous congestion, and presenting appearances of death from asphyxia. In the left kidney was a recent hæmorrhagic infarct. Brain pale, and "cold in tone," in contradistinction to reddish-pink warmer colour. Spinal cord not examined. I regret also that the urine was not examined for strychnine.

Points of Medico-Legal and Pathological Interest.—(1) Quantity of drug taken, 13½ to 18 grs., in the readily assimilable form of liq. strychninæ, *B.P.* (2) Relatively slow speed (namely, 15 to 20 minutes) at which so large a dose killed when taken upon an empty stomach, for the man drank it directly out of the bottle before breakfast. (3) This solution had been kept often exposed to light for probably six years, but was apparently unaltered as regards its potency.

The infarction in the left kidney is interesting, as is also the faintly "cold tone" of the cerebral tissues, as perhaps it may throw some indication upon the action of the drug on the cerebro-spinal nerve centre, and possibly also the corresponding vasomotor sympathetic nerves. For if such violent stimulation of the vasomotor centres takes place (as appears certain regarding the cerebro-spinal nerves), the arterial walls would become contracted, and their calibre so constricted as to cause this excessive pallor of the cerebral tissues, and the bluish tint from the colour of retained venous blood. This might also explain the hæmorrhage into the kidney; the vessels in and around the Malpighian tufts and capsules, by reason of their engorged condition (naturally) and their resistance in becoming rapidly emptied, when subjected to sudden tonic contraction of their walls, together with the tortuosity of their finer capillaries in the glomeruli, appearing to be most liable to rupture when such extraordinary *vis a tergo* and sudden lateral pressure is suddenly brought to bear upon their practically incompressible contents.

Again, the general and violent tetanic muscular contractions probably also increase the pressure from within.

Antidotes.—Save by the administration of morphine hypodermically, and the inhalation of chloroform, nothing could be done. Had time permitted neither would have been of much avail. The needle would probably have excited fatal spasm of the glottis, as even the touch of my hand actually produced when taking the pulse. Chloroform administered in time would possibly have caused relaxation of the respiratory muscles, but this large dose of strychnine was still within the stomach, and the patient already suffered from dyspnœa. Owing also to the persistent trismus, to evacuate the stomach was impossible.

PERCY T. ADAMS,
Kent County Ophthalmic Hospital.

REPORTS
ON
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

UNIVERSITY COLLEGE HOSPITAL.

ANEURYSM OF THE COMMON FEMORAL: DIGITAL COMPRESSION ON TWO OCCASIONS, FOR TWELVE AND SIX AND A-HALF HOURS RESPECTIVELY, WITH FIVE DAYS' INTERVAL: CURE.

(Under the care of Mr. CHRISTOPHER HEATH.)

[From notes by Mr. CHIDELL.]

A. B., aged 29, had been for nine years a laundry carman, and, though of slight build, had been accustomed to lift heavy weights. He had been fairly steady in regard to drink; had had gonorrhœa, but not syphilis; had never worked in lead, and neither he nor his family suffered from gout.

About four months before admission he first had pain in the upper part of the right thigh. The pain shifted down the thigh, and had been localised at the inner side of the knee for two months. It was worse at night, preventing sleep, and was relieved by walking.

On November 16th, 1893, he was obliged to leave his work, on account of the "rheumatism," and it was not until two days before admission that he noticed the swelling in the groin.

On admission (November 28th) he was found to be a small and poorly-developed man, evidently not in good health. The pulse was 80; the urine normal. There was no evidence

of syphilis or gout. In the right groin, an inch below Poupart's ligament, there was a tumour with forcible expansile pulsation, of the size and shape of a hen's egg. It produced an increase of 1 inch in the circumference of the thigh over the summit of the swelling. At least three-fourths of the tumour were external to the line of the femoral artery, which could be felt for three-quarters of an inch before it entered the tumour, a little on the inner side of the latter, and again leaving the lower end of the tumour, the transition in each case being quite sudden. Pressure on the vessel at the pelvic brim completely stopped the pulsation, as well as the systolic thrill and *bruit*. Weak pulsation was present in both popliteal arteries; that in the posterior tibial was weaker on the right side. The veins on the inner side of the calf were a trifle more evident than on the left side, and there was a very little œdema at the lower end of the leg. The arteries at the left groin, bends of the elbows and wrists were not calcareous or tortuous, but very hard, especially for a man of 29. No symptoms or signs of disease in the chest or abdomen were detected.

Treatment was commenced by a purge and a tonic, and by reduction of the diet to meat and biscuit with as little fluid as possible. The patient was confined to bed, and the knee laid across a pillow.

On November 30th digital compression of the femoral artery against the pelvic brim was maintained for twelve hours, from 9.45 A.M., by relays of students changing every ten minutes. The patient complained bitterly of pain at the site of compression, and three injections of morphine, in all m vii, were given during the day. For the greater part of the twelve hours the sac was pulseless, but at 5.30 P.M. pulsation was readily felt. About this time the sac began to harden: at 10 P.M. pulsation had ceased and the tumour was much firmer.

On December 1st, at 2 A.M., pulsation could be detected at the lower part of the tumour, and in the course of the day affected the whole. A *bruit* could again be heard, though of softer quality than formerly. The posterior tibial artery pulsated very slightly if at all, but the foot was not cold or altered in colour.

On December 2nd pulsation was more forcible in the sac and distinct at the ankle. One or two sharp pains had occurred in the knee. The temperature which had continuously been a little above normal, reached its maximum, 100.6° F., at 9 P.M.

On December 4th the aneurysm pulsated as strongly as ever, and the old pain was again severe. On December 5th compression was again employed for six hours and a-half, commencing at 9.45 A.M. From that time no pulsation has been present. Hardening commenced in about an hour, and continued during the day. The beat in the posterior tibial was weak until compression was relaxed, when it instantantly became strong. Three injections of morphine were again used.

On December 8th a fuller, ordinary, diet was given, but the amount of liquid was restricted till December 25th.

On December 22nd the tumour was much harder and smaller than it had been ten days earlier, and the girth of the limb was only ⅝ inch more than its fellow. On December 25th the patient was allowed up on a chair, his general condition being much improved. On December 29th it was noted that for the previous few days a vessel had been felt pulsating along the outer side of the aneurysm—no doubt a vessel enlarged for collateral circulation.

On January 5th, 1894, the patient was allowed to walk a little with crutches. On January 8th he walked well without crutches, and went to a convalescent home.

In a clinical lecture on this case, Mr. Heath remarked that the common femoral was one of the few arteries in which a fusiform occlusion was occasionally found. This did not appear to be one, however, for a small sac could be traced, and hence it was more suitable for pressure treatment. The *rationale* of digital compression was discussed, and the cure was shown to depend upon coagulation of the contents of the sac, and not upon the deposit of laminated fibrine, as when instrumental pressure was employed. The method of "needling," as practised by Professor Macewen, of Glasgow, with the view of producing irritation of the sac wall, and the entanglement of fibrin was referred to, and also Reid's method of employing Esmarch's bandage, which Mr. Heath said he had used successfully twice in popliteal aneurysm. Failing to effect a cure by digital pressure, Mr. Heath would have resorted to a single ligature applied to the common femoral at Poupart's ligament, since the experience of the Dublin surgeons had shown that this was not more likely to induce gangrene than ligature of the external iliac, which latter had dangers of its own.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

F. W. Pavy, M.D., F.R.S., President, in the Chair.

Tuesday, February 6th, 1894.

Dilatation and Rupture of the Sigmoid Flexure.

Mr. James Berry reported the case of a man, 73 years of age, admitted to St. Bartholomew's Hospital, dying of collapse from perforation of the sigmoid flexure. The patient many years previously had suffered from chronic constipation. The attack leading to death dated from nine days before. After death the cæcum and the whole of the colon were found to be unaffected and not distended. The sigmoid flexure was of such dimensions as to reach the spleen and liver, to which it was connected by old adhesions. Its inner surface presented shallow ulcers and perforations. The rectum was not involved in the distension, and there was no trace of stricture or other cause of obstruction. The whole of the condition had arisen from neglected constipation, and was unusual mainly in being confined to the sigmoid flexure.

The President observed that the only conceivable explanation of such a condition was atony or paralysis of the bowel, allowing of its passive dilatation.

Mr. Berry, whilst adopting this view, thought it possible that the starting cause was some twist of the nature of a volvulus, though this was not persistent and none such was found after death.

Dr. Pye-Smith cited the case of a man admitted suffering from great distension, constipation, and symptoms thought to be due to chronic stricture of the descending colon. After some days the patient was persuaded to submit to left lumbar colotomy; relief, and what was practically recovery, ensued. The patient was readmitted not long afterwards and died of Bright's disease, the colotomy opening being nearly closed and the evacuations passing by the normal way. A careful examination after death showed no trace anywhere of obstruction by band, or resulting from volvulus, or other cause.

Cyst of Vas Aberrans.

Mr. J. Jackson Clarke showed a specimen comprising a testis, etc., with a cyst as large as a pigeon's egg, behind the epididymis. The parts were removed after death from an elderly man who was admitted into St. Mary's Hospital under Mr. Norton, and transferred to a medical ward on account of tuberculosis of the lung, of which he died. In life the cyst could be felt at the back of the right testis, from which it could easily be separated by the fingers. The chief points of interest afforded by the specimen were: (1) That the above-mentioned cyst was clearly proved by dissection to be a dilated vas aberrans; (2) that this cyst proved to be a spermatocele; (3) that coexistent with this cyst of the vas aberrans was a small encysted hydrocele (spermatocele) of the common kind in the globus major.

Transverse Hermaphroditism in a Male.

Mr. Edgar Willett exhibited a dissection of the parts from a man aged 44, who died of cerebral hæmorrhage. The testicles were undescended. Dissection showed the presence of a well-developed uterus and vagina; the sexual glands, though in the situation of ovaries, were shown by microscopic examination to be testicles, in which the membrana propria of the tubuli was remarkably thick. There was a tunica vaginalis in either side of the scrotum, and the penis was well developed. The subject had a beard, was married, and in the history is said to have had two children. The testicles were provided with vasa deferentia, which passed down by the sides of the vagina towards the prostatic

division of the urethra, but their exact mode of termination was not made out. The vagina narrowed as it perforated the prostate, and opened in the usual situation of the uterus masculinus. From the uterus there proceeded on either side a closed Fallopian tube, and this terminated above the globus major of the epididymis in a body representing the usual hydatid of Morgagni. Mr. Stonham had reported a very similar case to the Society a few years previously.

CASE OF MULTIPLE NEW FORMATIONS.

Mr. CECIL BEADLES reported the case of a man, aged 50, in whom there appeared a remarkable number of tumours, the first noticed having been a wart of the face, which was removed. The growths occurred on the limbs, scalp, and especially in large numbers in the subcutaneous tissue. Death occurred suddenly. After death nodules of new growth were found in the lungs, heart, adrenals, scattered over the peritoneum, etc.; there were none in the brain or kidneys or in the gastro-intestinal tract. Some of the tumours were typical sarcomata of the usual kind; others were alveolar, the spaces being filled with epithelial-like cells. The hair follicles and sweat glands at the site of the cutaneous growths were normal. The author expressed doubts as to the classification of the new formations, in which there was no pigment.

Mr. S. G. SHATTOCK considered that as certain of the tumours were typical sarcomata, the alveolar forms of the growths could not but be classed as alveolar sarcomata. The likeness between such and certain carcinomata or epithelial tumours of hypoblastic or epiblastic origin was at times very close. He referred to a specimen of double tumour of bladder and scalp recorded some while ago by Mr. Clutton. The tumour of the scalp was thought by certain competent histologists to be an epithelioma; but the Morbid Growths Committee, with the exhibitor, considered both the tumour of the bladder and that of the scalp to be alveolar sarcomata.

CARD SPECIMENS.

Dr. H. TURNEY: Thrombosis of Cortical Veins of Brain in a child aged 3 years.—Mr. DUDLEY COOPER: Dermoid Cysts of both Ovaries from a woman aged 32.—Mr. EDGAR WILLETT: Gastro-enterostomy for Carcinoma.

MEDICAL SOCIETY OF LONDON.

D. H. GOODALL, F.R.C.S., Vice-President, in the Chair.

Monday, February 5th, 1894.

TREATMENT OF SUPPURATING OVARIAN AND EXTRAUTERINE CYSTS COMMUNICATING WITH THE RECTUM.

Mr. HARRISON CRIPPS read this paper, which is published at p. 291.

The CHAIRMAN in such cases would be disposed to perform inguinal colotomy in order to divert the secretion which was causing suppuration.

Dr. CULLINGWORTH had had four or five cases of the kind. He had adopted the plan of treatment recommended by Mr. Teale, namely, opening the abdomen, emptying the abscess after, if possible, discovering its nature, washing it out, and stitching its edges to the abdominal wound. This proved very satisfactory in the next case upon which he had to operate, and the opening into the rectum promptly closed. That suggested to him the possibility of removing the cyst wall itself, and this plan proved successful in the three following cases, one of fistula through the vagina and two through the rectum. His last case, however, was one of communication with the bladder. He adopted the same plan, leaving the opening into the bladder to close of itself, and the patient did well. His own proportion of these cases among his ovariotomy cases was about 4 per cent. He did not believe that puncture from below could ever prove a satisfactory proceeding. It was quite unnecessary to close the opening into the rectum, even if it were possible, which was often not the case.

Dr. ROUTH had treated a number of these cases by puncture either through the vagina or through the rectum with almost uniform success. He always used the aspirator, and if the pus was fœtid he washed out the cavity with a solution of iodine. In a case in which he had performed abdominal section the cyst burst and the patient died.

Mr. CRIPPS, in reply, doubted whether puncture from below would suffice in the majority of cases. He was less afraid of the non-closure of the rectal opening than of the escape of fæcal matter through the opening into the peritoneal cavity. Though colotomy might be useful in certain cases, it would generally be thought too serious a complication for routine employment in these patients.

ARTIFICIAL DEFORMITIES OF THE GENITALS.

Dr. GARSON read a paper dealing with certain operations on the genitals of males and females performed by the aborigines of central Australia. Males were subjected to circumcision and sometimes to hypospadias in order to prevent their procreating. Young men thus treated were called "*mika*." Females whom it was intended to render sterile were subjected at 10 or 12 years of age to a complicated operation which had for effect to remove the vaginal portion of the uterine cervix and the subsequent creation of an artificial opening, the perineum being split back to the anus at the same time. Females thus rendered barren were called "*eriltha*." (A photograph was handed round of a male whose urethra had been split up in the manner described.)

West London Medico-Chirurgical—*Feb. 2nd* — Dr. TRAVERS, Vice-President, in the chair.—Mr. A. DORAN read a paper on the feeding of patients after abdominal section. Diet was the most essential feature in after-treatment. The surgeon had to consider how shock might best be counteracted by dietetic means, how much the stomach would bear, and how far the peritoneum and intestines could be left undisturbed. In old and feeble patients, and in others after prolonged and severe operations, the starving system was dangerous, nor was food well borne by the mouth. Beef-tea enemata were excellent in such cases, counteracting shock, and allowing the stomach to rest, while saving it from the dangerous irritability to which starvation subjected it. Barley water was the best food after twenty-four hours; meat broths not until the bowels had acted, as they tended to concentrate the urine; exclusive milk diet he condemned, but milk was beneficial in small quantities after the second or third day. The bowels were best opened by drugs where signs of gastro-intestinal irritation were present, but by enemata in ordinary cases. After a fair action of the bowels, fish, fowl, and then meat might safely be given. Sickness and flatulence were indications for returning to beef-tea enemata. The dangers of flatulence, whether primary or secondary, were great, and mouth feeding increased them.—The CHAIRMAN said he placed great reliance on turpentine in flatulence.—Mr. JESSETT preferred peptonised foods for rectal feeding, and also alternation of fluid and solid (suppositories). He considered the flatulence chiefly due to paralysis of the bowel from handling.—Dr. HANDFIELD JONES agreed with the Chairman as to the value of turpentine in flatulence.—Mr. BIDWELL thought solids might be given early, especially fish after the fourth day.—Mr. LENTHAL CHEATLE read a paper "On complications of certain diseases of the middle ear."—Specimens were shown by Dr. CLEMOW, Mr. J. R. LUNN, and Mr. S. PAGET.

Manchester Pathological—*Jan. 17th*—Mr. F. A. SOUTHAM, President, in the chair.—Dr. WILLIAMSON gave the results of the microscopic and macroscopic examination of the pancreas in fifteen consecutive cases of diabetes mellitus. In seven the gland was normal; in two it was atrophied; in two there was atrophy with fatty degeneration; in two, cirrhosis (not extensive); in one, most extensive cirrhosis with calculi. In one case a cerebral tumour was also found *post mortem*.—Mr. THORBURN showed a specimen of adenoma of the soft palate removed from the throat of a man, aged 27. The growth consisted of a stroma of interlacing bundles of fibrous tissue, which was in parts of more embryonic type. The general structure was of the composite type described in several reported cases, but the essential nature of these growths is doubtful.—Dr. ASHBY and Dr. WANSBOROUGH JONES showed (1) the brain of a child with atrophy of one-half of the cerebrum following an injury; (2) a specimen of congenital heart disease.—Dr. HILL GRIFFITH mentioned a case of orbital tumour, and showed microscopical preparations.—Numerous card specimens were exhibited.

Liverpool Medical Institution—*Feb. 1st*—Mr. CHAUNCY PUZEY, President, in the Chair.—Dr. ABRAM showed (1) a specimen of carcinoma of the gall bladder, with diffuse infiltration of the liver; (2) specimen of healing typhoid ulcers from a case without temperature, diarrhœa, or spots.—Dr. DAVIES showed a macerated hydrocephalic fœtus, one of twins. The second child was alive and healthy; the two children were lying in one amniotic sac, and had one placenta between them, which, however, was lobulated.—Mr. LARKIN showed two cases in which he had operated for pyonephrosis: (1) a woman, aged 24, in whom the disease, though apparently tuberculous, seemed localised to the kidney; the kidney was completely removed, and now, after nine months, the patient remained quite well. (2) A man, aged 28, in whom abscesses in the kidney were scraped out and drained; now (fifteen months after operation) he was well and hearty, and had gained 2 stones in weight.—Mr. ANDREW STEWART showed a boy, aged 9, who for the last three years had suffered from large warty patches on the fingers, elbows, knees, and palms of the hands. No tuberculous family history.—Drs. and Messrs. PARKER, WHITFORD, BARENDT, MURRAY, LESLIE ROBERTS, and NEWBOLT discussed the case, the universal opinion being that the disease was of the nature of lupus.—Dr. GRIMSDALE read notes of a case, and showed a specimen of cancer of the cervix uteri, coexisting with a three months' pregnancy, in a woman, age 34. The uterus and its contents were removed through

the vagina. The woman made an excellent recovery, and now (eight months after the operation) remained quite well. Dr. Briggs made remarks.—Mr. Murray read a paper on the treatment of crooked legs in children. In children under 4 years of age he strongly advocated the immediate straightening of the crooked bones, rather than the more gradual method by splints alone. In 1888 the late Mr. Rhinalt Pughe introduced this method at the Children's Infirmary, and the results had proved highly satisfactory. In 1888 Mr. Pughe straightened 30 legs, and in 1893 Mr. Murray straightened 311, the total number since 1888 being 341. These figures included both knock-knees and bow-legs. His hands were the only osteoclast he had ever used. There had been no single mishap in the whole series.—Mr. Rawdon had done a large number of subcutaneous osteotomies with excellent results, but he preferred to wait until the rickety tendency had ceased, lest the deformity should relapse. Latterly he had met with many cases where osteoclasis was readily performed by the hands alone, but in older patients where the bones were harder he had been satisfied with the osteoclast invented by the late Owen Thomas.—Mr Parker had forcibly straightened limbs with his hands for the last sixteen years whenever this system was practicable; at other times he had broken the limb across his knee, or had resorted to osteotomy. He never thought it necessary to remove a wedge-shaped piece of bone.—Mr. Robert Jones said it was very rarely that in private practice parents were willing to encourage osteoclasis or osteotomy where simpler methods would suffice. Mr. Jones advocated osteoclasis for bow-legs and anterior curves of the tibia.—Mr. Thelwall Thomas always performed osteoclasis for bow-legs, and when the hands failed he used Owen Thomas's osteoclast.—Drs. Carter, Logan, Alexander, and the President also took part in the discussion.

REVIEWS.

Atlas of Head Sections. By William Macewen, M.D. Glasgow: James Maclehose and Sons. 1893. (Demy 4to, pp. 378, plates 53, 70s.)

This is a collection of photogravures of sections through the head. The sections from which the photographs were taken were made on frozen material, which in all cases was perfectly fresh, and form a complete series at intervals of about ½ inch. Altogether there are fifty-three sections arranged in three series—twenty-four are coronal, eleven sagittal, and eighteen horizontal. The horizontal and coronal sections are given in duplicate, the sections from an adult male being supplemented by similar sections of very young males aged 2½ and 5 years respectively. Each plate is accompanied by a corresponding outline key, and by a short letterpress description. The plates are, moreover, photographed to a fixed scale, which is in each case appended; in this way rough measurements may be taken.

The form of the brain and its relation to the cranium, when seen *in situ* and undisturbed, differ in many respects from the conditions presented when the brain is exposed in the ordinary manner for dissection. Moreover, when the brain is removed altogether from the cranium, as it almost invariably is, for the examination of its internal structure and relations, the distortion is greater still. Within the skull the soft cerebral substance is supported and moulded to its bony investment by the intervention of the meninges and their contained fluids; and when the brain is removed and placed on a flat surface, the plastic substance of which it is composed assumes a position and form of rest depending altogether on external influences, and differing greatly from its natural one.

Owing to these facts it is very difficult to obtain reliable data as to the correct location of the interior structures of the brain, and more especially as to their relation to the exterior.

The method of frozen sections entirely obviates these difficulties, as in their preparation the whole head is frozen, and the supporting structures, especially the fluid, are fixed in a position identical with the natural one. Hence in the photographs before us we may be confident of accuracy. By the method of sections here adopted the surgeon has the correct location of any particular spot defined by three co-ordinates, obtained by a comparison of the three sections which pass through the point under consideration, and the three sections being in the three planes of space a very accurate location is readily formed.

Professor Macewen directs attention to several prominent features revealed by a comparison of the sections: thus the difference in size of the brain in the child and in the adult respectively relatively to the rest of the head is well marked, as may be seen on comparing coronal sections, Series A with Series C. Similarly, by a comparison of the various sections, many other points of importance are readily discernible.

The value of the work as a contribution to cranio-cerebral topography is very great. The plates are admirable examples of successful photographs, and the work is one which will doubtless take its place among the standard works of reference in its department.

Syllabus of Lectures on the Practice of Surgery. By N. Senn, M.D., Ph.D., LL.D., Chicago, Professor of the Practice of Surgery and Clinical Surgery in Rush Medical College, etc. Philadelphia: W. B. Saunders. 1894. (Long cr. 8vo, pp. 221. 2 dols.)

Professor Senn is surely one of the most active and industrious members of the profession. Although, as the long list of his appointments indicates, his public duties must make overwhelming calls on his time and energies, he has been able to make many and important additions to surgical literature, and also, by patient investigations, to assist in furthering the progress of his art. His work in abdominal surgery has been generally recognised; he has taken part in the important textbook edited by Keen, and has himself written a *Treatise on General Surgery*, besides being a constant contributor of surgical papers to *Transactions* and other forms of periodical literature. He has done very much for intestinal surgery, and although the technical details of his method may be found susceptible of improvement and modification, the principles he has established and the innovations he has suggested, particularly that of anastomosis, will be regarded as good instances of the great progress that has of late been made in surgical practice.

The *Syllabus of Surgery* is likely to prove of service to both teachers and students. The former will find it useful as a guide in arranging material for instruction, and also in obtaining the latest information. In its preparation the compiler has recognised the fact that tutorial teaching, or, as he names it, recitation, is gradually displacing didactic lectures. The student for higher examinations, if compelled to trust to himself more than to others, will find this book of service in showing where to seek for the best kind of written instruction, and how to use this with the greatest advantage. The contents, though arranged in conformity with the *American Textbook of Surgery*, will prove equally useful in the study of other works of a like scope, as the author has evidently spared no pains in making it thoroughly comprehensive, and has added new matter and alluded to the most recent authors and operations. Full references are also given to all requisite details of surgical anatomy and pathology. As the work is intended to serve merely as a guide and index, those who may look only for a crambook will certainly fail to find in it, excellent though it may be in other respects, a substitute for ordinary and fuller means of teaching.

Beri-beri. By Arthur J. M. Bentley, M.D., C.M., M.R.C.S. Edinburgh and London: Young J. Pentland. 1893. (Demy 8vo, pp. 257. 10s.)

From time to time during the last few years there have appeared in our columns several interesting and valuable communications on the subject of beri-beri, emanating from medical men practising in the Straits Settlements, Borneo, Burmah, and elsewhere in the East. Besides these we have had occasion to notice various independent publications on the same subject, some of them coming from the same sources, others proceeding from workers in Japan, the Netherlands' Indies, and South America. It is manifest, therefore, from this literary activity, that an interest which for many years had been practically in abeyance is once more being awakened in this very important disease, and we are justified in believing that ere very long beri-beri will occupy, in tropical medical literature, the place to which its extensive diffusion and its gravity entitle it.

Among the recent contributions to the subject this work by Dr. Bentley—the outcome of a very extensive experience of the disease in Java and Singapore—is one of the most original, elaborate, and important. Although in recent years the Japanese, the Germans, the French, the Dutch, and the Brazilians have written much and well on beri-beri

since the publication of the well-known papers of Anderson,[1] Rowell,[2] and Simmons[3] no detailed and systematic account of the disease has appeared in the English language; and the majority of the papers from foreign pens even have not attempted the systematic treatment of the subject, but have dealt rather with the histological and pathological aspects of the disease, ignoring for the most part its practical and clinical aspects.

The first part of Dr. Bentley's work is devoted to a systematic account of beri-beri; its geographical distribution, etiology, symptomatology, pathology, and treatment are carefully though succinctly gone into. Although the author's personal experience is the basis of this, as of the rest of the work, the views of other writers are not ignored, but discussed in a fair spirit, and with much judgment. Not only this, but with the view of bringing the book up to date, and to put the reader in possession of the latest foreign work on the subject (Dr. Bentley's book was composed in 1889, and originally formed a thesis presented at the University of Edinburgh) a *précis* of all important recent works on beri-beri on the Continent and elsewhere is appended to the systematic account we refer to. Following this is a summary of Takaki's researches on beri-beri in the Japanese navy, and full particulars of the gratifying results of the practical application of his views are given. Next come reproductions of the photographs of beri-beri patients, which illustrate admirably the principal phases of the disease, and cannot fail to be of great value to the student and to the neurologist. The attitudes assumed by beri-beri patients, both in repose and during locomotion, are excellently represented in these plates. The major and more valuable portion of the work lies in the appendix. In this we have the particulars of fifty-two cases of beri-beri, with short notes of the *post-mortem* appearances in nineteen. Some of the cases are given in great detail; together they illustrate all the more important varieties of the disease.

Dr. Bentley long ago, and entirely from personal observation, arrived at the conclusion that the primary and essential lesion in beri-beri lay in the nervous system. All modern observers of experience are now agreed on this point. Contrary, however, to the generally accepted view, Dr. Bentley considers the primary lesion as being central in origin, and not peripheral: founding his belief, partly on certain clinical facts, but more especially on the microscopic evidences of spinal congestion. Dr. Bentley may be quite right in this view of the pathology of beri-beri; but, if he is right, the more generally accepted modern doctrines as to the seat of the primary lesion in the class of case known as multiple peripheral neuritis must be abandoned; for this form of disease has no better representative than the dry, atrophic forms of beri-beri. Neurologists would do well to study Dr. Bentley's cases and *post-mortem* records in this connection. At p. 36, our author calls attention to a clinical point, which, if confirmed by future observers, must be regarded as novel and important. He states that in beri-beri, sore throat is almost invariably present at some time or another: in almost all his cases the fauces are described as being more or less congested.

It is interesting to note that Dr. Bentley denies emphatically that anæmia has anything to do with beri-beri. His elaborate and extended thermometrical observations prove that neither fever nor the subnormal temperature alluded to by some authors is a constant feature in the developed disease, although fever seems to have been a frequent antecedent in many instances, and subnormal temperature usual at the termination of fatal cases. The systematic examinations of the urine practised by Dr. Bentley completely upset the one time popular view that beri-beri had something to do with nephritis. Another doctrine, also formerly popular—namely, that the disease was a phase of scorbutus—receives no support from our author. Besides these there are many other interesting points in this work we should like to notice did space permit.

Owing to the author's absence from England while the work was passing through the press, many typographical and other errors have crept into the text, some of which are not a little misleading, and most of which are not referred to in the too meagre list of errata. Notwithstanding these, we have little doubt this work will be extensively read and much appreciated, especially by practitioners in the tropics, and that it will act as a powerful stimulus in leading others to endeavour to extend our knowledge of the very interesting and important subject of which it treats.

[1] *St. Thomas's Hosp. Rep.*, 1876.
[2] Special Report to the Singapore Government, 1880.
[3] *Chinese Imp. Mar. Cust. Gaz.*, Medical Report, 1880.

NOTES ON BOOKS.

A Practical Handbook of Midwifery. By Francis W. Nicol Haultain, M.D., F.R.C.P., Lecturer in Midwifery, Edinburgh School of Medicine, etc. Illustrated. (London: The Scientific Press. 1894. Crown 8vo, pp. 256. 6s.)—This little book is published at the request of many of the author's former pupils. It appears to be a syllabus of the course of lectures on the subject given by him. If so, and if we may judge of the lectures by the syllabus, we should say they are very good, and that the syllabus will be very useful to those who have heard the lectures. But those who have not the knowledge needed to fill up the syllabus, and who want to know, not merely outlines, but why and wherefore, will require more detail than is given here.

Essentials of Minor Surgery, Bandaging, and Venereal Diseases. Arranged in the Form of Questions and Answers. By Edward Martin, A.M., M.D. (Philadelphia: W. B. Saunders. 1892. Crown 8vo, pp. 166, 78 illustrations. 1 dol.)—This small volume, which is one of a series of elementary works for the use of medical students, has been favourably received in the United States, and is now published, after revision and enlargement, in a second edition. It contains much information on the details of dressing and minor surgery, which is given clearly and is well illustrated. Although we do not find any advantage in the method of giving such information by questions and answers, we recognise the able and thoroughly practical manner in which the author has dealt with his subjects and the success of his efforts to supply a cheap and, at the same time, a complete handbook of bandaging. The book concludes with some sections on the diagnosis and treatment of the different forms of venereal and syphilitic disease. These sections give abundant instruction, in a compressed form, on the subjects to which they are directed.

REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

TABLOIDS.

Messrs. Burroughs, Wellcome, and Co. have forwarded us samples of tabloids of dermatol, alumnol, iodopyrin, benzosol, hypnal, and agathin. Some of these drugs are now being very largely used, and the tabloid form will enable them to be conveniently administered in appropriate dose.

Dermatol Tabloids.—Dermatol is a basic gallate of bismuth, and has been found of value as an inodorous non-poisonous substitute for iodoform in dressing wounds of every kind. Taken internally it has astringent and soothing qualities recommended for the treatment of gastric ulcer and intestinal catarrh.

Alumnol Tabloids.—Alumnol is a sulphonic acid salt of aluminium, dissolving in water readily, and miscible with most menstrua. It has astringent qualities, and a more penetrating effect than silver nitrate. It has been used with alleged success in gonorrhœa and in skin diseases.

Iodopyrin Tabloids.—Iodopyrin consists of antipyrin in which one atom of H is replaced by one of I. Taken into the stomach it splits up into iodine and antipyrin, and aims at combining the therapeutic effects of both.

Benzosol Tabloids.—Benzosol is an odourless and tasteless benzoate of guaiacol. It is reputed to display the qualities

of guaiacol and creasote in the treatment of tuberculous complaints or night sweats, and without having the disadvantages.

Hypnal Tabloids.—Hypnal is a compound of chloral hydrate and antipyrin, possessing valuable hypnotic properties.

Agathin Tabloids.—Agathin is a synthetic compound, useful as an antineuralgic. It is alleged to be free from toxic properties and from unpleasant by- and after-effects.

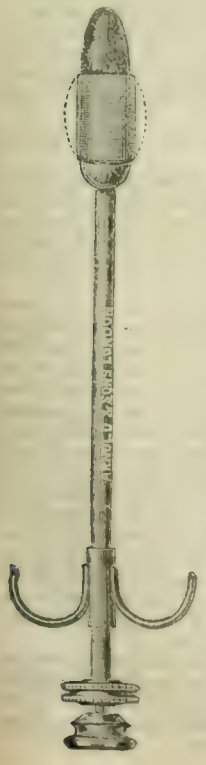
MALAKINE.

This is a new antipyretic manufactured by the Society of Chemical Industry of Basle, and forwarded by Messrs. James Woolley, Sons, and Co., Manchester. Chemically it is a combination of phenacetin and salicyl-aldehyde, and occurs in small yellow crystals insoluble in water, slightly soluble in alcohol, and tasteless. It is analgesic and antipyretic in action, and is recommended in articular rheumatism, feverish conditions, neuralgia, and headache. It is said to be extremely mild in its action, and to have no accompanying unpleasant effect. The dose is 15 grains, and 90 grains may be given during the twenty-four hours. It is best administered in powder. [See Epitome, Dec. 2nd, 1893, par. 460.]

FIRST FIELD DRESSING.

Mr. Milne, of Ladywell, S.E., sends us a sample of his first field dressing. It consists of a small linen package, 3½ inches broad and 5 inches long, containing a pad enclosed in gauze, a piece of jaconet, a bandage, a piece of gauze, and two safety pins. The whole is sealed in waterproof, and enclosed in a linen bag. The dressing is well made, compact, and portable, conforming closely to the type of first field dressings as used in our own and Continental armies; and affords a suitable and handy dressing for wounds or injuries occurring in factories or on railways and ships.

It is usually claimed for all this kind of "first aid" dressing that the contained pad, gauze, and bandage are antiseptic; but our experience goes to show that very few of them possess antiseptic properties. We have been unable to satisfy ourselves that this particular dressing has any special antiseptic quality.



A GYNÆCOLOGISTS' CERVICAL PLUG.

Dr. Alexander Duke (Cheltenham) writes: The inconvenience and discomfort entailed on both patient and doctor by the simple operation of plugging the vagina will, I think, be avoided by the use of the instrument depicted in the accompanying illustration.

It will be applicable in all cases for which plugging the vagina is practised and recommended. In early abortion and passive hæmorrhage from the unimpregnated uterus it will be found of special value.

It can be introduced into the uterus either through the speculum or by touch alone (which I prefer), and when *in situ* (the rubber plug forming the centre of uterine portion) can be then expanded by the action of screw at base, and if properly applied can be left in position for a considerable time without fear of expulsion, the patient (as a matter of course), strictly observing the recumbent position meanwhile.

This form of "uterine cork" will I hope be found in practice more convenient and effectual in its results than the older plan of plugging the vagina.

The makers are Messrs. Arnold and Sons.

REPORT

OF THE

ROYAL COMMISSION ON UNIVERSITY EDUCATION IN LONDON (GRESHAM UNIVERSITY).

ONE UNIVERSITY IN AND FOR LONDON.

The Constitution and Instructions of the Royal Commission.—Reconstitution of the University of London.—Relation of the University to Existing Public Bodies.—Examinations and Degrees.—The Matriculation Examination.—Medical Education.—Proposed Statutory Commission to be Appointed by Parliament. Scheme for the New University.—The Senate.—The Academic Council.—The Faculties and Boards and Studies.—Schools of the University.—The Medical Schools in London.—Examinations and Degrees.—Proposed Power of the Statutory Commission.

The report of the Royal Commission appointed by Lord Salisbury's Government to consider the draft charter of the proposed Gresham University for London has not yet been published, but it has been presented to the Queen, and we are enabled to give below its more important provisions, together with the general outline of the scheme for a university in and for London, approved by the Commission.

The Commissioners were thirteen in number: Earl Cowper, K.G. (Chairman), Lord Reay, G.C.S.I., Right Hon. Lord Playfair, K.C.B., Sir William S. Savory, Bart., Sir George M. Humphry, Bart., Right Rev. Bishop Barry, Rev. Canon Browne, Professor Burdon Sanderson, Professor George G. Ramsay, Mr. Gerald H. Rendall, Mr. Ralph Charlton Palmer, Mr. James Anstie, Q.C., and Professor Henry Sidgwick.

The report is signed by all the Commissioners, but dissentient or explanatory notes are appended by Lord Reay, Sir William Savory, Sir George Humphry, Bishop Barry, Canon Browne, Mr. Palmer, Mr. Rendall, and Mr. Anstie.

The Royal Commission adopted a wide view of their instructions, which were to consider, and, if thought fit, to alter, amend, and extend the proposed charter of the Gresham University, with the view of putting forth a scheme for the establishment by charter of a teaching university for London. The Royal Commission has, in fact, gone into the whole question of university education in London *ab initio*. The report recommends that the changes and new creations which will be required should be carried out not under a charter, but by the legislative authority, through the appointment of a commission with statutory powers.

Reconstitution of the University of London.

After giving a history of the movement down to the present time, the Commissioners proceed to say that upon the question whether there shall be two Universities in London or one only, that the large majority of their number have come to the following conclusions:

1. We are of opinion that there should be one University only in London, and not two; and that the establishment of an efficient teaching University for London will be best effected by the reconstruction of the existing University on such a basis as will enable it, while retaining its existing powers and privileges, to carry out thoroughly and efficiently the work which may be properly required of a teaching University for London, without interfering with the discharge of those important duties which it has hitherto performed as an examining body for students presenting themselves from all parts of the British Empire.

2. In view of the failure of previous attempts to settle this question, and of the difficulty and delay which must inevitably attend an alteration of the constitution of the University through the action of the University itself, we are of opinion that, in accordance with the precedents followed in other cases of University reform, the changes which we recommend should be effected not by charter, but by legislative authority, and by the appointment of a Commission with statutory powers, to settle, in the first instance, arrange-

ments and regulations in general conformity with the recommendations which we are about to submit to Your Majesty.

Relation of the University to Existing Public Bodies.

The report, in discussing the resources of which the local situation of the University may enable it to take advantage, points out the University will be situated in a great capital city, where museums, libraries, and other collections upon the largest scale, and of the highest degree of scientific and literary method and completeness exist under the national care, and which has long since become the seat of powerful independent bodies, exercising a control over the learned professions, possessed of large resources, and having an organic life and an historic past. With regard to the former, the national character of the collections must prevent them from being identified with the University; and the professional bodies, having an important position and public functions of their own, cannot be merged in the University, nor can they enter into arrangements with the University which would preclude them from discharging those public functions in a liberal and impartial spirit, or from making similar arrangements with other University bodies. The Commissioners consider that a mutually beneficial connection might be established between the University and the national collections, and propose, therefore, that the latter should be represented on the governing body. With respect to the professional bodies, they continue, it seems, equally reasonable that they should be invited to a participation in the University system which, without infringing on their autonomy, will hardly fail to increase their usefulness and importance. The Royal Colleges of Physicians and of Surgeons have, as is well known, long desired University recognition. The justice of their claims has been allowed in all schemes hitherto framed for the reconstitution of the University of London, as well as in the proposed charter for the Gresham University; and we have no hesitation in recommending that they should be represented on the governing body of the University. The Society of Apothecaries has made a similar request, and has expressed its readiness to concur in aiding the educational resources of the University. Although it cannot lay claim to an equal scientific rank with that of the two Royal Colleges, yet, having regard to its position as a licensing authority, to the fact that it was admitted to a place in the draft charter of the proposed Gresham University, and to the opportunity thus afforded of increasing the educational resources of the University, we are of opinion that it would also be represented on the governing body.

Examinations and Degrees.

The report, after pointing out that the University should retain its present function of examining candidates, and conferring upon them degrees, diplomas, and certificates without regard to the place or institution in which they may have received their education, recommends an exception in the case of medicine, in accordance with the existing practice of the University of London, which precludes it from receiving as candidates for examination in medicine any persons except those who have studied in medical schools recognised by the University. No alteration is proposed in this respect.

With respect to the entrance or matriculation test, the Commissioners observe that considerable difference of opinion exists among authorities entitled to high respect. While some are unwilling to insist on anything which might create a bar to admission to the University, preferring to trust to the subsequent training to furnish in such cases all that is necessary for higher education. Others insist on the importance of an intellectual preparation by adequate secondary training before the commencement of the university course, and maintain that the student who is to follow specialised courses in the University should prove that he is a master of the ordinary elements of a liberal education. Some regard the existing matriculation examination as a fair type, though erring in its range and severity. The majority of witnesses, it is added, are disposed to allow a considerable variety in its extent and character according to the various forms of university study on which the student is about to enter. Looking to the diversity of opinion, they continue: "We think that it should be left to the University itself to make such arrangements as it may think fit for the admission of students, and for their registration or matriculation, and to attach to such admission such tests of fitness for entrance upon a university course as they deem sufficient, having regard to the course of study which the student designs to follow. Should any entrance examination be imposed, it should be in the power of the University to accept, in lieu of such examination, a certificate of having passed, at school or otherwise, an examination of equivalent standard."

The Commission recommend that as a rule there should be only two orders of degrees, and that the higher degree—that of Doctor—should be conferred only on those who have by study or research contributed to the advancement of learning or science. In the case of medicine, however, where the Doctorate is so largely sought on account of the professional advantages connected with the title, it would be impracticable to make the attainment of that degree dependent on the performance of original work, without either, on the one hand, rendering the degree too difficult of access, or on the other hand impairing the real value and significance of the condition. We think, therefore, that in the degree of Doctor of Medicine, and the corresponding degree of Master of Surgery, the University will have to rely ordinarily on the test of examination; but to encourage the performance of the above-named condition as an alternative, either in whole or in part, to the examination. In Medicine all candidates for degrees will be required to go through regular courses, whether in schools of the University, or in other schools recognised by the University, but students attending any of the schools so recognised in London will be in the same position as other internal students.

Medicine.

The following are the recommendations of the Commission with regard to Medicine:

We are of opinion that the following main branches of medical study should be represented in the Faculty of Medicine:

(*a*) Physics; (*b*) Chemistry; (*c*) Biology; (*d*) Anatomy; (*e*) Physiology; (*f*) Pathology; (*g*) Pharmacology and Materia Medica; (*h*) Medicine, including Therapeutics; (*i*) Surgery; (*j*) Midwifery and Diseases of Women; (*k*) Hygiene and Public Health; (*l*) Forensic Medicine; (*m*) Mental Disease.

Some, at least, of these titles include many subsidiary subjects; for instance, under the heads of Medicine and Surgery are naturally included Dermatology, Ophthalmology, and other special branches of study.

Each of these subjects should be represented on the Board or Boards of Studies.

In our opinion, however, it is very desirable that with regard, at least, to the small medical schools the teaching of physics, chemistry, biology, anatomy, physiology, pharmaeology and materia medica, pathology, hygiene and public health, and forensic medicine, should be concentrated into one or two institutions.

At some of the medical schools the number of students attending these several classes is very small, and there is often great difficulty in obtaining teachers properly qualified for the work. As a rule, the best men are not anxious to accept these appointments. There is little or no remuneration or encouragement to exertion, but if the several classes in these subjects could be fused together, the individual classes so resulting would be of sufficient magnitude and importance to secure the services of the best teachers. It can hardly be doubted that considerable improvement in medical education would result from this arrangement, while by the saving of time and expense and concentration of force, the several schools would be set free from what must be now a burdensome weight, and would be enabled to devote all their energies to the teaching of the clinical subjects of medicine and surgery, which in all their various branches have largely developed of late years.

If such a plan as this were adopted the further question would be considered whether each of the several subjects should not be entrusted to more than a single teacher. The classes would probably be large enough and the remuneration sufficient to admit of this division of labour.

We would also observe, in relation to the subject of mental disease, that it would be highly desirable in the interests of the public for the instruction of students in this branch of medical study, if the lunatic hospitals, asylums, and licensed houses in the metropolis, were open for clinical study and available for the instruction of students. This is to some extent done in the metropolitan asylums, and in one of the hospitals.

Candidates for degrees in medicine should be required to go through the prescribed courses of instruction is admitted or recognised medical schools.

With regard to the examinations for degrees, we are of opinion that the University should have power to enter into arrangements with the Royal Colleges of Physicians and Surgeons, for conducting in common examinations in such portions of the subjects included in the course for the degree as may be determined by common consent between the University and the Colleges. It is obvious that much would be gained by a combination which would prevent an undue multiplicity of examinations, without on the one hand tending to lower the standard of the University degrees, or interfering, on the other hand, with the licensing authority of the Royal Colleges. The fact that an arrangement with this object was actually agreed upon by the Senate of the London University and the Colleges in 1891[1] gives us confidence in believing that little difficulty will be found in arriving at a mutual arrangement satisfactory to both parties. No arrangement of this kind will in any way lessen or interfere with the duty of the University to satisfy itself as to the adequacy of the examinations in all respects.

The Society of Apothecaries, being admitted to a representation on the Senate of the University, might be included in the arrangement for conducting examinations.

It should be clearly understood that we do not think it desirable—and in this nearly all who have given evidence concur—that a degree should be obtainable on the same terms as the ordinary licence to practise. A somewhat higher standard of knowledge, more particularly of scientific knowledge, should be required for the degree; and this, as we have already intimated, it will be open to the University to require.

It is hoped that by the means we have indicated the need of greater facilities for obtaining the medical degree in London will be adequately met without lowering its scientific character.

The Reconstitution of the University of London.

The Commissioners have appended to the report a summary of their recommendations relating to the constitution and conduct of the university. This summary is intended to draw attention to the main conclusions of the report, and the following paragraphs contain the Royal Commission's view of the effect of their recommendations, and of the general character of the constitution of the university which should be established in London.

VISITOR.

The Queen will be Visitor of the University.

THE CHANCELLOR.

The Chancellor will be elected by Convocation, and will hold office for life.

The Chancellor will be head of the University, and *ex officio* a member of the Senate and of Convocation.

The Chancellor will preside over all meetings of the Senate at which he is present.

THE VICE-CHANCELLOR.

The Vice-Chancellor will be elected annually by the Senate out of its own body, and will be *ex officio* a member of Convocation, a member of all boards and committees appointed by the Senate, and a member of the Academic Council.

The Vice-Chancellor will, in the absence of the Chancellor, preside over all meetings of the Senate; and will be chairman *ex officio* of all boards and committees appointed by the Senate, and of the Academic Council.

The constituent bodies of the University will be the Senate, the Academic Council, the Faculties and Boards of Studies, the Convocation.

THE SENATE.

The Senate will consist of the Chancellor, and of 65 other members appointed as follows:

3 by the Crown.
3 by the Lord President of the Council—
  1 in respect of the Royal College of Science.
  1 in respect of the Education Department.
  1 in respect of Art.
1 by the Secretary of State for the Colonies.
1 by the Secretary of State for India.
9 by the Convocation, elected—
  2 by the registered graduates in Arts.
  2 by the " " " Science.
  2 by the " " " Medicine.
  1 by the " " " Law.
  1 by the " " " Theology.
  1 by the " " " Music.
2 by the Royal College of Physicians.
2 by the Royal College of Surgeons.
1 by the Society of Apothecaries.
4 by the Inns of Court, one for each Inn.
2 by the Incorporated Law Society.
1 by the Royal Agricultural Society.
1 by the Institution of Civil Engineers.
1 by the Institution of Mechanical Engineers.
1 by the Royal Institute of British Architects.
1 by the Trustees of the British Museum.
1 by the Royal Society.
2 by University College.
2 by King's College.
1 by the Governors of the City and Guilds of London Institute
1 by the Corporation of London.
1 by the Mercers' Company.
2 by the London County Council.
22 as follows—
  4 by the Academic Council.
  4 by the Faculty of Arts.
  5 by the " " Science.
  4 by the " " Medicine.
  2 by the " " Law.
  2 by the " " Theology.
  1 by the " " Music.

All members of the Senate, other than the Chancellor, will (except by special provision in the case of the first appointments) be appointed for a term of four years.

The Senate will be the supreme governing body of the University and will have power from time to time to frame statutes* to be submitted to the Queen in Council and to be laid before Parliament for altering or adding to the constitution, powers, or functions of the University.

The Senate will further have power to make, alter, or revoke ordinances* for regulating all matters concerning the University and to exercise all powers and do all things authorised to be exercised and done by the University, provided always—s. 41:

1. That any such ordinance be not repugnant to any provision of the statutes of the University.

2. That it shall not adopt or impose on any person any test whatsoever of religious belief or profession or assign any grant of money for any purpose in respect of which any privilege is granted or disability imposed on account of religious belief.

Subject to these conditions the Senate will in particular—

Control the affairs and property of the University, regulate the amount and determine the distribution of all fees payable to the University, and appoint a registrar and other officers necessary for conducting the business of the University.

Assign funds for the conduct and administration of the University, and after first inviting the opinion of the Academic Council assign funds for the erection or extension of buildings for the provision of teaching and equipment and for the endowment or remuneration of University professors, readers, lecturers, demonstrators, or assistants.

Make regulations regarding scholarships and other emoluments.

For good cause deprive the holder of any University office or emolument of such office or emolument.

Admit institutions or departments of institutions as schools of the University, visit such schools, and (subject to an appeal to the Queen in Council) remove any institution or department of an institution from being a school of the University.

Recognise medical schools other than schools of the University for the time being as schools from which candidates will be allowed to proceed to medical degrees, and withdraw such recognition.

Alter the number and distribution of the faculties.

Appoint University professors upon the report of standing boards appointed by it for the purpose.

[1] Note.—The following are the paragraphs in the Senate's scheme referred to:—

Degrees in Medicine.

47. The Senate shall have power to enter into arrangements with the Royal Colleges for conducting the Examinations in Anatomy, Physiology, Medicine, Surgery and Midwifery for the Pass M.B. Degree by a Board of Examiners, consisting of the Examiners appointed by the University and Examiners to be appointed by the Royal Colleges, who shall join in the reports to the Senate on such Examinations. The Examiners appointed by the University may be called upon, if the Senate so think fit, to make in addition separate reports. These Examinations may, if so agreed on, be conducted in combination with Examinations for the Royal Colleges. The arrangements for giving effect to this clause shall be carried out under the direction of a Committee to be appointed in equal numbers by the Standing Committee for the Faculty of Medicine and a Committee to be appointed by the two Royal Colleges. Such arrangements to be subject to the approval of the Senate and of the two Royal Colleges. This arrangement for joint Examination shall not lessen or interfere with the duty of the Senate to be satisfied as to the adequacy of the Examinations in all respects.

48. Candidates for Degrees in the Faculty of Medicine to show that they have passed through the required courses of instruction in one or more of the Constituent Colleges in that Faculty or of the recognised Medical Institutions.

* By a "statute" is meant a law of the University alterable only by the Queen in Council, with the usual reference to Parliament; by an "ordinance" a law of the University passed by the Senate and alterable upon its sole authority.

Appoint University readers, lecturers, demonstrators, and assistants upon the report of boards, whether boards of studies or otherwise.

Determine the duties of University professors, readers, lecturers, demonstrators, and assistants.

Assign University professors, readers, and lecturers to their respective faculties.

Regulate the admission, and order the examinations of internal and external students.

Appoint a standing board to superintend, regulate, and conduct the examinations for external students, and to advise external students in the prosecution of their studies.

Appoint examiners of internal students, upon the reports of boards of studies transmitted through the Academic Council.

Appoint examiners of external students, upon the nomination of the board for external students.

Appoint a standing board to promote the extension of University teaching; and upon the report of the Academic Council recognise work done under the superintendence of the board as an equivalent for parts of the regular University course.

Confer degrees, diplomas, and certificates.

Admit duly-qualified graduates to the register of Convocation, and for non-payment of fees, or for other good cause (subject to an appeal to the Chancellor), remove the name of any member from the register.

Determine the manner of conducting the election of the Chancellor, and of the representatives on the Senate of Convocation, of the faculties, and of the Academic Council.

Elect the Vice-Chancellor out of its own body.

Sixteen members should form a quorum.

THE ACADEMIC COUNCIL.

The Academic Council will consist of the Vice-Chancellor, who shall preside, and of 15 members, elected by the faculties as follows:—

4	by the Faculty of Arts.		2	by the Faculty of Law.	
4	,, ,,	Science.	1	,, ,,	Theology,
3	,, ,,	Medicine.	1	,, ,,	Music.

All representative members of the Academic Council will (except by special provision in the case of first appointments) be elected for a term of four years.

The Academic Council will elect four representatives upon the Senate.

Subject to the statutes and ordinances of the University, the Academic Council will have power—

To recognise teachers in any admitted school of the University as teachers of the University, and to withdraw such recognition.

To assign such teachers to their respective faculties.

To assign, if they think fit, a place upon the faculties to demonstrators and assistants appointed by the University.

To determine the number and composition of the boards of studies in each faculty, and the mode of election and period of service of the members of the boards.

To appoint such members as they think fit upon any board of studies, provided that the number so appointed shall not exceed one-fourth of the board.

To delegate to any board or boards of studies such functions as it may see fit, and to refer any matter for report to any board or boards of studies.

To direct the dean of any faculty to summon a meeting of the faculty for a consideration of the report of any board of studies belonging to the faculty.

To determine curricula of study and examination, after having had before them the opinion of the board or boards of studies of the faculty concerned.

To settle University courses of study to be pursued at any school of the University, after consultation with the authorities of the institution concerned,

To arrange for the holding of University examinations for internal students, in so far as separate from those for external students, and to fix the times and places at which they shall be held.

To advise the Senate upon the various matters enumerated in Section 32.

Six members should form a quorum.

FACULTIES AND BOARDS OF STUDIES.

The faculties will be six in number, namely, arts, science, medicine, law, theology, and music; and the faculty of science will be divided into two departments, one for pure and one for applied science. But the number and distribution of the faculties may be altered from time to time by ordinance of the Senate.

The faculties will consist of:—

(1) University professors, readers, and lecturers.

(2) University demonstrators and assistants approved by the Academic Council.

(3) Teachers in the schools of the University recognised by the Academic Council.

University professors, readers, and lecturers will be assigned to their respective faculties by the Senate.

University demonstrators and assistants, if approved for the purpose, and all recognised teachers of the University, will be assigned to their respective faculties by the Academic Council.

Each faculty will elect representatives upon the Senate, in the manner prescribed by the Senate, as follows:—

The Faculty of Arts,	4.	The Faculty of Law,	2.
,, Science,	5.	,, Theology,	2.
,, Medicine,	4.	,, Music,	1.

Each faculty will elect representatives upon the Academic Council, in the manner prescribed by the Senate, as follows:—

The Faculty of Arts,	4.	The Faculty of Law,	2.
,, Science,	4.	,, Theology,	1.
,, Medicine,	3.	,, Music,	1.

Each faculty will elect a dean, to hold office for four years.

The dean of each faculty will summon a meeting of the faculty when he sees occasion, or when directed by the Academic Council, or when requested by one-third of the members of the faculty to do so.

In each faculty a board or boards of studies will be constituted in the way determined by the regulations of the Academic Council, and not less than three-fourths of the members of every such board will be elected by the faculty to which it belongs.

Each faculty or board of studies will consider and report upon any matter referred to it by the Senate or the Academic Council, and may consider any matter concerning courses of study, examination, degrees, diplomas, certificates, and teaching, in subjects within the province of the faculty, and report to the Academic Council thereon.

Each board of studies will elect its own chairman and conduct its own proceedings.

A board of studies may meet and act concurrently with another board or boards, and will, if so requested, deliberate in conjunction with the Academic Council or any committee thereof.

Any board of studies may exercise administrative or executive functions expressly delegated to it by the Senate or the Academic Council.

THE CONVOCATION.

Convocation will consist of the Chancellor, the Vice-Chancellor, and registered members as follows:—

(1) Present members of Convocation.

(2) Graduates of the existing University qualified to be members.

(3) Future graduates, of three years' standing from the date of first graduation.

(4) Members of the Academic Council registered under ordinance of the Senate.

(5) Subject to the assent of Convocation, persons admitted to a degree otherwise than by ordinary graduation.

Saving the rights of members already registered or qualified to register, members of Convocation will be required to register and to pay fees according to the regulations of the Senate. In default of payment of fees, or for other good cause (subject to an appeal to the Chancellor), the names of members may be removed from the register by the Senate.

Convocation will elect its own chairman, manage, and record its own proceedings, and appoint a clerk with such salary as the Senate may determine.

Convocation will be convened by the chairman, once at least every year as provided by the Senate, and at other times if directed by the Senate; the chairman will at his discretion convene an extraordinary meeting for the despatch of specified business, if so requested in writing by 20 members of Convocation, but no such extraordinary meeting will be held within three calendar months of the last foregoing extraordinary meeting.

Convocation when convened for ordinary purposes will have power to discuss any matter relating to the University, and declare to the Senate its opinion thereon.

For the decision of any question in Convocation the numbers present should be not less than 50.

Convocation will be entitled to express its views before the Queen in Council, upon any alteration of the statutes proposed by the Senate.

Convocation will elect the Chancellor, voting by voting papers, in accordance with regulations laid down by the Senate.

Convocation will have nine representatives upon the Senate, elected as follows:—

2	by the registered Graduates in Arts,	
2	,, ,, ,, ,, ,,	Science,
2	,, ,, ,, ,, ,,	Medicine,
1	,, ,, ,, ,, ,,	Law,
1	,, ,, ,, ,, ,,	Theology,
1	,, ,, ,, ,, ,,	Music;

but until the registered graduates in theology amount to 20, their representative will be elected by the registered graduates in arts. The elections will be conducted by voting papers, in accordance with regulations laid down by the Senate.

SCHOOLS OF THE UNIVERSITY.

A school of the University will be any institution, or department or departments of an institution, admitted by the Senate to a place in the University, as a school at which University courses of instruction may be pursued.

In deciding the claim of any teaching institution to be admitted as a school of the University, the Senate will consider (*a*) the character of the foundation; (*b*) whether the teaching and appliances are of University rank; (*c*) the average age of students; (*d*) the number of students proceeding or likely to proceed to University degrees; (*e*) financial position; (*f*) relation to any other University. But the claim of special institutions for research will be considered on the special merits of the case.

The following institutions will be admitted in whole or in part as schools of the University:—

University College.
King's College.
The Royal College of Science.
The Medical School of Charing Cross Hospital.
,, ,, Guy's Hospital.
,, ,, London Hospital.
,, ,, Middlesex Hospital.
,, ,, St. Bartholomew's Hospital.
,, ,, St. George's Hospital.
,, ,, St. Mary's Hospital.
,, ,, St. Thomas's Hospital.
,, ,, Westminster Hospital.
The London School of Medicine for Women.
The City and Guilds of London Institute.
Bedford College.
The following theological colleges, namely:—
Hackney College.
New College.
Presbyterian College.
Regent's Park College.
Cheshunt College.
Richmond College.
The following four colleges of music:—
Royal Academy of Music.

Royal College of Music.
Guildhall School of Music.
Trinity College, London (music).

And, under certain reservations, the Inns of Court and the Incorporated Law Society.

No institution will in future be admitted which is not within the administrative county of London, including the county of the City of London.

Any institution or department of an institution which the Senate shall refuse to admit as a school of the University will have a right of appeal to the Queen in Council.

Any teacher in a school of the University, who has been duly recognised by the Academic Council, will be a member of the faculty or faculties to which he is assigned by the Academic Council.

The courses of University study to be pursued at any school of the University and the requirements of attendance will be regulated by the Academic Council, after first consulting the authorities of the institution.

Schools of the University will be open to the visitation of the University, and subject to the right of appeal to the Queen in Council any school may be removed by the Senate from being a school of the University.

EXAMINATIONS AND DEGREES.

The University may, if it think fit, impose an entrance or matriculation test on all students of the University, and may accept in lieu of any such examination other examinations of equivalent standard.

The University will recognise students of two kinds—internal and external. Internal students will pursue regular courses of study of not less than three academic years' duration, under the regulations of the Academic Council, in a school or schools of the University. External students will proceed to a degree by way of examination without attendance, and three academic years must elapse between their first examination by the University and their final examination for the first degree.

The final examinations for the first degree for internal and external students respectively will, if not the same, represent the same standard of knowledge, and will be identical so far as identity is consistent with the educational interests of both classes of students.

Other arrangements for the conduct of examinations are explained in Section 48.

All candidates for degrees in medicine will be required to go through regular courses, whether in schools of the University or in other schools recognised by the University.

The degrees should, as a rule, be of two orders only. The degree of doctor will, except in medicine, be conferred only on those who have by study or research contributed to the advancement of learning or science.

In addition to ordinary graduation, degrees may be conferred without examination on University professors; similar and equal degrees on graduates of other universities, who are recognised teachers of the University; and honorary degrees, except in medicine, on persons esteemed worthy of that distinction by the Senate.

SUGGESTIONS WITH RESPECT TO THE PROPOSED STATUTORY COMMISSION.

After hearing a very large amount of evidence, and giving the matter our most careful consideration, we held it our duty to make detailed recommendations for the organisation and powers of the University; and with a view to their being promptly and authoritatively carried into effect, we recommended that a Statutory Commission should be appointed, with power to carry out (subject to the approval of Parliament in the usual way) the recommendations and provisions contained in our report, and to give conclusive authority to our determinations.

We have, therefore, to recommend that the Statutory Commission should be appointed for such a period as may be thought necessary, with the following powers and duties:

1. To determine in what mode, and under what conditions, any property now held by the University of London should continue to be held by the University as reconstituted, regard being had to any trusts to which the same is now subject.

2. To receive the assents of the institutions named in the twenty-fourth paragraph to be admitted as schools in the University; and with reference thereto to determine, in the first instance, the following matters:

(*a*) Whether any institution is to be admitted as a whole to be a school in the University; and, if not, in respect of what department or departments it is to be admitted.

(*b*) What teachers in such institutions are, in the first instance, to be recognised as teachers in the University, and in which faculties they are respectively to be placed.

3. To receive the assents of the various persons and bodies, other than the Crown, the Convocation, the faculties, and the Academic Council, who are to nominate to seats upon the Senate.

4. To determine the time or times within which, and the mode or modes in which, nominations are in the first instance to be made by the various nominating persons and bodies (*a*) to the Academic Council, (*b*) to the Senate; to determine (when necessary) the period of office of those first nominated upon the Academic Council and the Senate respectively, so as to secure a due rotation; and to receive and record, or appoint some person to receive and record, such first nominations.

5. To frame, in accordance with the recommendations now submitted to your Majesty, the statutes of the University; and therein to make such provision as they may deem necessary for preserving the rights and protecting the interests of any existing members or officers of the University.

6. To frame such ordinances as they may deem necessary for the conduct of the business of the University in the first instance, such ordinances to have the same effect and to be alterable in the same mode as if they had been made by the Senate acting under the statutes of the University.

7. To make such temporary provisions as they may deem necessary for better effecting the transition of the University from its present form and functions to the form and functions to be defined by the statutes, and to fix the date at which the present constitution of the University should cease to exist and the new constitution come into operation, with power to direct that such new constitution shall come into operation, although the Senate or any other part of the University may not be fully constituted, and to fix the date of the first meeting of the Senate and the mode in which it is to be summoned.

8. On application by the governing body of any of the said institutions to repeal and abrogate in whole or in part any Act of Parliament, charter, letters patent, statute, deed, instrument, trust, or direction relating to such institution or the property thereof, and to make such provisions, and frame such charters in relation thereto as to them may seem fit, and as may be assented to by such governing body.

9. To make such order from time to time as may seem to them necessary for carrying into effect any of the matters aforesaid.

10. It should also be the duty of the said Commission to make such recommendations as they may see fit in respect to any grant of funds which Parliament may provide for the endowment of the University, and for making an adequate provision for scientific research.

ANALYSIS AND REPORT
ON
ORIGINAL DOCUMENTARY EVIDENCE CONCERNING THE USE OF OPIUM IN INDIA.

[FURNISHED TO THE "BRITISH MEDICAL JOURNAL" BY UPWARDS OF 100 INDIAN MEDICAL OFFICERS.]

VIII.

Prohibition of Opium and Substitution of Real Poison.—Disastrous Results (Commercial, Economical, and Political) of Stoppage.

HAVING learned from the preceding chapters the real facts concerning the use and abuse of opium of India; having seen the baselessness of all assumption as to its injuriousness to the health and the morals of the population, and having thus obtained a true conception of the whole matter as it is under the circumstances prevailing at the present time in India, we can now proceed to investigate the state of affairs which would be brought about should the antiopiumist propaganda prove victorious, and should the stoppage of opium they aim at become a fact. Granting for the sake of argument that such a thing is possible, two questions would arise (1) Would opium be replaced by any other stimulants or intoxicants or not? (2) What intoxicants would be used by the natives instead of opium? The former of these questions cannot be answered in the negative by anyone who has an open mind for facts and observations. There is no nation on the earth, no class, and perhaps no individual, who does not take a stimulant of some kind, and to assume that the hundreds of millions of the population of India would step forward as one man, and with one voice spontaneously take a solemn vow to refrain from all stimulants, including alcohol, hemp, tobacco, tea, opium, coffee—is an utterly chimerical idea, which could be entertained only by a philanthropic dreamer. As to the nature of the probable substitutes our correspondents are not unanimous, but they all agree that whatever substitute may prove the most palatable to the native and the most fit to replace the effects of opium, it will prove to be a very disastrous exchange.

The catalogue of the most probable substitutes runs as follows:—(1) Various forms of Indian hemp, as *churrus*, *ganja*, *bhang*, and *majoon*: (2) *arec* (country liquor): (3) datura stramonia alone or mixed with bhang: (4) adulterated English gins, Irish and Scotch whisky: (5) arsenic. As most of our readers are probably acquainted with the deleterious effects of Indian hemp on the mind of its consumer, and are also aware of the violent intoxication which it produces, and as all of them know the toxic qualities of the impure oil which form a large percentage in all kinds of unpurified alcoholic drinks, we need not dwell upon the pernicious effects which would follow a general substitution of hemp and bad alcoholic liquors for opium. It is enough to say that even the best alcohol, if used habitually by natives of a hot country like India, proves more disastrous there than it does under the worst conditions in this country. A few quotations as to this point may be given here, but it must be understood that not one of our correspondents is in favour of such a change.

Surgeon-Lieutenant-Colonel Gordon Price says: "Abandon-

ment of the use of opium would certainly lead to excess in the use of alcohol and deleterious drugs (*gan'a* and *bhang*), which are infinitely worse, both physically and morally, than opium."

Surgeon-Colonel S. D. Spencer writes: "If opium were abolished in India some other drug would be substituted for it, and the abolition would cause a gigantic wave of unpopularity and of indignation, and there is no saying how far it might reach or what it might swamp."

Mr. Whitmore says: "The ex-consumer would, I think, most certainly fall back upon either alcohol or *ganja*. Alcohol is probably as ill-suited to the native of India as opium to the native of England. As for *ganja*, this drug, unless taken with great moderation, excites to violence and bloodshed, and leads very frequently to insanity of the most dangerous type."

Passing now to the most important aspect of the whole matter—the political—we think it right to mention that the natives themselves are also thinking of substitutes, but in a somewhat different way.

The Royal Commission on Opium has given rise to much uneasiness in India, and among the many fancies bred in the Oriental imaginations of the sons of "Sindh"—or, who knows? perhaps purposely implanted in them—one has assumed a distinct shape, and has spread considerably. This is an idea that the whole question as to the use of opium in India has been started by Parliament for the sake of the British distillers—in short, that the object of the English Government is simply to make the natives of India consumers of alcohol for the benefit of the "liquor interest," and that it sees in the suppression of the use of opium the readiest means of effecting this. Ridiculous as such an idea may seem at first sight, the grave nature of such rumours is too obvious to require to be insisted on.

The political aspect of the opium question has hitherto been practically ignored in England. At the instigation of a handful of missionaries and lay agitators here and in India a habit ingrained in the people, made inveterate by long custom, and believed by them to be useful and protective to health, has been made the subject of fussy interference by persons without knowledge of, or sympathy with, native feeling, has been made a bone of contention in newspapers, has been decided *pro* and *con* in the most light-hearted way, without reference to the views of the natives themselves. The natives cannot see the aim of the agitation. They ask, are the English going to convert them all to Christianity? Are they going to take opium away in order to substitute alcohol for it? They cannot see the reason for the nomination of a Royal Commission, or for the unknown innovations which are to be introduced; and their first impression is naturally one of distrust and fear. Whether opium is useful or injurious could be a question only for Englishmen, but not for the natives; so they did not and do not believe that the elucidation of the effects of opium on health and morals was the true reason for the appointment of the Opium Commission; and the result of the latter, whatever it may be for the enlightenment of our philanthropes at home, can only be disquieting to the natives of India. It will take a good time to dissipate the effects of the opium craze. It is not too much to say that, were the Government foolish enough to satisfy the agitators and to abolish the use of opium, another mutiny would be the consequence. Are we ready to sacrifice India to the fancies of a few faddists? The immense danger to which our rule in India, and the whole European and Eurasian population of India would be exposed, never seems for a moment to have occurred to the minds of these fanatical agitators, and unfortunately they find weak-minded persons enough at home to support them, and to disregard the vital interests of the whole British Empire. We are glad to have been able to do our share in unmasking the false prophets of a pernicious philanthropy, and we are supported therein by the best part of the medical and legal profession of India. Let us give a few of the replies we have received:—

Judicial Assistant F. C. O. Beaman, of Kashiwad, writes: "It is, of course, a mere platitude now that, by comparison with the evil effects produced by equivalent excesses in alcohol or *ganja*, opium as an agent of evil is entitled to rank as the least harmful of all intoxicants in common use. Stop your liquor at home before you meddle with the Indian's opium is the unanimous advice of every person not actuated by mistaken philanthropy or religious impulse, who has had any opportunity of comparing the results of English gin shops with those of the opium habit."

Mr. A. B. Napier says: "I believe that the sudden cutting off of the supply of opium would mean the greatest distress among the people. Political troubles might follow, who can say? But this does not seem to me to be probable. If beer were prohibited in England there would be great discontent and a lot of smuggling, but if Government held firm some other drink would probably be invented in time. The prohibition of opium, however, would no doubt be the greatest strain on the Government it has ever borne, and there is no doubt that the results might be a catastrophe. Of course our Government could not under its treaties interfere with the native States, and smuggling from them would of course go on."

Judge J. Whitmore writes: "We must further reckon with extreme discontent among those races with whom the use of opium is most prevalent. The mere enforcement of an opium tax, when introduced into Assam, provoked dangerous riots among the peaceable inhabitants of that feverish province. And the races I refer to are by no means the least inclined to forcibly assert their rights, seeing that they include the warrior nations of Rajputs and Sikhs (to say nothing of Pathans and other fighting Mohamedans, by whom alcohol is thought sinful). If prohibition were effectual we should be within conceivable distance of an insurrection, and the general sense and sympathy of those who took no active part therein would naturally be on the side of the insurgents. But prohibition could only be partially successful. There would be far more smuggling than now, since Government could no longer afford to maintain a costly preventive agency. And in so far as illicit opium was consumed, the only result of prohibition would be that the revenues of the Indian peoples would *pro tanto* be assigned to the opium smuggler, and to less reputable kind of 'dispensary keeper,' who, dignified by the title of 'qualified medical practitioner,' and under cover of a drug store, would, at any rate in towns, take the place of the existing licensed retail dealer." With regard to the proposal to restrict the sale of opium to chemists only, his Honour goes on to say: "This proposal implies a grave misapprehension of the conditions of life in India. Outside the Presidency and other considerable towns, where are the chemists' shops to be found? Taking the population of India at 285 millions, it would be probably safe to say that fully 200, if not 230, millions have never seen or heard of any one practising medicine as we understand it, or capable of writing a prescription which a trained chemist could act upon. For the vast majority of the people of India the only 'doctoring' is that of illiterate quacks and charm-mongers. Practically, therefore, the proposal is simply prohibition, tempered by town residence and the power to fee a licentiate of our medical schools, who may or may not be himself the keeper of a 'dispensary'—that is to say, a monopoly-holding opium shop."

The collector of the Godaveri District in the Madras Presidency remarks: "The consequences [of cutting off opium] would be very serious. In the hills there would certainly be a rebellion." (They include Rumpa, where there was a rebellion in 1880.)

From the Nilgiris, Deputy-Collector Fr. D'Arcy O. W. Murray, writes: "I have no doubt such a measure would have a very bad effect, or might have; it would necessarily vary according to constitution. If denied to those who are accustomed to take it in malarious tracts to ward off fever it would be serious. I should not be the least surprised, if such an attempt were made in certain parts of the country, to see an open mutiny break out. Cheap opium is an absolute necessity in such regions, and goes a long way in keeping the people contented."

The impossibility of suppression is often pointed out: "If," says a correspondent, "you mean to ask the effect of the abolition of the present system of cultivation and sale and the suppression of its growth, I should say the results would be lamentable, fiscally and otherwise. In fact, the 'suppression' would be only an attempted one, and illicit cultivations would increase the manufacture."

Surgeon-Major A. K. Thwart says: "There would be ex-

treme dissatisfaction among the opium-eating community with the Government. It is extremely doubtful whether any measure to exclude opium from the country could be successful in the face of such a craving and demand as that set up by the opium habit. The drug would be obtained at any and every cost, and if the heavy duties now imposed—which are nothing like enough to prevent its use—even now offer great inducements for contraband traffic, what will those inducements be when the value of the article goes up to an unlimited extent?"

PROFESSOR BENEDIKT ON HYPNOTISM AND SUGGESTION.

[Second Notice.]

The Therapeutic Value of Hypnotism and Hypnotic Suggestion.—The Scientific Worthlessness of Experiments on Mediums.—Professor Krafft-Ebing's Experiments.—A Character Sketch.

Proceeding to estimate the value of hypnotism as a therapeutic agent, Benedikt recalls the fact that at the International Psychiatric Congress in Paris (1889) he pointed out that in studying this question the effects of hypnotism must be carefully distinguished from those of suggestion. The latter may be successful without the former. The very fact that the subject of such a condition as, for example, perversion of the sexual instinct, seeks medical advice is a proof that morally he is in a favourable state for treatment. Most of the reports of cure by hypnotic suggestion are, however, founded on error, the patients simply deceiving the physician by false statements, exactly as morphinomaniacs, etc., do. If, says Benedikt, the subjects of the Nancy experiments ever publish their memoirs the whole world will shake with laughter. Benedikt himself, like every experienced practitioner for thousands of years past, has often had occasion to recognise the value of suggestion as a therapeutic agent in conditions of deficient will power and psychical weakness. Hypnotic suggestion, on the other hnnd, "places the patient on a lower plane of existence."

With regard to hysteria in particular, Benedikt points out that in cases of hysterical convulsions the prognosis is as a rule good. The most diverse influences may be beneficial in such cases; a cure is sometimes effected by suggestion without hypnosis, sometimes by other agents. "Sometimes amusement, sometimes isolation, sometimes rest, sometimes movement, sometimes cold, sometimes heat, sometimes magneto-therapy, sometimes electricity in one form or another, sometimes *points de feu*, sometimes hypnosis, sometimes the avoidance of it, sometimes Chapman's method, sometimes external or internal metallo-therapy, etc., is indicated."

The prognosis is always made more gloomy by long-continued hypnotic experiments, by which the patient is transformed into a medium and an actor. Only these female "convulsionists" are *a priori* incurable in whom hystero-epilepsy is the expression of a sexual metamorphosis of genuine epilepsy or "degeneration." Individuals belonging to either of these categories are, however, recognisable without much difficulty by the "cephaloscopic stigmata" which they present.

Benedikt gives details of several striking cases of hysteria in which he effected a cure by psychical influence—that is, "suggestion"—without hypnotism. The only *mise en scène* required is that the physician must have the power of impressing the patient by moral influence—must, as Benedikt quaintly puts it, be able to play the part of "Æsculapius Tonans" with effect. He says: "This psychical influence has a beneficial effect on the general condition of the patients. They learn to know the great importance of the connection between the will and the moral power and bodily health, and this leads them to a psycho-hygienic self-discipline. On the other hand, a similar therapeutic result obtained by means of hypnotic suggestion demoralises the patients, inasmuch as they acquire the crushing consciousness of being the passive instruments of a medical work of art."

According to Benedikt, the most important result of modern hypnotic experiments is that they have drawn the attention of physiologists to the relations between the brain and the body in such a manner that the subject will never again be allowed to drop out of medical literature. He strongly recommends all practitioners to read Dr. Hack Tuke's book, *Body and Mind*.

He goes on to give details of some cases of hysteria in which he used hypnosis with more or less success. His method was to place his hand over the patient's eyes and press gently on the eyeballs. The condition of mental subjection and dependence on the physician induced by hypnotism in his own hands made a deep impression on his mind, as showing how liable it was to abuse. He says: "We often remove a symptom by hypnosis, and thereby increase the tendency to the development of other and more serious ones."

At the meeting of the British Medical Association at Bournemouth in 1891 Benedikt pointed out with, regard to Voisin's communication on the possibility of bringing about the commission of crimes by hypnotic suggestion, that so many circumstances have to be taken into account in the commission of a crime that, even granting the possibility of influencing the will of a person in that direction by suggestion, the carrying of this suggestion into effect would still be practically impossible. At the Congress of Criminal Anthropology at Brussels in 1892 Benedikt again dealt with the same question. He there denied that there was any case on record in which it could be proved that a crime had ever been committed under the influence of hypnotic suggestion, and he pointed out that the case reported by Voisin[1] proved nothing to the contrary; the subject in that case was a woman who had led a loose life, and who was of weak mind and had been repeatedly hypnotised. Such a person is a favourable subject for such experiments, but from imaginary crimes executed in the drawing room and the clinic to real crimes is a very long step. Benedikt further hints that it would be well in such cases to determine how far the experimenter is the victim of deliberate humbug. He says: "The question of crimes committed under the influence of hypnotic suggestion and that of the responsibility of the criminal under such circumstances possesses no actuality." He adds: "We have a whole library of cases in which morphinophagy, alcoholism, perversion of the sexual act, and all possible offences and crimes have been cured by means of hypnotic suggestion. I now ask where are these cured cases, and why do the immoralities referred to for the most part still persist? There can be no possible doubt that the responsible authors have to-day become aware of their error. Why are they silent?"

Benedikt emphatically condemns the employment of mediums in hypnotic experiments—a source of error of which not even men like Charcot and Beard were able to steer clear. It is only to experiments on unprepared subjects that any value is to be attached. He has often had occasion in his own clinic to observe how easily a credulous and inexperienced experimenter might be misled. He has satisfied himself that of those who appear to be hypnotised only a small fraction are really so. "They say to the hypnotiser that they have been asleep. If, however, an unprejudiced bystander interrogates them, they say that they have not been asleep, and in reply to the question why they said otherwise they answer that the doctor wished to have it so." According to our author the true history of innumerable "cures" of morphinism, alcoholism, perversions of the sexual instinct, etc., is simply that the patients want to be left alone, and therefore say they are cured. At least 90 per cent. of all cases in which the occurrence of hypnotic phenomena is recorded must be eliminated for this reason.

As to the training of mediums, Benedikt says that somnambulistic and ecstatic conditions are chiefly capable of being imitated, and the cataleptic condition in the narrower sense of the term can also be to some extent simulated. He formulates the following general rules of judgment applicable to all cases of hypnotism: (1) Hypnotic phenomena in general cannot be accepted as scientifically established facts without objective proof. Performances at the command or at the supposed wish of the experimenter take place under the pressure of his authority even in the case of persons who are not deliberate deceivers, as relatively few persons are capable of independent volition and independent thought. (2) Only experiments on unprepared individuals who have not been initiated into the mysteries of hypnotism have any

[1] British Medical Journal, September 12th, 1891, p. 594.

value; experiments on "mediums" are worthless. (3) As a rule only very few individuals and very few conditions are suitable for hypnotic treatment. Benedikt strongly condemns the frequent repetition of such experiments on neurotic subjects.

He says that the sum of impostures and deceptions is incomparably greater in suggestion than in hypnosis. With regard to what is called post-hypnotic suggestion, this in the majority of cases is nothing more than a farce. For this kind of farce women have more natural talent than men.

A striking exemplification of this is, according to our author, afforded by the sensational performances of a female medium in Vienna, who is said to have humbugged no less a person than Professor Krafft-Ebing. This accommodating damsel, whose age is 33 and who for some ten years past has "played at hypnotism" with an "amateur," seems to have allowed herself to be "translated" at the will of the operator into a child of 7, a girl of 15, a maiden of 19, and finally, by a supreme triumph of "suggestive" art, into an old woman. In these various phases of hypnotic metamorphosis, she wrote her name, gave interesting autobiographical details, and generally gave an accurate rendering of the phase of existence into which she was supposed to have been transported. This accuracy did not, however, apparently extend to her name as, according to Benedikt, even in her signature as a child of 7 she used an assumed name. The whole thing, according to him, was a transparent and ignoble farce, which could only have misled a person totally destitute of the critical faculty. In connection with this matter, Benedikt gives a very unflattering "character sketch" of his brother professor, whom he describes as an industrious compiler rather than an original worker, and a *dilettante* for whom such subjects as neurasthenia, moral insanity, hypnotism, sexual perversion, etc., have an irresistible attraction, but who deals even with these matters only as a *feuilletoniste* and a bookmaker.

Finally Benedikt warns all persons interested in hypnotism to have nothing to do with trained mediums—"adventuresses, mistresses, and coquettes, and their male hangers on." Lies, deceit, and imposture are the stock-in-trade of such people, and whoso uses them as the subjects of experiment is in danger of sinking to the level of a conjuror.

We cannot conclude this hasty summary of a most interesting book without a word of thanks to Professor Benedikt for his outspoken denunciation of the shams and trickery of which hypnotism as practised by many of its devotees is largely made up. Destructive criticism is peculiarly needed in such a field, and it has been applied by Professor Benedikt with an unsparing but withal discriminating hand. He has taken great pains to sift the small quantity of wheat from the heaped-up mass of chaff, and the result is one of the most important contributions yet made to medical science on the subject. His book is philosophical in the best sense: he keeps an open mind for truth wherever it is to be found, but his scientific enthusiasm is always controlled and directed by the practical insight of a man of the world. In a word, he "sees things as they are," thus realising Matthew Arnold's ideal of culture. No one interested in the study of the obscure phenomena of the interaction of body and mind should omit to read Professor Benedikt's valuable and, in the best sense of the word, "suggestive" work.

REPUTED "CURES" FOR INEBRIETY.

We have repeatedly drawn attention to the persistent efforts by the representatives of proprietary and undisclosed alleged "cures" for inebriety to push their wares in non-medical temperance, religious, and philanthropic circles. The favourite hunting ground of the proprietors of all such specifics has ever been these circles, in which intelligent criticism by persons in a position—from professional training—accurately to weigh the character of the psychical phenomena presented before them cannot reasonably be looked for. Whether the alleged panacea be a patent medicament for the cure of rheumatism or a secret process for the cure of drunkenness matters not; it is all the same. We have known men of wealth and culture publicly testify their belief in the perfect efficacy of a once popular, but now discredited, patent external application for the cure of rheumatism of any chronicity. Accordingly, we read in the pages of a lay contemporary of committees, composed of clergymen and non-medical persons, seeing inveterate drunkards "cured" before their eyes, practically *coram populo*, of 20-year-old "craves for intoxicants" being extinguished by processes and preparations of various forms.

Take an instance. A female drunkard, after taking a certain remedy for so many days, in a public assembly the other day, when asked whether "she was restored to the condition in which she was when in her teens," replied: "Yes; I have no desire for drink:" whereupon a member of the investigating committee oracularly remarked, "That is perfectly satisfactory. It is a complete cure." Such a test is, to the experienced and skilled student of inebriety, valueless. We have heard similar declarations as positively and publicly made, thirty years ago, by ardent teetotalers, who in the intensity of their enthusiasm believed that a sudden and perfect cure of the drink crave had been effected by purely moral and religious means. Times without number special teetotal mission operations have produced as wonderful and more numerous apparently quite successful cures. Beside Father Mathew's hundreds of thousands of seeming immediate cures, these modern results shrink into comparative insignificance. In those days the effort was purely disinterested, a labour of love; now the credit is attributed to a special secret potion or application, and avowedly for gain.

Many medical men who have made the scientific treatment of the disease of inebriety a special study, and all genuine homes, could produce as sensational testimony from inebriates under their care at a certain stage of their treatment, for inebriates desirous to be cured, whether they relapse or not, are usually most grateful and elated, and feel perfectly certain they could never taste liquor again. But the loyal practitioner of the art of healing and the judicious conductor of such an institution would scorn to take such an advantage of a phase in the mental condition (often evanescent) of the patient, while science declines to accept such phenomena as a test of permanent improvement. We gladly record that most of the leading temperance reformers have held aloof from all these sorry exhibitions, which are as little calculated to serve the cause of true temperance as would be mesmeric or hypnotic similar and more rapid "cures," which could as readily be produced in public gatherings.

At the same time nothing but good could result from an analysis and publication thereof of the various and numerous "remedies" which are alleged by their proprietors to have been nearly, if not always, successful. One curious feature is that the inebriety "cure" is reverting to its pristine form. The original modern specific was a liquid medical preparation. That was succeeded by hypodermic injections with or without the physic to be swallowed. The latest "cures" are simply fluids to be taken by the mouth.

We are requested to state that the lectures announced to be be given this month at the Royal College of Surgeons by Mr. Treacher Collins have been postponed, as Mr. Collins is about to proceed to Ispahan to attend the eldest son of the Shah of Persia.

The Longmore Hospital for Incurables, Edinburgh.—The annual meeting of this hospital was held on Wednesday of last week, under the presidency of Sir Charles Pearson. The hospital had now 90 beds for adults, and when the children's wards were completed there would be accommodation for 106 patients.

The first general meeting of the Life Assurance Medical Officers' Association was held on January 31st at the rooms of the Royal Medical and Chirurgical Society. Dr. Vivian Poore presided before the election of President. The following were elected on the Council: President, Dr. J. E. Pollock; Vice-President, Dr. Douglas Powell; Treasurer, Dr. Theodore Williams; Drs. McCall Anderson, R. W. Burnet, Boor Crosby, de Havilland Hall, Heron, Hector Mackenzie, Newton Pitt, Vivian Poore, Symes Thompson, Samuel West, Secretary, Dr. Thomas Glover Lyon. The rules were revised, the chief change being that it was resolved that candidates for membership must have some definite interest in life assurance medicine. The President's address was postponed till the next meeting. The Association now numbers 80 members.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1894.

Subscriptions to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, FEBRUARY 10th, 1894.

THE NEW SCHEME FOR A TEACHING UNIVERSITY FOR LONDON.

If any proof were needed of the great difficulty of finding a practical solution of the questions submitted to the Royal Commission on the draft charter of the Gresham University for London, and of the multiplicity of the interests to be reconciled or conciliated, it would be afforded by the extreme complexity of the scheme sketched out in the summary of the recommendations of the Commission, which we print in another column.

It is proposed that the Senate, the titular governing body of the proposed University, shall consist of sixty-six persons appointed or elected to represent no fewer than thirty different bodies or interests. This great multiplicity of interests, and of corporate bodies, to be represented in the governing body of a teaching university for London, has all along been one of the great difficulties of the situation. As time went on, and as the interest in the question widened, more and more bodies felt their interests affected, and each succeeding scheme has contained a more numerous Senate, until that body has become obviously too unwieldy to be an effective instrument for the despatch of business.

The scheme of the Commission proposes to turn this difficulty by the creation of an Academic Council with very large executive powers. This Council would, for instance, have the power of recognising teachers, of determining the number and composition of the boards of studies in each faculty, of determining the curricula of study and examination, and of settling the course of study to be pursued at any school of the University. It would appear, therefore, that the Academic Council would under this scheme have very extensive powers and would in all probability become the active governing body of the University especially in questions affecting the medical schools of London. For, as Lord Reay says in his note: "This Council will inevitably determine the character of the University."

It will be observed that it is proposed to make a distinction between external and internal students, thus saving the imperial functions of the present University. All candidates for degrees in medicine, however, will be required to go through regular courses, whether in schools of the University or in other schools recognised by the University. All the medical schools in London would be recognised as schools of the University. Students of the metropolitan medical schools would, therefore, be internal students. Provincial medical schools might, however, be recognised by the Senate, and their students would be permitted to proceed to medical degrees. In practice, however, the difference between the two classes of students in the medical faculty would to a great extent disappear if it should eventually be found possible, as the Commissioners recommend, to arrange for the University to enter into arrangements with the Conjoint Board in England for conducting in common certain portions of the examinations. The question, however, seems likely to be further complicated by the proposal to include the Society of Apothecaries in this scheme. The fact remains, however, that upon the Academic Council, which will undoubtedly have a very large, if not a preponderant, part in determining the nature of the curriculum and examinations to be required, medicine will be represented by only three out of sixteen members, arts having four members, science four, law two, theology one, and music one. If we take the list of institutions to be admitted as schools of the University, the fact that the medical schools are by far the most important teaching institutions of university rank in London at once becomes obvious.

The movement in favour of reform of the University had its origin, and all along has gathered much of its force, from the demand of London medical schools, and of English medical men who have obtained their education in London, that a degree in medicine should be placed within their reach on terms equivalent to those on which they can be obtained at other universities in the United Kingdom. As was pointed out many years ago, in the report of the Metropolitan Counties Branch upon this subject, and as has been frequently reiterated since, the real difficulty which has stood in the way of the average London student obtaining a degree from the existing University arose from the stringent regulations with regard to the matriculation examination, and to that in preliminary science. Unless this difficulty is frankly and fairly met, it is clear that no scheme can in any way meet the medical grievance.

It is too soon to form a definite judgment upon a scheme involving so many points of detail, and as may be seen by the correspondence which appears in another column, much difference of opinion must be expected to arise. The constitution of the Academic Council is the most novel and the most questionable part of the scheme, and we cannot but fear that the proposal to hand over the framing of regulations for study and examinations to an academic council in which the representatives of medicine must always be so considerably outvoted by arts, science, and the other faculties, must make ultimate success too much dependent on contingencies which cannot be foreseen. When every reserve is made, however, it will be admitted that the Commissioners have materially advanced the question. They have once more declared emphatically in favour of a single university for London, and they have prepared a comprehensive plan embracing all the agencies and institutions engaged in the work of higher education in London. Moreover, in recommending that the changes proposed should be effected not by charter but by legislative authority and by the appointment of a Commission, with statutory powers, they have devised a tribunal which will be in a position to enter into a consideration of all details affecting the in-

terests of all the parties concerned, whether they be corporate bodies, teachers, students, or the graduates of the existing University.

NEW HOSPITALS VERSUS THE EXTENSION OF OLD HOSPITALS FOR LONDON.

I.—THE PRESENT POSITION.

SOME discussion has arisen of late on the alternative policies of (1) providing additional beds at the existing metropolitan hospitals, and (2) establishing new hospitals in outlying districts where such accommodation is much needed, as at Camberwell, which the Lords' Committee specially indicated in their report.

Critics are fond of quoting the ancient gibe against existing metropolitan hospitals that they fail properly to fulfil the functions with which they are charged owing to their being placed upon sites within a radius of two miles from Charing Cross. This fact led to a new departure in the case of the Great Northern Central Hospital, which was moved from the Caledonian Road to Islington, at the instigation of the inhabitants of that district, who have loyally and liberally supported the Committee which had the courage to make the experiment.

At first only half the Great Northern Central Hospital was erected, but the whole plan has now been carried out, and it is expected that the entire hospital will be open for the reception of patients by Midsummer next. The completion of this new hospital will enable the vexed question of the relative merits of rectangular and circular wards to be set at rest once and for all. It was very difficult to procure a site at all in Islington, and that chosen was so situated as to lend itself to the erection of one rectangular and one circular block of wards. Each of these blocks contains the same superficial and cubic area, the whole arrangements are identical, and it will be possible to treat patients under the same conditions in the rectangular and the circular wards, which are well worthy of inspection and study.

Reverting to the question in hand, the need for further hospital beds is made apparent by the fact that every year the population of London is increased by something like 60,000 souls. Notwithstanding this enormous annual increase in the number of those whom the managers of the metropolitan endowed and voluntary hospitals have to provide for, it appears that during the twelve months ending December 31st, 1892, out of 8,180 available hospital beds, only 6,165 were daily occupied throughout the year. We have thus a margin of 25 per cent. of the total accommodation still available to meet the needs of the sick who seek in-patient treatment at the hospitals. These figures do not convey the whole truth, as it is necessary for the managers to keep a certain margin of vacant beds, say 10 per cent., that is 800 of the 2,000 now vacant, always available to meet special emergencies which occasionally cause a large number of accident and urgent cases to be brought in at the same time.

There is still one other circumstance which has an important bearing upon this question of the extension of old buildings *versus* new hospitals. A reference to the fourth volume of Mr. Burdett's *Hospitals and Asylums of the World*, where plans of the sites of all the chief metropolitan hospitals are given, shows that unless further land be acquired it will not be possible to provide additional beds in new buildings at Guy's, St. Bartholomew's, St. Thomas's, St. George's, King's College, Westminster, the Royal Free, Middlesex, and Charing Cross Hospitals. We believe that the authorities at St. Bartholomew's Hospital have secured a portion of the Bluecoat School property at enormous cost for the erection of a new nurses' home, which is most urgently needed; that at the Middlesex Hospital, with the exception of a few small houses, all the available site has been acquired and built upon; that in the case of Charing Cross Hospital the expense of acquiring an additional site so as to occupy the whole of the triangular piece of land bounded by King William, Chandos, and Agar Streets—a step most desirable on hygienic grounds—would be so great as to be prohibitory, unless a millionaire took the matter in hand; and that of the other hospitals mentioned, with the exception perhaps of St. Thomas's, the adjacent land does not readily lend itself to the purposes of hospital extension. There remain the London Hospital, where the authorities, we understand, hold that the site available is large enough to justify the erection of a memorial wing to Sir Andrew Clark, a contention which, to say the least, is open to serious question; St. Mary's Hospital, where the governors have recently acquired a site equal in extent to about one-third of the area upon which the present hospital stands, upon which they are preparing to erect buildings to contain about 100 additional beds; and University College Hospital, the Committee of which have acquired the whole of the properties at the back of the present hospital, which places them in possession of a splendid site, entirely surrounded by streets, upon which it is most desirable that there should be erected, without loss of time, a magnificent modern hospital to contain 400 or 500 beds.

The present position is therefore as follows: Assuming that University College Hospital is rebuilt, that additional wings are erected in connection with the London and St. Mary's Hospitals, that the proposed extension of the cancer wards at the Middlesex Hospital proves feasible, and including the new beds at the Great Northern Central Hospital, some 550 beds would be added to the present accommodation provided by the metropolitan hospitals, a number which might be supplemented, as an outside estimate, by 100 more beds for which accommodation might possibly be found by reconstructions of various kinds elsewhere. Of course, some 1,600 other beds might be made available for London cases only if admission was to be refused to all cases sent up from the country to the metropolitan hospitals for treatment. Such a step, however, could, in our judgment, never be taken, and the suggestion must be regarded as impracticable.

THE DUBLIN BRANCH AND THE DISPENSARY OFFICERS.

THE proceedings at the annual meeting of the Dublin Branch were of an important and interesting character. The President's address, which is printed in another column, was a hearty recognition of the power and influence which the Association exercises in all matters which are for the benefit of the profession. His summary of the work which has been done already was an accurate representation of the reforms which have been achieved, and he based upon this an appeal to the members in the Dublin district to join

their local Branch. If anyone doubts the advantage of belonging to that body we refer him to the address of Dr. J. W. Moore, and we hope that the Council in Dublin will during the year succeed in bringing up the numbers to at least double that at which they now stand.

A further matter, which is of interest to Irish practitioners particularly, is the reference to the case of the dispensary doctors. The report bears testimony to the labours of the British Medical Journal in that cause, and to our readiness to open our columns for the advocacy of their claims. We have certainly amply proved that the Association is willing to lend all the strength of the organisation to the removal of evils which are admitted.

The report properly asks the medical officers themselves to take united and continuous action. We can only re-echo that advice. We have already frequently said that there must be absolute cohesion and persistent effort. Every medical officer can influence someone, but what is wanted is the systematised labour of the united medical officers in each county in bringing before those who are ignorant the full details of their grievances. This is the more important as we know that strong opposition will be offered to the Bill for superannuation and the Bill for general reforms. The guardians are frightened by the possibilities of increased taxation, and by the suspicion that they may be deprived of some of their powers. These are difficulties to be faced, and it is better that they should be realised as early as possible. For ourselves, we shall not lose interest in the question; but our friends must show their own earnestness. Defeat may be suffered many times, but the case is so strong that there must be no despair.

The annual oration of the Hunterian Society will be delivered in the theatre of the London Institution, Finsbury Circus, by Dr. J. Dundas Grant, on February 14th, at 8.30 P.M. The subject will be Aspects of Medical Life: John Hunter—Andrew Clark.

The retirement of Dr. W. H. Dickinson from the post of Senior Physician to St. George's Hospital will take effect from Monday next, when Dr. Dickinson, who has so much endeared himself to many generations of St. George's men, will go round his wards for the last time.

The proposal to hold an Indian Medical Congress has, it appears, every prospect of being realised. It seems to be generally agreed that Calcutta will be the most suitable place for the first meeting, and another element which augurs well for the success of the scheme is the warm interest taken in it by Surgeon-Colonel R. Harvey, Inspector-General of Civil Hospitals, Bengal.

LECTURES AT THE ROYAL COLLEGE OF PHYSICIANS.

The Milroy Lectures, at the Royal College of Physicians, will be given by Dr. Berry Haycraft, Professor of Physiology of the University College of South Wales, on February 15th, 20th, and 22nd. The subject is Weismannism, Disease, and Race Progress. The Goulstonian Lectures on the Physics of the Circulation will be given by Dr. Paul M. Chapman on February 27th, March 1st, and 6th. These lectures will be delivered at the Examination Hall, Savoy, at 5 P.M. The Lumleian Lectures, which will be given at the same hour on March 8th, 13th, and 15th, will be delivered at the College, Pall Mall East, by Dr. Octavius Sturges, who will deal with "Heart Inflammation in Children."

THE CONJOINT BOARDS IN IRELAND.

We understand that the attention which was called by Dr. Atthill at the last meeting of the General Medical Council to the nature of the regulations and curriculum required by the Conjoint Board of the Royal College of Surgeons and the Apothecaries' Hall in Ireland, has already had considerable effect. The publicity thus given to the question has forced it upon the attention of individual members of the Council of the Royal College of Surgeons. These gentlemen sympathise with a large proportion of the other members of the College in feeling very keenly the somewhat ignominious position in which their College has been placed by the arrangement sanctioned by the Committee of Management. Expression has been given to this feeling by a notice of motion to reconsider the conjunction, with the view, as it is understood, of terminating it.

DIARRHŒA OUTBREAK.

An acute outbreak of diarrhœal disease resembling in some respects that which occurred some time ago at the Greenwich Workhouse Infirmary has taken place at the South-Eastern Hospital of the Metropolitan Asylums Board, New Cross Road. We are indebted to Dr. Frederick Thomson, acting Medical Superintendent, for the information that on January 23rd, 24th, 25th, and 26th thirty-six of the staff were seized with diarrhœa, colic, and headache; some of them also suffered from vomiting and rise of temperature. In most of the cases the diarrhœa lasted only a short time; there was also some abdominal pain and headache which also passed off in from twelve to thirty-six hours. All the attacks were of a mild type, several of the staff being able to resume duty in three or four days and most of them within a week. The disease was confined to the staff. The nature of the outbreak appears to point to some article of diet as the source, but this is still under investigation. The illness of so many of the staff caused some inconvenience in administration, but the difficulty was satisfactorily got over.

THE LICENTIATES OF THE ROYAL COLLEGE OF PHYSICIANS OF IRELAND.

It will be remembered that the Royal College of Physicians of Ireland only recently obtained the power of granting the grade of Member. Previously the College appears to have held that its Licentiates were on a par with Members of the Royal Colleges of Physicians in London and Edinburgh, and in consequence bound them not to engage in the sale of drugs. This restriction has frequently been the source of much practical inconvenience and loss to Licentiates, and the difficulty has been aggravated since the creation of the Conjoint Board of the Colleges of Physicians and Surgeons in Ireland, since no such restriction was imposed by the College of Surgeons. We understand that at the meeting of the College of Physicians last week a motion was adopted, with only two dissentients, which will have the effect of removing the restrictions. In future, therefore, Licentiates of the Royal College of Physicians of Ireland, who may be otherwise duly authorised to compound, will be at liberty to do so.

ABERDEEN MEDICO-CHIRURGICAL SOCIETY.

A meeting of the Aberdeen Medico-Chirurgical Society was held in the Hall, King Street, on February 1st; Dr. John Gordon, in the absence of the President, in the chair. Professor D. W. Finlay read a paper on a Case of Abscess of the Spleen. The patient was a young woman, who had recently been delivered of a child, and who was admitted to the Royal Infirmary with symptoms pointing strongly to some affection of the left pleura or left lung. Exploration and examination of both failed to account for all the symptoms. Pyæmic indications developed. The patient died. The necropsy showed a collection of pus about the size of a small orange outside the spleen, and an abscess in the body of the spleen,

as well as a number of minute abscesses in the liver. The uterus and pelvic organs were normal; and the origin of the abscess was doubtful. Dr. James Rodger read the history of a case of unilateral anæsthesia (right). He stated that it was syphilitic in its nature; that ten years previously the left side had been affected in a like manner, and that there had been also a history of epileptiform convulsions. The anæsthesia was quite complete in the right side, except in the facial regions, where the sensation was not quite abolished.

MORISON LECTURES ON INSANITY.

The first lecture of the present course was delivered at the Edinburgh Royal College of Physicians by Dr. J. Batty Tuke, on January 30th. The general thesis was: What Lessons as to Treatment can be Derived from the Study of the Anatomy, Physiology, and Pathology of the Brain? Overexertion was referred to as a factor in the production of insanity. A short historical retrospect was given to show the reasons why insanity was popularly regarded as a disease of the mind, and the changes of opinion brought about by investigations into the anatomy, physiology, and pathology of the brain were indicated. The lecturer next discussed the question, What position would the medical profession assume if a case of so-called acute mania or so-called acute melancholia were presented to it for the first time? and gave his reasons for believing that the diagnosis would be "obscure disease of the brain, with mental symptoms," a very different diagnosis from that of "mental disease." Inasmuch as an intimate knowledge of the brain was an absolute necessity for forming a practical conception of the morbid changes in that organ in consequence of overexertion, a demonstration was given of a convolution considered as an apparatus, and the layers of cells, according to Ramon y Cajal and Golgi, were explained. The probable connections of the three systems of fibres with cells, the fourth system of centripetal or terminal fibres, the lymphatic system, the neuroglia, and Andriezen's classification of glia cells, were in turn discussed and illustrated by limelight views.

THE CHELSEA HOSPITAL FOR WOMEN.

The occurrence of four cases of scarlet fever among the nursing staff of this hospital has drawn the attention of the district medical officer of health to its condition, and the result of his investigation is that he has recommended to the sanitary authority that notices should be served on the governing committee, requiring them to place the hospital in a thoroughly sanitary condition within a space of two months, and prohibiting its use for the reception of in-patients until such work has been satisfactorily performed. The mortality statistics for the past year, as furnished to Dr. Parkes by the local registrar of births and deaths, showed that of the total deaths—36 in number—21 were consequent on surgical operation. There were also 6 deaths from septicæmia unconnected with operation, 3 of which were consequent on miscarriage. Of the deaths following operation, 2 were stated to be due to septicæmia, 10 to peritonitis; in 6 the actual cause of death was unstated, and in 2 it was ascribed to shock six days and four days after the operation—a phrase which, we need not say, is in many cases only another way of expressing septic poisoning in which no coarse pathological changes are observable. The return of the causes of death after operation, appended by Dr. Parkes to his report, shows 9 deaths during 1893 after operations on the ovaries, 6 after hysterectomy, 2 after partial removal of uterine fibroids, and two after hysteropexy. Regarding the number of operations performed we have no data; a considerable number of cases of hysteropexy ought, however, to be successful to justify 2 deaths. It was resolved by the vestry that the Home Secretary be requested to order an inquiry into the past management of the hospital.

THE INTERNATIONAL SANITARY CONFERENCE.

The International Sanitary Conference was opened at the Foreign Office in Paris by M. Casimir-Périer, President of the Council and Foreign Minister, with an address, in which he remarked that the first of these conferences had been held in Paris in 1851. He observed that through the labours of previous conferences science and diplomacy combined had sought to reconcile the interests of commerce with the protection of life. Light, publicity, and solidarity had superseded fear and mystery, and instead of improvised precautions dictated by panic, a system of inspection, publicity, and conservation had been organised. The present Conference would have to continue the task of its predecessors by pursuing cholera to its centres of origin and diffusion in Asia. M. Casimir-Périer then vacated the chair, and M. Barrère, principal French delegate and French Minister at the court of Munich, was elected President of the Conference. M. Proust then read a long and important address, tracing the efforts to control Oriental diseases since the date of the first sanitary conference, Paris, 1851, down to the present time. A vote was taken and unanimously adopted that delegates were to regard future proceedings of the Conference as confidential pending the issue of any account by the French Government. The Conference then adjourned its formal sittings to Tuesday, February 13th. On Wednesday evening the delegates were entertained at a banquet given at the Foreign Office, Quai D'Orsay, by M. Casimir-Périer, and on Thursday evening they were received by the President of the Republic.

HOSPITAL V. HOME MORTALITY.

At the request of the Chairman of the Liverpool Hospitals Committee, Dr. E. W. Hope has made an inquiry as to the relative mortality amongst patients treated at home and those treated in infectious hospitals in various towns. In relation to the statement made in a recent report of the Metropolitan Asylums Board, that the cases of scarlet fever admitted to their hospitals died at the rate of 6.4 per cent., against 2.3 per cent. among those treated in their own homes, it is interesting to observe that in Liverpool, while the hospital mortality ranged from 6.0 per cent. in 1891 to 5.3 per cent. in 1893, the home mortality in the same years ranged from 11.6 to 6.9 per cent., so that the home percentage was always higher than that in the hospitals. At the same time it is not certain that this simple statement expresses all the facts. There is a curious steadiness in the hospital as compared with the home mortality, which suggests that there may be a certain average standard of severity of attack which, irrespective of either town or season, tempts people to avail themselves of these institutions; for, whereas in the towns mentioned in the report with the exception of Leeds, where notification is not in force, the home mortality ranged from 2.3 to 11.6 per cent., the hospital mortality only varied from 5.3 to 6.4.

BURIAL AT THE CROSS ROADS.

The clerics of Wells and Clevedon are surely somewhat lacking in sense of humour, or they never would suggest, by petition to Convocation, that it is a hardship to have to bury a sinner in the same God's acre with good men, or that the tide of suicide would be checked by making it plain that "the Church of England recognises and condemns the great sinfulness of the act." The cause of their perturbance is the frequency with which coroners' juries bring in a verdict of temporary insanity in cases of suicide, and so enable the body to receive that Christian burial which is accorded to other sinners. We quite agree that the giving of such a verdict in these cases is wrong and indefensible, but to suggest that a refusal of Christian rites, or a reversion to the old custom of burial at the cross roads, would deter a man from suicide, when so hard pressed by trouble or misfortune as to contemplate such an act, is entirely to misread the ordinary facts of daily life. At the present day, when so

many people are buried of their own choice in unconsecrated ground, and when a yearly increasing number prefer to be cremated, we cannot believe that men's actions will be much influenced by threats as to where their bones shall lie. There are much better reasons than these for doing away with this absurd form of verdict. First it is often quite untrue, and next it gratuitously brands innocent people with the undeserved stigma of belonging to a family tainted with insanity, a stigma which is injurious in many ways, and is passed on to succeeding generations. If it become a question of balancing deterring influences, we cannot but think that the dread of doing such injury to one's family and descendants might with many men be much more effectual than any fear of the cross roads. It is as a mere matter of justice that we protest against a man being legally declared "mad," merely because he has put an end to his existence, or an unhappy girl being spoken of as temporarily insane because she has preferred death to bringing shame upon her family.

IMPERIAL MEDICAL COLLEGE, TIENTSIN.

The Chinese Government some time ago—on its own initiative, as we understand—decided to establish a Medical College on European lines at Tientsin, North China. The post of Director and Professor of the new institution was offered to Surgeon-Captain Heuston, F.R.C.S.I., of the Army Medical Staff. That officer has accordingly been seconded for five years, and is already on his way to China. The College has been founded for the purpose of educating Chinese subjects for the medical profession, with a view to qualifying them to fill military, naval, and civil appointments in their native country. The College was opened in October last with sixty students, divided into a senior and a junior class, each consisting of thirty members. The "seniors" are those who have had some preliminary education in the English language, but all alike are studying anatomy, physiology, and the other elementary branches of the ordinary medical curriculum. Surgeon-Captain Heuston is assisted by four Chinese doctors, all of whom are graduates of the University of Edinburgh. All interested in the "opening up" of China to Western civilisation and science must wish well to the new College.

NILE RESERVOIRS.

Mr. Garstin, Under-Secretary of State Egyptian Public Works Department, has published a report in favour of the erection of dam reservoirs in the bed of the Nile; the alternative scheme for impounding the flood water in the Raiyan desert being condemned on account of the larger cost. The difference between the two estimates is only £250,000 on £5,000,000. It is not as if the schemes were nearly alike as regards the benefits to be conferred. If they were, a difference of 5 per cent. might reasonably be taken into consideration. This, however, is far from being the case. From the point of view of public health the projects are as different from each other as light is from darkness. If the river-bed scheme be carried out, the preventable mortality, so deplorable at the present time in Egypt, will become permanent, or may even increase in severity; whereas, if the desert basin project gain the day, the result may unquestionably be looked forward to in a diminished death-rate.

AN ENGLISH NAVAL SURGEON AT RIO DE JANEIRO.

The special correspondent of the *Times* writes in warm terms of praise of the humane services rendered by Surgeon Senior, of H.M.S. *Sirius*, to the wounded during the present civil war in Brazil. He has given valuable assistance in the hospital establishment on Enchadas Island, where the insurgent sick and wounded are collected, and "has introduced into the hospital *réyime* a system of order and attention to detail hitherto unknown in this part of the world. He has taken over the whole night charge of the hospital, thus giving the Brazilian staff the night's rest of which they stand greatly in need." The results obtained are stated to be excellent. "That his work is thoroughly appreciated both afloat and ashore," the correspondent adds, "I have good cause to know, and I can only say that amongst Brazilians his name will be hereafter respected and honoured by both sides in this quarrel as that of a man who is willing to devote his best energies and his professional skill to alleviate pain and suffering." That the service thus rendered is not altogether free from personal risk, appears from the statement that the government batteries at Nictheroy have deliberately fired at the hospital. On one day five shells struck and exploded in the wards; two men badly wounded died from shock, and the patients from other wards rushed out into the open square, deranging bandages and inflicting other injuries. The number of patients under treatment was 209. Convalescents are drafted to a hospital ship. Surgeon R. W. Senior entered the Royal Navy in February, 1891, taking second place in the competition. He was educated at Marlborough School and King's College Hospital. He was appointed to H.M.S. *Sirius*, the senior officer's ship on the South-east Coast of America, in April, 1892. His father was for many years an official at the Admiralty, Whitehall.

CHOLERA IN LONDON DURING 1893.

Mr. Shirley Murphy, Medical Officer of Health to the London County Council, has sent in a report giving details of the cases suspected to be cholera which occurred in London during the past year, with Dr. Klein's report on the specimens which were sent to him for examination. Of the total number of cases investigated, upwards of 50 altogether, 16 afforded reasonable suspicion that they were instances of true cholera, and from 13 of these material was sent to Dr. Klein for examination. Out of this material complete bacteriological evidence of cholera was found only in 4 cases. In the *post-mortem* diagnosis of cholera Dr. Klein points out that (1) the presence of actual epithelial flakes in the cavity of the intestine forms an important point. I have, he says, had submitted to me stools from certain cases which were, to the naked eye inspection, not distinguishable from typical rice-water stools of Asiatic cholera: numerous flakes of the so-called "mucous flakes" were present, but these were not true epithelial flakes.... My experience of Asiatic cholera coincides with that of other observers on this point, namely, that if in the (epithelial) "mucous flakes" of the rice-water stools, or of the contents of the ileum, Koch's comma bacilli (as far as shape, motility, and arrangement) occur in great numbers (in some typical cases they occurred in almost pure culture) the diagnosis of Asiatic cholera is quite justified. (2) The peptone culture of the stool, or of the intestinal contents, in all cases yielded positive colour results if at the outset cholera vibrios were present. (3) In addition to the above tests, we have the characters of the growth obtained by cultivation in the ordinary media. "These, then, were the lines on which I have hitherto based my preliminary reports as to the result of the examination of intestines or stools submitted to me. Knowing that Koch's comma bacillus (judging by morphological and cultural and chemical characters) does not occur in any except true cholera cases, I have felt justified when they were shown to be present in the stool or in the intestinal contents in definitely pronouncing those cases as Asiatic cholera. Whether cases in which they (the particular comma bacilli) cannot be demonstrated by the above tests are or are not cases of true Asiatic cholera cannot, in the present state of our knowledge, be satisfactorily answered. It is on record that experienced observers, who have devoted special attention to this very point, have had before them cases which, clinically and pathologically, presented the characters of Asiatic cholera—cases which occurred *in localities and at times when true cholera was rife* (in Hamburg, in Russia, in France, and elsewhere)—but in which no Koch's comma

bacilli could be demonstrated. In conclusion, I wish to state that the comma bacilli which I have isolated from the numerous cases of cholera that occurred in England during September and October last do not belong to one single species, or, to speak more correctly, they rather represent varieties of a species; though, in a general way, their morphological and cultural characters are the same, there nevertheless exist between them certain *definite* and *permanent* differences in their mode of growth in the different media, and in the amount of cholera-red produced by them in the peptone cultures." It should be added that in all the cases which occurred careful inquiry was made as to a source of infection, but in no instance was it possible to trace any connection between the suspicious cases occurring in London and other suspected cases, whether occurring in London or elsewhere; and, further, in no single instance was there any evidence of spread of the disease from any of the cases brought under notice.

THE TEETH OF SCHOOL CHILDREN.

THE British Dental Association appointed in the year 1890 a Schools Investigation Committee to collect statistics with regard to the teeth of the children in district and industrial schools. As the children of each school have been examined a report has been submitted to the Boards of Management, and to a large proportion of these records we have referred in these columns at the time of issue. More than twelve such reports have been made, the most recent being one sent to the London County Council with regard to the industrial school at Feltham. It supports in every particular the statistics that have been accumulated at all the former schools. The condition of the teeth of the children is one of serious importance to the welfare of the poorer part of the community. At each such school, and probably also at all public schools, it is necessary that a skilled practitioner should be appointed, whose duty it shall be to have charge of the teeth of the inmates. These statistics raise the question of the cause of such a condition that among 538 boys no fewer than 1,744 unsound teeth, 741 of which are permanent, require filling. Much dental caries is no doubt caused by the neglect of hygienic precautions in the mouth itself, and now that it has been conclusively proved that the fermentation of food, especially of starchy stuffs, is the prime factor in its production, supplemented, as it is, by the presence of micro-organisms, too much care cannot be devoted to carefully removing from between the teeth the *débris* of food, and counteracting as far as possible, by germicides and disinfectants, the baneful action of bacteria and micrococci. Such methods, however, must be carefully supervised by matron or nurse. In addition to these local causes there is certainly a degeneracy in the structure of the teeth themselves, due very largely to hereditary causes and bad feeding. Although it may be true that the former cause is difficult to deal with, the latter one may certainly be improved. Much of our food by its present method of preparation is deprived of lime salts before it is administered to children.

IDIOTS AND EPILEPTICS.

DR. SHUTTLEWORTH has written to the *Times* an interesting letter respecting idiot children and epileptics under the Poor Law, which was called forth by a letter from Miss Louisa Twining on the subject. The point emphasised by the late medical superintendent of the Royal Albert Asylum, Lancaster, is the question how far the State has performed its duty in regard to pauper idiots and imbeciles. The answer is that it has by no means done its duty, with some exceptions, notably in the metropolitan district, in which the Asylums Board, empowered by the Gathorne-Hardy Act, established the Darenth School for this class. There is no difference of opinion as to the importance of separating imbeciles from the insane. The report of the Charity Organisation Society some fifteen years ago insisted on their removal from county asylums. The Lunacy Act of 1890 provided that the local authority of any county or borough might provide separate institutions "for idiots or patients suffering from any particular class of mental disorder." Epileptics, of course, may be included under the latter. Dr. Shuttleworth regrets that this clause is merely permissive. He thinks it humiliating to have to confess that although the number of idiots in England and Wales is estimated at 30,000, two-thirds of whom are proper subjects for Poor-law care, it does not provide for more than 6,600. He points out that Norway and Denmark are in advance of England in State provision for imbeciles. Incidentally reference is made by Dr. Shuttleworth to the important arrangements which have happily been made for the special and separate education of somewhat feeble-minded children in board schools, not imbeciles. A communication like this from so experienced a worker in a field of psychological labour too little cultivated ought to produce some effect.

JACQUES DE COICTIER.

VICTOR HUGO, in his inimitable *Notre Dame de Paris*, has immortalised this historical physician. Dr. Cabanès has phblished an interesting sketch of Dr. Coictier or Coitier, the man who took on himself the unpleasant responsibility involved in being Louis XI's private physician. Dr. Cabanès has not succeeded in proving that Coictier was either a rogue or a quack. Considering that Coictier was a Burgundian, the French king must have had good reasons for believing him to be a trustworthy man. No doubt this physician took great care of himself; he acquired money, land, and dignities, directly begged from his royal patient. but in these matters he only acted like any other successful courtier. These substantial advantages formed a not exorbitant fee for a dangerous appointment in dangerous times. His foresight in looking after his temporal interests was justified, for directly Louis XI died the physician was dismissed from court and from his dignities, but he lived at peace in his lands for the rest of his life. The profession will chiefly judge him from his treatment of his patient. It can hardly be said that Coictier was either dishonest or unskilful. The worst thing urged against him rests on the authority of Comynes. When the King was in a particularly bad humour, a condition which he relieved by sending some of his household to the gallows, Coictier boldly told him that he knew that he, the court physician himself, would be treated like the other officials, but added that the King would not survive him one week. Comynes possibly received a garbled report of some prudent expression used by Coictier to bring his patient to reason. Louis was the grandson of a mad king, Charles VI, and the first cousin of another mad king, Henry VI of England. He certainly suffered from hemiplegia and aphasia; on one occasion his right elbow was used instead of his paralysed hand in affirming a State document, but his well-known suspicious conduct suggests insanity after, if not before, the attack of paralysis. Making fair allowance for court scandal, we may assume that Coictier's conduct was both skilful and professional, for he did his best for a very troublesome patient.

THE HEALTH OF THE TRAINING SHIPS.

MR. ARNOLD-FORSTER, M.P., has published some very alarming statistics with regard to the naval training ships at Devonport. He asserts that the death-rate and invaliding-rate are so high as to prove that the sanitary condition of these ships exercises a very injurious influence on the health of the boys. He assumes for some reason that the boys on the *Impregnable* and *Lion* are the very pick of their class; but from inquiries we have made it would appear that there is not the least authority for asserting that they are as a body in any way physically superior to the boys in other training vessels. Mr. Arnold-Forster calculates that the death-rate of

the *Impregnable* and *Lion* is 157 per cent. over that of the *Britannia*, 134 per cent. over the other four training ships, and 166 over the home station. Further, he says that the invaliding rate is 37 per cent. over the West African station, 110 per cent. over the other training ships, and 744 per cent. over the *Britannia*. Why the West African station should have been selected for comparison it is difficult to see, unless it be that it had a bad name in times long past. Mr. Arnold-Forster in search of a sensation forgot that the West African is nowadays by no means a very unhealthy station. Mr. Arnold-Forster is founding his arguments upon imperfect data. Instead of taking the invaliding rate, he ought to have taken the average number of sick daily, with the ratio per thousand. This would have given him a true criterion, and tested by it we have reason to believe that it will be found that the *Impregnable* and *Lion* would compare very favourably with many other ships, including training vessels. But we fear that Mr. Arnold-Forster is not altogether an impartial critic. He appears to assume that the health of the ships during 1893 has been even worse than during 1892. Now, in the first place he has absolutely no statistical data to go upon; in the second place, the probabilities are all the other way, since many improvements, especially with reference to ventilation, have been instituted during the past year; and since 1892 a new training ship, the *Minotaur*, a capacious vessel, has been stationed at Portland, thus reducing the demands on the *Impregnable* and *Lion*.

MEDICAL RELIEF AND THE FRANCHISE.

The possession of a vote is rightly valued, but when a man neglects to discharge the ordinary obligations of a parent for fear of thereby losing his vote he puts a somewhat exaggerated value on it. A man is, however, reported by the *Sun* to have so acted recently in London. His children caught small-pox, but he would not call in the parish doctor, because he feared that so doing would endanger his vote, and alleged that he was too poor to call in any other. One can hardly believe that this excuse was the true one. The fact that an Act was passed in 1885, which expressly provides that "where a person has in any part of the United Kingdom received for himself or for any member of his family any medical or surgical assistance or any medicine at the expense of any poor rates, such person shall not, by reason thereof, be deprived of any right to be registered or to vote," has been pretty widely disseminated and is generally known. It is most important, for the well-being both of the patient and of the community that medical aid should be obtained, especially in infectious cases. Medical aid is provided at the public expense, and its acceptance does not pauperise the recipient. If any people are really ignorant of this fact they had better be told it again. The Editor of the *Sun* will, perhaps, give it the same publicity which he gave to the original report.

TOWELS AND DISEASE.

For all that has been said about over-pressure in schools, it has been thought by many that the present system of elementary education was more likely to receive a check from its liability to produce ringworm on the outside of the children's heads than from any harm the teaching does to the parts within. Be that as it may, there is no doubt that the liability of schools to be intruded upon by infectious diseases is one of the great difficulties in the way of national education. Ringworm we all know about; the recent spread of diphtheria is looked on by many, who have given anxious thought to the matter, as having more to do with compulsory education than with any other single cause; and now we find Mr. Hutchinson insisting, at the last meeting of the Ophthalmological Society, that school ophthalmia has broken bounds, and spread from the pauper schools to those of a higher grade. Outside and beyond the probability that deficient air and food, and exercise, are predisposing causes, the great lesson taught by recent outbreaks of this disease is that it is definitely contagious, and we can have but little doubt that community of towels is at the bottom of its occurrence in many instances. Considering the great laxity with which ordinary children regard *meum* and *tuum* in the lavatory, we would strongly urge parents to make their children clean before they start in the morning, and definitely forbid them to wash at school.

THE DANGERS OF ELECTRICITY.

Coroners' juries are so fond of seeking scapegoats and casting blame that we can but feel a certain amount of almost incredulous surprise at the exceeding mildness of the verdict which, according to the *Liverpool Post*, was returned in the case of a lad, aged 13 years, employed by the British Insulated Wire Company, who was killed last week by coming in contact with a live electric cable. It seems the boy was left in charge of a cellar in which was a transformer. Although the wire was insulated, there was a spot where a joint had been made two days before, and the least touch at that point would break the insulation, and, as a current of 2,000 volts was running, would be sufficient to kill anyone. On the return of the workman the boy was found dead, with a burn on the thumb and forefinger. No doubt curiosity had led him to investigate the recent joint; but surely the mere fact that a boy of 13 was employed on such a job, and was left alone with such an innocent-looking but dangerous machine, was enough to show that someone was to blame. We would go so far as to say, not only that no boy should under any circumstances be engaged about high tension electric wires, but that no man should be so employed until he has received some very practical instruction as to the deadly properties of these wires.

THE NURSES' CO-OPERATION.

The third annual meeting of the Nurses' Co-operation was held at the rooms of the Royal Medical and Chirurgical Society on February 2nd, the chair being taken by Mr. Justice Kekewich. A most satisfactory report of the progress of the Co-operation was presented. After deducting 7½ per cent. for working expenses, £17,349 was paid over to the nurses, as compared with £13,361 in the preceding year. At the end of last year the number of nurses on the staff was 258, an increase of 54 since the last report. The number of cases attended was 2,705. By dividing the total amount paid to the nurses by the average number on the staff, an estimate can be formed of their average earnings, which comes to the very comfortable sum of £96 each. If we compare this with the amount of wages given by many of the nursing institutes the advantages of co-operation become strikingly apparent. Both to the public which pays, and to the medical men who are forced to sanction the arrangement, it is often extremely annoying to feel that so large a portion of the payment made for nursing, a payment made quite willingly, and with a feeling of great gratitude for benefit received, should go into the pockets, not of the nurse, but of the individual who runs the institute. In the case of this Nurses' Co-operation, with the appropriate telegraphic address of "Aprons, London," the whole of the earnings of the nurses, with the exception of the small percentage for necessary office expenses, goes to the nurses themselves. It is to be feared that we do not all sufficiently appreciate the dangers and the risks run by those who take up nursing as a profession. It is a striking fact that of those who belong to the Royal National Pension Fund for Nurses, and who entered for sick pay, 22 per cent. received benefit during the past year. Nurses run great risks and work hard while on duty, so hard that, as Mr. Bryant said, they have to spend nearly a quarter of their time in recuperation, in "picking up" after the toils and watchings they have undertaken, and we shall all be in full sympathy with a movement which aims at giving them what they earn, so far, at any rate, as it can be expressed in coin of the realm.

OPIUM, BHANG, OR ALCOHOL?

IT is of some importance, in view of the agitation against opium which is now making itself prominent, that it should be understood that this crusade is but part of a general movement in favour of the total legislative prohibition of the sale of every substance which is capable, if used in excess, of producing intoxication. It is perhaps a pity that opium should be dealt with by one party, Indian hemp by another, and alcohol by a third; for in fact, whatever the conclusion of any individual Commission, the questions really to be decided are, not as to the use of this, that, or the other drug, but whether it is possible to stop by law, not mere spirit drinking or opium eating, but the vice of intoxication. If it should turn out that the only way of enforcing temperance on those who are intemperate is by absolutely debarring vast populations from the use of many substances which from time immemorial they have been in the habit of using for other purposes, the question arises whether virtue enforced on the few at such a cost is worth the trouble. It is certainly true that an isolated movement against alcohol, or opium, or Indian hemp does not touch the vice of intoxication, but merely drives its votaries into other forms of indulgence; is, in fact, a mere matter of conscience salving, comforting to those who preach the doctrine but useless to the world. The unanimity with which those who have studied the question on the spot agree that the prohibition of the use of opium would but drive people to *ganja*, or alcohol, or to some of the numerous narcotic herbs which grow so freely in India cannot be ignored. Narcotic herbs there grow on every side. Opium is the one which happens to be chiefly used, possibly in consequence of old traditional experience of its comparative safety, but the people by no means averse to more active intoxicants—*ganja*, *bhang*, and other products of Indian hemp, and every variety of alcohol are already far too popular. Whatever, then, may be the case in China, so far as regards our own Indian Empire the morality of our interfering with the traffic in opium hinges on our power to prevent the use of these other and much more injurious substances. Is India ripe to have a revolution of this magnitude forced upon it from outside? It is curious, as an illustration of the contrariety of men's minds and of the erratic nature of their actions, that the same set of people who appear most anxious that the government of India should devolve more and more upon its natives, and that the voice of India should be increasingly felt in its councils, should be found proposing to force upon that country, unasked and probably against its will, such a far-reaching change as the total suppression of the manufacture and sale of all intoxicating substances. No one can pretend that the native races either ask or wish for such legislation; and yet while the justice of asking India to contribute to the cost of the Opium Commission is disputed on the ground that India did not ask for it, no one seems to question the justice of forcing upon her the proposed prohibitory legislation, for which she has shown no sign either of inclination or desire.

THE WAR AGAINST FILTH DISEASES.

THAT enteric fever is a filth disease, spread by the ingestion of fæcally contaminated substances, and that, when great epidemics occur, water or milk are in general the substances implicated, is widely recognised as an all-sufficing explanation, and so comfortably throws the responsibility on to the authorities, that people, we fear, are only too apt to forget the little circles of filth infection which, without the extremest care, soon establish themselves around each case of the disease. In a well-appointed hospital, with good drainage, free water, plentiful air space, skilled use of disinfectants, and routine resort to the nail brush, typhoid infection finds itself trapped, the magic circle is broken, and it can get no further; but in cottages, where appliances are few, or in farmhouses, where water has to be carried or stored in pails, things are very different. Chamber pots, perhaps, stand on the stairs, waiting a convenient season for their emptying, and then are washed at the common sink; soiled sheets lie in corners of the room, and slightly implicated blankets tend even to get dried and used again; and the one who nurses the invalid may cook also for the family. The whole atmosphere thus easily becomes dust-infected, and both food and drink are fæcally befouled. Amid surroundings such as these a dissertation on the absence of immediate contagiousness in typhoid fever is sure to be misunderstood; and nothing but the most dogmatic teaching, and the most definite instruction as to the exact course to be taken, is likely to be of the slightest use in checking the local spread of the disease.

ICECREAM, NOT MILK.

THE above question has been settled in the negative in the Justiciary Appeal Court of Glasgow, on appeal against a conviction by Sheriff Birnie in the case of an icecream dealer who used some 32 gallons of milk weekly in his business. The point was that the appellant ought to be registered under the Dairies, etc., Order as a purveyor of milk. The Lord Justice Clerk held that hotel and coffee-house keepers would be equally liable to registration; in fact, all who used milk as a part of their business. And, however great might be the danger of spread of infection by articles sold after admixture of milk, he had no difficulty in setting aside the notion of registration being legally requisite. Looking to the numerous fatalities which have occurred from the vending of "icecreams" and the obvious danger of pollution of the material used, this decision is much to be regretted in the interests of the public health.

THE DIAGNOSIS OF GLANDERS IN MAN AND IN THE HORSE.

THE diagnosis, mode of infection, prevalence of glanders in large studs, and the duty of horseowners to their servants and the public are matters of great importance. The difficulties of diagnosis are recognised, and in the absence of appreciable local lesion it is seen that glanders may simulate rheumatic fever, and this suggests the probability that statistics on the point are to some extent open to question. As to the mode of infection there appears to be no room for dispute as to the possibility of glanders being conveyed by any of the usually mentioned means. The bacillus mallei has, since its discovery by Loeffler and Shütz, been the subject of much careful study. It is well ascertained that on dried discharges it retains its virulence for comparatively long periods (according to Loeffler three months), and on reaching the respiratory membrane in its dried state is capable of inducing glanders. The act of grooming horses whose skins may have become contaminated by glanders or farcy discharges is in every way favourable to the inhalation of the virus with fine dust, and especially so by the excessive inspiratory act which follows the noisy expiratory effort so often adopted by grooms. In a considerable proportion of glandered horses the lung alone is the seat of the lesion. It is, perhaps, within the range of possibility that the virus inoculated at the finger may pass by the circulation to the respiratory membrane without inducing appreciable change at the seat of inoculation, but we know that the virus may be readily carried to the pituitary membrane, and implanted there by a contaminated finger.

WATERBORNE ENTERIC FEVER.

WE learn from a report in the *Consett Guardian* that proceedings were instituted recently by the Chester-le-Street rural sanitary authority against a local water company under the 70th section of the Public Health Act of 1875. It was sought to restrain the company from supplying water from their reservoir, on the ground that after being polluted by sewage from certain villages, including two known as South Moor and Crag Head, it was only imperfectly purified at the

waterworks. The evidence went to prove that in October last there was an outbreak of enteric fever in these villages, followed in November and December by an epidemic at Chester-le-Street in the district supplied by the company. Eleven out of the 13 cases occurring in November were among the consumers of this water, and 65 out of the 77 cases in December, but it is not stated what proportion of the population concerned were so supplied, nor is the attack-rate among either section of the community mentioned. For the defence it was contended that no "typhoid bacilli" had been found in the water, and that the sanitary authority rather than the water company were in fault, since they allowed the pollution of the stream to continue at the points stated, and, moreover, had permitted the existence of grossly insanitary conditions upon some, at least, of the premises where the fever cases occurred. It does not appear what alternative supply the sanitary authority wished to substitute, but it was stated that the water in question had been found on analysis to give less indication of sewage contamination than the water supplied by a neighbouring company, upon which facts one of the medical witnesses for the authority is reported to have made the comment that under such circumstances, if no enteric fever were associated with the latter, he would seek elsewhere for the cause of an epidemic of enteric fever arising within the area of supply of the former. This is not in accordance with present medical opinion upon the relations of water pollution, water epidemics, and water analysis. To the question whether on a given date a certain water contained the poison of enteric fever, no analysis made some weeks later can afford any satisfactory reply. The presence of much or little organic matter is quite inconclusive in this respect. The absence of "typhoid bacilli" weeks afterwards goes for nothing, for the hypothesis of water infection in explosive outbreaks assumes an intermittent presence of specific poison in the water. In the end the company were ordered to improve their collecting tank and their method of filtration, and the sanitary authority were admonished to attend more diligently to their duties in future. The shortcomings of the authority, even if established, are only a side issue in the case. The gist of the matter as concerns preventive medicine is the difficulty of locating the responsibility for impurity of water supply when one party pretends to purify its sewage before turning it into a stream, and another party pretends to purify its drinking water after taking it out, lower down. Medical opinion, notwithstanding the report of the London Water Commission, inclines more and more to the view that water supplies taken from rivers which drain populous districts are always to be regarded with suspicion. The opposite view implies a lively faith in two propositions, one of which is difficult of proof and the other impossible—that the enteric poison cannot get through an "efficient" filter, and that the filtration never ceases to be efficient, even temporarily. Dr. Eustace Hill, medical officer of health for the county of Durham, remarks very justly that this case affords once more an illustration of the quibble so often raised under the 70th section that the sanitary authority must show that the water is "so polluted as to be injurious to health" in the sense of having actually caused illness. This uncomfortable doubt as to the meaning of the word "injurious" ought to be set at rest by substituting the words "dangerous or injurious," as has already been done for London by the Act of 1891.

UNDETECTED STONE IN THE BLADDER.

A singular case is reported of the death of a girl of 16, who had long been suffering from disease of the bladder. What the immediate cause of death was is left somewhat uncertain in the account which we have seen. It is merely stated that she had been much worse for a week before her death, and that when the body was examined "the bladder and intestines were very much inflamed." The cause of the affection of the bladder was the well-known one of a hairpin, around which a stone had accumulated. Whether this pin had perforated the bladder is not stated. But what makes us think the matter worth comment is that the girl is said to have been taken "to several hospitals, where she was treated for disease of the bladder." What these so-called hospitals were is not stated. And there are (unfortunately for the public) institutions in London calling themselves "hospitals," which are really presided over by, and managed for the benefit of, persons who have been, and others who ought to be, removed from the list of qualified medical men. Still, the case in question is not absolutely unexampled even in the records of the most famous hospitals. We knew once the case of a girl who had long been treated at one of our chief hospitals for enuresis without success, and who was found, on examination at another hospital, to be suffering from stone projecting into the neck of the bladder, and keeping the urethra permanently open. The removal of the stone brought the case to a favourable end. Unhappily, in the case under notice, the medical attendant was misled by the fact that the girl had been a hospital patient, to conclude that examination of the bladder was unnecessary. And we cannot say that the inference was not natural. But the case is, perhaps, worth remembering, as showing that in such cases, whether the patient has been under treatment previously or not, the bladder should be carefully sounded. Everyone knows how often a stone escapes detection even by the most experienced surgeons.

OUT-PATIENTS AT EDINBURGH.

In the British Medical Journal of February 3rd we called attention to a scheme which has been proposed at Birmingham for remedying the abuses of the out-patient system there, and we remarked that the evils of that system are beginning to be felt everywhere. Reference to page 265 of the Journal of February 3rd will show that this is at any rate the case at Edinburgh; Professor Struthers has plainly proved the magnitude of the abuse of medical charity there, and the Lord Provost dwelt on the necessity for some movement towards "codifying the medical charities of the city." But what practical measures would result from these premises?

Professor Struthers himself has nothing better to suggest than that "some gentlemen" should form an association or committee, look into the matter, and advise the public which of the institutions deserve support. We do not hesitate to say that this suggestion is altogether impracticable, and could not lead to any result whatever. What is wanted is not a distinction between one superfluous institution and another probably equally superfluous, but the radical reform of the whole system of superfluous and demoralising "charity," and this can be accomplished only by the united and determined action of all the classes who are now suffering from it. To speak plainly, the chief offenders are the medical men themselves. General practitioners are complaining, and most justly, of the harm which is done them by this system. Yet who ever heard of any general movement among the practitioners of any city, town, or district for its abatement? Such movements are started by individuals, most of them laymen, and are looked on very coldly by both consultants and general practitioners. Again, it is the hospitals which are said chiefly to suffer from this abuse. Yet who ever heard of any general movement amongst the hospitals or even any steady effort on the part of any single hospital for its reform?

So long as we decline to help ourselves and call for "some gentlemen" to do for us what we are afraid to attempt in our own persons so long will this monstrous abuse grow and flourish, while everybody continues to cry out that "something ought to be done."

Let the Edinburgh authorities take a leaf out of the book of those at Birmingham, so far at least as to try whether they cannot devise a scheme for the regulation of the whole system of medical charity and not merely for the codification of the medical charities. The latter would be good and may even be necessary but not till the former has been successfully handled.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1894. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on April 11th, July 11th, and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, March 22nd, June 21st, and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. FRANCIS FOWKE, *General Secretary*.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the Office.

BRANCH MEETINGS TO BE HELD.

SOUTH-WESTERN BRANCH.—An intermediate meeting of this Branch will be held at the Athenæum, George Street, Plymouth, on Wednesday, February 14th, at 2.15 P.M. Luncheon will be provided at Risdon's, 38, George Street, at 1.30. Members intending to be present are requested to give notice of their intention to the Honorary Secretary not later than February 13th.—WM. GORDON, Honorary Secretary, Barnfield Lodge, Exeter.

STAFFORDSHIRE BRANCH.—The second general meeting of the present session will be held at the Swan Hotel, Stafford, on Thursday, February 22nd. The President, Mr. H. M. Morgan, will take the chair at 3.45 P.M.—GEO. REID, Honorary Secretary, St. Mary's Grove, Stafford.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this District will take place at Maidstone on Tuesday, March 6th, Dr. Joyce, of Cranbrook, in the chair. Members desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary, Dr. GROUND, 1, Ashford Road, Maidstone, not later than February 12th.

DUBLIN BRANCH.

THE eighteenth annual meeting of this Branch was held in the Royal College of Physicians, Dublin, on February 1st, under the presidency of Mr. THORNLEY STOKER.

Annual Report: Irish Dispensary Doctors.—The annual report was read by the SECRETARY (Dr. J. Molony) and contained the following observations in reference to the Irish dispensary doctors: The condition of the Poor-law medical service has been under consideration of your Council—the small salaries, the difficulties in reference to pensions, and the abuses in the issue of dispensary and visiting tickets. The subject, as a whole, is one which, your Council submit, is worthy of the best efforts of the Association, but unless the Poor-law medical officers combine and make united effort both in the columns of the BRITISH MEDICAL JOURNAL and through their Parliamentary representatives reform in that service can scarcely be expected. It is in the recollection of members of this Branch how year after year the Army Medical Staff fought their way through difficulties just as great and left no stone unturned until they obtained many of the rights for which they contended. The BRITISH MEDICAL JOURNAL was freely opened to them for the ventilation of their grievances, as it is now to the Poor-law medical officers of Ireland. Your Council suggest the grouping in each province of two or more counties for the formation of Branches of the British Medical Association, from which representatives on the General Council of the Association could be selected, who, when in London attending Council meetings, might also take the opportunity of conferring with the Parliamentary members of their provinces, and place before them such matters as required redress. One of your Council, Mr. W. Thomson, F.R.C.S., has already done much for the Poor-law medical officers, and has collected a largeamount of evidence from which a most powerful case on their behalf has been made, which, if zealously utilised by them, should carry success with it. Deputations to high officials in Dublin Castle and the Local Government Board offices are, no doubt, very good things; but for how many years longer will the Poor-law medical officers of Ireland be satisfied with such ineffective measures? Is it not time for them to combine and make an effort similar to that which brought victory to their military brethren? Are their grievances less deserving of consideration? Are not the members of the Poor-law Medical Service worthy, hard-working members of our profession?—the best years of whose lives are devoted to the care of the sick poor in their districts. Your Council consider the great and influential organisation, the Association of which we are members, could have no more deserving professional question presented to it for assiduous examination and advocacy than the present condition of the Irish Poor-law Medical Service.—Dr. W. G. SMITH, President of the College of Physicians, moved its adoption, and urged the need of untiring efforts on the part of the dispensary doctors to help the work that was being done by the Association.—Mr. W. THOMSON, in seconding the motion, said a good deal had been done by outside effort; he was afraid much more than had been within the ranks of the dispensary medical officers themselves. It was of the greatest importance that the public should be educated through the lay press as to the reality of the grievances, particularly in view of the opposition which would come from board of guardians. If they could not get their Bills through Parliament they should ask for a public inquiry.—The report was adopted.

Election of Officers.—The PRESIDENT announced that the following officers had been elected:—*President-Elect:* R. H. Swanzy, F.R.C.S.I. *Vice-Presidents:* G. P. L. Nugent, M.D., and William Thomson, F.R.C.S.I. *Council:* Lombe Atthill, M.D.; Sir John Banks, M.D., K.C.B.; Wallace Beatty, M.D.; E. H. Bennett, M.D., F.R.C.S.I.; Kendal Franks, M.D., F.R.C.S.I.; T. W. Grimshaw, M.D.; E. Hamilton, M.D., F.R.C.S.I.; F. T. Heuston, M.D., F.R.C.S.I.; W. Moore, M.D.; W. G. Smith, M.D.; Sir William Stokes; W. Thornley Stoker, M.D., F.R.C.S.I., ex-President. *Representative on the Council of the Association:* W. Thomson, F.R.C.S.I. *Honorary Secretary and Treasurer:* John Molony, F.R.C.P.I., St. Patrick's Hospital, Dublin.

Vote of Thanks to Retiring President.—Dr. J. W. MOORE having taken the chair, a vote of thanks to the outgoing President, Mr. Thornley Stoker, was proposed by Dr. ATTHILL, seconded by Professor BENNETT, and passed by acclamation.

President's Address.—The PRESIDENT then read his address, which is published at page 285.

Representation of Branches on the Council of the Association.—Dr. GRIMSHAW proposed: "The members of the Dublin Branch of the British Medical Association are of opinion that in cases of Branches like that of Dublin, where the Branch has only one representative for the General Council of the Association, the Council or Committee of the Branch should have power to nominate a substitute to represent the Branch at any meeting of the Council of the Association at which their elected representative should be unable to attend."—The PRESIDENT OF THE COLLEGE OF PHYSICIANS seconded the motion, which was adopted.

Annual Dinner.—In the evening the annual dinner took place, at which over fifty sat down. The speakers were the PRESIDENT; Rev. Dr. STUBBS, S.F.T.C.D.; Mr. W. THOMSON; Dr. W. G. SMITH, President of the College of Physicians; Mr. THORNLEY STOKER, Vice-President of the College of Surgeons; Mr. AUSTIN MELDON; Sir WM. STOKES; Dr. MOLONY, Sir CHARLES CAMERON.

BATH AND BRISTOL BRANCH.

THE third ordinary meeting of the session was held in the Medical Library of University College, Bristol, on January 31st; Dr. SHINGLETON SMITH, President, in the chair. Fifty-six members were present.

New Members.—The following gentlemen were elected: J. C. Burton, M.R.C.S., L.R.C.P., Willsbridge; R. W. Brimacombe, M.R.C.S., L.R.C.P., Kingswood; D. G. Johnston, M.B., C.M., Bristol; C. H. Graham, M.R.C.S., L.R.C.P., Bath; M. Thomson, L.R.C.P., L.R.C.S.I., Bradford-on-Avon.

Appendicitis.—The evening was devoted to a discussion on appendicitis, which was ably introduced by Dr. James Swain; and the following gentlemen took part in the debate: Messrs. Harsant and Morton, Dr. Waldo, Mr. Lowe, Dr. Steele, Dr. Michell Clarke, Messrs. Dobson, Greig Smith, Bush, Barclay, and Pickering, Drs. Newnham and Parker, and the President.

SYDNEY AND NEW SOUTH WALES BRANCH.

The 113th general meeting of this Branch was held at Sydney on December 1st, 1893, Dr. Worrall, President, in the Chair. Drs. Crago, Millford, McKay, Bowker, Angel Money, Norris, F. A. Bennet, Clubbe, Pockley, Newmarch, Huxtable, Thomas Dixon, Arthur, West, G. A. Marshall, Scot Skirving, Todd, Abbot, Jenkins, Langhorne, A. Parker, O'Reilly, Frizell, Gordon McLeod, Fullerton, Jamieson, Knaggs, Fiaschi, Brady, and Bucknell were present.

Confirmation of Minutes.—The minutes of the adjourned meeting were read and confirmed.

New Members.—Drs. James Gordon Macleod and C. Seymour Dowdell were admitted members.

Communications.—Dr. Edwards exhibited an Acephalic Fœtus.—Dr. Bowker exhibited a patient suffering from Branchial Fistula. Drs. Worrall, McKay, and Bowker made remarks on the cases.—Dr. Jamieson read notes on a case of Anomalous Form of Carcinoma Ventriculi.—Dr. Brady exhibited a specimen of new Growth in the Larynx, and explained the case.—Dr. Jenkins exhibited a specimen of Aneurysm of the Arch of the Aorta.—Dr. Edwards read a paper on Changes Apparent in the Aspect of Disease.

The Library.—The President said that Dr. Huxtable desired to withdraw his motion about the appointment of trustees for the library for the present.

HALIFAX, NOVA SCOTIA, BRANCH.

The regular fortnightly meeting was held at Halifax, N.S., on January 18th, the President, Dr. Campbell, in the chair. Surgeon-Colonel Archer, P.M.O., Drs. Farrell, G. M. Campbell, Smith, Silver, Kirkpatrick, Trenaman, Smith, and Carleton Jones were present.

Communications.—Dr. M. A. B. Smith read a paper on Orthopædic Surgery, which was followed by a long discussion.—The President presented a specimen of Extrauterine Pregnancy and Rupture of the Sac, occurring after an attempt at abortion.

Resolution.—A resolution was passed regretting the departure of Surgeon-Captain Fowler from this station, he having been an ardent member of the Branch, and holding the office of Vice-President for two years.

SPECIAL CORRESPONDENCE.

PARIS.

Hospital Abuse and Hospital Reform in Paris.—Medical Men and Legacies from Patients.—Curious Case of Illegal Medical Practice.—Decrease of Typhoid Fever in Paris.—Cholera and other Epidemic Diseases in Paris.—Vaccine Tubes Sent by Carrier Pigeons.

Hospital abuses and hospital reforms form the subject of frequent discussion here at present. Dr. Tison complains that on the visiting days at hospitals the number of friends and relations who crowd in to see the patients is far too large. An ignorant onlooker would suppose he was at a market rather than in a hospital where the sick and suffering were ordered complete rest and strict diet. Besides the noise caused by the constant incoming and outgoing, there is another much more important evil; all sorts of forbidden food are smuggled in—wine, ham, sweets, etc.—to the despair of the surgeons and physicians who the next morning go their rounds and find patients after operations more feverish, and febrile patients with their temperature increased. Dr. Tison proposes that no visitors should be admitted to see any patients who have undergone operations, nor such as are suffering from acute affections. Convalescents should be visited by their relations in a separate ward. Dr. Tison also demands that stringent measures be adopted to prevent visitors from taking wine or food of any kind to hospital patients. The hospital, he says, supplies everything necessary for the restoration of the health of its inmates. His assertion is however traversed by Dr. Cabanès (*Journal de Médecine* of February 4th), who asserts that he has often been present when the meals were served out to the patients, and the smell nearly made him sick.

There is a clause in the civil code which forbids medical men from receiving legacies from patients whom they have attended during their last illness. A case has recently been decided in a French law court in which a legacy bequeathed to a medical man who had been called in in consultation, during an illness which ended in the death of the patient, was withheld on the ground it was illegal. The Court, however, judged differently, on the ground that the medical man in question attended the patient only during a short period of the illness and in consultation.

A curious case of illegal practice has happened in a little French country town. Madame Riols, of Sarrao, died in a state of advanced pregnancy. The priest, who was present during her last moments, persuaded a person who was at her deathbed to perform Cæsarean section, in order that he might baptise the child. The authorities, considering this practice to be illegal, proceeded against the operator, who has been proved guilty of practising medicine without a qualification, and has been fined 12s.

According to M. Rochard, typhoid fever is on the decrease in Paris. This is pleasant news to those now visiting the French capital and to those who propose doing so. Formerly the mortality was at the rate of 147 per 100,000 inhabitants, now it is 27.7 per 100,000. This decrease is attributed to an improved sanitation and principally to the fact that pure drinking water is supplied in sufficient quantity; the more complete inspection of unhealthy dwellings, lodging-houses, etc., and their improved sanitation is also a factor.

Cholera still lingers in the Finistère Department; four deaths have occurred—two at Concarneau, one at Brest, and one at Pouldergat. At Aisne, Soissons, Chauny, and Septmonts there is typhus. Dr. Chantemesse, Deputy Inspector-General of the Sanitary Services, has been sent to the Aisne Department to organise prophylactic measures. The epidemic of cholera at Namur appears to be the vestige of the epidemic at Charleroi last autumn. Cholera stools were thrown into the river, and the infection was thus conveyed. All the localities attacked are on the borders of the river.

An army surgeon, Dr. Hœbel, has sent small-pox vaccine from Fontenay-le-Comte to Rochelle by carrier pigeons. In the tube of the median feather, instead of a despatch, small tubes of vaccine were placed, steadied by the under portion of lucifer matches. The tubes arrived in perfect condition in fifty-five minutes. Carrier pigeons in war time may thus arrest a small-pox epidemic.

PHILADELPHIA.

Epidemic of Influenza: Notes on Treatment: Difficulties in Diagnosis.—Laryngology and Otology.—"Francis Drake," by Dr. Weir Mitchell.

We are in the midst of an epidemic of influenza. The term "catarrhal fever" would be very appropriate to the classes of cases seen this year. The cases began to be seen about the middle of October, and became most numerous about the middle of December. They are now beginning to diminish in number. The severity, as a rule, is much less than in 1889-90 or 1890-91. A significant feature of morbidity statistics is the concomitant decrease in the number of cases of typhoid fever reported, showing the correctness of the views maintained by some, that many of the cases called typhoid fever in Philadelphia have been unrecognised instances of the enteric form of catarrhal fever. The mortality is much less than that of the first of the recent epidemics, doubtless because physicians have learned the unwisdom—to say the

least—of the use of antipyretic drugs. Unfortunately, phenacetin is still used by some, on account of its analgesic powers; but we can be thankful that acetanilid and antipyrin have been practically abandoned. There is no necessity to use any of these dangerous depressants. The best of all drugs in every form of influenza is strychnine; hardly second is sodium benzoate freely given; according to the type of the attack, ammonium salicylate, ammonium carbonate, cinchonidine or quinine salicylate, phenyl salicylate, or terpin hydrate may be conjoined with these. Pain and headache may be relieved by hyoscin hydrobromate; a single dose of $\frac{1}{100}$ grain often answers. In the pulmonary form of the disease, which is the prevailing type, many practitioners are once more resorting to poulticing, and apparently with excellent results. Pleurisy is rather more common as a complication than in previous years, but large effusions are less frequent. Many physicians report cases in which the diagnosis is for a little while in doubt between acute articular rheumatism and influenza. In some of these instances sore throat is the first manifestation in others an intense pain in the lumbar region is first complained of. Double sciatic neuritis has been met with as a complication.

A Section in Laryngology and Otology has recently been organised in the College of Physicians. Dr. J. Solis-Cohen is Chairman of the Executive Committee, Dr. Harrison Allen Chairman of the Section, and Dr. C. M. Burnett Clerk of the Section and Secretary of the Executive Committee. At the first meeting Dr. B. Alex. Randall presented specimens of corrosion casts of the air passages, and Dr. J. Solis-Cohen related the history of a case of primary sarcoma of the tonsil successfully removed by operation through the mouth.

Among the notable events in literary and social circles having somewhat of a medical interest was Dr. Weir Mitchell's reading of his dramatic poem "Francis Drake" before the Cotemporary Club, of which, by the way, another physician, Dr. Harrison Allen, is President. Doughty, the false friend, who having sold Drake to Burleigh, attempted to stir up a mutiny in the fleet, and failing, was executed for treason, is strongly drawn by Dr. Mitchell. The change which comes over him at the last redeeming his character and transforming him once more into the brave, honourable English gentleman and soldier, is skilfully developed. Dr. Weir Mitchell's rich and unique experience in mental disorders may have had much to do with his success as a writer of fiction, for it is in psychological interest that his work is always strongest. Thus in "Francis Drake," while the text is rich with noble thought sententiously expressed, and although it sparkles with epigram and is adorned with melody the highest value is yet found in the study of the strange but strong mentality and oddly perverted moral nature of Doughty. I suspect that it was the fascination of this character rather than that of the titular hero which led Dr. Weir Mitchell to write the poem.

CORRESPONDENCE.

THE PROPOSED TEACHING UNIVERSITY FOR LONDON.

SIR,—The summary of the recommendations of the Royal Commission for a Teaching University for London has been issued, so far as it relates to the constitution and conduct of the university. There is to be a Chancellor elected for life by the Convocation of the University, and there are to be three bodies with different powers to conduct the affairs of University. First, a Senate, consisting of sixty-five members, including eleven representatives of medicine. Four of these gentlemen will be sent to the senate by the Royal Colleges of Physicians and Surgeons, one by the Society of Apothecaries, London, and four by the Faculty of Medicine. The City of London, various guilds, the County Council, and a number of learned societies and institutions which have to do with education, help to fill up the number required to form this great council, which is to be the supreme governing body of the University. The Senate will enact the statutes governing the university, its laws being alterable only by itself and the Queen in Council. Secondly, there will be an Academic Council, with its vice-chancellor and fifteen members, elected for a term of four years by the various faculties constituting the University, including three members to represent medicine. To this body practically the regulation of the teaching, as contrasted with the constitutional work, of the University will be entrusted. The Senate, as the governing body, will act in matters directly concerning teaching, with the advice it receives from the Academic Council and the Boards of Studies. In this way the Senate has power to admit institutions or departments of institutions as schools of the University, visit such schools, and, subject to appeal, remove any such institution from being a school of the University. The Academic Council is to determine curricula of study and examination in the schools of the university, to control the boards of studies, to settle courses of study, and, in fact, to exercise a very practical control over the schools admitted into the University—a power somewhat similar to that held by the University of Oxford and of Cambridge over their colleges. The control to be exercised by the Senate, by means of the Academic Council, over the schools and teachers of the University seems to be the keystone upon which the whole system rests; and in principle is most commendable. We must hope that its details, when they are published, will not weaken this impression. Doubtless the action of the Academic Council must be influenced to a large extent by the Faculties and Boards of Studies, and these are to be constituted of the professors and teachers in the University and its schools. There is one other body concerned in the government of the proposed University, and that is Convocation, which is to consist of registered members of the University; this body will have power to discuss any matters relating to the University, and declare to the Senate its opinion thereon, or it may express its views to the Queen in Council upon any alteration of the statutes proposed by the Senate.

The question is, Are we ever to have a University for London or to be content with an examining board which grants degrees? If a university, its chief function must be education; examinations are necessary, but teaching first and foremost is the work of a university, and such an institution we may hope now to see established in London. When the evidence taken by the Commission is published, it will be found that the witnesses sent by the Metropolitan Branch of the British Medical Association insisted that the energy of the Association for the past fourteen years has been directed to promoting the establishment of a teaching university, as contrasted with an examining body, in London. In so much as, from the information before us, the proposed scheme for a new university carries the principles I have contended for into effect, I am bound to give it my hearty support.

As may easily be foreseen, the *crux* of the situation will lie in the composition of the Academic Council, and as to whether the Faculty of Medicine will elect three representatives to this Council who will possess sufficient backbone and independence to organise the great resources of the medical schools in London into thoroughly efficient teaching institutions. Some of the schools evidently exist for the interests of the teachers as much as for the students; and the proposed new University will find it difficult to overcome the prejudices of those who have been reared under the existing system. Much has yet to be learnt as to the details of the constitution, and everything as to the medical examinations proposed under the scheme for a new University in London, so that any expression of opinion on these most important matters must be reserved. The way may thus be barred under the new scheme, as it now is, to London students who have passed through a thoroughly efficient course of study, from gaining degrees upon terms honourable to themselves and on a par with degrees obtainable in other universities of the United Kingdom. If any such obstacles present themselves in the scheme of the Royal Commission, I need hardly say that, in my opinion, they should be met with strenuous opposition on the part of the British Medical Association.—I am, etc.,

February 7th. N. C. MACNAMARA.

Sir,—Of the first importance is the recommendation that the University of London shall be remodelled according to the plan of the Commission. All except the few who decided to sink or swim with the Gresham Charter will approve of this, provided that the further suggestions of the Commissioners seem likely to transform the University of London into that which London requires, namely, a teaching University.

In its fundamental idea the plan of the Commissioners resembles that of the Senate of the University of London.

The Convocation of the University will be constituted much as at present, and governed by laws very similar to those at present holding—with this important difference, that for the veto which Convocation had upon the Senate in the matter of alterations in the charter, and which has proved so mischievous, there is to be substituted the right to appeal to the Queen in Council upon any alteration of the statutes proposed by the Senate. This would be a great gain—to all those, at least, who desire to see the University of London becomes what its name signifies. For, as has frequently been said in Convocation, the University has proved a great success as an Imperial examining board, and it behoves Convocation to take care that, whatever happens, the interests of the non-collegiate student do not suffer; and thus Convocation has been led to oppose any change which might tend to encourage the student who has had the advantage of a good education.

The schools of the University are to be institutions recognised by the University as places at which University courses of instruction may be pursued. Certain institutions will be admitted *ab initio*, in whole or in part, as schools of the University, namely, University and King's Colleges, the Royal College of Science, and all the Medical Schools; the City and Guilds of London Institute, Bedford College, half-a-dozen Theological Colleges, four Colleges of Music, with certain reservations, the Inns of Court, and Incorporated Law Society. The number of schools may hereafter be increased or diminished, and all are open to the visitation of the University. I sincerely hope that this visitation will be real and practical.

As to degrees, the only changes suggested seem to be, first, that, except in medicine, the doctor's degree should be given only to those who, by study or research, have contributed to the advancement of learning or science; and, secondly, that honorary degrees are to be conferred. The latter change would, I believe, have a most beneficial effect in the London University.

I do not know exactly what statutory powers are, but apparently the above Commission would have to receive the assent of many bodies to various proposals; so it is likely to be some time yet before the birth of the new constitution will be witnessed, and it is more than likely to be a good deal changed before it comes into action.—I am, etc.,

Feb. 6th. Stanley Boyd.

Sir,—From my work in connection with the recent Welsh University Conference I learned at least one thing—how easily mistakes are made in attempting to judge a detailed scheme without having been present at the discussions by which it was shaped. What I have to say, therefore, about the scheme of the Royal University Commission, the summary of which appears in the *Times* of February 6th, I say with all reserve, and in the hope, rather than the fear, that my criticisms, such as they are, may admit of refutation.

The problem laid before the Commissioners was undoubtedly a complex and difficult one. They were required (1) to construct a university for the students of existing metropolitan teaching institutions, in the conduct of which the actual teachers should have a due share, and in which degrees should be given in recognition of study as well as examination; (2) to provide, at the same time, for the introduction to London of university professors of the Continental type; and (3) to provide, if possible, for the proper exercise of the functions of the present University of London by whatever new or amended organisation they might propose.

In meeting the first-named requirement the Commissioners have gone to work in a bold and thorough manner. They propose to sweep away the whole of the present University except its Convocation, and to substitute for it an organised body of teachers exercising university functions subject to the appointment of examiners and to the making of general statutes and ordinances by a new Senate. They propose that one-third of the new Senate shall be elected by the teachers, and the remaining two-thirds by Convocation and by various authorities and bodies more or less connected with education. They propose that the power of appointing such university teachers as may be needed to meet the second requirement should rest, subject to financial possibilities, with the Senate, and that teachers so appointed should hold equal place in the academic organisation with those of the existing institutions recognised in the scheme. This, in its main outlines at least, appears to me a plain and workable scheme, and one as generally satisfactory as the confessedly difficult conditions admit of: but whether the third element of the problem, which was really the main difficulty of the situation, has been equally satisfactorily met is a point on which it is not easy to form an opinion without full study of the entire report.

The language of the summary is not quite clear, but it would seem that the drawing up of schemes of study for "external student" degrees is either to be placed unreservedly in the hands of the mainly non-academic Senate or else is to be committed without appeal, subject only to statutes and ordinances, to the executive Council of the academic body. If the latter is intended, I should apprehend some opposition on the part of provincial, colonial, and private teachers; if the former, it might be a question whether the composition of the standing board of the Senate which is to "superintend, regulate, and conduct the examination" of these students should not be more precisely defined—if, indeed, the composition of the Senate itself escapes criticism on this account.

The clauses relating to the academic body seem to me to enforce upon it an excess of organisation that may seriously compromise the objects for which it is constituted. All questions relating to schemes of study or examination should, in my opinion, be thoroughly threshed out in a full meeting of the faculty concerned before a decision is taken upon them. These clauses, I am inclined to think, place more power than is desirable in the hands of an executive council too small really to represent the interests concerned. But this is a detail so little involved in the essence of the scheme that it would be premature to dwell upon it.

With regard to the position of the ten unendowed schools of medicine in London, the language of the summary is again a little wanting in precision. They are, in general terms, to be "schools of the University," are not to be excluded without the right of appeal to the Privy Council, and their teachers are to be members of the academic body. But the entire list of teaching institutions recommended for inclusion is introduced with the words: "The following institutions will be admitted *in whole or in part* as schools of the University;" and I further read that "any teacher in a school of the University *who has been duly recognised by the Academic Council* will be a member of the faculty or faculties to which he is assigned by the Academic Council," while, in another place, I find that the Academic Council is to be empowered to withdraw, as well as to grant or refuse, recognition of a teacher, in all cases apparently without appeal. I surmise, from the general tenour of the clauses, that the words "in whole or in part" are intended to apply to other institutions than the medical schools, and that the "recognition" or otherwise of teachers is not meant to be left altogether at the mercy of a small executive committee. If these points are satisfactorily cleared up, the position of the medical schools seems to me to be sufficiently well secured.

But the position of medicine as a whole in the scheme cannot, I fear, be regarded with the same complacency. In specifying the constitution of the various proposed University authorities the Commissioners have, perhaps, rather regarded what might or ought to be the educational conditions of London than what they actually are at the present moment. It is possible that at some future period private or State liberality may be exercised on such a scale as to make London a great centre of university education in arts and science. But at present this is certainly not the case. The most important teaching needs of London in these subjects are still supplied by Oxford and Cambridge, and the

University teaching of the metropolis in arts and science can, under existing circumstances, claim but a local and secondary place. The importance, on the other hand, of the medical education given in the London hospitals, not only to London but to the whole of England and Wales, it would be difficult to exaggerate. The capital is the natural and inevitable centre of medical teaching, the interests of medical education in London are a national rather than a local matter, and it would be, in my opinion, a grave national misfortune were the present University displaced only to leave these interests at the mercy of the relatively unimportant London faculties of arts and science. This, however, there seems to be some danger of doing if the details of the Commissioners' scheme are implicitly adopted. I do not attach too great importance to precise proportional representation in the Senate. In a miscellaneous body of sixty-six members eleven medical representatives will doubtless be able to make their influence effective. But within the limits of the Senates' statutes and ordinances the framing of university schemes of study and examination is given by the Commissioners without appeal to the Academic Council or executive of the academic body, and upon this Council it would seem that the interests of medicine and surgery are to be represented by only three members out of sixteen, while no fewer than eight, an actual majority, unless the Chairman votes, are to be elected by the teachers of arts and science.

The absence from the scheme of any representatives of the general body of the profession would be a point less noticeable were it the result of any fixed principle; but the most academically minded will surely admit that such a body, for example, as the British Medical Association has a closer interest in the policy of the University of London than the Royal Agricultural Society, or the Institute of British Architects, or the trustees of the British Museum, to all of whom representation on the Senate is accorded.

These, however, are details, important indeed, but admitting of modification without affecting the general principle of the proposals, which undoubtedly form a consistent and carefully considered scheme, and one that I am tempted to think may lead to a solution of the problem that has been so long pressing upon us.—I am, etc.,

Curzon Street, W., Feb. 6th. ISAMBARD OWEN.

SIR,—As one of those who have devoted a good deal of time to the consideration of the various schemes which have been put forward for the formation of a teaching university for London, I shall be glad of your permission to express my opinion as to that which has just been issued by the Royal Commissioners.

The objections of the provincial colleges to former schemes may briefly be formulated as follows:

1. The preponderating influence of the Royal Colleges of Physicians and Surgeons.

2. The large amount of direct representation assigned to schools of medicine as such.

3. The great excess of medical representatives arising from this.

4. The possibility of the adoption, had a second university been established, of differing standards of degree for London and provincial candidates.

In the evidence which Principal Heath and I gave before the Royal Commission, on behalf of our College, we endeavoured to emphasise these points, and urged that the organisation and arrangement of academic affairs should be in the hands of the teachers; in fact, that the members of the body in whose hands the curriculum, etc., should be placed should be the representatives, not of institutions, but of subjects.

As far as can be judged from the summary which appears in this day's *Times*, these points have been met in such a manner as to satisfy us. Thus:

1. The Colleges of Physicians and Surgeons have each two representatives on the Senate only.

2. There are no direct representatives from schools or institutions, other than University and King's Colleges.

3. It is expressly provided that the standard for external and internal students shall be the same, although different examinations may be held by different examiners for each class.

4. The academic part of the work is placed in the hands of teachers. As the *Times* points out: "The body which will hold in its hands the real power is the Academic Council. It is to consist of the Vice-Chancellor, who will in the nature of things be the working head of the University, and of fifteen members, elected by the different faculties. These members will of course be the principal professors. They will have in their hands the educational, as distinct from the constitutional work of the University."

5. Finally, the interests of the external students are to be cared for by a special board, with the power of nominating examiners for this class of students. It is to be hoped that some representatives, at least of the larger provincial schools and colleges, will find places on a board with which their interests will be so closely connected.—I am, etc.,

BERTRAM C. A. WINDLE, D.Sc., M.D., M.A.,
Dean of the Medical Faculty, Mason College, Birmingham.

Birmingham, Feb. 6th.

SIR,—It is early to express a decided opinion on a scheme which was promulgated only yesterday, but, as far as I can gather from the summary in the *Times*, it seems to me a well-considered one and likely to attain the objects for which the Commission was appointed. At any rate, if there be a feeling of amicable compromise amongst the various schools and institutions involved in the scheme, we ought before long to see in London a University in the fullest and best sense of the term. Medicine has been fairly, even generously, dealt with, inasmuch as it will have a representation of at least one-sixth—and it might be more—upon the Senate, and of one-fifth on the Academic Council; while the constitution and wide basis of the faculty are such as to give voice and influence to the teaching and professorial elements in the governing bodies of the University. The medical schools are to have no direct representation on either the Senate or the Academic Council, but the difficulty ought not to be insuperable of finding fit representatives of medicine, and, through them, of the schools themselves, on the two elected governing bodies. The interests of the students and conduct of the examinations seem to be safeguarded by the representative character of the faculty of medicine, and the proposed division of students into two classes—internal or resident and external or non-resident in London—with separate examinations of the same standard for both, appears likely to do away with any undue advantages which the former class of resident students might be supposed to have. Points of detail in organisation will have to be worked out, but here is at least the groundwork from which the much-needed University ought to be developed. If the opportunity is lost now the whole matter will assuredly be shelved for a generation.—I am, etc.,

Harley Street, W., Feb. 7th. HERBERT W. PAGE.

SIR,—The scheme of the Royal Commission, so far as it can be judged by the summary already published, is one which will require to be very carefully considered by the rank and file of the medical profession.

It would appear that it is proposed to hand over practically the whole conduct of the business of the University to an "Academic Council" consisting of sixteen members, all of them, with one possible exception, representing the teachers. The Senate, consisting of sixty-six persons, will be merely an ornamental body, and in the important matter of examinations and the terms of the curriculum will have little more to do than register the decisions of the Academic Council. Upon this council of sixteen medicine would only have three representatives, all belonging to the professorial class, for they would be elected by the faculty of medicine, which would consist entirely of university or school professors, lecturers, and demonstrators. There seems to me to be here a very real danger of creating a close body which would legislate entirely in the interests of the teachers, and especially of those attached to the London medical schools. The inevitable result, it is to be feared, will be a downward tendency

due to the pressure of the competition with provincial colleges and schools, which the metropolitan institutions already feel so heavily.—I am, etc.

February 6th. PLEBS.

SIR,—The new constitution proposed for the University of London is complex and peculiar, and one naturally wonders first how it will work, and next how far it will fulfil the object of the agitation which gave it birth.

Convocation appoints the Chancellor, and, by its graduates, voting in separate blocks according to their faculties, elects nine representatives on the Senate—ten, that is, out of sixty-six. It has no further power beyond that of expressing pious opinions. The Senate is appointed partly by Convocation, partly by the faculties, partly by the Academic Council, and its numbers are filled up by an *olla podrida* of lawyers, architects, civil engineers, museum trustees, and City companies. Its basis is wide, but how these scattered units will go in harness is another question.

The faculties consist of the teachers, but in strictness only of those appointed by the Senate. The teachers in the schools do not form part of the faculties until they are recognised by the Academic Council. This Academic Council, then, is the central and most powerful body in the University, and this consists of fifteen members appointed by the faculties, which in turn are appointed partly by itself and partly by the Senate, which again is appointed partly by the Academic Council, by the faculties, and by Convocation, which in turn again has upon it the whole of the Academic Council. So there is a nice interlocking of the departments of this University; in fact, it has been found necessary to invent a *deus ex machinâ* in the shape of a Statutory Commission to start the apparatus, and when once started it is impossible to see how any single interest will manage to make itself heard.

Now, it is no use blinking the fact that the very object and aim of the movement which has led to the drawing up of this new constitution, is the necessity of providing London medical students with the same facilities for graduation which are possessed elsewhere. London itself, even if it did not draw students from the rest of the world, numbers more inhabitants than Scotland. Yet while Scotland has four Universities London has but one, and that one has thought its mission to be the setting up of a high standard of examination, not for London students but for the world. We come then at once to the question how far will the new constitution give voice to the teachers in the numerous London medical schools? The examiners and university professors are appointed, and the distribution of funds for teaching, and for the endowment of these professors, is performed by the Senate, which has eleven representatives of medicine among its sixty-six members. Of these two are elected by the graduates, five by the other examining bodies, and only four by the faculties.

The determining of the curricula of study and examination, the composition of the boards of study, even the appointment of one-fourth of the members of such boards—all falls into the hands of the Academic Council, in which medicine has three members against twelve representatives of the other faculties. Nor do the teachers in the schools necessarily have anything to do with the election of these three members. They are appointed by the faculty, which does not include the teachers, even of the University schools, except by grace of this Academic Council, on which medicine is represented by three members—less than science and less than arts.

The weak point in the present London University is not so much that it does not teach as that it is not in touch with the actual teachers in the schools, and in the constitution before us there is but little sign of this being altered.—I am, etc.,

S.

A GIGANTIC ABUSE AND ITS REMEDY.

SIR,—I regret that you have so hastily given your approval to the scheme for out-patient reform published in *Forward*, the local organ of the Hospital Saturday Fund, as I fear it is quite impracticable, and your approval may lead to undeserved censure of our hospital authorities. In my opinion, nothing can be more absurd than to propose that no one shall go to a hospital except after having seen and with the permission of young gentleman, recently qualified, who has been appointed a "stipendiary" officer of "the dispensary." Such a system would be bad for the hospitals, and worse for the patients. Good as it looks in theory, it is not safe to limit out-patients to those who can obtain medical recommendations. This only works well in very obvious ailments—diseases of the eye, wounds, and external diseases, where there can be little difference of opinion about the diagnosis or the sort of treatment required, and where a blunder would be readily detected by the patient and his friends.

I believe the abuse of hospitals is grossly exaggerated. I have invariably refused to see patients whose position seemed not to entitle them to such attendance, but the number of such cases has been quite small in proportion to the number of out-patients I have seen. No one supposes that the present hospital system is perfect: but its defects seem to depend mainly upon some ineradicable faults of human nature, while the good achieved outweighs the evil by a very great deal. On the other hand, a dispensary which sells its tickets to anybody for "personal use"—tickets which entitle the holder to attendance at home and medicine free, as do the tickets of the dispensary here—is a form of competition which the general practitioner may well grumble at, and not wish to see extended.—I am, etc.,

Birmingham, Feb. 3rd. ROBERT SAUNDBY.

*** Dr. Saundby's letter assumes that this JOURNAL has approved the scheme in its details, which, if he will turn back to our article, he will see is not the case. We approved of the main principle of the scheme (which has, indeed, been often recommended in our columns), namely, that a medical recommendation should be a necessary preliminary to out-patient treatment; and this principle is, we had imagined, generally approved. We do not see why the dispensary officer must necessarily be a young man recently qualified, or why the sale of tickets should involve hurtful competition with the practitioners of the town. All these matters depend on the rate at which the tickets are sold and the dispensary officers paid. On the other hand, we must be allowed to differ entirely with our correspondent as to the extent to which our hospitals are abused, and also as to the dependence of such abuses on "ineradicable faults of human nature." The reform of the out-patient system involves, we need hardly say, no censure on those who are administering the present system to the best of their power.

SIR,—It will be generally conceded that the hospital system throughout the country is grossly abused, the public being as seriously demoralised as the medical profession is robbed. We want some practical suggestions for remedying matters, and especially some plan by which the wage earning classes can obtain medical treatment without sacrificing their self-respect on the one hand, or an unreasonable portion of their wages on the other. I would recommend that provident dispensaries be established throughout the country, each town having several; that membership be limited to persons earning less than some definite wage (say 8s. per adult per week, counting each child under 14 years as half an adult); that membership involve a regular payment (say 6d. per month); that all payments from members be made to a paid secretary at regular intervals (say fortnightly); that every member have a card upon which the practitioner signs his initials (say once for a consultation with medicine, and twice for a visit with medicine), every such signature representing 6d. to be paid by the member to the secretary; that a double charge be made for visits required outside certain specified hours (say 10 A.M. to 6 P.M.), and 5s. for night visits (10 P.M. to 6 A.M.); that the midwifery fee be 15s., payable in advance; that an entrance fee of 5s. be paid by those joining during sickness; that several practitioners be attached to each dispensary; that the receipts (after paying expenses) be divided yearly among the practitioners in proportion to the work done; that a voluntary committee meet periodically (say monthly) to consider the claims of persons seeking membership.

Such an institution has been in existence in Kendal for

eleven years; it has nearly 800 members (counting a family as one member); there are about 12,000 consultations or visits in a year (probably two to three times as many consultations as visits); the four practitioners receive about £550 in a year between them; the expenses of management, including secretary's salary, are under £40 a year. In this case the secretary's office is his shop; the Committee meet freely in the Town Hall, and the practitioners use their own surgeries for consultation.

No money passes directly between patient and practitioner. There is nothing degrading in accepting small fees, any more than if each practitioner received an honorarium of £150 a year and took his chance of what work it involved. There is no demoralising effect upon the wage-earning class, as in the wholesale pauperisation of the hospital system.

Where the wages are below 4s. per adult per week (counting two children under 14 years as one adult) some charitable assistance is perhaps inevitable, unless we can grapple successfully with the unemployed question. As an aid to the solution of this problem, I would strongly commend the urgent need of sanitary reform throughout the country, comprising the demolition of rookeries and fever dens to make room for decent dwellings for the wage earners; improved scavenging and sewerage, with the utilisation of sewage, improved water supply, etc. The extra employment of 100,000 workers to effect these much-needed reforms would indirectly reduce the number of employed by the same number: it would involve an outlay of some five million pounds a year, but the whole of this would revert to the class who paid it from the increased need of the necessaries and luxuries of life, thus involving a little extra work on the part of the community generally. Thus, if we all consent to undertake a little extra work in our own sphere of life, and put up with a little extra expenditure in the way of rates and taxes, with the clear understanding that it will revert to us in the aggregate in the shape of increased income, then the question of the unemployed is largely solved for many years to come; our surroundings are sweetened, and life becomes generally more worth living.—I am, etc.,

WM. RUSHTON PARKER, M.A., M.D.Cantab.

Kendal, Feb. 5th.

THE LATEST DEVELOPMENT OF A GIGANTIC ABUSE.

SIR,—Under this heading your correspondent "F.R.C.S.," writing in the BRITISH MEDICAL JOURNAL of February 3rd on the subject of evening attendance at the Western Ophthalmic Hospital, falls into the error of fact and inference. This is a pity, as such inaccuracies tend to mar the effect of his borrowed eloquence.

As to the surgeon from Windsor, his connection with the said hospital ceased in June, 1893, before the institution of Thursday evening attendances was ever contemplated.

The Western Ophthalmic Hospital contains only ten beds (unless very recently increased), not twenty, as stated.

"F.R.C.S." says "that hospitals originally founded and ostensibly carried on for the relief of the poor should be permitted thus openly to bid for and seek to attract the working classes while in receipt of full pay in order to pauperise them, is a scandalous abuse." "In order to pauperise them!" That is a rather invidious motive to attribute to the committee of the hospital. The real position of things is as follows: The Western Ophthalmic Hospital, though near some poor districts, is situated in a part of London that, in the main, is well-to-do, and, as a direct result of this, was formerly taken advantage of by persons well able to pay. In 1874 (that was six or seven years before the writer of this was attached to the hospital) a limited pay system was adopted, and continued in force till a month or two ago. For this reason a very large proportion of cases who came to the out-patient room and required indoor treatment were obliged to go to other hospitals, as they could not afford to pay diet money, and often had difficulty in getting governors' letters. Naturally the pay system was always obnoxious to the staff, and has now been abolished. Though much is to be said in its favour, it placed the Western Ophthalmic Hospital at a heavy discount in comparison with other hospitals. Doubtless the evening attendances will prove a great boon to many whose "full wages" are often insufficient for empty stomachs.—I am, etc.,

February 4th. F.R.C.S.ENG.

SIR,—In the BRITISH MEDICAL JOURNAL of February 3rd appears a letter, signed "F.R.C.S.," respecting the Western Ophthalmic Hospital, and casting grave aspersions upon that institution, its managers, and its honorary staff. Lest silence might be interpreted as acquiescence in the charges which have been brought, will you allow me to state, as a member of the committeee and of the staff, that the statements made by "F.R.C.S." are unwarranted, his assumptions baseless, and his personalities unjustifiable?—I am, etc.,

EDWIN HOLTHOUSE,
Surgeon to the Western Ophthalmic Hospital.

Weymouth Street, W., Feb. 5th.

LIABILITY FOR ALLEGED INCORRECT NOTIFICATION.

SIR,—In the BRITISH MEDICAL JOURNAL of February 3rd, in reply to a question addressed to you by "Medicus," you say that you are advised that it is probable that a claim for compensation could be maintained if a case were diagnosed in error as small-pox and removed to hospital; and, further, you say "that it would be desirable to come to some arrangement with the parties if a reasonable sum representing the actual loss of time and expense were named."

May I be allowed to say that I entirely disagree with the opinion, and strongly reprobate the advice given? Surely such a position would render medical practice so responsible as to be unendurable. The whole theory of English law is to demand only reasonable care and skill on the part of medical practitioners, and in no statute or ruling is it implied that knowledge approaching infallibility is required from the medical servants of the community. I suppose no medical man will deny that the difficulties of diagnosis of variola in the early stages, and in the first cases of an outbreak, are so real as to render any diagnosis presumptive only? And it is clear that the immediate isolation of cases of this disorder, properly demanded by the public opinion of the country, not only renders mistake in doubtful cases highly probable, but puts great difficulties in the way of training our students to easily recognise the disease. I have known an experienced medical man, who for years had had charge of a small-pox hospital, and, moreover, after deliberate consultation with two other practitioners, send into hospital as varioloid what proved to be an acute papulo-pustular rash due to sewer-gas poisoning.

The English law has nowhere said or implied that an act deliberately done in the interest of the public safety, and with the exercise of reasonable skill and care, as was the case in this instance, shall place a medical man in the position your answer assumes—a position which opens to the unprincipled blackmailer the doors of unhindered and unlimited activity.

If such a statement of the law be a correct exposition, then no medical man will notify cases of variola till mistake is absolutely out of the question—that is to say, till every facility for the further spread of the disease has been afforded, even if by so doing he expedites what I venture to think is inevitable—namely, the amendment of the Infectious Disease (Notification) Act of 1889.—I am, etc.,

LESLIE PHILLIPS,

February 6th. Honorary Secretary Medical Defence Union, Limited.

*** We have received communications from Dr. Saundby and Dr. Greenwood, raising similar questions. Our correspondents are evidently under the impression that our reply was given by way of interpretation of the Infectious Diseases (Notification) Act, 1889, and take exception to our reply accordingly. In deference to our correspondents, we shall not confine ourselves to stating that this certainly was not the case, but shall show, by a reference to the Act, that it could not have been intended as such. The duty of notifying to the medical officer of health is cast on the head of the family, etc., equally with the medical attendant; in other words, the medical man can no more be held responsible under the Act for making a mistake as to its being or not being a case of infection than the head of the family, etc.

In the next place there is no reference whatever in the Act as to sending anyone to a hospital, nor is there the slightest

obligation imposed by it on anyone to do so. It was impossible for us to assume that "Medicus" was asking a question as to his liability if he had absolutely done nothing to make himself liable; and we must repeat that our answer to his question had no reference whatever to the Act. The heading to our reply, and the use of a word which, besides its ordinary use, has a technical signification under the Act, may have misled our correspondents; and if this be so, we are sorry that it should have caused them any trouble. We observe, also, that it accidentally followed a paragraph "Duties of M.O.H. under the Notification Act," which may have confirmed their impression that the reply was given in reference to the Act.

THE OPHTHALMOLOGICAL SOCIETY AND SCHOOL OPHTHALMIA.

Sir,—At the recent meeting of the Ophthalmological Society the discussion on my paper on School Ophthalmia was adjourned, and I was requested to formulate some propositions and definitions which might assist the debate. These I now send to you, as their early publication will be of advantage in allowing of their deliberate examination, and may also elicit expressions of experience from some not members of the Society.—I am, etc.,

Cavendish Square, W., Feb. 6th. Jonathan Hutchinson.

Propositions, Definitions of Terms, etc., in Reference to School Ophthalmia.

1. That the contagious ophthalmia which has recently prevailed to a greater or less extent in certain high class schools is precisely the same malady as that which in pauper schools has long been recognised as the origin of trachoma.
2. That the reason why but few cases of trachoma have resulted from these outbreaks is that treatment has been adopted.
3. The epidemic to which I referred in my paper as having recently occurred at —— School was, excepting in that the cases were of somewhat minor severity, precisely the same in character as that on which I reported in 1866 as then present in the Brentwood pauper schools (see *Ophthalmic Journal*, vol. v, p. 331). Not a few of the cases at —— School had persisted for several months, and after a certain amount of treatment: many relapses had occurred, and in some instances after medical certificate that the cure was complete.
4. Neglect isolation, and school ophthalmia will spread through the establishment.
5. Neglect the local treatment of school ophthalmia, and a certain number of trachoma cases or "workhouse ophthalmia" will be the result.
6. A certain number of protracted trachoma cases have already resulted from ophthalmia epidemics in middle class schools, and a far larger proportion of cases would have passed into this stage had it not been for careful treatment.
7. It is a feat of clinical imagination merely to conceive that there are two forms of epidemic follicular ophthalmia, one of which has no tendency when neglected to end in trachoma (see Nettleship, *On Diseases of the Eye*, page 83).
8. "Follicular conjunctivitis" or "follicular ophthalmia" are names for an early stage of granular lids. This stage is characterised by general enlargement of the normal follicles, and often of the papillæ also.
9. It is admittedly extremely difficult to say in slight cases whether enlarged follicles are a personal peculiarity or an evidence of disease.
10. "School ophthalmia" is a name for a contagious and often very brief form of conjunctivitis, which, if neglected, may in certain cases produce granular lids.
11. "Workhouse ophthalmia" is a name for advanced cases of granular lids (trachoma). It is always initiated by an attack of "school ophthalmia."
12. The disease known conventionally as "catarrhal ophthalmia," which often runs through families, and is attended by patchy congestion of the ocular conjunctiva, may possibly be the same disease as "school ophthalmia."
13. "School ophthalmia" is, however, rarely attended by much congestion of the ocular conjunctiva.
14. The initial attack is usually easily and completely cured by local treatment.
15. The second stage, "follicular ophthalmia," is usually curable by efficient treatment perseveringly used for a month or two.
16. The third stage, that of "trachoma" (when the conjunctiva is thickened and the follicles extensively implicated), is curable with great difficulty, very liable to relapse, and often requires a treatment extending over years.
17. In all stages those who suffer from granular lids are liable to relapse and to become sources of danger from contagion.
18. The danger of contagion is probably in proportion to the amount of puro-mucous secretion. During conditions of dry eye, with little or no secretion such cases are probably but little dangerous.
19. School ophthalmia by no means always leads to granular lids; on the contrary, a very large majority of its subjects recover completely, and such recovery is almost universal under efficient treatment.
20. There is however always a risk that school ophthalmia may, if neglected and in certain constitutions, run on into granular lids.
21. Conversely cases of granular lids are in all stages, if temporarily attended by disharge, liable to become the sources of epidemics of school ophthalmia.
22. It is probable that all epidemics of contagious ophthalmia in schools are the same in kind, although they may, in accordance with the general laws of epidemics, differ widely in severity of type.
23. The tendency to the development of granular lids after an attack of school ophthalmia probably depends much upon the race-descent, structural endowments, and state of vigour of the patient.
24. All cases of trachoma have been preceded in the first instance by an attack of conjunctivitis due to specific contagion.
25. The initial attack of conjunctivitis is in its nature transitory; it is often slight and lasts only a week or ten days.
26. After the initial attack the conjunctiva of the globe may resume a normal condition whilst changes are going on insidiously in the follicles and papillæ.

Memoranda for the Guidance of School Authorities.

A certificate of freedom from ophthalmia should always be required on the return of a pupil to school (as is already the case in reference to tinea and some other maladies).

In the case of anyone in a school suffering from "sore eyes," isolation should be immediately adopted and advice obtained.

If in any case relapses occur and granular lids are developed, the isolation and treatment ought to be prolonged, and the pupil ought not to be allowed to return to school until the cure has been established (without relapse) for several months.

No case of granular lids, still requiring treatment, should ever be admitted into a school where there are healthy children.

In case of an outbreak in a school the treatment should be conducted on the spot and the pupils ought not to be sent home.

The treatment need not interfere materially with school routine.

M. HERMITE'S SYSTEM AND THE FLUSHING OF SEWERS.

Sir,—I fear that the immense cost of furnishing a special system of delivery pipes for the supply of electrolysed sea water to the closets of those seacoast towns which already possess a fairly complete water carriage system will hinder the extensive adoption of M. Hermite's excellent plan of electrical purification of sewage.

I would like, however, to draw attention to the benefits which would accrue from the use of this electrolysed sea water in the watering of streets and the flushing of drains, especially during the summer months. For some years past I have advocated the more extensive use of ordinary sea water for this purpose, for apart from the benefits derivable from flushing during any prolonged drought sea water has undoubtedly some antiseptic properties, due in part perhaps to the minute traces of free iodine, bromine, or of ozone to be found in it, and if these antiseptic properties can be readily increased, as by the passage of a current of electricity of low voltage through the water, we have at hand an exhaustless supply of an excellent disinfectant at a small cost with which to cleanse our sewers, and what is perhaps equally important to purify our subsoil and surface water.

The remarkable corroboration of Ballard's theory of zymotic diarrhœa being dependent on the 4 foot earth temperature and hence on the activity of certain organisms in the soil at the said temperature which was experienced in this and other towns during the past year shows that there are organisms in the soil of all urban districts which have a potent influence for evil under certain circumstances favourable to their development, while the researches of Pettenkofer point to the same influences being at work in some at least of the epidemics of typhoid fever and of cholera. If the plentiful distribution of such a powerful and harmless disinfectant over our roads and paths, and especially over the festering soil of our slums and back streets would do aught to check the development of these organisms and the heavy infant mortality induced by them, then it is our duty to advocate its use, and we cannot be too grateful to M. Hermite for his researches.

It is pitiful to see the vast quantities of permanganate of potash, of chloride of lime, of carbolic powders and what not which are poured into our sewers or sprinkled over our manholes during a dry season, when the cry, if only rightly interpreted, is for water; and all the time there is the vast sea at hand to bring the needed succour, to cool and moisten the parched earth, to lower the subsoil temperature, and destroy its fateful organisms. The hygroscopic properties of the chloride of magnesium present in the sea water, on which depends the circumstance that articles wetted with this water never become perfectly dry, is another safeguard to health, for it is only by perfect drying that these organisms or their spores can rise into the air with the dust and be inhaled: and as with the sputum of phthisis, so with the germs of typhoid, of cholera, or of diarrhœa, the greatest safeguard of the com-

munity (short of actual combustion) lies in the direction of moisture.

It may be objected, however, that moisture engenders putrefaction, and this leads to the generation of gases, the bubbles of which, bursting on the surface, will project organisms into the atmosphere, as in the case of a foul foreshore. This is undoubtedly so, and hence the necessity of a harmless antiseptic liquid which can be used lavishly and at no great cost; and it is these very wants which electrolysed sea water seems so readily to supply.

I would strongly urge all sea-coast towns to give this system a fair trial, for where ordinary sea water has already been used for this purpose—as, for instance, at Shields, Tynemouth, Torquay, Ryde, and other towns—the results have been satisfactory, and I am convinced would be far more so after the adoption of M. Hermite's improvement.—I am, etc.,

Francis W. Clark, M.B., D.P.H.,
Lowestoft. Medical Officer of Health.

HOARSENESS IN LIFE ASSURANCE.

Sir,—While I agree that in cases of hoarseness a laryngoscopic examination should be insisted on, I cannot ask for a routine examination of the larynx. For the sake of the individual, of the assurance companies, and of the community at large it is desirable that the benefits of assurance[1] should be distributed as widely as possible. From a somewhat lengthy practical experience of the subject I am convinced that any further elaboration of the method of examination in life assurance would certainly bring about a diminution in the number of applicants. Many are at present deterred from presenting themselves for assurance through a dread of the examination, and if an additional method is adopted I am afraid that even more will be frightened away.

Looking at the question from another point of view, Is the game worth the candle? I venture to give an emphatic negative. In the first place, there are very few country examiners (and not all of the physicians attached to the head offices) who are capable of recognising unilateral, abductor, or recurrent paralysis when they see it, and these are just the cases which require to be excluded if the company is to "be saved what may be severe losses." Three cases coming under my own observation, and bearing on the subject of laryngoscopic examination in life assurance, may be briefly mentioned.

Case I.—A gentleman, aged 56, applied for assurance in June, 1884. As he was suffering from hoarseness, which he stated had existed for twenty years, I insisted on a laryngoscopic examination, and found chronic congestion of the vocal cords; in addition to the hoarseness he had a tendency to bronchial catarrh and slight emphysema, so he was consequently accepted at an enhanced premium. The diagnosis of chronic laryngitis was confirmed by Dr. Semon, to whom the patient applied for treatment in January, 1885, but the treatment suggested was not carried out as the patient objected to resting his voice. In August, 1886, he consulted me, and I found epithelioma of the right ary-epiglottic fold, from the effects of which he died in January, 1887.

Case II was a patient under my care, with incomplete abductor paralysis of uncertain origin. He applied for assurance, and was, of course, declined, but the stridor attending inspiration would have sufficed to exclude him in the absence of a laryngoscopic examination.

Case III.—A patient I saw for Dr. Semon. In the proposal form the patient mentioned that he had consulted me for slight hoarseness. Dr. Semon diagnosed unilateral abductor paralysis, and advised the company not to accept the life.

In the first case the laryngoscopic examination afforded no assistance, in the second any medical man of ordinary powers of observation would have rejected the life without requiring an examination of the larynx, in the third case I grant that the company may possibly be saved a loss, but as the cause of the paralysis was not discovered, and the later history of the patient is unknown to me, I cannot speak definitely on this point. In this case, moreover, I think that very probably the laryngeal paralysis would have been overlooked by an ordinary observer; indeed I must confess that I did not recognise it when I first saw the patient.

If a laryngoscopic examination be insisted on, we shall have ophthalmic surgeons urging the advisability of making an ophthalmoscopic examination in all cases. When I look back to the excellent results which were attained by assurance companies in the days before a medical examination was instituted, I cannot help thinking that it is possible to have too elaborate a system of examination. It should always be remembered that the tables of premiums in use allow a margin of risk, and I am of opinion that it is better that now and then an inferior life should be passed, rather than by exercising too great severity in the examination that cases should be unnecessarily rejected, or be prevented from applying.—I am, etc.,

Wimpole Street, Jan. 30th. F. de Havilland Hall.

[1] It will be noticed that I have used the word "assurance," whereas in the annotation "insurance" is employed. Is it not desirable to use assurance when provision is made against a certainty, namely, death; whereas insurance should be restricted to cases in which the result is uncertain, namely, fire, shipwreck, etc.?

THE RADICAL CURE OF LARGE UMBILICAL HERNIA.

Sir,—In No. 1,716—November 18th, 1893—of the British Medical Journal, under the Epitome of Current Medical Literature, page 81, there is mention of a "new operation for radical cure of large umbilical hernia," by Gersuny. Permit me to refer your readers to the *Transactions* of the Intercolonial Medical Congress of Australasia of September, 1892, page 534. A perusal of my paper on "A novel method of operating for the cure of large ventral hernia" will, I think, clearly show that the priority of designing and practising this method may be fairly claimed by me, as I operated on December 10th, 1891. The patient is at this date—December 27th, 1893—perfectly well, and her abdominal parietes as sound as a bell.—I am, etc.,

R. D. Pinnock, M.D., etc.,
December 27th, 1893. Hon. Surgeon Ballarat Hospital, Victoria.

NAVAL AND MILITARY MEDICAL SERVICES.

ADMINISTRATIVE CHANGES IN INDIA.

We understand that the following administrative changes are likely to be the consequence of the introduction of the new army corps system in India. There will be a Surgeon-Major-General at headquarters as heretofore, but under him there will be one Surgeon-Major-General for each army corps, apportioned between the Army Medical Staff and the Indian Medical Service as follows: Punjab, I.M.S.; Hindustan, A.M.S.; Bombay, A.M.S.; Madras, I.M.S. Thus the two new Surgeon-Major-Generals are both taken from the Indian Medical Service. We are informed that the Surgeon-Major-General, I.M.S., selected for the Punjab is an officer five years junior to the Senior Surgeon-Colonel of the A.M.S. at Rawal Pindi. This, it is to be feared, will hardly conduce to perfect harmony in administration.

The appointment of an officer who has had no experience in European military hospitals to the medical charge of the Punjab Army Corps, the largest of the four, which consists of 70,000 troops, of whom 25,000 are Europeans, appears to us decidedly open to criticism. We learn further, with regret, that the Government of India has decided to reduce the pay of the Surgeon-Major-Generals of the four army corps from 2,500 to 2,200 rupees per mensem. Why should the medical department always be the first to feel the edge of the financial pruning knife?

We are informed that Bangalore and Madras are no longer to be held by Surgeon-Colonels of the A.M.S. A Surgeon-Colonel of the I.M.S. is going to Bangalore, and a Brigade-Surgeon-Lieutenant-Colonel, I.M.S., to Madras. The Surgeon-Colonel, I.M.S., at Secunderabad, is to be relieved by the Surgeon-Colonel, A.M.S., from Bangalore. The latter will however draw 200 rupees a month less, that is to say the charge pay hitherto given for the Hyderabad contingent. Thus the two Surgeon-Major-Generals of the Hindustan and Bombay army corps and the Surgeon-Colonel at Secunderabad between them lose 800 rupees a month, or 9,600 rupees a year, the Indian Medical Service on the other hand gaining two appointments of 2,200 rupees each. Finally a Surgeon-Colonel of the A.M.S. is to be appointed P.M.O. of Upper

Burmah, with his head quarters at Mandalay. We understand that all these changes will take place during the current year, and we fear the pecuniary loss which they involve will not make them be looked upon with favour by the senior grades of the A.M.S.

ARMY MEDICAL STAFF EXCHANGE.

The charge for inserting notices respecting Exchanges in the Army Medical Department is 8s. 6d., which should be forwarded in stamps or post office order with the notice. The first post on Thursday mornings is the latest by which these announcements can be received.

A Surgeon-Major, stationed at Gibraltar, who has nearly completed three years' foreign tour, wishes to exchange to Egypt, if possible, with an officer who has also been abroad for about the same period. Address: Surgeon-Major D. L. Irvine, Army Medical Staff, Gibraltar.

THE NAVY.

The following appointments have been made at the Admiralty:—Alfred Patterson, Staff-Surgeon, to the *Warspite*, undated; Henry W. G. Green and Edward B. Pinkthorn, Surgeons, to the *Ramillies*, additional, for disposal, January 31st; Walter J. Bearblock, Surgeon, to the *Severn*, February 2nd; George A. S. Ball, Surgeon, to the *Victor Emanuel*, February 2nd; Joseph C. Wood, Surgeon, to the *Pheasant*, February 3rd; Samuel J. Oddie, Surgeon, to the *Vivid*, February 6th; Edgar F. Mortimer, Surgeon, to the *Albacore*, February 6th.

ARMY MEDICAL STAFF.

Surgeon-Colonel C. H. Giraud, Principal Medical Officer at Colchester, becomes entitled to promotion to the rank of Surgeon-Major-General by the retirement of Surgeon-Major-General Wade.

INDIAN MEDICAL SERVICE.

Surgeon-Lieutenant-Colonel E. R. Johnson, Bengal Establishment, is promoted to be Brigade-Surgeon-Lieutenant-Colonel from October 1st, 1893. He was appointed Assistant-Surgeon October 1st, 1868, and became Surgeon-Lieutenant-Colonel from October 1st, 1888. His retirement from the service, from January 2nd, 1894, was recently announced in the British Medical Journal. He was with the Lushai Expedition in 1871-72, was mentioned in despatches, and received the Frontier medal with clasp, and with the Akha Expedition in 1883-84, being again mentioned in despatches.

THE VOLUNTEERS.

Surgeon-Lieutenant A. H. Twining, 2nd Devon Artillery (Western Division, Royal Artillery), has resigned his commission, which was dated April 25th, 1885.

Brigade-Surgeon-Lieutenant-Colonel S. J. Moore, M.D., 1st Lanarkshire Engineers (Fortress and Railway Forces, Royal Engineers) has resigned his commission, with permission to retain his rank and uniform.

Mr. Frederick Lace is appointed Surgeon-Lieutenant to the 1st Volunteer Battalion the Prince Albert's Somerset Light Infantry (formerly the 1st Somerset Rifles), February 3rd.

Lieutenant Percy Austin Roden is appointed Surgeon-Lieutenant to the 2nd Volunteer Battalion the Worcestershire Regiment (late the 2nd Worcestershire), February 3rd. Surgeon-Lieutenant Roden joined the corps as Second Lieutenant, July 5th, 1890, and was promoted to be Lieutenant, November 11th, 1893.

Mr. William Herbert Lister Marriner, M.B., is appointed Surgeon-Lieutenant to the 4th Volunteer Battalion the Hampshire Regiment (formerly the 4th Hampshire), February 3rd.

Surgeon-Lieutenant H. Kelly, M.B., 1st Volunteer Battalion the Highland Light Infantry (late the 5th Lanarkshire), is promoted to be Surgeon-Captain, February 3rd.

It will be gratifying to the numerous friends of Brigade-Surgeon Gribbon, of the Recruiting Service to learn that he is now fairly convalescent from a very severe attack of influenza complicated with pneumonia, in the course of which he has had three or four serious relapses.

MUDDLED TITLES.

We have before us the envelope of a letter lately received by a retired surgeon-general from—of all men—an intelligent and educated clergyman. It is addressed as follows:

"Lt. Col.
Surg.-Gen. ——
—— etc."

It is hard to conceive a greater muddle, and from the pen of a clergyman it is inexcusable. If that gentleman were made a dean or a bishop he would doubtless expect his letters addressed with due courtesy and conventionality, and there is no more difficulty in looking up military than church titles. We fear improperly addressed letters from educated people indicate one or all of three things—ignorance, carelessness, or indifference, which means want of courtesy. Offenders will be apt to plead the first, those offended to assume the last.

THE ARMY MEDICAL DEPARTMENT AND ITS DIFFICULTIES.

Brigade-Surgeon-Lieutenant-Colonel writes: Your excerpt of my communications on this subject in the British Medical Journal of December 30th, 1893, only imperfectly expresses my views. I hold that in equity we are entitled to claim army rank, but consider that the concessions made and the "unseemly titles" do not indicate army rank, and that the great increase of non-professional work is a very questionable advance.....It has been frequently urged that we are entitled to army rank equally with engineers, paymasters, etc., which no one doubts; but has army rank done much for engineers? It has no doubt produced one whose utterances towards our department in Parliament and the press are very peculiar. Should militarism produce such a one in our department we would be better without army rank. It cannot be held unreasonable in society to avoid our overcrowded titles.....As army rank is necessary for disciplinary and command purposes, I would advocate pure military titles for executive medical officers up to a certain status, as before mentioned; but I consider the title of Colonel or Major-General ridiculous and unsuited for our seniors.....Military rank and title have not the glamour attaching to them a generation ago, and we should seek professional rather than military distinction.

*** We are sorry if we fail to express a correspondent's views in excerpts; but the limits of space compel condensation, and we fear there are correspondents who would not thank us, on second thoughts, if we could publish verbatim all their communications. We have before characterised our present correspondent's view as eccentric, but that is no reason why they should not be heard.

FRESH COMMISSIONS.

Emeritus writes: It is a fancied grievance of "Surgeon-Lieutenant-Colonel, I.M.S." in not having received a commission in his new rank, and I trust no one will act on the suggestion that the Secretary of State should be questioned regarding the matter. The fact is, the system of giving a fresh commission with every promotion was abolished by order of Her Majesty in Council so long ago as May 5th, 1873 (see Army Circulars, clause 65, of 1873, and reprints issued with Army Order 252 of 1889). Under this order, however, an officer who was in the service prior to 1871 received a new commission on his first promotion or transfer after the date of the Order in Council, and by this rule your correspondent no doubt received his Surgeon-Major's commission: but neither he nor his "colonel" need ever expect to get another commission. As the present titles when granted were distinctly stated to be "Designations of Departmental Rank," I have never been able to understand how anyone can imagine they carry army rank, but it is pretty clear the majority of those who were at first pleased with these, now look on them, as I have always done, as "signifying nothing."

*** We take it that the sting of our Indian correspondent's complaint lay in the fact that his "chief" refused him the title of Surgeon-Lieutenant-Colonel because he had not received a fresh commission since promoted Surgeon-Major. Our present correspondent's lucid reminder of the twenty-year-old Order in Council will, we hope explain matters. What we should like to know is, and we cannot see the harm of the Secretary of State for War being asked, whether any class of officers now receive fresh commissions on promotion; or whether the only commission of a combatant officer is that of Lieutenant, or of a medical officer that of Surgeon-Lieutenant?

MEDICO-LEGAL AND MEDICO-ETHICAL.

CONVICTION OF A "BOTANIC DR."

Proceedings under the Medical Act, 1858.

Special Report for the British Medical Journal.

On Thursday, February 1st, Joseph Steel, of Hetton-le-Hole, was summoned before the Houghton-le-Spring (County Durham) Petty Sessional Bench, the magistrates present being Mr. E. Richardson, who presided, and Colonel Gregson. The charge against Steel was that he infringed the Medical Act of 1858 by practising as a Doctor of Medicine.

Mr. Greenwell, barrister, prosecuted, and Mr. Pattinson, of London, defended.

The case was opened by Mr. Greenwell reciting to the Bench the chief items of the offence, which it was intended to prove by evidence. He also stated that the defendant was, up to about eighteen months ago, a working miner at one of the pits in the district. Since then he had become a doctor, with a brass plate on his door, and had issued handbills on which his name appeared as "M.D., (Bc.)" This, Mr. Greenwell submitted, was intended to induce people to believe that he was a fully-qualified medical man. The learned counsel, however, confessed that he could not understand what "Bc" meant. The whole business was declared by Mr. Greenwell to be a fraud.

Sarah Stephenson was first called as a witness. She stated that defendant attended her husband during an illness. Defendant visited the house. A neighbour named Mrs. Oxley was in the house at the time. Mrs. Oxley called defendant "Joe." Defendant told them that "they were going to have him at the workhouse."

Harriet Lyne was also called, and said that she knew Steel was practising as a "botanic doctor."

Joseph Elliott, registrar of births and deaths at Hetton-le-Hole, deposed to receiving certificates relating to births and deaths signed by defendant. Witness did not, however, regard the certificate from defendant in the same light as certificates from a qualified medical man. Witness believed that defendant did style his residence "Avenue House."

Dr. Sutherland, one of the medical officers of health for the Houghton-le-Spring Union, produced notifications of infectious diseases signed by defendant.

In cross-examination by Mr. Pattinson, witness said he had not concerned himself about defendant. Witness did not originate the prosecution, nor did he know anything about the proceedings. In fact, he never knew defendant until that day. Witness had seen a handbill issued by defendant, and being pressed to say what he thought the letters "M.D.,

(Bc.)" would lead him to think, replied that it was sought to imply that defendant was a qualified man.

Thomas Sherwood and James Smith, officials connected with friendly societies, produced certificates for sick pay to members, signed by defendant, who used the affix "(M.D., Bc.)" They were led to believe that defendant was fully qualified by the affix mentioned.

This was the close of the case for the prosecution, after which Mr. Pattinson said that he would, with the permission of the Bench, call evidence on behalf of his client before addressing the Court.

William Darby, an officer of a Rechabite lodge, gave evidence that he was aware defendant practised as a medical botanist. When defendant's services were first retained by witness's lodge, he distinctly stated that he was not a registered doctor, and that there would be a difference between the certificates he gave and those given by the other doctors.

The "Rev. Berryman Trimming" was next called to prove that defendant had been elected after due examination as as a member of "The Incorporated Council of Safe Medicine," the headquarters of which were in America, with offices in London. Defendant was awarded a diploma of the Council, which gave the right to make medicines under their formula. It was a botanical society.

Witness, was cross-examined by Mr. Greenwell, In reply to questions of counsel, witness said that he knew nothing about what defendant styled himself, nor did he know that he professed to treat such afflictions as strangulated hernia. Replying further, witness said that, as to defendant calling himself accoucheur, many ignorant persons professed to act at times of birth, and notably women who were not registered.

Mr. Greenwell: Yes, but they were qualified by having attended on other women at such critical times, and by having gone through the ordeal themselves.

Witness: The Council did not profess to teach surgery.

Other evidence was called to show that the defendant never stated himself to be other than a medical botanist. Defendant's diploma was shown in court, and a huge framed placard, setting forth the constitution of the "Incorporated Council of Safe Medicine," was also exhibited. This last named was stated by defendant's witnesses to have been displayed at the entrance of defendant's residence.

Mr. Pattinson then made a lengthened address, in which he argued that the prosecution had failed to make out a case against his client.

The magistrates retired to consider the evidence, and on their return into court announced that they had decided to convict defendant, and inflicted a penalty of £10, with £4 1s. 6d. as costs, and, in default of pay ment, six weeks' imprisonment. Leave was given to appeal.

We have received a copy of a leaflet, reproduced below, which we are informed was circulated in the district after the summons was granted:

"The case of Joseph Steel, M.D.(Bc.). To the inhabitants of Hetton-le-Hole, co. Durham, and all true Englishmen and women.

"Be it known that on February 1st, 1894, an attempt is to be made by the allopathic doctors to crush Joseph Steel, M.D.(Bc.) by examination, Member of the Incorporated Council of Safe Medicine, Limited, London.

"We do not say that this persecution is the outcome of jealousy, or a dread of honourable competition: judge for yourselves.

"But we do say that this is a small instalment of what you may expect if this tyrannical organisation, the Allopathic Doctors' Union, is allowed to go unchecked in their interference with the rights of Englishmen and women to conduct their own domestic affairs. The allopathic doctors are aiming to conduct them for you. Will you allow them? We hope that Englishmen may never see the day when they cannot choose their own tailor, shoemaker, washerwoman, bootblack, or doctor.

"The allopathic doctors have already obtained the power to take your children, and break their little hearts by isolating them from their natural protectors in cases of fever and so-called infectious diseases, and depriving them of a mother's care and consolation, which only a mother can bestow. We believe that thousands of children have died broken-hearted from this cause alone. The allopathic doctors are now seeking extended powers to these already mentioned, and it is high time that you, fathers and mothers, were alive to these facts, and take such steps to preserve your sacred rights and liberty, to protect the charges the Creator has placed under your care, by speaking out in a decided manner that you will not allow such men as Joseph Steel, M.D.(Bc.), Doctor of Botanic Medicine, in whom you can safely place confidence, to be crushed out of existence, and therefore unable to minister to your needs in time of sickness or ill-healrh.

"We say emphatically that the allopathic doctors fear the records of such men as Joseph Steel becoming public, hence this miserable persecution.

"The Incorporated Council of Safe Medicine, Ltd.,
"D. YOUNGER, M.D.(Bc.), President Elect."

PROSECUTION BY THE LUNACY COMMISSIONERS.

ON January 31st, before the magistrates at Malvern, Mr. Harry Jones, Mrs. Herbert, and Miss Jones, living at Ridgeway House, about six miles from Malvern, were charged with obstructing a public official in the execution of his duty. According to the report in the *Birmingham Post*, Mr. Taynton, who appeared for the Lunacy Commissioners, said that the defendants had had charge of a gentleman named Myers, who was of unsound mind, for about ten years. Under an order granted by the Lord Chancellor, Dr. Soutar, Medical Superintendent of Barnwood House Asylum, went to the house on November 25th. He obtained admission with difficulty, and the defendants threw obstacles in the way of his seeing Mr. Myers. They would not allow a private interview between the patient and the doctor, and, upon their advice, Mr. Myers refused to answer questions. Dr. Soutar having given evidence, Mr. William Glyde for the defendants admitted the obstruction, and pleaded ignorance of the law. Defendants were fined £5 and costs, or in default two months' imprisonment. A fortnight was granted in which to pay the amount.

ILLEGAL DEATH CERTIFICATES.

JAMES LEVACK, a medical student, acting as an assistant to Dr. Hepburn, of Coxhoe, was summoned at the Durham County Police Court for making a false certificate of death, purporting to be signed by Dr. Hepburn, on November 26th, 1893. After hearing the evidence the Bench fined the defendant 20s. and costs.

ALLEGED "ELECTRIC BELT" FRAUD IN LIVERPOOL.

AT the Liverpool City Police Court on February 1st Francis M'Conville, *alias* Professor Hamilton, was charged with obtaining money by false pretences.

According to the report in the *Liverpool Post* Mr. Moss, who appeared for the prosecution, stated that the prisoner had been carrying on business at 14, Brunswick Road, under the name of Professor Hamilton, and the charge against him was one of obtaining various sums of money, amounting to £52 12s., from a labourer named John Gardner, who resided in Ireland, by false pretences. The prisoner had posed as a medical man, and under the title of Professor Hamilton he had succeeded in obtaining the amount named from Gardner, to whom he had sold amongst other things an alleged electric belt for twelve guineas, which was to cure him of a disease.

Mr. Frank Thomas Paul, F.R.C.S., said he had examined the belt sold by the prisoner and found it had no medical effect whatever. It was quite useless but harmless.

Mr. B Davies, private assistant to Professor Lodge in the Physical Laboratory of the University College, gave corroborative evidence as to the uselessness of the belt.

John Gardner, labourer, of Lambeg, co. Antrim, said that he was given a leaflet at Lisburn, in August, 1890, and in consequence wrote to 14, Brunswick Road, and received a pamphlet called "The Beacon Light." Subsequently he forwarded various sums of money, in return for which Professor Hamilton sent him advice and instructions. Later he visited the house in Brunswick Road, and saw a man, whom he believed to be the accused, who recommended him to wear an appliance which, as he was a patient, he should have for £10. He was also recommended a certain medicine which would cost £25.

Arnold Parsons George said that he entered the employment of the prisoner in July, 1891. The prisoner saw the patients personally in most cases, but he had not the slightest knowledge of medicine or surgery. There was in the establishment a fully qualified medical man named Collins, who received 30s. to £2 a week, his principal duty being to answer the door. Witness's duty was to conduct the correspondence and make up medicines.

A detective gave formal evidence of the arrest and stated that the prisoner had been for some time in the employ of one Lougest, another local quack.

The magistrate committed the prisoner for trial, bail being allowed in two sureties of £500 each.

TIBBITS v. THE *MORNING* NEWSPAPER PUBLISHING COMPANY, LIMITED.

AN action, in which Dr. Herbert Tibbits sued the above company for an alleged libel published in the *Morning* on February 18th, 1893, was concluded before Mr. Justice Lawrance and a special jury on February 5th. The plaintiff, who conducted his case in person, alleged that the meaning of the passages he quoted from the article was that he (the plaintiff) was a man of straw and of no reputation, and had lent himself to be bribed by a money payment to write a spurious pamphlet upon a medical subject of which, though a physician, he was ignorant, and that he had endeavoured, for mercenary and fraudulent motives, to bolster up a worthless appliance and assist in an imposition, and had so rendered himself unfit for the society of honourable men, and a disgrace and scandal to his profession. The defendants admitted the publication of the article in question, but denied that it was published falsely and maliciously; and they further denied that the article bore the meaning suggested by the plaintiff; and also that it was privileged, being fair and *bond-fide* comment in a newspaper upon matters of public interest.

The plaintiff having opened his case and sworn to the correctness of the facts opened, and the pleadings and shorthand notes of the evidence in Tibbits *v.* Alabaster, in a comment upon which the alleged libel occurred, having been put in, was cross-examined by Mr. Horace Browne for the defendants. In reply to questions he stated, according to the report in the *Times* from which we quote, that Mr. Harness had not assisted him in Tibbits *v.* Alabaster. The Medical Battery Company assisted him by discounting his bills; at the time of the action he was an undischarged bankrupt. The Medical Battery Company's solicitor acted for him, but he had no means of paying the counsel's fees. Mr. Harness had asked him to investigate the belt, and he was paid a fee of 100 guineas for doing so three days after the first visit, and before any investigation had been made. He had no idea that Mr. Harness was going to publish his letter of August 24th, 1893, as a "testimonial," but a "proof" of it was sent him. It was described as an extract from the "last edition" of Dr. Tibbits's work on "Massage, Electricity, and Allied Methods of Treatment," but that work was never published for want of funds. He had had several previous lawsuits. First, against Lord R. Montagu for libel. That was a friendly suit, and was settled. Secondly, against Messrs. Macmillan for libel. He obtained a verdict for one farthing, and was deprived of costs. Thirdly, against the committee of his hospital for wrongful dismissal. That was settled by the committee accepting his resignation and a verdict being entered for the defendants. Fourthly, against the *Charity Record* for libel. Result—verdict for the defendants with costs. He had no means of satisfying even that judgment. They would, however, be paid in good time, when people ceased to libel him and his patients returned.

Mr. Harness was called by Dr. Tibbits, but Mr. Browne objected to the merits of the belt being gone into, and the objection was allowed.

No witnesses were called for the defence, and Dr. Tibbits addressed the jury, urging that the article was written maliciously without the slightest foundation, and bearing on its face evidence of the animosity and unfairness with which he was treated by the medical profession. Mr. Harness had not inspired the action referred to.

Mr. Horace Browne submitted that the article was directed against Mr. Harness, who was described in the article as the real plaintiff, and it was his reputation which was referred to.

Mr. Justice Lawrance summed up briefly, and the jury immediately found a verdict for the defendants.

Judgment accordingly.

UNQUALIFIED DENTAL PRACTICE.

The Dentists Act, 1878, following the similar provision contained in Section 40 of the Medical Act, 1858, renders liable to a fine of £20 any person who, not being on the *Register*, takes or uses any description implying that he is registered, or is specially qualified to practise dentistry. A prosecution under this Act has recently taken place at Plymouth. The circumstances, as detailed in the reports before us, are instructive. Mr. Duff, the defendant, was, it appears, formerly on the *Register*, but has ceased to be so. Why this was did not appear in evidence. He has recently acted as assistant to a Mr. Passmore, who resides and himself practises at Exeter, but keeps a dental surgery at Plymouth, which he has visited two or three times a week as occasion required. Mr. Duff resided at the surgery at Plymouth, and had cards printed with his name and the words "Dental Surgery, 195, Durham Street, Plymouth" upon it. On the lamp outside the house the words "dental surgery" and on the inner door the words "co-operative dental surgery" also appeared; Mr. Passmore's name appeared nowhere. The prosecution was undertaken by the British Dental Association, on whose behalf it was urged that the use of the words "dental surgery" as above stated amounted to a representation that the person occupying the premises in question was a legally qualified dental surgeon.

For the defence the contention was that the words on the card were merely descriptive of the defendant's address, while the words on the lamp and on the door were correct as applied to Mr. Passmore, to whom the business belonged, and who was the lessee of the house, Mr. Duff being merely his paid servant, not practising on his own account at all. The magistrates had no difficulty in coming to the conclusion that the provisions of the Act had been infringed, and imposed a penalty of £10 and costs.

It is hard to see how they could have come to any other conclusion without ignoring the judgment of Justices Hawkins and Wills given in the year 1892 in case of the College of Veterinary Surgeons *v.* Robinson. The Veterinary Surgeons Act, 1881, in words almost the same as those used in the Dentists Act, 1878, imposes a penalty, or any person who, not being duly registered, takes or uses any name, title, addition, or description implying that he is specially qualified to practise veterinary surgery. Robinson was a shoeing smith, not on the *Register*, who had written up on his premises and on his billheads the words "J. Robinson, veterinary forge." The magistrate before whom that case came declined to convict, but the judges held this was wrong, as the defendant had so described his business as to lead people to think that he did possess the special qualification as provided by the statute. Mr. Duff's conviction was, in accordance with that judgment, not only correct in law, but the only result at which the magistrates could properly have arrived as far as he was concerned. The defence set up and attempted to be proved by calling Mr. Passmore as a witness should not, however, be overlooked. If this was true, Mr. Passmore was carrying on business by means of an unqualified assistant, who could not possibly have been supposed to merely work under his supervision and direction—the distance between Exeter and Plymouth sufficiently negatives such an idea—in other words, was "covering" Mr. Duff. This is a matter which requires further investigation.

The General Medical Council has dealt with such cases already, and has successfully vindicated its right to adjudicate in fitting cases. It would not be right now to say more of this case than to point out that, while the public have been protected against the unqualified servant, the principal, who, according to his own statement, enabled the minor offender to break the law, has not yet been made amenable to any tribunal.

MEDICAL ETIQUETTE.

Subscriber.—Assuming that the statement fairly represents the facts of the case, the course pursued by B. in examining A.'s patient and altering the treatment without reference to the attendant practitioner would, in the absence of all urgency and *de facto* necessity, be held as indefensibly unprofessional, and justly subject him to severe criticism and reproof. As to any further action in the matter, A. should be guided by the general estimation in which the offender is held by his *confrères*; if that be satisfactory, we would counsel A. to let it drop; if, on the contrary, he be regarded as a more or less professional "free lance," it may be well to submit the question for the consideration of the local faculty, in which event "A." may consult with advantage the rules laid down in the *Ethical Code*, chap. 2, sect. 6, with reference to the mode in which such investigations are best conducted.

TEMPERANCE LECTURES.

Kilmarnock.—Assuming, as we naturally do from the context, that the advertisement in the *Kilmarnock Standard* relative to the intended "Lecture on the Problem of Health" was under the auspices of a local association, responsible, moreover, for the issue of the "posters," etc., we fail (though scrupulously jealous of an alleged unethical proceeding) to recognise any valid objection to the wording thereof, and are reluctantly impelled to regard our correspondent's exception thereto as hypercritical.

"CHANGING THE DR."

A Practitioner of Nearly Twenty Years.—In view of the fact that the patient in question had, prior to sending for Dr. J., written a note to his late medical adviser to the effect that his further attendance was not desired, inasmuch as he had decided to change his doctor, he (Dr. J.) was fully justified in accepting charge of the case; and if the discarded and medico-ethically dissatisfied practitioner still entertains any doubt upon the point, he will find a confirmation of our opinion in rule 9, chap. ii, sect. 5, of the *Ethical Code*.

TRANSFER OF A PRACTICE.

M.B.—In response to "M.B.'s" query, we may note that the most judicious and unexceptionable mode is to transmit an autograph note, or a lithographed *facsimile* thereof on notepaper, to the *bonâ-fide* patients of the vendor.

THE HARNESS CASE.

Dr. Heywood Smith (Harley Street, W.) writes: My attention having been drawn to the evidence of Nurse Beatty in the Harness trial as stating that I had recommended her to go to 52, Oxford Street, I beg to say that I did not recommend her to go there.

CLUB APPOINTMENTS.

G. T.—We should strongly advise "G. T." to be very careful not to commit himself in any way with a single member of a club by allowing his name to be brought forward against the present occupant of the post of surgeon. It is very unusual for a club to depute a single member to interview a medical man on such a subject as this; nearly always several are sent as a deputation, for otherwise a practitioner has no guarantee that he is not being made the catspaw of a single dissatisfied member, and may find himself later on landed in a very unenviable position. If a club is dissatisfied with its medical officer, and decides to make a change, it can have no difficulty in doing so; and if in a fresh election "G. T." should be elected, he need have no scruples in accepting the post, if he thinks it likely to profit him. Under such circumstances we do not see how the former surgeon can take any umbrage at "G.T.'s" action, if everything be done openly and without concealment.

A QUESTION OF PROCEDURE.

W. D.—A *locum tenens* would not, in the absence of any specific arrangement to the contrary, be legitimately entitled to any part of the fee in question. Assuming that the statement submitted to us fairly represents the facts, we are of opinion, in view of the averment, that both the partners agreed that an undetermined portion of the fee should be remitted to the acting *locum tenens*, the latter has a moral claim thereto. With reference, moreover, to the mutual arrangement that the fee should, "as a matter of courtesy," be paid to the operator through the medium of his personal friend the *locum tenens*, who held himself responsible therefor, it might well have been fulfilled, seeing that no important medico-ethical rule would be involved thereby.

ETIQUETTE AND INSURANCE.

B. writes: X., a patient insured in an accidental company, meets with an accident, and is attended by his own medical man, A. B., the medical referee for the company in which X. is insured, is called upon by the company to make an examination, and report and advise them as to compensation. B. has always made a practice of communicating with the medical man in attendance on accident insurance cases, when called upon to report, but in this case A. and B. are not on friendly terms, and A. refuses to meet B. (the patient is neutral).

1. Is B. justified in examining the nature of the injury in this case without A.'s consent? If not, how can B. act in advising his company?
2. Is it necessary etiquette for B. to ask permission from the medical man in attendance at all?

*** 1. Under the circumstances stated, as A. refuses to meet B., the latter, it would appear, is justified in examining the nature of the injury, in order that he may advise his company. 2. There can be no doubt that it is desirable and in accordance with professional etiquette that B. should communicate with the medical man in attendance before visiting the patient.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

Downing Professorship of Medicine.—The electors to this chair will meet for the purpose of filling the vacancy on Saturday, March 3rd. Candidates are to send their names and twelve copies of their testimonials (if any) to the Vice-Chancellor, for the use of the electors, by Monday, February 26th.

Post-graduate Study and New Degrees.—The Council of the Senate have published a highly important proposal, which may lead to a considerable increase in the number of advanced students availing themselves of the opportunities Cambridge has to offer for literary and scientific research. The proposal is to establish two new degrees, Bachelor of Science and Bachelor of Letters, open to graduates of Cambridge or of some other recognised University. At present graduates of Oxford and of Dublin only have the privilege of proceeding to *ad eundem* degrees in Cambridge, these Universities being the only ones requiring actual residence for three years as a condition for graduation. If the new scheme comes into operation, graduates of other universities, both British and foreign, may, by residing as matriculated students for three terms (one academical year), and offering evidence of having pursued in Cambridge a course of advanced study or research, submit a dissertation on some branch of science or learning. If this is approved, they will thereupon be admissible to the complete degree of Sc.B. or Litt. B., as the case may be. It is understood that like proposals are under consideration at Oxford, but Cambridge has the credit of formulating a plan which should do much to attract to an English University those maturer students who now in large numbers seek the Continental schools. The new degrees will be of considerable distinction, for they will be open to those Cambridge men only who, having already graduated in Arts, Law, Medicine, or Surgery, present an original dissertation approved by one of the boards of studies. It is an interesting feature of the proposal that evidence of study and research, not of power to pass examinations, is to be the condition for the "post-graduate" degree.

MEDICAL DEGREES.—At the Congregation on February 1st, the following degrees were conferred:—

M.B. and B.C.—A. J. H. Saw, B.A., Trinity; C. S. Storrs, B.A., Emmanuel; C. W. Windsor, B.A., non-collegiate.

THE ROYAL COLLEGE OF SURGEONS OF EDINBURGH.

AT a meeting held on February 3rd a letter from the Board of Managers of the Royal Infirmary was read, pointing out, with regard to the election of Drs. John Duncan and Argyll Robertson to be their representatives at the Infirmary Board, the unsuitableness of the appointment, in that these gentlemen were already members of the hospital staff. After discussion, a committee was appointed to draft a letter to the Infirmary Board, affirming the legality of the appointment and the inability of the College to review their decision.

UNIVERSITY OF ST. ANDREWS.

AT a meeting of the Court of St. Andrews University held on February 3rd, the following resolution was by 7 votes to 6 adopted, and ordered to be transmitted to the Universities Commissioners:

"That the University Court desire to express their regret that the Commissioners appointed under the Universities (Scotland) Act, 1889, have taken no steps to give effect to the terms of the said Act in providing that there shall be 'joint' medical teaching in St. Andrews and Dundee, but have, on the contrary, taken steps to entirely destroy St. Andrews as a medical school, and to deprive it of its ancient rights of medical graduation; and they further desire to express their deliberate opinion that it is quite practicable to prosecute medical studies proper for two years (at least) of a five years' course of medical studies preparatory to graduation, and that the Berry Bequest and the Taylour Thomson Bursaries afford facilities as well as gravely urgent considerations for providing two years of medical teaching in the class rooms of St. Andrews itself, which are in most respects superior both in themselves and their surroundings to the class rooms in Dundee."

With reference to this rather strong and even bitter feeling between the University of St. Andrews and University College, Dundee, the writer of a very good article on "The Medical Schools of Scotland" in the *Scottish Review* for January makes the following remark: "It seems to an onlooker suicidal for this school (Dundee University College) not to utilise in harmony the academic traditions, the reputation and the degree granting power of St. Andrews University; and for St. Andrews not to take willing advantage of Dundee Royal Infirmary to complete its teaching. But internal competition, rivalry, and even some healthy quarrelling has been the milk on which Scottish medical teaching has grown lusty."

UNIVERSITY OF ABERDEEN.

LADY STUDENTS AND BURSARIES.—At a meeting of the Senatus of the Aberdeen University on February 3rd, the question was raised for the first time whether female competitors would be admitted at the next bursary competition. After considerable discussion, it was agreed that they should, it being held that such candidates would be eligible for all bursaries except those in which they are expressly excluded by the deeds of foundation. The Senatus have not as yet given indication as to how many of these exist, but doubtless that information will be given in due time. As the bursaries in Aberdeen University have a considerable number associated with the medical faculty, doubtless there will be dividing of the honours in this department as well as in the others.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns, including London, 6,604 births and 4,012 deaths were registered during the week ending Saturday, February 3rd. The annual rate of mortality in these towns, which had declined from 28.5 to 20.7 per 1,000 in the preceding three weeks, further fell to 20.0 last week. The rates in the several towns ranged from 13.3 in Blackburn and 13.8 in Leicester to 27.9 in Plymouth and 29.2 in Liverpool. In the thirty-two provincial towns the death-rate averaged 20.4 per 1,000, and exceeded by 1.0 the rate recorded in London, which was 19.4 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.2 per 1,000; in London the rate was equal to 2.6 per 1,000, while it averaged 2.0 in the thirty-two provincial towns, and was highest in Birkenhead, Bristol, and Plymouth. Measles caused a death-rate of 1.8 in Wolverhampton and 2.0 in Birkenhead; scarlet fever of 1.1 in Burnley; and whooping-cough of 2.5 in Cardiff, 3.0 in Bristol, and 4.7 in Plymouth. The 109 deaths from diphtheria included 74 in London, 4 in Liverpool, and 3 each in Manchester, Salford, Sheffield, and Newcastle-upon-Tyne. Five fatal cases of small-pox were registered in Birmingham, 2 in West Ham, and 1 each in London, Bradford, and Gateshead, but not one in any other of the thirty-three towns. There were 81 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, February 3rd, against 88, 82, and 78 at the end of the preceding three weeks; 17 new cases were admitted during the week, against 11 and 17 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,491, against 2,733, 2,645, and 2,533 at the end of the preceding three weeks; 245 new cases were admitted during the week, against 216 and 235 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, February 3rd, 821 births and 600 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had declined from 23.8 to 21.0 per 1,000 in the preceding three weeks, was again 21.0 last week, and was 1.0 above the mean rate during the same period in the thirty-three large English towns. Among these Scotch towns the death-rates ranged from 14.2 in Greenock to 41.0 in Perth. The zymotic death-rate in these towns averaged 2.8 per 1,000, the highest rates being recorded in Paisley and Perth. The 293 deaths registered in Glasgow included 23 from whooping-cough, 8 from scarlet fever, and 5 from diphtheria. Six fatal cases of whooping-cough occurred in Perth, and 2 of diphtheria in Edinburgh.

LEAD POISONING IN GIRLS.

AT an inquest held recently at Greenwich Workhouse by Mr. Carter on a case of lead poisoning it was stated that the deceased, a girl aged 20, had worked, on and off, for the last three years at the Millwall Whitelead Works. From the evidence tendered, she was apparently one of those women who should never been allowed to enter a lead factory at all. On several occasions she had to give up work through being "leaded," the form the illness took being paralysis and obscuration of vision; and yet, with these premonitions, she persisted in returning to the lead factory rather than enter upon domestic service. Dr. Keats, of the Greenwich Union Infirmary, stated that the deceased was blind on admission, and that she died in a fit. In addition, he remarked that at the present time he had five young women under care suffering from plumbism, who had worked at Millwall. Experience ought to be convincing. Professor Oliver, of Newcastle-upon-Tyne, in his Goulstonian Lectures showed how extremely susceptible young females are to plumbism, and the Whitelead Committee have supported him in recommending the abolition of female labour in the "white beds" and "stoves." The recent deaths of female leadworkers in the metropolis, if they do not carry conviction to the minds of those who are interested in the purely social and economic side of the question and who regard themselves as the champions of women's right to labour, must create difficulties not readily dispelled by those who argue in favour of the retention of females in all the departments of a whitelead factory.

WOMEN SANITARY INSPECTORS.

MR. JOHN BRAYE, so well known for the active part which he took in the appointment of women sanitary inspectors, has drawn attention in a letter in the *Times* to the excellent work already done by the two ladies selected for the post in Kensington. The report to the Sanitary Committee, Kensington Vestry, gives a long list of houses visited and workshops inspected by the two ladies, and their conclusions as to the cleanliness, ventilation, and general sanitary condition of the premises in question. The medical officer of health to the vestry of Kensington speaks, in his last report, of the interest aroused in England generally by the new departure, and speaks confidently of the good work which the ladies will certainly do. He urges that their signatures should be appended to all notices issued upon their recommendation by the Sanitary Committee under the provisions of the Public Health (London) Act, 1891, and also that they should serve written intimations of nuisances in conformity with the third section of the same Act. It is to be hoped that other vestries may soon follow the example of Kensington, and thus ensure that the work may be done with the efficiency of which, in all cases, women inspectors are so pre-eminently capable.

RETIRING ALLOWANCE TO A MEDICAL OFFICER OF HEALTH.

THE Health Committee of the Corporation of Liverpool have come to a resolution, on the report of the treasurer and the chief accountant and auditor, that it be reported to the council that, pursuant to the 64th section of the Liverpool Corporation Act, 1893, Dr. John Stopford Taylor is entitled to an allowance of £291 18s. 7d. per annum from April 3rd, 1894.

FEVER HOSPITALS IN THE ISLE OF MAN.

AT the last meeting of the Manx Legislative Council a Bill to provide for the establishment of fever hospitals was under discussion. A clause vesting the management of such hospitals in an asylum board was carried after a division, but after a few other clauses had been adopted the further consideration of the Bill was postponed, to allow time for the Governor to become acquainted with the position of the revenue and the demands upon it.

INCREASE OF FEVER IN LONDON.

AT the last meeting of the Metropolitan Asylums Board, Sir E. Galsworthy stated that, though the number of fever patients under treatment had notably fallen, the number of admissions during the previous fortnight had increased, and that the notifications of diphtheria were thirty-five more, and those of enteric fever twenty more. He thought that there was, therefore, reason to fear an early increased demand on the accommodation at the disposal of the Board. Subsequently the plans for a hospital to hold 500 patients, to be erected at Shooter's Hill, were approved and transmitted to the Local Government Board for their sanction.

SMALL-POX IN EDINBURGH AND DISTRICT.

FOUR cases of small-pox were reported in Edinburgh last week, and seven in Leith.

WIGAN MEDICAL SOCIETY.—At the annual meeting of this Society on February 1st, Dr. E. H. Monks, jun., was elected President and Treasurer, Mr. W. Berry Honorary Secretary, and the following members of the Committee chosen: W. C. Barnish, R. P. White, C. M. Brady, R. H. Cowan, M. Benson, and W. Latham.

OBITUARY.

THEODOR BILLROTH, M.D.,

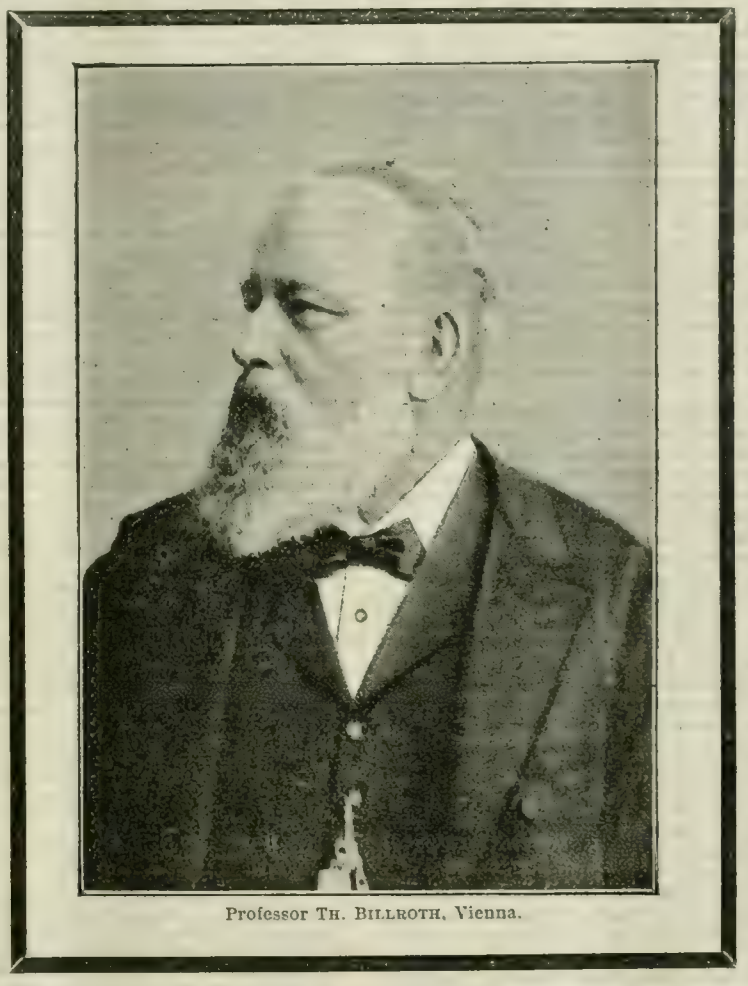
Professor of Clinical Surgery in the University of Vienna.

By the death of Professor Billroth, which occurred at Abbazia somewhat suddenly on February 5th, surgery, both as a science and an art, loses one of its foremost representatives. His death, though sudden, was not altogether unexpected, for he had been in broken health for some years, and only a few weeks ago he was granted leave of absence for the remainder of the winter semester, and sought quiet and a milder climate at Abbazia, on the shores of the Adriatic. The cause of his death was heart disease.

Christian Theodor Albert Billroth was of Swedish extraction, and was the son of a Lutheran pastor. He was born at Bergen on the island of Rügen on April 26th, 1829, and was therefore in the 65th year of his age. In 1848 he began the study of medicine at Greifswald, afterwards migrating to Göttingen, and finally to Berlin, where he graduated in 1852 with a thesis "De natura et causa pulmonum affectionis quæ nervo utroque vago dissecto exoritur." After the usual scientific *Wanderjahr*, during which he visited the schools of Paris and Vienna, he returned to Berlin and became assistant in the clinic of Von Langenbeck. In 1856 he qualified as *Privatdocent* in the University of Berlin.

In 1860 Billroth accepted a call to the Chair of Clinical Surgery at Zurich. The commencement of his career in the Swiss university was somewhat unpromising: during his first semester his pupils numbered only ten, and his private practice, as he himself used to say, was insufficient to pay for his morning cup of coffee. His reputation quickly grew however; students flocked to his lectures, and with the co-operation of energetic colleagues, notably Griesinger, he in a few years raised the Medical Faculty of Zurich to a prominent position among German speaking schools.

In 1867 he was offered the Chair of Surgery in the University of Vienna, in succession to Franz Schuh. Here for more than 26 years Billroth's clinic has been a kind of surgical Mecca to which scientific pilgrims from all parts of the world have resorted in constantly increasing numbers. Though he laid the foundation of his fame at Zurich it is with Vienna that his name must ever remain identified, for it was the work done on this larger and more conspicuous theatre that made him the power that he was in the surgical world. Here his operative triumphs were won. Here, in 1873, he first excised the larynx for cancer; here he performed resection of the œsophagus; here, in 1881, he first successfully resected the stomach. It was probably this operation that made him take a special interest in surgical procedures on the stomach and intestines. At the tenth International Medical Congress in Berlin in 1890 he was able to present a series of 124 operations of the kind performed in his clinic.



Professor Th. Billroth, Vienna.

Billroth was certainly one of the boldest and most successful operators of his time, but he was far indeed from being merely what Shakespeare would have called "a tall fellow of his hands." As an artist with the scalpel he was second to none of his contemporaries, but he was also a thoroughly scientific surgeon. He was, indeed, one of the pioneers of surgical pathology, and most of his earlier work was done in this important field. We need only mention his investigations on the structure of mucous polypi, on the development of blood vessels, and above all, the work by which he is best known to English readers, his *Lectures on Surgical Pathology dan Therapeutics*, which has gone through innumerable editions in Germany, and which has been translated into nearly every civilised tongue. The Sydenham Society published an English translation from the 8th edition in 1877-78.

Billroth's literary activity was immense, the total number of his published books and papers of which he was the author amounting to about one hundred and forty. Amongst these the largest is the encyclopædic *Deutsche Chirurgie*, which he edited in collaboration with Lücke. He also collaborated, with von Pitha in a *Textbook of General and Special Surgery* the publication of which was completed in 1882. To this Billroth contributed the section on Scrofulosis and Tuberculosis, Injuries and Diseases of the Breast, Instruments and Operations, Burns, Frostbites, etc. One of his most important works is his *Clinical Surgery, or Reports of Surgical Practice between the Years 1860-1876*, which was translated for the Sydenham Society by Mr. Clinton Dent in 1881.

During the Franco-German War of 1870-71 Billroth did excellent work in the military hospitals at Mannheim and Weissenburg, and he embodied his experience of war surgery in his *Surgical Letters from Mannheim and Weissenburg*. He was so impressed by the horrors of war, that he was ever afterwards an ardent advocate of peace. On December 3rd, 1891, he delivered an address on the care of the wounded in war which made a profound sensation and led to large sums of money being voted by the Austrian legislative chambers for the provision of adequate means of succour for the wounded.

Billroth was also greatly interested in nursing. He founded a training school for nurses in Vienna, and wrote a book, *Nursing at Home and in Hospital*, which is a model of what such a book should be.

Honours and decorations were showered on the distinguished surgeon, and in 1887 he was made a member of the Austrian Chamber of Peers, a distinction which has been rarely bestowed on members of the medical profession.

As a teacher his influence was very far reaching; his works are the classical textbooks in Germany, and there is hardly a practitioner in the Fatherland who does not seek for guidance in surgical difficulties in the writings of the famous teacher of Vienna. Among his best titles to fame are the names of his pupils, who include such men as Czerny, Gussenbauer, Mikulicz, Salzer, Winiwarter, Wölfler, and Von Eiselberg.

Professor Billroth was a man of fine presence and powerful physique. He had a highly cultivated feeling for music. He was an excellent performer on the piano and violin, and at one time seems to have had some thought of taking up music as a profession. He was an intimate friend of Brahms and other musical celebrities, and at the time of his death he was busily engaged on a work on the physiology of music, which we hope he has left sufficiently advanced for publication.

We are indebted to Sir WILLIAM MAC CORMAC for the following estimate of Professor Billroth's character and worth: Few men more than Professor Billroth could inspire one with a greater sense of combined power and modesty. In manner and appearance he was most winning and sympathetic. His pupils and friends alike admired and loved him. I met him after the war in 1870-71, when he had already left Switzerland for Vienna, and several times in company with Langenbeck, his former master and fast friend. At that time it was thought by some in Vienna that he was still German in feeling, and would return sooner or later to take Langenbeck's succession; but this was not so, and he became in all his work and sympathy completely identified with the people among whom he lived. He was prominent amongst all his cotemporaries in Austria, and sent his pupils to fill the chairs of surgery, not in the Austrian universities alone, but, as in the case of Czerny and others, to many German universities as well.

As an operator his knowledge and boldness were only equalled by his brilliant execution and skill; and what he did and the reasons for doing it were explained to his overflowing class with a rare talent for exposition. His patients, attracted by his great fame, came from very distant parts—not rich only, but poor also to fill his hospital beds. He loved his science and art, but he also loved other arts as well, and painting and music were his favourites, while the great masters of both were amongst his most intimate friends.

One personal reminiscence may be interesting as showing his princely hospitality. During the great International Exhibition in Vienna he entertained a party of about 100 military and civil surgeons who had come to attend a conference on the subject of medical aid in time of war, at a banquet at Vöslau, a well-known suburban resort of the Viennese. There were the choicest wines, from the Imperial Tokay downwards; native oysters from Colchester; sturgeon from the Volga, and, last and best, Strauss's band. I shall not easily forget the magical effect produced when, after dinner Johann Strauss, one of Billroth's great friends, mounted the orchestra, and, waving his bâton, the band played the Beautiful Blue Danube. The music was beautiful before but it seemed transformed when Strauss led it. Immediately afterwards Billroth gave the only toast proposed on this memorable occasion. He said, "Ein Oesterricher grüsse ich Sie, in Oesterich, mit Oesterich." The response did not want in enthusiasm. This dinner took place in a restaurant on the slope of a vine-clad hill covered with ripening grapes, which were to make wine such as we were drinking.

Our journey to this beautiful spot was by special train composed of carriages fitted up for the transport of wounded during war, a Lazarette train with everything of the most complete description for the purpose in view. It was, in fact, a large hospital on wheels.

THE number of cremations in Paris has increased considerably since the enactment of a measure about eighteen months ago to minimise the objections raised against the method of cremation adopted at the cemetery of Père Lachaise. The Prefect of the Seine announces that the number in 1893 rose to 180, against 156 in 1892. The erection of a large hall to form an approach to the crematorium, and of a columbarium with 738 niches for urns, will be commenced immediately by the Municipal Council.

MEDICAL NEWS.

MR. F. H. TURNER, East Bergholt, Suffolk, Public Vaccinator for the Capel District of the Samford Union, has been awarded the Government grant for efficient vaccination.

CHRIST'S HOSPITAL.—While the drains wait, and the governors wonder what next to do, the boys' education is standing still, and there can be no doubt that a very serious hardship is being inflicted on them and their guardians. Under these circumstances, then, as it is certain that the school is in any case closed until May, the question has arisen of giving some compensation, making some form of payment, so as to help the boys' guardians in providing them with such education as can be found in the vicinity of their homes, until such time as the school will be available again. The nature and amount of this compensation will vary, those who have been presented to the hospital under the new scheme, by which certain fees are required, not receiving any direct payment, but probably having these fees reduced in the term following the reopening of the school.

FRENCH HOSPITAL AND DISPENSARY.—The twentieth annual dinner in aid of the funds of this institution took place on February 3rd at the Hôtel Métropole; the new French Ambassador, M. Decrais, in the chair. The Lord Mayor was prevented by illness from attending, and was represented by Sir Polydore de Keyser. Many members of the *Corps Diplomatique* were present, and the number present was altogether unprecedented. According to the annual report, it seems that until last year the hospital was able to pay its way; but the general expenses have so greatly increased since the removal to Shaftesbury Avenue, that a heavy deficit remains on last year's liabilities, to clear off which an urgent appeal was made. A touching allusion was made by the chairman to the loss sustained by the hospital and by France in the person of the late M. Waddington, who for so many years had presided over these festive meetings. Donations to the amount of about £2,500 were announced.

MEDICAL VACANCIES.

The following vacancies are announced:

ALNWICK INFIRMARY.—House-Surgeon, unmarried. Salary £120 per annum, with furnished apartments, attendance, coals, and gas. Applications to W. T. Hindmarsh, Honorary Secretary, 26, Bondgate Without, Alnwick, by February 16th.

BRADFORD EYE AND EAR HOSPITAL.—Special Assistant Surgeon. Must be registered medical practitioner. Honorarium, 100 guineas per annum. Applications and testimonials with certificate of registration to the Secretary, C. V. Woodcock, by February 15th.

COUNTY LUNATIC ASYLUM, Snenton, Nottingham. — Assistant Medical Officer, unmarried. Salary, £100 per annum, rising £10 annually to £150, board, lodging, washing, and attendance. Applications to the Chairman of the Committee of Visitors by February 27th.

CUMBERLAND INFIRMARY, Carlisle. — Assistant House-Surgeon. Salary, £40 per annum, with board, lodging, and washing. Appointment for one year. Applications and testimonials to the Secretary by February 21st.

DENTAL HOSPITAL OF LONDON, Leicester Square, W.C.—Assistant Dental Surgeon. Applications to J. Francis Pink, Secretary, by March 12th.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Pathologist and Registrar. Honorarium, £40 per annum. Applications to the Secretary, Thomas Hayes, by February 27th.

EAST SUFFOLK AND IPSWICH HOSPITAL, Ipswich.—House-Surgeon, unmarried. Qualified in medicine and surgery. The office is held subject to annual re-election. Salary, £80 per annum, with board, lodging, and washing. Applications and testimonials to the Secretary, T. Edgar Mayhew, by February 20th.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway, N.—Physician to Out-patients; must possess the degree of M.D. or M.B., or Fellow or Member of Colleges of Physicians of London or Edinburgh, or King and Queen's College of Physicians Dublin. Applications and testimonials to the Secretary at the hospital, William T. Grant, by February 26th.

HOSPITAL FOR WOMEN, Soho Square, W.—House-Physician. Salary, £30 for six months, with board, etc. Applications and testimonials to the Secretary, David Cannon, by February 21st.

HOSPITAL FOR WOMEN AND CHILDREN, Leeds.—House-Surgeon, for less than twelve months. Salary, £75 per annum. Applications to the Secretary of the Faculty.

KILBURN, MAIDA VALE, AND ST. JOHN'S WOOD DISPENSARY.—Vacancy on the Honorary Medical Staff. Applications to the Secretary, 13, Kilburn Park Road, by February 14th.

LIVERPOOL HOSPITAL FOR CANCER AND SKIN DISEASES.—Honorary Assistant Surgeon. Applications to Mr. A. N. Talbot, 3, Rumford Street, Liverpool, by February 20th.

MANCHESTER INSTITUTION FOR DISEASES OF THE EAR.—Honorary Assistant Surgeon. Applications to the Honorary Secretary, Mr. T. C. P. Gibbons, 33, Mosley Street, Manchester, by February 17th.

NEW HOSPITAL FOR WOMEN, 144, Euston Road, N.W.—Lady Dispenser. Salary, £40 per annum. Applications to the Secretary by February 17th.

OWENS COLLEGE, Manchester.—Professor of Zoology. Applications to the Council of the College, under cover to the Registrar, by April 3rd.

OXFORD EYE HOSPITAL.—House-Surgeon. Appointment for one year. Salary, £50, with board and lodging. Applications to Mr. B. H. Baden-Powell, Honorary Secretary, 29, Banbury Road, Oxford, by February 24th.

PARISH OF ST. LEONARD, Shoreditch.—Medical Officer of Health. Salary, £500 per annum; must reside within one mile from the boundary of the parish. Applications on forms to be obtained of the Clerk marked "Medical Officership," to be sent to H. Mansfield Johnson, Solicitor and Clerk, Shoreditch Town Hall, Old Street, E.C., by February 13th.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, Marylebone, N.W.—Resident Medical Officer. Appointment for four months. Salary at the rate of £60 per annum, with board and residence in the hospital. Applications and testimonials to the Secretary, G. Owen Ryan, by February 20th.

ROYAL SURREY COUNTY HOSPITAL, Guildford.—House-Surgeon. Salary, £80 per annum, with board, lodging, and laundry. Applications to the Honorary Secretary by March 10th.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY, 60, King Street, Regent Street, W.—Physician. Applications to St. Leger Bunnett, Secretary, by February 14th.

ST. LUKE'S HOSPITAL, London, E.C.—Clinical Assistant. Appointment for six months, with board and residence. Applications and testimonials to the Secretary, Percy De Bathe, M.A., by February 19th.

ST. PANCRAS AND NORTHERN DISPENSARY, 126, Euston Road.—Honorary Physician; must be a Member of the Royal College of Physicians of London or a graduate in medicine of one of the Universities. Application with testimonials to the Honorary Secretary, H. P. Bodkin, 23, Gordon Street, Gordon Square, W.C., by February 24th, 1894.

SALFORD ROYAL HOSPITAL.—House-Surgeon, doubly qualified. Salary, £100 per annum, with board and residence. The Junior House-Surgeon is a candidate, and in the event of his being appointed the post of Junior House-Surgeon will be vacant. Salary, £50 per annum, with board and residence. Applications to the Secretary by February 15th.

SOUTH EASTERN HOSPITAL FOR CHILDREN, Hackney Road, N.E.—Physician to Out-patients; must be Fellows or Members of the Royal College of Physicians of London. Applications and copies of testimonials to the Secretary, F. Glenton-Kerr, by February 10th.

STAFFORDSHIRE COUNTY INFIRMARY, Stafford.—Assistant House-Surgeon. No salary, but board, lodging, and washing. Applications to House-Surgeon.

TIVERTON INFIRMARY AND DISPENSARY, Tiverton.—House-Surgeon and Dispenser, registered and unmarried. Salary, £100 per annum, with lodgings, attendance, fire, and lights. Applications with testimonials to the Honorary Secretary, Arthur Fisher, Tiverton, Devon, by February 23rd.

WYNAAD PLANTERS ASSOCIATION.—Medical Officer for an Indian planting district. Salary, 450 rupees a month: married man preferred. Applications to J. Williams Hockin, Honorary Secretary, U. P. A. Medical Fund, Vayitiri, Malabar, India.

MEDICAL APPOINTMENTS.

BARTLETT, R. C., M.R.C.S., L.R.C.P.Lond., appointed House-Surgeon to the Dorset County Hospital, *vice* W. A. Rudd, M.D., resigned.

BERKELEY, G. H. A. C., M.B., B.C.Cantab., appointed Clinical Assistant to the Ear and Throat Department of the Middlesex Hospital.

BISHOP, Henry Draper, M.R.C.S.Eng., L.R.C.P.Lond., appointed Senior House-Surgeon to the Carnarvon Hospital, Kimberley.

BULLEN, H. J. L., M.R.C.S.Eng., L.S.A., appointed Medical Officer for the 3rd District of the New Forest Union.

HOBSON, Lewis John, M.D.Lond., B.S., F.R.C.S., reappointed Honorary Consulting Physician to the Royal Bath Hospital and Rawson Convalescent Home, Harrogate.

JACKSON, Philip J., M.R.C.S.Eng., appointed Medical Officer to the Southwark Division of the General Post Office, *vice* T. H. Waterworth, M.D., deceased.

JONES, R. Langford, M.R.C.S.Eng., etc., appointed Medical Officer to the North Wales Church Training College, Bangor.

O'CONNOR, C. P., M.D., appointed Medical Officer for the 3rd District of the North Witchford Union.

PRINCE, J. W. G., M.R.C.S., L.R.C.P.Lond., appointed Medical Officer for the 3rd District of East Grinstead Union.

SHAW, R. Hill, B.A., M.B., B.Ch.Univ.Dub., appointed Acting House-Surgeon to Mercer's Hospital, Dublin, *vice* John Elliott, B.A., M.B., B.Ch.Univ.Dub.

TILDESLEY, Josiah P., M.R.C.S., L.R.C.P.Lond., appointed Medical Officer of the Willenhall District of the Wolverhampton Union.

UNITT, James Arthur, L.R.C.P.Edin., M.R.C.S.Eng., appointed Medical Officer for the Quorn District of the Barrow Union, *vice* S. Harris, M.R.C.S.Eng., resigned.

WALTER, Wm. Hy., M.D.Brux., L.R.C.P.Edin., M.R.C.S., appointed Medical Officer for the Second District of the Winslow Union.

WATERHOUSE, Herbert F., M.D., C.M.Edin., F.R.C.S.Eng., appointed Aural Surgeon to Charing Cross Hospital.

WICKHAM, Gilbert H., M.B., B.C.Cantab., appointed Honorary Medical Officer for Out-patients, Royal Victoria Hospital, Bournemouth.

WOOD, C. G. Russ, M.R.C.S.Eng., L.R.C.P.Lond., appointed Honorary Ophthalmic Surgeon to the North of England Children's Sanatorium, *vice* F. Harris, M.R.C.S.Eng., resigned.

YEARSLEY, P. Macleod, F.R.C.S.Eng., appointed Curator of Museum, Westminster Hospital.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. W. Lang: Corneal Affections. Bacteriological Laboratory, King's College, W.C., 3 to 5 P.M.—Lecture: Actinomycosis and Glanders. Practical work: Staining Sections and Cultivations. London Throat Hospital, Great Portland Street, 8 P.M.—Dr. Whistler: Syphilis of Nose and Pharynx.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. Frederick Treves: Peritonitis (second Lettsomian Lecture).

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr. Corner: Alcoholic Insanity.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M.—Dr. Kenneth McLeod: On Nerve Stretching and Splitting in Localised Interstitial Neuritis, Leprous and otherwise. Mr. Thomas Bryant: Two Cases of Intussusception of the Large Intestine due to the Presence of a Papillomatous Growth Successfully Reduced by introduction of the Hand into the Rectum after the Removal of the Growth.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 1 P.M.—Dr. Payne: Acne. Hospital for Consumption, Brompton, 4 P.M.—Mr. R. J. Godlee: Subdiaphragmatic Abscess. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. R. Marcus Gunn: Cataract.

LARYNGOLOGICAL SOCIETY OF LONDON, 20, Hanover Square, W., 5 P.M.—Dr. Clifford Beale: Tuberculous Tumour of Larynx. Mr. Butlin: Tumour of the Thyroid Gland. Dr. William Hill: Case showing so-called "Cleavage of the Middle Turbinated." Dr. Felix Semon: Pharyngeal Ulceration of Doubtful Nature in a case of Arrested Pulmonary and Laryngeal Tuberculosis. Dr. Scanes Spicer: Unilateral Laryngeal Infiltration and Œdema of Undetermined Nature. Dr. Hale White: Case of Gumma over the Arytenoid Cartilage. Dr. Willcocks: Gummata of Epiglottis.

POST-GRADUATE COURSE, West London Hospital, Hammersmith, W., 5 P.M.—Mr. Swinford Edwards: Carcinoma of the Rectum.

HUNTERIAN SOCIETY, 8.30 P.M.—Annual General Meeting. Election of Officers. 8.30 P.M. Oration by Dr J. Dundas Grant: Aspects of Medical Life—John Hunter, Andrew Clark.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and the Epileptic, Queen Square, 2 P.M.—Dr. Ormerod: Hemiplegia. Hospital for Sick Children, Great Ormond Street, 3.30 P.M.—Mr. C. A. Ballance: Clinical Lecture. Central London Sick Asylum, Cleveland Street, 5.30 P.M. Dr. Patrick Manson: Malarial Disease.

SOCIETY OF ANÆSTHETISTS, 20, Hanover Square, 8.30 P.M.—Discussion on the Administration of Anæsthetics in Operations on the Nose and Throat by Mr. Bailey, Mr. Braine, Mr. Tyrrell, Dr. Buxton, Dr. Hewitt, Mr. Davis, Dr. Silk, and others.

HARVEIAN SOCIETY OF LONDON, 8.30 P.M.—Cases by Messrs. D'Arcy Power, Lockwood, Dr. Boxall, and others. At 9, Dr. W. R. Dakin: Modern Methods of Treating *Post-Partum* Hæmorrhage.

FRIDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. E. Symes Thompson: Phthisis and Life Assurance.

QUEKETT MICROSCOPICAL CLUB, 20, Hanover Square, W., 8 P.M.—Annual Meeting. Address by the President, Mr. E. M. Nelson, F.R.M.S.

SATURDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M.—Dr. Percy Smith: Climacteric and Senile Insanity.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

MARRIAGE.

BONAR—NIELSON.—At Glasgow, on January 31st, by the Rev. A. Orrock Johnston, D.D., assisted by the Rev. James Stalker, D.D., Thomson Bonar, M.D., Edinburgh, to Elizabeth Christian (Elsie) daughter of William Nielson, Esq., of the Bank of Scotland.

DEATH.

CHEYNE.—On February 6th, at Caxton, Cambs, Mary Emma, wife of W. Watson Cheyne, F.R.C.S., aged 37.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

W. A. F. B. would be glad to hear of a home for a lady suffering from chronic rheumatism. She cannot pay more than 30s. weekly.

TREATMENT OF TAPEWORM.

DR. W. FEARNLEY (81, Elgin Avenue, W.) asks for advice in the treatment of tapeworm in a man, aged 41, to whom he has given male fern four times without result. A huge length of worm has come away each time, but in three months, almost to a day, the unwelcome guest has reappeared.

ANSWERS.

DR. J. O.—The *Medico-Chirurgical Tariffs prepared for the late Shropshire Ethical Branch of the British Medical Association*, by Dr. de Styrap. (London: H. K. Lewis. Fourth edition, 1888, 2s.), will probably supply our correspondent with the information as to fees which he requires.

ALKALINE SOAP LINIMENT.

DR. F. FINLAYSON.—The following is the formula of Hebra's spiritus saponatus alkalinus: R Sap. mollis ʒviij; spt. vin rect. ʒiv; solve et filtra; deinde adde ol. lavand. gutt. v. M. Dilute with water, and use the lather that is formed.

BOOKS ON NURSING.

L.R.C.P.LOND. asks to be recommended a book of medical lectures for nurses in addition to Humphry's.

*** *The Theory and Practice of Nursing*, by Percy G. Lewis, M.D., 3rd edition (London: The Scientific Press, 428, Strand. 3s. 6d.), may meet our correspondent's requirements.

INQUISITORIAL INSURANCE CERTIFICATES.

M.B.'s strictures upon the declaration he was called upon by an American office to fill in are justified. First-class British offices are content with a simple certificate as to the cause of death and the duration of the previous illness. There can be no necessity for so inquisitorial a document as that which has excited M.B.'s just ire. It hardly seems possible that a document asking so many confidential questions should be open to the inspection of any but the responsible officers of the company.

TREATMENT OF GLEET.

DR. ROBERT EDWARDS (Sutherland Avenue, London) writes: I would suggest that M.B., C.M. should, in the case of gleet that he mentions in the BRITISH MEDICAL JOURNAL of February 3rd, try the following plan of treatment:—

Alcoholic beverages to be given up entirely, nitrogenous diet to be limited, sexual intercourse abstained from, the cold bath or cold sponging to be used every morning, tinct. ferri perchlor. to be administered internally in doses of from xv to xx m three times daily; bichloride of mercury to be used in an injection for the urethra, as mentioned by Dr. Whitla in his *Dictionary of Treatment*, 1 grain dissolved in 16 ounces of water, with directions that this is to be diluted at first with an equal amount of hot water, the water to be gradually diminished till he full strength is employed.

VILLAGE NURSES.

M.R.C.S.—The answer to our correspondent's request for particulars as to working expenses, duties, etc., of a village nurse must depend very much upon the sort of nurse required, the varieties ranging from a thoroughly-trained Queen's nurse down to cottage nurses, or rather "helps," such as have been established by Miss Broadwood, of Reigate, and by Lady Baker in Dorset. If a village is sufficiently large to afford fair occupation for a nurse there can be no doubt about the great advantage of having one who has gone through a proper training in district work, such as is given by the Metropolitan and National Nursing Association, 23, Bloomsbury Square, to those desirous of becoming Queen's nurses. We believe that in round numbers the expense of a properly-qualified nurse may be taken at about £100 a year. Our correspondent might apply to the Rural Branch of the Queen's Institute, 12, Buckingham Street, Strand, W.C., where he would learn what the scheme would be likely to cost and how the work should be arranged. We believe that a registry of cottage nurses, in connection with Miss Broadwood's scheme, has been started at Grange House, Cambridge. In the BRITISH MEDICAL JOURNAL last year there are answers from two correspondents, living in places where district nursing has been established, in which it is stated that information may be obtained in the one case from Miss E. J. Scott-Moncrieff, 5, Montebello, Portobello, N.B.; in the other from Dr. J. Lee Jardine, Capel, Surrey. Two articles upon the subject, by a correspondent with practical experience, were published in the BRITISH MEDICAL JOURNAL on September 16th, 1893, and December 30th, 1893.

REGISTRARS AND MEDICAL CERTIFICATES OF THE CAUSE OF DEATH.

J. M. H.—Registrars of births and deaths have clearly no authority to dictate to, or in any way to call in question, the discretion of registered medical practitioners as to the way in which they describe a cause of death in the medical certificate, which is furnished under the provisions of Section 20 of the Births and Deaths Registration Act of 1874. In the case referred to by our correspondent, we can take no exception to the quoted description of the cause of death, and we would suggest that the circumstances of the case should be reported to the Registrar, who would, we are sure, not sanction a registrar of births and deaths attempting to dictate to a medical practitioner in such a matter. The space provided in the Death Register for the description of a cause of death is limited, and on this account local officers naturally prefer that the cause of death should be described with as much terseness as is compatible with strict accuracy.

A SUFFERER ADVERTISING FOR HELP.

F.R.C.S. complains of the following curious advertisement in one of the large dailies, which runs as follows:

"Neuralgia.—A lady suffering from intense facial neuralgia and tic douloureux would be deeply grateful to anyone, who has suffered in a similar way, if they can suggest or recommend any means that has been been beneficial to them and given relief, or the advice of any specialist."

Specialists, he says, have nowadays to put up with quite low enough fees, without giving gratuitous advice to every lady who advertises. Is "F.R.C.S." quite sure that he is not doing this lady an injustice? A chronic sufferer from severe neuralgia may well feel driven to her wits' end; she may even have suffered many things from many physicians. She may vaguely know that new things are being given and new operations done for the relief of such cases, and yet may find it difficult to discover from whom such help can be obtained. We certainly cannot advise sufferers to seek help in this way by advertisement—a proceeding very like putting one's head into the lion's mouth; nevertheless this somewhat vaguely-worded advertisement does not appear on the face of it a dishonest one, and, as we read it, does not seem, as "F.R.C.S." imagines, to seek for the gratuitous help of a specialist, but only asks a fellow-sufferer to recommend one.

NOTES, LETTERS, Etc.

PREHISTORIC TREPHINING IN PERU.

DR. MANUEL ANTONIO MUÑEZ, the Surgeon-General of the Peruvian army, has presented to the Smithsonian Institution nineteen skulls showing evidence of prehistoric trephining for surgical purposes. In some instances the patients seem to have died under the knife. In one instance the patient survived the removal of a fragment 4 inches long and 1½ inch wide. The resulting cavity was covered with silver. In one instance the patient survived two trephinings, but died after the third. The instruments used were flint, such as were employed in the stone age. These skulls all have a well-defined frontal suture.

GAS STOVES.

WE have received Dr. Pullar's letter on the subject of his gas stove, and are in some doubt as to the object for which it is sent. The principle on which Dr. Pullar states that his stove is founded is a scientific truism. Gas, however burned, whether in the luminous or non-luminous form, must, for equal quantities, give off equal amounts of heat, provided that it is in each case perfectly burned—that is, that there is no soot or smell. It is only a question between the relative diffusion of the heat in the form of radiant and non-radiant heat—that is, the heat diffused by the heated products of combustion. Dr. Bond has fully dealt with this subject in his pamphlet on *How to Use Gas for Heating Purposes*, which we shall further discuss. If Dr. Pullar wishes to test his stove in regard to its economical value, he can do so himself easily in the way described in the BRITISH MEDICAL JOURNAL of January 27th. He might then report the results.

QUARANTINE RELATIVE TO INFECTIOUS DISEASE.

DR. GEORGE ROBERTSON (Kilburn Park Road, N.W.) writes: With reference to F.R.C.P.'s letter under the above heading and your own editorial note, published in the BRITISH MEDICAL JOURNAL of January 20th, may I ask if it does not strike you that both article and note are retrogressive, in the light of the fact that infectious disease (and more especially cholera) occurring on board ship has been successfully dealt with by the port sanitary authorities by separating the sick from the healthy, and, after disinfection of the clothes and chattels of the latter, permitting them to depart for their homes? Is there any reason why the same principles should not apply to the cases mentioned by your correspondent?

For instance, the lady might proceed straight to an unoccupied room in her own house, take a bath, put on fresh clothes, and have the suspected garments disinfected. The master of a ship could do the same,

but, in addition, should have everything brought with him disinfected. The boy would prove more troublesome, chiefly owing to the heterogeneous substances he usually carries in his pockets and freely exchanges with fellows of his kind: these ought to be destroyed. But, in addition to himself and his kit undergoing the same process as the lady and master, his books should not be brought home or should be burnt, as they can never be satisfactorily disinfected.

Having taken these precautions, all parties, if sound and well, might mix with their families in the full assurance that they were less likely to communicate the disease than the others were to contract it from going in public conveyances, playing with other children, or wearing garments washed by the laundress, of whose family sickness, as a rule, they are not likely to hear much.

I do not write without experience, as in the epidemic of scarlet fever on board H.M.S. *Sultan* in 1875-76, when similar steps to those described were carried out at Gibraltar, no subsequent case of scarlet fever occurred after forty-eight hours, and, after a second disinfection and quarantine at Plymouth, the crew were transferred to other ships without any instance occurring of communication of scarlet fever.

When small-pox broke out in the Mediterranean fleet in 1870-71 the epidemic was cut short, as if by a knife, by vaccination and revaccination, and the only case that occurred subsequently was that of an officer who had just arrived at Malta from England, refused to be revaccinated, and slept in a bed made up by an attendant whose family was down with small-pox. With such an object lesson, I need scarcely express my opinion that the only sure way to prevent small-pox is by thorough and efficient vaccination and revaccination, and that if the master and his belongings were not protected by this safeguard, a quarantine extending over three weeks or more might prove unavailing. He and his family ought to be revaccinated at once if the operation had not been successfully performed within five years.

*** The need for "quarantine stations" of the kind here in question is recognised by medical officers of health, who have to do with outbreaks of disease under more difficult circumstances than those referred to either by "F.R.C.S." or Dr. Robertson. Vaccination or revaccination may be refused, or may be performed too late to prevent small-pox. It is obviously unwise to allow a person who in a week or ten days may be in a condition to diffuse small-pox to go about his business when he is willing to remain under observation in a quarantine ward. Perhaps Dr. Robertson is misled by the term quarantine, which suggests an old and exploded practice now happily falling into disuse. The term has, however, another meaning in municipal sanitary administration, and quarantine in this sense can be practised either at home (if home affords facilities for it) or in special places provided for the purpose. For many obvious reasons the latter is more satisfactory, and especially among the poorer classes.

Riviera Health Resorts: Alassio.

Mr. W. Rathbone, M.P., writes (from Alassio): My attention has been called to a letter from Dr. St. George Mivart in your paper strongly condemning Alassio as a health resort, written, as he admits, after "a very brief stay," and after only one attempted walk. From a much longer experience and many walks in the valleys which rise behind and around it, I venture to say that a further investigation would have led him, not merely to modify, but reverse his decision.

In the little town, and on that part of the beach in front of which the sardine fishing boats land, there can no doubt be often found those smells which exist more or less in most old Italian towns; but in the residential parts of Alassio, along the beautiful sandy beach over two miles long, and the sunny part of the hills behind it, I believe you will find the most health-restoring climate of the Riviera, and this is the experience of many friends.

I first visited Alassio in 1882 with my wife and family, intending only to spend a week there, but my wife, who was considerably out of health, benefited so much more in that short period than in five weeks previously spent in one of the most popular health resorts on the Riviera, and all enjoyed the place so much that, later on, finding our experience of its invigorating effect confirmed by other friends, I bought a small house on the east end of the beach. We have since spent one winter and several short holidays there, and our house has been occupied by most of the members of our family, and a large number of our friends (nearly 100 in all), many of them more than once; they speak of great enjoyment of the climate and neighbourhood. Except the season of the influenza epidemic there has been no illness in the villa during the ten years. I consider it the most invigorating and recuperative climate on the Riviera, especially for those run down by excessive brain work. It is the favourite summer resort for Italians, and its English residents sometimes remain until the end of June and through the hot weather, and from their account I should like to try it at that season did Parliament permit.

I venture to ask space for these lines in the interests of those who have opened pensions here, but more especially because, as a cheaper place, it is available for those invalids who cannot afford the expensive luxury of Cannes, Mentone, etc., it having not yet been overrun by the plutocracy of Europe.

A Legal Suggestion

City Lawyer writes: I beg to bring to your notice an incident which, though of an unsavoury nature, so closely affects the lives of the travelling public that I feel my experience ought to be known, and that no one is better able than yourself to suggest precautions for the avoidance of such dangers in future. Last night (after midnight) I arrived at one of the big London hotels, where I had secured a bedroom by telegram. I was shown into a room which appeared to be clean and orderly. When undressing, in accordance with my custom, I went round the room to see if there was anything offensive. There was a night commode in its proper place, and presenting a most innocent appearance, but I pursued my investigation, with the result that I found the commode contained human excrement which, judging from the awful effluvium, I should suppose had been there for weeks, or perhaps months. I complained, declined to sleep in the room, and was shown into another room. I cannot help feeling thankful that I did not spend the night in what must have been a "death trap." In these days, when the passages of hotels are lighted during the whole night, is it necessary for these filthy receptacles to be placed in a bedroom, and would it not be well that one and all should be at once smashed and burnt? It appears to me that they are the source of very great danger.

Public Health Appointments.

Candidatus writes: "Filtration" arouses my curiosity in his letter in the British Medical Journal of February 3rd, as I was under the impression that a candidate who possessed a D.P.H., when seeking a dispensary appointment, was necessarily appointed before all other candidates, if none else had such diploma. I had some reason even for believing that if the committee of the dispensary gave the appointment to a candidate who did not hold such diploma and a D.P.H. to be a candidate at the election, the Local Government Board would step in and cancel the appointment, giving the appointment to the D.P.H. I should like to know positively is this a fact or not, as I am preparing for examination for a D.P.H.," and "Filtration" has shaken me this day by his letter.

Influenza in North America.

Dr. M. A. Veeder (Lyons, N.Y.) writes: It may be of interest to note that cases began to be observed hereabouts during November the same as in Europe, the cable reports in the daily newspapers showing that the inception of the disease and its increase and diminution have exhibited a remarkable similarity in respect to times of occurrence on both sides of the Atlantic. The prominent features in the cases observed in this vicinity have been nausea and vomiting and occasional diarrhœa, with more or less cough and sore throat and some fever. Except in the case of very aged people, the results do not appear to have been serious, and there is no report of any very large mortality that has come to the knowledge of the writer from any part of the United States or Canada. The curious feature is the fact of comparatively sudden beginning in localities widely scattered in North America and Europe simultaneously. Something of this sort was noted in connection with the outbreak in the winter of 1889. Whatever may be the nature of the infection or causative agent producing the disease, it would seem that its action must depend upon general conditions existing over vast areas, and most likely of an atmospheric nature. Perhaps it may be lowered powers of resistance, due to temperature changes, which makes it possible for infection to gain access, or it may be that the germ of the disease itself has greater power to infect the system under certain atmospheric conditions.

High Mortality in Indian Prisons.

Dr. T. Murtagh (West Brighton) writes: In the British Medical Journal of January 20th, page 144, under the heading "High Mortality in Indian Prisons," you say, "the statement that the high death-rate is due to insanitary conditions must be accepted with some caution," etc. The Indian prisons have neither sewers nor waterclosets: the dry earth system of conservancy is carried out, and the dejecta, mixed with earth, are removed by the "sweepers." When I was in India, a few years ago, the manufacture of "poudrette" (a valuable manure) from these dejecta was a gaol industry. I saw it made in the Nagpore Gaol in this way. The evacuations, mixed with dry earth, were thrown into a covered pit, and a number of naked prisoners trampled about in the mass until well incorporated, after which it was dried and powdered. Trampling for some time in the fæces of healthy persons is not a sanitary occupation, but when we consider that the sweeper may often throw the evacuations of infected persons among the rest, "poudrette" making may be classed as a dangerous trade; and should it be still carried on, as I have described, in Indian goals, it may be worth while to inquire how far the mortality in prisons is affected by it.

Automatic Writing.

Dr. Charles Lloyd Tuckey (London) writes: The following experience may perhaps prove interesting, as throwing some light on the sources of inspiration in automatic writing, and as confirming the views of several of your correspondents who regard it simply as a manifestation of a different phase of consciousness to that existent under ordinary circumstances.

Miss E., an unmarried lady of 40, has been frequently hypnotised by me for various nervous troubles, and is extremely somnambulistic. In September last I hypnotised her, and as she had appeared to me depressed and anxious I asked her, while in a state of profound hypnotic trance, whether she had any troubles on her mind. She replied that she felt unhappy about her boots, as they were nearly worn out, and she had no money to buy new ones. Miss E. is naturally very proud and reserved about money matters, and would certainly not have confided this embarrassment to me in her normal state. On waking she remembered nothing of our conversation, and after her departure I asked a lady friend to send her a pair of boots anonymously. This was done, and when next I saw Miss E. she expressed much gratitude to an unknown friend who had divined her unexpressed wish. About this time Miss E., who was greatly influenced by Mr. Stead's articles, began to practise automatic writing, and soon acquired facility in that direction. The communication purported to come from her deceased brother, whom she questioned, and from whom she received replies. She asked him who had given her the boots, and was promptly informed that I had sent them to her. In consequence of this I was led to make a further experiment, and again hypnotised Miss E. This time I told her that a billiard match was in progress between Mitchell and Peall, and that Peall would win it. Again, I told her that in the forthcoming race for the Manchester Cup La Flèche would win. I then awakened her. After a few minutes ordinary conversation a friend who was present asked her to try some automatic writing. She was supplied with pencil and paper, and I told her I was interested in the above-mentioned sporting events, and begged her to obtain some information regarding them from her ghostly

correspondent. After remaining quiet for two or three minutes, Miss E. wrote down rapidly and decisively the answers I had suggested. She professed great surprise at this, for, she said, she had never heard the name either of the horse or the billiard player, but, she added, I might safely put my money on both, as her brother had never deceived her.

Miss E. is only one of the several highly emotional and neurotic women with whom I am acquainted who have taken to this form of amusement, and I must confess that in such cases I endorse Dr. Rayner's estimate of its dangers. Moreover, the results obtained from such sources are to the last degree untrustworthy, for subjects of this type are born self-deceivers. However, all automatic writers are not of this hysterical type, and I know one lady of the highest intelligence and most masculine scientific acumen who has for years been an automatic writer and crystal gazer. But with her those pursuits have been merely scientific side studies, indulged in occasionally among the employments of an active and intellectual life. The danger attending those pursuits is, I think, in becoming absorbed in them, to the exclusion of practical interests.

Creasote in Phthisis.

A. J. Garland (Oamaru, New Zealand), writes: In the British Medical Journal of June 24th, 1893, is a letter on "Consumption and Climate," in which the practice of sending phthisical patients away to a dry climate indiscriminately is deprecated. My object in writing this is to urge on the profession the creasote treatment, with which I have had remarkably good results of the advantages of residence in a high altitude with a dry climate. I am convinced, and where practicable I advise that, in addition to the creasote. One case from my notebook will suffice. I could quote numbers of these cases equally successful. A. F., admitted to hospital on April 11th, 1893, 24 years of age, had been anæmic for about two years. Some time since caught a bad cold, and had been under treatment for some weeks, the last few days entirely confined to bed. Temperature, 101°; pulse, 120; respirations, 40. Expectoration muco-purulent; profuse night sweats, dulness over both apices, with tubular breathing. She was put on creasote jm ter in die, and quin. sulph., grs. v., in hydrobromic acid, at night. On April 21st allowed to sit up; cough much less frequent; felt better. On April 24th the temperature was normal; night sweats gone. On May 14th the improvement continued; gained 3½ lbs. in weight. On May 29th much improved; expectoration almost gone; cough very slight; feels quite well; sent to the country. This patient came in to see me at the end of July, looking rosy and well; had only slight cough; the dulness and tubular breathing still persisted; in this case, as is usual before the disease has advanced too far, it has become arrested, and I would urge my professional brethren to use creasote much more than it has hitherto been used, as in it, if used early, we have almost a specific for phthisis.

The Destination of Condemned Meat and Fish.

Mr. J. Lawrence-Hamilton, M.R.C.S. (Brighton), writes with reference to the custom of corporations of selling for manure condemned meat, poultry, and fish, to point the possible danger of this mode of disposing of such offal. No disinfection short of destruction by fire can be certainly depended on to destroy disease germs which may present. The use of such material for manufacturing purposes is also open to objection. Cremation in suitable furnaces would undoubtedly be the most simple and suitable manner of disposing of such material.

Doctors of Medicine in France.

The number of candidates admitted to the degree of Doctor of Medicine by the seven medical faculties of France during the academic year 1892-93 was 723, being an increase of 88 as compared with the number admitted in 1891-92, and of 129 as compared with 1890-91. Of the 723 degrees, 441 were conferred by the Paris Faculty, 104 by that of Lyons, 88 by that of Bordeaux, 50 by that of Montpellier, 15 each by those of Nancy and Toulouse, and 10 by that of Lille.

The Cure of Housemaid's Knee.

Dr. A. Herbert Butcher (Birkenhead) writes: What Mr. Hugh C. Roberts, of Melton Mowbray, has described in the British Medical Journal of January 27th as "the accidental cure of housemaid's knee," I have been in the habit of intentionally performing for some years. The method I adopt is to flex the knee-joint so as to render the enlarged bursa as tense as possible, and then by a forcible blow with the soft hypothenar eminence of the closed hand I generally succeed in rupturing the sac and dispersing the fluid into the surrounding tissue, generally about the quadriceps extensor tendon. This method I should never think of adopting in cases of acute inflammation. In some cases where the sac has proved too tough to be ruptured in this manner, I have opened it subcutaneously with a tenotome, and thus let the fluid escape into the surrounding tissue, and by applying a back splint and firm pressure with a bandage, the fluid has been absorbed in a short space of time, and the patients are generally able to resume their occupation in about ten days.

Unusual Position of Placentæ in Twin Pregnancy.

Dr. R. T. H. Bodilly (South Woodford) writes: In November, 1892, I was called to Mrs. C., whom I found to be losing profusely, she being then in the eighth month of pregnancy. I prescribed for her and the flow ceased. At 5 the next morning I was again called to her, and found that she had had labour pains during the night but that they had now ceased; she was losing abundantly. On examination I found a partial placenta prævia attached to the interior of the right side of the cervical portion of the uterus. This I rapidly separated, and, having turned, brought away the child as quickly as possible. Finding a second bag of membranes protruding I ruptured them, and brought away a second child in the same manner as the first. A second placenta being present which would not come away by expression I introduced my hand, and found it situate in the left corner of the uterus immediately over the entrance of the Fallopian tube; this I had to pick away piecemeal. The woman made a good and quick recovery without a bad symptom. One child lived 30 minutes and the other one an hour and a-half. The interest of the case is, I believe, in the position of the placentæ.

LETTERS, COMMUNICATIONS, Etc., have been received from:
(**A**) Professor T. Clifford Allbutt, Cambridge; A. E. L.; Alpha. (**B**) Mr. L. A. Bidwell, London; Mr. J. Baker, Colchester; Mr. A. H. Butcher, Birkenhead; Messrs. Burroughs, Wellcome, and Co., London; Mr. G. Boggon, Sunderland; J. E. Becker, M.B., Colchester; Mr. B. P. Bartlett, Bourton; Dr. R. T. H. Bodilly, South Woodford; Messrs. G. Beeching and Son, London; Mr. H. D. Bishop, Kimberley; G. H. A. C. Berkeley, M.B., London; Mr. W. Berry, Wigan. (**C**) Mr. T. C. D. J. Cathcart, Belfast; Congrèss; F. Clark, M.B., Lowestoft; City Lawyer; Mr. L. J. G. Carré, London; Candidatus; C. C. (**D**) Dr. A. Duke, Cheltenham; Mr. W. Duncan, Westbury-on-Trym; Messrs. Down Brothers, London. (**E**) Mr. E. Child, New Malden; Mr. R. Edwards, London; Messrs. Elliott, Son, and Bayton, London; Mr. W. D. Eddowes, Stamford; C. N. Elliott, M.B., Oundle. (**F**) J. Ferguson, M.B., Perth; Dr. A. Foxwell, Birmingham; Mr. J. V. Foveaux, London; Mr. C. Forbes, London; Messrs. J. F. Farwig and Co., London; F.R.C.S.Eng.; Dr. A. F. Fergus, Glasgow; Dr. C. Frere, Philadelphia; Dr. D. A. Fraser, Totnes; Mr. H. Frowde, Oxford. (**G**) Dr. H. R. Greene, Knaphill; A. H. Godson, M.B., Croydon; Mr. A. J. Garland, Oamaru, New Zealand; D. W. Geddie, M.B., Fort William; Dr. T. D. Greenlees, Graham's Town; Dr. G. de G. Griffith, London. (**H**) Dr. W. W. Herbert, Denbigh; Mr. H. R. B. Hickman, London; Mr. C. R. Hingelberg, Glasgow; Mr. H. A. Hare, Philadelphia; E. Holthouse, M.B., London; Dr. L. J. Hobson, Harrogate; Professor J. Berry Haycraft, Cardiff. (**I**) Dr. C. R. Illingworth, London; Inquirer. (**J**) J. M. H.; Mr. R. L. Jones, Bangor. (**K**) Mr. G. C. Karop, London; Dr. T. N. Kelynack, Manchester; Dr. H. Knapp, New York. (**L**) Mr. J. H. Linden, Basingstoke; C. N. Lovely, M.B., Dawlish; Mr. C. H. Leet, Seaforth; Dr. P. Leech, Halifax; Messrs. Leathwaite and Simmons, London; Messrs. Lee, Brothers, and Co., Philadelphia. (**M**) Dr. E. Mackie, Brighton; M.B., M.A.; Mr. H. E. Maberly, London; Mr. H. H. Marshall, Edinburgh; Mr. D. McAitken, Edinburgh; Dr. J. D. Mann, Manchester; Member; Dr. J. W. Moore, Dublin; Dr. T. Mitchell, Gorseinon; Mr. M. C. Moxham, Stickney. (**N**) Nursing Sister; Nine Circles; J. H. Nicoll, M.B., Glasgow; Mr. J. E. Nicholson, Hong Kong; Dr. R. Neale, London; Dr. T. G. Nasmyth, Cupar; Mr. W. G. Nash, Bedford; Mr. R. J. B. Neale, London. (**O**) Dr. T. Oliver, Newcastle-on-Tyne; Dr. J. Orton, Beeston. (**P**) Dr. G. H. Philipson, Newcastle-on-Tyne; Mr. R. W. Prentice, Seaford; Dr. W. R. Parker, Kendal; Dr. A. Pullar, London. (**R**) Mr. G. Q. Roberts, London; Mr. T. F. Roche, Cardiff; Mr. R. Russell, Haslemere; Dr. J. C. Russell, Southport; Mr. C. Roch, Dublin; Mr. J. S. Ray, Banbury; Dr. E. S. Reynolds, Manchester; Rusticus. (**S**) Dr. G. E. Shuttleworth, Richmond; Mr. E. Somerset, Oundle; Dr. C. J. Sutherland, South Shields; Mr. H. Smith, London; Dr. A. T. Sloan, Edinburgh; Dr. J. F. W. Silk, London; Mr. C. H. B. Shears, Liverpool; Mr. J. J. Stack, London; Dr. J. K. Spender, Sandown; Dr. E. M. Skerritt, Bristol. (**T**) Mr. A. G. Tyler, Birmingham. (**W**) Mr. F. H. Walmsley, Manchester; Mr. M. Walsh, New Ross; Mr. J. Wilson, Southsea; Mr. G. Wood, Southport; Mr. G. F. Webb, Dawlish; Dr. R. T. Williamson, Manchester; Mr. W. T. Whitmore, London; G. A. Wright, M.B., Manchester; Mr. E. W. Wallis, London; etc.

BOOKS, Etc., RECEIVED.

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Index Pathologicus for the Registration of the Lesions recorded in Pathological Records or Case Books of Hospitals and Asylums. By J. C. Howden, M.D. London: J. and A. Churchill. 1894. 6s.

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Notes on Nursing in Eye Diseases. By C. S. Jeaffreson, M.D. Bristol: John Wright and Co. 1894. 2s. 6d.

Outlines of Gynæcological Diagnosis. By N. T. Brewis, M.B. Edinburgh: W. F. Clay. 1894.

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*** In forwarding books the publishers are requested to state the selling prices.

THE LETTSOMIAN LECTURES
ON
PERITONITIS.

Delivered before the Medical Society of London, January, 1894.

By FREDERICK TREVES, F.R.C.S.,

Surgeon to, and Lecturer on Surgery at the London Hospital; Examiner in Surgery, University of Cambridge.

Lecture II.—The Causes of Peritonitis.

Of the many classifications of peritonitis which have been attempted, those are the most satisfactory in which the etiology has been taken as a basis. Even when this method of division has been regarded, there is no disease which has been broken up into more varieties or burdened with more differentiation than has the affection under consideration. In the very elaborate monograph on peritonitis by Spillmann and Ganzinotty,[1] no fewer than twenty-six different forms of the disease are described, and even these are subjected to many and complex subdivisions. Every addition to our knowledge of inflammation of the great serous membrane tends to make the classification of its various forms more and more simple.

It has now become evident that peritonitis depends almost entirely, if not entirely, upon infective processes, and that these agencies are concerned, directly or indirectly, in every form of the disease. There are those who maintain that there is no form of peritonitis which is not due to infection, and although the data upon which such an assertion is based are not entirely perfect, there is yet much presumptive evidence in favour of its accuracy. Indeed, the domain of non-infective peritonitis is becoming rapidly more and more dubious.

In dealing with any classification in which an infective process is the main element, there are many general considerations to be borne in mind. On the one hand, there is the dose of the poison, and on the other hand there is the soil into which it is introduced. The dose must obviously be liable to considerable variations, not only in amount but also in virulence, while the conditions offered for growth by the inoculated body must differ to even a wider and more complex extent.

The resistance of the individual to the growth of septic organisms is influenced by a multitude of circumstances, the value of which is scarcely susceptible of being formulated. There are questions of age and of health, and of such unfavourable affections as Bright's disease, diabetes, and alcoholism. There are local conditions which lend themselves to the more ready cultivation of germs, such as extensive damage to the peritoneum, and extensive interference with its functions of absorption, or at least with that ill-understood power it possesses of dealing with noxious micro-organisms. There are the presence of ascites, and the coexistence of extravasations of blood, bile, or intestinal matter in the peritoneal cavity. There is, finally, the entirely undefined peculiarity of the individual which appears to alone render one man susceptible and another almost exempt.

In the great majority of instances peritonitis depends upon what Tavel and Lanz[2] call "continuity infection." By this is understood the direct spreading of the infection to the peritoneum from a neighbouring tissue other than the serous membrane. Under such heading would be included peritonitis following hernia or any visceral lesion or disease capable of producing the trouble, puerperal peritonitis, most forms of pelvic peritonitis, and certain varieties of tuberculous peritonitis. It would exclude the larger number of the cases of inflammation of the serous membrane which follow accidental or operation wounds.

With peritonitis due to infection by continuity must be included what is conveniently termed by the authors just named "chemical peritonitis." Here the peritoneum is invaded not so much by the micro-organisms themselves as by their chemical products. The serous membrane may absorb these products from adjacent tissues, for in a few examples of peritonitis no micro-organisms have been discovered in the exudation after careful examination by competent observers.

Classification.

The following classification of peritonitis, according to its cause, appears to be justified by our present knowledge of the subject.

1. *Peritonitis due to Infection from the Intestine.*—Under this heading are included most cases of peritonitis associated with hernia, with intestinal obstruction, and with perforation: peritonitis due to any form of ulceration of the bowel; to enteritis; to cancerous growths of the gut and to troubles in the appendix. There will also be included peritonitis due to inflammatory changes in the biliary canals, and some forms of peritonitis following upon operation.

The micro-organism which is usually found associated with these different forms of peritonitis is the bacterium coli commune.

2. *Peritonitis due to Infection from Without.*—This division will include puerperal peritonitis, peritonitis consequent upon inflammatory troubles in the genital organs or in the parietes of the abdomen, and some forms of peritonitis following upon operation.

The micro-organisms usually associated with the varieties considered under this heading are pyogenic cocci, and notably the streptococcus pyogenes.

3. *Peritonitis due to the Pneumococcus.*

4. *Tuberculous Peritonitis.*

5. *Peritonitis of a Doubtful Nature.*—Under this purposely indefinite heading it will be convenient to discuss (*a*) peritonitis due to irritants; (*b*) forms of the trouble reputed to depend upon rheumatism, gonorrhœa, syphilis, Bright's disease and alcoholism; and (*c*) peritonitis met with in the newly born.

In order to form an approximate idea of the relative frequency of different forms of peritonitis, two tables are appended. The first is an analysis of 100 cases of peritonitis taken from the records of the London Hospital. The only test applied in the selection of these cases was evidence that the clinical details and the accounts of the necropsy (in the fatal examples) were as complete as possible. The latter accounts are from the pathologists' reports. The clinical details in the 100 cases are practically complete as regards temperature, account of vomiting, state of the bowels, pulse, respirations, etc., and in the majority of instances a daily statement of the patient's symptoms is given. For the making of this laborious collection of cases I am indebted to Mr. A. Hallidie, F.R.C.S.

Table I.

Peritonitis.	Number of Cases.	Sex. Males.	Sex. Females.	Average Age.	Result. Deaths.	Result. Recoveries.	Time of Death. In 36 hours.	Time of Death. In 48 hours.	Time of Death. 3rd to 4th day.	Time of Death. 5th to 7th day.	Time of Death. After 7th day.	Exudation in Fatal Cases. Commencing.	Exudation in Fatal Cases. Plastic.	Exudation in Fatal Cases. Serous.	Exudation in Fatal Cases. Sero purulent.	Exudation in Fatal Cases. Purulent.	Vomiting. Absent or very Slight.	Bowels Loose.
With hernia	10	3	7	52	10	0	0	0	0	6	2	2	3	3	0	3	1	2
With perforation of bowel	9	4	5	40	9	0	4	2	0	2	1	1	2	3	1	1	2	3
With gross disease of bowel	6	4	2	40	6	0	3	0	0	2	1	1	1	2	1	2	0	2
With disease of appendix	22	19	3	22	6	16	0	0	0	5	1	0	1	1	1	1	3	4
Starting from lesions about the pelvis	18	5	13	36	11	7	3	1	1	6	0	3	1	0	2	5	2	6
Following abdominl. wounds	14	2	12	36	14	0	0	1	5	5	3	2	6	1	2	3	5	4
By extension from the pleura	1	0	1	32	1	0	0	0	1	0	0	0	0	0	0	1	0	0
Tuberculous	8	2	6	20	5	3	0	0	0	1	4	0	2	3	1	0	3	4
Diffuse cancer of peritoneum	2	2	0	42	2	0	0	0	0	0	2	0	0	2	0	0	1	0
Causes of peritonitis unknown	10	2	8	29	6	4	0	0	1	0	5	0	3	3	0	-	2	2
	100	43	57	—	70	30	10	4	14	23	19	11	21	12	12	15	23	28

The second table is from the monographs by Fraenkel and Tavel and Lanz.[1]

Table II.—*Cases of Peritonitis in Man in which Micro-organisms were found in the Exudation.*

	Fraenkel.	Tavel and Lanz.	
	Found Alone.	Found Alone.	In Association.
Bacterium coli commune	11	15	16
Streptococcus	7	3	15
Staphylococcus	1	3	6
Pneumococcus	1	0	2
	20	20	39

I.—Peritonitis due to Infection from the Intestine.

As already stated, the micro-organism which appears to be usually answerable for the numerous forms of peritonitis met with under this heading is the bacterium coli commune. This most remarkable and common bacillus was first described by Escherich[5] in 1885; its definite pathogenic properties remained imperfectly recognised until 1889, when they were expounded by Laruelle,[6] by Roux and Rodet,[7] and many others. Within the last few years the literature appropriated to this little organism has become so extensive as to be almost overwhelming.

The morphology of the bacillus—with which we have no concern in this place—has been elaborately dealt with by Wurtz,[9] Macaigne, and other writers. It has been shown to be identical with the bacillus pyogenes fœtidus obtained by Passet in 1885, from the stinking pus of a perirectal abscess. It has been proved to be the same micro-organism as the bacillus lactis aërogenes, and the pyogenic urinary bacterium described by Clado and Albarran in 1891.[10] In many particulars it closely resembles the bacillus of typhoid, but the distinguishing features of the two micro-organisms have been fully pointed out by Trambusti,[11] Péré,[12] and Wurtz.[13]

The bacterium coli commune exists normally in the human body, and is found in individuals in a state of perfect health. It has been demonstrated to be present along the whole length of the alimentary canal, from the mouth to the anus.[14] Its natural habitat is the bowel. It is said to be especially numerous in the duodenum[15] and in the colon, and it has been found in the bile passages. It is certainly the most abundant and the most constant of the bacteria found normally in the human body, and has been estimated to form 95 per cent. of the micro-organisms met with in the bowel of man. Sternberg[16] gives a list of forty-eight micro-organisms which have been isolated from human fæces or the contents of the intestine. Of this number twenty-five are non-pathogenic, and of the pathogenic forms not a few represent the same bacillus under different names. There is no doubt that special names have been given to micro-organisms which are mere variations of one common form.

This matter is well dealt with in the excellent monograph by Tavel and Lanz,[17] a work which forms by far the most important recent contribution to the subject of the etiology of peritonitis. Tavel and Lanz regard the term bacterium coli commune as a generic term applicable to an extraordinarily numerous family of bacteria. They themselves indicate some twenty varieties in this great family. These authors also have pointed out that the colon bacillus is sometimes mobile and possessed of cilia, and sometimes immobile. They do not, however, associate any pathogenic differences with these two forms, which they have admirably figured.

The bacterium coli commune has a striking feature in that it appears to vary in virulence. So far as experiments upon animals are of value it would seem to be quite harmless when taken from the normal intestine. A culture of the bacillus so obtained has no effect when injected into the peritoneum of animals.[18] If, however, the bowel become the seat of certain diseased conditions (or it may almost be said of any diseased condition), then the bacillus becomes at once virulent. Virulence has been found to be developed in cases in which the bowel was obstructed, strangulated, or inflamed, in venous congestion of the gut, in œdema of the bowel wall, in diarrhœa, in typhoid fever, and in cholera. In a case of diarrhœa produced by tartar emetic this colon bacillus was found to have become virulent.[19] It also appears to develop qualities for evil in instances of advanced constipation.

In any case experiments show that the virulence when once developed may vary considerably in degree. Tavel and Lanz describe an interesting case of localised abscess due to mischief in the vermiform appendix. The pus was swarming with the colon bacillus. Quantities of the same bacillus were found in the peritoneum, but there was no peritonitis. Much gas is discovered in the peritoneal cavity. When the intestine is healthy the bacterium coli commune has little disposition to escape through the gut wall or to invade the tissues of the body after death. If, however, the intestine be damaged or diseased, then the bacterium shows an active inclination to penetrate through the bowel wall, and is usually found to have extensively invaded the tissues after death.[20] The disposition of the bacillus to pass through the intestinal wall under the circumstances just stated is well illustrated in examples of slight degrees of strangulation of the bowel produced by experiments in animals.[21]

The effect of injecting a culture of the virulent colon bacillus into the peritoneum of animals varies—other things being equal—according to the dose. In the slightest cases the animal, after an illness in which diarrhœa is a symptom, recovers. In another grade a localised purulent peritonitis is produced, which follows a chronic course. In a third degree death is rapidly brought about by a diffuse fibro-purulent peritonitis. In instances in which a large dose is employed, the animal dies of acute sepsis before any phenomena of peritonitis are produced. When peritonitis *is* produced, it is usually purulent. The presence of fluid in the peritoneum, and especially of blood, greatly aids the development of peritonitis in these experiments.[22] The activity also of the bacillus is much increased, if it be injected with sterilised fluid from the intestine as a medium. If a sterile saline solution be used the effect is diminished.[23] The endothelial cells of the peritoneum do not appear to act as phagocytes, for in various experiments in which the colon bacillus was injected into the peritoneal cavity, it was never once found by Ziegler within these cells.

It has been clearly demonstrated that the bacterium coli commune can produce pus after inoculation. It has been found in man in a state of almost pure culture in the pus from an ischio-rectal abscess. So far as the human subject is concerned, it has been shown that these various forms of peritonitis which are assumed to be of intestinal origin, depend mainly and in many instances solely upon the bacterium coli commune.

In peritonitis associated with hernia, the colon bacillus is the micro-organism most commonly found in the sac. This is the case in all stages of strangulation, and is independent of the character of the fluid, the bacilli being obtained in cases in which the fluid in the sac is copious and opaque, as well as in those in which it is clear and scanty. In fifteen examples of hernia, Bönnecken[24] found the bacterium coli in the sac in thirteen instances.

The bacillus so commonly found in the hernial sac by Clado,[25] in 1889, is now known to have been the colon bacillus. Tavel and Lanz examined bacteriologically the exudation in the sac, or in the adjacent peritoneum in twenty-one cases of strangulated hernia, in two cases of "hernial hydrocele," and in one case of suppuration of the sac. In eighteen instances they discovered no micro-organisms of any kind. In five examples—including three in which the gut was apparently not involved in the rupture—bacteria were found, the most common being the bacterium coli commune. The authors consider the cases unassociated with micro-organisms to be examples of "chemical peritonitis," and to be due to the products of bacteria rather than to the germs themselves; they do not, however, commit themselves to the opinion that the bacillus chiefly concerned is that now under consideration. Laruelle[26] has demonstrated the bacterium coli commune in gangrenous hernia, and in gangrene of the gut produced artificially in animals.

Arndt[27] has shown, by a series of most carefully conducted experiments, that micro-organisms can pass through the gut wall into the peritoneal cavity, when the strangulation is of quite a slight grade, and is very far short of producing even

a limited gangrene. Bönnecken's[28] investigations give practically the same result. Cornil[29] found bacteria actually in the substance of the wall of a partly necrosed intestine. Tavel and Lanz are of opinion that while micro-organisms cannot pass through the wall of healthy bowel, they are very ready to escape if the gut be the seat of even a slight lesion. It is only fair to say that Orth's[30] experiments do not support these very widely held opinions.

Macaigne gives an account of thirty-five cases of peritonitis of intestinal origin, in which the colon bacillus was the only organism present, or at least the principal one. These thirty-five cases are distributed as follows:—

With troubles in the appendix	10 cases
With typhoid fever	9 ,,
With ulcerative enteritis	6 ,,
With perforation	3 ,,
With cancer of colon	3 ,,
With hernia	2 ,,
With thrombosis of mesenteric vessels	1 ,,
With ulceration of gall bladder	1 ,,
Total	35 ,,

The researches of Welch, Ziegler, Fraenkel, and Malvoz all bear in the same direction.

The colon bacillus has been shown by Cornil, Babes, and others to be almost exclusively the bacterium concerned in perforative peritonitis. Barbacci[31] states also that it is practically the only bacillus to be produced in cultures from the exudation in perforative peritonitis in man. The same applies to perforative peritonitis produced experimentally in dogs. In this form of peritoneal inflammation, the other micro-organisms found in fæces develop in the serous cavity, but only for a time. The bacterium coli commune alone survives. Barbacci points out that the liberal development of this bacillus is greatly favoured by the presence of such a medium as is provided by the fluid contents of the intestine, a material which readily damages the peritoneal endothelium. He considers that death is due to absorption partly of the bacterial products, and partly of the noxious chemical matters contained in the intestinal fluid which escapes into the belly cavity.

In the same way it has been demonstrated that this micro-organism is the active agent in the majority of cases of peritonitis starting from the appendix. Adenot[32] gives four cases of so-called appendicitis attended with suppuration, in the pus of which the colon bacillus was found in a pure culture. In another instance in the exudation upon the surface of a non-perforated appendix containing a concretion, this bacillus was the only micro-organism found. Tavel and Lanz, in the valuable work already quoted, deal with twenty-three cases of trouble in the appendix. An examination was made either of the pus within or without the appendix, or of the exudation into the peritoneal cavity immediately around the diseased process. The material for this bacteriological examination was obtained during the patient's life. In three instances no micro-organism was found. In nineteen examples the colon bacillus was found either alone or in association with other pathogenic germs. The streptococcus was found in several cases, the pneumococcus was met with in two examples, but not in pure culture. The staphylococcus pyogenes citreus was in one instance the only micro-organism discovered. Tavel and Lanz give five cases of internal strangulation of the bowel and one case of resection of the gut. In three of these the colon bacillus was found in the exudation of the peritonitis which resulted.

Chemical Peritonitis.—One of the five cases affords a good example of "chemical peritonitis." The patient, aged 40, had symptoms of intestinal obstruction. Laparotomy was performed on the seventh day. Strangulation by an omentum band was discovered; there was general peritonitis; the abdomen was drained. The fluid escaping from the drainage tube proved to be sterile on cultivation. The patient recovered.

Bignami,[33] Bastianelli,[34] Le Sage, and Macaigne[35] have shown that in suppurative or ulcerative troubles of the gall bladder or biliary passages the bacterium coli commune is often the only bacterium found. Roswell Park[36] has also furnished a case illustrative of this association. In three examples of peritonitis following suppurative inflammation of the gall bladder, Tavel and Lanz found the bacterium coli commune in two instances and pyogenic cocci in the third.

This bacillus has also been found in cases of peritonitis following operation, and on this subject Dr. Welch writes as follows:[37]

> Its presence several times in pure culture, in laparotomy wounds treated aseptically, although apparently not a source of serious trouble, was not a matter of indifference. It was generally accompanied with moderate fever, and a thin, brownish, slightly purulent discharge, of somewhat offensive but not putrefactive odour. The smooth and rapid healing of the wound was interfered with. In some of the cases there was evidence of intestinal disorder.

In the cases of peritonitis after laparotomy in which the colon bacillus is found, it is probable that such an injury had been inflicted upon the intestinal peritoneum at the operation as to permit the bacterium to escape through the bowel wall. It has been shown that it requires but little damage to the bowel or to its serous covering to allow of such escape.

It is well known that pneumonia is not an uncommon sequel of peritonitis, and it is possible that in certain of these cases the colon bacillus is the active agent. It has been found in the pleura when pleurisy was present (Laruelle), and has been obtained by puncture from the hepatised lung some days before death from peritonitis (Macaigne). Fisher and Levy give two cases of strangulated hernia with pulmonary complications, and in both instances the colon bacillus was found in the affected parts of the lung.[38]

Finally, it has been assumed that some of the constitutional symptoms attending severe constipation may be due to the absorption of the products of this widely diffused bacillus.

The exudation associated with the bacterium coli commune when it attacks the peritoneum is often characteristic. It is well seen in cases of inflammation about the appendix. The fluid is at first clear and greenish looking. It then becomes greenish yellow, thin, semi-opaque, and foul smelling. If it pass on to suppuration the pus has no especial characters except that it is frequently offensive. In chronic cases there is sometimes produced a white, soft custard-like material which is often met with in operations upon the appendix during a quiescent period and which I do not think is changed pus nor a residuum left by pus. In some long-standing cases I have scraped away a full teaspoonful of this matter from about the cæcum.

In concluding the account of this variety of peritonitis it may be pointed out that the irritant which induces the peritonitis and which reaches it from the intestine may follow more than one path. (1) Bacteria may escape through a perforation in the bowel; (2) they may pass through the wall of a segment of intestine which has been in some degree damaged but not perforated; and (3) chemical products of bacteria may reach the peritoneum by either one of these routes.

II.—Peritonitis due to Infection from Without.

It has been already observed that this variety of peritonitis usually depends upon pyogenic cocci. Of these the streptococcus is the one most usually met with. It is often alone, or it may be found in association with micro-organisms, among which, however, it is the chief.

That the streptococcus is the usual agent in puerperal peritonitis has been shown by Widal, Bumm, Fraenkel, and Courtois-Suffit.[39] It has been met with in association with putrefactive bacteria in examples of perforative peritonitis by Predœhl and others. The staphylococcus is very rarely met with alone in cases of peritonitis, and is usually associated with the more virulent form of coccus. (See Table II.)

So far as experiments go it has been shown that injections of pyogenic cocci into the peritoneum act more vigorously if mixed with a fluid difficult of absorption, or if introduced with a corrosive fluid capable of damaging the peritoneal endothelium.

In twenty instances reported by Pawlowsky,[40] in which the staphylococcus was introduced into the abdomen of animals, death followed in eighteen cases from purulent or hæmorrhagic peritonitis. A drop, or even half a drop, of fluid from a case of puerperal peritonitis may kill an animal when injected into the abdomen, whereas in a control experiment a syringeful of the exudation from an example of peritonitis after operation may not lead to a fatal result.

The pyogenic cocci, and most usually the streptococci, have been met with in cases of peritonitis after operation in man, and experiments upon animals show how the noxious

effect of those micro-organisms may be assisted by extravasations in the peritoneal cavity, by long exposure of the peritoneum, and by damage to its delicate surface. In the operation cases it is most probable that the streptococcus gains an entrance through the wound. In puerperal peritonitis it, no doubt, reaches the abdomen through the pelvic organs following the veins or lymphatics, or the Fallopian tube.

In the rare examples of peritonitis associated with erysipelas of distant parts (such as the face) the streptococcus must be assumed to reach the serous membrane through the blood.[41]

III.—Peritonitis due to the Pneumococcus.

This variety of peritonitis has not yet been so soundly demonstrated as to possess an indisputable existence. In the first place, the connection of the pneumococcus with pneumonia is a subject about which there is much conflicting evidence. In the second place, peritonitis is a very rare sequela to pneumonia, although it is true that pneumonia is not an uncommon complication of peritonitis.

The pneumococcus has been found in the peritoneum in a large number of the subjects of fatal pneumonia, and yet the serous membrane has remained sound. In 151 necropsies in which the pneumococcus was demonstrated Netter[42] found only two cases of peritonitis. However, cases of peritonitis have been reported by Weichselbaum,[43] Courtois-Suffit,[44] Scavestre,[45] Nélaton,[46] and Galliard,[47] in which the pneumococcus appears without doubt to have been the cause of the inflammation. The peritonitis in some of these cases was primary, and was the sole disease; in the other instances is was secondary to ordinary pneumonia. The pneumococcus would seem to be at one time noxious to the peritoneum, and at other times to be harmless. It is difficult to localise it in the peritoneum of animals by experiment. Cultures obtained from the exudation in certain instances of peritonitis in which the pneumococcus was the only micro-organism found and injected into animals caused death from general sepsis. Morisse,[48] whose monograph on this subject is by far the most complete, has collected eight examples of peritonitis in which, and in the associated lesions, the pneumococcus was the only micro-organism found. In seven of these there was either pneumonia or pleurisy. The exudation was purulent in five, and sero-fibrinous in three. Six of the patients died, and two recovered. In both of these laparotomy had been performed.

IV.—Tuberculous Peritonitis.

This variety of peritonitis is dealt with in Lecture IV.

V.—Peritonitis of a Doubtful Nature.

(*a*) *Peritonitis due to Irritants.*—On the subject of this form of peritonitis there is much conflict in opinion. If its existence be established, then the existence of a non-infective variety of peritonitis has to be at once acknowledged. Bumm[49] maintains that a non-infective peritonitis may be produced by mechanical, chemical, or thermal irritants, and states that it is usually plastic and localised. Pawlowsky injected sterilised croton oil into the abdomens of twelve animals. Of this number, eight died from hæmorrhagic peritonitis, and neither pus nor micro-organisms were found in the exudation, nor were there any signs of sepsis.

As a comment upon these experiments, it may be noted that pyogenic cocci (for example, the staphylococcus aureus) will act more readily, and in smaller doses if introduced into the peritoneum together with some corrosive fluid capable of injuring the serous endothelium, and further that such injury to the peritoneal surface—in cases in which no cocci are injected—encourages the escape of the colon bacillus from the intestine.

Fraenkel injected tincture of iodine and liquor ferri perchloridi into the peritoneum of certain animals. Peritonitis followed. If the exudation were examined at an early stage, or in the slightest cases, it was found to be clear and free from micro-organisms. If, however, the case were advanced, the exudation was purulent and swarming with bacteria which had passed through the bowel wall. A like explanation would appear to be adapted to an experiment by Thompson,[50] who found that a piece of wadding dipped in 1 in 1,000 solution of corrosive sublimate and placed within the abdomen caused in some animals a fatal peritonitis. Jalaguier[51] showed that tampons of sterilised gauze introduced into the peritoneal cavity of dogs caused no symptoms and no reaction, and when the animals were killed at the end of some months the gauze was found rolled up in a ball and encapsuled by adhesions. It was made evident, moreover, that it needed a foreign body of a certain size to even excite adhesions.

Fæces, if introduced into the peritoneal cavity, cause peritonitis, not by chemical action, nor as an irritant, but by reason of the micro-organisms or their products contained in the extravasation.[52] If the material be sterilised no effect follows. Fresh filtered fluid from the bowel caused, when injected into the abdomen, a fatal peritonitis in the exudation of which the bacterium coli commune was found. The same fluid when filtered through many layers of gauze produced abdominal symptoms, but all the animals lived. When the fluid was sterilised it had no effect.

The same results have attended the injection of human bile into an animal's peritoneum. When the bile was untreated peritonitis usually followed, but when it was sterilised the injection was attended by no evil results. According to Naunyn[53], normal bile is sterile. According to Létienne[54], it may contain bacteria. It is said by others to be sterile so long as it contains free biliary acid. In inflammatory conditions of the bile passages the bacterium coli commune is commonly found. Lähr[55] has shown that in man a considerable effusion of bile may take place into the peritoneal cavity without causing peritonitis.

Blood is not of itself capable of producing peritonitis, although it affords a very favourable condition for the development of any bacteria which may gain access to the extravasation. This fact may be considered to be proved by the experiments of Penzoldt,[56] Cornil and Ranvier,[57] and others, and by the operation of peritoneal transfusion of blood performed on man by Ponfick,[58] Golgi and Raggi.[59] Orth[60] believes that it is possible to set up peritonitis by injecting a large quantity of blood into the cavity. He considers that it induces inflammation not so much through the action of bacteria as through the development of some fibrin ferment. Mr. Herbert Page[61] has published three very interesting cases of peritonitis from hæmorrhage, but it is evident from the reports that the peritonitis was of a very slight degree and of very secondary importance.

A consideration of the whole matter leads to the conclusion that the production of peritonitis by non-infective irritants has not yet been satisfactorily proved.

(*b*) *Peritonitis Secondary to Rheumatism, Gonorrhœa, etc.*

Spillmann and Ganzinotty[62] have collected fifteen recorded cases of rheumatic peritonitis, with nine deaths. In some of these cases the peritonitis appeared alone, in others in association with rheumatic troubles in the joints, or in other serous membranes. The evidence, however, upon which the pathological assumption depends is by no means satisfactory, and will not stand a critical examination.

Peritonitis has been met with in association with gonorrhœa, but inasmuch as the gonococcus will not survive in the peritoneal cavity, it is to be assumed that pyogenic cocci have found a nidus in the discharge from the genitals, and have spread by extension to the peritoneum. Interesting articles on this subject have been published by Horowitz,[63] Menge,[64] and Wertheim.[65]

The peritonitis reputed to be due to Bright's disease, to alcoholism, and to syphilis, has not been shown to have a specific etiological existence. It would seem rather to occur under conditions which are very favourable to bacterial growth, or to be due to extension from parts which are already inflamed. The subject is fully dealt with in the monograph by Spillmann and Ganzinotty, to which reference has already been made.

(*c*) *Peritonitis of the Newborn.*

The peritonitis met with in the newly born appears to be due to one of two conditions. It may depend upon puerperal infection, and be brought about by direct extension from the cord, which is found to be inflamed, or gangrenous, or the seat of an actually erysipelatous condition, or it may be due primarily to the giving way of the bowel in cases of imperforate anus, or to that rupture of the normal sigmoid flexure

which has been assumed by Zillner[66] and Generisch[67] to be due to direct pressure on the bowel during parturition.

NOTE.—For some fuller account of non-infective and of chronic non-tuberculous peritonitis reference may be made to special articles by Schroeder (*Zeitsch. f. Geburt. und Gyn.*, 1886, p. 493) and Strümpell (*Gen. Path.*, Leipzig, 1885).

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ON SOME CASES OF ACUTE INTUSSUSCEPTION IN CHILDREN.

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I AM desirous of placing on record four cases of acute intussusception in children which, taken with three others I have already published, constitute a complete list of all the cases of this condition which it has fallen to my lot to treat in patients of tender age. I may add that in adults I have besides twice bodily excised intussusceptions of the sigmoid flexure of the colon with complete success. But the total number of young patients coming under my personal care has been seven.

The first was a female infant, aged 4 months, whom I treated by inversion and injection of air and water twenty-eight hours after the onset of the condition, and with apparent reduction. The tumour however had returned nine hours later, and fourteen hours after the first injection was again treated as before with the same apparently good result. Some two hours later however the tumour was again found, and was again to all appearance reduced as before. Soon after this the child became exhausted and died; when it was found that the bowel had never been *completely* reduced, and was gangrenous at the point strangulated. There was no rupture of the gut, and reduction of all but the ileo-cæcal portion had been brought about each time the injection had been tried.

The second case has already been fully recorded,[1] and I will only say of it that the patient was a boy of 4 years old, whom I saw eleven hours after the onset, when I at once tried injection with water, and apparently with success as far as disappearance of the tumour was concerned. But five hours later the condition was as bad as before, and I at once performed median laparotomy, reduced the intussusception with some difficulty but with perfect success, the child recovering without a bad symptom.

The third case was seen in private, and is as follows:

February 14th, 1889. Sent for to see baby V., aged 16 months, at midnight, and found a very healthy child, apparently not suffering very much. An intussusception had been diagnosed thirty-six hours before. This had come on immediately after an elder child had fallen in a sitting position once or twice upon the patient's abdomen while it lay in its perambulator with the strap and buckle crossing the latter. Dr. Gee had seen the child twenty-four hours after the onset of symptoms, and had employed inflation apparently with the best immediate results as regards disappearance of the tumour. The baby had, however, been evidently ill since, and the temperature had reached 103°, and the pulse was 140 to 160. Under chloroform I could detect no distinct tumour, but there was an increased sense of resistance under the right border of the liver. There had been no vomiting, and as both the medical men in attendance thought the child was somewhat better by the time I saw it, we agreed to await further symptoms. The next morning (February 15th) I was sent for early, as the child was manifestly worse. It had vomited twice since midnight and the abdomen was more distended. There was, however, no straining and no passage of blood or mucus. Pulse 140.

Laparotomy, February 15th, at 2.15 P.M., fifty hours after onset. Spray, etc. The tumour was easily found bound down in the right flank at the spot where resistance had been felt before. It was 4 to 5 inches long and consisted of the last 8 inches of the ileum, prolapsed and strangulated through the ileo-cæcal valve. With some trouble it was brought out of the wound, but was then easily reduced by gathering in the intussuscipiens from below with the fingers, and thus squeezing on the intussusceptum upwards. As it was slipping back through the ileo-cæcal valve and the intussuscipiens was unfolding, it was seen that there was adhesive peritonitis glueing the surfaces together over an area equal to a sixpenny piece, and here the peritoneum peeled off to that extent. At this spot there was much swelling and discoloration, but the bowel looked as if it would recover. There were two or three bubbles of gas under the peritoneum at the mesenteric border of the bowel at the point of greatest constriction, and here there was some thrombosis of the small veins of the mesentery with white lines on either side of them. There was some clear fluid in the abdomen, which was sponged out before closing.

The abdomen was closed within half an hour of the commencement of the operation, but had been only open a quarter of an hour. There was no shock, and the pulse at the end had fallen to 120. The patient was fed by the rectum, only a little brandy and opium to be given by the mouth. At 9 P.M. he looked fairly well. Pulse 160.

The next day, February 16th, the child seemed better in every way. The dressing was wet with urine, and was changed. At 1.30 P.M. there was a sudden cry of pain, and the child drew up his right leg and became restless. He then gradually failed, and died at 3.10 P.M.

Necropsy forty hours after death. No general peritonitis. The intussuscepted part of the ileum was still dark, but sound except at the point of greatest nipping. Here a slough was to be seen at the mesenteric aspect of the bowel, and in the centre of this a perforation, with escape of fæces, causing local peritonitis. The slough was seen on both sides of the mesentery, and appeared to correspond to an area supplied by one vessel. It was wedge-shaped, with the apex towards the mesentery, and was whitish-grey. It appeared to correspond to the thrombosed veins seen during the operation at the most constricted point. The spot mentioned above as having been stripped of its peritoneal covering was quite sound and clean. The specimen was removed *in toto*.

The fourth case was that of a male child of 5 months, whom I saw two days after the onset of the intussusception, and immediately used injection, apparently with success. But five hours and a-half later matters were as bad as before, and I performed laparatomy and reduced the strangulation. The child made an excellent recovery. In this case I reduced the intussusception with my finger in the abdomen before I could draw the part involved into view.

The fifth case has also been recorded fully.[2] The patient was a boy, aged 4 months, whom I did not see until the fourth day after onset of the intussusception. He was then much collapsed, and, as injection had been tried already in the country, I proceeded at once to laparotomy. On opening the belly the intussuscipiens was already sloughing, and had two large perforations in it. Enterectomy was at once done, but the child died ten hours later of exhaustion.

In the sixth case, a boy aged 12, laparotomy was also done for the enteric variety of intussusception forty-eight hours after the onset. Here the jejunal strangulation could not possibly be reduced, and enterectomy was at once done. The boy died twelve hours latter of collapse.[3]

The seventh case is the last of my own series, excluding adults. R. D., aged 7 months, a healthy child until her present illness, was admitted into University College Hospital on February 7th, 1893. She had hitherto been fed by the breast, and her motions had been natural. On February 6th, at 9 A.M., the bowels were opened for the last time before admission. At 1 P.M. the same day the child was sick, and had been so frequently until admission. During the night blood and mucus were passed by the bowel, and several times since. On admission in the evening she was pale, restless, and fretful, but showed no collapse. The abdomen was not distended, and was fairly soft, but on palpation there was rigidity of the muscles. A rounded swelling could, however, be felt in the right flank, reaching from under the rectus muscle to the back of the abdominal cavity on the same side; it was movable, but not freely. Nothing abnormal could be felt from the rectum, but the finger came away stained with blood, mucus, and fæces. At 9.45 I made an examination under chloroform, and found a curved reniform tumour reaching from just external to the right linea semilunaris on a level with the umbilicus to just beyond the middle line, midway between the latter and the base of the xyphoid cartilage. The whole mass was now freely movable; it was blunt below and tailed off above. By manipulation the mass was reduced by about one-half, and what remained lay in the right iliac region, and was easily grasped between finger and thumb. Manipulation gave rise to much gurgling and an evacuation of blood-stained mucus. Ten ounces of warm water were now run into the bowel with 3 ft. pressure. This appeared to fill the colon right up to the iliac fossa, but, on its being allowed to run off, the tumour was found unaltered.

Operation.—I then performed laparotomy in the usual way by a 2 inch

[1] *Vide Lancet*, vol. ii, 1888, pp. 200 and 202.

[2] *Vide Lancet*, January 9th, 1892.

[3] *Vide Lancet*, January 9th, 1892.

Twenty-five Cases of Acute Intussusception in Children from the Surgical Wards of University College Hospital.‡

No.	Year.	Result.	Sex and Age.	Variety of Intussusception.	Duration of Symptoms before Injection	Duration of Symptoms before Operation	Abdominal and Rectal Examination.	Treatment.	Condition of Bowel.	Result, or Cause of Death.
1	1877	D. in 19 hours	F., 8 mos.	Ileo-cæcal	5½ hours oil, 15 hours oil, 22 hours air	26½ hours	Tumour below umbilicus on left. Also felt by rectum. Partly reduced by first injection	Injection of oil 5½ hours after onset; again 15 hours; again 22 hours after with air. Laparotomy 26½ hours after onset by Mr. Beck. Reduction	Reduction not difficult; bowel deeply congested at seat of obstruction	Acute peritonitis
2	1879	R.	M., 6 mos.	Ileo-cæcal	31 hours air and water	—	Tumour felt in descending colon	Injection of air and water, followed soon by complete reduction	—	Recovered
3	1882	R.	M., 9 mos.	Ileo-cæcal	4½ days air and water, with inversion	1½ days following injection at once	Tumour felt through abdominal wall and rectum	Injection of air and water in inverted position. Immediately after laparotomy by Mr. Godlee. Reduction easy in two minutes	—	Recovered
4	1882	D. 12 hours p. op.	M., 7 mos.	Ileo-cæcal	—	2½ days	Tumour on right of umbilicus; nothing felt per rectum	Laparotomy by Mr. Godlee. No injection practised. Reduction easy before the intussusception was brought into view	—	Acute peritonitis
5	1884	D.	F., 4 mos.	Ileo cæcal	28 hours		Tumour felt in left hypochondrium	Injection of air and water with inversion with apparent reduction. Return of tumour in 9 hours. Injection again 14 hours after first apparent reduction. Return in 2 hours. Injection as before apparently successful. A. E. B.'s case	The bowel after death was found to be gangrenous, and had not been really reduced completely	Collapse and exhaustion
6	1885	D. 3½ hours p. op.	M., 5 mos.	Ileo-cæcal	35½ hours	59 hours	Tumour in left hypochondrium; none in rectum	Laparotomy by Mr. Beck. It was found impossible to reduce bowel. Abdomen closed. Injection of air and water had failed 5 hours before operation	The parts were so swollen that reduction was impossible	Shock
7	1885	R.	M., 5 mos.	Ileo-cæcal	8 hours manipulation	before lation	Tumour in right hypochondrium quite movable between finger and thumb	Manipulation under chloroform by Mr. Beck. Reduction easy	—	Recovered
8	1885	D. same day	M., 4 mos.	Ileo-cæcal ?	4 days	4 days	Tumour to left of middle line and in rectum	Laparotomy by Mr. Horsley after failure of inflation with air. Tumour irreducible. Artificial anus	The parts were preserved unreduced, apparently simply ileo cæcal	Shock
9	1885	D. in 30 hours p. op.	M., 5 mos.	Ileo-cæcal	17 hours	19 hours	Tumour in middle of abdomen	Laparotomy by Mr. Horsley after failure of inflation. No shock. Reduction easy	—	Died, cyanosed lungs congested, high temperature
10	1887	R.	M., 4 years	Ileo-cæcal	11 hours water	16 hours	Tumour felt in left flank; none by the rectum	Laparotomy by Mr. Barker 16 hours after onset. Inflation 11 hours after with water had produced apparent reduction, but 5 hours later the condition was as before	The ascending and transverse were invaginated in the descending colon, but were released without much trouble	Recovered
11	1888	R.	M., 7 mos.	Ileo-cæcal ?	6 hours air and water	—	Tumour in left iliac fossa; also felt in rectum 1½ inch from the anus	Injection of air and water 6 hours after the onset was successful in reducing the obstruction	—	Recovered
12	1888	R.	M., 9 mos.	Ileo-cæcal ?	24 hours	—	Tumour in hepatic flexure of colon	Injection of air under chloroform with manipulation resulted in slow disappearance of tumour and all bad symptoms	—	Recovery.
13	1889	R.	M., 6 mos.	Ileo-cæcal ?	12 hours	—	Tumour in left flank and in rectum	Manipulation first then injection of air and water with partial reduction. Tumour soon returned to original position. Reduction was then effected with water at 3 feet pressure	—	Recovery.
14	1889	R.	F., 5 mos.	Ileo-cæcal ? Ileo colic	2 days	2 days	Tumour in right flank on level of umbilicus under chloroform	Injection of 12 ounces of water with diminution of tumour; 5½ hours later tumour felt as before. Laparotomy reduction out of sight	Reduced bowel much congested and swollen. Vermiform healthy. Ileum was constricted at congested area, dilated above the constriction	Recovery.
15	1890	R.	M., 2 years	Ileo-cæcal	6 hours	—	Tumour in right flank. Rectum normal	Injection of air under chloroform; reduction with distinct gurgle	—	Recovery.
16	1890	D.	M., 11 years	Enteric	?	5 days	No tumour felt	Laparotomy by Mr. Horsley, at parents' request. Cause of obstruction had not been found	General peritonitis. Intussusception of ileum 4 feet above ileo-cæcal valve	Death during operation.

Twenty-five Cases of Acute Intussusception in Children from the Surgical Wards of University College Hospital.—Continued.

No.	Year.	Result.	Sex and Age.	Variety of Intussusception.	Duration of Symptoms before Injection	Duration of Symptoms before Operatn.	Abdominal and Rectal Examination.	Treatment.	Condition of Bowel.	Result or Cause of Death.
17	1891	D.	M., 4 mos.	Ileo-cæcal	3 days	4 days	Tumour in left iliac region and per rectum; fishy smell	Injection had been tried in the country on the third day and failed. On the fourth day brought to town in collapsed condition; no attempt at injection. Laparotomy two hours after admission. Excision of intussusception.* The intussuscipiens was already sloughing in two places and the intussusceptum was protruding through it. Operation by Mr. Barker.	The parts removed were gangrenous. They consisted of the lower couple of inches of ileum, caput coli, and vermiform	Death from collapse ten hours after operation.
18	1891	D.	M., 12 years	Jejunal	?	48 hours	Tumour in flank on right side, freely movable. Nothing felt per rectum	Laparotomy by Mr. Barker. Jejunal intussusception found irreducible. Excision of tumour.†	The intussusception was within 3 feet of the duodenum and its serous coats were adherent. It was 9 to 10 inches long	Death from collapse fourteen hours after operation.
19	1892	R.	M., 4 mos.	Ileo-cæcal	24 hours	28½ hours	Tumour under and parallel to right costal margin. No tumour per rectum	Injection of water failed, and two hours later laparotomy was performed by Mr. Godlee in right linea semilunaris. Reduction easy.	Intussusception not deeply strangulated.	Recovery.
20	1892	R.	M., 10 mos.	Ileo-cæcal	Within 12 hours	—	Tumour in left flank and protruding from the rectum for 3 ins.	Injection of air with Higginson's syringe	Prolapsed and swollen	Recovery
21	1892	D.	M., 5 years	Enteric, ending 6 ins. above the cæcum	No note	7 days	No note	Laparotomy by Mr. Horsley. Median. Intussusception could not be exposed at first. Distended coil of gut opened and emptied. Then intussusception was easily reduced	Intestine engaged was deeply congested and covered with lymph. Opening made in gut was 2 feet above strangulation. Gangrenous patch in strangulated part	Death the same day
22	1893	R.	F., 7 mos.	Enteric	36 hours	36 hours	Tumour in right hypochondrium, none in rectum	Injection and manipulation having failed, laparotomy by Mr. Barker. Enteric strangulation easily reduced by pressure from below	Five or 6 ins. of ileum prolapsed through ileocæcal valve; deeply congested but sound	Recovery
Private.	1889	D.	M., 16 mos.	Ileo-colic	24 hours	51 hours	Tumour in right hypochondrium	Injection 24 hours after onset, by Dr. Gee; again under chloroform 36 hours after by A. E. B. Then laparotomy by Mr. Barker 50 hours after onset	About 6 ins. of the ileum prolapsed through the ileo-cæcal valve, serous coats adherent in patches. Thrombosis of small mesenteric veins with commencing slough	Died 25 hours after operation of perforation at mesenteric border of gut

* *Vide Lancet*, January 9th, 1892. † *Vide Lancet*, January 9th, 1892.

‡ Since this table was compiled last summer, there have been two cases treated by abdominal section in University College Hospital before the end of the year 1893, one by Mr. Godlee and one by Mr. Pollard. Mr. Godlee tells me he found the bowel gangrenous and the patient was so collapsed that he did nothing more but closed the wound; the child died soon after. Mr. Pollard's case was a perfectly successful laparotomy though the intussusception was difficult to unravel; the child recovered.

median incision below the umbilicus. The actual opening of the abdominal muscles was less than 2 inches. The omentum which was in the way was pushed up, and the intestines were found moderately distended, but not reddened. The tumour was easily found, but was not so easily brought into view. The last foot or so of the ileum contrasted with the rest in that it was collapsed, and its serous coat was reddened. When the tumour was at last brought into view by hooking the first two fingers under it, it was seen to consist of cæcum, with 4 or 5 inches of ileum prolapsed through the ileo-cæcal valve. While squeezing with the fingers from below and holding the ileum, the intussusception suddenly ran free of the ileo-cæcal valve, and reduction was complete. The piece of collapsed ileum was probably that portion which lay within the colon when the tumour was at its greatest size; but only 4 to 6 inches had actually passed through the ileo-cæcal valve. This latter portion was quite collapsed, and of reddish-blue colour, with lines of deep injection.

The peritoneum was now sponged dry and the wound was closed in the usual manner with silk stitches passing through skin, muscle, and serous coat together. Great care had to be taken to avoid injury to the conical bladder the apex of which was under the lower angle of the incision. The lowest stitch just traversed a small portion of its muscular coat, but no harm resulted. The wound was dressed with dry salicylic wool firmly bandaged. During and after operation the child vomited a small quantity of brownish offensive but not fæcal matter. The operation up to the reduction of the intussusception occupied eleven and a-half minutes, the whole being completed within 26 minutes. There was considerable collapse after it and the patient was sick twice soon after being put to bed. Half a minim of tr. opii was given just after the operation and this dose was repeated soon after.

Up to 12 noon next day there was no sickness. Pulse 144, temperature 99.6. At 3 P.M., temperature 98; at 9 P.M., 99.6; pulse 108. At 3 30 the child was fed at the breast, the mother having been admitted with the baby. At 8 P.M. the patient vomited after being fed at the breast. The bowels then opened naturally, the motion being semisolid and dark but with no blood to the naked eye. After the 9th all opium was stopped and the child seemed to be going on well; only five ½-m doses had been given.

After this there is nothing to note except uninterrupted recovery. The stools soon became normal and regular. The wound was dressed under chloroform on the ninth day for the first time, all the stitches being removed. Union *per primam* had taken place. Some wool and collodion was applied, and over this a broad band of rubber plaster, going once and a-half round the abdomen. After the anæsthetic, m ½ tr. opii was given to keep the child quiet now that the stitches were out.

The child left the hospital on February 28th—that is, the fourteenth day after operation, having a sound wound, and to all appearance quite well. It returned a week later to be seen, and was still in excellent condition, as also when seen some weeks later.

The chief points of interest in this case appear to me to lie, first, in the fact that here we had an ileo-colic intussusception to deal with, which no amount of inflation or manipulation would be likely to reduce; next, that a certain amount of reduction had been effected by manipulation which could not be improved upon by injection. I venture to think that this is frequently the case, for I have seen instances in which reduction has been supposed to have resulted from manipulation or inflation and where all but the last or most essential part of the protrusion had been forced back undoubtedly. But it is just this last portion which it is most necessary to reduce and which offers the greatest difficulty.

In this case the mass was as hard as the kidney as I felt it between finger and thumb before opening the abdomen, and I am confident that nothing but abdominal section could have saved the child's life, otherwise the swollen œdematous protrusion would never have passed the ileo-cæcal valve.

I have now put upon record all the cases of intussusception in children which I have been called upon to treat—three females and four males. All were infants under 18 months, except one a boy of 4 years and one of 12 years of age. One was treated by repeated injection, and inflation alone, with apparent reduction each time until gangrene and collapse came on, with speedy death. Six were treated by laparotomy after injection had failed completely. Of these, three recovered perfectly, one aged 4 years, one 5 months, the last 7 months.

It is interesting to note that out of the six operated on, three at least could not possibly have been reduced by inflation or injection. For in one the intussusception was high up in the small intestine, and in the other two several inches of ileum were prolapsed through the ileo-cæcal valve. In all the seven it may be said, then, that injection failed, and in three it must have failed. In spite of this, laparotomy saved three out of the six operated on. But when we come to examine the causes of death in the three which died after operation, it is clear that the result was due in each case to the operation not having been done soon enough. In one of them when the abdomen was opened the intussuscipiens was sloughing largely, in two places forming wide perforations. In another the gut was not actually sloughing, but was rotten from strangulation and incapable of being reduced. In the third a small slough was in process of formation at the time of operation, which gave way a day later with fatal perforation. All these cases might have been saved by a somewhat earlier laparotomy; they could not have been saved by injection.

In addition to the cases now related I have collected all those of children treated for acute intussusception in the surgical wards of University College Hospital from the year 1877 to the end of 1893. These, with my own 7 (1 in private), form a list of 25 (*vide* footnote), cases all under 13 years of age. Of these, 13 recovered, 12 died. The treatment adopted in 19 was either manipulation (1) or injection of air or water (7), followed in case of failure by laparotomy (11). In 5 cases laparotomy was done without any previous attempts at reduction; 2 of these were of the enteric variety; 4 died, 1 recovered.

Of the 19 cases where injection and manipulation had been tried, followed by laparotomy where necessary (11), 7 died and 12 recovered. Of these 12 recoveries, 7 followed manipulation or injection alone, 5 followed laparotomy where these had failed. Of the 8 fatal cases, 7 deaths followed laparotomy, 1 followed repeated injection. Taken in the gross, there were therefore 17 laparotomies with 11 deaths, and 8 injections or manipulations alone with 1 death.

From all this it would appear that the practice at University College Hospital for many years past has been to try injection of air or water in all cases not recognised at once as desperate, and, when these means have failed, to proceed to laparotomy at once. By these measures 13 out of 25 cases have been saved, and probably a larger number would have recovered if the laparotomies in several cases had been done earlier.

Of course the majority of the recoveries are credited to the injection method, inasmuch as laparotomy was only resorted to when the latter had failed. In other words, abdominal section was only done in bad cases: indeed, in several cases the condition was desperate. In the face of this fact it is encouraging to note that out of 17 cases treated by laparotomy, 6 recovered, although several were in a very bad condition at the time of the operation, in some the bowel being actually gangrenous. If we subtract these cases from the list the proportion of recoveries is fairly good considering the gravity of the condition.

The conclusions, then, which seem deducible from a study of these and many other records appear to me to be as follows:

1. That in all cases of intussusception in children injection of water or manipulation should be at once resorted to *if the patient is seen within a few hours of the onset* of the strangulation.

2. That if these means fail after a fair trial, not too much prolonged, laparotomy should be at once done as the safest treatment.

3. That there is a certain proportion of cases among all the varieties of intussusception which no amount of injection will relieve, or in which injection would be dangerous, and these can only be dealt with by opening the abdomen.

THE MILROY LECTURES
ON
DARWINISM AND RACE PROGRESS.

Delivered before the Royal College of Physicians.

By JOHN BERRY HAYCRAFT, M.D., D.Sc., F.R.S.E.,
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Lecture I.—The Biological Position.

Before the simultaneous publication in 1858 by Darwin and Wallace of their law of natural selection, biologists believed in the Lamarckian view of heredity, a notable believer being our own Herbert Spencer. Lamarck would have accounted for the long neck of the giraffe by supposing that it was at first a short-necked quadruped, that it exercised its neck in browsing off the trees, that the neck elongated in consequence of this use, and that this effect, ever so slight, was transmitted, each generation of stretching accumulating until the present condition was established. In this Lamarckian view of heredity and racial change we have the two ideas; first, fresh characters may be acquired during an individual's lifetime, due to the action of environment; secondly, these are transmitted to the offspring, and produce in time marked racial change. Now the first of these ideas is certainly and admittedly true. The second idea—whether these changes are transmitted—is the rock upon which the Lamarckian boat founders.

The law of natural selection brought forward by Darwin and Wallace may be stated as follows. No two offspring of the same parent are quite the same; they vary often widely. Under the conditions in which they live, some of these offspring will, from the very fact that they differ from each other, have an advantage over the rest, and in the struggle for existence will run the better chance of carrying on the race and transmitting their inborn peculiarity.

Keeping to the case of the giraffe, the history of its development would be as follows: It was at one time advantageous, from the point of view of getting food, for the ancestral giraffe to browse upon trees, therefore those born with long necks and legs would have an advantage over the others, and would in greater numbers survive those with short legs and necks. These would have offspring the average of whose necks would be as long as their parents', but who would again vary, some having longer, others shorter necks. The ones with longer necks would again have an advantage, and produce most offspring, and so on.

Now, there are three ideas in this law of natural selection; first, that there are inborn variations among offspring, even of the same family; secondly, that these variations occurring in surrounding conditions, on the whole uniform and common to all of them, will start some with an advantage and others with a relative disadvantage, and that those with an advantage will, more of them, tend to produce offspring; thirdly, that the variation, inborn in this case and not acquired, will probably be transmitted.

Variations will be of advantage or disadvantage to their possessors, and in animals and plants, where there are no social props to the weak, the variations may, and do, determine survival. To give an idea of the keen competition of existence which we find among the lower animals, we have only to enumerate the number of the progeny produced by each pair, which is often prodigious. Knowing as we do that the number of individuals in a species remains virtually the same in a given district for long periods of time together, and that the room of the parents is just filled by a younger pair, all the excess of their progeny over and above this one pair must have succumbed in the great struggle.

The third idea in the law of natural selection—namely, that inborn variations are transmitted, is also a fact that is

universally admitted, not only among biologists of the present day, but also by those who trust only to their every-day experience. The law of natural selection is therefore fact, every bit of it, and no mere theoretical improvised fancy. The only question is, How far may this law be applied? Is there also a concomitant transmission of acquired inborn characters (Lamarck's view)? Darwin thought there was; he held that certain racial distinctions were due to the action of the environment of the parents, and the transmission of the change thus produced upon their offspring. In *The Variation of Animals and Plants under Domestication*, 1875, vol. ii, chap. xxvii, he enumerates some of these. They may be divided roughly into two classes—first, instinct and habit; second, results of use and disuse. Darwin believed that the tamed habits of dogs and horses, the tameness of the rabbit and other domestic animals, were due to the direct and transmitted effects of man's contact. He held that the large size of the leg and small size of the wing of the domestic, as compared with the wild, duck, are gradually acquired and transmitted by use and disuse. That he might picture to himself by means of material particles the views that he held of heredity, Darwin supposed that during their lifetime every cell of the parent disengages small living particles (gemmules), which find their way to, and are stored up in, the generative cells, ready to develop in the next generation into cells similar to those from which they came. This theory was actually framed to support those cases where Darwin supposed that acquired characters were transmitted.[1]

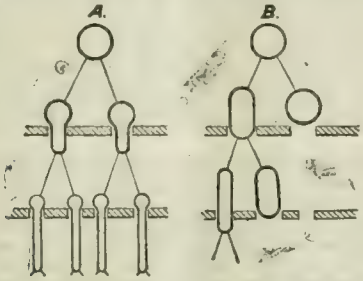


Fig. 1.—Diagram to illustrate (A) the transmission of acquired characters, (B) modification of type by natural selection. In A an individual of rounded proportions at the top of the diagram has two children. Environment is represented by a board with holes through which they must pass. In so doing they become thinner, transmit the thinness to their children, and so on. In B a man of rounded proportions has two sons, who vary, one being fat, the other thin. The fat son cannot get through the hole in the board, but the thin one does, has children who again vary, the thin ones having an advantage.

In this theory of pangenesis the gemmules in the body or somatic cells will be subject to such influences as affect the cells, and will naturally transmit any change to which they have been subjected to the offspring that they eventually build up. Darwin's view may be graphically represented by Fig. 2. Since Darwin's time most biologists have come to doubt whether there is any evidence that acquired characters are transmitted at all, and incline rather to view racial change as altogether due to inborn variations, some of which variations have an advantage over others. Darwin himself, as Huxley pointed out,[2] laid less weight on the influence of acquired habits in his later than in his earlier writings. It has been known for many years that every cell in the body, including the sperm cells or ova, are descended from a fertilised ovum. Of these cells of the body all obviously die except these sperm cells and ova which give rise to the next generation and so on. We have, therefore, a continuing chain of actual organic matter linking every living form with those that are most ancestral and remote, and from these chains all the so-called living individuals that have ever existed have, as it were, been thrown off. Many have emphasised this point—Owen, Haeckel, and others; but perhaps Francis Galton must be given much of the credit of clearly stating it, though similar views have more recently been popularised among biologists by Weismann. The "continuity of the germ plasm," the title by which this view is generally known, expresses the fact that germ substance continues in an unbroken line from generation to generation; a man is similar to his parents because he develops out of a similar plasm. The continuity of germ plasm (stirp of Galton), like Darwin's selection, is a fact, not a theory.

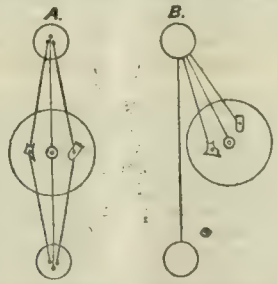


Fig. 2.—Diagram to illustrate (A) Darwin's theory of pangenesis, (B) the continuity of the germ plasm; (A) an ovum above full of gemmules (only three of which are represented) develops into an individual made up of cells, three of which are shown. These cells give off gemmules which collect and form the substance of the ovum of the next generation. One can see how the gemmules formed by the body cells will be influenced by any change in these. (B) An ovum gives rise, on the one hand, to body cells, and, on the other hand, to the substance of the ovum of the next generation. A change in the somatic cells does not influence the ovum.

[1] *Life and Letters*. First edition, vol. iii. p. 44.

Now, while Darwin's theory of pangenesis compelled one to believe that the effects of disuse and use, the action of acquired disease and mutilation must be transmitted by the gemmules contained in the parts so affected, the fact of the continuity of the germ plasm leaves the question of their transmission an open one still. We can imagine that the generative cells within our body are affected by what goes on in our other cells, or that they lie there unaffected, the lymph and blood being in fact the only channels of communication between the two. The continuity of the germ plasm does not compel us to accept either view.

The fact of the continuity of germ plasm was shortly and precisely stated by Galton in 1875, and by Weismann in his *Studies in the Theory of Descent* published in English in 1882, but since that time Weismann has speculated at great length upon what I may term the actual process of heredity. His essays, many of them, deal with facts capable of test and verification, and are of a value that it is impossible to overestimate.

In 1883, in his Essay upon Life and Death,[3] Weismann looked upon the germ plasm simply as the substance of the germinal cells, but since that time Weismann has left facts behind, and has elaborated the details of this germ plasm from his own fancy. To him it consists of ultimate living particles, to which he assigns various and specific purposes, and groups them at will, group within group, like nests of Chinese boxes. As new discoveries of facts are made by the histologist or embryologist these fancies have to be altered and extended, and his particles have to possess such and such fresh qualities. We cannot test his view, it does not assist us, for it merely refers the qualities we observe in men and animals to the properties of groups of chemical molecules where these qualities are equally without possibility of explanation, and still confront us; and, lastly, we have no reason for assuming that living matter is made up of living molecules, but rather the reverse.

Now, we may speak of a molecule of a gas or of incandescent iron, but we must hesitate before speaking of a molecule of an ordinary solid at ordinary temperature, and one would certainly, if an exact thinker, never dream of speaking of a molecule of wood or flesh or bone. The idea of molecule is a conception of an ultimate bit of a substance towards which experimental breaking may in actual experience partially reduce it. When, therefore, we translate this idea to the realms of biology where bodies are not made up of similar parts, it is obvious that we do this without warrant in face of our biological experience, and that we are thoughtlessly accepting a physical theory of gases and incandescent solids without appreciating the foundation upon which this theory rests. The fact of the matter is, we are in utter ignorance as to the ultimate constitution of any living matter; but, so far as

[2] *Life and Letters*, ii, p. 14.

[3] *Essays upon Heridity and Kindred Biological Problems*, Eng. Trans., 1889.

microscopic investigation goes, we learn that it has unlike, not like, parts.

How much can we explain of racial change by selection, and how much must we leave over to be explained by the transmission of acquired characters? Here we are dealing with definite issues which can be settled by observation and direct experiment, and which have been so far settled already as to enable us to state such a conclusion as will safely guide us in further inquiry.

Francis Galton,[4] as long ago as 1876, is most clear and concise as to this question. He says: "The conclusion to be drawn from the foregoing arguments is that we might almost reserve our belief that the structural cells can react on the sexual elements at all, and we may be confident that at the most they do so in a very faint degree; in other words, that acquired modifications are barely, if at all, inherited in the correct sense of the word." Thirteen years later,[5] during which period he had been a devoted investigator of the facts of heredity and an indefatigable collector of fresh facts, he expressed himself in precisely the same terms.

In 1882 August Weismann questioned whether there is as yet any proof that acquired characters are transmitted. He writes: "The theoretical conception of variation as a reaction of the organism to external influences has also not yet been experimentally shown to be correct. Our experiments are still too coarse as compared with the fine distinctions which separate one individual from another, and the difficulty of obtaining clear results is greatly increased by the circumstance that a portion of the individual deviation always depends upon heredity, so that it is frequently not only difficult but absolutely impossible to separate those which are inherited from those which are acquired." Since that time Weismann, in a series of important essays, indicating a profound knowledge not only of comparative morphology, but of the habits and modes of life of a vast number of animals and plants, has shown, first, that the cases which Darwin and others have assumed to be those of transmitted acquired characters, may reasonably be explained—most of them—by selection; and, secondly, that characters experimentally produced are, as a fact, not transmitted. The gradual increase, generation after generation, in the size of a useful limb, or the perfection of a valuable organ of sense, may readily be explained by selection alone. The fact that the limb or organ is of use to the race in its struggle will determine the survival of those born with the possibility of growing those serviceable parts, and these in their turn will produce others as favourably, and more favourably, structured than they are, and so on. In this case we may assume the survival of a useful variation, and are not compelled necessarily to assume that the used organ transmitted the effect of its usage on succeeding generations.

Many cases, indeed, exist of which no explanation can be given from the selective point of view, such, for instance, as the effect of climate upon the wool of sheep. In these cases, however, the information we possess is often of a slight nature, so that judgment can hardly be given at present, and all that we can say is that the more closely these cases are studied the greater is the number which suffer a ready explanation as having been brought into existence through selection. This being so, the direct evidence we possess that experimentally induced changes, such as the effects of mutilation, and compressions of various parts of the body, are in no cases transmitted, while we can vary an animal or plant, almost at will, by selective agencies, points strongly to selection as being the prime producer of racial change, while the direct action of the environment, and the transmission of its effects, are of little, if any, account. Mutilations practised upon male infants by Jews, and other Semitic races for thousands of years, have still always to be repeated, for the lost parts are reproduced as at the earliest periods of the race's history. Many breeds of dogs and sheep have been for many generations systematically docked, and yet the young are born with as long tails as those of other breeds. Chinese women have compressed their feet from times long back in their history, yet Chinese infants are not born with small feet. More curious still, as affecting an organ of paramount importance—the brain—a certain tribe of Indians artificially flatten their heads in early life, entirely changing not only the shape of the skull, but also that of the brain itself, and yet their children are born with rounded heads.

We are bound, then, to admit that the thousands of germinal cells lying in the body of the parent are, like other cells of the body, of slightly different constitution; they vary among themselves in size and constitution. They live and are kept alive in the organ where they lie; and the rest of the parent organisms may be mutilated, compressed, suffer change in parts from use or disuse, from climatic or other conditions, and the germ cells rest where they are unchanged. If they develop, the resulting individuals will be what the germs had it in their own nature to be, uninfluenced by changes induced in the body of the parent.

But the ovum may be affected, as all admit it to be, by changes in the blood. The environment is not therefore without action upon the germinal cells, inasmuch as the parent may be thrown by adverse conditions into unhealthy states of body, under which circumstances the tissues, including the germ cells, will all alike suffer from want of nutrition.

We may sum the whole subject up by saying that a constitutional, but not a purely local, disturbance may affect a germ cell. One man may use his arm, another his leg, and these members will hypertrophy in consequence. The voice may be trained, or skill in music may be acquired, or reasoning obtained during the lifetime of an individual without affecting the constitution of the body; while, on the other hand, starvation or bad food will impoverish the blood and the whole system, and good food and healthy exercise will enrich the blood and endow it with energy; whilst acquired zymotic disease will produce general as well as local symptoms. In the former cases the germ cells will be unaffected; in the latter they may suffer change, in common with other tissues, depending for their vitality as they all do upon the general well-being of the body. Both Galton and Weismann clearly draw the line that I have indicated; and when they state that the environmental changes produced in an individual are not transmitted, they positively exclude those cases where the environment may act directly through the blood upon the germinal cells.

Whereas the tendency is strongly in the direction of showing that variation cannot be acquired by the germ as the result of environmental changes of a *local* kind in the parent, and that all such apparent cases are explainable by selection, the evidence that variations can be acquired from constitutionally acquired parental changes is quite conclusive. Both among plants and animals the change from a better to a poorer food will in the individual lifetime diminish the size of the individual, affect the richness and quality of the blood and sap, and so modify the size of the germinal cells which depend for their growth and sustenance upon the blood or sap.

We cannot state that in no case does a local change produced by the environment, acting directly upon an organism, induce corresponding change in the germ cells within that organism. We can, however, affirm that while the evidence is here not sufficiently complete to convince a majority of naturalists, everyone is agreed that the environment by selection can do almost anything in the way of producing racial change.

Environment may therefore act upon a race in two different ways. In the first case it may give a preference to certain innate qualities of certain members of the race, and so determine the production of the race from these. We have also undeniable evidence that the environment can vary the size and general well-being of a race through the parental blood, and in the same way we shall see that poisons or micro-organisms introduced into the blood may cause qualitative changes in the germ cells which will appear in the individuals which develop from them as disease, or as predisposition to disease.

(To be continued.)

[4] *Journal of the Anthropological Institute*, vol. v, pp. 311-47.
[5] *Natural Inheritance*, 1889, p. 14.

ITALIAN DERMATOLOGICAL SOCIETY.—At a meeting of the leading dermatologists of Italy held in Rome on December 29th, 1893, the statutes of the new Dermatological Society were finally approved. Professor De Amicis was elected President and Professor Barduzzi Secretary.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

RETAINED PESSARY CAUSING STRANGULATION OF THE UTERUS.

On July 19th, 1893, I was asked by Mr. W. Bowes, of Aldington, Kent, to assist him in the treatment of a lady, aged 74, residing in London, to whom he had been summoned from the country, and who was suffering from a retained pessary. Taking an anæsthetic and instruments, I visited the patient. Her temperature was 101° F. and the pulse about 100. The abdomen just above the pubes was somewhat tender; the vagina also was tender, and was occupied by a slippery, smooth, hollow, sphere of wood, measuring 2½ inches in diameter, around which oozed a foul-smelling discharge.

It appeared that this pessary had been in the vagina for months, and that the lady herself, on attempting to remove it some three or four weeks before my visit by pulling at a tape attached to one of the poles of the pessary, had brought away a circular piece of wood—a polar zone, if one may so designate it—leaving a circular aperture nearly an inch wide, that communicated with the hollow interior of the wood. The pessary was now so placed that the opening was at the upper end of it, because I could nowhere with my finger detect the aperture, nor could I with my hand alone drag the pessary down. In this dilemma, with Mr. Bowes's assistance, I passed the blades of vulsellum forceps up opposite sides of the sphere, and when their points were opposite its equator I forced them into the wood. Applying traction I brought the pessary outside the vagina and then found that all the vaginal portion of the uterus had passed into its interior. With bone forceps I cracked the thin shell of wood into two equal parts by lines of cleavage running from pole to pole, whereupon the two separated hemispheres fell away from the enclosed uterus, which had been strangulated therein and was almost gangrenous. It was greatly swollen, of an ashy grey colour, and gave off a most offensive odour. The patient was able to bear the necessary manipulation without an anæsthetic. Frequent antiseptic vaginal douches were subsequently employed and rest in bed was enjoined. The local inflammation soon subsided, the uterus returned to its normal size, and after some three or four weeks complete recovery ensued.

The pessary was of an antiquated type, such as is rarely now seen; and the mishap which I have detailed would appear to be almost if not absolutely unique.

Dr. H. R. Spencer stated at the Harveian Society, when I described the case at a recent meeting, that nothing exactly similar is recorded in Dr. Neugebauer's paper in the *Archiv für Gynäkologie*, to which reference was made in a leading article entitled Dangers of Vaginal Pessaries, published in the British Medical Journal of May 27th, 1893.

Gloucester Place, Hyde Park, W. George Eastes, M.B.

A METHOD FOR OBTAINING HÆMIN CRYSTALS FROM BLOODSTAINS MIXED WITH RUST.

It is well know that hæmoglobin changes into hæmatin and a proteid body in the course of time, and this decomposition can be produced more quickly by the action of heat, acids, plenty of water, etc.; also, under favourable circumstances, it loses its iron and undergoes further changes.

Now hæmatin, in the presence of iron rust, cannot lose iron, so that it cannot undergo further changes, but it forms, as all are aware, a rather insoluble connection with it, hence iron rust may be regarded as a preservative agent, and it is only necessary to select a proper solvent for the hæmatin, and one which will have no action on iron rust.

A few days back I had occasion to examine some rust from a small crowbar. I found that the blue colour given by the guaiacum test was more intense if the rust was mixed with a little ammonium chloride before being treated with a weak alkaline solvent. This led me to believe that the presence of ammonium chloride favours the solution of hæmatin.

Ammonia is a solvent of hæmatin and hæmin; it does not act on iron rust, and it has the additional advantage of being easily expelled by gentle heat when its solvent action is no longer required.

Placing a portion of the suspected rust in a test tube, and adding a little powdered ammonium chloride, a little strong solution of ammonia was poured over it; the test tube was then tightly corked and shaken at frequent intervals; beyond the temperature of the room no other heat was used. After a few hours the whole was filtered to separate the rust; the filtrate was of a clear pale amber colour. A small quantity of this filtrate was placed on a slide with a particle of sodium chloride, and evaporated to dryness by gentle heat, a cover glass put on, and glacial acetic acid introduced beneath, again gently heated, and allowed to cool. In this manner the crystals represented in the drawing were obtained. I have tried portions of the filtrate in the above manner five separate times, and did obtain a number of crystals every time.



Viewed with a polarisation apparatus attached to microscope and ⅛ objective. Obtained by method described. The drawing does not show the brighter colour of the crystals, but is accurate as to size and appearance.

The rust is from a small crowbar connected with the Colchester fire and murder case, so that it could not have had blood upon it without my knowledge for fifty days prior to my examination of it by this method.

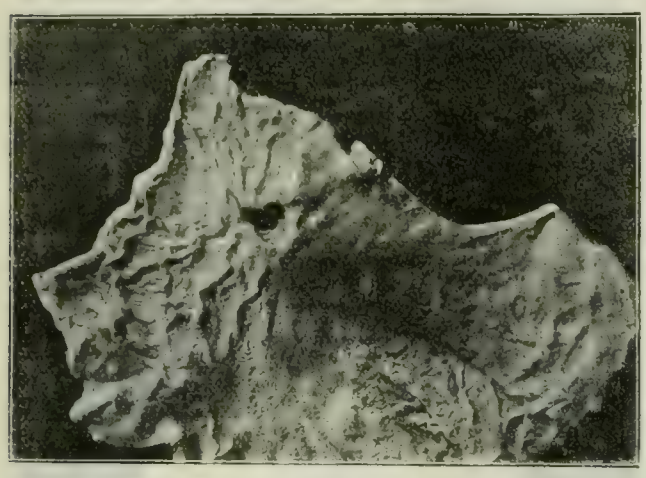
Instead of ammonium chloride sodium chloride may be used; the filtrate then obtained is of a darker amber colour. It is only necessary carefully to evaporate a drop of this, cover with a cover glass, and proceed as before. The crystals thus obtained are much longer and more easily distinguished.

Colchester. Jonathan Becker.

A CASE OF GASTRIC ULCER.

F. L., aged 21, a domestic servant, whose family history was unimportant except that there was phthisis on the mother's side, complained suddenly one afternoon of pain all over the abdomen. She was treated by friends with poultices, etc., and a dose of castor oil. At 10 P.M. she was left to sleep by herself as she was much easier. Next morning she was discovered dead in bed. No medical man was called in. On *post-mortem* examination, there was a cachectic hue of face but no apparent wasting of the body, which was well developed. The heart was normal: both lungs were adherent to the pleuræ and shrunken: the abdomen was filled with an offensive thin fluid of a yellowish colour (liquid food): the

liver was anæmic, enlarged, and adherent to the diaphragm: the stomach was empty and thickened, and showed an ulcerated perforation on its anterior surface, nearer the



pyloric than the cardiac end, and close to the lesser curvature. The condition of the other organs was fairly normal.

Remarks.—The case is of interest from the fact that the patient, previous to the sudden attack of pain, had never any occasion to consult a medical man, and only complained very slightly to her fellow servants of indigestion. There was no history of vomiting or hæmatemesis, and to the day of her death she carried on her duties in the house. Her greatest complaint seemed to be a shortness of breath going upstairs. The accompanying photograph shows the ulcer as viewed from the inside, and gives very clearly the thickened condition of the surrounding stomach wall. It is difficult to conceive how such a pathological condition could exist without more symptoms.

G. Fortescue Webb, M.R.C.S., L.S.A.
Dawlish. C. Newton Lovely, M.B., B.S.Durh.

REPORTS

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

STATION HOSPITAL, SECUNDERABAD.

COMPOUND COMMINUTED GUNSHOT WOUND OF THE UPPER THIGH, WITH COMPLICATIONS.

(By Surgeon-Major F. P. Nichols, M.B.Cantab., A.M.S.)

It is not every day that a man recovers with a good leg from a comminuted gunshot wound of the femur, and when that condition is complicated with the passage transversely through the pelvis of a portion of the bullet, the case becomes, I think, of sufficient interest for record. These considerations, and a wish to bring forward more prominently a method of treatment which seems peculiarly adapted to the military services, induce me to report the following case:

On August 22nd, 1892, Private H. was accidentally shot on the rifle range at Secunderabad, from the 200 yards butt, with a bullet from a Martini-Henri rifle. He was standing sideways to the target, and the bullet entered the outer side of the left thigh just below the great trochanter, and made its exit in the middle of the left gluteal fold, smashing the femur in its course. A piece of bullet, weighing 260 grains, was found lying in his shirt opposite the wound of exit. The man, who suffered very little from shock, and was quite sensible, was taken at once to the Station Hospital, where, under chloroform, the injury was found to be very extensive. After enlarging the openings, the fingers could be easily inserted between the ends of the broken femur, the space being occupied with clot and fragments of bone. No trace of the rest of the bullet could be found.

It was decided to make an effort to save the leg; and it was therefore placed on a McIntyre's splint, with a large drainage tube from side to side. The position of the wound was such that both this and a long interrupted splint were abandoned in favour of a stretcher, which was adapted in the following manner, and to which I would draw special attention. A W. O. pattern stretcher was made without rollers, and with fixed traverses. A hole about six inches square was cut in the canvas from the pole inwards, large enough to enable both wounds to be seen from below, and defæcation to be accomplished with ease. For dressing purposes this was raised on the shoulders of four men, and after dressing (which consisted only of irrigation with iodine water), it was merely laid on a fracture bed, with interrupted mattresses, one of the mattresses being replaced by a pad of absorbent cotton wool. By arranging pillows and blankets under and between the poles pressure could be exactly regulated, and the man passed three months perfectly comfortably, only being twice raised from the stretcher—once for an extra cleaning, and once to have the canvas (which had given way) repaired. Extension was kept up all through by weight and pulley.

The course of the injury requires a few comments. Bony union was perfect on the ninety-first day. He was put on a Thomas's splint on the one hundred and seventeenth day. Both wounds were healed perfectly on the one hundred and thirty-fifth day; within five months he was walking about with a stick, having only a two-inch shortening.

From the day of his accident he had complained of pain over his right trochanter, where there was tenderness and bruising (put down to his fall), and for the first fortnight he was unable to pass his urine, which was readily drawn by catheter, and was of a natural appearance. On the twenty-fifth day, however, I found an abscess pointing on the inner side of the right thigh. It contained an ounce of foul pus, and extended towards the perineum; on further examination I found a hard lump just below the right trochanter. I at once cut down on it, and extracted a piece of bullet, weighing 120 grains, from beneath the fascia. The wound healed under one dressing, and the abscess, which did not appear to be connected with the bullet, pursued a satisfactory course.

These three facts—his temporary inability to pass water; the abscess running towards the perineum; and the piece of lead cut out from the right thigh—make it certain that part of the bullet passed through the perineum, without damaging any of the delicate organs contained in it. One hundred and ten grains of lead are still unaccounted for.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

W. S. Church, M.A., M.D., F.R.C.P., Vice-President, in the Chair.

Tuesday, February 13th, 1894.

Nerve Stretching and Splitting in Localised Interstitial Neuritis, Leprous and Otherwise.

Dr. Kenneth McLeod read this paper. In 1877 the author proposed nerve stretching in cases of anæsthetic leprosy as a means of liberating the nerve tubules from the destructive pressure exercised by the organised neoplasm of leprous neuritis. The operation had been performed in over 250 cases by Lawrie, Downes, Neve, Wallace, Rake, and others. In a large proportion of these cases pain had been assuaged, sensation restored, muscular power improved, eruptions cured, ulceration healed, and the general nutrition of limbs greatly ameliorated. In many cases these effects had been permanent. In 1880 the author had occasion to lay open a sinus which occupied the interior of the ulnar nerve for a distance of 4 inches. The indurated nerve was split in two and stretched. Great benefit followed the operation as regards sensation, motion, and nutrition, which was observed

to be permanent and progressive for a period of ten years. Since then longitudinal splitting had been practised in eight recorded cases, in two of which signal success was obtained, in four decided relief, and in two cases of multiple leprous neuritis no improvement occurred. The circumstances connected with leprous neuritis which countenanced operation were: 1. The interstitial character of the inflammation. 2. The limitation of the lesion as regards both the length and thickness of the nerve. 3. The site of the lesion, which usually attacked superficial nerves in places where they were easy of access. 4. The pathological results of the lesion. 5. The evidence in some cases of a tendency to limitation of the lesion in time and an effort towards resolution. 6. Indications of existing tension and pressure. 7. The progressive character of the malady in intensity and area. The constitutional and inevitably fatal nature of the disease was, on the other hand, a discouragement, which did not obtain in cases of non-leprous neuritis: these were not uncommon, and in them, other measures failing, operation was more justifiable and promising. The facts and considerations adduced seemed to the author to support the following conclusions: 1. The operation of nerve stretching has been followed by decided relief in a large proportion of cases of leprous neuritis which have been subjected to this method of treatment. 2. The benefits conferred have consisted in the relief of suffering (pain, tingling, etc.), the restoration of sensibility, the return of muscular power, the healing of ulcers, and general improvement in the nutrition of the affected parts. These benefits have speedily followed the operation, and in a considerable proportion of cases have been sustained and progressive. In many instances repetition of the operation has been resorted to with success. 3. Additional knowledge is desirable regarding the precise conditions under which recourse to the operation is likely to be advantageous, more especially with reference to the limitation of the local lesion and the stage of the malady. 4. The relief obtained by the proceeding appears to depend on the removal of pressure and tension on nerve fibres caused by the products of the inflammatory disease which has taken place in the ensheathing connective tissue of the trunk. 5. When these products have undergone organisation, and the enveloping material has become sclerosed, longitudinal incision of the sheath followed by manipulation and stretching gives reasonable promise of more complete relief—resolution or even restoration—than stretching alone. 6. This process of splitting sclerosed nerve trunks has been attended with success in a sufficient number of cases to render further trial justifiable and desirable. 7. In cases of non-leprous localised neuritis these procedures are more likely to be followed by radical and permanent improvement than in cases of anæsthetic leprosy. 8. In no instance has either the stretching or the splitting of nerves been productive of any inconvenience or harm.

Mr. Godlee asked if stretching or splitting had been tried in combination or separately.

Dr. McLeod stated that in only eight cases had splitting been tried, and in all of these the nerve had been manipulated as well in order to free it from surrounding structures, so these cases might be considered as a combination of the methods. In all the other cases stretching alone had been employed.

Dr. Thin said that during his investigations into the histological changes in nerves in leprous subjects he had been much struck by the remarkable connective tissue changes present. In affections of the nerves in leprosy, what happened was first a deposit of cells containing leprosy bacilli in the nerve bundle, and later a growth of ordinary connective tissue, which finally contracted upon and destroyed the nerve tubes. In late stages also no leprosy bacilli could be found. From the success which followed the operations mentioned by the author, it was quite clear that there must be a new growth of nerves, and the question was: In what way did the operation act so as to render this possible? He would suggest the following hypothesis: that the first effect of the operation was to cause an effusion containing numerous leucocytes, which absorbed and removed the pathogenic organisms. After their removal the progress of the disease would be stayed, and it would then be possible for the nerves to grow downwards again and become functionally active. It was well known that in some individuals leprosy bacilli penetrated as far as the nerves, but never succeeded in infecting the rest of the organism. These individuals had undoubtedly a certain power of resistance to the leprosy bacillus, which, according to modern pathological teaching, was centred in the leucocytes. If then these were set free in great numbers, it was reasonable to suppose that they could effect a clearance of the bacilli, and sweep them away as it were. Leprosy bacilli were known to penetrate into the nerve bundles from the surface of the body. He mentioned a case of leprosy which was seen at a very early stage of the disease, in which there was a small discoloured anæsthetic patch of skin on the back. After vigorous treatment with pyrogallic ointment this patch regained sensation, and returned to its normal condition. Later some small white spots of anæsthetic leprosy appeared on the thighs, and these, under similar treatment, completely recovered; so it appeared that it was possible to kill the bacilli by reagents applied to the surface, and that they were thus prevented from penetrating and becoming fixed in the nerve sheaths. This led, he thought, to the point that if the disease was detected in the earliest stages it might be possible to stop it before the infective process had penetrated beneath the surface. Mr. R. W. Parker had some eight or ten years ago, at Dr. Radcliffe Crocker's request, stretched nerves in a boy the subject of leprosy, but the result had not been favourable.

Dr. McLeod, in reply, agreed with Dr. Thin that there must be a new growth of nerve tubes, and referred to those cases mentioned in his paper in which the ulnar nerves had given way whilst being stretched, but that sensation had afterwards been regained. He also referred to a case related by Dr. Bomford, who had stretched both the ulnar nerves: one had snapped during the stretching, but there was ultimately recovery of sensation through this as well as through the other nerve.

Intussusception of the Large Intestine, due to a Papillomatous Growth.

Mr. Bryant related two cases. Case I was that of a lady, aged 84, under the care of Dr. J. Mackern for intussusception. When seen by Mr. Bryant in October, 1886, the intussusception filled the rectum, and a papillomatous growth was found attached to the orifice of the intussusceptum. The growth was drawn down, ligatured at its base, and removed, and the intussusception pushed up by the hand introduced into the rectum nearly up to the elbow, when the bowel rushed away from the hand. The lady subsequently rapidly recovered. Case II was that of a lady, aged 50, under the care of Dr. Richardson, of Putney. She had been ailing for years from bowel trouble. The intussusception was discovered by Dr. Richardson in August, 1893, and when Mr. Bryant saw her the nature of the case was clear, and a papillomatous growth was found attached to the orifice of the intussusceptum, as in the former case. The growth was drawn down, ligatured at its base in three parts, and cut off, and the intussusception reduced by the introduction of the hand into the rectum above the wrist, the bowel at this distance disappearing. The lady rapidly recovered. Mr. Bryant pointed out the connection between prolapse of the bowel at the anus and intussusception, and how both conditions were due to local irritation, either of a temporary or more permanent nature. In children the former condition was most common. In adults the latter was to be expected and looked for. He illustrated the subject further by means of preparations brought from the museum of Guy's Hospital, three of which were examples of intussusception, due in two to the presence of polypi—in one of the jejunum, and in the other of the lower small intestine; whilst the third case was due to the existence of an inverted diverticulum of the ileum, which acted like a polypus. The three other preparations of intussusception were due to the presence of cancerous growths: all were of the large intestine. In the two cases related, the cause of the intussusception was papillomatous; and the author expressed an opinion that those growths were not infrequent in the large intestine and rectum, and that in all cases of intussusception in adults they were to be looked for. He expressed a hope that the means which in his hands had proved so successful would be applied to future cases of intussusception in adult females which had made their way

into the rectum, whether due to the presence of a growth or some unknown cause. In many cases, he admitted, it was more than probable that success would not follow, but in many he believed it would. He had found little difficulty in introducing his hand—which measured when closed for introduction 9¼ inches—into the rectum after he had forcibly dilated the anus, and in only one case out of about a dozen in which he had made the attempt was there any subsequent troublesome want of control in the anal sphincter. A steady alternating half-screwing movement with moderate pressure had effected the desired purpose. Great violence must do harm. He had never succeeded in passing his hand into the rectum of a male patient. He in conclusion strongly urged the adoption of the practice illustrated by his cases upon the attention of surgeons.

Dr. MCLEOD stated that in the East, in cases of chronic dysentery in males, it was not very uncommon to get an enormous prolapse of the rectum. In such cases the anus and rectum were so stretched that it was quite possible to get the hand well up the gut. He related a case of a young man with very aggravated prolapse of the large bowel, in which, after trying various methods of keeping it in place unsuccessfully, he finally passed his right hand and part of his forearm through the anus until he could feel the fingers of this hand with those of the other through the abdominal and gut walls. He then transfixed the gut through the abdominal wall, and finally sutured it to the abdominal wall in the neighbourhood of the left anterior iliac spine. The prolapse of the bowel was completely cured, though some weakness of the sphincter ani persisted.

Mr. GODLEE suggested that, in cases of the kind described, other methods, such as injecting water or air, might be tried. He asked Mr. Bryant if he did not consider that there might be some risk in introducing the hand into the bowel. He congratulated Mr. Bryant on having come across two cases of polypus at the ages mentioned, as malignant disease would be more probable at that age.

Mr. BRYANT agreed that the hand should not be introduced unless absolutely necessary. In the two cases he had related it was the only practicable way. In the first case he would not have thought it right to keep an old lady so long a time under the anæsthetic as would have been necessary to get the injection apparatus ready, and, after the satisfactory experience of the first case, the trial naturally followed in the second. He had occasionally attempted to introduce his hand into the male rectum, but had always desisted before effecting his purpose, as he deemed that the force necessary for its insertion would not have been justifiable. He did not consider papillomata so very rare, as he had seen a good many cases. In cancer there was not such extensive prolapse as with papillomata.

CLINICAL SOCIETY OF LONDON.

J. W. HULKE, F.R.C.S., F.R.S., President, in the Chair.

Friday, February 9th, 1894.

NEPHRECTOMY FOR MALIGNANT TUMOUR IN AN INFANT.

MR. BLAND SUTTON, in opening the discussion of Mr. Malcolm's case described at the previous meeting, said sarcomata in children were characterised by large spindle cells, transversely striated, resembling voluntary muscular fibres, or by cubical epithelium arranged as tubules or solid columns, especially in sarcomata arising in glands. Nothing in the histology of these tumours enabled one to distinguish between malignancy and non-malignancy. Cases of both kinds of structure, in which operation was survived for eighteen and fourteen months respectively, had been recorded; the suggestion, therefore, that non-recurrence of the tumour in Mr. Malcolm's case was due to its histological structure fell to the ground. Moreover, these other tumours had been removed by simple enucleation out of the capsule, so that the removal of the capsule as an explanation of the immunity in the author's case must also be discarded. He considered risk was greatly increased when the capsule was also removed. He objected to the bringing of the ureter outside, as he would to similar dealing with a tied Fallopian tube, and thought the tied ureter might be left to take care of itself. Sarcomata in children were painless, and hardly gave rise to inconvenience. They threatened life, indeed, but the chances of prolonging life by their removal were so remote, and the risks of operation so great that he thought such tumours had best be left alone.

Mr. DORAN referred to a paper read by Dr. Spencer before the Obstetrical Society, giving the results of examination of stillborn infants, or of infants that died early from organic defect. Hæmorrhage into solid viscera was frequently found, and in 38 out of 120 cases examined the hæmorrhage was around the kidneys; it was often intrauterine, and, if so, might it not be the origin of sarcomatous and malignant growths? He had seen Mr. Malcolm's patient, and favoured the operation, and thought the end had justified the means.

Mr. TARGETT said that sections had only been made from one side of the growth, and these showed it to be largely composed of tubules.

The PRESIDENT alluded to a case of tumour of the testicle, which showed structures closely simulating striped muscular fibre.

Mr. MALCOLM, in reply, said he did not believe the removal of the capsule added much to the risk of the operation. The end of the Fallopian tube was surrounded by peritoneum which readily underwent repair; whereas the end of the ureter was extraperitoneal.

MULTIPLE EPITHELIOMATOUS GROWTHS DEVELOPING IN PSORIASIS.

Mr. ARBUTHNOT LANE read notes of this case. The patient was a man, aged 60, and had for thirty years been treated with arsenic (Fowler's solution) for psoriasis. He had on the back of his forearm an ulcerating epithelioma nearly 2 inches in diameter. The ulcer was removed in April, 1892. At that time he was free from eruption. In March, 1893, three separate epithelial growths were found on the scrotum and perineum. At this time the man was covered with the eruption; he was directed to give up arsenic. In December, 1893, two other raised plaques were found in the scrotum. They were cut out and found to be small epitheliomata. Again on January 22nd, 1894, two more typical little epitheliomata were removed from the scrotum. This patient had eleven separate foci of malignant growth, four on the forearm, and seven on the scrotum and perineum, and in only one of these, namely, one by the anus, was there any suspicion of the growth having taken place in a patch of psoriasis. There was no reason to suppose that the formation of these growths would cease, and they must be looked for and removed as they appeared.

Mr. HUTCHINSON said that in cases of the kind he had found corn-like indurations forming in the palms and soles, indicating that the epitheliomatous process was setting in. He always left off the arsenic as soon as these disturbances appeared.

The PRESIDENT had inquired amongst workers in the arsenic mines of Cornwall as to the occurrence of such growths amongst them, but had found none, though the local irritation of the arsenic was severe. He had seen multiple epithelioma start from a simple wart.

Mr. LANE, in reply, said the first growth appeared in apparently healthy skin.

GENERAL ACUTE SUPPURATIVE PERITONITIS DUE TO APPENDICITIS.

Mr. ARBUTHNOT LANE read notes of a case of this kind in a youth, aged 18, under the care of Dr. Shute, of Northfleet. The patient had had two or three previous attacks of acute abdominal pain. On opening the abdomen all the viscera were seen to be intensely injected, to move freely upon one another, and to be covered with a thin layer of pus, which was most obvious where the viscera came into apposition. In the right iliac fossa the appendix was found about as large as a thumb, intensely hard and congested, and forming part of a wall of a localised abscess cavity, with adjacent viscera. General peritonitis had resulted from rupture of this abscess cavity. The appendix was removed. It was thought advisable not to wash out the peritoneal cavity, nor to introduce drainage tubes or tampons of gauze, as they would add to the patient's risks, but to close the wound, to keep the patient under morphine, and to feed by the rectum. He improved slowly but steadily after the operation. The operation could have had no beneficial effect upon the existing

peritonitis. That the removal of the intensely-inflamed appendix was most advantageous to the patient was obvious, as his improvement followed almost at once upon its removal. The operation also freed him from risk of subsequent attacks.

After some remarks from Mr. Malcolm, Mr. Barker said he had operated in two such cases without drainage, and both recovered. He thought the drainage might be dispensed with in many cases, though not in all, if all the pus possible were drawn off, and the remainder left for absorption. He had flushed in both his cases.

Remarks were also made by Mr. Howard Marsh and Mr. Waterhouse; and Mr. Lane replied.

Fungating Growth of Penis (Epithelioma?).

Mr. John R. Lunn described a case of this nature in a man, aged 31. There were unhealthy granulations all round the glans, with a large raw granulating surface on the dorsum of the penis near the root, and several small nodules on the scrotum. Some nodules were breaking down, leaving painful ulcers; there were doubtful amygdaloid glands in both groins. The granulations on the glans were curetted under an anæsthetic several times, but did not improve much, and the ulcers spread at their edges. Finally the penis was amputated. Mr. Targett reported that the extremity of the organ was converted into an oval lobulated tumour, 2 inches in its chief diameters. The integuments at the margins were raised and undermined, and near the base of the tumour several white tubercles were seen protruding through the skin. Sections were composed of cells and large nuclei and capillary vessels, as in granulating tissue, but sections from the inguinal glands contained suspicious nodules of epithelial cells. The sections showed no evidence of tubercle.

Mr. Hutchinson had seen the case, and was still inclined to consider it syphilitic.

Mr. Gould considered the granulations analogous to fungating tertiary sores of the leg, which were very resistant to antisyphilitic remedies.

The President referred to a case of fungating sore on the instep, for which the leg was amputated. Afterwards the patient developed a swelling of the forearm, which discharged gummatous masses, and died with similar disease near the hip.

Mr. Lunn, in reply, said the diagnosis of hard chancre was confirmed by a doctor.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Wednesday, February 7th, 1894.

T. H. Clouston, M.D., President, in the Chair.

Intracranial Surgery.

Professor Annandale discussed: 1. *Exploratory or Diagnostic Procedures.* He held that when there were (*a*) signs of general brain pressure, or (*b*) great pain in the head an exploratory opening was justifiable. The history often gave some help; it might give some account of injury or the existence or probable existence of syphilis. 2. *Intra-inflammation and Suppuration.* (*a*) *Traumatic:* Any injury might lead to inflammation and suppuration. Injury might be diffuse or circumscribed; when localised symptoms were present operate at once; if general signs only exist it was better to watch carefully for a time; in all cases of doubt explore. (*b*) *Middle-ear Disease:* (1) Patients so suffering were liable to certain risks with which all were familiar; (2) these risks might involve suppuration extending to the mastoid or even to the cerebral sinuses; (3) the temporo-sphenoidal lobe was most commonly first affected, the rest of the cerebellum, and then the cerebellum; (4) localised ear symptoms were not usually present; (5) incision should be made at the point of suggestion. Two illustrative cases were related. (*c*) *Idiopathic:* The general constitutional state might be one of tuberculosis, or the brain mischief might be secondary to other constitutional states. If the symptoms were local operate at once, if general at some carefully considered point or points. With regard to abscesses in the brain, one had to note that (1) they were most common in the white matter; (2) between bone and dura mater; (3) they might exist some time without giving rise to any symptoms; (4) they might be circumscribed or not. 3. *Hæmorrhage.* (*a*) *Traumatic:* The symptoms depended on the seat and the amount of the hæmorrhage. If they were localised, by trephining one sometimes came on a localised clot; if they were general, an opening might remove intracranial pressure and save life. The opening should be made at the seat of injury, and if nothing were found there, then at the opposite point of the head. Even if the base of the skull were injured, one should trephine, inasmuch as a clot might so be removed, and if not, at least the amount of cerebro-spinal fluid could be diminished. (*b*) *Non-Traumatic Hæmorrhage:* Rupture was generally of the anterior, middle, or posterior cerebral artery. If there were localised symptoms trephine at once; and if general, by trephining pressure would be relieved. If no guiding signs were present, the opening should be made at a point where there was little danger of injuring the great vessels. 4. *Epilepsy.* (*a*) *Traumatic:* (1) Such cases were due chiefly to irritation of bone; (2) chronic inflammatory thickening, or bony spicules; (3) irritation from suppuration; (4) from extravasation of blood; (5) foreign bodies. In some cases a history of accident could be got, and with it localised symptoms. In all cases of traumatic epilepsy secondary changes in the brain tissue were apt to supervene. (*b*) *Syphilitic:* If not treated such cases gradually got worse, and unless there were definite local symptoms operation was not advisable. (*c*) *Developmental and Idiopathic:* Such cases fell under these groups: (1) Traumatic; (2) inflammatory conditions; (3) some arrest of development; (4) cysts in connection with Nos. 1 and 2. Epilepsy was common in all these groups. If the brain tissue were permanently injured, operation was not of much value. If no diagnosis could be arrived at, one ought to explore. Epileptic seizures were often lessened in number after such operations. Idiopathic epilepsy in adults might arise from any brain disease. Some of these cases might in reality be traumatic, though no history could be got, and no obvious signs existed. Even if local signs or symptoms were present in idiopathic epilepsy, operative procedure was not always productive of good results. 5. *Intracranial Tumours:* The important points here were—(1) The nature of the tumour, (2) pressure, (3) hæmorrhage. The exact nature of the tumour was not always easily made out. The prominent symptoms were pain, vomiting, optic neuritis, and in some cases epilepsy. Experience had proved—(1) That there was in certain cases absolute uncertainty, (2) the tumour and its exact relations called for trephining, (3) to determine if it could be removed; then success was assured. Again, if only general symptoms existed, exploratory incision might be made, and thus might give even permanent relief. Effusion and hæmorrhage were certainly relieved by operation. 6. *Microcephalus and Hydrocephalus:* Fair success was obtained in the cases of microcephalus, but operative procedure in hydrocephalus was very unsatisfactory, perhaps because it was generally deferred till too late. 7. *Mental Conditions.* (*a*) *Traumatic:* (1) Two per cent. of mental cases were the result of injury, and might show immediately; (2) mania and dementia, with or without suicidal or homicidal tendencies were most common. The proper line was to open freely, explore, and remove chips or spicules of bone, cysts, etc. (*b*) *General Paralysis:* Serious changes took place sooner or later in the substance of the brain, but exploratory incisions might be of use. (*c*) *General Insanity:* Operative procedure could not be suggested unless there were very definite local symptoms.

Professor T. Grainger Stewart, after relating some cases that had come under his own care, summed up our experience as follows: 1. With proper antiseptic precautions, operative procedure was safe. 2. Operations at the seat of injury were often followed by excellent results. 3. In every case where there was evidence of localised lesion we were bound to have surgical help. 4. In cases where there was evidence of intracranial pressure we were fully warranted in trephining to relieve suffering.

Dr. McBride, speaking of intracranial surgery in relation to ear disease, said the cases most frequently grouped themselves round meningitis, sinus phlebitis, or hæmorrhage. Evidence of present or past ear disease might not be got. Otitis media with bulged membrane was suggestive. Acute middle ear disease following influenza might give rise to symptoms of intracranial mischief, and yet all these passed

off without interference. If the case were of a more serious type great pain existed, and there might be tenderness on external examination, perforation might be found, and it was supposed that a small perforation was more dangerous than a large one. The malleus might be largely exposed. When danger was threatened from an otorrhœa, the discharge often lessened or ceased. If intracranial disease resulted from ear disease there might be local tenderness or external swelling. If deep-seated pain in the ear with rigors existed, then swelling outside was rather a favourable sign than otherwise. The pain might be followed by vomiting, etc. The question of meningitis *versus* local disease had then to be considered.

Dr. GEORGE BERRY spoke of intracranial surgery in relation to eye diseases, injuries, or operations. In most such cases meningitis was set up. Optic neuritis was common with tumours, more rare with abscess, and still more rare in traumatism. But in traumatic cases there was often paralysis of accommodation, and therefore disturbance of sight.

Dr. JOSEPH BELL's experience in cerebral and cerebellar abscess was not very satisfactory. The pulse and temperature were the most satisfactory guides. As a rule operation was resorted to too late.

Dr. J. CARMICHAEL spoke of his experience with reference to children.

Dr. Dow (Dunfermline) and Dr. ANDREW SMART also took part in the discussion.

Harveian—*Feb. 1st*—Mr. GEORGE EASTES, President, in the chair.—The PRESIDENT read notes of a case which is published at p. 354.—Dr. GOW read a paper on eight cases of vaginal hysterectomy for cancer. All the patients recovered from the operation, and were able to return to their household duties, and five of them were known to be alive at the present time. Six of the patients were suffering from carcinoma of the cervical canal, one from carcinoma of the body of the uterus, and one from sarcoma of the body of the uterus. Of the eight patients, two had died from recurrence within twelve months of the operation, one had been lost sight of, one had remained free for two years and eleven months, and one for twelve and a-half months. The two last-mentioned patients were both well at the time of reading the paper. The three remaining patients had been operated on during the last twelve months, and therefore sufficient time had not elapsed to allow conclusions to be drawn as to the ultimate result. He upheld the use of silk ligatures in preference to clamps, as being the safer method of securing the broad ligaments. He did not think it was necessary to make any attempt to close the wound in the vaginal vault or to stitch the peritoneum to the vagina. After removal of the uterus a long strip of iodoform gauze should be introduced into the vagina and left undisturbed for from five to seven days. He advocated complete extirpation of the uterus in cases of cancer involving the whole length of the cervical canal as well as in cases of malignant disease of the uterine body. In cases of squamous-celled epithelioma of the vaginal portion, or of carcinoma involving the lowest part only, of the mucous membrane of the cervical canal, he believed supravaginal amputation of the cervix to be indicated. Extensive operations were justifiable only when it appeared probable that all the disease could be removed.—Mr. F. BOWREMAN JESSETT said he had now done twenty cases with one death. He agreed with Dr. Gow that silk ligatures were preferable to catgut; if the ligatures applied to the ovarian arteries were cut short they became encysted in the same manner as the ligature round an ovarian pedicle, while the outer ligatures usually came away in about ten days to a fortnight—sometimes later. He always introduced a drainage tube for the first twenty-four or forty-eight hours, and packed the vagina with iodoform gauze.—Dr. HERBERT SPENCER said that, in his opinion, catgut was preferable to silk for ligature of the broad ligament in vaginal operations. The removal of the ovaries in vaginal hysterectomy was not always necessary, and was followed in some cases by the total loss of sexual passion, and by other troubles. The diagnosis of cancer by the microscope was sometimes extremely difficult. In considering the relative mortality of vaginal hysterectomy and supravaginal amputation—which statistics still showed to be in favour of the latter—he pointed out that, after hysterectomy, small intestine often adhered to the scar and became rapidly involved when recurrence took place, and death—from intestinal obstruction—occurred much sooner than it would have done had the body of the uterus been left.—Dr. HERMAN agreed with Dr. Gow both as to the diminished mortality of vaginal hysterectomy, as compared with that at the time of the publications to which he had alluded, and as to the advantages of hysterectomy over supravaginal amputation of the cervix for cases of cancer beginning in the cervical canal. For cancer beginning in the vaginal portion amputation of the cervix was enough.—Dr. HANDFIELD-JONES and Dr. ROUTH also took part in the discussion.—Specimens were exhibited by Mr. BOWREMAN JESSETT.

Bradford Medico-Chirurgical—*Feb. 6th*—Mr. JOHN APPLEYARD, President, in the chair.—Mr. HORROCKS read a paper on the after-treatment of severe surgical cases. Owing to the use of anæsthetics the effects of shock, which were most noticeable in the very old or very young, were too generally neglected; they might be best met by brandy or opium by the mouth as soon as the chloroform sickness had passed; by warmth; and if necessary by inhalation of oxygen. In cases with hæmorrhage the slow intravenous injection of several pints of a sterilised 1 in 1,000 saline solution, the injection of hot water *per rectum*, and inhalation of oxygen were most useful. For sickness, washing out the stomach before the patient recovered from the anæsthetic generally gave relief. When ether had been used bronchial irritation was best relieved by inhalations of steam with compound tincture of benzoin. Abstention from food was usually recommended, but the old and the very young did well with small quantities of brandy or beef tea at short intervals within a few hours of operation. After operating about the upper part of the abdomen food had been given *per rectum* with good effect within ten hours; in pelvic cases mouth feeding was best; nutrient suppositories might be unabsorbed for hours after operation. Purgatives were probably useful in early stages of peritoneal effusion due to sepsis, harmful in plastic peritonitis, and useless in advanced cases or general septic peritonitis.—Messrs. HONEYBOURNE, HERMANN BRONNER, BERRY, and the PRESIDENT spoke.—Dr. A. BRONNER read a paper on intracranial disease secondary to ear disease.—Specimens were shown by Dr. MAJOR, Dr. T. J. WOOD, and Dr. H. BRONNER.

Royal Academy of Medicine in Ireland: Section of Anatomy—*Jan. 26th*—Professor ALEX. FRASER, President, in the chair.—The PRESIDENT exhibited enlarged photographs of human and other vertebrate embryos.—Dr. R. H. WOODS exhibited specimens of enlarged turbinated bones causing obstruction.—The PRESIDENT delivered an address on the position of anatomy in general, and certain problems in connection with the evolution of the central nervous system in particular. There was also a lime-light demonstration illustrating anatomy from the morphological side (macroscopic, minute, and developmental).—A vote of thanks to the President for his address was proposed by Sir W. STOKES, and carried by acclamation.—Dr. H. C. TWEEDY exhibited a "single kidney" from the body of a woman, aged 30. The left kidney was greatly enlarged. The left renal vessels were normally placed, but were also larger than usual. The ureter was much wider and also apparently thicker than in the natural condition. No trace of kidney could be found on the right side, and careful dissection revealed no artery or vein, large or small, corresponding to the vessels supplying the existing kidney. No ureter was found on the right side. Only about 100 cases of this condition were on record, the proportion of females to males being about 1 to 4. No congenital defects were discoverable in other organs. The patient died of cirrhosis of the liver, followed by peritonitis, and the cause of death was in no way connected with the absence of the right kidney. Remarks were made by the PRESIDENT, Professor CUNNINGHAM, Professor BIRMINGHAM, and Professor PURSER; and Dr. TWEEDY replied.—Professor FRASER next made a communication on the lobus olfactorius impar of birds and mammals, which was discussed by Professors SYMINGTON, HADDON, and FRASER.

Midland Medical—*Feb. 7th*—Dr. A. H. EVANS, President, in the chair.—Dr. PURSLOW showed an ovarian cyst, with twisted pedicle, removed from a woman aged 33. The cyst was found to grow from the left ovary; it was multilocular, and had undergone rotation from left to right anteriorly through a circle and a-half. There were extensive adhesions. The patient made an uninterrupted recovery.—Dr. J. W. RUSSELL showed a specimen of a double intussusception. The first invagination was of the ileo-colic variety, and presented a sloughing apex; the second had occurred in the ileum, about two inches above the former, which it had nearly overtaken. The condition of the patient, a child aged nine months, had not admitted of operation.—Mr. GEORGE HEATON showed a large branched renal calculus. The patient, a woman aged 33, had suffered from suppurative pyelitis for many years, and died of suppression of urine.—Mr. CHRISTOPHER MARTIN showed a dermoid cyst removed from the cæcal region of a woman aged 38, in July, 1893. It contained fat, hair, bones, and teeth, and it was apparently growing from the cæcum, the pedicle (which was twisted thrice from left to right) being formed by the enlarged vermiform appendix and its mesentery. The blood vessels of the growth were entirely derived from those of the appendix and cæcum. The only connection it had with the uterus was by a long fibrous cord, which passed to the right corner of the uterus, and proved to be an attenuated twisted Fallopian tube. Undoubtedly the tumour was originally an ovarian dermoid with a long pedicle, and the attacks of pain were due to repeated axial rotation of the growth. It had almost entirely twisted itself off the broad ligament, having previously become adherent to the vermiform appendix. The patient made an uninterrupted recovery.—Dr. DONOVAN read a paper on puerperal septicæmia.

REVIEWS.

DISEASES AND INJURIES OF THE TEETH. By MORTON SMALE and J. F. COLYER. London: Longmans, Green, and Co. 1893. (Demy 8vo, pp. 436. 15s.)

IT is a little difficult to form a perfectly just estimate of the merits of this work, as the reader is very likely at first to take a prejudice against it on account of the grave literary defects by which it is marred. Indeed the book would be a veritable treasure mine to an examiner in search of sentences to be set for correction in a grammar paper: whilst sentences which are perfectly redundant and add nothing to the information conveyed occur with annoying frequency. This latter defect is the more important inasmuch as some subjects which deserved fuller treatment are dealt with rather briefly.

Should the work come to a second edition, as we hope it

may, we would suggest that its authors should either leave out, as is quite permissible in a textbook, all but the most general reference to individual investigators, or else, if they undertake to give the history of research upon any particular subject, should exercise much greater care in giving to each investigator his due, both in respect of priority and of subject matter.

Nevertheless the book is by no means without good points; there is but little in its pages which is misleading, so that the student may turn to it with confidence, and the work is not too closely modelled upon its predecessors in the same field, so that it possesses a character of its own.

The account of dental caries is hardly so full as it might have been; the earliest exponents of the parasitic theory are not even mentioned, and some appearances represented in the figures are not alluded to in the text; still what is said is in accord with the more recent investigations. The chapter on filling is very good so far as the description of methods of manipulation goes, though many slips are to be found, such as the statement that palladium amalgam "expands on cooling," that gutta-percha for dental purposes is mixed with "calcium carbonate and aluminium," etc. A good account is given of odontomes, the classification advocated by Mr. Bland Sutton being adopted, and the diseases of the gums and of the dental pulp are well described.

The book is thoroughly well got up, and the numerous illustrations are, to a larger extent than is usual, original. There is so much good material in the book that it would well repay its authors to devote a great deal of time to presenting it in a better form; as it stands at present it is suggestive of too much haste in its preparation.

Relation of Music to Language as a Theory of Development. By W. Craig, M.B., C.M.Edin. Edinburgh and London: Young J. Pentland. 1893. (Demy 8vo, pp. 22.)

The title of this essay is indicative of a matter as difficult as it is interesting, one to which the observations and thoughts of careful writers may well be directed. In Dr. Craig's pamphlet we looked for some such sober reasoning; we find in it much vague rhapsody.

We do not object on principle to rhapsodies; but they must be excellent of their kind. Now, to speak honestly, we take more pleasure in Dr. Craig than in his prose poem. The author does well to entertain such lofty and beautiful thoughts as those which he shadows forth rather than expresses in words; nay more, he may do well to utter them among his own friends: but for wider publication a far sounder construction of thought, a far more accurate use of words, and a far closer attestation of facts are necessary. Our space will not permit us to illustrate these remarks by quotations, but we may point out that one cardinal assertion in this essay—namely, that woman is the embodiment of music—seems to us peculiarly unhappy when we look back upon the roll of composers.

But we part with Dr. Craig with kindly feelings; he is evidently a man of high aspirations and of deep and pure sensibility, and it is pleasant to think that there are many such men labouring in our ranks, bringing their sympathetic skill and gentle hearts to soothe the suffering and the sorrowful, and to exert an elevating and refining influence upon all those with whom they come in contact in their daily work.

NOTES ON BOOKS.

Wiesbaden as a Health Resort. By Emil Pfeiffer, M.D. Translated from the Fourth Improved German Edition by M. A. Fraser. (Wiesbaden: J. Bergmann. 1893. Demy 8vo, pp. 103. 1 M.).—This translation of Dr. E. Pfeiffer's little book on Wiesbaden is divided into six parts. The first part is devoted mainly to a historical, topographical, and geological account of Wiesbaden and its environs, together with some observations on the social advantages this resort presents both to the occasional visitor and the permanent resident. It points out also the remarkably compendious character of the place as a resort for invalids, containing as it does special establishments for the treatment of almost all the chronic ailments to which mankind is subject. The second part deals with the uses of the Wiesbaden thermal springs, their chemical properties and their applications both as a "drinking cure" and a "bathing cure." It enters into the examination of the physiological effects of these mineral waters and the mode of employing them, internally and externally; the complaints for which they may with benefit be employed are also stated; these are chiefly the various manifestations of gout and rheumatism, catarrhal affections of the principal mucous membrane, some disorders of the nervous and genito-urinary systems, and obesity. In treating of the indications for the cure at Wiesbaden the author, as is too commonly the case with the resident authorities in health resorts, casts his net very widely and scarcely any chronic disorder escapes; as, for example, we find pleurisy, pericarditis, peritonitis, diseases of the heart, renal calculus, and syphilis included amongst the maladies suitable for the "cure" at Wiesbaden. The other parts of this little book are devoted chiefly to recommendations of Wiesbaden as a winter health resort and as a permanent residence. An appendix contains analyses of the two principal springs.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

BULLET-EXTRACTING FORCEPS.

The qualities to be aimed at in constructing a bullet extractor are: (1) That it shall be capable of being passed into a bullet track without causing unnecessary distension, and without injury to the tissues through which it passes; (2) that it should take a sufficiently firm hold of the bullet to enable the surgeon to apply the amount of force which is justifiable in the operation of extraction; (3) that, when attempts at seizing the bullet fail, the soft parts at the end of the track cannot be lacerated by the jaws of the instrument; and (4) that the handles need not be greatly separated in order to open the jaws sufficiently to grasp the bullet. When closed, the point of this forceps is smooth, and it is certainly smaller in diameter than any wound or track likely to be made by a modern bullet; its grasp of a bullet, or of a fragment of a bullet, is very firm, quite sufficiently so to enable any force which it would be advisable to use in the operation being applied in the extraction of a foreign body from a wound. Bullet extractors, the jaws of which are formed on the principle of vulsellum forceps, are open to the objection that the soft parts in the neighbourhood of the bullet sought for are liable to be caught in the sharp points with the bullet, more especially when the attempt to grasp the bullet fails, and serious damage is done to them in this way. With any ordinary care this is impossible with this instrument. The pin joining the blades is placed so far back that very slight separation of the handles opens the jaws to the necessary extent. The forceps is made by Messrs. Arnold and Sons, of West Smithfield, to the design and at the suggestion of Brigade-Surgeon-Lieutenant-Colonel W. F. Stevenson, Professor of Military Surgery, Army Medical School, Netley.



THE NURSERIES OF CHOLERA.

An Address delivered before the Section of Public Medicine of the British Medical Association at Newcastle, August, 1893.

BY ERNEST HART, D.C.L.,

Chairman of the Parliamentary Bills Committee.

[OWING to the great pressure upon space this address was not published in the BRITISH MEDICAL JOURNAL at the time of its delivery. The renewed interest in the subject at the present time, due to the assembly of the International Cholera Conference in Paris to discuss questions in connection with the regulation especially of pilgrim traffic, appears to render the publication of the address in full desirable.]

I.—DIVERSITY OF VIEWS.

In entering on an investigation of the mode of the diffusion of cholera, one is met at once by the embarrassment that the most diverse views are held and the most opposite opinions expressed on the subject by men who certainly have had no lack of experience of this disease. There is no subject which has been so drowned in experience, in which knowledge has been so dwarfed and stunted by an overgrowth of so-called facts, isolated, unexplained and useless, as this matter of the mode of diffusion of cholera.

THE "PROVIDENTIAL" THEORY.

Nor need we wonder. The great bulk of experience in the matter comes from India, and from that part of India which, from the fact that no year passes, nor any month of any year, without the occurrence of the disease, has been aptly called the home of cholera. In that home of cholera the disease, the infection if you like, cannot be traced back from case to to case like a pedigree in a well-kept family tree, but is lost at once in a mongrel crowd of possible ancestors. Cholera exists there on every side. However clear one cause may seem it is equally clear that other causes cannot be eliminated. The observer, bewildered by the omnipresence of the disease, is ready to accept in turn dirt, water, food, temperature, moisture, seasons, flies, and monsoons, as possible modes of origin. Thus arise the Indian opinions that an "epidemic influence," in other words, a "providence" rules these things, and the belief that by no effort could one implant cholera in a district if the epidemic were not moving that way, and that by no effort can one prevent it from arising if this occult, inexplicable entity, this unknown cause, happens to be in operation. A fatalistic notion, a hopeless confession of ignorance and helplessness, just redeemed from being absolutely culpable by the curious coincidence that the same people who hold it do after all believe that somehow or other, in some way which to them is quite inexplicable, good sanitation is a means of preventing cholera—a mixture of sanitary agnosticism and blind belief which it is pitiable to behold. If we want to make progress we must turn from people who are bewildered by statistics and "returns," and seek how cholera behaves when it gets outside and beyond its home, and when, from its isolation, its every movement can be traced. Space will not permit me to give you the details, the complete proof, of the fact that cholera is not a blow from a hidden providence, a vague, imcomprehensible influence, but that it is a filth disease, a malady caused by one man swallowing a poison or contagium which has come from another man; that its power of spreading from man to man depends on man's habit of swallowing substances, chiefly water, which have become contaminated; and that, where men's lives are cleanly and this does not occur, there cholera does not occur either. But I say without hesitation that that is the outcome of European experience, where cholera can be traced and tracked and its outbreaks mapped out free from interference by collateral cases.

MISAPPREHENSION OF INDIAN ADVISERS OF THE GOVERNMENT.

Few things excite my astonishment more than the way in which men highly placed in the sanitary service of India allow themselves to misapprehend, and even to misstate, the position arrived at in regard to cholera by European investigation, and, it should also be said, by a considerable number of men in India who are now watching Indian outbreaks from the European or "water" standpoint. I read in a well-known book:—

> For years now the upholders of the doctrine of the spread of cholera by human intercourse, and by human intercourse alone, have advanced opinions as to what may be expected from the recently increased and much more rapid intercourse between India and England; and in obedience to those theories the restrictions laid on commerce and on travellers in the shape of quarantine and other measures have been made more and more stringent, till they have become a grievous burden.[1]

Why confuse direct infection with infection by means of water? Why lump together those who believe in these two very opposite methods of cholera diffusion as people in obedience to whose theories quarantine is maintained? Every reader of a newspaper must know that England, the home of the water theory, is the constant opponent of such proceedings. Another writer, touching on the "main arguments in opposition" to the "water theory" and the "human intercourse theory" says:

> In the first place it is remarkable that cholera in India, certainly in the Bengal Presidency, always advances up stream.[2]

Does he really think that the term "waterborne cholera" means cholera that has got in at the top of a great river like the Ganges, and is floating down stream like a boat or a raft? Again,

> In the second place, years will sometimes elapse between epidemics, though it is quite certain the water supply in the interval is just as bad.

Did it never occur to him that "badness" of water has nothing to do with it unless the badness results from infection with cholera?

CHOLERA-LADEN SHIPS.

But space does not permit my carrying this matter any further now. A new band of men is springing up who see where truth lies, and who are more likely to be of service in the war against cholera than those whose main delight seems to lie in putting conundrums to their opponents and triumphantly asking, "How can you explain that?" As if things could be explained when only one-half the facts are known. A series of instances in which it can be shown that the drinking of cholera-infected water produced cholera proves the case and pricks the bubble of the monsoon and the occult influence. It is said even that cholera is not carried by ships, but that when cases occur on board some time after departure,

> It seems most probable that the ship has passed through an area where the cholera-producing cause was at work. Such areas, beyond all question, do exist on land, and it is only in accordance with the facts that they should also exist on sea.[3]

So we are to imagine that the gnomes or fairies which cause the cholera are web-footed, and paddle about on sea, or are winged and fly across the ocean, and overhaul unfortunate ships. For by whatever means it has been done, ships have certainly carried cholera. Four times Mauritius has been attacked, each time after the arrival of vessels from India with cholera on board; Sunderland in 1831, after a ship arrived from Hamburg; Quebec in 1832, four days after the arrival of the *Royalist*, on board which cholera had existed on the voyage; Staten Island, New York, in 1848, on arrival of the vessel *New York*, from Havre, which had lost seventeen persons from cholera during the voyage; New Orleans in 1848, three days after the arrival of the ship *Swanton*, thirteen of whose passengers had died during the voyage. Are all these accidental coincidences, or is this "epidemic influence" of so timid a nature that it seeks a good vessel and the companionship of "human intercourse" before it faces the dangers of the deep?

CHOLERA A WATERBORNE DISEASE.

What, then, do I mean when I say that cholera is a waterborne disease? I mean that it is caused by a poison which is swallowed, and which in ninety-nine cases out of a hundred is carried to the mouth in water. Within the body this poison grows, multiplies, and in its growth causes the disease, in the course of which it is discharged; then it is ready to take up the other phase of its life, to grow in damp earth, to breed in dirty water, to be washed by rain into watercourses, to soak through porous soil into wells; in some very rare, un-

[1] Surgeon-General Cuningham: "Cholera: What can the State do to Prevent it?"

[2] Surgeon-Colonel Hamilton: "Cholera." Medical Society of London. 1893.

[3] Cuningham, *op. cit.*

The Great Fair at Hardwár: Pilgrims at the Holy Pool.

proved cases, perhaps, where cholera is very rife, and filthy habits are overabundant, to be, perhaps, blown by gusts of wind or carried by the hand into food, and thus by one means or another, but in an infinitely larger proportion of cases by means of water, to get round to another person's mouth, to be swallowed and again set up the whole cycle of events. It is not a mere matter of rivers and watershed, but of cooking utensils, drinking cups, water bottles, and especially of cisterns and reservoirs. The disease is waterborne because it is carried by water to the mouth; but that is only the last stage of a journey, circuitous and long, though not often difficult to trace, by which it has travelled from its past to its present host. Inside the body the poison passes, often killing the patient in its passage; outside its course is halting, erratic, various in manner and intensity, depending largely on the physical surroundings in which it finds itself (the soil, the water, the temperature), by which oftentimes it is destroyed, or amid which it dies out.

A Filth Disease.

If it lives through its adventures and lands again in the body of a man susceptible to its influence, then again it has its chance, and sets up afresh the old disease. If we fully grasp this conception of the malady, facts fall into their places. The seasonal curve becomes a curve depending on the proper heat and moisture requisite for the development of the most active outside life of the contagion, on thirst causing large drinks, on scanty and therefore foul water, on rains washing accumulated filth into the tanks and watercourses, on a mass of physical causes, and not on the spread of an "epidemic influence." The varied susceptibility of individuals points to varied powers of digesting and thus destroying the contagion, and the greater liability of some nations to be attacked depends on their greater willingness to drink contaminated water. Truly cholera is a filth disease. In the region of the lower Ganges, "the home of cholera," the air, the water, and the soil are never cold, and the ground is often damp, and when it is dry the tanks are foul, so that always there is a fit breeding place for the contagion, and the habits of the people in every way facilitate its entry into their systems. There is nothing strange, then, in cholera becoming endemic in this area; there is a climatic condition, such that the germ can keep alive for considerable periods outside the body, and there is an endemic habit of drinking it freely, but if this habit is broken people can and do live in the very midst of the area free from cholera, and whole districts and communities have thus been endowed with this immunity.

II.—INDIAN FAIRS A SOURCE OF GREAT DANGER.

Among the habits and customs of the natives of India few are more replete with interest and none more full of the picturesque than the great fairs and pilgrimages which take place at stated periods, attracting people from all parts of the country to one or another spot on the sacred Ganges. From its source down to the sea every foot of Mother Ganga's course is holy ground; to bathe in her waters will wash away sin, to die and be buried on her banks secures free entry to eternal bliss. We need not wonder, then, at the multitude of Hindus who come every year to partake of such blessings. Gangotri, Hardwár, Allahabad, and the Sagar Island are the most sacred spots, and are annually frequented by thousands of pilgrims. Nor are these merely local worshippers, drawn only from the great watershed which the Ganges drains. Wherever the Hindu faith extends, there the legend of the Ganges is believed, and so from every village in India come pilgrims to the holy stream, bringing with them germs of such diseases as may then happen to be epidemic in their midst, or taking back with them to their villages such infection as they may pick up at the holy place. The fair is not only an exchange for merchandise; it becomes a veritable clearing house for contagion, to which each brings what he has and takes away what he can carry. These fairs have always been a source of danger. The Hindu population has for its unit the village. Each village leads a comparatively isolated existence, but at the fairs representatives from the various villages mix freely and a great dissemination of infection takes place.

Pilgrims Carrying Contagion.

An account is given by Dr. Simpson, in a report on "Pilgrims and Cholera," of the effect of a large fair or festival held in February, 1891, near Calcutta, in scattering the infection of cholera over the large district from which the pilgrims were drawn. "The evidence is such as to show that to the pilgrims themselves it has been a most disastrous affair; that in many villages the residents who did not attend the bathing festival have suffered on account of the return of the pilgrims; and that in three districts at least a widespread epidemic has been set up." A good example of the way in which pilgrims carry cholera along their track is given by Brigade-Surgeon Coates. The Chief Commissioner of the Central Provinces turned the Bombay pilgrims, who were on their way to Pooree, off one route on to an entirely new one, preventing them from passing through Rajpore and Sumbulpore, because they had always brought cholera with them. The pilgrims were obliged to pass through the Khond country, a part which had always been pointed out as one in which no cholera had ever occurred. Different theories had been framed regarding the soil and climate in explanation of this absence of cholera, but with the advent of the pilgrims all these theories fell to the ground, for cholera broke out and decimated the villages, causing an untold mortality. In Madras it has been officially recorded that the intensity of cholera and the prolongation of its epidemic visitations are largely due to the people going to the divers places where festivals are held, and to their unnatural mode of living during such seasons. It appears to me that this is a matter in which both reason and history point to the same conclusion, namely, that these great gatherings of people from all parts are a frequent and recurring source of danger to the countries from which the pilgrims come, and to which they carry back such infection as they meet with.

The Great Fair of Hardwár.

The town of Hardwár is not within the endemic area of cholera, but the water of the Ganges at that spot, just as it escapes cool and clear from its upland home, has a peculiar fascination for the dwellers in the hot and vaporous plains, so that the Hardwár Fair is always largely attended by pilgrims from the area where cholera is always endemic. It has thus frequently happened that this great concourse has been followed by a wide diffusion of the disease outside its bounds. Besides the annual fair (occurring when the sun enters the constellation of Aries), a Kumbh, or great fair, occurs when the planet Jupiter enters the constellation of Aquarius while the sun is in Aries. This only happens once in twelve years, and the occasion is looked upon by Hindus as one of peculiar sanctity. Hence very large numbers then avail themselves of the opportunity of bathing in the holy pool. In 1891, when the last Kumbh fair was held, 800,000 to 1,000,000 pilgrims assembled in Hardwár, a town which, together with the villages of Kankhal and Jawalapur, only has 29,000 inhabitants. To understand what this means, to appreciate at all the danger of the spread of cholera arising from so vast a gathering, we must bear in mind the habits of the individuals of whom it is composed, and who, entire strangers to each other, carry to their temporary meeting-place the habits of the villages from which they come.

Drinking Foul Water.

The Hindus are a people with cleanly instincts, but are forced by circumstances into dirty habits. If possible, it is customary for them to bathe every day, and for the women to do so even oftener. And yet during several months there is no rainfall, and they have to trust entirely, both for drinking and bathing, to water which has been stored in tanks. Horrible as it may appear, it is the ordinary custom of the natives to use for all culinary purposes the water of the public tanks, in which the villagers bathe and wash their clothes, and around which is accumulated every sort of unnamable filth. This habit of drinking foul water is at the root of the constant presence of cholera in India. The natives continually suffer. The Europeans, however, have no "funk" about cholera. They carry with them certain habits of cleanliness, and, being strongly impressed with the necessity of avoiding polluted water, they escape. The comparative, and in some cases almost total, immunity from the

disease enjoyed nowadays by troops, prisoners, and certain townships is a matter of demonstration; and yet when security begets carelessness the charm is broken, and the hitherto protected communities suffer like the rest. In 1890 the troops at Ranikhet, a hill station, were attacked by cholera, and the characteristic of the outbreak was the large proportionate fatality among the officers of the garrison. The epidemic was in all probability connected with the use for potable purposes of the water of an open trough near the dâk bungalow, where two servants had died. The water of the trough had been used as occasion served for drinking purposes in the married men's barracks, where cases occurred, and for special purposes in an aërated water factory from which the officers obtained their supply. Europeans escape so long as they drink clean water; natives also escape when they get into a well-managed gaol where clean water is compulsory; but at these fairs and festivals the very aim and object of their pilgrimage is to bathe in the sacred river and drink of its holy waters. Is it then to be wondered at that they suffer? Amid so great a crowd, largely drawn from the "endemic area," some one or other is sure to have the cholera and to foul the stream, giving to those who drink the fœtid water in hope of sanctity an infection which quickly brings about their death. The pilgrims, however, are not the only sufferers. Soon after the festival is over they are scattered to the four winds of heaven, carrying with them the infection. Some drag their weary bodies homewards till they drop by the wayside and die, others by boat or train are carried to distant parts, where, if they do not die *en route*, they set up fresh foci of disease from which infection spreads among their neighbours.

"A Record of Disease and Death."

The danger attaching to these vast gatherings at Hardwár, and especially to the great Kumbh fair, is very real. Regarding them a Sanitary Commissioner says that previously to 1867 "very little remains on record, but that little is a record of disease and death." In 1867, and again in 1879, the festival was followed by an outbreak of epidemic cholera, which, on the latter occasion, rapidly extended to the western districts, and in its extreme virulence carried off large numbers of the hill people. Cholera does not become permanently established outside its own endemic area, but it may be carried anywhere, and wherever the habits of the people allow it to take root it will, for a time, ravage and destroy.

An Official Warning.

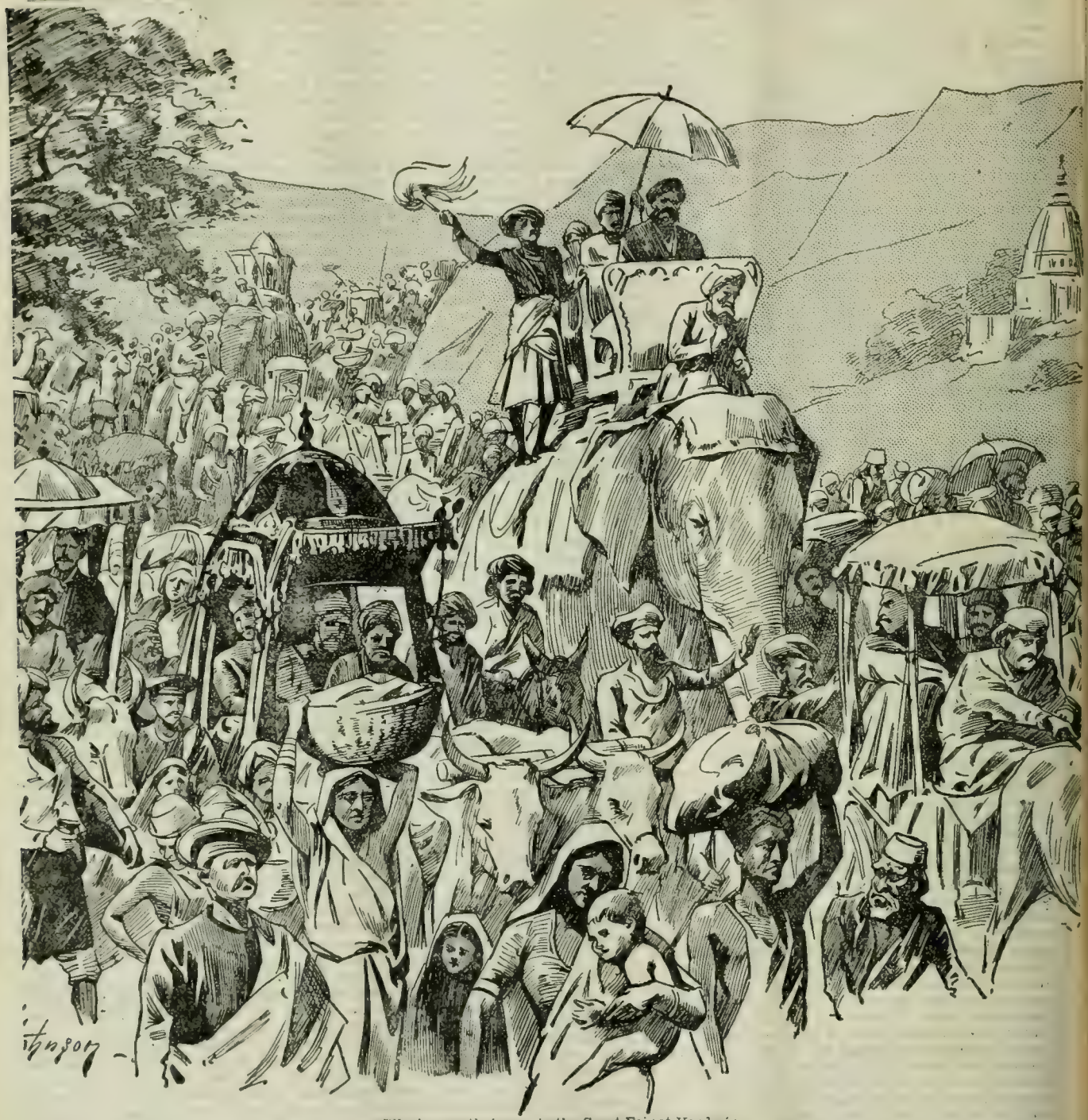
After two such disastrous experiences the Indian authorities felt a great and natural anxiety as to what would happen when the time came round again in 1891. Nor was this lessened by seeing that the same conditions which had before been followed by great epidemics were repeating themselves. It had been noted that the appearance of cholera in the spring was always heralded by the occurrence of individual cases of true cholera in the same neighbourhood at the commencement of the cold season preceding. This had been the case in 1866, before the Kumbh of 1867; it was also the case in the cold weather of 1878, and again in the autumn of 1890 cholera was again showing its face. A sharp outbreak took place near Hardwár, at a place near to where it had appeared in 1878, and in Hardwár itself there had been a good deal of it during the hot weather. All through the winter 1890-91 there was much cholera in the North-Western Provinces, and it was especially severe in the Kumaun hills and along the pilgrim routes below the hills. So grave, in fact, was the outlook that the question of prohibiting the fair, even though a display of force would have been necessary for the purpose, was seriously discussed. Strong opinions were held on the subject, and a communication from the Saharanpur civil surgeon expressed those of many men, officials and others of much experience, when he said that "the most complete sanitary arrangement will be powerless to prevent the spread of cholera should the contemplated fair at Hardwár be permitted to take place."

III.—THE KUMBH FAIR AT HARDWÁR.

I think I have said enough to show that the position of affairs at Hardwár was critical, and that if the Kumbh fair passed over without evil consequences this could not fairly be looked upon as accidental, but must be attributed to the precautions taken. The steps taken to prevent mischief arising from the Kumbh at Hardwár in 1891 are very fully described in Appendix E to the 24th Annual Report of the Sanitary Commissioner of the North Western Provinces and Oudh, and to that report I must acknowledge my indebtedness for much that I have to say on the matter. The fair took place in April, 1891. In December, 1890, proceedings began by the construction of seven bridges, by means of which access to the sacred pool from various parts was much facilitated. The whole of the site was then cleared of undergrowth, all filth was scraped away and removed, and arrangements made for the trenching of night soil. A small army of 1,342 sweepers was engaged, and means were taken to prevent their desertion—an event which previous experience had shown to be not unlikely. The whole site was divided into sanitary sections, each with its temporary hospital and its sanitary patrol, every constable of which had his own fixed beat within which he was instructed to: (1) Prevent overcrowding; (2) See to surface cleanliness; (3) Give notice and remove nuisances; (4) Report offenders; (5) Remove those sick of infectious diseases; (6) See to the proper location of animals. The sanitary, police, and medical sections were made to correspond, each section being equipped with a special hospital, a number of constables, sanitary inspectors, an ambulance, and a large staff of conservancy men. Each section was thus complete and self-contained, and was directly responsible to the Sanitary and Deputy Sanitary Commissioners for the conditions of its own area. The members of the sanitary patrol had each their given beats, over which they exercised a constant supervision, acting also as detectives for sickness. The key to the sanitary management of the fair lay in the searching out and rapid removal of all cases of suspicious disease, in the maintenance of perfect cleanliness in the camp, and in the measures taken to prevent all possibility of contamination. Various improvements, however, were made in the conduct of the bathing festival which were no doubt of great importance.

Confluent Colonies of Microbes.

The sacred pool, to bathe in which the pilgrims gather together in such multitudes, is approached by a handsome ghat, and is somewhat retired from the rest of the river. It thus soon becomes defiled by the vast concourse of bathers. Dr. Simpson, in describing the scene, says that as the bathing went on the clear stream became a muddy one, and the water collected from any part of it smelt in a few hours offensively, and the micro-organisms developed from it were legion. He sent samples of the water for bacteriological examination to Professor Cunningham, from whose report it is seen that plate cultures made from water above the ghat showed very few microbes; that two to three miles below they were numerous; and that in cultures from all parts of the bathing ghat their numbers were so great as not to form discrete colonies but to become confluent. The water collected from one part also contained comma bacilli. To remedy this condition of affairs the engineer of the Ganges canal arranged for a stream of fresh water to traverse the pool, which was very effective in carrying away the impurities deposited by the bathers, the washings of their bodies and their clothes, the ashes of their deceased relatives, the hair of widows who had been shorn, the decaying flowers offered by pilgrims, and the varied organic filth deposited by a crowd which passed through the sacred waters at the rate of 400 to 500 a minute. Another improvement of great importance, and which, as we shall see later, has a very important bearing on the proceedings at Mecca, was the purification of the Bhim Goda tank about half a mile from Hardwár. This tank is peculiarly sacred, and much reverenced by the pilgrims. In it there is an image of Mahadeo, and here all pilgrims must present offerings, bathe, and drink of the water. The tank is a very small one, and had a mud bottom; the water in it, moreover, could not be renewed, and it may perhaps be imagined what was its condition when many thousands had bathed therein. Dr. Hutcheson recommended that it should be deepened and paved, and that a siphon should be constructed to bring a constant supply of fresh water from the Ganges. This cost a good deal of money, but if it had not been done the slightest



Pilgrims on their way to the Great Fair at Hardwár.

taint of cholera would inevitably have spread the disease among those who drank there.

MYRIADS OF MOVING CREATURES.

At last the time arrived when all these precautions would be tested. The camping ground was invaded by a vast army of pilgrims. By train from distant parts they came in hundreds of thousands, but in the East old ways are not soon supplanted by modern methods, and the great majority came by road. Concentrating from every point, they crowded together as they came nearer to their destination. Rich people on elephants with their attendants, parties with camels to carry their baggage, long trains of bullock carts containing whole families, riders on ponies or on donkeys, intermixed with a vast concourse tramping along on foot, each carrying his bundle on his head, but all alike bringing with them gifts and sins, and hoping to take back their due reward—the sanctity derived from contact with the holy river. Not only were the towns of Hardwár and Kankhal crowded to the utmost, but every available open space was camped upon.

From April 8th to the 12th there was little space left in Hardwár which was not occupied by a human being. The town on these nights was simply one mass of humanity, stretched along roof, verandah, and every open space, and crowding all the available accommodation in dwellings, outhouses, and temporary huts of every description. In the day, Dr. Simpson tells us, "the scene was full of colouring and variety, but that at the ghat baffles description. Such a seething mass of humanity, in constant motion, on the steps, entering and coming out of the sacred pool, could be seen in no other country, and reminded me of the agitation of myriads of moving creatures which one sees under a microscope in a colony of microbes." Hour after hour and day after day they passed through the pool in one continuous stream. It was quite impossible to enforce limits of cubic space for such a crowd. It covered everything, and if it had been allowed to act according to its natural instincts it would have defiled everything, and have wallowed in its own defilement; but it was inspected, drilled, and organised, and, although at first there was some resistance, this soon passed away when it was found that if they obeyed in small details the great object of the festival was not interfered with.

A Kumbh Fair without an Epidemic.

There was no house or spot in Hardwár which was not closely scrutinised almost daily; all sullage, water, and refuse was removed from within the town at stated intervals. Dirty water was not allowed to run into the streets or lanes, but was carried right out of the town. No refuse, dirty water, or filth of any sort was allowed even to be trenched or pitted, and still less permitted to accumulate in the town, and both before and during the progress of the fair all night soil, etc., was carefully removed from within the inhabited area. Solution of perchloride of mercury was freely used as required. Sweepers were everywhere. Two hundred and thirty-five sweepers perambulated the roads and camp, cleaning and sweeping all around, and 198 men were formed into eighteen reserve gangs to be sent to any point where there might be extra pressure. Altogether 1,342 sweepers were employed, besides the inspectors and sanitary patrol. The system stood the test. Cholera was prevalent in the eastern districts, and cases were reported from the pilgrim centres of Benares, Fyzabad, and Allahabad during the period of the fair. The pilgrims coming from cholera-infected districts brought the infection with them, and two people died of undoubted cholera at Hardwár during the most crowded period, but they were promptly isolated, and the infection did not spread. No more cases arose in the town or camp, nor did the disease develop on the track of the dispersing pilgrims. And thus we had the novel experience of a Kumbh fair at Hardwár without an epidemic of cholera spreading all over the surrounding country concurrently with the dispersion of the gathering.

THE HYDERABAD CHLOROFORM INQUIRY.

We have been requested to publish the following letter, which has been addressed by Mr. Furdonji Jamshedji, Private Secretary to his Excellency the Nawab Vikar-ul-Umra, Bahadur, Prime Minister of His Highness the Nizam of Hyderabad, to W. H. Gaskell, M.D., F.R.S., and L. E. Shore, M.D., Cambridge University, and H. A. Hare, M.D., Professor of Therapeutics, and E. Q. Thornton, M.D., Demonstrator of Therapeutics, Jefferson Medical College, Philadelphia. The letter is dated Hyderabad, January, 1894.

Sirs,—I am directed by His Excellency the Nawab Vikar-ul-Umra, Bahadur, to tender to you, and to your assistants, the cordial acknowledgments of His Highness the Nizam's Government for your experiments and reports on Chloroform.

2. In doing so the Minister considers it advisable, in the interests of His Highness the Nizam's Government, to review not only the circumstances which led to the appointment of the Hyderabad Chloroform Commission, but also the finished results of the Commission's, as well as of your own, researches, on all of which a large sum of money has been expended by this Government.

3. The Chloroform Commission of 1889 was originated by Surgeon-Lieutenant-Colonel Lawrie. The object of the Commission was to determine whether or not chloroform has any direct action on the heart, and to set at rest the all-important question, on which the uniform safety of the patient under chloroform depends, "Is it right or wrong to take the pulse as a guide to the effect of chloroform?"

4. It was necessary to settle this question once for all by experiments on animals, because the London school refused to accept as final the clinical statistics put forward for the late Professor Syme, by his former pupil and house-surgeon, Surgeon-Lieutenant-Colonel Lawrie, to prove that chloroform does not directly affect the heart, and that pulse feeling during chloroformisation is the most common cause of accidental overdosing. These statistics presented an unbroken record extending over forty years, from 1847 to 1889 (and it is still unbroken in 1894), of chloroform administered on Syme's principles in England and in India, without a death. Syme's principles are best stated in his own words: "We are guided as to the effect, not by the circulation, but entirely by the respiration; you never see anybody here with his finger on the pulse while chloroform is given."

5. The researches of the Hyderabad Commission confirmed Syme's principles. The Commission proved that:

(*a*) Chloroform and shock are incompatibles. It was found to be impossible to stop the action of the heart by any form of shock under chloroform.

(*b*) In death by chloroform the respiration always stops before the heart, which beats effectively for a considerable time after the breathing has ceased.

(*c*) The lowering of the blood pressure which is produced by the narcotic action of chloroform is harmless, and cannot be due to weakening of the heart.

(*d*) Chloroform anæsthesia is free from risk. As long as the breathing is natural and regular, and the inhalation is not continued after anæsthesia is complete, over-dosing with chloroform is impossible.

(*e*) The pulse is never appreciably affected by chloroform, except through interference with the breathing or by over-dosing.

6. The experiments of the Hyderabad Commission did not satisfy the profession. The Commission's evidence of the absence of direct heart failure under chloroform was said to be wholly negative, and further experiments were rightly demanded in order to show the cause or causes of the fall of the blood pressure.

7. These experiments were undertaken on behalf of His Highness the Nizam's Government by two of the greatest living authorities on physiology and physiological therapeutics, Dr. Gaskell in England and Dr. H. A. Hare in America. Dr. Gaskell was assisted by Dr. Shore, and Dr. Hare by Dr. E. Q. Thornton.

8. The experiments of Drs. Hare and Thornton substantiated those o the Hyderabad Commission. They found that it is not possible "in lower animals (the dog) to cause cardiac death by the freest use of chloroform by inhalation without first causing respiratory arrest." And their report concluded in the following terms: "We agree so heartily with Lawrie's conclusions" (which are those of the Hyderabad Commission) "that we print them below."

9. The value of Dr. Hare's report will be more thoroughly appreciated when it is remembered that it is directly opposed to the conclusions published, only four years ago, by himself and Professor H. C. Wood, of Philadelphia: and that it is also altogether opposed to the statement made by Professor Wood at the Berlin International Medical Congress in August, 1890: We definitely proved that in the dog chloroform has a distinct direct paralysing influence on both respiration and circulation, and that in some cases the heart is arrested before respiration."

10. The fallacies of Professor Wood's experimental and clinical data were exposed in the *Lancet* and in the Hyderabad Commission's Report on Chloroform (page 274), and it is satisfactory to note that the report of Drs. Hare and Thornton indicates that they have convinced themselves that the opinions of Professor Wood were founded on error.

11. The cross-circulation experiments devised by Drs. Gaskell and Shore were new to chloroform research. They were of an excessively complicated character, so much so that the difficulties connected with their performance were underrated even by their authors. The cross-circulation experiments consisted of two series. The first series was conducted in the Physiological Laboratory at Cambridge by Drs. Gaskell and Shore. It is true that the deductions made by these gentlemen from their experiments led them to express opinions adverse to the conclusions of the Hyderabad Commission, but the credit for the application of cross-circulation experiments to chloroform investigation belongs exclusively to them. The second series, which was carried much further than the first, was completed in Hyderabad by Dr. Lawrie and Dr. Arthur Chamarette, assisted by students of the Hyderabad Medical School.

12. The object of the cross-circulation experiments was to demonstrate the effects of sending chloroformed blood to the brain alone, or to the heart alone, and His Excellency the Minister is advised that in no other way could the question whether chloroform has a direct action on the heart or not be settled. The chief difficulty connected with the cross-circulation experiments (a difficulty so great as to be nearly prohibitive) consisted in the almost total impracticability of establishing and maintaining an efficient cross circulation between two animals. When, however, after endless failures this difficulty had been overcome and chloroform was sent to the heart alone, it produced no effect whatever; but when it was sent to the brain alone it produced its usual sequence of events, namely, lowering of the blood pressure with, first, anæsthesia, then stoppage of the respiration, and then death.

13. The cross-circulation experiments established the following facts in addition to those already made good by the Hyderabad Commission:

(*a*) Chloroform has no direct action on the heart or circulation. The heart can only be affected under chloroform by interference with the breathing or by overdosing, which is practically the same thing. Accordingly, it must be futile and dangerous to take the pulse as a guide to its effect.

(*b*) The lowering of the blood pressure, which is caused by an effective dose of chloroform, is due entirely to its direct narcotic action on the brain, and is a safeguard to the heart, by dilating the smaller arteries and facilitating the flow of blood from the arterial to the venous system, thus diminishing its work and relieving it of strain.

Syme's principles of chloroform administration are, therefore, physiologically correct, and there is no longer the shadow of an excuse for the impotent and dangerous "finger on the pulse while chloroform is given."

14. The Minister observes that Drs. Hare and Thornton express a fear lest, in certain diseased and enfeebled conditions of the heart, "chloro-

form might be the last straw which upsets the cardiac balance" and cause death. But it is clear that, the cross-circulation experiments having determined that chloroform has no direct action on the heart, it can make no difference as regards the direct effect of the anæsthetic whether the heart is sound or unsound, strong or feeble. Moreover, as chloroform eases and lightens the heart's work, it is obvious that, in the case of a diseased or enfeebled heart, so far from upsetting the cardiac balance, the action of the anæsthetic must be advantageous. Provided, therefore, the breathing is in no way interfered with, chloroform must render a surgical operation, in the case of a patient with heart disease, infinitely safer than it would be if anæsthesia were not employed.

15. It is evident then that the experiments devised by Drs. Gaskell and Shore have led to results of the most far-reaching and important kind, and have placed the proofs—that chloroform does not directly affect the heart—on an unassailable basis; while the practical conclusion of these scientists—that "chloroform can be given with perfect safety"—is the most valuable of all evidence of the enormous influence for good that has resulted from the Hyderabad Commission. The Minister is informed that this conclusion is in absolute accordance with the clinical results obtained at the Afzulguni Hospital, where chloroform is given by students with uniform and perfect safety, solely because the inhalation is never allowed to interfere with the patient's breathing, and the heart is entirely disregarded as a factor in the administration.

16. Under these circumstances His Excellency the Minister proffers his best thanks to Drs. Gaskell and Shore for their invaluable experiments, and for the time and care they devoted to the work entrusted to them by His Highness the Nizam's Government.

17. No less valuable are the researches of the American physicians. The Nizam's Government recognises to the fullest extent the difficulty Drs. Hare and Thornton had to encounter, and the Minister desires to express his personal admiration of the manner in which Dr. Hare fearlessly and frankly abandoned his previously conceived opinions when he had satisfied himself of the truth of the deductions of the Hyderabad Commission.

18. In conclusion, I am to intimate to Drs. Gaskell and Shore, and to Drs. H. A. Hare and E. Q. Thornton, that in commemoration of their researches, and as a mark of the high appreciation by the Nizam's Government of their experiments and reports, the Minister begs their acceptance of a piece of silver plate which will be forwarded to each of them in due course.

ANALYSIS AND REPORT
ON
ORIGINAL DOCUMENTARY EVIDENCE CONCERNING THE USE OF OPIUM IN INDIA.

[Furnished to the "British Medical Journal" by upwards of 100 Indian Medical Officers.]

IX.

The Consequences of the Abolition of the Opium Monopoly.—Conclusion.

We should like here to make the following remark: Our correspondents state expressly that it is quite possible and even easy to stop the habit in the individual, when one is in a position to enforce abstinence for a certain number of days. In gaols opium is usually cut off at once, and it is only in rare cases that it is gradually discontinued. The prisoners do very well without it. Thus, if it were possible to put all opium consumers—that is, the 5 to 7 millions—into gaol, it would be easy to make them abandon the habit for a time, but so drastic a measure is hardly "within the sphere of practical politics."

From the evidence before us, what are likely to be the results of cutting off the opium supply? First, about half a million native cultivators would be thrown out of work and would lose their regular income; secondly, not less than half the revenue of the Government of India—about ten millions sterling—would cease to be, and would have to be replaced either by doubling the taxes or not at all. The people of India are not prepared to pay higher taxes than they do now, and could only be compelled to do so by force. And after all, as can be gathered from the replies of our correspondents, the supposed evil would not be really suppressed. The drug would be largely smuggled and the Government would be without means of preventing this; or, supposing the Government should choose to enforce rigidly the suppression of opium or should attempt to meet the deficit by increased taxation, in either case we should undoubtedly have to face a rebellion. And whom would all this benefit? Certainly neither the natives nor ourselves. It would only profit neighbouring countries, which would be glad to find the opium market of the world freed from the competition of India, and would increase their output of opium to the utmost extent. Persia, Turkey, and China would soon not only supply the whole demand of the latter country, but also that of India. It is simply impossible to conceive anything more absurd, more dangerous, more suicidal for the interests of Britain and India than the abandonment of the opium monopoly, which for hundreds of years has been the chief source of revenue to the different rulers of India. Our correspondents are loud in their expressions of indignation at this artificial agitation got up by missionaries and pseudo-philanthropists.

Dr. J. Ch. White says: "The present absurd outcry against the use of opium is the outcome of a ridiculous pedantry by a few intolerant faddists."

Collector F. Charles writes from Belgaum: "In the first place, nothing less than a gigantic army of excisemen, costing vast sums to maintain, would suffice to repress smuggling, where the whole population would be on the side of the smugglers; and as an executive officer of twenty-four years' experience I am of opinion that, having regard to the way British territory is interlaced with independent native States, the absolute prevention of smuggling would be an impossibility."

Judge A. B. Napier says: "I may add that out in India I have never met any doctor, or any officer of Government, or any person except missionaries, who naturally are biassed in favour of the long accepted religious view of the question, who has expressed before me the opinion that opium eating in the moderate way generally observed has any bad effect. Not only is this the European opinion, but it is the opinion of all the natives of education I have talked with on the subject, and by these persons I do not mean the class only too prone to say 'Han Nuzur' to the sahib's statements, but those pleaders, sympathisers with the Congress movement, etc., who are by no means averse to finding any fault possible with our Government."

In conclusion, we may give a few extracts from an interesting communication received from an Indian civilian of thirty years' experience, whose name we regret to be unable to publish:

"Those who in this country require opium must be left to die of the various climatic influences to which opium is a prophylactic. Those who use it without, perhaps, requiring it will unavoidably be driven to the use of stimulants, which to Orientals are always injurious, and frequently mean death—namely, 'country' and imported spirits. Much of the spirit imported into the country is best described as active poison; if anyone will commence a crusade against the use of spirits by natives I shall give it my best support. The crusade against opium, considered apart from political, or rather Parliamentary, exigencies, is simply unintelligible. The result is to aim at taking away what is good and necessary, so as to prepare the way for what is deleterious and in the circumstances deadly—namely, alcohol. Other results will be that the Chinese will be forced to confine themselves to their own inferior stuff—an unnecessary hardship for them; also, still more important, the general opinion of this country is outraged. The natives can no more understand a proposal to take away their opium than they would understand one to take away their rice. They are beginning to ask the secret meaning of the strange movement. It is never desirable to arouse the suspicions of the native, even though they be unreasonable and wrong, as in the matter of the greased cartridges and the Mutiny."

Further, the same correspondent says:

"Neither India nor the United Kingdom has anything, even of a theoretic kind, on its conscience in connection with opium and the people of this country. As regards China, I have, of course, no personal knowledge. Yet it stands as a matter of necessity that it is not our opium which—assuming demoralisation there—demoralises the Chinese. Indian opium in China is like the half-crown Havana cigar at home. It cannot possibly be what is used by the common people; while doubtless the Chinese gentleman, who alone can use our Indian opium, knows how to enjoy it without 'demoralising' himself, even as the English gentleman can enjoy his Havana cigars without soaking his system in nicotine.

"As for what I recently read, as from the mouth of a

missionary (at home), namely, that the abuse of opium in China prevents the 'evangelisation' of that country, I shall say nothing about China, but I challenge all the missionaries in India to say the same as regards the use or abuse of opium in India. I feel sure that not one of them will venture to say that opium affects their work here, one way or other; and yet they have not 'evangelised' India. If Indian opium does no harm in this matter in India, how can the same thing do so much harm in China?

"Or, if the missionary referred to Chinese opium, then we can do nothing to help him. He must apply to the Chinese. While awaiting the abolition of opium cultivation by them, he should be thankful that, anyhow, the upper classes of the country can obtain a non-injurious form of the drug from India."

To sum up. The testimony of the overwhelming majority of our correspondents shows: First, that from whatever side the opium question in India is viewed, any interference with the present state of things is quite uncalled for; secondly, that not only would no benefit arise from meddling with the old custom of natives, but, on the contrary, any attempt in that direction is certain to be followed by the most serious consequences to the economic, sanitary, physical, and moral condition of our Indian fellow-subjects, and could not fail to prove highly dangerous and, indeed, fatal to our rule in India. The evidence which we have been able to adduce from unimpeachable sources justifies us answering the question, "Are British interests and the Indian Empire to be sacrificed to the fancies of a few fanatics and faddists?" with an emphatic "No."

COOKING AND HEATING BY GAS.

VI.

The Comparative Costs of Coal and Gas.

The Elements of Comparison.—Cooking Charges.—Hot Water Apparatus.—Economy in Cooking.

Consideration of the important question of the comparative costs of coal and gas when employed for cooking purposes is somewhat complicated by the varying prices of both these commodities. Coal, which can be purchased in some northern towns at 15s. per ton costs in London 30s. per ton, whilst gas varies in price from 2s. to 5s. per thousand cubic feet. For the purpose of comparison it is necessary to take an average price for both forms of fuel, and we shall estimate gas at 3s. per thousand cubic feet and coal at 25s. per ton in making our calculations.

The conditions of combustion in ordinary working of solid and gaseous fuel are so entirely different that it would serve no useful purpose to enter into the question of the theoretical heating value, stated in units of heat, of each description of fuel. It will be sufficient for our purpose to look at the question broadly and fairly and to indicate as clearly as we can the general results.

Viewing the matter thus it would appear that for general cooking purposes, more especially for roasting and baking, there is a decided economy in the use of the gas oven as compared with the ordinary coal range. It must, however, be borne in mind that gas possesses one of the defects of its qualities in being so exceedingly handy, that it is always liable to be wasted when left to the uncontrolled care of servants, and that some supervision should be exercised to check waste. This can be done by having a separate meter attached to the supply pipe or by the fixing of a lock key upon the supply so that the stove can only be used between certain hours.

It has been found from careful tests that in a properly constructed gas range all the necessary cooking for a family of eight to ten persons can be accomplished at a cost of threepence or fourpence per day, where ordinary care is exercised; this amount is calculated as follows:

	Cubic Feet.
Breakfast.—Tea or coffee, bacon and eggs, chops, etc., toasting bread, and hot water for washing-up ...	20
Dinner.—Six-pound joint, pie, and milk-pudding, soup, fish, and vegetables ...	55
Hot water for washing up ...	15
Tea.—Hot water	10
Total ...	100

This amount of gas, at the rate of 3s. per 1,000 cubic feet, would cost 3½d.; and where a joint is cooked only on alternate days, the cost would be proportionately less.

Where large quantities of meat are roasted at one time (as in hospitals, hotels, etc.), it may be estimated that the gas consumption will average about one cubic foot of gas to each pound of meat, whilst for roasting smaller quantities for ordinary domestic purposes the average consumption of gas is about three cubic feet to each pound of meat.

In an ordinary kitchener or coal range, we find that the quantity of coal required to maintain the coal range at a proper working heat averages one hundredweight a day, costing at 25s. per ton 1s. 3d., or four times the cost of the gas oven. The economy results, of course, from the fact that the gas oven is only consuming fuel when actually performing work, whilst the coal range fire has to be maintained throughout fifteen or sixteen hours of each day.

It has, of course, to be borne in mind that the coal range maintains the hot water supply necessary for baths, lavatories, and scullery purposes; and in order to make a fair comparison between the merits of gas and coal, it is essential that this aspect of the question should be dealt with. It is frequently urged, to the detriment of gaseous fuel, that it is only possible to use it as an adjunct to the coal range owing to the necessity for maintaining the supply of hot water throughout the house, and it is generally assumed that this is an insurmountable difficulty. As a matter of fact, it is a difficulty which exists only in imagination, and can easily be overcome. All that is necessary is to place by the side of the gas oven a small gas boiler constructed to stand ordinary pressure; this boiler is attached to the circulating tank or cistern by the ordinary flow and return pipes, and simply supersedes the pressure boiler usually placed behind the range fire. This gas-heated boiler will do the work effectively of heating a thirty or forty gallon tank for baths, etc., at a cost not exceeding 4d. a day. We thus arrive at an estimate for cooking and heating water supply of house by gas, giving a total of 8d., as against 1s. 3d. the cost for coal, showing a saving of nearly one-half by the use of gas. This estimate is specially applicable to the summer season, when there is no necessity to light a fire for purposes of heating the kitchen, and when the absence of the blazing coal fire and scorching heat is a decided boon.

It has also to be borne in mind, as we pointed out in our issue of December 2nd, 1893, that the saving of labour, especially in large kitchens, often enables a servant to be dispensed with, and this has to be taken into account in estimating the saving effected by the adoption of gaseous fuel; there is also the very important question, to which we referred in the British Medical Journal of February 3rd, of the saving of weight of meat in roasting by means of the gas oven; the London Hospital authorities estimate that they save by this means a very considerable sum annually.

The question of maintaining the hot water supply of the household we feel is a very important one, and it is an aspect of the question that when once properly grasped by architects, plumbers, and builders, will do much to facilitate and popularise the introduction of gas cookery. But the question has another, and a very serious side; we are painfully reminded each recurring frost of the dangers resulting from our present system of having pressure-boilers attached to our kitchen fires. This winter we have had the usual series of explosions, with the attendant loss of life and injuries of a very painful character. In view of the fact that all risk and accident could be avoided by the substitution of the gas-heated boiler, it is a serious question whether the present dangerous system should continue; further, in thousands of households, whenever there is an attack of frost the kitchen fires have to be withdrawn, and at the period when heat is most urgently required we are deprived of it.

If the gas boilers were introduced, the range fire could never occasion either anxiety or accident, and its heat would be available when most wanted, while in the summer season its place would be taken entirely by the gas oven.

We have endeavoured in this series of articles on gas cooking and heating to point out the various advantages which the use of gaseous fuel can confer upon us in our homes by providing us with a means of cooking and heating available at all hours and in any emergency, easily regulated,

and perfectly under control; we have pointed out the economy resulting from its proper use, and the advantage to the general community in lessening the evils of the smoke-laden atmospheres of our cities and large towns; rendering life at once more tolerable, and certainly more wholesome.

Gas stoves are by no means perfect in their present form, but it is only just to bear in mind that the industry is a comparatively new one, and that as the demand for such apparatus extends there will be a corresponding improvement and advancement in every description of stove which seeks to gain public favour. Great advances have been made during the past ten years; still greater improvements will, we trust, be witnessed before the close of the century, when we shall doubtless be nearer the fulfilment of the late Sir William Siemens's prophecy in having all our fuel separated into its two constituencies before reaching our factories or our domestic hearths, and thus be furnished with the complete solution of the smoke problem.

GAS BURNER writes: In the series of articles which have appeared lately in the BRITISH MEDICAL JOURNAL on cooking and heating by gas, one is principally devoted to a comparison of the Euthermic stove invented by Dr. Bond, of Gloucester, and the George's Calorigen, greatly to the advantage of the former. Speaking of the Calorigen, after various criticisms, the writer says: "It is evident, however, that the general plan of construction is good, except in one respect, in which it must be considered radically defective, and that is in the closure of the body of the stove at the bottom, necessitating, as it does, a special tube for supplying air for the sole purpose of maintaining combustion. Why the designer of the stove should have adopted this arrangement is inconceivable." Now, is it not perfectly plain that the object is to entirely separate the air of the combustion chamber from the air of the room, and to prevent the possibility of burnt air being forced back into the room when the wind blows against the open end of the flue? A Euthermic stove placed in the same position as that in which the Calorigen is shown in your diagram—that is, with its flue passing through a wall, without a rising chimney, would have all the products of combustion blown back into the room if the wind blew against the opening. This point is essential to the Calorigen, and gives it the great advantages which it possesses over many other stoves—namely, its independence of rising flues, the facility with which it can be placed against any outside wall through which two holes can be drilled, and the impossibility of the air of the room becoming contaminated by the products of combustion.

Again, I wonder why the readers of the BRITISH MEDICAL JOURNAL should be taught that the real and only test of the efficacy of such stoves is to be found in a comparison of the quantity of gas burned in unit of time and the temperature of the out-going products of combustion, as if a chimney carried nothing but these products. A chimney may be very cool and yet be very wasteful. It is all a question of how far the products of combustion are diluted with air, and we may fairly opine that in an open-bottomed stove like the Euthermic, if attached to a good chimney, this dilution will be no trifle.

The Euthermic poses, above all things, as a ventilating stove, and it is said that by bringing a free supply of air into the room through the stove itself the nuisance of draughts of cold air may be entirely abolished. What, however, becomes of these pretensions when we are told that the air enters the room through the stove at a temperature of 302° F.! To make it respirable this hot air must be diluted by many times its bulk of cold, which must come in some other way, and will surely have a fair opportunity of forming draughts. A ventilating stove introducing fresh air at a temperature of 302° is an absurdity on the face of it—except for a Turkish bath. Curiously enough the writer of these articles does not mention the real defect which does attach to the Calorigen, possibly because the same may apply to the Euthermic: It rather quickly wears out. The more economically gas is burned in a close stove the greater is the tendency for some of the vapour produced by its combustion to condense, and thus stoves made of thin sheet iron naturally tend to rust; and here is the trouble.

*** The criticisms of "Gas Burner" open up several questions of considerable interest, to which it is only possible to refer very briefly within the limits of a note. The question whether a gas stove of the type described in the article which "Gas Burner" criticises should be a chamber that is practically closed, except in regard to limited apertures in it for the supply of air to maintain combustion and to carry off the burned gases, is one which, like a good many others, must be decided by a balance of advantages and disadvantages. In favour of closure there is, as "Gas Burner" claims, the advantage of control of down-blow from external wind pressure. But, on the other side, there are two serious disadvantages; one is the risk of explosion from the application of light to an explosive mixture of air and coal gas, under circumstances which might easily occur in the domestic management, or rather mismanagement, of such appliances; the other is the fact that a gas stove which only pours warm air into a room and does not extract any air from the room cannot be said to be as effective a ventilating appliance as one which does both. The drawback which this latter type of stove offers, in its liability to down draught, is, as "Gas Burner" states, unquestionable; but it may be to a large extent controlled by making the exit flue as short as possible, and by protecting its distal end by an appropriate wind guard. In such circumstances the worst that can arise is that an excessively strong gust of wind or the sudden opening of a door may produce a momentary arrest of the upward current of the products of combustion, with possibly an escape of them into the room equal to what would be produced by an ordinary illuminating burner in a few minutes.

"Gas Burner" objects to the high temperature at which one of the stoves described in the article on which he animadverts is stated to bring fresh air into the room. The answer, it is to be assumed, is that 302° F. is given as a maximum result when 20 feet per hour of gas is being burned in the stove. But if a room has to be warmed rapidly, as is often desired, the power of a stove thus to pour a stream of hot air into it is a valuable one. There need be no fear in such a case of any disagreeable effects, since the stream of hot air would, of course, rapidly diffuse itself through the cooler air of the room, and when the whole had thus been equally warmed the burner of the stove could be turned down.

Our correspondent also objects to the temperature of the outgoing products of combustion being taken as the criterion of efficiency of a stove, when compared with the quantity of gas consumed. If the chimneys of such stoves were of excessive size there might be some force in this objection that "a chimney may be very cool and yet be very wasteful." But with a flue of 4 inches diameter, which is the average size of most stove flues, a cool outflow of the products of combustion must mean a slow current, and be an indication of a corresponding proportion of the heat of combustion having been carried into the room. The test is, of course, assumed to be applied at the exit of the products of the stoves, and not at the end of a chimney of indefinite length.

"Gas Burner's" letter will not be without effect if it shows that no stove, whether for burning gas or any other combustible, is perfect. Every gain in one direction involves some loss, albeit it may be small, in another. And unfortunately, in addition to the drawback of liability to corrosion, from which, as "Gas Burner" points out, all gas stoves suffer, their efficiency is often much affected by the unskilful way in which they are fixed by ordinary gasfitters.

Messrs. Farwig and Co., 1, Upper Thames Street, E.C., the makers of George's "Calorigen," have drawn our attention to an error in the description of that appliance in the article on "Heating by Gas" in the BRITISH MEDICAL JOURNAL of January 27th, the air tubes which passes through the stove being there described as of *cast* instead of *sheet* iron. We regret that any injustice should in this respect have been done to the "Calorigen." The question of the closure of the stove at the bottom, to which Messrs. Farwig also allude, has been referred to in the note to the letter by "Gas Burner," and need not be further discussed here.

DR. RICHARD NEALE (South Hampstead, N.W.) writes: Having had considerable experience of George's Calorigen, both in my own house and in the rooms of many of my patients, I was rather surprised at the objections raised to its use at page 213 of the BRITISH MEDICAL JOURNAL. The closed bottom is one, and perhaps the chief, feature that meets disapproval. In my own experience it has always had these advantages: that no draught is caused and that a patient can sit quite near and not have cold feet. Again, with the closed bottom every gallon of fresh air sent into the room necessitates the exit of more or less impure air, and the draughts are always from the room and not into the room. Surely in ordinary rooms there is no chance of absolutely closing them so as to prevent ingress of air. Again, does not the closed form of stove retain more heat to be expended in warming the air sent into the room? When open, the very strong draught up the chimney must certainly take away much heat. So strong is the draught that the taper is often extinguished before the gas jets can be lighted. There are, again, many winds which would drive the products of combustion into the room were the bottom open. Lastly, it is stated that were there any gas escape the Calorigen would be converted into a veritable bomb. Surely this is a startling theory. In the first place, there is a free egress up the chimney; and secondly, the gas could not ignite unless the door were opened to light it, and then there would be a very free opening below as well as above. Dr. Bond's Euthermic stove I have not used, but, excepting the open bottom, it seems to be identical in action with the Calorigen, and for sick rooms—and, indeed, for all bedrooms—I cannot conceive of any mode of warming more perfect. One lady, aged 102—my own mother—by the aid of the Calorigen has enjoyed a pure warm atmosphere, equal to Madeira, for many years.

WE have received a further letter from Dr. Pullar, saying that the Leeds stove is the one to which he refers in his former communication. We need hardly say that we are perfectly familiar with this stove, which has been considerably advertised. So far as the inventor of this apparatus insists on the advantage of radiant heat, and shows that it can be best obtained by causing the heat of combustion to be absorbed by asbestos and fire clay, from which in turn it radiates into the apartment, he is perfectly right, but this appears to be the principle on which all the incandescent stoves are constructed. Again, he is right in pointing out the great advantage of warming the floor rather than the air of the room, but there seems no reason for believing that this object can be attained any better by the use of luminous than of non-luminous flame. The hotter the asbestos, the greater the radiation, and certainly the asbestos can be made hotter by a Bunsen flame than by a luminous one. The great objection to the Leeds stove, as described in the papers enclosed in Dr. Pullar's letter, is that the products of combustion are poured into the room, and we do not feel justified in recommending any stove in which this is done.

THE Leprosy Commission appointed by the Government of Cape Colony began its sittings on February 1st.

AT a public meeting held in the Town Hall last week, it was resolved to invite the Sanitary Institute to hold its annual meeting in Liverpool in the autumn of this year.

DANGEROUS INDUSTRIES.—The trades or manufacturing processes which Mr. Asquith has just added to his proclaimed list of dangerous industries consist first and foremost of flax mills and linen factories (as to which a full report has reached the Home Office from an expert in the Factory Department) of red, orange, and yellow lead, lead smelting and tinning and enamelling of iron hollow ware and electric accumulator works. Every trade which is scheduled as dangerous will be dealt with in a way that will go to the root of the evil.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

Subscriptions to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, FEBRUARY 17th, 1894.

THE MEDICAL ASPECTS OF THE NEW UNIVERSITY SCHEME.

In considering the effect of the scheme propounded by the Royal Commission on University Education in London it is necessary to bear in mind the sources of the demand for increased university facilities so far as they had their basis in considerations affecting the medical profession. The main source was undoubtedly the fact that the existing University of London had failed, after a trial of half a century, to become a graduating body for the majority of London medical students. The causes for this were various, but chief among them was the fact that the early stages of the curriculum laid down by the University were of such a character as to form a very real obstacle to the average student. The degrees of the University were only to be obtained after passing through the whole of a prolonged and expensive course of study. Practically no student who was not devoted to the career at the age of 17 or 18 could hope to obtain a degree at anything like a reasonable expenditure of time and energy. If all university degrees in medicine had only been obtainable on similar terms the injustice might not have been apparent; but when it was known that degrees which had always possessed a highly honourable standing could be obtained on far different terms in the Scotch, Irish, and at least one English university, and when it was perceived that the metropolitan schools were annually losing many of their best students, who sought the distinction of M.D. elsewhere, the injustice became crying. In its operation it was not only unjust to the medical students, who, on leaving the London schools, found themselves when entering on practice unfairly handicapped, but it had an injurious effect on the progress of medical education, and militated against the maintenance of a high standard of excellence in the teaching methods and appliances in the metropolis.

A consideration of the summary of the Royal Commission's proposals leads to the conclusion that if the Legislature sanctions its proposals the battle of the London medical students must be fought out before the Statutory Commission. This body will have to settle all the preliminary arrangements, and if the precedent of the Commission which dealt with the Scotch universities be followed, it will deal also with matters of detail which will arise, both with regard to the character of the entrance examinations and the nature of the arrangements to be entered into with the Royal Colleges of Physicians and Surgeons and with the Apothecaries' Hall.

The Royal Commission appears to contemplate the acceptance, as equivalent to matriculation examination, of an examination of equivalent standard passed at school. As to the nature and extent of such an examination the University, when formed, would doubtless be empowered to decide. If, however, the principle that the standard of matriculation required should be similar to those required by other universities and such as the average boy, properly taught, should be able to pass on leaving school, it seems reasonable to hope that one great difficulty which has stood in the way of London students will be removed.

With regard to the arrangements to be come to with the London Corporations, it would appear that the Royal Commission approves generally the plan suggested in 1891 by the Senate of the University. This plan contemplated examinations in anatomy, physiology, medicine, surgery, and midwifery for the pass M.B. degree, conducted by a board of examiners appointed jointly by the Royal Colleges and by the University. The examinations, it was proposed, should be conducted at the same time and place as the examinations of the existing Conjoint Board, and it would seem to have been intended that these examinations should be in practice accepted by the University, which would at the same time, as was only reasonable, reserve the right to apply, if it appeared necessary, any further test to the candidate for its degrees.

The admission of the Society of Apothecaries into the new University would undoubtedly add immensely to its practical working efficiency. It would, indeed, be difficult to exaggerate the practical importance of this proposal. It will afford another opportunity to the London licensing authorities to combine to form a single portal, while retaining, for the benefit of the profession at large, the important statutory powers which the Society of Apothecaries possesses for checking unqualified practice. There never was a time when these powers were more needed than at the present moment, and their loss would be disastrous.

The importance of this aspect of the question was fully set out in a series of articles published in the British Medical Journal some years ago. At that time we insisted on the absolute necessity of retaining the Apothecaries' Society, with its statutory powers in regard to unqualified practice, intact, while we at the same time advocated strongly the inclusion of that Society in the Conjoint Examining Board for England.

The recommendation of the Royal Commission that the Society of Apothecaries should be admitted to a representation on the Senate of the new University concurrently with the Royal Colleges of Physicians and Surgeons is a striking proof of the justice and strength of the position which we then took up, and indicates very plainly that in the opinion of the Commissioners no satisfactory solution of the question can be arrived at without the co-operation of the Apothecaries Society. When we recollect the constitution of the Royal Commission we may feel sure that a unanimous decision to admit the Society to representation on the Senate, and to co-operation in conducting the examinations, was only reached because the arguments in its favour were felt on close examination to be absolutely unanswerable.

There are other aspects of the scheme contained in the report which are well worthy of consideration, and we propose to return to the subject at an early date.

THE UNQUALIFIED ASSUMPTION OF MEDICAL TITLES.

The recent legal proceedings against a Mr. Joseph Steel, of Hetton-le-Hole, for infringing the provisions of Section 40 of the Medical Act, 1858, by the unqualified assumption of a medical title, are a matter of more than ordinary interest to the medical profession in consequence of the remarkable defence which was set up at the trial.

In the report of the case published in the British Medical Journal of February 10th it was stated by counsel for the prosecution that the defendant was, up to about eighteen months ago, a working miner at one of the pits in the district, since which time he had become a "doctor," and had issued handbills on which his name appeared as "M.D. (Bc.)"

According to the published report it was proved that he had signed certificates of births and deaths, notifications under the Infectious Diseases (Notification) Act, and certificates for sick pay to members of certain friendly societies.

For the defence the Rev. Veryman Trimming was called to prove that the defendant had been elected, after due examination, a member of the Incorporated Council of Safe Medicine, the Council of which had awarded to the defendant a diploma which gave the right to make medicines under their formula. It was, the witness stated, a botanical society.

This is not the first time we have heard of the General Council of Safe Medicine, Limited, but we believe it is the first time that the defence referred to has been raised in proceedings for infringement of the penal clauses of the Medical Acts, namely, that the holder holds a diploma from that body, and the matter has therefore assumed an aspect that renders it desirable to make some inquiry into the constitution and powers of the company in question.

At first sight it appears impossible to believe that a company could have been registered under the provisions of the Joint Stock Companies Acts for such a purpose as granting degrees, but we find on inspection that such is really the case, and that a company under the title of the General Council of Safe Medicine was incorporated in the year 1893, with the following objects:—To grant degrees, scholarships, and awards of merit in the magnetic and botanic system of safe medicine to students passing a satisfactory examination before the General Council of Safe Medicine, and to those of the botanic profession of good moral character, and who could produce reliable evidence of qualification, or ten years' practice at discretion of the Council. The highest diploma of the Council conferring the degree of M.D.(Bc.), which shall signify the rank of Doctor of Botanic Medicine, in contradistinction to Surgery and the practice of the Allopathic and Homœopathic Schools of Medicine. Also to maintain a lecture hall and library, etc.

The memorandum of association is subscribed by the statutory number of persons, who each undertake to contribute to the assets of the company in the event of the same being wound up a sum not exceeding £5 for payment of the debts and liabilities of the company.

The subscribers are David Younger, medical herbalist (who is probably the person referred to in the leaflet published in the Journal of February 10th as D. Younger, M.D. (Bc.), president-elect), Arthur Bedells, medical herbalist; Robert Hoare, merchant; Charles Gapp, medical herbalist; Alfred Charles Norfolk, medical herbalist; Alfred William Maguire, medical botanist; the Rev. Veryman Trimming, clerk in holy orders and journalist.

We have before us at the moment a circular purporting to be issued by a person with the following designations after his name: M.A., M.D. (Bc.)Eng., M.D., LL.D., U.S.A., Gold Medalist in Science Eng., Member of the Magnetic and Botanic College of Safe Medicine, London, late of Trinity Medical College and General Hospital, Toronto ——— etc., and undertaking the treatment of nervous and other similar diseases on moderate terms, and intimating that all diseases, however chronic, may be either permanently cured or greatly relieved.

If active steps are not taken to enforce the penal clauses of the Medical Acts, the unqualified assumption of medical titles under the auspices of the General Council of Safe Medicine may, judging from the above circular and the case of Joseph Steel, attain proportions of some magnitude. We find that by a special resolution of the Company passed on January 4th, and confirmed on the 25th, it was resolved that the number of members be raised to 50, it being thought desirable to promote the advocacy of Medical and Botanic Medicine.

It is satisfactory to find that the General Medical Council is taking active steps to contest the validity of the titles purporting to be granted by the General Council of Safe Medicine, and assumed by the holders of degrees or diplomas of that Council; but we would urge on the Council also to give its careful attention to the source from which the alleged qualifications have been derived, with a view to ascertain how the registration of such a company was permitted, and of sparing no efforts to secure the removal of its name from the Register of Joint Stock Companies.

NEW HOSPITALS VERSUS THE EXTENSION OF OLD HOSPITALS FOR LONDON.

II.—The Solution.

The facts with which we have to deal are, shortly, that London adds to its population at the rate of about 60,000 souls every year, while it is difficult to see how, by any feasible alterations or additions to existing hospitals, more than five or six hundred beds could be added to those at present available. How then is the inevitable deficiency to be supplied? There seem to be three possible courses (1) to build new hospitals on the pattern of the old ones in the midst of the populations they will have to serve; (2) to establish ambulance stations, each with a few beds for the immediate reception and distribution of accidents and emergencies, such increased accommodation as might be required being provided for by the erection of new hospitals, not necessarily in the midst of the people, but in the best and most healthy situations, probably in the outer suburban ring; (3) the establishment either in the midst of the populous neighbourhoods, or by aid of ambulance stations in the suburbs, of branch or outpost hospitals, connected with and under the same management as the large medical school hospitals already in existence.

At first sight it would seem that the common sense solution of the problem would be to accept the first of these courses. The affair, however, is not quite so simple as at first sight

might appear. There are three most legitimate functions served by the London hospitals, and any solution of this problem, to be acceptable, should make reasonable provision for the performance of these three several duties. The first is the immediate reception and treatment of cases of accident and emergency. Now there can be no question, as regards this point, that hospitals ought to be in the midst of populations. In cases of serious accident every half hour's delay adds to the patient's danger; nor would this difficulty be overcome by the establishment of ambulance stations, necessary as this may be as part of a complete scheme. When a case of accident once arrives at a large London hospital, not only is the best surgical help available, if necessary, but even in the cases treated by the junior staff everything is done under the critical observation of teachers and students, and, in difficult cases, there is an unlimited supply both of nurses and assistants. No possible ambulance station could provide help of the same character, even if the direful necessity of a second removal, no slight risk in severe cases, is put out of consideration. We may say at once then that, for the treatment of accidents and emergencies, ambulance stations will be useful supplements to other schemes, but will not take the place of hospitals situated in the midst of the population. The question, then, so far as this point is concerned, narrows itself to that between new independent establishments and branches of the existing hospitals.

The second great function of London hospitals is to provide superior advice and assistance for those whose cases demand them and whose means render them otherwise inaccessible. The old duty of providing asylum for the indigent and the helpless we put out of consideration, as it now falls to the Poor Law. For this purpose, then, it is essential that these hospitals be officered by those who are connected with the medical schools. We are not discussing an ideal state, but taking things as they are, and just as there can be no doubt that the best talent available now struggles to be connected with the medical schools, so the hospitals must be connected with the schools if they are to secure this best talent for their patients. Now, no one can look forward with equanimity to any enlargement of the number of medical schools in London; there are more than enough of them as it is; and yet, if new and independent hospitals are built, of such a size as to be economically worked—say, 400 beds apiece—who is to refuse to each of them a school? We come, then, to this point, that to provide the best assistance the staff of these institutions should be connected with medical schools, and, as it would be absurd to found new schools, it would be better that these new hospitals should not be independent, but should be linked to the old ones.

The third great function of the hospitals is the scientific investigation of disease and the provision of medical education. For these purposes there are three great requirements: a good staff; a large field for the selection of clinical material; and a plentiful supply of ward appointments for the students. It is obvious that, in all these points, a plan by which such new hospitals as the growth of population may make necessary should be linked with old hospitals and old schools, would be far more useful than any scheme for the erection of complete but independent institutions. It would be a great disaster to medical education and scientific progress were the clinical material available for educational purposes still further scattered among institutions which, however perfect in themselves, were unconnected with the schools. We all know that even now there is, by means of community of staff, an informal alliance unrecognised, and even sometimes disapproved of, by the managers, between some of the smaller hospitals, special and other, and those connected with the great schools. How much better that this link should be a real one, that their patients should have the full benefit of that division of work which is only possible in hospitals fully equipped with special departments, and that the schools should have the advantage of the clinical material thus placed at their disposal.

What seems then to be the proper solution of this problem is that, instead of expensive additions being made to hospitals which already are so large as to be managed only with considerable difficulty, new hospitals should be erected in the midst of the populations they are intended to serve, but that they should really be outposts of existing institutions, open to their students, and supply clinical material to the schools. The advantages of such a scheme to the progress of medical education are indisputable; the sick poor also would not only have the benefit of finding well-equipped hospitals within reasonable distance of all parts for the treatment of emergencies, but, so far as specialism is useful, would receive the full advantage of being in touch with the well-organised departments of the central institution; the ambitious juniors in the profession would discover that taking office in such hospitals meant a step up rather than a shelf on which to rust; and the subscribing public would no doubt soon discover considerable economy in the management of these linked institutions. Ambulance stations might be required even then, but certainly not more than they are at present.

Professor August Weismann, the well-known writer on germ plasm and heredity, will deliver the Romanes Lecture in the Sheldonian Theatre at Oxford on May 2nd, at 2.15 P.M.

Dr. A. H. Ferguson, of Winnipeg, President of the Manitoba Branch of the British Medical Association, and Professor of Surgery in the Manitoba Medical College, has accepted a call to the Chair of Surgery in the Post Graduate Medical School and Hospital at Chicago.

We have received a communication from Mr. Richard Furber, solicitor, stating that Mr. Harness "has been reluctantly compelled" to discontinue his action for libel against the *Pall Mall Gazette*.

Dr. E. Seaton, M.O.H. Surrey, will open a discussion on vaccination and the laws relating thereto, at the meeting of the Society of Medical Officers of Health, at 8 P.M. on Monday next, at the rooms of the Royal Medical and Chirurgical Society of London. This is the second of a series of discussions which have been arranged to be held during the present session.

The Hungarian Government has established a bacteriological institute at Buda-Pesth for the purpose of giving facilities for the study of infectious diseases from the scientific point of view; for the employment of bacteriological methods for the combating of such diseases; for

general bacteriological researches; and for supplying information on bacteriological questions to public authorities and private inquirers.

Professor Billroth's funeral, which took place on Friday, February 9th, was attended by an immense concourse of people, in which all sections of Vienna society were represented. Farewell speeches were delivered at the graveside by Professor Gussenbauer in the name of the departed surgeon's pupils; by Professor Chrobak in the name of the Vienna Medical Society; by Professor Vogel in the name of the Professorial College; and by Freiherr von Mundy.

THE OWENS COLLEGE AND THE MANCHESTER INFIRMARY.

At the annual meeting of the trustees of the Manchester Royal Infirmary a most important resolution was passed, completing the working relationship of that institution with the medical department of Owens College. It was decided to grant beds at the infirmary to one Professor of Systematic Medicine and one Professor of Systematic Surgery, in order that the choice of the College authorities, in their appoint ment to vacant chairs, should not in future be limited to candidates who happened at the time to be on the infirmary staff. The adoption of this rule remedies what the College has long considered a serious defect in the working arrangements of the Medical School, and brings into much nearer relationship the systematic teaching of the College with the clinical teaching of the infirmary. We will not attempt to say how far the possibility of the College authorities getting a hospital of their own has had to do with this decision, but we cordially congratulate both institutions on arriving at a *modus vivendi* so thoroughly in accordance with common sense.

EDINBURGH ROYAL INFIRMARY.

At the Board meeting of this institution, on February 12th, Dr. John Duncan moved, and Dr. Argyll Robertson seconded, that it be remitted to the Committee of Medical Managers to consider the expediency of forming in the institution a central surgical instrument department under the supervision of a skilled mechanic. The motion was adopted. At the same meeting some conversation took place on the subject of members of the staff being members of the Board of Management, one member stating that he was prepared to move that on a member of the staff becoming a manager he should forthwith cease to be a member of the staff. Inasmuch as there was doubt as to whether this question could only properly be settled by the Court of Contributors, the matter was referred to the Law Committee for opinion and report. So far as the medical profession and the public are concerned, the appointment of Drs. John Duncan and Argyll Robertson has already been more than fully justified, and opinion is being freely expressed in many quarters that the Royal College of Physicians of Edinburgh will do well at their next election to send two physicians, members of the staff, to represent the College on the Managing Board. The result can only be to the greater efficiency of the hospital, and the better discussion and regulation of the various matters therewith connected.

A DOCTOR IN THE TIME OF DANGER.

Dr. Goodridge, of Childe Okeford, Dorset, was some time ago appointed medical superintendent to the Government coolie emigration work. A statement of his conduct in connection with the loss of the *Volga*, and the narrow escape of nearly 700 coolies, has been sent home, which is of great interest. Dr. Goodridge left Calcutta in the *Volga* with 160 coolies for the West Indies, and 483 for Jamaica. The *Volga*, after touching at St. Helena, made for St. Lucia on December 10th, ninety-six days after leaving Calcutta. On the same day the inhabitants of the island were alarmed at the booming of a distant gun, and it was then found that the *Volga* was on the rocks at the foot of the Vigie Hills, two miles from the wharves. She was lying upon her starboard side, held on to a ledge of rock by her starboard anchor. The coolies were paralysed with horror, and crouched quietly on the main deck, watching every movement of Dr. Goodridge, in whom they seemed to have perfect confidence. Fortunately coolness and discipline prevailed among the crew, and by midnight all the coolies and some of the crew were landed without loss. An hour later the ship settled down on the port side, her main deck was under water, and the whole ship was swept by the south-west swell. Under Dr. Goodridge's care the coolies were well attended to.

CIGARS AND INFECTION.

The smoking community must feel grateful to Dr. Kerez, of Rome, for alleviating their not unnatural alarms as to the possibility of becoming infected with tuberculosis from smoking cigars in the manufacture of which the saliva of the workpeople is so often made use of. The well-known fact that, possibly from the lightness of the work being attractive to such people, large numbers of cigar makers are more or less affected with consumption makes the risk from this source all the more obvious. Dr. Kerez, however, has had cigars made by the ordinary method, with this exception, that in each part of the process where the operative usually applies his mouth or wets the tobacco with his saliva, the leaves were moistened with saliva known to contain the germs of tuberculosis. The cigars thus made were then dried and packed in the ordinary way. At various dates afterwards inoculation experiments were made with these cigars with the result of showing that, while they retained their infective property as regards tuberculosis for ten days, they were found, when kept for any longer time, to have lost the power of communicating the disease, and the guinea-pigs employed suffered no ill-effects whatever from their inoculations.

OPIUM AND ITS OPPONENTS.

Surgeon-General Sir William Moore trenchantly defended the dietetic use of opium at the Society for the Study of Inebriety on February 8th. Dr. George Harley spoke on the exaggeration of many of the statements put forth by anti-opium advocates; Brigade-Surgeon Pringle and Dr. Lansdell took the opposite side. The President, Dr. Norman Kerr, said that it seemed to him that there had been exaggeration by both parties in the controversy. In some respects opium inebriety was more grave than alcohol omania. It was less easily cured, but, on the other hand, it had not been shown to have produced the serious organic lesions arising from alcohol. While alcohol lowered, opium raised the temperature of the body. In the East, though excess in opium varied in different countries—being less prevalent in India than in China—opium could be taken with much greater immunity than in England or America. It was a fallacy to suppose that the majority of opium users in the East were slaves to the drug. As with alcohol in Britain, the majority were limited consumers, being less than 10 per cent. Yet, after every allowance for exaggeration, it appeared to Dr. Kerr that, from a medical and scientific point of view, opium and alcohol were poisons whose useful and beneficial employment was restricted to therapeutic use.

CORONERS AND INQUESTS.

"Are medical men ever called to give evidence now?" Such is the question with which a medical man in one of the most important towns in the North prefaces a letter to us. In it he tells us that he was called to a woman, aged 76, who, in consequence of having been knocked down in the street, had sustained a Colles's fracture, as well as severe contusions of one hip, and who died from hypostatic congestion of the lungs a few days later. He was not called upon

to give evidence at the inquest. All we can say is that the coroner did not discharge his duty as it is laid down by Mr. Braxton Hicks,[1] which is "to find out how, when, and by what means a person came by his death." The same post brought a letter from a correspondent in the West, who writes: "I was called to see a man who had wounded his arm whilst cutting up a diseased cow, cellulitis developed, and the man died fourteen days after the injury. I reported the case to the coroner, who referred the case back to me for a certificate of death, which I refused to give. An inquest was held, and it appeared from remarks made by the coroner that he thought an inquest was not necessary. Should I, in your opinion, have given a certificate?" Our correspondent most unquestionably was right in refusing to give a certificate? When death has resulted, either directly or indirectly, immediately or remotely from violence, it is the duty of the medical man not to give a certificate, but to refer the matter to the coroner. If the latter does not know his duties, that is no reason why the former should not be strict in the observance of his responsibilities. Could not Mr. Braxton Hicks write another pamphlet, this time entitled *Hints to Coroners concerning the Holding of Inquests?*

PARASITIC ANÆMIA AND DIARRHŒA.

Professor Penberthy, of the Royal Veterinary College, has described a small nematode which he regards as the cause of anæmia and diarrhœa in cattle. The small strongyle is found in the mucous membrane of the abomasum and small intestines, free and partially imbedded under the epithelium. It is not usually detected by the naked eye, but a light scraping of the mucous membrane placed under $\frac{1}{4}$-inch objective allows of differentiation of the sexes, and sometimes a field reveals as many as six worms. The length of male and female may be roughly stated at from $\frac{1}{75}$ in. to $\frac{1}{45}$ in. The female, pointed at each extremity, usually contains relatively large ova. The male is provided with a bilobed bursa supported by eleven rays, four on each side, and three centrally placed more distinct and the middle bifid at the free extremity; above the bursa is a retracted spicule, dark and prominent. Another female parasite found in very acute and fatal cases is about $\frac{1}{25}$ in. in length, very fine, and pointed at each end. This the author regarded as *anguillula intestinalis*, which is credited with inducing anæmia in various species of animals. Young cattle are most commonly affected, and often the losses are very serious. The symptoms are those of anæmia and diarrhœa, the course, according to the number of parasites, acute or chronic, and the result often fatal. The parasite has been demonstrated in cases heretofore attributed to tuberculosis, sewage poisoning, etc. It is stated that if the anæmia is not very far advanced the disease yields to such remedies as asafœtida, turpentine, picrate of potash, common salt in association with iron salts.

MEDICAL WOMEN AS WORKHOUSE DOCTORS.

The Lambeth guardians last week had before them the question of appointing a lady as assistant medical officer to their infirmary. There seemed to be a general agreement that the lady had the better testimonials, but many of the guardians doubted whether in an institution such as a workhouse infirmary her appointment would work well. Ultimately, when the votes were taken, they were found to be equal, and the chairman gave his casting vote against the lady's appointment, but it was intimated that the opinion of the Local Government Board would be asked as to the legality of this course. It seems that we shall soon see how far medical women propose to undertake the full duties of their profession, irrespective of the sex of their patients, and how far public opinion will support them in so doing. The question of the suitability of women for the profession of medicine has always been more or less befogged by the assertion so commonly made—by their friends, it must be allowed, rather than by themselves—that there was plenty of work for them among the women and the children. We confess that this distribution of work according to sex never seemed to us likely to hold good for long, in the face of the hurry of daily work and the competition of general practice. The question was put by one of the Lambeth guardians whether work enough could be found for this lady on the female side, to which Dr. Lloyd very properly replied that her services would be required on the other side also. The fact is that view of the matter is blinking the situation; if a lady accepts such a position she must be prepared to do the work, as, indeed, we have no doubt she was. The last ten years have made a great difference in the way in which this question is regarded, both by the profession and by the public. We have all become accustomed to what at first was a somewhat startling novelty, and familiarity has bred, at any rate, acquiescence. But another great influence has been at work which now makes it far easier for medical women to undertake the treatment of the opposite sex than it would have been some time ago. The great spread of nursing as an occupation for educated women has shown men of every rank how a scientific interest makes all things pure, and how women can retain their tenderness and true womanliness although they may be steeped in the knowledge of all that is most vile. All this makes it much easier than some years ago anyone would have supposed it possible for medical women to undertake the full duties of their profession, and for the public to understand that they do it without degradation.

[1] *Hints to Medical Men concerning the Granting of Certificates of Death.* By A. Braxton Hicks.

"POISON" WITHIN THE MEANING OF THE PHARMACY ACT.

The argument put forward in the defence of a charge of infringement of the Pharmacy Act before his honour Judge Bacon last week, shows that the endeavour to import into the construction of the statute an interpretation of the word "poison" different from the definition contained in the second section, is still being persistently continued. There is no longer any attempt to support the general proposition that a medicinal compound containing as an ingredient a scheduled poison is something different from a preparation of the poison or the poison pure and simple, and therefore outside the operation of the Act. That contention was broadly disposed of by the judgment in the chlorodyne case, but it was not thought necessary to lay down a rule which would cover every possible case. As a consequence it is now maintained that—admitting a compound of the kind above mentioned to be a preparation of the poison which it contains—the provisions of the Pharmacy Act do not apply unless the quantity of the poison is sufficient to make the preparation itself poisonous. This is, as Judge Bacon suggested, trying to find a way out of the Act, and to enforce the argument that the element of quantity is essential to the definition of poison it was urged that anything may be poisonous under certain conditions. That argument, however, is quite beside the question. It is no doubt difficult to give a correct and comprehensive definition of the word "poison," and the attempt to arrive at such a definition from the relation between quantity and effect would perhaps be the most fallacious of any. The Pharmacy Act recognises that position, and for its particular purpose overcomes the difficulty by defining "poisons" as the several articles enumerated in the schedule. "Morphine" is a poison and "preparations of morphine" are also poisons within the meaning of the Act. A medicinal compound containing morphine is, from that point of view, a poison to which the provisions of the Act apply. There is no ground for introducing considerations as to quantity or proportion. Anything included by the term "preparations of morphine" is a poison within the meaning of the Act. It would be out

of place to consider whether any given quantity of morphine, properly administered, would be injurious, for it is the possibility of injury, as a result of improper administration, to which the provisions of the Act are directed. Consequently the quantities of poisonous articles specified as medicinal doses in the *Pharmacopœia* cannot be regarded as limits to the applicability of the Pharmacy Acts. Those statements are intended for the guidance of specially qualified persons, and not to justify the sale or use of dangerous articles under conditions affording no guarantee of the protection required. The decision in the Delve case appears to have been given without due regard for the object contemplated by the Pharmacy Act, and to have been suggested by abstract considerations which have no practical bearing on the question at issue. If proof of detrimental effect is held to be necessary for justifying the application of the term "poison" a coroner's inquest would be the only authority competent to decide the question, What is a poison? and the beneficial influence of the Pharmacy Act as a protective measure would be entirely counteracted.

DUTIES OF THE MEDICAL OFFICER OF HEALTH UNDER THE NOTIFICATION ACT.

A CORRESPONDENT has sent us a copy of a letter addressed to the clerk of a rural sanitary authority by Mr. Alfred J. Adrian, Assistant Secretary to the Local Government Board, with regard to the right apparently claimed by some medical officers of health to make personal visits to patients of other practitioners to verify the diagnosis in cases notified to them under the Infectious Disease (Notification) Act, 1889. The first sentence of the letter has reference to a special case, and this it seems needless to reproduce, but the remainder of the letter is of general application, and expresses very clearly the view of the duties of a medical officer taken by the Local Government Board, the responsible central authority: "As regards the general question of the medical officer of health's duties in connection with cases of infectious disease, I am to state," Mr. Adrian writes, "that the Infectious Disease (Notification) Act, 1889, makes no difference in those duties, but merely extends his information as to the existence of cases of infectious disease. His duties as regards such cases are prescribed by Article 18 (6) of the Board's Order of March 23rd, 1891, of which a copy is enclosed. It appears to the Board to be undesirable that the medical officer of health should in general undertake a personal diagnosis of the notified cases in order to test the accuracy of the certificates. In some cases, as, where there is reason to doubt the good faith of the certifier, or where the disease is one which in itself is, or owing to the attendant circumstance threatens exceptional danger to the community, it may be desirable that the medical officer should make a personal diagnosis, but it must be remembered that this can only be done with the consent of the patient, or those having charge of the patient, and that the medical practitioner in charge of the case should always be communicated with, and his co-operation secured, if possible."

DIPHTHERIA IN THE SUBURBS.

AN inquest held at Tottenham, in the case of a man who died there from diphtheria, shows in a striking way the helplessness of the outer ring of London in regard to its dealings with infectious disease. It is cruel to train people up to expect hospital treatment, and then to leave them without hospitals to go to. This unfortunate man would have been better off if no such institutions had been in existence, for instead of being nursed by his wife, she, poor woman, spent her days and her money running about from place to place trying to gain admission for him, and in telegraphing to half the hospitals in London without avail. The whole of the outer ring of London, beyond the territory of the Asylums Board, is ruled by a series of isolated local boards, the sanitary authorities for their respective districts, some of which possess hospitals of a sort, while others are entirely without any such appliances for the limitation of the spread of infectious disease. It is high time that some pressure were brought to bear to compel such of these authorities as are not large enough to act independently to combine for hospital purposes. What is happening is that the more progressive boards are making provision for themselves, and leaving the intervening patches so isolated from each other, and so awkwardly placed, as to be very difficult to combine into joint districts for hospital purposes. The most cursory study of the subject will show how essential it is that the whole outer ring of London should at once be mapped out into hospital districts, so that the money spent in providing hospital accommodation shall not be thrown away in setting up small institutions which can never form part of any general scheme.

LONDON BAKEHOUSES.

DR. WALDO read a paper on the sanitary condition of bakehouses on February 14th, at the Parkes Museum. He gave a striking description of the conditions amid which a very large proportion of the bread consumed by Londoners is made. Especial stress was laid upon the ineradicable evils resulting from bakehouses being below ground. Dr. L. Parkes, speaking in the discussion which followed, pointed out that there was one mitigating circumstance—namely, that at least the bread was sterilised in the process of baking; but Dr. Waldo showed that this gave no real protection, seeing that in low-lying districts sewage occasionally regurgitated into the cellars, that the floors and walls became soaked with it, and that the bread was often soiled after it was baked. He said that not so long ago he had visited twenty bakehouses in one day, in which at the time of his visit sewage was lodging on the floor. He advocated legislation, and especially in the direction of making it necessary for bakehouses to be licensed, the licence to be renewed year by year, and in this he was supported by Mr. Lakeman and other speakers.

THE INDIAN OPIUM COMMISSION.

THE members of the Indian Opium Commission after having, in two parties, taken evidence in various parts of India, reassembled at Bombay, but continued to take evidence in two sections. A telegram of the *Times* correspondent states that the most striking evidence was that given on February 13th by Mr. M'Lauchlan Slater, the manager and actuary of the Oriental Life Assurance Company. He said that the results of the company's inquiries showed that, while English lives in India suffered 52 per cent. greater mortality than at home, Indian lives suffered only 16 per cent. greater, and that since 1892 the company had resolved not to impose extra premiums on moderate opium eaters. The Burmah Branch of the British Medical Association have forwarded to the Opium Commission a unanimous resolution against the introduction of further restrictive measures in the province. The present opium regulations they consider more than sufficiently stringent to meet the exigencies of the case.

THE SALE OF SECRET REMEDIES.

THE zeal of counsel in endeavouring to attain the objects of their clients sometimes leads them to adopt arguments which betray the weakness of their cause, though they may present some superficial plausibility. An instance of this kind occurred the other day in a prosecution under the Pharmacy Act of an unregistered person for the sale of a secret remedy, which is a preparation of opium, and consequently is a poison within the meaning of the Act. In regard to the safety of the public, which is the specific object of the Act, it was contended that the restriction of the sale of the article to registered chemists does not offer any pro-

tection, because a chemist selling it does not know it is a poison within the meaning of the Act any more than a grocer or other unregistered person selling it. That is true only so long as the article is put forward for sale by the maker in violation of the provision of the Pharmacy Act that such articles shall be labelled "Poison," and it is only from the concealment of the fact that they are poisons within the meaning of the Act that there is an equal absence of protection to the public when such articles are sold by chemists or by grocers. A preparation of opium, even of so weak a nature comparatively as paregoric, is a dangerous thing, and it may be detrimental or even fatal in its effects. For that reason the law declares that, like other preparations of opium, it shall be deemed a poison, and sold only by persons competently qualified to deal with poisons. The condition under which it can be stated that there is an equal provision for the safety of the public in the sale of such articles by grocers as in their sale by chemists, is simply the antecedent violation of the statute which is perpetrated by offering these articles for sale without a disclosure of the fact that in the eye of the law they are poisons. That practice has been continued too long. Now that it has been exposed and declared unlawful it is time that it should be put an end to, without entering into fallacious arguments which have no better foundation than the malpractice and disregard of the law which has hitherto prevailed.

THE DEFENCE OF RORKE'S DRIFT.

In the *True Story Book*, edited by Mr. Andrew Lang, the "Tale of Isandhlwana and Rorke's Drift" is told by Mr. Rider Haggard. It is unnecessary to say that, written by such a pen and revised by such an editor, the "tale" is most admirably and vividly told; but in the account of the heroic defence of Rorke's Drift, there is an omission which must strike any well-informed reader as remarkable, and which to us is inexplicable because almost inexcusable. While the names of all the officers save one engaged in that memorable fight are most properly and sympathetically mentioned, namely, Lieutenants Chard and Bromhead, Mr. Dolton of the Commissariat, and the Rev. Mr. Smith, the very existence of one of the most prominent and well known actors in the scene is altogether, we hope unintentionally, ignored, namely, Surgeon J. H. Reynolds, of the Army Medical Staff. Did neither Mr. Haggard nor Mr. Lang ever hear of that gentleman, or, when all the other officers are mentioned, how comes his name to be omitted, especially when he was the central figure of that wonderful defence of the hospital which is so thrillingly described? Perhaps the writer is less in fault than the information upon which he based his tale, for, if it came from certain sources, it is not unlikely that heroic conduct on the part of "only a doctor" would be minimised, or even ignored. It is the unfair spirit so often displayed by military writers towards army medical officers that makes the medical profession at large very sensitive over such omissions as the one in question. Brigade-Surgeon-Lieutenant-Colonel Reynolds is still on active service, and to his many friends is known to be as modest as he is brave. It was for services as the following, but which find not even an allusion in the "true tale" of Rorke's Drift, that he was decorated with the Victoria Cross, and specially promoted to the rank of surgeon-major, see the *London Gazette* of March 15th, 1879, and Hart's *Army List*: "For conspicuous bravery during the attack on Rorke's Drift on January 22nd and 23rd, 1879, which he exhibited in his constant attention to the wounded under fire, and in voluntarily conveying ammunition from the store to the defence of the hospital, whereby he exposed himself to a cross fire from the enemy both in going and returning." Perhaps Messrs. Haggard and Lang will take a note of these facts for any future issue of the "true tale."

ASYLUM SUPERINTENDENTS.

We were not sorry to observe[1] that the number of applicants who presented themselves for the post of medical superintendent of Whittingham Asylum was so limited that the subcommittee of selection had to adjourn. The Lancashire authorities, like too many other bodies of the kind, have been constantly endeavouring (certainly before the days of the county councils, we believe, and also since) to cut down the already inadequate salaries, and to endanger the pensions of the holders of these important offices. It has now become obvious how foolish it is to expect to secure an officer so responsible and so capable as the head of Whittingham must be for the salary of a private practitioner in a country village. What the authorities finally decided to offer to Dr. Wallis's successor we do not know, but we know that £800, and even £600 a year, with a house, were privately suggested by influential persons. If county councils will go on building huge asylums, and placing 2,000 patients under the medical care of one man of experience, aided only by a few house physicians at perhaps £100 a year a-piece, we must expect lunatics to accumulate and superintendents to be prematurely worn out with fatigue and anxiety, and yet inefficient for any scientific ends. Of course among the multitude of asylum assistants there are many good men; some few, indeed, have gained distinction in their avocation; but nine out of ten of them can have no heart in their work, they can see no chance of any prizes in the branch of medicine they have entered, and are largely cut off from the general currents of medical life and progress. Now they see that even a superintendency is not worth having at the price. It is hopeless to expect first-rate work under these circumstances. There is no energy or enthusiasm left, even if there were time to do much either for science or for cure. Let us look into the casebooks, and see there too often perfunctory notes and no attempt whatever at any original observations or even any industrious survey of the rich material at hand. As for cure, little is attempted which good nursing, food, and clothes, cricket matches, and dances fail to bring about. And how shall even these attempts at gaiety lessen the hideous monotony of living for years in a ward of 50, 100, or 150 fellow lunatics? The head of an asylum like Whittingham should have at least the salary of a successful urban practitioner—say, about £2,000 a year—for his income is even more hardly earned; and the patients should have the advantage of the help of one or two experienced deputy superintendents at £300 or £400 a year, who should be more directly responsible for scientific diagnosis and medical treatment under the guidance of their superior. The whole system of herding these poor people in barracks in such vast numbers, without individual treatment or domestic surroundings, is very doubtful, but while it is continued some liberal attempt at least should be made to make the cumbrous machine work its best.

THE NATIONAL HEALTH SOCIETY.

The first of a course of Lenten Lectures was given at the rooms of this Society on February 14th by Dr. C. E. Shelly, consulting medical officer of health for Haileybury College, on the interesting topic of the Feeding of Schoolboys and Schoolgirls. The lecturer pointed out that in adult life nutrition could but replace worn-out tissues on the exact model in which they existed in the frame. The formation of the model took place during childhood and youth, and any perversion of nutrition occurring at that time perpetuated its effects throughout the whole of life. He drew attention to the large demands on and interferences with the nutritional side of life resulting from modern educational methods, and urged that the character of the food and the hours of meals should be fixed in regard to the requirements of the children's work rather than in deference

[1] British Medical Journal, February 3rd, p. 261.

to old tradition or the convenience of the masters and officials of the schools. One effect of modern improvements in some schools had been to draw to them a more delicate class of boys, boys who years ago would have been pronounced unfit for public school life, and if the schools accepted these boys they ought at least so to order their feeding that no untoward results should happen from their admission. The next lecture of the series will be given on February 21st by Dr. Arthur Newsholme on Diphtheria in the House.

COMPULSORY NOTIFICATION IN LEEDS.

A deputation representing the medical profession in Leeds and the Sanitary Aid Association, attended a meeting of the Leeds City Council last week to urge the importance of the adoption of the Infectious Disease (Notification) Act in that city. Dr. Eddison and Mr. T. R. Jessop spoke for the medical profession, and the latter stated that the profession in Leeds was unanimous in favour of the adoption, as they were convinced it would diminish the mortality of the city, and materially lessen disease. The Rev. Canon Talbot, Vicar of Leeds, and Mr. R. Benson Jowitt, Treasurer of the General Infirmary, also spoke in favour of the adoption of the Act. Subsequently a deputation described as large, but not stated to be of a representative character, advanced certain objections, which were of the usual character, against the adoption of the Act. At an adjourned meeting of the Leeds City Council, held on February 14th, Alderman Ward (Chairman of the Sanitary Committee) moved that the Council, as the local authority for the City of Leeds under the Infectious Diseases (Notification) Act, 1889, adopt the said Act; and that the Council fix Tuesday, May 1st next, as the day upon which the provisions of the said Act should come into operation in and for the City of Leeds. The motion was seconded by Councillor Dr. Loe, and carried by 25 votes to 21.

"DOCTORS AND THE PRESS."

"Mr. J. Charles Harrison, M.D.," whose lithographed portrait has recently occupied a prominent place on London hoardings, in a letter to an evening contemporary, asks why a physician, who has made a special study of a disease, should not "announce the fact in a modest advertisement? Brazen quackery is one thing, a simple announcement another." In conclusion, he says: "The portion of medical ethics dealing with advertising is a relic of other days." We presume that this last sentence is intended to raise a prejudice against this "portion of medical ethics;" but surely it should have the opposite effect. Ethical rules may and do need careful revision from generation to generation, but these changes, as all careful thinkers admit, consist not so much in changes of principle as in the adaptation of the old principles to new cases. The stability of the principles of ethics has been a matter of admiration, even to revolutionary thinkers; the presumption, indeed, is that even ethical methods and applications which have stood the wear of several generations have in them some large element of stability, and are not to be hastily suspected of narrowness because they act in restraint of the impatience of modern ambition. "Mr. J. Charles Harrison, M.D.," whose name is not on the *Medical Register*, says he is very anxious that the public should learn from advertisements in the lay press the names and addresses of the physicians best fitted to deal with each several disease. He forgets to tell us by the way who is to diagnose the complaint for the patient before the search for the specialist in the columns of the journals is to begin. But, apart from this, does any man of the world really think that the physician who advertises himself as peculiarly competent to deal with certain maladies is, generally speaking, likely to be the one who most deserves confidence? Those persons who, in any branch of knowledge, have attained to the largest views of it and to the most excellent skill, are precisely those who would most sincerely and persistently shrink from any assertion of their own value and attainments. It is the persons who have recently picked up a little learning and skill who are most likely to pose as omnipotent. Thus the advertisements proposed would end, as they would begin, in a continual selection of the unfittest. It may be useful to advertise things which can be tested by positive methods, by standards of weight, purity, and efficiency for immediate practical ends, things as to the value of which a purchaser can with more or less trouble definitely assure himself; but personal qualities which are imponderable and beyond analysis or definite appraisement by the purchaser cannot usefully be advertised. Opinions involving the opposite view have appeared from time to time during the last few years. Mr. Ernest Hart's address to the Pan-American Congress on the subject, incontrovertible as it must seem to all self-respecting members of our profession, has, nevertheless, aroused criticism, and something like opposition, on the part of certain lay journals. The arguments already criticised reappear in a lay article in the *Sydney Herald* of December 16th, 1893, and reference is there made at length also to the attitude of the profession towards homœopathy and towards the proprietors of secret remedies. As regards the former of these matters we shall say no more; the homœopathy craze is dying out, and the question is, therefore, every day of less and less importance. We may remark, however, once more that the aversion of our profession from "homœopathists" is not, nor ever has been, on scientific grounds alone, but on ethical grounds also. To the matter of the ethics of secret remedies we must return, if necessary, on another occasion.

PROFESSOR RAMON Y CAJAL.

As the distinguished Spanish physiologist whom the Royal Society has chosen to deliver the Croonian Lecture this year is probably but little known except by reputation to a large number of our readers, a few details as to his career may be interesting. Dr. Santiago Ramon y Cajal was born at Pitillas, a village in Navarre, in 1852. He received his preliminary education at Huesca, and studied medicine at Saragossa, where his academic career was a distinguished one. After acting as demonstrator of anatomy for some time, he entered the medical department of the Spanish army, in which he served for two years. When stationed in Cuba he contracted malaria of so severe a type that he was invalided out of the service, and returned to Spain. For five years he wrestled with the malarial poison, which had taken deep root in his system, and with symptoms which engendered a suspicion of tuberculosis. During this period he lived entirely in the country at Panticosa and at San Juan de Peña, but without neglecting his scientific work, for in 1878 he won by competitive examination the post of Director of the Anatomical Museum of Saragossa. This post he held for five years, during which he cultivated with great success the art of painting in pastel for the illustration of anatomical subjects. The special direction of his mind to histology seems to have been the result of a curious misadventure. Having entered as a competitor for a Chair of Descriptive Anatomy, there fell to his lot seven questions on histological *technique*, not one of which he was able to answer satisfactorily. This failure aroused in him the determination to master the subject. He bought books and instruments, learnt English and German, and worked to such purpose that on presenting himself in 1882 to compete for the Chair of Anatomy in the University of Valencia he carried all before him. It is told of him that on the occasion of his formal installation, Professor Aureliano Maestre, who acted as his academic sponsor, having expressed a hope that histology would be more studied in Spain than it had been till then, he said, in a spirit recalling Lord Beaconsfield's famous prophecy in the House of Commons, that if life was granted him he would before ten years had passed make his name as a histologist be quoted by

foreigners, "since it is a disgrace that among so many thousands of discoveries in anatomy, there is not one to which the name of a Spaniard is attached." His selection by the Royal Society to succeed a man like Rudolph Virchow as Croonian Lecturer proves how well the young anatomist has redeemed his promise. He has done so, however, at the cost of sacrifices of which only those rare spirits to whom the discovery of truth for its own sake is its own exceeding great reward are capable. Ramon y Cajal lives only in and for his scientific work, and it is no secret among his countrymen that his investigations have often been seriously hampered by want of means. In 1888 he exchanged his Chair at Valencia for that of Normal and Pathological Histology at Barcelona, and finally in 1892 he competed successfully for that of Histology and Pathological Anatomy in the College of San Carlos, which is the Medical Faculty of the Central University, Madrid. Since 1880 his scientific and literary activity has been incessant, and his researches on the minute anatomy of the nervous system have been confirmed by the leading anatomists of Europe. It is impossible to give here even a list of his numerous papers and monographs, but among them may be mentioned Terminations of the Nerves in the Striped Muscles (1881); The Structure of the Cerebellum in Birds (1888); The Origin and Direction of the Nervous Prolongations of the Molecular Layer of the Cerebellum (1889); New Applications of Golgi's Method of Staining (1889); The Origin and Ramifications of the Nervous Fibres of the Embryonic Spinal Cord (1890); The Nervous Fibres of the Molecular Layer of the Cerebellum and the Evolution of the Cerebellar Elements (1890); and The Physiological Significance of the Protoplasmic and Nervous Expansions of the Cells of the Grey Matter (1891). Most of Dr. Ramon y Cajal's papers have appeared in the medical journals of Valencia and Barcelona, and in a quarterly publication, *Revista Trimestral de Histologia*, of which he is himself the editor; a few have appeared in French. Most of his papers are illustrated by his own hand.

PHYSICAL CULTURE IN ENGLAND.

That the English evince a great interest in all athletic sports is not to be denied, but the number who take an active part in them is relatively small. True physical culture, as understood by the Greeks, and more or less perfectly followed in America and most Continental cities, constitutes a very small factor in the national life of the people of Great Britain. In these days of stress and strain when the long head rather than the long limb wins, when men and women naturally crowd to the large cities as offering the coveted prizes of wealth and fame, it is more than ever necessary that due care be paid to physical development. The importance of the question is making itself felt, as is shown by the annual report of the British College of Physical Education (92, Long Acre). The object of the movement is to reduce physical education in England to a national system based on a knowledge of the structure and functions of the human body. The Earl of Meath is the President, while the vice-presidents are men who are particularly qualified to testify to the value of the proposed work. And last but not least the physical instructors are represented by the directors of many of the leading gymnasia throughout the kingdom. The college has drawn up a syllabus for the guidance of those intended to follow the profession of instructors. Examinations are held twice a year, in November and May, for conferring the diploma of the college. It is, moreover, proposed to form an Institute of Physical Education in England similar to the numerous institutions in America, which may be a centre for all who are interested in physical education. They offer to their members all the advantages of co-operation and to the public a guarantee as to the qualifications of teachers connected with the college. Already lectures on the subject of physical education and collateral sciences are being held under its auspices. The movement is one which should be warmly supported by the public.

THE ACTION OF ANTISEPTICS ON THE INFLUENZA BACILLUS.

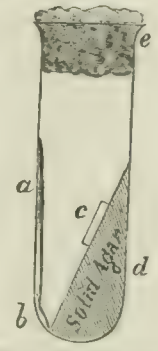
We have received from the Hon. Rollo Russell the following report on some experiments made at his request by Dr. E. Klein, F.R.S., on the influence of certain antiseptics and other materials on the growth of cultivations of the influenza bacillus:

On the Behaviour of the Influenza Bacillus in Cultivation.

Series I.—The influenza bacillus does not grow on media when their reaction is acid; it grows well on the same media if the reaction is alkaline. It also grows, but less vigorously, if neutral.

Series II.—(1) The influenza bacillus, subjected to the action of carbolic acid (absolute phenol), in the strength of 0.5 per cent. solution, for ten and fifteen minutes, and afterwards transferred to nutritive medium, shows good and normal growth, but when subjected to a 1 per cent. solution for ten minutes is thereby killed; five minutes' exposure to a 1 per cent. solution does not devitalise it. (2) Izal (a coal-tar product) kills the influenza bacillus as a 0.5 per cent. solution in five minutes' exposure.

Series III.—The influenza bacillus, from culture, well dried on fine linen or thin blotting paper, is thereby killed; dried on flannel it is not killed, for from such flannel vigorous subcultures can be established. Dried on gummed paper the influenza bacillus retains its vitality; vigorous subcultures can be established from such gummed paper.[1]



a and *b* were covered with the disinfectant. *c*, the place inoculated with the influenza bacillus. *d*, the agar material. *e*, cotton wool plug, dense.

Series IV.—In this series, to culture media (solidified agar) were added the following substances separately: (*a*) eucalyptus oil, (*b*) "Sanitas" disinfecting fluid, (*c*) Jeyes disinfectant, (*d*) izal, (*e*) absolute phenol, and (*f*) essence of cinnamon. All these substances were added in the concentrated form, just as they are sold. The addition was made in such a way that a few drops were deposited at the bottom of the tube and on the surface of the glass opposite the agar, as shown in the accompanying diagram.

After inoculation of the agar surface with the influenza bacillus, the tubes were placed in the incubator at 37° C. Examining them after twenty-four, forty-eight, and seventy-two hours, the presence of the disinfectant could be easily recognised by the smell.

The result of these experiments was: Sanitas and absolute phenol do not by their presence in the least interfere with the growth of the influenza bacillus, while in the tubes that were charged with essence of cinnamon, with eucalyptus oil, with Jeyes disinfectant, and with izal the bacillus remained sterile; no growth took place in them.

Although in the presence of these different substances the influenza bacilli did not show any growth, it does not necessarily follow that the bacilli were killed: it only shows that in these experiments they had an inhibiting action, but not necessarily a killing action.

[1] In all these instances bits of the materials (flannel, linen, blotting paper, and gummed paper) were placed in sterile test tubes, and then thoroughly sterilised; after that dried. When dry a few drops of a culture of the influenza bacillus were deposited on the materials and again dried. Finally they were transferred to sterile broth culture and the effect watched after incubation at 37° C.

DR. W. H. DICKINSON.

THE retirement of Dr. W. Howship Dickinson from the acting staff of St. George's Hospital was the occasion of a very impressive demonstration of respect for their former teacher on the part of many past and present students of St. George's on Monday, February 12th, when the late Senior Physician went round his wards for the last time.

He was met in the hall of the hospital by a number of admirers, far in excess of his normal following. The number continued to swell ward by ward. Among those present were several of his colleagues on the staff and a goodly number of his old house physicians and clinical clerks.

Dr. Dickinson gave a short clinical demonstration on a few of the cases. Commencing in the Crayle Ward he showed a case of cardiac dropsy, and dwelt on the efficacy of the St. George's prescription, now universally known as Matthew Baillie's pill, for this condition. Passing to the Queen's Ward he showed a case of recovery after severe tuberculous peritonitis in a child, and incidentally remarked that in his experience tuberculous peritonitis was not the extremely fatal disease that it was generally supposed to be, at least half the cases spontaneously recovering, at any rate for a time. In the Roseberg Ward a case of old standing renal disease in a young woman of 21, served as an illustration of hypertrophy of the heart commencing to show signs of secondary dilatation. A case of pertussis provoked the remark that two agencies wrought the cure of the disease—a good constitution on the part of the patient and time. Passing to the male side of the house, a case in the Fuller Ward served to illustrate the difficulty of the diagnosis of mediastinal tumours, and Dr. Dickinson impressed upon his hearers the importance of an old adage of Sir William Jenner, that without external pulsation it was impossible to diagnose definitely the presence of a thoracic aneurysm. In the William King Ward a convalescent case of enteric fever served to illustrate the occurrence of fairly profuse hæmoptysis in the course of that disease, without any evident pulmonary lesion. The case in point had considerable hæmoptysis on two consecutive days, so that for some time the diagnosis of enteric fever as against acute tuberculosis was a matter of considerable doubt. A glance at a case of diabetes drew from Dr. Dickinson remarks on the good and on the harm which could be done by medicine in this disease.

Thus finished the tour of the wards, which had seen Dr. Dickinson almost daily for twenty years, and now saw him for the last time. Proceeding then to the board room, into which he was followed by upwards of a hundred of the younger generation of St. George's men, Dr. Dickinson then said a few words of farewell—farewell to his school, to his colleagues, and to his former and present clinical clerks. In the course of his remarks he observed that he had so often said goodbye during the last fortnight, that he felt like the man in Matthew Prior's lines:

> Now fitted the halter, now traversed the cart,
> And often took leave, yet seemed loth to depart.

"Loth to depart," he continued, "I certainly am, gentlemen, for my work in this hospital has been one of the greatest pleasures of my life, to teach my clinical clerks in the wards, and to deliver my lectures in the medical school—where I have ever had so sympathetic an audience—has always been a matter of very great interest to me. I have often said very unconventional things, and I have been often personal, but I hope never scurrilous; nevertheless, to work with St. George's men in St. George's has occupied the pleasantest hours of my life. It is no doubt for the good of the hospital that I should be bound to go before any sensible impairment or diminution of my energies should have appeared, for I am not, gentlemen, as yet aware of any apparent cerebral decay. I thank you most sincerely for the honour and kindness you have shown to me to-day in accompanying me round the wards for the last time in such numbers, while I have looked along those old wards and trodden those well-worn teak boards for the last time; but I am not going to be sentimental, so I will wish you all farewell, and thank you once again for your kindly God-speed. Good-bye!"

And at the close of his few remarks Dr. Dickinson was not the only one who was visibly moved by his few simple words. As he walked down the centre of the board room, a very genuine applause greeted him, which was continued for several minutes.

A Committee has been formed to present a testimonial to Dr. W. H. Dickinson on his retirement from the office of Senior Physician to St. George's Hospital. His Royal Highness the Duke of Cambridge, Vice-President of the hospital, will act as Chairman of the Committee. Among the other members of the Committee are the Duke of Westminster, the Earl of Cork and Orrery, Mr. Shaw Stewart, and Colonel Haygarth, Vice-Presidents of the hospital; Mr. J. R. Mosse, Treasurer; Sir Henry Acland, Admirals Sir George Willis and Sir W. Houston Stewart, Sir George M. Humphry, Sir Francis Laking, Surgeon-General Cornish, and many of Dr. Dickinson's past and present colleagues and past and present students of St. George's Medical School. The Honorary Secretary is Mr. S. J. Gerard Carré, St. George's Hospital, S.W.

PROFESSOR BILLROTH AS AN OPERATOR.

MR. CLINTON DENT sends us the following estimate of Professor Billroth as an operating surgeon:

The general public not unnaturally assume that a great surgeon is necessarily a most skilful operator, a mistake not infrequently made by the profession also. Ingenuity, however, and boldness in devising operations are very different attributes from the manipulative skill, decision, and tact required to carry them out. Professor Billroth united the two sets of qualities in a very conspicuous manner. Yet it was always the guiding intellect rather than the manual dexterity which impressed itself on the spectator. Truth to say in the actual performance of an important operation Billroth showed no very marked superiority over his fellow surgeons. He avoided any show of brilliancy or flourish, went steadily to work, erred, if at all, on the side of slowness, and was neither more nor less discomposed by any complication or untoward event than anyone else. The finish of his operative work was rather the result of his immense experience than of any remarkable aptitude. Nevertheless, as an operator he must be held to have justly earned a very high place.

In the pages of his *Chirurgische Klinik* will be found the best proof of this, for these records cover the most active period of his life—from 1860 to 1876. No man was ever more modest or more candid in the accounts of his cases, and this long before he had attained world-wide eminence. Mistakes were fully acknowledged, his own early enthusiasm for operations of the most desperate character—such, for instance, as the removal of large pelvic tumours, or widely spread malignant growths in the abdominal cavity—greatly deprecated, while operative statistics were given with an impartiality with which the bitterest critic or rival could not find fault.

From first to last he was never a specialist, and his operative experience was singularly varied. In the surgical treatment of trigeminal neuralgia he was early in the field, advocating and practising very complete extirpation of the nerves. Thus in 1866 he conceived the idea—not knowing at the time that the operation had previously been practised—of dividing the nerves just at their exit from the base of the skull and removing large portions. So far as I am aware, he never practised extirpation of the Gasserian ganglion, but he removed the spheno-maxillary ganglion. While at Zurich he had to deal with many cases of bronchocele, and in this department met with good success. In such operations, as in removal of the larynx, he was, perhaps, over-anxious about hæmorrhage, with the result of being rather slow.

As an ovariotomist he was as successful as a man who does not select his cases could expect to be, at a time when the details of the operation were yet imperfect. In the *Chirurgische Klinik* he wrote: "I saw Spencer Wells operate in 1865 at Zurich. This case I took as my model, and Spencer Wells's remarks on the most important points I adopted as the fundamental principles for my own guidance." In intestinal surgery Billroth was again a pioneer. In January, 1881, he first excised a cancerous pylorus. The patient lived four months after the operation. Péan, however, was the first surgeon who resected the pylorus, in April, 1879. The operation is not one likely to be practised often in the future, but the proceeding will remain as a good example of Billroth's boldness in devising, of his thoroughness in

perfecting, and dexterity in performing a very intricate and difficult operation. In 1875 Billroth first employed the antiseptic method of wound treatment systematically. He recognised in the system, as regarded his own practice, more of a reform than a revolution, and always regretted the divided responsibility that the method entailed. "The proper management of operation cases under the antiseptic system is the most difficult task I have ever attempted," he wrote in 1880, "still this shall not deter me from doing my very best to perfect the system."

Reviewing Billroth's career as an operating surgeon, we may recognise that as an executant he had equals, but few could rival the enormous variety of his experience, and probably no surgeon ever carried more important operations to a successful issue.

THE DENTAL PROFESSION IN THE UNITED KINGDOM.

The *Dentists' Register* for 1894 was issued on February 9th, a date considerably earlier than in former years. The volume, which has been issued under the supervision of the Registrar (Mr. W. J. C. Miller, B.A.), appears to have been prepared with the minute accuracy of detail which we have learnt to look for in all the work of this conscientious officer.

The *Register* for 1894 contains the names of 72 additional Licentiates in Dental Surgery who have been registered during the past year. The number of dentists in the United Kingdom is 4,795, almost the same as that in the *Dentists' Register* of 1893, but there is, in addition, a list of foreign dentists containing 27 names. These gentlemen hold diplomas from the Universities of Harvard and Michigan. Owing to a recent decision of the General Medical Council the diplomas granted by these American Universities—the only foreign diplomas ever admitted to this *Register*—are no longer registrable.

Though the number of registered dentists in the United Kingdom has remained nearly stationary, there is an increase in the number of those registered as in possession of a diploma from one of the licensing bodies, and a corresponding decrease in the number of the practitioners who were registered on the ground that they were in practice before July 22nd, 1878. The following table, for which we are indebted to Mr. Miller, shows the slow but steady increase in the number of Licentiates in Dental Surgery:

Percentage Table of Licentiates in Dental Surgery and Registered Dental Practitioners.

Year.	Licentiates in Dental Surgery.	Registered as in Practice.
1879	9.13	90.87
1881	10.74	89.26
1882	13.06	86.86
1883	14.43	85.47
1884	15.12	84.78
1885	15.90	83.93
1886	16.68	83.11
1887	17.89	81.97
1888	19.94	79.90
1889	20.83	78.97
1890	22.41	77.32
1891	23.36	76.32
1892	24.07	75.55
1893	25.43	74.09
1894	26.48	72.95

It will be seen that the ratio of Licentiates to non-Licentiates has increased from 9.13, 90.87 to 26.48, 72.95, and it is plain that this increase is due to a sustained process of growth. The total number of Licentiates in Dentistry on the *Dentists' Register* is now 1,277, and these gentlemen have altogether registered, in addition, 153 surgical and medical qualifications. Of the 3,489 dentists registered as in practice before 1878 there are 29 who possess surgical qualifications.

New Fever Hospital for Leith.—A committee of the Leith Town Council have recommended that a hospital for infectious diseases, consisting of four wards, built of brick, and estimated to cost £30,777, be now proceeded with.

METROPOLITAN PROVISIONS AGAINST CHOLERA.

Existing Arrangements.—Ambulance Stations.—Medical Attendance.—Hospital Beds.—Inadequate Provision in Certain Districts.

Dr. Shadwell, in his report to the Cholera Committee of the Metropolitan Asylums Board, details the arrangements which were made last year to provide transport and hospital accommodation for the sick in case of any outbreak of cholera. One hundred and thirty-three ambulance stations were provided in various parts of London, which in Dr. Shadwell's opinion forms a fairly adequate allowance for all the districts except that of Rotherhithe, where great difficulty was experienced in finding places where the ambulances might be kept. Of litters there does not seem to be any adequate supply; eighty-two litters would go but a very short way in supplying the needs of the various districts, and of these only thirty-six seem to have been fully equipped.

As regards the manning of the ambulance stations, arrangements were made with the Volunteer Medical Staff Corps, and a form of agreement was signed by forty-two of its members, by which their services are available until September, 1894. Dr. Shadwell thinks there would be no difficulty in obtaining the services of an indefinite number of senior medical students and junior qualified men, at a few hours' notice, except during the vacation, when more time would be required to get them together. Grey linen overalls would be provided for the bearers.

As regards the number of beds available, 1,687 were promised by the different hospitals and infirmaries. It is pointed out, however, that the distribution of these beds is extremely unsatisfactory, whole districts remaining without any accommodation whatever so far as the Board is concerned, particularly the immense area in the south and south-east, including the whole of Wandsworth, Battersea, and Camberwell, and part of Lambeth. All these districts contain a large proportion of very poor inhabitants, who are particularly susceptible to cholera. Any cases occurring in these parts would have to be carried several miles, a course the danger of which is well known.

We may fairly congratulate the Asylums Board on their careful organisation of such material as they found to hand, and even more on their organisation not having been put to the test.

We cannot, however, congratulate the metropolis as a whole on the way it rose to the emergency. These were, indeed, but puny efforts to be made by 5 millions of people to ward off so great a danger. If ever cholera makes a serious attack it will not be the Asylums Board but the vestries which will have to meet it, and when we think of what was done in Hull, a town about the size of some London parishes, to meet what, after all, was a mere flash in the pan, we cannot think that London has any great cause for pride in its measures for self-protection.

LITERARY NOTES.

Dr. George Mather's study of the lives of William and John Hunter has now been issued by Messrs. Maclehose, of Glasgow, under the title of *Two Great Scotsmen*. The volume, which has been delayed by unavoidable circumstances, is issued in commemoration of the centenary of John Hunter's death. It is a quarto, beautifully printed, and contains a series of etchings of places associated with the Hunters by Mr. D. Y. Cameron, portraits of William and of John, and some illustrations of the latter's anatomical studies.

Among the volumes of *Transactions* recently received are: Vol. XI of those of the Royal Academy of Medicine in Ireland, a handsome volume edited by Mr. William Thomson, printed clearly and illustrated profusely; Vol. XI of those of the American Surgical Association, containing the papers read at the meeting of the Association in 1893, edited by Dr. de Forest Willard; and the volume containing the proceedings of the twenty-ninth annual meeting of the American Ophthalmological Society, held at New London, Connecticut, last July.

Mr. Frederick Treves has undertaken to edit for Messrs. Cassell and Co. *A System of Surgery*, to be written by various authors. The book will be intended primarily for students, and the articles will deal with pathology, clinical features, diagnosis, and treatment, but technical details of operative surgery will be excluded. It is proposed that the work should be well and fully illustrated. The illustrations have been undertaken by Mr. Henry Tonks, F.R.C.S., formerly Demonstrator of Anatomy at the London Hospital, and now one of the masters at the Slade School of Art. Among the contributors to the work will be Mr. Watson Cheyne, Dr. Sims Woodhead, Mr. Lockwood, Mr. Makins, Mr. Jonathan Hutchinson and Mr. Jonathan Hutchinson, jun., Mr. Bland Sutton, Mr. Pearce Gould, Mr. Morgan, Mr. Bowlby, Mr. Stanley Boyd, Mr. Clutton, Mr. Sheild, Mr. A. E. Barker, Mr. Arbuthnot Lane, Mr. Dean, Mr. Bennett, Mr. Pitts, Mr. Pepper, Mr. Bruce Clarke, Mr. Henry Morris, Dr. Hewitt, Surgeon-Major Duncan, and the Editor. The book, it is stated, is intended to represent, in a complete but concise manner, the surgery of the present day, and with such an array of tried contributors this expectation is likely to be fulfilled. It is intended that the work, which will be issued in two volumes, should be ready for publication in time for the next winter session.

Dr. Thomas Dolan, of Halifax, editor of the *Provincial Medical Journal*, has made an incursion into the lighter realms of literature by printing two one-act plays, *A Confidential Patient* and *The Lady Doctor*. Of these, the first-named seems to us a good deal the better: it is an amusing presentation of a dilemma which has more than once turned an ordinary consultation into a very serious tragedy for the doctor.

The *Medical Magazine* for January contains an interesting article by Dr. Wilks on the origin of music. He expresses the belief that the rhythmical sense or sense of time insisted on by Wallaschek as the basis of music, is the same thing as the muscular sense which, as pointed out by Sir Charles Bell and other physiologists, forms an intimate part of the musical faculty.

A new medical journal, the *Revista de Medicina e Cirurgia*, has just appeared in Portugal. It is edited by Drs. Alfredo Costa, L. da Camara Pestana, J. de Mello Vianna, and Avelino Monteiro, and is to be published fortnightly.

The *Journal de Pharmacie*, the organ of the Pharmaceutical Society of Antwerp, has just celebrated the fiftieth anniversary of its birth into the literary world. It is said to be one of the oldest pharmaceutical journals in existence.

Dr. J. C. Lisboa, of Bombay, is (we learn from the *Indian Medical Record*) at work on a new edition of his book *The Useful Plants of Western India*, which is described as a textbook for botanical instruction in the departments of Medicine, Agriculture, Forestry, and Engineering in the University of Bombay.

A new journal devoted to ophthalmic surgery, and entitled *Anales de Oftalmologia*, has recently begun to appear in Madrid. It is edited by Dr. Rodolfo del Castillo, Member of the Spanish Cortes, and formerly for sixteen years editor of *La Andalucia Medica* at Cordova.

THE UNIVERSITY COLLEGE OF SOUTH WALES AND MONMOUTHSHIRE.

OPENING OF THE NEW MEDICAL SCHOOL.

[Special Report to the British Medical Journal.]

On Wednesday, in the presence of a large and representative gathering, a new medical school in connection with South Wales and Monmouthshire University College was opened by Sir Richard Quain, Bart., President of the General Medical Council, under most auspicious circumstances. The College Buildings, Dumfries Place, Cardiff, were filled with a brilliant assemblage, presided over by Lord Windsor, who, in opening the proceedings, said wonderful progress had been made in all directions of scientific research, and certainly not least in the medical direction. It must be acknowledged that the people of this country had derived most extraordinary benefits from the skill of the medical profession.

Principal Viriamu Jones read letters of apology from Lords Bute and Aberdare, Sir E. J. Reed, and others, and gave an interesting account of the movements for the establishment of a school. They wanted £18,000 to found a school on proper lines, and towards this £6,000 had been subscribed.

Sir Richard Quain, in his inaugural address, after briefly reviewing the history of education in Wales, said the method mapped out for the new school was the one pursued at Oxford, and to a still wider extent at Cambridge. He recognised with great satisfaction the admirable arrangements made for teaching materia medica and kindred subjects as well as for giving instruction by practical demonstration. Speaking of the progress of medical education in general, he referred to the important position now accorded to sanitary science, the immense importance of the latter being proved by the manner in which of late years cholera had been checked in these islands. It was to the late Dr. John Snow that they owed the discovery that cholera was propagated by the use of drinking water containing choleraic poison. This discovery had been the means of saving perhaps millions of lives, yet there had been no public recognition of Dr. Snow's great services to humanity. The medical profession were beginning to appreciate more accurately, that two principal sets of influences in mutual opposition are concerned with beginnings of disease; the first comprehends external influences, the second inherent provisions within the body for resisting morbific causes and repairing damage. If the latter fail, disease originates. Immunity against disease was natural or acquired; the latter was fully illustrated by vaccination, with its splendid results, and by the success of Pasteur's inoculation for the prevention of hydrophobia and anthrax. The importance of investigating the chemical properties of blood was to-day fully recognised; as also that certain glands formerly believed to be functionless assisted in maintaining health, their failure being accompanied by debility, torpor, and even mental disorder. The discovery of the value of artificial injection of gland substances from animals for the removal of certain symptoms of disease in the human body promised something little short of revolution in the present methods of treating certain diseases; some of these discoveries were too recent to have much effect on the death roll; still it could not be overlooked that the mortality of London had fallen from 29 at the beginning of the century to 19.6. Addressing the students more particularly, Sir Richard Quain pointed out illustrious examples Wales had already afforded them—the late Dr. Charles Williams, whose works on principles of medicine constituted an era in science; the late Dr. Owen Rees, an eminent physician, greatly distinguished at Guy's; Sir W. Roberts, Drs. Theodore Williams, Frederick Roberts, John Williams, Isambard Owen, and Edmund Owen, all holding foremost positions in the medical profession. He reminded students of the great responsibility they had to face, and that it was for them to prepare themselves by accumulation of knowledge which would give them power and confidence in themselves. Let them regard disease as their enemy, and use their remedies not by chance, but as weapons of precision, and above all things regard their profession as a generous and noble art, and not as a trade. In conclusion, he offered them cordial good wishes for success in the profession which they had chosen, and expressed his hope that the institution would achieve a great and distinguished position in the future.

In the evening a banquet to celebrate the opening of the school was held at the Town Hall, at which Dr. W. T. Edwards, Cardiff, presided, and there was a large attendance. The toast list was short and the speeches purely complimentary, Sir Richard Quain proposing, in a capital address, success to the medical school.

The newly-appointed professors—Professor Haycraft and Professor Hughes—in responding, said there was ample room and great need for the same kind of work being done in Welsh medical schools as had long been done at Heidelberg.

Dr. Isambard Owen, who also replied, received hearty applause for his statement that the Welsh University was the first university established on purely democratic lines.

The characteristic of the gathering was the marked national sympathies of professors and medical men from all parts of South Wales.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1894. ELECTION OF MEMBERS.

Meetings of the Council will be held on April 11th, July 11th, and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, March 22nd, June 21st, and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. Francis Fowke, *General Secretary.*

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

Members are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 a.m. to 5 p.m. Members can have their letters addressed to them at the Office.

BRANCH MEETINGS TO BE HELD.

Staffordshire Branch.—The second general meeting of the present session will be held at the Swan Hotel, Stafford, on Thursday, February 22nd. The President, Mr. H. M. Morgan, will take the chair at 3.45 p.m.—Geo. Reid, Honorary Secretary, St. Mary's Grove, Stafford.

South-Eastern Branch: West Kent District.—A meeting of this District will be held at the West Kent Hospital, Maidstone, on Tuesday, March 6th, at 4 p.m.; Dr. Joyce, of Cranbrook, in the chair. Communications:—Mr. Prideaux Selby: On the Diagnosis and Treatment of Perforating Ulcer of the Stomach. Dr. Tirard: Some Sequelæ of Diphtheria. Dr. Joyce: On the Differentiation of Tuberculous Disease of the Kidney from Renal Calculus. Mr. Hugh Smith: On Brain Syphilis. The dinner will take place at the Mitre Hotel at 6.30 p.m. Charge 6s. 6d., exclusive of wine. Gentlemen who intend to dine are requested to signify their intention to the Chairman (Dr. Joyce, of Cranbrook) not later than Monday, March 5th. All members of the South-Eastern Branch are entitled to attend this meeting and to introduce professional friends.—E. Ground, Honorary Secretary, Ashford Road, Maidstone.

Gloucestershire Branch.—The next ordinary meeting will be held at the General Hospital, Cheltenham, on Tuesday, February 20th, at 7 p.m., under the presidency of Mr. G. Arthur Cardew. Agenda:—Dr. Watters (Stonehouse): Hypnotism, with Experiments.—S. T. Pruen, Honorary Secretary, Cheltenham.

South-Eastern Branch: East Surrey District.—The spring meeting of this District will take place at Upper Norwood on Thursday, March 8th, at p.m.; Dr. Rice Oxley, of Streatham, in the chair. Members desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary at once.—Henry J. Prangley, Tudor House, Anerley, S.E.

Metropolitan Counties Branch: North London District.—A meeting of the North London District will be held at the St. Pancras Infirmary, Dartmouth Park Hill, Highgate, on Wednesday, February 28th, at 5 p.m. Dr. McCann, Medical Superintendent of the Infirmary, will show interesting cases in the wards. Dr. Shuttleworth, of Richmond Hill, will read a paper on Types of Idiocy and Imbecility. Dr. Cleveland will preside.—Hugh Woods, Honorary Secretary, Archway Road, Highgate, N.

EDINBURGH (FIFE AND LOTHIANS), STIRLING, KINROSS AND CLACKMANNAN, AND BORDER COUNTIES BRANCHES.

A combined meeting of these Branches was held at Edinburgh on February 2nd, 1894; Professor Annandale, F.R.C.S., in the chair.

General Meeting.—The members of the united Branches met at 4 p.m. in the large Surgical Theatre of the Royal Infirmary. This portion of the meeting was entirely clinical. Professor Annandale described a case of Ligature of the Internal Iliac Artery.—Dr. Argyll Robertson showed two cases of Artificial Ripening of Immature Senile Cataract by Förster's method, and a case of Melanotic Sarcoma of the Iris.—Dr. George Mackay showed a case where a plastic operation had been successfully practised in the Orbit.—Dr. Allan Jamieson: Several cases of Lupus.—Dr. Bramwell: A case of Ichthyosis and several other skin affections improving under treatment with thyroid extract.—Dr. V. Walker: A case of Adenoma Sebaceum, under similar treatment, and others.—Dr. Currie: A case of Lymphadenosis.—Dr. John Thomson: A case of Cretinism in a patient aged 39, improving under the thyroid treatment, and photographs of other patients showing similar improvement.—Dr. Andrew Smart: A case of Hysterical Disease, with unusual symptoms: and a case of Extreme Ptyalism cured by atropine.—Dr. James: A case of pronounced Psoriasis Linguæ; a case of Addison's Disease; and a patient under treatment for Empyema with new valvular drainage tube.—Dr. R. W. Philip: A case of Pulmonary Tuberculosis, two years and a-half after treatment with tuberculin; and a case of Hydatid of Liver in a child, nine months after treatment by aspiration.—Dr. McBride: Cases of Primary Lupus of Pharynx and Larynx, and a case in which the Tympanic Membrane and Malleus had been excised.—Mr. F. M. Caird: A case of recovery after operation for Hernia with Gangrene; a case of recovery after Compound Fracture of Leg with Rupture of Anterior and Posterior Tibial Arteries; a case of recovery after removal of portion of Bladder Wall with attached Tumour.—Mr. J. M. Cotterill: A case of successful Laparotomy for intussusception of large intestine; a case of recovery after treatment of Multiple Tuberculous Arthritis.—Mr. Shaw M'Laren: Two cases of Ruptured Ligamentum Patellæ (one being double).—Dr. Miles: A case of successful treatment of very extensive Burn by Skin-grafting from dog.—Mr. H. A. Thomson: A case of successful excision of Hip-joint for Tubercle (one year after operation), and a case of excision of Kidney for Tubercle (six months after operation).—Mr. Seiles: A case of Hydrocephalus treated by repeated tapping; a case of Multiple Subcutaneous Abscesses, showing comparative results of treatment by iodoform-glycerine injection as compared with incision and scraping; and a case of Gonorrhœal Tendino-synovitis.

Special Demonstrations.—Dr. Milne Murray showed a modification of Wheatstone's Bridge, adapted for various clinical and physiological measurements, such as temperature, acuteness of hearing, etc.—Mr. Charles W. Cathcart gave a demonstration of some recent methods for the Treatment of Gleet.

Pathological Museum, Microscopical and Bacteriological Exhibits, etc.—Throughout the afternoon there was on view in a number of the infirmary theatres and side rooms a large and interesting collection of rare specimens and preparations. Among the contributors were Professor Chiene, Drs. Altham, Barbour, Brewis, Alex. Bruce, F. M. Caird, Cathcart, G. A. Gibson, Gulland, Hutton, Leith, Lewis, Muir, R. W. Philip, Stiles, H. A. Thomson, Norman Walker.

Dinner.—At 6.30 p.m. the members dined together at the Waterloo Hotel. Professor Annandale occupied the chair, and the croupiers were Professor Chiene and Dr. Argyll Robertson. There was a large company. After the loyal toasts that of the "Navy, Army, and Reserve Forces," proposed by the Chairman, was felicitously replied for by Dr. Spence, Burntisland, Brigade-Surgeon Alexander, and Dr. P. A. Young. The "British Medical Association" was proposed by Emeritus Professor Struthers, who traced the rise and development of the Association, and emphasised the important part played by the Branches. Professor Annandale (Edinburgh), Dr. Lewis (Stirling), and Dr. Somerville (Galashiels), responded on behalf of their respective Branches.—The Chairman's health was given by Dr. Douglas (Cupar), and the croupiers by Dr. Crerar (Maryport).

SOUTH-EASTERN (OF IRELAND) BRANCH.

The January meeting of this Branch was held at Carlow.

Election of Officers.—The following officers were elected for the ensuing year:—*President:* C. E. James, M.B. (Kilkenny). *Honorary Treasurer:* R. B. Carey (Borris). *Honorary Secretary:* J. Cooper Lloyd Stawell, M.B. (Bagenalstown). *Council:* Messrs. Hackett, O'Callaghan, F.R.C.S.I.; W. H. O'Meara, and Morris.

Membership of Branch.—This Branch now numbers over forty members.

SPECIAL CORRESPONDENCE.

PARIS.

Hospital Reform in Paris.—A Question of Inclusive Fees.—The Remains of Vaillant.—Disposal of Paris Refuse.—General News.

THE Conseil Supérieur de l'Assistance Publique has, according to the proposition of M. Paul Straus, decided on reorganising the Conseil de Surveillance de l'Assistance Publique. The Municipal Council will be represented by eleven of its members—one third of the Council. Members of the Council will also be chosen among the hospital *accoucheurs* and the *médecins des bureaux de bienfaisance*. M. Straus may contratulate himself on his success; he has succeeded where the medical press had failed. The *Progrès Médical* declares that, for its part, it is glad to see that the Conseil Municipal protects the poor and abolishes certain privileges, especially the one of never performing duties that are accepted solely for the honour and distinction that is attached to them. The *Journal de Médecine*, one of the most enterprising medical journals, is naturally not mute on the subject. Dr. Navarre, a Municipal Councillor, has stated to that journal that everything would be perfectly straight if the hospital physicians and surgeons were more regular in their attendance. Members of hospital staffs are appointed for life, and the only way of removing them is by actual dismissal. The administration evidently cannot take so grave a step except under exceptional circumstances. Dr. Navarre points out that if the law of 1849 were revived, and hospital physicians and surgeons were elected for a period of four or five years, then the administration and Conseil de Surveillance could exercise some influence. The *Journal de Médecine* considers that many hospitals would profit by this revival, inasmuch as some hospital physicians and surgeons take their duties too easily. It declares that certain physicians and surgeons only put in an appearance in their wards once a month, devoting their time to attending different committees, and pocketing the proceeds from the *jetons de présence*.

A curious case of responsibility for payment was tried in a French law court a few days ago. A patient agreed to pay £20 to be operated on in a *maison de santé*. Of this sum £4 was to be handed to the director of the house, the remaining £16 being to remunerate the operator and his assistants. On the day of the operation medical comforts were ordered at a chemist's to the amount of £3. The patient refused to pay for these articles, and the court upheld him and ordered the operator to pay on the ground that the things had been ordered by the surgeon and not delivered at the patient's house but at a *maison de santé*. This decision has naturally given rise to great dissatisfaction.

The medical press addresses covert reproaches to the Minister of Justice because the medical faculty was not made acquainted of the execution of Vaillant, the anarchist, in time to take possession of his body. The *Progrès Médical* boldly declares that *messieurs de la justice* prefer that science should not discover physiological or pathological data which would interfere with their "trade," and regrets that Vaillant's cranium is not at the Anthropological School.

The *Annales d'Hygiène et de Médecine Légale* express much concern that the habit of disposing household refuse in the fields situated in the country surrounding Paris continues. Paris, it says, is condemning its environs to slow asphyxiation by the insufferable atmosphere infected by emanations from the slow decomposition of its household refuse. It suggests that this misplaced matter should be utilised to fertilise barren regions such as Champagne and the Sologne. Incineration of this refuse would, it is contended, be a grave error, costing 3,587,500 francs, besides the loss of manure thus destroyed.

The *Conseil d'Hygiène* at a recent meeting expressed its dissatisfaction at the disuse of the muzzle for dogs, and at the considerable number of stray dogs met with in the Paris streets. A few cases of rabies have been notified.

The Sanitary Police Office has collected statistics showing that 2,208 medical men are practising in Paris, nearly one to every thousand inhabitants.

BERLIN.

The Best Method of Slaughtering Animals.

AT a recent meeting of the Berlin Physiological Society, Dr. Dembon, of St. Petersburg, read a paper "On the Best Method of Slaughtering Animals," which gave rise to an animated discussion. Two methods are in use in the central slaughterhouses of the Berlin "Viehhof." One consists in stunning the animal by blows on the head before killing it; the other, in sudden severing of the carotids without any previous stunning. This, as is well known, is the old Jewish ritual method of slaughtering. Dr. Dembon has carried out a series of experiments on animals in Professor Munk's physiological laboratory in Berlin, and his results go to prove the superiority of the Jewish method. To stun completely a powerful animal, such as an ox, as many as eight or nine blows are sometimes required; whereas, the loss of blood from the brain that follows the severing of the carotids produces unconsciousness almost instantaneously. Again, where the animal is stunned by blows on the head, there is paralysis of the vasomotor centre, and in consequence an enlargement of the blood vessels. This prevents the blood from escaping quickly and completely. Now, it is a fact well known to butchers that raw meat will not keep fresh unless the blood be permitted to escape as freely as possible; and many of them for this reason habitually employ the Jewish method of slaughter, which, by the strong reflex convulsions that follow the sudden opening of the large vessels of the throat, favours a speedy and complete escape of the blood. These reflex convulsions also cause the production of lactic acid in the muscles (as proved by Du Bois-Reymond in 1859), which probably acts antiseptically.

MOSCOW.

The Czar's Physician.

SINCE the death of Professor Botkin, of St. Petersburg, the title of the "first physician in Russia" has been transferred by the public to his old rival, Professor Zakhärin, of Moscow. The latter is in every respect a very interesting personality. He is now about 65 years of age, and has been professor of clinical medicine in the Imperial University of Moscow for the last thirty-five years. He received his medical education in Russia, afterwards completing it by visiting some of the German universities. He was the first in Russia to introduce exact clinical examination and treatment, and he very soon acquired a large and important practice in the Old Capital of Russia. So successful has he been that he is believed to be worth 5,000,000 roubles (half a million sterling), the bulk of which has been earned by the practise of his profession. Zakhärin has not written much. He has throughout his career chiefly concerned himself with the practical side of medicine, and especially with the details of treatment. To his consulting room patients are sent by their medical attendants from all parts of Central and Southern Russia and from Siberia. Success, however, has engendered some peculiarities of character, or perhaps rather of manner, in Professor Zakhärin which, though possibly in place in Russia, would hardly be suited for other countries. He is fond of showing his power in a manner which is sometimes inconvenient to the people who require his services. Special arrangements must be made in every house in which he sets foot; all dogs must be kept out of the way; all clocks must be stopped; all doors must be thrown wide open. The professor on entering begins a process of gradual undressing, leaving his furs in the hall, his overcoat in the next room, his goloshes in the third, etc. He insists on perfect silence on the part of the afflicted relatives, except in reply to his questions, when their speech must be literally "Yea" and "Nay." His demeanour towards practitioners with whom he happens to be unacquainted makes him greatly feared by them. The learned professor is a man of many "humours," as Ben Jonson would have called them. His fear of over-exertion almost amounts to a monomania. He has a theory as to idiopathic hypertrophy

of the heart, which forms a rule of life for him. A maxim which he is fond of repeating is "Take a rest before you are tired," and accordingly he sits down every eight or ten steps. His eccentricities have naturally been the subject of a good deal of unfriendly comment, and some eight years ago a kind of public agitation was got up in opposition to him, in which many hundreds of doctors took part. Resolutions were passed and addresses were presented, and echoes of the gathering storm made themselves heard in the press. These manifestations of feeling were speedily repressed in a way characteristic of Russia. The then General-Governor of Moscow, Prince Dolgoroukoff, sent for the editor of the medical journal in which the addresses were printed, and told him that if he published a word more about Zakhärin he would have to leave Moscow in 24 hours' time. It must be admitted, however, that this medical despot can be as courteous and considerate to his patients as possible if he likes, and certainly he is very thorough in his methods of treatment. He never orders or prescribes anything—except, of course, in urgent cases—unless he knows his whole past, his mode of life, his habits, his diet, and his whole social environment, and often by a trifling change in the habits he cures a very chronic ailment. He keeps his patient often two or three hours under examination, and he never sees a patient without a doctor, even if he comes from a distance, and he never prescribes himself. Zakhärin is an individualist; he has no printed diet sheets, and no cut and dried prescriptions; every case is treated in accordance with its particular circumstances. Zakhärin had seen the Czar before his Majesty's recent illness, when he was on the way home from visiting the late Minister of the Interior, Count Tolstoi. When that favoured and influential minister was on his deathbed, in St. Petersburg, Zakhärin was ordered by the Czar to report personally on the condition of his patient. It is remarkable that he was called in both to the Minister and afterwards to the Czar against, or at least without any personal wish. To Count Tolstoi he was taken by a stratagem on the part of the patient. The latter had been sent by his St. Petersburg physician to the Crimea, but the change of scene and climate did no good, and the Minister returned home in a very bad condition, prepared to die, and having lost all faith in medicine. On passing through Moscow his family sent for Zakhärin; the Minister did not want to receive him, and only after a long struggle, and in order to avert a public scandal, consented. Zakhärin relieved him at once, and Tolstoi lived two years longer. When the Czar fell ill with his recent illness he did not personally send for Zakhärin, and probably only the persuasions of the Czarina induced him to see the eminent physician. Both he and his Imperial patient may be congratulated on the result.

CORRESPONDENCE.

A GIGANTIC ABUSE AND ITS REMEDY.

Sir,—I do not think you can fairly charge me with having assumed that you approved of the details of the scheme for out-patient hospital reform, published in the journal of the Birmingham Hospital Saturday, because I criticised your approval of what appears to me to be its essence, namely, entrance to hospitals only on the recommendation of a dispensary officer.

It had not occurred to me that anybody who has any practical knowledge of out-patient work could seriously entertain the Utopian opinion that no one should go to a hospital except on a medical recommendation, and it certainly surprises me to learn that you consider that this is "generally approved." I think if you will inquire you will find that the staffs of hospitals would be tolerably unanimous in dissenting from such a view. Difficulty of diagnosis, which would prevent cases being sent in their most curable stages, exaggerated *amour propre*, and even the love of money, combine to create obstacles which make the proposed plan acceptable neither to the patients nor to the hospitals.

In writing of the talk about the abuse of hospitals as greatly exaggerated, I was referring to the statements commonly made that our hospitals are used by a class of patients which can afford to pay for suitable medical or surgical advice. I may remind you that three years ago a committee of inquiry under the chairmanship of Mr. M. D. Chalmers, our eminent county court judge, took evidence on this point from all who cared to give it, and the result was a complete failure, in the opinion of the committee (see the Report) to substantiate these accusations. I was writing with reference to the hospitals of this city, with whose affairs you had concerned yourself, and my own experience and the investigations of that committee justify the opinion I expressed.

But our hospitals are terribly overburdened by the magnitude of their out-patient work, and especially by what we call at the General Hospital "medical casualties"—a very trivial kind of case, which has during the last twenty years taken to come to the hospitals in enormous numbers.

Before that time such cases recovered without medicine, or took domestic remedies, or bought a dose at the chemist's; I am sure this class never enriched the past generation of doctors, so that it is a fallacy to suppose that the profession is poorer for its patronage of the hospitals. If we could get rid of these by remitting them to a dispensary, the true work of the hospital would be greatly facilitated. It is in this direction that some good may come out of the proposals to which you have drawn attention.—I am, etc.,

Birmingham, Feb. 12th. Robert Saundby.

THE HEALTH OF THE TRAINING SHIPS.

Sir,—In the British Medical Journal of February 10th you refer to the question of the Devonport training ships and to the part I have taken in calling attention to their insanitary condition in 1892. May I make one or two remarks upon the subject. You say, "Mr. Forster assumes for some reason that the boys on the *Impregnable* and *Lion* are the very 'pick of their class, but from inquiries we have made it would appear that there is not the least authority for asserting that they are as a body in any way physically superior to the boys in other training vessels.'" I think you mistake my point. There are six training ships and the boys in all of them are selected with equal care; but considering the wide field of selection, the large number of candidates, and the careful medical inspection all boys taken for the Navy ought to be, and I believe are, the pick of their class.

You wonder why I take the West African station, and you say that "in search of a sensation I forgot that the West African station is nowadays by no means a very unhealthy station." For all I know you may be right, but it is the unhealthiest we have got, and that is the very obvious reason why I took it as a basis of comparison.

You say I ought to have taken "the daily sick rate instead of the invaliding rate." I fail to see why. To me it seems monstrous that thirty boys should have died in a single year on these two ships and that one hundred and fifty should be invalided from them right out of the service.

You say "that I appear to assume" that the health of the ships during 1893 has been even worse "than during 1892." The assumption, if I may say so, is entirely on your part. I have never said, nor do I believe that the health of the ships was worse in 1893 than in 1892. On the contrary, I hope and believe it is better.

You say I have "absolutely no statistical data to go upon." That is precisely why I made no statement with regard to 1893. I was told that the statistical data for 1893 would be found in the Blue Book. As a matter of fact they are not to be found there. I have endeavoured to obtain them from the Admiralty, but the officials there have so far refused to furnish them. I know in detail what has been done in the matter of ventilation on board the ships. I am glad to hear that since I raised this question and since light has been let in upon the condition of the ships the Admiralty have done what they ought to have done a couple of years ago, and have removed a number of boys to another vessel.

I venture to trouble you with this letter because I do not like to rest under the charge of inaccuracy in matters of this kind. I take infinite pains and trouble to acquaint myself with the facts. I try never to speak until I am absolutely certain that what I say is correct. I depend upon the evidence of my own eyes, and hitherto I cannot reproach myself with having been misled by them. It is important to me

that I should not be misrepresented by an influential paper such as the British Medical Journal.—I am, etc.,

Evelyn Gardens, S.W., Feb. 13th. H. O. Arnold-Forster.

*** Mr. Arnold-Forster is in error in thinking that the West African station is "the unhealthiest we have got." Taking the year 1891, for example, the last year which can be taken, because in 1892 naval brigades were landed, and, as a result, suffered a good deal from malaria, we find the ratio of sickness per 1,000 of strength to be 939 on the West Coast of Africa and Cape of Good Hope station, against 1,202 on the Mediterranean, 1,348 on the China, and 1,578 on the East Indian station. As to the Blue Book and the statistical data for 1893, no Blue Book yet exists dealing with that year. It is no doubt interesting and encouraging to Mr. Arnold-Forster to feel that, as a matter of chronology, the removal of some of the boys to the new training ship, the *Minotaur*, has occurred since he "raised this question": we should not, however, like to vouch for the assumed connection between the two events.

"PROPOSED NEW ORDER OF MIDWIFERY PRACTITIONERS."

Sir,—The letter from Dr. R. R. Rentoul, of Liverpool, which you publish under the above heading in the British Medical Journal of February 3rd, seems hardly to call for a reply from us, since the General Medical Council, so lately as December 5th, 1893, refused to seriously consider a petition drawn up by Dr. Rentoul in very much the same strain as his present letter. Yet, since he definitely states that "the Midwives' Registration Association has been established for the purpose of creating a new order of midwifery practitioners," and in proof of his statement gives a reference to the British Medical Journal of January 20th, your readers might perchance think that the reference he gives would be found to support his contention. The reverse is, however, the case. The annotation in point speaks of "the incompetence and presumption of ignorant midwives" as proof of "a crying evil, an evil which it is the duty and also the interest of the medical profession to bring to a speedy end." It does not even mention the absurd and untenable contention which forms the subject and heading of his letter.

We are glad to have the opportunity of pointing out that the rule of the Association which he quotes: "A midwife is a woman who attends, or undertakes to attend, a labour without the direct supervision of a medical practitioner" is not to be taken by itself. It should, of course, be read in connection with Rule II of our Association, setting forth our object, which is "To obtain legislation such as shall secure the proper education, registration, and supervision of midwives." Limits to their practice will, of course, be clearly laid down.

The rest of Dr. Rentoul's letter requires no answer.—We are, etc.,

Robert Boxall, M.D.,
Rowland Humphreys.

Midwives' Registration Association, Feb. 10th.

CHELSEA HOSPITAL FOR WOMEN.

Sir,—With reference to an article appearing in the British Medical Journal of February 10th, embodying some observations of the Medical Officer of Health for Chelsea, I am requested to state that his deductions are based on insufficient and inaccurate data, and are therefore misleading. This necessarily renders his report valueless. Full and correct details are being prepared, and will be published in due course.—I am, etc.,

T. W. Eden, M.D. M.R.C.P.,
Hon. Secretary to the Medical Staff, Chelsea Hospital for Women.

Bentinck Street, W., Feb. 13th.

AMENDMENT OF THE MEDICAL ACTS.

Sir,—The eternal question of unqualified practitioners and their "devoutly-to-be-wished-for" extinction can hardly be remedied by inflicting a tax on the qualified members of the profession, as suggested by your contributor. Perhaps this Utopian idea would be more enthusiastically received by the rank and file if this proposed addition to the revenue were, together with the censorship of the excise, to be transferred to the quacks.

To further inflict a penalty on a struggling and not overwealthy body, as the "slaves of the ring" undoubtedly are, completely "out-herods Herod." It is always a painful task to discourage enthusiasm and originality when it is ingenuous, but if this proposed panacea is to be upheld by the powers that be, I, for one, sincerely hope and trust that it will not be retrospective.—I am, etc.

New Cross, S.E., Feb. 3rd. John Joseph Stack, L.R.C.P., etc.

Sir,—I see in the British Medical Journal of February 3rd a very good suggestion by Dr. Hugh Woods that the Inland Revenue should issue a licence to medical men—duly qualified only—and that all practising or prescribing for patients without this licence should be proceeded against in the same way as dog owners without a licence. I think it a very good idea, and that the sooner the step is taken for the adoption of this the better. No medical man would object to this: in fact, look at it as a perfect "godsend." In this way our true interests would be protected, the public would be protected, and quacks and unscrupulous chemists which abound in this neighbourhood and all other districts would not be able to deprive us of our just small fees.—I am, etc.,

New Malden, Feb. 3rd. Edwin Child, M.R.C.S.

THE QUESTION OF THE INCREASE OF CANCER.

Sir,—Mr. Roger Williams seems strangely determined to misunderstand his opponent's position. His last letter contains nothing beyond two instances of this:

(*a*). Mr. Williams erroneously attributes to me a statement which would reduce Dr. Farr's "statistical edifice to a heap of ruins." The Registrar-General has for a long series of years almost annually pointed out that a large share of the registered increase in cancer is due to improved certification of deaths; and the only question really at issue is whether there is a residuum of increase which is not accounted for by this and allied reasons.

(*b*). Mr. Williams again quotes hospital experience to show that cancer of specified parts of the body is not equally common in both sexes. I never said it was. Here Mr. Williams is guilty of a fallacy which may be thus illustrated. It is affirmed that the three angles of one triangle are collectively equal to the three angles of another. Mr. Williams, in order to disprove this, triumphantly quotes an instance in which an angle of the first triangle is 60°, and of the second is only 15°!—I am, etc.,

Brighton, Feb. 5th. Arthur Newsholme.

*** This correspondence must now cease.

THE IDENTIFICATION OF THE UNCLAIMED DEAD.

Sir,—In reference to your note on the above in the British Medical Journal of January 27th, I may say that it is the invariable practice here to have our unclaimed and unknown dead bodies photographed for the purpose of identification.—I am, etc.,

Charles J. Sutherland, M.D., L.R.C.P.,
Surgeon to the Police of the County Borough of South Shields.

January 31st.

With reference to a statement made in a letter published in the British Medical Journal of January 20th, to the effect that "A certain Mrs. Longshore Potts and a Dr. Harrison, of no uncertain notoriety, are announcing that they have taken," 19, Harley Street, formerly the residence of Sir Morell Mackenzie, "for a time," the lessee desires to state that Mrs. Potts and Dr. Harrison do not now occupy any part of the house, and will not return there.

THE PROPOSED TEACHING UNIVERSITY FOR LONDON.

It should have been stated that the letter by Mr. Stanley Boyd, published under the above heading in the British Medical Journal of February 10th, was curtailed by the omission of certain paragraphs containing an analysis of the summary recommendations of the Royal Commission.

Surgical Congress in Belgium.—The Belgian Surgical Congress will meet at Antwerp on May 14th. The chief subject proposed for discussion is **Tuberculous Complications following Surgical Procedures on Tuberculous Subjects.**

MEDICO-LEGAL AND MEDICO-ETHICAL.

UNQUALIFIED DENTAL PRACTICE.

In the report of the case of Herbert Durham Duff, who was convicted at Plymouth for implying that he was specially qualified to practise dentistry, it was stated that he had been on the *Dentists' Register*. We are informed that this is incorrect. His name was on the *Students' Register* which was published with and as an appendix to the *Dentists' Register*. This had no statutory value, and its publication has been discontinued. We are informed, further, that Mr. Passmore, who employed Duff, admitted in cross-examination that the defendant would in his absence perform any dental operation. It would appear, therefore, that the case is an example of covering.

THE HARNESS CASE.

The prosecution of Mr. Harness and others for alleged fraud has finally come to an end, as no action has been taken under the Vexatious Indictments Act. The *Daily News*, in commenting on the circumstance, sums up the legal aspects of the matter in the following sentences:

"The real issue in the case, as Mr. Hannay pointed out, was not the value or efficacy of the electrical contrivances in question—about which the witnesses were divided in opinion—but whether the defendants, who sold them, knew them to be fraudulent. Mr. Hannay thought that no jury could be got to believe this; and the prosecution, after a week's consideration, have come to the same opinion. The case of the Indian oculists was the only one which ran on all fours with the Harness case, and, as Mr. Hannay pointed out, the trial did not result in conviction. The virtues that are attributed to various patent remedies may exist only in the imagination of believers, but the law cannot base a conviction of fraud on what is, after all, a matter of opinion."

Miss A. J. Beatty (Portland Road, Holland Park, W.) writes that her attention was called to a letter in the British Medical Journal, from Dr. Heywood Smith, contradicting the statement she made in the prosecution of this case (Regina *v.* Harness) before Mr. Hannay, that he advised her to try a course of electricity and massage at the Electropathic and Zander Institute, at 52, Oxford Street. Miss Beatty reaffirms the statement and asks us to give the same publicity to her letter as we gave to Dr. Heywood Smith's.

"THE SKIN AND COMPLEXION."

A correspondent has forwarded to us a pamphlet with this title, which he informs us was received by a patient of his who is quite unacquainted with the author or publisher. The cover and title page contain the name and official description of a qualified practitioner. It does not appear whether the pamphlet has been circulated through the post with his knowledge and consent, and we can only hope that he is not responsible for a proceeding which must be strongly reprobated by all right-thinking members of the medical profession.

A CLAIM FOR DAMAGES FOR REVACCINATION.

The case in which a boy, Samuel Bramwich, aged 12, by William John Bramwich, of Birmingham, his father and next friend, sued Dr. G. A. Ferraby, Medical Officer to the Birmingham Board of Guardians, to recover £10 damages for an assault committed upon him by the performance of revaccination while an inmate of the workhouse, was again before the judge sitting at Birmingham County Court on February 7th. At the previous hearing early in last year, Sir Richard Harrington upheld the contention of the guardians that the revaccination of plaintiff was necessary for the welfare of the institution, but this decision was reversed by the High Court, and the case sent back in order that the issue might be tried as to whether or not the lad gave his consent to the performance of the operation. The jury decided that he had given such consent, but added to their verdict a suggestion that in future it should be made more clear that a person has the option of refusing to be revaccinated.

UNQUALIFIED ASSISTANTS.

From the report of an inquest published in the *Southampton Times*, we glean that public opinion in that town, as re-echoed in the coroner's court, coincides with the gradually strengthening professional views on the subject of the unqualified assistant. A man was suddenly taken mortally ill, and the unqualified assistant of a practitioner attended. The coroner said that the practice of employing unqualified assistants was, in his opinion, wrong and derogatory to the profession, and called attention to the fact that fees for services rendered by such assistants could not be recovered by the principal.

THE LEWISHAM WORKHOUSE INQUIRY.

The notice of this inquiry has appeared under various headings in the local papers; for example, "Sane Man in a Madhouse," "Workhouse Scandal," and the like. We believe that its importance at the present time is very great, and its influence far-reaching.

The inquiry was held before Dr. Downes, Local Government Board Inspector, and lasted nearly three weeks. The inquiry was really started by an application made by Dr. Beaumont, though at the time there were other agencies at work provoking an investigation of certain proceedings in lunacy.

The points at issue are very plain. A certain man named Williams, who was stated to be by profession a journalist, had from one cause and another fallen into poverty. It appears that he had taken to drink, and that he had on several occasions suffered in consequence. He found himself in the workhouse at Lewisham, and there he seems t have been miserable and depressed, saying that his life was not worth living. He is said also to have made untrue statements about his friends, and to have accused persons of following him or watching him. In fact, he was sleepless and depressed, with suicidal ideas, and with some sensory perversions, as well as perversions of judgment. On the strength of this state of mind and of body he was transferred to the lunatic ward of the workhouse, where he remained for a short time, and thence he was sent to the asylum at Cane Hill, where he was seen by the medical superintendent, and also by the assistant medical officer. On his reception at the asylum no obvious signs of insanity were noticed by either of the medical officers. Though no clear evidence of insanity existed, yet the physical and other symptoms pointing to alcoholic excess were recognised, and the patient was retained in the asylum for some weeks. Ultimately he was discharged, and soon after he began to interest people on his behalf, and the result has been the inquiry.

The questions most interesting to our readers will be the following: As to the action of the parish medical officers; the action of the asylum officers; and the legal position of the profession in regard to alcoholic cases.

After carefully considering the evidence, we think that a medical man is fully justified in signing a certificate of insanity in such a case. If a patient kills himself after he has distinctly said that he felt tired of life and that he must kill himself, the public without any hesitation blame the doctor and the friends for not having taken the necessary steps to prevent an accident. If this is the general feeling, and if the jury would certainly have returned a verdict of temporary insanity if suicide had been committed, it appears clear that a medical man of a workhouse was justified in sending the patient first into the insane ward, and later into the asylum.

The conduct of the medical officers of the asylum might at first sight seem to have been unreasonable, but one must remember that patients suffering from alcoholic disorder of the mind may, and frequently do, recover very rapidly, and it is notoriously difficult to decide what are delusions and what are not in persons recovering from alcoholism. It is a common experience to meet with such persons who tell the most pathetic tales in the most truthful way, believing them to be true themselves, who, yet later, will disown them altogether. We may take it that the disorder from which Williams was suffering was mental depression associated with certain sensory and intellectual perversions, and that the depression passed off before the later symptoms; so that in appearance he was sane on his reception into the asylum, though really he had marked delusions as to the conduct of others and their relationship to him. We hardly know how officers to an asylum can investigate the truth or falsity of statements made by their patients; they have, in large asylums at least, to judge rather by the general appearance of the patients than by their notions. It was a pity that there should appear to be any difference of opinion existing between the officers of the workhouse and those of the asylum, and we believe, from the evidence given, that this difference only exists in appearance, for the doctors at Cane Hill were prepared to admit that melancholia of an alcoholic type might pass off rapidly, and also that Williams might have had delusions while under their care, though general insane aspect and conduct were absent. In investigations of this type counsel have a way of magnifying differences in professional evidence for the good of their respective clients. The medical men who gave evidence in this prolonged inquiry have no reason to be ashamed of the part they played under very trying conditions.

The practical outcome of the whole matter is that steps must soon be taken to deal more effectually with inebriates. It is scandalous that men, who by their vices cause worry to their friends, should also, when being preserved from themselves, have a power to damage or even ruin a medical man who acts in good faith, and should also be able to cause the public a very large expenditure for their selfish gratification. Medical men must never forget the danger they at present run in signing lunacy certificates for any patient, who, however insane he may be, has at least contributed to his insanity by over-indulgence in stimulants.

The inquiry was enormously spun out, and we think the counsel for Williams went to the extreme limit in his cross-examination of the medical witnesses.

PATENTS.

Medico.—If our correspondent will refer to the *Code of Medical Ethics*, chap. ii. sect. 1, rule 4, he will find it distinctly laid down that it is derogatory to professional character for a practitioner to hold a patent for any surgical instrument; and in reply to his second question, we are constrained to observe that to accept an agreed sum from the instrument maker on each respective sale thereof would be equivalent to entering into a compact with a pharmacist for a percentage on his prescriptions, which it is scarcely necessary to add would justly subject him to severe professional condemnation.

A DISPUTED LIABILITY.

Member.—The questions raised involve many points of a complicated character, and we would recommend that the facts should be laid before a solicitor. It would, we think, be desirable for our correspondent to be advised carefully before bringing an action against the lady, either with or without joining her husband.

PREMATURE CANDIDATURE.

Chelos.—The professionally disinterested advice tendered by our correspondent to his friend and *confrère*—with the usual result in relation to unsought and unwelcome counsel—was sound and strictly in accord with the principle laid down in the ethical code. To issue testimonials and, in view of a prospective but necessarily undetermined medical

appointment, to solicit votes from mere candidates for a non-elected body, was not only ill-advised but calculated to mar his prospects of eventual success. Moreover, he might appear to subject himself to the imputation of covert unprofessional advertising.

NAVAL AND MILITARY MEDICAL SERVICES.

THE LATE PRINCIPAL MEDICAL OFFICER OF MALTA.

THE officers of the Army Medical Staff at Malta gave a farewell dinner to Surgeon-Major-General Paterson, on the eve of his return to England to take up the duties of his new appointment as Principal Medical Officer of Aldershot. After the usual loyal toasts, the health of the guest of the evening was proposed by Brigade-Surgeon-Lieut.-Colonel Macartney, who, in a few appropriate words, expressed the regret felt by all the officers at the departure of a chief who during his short stay had won golden opinions from all. Surgeon-Major Manché, R.M.A., added that few men knew so well as Surgeon-Major-General Paterson how to be *fortiter in re, suaviter in modo*.

THE NAVY.

FLEET-SURGEON H. D. STANISTREET has been promoted to be Deputy Inspector-General, January 2nd. His previous commissions are dated as follow: Surgeon, August 4th, 1867; Staff-Surgeon, February 19th, 1876; and Fleet-Surgeon, July 29th, 1883.

Fleet-Surgeon HENRY JOHN MADDERS, M.D., has been placed on the Retired List, at his own request, February 7th. He was appointed Surgeon April 1st, 1873, Staff Surgeon April 1st, 1885, and Fleet-Surgeon December 5th, 1893.

Surgeon EDWARD C. WARD, M.D., has been appointed to the Royal Naval Hospital, Chatham, not to Chelsea Hospital, as stated in the BRITISH MEDICAL JOURNAL of February 3rd.

The following appointments have been made at the Admiralty: FREDERICK J. BURNS, M.D., Surgeon, to the *Dolphin*, February 10th; GEORGE HEWLETT, M.B., Surgeon, to Haslar Hospital, February 13th; JAMES C. F. WHICHER, Surgeon, to Sheerness Barracks, February 9th; R. W. ANDERSON, Staff-Surgeon, to the *Wallaroo*, February 28th; WILLIAM S. LIGHTFOOT, Staff-Surgeon, to the *Lion*, February 28th; FRANCIS J. LEA, Surgeon, to the *Ringarooma*, February 28th; A. E. WEIGHT AN, Surgeon, to the *Katoomba*, February 28th.

ARMY MEDICAL STAFF.

SURGEON-COLONEL J. DAVIS is promoted to be Surgeon-Major-General, *vice* T. N. Hoysted, retired, January 11th. Surgeon-Major-General Davis entered the service as Assistant-Surgeon, March 10th, 1858; became Surgeon, March 1st, 1873; Surgeon-Major, April 1st, 1873; Brigade-Surgeon, October 29th, 1883; and Surgeon-Colonel, December 19th, 1888. He was engaged in the New Zealand wars in 1861 and 1865, and was at the repulse of the attack on Camp Nukumaru and the affair at Kakaramea (medal).

Surgeon-Colonel C. H. GIRAUD is also promoted to be Surgeon-Major-General, *vice* F. W. Wade, retired, January 24th. His earlier commissions are thus dated: Assistant-Surgeon, March 10th, 1858; Surgeon, March 1st, 1873; Surgeon-Major, April 1st, 1873; Brigade-Surgeon, April 2nd, 1884; and Surgeon-Colonel, May 7th, 1889. Surgeon-Major-General Giraud served with a flying column in the North-West Provinces of India in 1858-59, including the action at Sissaghat (medal with clasp); with the 31st Regiment during the campaign in North China in 1860, including the action of Sinho and storming of Tangku (medal with clasp for the Taku Forts); with the 31st Regiment in the operations against the Taepings in the vicinity of Shanghai, including service with the storming parties at the capture of the walled towns of Kahding, Najow, Cholin, and Tsinpoo, taking of the stockaded fort at Nansiang, relief and recapture of Kahding; and with the 2nd Brigade 1st Division in the Zulu war of 1879, and afterwards as Senior Medical Officer throughout the operations of "Clarke's column (medal with clasp).

The death of Surgeon JOHN WARDROP MOORE, at an advanced age, is announced. He was appointed Hospital Assistant May 8th, 1828, Assistant Surgeon July 29th, 1830, and Surgeon February 10th, 1843. He retired from the service October 6th, 1854.

Brigade-Surgeon-Lieutenant-Colonel J. W. MAXHAM, M.D., is gazetted Surgeon-Colonel, *vice* J. Davis, January 11th. He was appointed Assistant-Surgeon, March 31st, 1861; Surgeon, March 1st, 1873; Surgeon-Major, April 28th, 1876; attained the rank of Lieutenant-Colonel, March 31st, 1884; and was made Brigade-Surgeon-Lieutenant-Colonel, December 19th, 1888. He has no war record in the *Army Lists*.

Brigade-Surgeon JAMES WATSON, F.R.C.S., died at the Tower of London on February 9th, at the age of 57. He was appointed Assistant-Surgeon, February 1st, 1859; Surgeon, March 1st, 1873; Surgeon-Major, April 1st, 1874; and was granted retired pay, with the honorary rank of Brigade-Surgeon, December 8th, 1880. He served throughout the North China campaign in 1860, being present at the capture of the Taku forts (medal with clasp); throughout the New Zealand war in 1863-66, including the Waikato campaign and the field operations on the East Coast (medal); and in the Ashanti war of 1873-74 (medal). He was appointed medical officer at the Tower of London, April 7th, 1891.

THE MILITIA.

SURGEON-MAJOR HENRY JAMES PAINE, M.D., formerly of the 3rd Battalion the Welsh Regiment (Royal Glamorgan Militia), recently died at his residence, Elmsfield, Cardiff, in his 78th year. Surgeon-Major Paine joined the old Glamorgan Light Infantry as Surgeon in 1852, became Surgeon-Major Militia Medical Department in 1873, and retired in 1883.

INDIAN MEDICAL SERVICE.

BRIGADE-SURGEON-LIEUTENANT-COLONEL J. C. G. CARMICHAEL, Bengal Establishment, has been promoted temporarily to the rank of Surgeon-Colonel, to fill a vacancy in the administrative grade consequent on the retirement of Surgeon-Colonel G. C. Chesnaye, Principal Medical Officer Lahore district.

The medical arrangements in India on the formation of the Army Corps will be one surgeon-general of Her Majesty's forces at army headquarters, with a secretary (presumably a medical officer), four surgeon-generals, each with a secretary, for the four army corps: fourteen surgeon-colonels on the administrative staff of districts, and four brigade-surgeons, surplus to the present establishment—total 28 against 29.

THE VOLUNTEERS.

THE undermentioned gentlemen are appointed Surgeon-Lieutenants in the corps specified, all dated February 10th: ALEXANDER BARCLAY LYON, M.B., 1st Banff Artillery; ROBERT JACKSON, M.B., 2nd Lancashire Engineers, Fortress and Railway Forces, Royal Engineers; JOHN BENJAMIN NICHOLSON VICKERS, 2nd Volunteer Battalion the Norfolk Regiment (late the 2nd Norfolk).

Surgeon-Lieutenant A. E. DRURY, 1st Dorsetshire Artillery (Southern Division Royal Artillery) has resigned his commission, which was dated September 6th, 1890.

Surgeon-Lieutenant H. R. BRAMWELL, M.B., Tynemouth Artillery (Western Division Royal Artillery) is promoted to be Surgeon-Captain, February 10th.

Surgeon-Major C. E. COLLINS, 2nd Volunteer Battalion the Royal Sussex Regiment (late the 2nd Sussex), has resigned his commission, retaining his rank and uniform.

ARMY MEDICAL SCHOOL AT WASHINGTON.

THE establishment of an army medical school at Washington, United States, was authorised by a general order dated June 24th, 1893. The object of the school is the further instruction of newly-appointed medical officers. The course of instruction will extend over four months, beginning annually on November 1st. The faculty is to consist of a president, who will deliver lectures on the duties of medical officers in peace and war; a professor of military surgery (including the care and transport of the wounded); a professor of military hygiene (including practical instruction in the examination of water, air, food, and clothing from the sanitary point of view); and a professor of clinical and sanitary microscopy (including bacteriology and urinology).

EUROPEAN FIELD HOSPITALS.

ACCORDING to a report based on personal observation, the Medical Director of the United States navy says the Germans alone in Europe have a thoroughly drilled and organised hospital corps. The Italians are making praiseworthy efforts to perfect their hospital service; but the French are much behind. As for ourselves, we cling to primitive methods, and are the most backward of all. We fear there is little chance of improvement so long as our military hierarchs seem bent on thwarting and repressing our medical services.

POST OFFICE RIFLES.

THE ambulance section of this regiment held its first annual smoking concert recently. The concert was well attended, and Surgeon-Captain Dundas Grant, M.D., who was in the chair, took the occasion of congratulating Sergeant Gage on the very efficient state of the ambulance section.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF OXFORD.

THE WELSH ANATOMICAL PRIZE.—A prize in memory of Hugh Russell Welsh, B.A., of Trinity College, has been founded in the University of Oxford. The income of the fund which has been raised will be offered as a prize either in money or books for the best set of drawings illustrative of human anatomy, the work of a student being a member of a university, who shall have been engaged in the study of anatomy in the Anatomical Laboratory of the University during not less than one term. If no drawings of sufficient merit are submitted, the prize may be awarded to any student of proper standing who may have shown conspicuous excellence in any other branch of the study or practice of human anatomy.

UNIVERSITY OF LONDON.

PRELIMINARY SCIENTIFIC (M.B.) EXAMINATION PASS LIST.

Entire Examination.—First Division.—F. Barnes, Mason College; W. D. Braithwaite, B.A., Yorkshire College; C. F. Carrick, University Tutorial College and private study; W. R. Cazenove, Guy's Hospital; C. Clemow, B.A., private study; H. S. Clogg, University College, Cardiff; J. H. Crofts, B.A., private study; J. Dumas, private study; H. G. Frankling, Combe Down School and London Hospital; A. E. Horn, St. Mary's Hospital; W. H. S. Liddell, St. Mary's Hospital and Engineering College, Earl's Court; W. F. Peach, Royal College of Science and private study; T. Samuel, B.A., University College, Liverpool, and private study; A. L. Scott, St. Bartholomew's Hospital and private study. Second Division.—H. T. Barron, St. Mary's Hospital and Penywern House; F. F. Bond, Westminster Hospital; E. C. Bourdas, University Tutorial and Carlyon Colleges; E. J. Budd-Budd, Westminster Hospital and private study; A. E. Clarke, Guy's Hospital; J. A. P. Cullen, Epsom College and London Hospital; H. Durbridge, Guy's Hospital and University Tutorial College; F. L. A. Greaves, St. Thomas's Hospital and private study; C. M. Martin, B.A., private study; H. T. Newton, College of Science, Newcastle-on-Tyne, and private study; E. E. Parrett, B.A., Guy's Hospital; G. Sandham, B.A., Yorkshire College and Leeds School of Science; F. J. W. Sass, University Tutorial College and St. Mary's Hospital; G. Steward, B.A., private study and University

Tutorial College; Blanche Elinor Walters, University College, Bristol; H. G. S. Webb, St. Mary's Hospital and private study; J. T. Whiteside, B.A., University Tutorial College and private study; and G. Winn, private study.

Chemistry and Experimental Physics.—*D. A. Ashton, Owens College and private study; *Lucy Bramley-Moore, Bedford College, London; Isobel Sarah Bryson, private tuition; S. A. Bull, private study; *F. Butterfield, Owens College; *H. Calvert, University College; *W. H. Cazaly, B.A., St. Bartholomew's Hospital; C. E. C. Child, Epsom and King's Colleges; *F. W. Cotton, Clifton Laboratory; *D. Davies, University College and private tuition; F. F. Elwes, Middlesex Hospital and University College; *E. Evans, University College, Bangor; *T. Evans, University College, Aberystwith; *C. B. Fairbank, University College and private tuition and study; *B. G. Fiddian, University College, Cardiff; *E. F. Fookes, Owens College; *H. E. C. Fox, Guy's Hospital; *J. M. Garman, private study and University Tutorial College; *A. S. Grant, private study; *F. A. Hadley, King's College; *Helen Beatrice Hanson, private study; H. S. Harris, Merchant Taylors' School and private study; W. W. Harrison, Tonbridge School and Guy's Hospital; *W. C. Hill, University Tutorial College; P. L. Hope, St. Thomas's Hospital and private study; *B. F. Hussey, St. Mary's Hospital and Penywern House; *H. J. Hutchens, St. Bartholomew's Hospital; *E. Leach, Owens College; *L. Lindop, St. Mary's Hospital; *T. F. R. McDonnell, St. Paul's School and private study; *S. A. Mahmood, private study and University Tutorial College; *Louisa Martindale, Royal Holloway College; *Marion Bessie Mathieson, University Tutorial College; W. G. D. Miller, St. Bartholomew's Hospital; *R. R. Mowll, King's College; *E. C. Plummer, King's College; *H. D. Pollard, High School and University College, Nottingham; *G. M. O. Richards, Owens College and private tuition; *A. Ricketts, University College; Florence Robinson, Owens College and private study; *Mary Ethel S. Scharlieb, B.A., University and Bedford Colleges, London; C. H. Sedgwick, St. Paul's School; *W. B. Silas, Westminster Hospital and University Tutorial College; *A. R. Spencer, private study and Carlyon College; *E. Stott, Owens College; R. Stowe, B.A., University College, Cardiff; *J. G. C. Taunton, Mason College and private study; *H. J. Taylor, Owens College; *I. Taylor, private study; F. G. Thompson, St. Mary's Hospital; D. B. Truman, Epsom College; W. E. Turner, private study; *J. H. Williams, London Hospital; *R. E. B. Wilmot, St. Mary's Hospital and Penywern House; E. Young, University Tutorial College, private study, and London Hospital.

Biology.—R. M. Barron, Guy's Hospital; *H. R. Beale, St. Thomas's Hospital and private tuition; *J. W. H. Bendle, St. Mary's Hospital; *S. O. Bingham, St. Thomas's Hospital; G. Binns, private study and Owens College; *J. C. Briscoe, King's College; *Josephine Brown, private tuition; *R. W. Collum, private study; *W. H. Coltart, Mason College; *E. J. Crawshaw, Craigmore College, Bristol; C. H. Crombie, Worcester College, Oxford; *B. N. Das, University College and private study; *F. S. Dawe, St. Mary's Hospital; *R. H. Dixon, St. Mary's Hospital; H. G. Drake-Brockman, University Tutorial College and private study; *E. P. H. Dudley, Firth College and St. Bartholomew's Hospital; J. E. Dupigny, private study; *H. Dyer, Epsom College and St. Mary's Hospital; *H. A. T. Fairbank, Epsom College and private study; W. Ferris, St. Mary's Hospital; H. Goodman, University and University Tutorial Colleges; *M. H. Greener, private study; C. F. Günther, B.A., Firth and University Tutorial Colleges; *A. C. Haslam, private study; *R. Hatfield, St. Bartholomew's Hospital; *E. T. Jensen, Guy's Hospital; *A. Jones, University College, Cardiff, and private study; *J. R. Morton, London Hospital; *B. N. Mullan, University, Edinburgh, and University Tutorial College; *A. Ormie, private study and London Hospital; A. Rayner, St. Mary's Hospital; E. Risien-Russell, University and University Tutorial Colleges and private study; Mary Ariel Stewart, University Tutorial College; R. H. J. Swan, Camberwell Grammar School; *J. F. West, Mason College.

* These candidates have now completed the examination.

INTERMEDIATE EXAMINATION IN MEDICINE PASS LIST.

Entire Examination. First Division: R. W. Dodgson, St. Mary's Hospital; E. G. D. Drury, St. Bartholomew's Hospital; B. Dyball, St. Thomas's Hospital; S. P. Huggins, St. Bartholomew's Hospital; J. C. H. Leicester, B.Sc., University College; H. P. Noble, Middlesex Hospital; F. T. Waldron, London Hospital. Second Division: F. W. Chandler, University College; W. E. Dixon, B.Sc., St. Thomas's Hospital; M. Farrant, Westminster Hospital; Ella Catherine Flint, London School of Medicine for Women; W. D. Frazer, St. Thomas's Hospital; C. B. Goring, University College; H. Green, Charing Cross Hospital; Charlotte Elizabeth Hull, London School of Medicine for Women and Birkbeck Institute; H. Innes, London Hospital; A. D. Ketchen, University College; J. P. Maxwell, St. Bartholomew's Hospital; Winifred Seen. Patch, B.Sc., London School of Medicine for Women; J. Robertson, Guy's Hospital; W. G. Savage, University College; E. T. Scowby, Guy's Hospital; R. T. Thomas, University College; E. F. G. Tucker, London Hospital; R. Waterhouse, St. Bartholomew's Hospital; Sarah Elizabeth White, B.Sc., London School of Medicine for Women; W. Wilkins, Charing Cross Hospital; H. M. Wise, Guy's Hospital.

Excluding Physiology.—First Division: P. W. Brigstocke, St. Bartholomew's Hospital; D. H. F. Cowin, St. Bartholomew's Hospital; J. C. Harcourt, St. Thomas's Hospital; L. F. Marks, St. Bartholomew's Hospital; J. H. Murray, University College; J. W. F. Rait, University College. Second Division: J. N. Bahadhurji, University College and Birkbeck Institute; F. W. Binckes, St. Thomas's Hospital; S. L. Box, St. Bartholomew's Hospital; H. R. Emms, University College; E. G. L. Goffe, University College; J. T. Leon, B.Sc., St. Mary's Hospital; F. M. Seal, University College; E. Shepherd, St. Mary's Hospital; R. O. Sibley, St. Mary's Hospital; A. H. Spicer, Guy's Hospital; W. L. Stuart, Guy's Hospital; C. E. Trimble, University of Edinburgh; A. B. Tucker, St. Bartholomew's Hospital.

Physiology only.—Second Division: F. H. Atkinson, Charing Cross Hospital; J. B. Brash, University College; T. R. H. Bucknall, University College; T. Chave, St. Bartholomew's Hospital; M. W. Coleman, St. Bartholomew's Hospital; J. A. K. Griffiths, University College; J. H. Hugo, St. Bartholomew's Hospital; A. E. Hutton, Yorkshire College; A. R. H. Skey, St. Bartholomew's Hospital; C. F. Steele, Bristol Medical School and University College; J. R. Steinhaeuser, Guy's Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following gentlemen, having conformed to the By-laws and Regulations, and having passed the necessary examinations, were at the ordinary meeting of the Council on February 8th, admitted Members of the College:

Allen, W. H., L.R.C.P.Lond.
Appleyard, F. E., L.R.C.P.Lond.
Austin, J. H., L.R.C.P.Lond., M.D. Toronto
Axford, S. B., L.R.C.P.Lond.
Bannerman, G. D. K., L.R.C.P.Lond.
Barrow, A. S., L.R.C.P.Lond.
Barrow, G. A., L.R.C.P.Lond.
Bennett, J. H., L.R.C.P.Lond.
Beresford, R., L.S.A.
Brooke, B., L.R.C.P.Lond.
Burrow, T., L.R.C.P.Lond.
Clarkson, G. A., L.R.C.P.Lond.
Colby, F. E. A., L.R.C.P.Lond.
Coleman, J. G. B., L.R.C.P.Lond.
Collcutt, A. M., L.R.C.P.Lond.
Cooper, F. B., L.R.C.P.Lond.
Corbould, V. A. L. E., L.R.C.P.Lond.
Cory, C. G., L.R.C.P.Lond.
Crowley, J. H., M.B., B.S.Melb.
Cutting, E. B., L.R.C.P.Lond.
De Jong, E. M., L.S.A.
Dalby, J. L. J. B., L.R.C.P.Lond.
Davies, S. H. R., L.R.C.P.Lond.
Denny, A. W., L.R.C.P.Lond.
Dickens, C. H., L.R.C.P.Lond.
Dobson, A., L.R.C.P.Lond.
Duffett, H. A., L.R.C.P.Lond.
Dunstan, C. H., L.R.C.P.Lond.
Ellerton, H. B., L.R.C.P.Lond.
Elliot, E. E., L.R.C.P.Lond.
Emerson, H. B., L.R.C.P.Lond.
Ewing, S. A., L.R.C.P.Edin.
Fagge, R. H., L.R.C.P.Lond.
Farnum, C. M. S., L.R.C.P.Lond.
Fenwick, P. C., L.R.C.P.Lond.
Fisher, R. W., L.R.C.P.Lond.
Fosbery, F. C., L.R.C.P.Lond.
Frent, E. C., L.R.C.P.Lond.
Gittins, A. B., L.R.C.P.Lond.
Grünbaum, A. S. F., L.R.C.P.Lond.
Gurney, A. C., L.R.C.P.Lond.
Halliwell, T. O., L.R.C.P.Lond.
Hawes, G. C. B., L.R.C.P.Lond.
Henderson, W. D., L.R.C.P.Lond.
Hickman, H. R. B., L.R.C.P.Lond.
Hoare, E. S., L.R.C.P.Lond.
Hovenden, G. S., L.R.C.P.Lond.
Hoyten, W. J., L.R.C.P.Lond.
Hudson, J. S., L.R.C.P.Lond.
Huskinson, H., L.R.C.P.Lond.
Hutley, W. C., L.R.C.P.Lond.
Jackson, R., L.R.C.P.Lond.
Jenkins, H. T., L.R.C.P.Lond.
Jones, C. A., L.R.C.P.Lond.
Jones, W. D., L.R.C.P.Lond.
Kennington, E., L.R.C.P.Lond.
Kerswill, H., L.R.C.P.Lond.
Kirton, R. G., L.R.C.P.Lond.
Lawrence, G., L.R.C.P.Lond.
Lawson, K., L.R.C.P.Lond.
Leete, A. H., L.R.C.P.Lond.
Lindsey, C. D., L.R.C.P.Lond.
McCardie, W. J., L.R.C.P.Lond.
McCone, J. F., L.R.C.P.Lond. and M.D.Calif.
Marsh, J. H., L.R.C.P.Lond.
Meakin, H. B., L.R.C.P.Lond.
Meggs, T. H. E., L.R.C.P.Lond.
Miles, H. P., L.R.C.P.Lond.
Minnes, R. S., M.D.Kingston
Mitchell, J. E. H., L.R.C.P.Lond.
Oldfield, H. E., L.R.C.P.Lond.
Orme, W. B., L.R.C.P.Lond.
Park, W. C. C., L.R.C.P.Lond.
Passmore, J. E., L.R.C.P.Lond.
Peake, F. E., L.R.C.P.Lond.
Pereira, J. A. W., L.R.C.P.Lond. and L.M. and S.Bombay
Phillips, F. G. M., L.R.C.P.Lond.
Pinniger, W. A., L.R.C.P.Lond.
Pollard, W. H., L.R.C.P.Lond.
Powys, H. L., L.R.C.P.Lond.
Reid, E., L.R.C.P.Lond.
Ridsdale, A. E., L.R.C.P.Lond.
Roche, R. J., L.R.C.P.Lond.
Romer, H., L.R.C.P.Lond.
Rubel, J. L., L.R.C.P.Lond.
Russell, C. H., L.R.C.P.Lond.
Rutherford, A. E. R., L.R.C.P.Lond.
Ryall, C., L.R.C.P.Lond.
Shaw, A. G., L.R.C.P.Lond.
Simpson, F. H., L.R.C.P.Lond.
Smith, R. N., L.R.C.P.Lond.
Snowman, J., L.R.C.P.Lond.
Stewart, C. H., L.R.C.P.Lond.
Storey, P. A., L.R.C.P.Lond.
Strand, A. C., L.R.C.P.Lond.
Sutter, R. R., L.R.C.P.Lond.
Symons, R. F., L.R.C.P.Lond.
Symons, T. H., L.R.C.P.Lond.
Taylor, A., L.R.C.P.Lond.
Taylor, E. C., L.R.C.P.Lond.
Taylor, J. W., L.R.C.P.Lond.
Terry, J., L.R.C.P.Lond.
Thorp, A. E., L.R.C.P.Lond.
Todd, L. B., L.R.C.P.Lond.
Tomlinson, L. P., L.R.C.P.Lond.
Tuck, E. S., L.R.C.P.Lond.
Twemlow, W. A. F., L.R.C.P.Lond.
Wakeling, T. G., L.R.C.P.Lond.
Walker, A., L.R.C.P.Lond.
Wallace, L. A. R., L.R.C.P.Lond.
Warren, C. F., L.R.C.P.Lond.
Watson, C. H., L.R.C.P.Lond.
Way, W., L.R.C.P.Lond.
Weston, A. E., L.R.C.P.Lond.
Whelpton, E. S., L.R.C.P.Lond.
Whichello, H., L.R.C.P.Lond.
Whittingham, G. M. Y., L.R.C.P. Lond.
Wilkinson, G., L.R.C.P.Lond.
Willway, F. W., L.R.C.P.Lond.
Winter, E. S., L.R.C.P.Lond.
Witham, H., L.R.C.P.Lond.
Wonnacott, R. R. H., L.R.C.P.Lond.
Wood, W. C., L.R.C.P.Lond.
Wrangham, J. M., L.R.C.P.Lond.
Wray, W. T., L.R.C.P.Lond.
Wrinch, E. P., L.R.C.P.Lond.
Wyllys, W., L.R.C.P.Lond.

The following gentlemen having previously passed the necessary examinations, and having now attained the legal age of 25 years, were admitted Fellows of the College:

Miles, W. E., L.R.C.P.Lond. Clegg, J. G., M.B., Ch.B.Vict.

AN ordinary Council was held at the College on February 8th, Mr. J. W. Hulke being in the chair. The minutes of the last quarterly Council were read and confirmed.

A report was read from the Committee on Section XVI of the by-laws recommending that application should again be made to the Secretary of State for an alteration of Section XVI. In arriving at a conclusion the Committee were specially influenced by the fact that at the present time the Council is not infrequently in the position of being unable to take any action against Members of the College who have been removed from the *Medical Register* by the General Medical Council, with the result that the names of Members whose conduct has been adjudged so disgraceful as to render them unfit to be retained on the *Medical Register*, still appear on the lists of the College. The Committee had also reason to believe that an extension of the very limited powers conferred by the present by-law would meet with the cordial approval of the great majority of the Fellows and Members. This report was approved and adopted

It was then proposed by Mr. Macnamara, and seconded by Mr. Bryant, "That it be referred to the Committee on Section XVI to consider and report to the Council whether any, and if so what, alterations are desirable in the following sections of the by-laws: Section IV, Clauses 5 and 6, relating to the voting papers; Section XX, Clauses 2 and 4, relating to the Fellowship examination; Section XXV, Clause 8, relating to fees for certificates in dental surgery."

The Council had under consideration two cases of misconduct on the part of Members of the College.

A letter was read from Mr. C. C. Walker offering to found a prize to be competed for by persons investigating the disease of cancer, and inquiring whether the College would undertake to administer the fund in accordance with certain suggestions made by him. The Council accepted with pleasure the offer of Mr. Walker, and referred the matter to a Committee to draw up regulations for carrying out his proposals. Messrs. Hutchinson, Bryant, and Heath, with the President and Vice-President, were appointed as the Committee.

OBITUARY.

ROBERT LAWSON,

Inspector-General of Hospitals.

DR. ROBERT LAWSON died at Aberdeen on February 8th at the age of 79. By his death the profession loses a man of note, and the Army Medical Service a landmark and an ornament.

Dr. Lawson was born in 1815, and belonged to an Aberdeenshire family. He graduated as Licentiate of the Royal College of Surgeons in 1834, and was appointed assistant surgeon in the army on May 15th, 1835. He served in the West Indies and the West Coast of Africa, and showed thus early the scientific bent of mind that pervaded the whole of his career by observations regarding meteorology and the laws of storms, a subject which was at this time little regarded, and only in its infancy. He was one of the earliest to draw attention to the rotation theory of cyclones, but his work in this respect, like much of his later work, was ahead of his time, and did not attract the notice it deserved. He further made valuable observation concerning the spread of malarial disease and yellow fever by means of air currents and prevailing winds, and the natural means of protection from their spread by such causes.

He was promoted to be surgeon on December 16th, 1845, and took part in the Crimean war, and in the hospital work at Scutari. He also served in many parts of the world, Cape Colony among others, but, singular to say, never in India. In 1854 he received the rank of deputy-inspector-general of hospitals, and in 1867 inspector-general of hospitals. There are now only two officers alive who ever served as inspectors-general of hospitals, a rank which became obsolete under the Royal Warrant of March 1st, 1873, one of those remaining, Dr. Arthur Anderson, C.B., being like Lawson, an Aberdonian.

Dr. Lawson received the degree of LL.D. from the University of Aberdeen in 1884, and was appointed Honorary Physician to the Queen on May 6th, 1891. His retirement from the army in 1872 did not entirely break his connection with the service, as he acted on several commissions, and assisted in the development of the modern system of ambulance. He was an active member of the Epidemiological and Statistical Societies, and was president of the former. In their *Transactions* and elsewhere a large number of publications have appeared from his pen at various times, dealing chiefly with the methods by which cholera and other epidemic diseases are spread, and he delivered the Milroy Lectures in 1888 on Epidemic Influences, Yellow Fever, and Cholera.

Perhaps the best known of his labours, at least among the general profession, were those referring to the progress of epidemics from north to south of the earth at a given rate of progress, at right angles to the distribution of the isoclinal lines of the magnetic dip, which he termed the pandemic waves. Having access to the records of the Army Medical Department, he collected a great body of statistics bearing on this point, showing the apparent influence of these waves on all infectious diseases, and curiously, also, on such diseases as syphilis.

In the autumn of 1893, owing to failing health, he left London, where he had resided since his retirement, and settled in Aberdeen, where his health gradually continued to fail until his death.

He was much beloved and respected by all with whom he was brought into contact, and will long be sincerely mourned by those who were privileged to be his intimates. The kindly and high-minded old man, full of accurate and interesting knowledge, and of theories and deductions from carefully sifted facts, often considerably in advance of even the present time, will not readily be forgotten by many members of the Army Medical Department, the general profession, and private friends.

Dr. Lawson was a member of the Sanitary Institute and of the Parkes Museum of Hygiene before their amalgamation, and after that event became Treasurer of the Institute in succession to Lord Braye. He devoted much time to the interests of the institution until failing health compelled him to resign last summer.

He was buried in the Nellfield Cemetery at Aberdeen on February 12th.

ARTHUR STEDMAN, M.R.C.S., L.S.A.,

Great Bookham, Leatherhead.

ON January 28th last this well-known and esteemed practitioner in the county of Surrey passed to his rest, at the age of 60. He was educated at Tunbridge Wells Grammar School, and after an apprenticeship to Mr. Miles, of Gillingham, he entered at the medical school of University College, London, where he obtained various class distinctions, and acquired the lifelong friendship of many of his fellow-students. He then went as assistant to Dr. Carter, of Pewsey, and afterwards practised for a short time at Cookham, Berks, and Cullumpton, Devon, respectively, finally succeeding in 1862 to his father's practice at Great Bookham, where he remained until his death.

He was medical officer and public vaccinator to the boards of guardians of Epsom and Dorking, and held various dispensary appointments. He was also for the last twelve years medical officer of St. John's College, Leatherhead. This last was his favourite work, and one in which he took the deepest interest, and of the duties of which he allowed no pain or suffering to lead him to neglect. His zealous and kindly supervision endeared him to all connected with the school which owed so much to him.

He took the greatest interest in local affairs, and actively and successfully promoted many undertakings for the advantage of the neighbourhood, and especially for the poorer inhabitants, by whom he was regarded with the warmest esteem, as one of their best and truest friends. He was a great lover of flowers, and most proficient in botany, which was his favourite study. In the course of his life he acquired a splendid herbarium, which he has bequeathed to Lord Ashcombe. He was an excellent type of country practitioner, calm and resourceful in an emergency, untiring in his devotion to his professional duties even to the end of the painful disease which terminated his life, and ever ready with his advice and help to all who were in trouble or difficulty. His death has left a blank which it will be difficult to fill.

EWING WHITTLE, M.D., M.R.C.S.,

Liverpool.

WE regret to record the death of Dr. Ewing Whittle, one of the oldest and most esteemed members of the profession in Liverpool. Born in 1814 in Everton, at that time a semi-rural dependency of Liverpool, he spent most of his early years at Westport, in Ireland, and ultimately commenced the study of medicine in Dublin, where he was a distinguished student and a prizeman. He obtained the degree of M.B., with honours, at the University of London, became M.R.C.S. in 1846, and M.D. of his University in 1848. Having settled in Liverpool, he acquired an excellent practice, which he continued to carry on until his retirement in 1886. He was a former president of the old Liverpool School of Medicine, and on the institution of University College he became its first Lecturer on Forensic Medicine, a department in which he was looked upon as a high authority. Amongst other distinctions he was a member of the Royal Irish Academy, and was at one time a member of the Parliamentary Bills Committee of the British Medical Association, an office which he resigned on account of ill-health.

He took a keen interest in public affairs, especially in those affecting social and moral reform; and, in opposition to the prevailing views of the medical profession, he actively supported the opponents of the Contagious Diseases Act in their long-continued and ultimately successful struggle for its repeal.

Dr. Whittle was a man of wide culture, a great reader, and an original thinker, and kept himself well abreast of the advances of the time. He was married twice. He leaves one son (Dr. Glynn Whittle) and two daughters.

JOHN VALENTINE, M.B., C.M.Aberd.

The friends and old fellow-students of Dr. Valentine will hear of his death with the deepest regret and surprise. Dr. Valentine was born at Arbuthnot, in Kincardine, in 1868, and was therefore only 25 years of age. He was educated at the Montrose Academy, and studied medicine at the University of Aberdeen. Here he was a most diligent student, and succeeded in passing all his examinations six months before attaining the age of 21. After graduating he made three voyages to India as ship surgeon, and one to China and Japan. In 1891 he was appointed house-surgeon to the Pendleton Branch Dispensary of the Salford Royal Hospital; this post he held until the end of 1893. Six months before his death many of his friends noticed that his health was failing, but it was only at the end of December last that he was examined medically. He was then found to be suffering from most extensive pulmonary tuberculosis. His death occurred three weeks later, on January 24th.

Probably Dr. Valentine was not aware how extensive the pulmonary mischief had become, but as a medical man he must have known the serious nature of his illness; yet he bravely continued at his post. It is probable that knowing the fatal nature of his ailment he preferred—as do so many medical men—to continue his work as long as possible, and to die "in harness." For several months he continued to make his numerous daily visits—how he managed to do so no one knows—with great regularity, though he himself was far more seriously ill than three-fourths of his patients.

By his kindly disposition and unassuming manner he gained the love and respect of his patients and the esteem and sincere regard of his colleagues. During the few years that Dr. Valentine practised his profession his work was done in the most faithful and conscientious manner; and of him one can truly say: He was a man who bravely and nobly did his duty.

He was interred at St. John's Church, Pendlebury, on January 27th, the funeral service being conducted by the Rev. Canon Hicks, M.A.

Deaths in the Profession Abroad.—Among the members of the profession in foreign countries who have recently passed away are Dr. Gustav Scheuthauer, Professor of Pathological Anatomy in the University of Buda-Pesth, in his 62nd year; Dr. Frankenhaüser, formerly Professor of Obstetric Medicine in the Universities of Jena and Zürich; Dr. Maguet, of Paris, formerly Deputy for Morbihan; Dr. Giuseppe Dagna, some time lecturer on Clinical Medicine in the University of Pavia and Dean of the Medical Faculty, aged 87; Dr. Peremeschko, Emeritus Professor of Histology and Embryology in the University of Kieff, aged 59; Dr. D. R. Fox, one of the founders and some time President of the Louisiana State Medical Society, and a Vice-President of the Ninth International Medical Congress held at Washington, aged 71; Dr. C. Gilman Smith, formerly lecturer in the Women's Medical College, and physician to the Women's and Children's Hospital, Chicago, aged 66; Dr. J. G. Nava, formerly of Havana, where he was editor of *La Libertad*, a paper advocating the independence of Cuba, and afterwards of New Orleans, where he had taken refuge under stress of politics, aged 60; and Dr. Huart, formerly Professor of Midwifery and founder of a school for midwives at Nivelles, in Belgium, aged 78. Dr. Huart performed Cæsarean section on a woman with a rickety pelvis in 1857, saving both the mother and the child. A second operation of the same kind on the same patient some years afterwards was less successful.

The numerous friends of Dr. Lewis Sayre, of New York, will learn with regret that he has lost his dearly-loved wife, who accompanied him always on his journeys to Europe, and who has throughout his long professional career been of infinite solace and service to him.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns, including London, 6,532 births and 3,830 deaths were registered during the week ending Saturday, February 10th. The annual rate of mortality in these towns, which had declined in the preceding four weeks from 28.5 to 20.0 per 1,000, further fell to 19.1 last week. The rates in the several towns ranged from 12.1 in Croydon and 13.5 in Leicester to 24.2 in Liverpool and 26.5 in Bristol. In the thirty-two provincial towns the death-rate averaged 19.6 per 1,000, and exceeded by 1.2 the rate recorded in London, which was 18.4 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.1 per 1,000; in London the rate was equal to 2.4 per 1,000, while it averaged 2.0 in the thirty-two provincial towns, and was highest in Liverpool, Bristol, and Wolverhampton. Measles caused a death-rate of 3.1 per 1,000 in Wolverhampton; scarlet fever of 1.1 in Sunderland; and whooping-cough of 1.4 in Cardiff and 2.8 in Bristol. The 88 deaths from diphtheria included 56 in London, 10 in West Ham, 3 in Manchester, and 3 in Bradford. Four fatal cases of small-pox were registered in Birmingham, and 1 each in West Ham, Halifax, and Bradford, but not one in London or in any other of the thirty-three towns. There were 77 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, February 10th, against 82, 78, and 82 at the end of the preceding three weeks; 15 new cases were admitted during the week, against 17 and 18 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,387, against 2,645, 2,533, and 2,491 at the end of the preceding three weeks; 224 new cases were admitted during the week, against 235 and 245 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, February 10th, 859 births and 561 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had been 21.0 per 1,000 in each of the preceding two weeks, declined to 19.7 last week, but was 0.6 above the mean rate during the same period in the thirty-three large English towns. Among these Scotch towns the death-rates ranged from 9.6 in Paisley to 27.4 in Perth. The zymotic death-rate in these eight towns averaged 2.6 per 1,000, the highest rates being recorded in Perth and Leith. The 269 deaths registered in Glasgow included 14 from diphtheria, 12 from whooping-cough, 6 from scarlet fever, and 4 from "fever." Four fatal cases of small-pox occurred in Leith, and 6 of whooping-cough in Aberdeen.

THE INSANITARY CONDITION OF REGENT'S CANAL.

The London Council have again had under consideration the insanitary condition of the Regent's and Grand Junction Canals. The main reasons causing the foul condition of the canals, it will be remembered, are: (1) The collection of mud at the bottom of the canal from insufficient dredging; (2) the insufficient flow of water producing an almost stagnant condition; (3) the collection of decomposing material on the surface of the water: (4) the droppings from barges and the smell of refuse from gas works while conveyed by barges. The stagnant condition of the water is incidental to all canals which do not canalise rivers, and the canal companies state it is not in their power to pass more water down the canals. The serious discharge of sewage into the canal from the Zoological Gardens, which is Crown property, it is hoped will be diverted. As regards the other points at issue, it is found that legislation will be necessary to enable the central authority to deal directly with the canal in its course through London. At present the initial step lies with the local sanitary authorities, who must require the sufficient cleansing of the surface of the water and the dredging of the canal bed and lay-byes. They must see that no further pollution takes place from the wharves and frontages on the banks of the canals, and they must enforce the new by-law of the Council with regard to the carriage of fæcal or offensive or noxious matter. If the local authorities can effect no good, then the Council will serve notices under the Rivers Pollution Act, which, however, is slow and cumbrous in its action.

CHOLERA AND THE SANITARY STATE OF RESHT.

The report of the British Consul on the trade of the Consular District of Resht, in Persia, during 1892-93 furnishes a deplorable picture of the utter lack of attention to the most primitive elements of sanitation in the town, which has a population of thirty or forty thousand persons. It is, indeed, absolutely unprovided with any sanitary arrangements. The privies existing in each house are mere wells without exit. Drinking water is taken from wells sunk within twenty yards of those privies, water being found from five to ten feet from the surface. There are no sewers, and the guttering is worse than useless. Rubbish heaps abound in street corners and open places, whilst ice is consumed from contaminated water. Is it surprising, asks the report, that cholera should flourish here?

In 1892 cholera was introduced by sea to Enzelli, thence easily to Resht, from Baku or other Caspian seaport. The epidemic was at its height from July 24th to the end of August. Women suffered more than men, presumably on account of their harder work on bad fare in the rice

fields, knee-deep in liquid mud. There were 10,000 cholera deaths recorded in Persia, 2,820 being in Resht. But the Consul regards the latter total as an exaggeration. Dr. Loris Melikoff, as the result of a careful examination of the data, places the deaths in Resht at 1,050 during the prevalence.

SMALL-POX.

Four cases of small-pox were reported in Edinburgh last week, and 7 new cases were admitted to Leith Hospital. In Leith 4 deaths last week resulted from small-pox, and 3 of these occurred in the hospital. Small-pox appears to be prevalent in contiguous parts of Notts and Derbyshire. At Whittington 8 cases were recently reported from one street. At Worksop also cases are mentioned, and Darlton, a village, is reported to have had a case imported from Worksop.

THE GERMAN PUBLIC HEALTH ASSOCIATION.

The German Public Health Association will hold its nineteenth annual meeting at Magdeburg on September 19th and three following days. Among the subjects proposed for discussion are: Prophylactic Measures against Cholera, Hygienic Estimate of Water for Drinking and Ordinary Domestic Purposes, Gas Heating from a Sanitary Point of View, and the Sanitation of Dwelling Houses.

THE STATUS OF SANITARY INSPECTORS.

At the recent general meeting of the Institute of Certificated Sanitary Inspectors, held at the Parkes Museum, under the Presidency of Professor Wynter Blyth, it was resolved to send the following representation to the President of the Local Government Board, in order that the points raised might be considered in connection with the Local Government (England and Wales) Bill: (1) That the "inspector of nuisances" be abolished throughout the provinces, and that "sanitary inspector" be substituted therefor, as in the metropolis, under the Public Health (London) Act, 1891. (2) That in the interest of the public health, and for the proper performance of their duties, it is advisable that permanency of office, and some provision for the superannuation of sanitary inspectors be made. (3) That a clearer definition of the position and duties of sanitary inspectors than that contained in the general orders of the Local Government Board is necessary.

NOTIFICATION FEES.

Ferment writes: Your answer to "M. O. H." in the British Medical Journal of January 20th under the above heading has rather upset my own interpretation of the Notification Act. I think that unless a practitioner is consulted and advises in a case he cannot be said to be "attending on or called in to visit" (*vide* chap. 72, sec. 3, 1, *b*). Therefore, I think that any practitioner who accidentally sees a case (as "M. O. H." seems to have done) need not notify it, and I cannot see that the practitioner, under the circumstances, would be included in the list of persons required to notify in default of the head of the family (*vide* chap. 72, sec. 3, 1, *a*). You say that if "M. O. H." is entitled to anything it is a shilling, as a public body must include a sanitary authority, but in chap. 72, sec. 11, it states: "Where a medical practitioner attending on a patient is himself the medical officer of health of the district, he shall be entitled to the fee to which he would be entitled if he were not such medical officer."

FEES FOR MEDICAL INFORMATION GIVEN TO GUARDIANS.

A District Medical Officer writes to say that he has received medical orders from the relieving officer to visit and undertake the treatment of persons who have applied for "relief" (not medical). The orders state, "unable to work, applies for relief; please report next board." He asks: Is it a part of my duty as district medical officer to report on these cases, or does it come under the regulation which states that "the guardians may employ their medical officers to prepare or collect information to enable them to effectually discharge their duties and pay them specially for such services." If I am entitled to any fee, what would be a fair one to ask?

*** These questions are somewhat difficult to answer. If our correspondent, after the receipt of such medical orders as he has described, finds the applicants for relief to require no medical attendance whatever, and that they admit this, it appears to us that all the medical officer has then to do is to report such fact to the guardians, and, if he then receives any further instruction from them, to procure additional information in reference to the applicants, he would appear to be entitled to an extra fee for so doing. A district medical officer is doubtless bound to give the guardians any information he may possess in reference to patients under his care and treatment, but we do not understand it to be his duty to get up information for the guardians in reference to persons not under his care. Medical orders are granted to paupers who require medical attendance, to enable the holders of them to obtain such medical attendance as may be requisite, and this appears to us to be the only strictly legitimate reason for the issue of such orders. For information given to guardians in any one case, 3s. 6d. might be charged, but, if the cases were numerous, perhaps 2s. 6d. for each certificate would be a fair fee.

University of Moscow.—The University of Moscow celebrated the 139th anniversary of its foundation on January 24th. The official registers show that on January 1st, 1894, the total number of students on the books was 3,693, of whom 1,182 belonged to the medical faculty. During the last academic year the licence to practise medicine was granted to 193 students, and the degree of Doctor of Medicine was conferred on 10.

MEDICAL NEWS.

His Royal Highness the Duke of Connaught will preside at the festival dinner of the London Lock Hospital and Rescue Home, at the Hôtel Métropole, on April 21st.

At the annual meeting of the Philadelphia College of Physicians, held on January 3rd, Dr. S. Weir Mitchell was re-elected President.

Dr. P. M. Rice, of Millbrook House, Galway, a magistrate for the borough, has been appointed by the Lord Chancellor to the Commission of the Peace for the county also.

The Czar has conferred the St. Alexander Newski Order on Professor Zakhärin, in acknowledgment of the services rendered by that physician during his Imperial Majesty's recent illness.

At a meeting of the Medical Defence Union this week 140 names of candidates were put forward for election, and were duly admitted members. It was stated that quite as many await election at next meeting.

Edinburgh Royal Maternity Hospital.—Mr. D. C. Edington, M.B., C.M., and Mr. W. C. Hamilton, M.B., C.M., have entered on duty as house-surgeons to this institution.

Infectious Diseases Hospital for Crieff.—Dr. and Mrs. Meikle have offered to build a hospital for infectious diseases at Crieff (Perthshire), and the Town Council has accepted their kind offer.

Surgeon-Lieutenant-Colonel Edward Lawrie, whose term of office as Residency Surgeon of Hyderabad expires on March 31st, 1894, has, as we learn from the *Indian Medical Record*, again been recommended by the British Resident to continue in office for another period of five years.

A Committee, of which Dr. Almén is chairman, has been appointed to revise the Swedish *Pharmacopœia*. A new Norwegian *Pharmacopœia* is expected to appear by the middle of the present year. Only the names of the drugs are to be in Latin, the descriptions and modes of preparation being given in the vernacular.

St. John Ambulance Association.—A course of nursing lectures was given at Redruth by Mr. C. R. Laurie last November, and at the examination twenty-one ladies presented themselves, and all obtained certificates. An ambulance corps has been formed in the town, and many young men who hold First Aid certificates have enrolled themselves.

Berlin Medical Society.—During 1893 the Berlin Medical Society held thirty-three meetings, at which thirty-seven papers were read and seventy-eight demonstration were given. The membership of the Society is now 914. Its expenses for the year were 23,850 marks, its income 27,985 marks; its funds amount to 91,000 marks. The president for the current year is Professor Virchow, with Dr. Siegmund and Professor von Bergmann as vice-presidents.

The Recent Hospital Poisoning Case.—At a meeting of the Public Health Committee of Edinburgh Town Council, the report of the subcommittee in regard to the recent poisoning case at the Fever Hospital was discussed. The subcommittee disagreed with the report presented by the medical officer, in so far as it laid blame on the night superintendent. They considered that the facts did not warrant this. The report was adopted, and the matter may now regarded to be ended.

The Highgate Sanitary Museum.—This useful institution continues to do good work. It is, we believe, the only instance in the country in which a sanitary authority has set up a museum of the sort for the instruction of its constituents. All the different kinds of sanitary appliances are here well displayed, and anyone wishing to compare his own domestic traps and drains with what is possible in that line has only to turn in and see. Besides ordinary health lectures to the general public, classes in practical sanitary plumbing are held for the benefit of apprentices and others in the trade. Since the opening of the museum in November, 1892, over 16,000 visitors have been admitted.

German Congress for Internal Medicine.—We are requested by Dr. Emil Pfeiffer, of Wiesbaden, the Secretary of the Congress for Internal Medicine, to state that, in consequence of the date chosen for the meeting of the International Medical Congress in Rome, difficulties have arisen which have led the organising committee of the former to decide that the thirteenth meeting of the Congress for Internal Medicine shall be postponed till 1895, when it will be held at Munich.

Society for the Study of Inebriety.—Dr. Henry Lansdell, the well-known traveller in Asia, an associate of the Society for the Study of Inebriety, was entertained at a reception by the President and Council, in the rooms of the Medical Society of London, on February 8th. Dr. Norman Kerr, in proposing a resolution of welcome, referred to the distinguished guest's three great journeys in Siberia, Chinese and Central Asia, as valuable object lessons to inebriates, Dr. Lansdell having undergone all the enormous amount of endurance without once resorting to intoxicating stimulants. Dr. George Harley and Surgeon-Lieutenant-Colonel Evatt supported the resolution. Refreshments were served by Dr. Lansdell and friends dressed in Asiatic robes, royal gifts presented to Dr. Lansdell.

The General Medical Council.—We have received Vol. xxv of the *Minutes of the General Medical Council*. This volume contains the proceedings of the Council and its Committees, and of the Branch Councils for 1893, together with thirteen appendices. Among the appendices are the report by the Committee on Medical Aid Associations, and the Visitation Reports on Irish Universities and Corporations, on the Scotch Corporations, and on the English Universities. The *Minutes* are published for the Council by Messrs. Spottiswoode and Co., price 12s. Many of the special reports can be purchased separately; among others, the *Visitation Reports on the Irish Universities and Scotch Corporations* (5s.), and on the *Irish Corporations and English Universities* (5s.). The report on each body can also be obtained separately (1s.). The *Medical Aid Association Report* can also be had separately (1s.), as can that on *Reciprocity of Medical Practice in Relation to Foreign Countries* (1s).

Dangers of Revolving Shafting.—Recently an inquest was held at Sheffield, on the body of a man who had been killed by being caught and whirled round by the shaft when putting on a belt. The occasion drew forth some remarks from Commander Hamilton Smith, the Inspector of Factories. He said the number of these accidents had impressed him very much. On January 26th a man had been killed at Lincoln, another at Camberwell on the 29th, and further back a man was killed on December 11th last year at Blackburn. In Sheffield there had been three men killed in this way during the last five or six weeks. He thought the question was a very serious one, and one that demanded inquiry. He suggested that when putting these belts on the engine should be slowed, and he pointed out that while the law compelled all machinery less than 7 feet from the ground to be securely fenced, those high up were supposed to be safe, but they were not necessarily so when a man could approach them by a ladder or platform. Machinery like this should be fenced or boxed.

Obstetrical Society of London.—The annual meeting of this Society was held on Wednesday, February 7th: Dr. G. E. Herman, President, in the chair. The gentlemen whose names were given in the British Medical Journal of February 3rd, p. 281, were elected officers for 1894. The Treasurer's report was read and adopted. On the motion of Dr. West, seconded by Mr. Malcolm, a vote of thanks was unanimously accorded to him. The Honorary Librarian's report was read and adopted, and a vote of thanks (proposed by Dr. Champneys and seconded by Dr. Spencer) was unanimously given him. The Chairman of the Board for the Examination of Midwives' report was read and adopted, and a hearty vote of thanks (proposed by Dr. Gervis and seconded by Dr. A. Routh) was given him. The President then delivered his annual address. Dr. Playfair proposed a hearty vote of thanks to him, and asked that he should allow the address to be printed and published in the Society's *Transactions*. This was seconded by Dr. Watt Black, and carried by acclamation. Votes of thanks were also given to the editor of the *Transactions*, and to the retiring officers. Specimens were shown by Dr. Probyn Williams, Dr. Boxall, the President (for Mr. W. Grogono), and Dr. W. Duncan.

German Surgical Congress.—The twenty-third congress of the German Surgical Society will be held in Berlin from April 18th to 21st, instead of at Eastertide as usual, so as not to clash with the International Congress in Rome. Among other subjects on the programme are the following addresses: Professor Bruns, of Tübingen, "The Results of Tuberculous Inflammation of the Hip-joint under Conservative Treatment;" Professor Küster, of Marburg, "Early Operation in Osteomyelitis;" and Professor von Bardeleben, of Berlin, "Early Movement of Fractured Limbs with Special Reference to the Lower Extremity." A report on the results of a collective investigation on anæsthetics will be presented by Professor Gurlt.

MEDICAL VACANCIES.

The following vacancies are announced:

BACTERIOLOGICAL INSTITUTE, Cape Colony.—Medical Assistant. Salary, £350 per annum. Successful candidate will be provided with a free passage (first class) to the colony. Apply by letter to Mr. Charles Loudon, W.S., 54, Queen Street, Edinburgh.

BELGRAVE HOSPITAL FOR CHILDREN, 77 and 79, Gloucester Street, Pimlico, S.W.—House-Surgeon. Board, lodging, fuel, and light provided. Applications to Percy Gates, Honorary Secretary, by March 7th.

BURY DISPENSARY HOSPITAL, Bury, Lancashire.—Junior House-Surgeon, Salary, £60 per annum, with board, residence, and attendance. Testimonials to the Secretary, Henry Webb, Brentwood, Bury.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Resident Medical Officer. Salary, £100 per annum, with board, etc. Applications to the Secretary, T. Storrar-Smith.

COMBE LYING-IN HOSPITAL, Dublin.—Assistant Master. Tenure of office three years; premium to Master £200. Applications and testimonials to the Master, Coombe Hospital, Dublin.

CORK STREET FEVER HOSPITAL, Dublin.—Assistant Registrar and Resident Medical Officer. Salary, £65 per annum, furnished apartments, coals, attendance, and gas. Testimonials to the Chairman by February 21st.

COUNTY ASYLUM, Rainhill, Liverpool.—Assistant Medical Officer; unmarried, and not more than 30 years of age. Salary, £100 a year, with prospect of an annual rise of £25 up to £200, with further increase according to promotion, together with furnished apartments, board, attendance, and washing. Applications and testimonials to the Medical Superintendent.

COUNTY BOROUGH OF OLDHAM.—Medical Officer of Health. Salary, £400 per annum. Applications, with particulars of qualifications, to be sent to the Town Clerk, A. Nicholson, by February 26th.

COUNTY LUNATIC ASYLUM, Snenton, Nottingham. — Assistant Medical Officer, unmarried. Salary, £100 per annum, rising £10 annually to £150, board, lodging, washing, and attendance. Applications to the Chairman of the Committee of Visitors by February 27th.

CUMBERLAND INFIRMARY, Carlisle. — Assistant House-Surgeon. Salary, £40 per annum, with board, lodging, and washing. Appointment for one year. Applications and testimonials to the Secretary by February 21st.

DENTAL HOSPITAL OF LONDON, Leicester Square, W.C.—Assistant Dental Surgeon. Applications to J. Francis Pink, Secretary, by March 12th.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Pathologist and Registrar. Honorarium, £40 per annum. Applications to the Secretary, Thomas Hayes, by February 27th.

EAST SUFFOLK AND IPSWICH HOSPITAL, Ipswich.—House-Surgeon, unmarried. Qualified in medicine and surgery. The office is held subject to annual re-election. Salary, £80 per annum, with board, lodging, and washing. Applications and testimonials to the Secretary, T. Edgar Mayhew, by February 20th.

FEMALE LOCK HOSPITAL, Harrow Road, W.—Assistant House-Surgeon. Board and lodging, but no salary. Appointment for twelve months. Applications and testimonials to the Secretary.

FRENCH HOSPITAL AND DISPENSARY, 172, Shaftesbury Avenue, W.C.—Resident Medical Officer; must speak French. Salary, £80 per annum, with board, furnished rooms, and attendance. Applications and testimonials to the Secretary, F. Sord, by March 1st.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway, N.—Physician to Out-patients; must possess the degree of M.D. or M.B., or Fellow or Member of Colleges of Physicians of London or Edinburgh, or King and Queen's College of Physicians Dublin. Applications and testimonials to the Secretary at the hospital, William T. Grant, by February 26th.

HOSPITAL FOR WOMEN, Soho Square, W.—House-Physician. Salary, £30 for six months, with board, etc. Applications and testimonials to the Secretary, David Cannon, by February 21st.

HOSPITAL FOR WOMEN AND CHILDREN, Leeds.—House-Surgeon, for less than twelve months. Salary, £75 per annum. Applications to the Secretary of the Faculty.

LIVERPOOL HOSPITAL FOR CANCER AND SKIN DISEASES.—Honorary Assistant Surgeon. Applications to Mr. A. N. Talbot, 3, Rumford Street, Liverpool, by February 20th.

LONDON TEMPERANCE HOSPITAL, Hampstead Road, N.W.—Assistant Resident Medical Officer. Appointment for six months. No salary, but residence in the hospital, board and washing, and an honorarium of 5 guineas. Applications and testimonials to E. Witson Taylor, Secretary, by March 8th.

MANCHESTER INSTITUTION FOR DISEASES OF THE EAR.—Honorary Assistant Surgeon. Applications to the Honorary Secretary, Mr. T. C. P. Gibbons, 33, Mosley Street, Manchester, by February 17th.

MIDDLESEX HOSPITAL, W.—Clinical Assistant in the Out-patients' Department for Diseases of the Skin. Applications to F. Clare Melhado, Secretary Superintendent, by February 21th.

NEW HOSPITAL FOR WOMEN, 144, Euston Road, N.W.—Lady Dispenser. Salary, £30 per annum. Applications to the Secretary by February 17th.

OWENS COLLEGE, Manchester.—Professor of Zoology. Applications to the Council of the College, under cover to the Registrar, by April 3rd.

OXFORD EYE HOSPITAL.—House-Surgeon. Appointment for one year. Salary, £50, with board and lodging. Applications to Mr. B. H. Baden-Powell, Honorary Secretary, 29, Banbury Road, Oxford, by February 24th.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL, Marylebone, N.W.—Resident Medical Officer. Appointment for four months. Salary at the rate of £60 per annum, with board and residence in the hospital. Applications and testimonials to the Secretary, G. Owen Ryan, by February 20th.

PARISH OF PADDINGTON.—Medical Officer of Health. Salary, £600 per annum. Applications and testimonials to the Vestry Clerk, Frank Dethridge, Vestry Hall, Harrow Road, W., by February 26th.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications with testimonials to the Secretary, T. A. Fisher-Hall by March 10th.

ROYAL SURREY COUNTY HOSPITAL, Guildford.—House-Surgeon. Salary, £80 per annum, with board, lodging, and laundry. Applications to the Honorary Secretary by March 10th.

ST. LUKE'S HOSPITAL, London, E.C.—Clinical Assistant. Appointment for six months, with board and residence. Applications and testimonials to the Secretary, Percy De Bathe, M.A., by February 19th.

ST. PANCRAS AND NORTHERN DISPENSARY, 126, Euston Road.—Honorary Physician; must be a Member of the Royal College of Physicians of London or a graduate in medicine of one of the Universities. Application with testimonials to the Honorary Secretary, H. P. Bodkin, 23, Gordon Street, Gordon Square, W.C., by February 24th, 1894.

STAFFORDSHIRE COUNTY INFIRMARY, Stafford.—Assistant House-Surgeon. No salary, but board, lodging, and washing. Applications to House-Surgeon.

TIVERTON INFIRMARY AND DISPENSARY, Tiverton.—House-Surgeon and Dispenser, registered and unmarried. Salary, £100 per annum, with lodgings, attendance, fire, and lights. Applications with testimonials to the Honorary Secretary, Arthur Fisher, Tiverton, Devon, by February 23rd.

WYNAAD PLANTERS ASSOCIATION.—Medical Officer for an Indian planting district. Salary, 450 rupees a month; married man preferred. Applications to J. Williams Hockin, Honorary Secretary, U. P. A. Medical Fund, Vayitiri, Malabar, India.

MEDICAL APPOINTMENTS.

ATKINS, S. E., L.R.C.S.I., L.S.A.Lond., appointed Medical Officer to the Dalwood, Kilmington, Stockland, and Membury Districts of the Axminster Union, *vice* B. Hodges, deceased.

BEHRENDT, M. R. J., L.R.C.P.Edin., L.R.C.S.Edin., appointed Medical Officer to the Scunthorpe Local Board.

BLAXALL, Frank R., M.D.Lond., D.P.H.Camb., appointed Lecturer on Bacteriology at the Westminster Hospital.

BRAIDE, George, L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer to the No. 2 District of the Warrington Local Board.

HASWELL, W. C., M.B., B.S.Durh., appointed Resident Medical Officer to the Public Dispensary, Leeds.

HICKEY, G. A., L.R.C.S.I. & L.M., appointed Medical Officer to the New Ross Union.

HOPE, E. W., M.D., appointed Medical Officer of Health for Liverpool.

HOWELL-GRIFFITHS, J., M.B., B.S.Lond., M.R.C.S., L.R.C.P., appointed Second Assistant Medical Officer to the Greenwich Union Infirmary.

LEE, Charles George, M.R.C.S.Eng., appointed Honorary Aural Surgeon to the Royal Southern Hospital, Liverpool.

MILNE, A. D., M.B.Aberd., appointed House-Surgeon to the Children's Hospital, East End Branch, Sheffield.

NIVEN, James, M.A.Aberd., M.A.Camb., M.B., appointed Medical Officer of Health for the City of Manchester.

PERRY, Fred. W., L.R.C.P.I., L.R.C.S.I., L.M.Dub., appointed House-Surgeon to the Pendleton Brunen Dispensary, *vice* John Valentine, deceased.

SAWYER, J. A. F., L.R.C.P.I., L.R.C.S.I., reappointed Medical Officer to the Clevedon Local Board.

STOBO, James, L.R.C.P.Edin., L.R.C.S.Edin., appointed Medical Officer to the Southwick Local Board.

WILLIAMS, Richard, M.R.C.S., appointed Ophthalmic Surgeon to the Royal Southern Hospital, Liverpool.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. Stanford Morton: Ocular Injuries. Bacteriological Laboratory, King's College, W.C., 3 to 5 P.M.—Lecture: Typhoid Fever and Diphtheria. Practical work: Staining Sections and Cultivations. London Throat Hospital, Great Portland Street, 8 P.M.—Dr. Whistler: Syphilis as it affects the Larynx.

SOCIETY OF MEDICAL OFFICERS OF HEALTH, 20, Hanover Square, W., 8 P.M.—Discussion on Vaccination, and the Laws relating thereto. Opened by Dr. E. Seaton, M.O.H. Surrey County Council.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. Joseph White (Nottingham): The Administration of Anæsthetics Clinically Considered. Dr. Wethered: The Diagnosis of Diphtheria by Bacteriological Cultures.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr. Hyslop: Insanity with Cardiac Disease, Phthisis, Gout, etc.

PATHOLOGICAL SOCIETY OF LONDON, 8.30 P.M.—Dr. Elwin Harris: Sclerosis of Skull associated with Growth in the Brain. Mr. F. T. Paul: Specimens illustrating the Pathology of Rodent Ulcer. Dr. Kanthack and Mr. Byers: Specimens of Rodent Ulcer without Ulceration. Mr. Anthony Bowlby: Sixty-six Cases of Rodent Ulcer. Dr. Scholefield: Sarcoma of Suprarenal Body in a Child. Card Specimen: Dr. Charlewood Turner: Stomach from a Case of Oxalic Acid Poisoning.

ROYAL COLLEGE OF PHYSICIANS, Examination Hall, Savoy, 5 P.M.—Dr. J. Berry Haycraft: The Milroy Lectures on Darwinism and Race Progress. Lecture II.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 1 P.M.—Dr. Payne: Seborrhœa. Hospital for Consumption, Brompton, 4 P.M.—Dr. Habershon: Demonstration of Cases from the *Post-mortem* Room. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. Quarry Silcock: Glaucoma, with Illustrative Cases.

EPIDEMIOLOGICAL SOCIETY OF LONDON, 8 P.M.—Dr. Frank Clemow: A Contribution to the Epidemiology of Cholera in Russia.

NATIONAL HEALTH SOCIETY, 53, Berners Street, W., 4 P.M.—Dr. A. Newsholme: Diphtheria in the House.

POST-GRADUATE COURSE, West London Hospital, Hammersmith, W., 5 P.M.—Dr. William Hunter: Disease of the Blood (with lantern demonstration).

ROYAL METEOROLOGICAL SOCIETY, 25, Great George Street, Westminster, 8 P.M.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and the Epileptic, Queen Square, 2 P.M.—Dr. Taylor: Muscular Atrophy. Hospital for Sick Children, Great Ormond Street, 3.30 P.M.—Dr. Penrose: Tuberculosis in Children. Central London Sick Asylum, Cleveland Street, 5.30 P.M.—Mr. H. T. Butlin: Cases in the Wards.

ROYAL COLLEGE OF PHYSICIANS, Examination Hall, Savoy, 5 P.M.—Dr. J. Berry Haycraft: The Milroy Lectures on Darwinism and Race Progress. Lecture III.

FRIDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. R. Douglas Powell: Angina Pectoris.

CLINICAL SOCIETY OF LONDON. Living Specimens at 8 P.M. Papers at 9 P.M.—Dr. Mott: Multiple Toxæmic Neuritis: Dr. Hale White: Diphtheritic Peripheral Neuritis causing Sudden Death. Mr. Mansell Moullin: A Case of Cerebral Abscess. Mr. Battle: Three Cases of Extra-dural Hæmorrhage.

SATURDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M.—Dr. Corner: Insanity with Syphilis. Insanity with Organic Brain Disease.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTHS.

ALLISON.—On February 10th, at Fuller House, Kettering, Northants, the wife of John Allison, M.B., L.R.C.S.E., of a son.

DOWNING.—On January 28th, at Wellington House, Charles Street, Cardiff, the wife of Charles Downing, L.R.C.P.Lond., M.R.C.S.Eng., of a son.

MARRIAGE.

CHEW—GREENLEES.—At Fort England Church, Grahamstown, South Africa, on January 20th, by the Rev. W. H. Turpin, assisted by the Rev. W. B. Wallace, Dr. W. R. Chew, M.B., C.M.Edin., of Grahamstown, to Miss M. W. Greenlees, daughter of the late Dr. Greenlees, of Ballantrae, Ayrshire, N.B.

DEATH.

CLARK.—On February 8th, at Kirklands, Bothwell, N.B., Jessie Gowenlock, wife of Archibald Campbell Clark, M.D.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

Communications for the Current Week's Journal should reach the Office not Later than Midday Post on Wednesday. Telegrams can be Received on Thursday Morning.

Communications respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the Journal, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the Journal be addressed to the Editor at the Office of the Journal, and not to his private house.

Authors desiring reprints of their articles published in the British Medical Journal are requested to communicate beforehand with the Manager, 429, Strand, W.C.

Correspondents who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

Correspondents not answered are requested to look to the Notices to Correspondents of the following week.

Manuscripts forwarded to the Office of this Journal cannot under any circumstances be Returned.

Public Health Department.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* British Medical Journal *are devoted will be found under their respective headings.*

QUERIES.

J. W. asks how long nitrate of silver, ½-grain per diem, may be given without fear of staining the skin.

Dr. Casley (Ipswich) would be obliged if any member of the Association could give him any information about Benedict's combined Medical Daybook and Ledger, whether it is useful as a time-saving machine, and who are the publishers.

J. G. asks to be recommended an inexpensive apparatus that is also safe for assisting attendants in getting a patient in and out of bed. The patient is very heavy and almost helpless from age and debility, and will not or cannot make use of the usual conveniences for such cases.

Fellowship Examination R.C.S.I.

Q. E. D. asks what books are recommended for candidates to read who are preparing for the Fellowship Examination, Grade II, Royal College of Surgeons in Ireland.

Provident Dispensary.

M.A. asks where he could get information as to the advantages and disadvantages of instituting a public dispensary in a town of about 24,000 inhabitants.

*** Our correspondent might write to Mr. Warren, the Secretary of the Metropolitan Provident Medical Association, 5, Lamb's Conduit Street, W.C. That Association, of course, only works in London, but he could probably give the information required on the general question.

ANSWERS.

Dr. G. de G. Griffith.—Our correspondent's letter does not appear to contain any novel arguments, or to deal with any points not already fully dealt with by Dr. Routh or our correspondents.

A. R. B.—Particulars as to the requirements for the Preliminary Medical Examination will be found in the Educational Number of the British Medical Journal, published on September 2nd, 1893.

Bibliophile will probably find that Hoblyn's *Dictionary of Medical Terms*, eleventh edition, revised by J. A. P. Price, M.D. (London: Whittaker and Co., 10s. 6d.) will meet his requirements.

Hypnotism.—The full title of Professor Moriz Benedikt's book, reviewed in the last two numbers of the British Medical Journal, is as follows: *Hypnotismus und Suggestion: Eine klinisch-psychologische Studie.* Von Prof. Dr. Moriz Benedikt. Leipzig und Wien. Verlag der Buchhandlung M. Breitenstein, Wien ix, 3, Währingerstrasse 5. 1894. The price of the work is 2 marks.

M.D.—1. Since January 1st, 1894, the fee for the registration in the *Medical Register* of a diploma in State Medicine has been £2. Application should be made, in England or Wales, to Mr. W. J. C. Miller, B.A., Registrar of the General Medical Council, 299, Oxford Street, W.

2. The Assistant Secretary of the Royal Statistical Society is Mr. R. H. Hooker, B.A., of 9, Adelphi Terrace, Strand, W.C. He would no doubt supply particulars as to the conditions of admission as Fellow of the Society.

Treatment of Tapeworm.

Dr. K. W. Poole, M.B., B.S. (Kensington, W.), writes: I would suggest that Dr. W. Fearnley should try the following treatment for tapeworm: Keep the patient on liquid diet for two days. On the evening of the second day give the following draught: R, Ol. ricini, 3ss; ol. terebinthinæ, 5j; mucilag. acaciæ, 3ij; aq. menth. pip., q. s. The oil of turpentine, in conjunction with the castor oil, will clear away the mucus in which the head and small portion of the neck (the really essential parts to be expelled) are embedded. Early next morning after the above draught has acted give the usual draught of male fern.

Typhoid Fever in Cottage Hospitals.

Y.—In answer to our correspondent's question, we may say that it is generally held—

1. That typhoid fever is very little, if at all, infectious, but is communicated only through the dejecta of the patient.

2. If the stools are efficiently disinfected there is little or no risk of the disease being contracted even by the nurses, and the risk to patients is even less. All, however, depends on the efficiency of the disinfection and the state of the drains.

3. Typhoid fever is scheduled as an infectious disease because it is diffused through the contamination of water supplies by the dejecta of patients. Information of the occurrence of cases is thus of the greatest importance to medical officers of health, who are charged with the duty of guarding the purity of our water supplies.

4. Cases of typhoid fever are commonly admitted into the wards of general hospitals, and when the proper well-understood precautions are taken the disease does not spread to other patients.

"Reading Matter" Advertisements.

W. H.—The insertion in certain weekly and daily newspapers of advertisements of "cures" and of so-called patent medicines, printed in such a style as to give them the appearance of editorial articles, reflects little credit on the conductors of these newspapers. With regard to Mr. Edwin W. Alabone, we may observe that a case in which he was plaintiff was decided by Mr. Justice Wright on July 8th, 1893. The action was brought by Mr. Alabone for an injunction to restrain Henry E. Morton, a former clerk or assistant to the plaintiff, from continuing to publish a book entitled *The Prevention and Cure of Consumption*, on the ground of infringement of the plaintiff's rights in relation to a book written by him on the same subject. Mr. Justice Wright, in granting the injunction which he did, is reported to have expressed the hope that the proper authorities would take steps to enforce the Apothecaries Act against both parties. On November 4th, we reported the result of a prosecution by the Apothecaries' Society of Mr. Alabone for an offence against the Apothecaries Act, our correspondent will find the report on page 1006, and will note that the jury found a verdict for the plaintiffs, and that the defendant was required to pay a penalty of £20 and costs.

NOTES, LETTERS, Etc.

A Disclaimer.

Dr. Sherwood, of Eastbourne, finding that his name has been substituted for that of Mr. Sherrard in notices of the trial "The Queen *v.* Sherrard," wishes it to be known that he is in no way connected with the case.

Recurrence or Relapse.

Dr. T. B. Carlyon (Tenbury) writes: An unusual case of scarlatina is now under my care. A young lady, 11 years of age, was admitted three weeks ago into our Infectious Hospital with scarlatina, and is now "peeling." Other cases have been subsequently admitted. On February 6th a fresh and copious scarlatinal rash appeared on the young lady, so that "rash" and "peeling" appear together, denoting two attacks of the fever within three weeks.

Public Health Appointments.

D. S. C. writes: Your correspondent "Candidatus" should not rely on the Local Government Board to vindicate the rights of Public Health diplomates as against those who do not hold such a diploma. Within my recent experience, of two candidates for a medical officership, one of whom possessed the qualifications required under Sect. 108, subsect. 2(a), of the Public Health (London) Act, 1891, while the other did not, the district board elected the latter, and the appointment was confirmed by the Local Government Board. I do not know upon what grounds the Boards departed from the provisions of the Act.

Graduate writes: It seems that in a district with a population under 50,000 the candidate who has the most friends gets the appointment irrespective of any special qualification he may have. At least, this was the result in a recent election I know of, where there were three candidates for the post, and a graduate in health applied, and a man without any health qualification got the appointment. In every other branch of our profession—medicine, surgery, obstetrics, and lunacy special qualifications give a prior claim; but until, as "Filtration" remarks, only men with a health qualification should receive the approval of the Local Government Board this injustice will continue.

D.P.H. writes: I think "Candidatus" must not trust too much to a D.P.H. diploma. Some short time ago there was a vacancy in one of the largest districts in England. Many gentlemen holding the D.P.H. were candidates, but the appointment was given to one not holding any diploma in hygiene at all. Again, the post of Lecturer on Hygiene at a college was recently vacant. I was a candidate, and although I have acted in a similar capacity for some years, and hold the diploma of D.P.H.Cantab I was unsuccessful. The successful candidate held no such diploma, he was not a medical officer of health, and his knowledge of hygiene was, I suppose, on a level with that of most medical men who obtained their diplomas some years back; he had something, however, much stronger in his favour—his father knew several of the committee who had to make the appointment.

A Pill in the Trachea.

Dr. Alfred Ashby (Reading) writes: It is evident from Dr. Reginald C. Worsley's narrative in the British Medical Journal of February 3rd that he has not mastered the art of pill taking. The next time he has occasion to repeat the dose, if, instead of tilting his head backwards as he did he will stand up, tilt his head well forwards, and look at his feet, he will find no difficulty in disposing of his pill down the proper channel.

AN ELECTRO-MAGNETIC PLASTER.

WE learn from the *Electrical Review* that the statutory return of the Electro-Magnetic Medical Plaster Company, Limited, shows that out of a nominal capital of £10,000 in £1 shares 2,540 shares have been taken up, with 10s. called on each of 540. A sum of £215 has been received, £2,000 has been agreed to be considered as paid, and £25 is still outstanding. We gather from this that the project has not received much support from the investing public.

TREATMENT OF PSORIASIS (SYPHILITIC) BY THYROID EXTRACT.

DR. GEORGE OLIVER (Harrogate) writes: Dr. Gordon's case of psoriasis (syphilitic), published in the BRITISH MEDICAL JOURNAL of January 27th, has interested me considerably, for an inquiry in which I am engaged in respect to the diameter of the arteries in syphilis (and other diseases), and in subjects under the influence of thyroid extract, has inclined me to believe that this extract, in small frequently repeated doses, may prove useful in the treatment of syphilis. Guided by the facts I have observed, I am, therefore, disposed to suspect that in Dr. Gordon's case of psoriasis the benefit derived from the thyroid extract may be largely ascribed to its influence over the specific disease, more especially in counteracting the arterial changes which I have invariably observed so far in cases of acquired syphilis.

PROPHYLAXIS OF INFLUENZA.

DR. EDW. G. GILBERT (Tunbridge Wells) writes: During the first three epidemics of recent years I made all my family, consisting of at least seven persons, take a mixture containing 2 grains of quinine and 2 minims of liq. arsenicalis twice a day, and none of them caught the disease. I did not supply them with the mixture when this last epidemic set in, and five of them had influenza. I have supplied also some few other people with the mixture, and am not aware that any of them were attacked with influenza while taking it regularly. I do not hold my experience of its value to be by any means sufficient to justify my saying it is a certain prophylactic, but only that I have considerable reason to think that it has at least some prophylactic efficacy; and I felt the more ready to try it from supposing that if it should not prove preventive in any more direct way, it would as a tonic place the patient in a better position to grapple with the disease if he should catch it. A certain amount of resemblance between influenza and malarial disease was an additional incentive to me to try the quinine and arsenic. Might not freer ventilation, too, about influenza patients than is usually practised have its value, and perhaps also the regular use of a microbicidal solution to the eyes, nose, and throat?

THE PASSAGE OF THE CATHETER IN PROSTATIC DISEASE.

DR. WILLIAM DONOVAN (Erdington, Birmingham) writes: I think it will be generally accepted that retention of urine coming on suddenly in prostatic inflammatory conditions is a very grave complication, and fraught with danger to the patient and great anxiety to the surgeon. It is all the more advisable then for anyone who believes that he has discovered a method by which the catheter is easily, painlessly, and safely passed, under these difficulties, to give his ideas, even though they may be valueless, to the profession.

The middle lobe (so-called) of the prostate gland in cases of prostatic retention, standing in front of the passage into the bladder, forms a rampart against which the point of the catheter is stopped on its way into the bladder, and in bad cases, do what you will to pass it, the catheter will not go. We have all, at one time or another, had to deal with cases in which it then becomes a question of aspiration above the pubes or puncture through the trigone. A short time ago I had a case of this kind, and, only after a long and painful trial, was I able to relieve the bladder. Next time it wanted relief it struck me to lift the point of the catheter over the obstruction; this I did in this way. Having passed it down to the obstruction I placed the forefinger of my left hand behind the scrotum, felt for and found the point of the catheter, then pressed it upwards and forwards, at the same time depressing the distal end of the catheter with the right hand; it passed at once painlessly into the bladder. I have adopted the plan several times since with equal success.

"THE GERM OF ALL LIFE."

THE following is being circulated at the present time: Attention! The germ of all life is electricity. The electro-galvanic medical chain of health has by the excellent successes in a short time conquered the world, and would fail in no family and in no house. It became so celebrated because a great deal of maladies was quickly cured or mitigated by bearing it. It has a grand effect against rheumatism, palsy, pneumony, myositis, neuritis, headache, influenza, chlorosis, infection, excitation, anæmia, pleurisy, cold, fever, sweating fever, arthritis, palpitation, ague, cramp, osteomyelitis, phtisis, gastralgia, tabes dorsalis, apoplexy, cynache, nightmare, nephtritis, rickets, gout, cystitis, female diseases, etc. The electro-galvanic medical chain of health is made in largeness for: 1, middle-tall persons and children; 2, tall persons of more than 5½ feet. The electro-galvanic medical chain of health is sent against remittance of £1 5s. for No. 1, and £1 10s. for No. 2. The electro-galvanic medical chain of health is to have only by the Electro-technical Establishment of Severin Senator, Berlin, S.W., Wilhelmstr. 3a. Telegraphic address: Severin Senator, Berlin.

SUBSTITUTION IN PHARMACY.

ONE of the mischievous consequences of the inordinate multiplication of proprietary pharmaceutical preparations in the United States is the practice of substitution. Such at least may be inferred from the prominence given to this matter in a paper published by Dr. Cyrus Edson in the *Gross Medical College Bulletin*. He there speaks of substitution as a widespread evil, which can be accounted for only by assuming that the perpetrator in some way persuades himself that in supplying a preparation different from the one ordered he is selling something "just as good." Such a practice is really a form of commercial adulteration, calculated to damage patients and physicians alike, besides being a most reprehensible breach of the confidence placed in the pharmacist by both.

LETTERS, COMMUNICATIONS, ETC., have been received from:

(**A**) Professor Clifford Allbutt, Cambridge; J. M. Atkinson, M.B., Hong Kong; A.B.; A. Ashby, M.B., Reading; Messrs. Arthur, and Co., London; Dr. L. Atthill, Dublin; Anxious; Mr. S. E. Atkins, Newmarket; A. E. D. (**B**) Dr. J. Bright, London; Lady Baker, Blandford; Mr. L. A. Bidwell, London; Mr. R. J. N. Beale, London; Mr. T. B. Browne, London; J. F. Bullar, M.B., Southampton; W. T. Brooks, M.B., Oxford; Mr. J. B. J. Brady, Liverpool; Dr. R. Boxall, London; B.A. Mr. H. T. Butlin, London; Bibliophile; Mr. A. R. Barnes, Hailsham; Miss A. J. Beatty, London; B. C.; Dr. A. H. Bennett, London; Mr. W. A. Bateman, Richmond; Dr. J. W. Ballantyne, Edinburgh. (**C**) Mr. G. A. Critchett, London; Dr. A. H. Carter, Birmingham; Dr. E. W. Collins, London; Mr. T. B. Carlyon, Tenbury; Dr. R. K. Casley, Ipswich; Miss E. E. M. Creak, Birmingham; Mr. L. J. G. Carré, London; J. H. Clayton, M.B., Birmingham; Mr. J. W. Cruikshank, London; Messrs. Cuttting Bros. and Co., Derby. (**D**) Dr. A. Duke, Cheltenham; W. Downie, M.B., Glasgow; Dr. J. R. Day, London; Mr. R. Douglas, London; Mr. S. Duncan, Sunderland; Mr. F. C. Davidson, Belfast; Dr. C. Dukes, Rugby; D. Sc.; D. P. H. (**E**) Mr. M. A. H. Edwardes, London; Dr. T. W. Eden, London; C. S. Evans, M.B., Shattesbury; Messrs. Eyre and Spottiswoode, London. (**F**) Dr. R. H. Fox, London; Mr. H. Fisher, Tiverton; Mr. G. Foggin, Newcastle-on-Tyne; Dr. A. F. Fergus, Glasgow; F. H. S.; C. R. Francis, M.B., London; Mr. G. Fisher, Barnstaple; Mr. H. O. Arnold Forster, London; Fairplay. (**G**) Dr. W. F. Grant, London; Dr. W. Gay, Bournemouth; Professor W. T. Gairdner, Glasgow; Mr. F. W. Gibbon, South Shields; Dr. J. J. Gorham, Garstang; Mr. J. H. Griffiths, London; Dr. E. Giampietro, Rome; Mr. J. Gay, London; Galen. (**H**) L. Hill, M.B., London; Mr. J. G. Horder, Cardiff; Mr. J. C. Holderness, London; Mr. W. B. Holderness, Windsor; Dr. J. Haddon, Hawick; Mr. J. J. Hardesty, West Leigh; Professor J. Berry Haycraft, Cardiff; W. C. Haswell, M.B., Leeds; Mr. W. F. Haslam, Birmingham. (**I**) Dr. C. R. Illingworth, London. (**J**) P. J. Jackson, M.B., London; Mrs. B. James, Bridgwater; Mr. D. M. Jackson, Newcastle-on-Tyne. (**K**) J. J. Knox, M.B., East Molesey; Dr. J. Kerr, Bradford; Dr. J. H. Keay, Colne. (**L**) Mr. F. Lofthouse, London; Dr. C. R. Laurie, Redruth; J. Limont, M.B., Newcastle-on-Tyne. (**M**) Mr. J. McCaw, Belfast; Medico; Mr. H. W. Mattingham, London; A. D. Milne, M.B., Sheffield; M.D.Aberd.; M.A.; Mr. W. J. C. Miller, London; Dr. J. Mitchell, Barnard Castle; Member; Mr. H. J. Manning, Salisbury; Dr. E. Maragliano, Rome. (**N**) Mr. C. F. Newcombe, London; Mr. J. T. Neech, Tyldesley; Mr. A. Nicholson, Oldham; Mr. W. F. Nelis, Abergavenny. (**O**) O. W.; Observer; Mr. H. J. Osborn, London; Professor A. Ogston, Aberdeen. (**P**) Mr. H. S. Powell, London; Dr. L. C. Parkes, London; Dr. F. H. Pott, Bournemouth; Dr. E. F. Potter, London; Mr. K. Pearson, London; Mr. J. P. Parker, London; Mr. T. Pierse, Wexford; K. W. Poole, M.B., London; Mr. G. C. Pauli, Bristol; Dr. C. B. Plowright, King's Lynn. (**R**) Dr. T. C. Railton, Manchester; Mr. J. J. Reynolds, London; Mr. P. M. Rice, Galway; Mr. A. M. Rowley, Birmingham; Mr. E. J. Rawless, Crowthorne; R. T. B. (**S**) J. G. Sharp, M.B., Leeds; Dr. A. P. Sherwood, Eastbourne; Mr. A. W. Sheperd, Cowbridge; Dr. A. T. Schofield, London; J. C. L. Stawell, M.B., Bagnalstown; Messrs. Stephenson and Dormon, Bolton; Dr. J. Scott, Manchester; Dr. R. Saundby, Birmingham; J. F. J. Sykes, M.B., London; Dr. H. Snow, London; St. Bees; Senex; C. Stuart, M.B., Newburgh. (**T**) Dr. W. N. Thursfield, Shrewsbury; Mr. F. Thomson, London; Mr. J. T. Thomas, Torquay; Mr. H. H. Tomkins, Brighton; Mr. R. W. Turner, London; Mr. G. Taylor, Bakewell; Dr. J. C. Thresh, Chelmsford; Mr. W. Thompson, Bridgwater; A. Todd, M.B., Market Drayton. (**V**) Mr. F. H. Vertue, Southwold. (**W**) G. H. Wickham, M.B., Bournemouth; Mr. E. C. Ward, London; Mr. W. Watkins, Bournemouth; Dr. C. T. Williams, London; J. Wilson, M.B., Govan; Dr. J. Wyllie, Hull; Mr. E. Williams, Aberayron; Dr. F. J. Waldo, London. (**Y**) Mr. P. M. Yearsley, London; W. S. Young, M.B., Garliestown.

BOOKS, ETC., RECEIVED.

Traité des Maladies de la Grossesse et des Suites de Couches. Par Dr. C. Vinay. Paris: J. B. Baillière et Fils. 1894. 16 francs.

Grundriss der Kinderheilkunde. Von Dr. C. Seitz. London: Williams and Norgate. 1894. 9s.

The True Position of Oxygen as a Restorative in Carbonic Acid Poisoning. By Dr. W. E. Thomson. Glasgow: Alex. Macdougall. 1894.

Bourne's Handy Assurance Directory, 1894. By William Schooling. London. 1894. 3s. 6d.

Lehrbuch der Geburtshülfe. Von Dr. M. Runge. Berlin: Julius Springer. 1894. 9 marks.

A Short Guide to the Examination of Lying-in Women. By Professor Credé and Professor Leopold. Translated by W. H. Wilson, M.A., M.B. London: Henry Kimpton. 1894. 1s. 6d.

***** In forwarding books the publishers are requested to state the selling prices.**

A CLINICAL STUDY
OF A
CASE OF CYST OF THE CEREBELLUM:

Weakness of Spinal Muscles: Death from Failure of Respiration.

By J. HUGHLINGS JACKSON, M.D., F.R.S.,
Physician to the London Hospital, and to the National Hospital for the Paralysed and Epileptic;
AND
J. S. RISIEN RUSSELL, M.D., M.R.C.P.,
Assistant Physician to the Metropolitan Hospital

Our main object in recording this case is to emphasise a point in the symptomatology of cerebellar disease to which little attention has been paid. There is evidence of paresis of the trunk muscles, a direct result, we believe, of the structural damage to the cerebellum produced by the cyst. We record the case also as it exemplifies a mode of dying in cases of intracranial tumour first pointed out by the late Dr. Hilton Fagge—death by failure of respiration.

It has long been maintained by one of us (J. H. J.) that destructive lesions of the cerebellum, of its middle lobe at least, produce true motor paresis or paralysis, and that the trunk muscles are first and most affected, those of the inferior extremities next in order and severity, and those of the superior extremities last and least. Thus the degree and order of involvement of the different parts mentioned is the reverse of that which obtains in a destructive lesion of the cerebrum attended by paralysis, for in most cases of hemiplegia the arm suffers most, the leg less, and the trunk least. The recent experimental investigations of one of us (J. S. R. R.) appear to support these views on motor representation by the cerebellum. The results of these experiments in dogs and monkeys seem to prove the existence of motor paresis as one factor in the causation of the inability on the part of the animal to walk or stand after ablation of parts or the whole of the cerebellum; and it was evident that in the dogs the posterior extremities suffered far more than the anterior. The condition of the trunk muscles could not be so well judged of in these animals, but in monkeys, after extirpation of the whole of the cerebellum, the paresis of the back muscles was so great that the animal was unable to sit up.

Before going further, we must point out that paresis of the spinal muscles in cases of disease of the cerebellum was pointed out long ago by Niemeyer. He wrote: "In tumours of the cerebellum, as we have previously shown, hemiplegia is not constant, and when present is not pure, but extends to the other side of the body to a less extent, especially affecting the muscles of the spinal column. Paresis of the muscles inducing bending, erection, and lateral movements of the spinal column, first shows itself by a peculiar form of dizziness, which we have already fully described, and referred to vibrations of the spine in walking and similar acts; subsequently, it often evinces itself by an utter inability of the body to maintain itself, so in the sitting position the patients collapse and cannot move the body, unless held by both shoulders."[1]

We are indebted to Dr. J. B. Bird for the careful notes of the clinical history of the following case, and for his assistance in the investigation of the points of special interest; to Dr. James Taylor, then fellow house-physician of one of us (J. S. R. R.), for similar valuable aid; and to Dr. W. S. Colman for the record of the *post-mortem* observations made by him.

A. S., aged 30 years, was admitted into the National Hospital for the Paralysed and Epileptic, Queen Square, on January 4th, 1890, with symptoms believed to point to the existence of a tumour (it turned out to be a cyst) of the cerebellum.

History.—Three years before admission he suffered from headache vomiting, staggering with a tendency to fall backwards, and from "giddy attacks," the character of which he did not remember. He was also subject to attacks in which it was doubtful whether he lost consciousness or not; these and all the other symptoms passed off, with the exception of the headache, which persisted. (This symptom had been in existence for four or five years, but the patient was in the early part of the period constipated, and the headache used to be relieved when his bowels acted). A year later he was thrown down, struck the back of his head, and was also kicked on the head, but he did not lose consciousness, and was quite well next day. Six months after this he was diving, and struck the vertex of his head on a stone, which rendered him unconscious for half an hour. He vomited off and on for five weeks after this, and then was well enough to resume his duties as a police constable.

In January, 1889, that is a year before he came under our observation, he began to vomit nearly every morning on first getting up, before food was taken, and also during the day, especially after meals. On looking up, or on looking suddenly round to the right or left, he became giddy, and his sight became dim, but the giddiness passed off in a few minutes if he closed his eyes. If he turned abruptly in bed at night he felt giddy and stupid, and took some time to be sure of his position. When giddy he always tended to fall backwards, and actually did so sometimes. The pain from which he suffered was first in the forehead, then in the occipital region; latterly the vertex and the centre of his head was its seat. He continued his duties as a police constable until May, 1889, when all the symptoms became more marked, and had been increasing ever since, especially during the last month before his admission into hospital. Jerkings of both hands and feet were noted six weeks before he came under our observation, the face was never drawn, and speech was not affected. Ten days before admission sight began to be impaired, and three days later he could not, he told us, read; but he could do so at the time when we examined him. During the first three months of 1889 he was troubled by a subjective sensation of ringing in the ears. The patient had previously had good health; no history of syphilis could be elicited. There was no evidence of hereditary predisposition to malignant or tuberculous disease.

State on Admission.—The patient was a tall well-developed man, but looked pale, worn, and drowsy. It was evidently a great effort for him to speak and think.

Head.—The circumference of his head was 22 inches. Percussion of the skull elicited general tenderness, no one point being more tender than another. The sense of smell was less acute on the left side than on the right. Vision was $\frac{6}{6}$ on the right, and $\frac{6}{9}$ on the left; there was no hemianopia; there was intense double optic neuritis. Neither ptosis nor strabismus existed, but on lateral deviation the globes moved in a "punctuated" manner, and there were occasionally nystagmoid jerks. The pupils were 5 millimetres in diameter, and equal; they reacted normally to light and on accommodation. The motor and sensory divisions of the fifth cranial nerves were intact. The only evidence of asymmetry of the face consisted in a trifling drooping of the right angle of the mouth, evident, also, on showing the teeth; but on smiling and closing the eyes tightly, the facial movements on the two sides were equal. The power to raise the eyebrows and to frown was lost, and there were no transverse lines across the forehead. The ticking of a watch was heard 6 inches off each ear. The tongue turned slightly to the right when protruded, and was tremulous. The uvula was deflected in the slightest degree to the left; but the movements of the palate were equal on the two sides. The palatal reflex was present, and equal on the two sides. There was no dysphagia.

Neck.—All forms of sensibility were normal. Active and passive movements of the head on the trunk were restricted in all directions, as every change in the position of the head increased the pain in it, so that the patient was afraid to move it or allow it to be moved. There was no rigidity of the muscles, though there was occasionally a subjective feeling of stiffness in them.

Superior Extremities.—Sensibility of all kinds was intact in these extremities, and there were no subjective sensations. He was right-handed, and the right grasp registered 120 on the dynamometer scale, the left 100. Muscular sense was normal, as tested by position and weights; but in attempting to touch the nose when his eyes were closed, the left hand was slightly at fault. There was no rigidity; the tendon reflexes were well marked, the left slightly greater than the right.

Trunk.—Every variety of sensibility was normal. The abdominal superficial reflexes were present and equal on the two sides. There was slight but distinct weakness of the back muscles, as evidenced by the existence of "saddle back"[2] when the patient stood with his feet together. Further evidence of weakness of the back muscles was obtained by placing the patient flat on his abdomen, and then making him dorsiflex his spine by raising his head and trunk as far as possible off the ground without the aid of his arms. The vertical distance between the manubrium sterni and the ground was then measured, as was the distance between the manubrium and the furthest point to which the observer's hand could be pushed under the patient, without undue force, between the trunk and the floor. The former of these measurements was 5 inches, and the latter 6½ inches; whereas the average in three normal subjects was 5 inches in the former and 10¾ inches in the latter. That the abdominal muscles as flexors of the spine shared in this weakness was evident from the fact that when placed flat on his back with his arms folded across his chest, the patient was unable to sit up, even when he was aided by his legs being pressed close to the ground, a manœuvre which greatly facilitates the act of rising into the sitting posture. Sitting up can usually be accomplished by normal subjects in circumstances similar to those under which the patient was tested, and without aid by pressing on the legs.

Inferior Extremities.—There was no sensory disturbance, either subjective or objective. The plantar and cremasteric reflexes were less marked on the left than they were on the right. The gait was reeling, but there was no waddling. As the patient lay in bed, all movements of these extremities were freely carried out, but the power on the right side

[1] *A Text-Book of Practical Medicine.* By Dr. Felix von Niemeyer. Translated from the Eighth German Edition by George H. Humphreys, M.D., and Charles E. Hackley, M.D. Vol. ii, p. 244. 1876.

[2] We regret that there is no description in the notes of the characters of the "saddle back" (lordosis), but merely the statement that "there is distinct saddle back when he stands with his feet together."

was slightly less than on the left. There was no rigidity, but the knee-jerks were increased, the right more so than the left, and there was ankle clonus on the right side, while there was only a tendency to it on the left. Muscular sense was normal as far as position was concerned, and only slightly defective as regards the directing of movements as the patient lay in bed. When he reeled, he tended to fall to either side or backward. He could stand steadily with his feet together, but less steadily when his eyes were closed.

Rectum.—Constipation was of old standing. There was no loss of control over the sphincter ani.

Bladder.—For six weeks he had only been able to pass water when in the erect posture, and he did so infrequently, often passing a whole day without doing so. There was no loss of control over the sphincter.

Sexual Power.—There was no abatement of virile power, and he was not subject to priapism or to seminal emissions.

The circulatory, respiratory, alimentary systems, and the urinary system (except as just stated), presented no abnormal features until the dying by respiratory failure, which we now describe.

On February 12th the patient had severe headache during the day, with occasional vomiting, and at 6 P.M. he suddenly lost consciousness, and his breathing ceased, though his pulse continued fairly good. Artificial respiration was commenced at once, and was continued until 2.30 next morning, when the heart stopped beating. The pulse kept up well for some hours, but then gradually became weaker. During the eight hours and a-half that artificial respiration was continued there was no sign of natural breathing.

Necropsy.—The *post-mortem* examination revealed a cystic condition of the cerebellum. On cutting through the inferior velum and raising the medulla the fourth ventricle was seen to be widened; its floor was normal, but its roof was formed by the thin transparent floor of a cyst. The posterior wall of the cyst was gelatinous and uneven, possibly indicative of tumour, while the anterior was smooth. The cyst also excavated the lateral lobes, especially the left. The medulla was flattened, as were the cerebral convolutions, and the lateral ventricles of the cerebrum were dilated.

REMARKS.

This case presents many features of interest which might be commented on, but we shall confine our attention to the condition of the trunk muscles, and to certain general considerations with regard to cerebellar movements, and to the mode of dying.

We submit that the evidence of paresis of the trunk muscles in this case is fairly conclusive. "Saddle back" alone is strong evidence of weakness of the back muscles (extensors and flexors), and, as we have said, this phenomenon was well marked in the case under discussion. Further evidence of the weakness of these muscles was obtained from the investigations into the ability of the patient when lying on his face to raise the trunk from the ground, without the aid of the arms, that is, by the unaided action of the back muscles. It was clear that the patient's power to do this was considerably less than that of normal subjects on whom control experiments were performed. That the abdominal muscles, flexors of the spine, shared in the defect was evidenced by the fact that when placed flat on his back the patient was unable to sit up without the aid of his arms—a feat which is easily accomplished by normal subjects without that aid.

We are of opinion that this condition of paresis of the trunk muscles was a direct result of the destruction of cerebellar tissue, and not a secondary effect resulting from pressure by the cyst on the pyramids. With so much paresis of the trunk muscles, it would be reasonable for us to expect to find marked loss of power in the limbs, had pressure on the pyramids been responsible for the phenomenon, since the extremities always suffer more than the trunk when the paresis is the result of cutting off of the cerebral influence from the muscles. The fact that so much weakness of the trunk muscles existed when there was so little affection of the muscles of the extremities makes us attribute the weakness of the trunk muscles to cerebellar paralysis rather than to any secondary effect of pressure on the pyramids. We admit, however, that there was great pressure; the patient's hebetude, although it might have been owing to increase of fluid in the lateral ventricles, evidenced this. Moreover, the rapid failure of respiration causing death may have been owing to pressure on the medulla oblongata.

That paresis of the trunk muscles is an early feature of such lesions of the cerebellum has long been insisted by one of us (J. H. J.). The cerebellar reel, the so-called locomotor incoordination, is to be accounted for on the view that the erratic movements of the legs are attempts on their part to "run after" and "prop up" the trunk in its immoderate inclinings resulting from the weakness of the spinal muscles.

With regard to certain of our observations, it may be asserted that there is no mechanism whereby what we have called the cerebellar paralysis can be produced. It has been said that no motor connections between the cerebellum and the spinal cord have been discovered. Recently, however, Marchi has described descending degeneration after lesion, of the cerebellum in dogs and monkeys.[3] He finds that after ablation of one lateral half of the cerebellum there is a tract of degenerated fibres which occupies the periphery of the antero-lateral region of the spinal cord, on the side of the lesion chiefly, and also of part of the pyramidal tract, and of the anterior part of the direct cerebellar tract, on the side of the lesion. This observer also finds degenerated fibres in the anterior roots. One of us (J. S. R. R.) found degenerated fibres in the cord occupying mainly the antero-lateral region, on the side of the lesion, after ablation of one lateral half of the cerebellum in the dog; whilst in another series of experiments in dogs and monkeys he has found no such degenerated fibres in the cord. At present no satisfactory explanation of this discrepancy has been found. A paper has recently been read before the Royal Society by Dr. Ferrier and Dr. Aldren Turner; they were unable to confirm Marchi's statements as to the existence of a direct efferent cerebellar tract in the spinal cord, or of degeneration in the anterior nerve roots after extirpation of the cerebellum in the monkey. In one case they obtained degeneration in the anterior column, and in another in the lateral column of the cord; but Deiters' nucleus was injured in the first case, and the tegment of the pons, involving the nucleus of the lateral fillet, in the other.

Hence we admit that the facts as to degeneration "descending" from the cerebellum are discrepant; we can thus only rely for support of the hypothesis as to motor representation by the cerebellum, on such clinical facts as we have mentioned and on the extirpation experiments on the cerebellum of dogs and monkeys (J. S. R. R.). We have pointed out that what we believe to be cerebellar paralysis is by some observers accounted for by pressure by growths in the cerebellum on the pyramidal tract; if these are right, then the paralysis is cerebral, not cerebellar as we have suggested.

In this case the failure of respiration will, we suppose, by most be put down to pressure on the medulla injuriously affecting the respiratory centre. It is certainly the most obvious explanation. We have, however, to consider the rapid setting in of the respiratory failure, and also the comparative intactness of the other bulbar centres, those for circulation, for example. For, as we pointed out, the heart continued to beat for eight and a-half hours in the case of A. S. after failure of respiration. One of us (J. H. J.), adopting a principle first stated by Buzzard, has suggested that failure of respiration in cases of intracranial tumour may be owing to changes induced in the respiratory centre, changes akin to those of optic neuritis. Here, again, is the difficulty of the rapid setting in of the respiratory failure: an analogy may be suggested—that optic neuritis may exist for a long time with good vision, and then sight may rapidly fail. We do not, however, in this paper discuss that hypothesis. We wish to draw particular attention to some researches of great importance by Mr. Walter Spencer and Mr. Victor Horsley[4] bearing closely on the matter in question. These researches are important in many other clinical regards. Mr. Spencer and Mr. Horsley record the results of experiments on dogs and on a few monkeys. Intracranial pressure was artificially raised by the insertion of a thin-walled, easily distensible india-rubber bag; the bag was inserted at various points, from the supra-orbital region in front to the cerebellar region behind. By inflating the bag they produced well-marked effects on circulation and respiration. They write (p. 211): "When pressure is applied to the cerebral hemisphere, especially above and in front, we have such displacement of the encephalon that, in spite of the support given by the tentorium (which, it is to be remembered, is bony for the most part in the carnivora), the cerebellum is driven through the foramen magnum."

They show that the effects on circulation and respiration they produced are not owing to excitations from the brain immediately pressed on, for they obtained the same results when the mesencephalon was divided and thus when the ex-

[3] Marchi, *Rif. Sper. d. Fren. e Med. Leg.*, Anno XII, 1886, F. I; A. XIII, 1887, F. IV; A. XVII, 1891.

[4] *Trans. Roy. Soc. B.*, 1891, p. 201.

citations spoken of, if there were any, could not reach the medulla. The following extract (p. 244) will give some idea of the value of their researches: "If depressor influences were active and had not been impaired in any way then the slowing of the respiration was accompanied by slowing of the heart and a fall of blood pressure. When the respiration was arrested the heart was greatly slowed and then stopped. But if the depressor influence had been lost the heart was only slowed a little on the arrest of respiration and there was no fall of blood pressure nor arrest of the heart and the slight slowing was altogether lost when the heart was acting very quickly consequent upon paralysis of the cardio-inhibitory apparatus. The blood pressure affected the heart rate apart from any cardio-inhibitory effect, for after division of the vagi the heart became quickened as the blood pressure rose and slowed as it fell."

CASE OF TUMOUR OF THE SPINAL DURA MATER.

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WITH OPERATION BY
JOSEPH THOMPSON, M.R.C.S.,
Surgeon to the Hospital.

The excellent results obtained five years ago by Mr. Victor Horsley in the case of tumour of the spinal cord, diagnosed by Dr. Gowers, have not been always followed by equal success in other cases in the hands of others. It is therefore of importance that all instances of attempted operation for tumour in the spinal canal, whether successful or not, should be recorded and the diagnostic and therapeutic difficulties detailed.

The following is the second such case in which it has fallen to my lot to invite the help of the surgeon,[1] and in each the diagnosis was justified, though the final therapeutic result was in each, from special causes, disappointing.

In the former the tumour, an extradural echinococcus cyst, was found *post mortem* under the vertebra next above those removed, the extreme stoutness of the patient having prevented accurate counting of the spines.

In the following case the tumour, after a long operation, was found and removed, but the patient succumbed two days later. As will be seen from the report of the microscopical investigation, even if a satisfactory recovery from the operation had taken place, the nature of the growth was such that a recurrence was unavoidable.

Medical History.—C. R., aged 50, stationary engine driver, first saw me in the out-patient room on May 12th, 1893. He then complained of pain in the epigastrium and just above the pubes, and of passing blood in his water. There were no other signs of bladder or renal disease, and it was ultimately found that the suprapubic pain and hæmaturia were due to turpentine administered to him by a doctor for the stomach pain. This, however, he did not mention for three weeks, and the difficulties of diagnosis were thereby increased.

The note of May 12th runs: "Ill two months, off work a week. Pain began in epigastrium and lower dorsal spine. It began gradually, and has been always of a dull aching character. Not made worse by breakfast or dinner, but is worse after tea, when he has some wind. The pain is worse when at work. During the last fortnight it has spread down to the pubes. He has also some trembling in the legs, but seems rather nervous and shaky all over. Has lost two stones in weight in the last two months. There is no physical sign of disease of the heart, lungs, stomach, or liver. The urine is normal, and no stone is found by the sound in the bladder. His only previous illness is rheumatic fever nine years ago. No history of syphilis or alcoholism."

It may suffice to say that the hæmaturia and suprapubic pain disappeared after the first visit, the reason being later made clear when the history of the turpentine was revealed. The epigastric pain, however, did not diminish, though it was never very severe, and he continued to complain of pain in the lower half of the dorsal spine. On further inquiry he also admitted a slight feeling of tightness in the waist. During May the trembling and weakness of the legs, which were at first not conspicuous, steadily increased, so that he had to take to a stick in walking. They also became stiff, and there were some aching pains in the front of the thighs and the calves. Whereas on May 12th he could walk well, on June 2nd he walked very stiffly, and complained of numbness on the front of the thighs. On this day the knee-jerks were exaggerated, but there was no ankle clonus. June 6th. Double ankle clonus, slight tactile anæsthesia on front of thighs; walks with difficulty, dragging toes on ground. June 27th. Admitted into hospital; cannot walk, and can only stand with support. During this time the patient had slept and eaten well, and remained stout, although he said he had lost flesh. The urine and sphincters have been normal.

On July 2nd the following note was taken:

"Patient is a stout muscular man of healthy aspect. He complains of pain in the lower part of the epigastric region and a tight feeling spreading from this place round to the back, about the level of the eleventh rib. He has also pain in the back on either side of the spine about the level of the three last dorsal vertebræ. All his pains are dull and not accurately defined. There are also some crampy pains in the front of the thighs if he moves. He has a sensation of numbness on the front of the legs and thighs, more marked on the right.

"Motor power is normal in the eyes, face, arms, trunk, and sphincters, but the legs show great loss. He can just stand for a moment by himself, but cannot walk without support. The loss of power is greater in the left leg than the right.

"Sensation is normal on the head and arms. There is an area on the front of each leg, stretching from Poupart's ligament downwards as a narrowing cone to the lower third of the shin, on which sensibility is lost to touch, pain, and heat. On the left leg the anæsthesia is incomplete, but on the right it becomes almost complete at Poupart's ligament and extends an inch above it. On both soles and dorsal surfaces of the feet, on the back of the legs, thighs, and in the perineum sensation to touch and pain are normal, though heat and cold are sometimes confused.

"On the back of the trunk sensation seems fair, but there are a few points on either side of the eighth and ninth dorsal spines where a light touch is sometimes missed. There are similar patches of very faint anæsthesia in front near the anterior ends of the eighth and ninth ribs. On the abdomen sensation is normal. Just above the slightly anæsthetic spots behind there is a patch of slight cutaneous hyperæsthesia. Spinal tenderness is absent.

"The knee-jerks are increased, more especially the right, and there is double ankle clonus. The plantar, cremasteric, and abdominal reflexes are not obtained.

"Digestive, circulatory, respiratory, and urinary systems normal, except that he has occasionally some flatulence after tea."

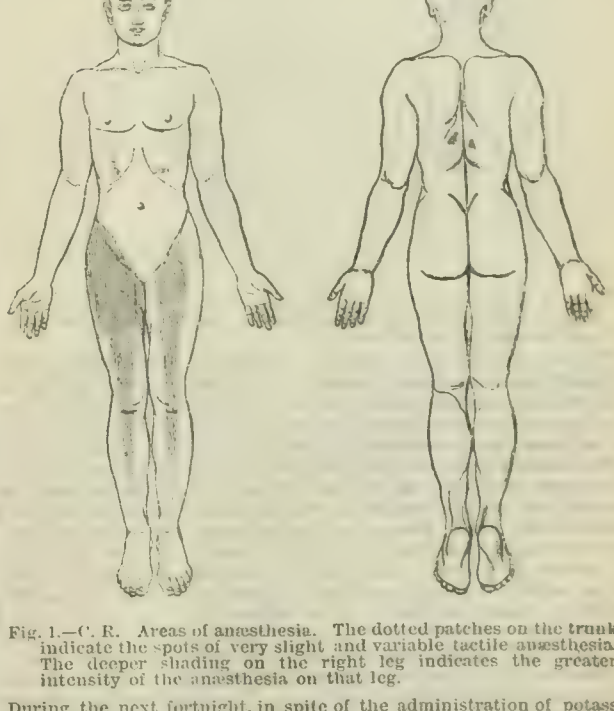


Fig. 1.—C. R. Areas of anæsthesia. The dotted patches on the trunk indicate the spots of very slight and variable tactile anæsthesia. The deeper shading on the right leg indicates the greater intensity of the anæsthesia on that leg.

During the next fortnight, in spite of the administration of potassic mercuric iodide, the condition of the patient did not improve.

The note on July 16th says "he cannot lift either leg off the bed, although the toes of both can be moved. There has been no distinct girdle sensation, and the pain in the epigastric region and back has been less intense and ill defined.

"The sensory loss is slightly variable and is not increased. Painful impressions are felt on the left leg, but on the front of the right he often misses a prick or pinch. Pulling the hairs in the right groin may be felt on one day and not on another.

"On the trunk the disturbance of sensation is still more uncertain. The patient's fat makes counting the spines difficult, but in an area of skin a square inch in size about the level of the eighth and ninth spines he usually misses a light touch on either side of the vertebral column. Occasionally on the left there seemed to be slight dulling of sensibility for an inch higher, but there is no zone of hyperæsthesia. On the front of the body there is a point about three inches below the nipple and just internal to it where he sometimes fails to detect a light touch, but this spot of partial anæsthesia cannot always be demonstrated. Otherwise

[1] See Ransom and Anderson, British Medical Journal, November 28th, 1891.

there is no alteration of sensation on the trunk. (See Fig. 1.) There is no wasting of muscles, no bedsore, and the sphincters are unaffected."

Diagnosis.

The cause of the paraplegia in this case was by no means obvious. The march of the symptoms—namely, pain, motor and sensory loss—did indeed suggest compression of the cord; but the small intensity and vagueness of the pain and the small and peculiar distribution of the anæsthesia obscured the diagnosis both of the nature and position of the spinal lesion. The only complete anæsthesia was in the area of the anterior crural nerves. I several times failed to demonstrate the slightly anæsthetic spots on the trunk, while hyperæsthesia was only once or twice detected. It was, indeed, the opinion of some of my colleagues that the paraplegia was due to myelitis and the pain to disturbance of the stomach, which last opinion was naturally inclined to by the patient. And a consideration of the well-known paræsthesiæ in the areas of the cutaneous branches of nerves whose visceral twigs are in communication with disordered organs—which have been so thoroughly investigated by Head[2] and Mackenzie[3]—gave additional weight to this view. The small patches of slight anæsthesia and occasional hyperæsthesia on the trunk closely corresponded with the region associated by Head with disorder of the stomach—seventh, eighth, and ninth dorsal areas—and Fig. 2, which is taken from a case of my own, shows this coincidence clearly.

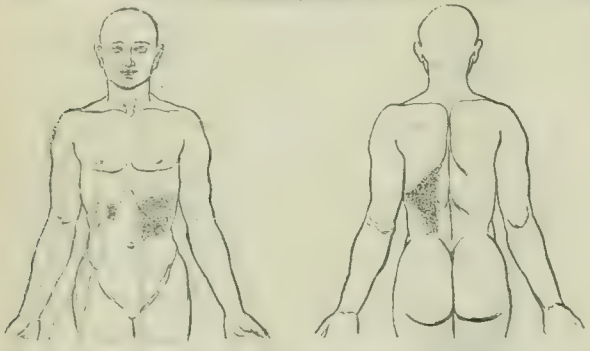


Fig. 2.—J. B., aged 22. Case of slight dilatation of the stomach, with agoraphobia and general nervousness. Dotted spots show areas of cutaneous hyperæsthesia.

This was the case of a young man who for two months had suffered from various dyspeptic symptoms, which had been followed by general nervousness, vasomotor instability, and that form of neurosis which consists in an inability to walk out of doors, more especially in wide streets or open spaces.

The stomach was slightly dilated, but the chief peculiarity noted was the zone of intense cutaneous hyperæsthesia in the left half of the epigastric region, stretching as a narrower band to the back, where it again widened out so as to reach from the scapula to the crest of the ilium. On the right side in front was a small patch of less intense skin tenderness. These areas of functional nerve disturbance due to gastric trouble, though slightly more extensive, thus correspond very closely with the paræsthetic spots in the case of paraplegia. But further consideration shows differences. First, in the case of dyspepsia, there is hyperæsthesia only; in the other anæsthesia is more marked. The functional change of cutaneous nerves whose visceral branches supply disordered organs appears to be always in the direction of exaltation rather than depression, except in cases of definite hysteria. Secondly, the paraplegic patient presented no other signs of stomach trouble, the appetite being good, and his only complaint being slight flatulence and discomfort after tea. And, thirdly, he showed no other stigmata of the neurotic disposition, as do most of the patients with these hyperæsthetic zones.

In spite, therefore, of the absence of well-defined root symptoms, I arrived at the conclusion that the pain and the paraplegia were due to a common cause—compression of the spinal cord, probably a tumour—and also from the absence of such symptoms that the tumour was probably situated outside the dura mater.

The position of the pain and the patches of slight anæsthesia pointed to the neighbourhood of the seventh and eighth dorsal roots as the level of the growth, but the total absence of anæsthesia lower down till the region of the anterior crural nerve was reached was difficult to explain. It is, however, a general rule that tumours of the spinal canal are found at or above the highest limit of sensory disturbance, and it is probable that extradural growths will usually be found higher above the anæsthetic zone than those situated within the dura mater. When therefore, after consultation, my colleague, Mr. Thompson, agreed to operate, we decided to commence the incision just below the small anæsthetic zone behind and to extend it some distance above. It was owing to a suspicion that there might be a lower portion of the growth causing the anæsthesia of the legs that I advised exploration at all below the anæsthetic spot on the back. If it had not been for the area of normal sensation on the abdomen I should have advised cutting altogether above this spot and, as it turned out, this would have been the right course to pursue.

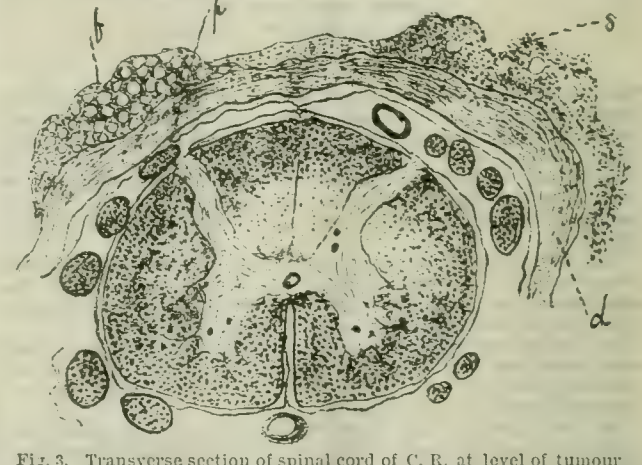


Fig. 3. Transverse section of spinal cord of C. R. at level of tumour (Weigert's stain), showing slight degeneration in the ventral portion of the posterior columns and in the lateral pyramidal tracts. *d*, dura mater; *p*, compressed posterior root; *f*, fat infiltrated with sarcoma cells; *s*, part of the sarcoma not removed at the operation.

It was not thought advisable to delay operation, on the chance of more definite localising signs developing, as if relief was to be obtained it could only be expected before the cord was irretrievably damaged by the pressure. Moreover, when the patient is enfeebled by bladder troubles or bedsores the chances of a satisfactory result are much diminished.

Operation by Mr. Joseph Thompson.

July 19th. The thickness of the subcutaneous fat making it impossible to localise the anæsthetic spots on the back by reference to spines, their position was marked on the skin with silver nitrate, and, after the patient was under the influence of the A.C.E. mixture, an incision was made over the spine from a point 2 inches below the mark to one 5 inches above. The muscles were separated from the spines and laminæ by the knife, and it was found necessary to make transverse cuts through aponeuroses at either end of the incision. Bleeding was very free.

Three spines having been removed by bone forceps, the trephine was applied to the lamina just at the mark on the skin. Then three laminæ above were removed by the help of fenestrated sequestrum forceps.

Three inches of dura mater were now exposed, but no tumour or inflammatory mass appeared. On the fat being removed it was thought that the dura bulged unduly, and a longitudinal incision was therefore made along its dorsal surface. The spinal cord thus exposed was, however, quite normal in appearance, and an aneurysm needle passed round it detected nothing abnormal on its ventral surface. It was

[2] *Brain*, part 1, 1893.
[3] *Medical Chronicle*, August, 1892.

now noticed that the posterior roots directed towards the mark on the skin seemed to run into the cord higher up than the part exposed. The dura mater was therefore stitched up with four silk sutures, and the lamina next above removed. There was now seen in the position of the extradural fat a bluish lobulated mass, rising slightly above the normal fat, and distinctly firmer to the finger. This was found to be readily separable from the dura and the bones. Its lower end being raised by dissecting forceps, the growth was removed by scalpel and scissors, although small portions could be seen spreading down the sides of the dura, and therefore inaccessible. The dura mater under the tumour was markedly depressed. The oval mass removed was 1½ inch in length, and *in situ* about ¾ inch broad.

It was not quite certain that the whole of the upper end was removed, but the condition of the patient made prolongation of the operation dangerous. Altogether the operation lasted two hours and a-half, during which time the loss of blood was considerable. The wound was frequently irrigated with 1 in 2,000 perchloride of mercury solution, and just before closing with warm iodised water. A long drainage tube was inserted, and the wound closed by deep sutures.

After-History.

July 20th. Though apparently under the influence of considerable shock, the patient came round fairly well from the operation, being helped by brandy enemata. Last night, temperature 97°. This morning, temperature 100.8°, pulse 160. Patient feels faint, thirsty, and is occasionally sick, but has not much pain. A pint of urine was drawn off early this morning by the catheter. The dressings are soaked with red discharge, and a little pale fluid can be squeezed out from the drainage tube, at the bottom end of which is a clot with an offensive smell. Wound was syringed out with 1 in 2,000 perchloride of mercury solution, and the tube shortened and reinserted.

July 21st. Patient is still very weak, but has kept down some iced milk and champagne. He was given a hypodermic injection of morphine in the night, as he had some pain in the back. There is still retention of urine. Temperature, 100.6°, pulse 150. The discharge is less abundant and less offensive than yesterday. About an ounce of dark sanious fluid was squeezed out from the drainage tube. Wound syringed with 1 in 2,000 mercurial solution, and some iodoform emulsion then injected into it. Tube reinserted. Yesterday sensation on the legs and abdomen was worse than before the operation, but to-day it has returned, so that now he feels rather better than before. He complains of some numbness in the upper part of the trunk.

July 22nd. Patient gradually sank during the night, and died this morning.

Pathological Report and Remarks by Dr. Ransom.

I was unfortunately not able to be present at the *post-mortem* examination, which was done hurriedly, and without a sufficient investigation of several important points. Thus it was not accurately noted which were the laminæ removed at the operation, and the exact relation of the tumour to a given dorsal vertebra was likewise not noted. The cord was exposed from the lower end of the dorsal to the middle of the cervical region, and this portion was preserved in Müller's fluid. No further trace of tumour was seen. The wound is described as "showing no sign of healing and looking in an unhealthy septic condition." The rest of the body was not examined.

From observations made at the operation and examination of the cord it is fairly certain that the laminæ removed were those of the fifth, sixth, seventh, eighth, and ninth vertebræ, and that the tumour compressed the cord at the level of the eighth dorsal roots.

The growth, on microscopical examination, proved to be a round-celled sarcoma, apparently arising in the extradural fat. Sections of the cord showed thickening of the dura mater, with some infiltration of the latter by sarcoma cells at, and for 3 inches above, the site of compression, but below all was normal. A few sarcoma cells were also seen in the veins of the anterior surface of the upper dorsal cord. There was no infiltration of nerve roots. No tracts of ascending or descending degeneration in the cord could be made out by Weigert's or by carmine staining, but at the level of the tumour some disorganisation was evident (Fig. 3). The anterior and most of the lateral tracts appeared normal, but in the ventral portion of the posterior columns numerous degenerate fibres were seen, and there was a slighter degeneration of the fibres forming the lateral pyramidal tracts, and those limiting the grey matter in the bend between the anterior and posterior horns.

As will be seen from the figure, however, the greater part of the white tracts presented a normal appearance. The grey matter was slightly distorted, and the cells did not take stains well, but there was no marked congestion or infiltration, either with sarcoma cells or leucocytes. One bundle of a posterior root was slightly flattened, and showed a few partly degenerate fibres.

Fig. 3 also shows a portion of the tumour outside the dura mater, but commencing to invade it and the fat.

None of the microscopical sections made demonstrated clearly the tissue of origin of the growth, but the naked-eye appearance at the operation and *post-mortem* examination strongly suggested the extradural fat rather than the dura mater itself. The bones were quite normal. It is probable that the growth was primary, as there was no clinical sign of tumour of any other part of the body, and secondary growths are rare in the spinal canal.

I append in tabular form the salient clinical points in this case and that of the echinococcus cyst referred to at the commencement of this paper.

	Extradural Echinococcus Cyst.	Extradural Sarcoma.
Level	Tenth dorsal vertebra	Fifth dorsal vertebra.
Duration, from onset to operation	One year and a-half	Four months.
Pain	Intense, shooting, and burning. Preceded motor loss by a year, but went away for intervals. Occurred in the area of anæsthesia, namely, in the legs and hips	Moderate, dull, aching, inconstant. Preceded motor loss by two months; relieved by rest. Was separated by a wide zone from the area of complete anæsthesia. Was in the epigastric region.
Spinal tenderness	Present, but slight	Absent.
Girdle sensation	Absent	Not definitely developed.
Motor loss	Slightly preceded the sensory. No spastic stage	Spastic condition preceded sensory loss. Paralysis ultimately complete.
Sensory loss	Was over the whole of the lower limbs, but most complete on their posterior aspect, beginning in the feet	Was only complete in the area of the anterior crural nerves, and was greater on the side where the motor loss was less. Very slight and variable in the zone of pain.
Hyperæsthesia	Slight and transient	Very slight and transient.
Reflexes	Knee-jerks and ankle clonus absent. Plantar reflex slight. Cremasteric and lower abdominal reflexes absent	Knee-jerks increased; double ankle clonus. Plantar, cremasteric, and abdominal reflexes absent.
Sphincters	Retention of urine	Bladder and rectum normal.
Bedsores	Formed rapidly on buttocks	Absent.
Muscular wasting	Towards the end came on in the thighs	Absent.

To return to the clinical aspect of the case, it has been already stated that the symptoms pointed to an extradural tumour. From the small amount of pain, I thought it probable that the growth was non-malignant, possibly lipoma, osteoma, or echinococcus cyst. According to the statistics collected by Horsley, lipoma was unlikely, because of the age of the patient and the rapid onset of the symptoms—paraplegia in three months. Both of these points, on the other hand, would agree with the diagnosis of hydatid. Osteoma as a cause of paraplegia was not met with in the fifty-four cases cases collected by Horsley, but Caselli[2] has recently successfully operated on such a case.

The present case shows, however, that an infiltrating sarcoma of fairly rapid growth may produce pressure paraplegia with but very little pain.

With regard to the relation of symptoms to the level of the tumour, the general rule that the growth is at or above the highest zone of anæsthesia or hyperæsthesia is again found true. Such slight and vague root symptoms as were present pointed to an affection of the seventh or eighth dorsal nerves, and the growth was found under the fifth dorsal vertebra, the spine of which, as is shown in Mr. Reid's valuable paper on the relation of nerve roots to vertebral spines,[3] is over the point of entry into the cord of the eighth dorsal root.

Mr. Horsley remarks that this rule appears to be without exception, and it was also illustrated by my case of echinococcus cyst of the spinal canal referred to above.

[2] *Rif. Med.*, November 8th, 1893; Epitome, December 23rd, par. 511.
[3] *Journ. of Anat. and Physiol.*, vol. xxii, 1889.

[An exception would, however, appear to have been at last met with in the case of Caselli, in which intense pain at the level of the third dorsal vertebra was produced by an osteoma of the fifth.]

The puzzling feature in the present case was the peculiarly limited anæsthesia in the legs with the wide zone of normal sensation above. This may, however, be partly explained by the appearances of the cord under the microscope, which show complete integrity of the columns of Burdach and only very slight affection of those of Goll. It would seem as if external pressure caused disintegration of the central sooner than the peripheral portions of the cord, and thus the fibres whose conductivity was impaired were a group which had entered the cord far below the level of the compression.

CHANGES IN THE POSTERIOR COLUMNS OF THE SPINAL CORD IN DIABETES MELLITUS.

By R. T. WILLIAMSON, M.D.Lond., M.R.C.P.,
Medical Registrar, Royal Infirmary, and Assistant in Medicine Owens College, Manchester.

The following are abstracts of notes in two cases of diabetes, in which pathological changes were found in the posterior columns of the spinal cord.

[The first case was under the care of Mr. Milner, M.B., at the Salford Union Hospital; the second was under the care of Dr. Steell, at the Manchester Royal Infirmary. To the kindness of these gentlemen I am indebted for the opportunity of making the clinical and pathological examinations.]

Case I.—J. D., aged 52. Symptoms of diabetes were first noticed whilst the patient was recovering from a severe cold. The amount of urine varied from about 140 to 170 ounces daily; the specific gravity was generally about 1040; the amount of sugar varied from 20 to 26 grains per ounce. The urine contained no albumen. The patient complained of weakness, loss of flesh, and thirst. The arteries were markedly atheromatous. There was paresis and wasting of the right pectorals, deltoid, biceps, and triceps muscles. The same muscles were affected on the left side, but to a less extent. There was numbness and tingling in the fingers, but no loss of sensation to tactile and painful impressions. The knee-jerks were absent when the patient was first seen; at a later date they became normal (I do not know the condition of the knee-jerks during the last two months of life). There was no ataxy in walking, and no symptoms of tabes were noted. Death occurred from phthisis, about eleven months after the onset of the disease.

Necropsy.—Body wasted. A considerable amount of serous fluid in the abdominal cavity. Tuberculous disease of the lungs. Pancreas firm; weight 3 ounces; microscopical examination, after hardening, revealed cirrhosis. No changes of importance in the heart, liver, kidneys, or spleen. Atheroma of the aorta. Attached to the left side of the lumbar vertebræ (first and second) was a firm oval tumour the size of an egg. Microscopical examination showed that it was a fibroma. The brain (including medulla and floor of fourth ventricle) and the spinal cord appeared normal to the naked eye. The arteries and their smallest branches, to the biceps muscles on each side, were completely calcified.

The spinal cord was hardened in Müller's fluid. On section of the hardened cord, in the lumbar region the cut surface appeared quite normal, but in the cervical and dorsal regions there were marked naked-eye changes in the posterior columns. Portions of these columns were much paler than the rest of the white matter of the cord. The colour of the affected parts resembled closely the colour of tracts of ascending degeneration in cases of transverse lesion of the cord—after hardening in Müller's fluid. In the lowest dorsal region this change—marked paleness—was seen only at the posterior half of Goll's column and the posterior third of Burdach's column on each side. A little higher the whole of both posterior columns, with the exception of a narrow area in front, was much paler than the rest of the white matter (see Diagram 3). Higher still, about mid-dorsal region, these changes were seen in Goll's columns and the median halves of Burdach's columns. At one spot in the upper dorsal region the cord was slightly bruised in removal; but examination of the bruised part showed the absence of compound granular cells or other evidence of myelitis. In the uppermost portion of the dorsal region, just above the bruised part, the changes (marked paleness) affected Goll's columns chiefly, but extended slightly into Burdach's columns. In the lowest cervical region the changes were very well marked, and affected Goll's columns only. The changes gradually diminished at the anterior parts of these columns, and in the highest cervical region only the posterior two-thirds of Goll's columns were affected, but the alteration in colour was quite distinct (see Diagram 1). With the exception of the posterior columns, the cord appeared quite normal to the naked eye.



2. 3.

Case 1.—Naked-eye appearances of the spinal cord on section, after hardening in Müller's fluid; normal white matter is shaded. The portions of the posterior columns affected are unshaded; 1, upper cervical region; 2, lower cervical region; 3, dorsal region.

On microscopical examination the changes found were very slight, and this was surprising considering the well-marked naked-eye appearances. In sections stained according to Weigert's method, the posterior median columns in the cervical region were paler to the naked eye than the rest of the white matter. In the dorsal region they were very slightly paler than the other tracts of white matter, but the difference was less marked than in the cervical region.

In sections stained with aniline blue-black the posterior median columns of the cervical region were slightly darker in colour than other parts of the white matter; but in the dorsal region the change could only just be detected.

Under the microscope, sections stained both according to Weigert's method and with aniline blue-black showed slight excess of neuroglia connective tissue in the posterior median columns of the cervical region.

In the posterior median columns (cervical region) many of the nerve fibres were swollen, and the part of myelin which is stained black by Weigert's method (that is, outer part) was reduced to a very narrow rim. In sections stained with aniline blue-black many of the axis cylinders of nerve fibres in the posterior median columns were seen to be swollen.

In sections stained according to Marchi's method, scattered degenerated fibres (stained black) were seen in posterior columns (median and external) of the dorsal region and in the posterior median columns of the cervical region; they were more numerous in the latter region. Sections of the lumbar part of the cord appeared normal. At no part of the cord was there any evidence of myelitis. The pyramidal tracts (direct and crossed), the direct cerebellar tracts, and all other parts of the white matter were normal. In the lower part of the cervical region most of the nerve cells of the anterior horns of grey matter were pigmented, and some—chiefly those of the inner group—were perhaps slightly atrophied.

The finest nerve fibres entering the biceps muscles (branches of the musculo-cutaneous) were teased fresh in osmic acid, but microscopically they appeared quite normal; also sections of nerve fibres to the biceps muscles, hardened and stained according to Marchi's method, appeared normal. The floor of the fourth ventricle and medulla appeared normal microscopically.

Case II.—E. B., aged 21, gave a history of severe fright, followed by great mental distress and anxiety, twelve months previous to admission to the hospital. Prior to that date the patient had been in good health, but she has not been able to follow her employment (that of a dressmaker) since. Thirst and diuresis noted first about four weeks after the fright. The patient was considerably emaciated. The urine had a specific gravity of 1038; it contained a large amount of sugar, but no albumen; it gave a distinct (Gerhardt's) reaction with perchloride of iron, and a well-marked reaction for acetone (Legal's test). There were signs of tuberculous disease of the apex of the left lung, and the sputum contained numerous tubercle bacilli. The knee-jerks were present, but feeble. The pupils reacted to light and accommodation. A few days after admission the knee-jerks disappeared; they remained absent up to death, which occurred from asthenia about seven months after admission. During the last few days of life there were slight pains in the legs, chiefly about the ankles and soles of the feet, but there were no symptoms of locomotor ataxy or other cord lesion during the illness. Both lungs were extensively affected with tuberculous disease during the latter three months of the patient's life. The quantity of urine varied from about 90 to 116 ounces daily during the time the patient was in the hospital, and the amount of sugar from 28 to 32 grains to the ounce.

At the necropsy there was extensive tuberculous disease of both lungs. The pancreas was small, and weighed 10 drachms 55 grains, but the heart and other organs were proportionally atrophied. On microscopical examination the pancreas appeared normal.

The spinal cord appeared normal at the necropsy, but after hardening in Müller's fluid, marked naked-eye changes were seen in the posterior columns, on transverse section. The affected parts appeared much paler than the rest of the cut

surface, the colour resembling that of degenerated tracts above a transverse lesion of the cord, when the specimen has been hardened in Müller's fluid. In the lowest lumbar region no changes could be detected, but in the middle lumbar region the median thirds of both posterior columns (external and median) were slightly paler than the rest of the cut surface of the cord. In the upper lumbar region the change in



4. 5. 6.

Case 2.—Naked-eye appearances of the spinal cord on section after hardening in Müller's fluid. Changes in the posterior columns: normal white matter shaded, parts of white matter affected are pale: 4, cervical region; 5, upper dorsal region; 6, upper lumbar region.

colour was more distinct and the pale area more extensive (see Diagram 6). In the lower dorsal region there was a very pale streak in each postero-external column. This was especially well marked in the upper dorsal region, and extended over the whole of each postero-external column (see Diagram 5). In the lower cervical region the postero-median columns presented this pale appearance. In the upper cervical region only the posterior halves of these columns were affected (see Diagram 4). The direct cerebellar tracts and other parts of the white matter appeared normal in all the regions of the cord.

Microscopical Examination.—Sections were stained according to the same methods as in Case 1. In the pale tracts in the posterior columns numerous swollen nerve fibres were seen. Only a very narrow rim of the myelin of these fibres was stained black in the Weigert's specimens; no other changes were detected. Nerve fibres (branches of the anterior crural nerve) to the rectus femoris (left) appeared normal on microscopical examination.

I have examined the spinal cord in three other cases of diabetes, but the appearances above described were not met with.

The changes in the posterior columns in the above cases were probably the *result* of the toxic diabetic blood condition. Slight changes in the posterior columns of the cord, in diabetes mellitus, have been described by Sandmeyer[1] and also by Leyden.[2] Somewhat similar changes in the posterior columns, more marked to the naked eye than on microscopical examination, have been reported by Minnich[3] in three cases of pernicious anæmia. Tooth[4] has pointed out that on the sixth day after section of the cord in animals, tracts of secondary degeneration are well marked to the naked eye (by their light colour) on hardening in bichromates, whilst the microscopical changes at this date after section are very slight, and consist chiefly in swelling of the axis cylinders and nerve fibres. Probably tracts of degeneration can be recognised by the naked eye, after hardening in bichromates, before any microscopical changes occur, and Tooth considers that the naked-eye changes are due to a preliminary chemical alteration in the nerve fibres. The condition of the posterior columns in the cases of diabetes recorded above, would appear to correspond closely to the early stage of degeneration described by Tooth.

In the second case the knee-jerks were absent, and slight naked-eye changes were found in the lumbar region of the cord. As the peripheral nerves (fibres of the anterior crural to the rectus femoris) were normal, it is possible that these changes were the cause of the loss of knee-jerks. Eichhorst has found degeneration changes in the peripheral nerves in two cases of diabetes in which the knee-jerks were lost; but in other cases the peripheral nerves have been normal.[5] The absence of knee-jerks in some cases of diabetes may be due to changes in the lumbar region of the cord, such as those slight described above.

[1] *Deutsches Archiv für klinische Medicin*, Bd. 50.
[2] *Wiener medizinische Wochenschrift*, No. 21, 1893 (society report, p. 925).
[3] *Zeitschrift für klinische Medicin*, Bd. xxii, 1893.
[4] British Medical Journal, 1889, vol. i, p. 754.
[5] Eichhorst (and Nonne, quoted by Eichhorst), *Virchow's Archiv*, Bd. cxxvii, p. [illegible]

A PSEUDO-HYPERTROPHIC FAMILY.

By FREDERIC C. COLEY, M.D.,
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The accompanying illustrations are reproduced from photographs kindly taken for the Children's Hospital by Messrs. Taylor, photographers to the Queen. They represent two



James R., aged 16.

members of a very interesting family, in which four individuals are affected by pseudo-hypertrophic paralysis in a very marked degree. I have not been able to discover any-



James R.—Back view.

thing noteworthy in the history of previous generations, but the present one comprises the following members:

James, the eldest, aged 16, affected as shown in the first illustration.
Alice, aged 14, entirely unaffected.
Tom, aged 11, shown in the second illustration.
Annie, aged 10, slightly affected.
Kate, aged 7, affected rather more than Annie.
Joseph, aged 4, has not yet shown any symptoms.

All the affected members of this family are accustomed to



Tom R., aged 11.

describe the subjective symptoms of their complaint as "stiffness." It was first noticed in each of the elder boys when they were 4 years of age. Annie had never complained of any subjective symptoms, and was apparently unaffected when examined at 6 years old. Now, though still free from



Tom R.

any obvious weakness she presents well-marked enlargement of the muscles of the calves and the thighs. The arms are perhaps slightly affected. Kate began to be "stiff" when she was a year old, but improved afterwards, and has now hardly any subjective symptoms; but there is very marked enlargement of the muscles of the calves and thighs and the gluteal regions. The muscles of the back and shoulders and the pectorals are also obviously enlarged. Lordosis is well marked in both these girls, but more in the younger.

But both the subjective symptoms and the objective signs of the disease are more marked in the two elder boys than in either of the girls. When the boys were first brought to me (now about six years ago) the ordinary symptoms were well marked. They could not go upstairs without great difficulty, helping the weakened muscles of the legs by their hands on their knees; and they could only get up from the ground very slowly, "climbing up themselves" with a very characteristic action. The enlargement of the muscles of the calves and thighs and back was quite as well developed as now, and that of the shoulders more so. Especially in the elder boy, the enlargement of the pectoral muscles was so great that when they were contracted the appearance resembled that of a half-grown mammary gland. This may be still recognised, although it is much less marked now than some years ago. Compare, in the figure of the elder boy, the pectoral muscles on the two sides, relaxed and extended. The characteristic lordosis was well-marked when the cases were first seen, and continues to be so, as the figures show.

Since these boys have been under treatment a very remarkable improvement has been observed in the symptoms. Neither of them finds now any difficulty in going upstairs in the erect position. They play football, and can even jump a fair height. At times they both find a variable amount of "stiffness" in the legs.

The treatment has consisted simply in the continuous administration of dilute nitric acid, with tincture of nux vomica in small doses, and friction with lin. camphoræ was used more or less.

All the members of this family are somewhat undergrown and look younger than they are. I noted that the height of the eldest when he was aged 14 years and 2 months was only 4 feet 5 inches. He has grown a little since that. They all appear to have intelligence quite up to the average, and are very bright and cheerful.

There are several points in connection with these cases which are of special interest. The occurrence of several cases in one family is not very unusual. But when this happens the girls are commonly spared. In the largest number of recorded cases the calf muscles, or the muscles of the calves and thighs, only have been affected. Hypertrophy of the muscles of the back and still more of those of the shoulder and of the pectorals, is somewhat exceptional. It is remarkable that this occurred in all my cases, except that enlargement of the pectorals could not be detected in the girl who was on the whole least affected. But perhaps the most remarkable circumstance of all is the great improvement which has taken place in the symptoms of the two boys. Whether this is due to the treatment adopted is of course open to question.

RIGHT BRACHIAL MONOPLEGIA AND PERVERTED SENSATIONS DUE TO TRAUMATIC ABLATION OF THE ARM-AREA IN THE LEFT CORTEX CEREBRI: RECOVERY.

By J. LYNN THOMAS, F.R.C.S.Eng.,
Cardiff.

This case was shown at a meeting of the South Wales and Monmouthshire Branch of the British Medical Association held at Newport on November 2nd, 1893. It came under my care whilst house-surgeon at the Cardiff Infirmary, and I am much indebted to Dr. Thomas Wallace for allowing me to treat and to record this interesting case.

History of Injury and Treatment.—G. G., aged 44, an engine driver on the Taff Vale Railway, was admitted on May 28th, 1891, on account of a compound comminuted fracture of the skull due to his being knocked down by a train whilst he was attending to his own engine. He was stunned

for two or three minutes, regained consciousness, and walked down the platform in Cardiff Station.

On admission the patient was pale, complained of much pain in the right shoulder, was under the impression that it was badly contused, but there was no evidence of injury on his clothes and skin, had absolute paralysis of the right upper limb, including scapular movements; had a bleeding, lacerated scalp wound on the left side, and several pieces of brain substance entangled in the hair. The man had a hypodermic injection of a fifth of a grain of morphine, was narcotised with chloroform, the aperture in the skull was plugged whilst the head was being shaved and asepticised, the scalp wound enlarged, and the whole extent of the fractured bone was fully exposed. The fracture of the bone was about 2 inches long. Its shape and situation are shown in the diagram. The fragments of bone were completely detached and driven into the brain at the anterior end, whilst the posterior extremity of the fracture was of the "gutter" type, and was elevated. My forefinger was easily admitted into the cerebrum, where several pieces of bone were lodged and removed. The brain wound was irrigated with carbolic lotion (1 in 50), and iodoform was swabbed into it with my finger. The edges of the dura mater and the scalp were trimmed, replaced, and sutured, and an aperture left in the posterior angle of the wound for drainage, was dressed with salicylic wool, and bandaged firmly.

The external dressing was changed the following day, and again in a fortnight when the stitches were removed, and the parts were quite healed and the brain pulsation was very marked. The recovery until firm closure of the gap in the skull was uneventful, there being no rise of temperature, no sugar in the urine, no disturbance of vision nor of hearing. The recovery of volition over muscular movements of the upper limb took place slowly but in a very definite order from above downwards, starting with elevation and forward movements of the scapula and abduction of the humerus, and terminating with the coarser movements of the fingers.

For six days there was complete paralysis of the limb, and patches of blunted sensibility but not of complete anæsthesia were noticed along the extensor surface of the forearm and hand. On June 4th he could slightly shrug his shoulder and abduct the arm. Three days later the shoulder movements were stronger and he could use his biceps and triceps. On June 10th circumduction of the shoulder could be performed, and there was improvement of flexion and extension of the elbow; the supinator longus acted prominently; no wrist movements.

On June 14th he had slight control over the extensors of the thumb and fingers but no power over the flexors. On the next day the extensors of the fingers were stronger; he complained of cramp in the ring and mid fingers. On June 17th, in the morning, he regained partial control over the flexors of the thumb and fingers quite suddenly after a fit of sneezing. From this date his improvement was slow but evident, and he left the infirmary on July 23rd, 1891.

I saw the patient again on April 23rd, 1893, and made this note: "Relative strength of hand grasp tested by dynamometer: left, 95; right, 65. Has no power of abduction and adduction of fingers—in other words, has no direct control over his interossei and abductor minimi digiti muscles; has a patch of marked blunted tactile sensation in the upper third of the right forearm in the course of the external cutaneous nerve."

Condition Two and a-half Years after Injury.

During November, 1893, G., who is a very intelligent man and a close observer, allowed me time to investigate his condition and drew my attention to facts in connection with his right upper limb which are of particular interest in connection with the physiology of the psycho-motor areas in man.

He now follows his occupation, and states that his "arm feels as if loaded with lead, and consequently he has to exert himself a little more than he normally should in executing movements." When he touches different objects out of sight he cannot realise their exact shape, nor those qualities usually displayed by the sense of touch such as take place when moving one's hand from the wooden frame of a chair to the leather part; he has to call in the aid of his sense of sight to interpret for his right hand what would at once be perceived by his left without this additional sense; he is now trying to train his hand to know what things are, but it is a very difficult task as progress is extremely slow.

He has a depressed scar in the region indicated in the diagram on the left side of the skull. It is 2¼ inches long, so placed that its anterior upper end is 2½ inches from the midline of vertex; its posterior upper end is 1½ inch from midline, and the scar direction continued backwards would touch the inion.

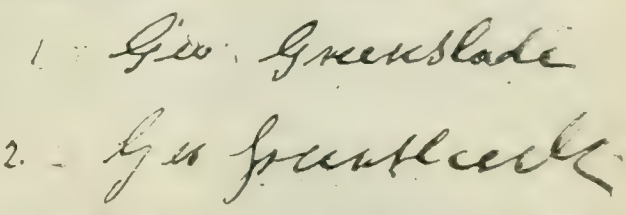
The width of the scar in the line of the fissure of Rolando is 1 inch, and occupies on the tape the space between the 2 and the 3, starting above; the total length of the line indicating the site of the fissure of Rolando being 5½ inches; so the scar overlaps the mathematical centre of this line. It extends ⅜ of an inch in front of the line for the sulcus of Rolando, and nearly 1 inch behind the vertical line from the posterior border of the mastoid process.

He cannot fully flex the terminal phalanges when the metacarpo-phalangeal joints are extended; he has fair control at present over his interossei and abductor minimi digiti; he can write, but more slowly and clumsily than formerly. I



The shaded area indicates position of scar in relation to the line of fissure of Rolando. The figures 1 to 5 represent the inches on the surface line for the above fissure.

append a specimen of his handwriting done slowly and at the usual pace.



Specimen of hand writing; 1, written in 30 seconds; 2, in 15 seconds

In the acquired movements of the hand which he has reacquired, he is up to the present time much slower in executing, and has literally to keep his eye on his hand when at work: he cannot, for example, take hold of a penholder in a proper way without the aid of his left hand. The sense of touch is blunted in the forearm and hand. The sense of pain is blunted in the same region. Sense of heat and cold is keener than in the left hand, and he made this interesting statement: "I am afraid to put my right hand in places on the engine where things are hot for fear of burning my hand." This fear is due to experience, not to pain, for he has more than once blistered his right hand without knowing it. It seems to me that, although his sense to heat and cold is keener within the limits that a normal hand will tolerate, the mechanism for apprising consciousness of thermal danger is utterly absent in this case, and hence the sense of pain (which is blunted in this case) is stimulated in a normal condition the moment thermal degrees become dangerous to the integrity of the organism.

He drew my attention to the fact that his nails on the right hand are more brittle and more striated longitudinally than they were before the accident. He also states that his right forearm is more hairy than formerly; it now certainly is more hairy than the left one. The ulnar side of the hand, including the middle, ring, and little fingers, suffers from hyperidrosis; when he places both hands in his trousers pockets this area alone becomes quite wet in a short time, and during the time he was writing for me a specimen of his handwriting it got quite wet. My hand cannot detect any difference in the temperature of the two limbs; the thermometer was never tried.



Shaded area indicates the extent of local hyperidrosis.

REMARKS.

The original destruction of brain tissue was more particularly confined to the anterior two-thirds of the scar region, and I do not think the injury extended much deeper than the grey matter. It is very difficult to account for the great



Areas for muscular movements of opposite upper limb.

" " " " lower "

Fig. 610 (after Ecker), from Landois and Stirling's *Human Physiology*.—c, Sulcus of Rolando. (1) Advance of the opposite hind limb; (2), (3), (4), complex movements of the opposite leg and arm, and of the trunk as in swimming; (12) eyes open widely, pupils dilate, and the head and eyes turned towards the opposite side; (13), (13'), the eyes move towards the opposite side and upwards and downwards centre of vision.

pain in the right shoulder complained of on admission and subsequently, except on the hypothesis that it was referred pain due to the cortical lesion.

Figure 610 from Landois and Stirling's *Physiology* was copied to serve as a key-reminder to the physiology of the region involved in this case, and the numbers on the outer surface of the brain are those well-known ones transferred by Ferrier from the motor areas in the monkey's brain to corresponding convolutions in man. The area marked (5)—I mean, of course, that on the left side—could not have been injured in this case, but it is just possible that its motor path was; if that be so, we must grant that the injury selected the No. (5) path and left undisturbed the paths of Nos. (12), (7), (2), (3), (4), which would be most improbable. In other words, I think this is an instance against the existence of No. (5) in man for the same purpose as it serves in the monkey.

Immediate and permanent disturbance to a part of the "sensory areas" for the right upper limb followed the injury, namely, those for common sensation, tactile sensation, heat and cold, and trophic changes. Nor is he conscious of the exact locality of his hand when searching for objects without his sense of sight. There could not be any injury to the gyrus fornicatus and hippocampal region, for the reason that such an injury would to a certainty cause some paralysis in the lower limb, and besides, the extreme improbability of such injury selecting only the "sensory areas" for the limb that was motorially paralysed.

The man is still conscious of his right arm feeling heavy when at work. This peculiarity may be due to the extra task thrust upon the motor areas which have so successfully taken up the function of the destroyed cortex.

The evidence of this case, taken altogether, is, I think, strongly in favour of Gowers's, Munk's, and Starr's contention that the "motor areas" are not exclusively motorial in their functions.

Cases of grave destructive lesions of the brain, unaccompanied by serious concussion and septic troubles, are of such paramount importance to the elucidation of the physiology of localised areas in man, and are also of such infrequent occurrence that I ventured to give as fully as possible details of the patient's consciousness of his injury, as well as those of my own observation.

THE MILROY LECTURES
ON
DARWINISM AND RACE PROGRESS.

Delivered before the Royal College of Physicians.

BY JOHN BERRY HAYCRAFT, M.D., D.Sc., F.R.S.E.,
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[ABSTRACT.]

LECTURE II.—DISEASE AND NATURAL SELECTION.

WE have as the result of the actions upon mankind of such diseases as measles or small-pox a constitutional disturbance which leaves behind as its sole relic individual and race immunity. It was at one time held that this race immunity was the result of hereditary transmission, that the parents were rendered immune, and that they transmitted this immunity to their children. It is conceivable that this may be so, for the blood is affected in these diseases, and therefore the germinal cell may be affected too. There is, however, no reason to believe that this is the case, for a community will, in several generations, undergo at the hands of the microbe a process of selection, and only those strains will be found alive who are able in some measure to resist its inroads.

There are other microbes which, in addition to the production of blood changes, have a profound and lasting effect upon many of the tissues of the body; such are the microbes of leprosy and syphilis. Strange to say, the germ cells seem not to be reached in leprosy, and this loathsome disease is not transmitted from parent to child.[1] Hideous as are its aspects, it must be looked upon as a friend to humanity, for while the microbe of typhoid will attack a man who is healthy, the microbe of leprosy feeds upon those who are debilitated, and from conditions under which healthy and strong racial development is impossible. It is a depopulator

[1] *Report o Leprosy Commission in India*, 1890-91.

of starved ill-nourished districts, and the race recruits to its advantage from those more favourably placed.

In the case of syphilis, serious and often permanent tissue change is produced as a result of the action of the microbe; and in this case to an absolute certainty an effect may be produced upon the offspring. Many suppose that this is due to the transmission of the specific microbe itself from the body of one or both of the parents to the developing egg. That such a thing is not impossible is shown in the case of the silkworm disease "pebrine," where a fungus affects the grub, and the spores of this fungus are to be found within the egg of the silkworm moth. These spores subsequently develop and attack the tissues of the grub of the next generation. In syphilis the same sort of thing no doubt occurs, for a syphilitic child may subsequently infect the mother or nurse during the period of suckling. But there are other cases which appear hardly to be explained so easily, and we have to assume that the germinal cells are themselves changed in some way during their sojourn in the parental body. After a certain time the disease is no longer capable of transmission by the parent, and the children born after this period are likewise incapable of infecting those who tend them. We have every reason to believe, therefore, that there are no specific germs or microbes left in the body of the parent, and that we have to do solely with the tissue change more or less permanent produced by the microbes during this residence. The children born during this period are frequently ill nourished, possess recognisable indications of disease, and are subject to nervous and other affections. We have here, therefore, for the first time distinct evidence that an obviously acquired constitutional disease is transmitted, and that that transmission is in some cases due to a direct effect of the action of the microbe upon the germinal cells. The microbe of syphilis, unlike the microbe of leprosy and like that of measles, feeds on healthy blood and tissue. It attacks the strong as well as the weak, and if the weak more readily succumb, the strong and vigorous are more apt to acquire it. It is not, therefore, selective like leprosy, and its capacity of transmission ranks it as a disease distinctly inimical to race progress.

The tubercle bacillus cannot gain access to or multiply in the tissues of a healthy, vigorous man or woman. A consumptive type of person is one who comes of a family liable to fall a prey to this microbe, and he is recognisable by many distinctive characteristics. Consumptives are prone to other diseases, such as bronchitis and other diseases of lungs, etc., so that, over and above their vulnerability to this one form of microbe, they are to be looked upon as unsuited not only for the battle of life, but especially unsuited for parentage and for the multiplication of the conditions from which they themselves suffer. It is evident that those people with the tuberculous variation, who, even under the present circumstances, manage to contribute their quota to the population, would, were the bacillus tuberculosis altogether exterminated, contribute more than their share and the type would become more common. This type, apart from the action of the bacillus, is delicate and fragile. The bacillus tuberculosis is a friend of the race, for it attacks no healthy, vigorous man or woman, but only the feeble. It is like the bacillus of leprosy in this respect.

Some of the microbes that cause disease, such as the bacillus of tubercle, only feed on unhealthy human tissue, while the greater number of microbes kill, if anything, the weak rather than the strong. They are, on the whole, our race friends rather than our foes, and if we attempt seriously to do away with their selective influence—namely, the elimination of the weak and the preservation of the strong—we must supply this selective influence by something else or the race will tend to deteriorate.

A large number of diseases due, probably, to some innate family predisposition are known to us. Of these diabetes, hæmophilia, and some others are of comparative rarity, and may be left on one side in this necessarily curtailed sketch. Others, such as cancer and constitutional weakness of respiratory and other organs and insanity, are frequent enough to merit our close attention. Of cancer we at present know too little, and I propose to leave it on one side. Of inherited weakness of special systems we have many examples, such as delicate respiratory or digestive mucous membrane, inherited variations in the mechanism of assimmilation, also gout and obesity; in fact, innate delicacy of all kinds. These render their possessor less able to cope with his natural surroundings, let them be what they may. It is evident, indeed, that the conditions of our daily life, even if we were to establish a perfectly uniform system of State communism, with self-heating houses, meat dinners, and flannel underclothing all round, would not be the same for all.

Insanity.

Brain affections are markedly hereditary. An overplus of work, anxiety, or depressing surroundings are truly exciting factors, but act with alarming ease in the case of certain types, while in others their action is relatively inoperative. This type—an organic variation—is transmitted; it is not destroyed. It would seem, then, that the neurotic individual is an innate variation, and that any racial change in respect to the prevalence of insanity must, therefore, be brought about by selective means.

Alcoholism.

The evidence in favour of there being any hereditary predisposition to alcoholism is very slight, but certain type variations occurring no doubt in families are especially liable to drink and other forms of vice. Drink may be looked upon as a selective agency, one constantly thinning the ranks of those who are weak enough by nature to give way to it. It appears probable, however, that the children of drunken parents suffer not only from the transmitted organisation of the fathers or mothers, but also from the direct action on the germinal cells of the alcohol carried in the parental veins.

This leads us to the question as to whether or not legislation, with a view to prevent the sale of alcohol, will further or retard race progress. The case against preventive interference would be quite clear were it not for the fact that the offspring are debilitated by the drunken habits of their parents. Dilke informs us[2] that the convict element may now be disregarded in Australian Society. In the case of some crime was an accident, and would not be transmitted to the children they left behind them. On the other hand, the genuine criminal, and also the drunken ne'er-do-wells, left no children.

Here the selective agency came in alone, for the facilities for marriage were slight, but the case would no doubt be altered had the drunkards before their death married and produced children, who would not only have inherited the parent's innate weaknesses of moral constitution, but would have been directly debilitated by the effects of his drunken habits while they still formed a part of him. May it not be said that a clear case is to be made out for the introduction of preventive measures in districts where drunkenness has become a matter of universal habit or fashion: where, therefore, the selective action of alcohol is reduced to a minimum, and where from its general consumption in injurious quantity the transmitted debility may be considered as reaching towards a maximum? On the other hand, from our point of view—that of racial progress—the case is not so clear, for its introduction into a district where the population have in the mass learnt to lead sober lives, where drunkenness is looked upon as vice, and where only those naturally without self-respect and proper self-control fall victims to it, takes away a selective agency of considerable potency.

In the United States there is and has been a strong feeling against the liquor traffic, not only on the part of those who hold that drinking is in itself wrong and leads to crime and misery, but on political grounds as well. In Maine a prohibitory law was enforced in 1851, lapsed for two years (1856 and 1857), but continued since that time up to the present date.[3] We have, therefore, an experiment on liquor prohibition lasting forty years. In Maine the manufacture and sale of alcohol in any form is illegal and punished by imprisonment and fine. The law is enforced, and, we are told, has so influenced manners that whatever share in the result ought to be assigned to the effect of prohibition, it is a fact that the demand for liquor or the desire for it in large

[2] *Problems of Greater Britain*, vol. i. chap. 2.

[3] *Liquor Legislation in the United States and Canada*, Rathbone and Faushawe.

quantities or small proceeds only from a limited section of the population. If now we turn to the statistics of crime, pauperism, and insanity, we shall find a result which may appear startling.

The statistics of the insane hospital show a great and progressive increase of patients from 75 in 1850-51 to 685 in 1891-92. In regard to indoor paupers the ratio is slightly lower than that of the neighbouring States:

Ratio of paupers per million of population:	1880.	1890.
Maine	2,319	1,756
Other States non-prohibitive	2,339	1,790

In regard to outdoor paupers, the census attaches to Maine a number very considerably in excess of the average. As regards prison population, Maine has a low but decidedly increasing ratio, which comes out especially clearly in the case of the juvenile offenders in reform schools:

Ratio per million of population in reform school:	1880.	1890.
Maine	176	256
Average in other nine North-Eastern States ...	469	425

In Kansas—another State in which prohibition dates from 1881—the United States census tells us that there were more prisoners in its penitentiary and county gaols in proportion to its population in 1890 than it had in 1880, and that, of all the neighbouring States, Kansas had in 1890 absolutely the largest ratio of prisoners to population.

In Iowa, the third State in which prohibition has been most effectually carried out, we are told[4] that opium dens are found as the alleged result of prohibition, and that "in one small town where prohibition was so effectually enforced that, when the bishop of the diocese visited it, an intended celebration of the Sacrament had to be abandoned because no wine could be obtained. My informant, whose testimony was unimpeachable, was told by a physician practising here that the use of opium in the place was a positive curse; he had twenty or thirty cases on his hands of persons suffering from the habit, both men and women."

The above data strongly suggest that any lasting prohibition, other than the dictates of a man's own conscience and sense of self-respect, may do more harm than good, for when not a fashion, excessive drinking can only be looked upon as a symptom of a debilitated or depraved nature, which, without access to drink, will show itself in other ways, and, if artificially kept sober, will tend to perpetuate and widen the circle of its depravity.

On putting before ourselves the broad question, How can we improve the health of the race? many may reply that the health of the race is being improved, as is shown by the fact that the individual living now has, on the average, a longer life than one living twenty years ago. This increased longevity does not necessarily imply increased innate healthiness, but may, and in point of fact does, imply increased amelioration of surroundings alone. Freedom from disease does not imply robustness of constitution. We have no foundation, therefore, for assuming that because the average longevity of the race has increased during the last half century we are more robust than we were. The evidence is quite the other way.

In the Registrar-General's reports we have ample data for drawing at any rate rough general conclusions as to the progress of disease amongst us. In Report 54, Table XVII, are the annual death-rates, from various causes, given per million of population, and arranged in groups of five years from 1858 to 1890. We have there a history of thirty years, and even in that time a notable change in this history is to be observed. In the first group of diseases are those due to micro-organisms, and in all cases, except that of puerperal fever, a diminution of disease to a very marked extent is to be observed. Consumption and scrofula share in this decrease.

In the second group are deaths that may, to a great extent, be classed as the results of carelessness, want of management, neglect, and ignorance, such as convulsions, diseases of dentition, parturition, and registered accidents. These, too, as one would expect, diminish yearly in a country where surrounding comforts and a sense of responsibility are on the increase.

When we turn to the third group, that of constitutional disease where the hereditary tendency comes in, we find an increase in almost all the hereditary diseases. A tendency to an increase of neurotic affections is shown by an increase in the deaths from nervous diseases, suicide, and intemperance. A large increase is to be observed in the diseases of the respiratory system, due in part to the increasing number of tuberculous patients, who, kept from inroads of microbes, nevertheless, readily fall a prey to other affections. There is, too, an increase in diseases of the circulatory system, in cancer, diabetes, and other constitutional diseases. It is evident, therefore, that, while preventive medicine and modern civilisation are removing the microbe and diminishing the dangers of childbearing and child-rearing, those who are spared fall a prey to some one or another form of constitutional disease.

In the chart from the Registrar-General's report we find that deaths from old age are less and less frequent, indicating that we are permeated by less healthy constitutional strains, and in a table compiled by Longstaff[5] we find that this is conclusively borne out. In this table we get the deaths from all causes in 1876-80 as compared with 1861-70. We find (in table) that while the death-rate is being lowered for all ages up to 40 (in women up to 45), after this the death-rate is increased.

The tendency of events is, therefore, to remove selective agencies whereby people escape death, and live in greater numbers through the child-bearing period, but this has gone quite far enough, and it may be modified to produce a different result. Why should the microbe select? Why not public humanity and public reason, since selection there must be? War may be waged with the microbes, provided at the same time that other selective agencies are used to replace them. Is it not our duty, by boldly facing facts, and publicly stating them, to endeavour to bring about such strong public opinion as will force people to look upon the production of children of feeble or depraved strains as an injury not only to the person of the child, but to the welfare of the State.

(To be continued.)

[4] *Op. cit.*, p. 170.

[5] *Studies in Statistics*, p. 256 and 257.

THE FUNGUS KINGDOM.

Abstracts of Three Lectures delivered in the Theatre of the Royal College of Surgeons.

By CHARLES B. PLOWRIGHT, M.D., F.R.C.S.

Phycomycetes: Ascomycetes; Basiomycetes; Hymenomycetes.

The increased attention given to the study of fungi especially from a biological point of view is one of the features of a scientific education in the present day. One of the difficulties which the novice encounters is the cumbrous terminology with which the science of botany in general and mycology in particular is overloaded. While anatomical facts and physiological phenomena must necessarily have distinctive names, it is most desirable that these should not be unnecessarily multiplied. It is a great mistake to imagine that because a man has learned the meaning of some few dozen technical terms, he has therefore become a botanist. Science is apt to be hindered rather than helped by a too prolific nomenclature. One of the most important groups of fungi is the phycomycetes, or moulds. They are characterised by their minute size, and to the ordinary observers are apparently unimportant. They are, however, an exceedingly interesting family in many ways. Moulds multiply themselves in many ways, and afford some of the best marked instances of sexual reproduction. Moulds are both saprophytic and parasitic. Amongst the latter the salmon disease and the potato disease are only too well known. Horticulturists are familiar with another pest—"the damping-off of seedlings:" while the young medical man who has to cure a case of ringworm in a fortnight, in order that "the child may go back to school," will have his work cut out. All these conditions owe their existence to moulds. The various fungi causing these diseases were described, and it was pointed out with regard to the ringworm

fungi that, judging from analogous plant diseases, it is very probable several species have to be dealt with. Amongst the ascomycetes some botanists place the so-called sprouting or yeast fungi (saccharomyces), one member of which, Oïdium albicans, is so well known to us. The parasitic ascomycetes include the fungi which cause the peach blister—"bladder" or "pocket plums"—the vine and the hop mildew, the larch disease, the canker of apple trees, and the caterpillar sphæria. To the same group belongs the fungus which furnishes us with ergot. The interesting family of lichens in which the parasite and its host are mutually beneficial to one another was also described. The basiomycetes, like the other groups, contain both saphrophytic and parasitic species. Amongst the last named the Uredineæ and their associates, the Ustilagineæ stand prominent in causing the rust and mildew in wheat, as well as smut and bunt, diseases of economic importance, and not mere scientific curiosities. The large family known as the hymenomycetes was the subject of the last lecture, of which the mushroom is the best known and certainly the most highly appreciated member in this country, but which also contains such harmful species as the dry rot fungus and various tree-destroying parasites. After describing the gasteromycetes, the puffballs, the Nidularieæ, the curious phalloidei, the course concluded with an account of the remarkable life-history of the myxomycetes, which presents so many analogies to the animal kingdom that some botanists have gone so far as to rechristen them the mycetozoa.

ENTERO-VESICAL FISTULA TREATED BY LAPARO-ENTERECTOMY.

FRANCIS T. HEUSTON, M.D., F.R.C.S.I.,
Surgeon to the Adelaide Hospital, Dublin; Professor of Anatomy, Royal College of Surgeons in Ireland.

When consulted in a case of rare occurrence one naturally looks to published cases for guidance. In this case I found very valuable information and much assistance from the perusal of Mr. Harrison Cripps's monograph, *The Passage of Air and Fæces from the Urethra*, and it was with surprise I found such a small proportion as 9 of the 63 cases mentioned by him were due to malignant ulceration, as I was under the impression that a very much larger proportion of cases were due to this condition. I cannot but think that this is owing to a large proportion of the cancerous cases not being published.

As owing to his investigations Mr. Harrison Cripps considers laparotomy impracticable, the publication of this case may be of service to surgeons, as showing that at least in a certain number of cases successful operation may be entertained by abdominal section with removal of the diseased or implicated portion of bowel and suture of the vesical opening.

In March, 1891, a medical gentleman, aged 36 years, consulted me under the following circumstances: In March, 1890, he had a severe attack of influenza, from which he apparently recovered fully, but in October of the same year he was affected for the second time, and subsequently never regained his strength fully. In December he was much troubled by pain in the hypogastric region and the internal aspect of the thighs, this being soon followed by frequent painful micturition and tenesmus.

In January, 1891, he sailed as ship surgeon to America, although feeling feverish, with bad appetite and generally out of sorts, accompanied by severe continuous pain in the lumbar region, irritability of the bladder, and frequent micturition; during the voyage he noticed what he believed to be fæces in the urine. On the return voyage his symptoms became so aggravated that he was unable to leave his bed, the pain in his hypogastric region and scalding during micturition being very severe; his bowels were confined and when relieved by medicine, which gave a liquid stool, fæcal material was always to be noticed in the urine. On his return to Liverpool he consulted a surgeon who recommended rest, so he came to Dublin and remained under medical treatment until I saw him.

The patient, full bodied and stoutly built, stated he had not lost much weight since the commencement of his illness; his pulse was 80, regular and of good volume; his bowels had a tendency to constipation but were readily moved by medicine; he had a furred tongue. The urine was acid, light in colour, specific gravity 1012, with a faint cloud of mucus and a slight deposit of phosphates, but no fæcal material could be discovered in the specimen examined. With the concurrence of his medical attendant the patient was placed under the influence of chloroform, and a full examination of his rectum made, but no tumour or communication with the bladder could be discovered. A Thompson's sound was now passed into the bladder, which was found to be somewhat rougher than usual, but no other abnormal evidence could be obtained. Milk injected through the sound did not pass into the bowel, although considerable pressure was resorted to. A few days after this examination a large simple enema containing a small quantity of sodium salicylate was administered; this did not give rise to more pain than one would expect from the use of a large enema in a healthy condition of the bowel. Within a few minutes the patient was requested to micturate, and the urine tested by perchloride of iron, when a relatively large quantity of the sodium salicylate was found to be present.

Fearing the milk test employed in the case of the bladder was not delicate enough, a solution of sodium salicylate was injected into the bladder, on a subsequent occasion, but no evidence of its having passed into the bowel could be obtained.

As the result of this examination, taken with the previous history, the case was diagnosed as a simple ulcerative communication between the superior fundus of the bladder and the large intestine in the region of the sigmoid flexure, and that this communication was valvular in its nature, allowing material to pass from the bowel to the bladder, but not from the bladder to the bowel. Hoping that the opening, which was apparently of small size, might be induced to close without resorting to operative procedure, the patient was kept in the horizontal position, and was given food of the most nutritive nature in small quantities and in such form as was most readily absorbed. He was also given opium in such quantity as to arrest the peristaltic action of the bowel; in addition, an attempt was made to keep the bladder in a condition of contraction by tying in a catheter; it was, however, found that the catheter gave rise to such irritability of the bladder and constitutional disturbance that it had to be removed in thirteen hours.

This treatment was continued for ten days, and although the bowels acted, no fæcal material passed through the bladder. It was, however, noticed that a much larger quantity of gas passed from the bladder when the urine was voided than had been the case before he was placed under this treatment. A change then occurred, and fæces appeared in the urine in a relatively large quantity, which gave rise to much irritability of the bladder and constitutional disturbance, vomiting being frequent. A consultation was held, when it was determined that operative interference was indicated. To this the patient gave a willing assent, only stipulating that on no account should a colotomy be performed. The abdomen was opened by an incision through the linea alba extending from about an inch below the umbilicus to about an inch above the symphysis pubis. On examining the posterior aspect of the bladder, I found that it was adherent near its fundus to the sigmoid flexure of the colon, immediately above the brim of the true pelvis; this adhesion was of such a character as to be readily broken down by my finger, and the two structures separated. I now found an opening into the bladder about the size of a pea, through which the mucous membrane of the bladder protruded; the surface of the bladder was revivified for about half an inch around this opening, and the raw surfaces brought into contact by silk sutures, taking care that the sutures did not include the mucous membrane; a second row of sutures were then passed so as to bring the serous membrane over the wound into apposition.

On turning my attention to the bowel, I found a mass of dense tissue implicating the bowel in its entire circumference to the extent of 2 inches. About the centre of this mass, on its anterior aspect, I found an opening into the bowel corresponding to that which existed in the bladder,

It being now evident that this mass must give rise to such an amount of occlusion of the gut that any attempt to close the opening without removal of the mass could only afford a temporary relief, I determined to remove the affected portion of the bowel, which was done to the extent of 3 inches, and the extremities of the bowel united by Czerny-Lembert suture.

The patient rallied well after the operation, but in a couple of days became restless, vomiting frequently, his pulse rising rapidly to 120, and becoming very feeble; whilst the highest temperature recorded was 99.8° F. Delirium supervened, and he died on the fourth day with all the evidences of collapse.

On *post-mortem* examination of the abdomen, no evidence of peritonitis could be noticed; the sutured bowel was firmly united, as was also the opening into the bladder.

Microscopic examination of the portion of the bowel, which was removed at the time of operation, proved that it was affected by columnar epithelioma.

Although a fatal termination occurred in this case, I consider it fully demonstrated the feasibility, in certain cases, of laparotomy as a treatment, and, further, should it have been found that enterectomy and suturing were impossible after the abdomen was opened, the surgeon would be in a much better position to perform a laparo-colotomy than if laparo-colotomy was undertaken as the primary operation, being able to see the most favourable position to open the bowel.

I would draw attention to the fact that the bowel in this case was affected by malignant disease, although the symptoms pointed to simple ulceration; and, indeed, such might have been the diagnosis after operation were it not that the microscope proved otherwise.

VESICO- AND RECTO-VAGINAL FISTULÆ.[1]

By ALEXANDER HUGH FERGUSON, M.D.,
Professor of Surgery, and Associate Professor of Clinical Surgery, Manitoba Medical College; President of the Manitoba Branch of the British Medical Association; Surgeon-in-Chief of the St. Boniface Hospital, etc.

I. Vesico-Vaginal Fistulæ.

Complete as the labours of Gosset, Simon, and Sims appear to have been in instituting and establishing rational operative procedures for the cure of vesico-vaginal fistulæ, yet a

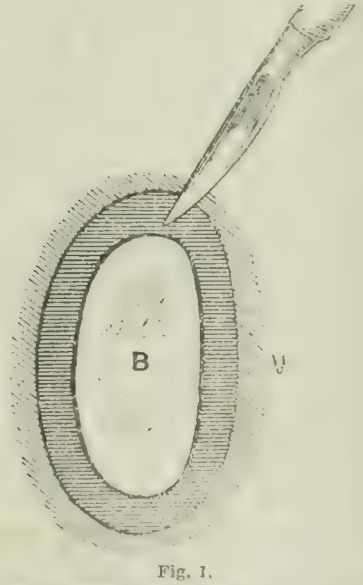


Fig. 1.

few failures, with consequent disappointment to patient and surgeon, lead one to believe that the present methods of treatment may be considerably improved. Disappointing results, obtained by methods that are old and tried, induced the writer to venture an improvement of which "flap-splitting" is the central idea. As in the repair of the perineum, the success of the operation depends largely on the principle that no tissue is removed. No originality is claimed except as to the manner in which the flaps are formed and coapted by a deep buried suture.

The fistulous opening being exposed an incision is made through the mucous membrane of the vagina at the distance of the full eighth of an inch from the margin of the fistula; this incision is extended till it completely encircles the opening.

The line of incision is carefully deepened till the lining membrane of the bladder is reached, and great caution is exercised in retaining the integrity of that membrane. A stream of sterilised water directed on the wound keeps it free from blood. In this manner a circumferential flap, hinged by the mucous membrane of the bladder, is obtained. This flap is inverted into the bladder, thus forming a roof for the broad raw surface exposed, and it is held in such position by a continuous suture of fine chromic catgut, inserted in such a manner that the stitches do not pierce the wall of the bladder.

A narrow strip of vaginal mucous membrane, which, owing to its density, retains a suture well, becomes part of the lining of the bladder, and causes no disturbance in its new position. The artificial opening is now closed and water-tight, and to complete the operation it is only necessary to pass and tie silkworm gut sutures on the vaginal surface in the ordinary way; great care must be taken lest these sutures include the mucous membrane of the bladder.

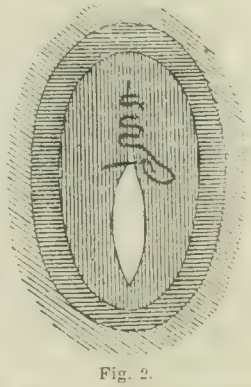


Fig. 2.

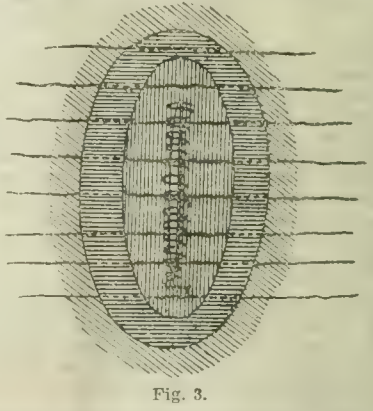


Fig. 3.

The vagina is carefully packed with iodoform gauze. This packing is left *in situ* for about eight days: it is then removed, the vagina is thoroughly irrigated, any loose suture withdrawn, and the packing renewed. This cleaning and dressing is repeated every five or six days for about three weeks.

In my opinion all the sutures should not be taken out on the eighth or tenth day (as recommended by so many operators): as long as a stitch is not easily moved in its bed it had better be left alone till fibrous tissue is fairly formed. When the vagina, cervix, and when necessary the uterus, have been rendered aseptic before the operation was begun, and the wound treated as above, direct union by first intention should ensue.

Figure 4 shows a sectional view of the flap inverted, sutures, and the projection into the bladder.

The chief advantages of this operation are:

1. There is no loss of tissue.
2. A very broad, raw surface is obtained for apposition.
3. At the site of the operation there is a projection into the bladder which forms a roof for the raw surface, and urine cannot trickle along sutures.
4. Should the mouth of a ureter be exposed at the edge of the fistula it is not injured, but merely turned into the bladder.

[1] Read before the Manitoba Branch of the British Medical Association, Winnipeg.

5. It obviates the danger of secondary hæmorrhage occurring into the bladder.

This operation has been successfully performed by its author three times, and in each instance union by first intention has been secured. The patient, in one instance, had been operated upon by reputable surgeons no less than four times, deriving therefrom no permanent benefit. Three weeks after the date of my operation she left the hospital perfectly and—as I have since repeatedly learned—permanently cured.

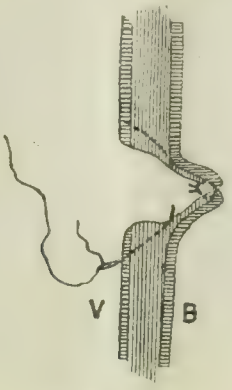


Fig. 4.

II. Recto-Vaginal Fistulæ.

In looking over the literature of the treatment of recto-vaginal fistulæ, and noting the colotomies of Rose and Czerny; the episiocleisis of Baker Brown, Slaviansky, Gerasimovitch, Crepsi, and Iakovleff (six cases in all) along with the rectangular flap method of Le Dentu, the writer felt justified in attempting a new procedure.

A circumferential flap is made from the vaginal surface: the incision extends to, but not through the mucous membrane of the rectum. The edge of the flap is now seized with four pressure forceps, inverted into the rectum, and a small pile clamp applied to it.

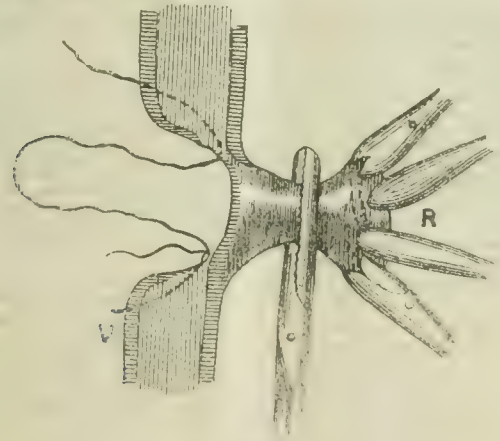


Fig. 5.

The free portion of the flap external to the clamp is burned off with the actual cautery, but the clamp is not removed until interrupted sutures of silkworm gut are inserted in the usual way without grasping the mucous membrane of the rectum, and tied on the vaginal surface. A rectal tube well wrapped with iodoform gauze is placed in the passage, while the vagina is also packed with iodoform gauze. In this manner an extensive denuded surface is secured and readily unites when properly coapted. The rectal flap is cauterised, thus lessening the liability to septic infection from that source. The rectal tube and vaginal pack further guard the wound against germs, and act as splints to ensure that rest so necessary to primary repair.

The after-treatment consists in keeping the parts as surgically clean as possible. The rectal tube is not disturbed for about a week, and when it is removed a copious enema is administered to move the bowels the first time after the operation. The rectum is washed out with plain water every twelve hours for the following week, and during that time a rectal suppository containing 5 grains of iodoform is inserted every six hours. The packing in the vagina is changed every six or eight days; the stitches are removed at intervals between the fourteenth and twenty-first days. It is better not to remove them all at one time. Previous to the first evacuation of the bowels the diet must be of a liquid consistency, and as free from excrementitious materials as possible.

My experience of the above detailed method of treating recto-vaginal fistulæ is limited to one case, which was completely cured by the one operation.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

EPIDEMIC JAUNDICE.

Dr. Calvert's letter in the British Medical Journal of February 3rd, on an epidemic of jaundice, decided me to give my experience of a somewhat similar epidemic I am now observing in my practice.

At the commencement of last September I was called into a cottage in a village, and found two children of the same family suffering from a mild form of catarrhal jaundice. At the same time I was shown another child from the next house with the same complaint. A few days later I came across two more cases in a house near, and after that several isolated cases in various houses in the parish. All the patients were children and the symptoms were simply those of jaundice with dyspepsia; no sign of influenza or any other infectious disease. In many cases the constitutional symptoms were so slight that the children ran about all the time.

About six weeks ago it appeared in another village about two miles distant, and I have already had several children brought to me with exactly the same symptoms, namely, jaundice, clay-coloured fæces, and very dark urine, and have heard of other cases in which the parents did not consider their children sufficiently ill to seek medical advice. All the cases soon recover on simple treatment. The epidemic has been a great puzzle to me until I read Dr. Calvert's letter. I had never heard of jaundice being in any way infectious. I am sure in my cases it was not a sequela to influenza, as at the time it appeared there was none in the district.

Bourton, Dorset. B. Pope Bartlett.

GONORRHŒAL INFECTION BY FOMITES.

On January 14th Mrs. P. consulted me about her daughter, aged 2 years, who was suffering from a discharge from the vulva. On separating the labia I found the parts in a catarrhal condition, bathed in pus. The hymen was intact, and it was difficult to ascertain the precise source of the discharge. Frequency of micturition and evident discomfort during performance of the act had, three or four days before, attracted the mother's attention to the child's condition. On examining another daughter, aged 4 years, a similar state of matters presented itself. I found that three weeks previously Mrs. P. had given birth to an infant which developed gonorrhœal ophthalmia, and had been treated by washing with strong nitrate of silver solution. Though specially warned of the infective nature of the pus, she admitted having used a towel employed for wiping the infant's eyes to dry the genitals of both children. Cover glass preparations of the pus from the infant's eyes and from the genitals of the sisters, stained with saturated alcoholic solution of eosin and Loeffler's blue, revealed typical gonococci. The discharge from the most recently infected case showed the largest number of cells containing the diplococcus.

Aberdeen. D. Watson Geddie, M.A., M.B., C.M.

ABORTION DUE TO AN INCARCERATED ANTE-FLEXED UTERUS.

IN this case the last regular menstruation was believed to have occurred at the end of August, but a month later there seems to have been a slight "show," which was followed by frequent losses at irregular intervals, until on December 18th severe pains set in quite suddenly, and a fœtus was expelled before my arrival.

I found the os high up and directed backwards, the whole of the vaginal roof anterior to it being filled with a firm resisting mass. What seemed like the fundus containing the placenta could easily be felt through the abdominal wall. With my left hand in the vagina I pressed the fingers of my right firmly downwards behind the pubes, when the uterus suddenly sprang into position like a released spring, the mass in the vaginal roof disappearing at the same moment. I removed the placenta, which was totally adherent, and my patient made an excellent recovery.

Peckham. HENRY E. MABERLY, B.A.

ABNORMAL POSITION OF SUPRARENAL GLAND.

WHILST examining the abdominal contents at a necropsy I performed the other day, I was surprised to find a gland 1½ inch long and 1¼ inch from side to side, attached by fibrous adhesions and areolar tissue of a very vascular nature to the transverse mesocolon, having as relations the pancreas behind and above, the transverse colon in front. The gland was examined by Dr. Joseph Coats, of Glasgow, and proved to be a suprarenal capsule. It would be of interest to know how the gland came to occupy this abnormal position.

BALFOUR STEWART NICHOLSON, M.B., C.M.,
Riggartsbar Asylum, Paisley. Resident Medical Officer.

ACUTE INFLAMMATION OF THE ANTRUM OF HIGHMORE AFTER INFLUENZA.

I HAVE had a personal experience almost similar to that recorded by Dr. Semon in the BRITISH MEDICAL JOURNAL of February 3rd. About two years ago I suffered from influenza (my second attack), with a good deal of nasal catarrh. One day the left side of my face became very painful and slightly swollen. The pain increased, and towards night was so intense, that I took 5 grains of opium during the night without much effect. In the morning when I got up I blew my nose rather violently, and a quantity of thick dark yellow fluid came out of my left nostril. The pain soon diminished, but during the day a considerable amount of thin dark yellow fluid trickled from the left nostril, especially when the head was bent down. I think there is no doubt that I suffered from an acute inflammation of the antrum of Highmore. I had two rather bad teeth on the left side of the upper jaw, a bicuspid and first molar, of which the latter had been recently stopped. The point that struck me as being most peculiar was the colour of the fluid, quite unlike ordinary pus.

Stickney. M. C. MONHAM.

FRACTURE OF RIB FROM COUGHING.

ON the morning of January 5th I was called to an old lady, aged 74, who told me that on the previous evening, while engaged in removing her stays preparatory to going to bed, she was seized with a violent fit of coughing, during which she felt something "go off" inside her, giving rise to great pain in the left hypochondriac region.

On examination I found a fracture of the ninth rib on the left side at its junction with the costal cartilage.

Oundle, Northants. EDWARD SOMERSET, M.R.C.S.ENG.

WE have received *Kelly's London Medical Directory* for 1894. This is the sixth issue of a compilation which is calculated to be very useful to Londoners; it contains the usual double directory of names and of residences, as well as a good deal of additional information as to hospitals, homes, and so on. The addition of lists of registrars, of vestry offices, and of insurance companies is a useful feature. The information, so far as we have been able to test it, is on the whole very accurate, but the table containing particulars as to the medical officers of the Royal households has evidently escaped revision.

REPORTS
ON
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

LINCOLN COUNTY HOSPITAL.

CASE OF TREPHINING FOR TRAUMATIC EPILEPSY.

(Under the care of Dr. CARLINE.)

J. B., aged 17, was admitted on July 3rd, 1893. Five years earlier he had received an injury to the head, owing to the fall of an iron girder and a lot of rubbish in a coal pit. He had to be dug out, and lay unconscious in the Sheffield Infirmary for a week, remaining in hospital for five weeks.

When he went home, he was found to be quite changed in disposition; whereas he was a good boy and a perfect stay for his mother before the accident, "she found him so altered, he might have been born again;" and his father considered him "worse than an idiot;" he was very mischievous, childish, and very forgetful. About a month after going home he returned to work at the pit, and his temper became so violent that his mother was afraid to leave him alone in the house with his younger brother.

In June, 1891, he started to walk from Rotherham to Lincoln, and got lost on his way, which resulted in his tramping a distance of over seventy-five miles before reaching home, where he had no sooner arrived than he had a fit, followed by several others during the day; this went on for a week, then he was free for a week; the fits then returned, at first while he was sleeping, but subsequently during the day as well. He had four or five a day.

He was attended at the Lincoln General Dispensary on this and several occasions, and was once quite free from fits for three months. He was also an in-patient at the hospital twice—in June, 1892, when he was treated by bromides for four weeks, one fit being recorded during the time; and again in January, 1893, when he remained five weeks, being then also treated by bromides, two fits being recorded. After this he remained free from fits for some weeks; they then became more frequent, and for the two weeks before his present admission they were said to occur every few minutes.

The following description of the seizures is from the house-surgeon's notes, under date July 4th:—

The fits begin without any aura or cry, but with a twitching and retraction of the left angle of the mouth, followed by spasm of the whole left side of the face and a rolling of both eyes to the left. The left arm and leg are then similarly affected, and the body becomes laterally flexed towards the left; consciousness is apparently lost, but there seems to be no respiratory spasm nor cyanosis, or if so only slight. The fits last fifteen seconds or longer, and he has had thirty-five or forty such fits during the twenty-four hours since admission. One fit often follows the other almost immediately, or there may be an interval of two hours. There has been no fit between 10 o'clock and noon to-day, but the patient is very drowsy and stupid. Temperature 100° F.; urine passed in bed.

On July 5th a hypodermic injection of morphine gr.¼ was given and chloroform administered. The fissure of Rolando was marked out on the right side by Thane's method, and the centre for elevation of the angle of the mouth fixed as the point for operation; a ridge of bone 2⅛ inches long was observed to pass backwards and downwards from this point in a direction at right angles to the fissure of Rolando. A curved incision with the convexity forward having been made, and the periosteum raised with the flap, a piece of bone was removed with a trephine, 1 inch in diameter, at the spot selected. The dura mater was firmly adherent, and a dense smooth growth of bone was found projecting for ¼ inch on to the posterior inferior circumference of the disc on its under surface. The incision was prolonged backwards, and in dissecting up the flap the periosteum was found dipping into and very adherent to a fissure in the bone; a second disc was removed immediately behind and below the first with a slightly smaller trephine, the disc separating into two in the line of the fissure, which was evidently the remains of an old fracture. This disc did not come away quite cleanly, but a piece from its under surface remained attached to the upper of the two wedges left where the discs had been removed. On being separated by a Hey's saw this was found

to have encroached slightly on the brain cavity. The dura mater, which was roughened and adherent to the pieces of bone removed, was not opened. The wound was closed by silk gut sutures and dressed with dry alembroth sedox, a drainage tube being inserted.



The patient slept for four hours after the operation, and woke up quite sensible. The highest temperature recorded after was 99.2° F. The patient made an uninterrupted recovery, and the wound was healed by July 12th.

At first the patient was under the impression that the left arm had been amputated, but on the second day he was able to move it feebly. He suffered from quiet delusions for four days, from which he could be roused. After this he became brighter mentally each day, and, on his discharge three weeks after admission, he said he felt better than he had for a long time and had lost all his severe headache and the "thoughts that used to go through his head and bring on the fits."

On November 29th the boy was shown to the members of the Lincoln Medical Society, and up to that time had had no fit since the operation.

He was stated by his mother to have lost his forgetfulness and violent temper and to be much more manly; that, with the exception of a few days during the hot weather, when he complained of pain in his head, he had had no pain or trouble at all, he had lost all his heaviness and stupidity and was quite clear and sharp; he was agreeable with his brothers and sisters, and quite affectionate and different; whereas he could never be induced to read before the operation, he required to be checked now from over-indulgence.

The patient wears in his cap a stout piece of sole leather which has been moulded to his head.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

F. W. Pavy, M.D., F.R.S., President, in the Chair.

Tuesday, February 20th, 1894.

Sclerosis of Calvaria and Gumma of Brain.

Dr. Elwin Harris reported the case of a man, aged 33, who had suffered from tremors commencing in the right arm fifteen years previously; these subsequently extended to all the limbs, and vision was nearly lost, there being atrophy of both discs. The frontal bone was unduly prominent, and the diagnosis of cerebral tumour was made. The bone was trephined in the mid-line, but relapse followed a certain amount of relief, and death took place seven weeks after the operation. After death the frontal bone was thickened and sclerosed to the extremest degree; where thickest it measured 1 inch; the increase had taken place almost solely on the outer aspect. In the frontal lobes there was a considerable firm new formation, in which were yellow caseating areas. Mr. Bowlby had found this to consist of granulation tissue the vessels of which were greatly thickened, and some obliterated. The author considered the formation to be a syphilitic one, and the sclerosis of the frontal bone to be of a similar nature. In answer to Dr. Tooth, he stated that the dura mater was firmly adherent to the mass, and was itself little altered. The spinal cord he had not examined.

Mr. F. S. Eve had seen even greater thickening with sclerosis over a subdural abscess that had formed in connection with disease of the ear, for which trephining in the mastoid region had been practised.

Dr. Howard Tooth and Mr. W. G. Spencer concurred in regarding the two conditions shown as being not causally related, but merely coinciding in position.

Pathology of Rodent Ulcer.

Dr. F. T. Paul opened a debate on the above subject by observing that whilst it was allowed that rodent ulcer was a carcinoma of the dermal appendages, it was still undetermined of which, whether hair follicles, or sebaceous or sudoriferous glands. To contrast the lesion with what was not rodent ulcer, he first made remarks upon ten cases of cutaneous epithelioma, mostly of only a few months' duration, and seven of them arising in the lip. In epithelioma arising in the skin, there were first the signs of irritation, downgrowth of epidermis, and this was associated with upgrowth of tissue, the lesion in all cases being at first a raised one, and not an ulcer; it began as a papilloma. Rodent ulcer never arose as a papilloma, but as a "pimple." It was at first subepidermal, and might so remain without undergoing ulceration for many years, even twenty. In two early cases of the disease he had found the epidermis intact; the hair follicles passed through the growth unaffected; the sebaceous glands were conspicuous by their absence, whence he concluded that these were the starting points of rodent ulcer. The disease spread by the lymph spaces, and secondarily involved sebaceous glands, etc., from the outer aspect; but the sweat glands were rarely so implicated. The cells and cell groups might vary, as in the case of other carcinomas; but, as a rule, the former were small, elongated, and with little cell body in comparison with the nucleus; some might be spindle-shaped. There were no prickle cells and no nests, and the groups were not in trabeculæ as in squamous-celled carcinoma of the skin, but presented an acinous arrangement. As to cell-nests, there were in ordinary epithelioma or squamous-celled carcinoma of the skin, a true kind, and a false which consisted of horny cell-accumulations the latter formed false pearls and might be seen in ordinary papillomata and even in rodent ulcer, when they indicated the involvement of other structures in the disease but were not part of it. The true nests, arising from endogenous cell division, were not found in rodent ulcer. The author did not deny the possibility of carcinoma arising in the sweat glands. All the rodent ulcers he had seen had been on the face and the lymphatic glands were never affected. It was a disease more frequent in men than women, and although it might commence between the ages of 20 and 30 it was mostly seen in advanced life.

Dr. Kanthack in most points agreed with what had fallen from Dr. Paul, in holding that the disease arose in the sebaceous glands, though it might possibly arise in other structures; in one case there seemed to be a connection between the cell groups and the rete, and he thought this was certainly so in other instances. Sometimes pigment occurred in the growth, the presence of which was difficult to explain. He did not hold that ordinary epithelioma always commenced as a papillary growth. As to the term "precancerous," applied to indicate the condition of epitnelial downgrowth, he regarded it as misleading; the condition was seen, for instance, in the larynx in cases of catarrh, and might be of no cancerous significance whatever.

Mr. E. Willett exhibited a rodent ulcer of the scalp, which had recurred three years after removal; its cells were larger than those usual in rodent ulcer, and in this it was not quite typical.

Mr. A. A. Bowlby reported the result of an examination he had made of 66 cases of rodent ulcer. The cases comprised

40 males and 26 females. Their ages after commencement of the disease were: Between 10 years and 15 years, 1 case; 15 and 20, 3 cases; 20 and 25, 1 case; 25 and 30, 5 cases; 30 and 35, 7 cases; 35 and 40, 10 cases; 40 and 50, 16 cases; 50 and 60, 15 cases; 60 and 70, 6 cases; over 70, 3 cases. It was seen from this table that instead of rodent ulcer being essentially a disease of old age, as so commonly alleged, it was rather a disease of middle age, and might commence in youth. The 4 youngest patients were males of the ages respectively of 14, 15, 19, and 21 years. In most of the cases the disease began as a wart, and in many of them there was a tumour-growth of considerable size. In 5 cases there was no ulceration, and in 1 case where the tumour was situated on the neck, although ulcerated, it was as large as a Tangerine orange. In exactly half the cases the edges of the ulcer were raised and thickened, and more or less indurated, whilst in 21 cases the edges of the ulcer were flat and sharply cut. There was, however, no difference in the microscopical structure of these varieties. He pointed out that the description by Moore of a flat ulcer with sharply cut edges applied only to a minority of cases of rodent ulcer, and that in a very large number there was a lumpy outgrowth and some induration. The suggestion which was often made to explain these latter conditions was that epithelioma had been grafted upon a rodent ulcer. There was, however, no proof whatever that such an event ever occurred. The author next pointed out that in these varieties of form and clinical conditions rodent ulcer did not differ from other kinds of carcinoma, and that in epithelioma there was sometimes much warty growth and but little ulceration, and at other times extensive ulceration, with hardly any growth at all. In scirrhous carcinoma of the breast also there was usually a tumour of some size, and if the skin was infiltrated there might be a good deal of fungous outgrowth, whilst in examples of the atrophic variety there was often a diminution in size of the breast, and if ulceration occurred there was no outgrowth. Yet in both varieties of epithelioma and of scirrhus the essential characters of the disease were the same, and it was evident that the varieties of rodent ulcer did not differ from each other more than did those of other and allied tumours. The situation of the growths was almost invariably the face, fifty-five being found between the forehead and the upper lip, whilst the others were placed on the chin, the angle of the mouth, the ear, the nape of the neck, and the mid-dorsal region. None of the tumours grew on the limbs. Microscopical examination showed in all the cases a growth of epithelial cells in alveoli. The cell masses were usually stellate or columnar in shape, and their outline was more defined, and there was less small cell proliferation than was found in epithelioma. The cells themselves were spheroidal or oval in shape, much smaller than those of the epidermis, and did not usually undergo any keratinous change. The new cell growth evidently developed from some part of the derma, and not as an ingrowth from the epidermis, and the appearance of the cells and of the cell masses seemed to point to their origin from the hair follicles. In one case such a development could be plainly traced. The following conclusions were drawn: (1) That rodent ulcer was more common in males than in females; (2) that it was not usually a disease of old age, but commenced most frequently between the ages of 30 and 50, and might begin in youth; (3) that the growth might develop for several years before ulceration commenced; (4) that it very rarely occurred except on the face and adjacent parts; (5) that in the majority of cases where ulceration had commenced the edges of the ulcer were raised and thickened, and there was good evidence of tumour growth, but that such cases did not differ structually from others where the edges were flat and sharply cut; (6) that the cell masses and the cells themselves were distinguishable from those of other tumours, and possessed characteristics of their own; (7) that the epithelial nature of the cells and their enclosure in alveoli justified the inclusion of the growth among the carcinomata; (8) that there were good reasons for believing that the growth commenced in the derma, and that it might originate in hair follicles.

Mr. JONATHAN HUTCHINSON spoke from the clinical side. He had seen rodent ulcer in a man, aged 25, in whom it had appeared at the age of 14, and whose father had died with a similar disease; but as a rule it was a disease of advancing life. He asked if no suggestion could be offered as to why the lymphatic glands were not invaded; and would point out that the non-involvement of glands were also witnessed in epithelioma attacking lupus scars. In these circumstances the epithelioma was very rapid, and it took a fungating form; histological examination of such formations had shown them to be squamous-celled carcinomata. Again, in what he had described as the crateriform ulcer, which was clinically a peculiar lesion, he had not observed gland infection, although histological examination had shown this lesion to be also a squamous-celled carcinoma. The tuberous or prominent varieties of rodent ulcer affected chiefly the end of the nose; in the upper part of the whisker the rate of progress was remarkably slow; in other cases the lesion might ulcerate superficially, and to a large extent cicatrise. He had seen one case of epithelioma of the cheek and other parts of the face arise in the skin after sunburn; the ulcer was destroyed, recurred, and was again destroyed, without gland infection having as yet followed. Similar ulcers also arose in freckles. He had seen several instances of multiple rodent ulcers affecting different parts of the face.

Mr. F. S. EVE showed a drawing of a rodent ulcer of the groin in a man aged 56, in whom it had lasted eighteen months; it was both histologically and clinically typical. He thought the seats of the lesion corresponded with those of the chief sebaceous glands, and that it might arise either in these glands or in hair follicles. It might be viewed as related to sebaceous adenoma in the same way that columnar-celled carcinoma of the rectum was to rectal adenoma.

Dr. G. THIN had, several years ago, held that rodent ulcer commenced in the sweat glands, and he did not think that any of the specimens shown by the speakers had demonstrated beyond question that it arose in the sebaceous glands, since in none was part of a normal gland to be seen in connection with the cell groups of the disease. The earlier confusion on the subject had arisen from German authors including under the term "flat carcinoma" the two kinds of ordinary epidermic epithelioma, and what in this country had been clinically differentiated as rodent ulcer.

MEDICAL SOCIETY OF LONDON.

F. ROBERTS, M.D., Vice-President, in the Chair.

Monday, February 19th, 1894.

THE ADMINISTRATION OF CHLOROFORM CLINICALLY CONSIDERED.

MR. JOSEPH WHITE (Nottingham) referred to a paper published by him forty years ago on chloroform administration, and stated that he had kept notes of 7,055 cases of anæsthetisation up to the present time. This number comprised 4,049 of chloroform, 798 of ether, 691 of nitrous oxide, 79 of bichloride of methylene, 5 of amylene, and 1,433 of the A.C.E. mixture. He pointed out that all the earlier deaths took place very soon after the commencement of the administration, and were all characterised by the same inability to discover *post mortem* the proximate cause of death. He divided the administration of chloroform into four periods: (1) the period of continued consciousness; (2) the period of semi-consciousness; (3) the period of sleep; and (4) the period of coma and threatened death. He himself had never had a death. He discussed the phenomena of the different stages of chloroform narcotisation, and pointed to the extremely contracted pupil as the indication of a sufficient depth of anæsthesia having been reached. He urged the removal of the inhaler as soon as there was full contraction of the pupil and fixation of the eyeball. Stertorous breathing he regarded as an indication for immediately desisting from the inhalation, and in the event of untoward symptoms the introduction of fresh air and the application of strong ammonia to the nostrils. He had had the best effects from the A.C.E. mixture, which was less depressing than chloroform and not more irritating to the pulmonary mucous membrane. He advocated the gradual administration of chloroform at the commencement.

Dr. SANSOM protested against the findings of the Hyderabad Commission, which tended to confirm the very erroneous idea that chloroform was best administered in large doses. Even if in animals breathing usually ceased before the pulse,

it by no means followed that the same took place in human beings. Even if such were the case, that would not militate against the fact that in chloroform narcosis there was always a danger of one or the other ceasing, a danger which could only be overcome by careful attention to the strength of the vapour inhaled. He had ascertained that with chloroform poured on to a towel in the ordinary way the vapour might constitute 30 per cent. of the inspired air, while Clover had indicated 5 per cent. of chloroform vapour as a dangerous strength, and 1 per cent. was quite sufficient for the production of anæsthesia. He dissented entirely from the idea that fatty degeneration of the heart was responsible for death from syncope under chloroform, pointing out that as a matter of fact fatty heart was a very infrequent cause of sudden death. He advocated the use of a mixture of equal parts of absolute alcohol and chloroform, the alcohol diminishing the volatilisation of the chloroform, and thus reducing the danger of too strongly charged an atmosphere being given.

Dr. Hewitt thought extreme contraction of the pupil was an indication that anæsthesia had not been pushed far enough. He himself worked with a pupil having a diameter of about 2.5 mm. The drawback of the different volatilising powers of the A.C.E. mixture might be obviated by pouring small quantities into the inhaler at a time. Strong muscular men often proved the worst subjects for chloroform administration, and he suggested that this should be borne in mind in choosing an anæsthetic. He joined with Dr. Sansom in protesting against the conclusions of the Hyderabad Commission.

Dr. Silk thought safety depended far more upon the care and skill with which chloroform was administered than upon its intrinsic qualities. He doubted whether fear had much to do with the production of death during the first stage of chloroform administration. The condition of muscular excitement which characterised the second stage was, he thought, represented in the heart in the so-called "delirium cordis." He did not desist from the administration if the patient struggled; on the contrary, he pushed it in order to cut short an admittedly dangerous period. In the same way, when sickness seemed to be impending, he pushed the anæsthetic in order that the depression of actual vomiting might not be superadded to the depression of impending sickness. He urged that the patient should be kept in bed for some hours before commencing the administration, care being taken to empty the bowels.

Mr. Rowell said that if any one sign were to be relied upon, fixation of the eyeball was more reliable than the condition of the pupil. Actual sickness had a stimulating effect, the symptoms of syncope which heralded its approach disappearing so soon as it had been accomplished.

Dr. Benham insisted on the advantages of previous administration of a dose of alcohol.

After some remarks from Sir W. Dalby, Mr. Davis pointed out that professed anæsthetists used ether far more than chloroform, and invariably commenced with gas or ether.

Dr. Edmunds recalled the observation of Dr. Snow that 18 minims of chloroform was sufficient to induce anæsthesia, and asked how it was that such large doses were considered necessary. He alluded in terms of commendation to Krohne's modification of Junker's inhaler.

Mr. White, in reply, said he had used the inhaler in question, and had found it a very admirable apparatus.

EPIDEMIOLOGICAL SOCIETY.

J. F. Payne, M.D., F.R.C.P., President, in the Chair.

Wednesday, January 31st, 1894.

Aërial Convection of Small-pox from Hospitals.

The adjourned discussion was resumed by Dr. W. A. Evans (Bradford), who showed a map of the district and plans of the hospital. Though 25 cases occurred in 1892, there was no evidence inculpating the hospital, but in 1893 many cases appeared in the fever hospital casual ward and streets around. The opening of the new hospital outside the town in September was followed by scattered cases in that quarter, but it was burnt down in the following month, and the patients removed to the old hospital in Leeds Road. A number of cases occurred among the crowds attracted to the scene, including two of the firemen. Since then the disease had apparently clung to the district around the hospital, and was not yet extinct, though every medical man was allowed to vaccinate and revaccinate at the public cost.

Dr. Seaton, referring to his report on the epidemic at Nottingham, pointed out a fallacy in spot maps representing an entire epidemic at one view. Such a map showed a marked excess of cases around the hospital, but this concentration did not begin until the sixth month of the epidemic, when a number of patients were treated at home, and the disease extended considerably. He deprecated the reckless recourse to the hypothesis of aërial convection in every case in which direct contact could not be proved. No "aërial convection" had taken place from the hospital ships on the Thames, though vessels were constantly passing alongside. Leicester had shown what could be done by isolation, but Mr. Power's conclusion would lead to the closure of hospitals altogether.

After some remarks by Drs. Pringle and Bulstrode, Dr. Mahood said his experience at Birmingham inclined him to accept aërial convection, as when cases occurred in the fever hospital, the gaol, the workhouse, and lunatic asylums in the vicinity of the hospital, the persons attacked being all unvaccinated or practically so, but having had no communication with the outside world.

Dr. Newsholme agreed with Dr. Seaton that the *onus probandi* rested on those who would substitute a doubtful for a well-known cause. When Stockwell Hospital was used for small-pox, the spot map showed the usual concentration of cases towards it, but only on one side, a railway on the other presenting no obstacle to aërial convection, but an insuperable barrier to human intercourse. It should be remembered that the class of people who occupied the houses springing up around a hospital were much less generally vaccinated than those higher in the social scale; and third persons and things might convey the contagion.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

Pathological and Clinical Section.

Bennett May, M.B., F.R.C.S., in the Chair.

Friday, January 26th, 1894.

Specimens.

Dr. Sinclair showed specimens from two cases of Intra-ocular Sarcoma.—Dr. Foxwell showed a Heart exhibiting recent vegetative endocarditis on all four valves, though the pulmonary and tricuspid were but slightly affected. The patient had been ill six months with general anasarca, and had had very varying murmurs at all four orifices. There was antecedent rheumatic fever three years ago. The temperature was typical of chronic ulcerative endocarditis, but there were no embolisms.—Mr. Heaton showed (1) the Sac of Strangulated Encysted Hernia with undescended testicle removed from the groin of a patient aged 45; the wound soundly healed and the man was well in ten days. (2) Parts removed *post mortem* from a case of Strangulated Intraparietal Hernia in a man aged 27; herniotomy was performed; the patient appeared comfortable for two days, but died on the sixth. *Post-mortem* examination showed peritonitis in the lower half of the abdomen; lying in the iliac fossa and over the situation of the internal abdominal ring was a tumour (specimen shown), lined on the outside and inside with peritoneum; it communicated with the peritoneal cavity by a small opening, through which passed coils of small intestine tightly strangulated; the testicle lay on the outer wall of the sac, projecting into its interior and slightly below and external to the internal abdominal ring; the scrotal sac, ligatured and excised, was a diverticulum from this sac, and communicated with the general peritoneal cavity only through it. The case was a good example of the hernia *en bissac* of French authors, or intraparietal hernia.—Mr. Barling showed (1) the Larynx taken from a middle-aged man, the subject of old phthisis; the patient suffered from laryngeal obstruction due to extensive tuberculous disease of the ary-epiglottic folds and the inter-arytenoid space; tracheotomy was decided on, but the man died during the night, apparently of syncope. Mr. Barling

also showed (2) a specimen of Acute Infective Periostitis and Osteo-myelitis commencing in the neck of the Femur within the capsule, taken from a boy, aged 15, who, without previous illness or injury, was seized with severe pain in his right hip-joint. The condition was diagnosed and the joint cavity was drained by an anterior incision. Subsequently the right and later the left elbow joint suppurated, and the boy died at the end of three weeks. There was not a single rigor throughout the illness, the most marked feature of which was the severe delirium. The specimen showed a good deal of erosion of the cartilage on the head of the femur and stripping of periosteum and attachment of capsule from the neck of the bone. There was some pus in the cancellous tissue.

TREPHINING FOR MIDDLE MENINGEAL HÆMORRHAGE.

Mr. HASLAM read notes of a case in which he had trephined successfully for hæmorrhage from a small branch of the middle meningeal artery. The clot was not situated over the motor area, but in a position over the angular gyrus and occipital lobe, and the pressure on the brain had interfered with the paths from the motor area through the posterior limb of the internal capsule.

Hunterian—*Jan. 24th*—Mr. F. GORDON BROWN, President, in the chair.—The PRESIDENT announced the gift of books by Dr. Bastian, to whom a unanimous vote of thanks was accorded.—The President showed a policeman with a systolic aortic *bruit* and other signs of atheroma, who two years before had been injured in the left foot. The left dorsalis pedis artery was now aneurysmal, and pulsation had been cured by recent ligature of the anterior tibial.—Dr. HINGSTON FOX showed a case of Graves's disease in a boy, aged 12. No thyroid enlargement could be made out, but the other three cardinal symptoms of the disease were present; it was unusual to see it at so early an age.—Dr. DAWSON showed a female, aged 56, with aneurysm of the right innominate artery, the size of an egg, and of five years' duration.—Dr. ARNOLD CHAPLIN showed a case of bronchiectasis treated with creasote inhalations. The patient, a girl, aged 16, had whooping-cough when a child, and since then a paroxysmal cough. This cough had been attended for the last three years with profuse, horribly foul, expectoration, which came up in gushes and filled the spittoon. She had severe dyspnœa on exertion, lost flesh, and was troubled with night sweats. Various remedies were tried with a view to diminishing the fœtor of the expectoration, but without success. Dr. Chaplin then used coal tar creasote, which consisted principally of pyridene bases, phenates, and acridin, together with other products of the distillation of coal tar, a small chamber having been fitted up and made as air tight as possible. Some of this creasote was put in a dish and heated by a spirit lamp until the fumes were given off in great quantity. The patient was then placed in the chamber, and inhaled the fumes with which it was filled for one hour every day. This inhalation produced violent coughing, with the expulsion of much expectoration. After three inhalations the morning paroxysm of coughing was absent, and the expectoration became sweet. The patient had had 54 inhalations lasting one hour, with the result that the expectoration was much less, and had remained free from odour for a month without any creasote inhalation whatever. The patient stated that her breathlessness and cough were but trifling now, and that the night sweating had ceased.—Dr. F. J. SMITH showed a case of transposition of viscera in a boy, aged 15, who was in good health.—Dr. F. C. TURNER showed a girl, aged 12, who presented multiple exostoses of ribs, clavicles, humeri, and tibiæ.—Dr. BATTEN exhibited a pulse manometer recently invented by him. The pulse was obliterated by one finger, which pressed upon a spring attached to a button, which rested upon the artery, and the force required was indicated upon a dial attached.

Nottingham Medico-Chirurgical—*Feb. 7th*—Dr. WALTER HUNTER, President, in the chair.—After the exhibition of cases by Dr. MACKENZIE and Dr. ELDER, Mr. BURNIE opened a discussion on the occurrence of death during the administration of chloroform. He said chloroform when inhaled might cause death (1) by paralysis of respiratory centre and consequent stoppage of respiration while the heart was still acting. Animals when purposely killed by chloroform died in this way. It required 10 or 12 minutes to kill a dog in this manner, and it would probably require at least as long to kill a human being. He believed human beings never died from primary respiratory failure if the heart were acting efficiently. (2) By anæmic syncope. Such deaths occurred frequently without warning, a short time after the commencement of inhalation, and when only a small quantity of chloroform had been used, and also when the patient was not completely anæsthetised, and after the inhalation had been discontinued. More than 50 per cent. of all deaths from chloroform took place before the commencement of the operation. He was inclined to agree with Dr. Robert Kirk that the deaths now under consideration were due not to the direct action of the chloroform, but to the inhalation being stopped at too early a stage. The heart cavities in such cases were found to contain very little blood. (3) By syncope with over-distended right ventricle. This form of death was apt to occur in patients whose nutrition was impaired from disease or from any other cause, such as free indulgence in alcohol, or whose hearts were the seat of local disease. There was usually in such cases great excitement, violent struggling, with muscular rigidity, great lividity of the surface, with distension of the superficial veins. The pulse, when it could be felt, was very frequent and small. It stopped suddenly, and respiration ceased at the same moment or soon afterwards. The cause of the heart failure was over-distension of the right heart and of the artery and veins attached to that side. The cause of the distension was the direct obstruction to the passage of blood through the lungs from the right to the left side of the heart, the local effect of the chloroform vapour in the air cells. The way to avoid accidental death from inhalation of chloroform was to give the chloroform freely with plenty of air, to give it pleasantly to the patient, and above all to give it continuously until the patient was in a state of complete anæsthesia.—In the discussion which followed, the PRESIDENT, Messrs. JOSEPH WHITE, TRESIDDER, ELDER, TOMPSETT, STEAVENSON, WATSON, WARING, MICHIE, and CATTLE spoke, and Mr. BURNIE replied.—Pathological specimens were shown by Dr. MACKENZIE, Dr. ELDER, and Mr. STEAVENSON (for Dr. C. V. TAYLOR).

Sheffield Medico-Chirurgical—*Feb. 1st*—Mr. RICHARD FAVELL, President, in the chair.—Mr. ARTHUR JACKSON exhibited a naso-pharyngeal polypus which he had removed from a girl, aged 23. It appeared to consist of two parts, the upper consisting of a gelatinous nasal polypus, the lower, which was intimately adherent to the upper, consisting of dense fibrous tissue. There was no bony attachment. Mr. Arthur Jackson also exhibited a specimen of necrosis of the lower end of the femur which had existed for twenty-six years, and was operated on twenty-two years ago, and again 3½ years ago. Bursting into the knee-joint, it was found necessary to amputate. Mr. Jackson raised the question as to the propriety of earlier amputation in such cases.—Mr. SNELL showed a child with subconjunctival lipoma.—Mr. MAKEIG JONES showed a man, aged 40, with Charcot's amyotrophic paralysis following dislocation of the humerus. Mr. Makeig Jones also related a case of cerebral tumour. The symptoms were severe paroxysmal pain over the right side of the forehead. Slight ptosis and external strabismus of the right eye, vomiting, and double optic neuritis. A tumour the size of a hen's egg was found on the right frontal convolution, growing from the dura mater. Microscopic sections were exhibited, showing the growth to be an endothelioma.—Dr. SOMERVILLE showed for Dr. HUNT a man, aged 44, with weakness of right arm and both legs, inability to stand with the eyes shut, and exaggerated knee-jerk on the right side. The symptoms were discussed, and the opinion was expressed that it was a case of ataxic paraplegia.—Dr. WEARNE CLARKE showed the temperature chart of a case of scarlatina in which, without the presence of any complication, the temperature, which had fallen on the fading of the rash to 100.8°, rose again suddenly to 102.6°, and remained elevated for ten days.—Mr. SNELL, Dr. KEELING, Mr. ARTHUR JACKSON, Dr. SINCLAIR WHITE, Mr. PYE-SMITH, and Dr. BURGESS made remarks.

Northumberland and Durham Medical—*Feb. 8th*—Dr. J. ADAMSON, President, in the chair.—Dr. A. A. MARTIN showed a girl, aged 17, with hypertrophy of the breasts. They were now as large as a double football. The enlargement seemed to be chiefly connective tissue. The girl had never menstruated.—Mr. WILLIAMSON showed a case of orbital aneurysm from rupture of the internal carotid into the cavernous tissues, caused by injury. If permission could be obtained he would tie the common carotid. Mr. Williamson also showed the temperature chart of a case of acute osteomyelitis of the upper end of humerus, and a case of carcinoma *en cuirasse* in a woman, aged 50.—Mr. BLACK showed boys, aged respectively 7 and 5 years, in whom he had performed suprapubic lithotomy.—Dr. W. G. RICHARDSON showed a case of osteitis.—Dr. C. L. LIGHTFOOT showed a case of traumatic detachment of the retina from sympathetic ophthalmia.—Dr. A. E. MORISON showed (1) the kidneys and suprarenal capsule of a woman; (2) vermiform appendix removed from a case of recurrent typhlitis after the third attack; (3) cæcum and appendix removed *post mortem* after a difficult labour; the patient suffered from sickness; vomiting became fæcal, and death occurred in a few days; *post mortem*, purulent peritonitis from a gangrenous appendix, with large perforation, was found; (4) foot removed for melanotic sarcoma.—Dr. OLIVER and Mr. WILLIAMSON showed (1) sarcoma of ovary; (2) cæcum removed for cancer from a patient, aged 23, who had suffered from pain and swelling for three years; no obstruction or hæmorrhage.—Dr. OLIVER showed a specimen of sarcoma of the skull. The scalp was injured seven years ago. Three years ago a tumour formed at site of scar, but afterwards disappeared. Six months ago the tumour reappeared. Erysipelas injection was tried. Optic neuritis was first detected in November, when there was no intracranial pressure. After a succession of fits, each of which began with a sensation in the leg, the man became comatose and died.

Liverpool Medical Institution—*Feb. 15th*—Mr. CHAUNCY PUZEY, President, in the chair.—After the exhibition of specimens by Dr. ABRAM and Dr. BRIGGS, Mr. HUGH E. JONES read notes of a case in which acute catarrh of the middle ear followed influenza in a young married woman. Two months later the disease extended through the vestibule to the posterior surface of the petrous bone. Extradural abscess, caries of the petrous bone, extension through the petro-occipital suture, and subperiosteal abscess quickly followed. The bone was freely opened up, and the patient was apparently recovering, but at the end of three weeks purulent meningitis came on, and she died in three days.—Messrs. LEE, PUZEY, and SHEARS made remarks on this case.—Mr. BANKS showed a young man who, some months after an injury, was admitted into the Royal Infirmary with a badly united fracture of the right leg and an unreduced dislocation of the left hip. By dividing the neck of the left femur the two legs were brought to the same length, and the patient could now get along very comfortably.—Mr. PUZEY brought before the meeting a young man who had recovered perfect movement of the elbow-joint after very severe injuries, including complete division of the biceps just above the tendon; paring of the divided ends and careful suturing had been followed by complete union. This patient had also, ten years before, sustained a rupture of the urethra, which had been untreated, and most of the urine passed through fistulæ in the perineum. After two operations the man returned home with a full gauge urethra and a sound perineum.—Dr. PERMEWAN read a paper on some points in laryngeal paralysis. Attention was drawn to Lederbaum's experiments on the transmission of voluntary and reflex stimuli through a nerve trunk, and

to the applicability of his results to the phenomena of laryngeal paralysis. Reference was made to the great value of abductor paralysis as a means of diagnosis in nervous disease, particularly locomotor ataxy.—Dr. Hunt said bilateral abductor paralysis did not always mean organic disease, as he had seen it follow laryngitis and end in recovery.—Mr. Bark, Dr. Barr Dr. Bradshaw, Mr. Bickerton, and Dr. Abram also took part in the discussion.

REVIEWS.

Diseases of the Skin: an Outline of the Principles and Practice of Dermatology. By Malcolm Morris. Cassell and Co. 1894. (Cr. 8vo; pp. 556: 10s. 6d.)

This volume forms one of the series of clinical manuals published by Cassell and Co., and is intended to be essentially practical in its scope, dealing principally with the symptoms, diagnosis, and treatment of diseases of the skin. It is prefaced by eight coloured plates, in which, although from the size of the volume the parts of the body represented are sometimes shown on a considerably reduced scale, the general effect is good and instructive. These small plates contain two or three figures, so that, in all, we have coloured representations of nineteen conditions of skin disease, and although they cannot take the place of a good atlas of dermatology, they will assist the class of readers for whom coloured plates are requisite. Ichthyosis hystrix, psoriasis, lupus erythema, and lupus vulgaris of the skin and mucous membrane are shown very successfully. There are seventeen woodcuts distributed throughout the volume, of more or less interest according as the subject lends itself to that form of illustration, which is, however, not always the case.

Perhaps the chief characteristic of the book is the industry with which an immense number of facts and opinions, gathered from contemporary literature up almost to the day of publication, and from the author's own experience, have been compressed into a volume of this comparatively small size. This large amount of matter in a condensed form, although doubtless it has its advantages, to some extent renders the work less easy reading; and we are not sure that Mr. Morris would not have produced a more useful book if he had drawn more largely on his own experience, and had been less conscientious in abstracting so largely, even although always with great conciseness, from the extensive literature of his subject. The style is simple and clear, and the author has done his best, in the limited space to which he has confined himself, to omit nothing of importance that has been contributed to dermatology in recent years. Even the most important papers read before the Section of Dermatology, at the recent meeting of the British Medical Association, are epitomised.

After chapters on the pathology of the skin, and the classification of skin diseases, the practical part of the work is introduced by a chapter on the principles of diagnosis, in which the method of examining a patient, and the various features of eruptions that lead to diagnosis are explained; and in this chapter there is a description of the eruptions of the exanthemata. Under the title of Affections of the Skin Depending on Nerve Disorder, a large number of important skin diseases are described. Erythema, pellagra, acrodynia, purpura, peliosis rheumatica, lupus erythematosus, rosacea, dermatitis herpetiformis, herpes gestationis, impetigo herpetiformis, cheiropompholyx, pemphigus, herpes, sclerodermia, morphœa, lichen, leucodermia, Raynaud's disease, dermatitis repens, diabetic gangrene, hysterical gangrene, glossy skin, atrophy of the skin, Charcot's bedsore, trophic ulcers, Morvan's disease, syringomyelia, œdema, are all brought under that category. It is evident that the dependence of these various affections on disorders of the nervous system is in many of them a matter of inference only, although, in the absence of proof to the contrary, the arrangement under this group may be as convenient as any other.

The general principles upon which this class of disease is to be treated are described in a separate chapter, in which many useful indications and hints are given. When narcotics are imperatively called for, Mr. Morris believes that opium is the least objectionable and the most efficient, but on the whole he considers that they must be looked upon as necessary evils. He has large faith in drugs, and places reliance on nerve tonics and quinine, combined with belladonna, arsenic, and valerian. Numerous formulæ are given for sedative and astringent lotions and cooling ointments.

One of the most troublesome affections of the skin to treat is pruritus, and Mr. Morris points out how necessary it is to make a careful examination in order to discover whether there is any focus of irritation, either from some small excoriation or slight localised congestion, or parasites. In such cases he regulates the patient's diet by enjoining abstinence from coffee, tea, and sugar (the "free breakfast table"), alcohol, shellfish, pickles, and all highly seasoned or salted food. In this complaint, apart from the nerve tonics and sedatives referred to, he recommends the internal administration of carbolic acid and cannabis indica, the recommendations of Bulkeley in regard to the latter drug being quoted and endorsed. Mr. Morris does not hesitate to recommend even digitalis, ergot, and antipyrin as sometimes useful; but we have no doubt that it is only in cases of unusual severity that he gives these powerful drugs. Amongst the long list of antipruritic local applications menthol is especially signalised as being valuable, whilst hydrocyanic acid is, according to Mr. Morris's opinion, much overrated as an antipruritic.

The ninth chapter is devoted to artificial eruptions, and here we find a very good and concise description of the eruptions produced by drugs, a summary being given in a table arranged alphabetically. Mr. Morris dissents from the doctrine of the older Vienna school that eczema is the same disease as that which can be produced at will by irritants, and shows how it arises spontaneously, and not in connection with any visible cause of irritation. Its uncertain course, in his opinion, shows that there is something more in eczema than simple inflammation of the skin due to a local and transient cause, and that there is an unknown quantity beyond this. As essential features he shows how the itching and heat are often out of all proportion to the visible changes in the skin, the symptoms being usually intensified in an extreme degree at night, especially in the early hours. Considering how common eczema is, it is certainly extraordinary how seldom it degenerates into any prominent malignant affection, using the word "malignant" in its widest term, but Mr. Morris states that he has at present under his care a case in which it has become transformed into mycosis fungoides.

Mr. Morris adopts Unna's views about seborrhœic eczema, considering that the seborrhœa prepares the ground for the eczema which follows: and, in addition to the well-known forms of eczema produced by excessive perspiration, and papular eczema, he sees grounds for the use of the term "nervous eczema" as applied to a special set of cases. Indeed, he considers that when eczema arises in an apparently normal skin, it is always of nervous origin. As, however, he has not observed any peculiarities of appearance or distribution whereby a purely neurotic eczema could be distinguished from other forms of the disease, it might be well to reserve any statement of opinion on such a point, for which, so far at all events, there is no anatomical foundation.

Space does not permit us to analyse further Mr. Morris's views, but it is satisfactory to know that he gives no encouragement to the old belief that there is any risk in rapidly curing an eczema, never having seen a case in which the cure or the abatement of the disease was followed by any ill-effect whatsoever. In acute cases he submits his patients, if they have good constitutions, to antiphlogistic treatment, reducing the heart's action by the administration of antimonial wine, forbidding stimulants, and allowing only the simplest diet. In cases attended with great prostration he combines quinine with opium. He places no reliance on arsenic in neurotic cases. He considers strychnine, phosphorus, and ergot useful. We presume, however, that he recommends the administration of these powerful drugs only in exceptional cases, for, as a matter of fact, troublesome as the treatment of eczema is, all that it is possible to attain can generally be accomplished by milder measures. The various "creams," ointments, and "pastes" which have been of recent years introduced into the practice of dermatology all find a place in this work, and their use is fully explained.

The reasons for the opinion Mr. Morris expressed that,

after all, tuberculin is of use in lupus, were stated fully by him in a paper published in the British Medical Journal. He considers that although it does not effect a cure, it prevents a recurrence when the disease has been destroyed by other means, and he thinks that a course of tuberculin should be a preliminary to the treatment of lupus by other methods, being, of course, absolutely contraindicated if there be any reason to suspect the existence of visceral tuberculosis.

Notwithstanding the number of excellent works on dermatology that have been recently published, Mr. Morris's book, from its compactness and the completeness with which it epitomises the latest suggestions in therapeutics of the skin, giving full references, will doubtless find a large field of usefulness.

The Diseases of Childhood (Medical). By H. Bryan Donkin, M.D. (Oxon.), F.R.C.P., Physician to the Westminster Hospital and to the East London Hospital for Children at Shadwell. London: Charles Griffin and Co. 1893. (Large 8vo, pp. 448. 16s.)

The diseases of children form a very large part of ordinary medical practice, and for their successful treatment they require as much skill and make as great demands on the resources of the practitioner as any department of medicine which can be named. The recuperative power of children is marvellous, but it is almost equalled by the rapidity with which they become intensely ill or pass into collapse. It is not wonderful, therefore, that the study of their diseases is yearly attracting more and more attention. The growth in the literature during the last few years has been extraordinary, but there can be little doubt that Dr. Donkin's work possesses characters which will earn for it a distinct place in the estimation of the profession. It is written in an easy style, or rather, perhaps, remembering Byron's uncomplimentary estimate of "easy writing," we should say that it is easy reading. Principles rather than details are dwelt upon, and much prominence is given to questions of dieting and general management.

The volume is divided into six main sections. In the first, on disorders of the alimentary tract and of the abdomen, a clinical rather than a pathological classification is followed, but this at the present time is inevitable, and has special conveniences of its own. Questions connected with the artificial feeding of infants are discussed in the first chapter under the head of "infantile wasting." Dr. Donkin speaks strongly in favour of sterilised milk, and shows that the allegation that the use of boiled or otherwise sterilised milk is likely to produce scurvy lacks foundation. While admitting that home sterilisation is perhaps to be preferred in the houses of the well-to-do, he points out that in the houses of the poor there is much risk of fresh contamination, and "no practicable guarantee of the proper quality of the milk supplied to the masses." This is very true, and if this be admitted we must accept the author's conclusion "that an abundant and cheap supply, under effective supervision, of thoroughly good milk in a sterilised form would be a great national boon." In Paris sterilised milk is sold to parents of patients at some of the children's policlinics, and we believe that a similar system has been worked in New York and some other cities in the United States. To be really effectual, however, there must be proper guarantees that the milk supplied to the institutions for sterilisation is whole milk of good quality; for, again to quote Dr. Donkin, "the commercial abstraction of cream from milk, so commonly practised to a greater or less degree, is to be credited with a considerable proportion of the alleged nutritive failure of cows' milk."

The second section of the book deals with general diseases—rickets, syphilis, tuberculosis, etc.—and the third with acute febrile diseases. The article on whooping-cough is well worth reading on account of the very frank discussion of the nature of the cases of paroxysmal cough simulating whooping-cough; with some apparent reluctance the author comes to the conclusion, which we believe to be sound, that unless the collateral evidence is absolutely conclusive against the diagnosis of whooping-cough, all such cases should be regarded as infectious. By acting on this rule a few cases will be isolated unnecessarily, but the opposite mistake, which would have much more serious consequences, will be avoided.

Diseases of the nervous system are treated of in the fourth section. The author has brought together a good deal of information which has not yet generally found its way into textbooks. The articles on chorea and on hysteria are the best, and contain much original thought and observation. That on the paralysis of childhood is also excellent, but might with advantage have been a little fuller. The two remaining sections of the book, on the diseases of the respiratory and of the circulatory system, do not call for special notice; we have not noted any special novelty in the discussion of the former, and the latter section is distinctly meagre.

A great many of the subjects dealt with in this book are very debatable, and it would not be difficult to find reasons for differing from the views expressed by the author on many points. To do this, however, would add unduly to the length of this review, and would, perhaps, fail to give a fair impression of the merits of the work. If the views advanced are not always those commonly held, the author always gives his reasons, and the perusal of his arguments will be a healthy stimulus to original thought and observation. The book is one which may be confidently recommended to the study of every practitioner who takes an interest in the subjects with which it deals, and keeps an open mind on the many problems which yet remain to be solved.

Infectious Diseases: Notification and Prevention. By Louis C. Parkes, M.D.Lond., D.P.H. London: H. K. Lewis. 1894. (Foolscap 8vo, 185 pp., 4s. 6d.)

Dr. Louis Parkes has made a praiseworthy attempt to place in the hands of the medical practitioner a handbook containing "all the enactments in force" bearing upon the notification and prevention of infectious diseases. The statutes dealt with are the Public Health Act, 1875, in its relations to infectious disease; the Notification Act of 1889, the Disease Prevention Act of 1890, and the Public Health (London) Act of 1891. These, with reprints of cholera orders, regulations, and memoranda form the first part of the volume, the sections being arranged in a very convenient order, explanatory notes inserted, and reference made easy. We could, however, have wished to see something said in the matter of vaccination and revaccination, and it is not easy to understand why the consolidated Cholera Order of September 6th, 1892, is omitted, or why the present phase of the rag question *qua* cholera is not mentioned.

Dr. Parkes includes summarised accounts of the incubation, quarantine, and infective periods, and possible sources of infection of the common infectious diseases, treating also of school epidemics, isolation at home, questions of disinfection, and the relation of the health officer and the general medical practitioner, all eminently useful and concise. The pages devoted to this latter important subject have been carefully penned, and demand equally careful reading. They form a solid basis on which it were well that all medical men should ground their action.

NOTES ON BOOKS.

Dictionary of the Active Principles of Plants: Alkaloids; Bitter Principles; Glucosides: their Sources, Nature, and Chemical Characteristics, with Tabular Summary, Classification of Reactions, and Full Botanical and General Indexes. By Charles E. Sohn, F.I.C., F.C.S. (London: Baillière, Tindall, and Cox. 1894. Long imp. 8vo, pp. 202, 10s. 6d.)—The title sufficiently indicates the scope of this work. It contains an alphabetical list of plants, under each of which a full description of the physical and chemical properties of their active principle or principles is given. For convenient reference the whole is summarised and accurately indexed. The information is up to date, and appears well chosen and reliable.

The Emperor of Austria has made the anniversary of the death of the late Crown Prince Rudolph the occasion for giving a sum of 10,000 gulden towards the establishment of a home for tuberculous patients in Vienna.

THE NURSERIES OF CHOLERA.

An Address delivered before the Section of Public Medicine of the British Medical Association at Newcastle, August, 1893.

By ERNEST HART, D.C.L.,

Chairman of the Parliamentary Bills Committee.

(Continued from p. 363.)

IV.—MECCA AND ITS MARTYRS.

We must now turn our attention to another great religious festival—a different religion, a different people, a concourse drawn together from a far wider area, but one which, like the Hardwár fair of old, has become a focus and a diffusion point of cholera, a cause of death and disaster to the pilgrims, and of danger to the world.

A Perilous Pilgrimage.

Shut up in our insularity, and taught to believe that Christianity and the civilisation with which it has of late centuries been associated are the great motive forces of the world, we are too apt to forget the power of that other religion which for so many centuries was the great competitor with Christianity. The wars between the Crescent and the Cross occupied the Middle Ages, and the standard of Islam stills blocks the way against the Christian country which possesses the largest army in the world. Mohammedanism is not dead, and Islam still remains the faith of 200 millions, or 14 per cent., of the human race—a faith which is absolute and obedient, and which leads intelligent men, men of position and whose lives are cast in pleasant places, to suffer pains and discomforts which to an ordinary *dilettante* Christian would be absolutely intolerable, rather than break the commandments. Among the ordinances, which to the faithful are commands, is that of pilgrimage to Mecca. From Turkey, from a belt of country extending eastwards across Asia to the farthest confines of Malay, and from the whole of Africa, pilgrims set out every year, turning their steps towards Mecca in obedience to this command. Many fall sick by the way, many die; from about 60,000 to 100,000 each year attain their end, months, and sometimes years, having been devoted to the task, and sufferings and hardships undergone which it would be difficult to describe. This intensity of faith must be remembered if we are to realise the frame of mind of those educated men who, to our undisguised surprise, are found willing to submit not only to the perilous and weary journey, but to the dirt, the danger, the extortion, and the rascality of the final act—their residence in the holy city. To many of them this is but a flea-bite after what they have gone through, and with Paradise in sight they will not draw back, after suffering so much, even if to advance mean martyrdom. Moreover, it is but for once, and when the Hajji has returned to his native country his personal interest in reform is slight. The Meccans therefore hold the key to the position, and do much as they please, allowing their city to become a pest-house, a centre where infection can intensify, and whence it can be spread by returning pilgrims over the whole world.

"Where only Man is Vile."

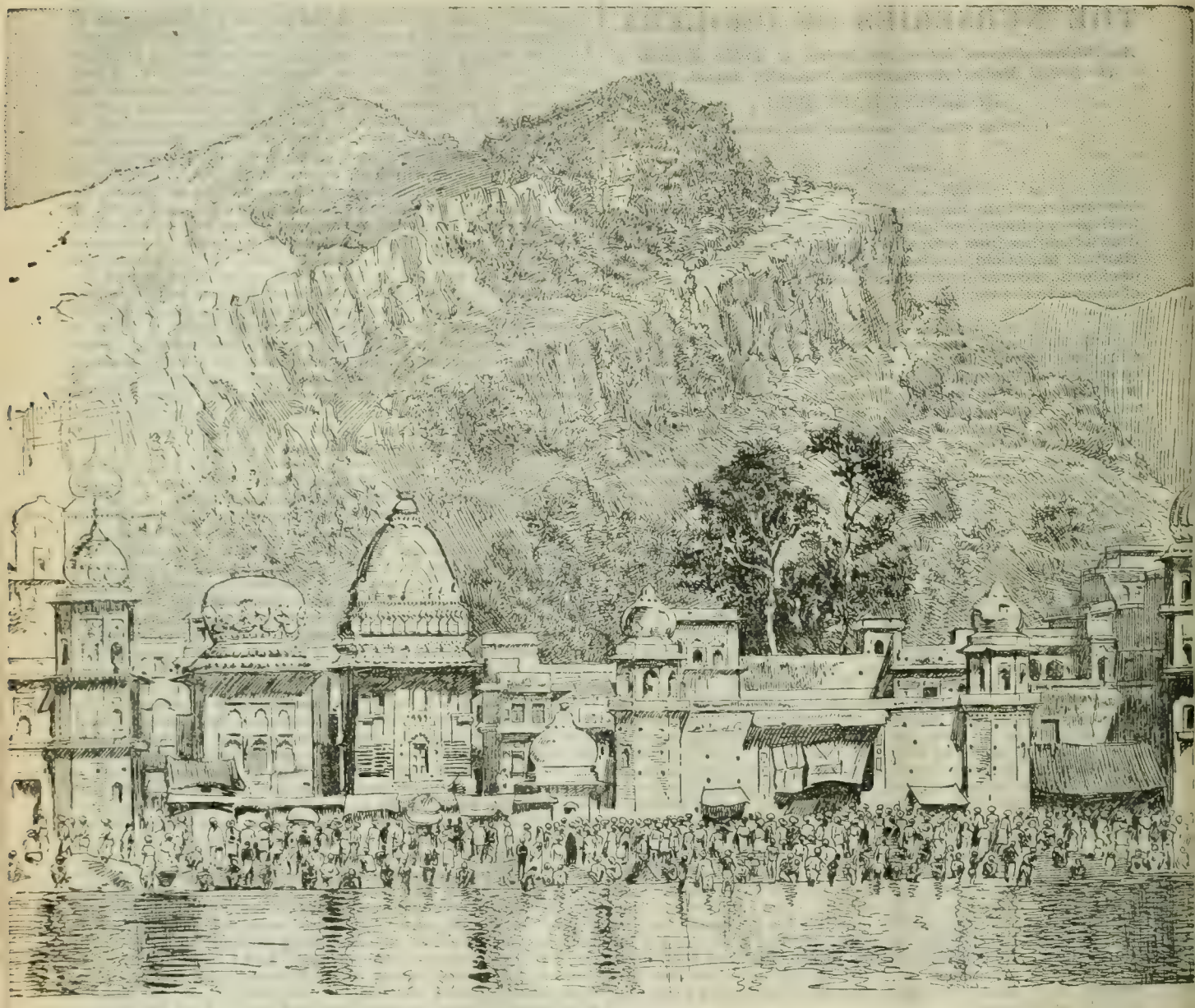
Mecca, the birthplace of Mohammed, stands in a narrow valley sixty-five miles from Jiddah, its port, on the Red Sea. The country close around is barren, and for provisions the inhabitants have to depend on importation from a distance. It has, however, a plentiful supply of water. From the times of earliest history it has been a trading centre, and long before the time of Mohammed was esteemed a holy place, possessing sacred objects which repaid a pilgrimage. Although the modern pilgrimages, then, with which we have now to do are performed in obedience to the commands of Mohammed, it may be doubted whether the customs of the place and the details of the observances are not, in many cases, survivals of practices which were current long before the origin of Islam. The city itself is mostly modern, having been frequently devastated by winter torrents from the hills around; the streets are, for an Eastern city, broad and airy, but unpaved and filthy. Drainage does not exist; water there is in plenty. The population is about 60,000, and is mainly supported by the proceeds of the annual pilgrimage and by the manufacture of sacred relics. Compared with the problem of dealing with an Indian fair, the purification of Mecca would seem by no means an insuperable difficulty. Clean dry rocks, pure water, and a blazing desiccating sun are the materials on which we have to work. Man, and man only, is the difficulty. No infection need defile the water, which constantly flows through the underground conduit from the mountainous district beyond Arafa; no local disease need reappear in the food, which all comes from afar; no difficulty need be found in dealing with filth, which, buried in the sand, quickly dries up into a harmless powder, and might be made by degrees to fertilise the arid soil. The inhabitants, however, choose to live crowded together and to surround their houses with refuse and filth; they choose to foul the water supply, and from immemorial usage they regard the pilgrims as victims to be fleeced rather than as co-religionists to be protected. The result is that, while Mecca may be well enough suited for the Meccans in ordinary times, it is not in any way prepared for the strain which comes upon it during the annual pilgrimage, and if a disease such as cholera be then introduced, it straightway spreads like wildfire. If, however, we inquire how it spreads, by what means the infection is distributed, we find that here, as in India, and everywhere else, the main factor, the constant cause, is the drinking of cholera-polluted water.

At Hagar's Well.

The proceedings of the pilgrims themselves, the ritual gone through by them during their stay, none of which they like to miss, little as their meaning may be understood, also tend to the spread of the disease, if once it be implanted among them. The march to Arafat, the night spent there in devotion or in the crowded coffee booths, the "stand" by the Hill of Mercy, the rush to Mina, the sacrifices, the fearful stench from the thousands of slaughtered animals, the tawaf, or sevenfold circuit of the sanctuary, each of the many thousand pilgrims kissing the black stone as he passes, the blazing heat, the intolerable thirst, the religious fervour which leads them to accept everything as holy which belongs to Mecca, all drive the unfortunate pilgrims to the consumption of the vilest fluids under the name of water. The ground is defiled, there is no attempt at conservancy, the wells are poisoned by filth, and, if that happens to be choleraic, cholera breaks out. One of the observances is especially dangerous. Next to the Ka'ba the principal point of interest in the Mosque is the Well Zemzem, a deep shaft said to be the source from which Hagar drew water for her son Ishmael. The pilgrims are many, the well, however, is but one, and its water not plentiful at the best. Yet everyone wishes to drink and to bathe in these miraculous waters. Each pilgrim in turn, stripped to the waist, stands beside the well while a bucket of the water is poured over him; of this he eagerly drinks as it flows from the bucket, the rest flowing over his naked body, soaking through his loin cloth, and streaming back into the well to be used again. His place is immediately taken by another and another, and so on, each drinking the washings of the rest. Can we wonder then that this water, on analysis, is found to have the characteristics of bad specimens of sewage, or that after the pilgrimage is over the roadside should be found strewn for a dozen miles with the dead bodies of the faithful, killed by a draught of dirty water, after all the difficulties and dangers they have overcome? There is a bathos about it which would appeal almost to one's sense of humour where it not so serious an affair.

A Ghastly Spectacle.

This is an actual business of to-day. I am not speaking now of things which happened years ago. From June 8th to June 25th, 1893, there were 2,201 deaths at Mecca; and on one day (June 26th) there were 499 at Minah and 500 at Mecca, making in one day 999 deaths. From June 26th to July 24th there were 499 deaths at Minah, 3,408 at Mecca, and 303 at Jiddah. I have an account of the state of Mecca, written by Dr. Chaffey, an Egyptian Moslem, sent by the Quarantine Board as their sanitary correspondent to Mecca, which reveals a ghastly state of things happening, one may



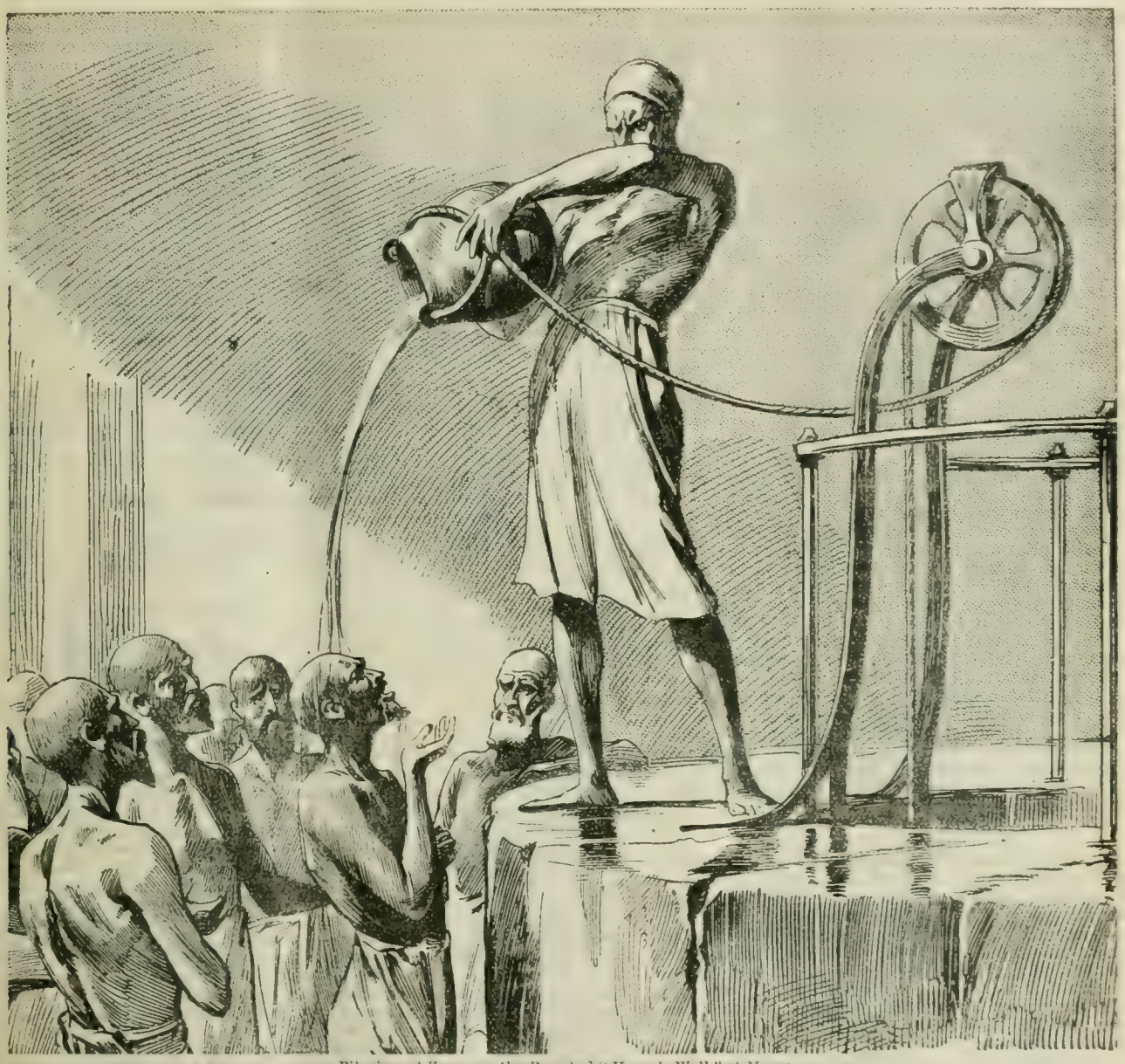
A Panoramic View of Hardwár

say, almost at the door of Europe, taking account of these days of rapid steam communication. Dr. Chaffey says:

On arrival at Mecca I commenced at once an inspection of the town. The hospital, private houses, and tents were full of people suffering from cholera. I sent you by telegraph the number of deaths declared officially, but on account of the extraordinary mortality it must be admitted that the number of deaths could not be precisely known, and it may certainly be considered to be double that officially declared, even more. At Moona it was impossible to bury all the dead, who lay here and there in heaps. Round about the Syrian Caravan (Mahmal) there was a large number of bodies lying unburied. Returning from Moona to Mecca I found the route strewn with dead. In the town of Mecca itself dead bodies were lying about in a state of putrefaction, and when they were at last transported to the cemetery they were thrown down there, and left lying for days unburied, from want of a sufficient number of gravediggers.

A Danger to the World.

The whole affair is horrible. The place is a slaughter-house, where the best men of the Mohammedan world are being every year destroyed. For it must be borne in mind that the injunction to visit Mecca is not imposed on every-one, but on those only who are able to devote the time and able to provide for their families while away. We make a great mistake if we class the Meccan pilgrims with the poor, the miserable, and the helpless; the cream of the faithful go to Mecca, and as years go by and the knowledge spreads that cholera is a preventable disease, a mere filth disease, spread by dirty customs and dirty water, Mohammedans are awaking to the fact that their best men are being gratuitously sacrificed, and from sheer ignorance and stupidity exposed to a danger never contemplated when the duty of pilgrimage was imposed upon them. But no nation, no part of the world can isolate itself or afford to stand aloof from the rest. This is not a mere Mohammedan question; what is a danger to the pilgrims is a danger also to the world; for it is through Mecca and its pilgrims that cholera spreads to Egypt, and thus to all the ports of Europe.



Pilgrims at Zemzem, the Reputed "Hagar's Well" at Mecca.

V.—CONCLUSIONS.

The infection of cholera does not fly about haphazard in the air; it does not go where it listeth; it has no voice in the decision whether it shall live and destroy or shall perish and be harmless; it cannot jump across open spaces, and when it moves from place to place is always carried, and mostly carried by man. It is, however, a living thing, and by the act of living produces the disease; within man's body it multiplies exceedingly, it is carried by him to fresh districts. Outside the body, however, it is passive and, although it may grow, cannot force its way into man again, and would in time die out if man were but careful not to swallow it. Thus it happens that when cholera travels it always follows lines of human communication, one person after another carrying it a step further on its journey.

Limits of Infection.

Now, suppose we grant for a moment that cholera is helplessly and hopelessly endemic in certain parts of India—a thing which I will not readily grant, believing as I do that what is endemic is the habit of drinking dirty water—but supposing that we grant so much, it still can travel out of its endemic home only so far as a man can carry it before he drops from the disease. This distance is increasing every year owing to railways and steamboats transporting the infected man a longer distance during the period of incubation: but, be the distance long or short, the disease would halt at the end of the first stage of its journey, unless the infection there were again swallowed by the healthy, and thus again carried forward another stage by another porter. The continued existence of an endemic area is doubtless a reproach to the sanitation of India, but so also is the repeated spread of the disease a reproach to the civilised nations among whom it so easily takes root, for it never would take root at all but for the prevalence of the filthy custom of drinking contaminated water. Some time, perhaps, cholera may be rooted out of its home; but that certainly will not happen in our generation, involving, as it will, a complete reversal of the habits of a people the very keynote to whose existence is custom and tradition.

Mecca the Centre of Infection.

England, however, is not standing idle in the matter. Sanitation is everywhere a department of Indian State administration, and every province has a sanitary commissioner, with his subordinate staff. The larger municipalities are expending large sums in obtaining pure water supplies, their example is gradually permeating the smaller communities, and a constant pressure is being brought to bear on the villages to avoid pollution of their wells and tanks. It is, however, a slow business with so vast a country, inhabited by so many diverse races. Meanwhile the teaching of the Kumbh fair at Hardwár in 1891 is not likely to be thrown away, and it is probable that in time the progress of cholera northwards, its old route to Europe, will be brought under control. It is hopeless, however, to look for any improvement in the Red Sea route so long as Mecca remains as it is. We hope to check the progress of cholera towards Afghanistan and Persia by carefully guarding the sanitation of the northern fairs; we dare not, however, expect to see its progress towards Egypt and the South of Europe materially checked until the authorities responsible for it will equally carefully guard the sanitation of Mecca. It is not by quarantining the pilgrims and setting up a series of lazarettos, which themselves become fresh centres of infection, that cholera can be stopped, but by looking after the pilgrims' resting places, and rendering them so clean that if cholera arrive it shall not spread, and shall not set out again on its forward march. Mecca is the place in which to stop the cholera. From every point where cholera can originate pilgrims set out, each of whom may bring with him the infection. All pilgrims, however, go to Mecca, where they wait time enough to trap the cholera and render it harmless if Mecca were but a cleanly place. Again, when the days of pilgrimage are over, the hajjis set out on their return, radiating from Mecca to every quarter of the compass, and carrying such infection as they may have gained. This, however, is not now the infection which was brought from India, but a fresh generation, born at Mecca, which would never have come into existence at all but for the uncleanliness of the place. Mecca, then, is the one place where one can put the foot down firmly upon cholera, whether coming in or going out. If the disease arrives at all, it comes there one by one; but it goes out by thousands, and it is giving it an enormous start to let it get to Egypt before it is interfered with. Egypt is practically part of Europe.

An Appeal to Mohammedans.

At the present time the precautions taken seem chiefly to consist of supervision of the Indian pilgrims, who are presumably the sources of infection, and their isolation at Kamaran, when disease appears among them during their voyage from Bombay, and, as regards the returning pilgrims, their so-called quarantine by the Egyptian authorities at El Tor. I cannot find that any systematic precautions are taken in reference to the great numbers who return to their homes by the various caravan routes which converge on Mecca, and it is clear that no amount of quarantine by sea, even if itself successful, can ever be a protection so long as Mecca remains a nursery of cholera and disseminates the disease by caravan. Mecca is the centre to which it converges, and from which in turn it scatters, and Mecca must be made clean. The whole district lives by the pilgrims. The least it can do after taking their money is to spare their lives. The difficulty is, who is to undertake the work? The Suzerain is the Sultan, who, being the religious head of the Mohammedan world, would probably hesitate to incur the odium of being dictated to by the Christian Powers in such a matter. The actual ruler is the hereditary Sheriff of Mecca, who is so firmly fixed in his position that the Sultan might well decline to enter into conflict with him, risking, as he certainly would thereby, a split among his followers. Direct interference by any single European Power is hopeless. Any Government making the attempt would soon find itself involved in the mazy labyrinths of the Eastern question. To wait for the spread of education in sanitary matters to such dark places is to wait till doomsday. No; the only person who can usefully interfere is the Sultan, but to interfere with efficacy he must be supported by a strong backing of Mohammedan opinion. This can only be done by the united action of the leading men in the various centres of that religion. If they can be brought to acknowledge, not only the greatness of the evil, which by personal and family experience they know well enough, but the direction in which the true cure lies, there may be hope of some action being taken. In the meantime the Powers might well unite, not perhaps to urge the Sultan, but to make his action easy, and to put no obstacles in his way; and England, great Mohammedan Power that she is, might well do all that is possible to lighten the lot of those unfortunate pilgrims who, for the sake of Europe, are isolated at Kamaran. If inspection is to be effectual, it must not be rendered hateful to those who are inspected; and, knowing the feelings of Mohammedans about their women, we might well afford to provide the Indian pilgrim service with some female doctors. The aim should be in all things to obtain the hearty co-operation of the Mohammedans themselves. If this were obtained Mecca, instead of being a place of rest and refreshment for cholera infection, might become a sanitary barrier which it could not pass.

What Should be Done.

Let me then formulate the steps which ought to be taken to save the Mohammedans from the danger caused by their pilgrimages, to save the world from the danger caused by Mecca:—

1. The Indian sanitary services should be reorganised on the following basis:

(*a*) An Imperial sanitary department attached to the Government of India.

(*b*) A provincial sanitary department attached to each of the provincial governments, such as Bengal, North-West Provinces, Punjab, Madras, Bombay, Central Provinces, etc.

(*c*) A local sanitary department attached to each municipality, district board, etc.

(*a*) The Imperial sanitary department should be administrative and scientific, and quite distinct from the sanitary department of the army. It should consist of (1) the Sanitary Commissioner with the Government of India; (2) a deputy sanitary commissioner; (3) a medical statist; (4) a veterinary commissioner; (5) a sanitary engineer; (6) a Minister of Health, having a seat in the Viceroy's Council, as president. Scientific agents: Laboratory with trained experts. Duties: The advising of the Viceroy and Council on important health matters, either initiated by the Imperial sanitary department, or referred to it by the local governments; the collection and publication of information as to epidemic disease existing in India and in other countries; the right of asking from provincial governments what they propose to do, or have done, in checking or inquiring into diseases affecting man, animals, or agriculture in their provinces; the arranging that all administration reports shall be drawn up on a uniform plan for ready reference; the acquiring of all information regarding the movements of pilgrims, coolies, and emigrants, and the advising the provincial governments, and requiring the latter to take proper precautions; the consideration of new sanitary laws, etc.

(*b*) The provincial sanitary department should consist of the following sanitary officers appointed by the local government: (1) Sanitary commissioner; (2) assistant sanitary commissioner; (3) sanitary engineer; (4) a president, who should be a high officer in the Civil Service. Travelling agents: Deputy sanitary commissioners or inspectors, veterinary surgeons, deputy sanitary engineers, as may be required. Scientific agents: Trained professors and assistants in government laboratory for bacteriological, chemical, agricultural work, etc., and general sanitary investigations requiring to be done in laboratory. Duties: To control local authorities; to institute special investigations at any particular spot on any particular subject; to make by-laws and amend sanitary laws; to investigate diseases of men and animals, and study agricultural pests, etc.; to analyse waters, etc.

(*c*) Local sanitary departments to consist of municipal commissioners or district magistrates, with civil surgeon when obtainable. Executive agents: A health officer, attached to one or more towns; an engineer in a similar position, and a sanitary staff for each place as required. Duties: Conservancy, water supply, building regulations, drainage;

The side of th Kaaba facing Yemen

General View of Mecca, with the Cloisters of the Great Mosq and the Kaaba

Zemzem Gate.

registration of births and deaths, vaccination, stamping out of infectious disease, and informing provincial authority by weekly reports as to prevalence of cholera, small-pox, or other dangerous disease.

2. A complete sanitary regulation of all Indian fairs should be undertaken, the precautions so successfully taken at Hardwár in 1891, of which full details have already been given, being taken as a type.

3. A rigid system of medical inspection of all pilgrims should be instituted at the ports from which they start, the sick being detained, and the healthy alone allowed to proceed. This, it may be added, would be all the more effectual in regard to Indian ports, from the fact that a second weeding out of the infected can take place at Kamaran.

4. The medical inspection at Kamaran should be so conducted as to ensure its complete efficiency. Among the inspectors should be qualified medical women, without whose assistance the medical inspection of Mohammedan women must be either a farce or a great cause of offence, and if possible these medical women should be selected from among Mohammedan women doctors, of whom numbers are now educated in India.

5. At Jiddah the sick would again be weeded out.

6. The sanitation of Mecca should be thoroughly reorganised under the auspices of the Turkish authorities. The water supply from its source to its distribution should be carefully inspected and protected from contamination. The poison well Zemzem should be cleaned and provided with a larger supply and a continued change of water, and the most complete precautions taken that the water used to bathe the pilgrims should at once run away, and under no circumstances return to the well.

7. During the time of the pilgrimage a complete system of conservancy should be carried out on the Hardwár plan, the strictest precautions being enforced to ensure the immediate removal of all refuse and the prompt isolation of all sick.

[*M. Hanotaux, Minister Plenipotentiary and delegate of France to the International Sanitary Conference now sitting in Paris, having stated that the substance of this address and the recommendations contained in it afforded the basis for the propositions to be submitted to that Conference, it has seemed desirable to publish in these columns the full text of the address, which has not hitherto appeared in any medical periodical in this country. The address at the time of its delivery was extensively reported abroad and in the columns of the "Daily Graphic," to which paper we are indebted for the illustrations accompanying it. Copies of these have been deposited by request in the International Medical Library of the United States at Washington, together with maps illustrating the progress of cholera during the several epidemic years since 1849.*]

MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

THE usual monthly meeting of the Executive Committee of this Society was held on February 15th. The chair was taken by Dr. de Havilland Hall, the Deputy Chairman, and there were also present Dr. J. Pickett, Mr. J. Brindley James, Mr. H. H. Clutton, Dr. Major Greenwood, Dr. A. S. Gubb, Dr. W. Knowsley Sibley, and Mr. Edward Bartlett.

The accounts presented showed that the Society had received 21 proposals for new membership during the month of January, and in addition 15 of the existing members had applied to have their benefits increased. This is about double the average number of new proposals, and is satisfactory evidence that the efforts recently made to bring the Society more prominently before the medical profession are bearing fruit.

A long list of sick claims was presented and examined, and in every case the sick pay was ordered to be continued. Seven special reports were also presented relating to as many cases of chronic illness, and their contents left little hope that any of these members would ever be able to resume their professional work.

The Secretary reported that the valuation of the business was being proceeded with, and it is hoped that some of the results will shortly be before the Committee.

Prospectuses and all information may be obtained on application to Mr. F. Addiscott, Secretary, Medical Assurance Society, 33, Chancery Lane, London, W.C.

THE GREENWICH EXPLOSION.

Nature of the External Injuries in the Case of Martial Bourdin.

WE are enabled to publish the following authentic details as to the nature of the injuries received by the man Martial Bourdin. His age was stated to have been 22, but he appeared to be four or five years older. He was admitted to the Seamen's Hospital, Greenwich, on Thursday, February 15th, at 5.15 P.M., having been found about half an hour previously in Greenwich Park in a state of collapse, and suffering from injuries caused by a loudly detonating explosive.

The patient, who had been tended before admission by Mr. W. Willes, was at once seen by Mr. Jervis, the house-surgeon, who found him profoundly collapsed, and in a dying condition. The surface was cold, and the face very pallid and spotted with blood. There was much restlessness, and the man was barely conscious. The only remark made in answer to inquiries was that he "felt cold." There was no smell of burning, but a strong acid odour, like that of acetic acid, was distinctly perceptible on removing the clothes. The contents of the pockets, which consisted of printed and written papers and some money in gold and silver, were intact, but stained with blood. There had evidently been much bleeding before admission, as the clothing was saturated. The left hand had been almost wholly removed, the forearm presenting a ragged stump, from the open extremity of which protruded fragments of carpal bones and long tendons, mostly flexors, which were still attached to their muscles. The edges of the torn skin were not discoloured.

After removal of the clothes, the chief external marks of injury on the trunk were presented in the upper part and right side of the abdomen. In the middle line in front, between the umbilicus and the top of the sternum, there was an oval wound which measured two inches from above downwards, and one inch and a half from side to side. To the right of this were two smaller and more superficial wounds, and in the right lumbar region, just below the last rib a small but deep and penetrating wound with everted edges. In the first of these wounds—that in the middle line—omentum and intestine were freely exposed, and from this and the wound in the lumbar region there was before death an escape of gas and blood. There were several large black eschars on both thighs and on both sides of the abdomen. The patient died at 5.40 P.M. The body was that of a short but well-developed and fairly muscular man, with small hands and feet, light hair, and a long moustache. The details of the *post-mortem* examination, which was made on Saturday, February 17th, at 1 P.M., will be given in full at the adjourned inquest on Monday next, but we are in a position to state that the internal injuries revealed at the *post-mortem* examination were such as might have been anticipated on examination of the surface of the body. There was a large rent of the duodenum, and the liver and right kidney were much torn. No metal nor foreign body of any kind was found in the abdominal cavity at the *post-mortem* examination. There were several wounds on the thighs and on the front of the trunk, from some of which small pieces of cloth were extracted. Beyond some firm and extensive pleural adhesions on the right side, no signs of injury or disease were found in any other internal organ.

PROFESSOR THEODOR PUSCHMANN, of Vienna, author of *A History of Medical Education from the most Remote to the most Recent Times* (translated into English by E. H. Hare London, 1891), is mentioned as likely to succeed the late Professor Hirsch in the chair of History of Medicine at Berlin.

PASTEURISM AT PADUA.—Statistics of the Antirabic Institute of Padua, of which Dr. De Giovanni is Director, recently published by Drs. Zaniboni and Bonetti, show that in 1891 the total number of persons treated was 57, and in 1892, 48. No death occurred in either series.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

Subscriptions to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, FEBRUARY 24th, 1894.

THE MEDICAL SCHOOLS AND THE NEW UNIVERSITY.

We publish elsewhere an interesting letter by Mr. Macnamara upon the subject of the scheme for a university for London proposed by the Royal Commission. Mr. Macnamara, it will be seen, supports the opinion that, granted certain alterations of detail, to which we have already alluded, the scheme furnishes the outlines of a good workable university capable of securing for London students the advantages for which we have repeatedly contended. There is a further question which the Royal Commission has raised but which the operation of natural causes could not have failed to bring very shortly to the front, the question whether the teaching of sciences contributory to medicine should still be carried on the in connection with each several hospital or be concentrated in one or in some few places. The Commissioners remark very pertinently upon the small number of students attending the earlier classes in some of the schools, of the scanty remuneration which these schools are able to offer their scientific teachers, and on the consequent difficulty of obtaining efficient men; and propose that, "with regard at least, to the smaller medical schools the teaching of physics, chemistry, biology, anatomy, physiology, pharmacology and materia medica, pathology, hygiene and public health, and forensic medicine, should be concentrated into one or two institutions."

Simple and plausible as such a proposal sounds in the abstract, it is impossible for anyone familiar with the London schools not to foresee at once many serious difficulties in putting it into practice. It is an obvious reflection that the crowded state of the modern medical curriculum demands the greatest economy of the medical student's time if he is to get through his prescribed work at all; and that the student whose laboratory is but a few steps from the wards of his hospital is so far at an advantage compared with one who has to go half a mile, or a mile, or a mile and a-half between the two perhaps several times a day.

If, therefore, teaching in these subjects is carried on, as presumably it will, in University and King's Colleges, it is not very likely that the schools attached to the large city Hospitals, with their comparative command of resources, will be at all willing to relinquish it, or to place themselves by doing so in a position of disadvantage. But if these schools adhere to the present system, and carry it out with a reasonable degree of efficiency, it becomes exceedingly doubtful whether any school which adopted the Commissioners' proposals could exist at all, unless it were by such a reduction of fees as would render efficiency of any kind impossible. A school whose students were obliged to journey to and fro from class to class, in all weathers, through London streets, would require, it may be surmised, an exceptional array of talent to enable it to compete with one that combined all its departments upon the same premises.

And yet the position of medical education, quite apart from the Commissioners' recommendations, is sufficiently serious for some of the smaller London schools. As one department after another of the curriculum develops into a "speciality" beyond the province of a physician or surgeon to teach, the difficulty increases of keeping up to the necessary standard in the matter of salaried teachers, of laboratory accommodation, and of costly teaching appliances; and the question how much longer the school can be conducted on a self-supporting basis comes nearer. The commercial tendency of the age is undeniably towards centralisation and large establishments.

Yet we should not, we confess, view with complacency the possibility of the extinction of even one of the existing London schools. To this question of adequate medical education there are two sides. The Commissioners have rightly lent an attentive ear to the claims of scientific teaching, which we would by no means minimise; but we are in the habit of hearing another side of the case as well, and cannot be deaf to the voice of the general practitioners, repeatedly warning us that the highly-taught graduate of the present day may still be sadly wanting in the practical knowledge and practical aptitude of his more rudely-educated predecessor. Medicine and surgery, we must not forget, are not all pure science. There is an art of medicine and surgery, equally essential to our professional utility, and, like other arts, it has to be learned, and can only be learned, by assiduous practice of its methods under the supervision of competent teachers. Eye, ear, and hand need to be trained as well as memory and reason, and the training of these three senses to their special work demands, as its first essential, a full field of clinical work. We have often expressed a wish that something equivalent to the old apprenticeship system could form part of the latter-day curriculum; but if the student's training must needs be mainly conducted in hospital wards and out-patient rooms, we regard it as of vital importance that the supply of material should be adequate for the purpose. There are at present between two and three thousand medical students in London. The total can hardly fail to increase should a reasonably accessible metropolitan degree in medicine be created. Even as the numbers are, the 4,750 beds at present available are, in our opinion, none too many if each student is to get his proper share of that personal clinical practice which is equally essential to the making of a medical man with the teaching of the lecture rooms and laboratories.

The whole question is at bottom purely a financial one. There is no lack of competent teachers for the London schools, as long as the schools are in a position to pay adequate salaries. It is premature to say that they will not be able to do so until the effects of the establishment of the proposed university can be seen and estimated. At present the schools are working under unfair disadvantages, for they cannot offer their students the distinction which Edinburgh or Manchester can give. But even if it should be eventually

found impracticable to carry on the schools on a self-supporting basis, after all medical education is a matter of public rather than private concern. Can no share of the public moneys, which have been so freely lavished on university education in Scotland and Ireland, be attracted to the needs of English medical students? And if the State should decline to consider English medical education its business, it must not be forgotten that there are other persons interested in the maintenance of the existing schools besides teachers and students. In the economy of a London general hospital, the existence of a school is an asset of no contemptible value. The privilege of conducting a school is the chief, in most cases the only, remuneration which the hospital offers, or needs to offer, for its entire medical and surgical service. Thanks to the school, the hospital can pick the talent of London to recruit its staff; thanks to the school, it can rely on the unwearied attentions of every member; thanks to the school, it can command an assiduous army of house officers and dressers; and all this it can do, and in most cases does, without the expenditure of a single penny in cash. It may be pertinently asked whether a hospital whose school is in danger of extinction from want of funds would not think it better economy to provide the modest endowment required rather than to allow so valuable a possession to be lost to it.

"STATE AID IN POISONING."

A writer in the *Pall Mall Gazette*, who is evidently well acquainted with the circumstances to which he principally refers, has under the above striking title described the ease with which poisonous articles of the most dangerous character can be procured without any limit as to quantity, or the observance of any precautions against accident or misuse. The materials used for photographic purposes—including corrosive sublimate, cyanide of potassium, nitrate of silver, etc.—are said to be readily sold in that way by dealers in photographic stores to all comers, and even to boys, who make photography a pastime, but are not aware of the dangerous nature of the substances. It is urged that this facility in obtaining poisons is a source of serious danger, and that it is most necessary such traffic in life-destroying articles should be put under proper legislative control.

There is unfortunately some foundation for this alarming representation in regard to the sale of photographic materials; but the writer in the *Pall Mall Gazette* is not equally correct in his remarks as to the need for legislative enactment. His acquaintance with the Act which regulates the sale of poisons is evidently very imperfect. Its anomalies do not lie, as he supposes, in the inconsistency of its provisions, but, as we have repeatedly pointed out in these pages, in the practical disregard of those provisions. The Act of 1868 did all that can be done by legislation to regulate the sale of poisons, with a view to public safety. It provided that the sale of certain articles should be confined to persons possessing legal qualification to supply them, obtainable only on the basis of proved competent knowledge of drugs and chemicals generally, and of their applications for medicinal and other purposes, and it prescribed regulations to be observed in the sale of poisons by those persons. It made the sale of the specified articles by any but legally qualified persons unlawful, and imposed penalties for infringement of these provisions. It also provided for other poisonous substances being made subject to the same restriction as occasion might require. The Act was passed under the influence of considerable alarm as to the dangers of poison, and with a full appreciation of the necessity of limiting the facilities with which poisons were obtainable. Unfortunately, as we think, the administration of the Act was entrusted to the Pharmaceutical Society; for though that body is fully competent to perform the duties of the position, its action has been considerably impeded by two circumstances. On the one hand, there is among the body represented by the Society a widespread aversion to the regulations prescribed by the Act; and, on the other hand, the Society has been charged wth endeavouring to establish a monopoly in the sale of poisons.

To this latter objection we do not attach much weight, since we hold it is desirable in the public interest that the supply of poisons should be monopolised by persons competent to exercise discretion and care in dealing with them, so as to prevent possible accident or misuse. The case is an exceptional one, to which free trade principles do not apply.

The other circumstance which has impeded the action of the Society in enforcing the law deserves more attention, for, singular as it is that chemists and druggists as a body should be disinclined to make the most of the position in which they are placed by the law, as the only recognised vendors of poison, that feeling on the part of many of them has been an obstacle to the efficient administration of the Act. The continuance of the sale of so-called "patent medicines," many of which are poisons within the meaning of the Act, is entirely due to the want of proper appreciation of what is requisite for public safety in regard to the sale of those articles, and the inordinate growth of the trade in them contrary to the provisions of the Act has been largely fostered and promoted by chemists and druggists. The conditions under which these articles have been sold by chemists and druggists has afforded a pretext for the argument that they may also be sold by other persons who have not the legal qualification, and until the provisions of the Act are fully enforced in regard to these articles, there can be no reasonable answer to that argument. Under the influence of the action taken by Mr. Ernest Hart in this respect, the Council of the Society has recently bestirred itself to enforce the law against the irregular sale of secret remedies. Owing to the length of time that it has been allowed to continue the task has become a difficult one, as is shown by the prosecutions which have been instituted, and it is incumbent upon the general body of chemists and druggists to support the action of the Council not only in their own practice, but also in pointing out infringements of the Act by others.

One of the results of the past neglected application of the Act is the difficulty of obtaining information as to its infringement sufficient for the purposes of prosecuting of offenders. The Bill introduced for the amendment of the Pharmacy Act ten years ago by Lord Carlingford proposed to meet that difficulty by transferring the power of prosecution from the Pharmaceutical Society to the police authorities by placing the punishment of offenders under the

Summary Jurisdiction Acts. If there is any foundation for the statement made by the writer in the *Pall Mall Gazette* that the Pharmacy Act, 1868, "is practically a dead letter in so far as it is capable of preventing the obtaining of poisons by irresponsible persons," it would appear that such a change is requisite now in order to deal satisfactorily with a state of things which is deplorable, and a danger to the public while it continues.

ANTISEPTIC MIDWIFERY.

The discussion which has lately taken place in the British Medical Journal in regard to the relation between bad drains and puerperal fever raised issues of great importance besides the more strictly academic question as to the etiology of the disease. A point to which we would direct special attention is that, so far as preventive treatment is concerned, the problem whether the infection comes by fingers or by drains is not of the supreme importance some would attribute to it, for there seems every reason to believe that both routes can be effectively barred by careful attention to the details of antiseptic midwifery. So far as books and published writings are concerned, there is, however, the widest divergence of opinion as to these details, and also in regard to the nature, the strength, and the mode of application of the disinfectants which should be employed. Among the various antiseptics recommended perchloride of mercury seems to be the one in which confidence is most generally placed, but even if we accept that as the standard antiseptic we are at once met with the question of strength of solution, which varies according to different authors from 1 in 1,000 to 1 in 4,000; and as to whether or not it is to be injected into the vagina, there seems not only to be no agreement, but in some books an apparently careful avoidance of explicitness.

Perhaps these differences may be to some extent due to the great dissimilarity of conditions in hospital and in private practice. Everyone recognises the immense improvements which have taken place in lying-in hospitals all the world over as the result of the careful application of antiseptic methods to their daily work, but it is pretty clear that the extreme precautions which have been found advisable in these institutions cannot be essential in ordinary private practice. In hospitals each patient must be looked on as a possible source of infection, and the dangers arising from their physical propinquity must be neutralised by erecting a perfect wall of antiseptics between them. In private practice, however, the only point in which one patient comes in contact with another is through the doctor and the nurse, and so far as case-to-case infection goes, if they take proper precautions, antiseptics really need not be applied to the patient at all. We cannot, however, entirely eliminate the harmfulness of local dirt and local insanitary conditions, unless we apply the system in some degree to the patient also, and obviously the dirtier and more unhealthy the surroundings the more complete the precautions necessary. Still in midwifery as in surgery it remains the fact that if the hands, the instruments, and the discharges are kept sweet, the interior of the wound will, to a large extent, look after itself. It is the knowledge of this fact which has been at the root of the great simplifications which have of late years taken place in antiseptic treatment, and which now make it possible to bring midwifery into line with surgery as regards the *rationale* of the precautions to be adopted.

The application of antiseptic methods to all the various details and events of obstetric work is a large subject, and one worthy of more minute treatment than it usually receives in the textbooks in common use by students. On this we cannot touch, but there are certain things which are so essential in every case, and are, we fear, so frequently neglected, that even at the risk of appearing elementary, we formulate them as a routine to be followed in every lying-in chamber both by doctor and nurse:—(1) the hands and wrists should be thoroughly cleansed with hot water, soap, and nail brush, and then soaked in some antiseptic solution, of which perchloride of mercury 1 in 1,000 is the best, whenever the patient's genitals have to be touched, and no lubricant should be employed which is not antiseptic: (2) in an early stage of the labour the external genitals should be thoroughly cleansed with warm water and soap, and then swabbed with the same antiseptic solution, pledgets of cotton wool being used and no sponges allowed: (3) during the progress of the labour the external parts should be occasionally wiped with pledgets of wool moistened with the antiseptic; (4) the washing and disinfection of the external parts with soap and water, followed by perchloride, should be repeated after the labour is over and once a day afterwards; (5) each time a diaper requires to be changed during the after-progress of the case, the outer parts should be wiped with a pledget moistened with perchloride solution; (6) all instruments should be thoroughly cleaned by boiling, and be disinfected immediately before use either by perchloride, 1 in 1,000, or by carbolic lotion, 1 in 20; (7) whenever either the finger or an instrument has to be introduced the vulvar fissure should be previously cleaned with pledgets of wool soaked in perchloride solution, 1 in 2,000: (8) the diapers should be clean, preferably either the "wood wool" or "sanitary" pads sold for the purpose; but, if the ordinary diapers are used, care should be taken that they are boiled in the washing.

All these are perfectly simple proceedings, and from their very simplicity absolutely harmless, although they doubtless involve a little trouble. If surgeons and nurses did not pass from case to case, possibly some even of these details, especially the use of chemical antiseptics, might be omitted, but as things are, and according to present ideas regarding antiseptic methods, they seem to represent the irreducible minimum of antisepsis which can safely be recommended.

Dr. Alfred Parsons, Assistant Physician, Sir P. Dun's Hospital, has been appointed Physician to the City of Dublin Hospital, in succession to Dr. Hawtrey Benson, resigned.

The first Hunterian Society Lecture will be delivered by Dr. Pye-Smith on Wednesday next, at 8.30 P.M., at the London Institution, Finsbury Circus. The lecture, which will be on "Rational Therapeutics," will be open to all members of the profession.

A meeting of the Executive Committee of the General Medical Council will be held on Monday next. We believe that a communication from the Royal College of Physicians of Ireland with regard to the examinations of the Conjoint

Board of the Royal College of Surgeons in Ireland, and the Apothecaries' Hall in Dublin, which has been sent in, will be brought before the Executive Committee on this occasion.

PROFESSOR VON PETTENKOFER, it is stated, has decided to resign his chair in the University of Munich at the end of the next (summer) semester.

DR. LOCKHART GILLESPIE has been awarded for the present biennial period the Freeland-Barbour Fellowship of the Royal College of Physicians of Edinburgh, a Fellowship founded by Dr. A. H. F. Barbour in memory of his father.

WE regret to have to announce the death of Dr. William Leishman, Emeritus Professor of Midwifery in Glasgow University. Dr. Leishman, whose resignation of the chair of Midwifery took effect only recently, died at Blairmore, on the Firth of Clyde, on February 18th.

THE Harveian Lectures of the Harveian Society of London will be delivered in November and December next by Mr. Herbert W. Page, Surgeon to St. Mary's Hospital, who has chosen for his subject "Some Disorders of Nervous Function due to Injury and Shock."

THE INFECTIOUS DISEASES (NOTIFICATION) ACT.

WE have received a further communication on this subject from Dr. Leslie Phillips, but we think it unnecessary to continue the discussion on the lines indicated by him. We have emphatically endorsed the opinion of our correspondents that no penalty attaches to a medical man for his notification under the Act to the medical officer of health of a disease as an infectious disease which is subsequently found not to be so.

MEMORIAL TO PROFESSOR MILNES MARSHALL.

A LARGE and influential Committee has been formed in Manchester to consider the question of raising a memorial to the late Professor Milnes Marshall. We understand that the executors of Professor Marshall have presented to the College his zoological library, which contains a unique collection of monographs and rare books in zoology, comparative anatomy, and embryology. It is proposed—although the scheme has not been definitely decided upon—to raise a fund wherewith to maintain this library, which remains in the College as the Milnes Marshall Library.

THE PARKE MEMORIAL.

A MEETING of the General Committee for promoting the erection of a memorial to the late Surgeon-Major Parke was held recently at the Shelbourne Hotel, Dublin, under the presidency of Major-General Moncrieff. The report of the Executive Committee, read by Mr. J. H. Campbell, Q.C., said the amount available for the purposes of the fund, after paying all expenses, was £420, and would probably reach £500. The general desire of the subscribers appeared to be that a statue should be erected on some site to be hereafter determined on. To achieve this, however, in a satisfactory manner further contributions were desired. A resolution to adopt the recommendation of the Committee was moved by the President of the Royal College of Physicians in Ireland (Dr. W. G. Smith), seconded by Sir John Banks, K.C.B., and unanimously agreed to. The Honorary Secretary of the fund is Mr. Herbert Malley, 24, Kildare Street, Dublin.

THE DUBLIN MAIN DRAINAGE SCHEME.

AT the annual meeting of the Dublin Sanitary Association recently the Lord Mayor stated that the main drainage scheme had come to a deadlock. It appears that the War Office authorities possess the power of veto under a clause in the provisional order. The precipitating stations were to be placed near the Pigeon House Fort, and the War Department objected that this would be prejudicial to the health of the troops. It was then proposed that the Corporation should purchase the fort and buildings for £65,000, but this sum the latter held to be too large. If this difficulty were overcome, however, the War Office authorities still retained the power to have the works removed should they be found to be injurious to the soldiers at the sub-marine mining station. Negotiations are still proceeding, with a view to the removal of these difficulties.

PROPOSED AMALGAMATION OF OPHTHALMIC HOSPITALS IN DUBLIN.

AT the annual meeting of the National Eye and Ear Infirmary in Dublin last week reference was made to the proposed amalgamation of this institution with St. Mark's Ophthalmic Hospital. A difficulty has arisen as to the title, each board apparently claiming that the new institution should be known by the name of the hospital in which the governors on either side are interested. A suggestion that the matter should be left to arbitration has received a qualified assent from St. Mark's. As soon as an arrangement on this point is come to a Bill will be proceeded with in Parliament to secure this much desired union. An obvious way out of the difficulty would be that the new hospital should bear a new name.

SANITARY WORKSHOPS IN LONDON.

THE London County Council has in hand a scheme to build workshops of its own wherein the clothing and boots required by persons in its employ shall for the future be made. Some 17,000 garments and 16,000 pairs of boots are annually required, including those for the officers and inmates of the asylums, costing about £8,000 and £6,000 a year respectively. Under the scheme the Council will be brought into direct relations with the actual workers, who will be guaranteed a steady and certain rate of wages for fifty-four hours a week. At present some of the Council's work is executed in wretched places, and there is great desire on all sides to remedy the evils. It is anticipated that there will be also a considerable saving to the ratepayers.

RABIES IN GLASGOW.

FOR a little time back rabies has been alarmingly prevalent in the counties surrounding Glasgow, specially in Lanarkshire and Renfrewshire, from which several patients have recently been sent to the Pasteur Institute. It is only since the first of the present month, however, that any cause for alarm has arisen in Glasgow itself. On that day three persons were bitten by the same dog, which was subsequently secured and destroyed. The *post-mortem* appearances were suggestive of rabies. These three persons are now in Paris, one having gone at his own expense, the other two being sent at the expense of the city, accompanied by one of the medical officers of health (Dr. Chalmers). On February 14th another person was bitten by a dog supposed to be suffering from rabies, and was sent off to Paris on the 16th, accompanied by one of Dr. Russell's pupil-assistants (Dr. Marsh). The magistrates of the city, in consequence of these occurrences and the alarm excited, have issued a muzzling order, which is being vigorously enforced.

MUIRHEAD COLLEGE FOR WOMEN, GLASGOW.

DR. HENRY MUIRHEAD, of Cambuslang, who died two or three years ago, left his estate to found a college where women might be trained for any professional or scientific pursuit. The value of the estate, about £34,000, is inadequate for the carrying into effect of the wide views of Dr. Muirhead's will, and at the time Queen Margaret College had only just been established. If the Muirhead trustees had seen their way to join hands with the already established

college, a magnificent school for women would have been the result, and university recognition and affiliation could not have been denied. The terms of the will, however, and other circumstances made this difficult, and Queen Margaret College has now been absorbed in the University. But the women medical students of the University are subject to the very serious inconvenience of having to go to the Royal Infirmary, fully two miles from the University, for their clinical and dispensary instruction; the Western Infirmary, adjoining the University, being already barely adequate to the requirements of the men. It would take between £30,000 and £40,000 to extend the Western Infirmary sufficiently to meet the new demands, and that would imply an additional annual expenditure of £5,000 to £6,000. How that sum could be raised, when already the annual deficit is about £5,000, it is impossible to imagine. The Muirhead trustees, therefore, have determined to equip an independent school for women, in the immediate neighbourhood of the Victoria Infirmary, whose resources would be wholly devoted to women's instruction. Even though the University decline to affiliate the new college, the trustees expect the University of St. Andrews would fully recognise the courses given there for graduation purposes, as they intend to give a complete five years' course.

FATAL FOOTBALL ACCIDENT.

A sad fatality occurred on February 9th at the Recreation Ground, Portsmouth. Sub-Lieutenant Arthur William Richmond, the son of Dr. Sylvester Richmond, of Greenhithe, Kent, while playing in a football match, received an accidental blow on the abdomen, and succumbed from the injury in forty-eight hours. The deceased, after kicking the ball, collided with another player, and then instantly fell to the ground. His companions thought that he was only "winded," and commenced to rub him in order to bring him round. After two or three minutes he opened his eyes, and said that he was all right. He got up, went back into his own goal and stood between the posts, but after a few minutes he walked away to the dressing room. He then appeared to be suffering great pain, and shortly afterwards he was taken home to the Royal Naval College in a cab, and thence to Haslar Hospital across the water, a journey of three miles from the spot where the accident occurred. We desire to express great sympathy with Dr. Sylvester Richmond and his family. The unfortunate injury was clearly an accident. Football, perhaps more than any other game, is always attended with some amount of risk. Similar accidents have happened before, and a large amount of care should always be exercised by contending teams. It is, however, much to be regretted that this young officer did not receive immediate surgical assistance on the field, and then careful conveyance to one of the institutions which are within a short distance of the ground. The severe shock, followed by acute abdominal pain and vomiting, clearly indicated that some visceral injury had in all probability been received, and that all hope centred in prompt surgical treatment. Moreover, the rough journey in a cab, and then another over the harbour to Haslar must have seriously aggravated the risk of any abdominal injury. On his arrival at the hospital the patient, we are confident, obtained the greatest attention and kindness from the medical staff, but the unfortunate shaking he had received had so increased the intensity of the shock that he soon lapsed into a condition of hopeless depression.

THE PREVENTION OF CHOLERA.

Dr. Klein, F.R.S., gave a lecture on cholera at the London Institution on February 15th. He observed that the prevention of cholera ought to be less difficult than that of some other communicable diseases. He quoted the account given by Mr. Ernest Hart, in the address now being published in our columns, of the great religious festival at Hardwár, and observed that the success of the excellent and stringent sanitary precautions taken was a surprise to many of the most experienced Indian sanitary officials. The prevention of the spread of the disease in an assemblage of close on one million pilgrims was unquestionably one of the most remarkable and brilliant achievements of sanitation in the whole history of cholera epidemics. That cholera could be prevented had also been demonstrated recently in Europe. In former years the establishment of such a focus of cholera as Hamburg, with its vast communications with the whole of Germany, would have been followed by innumerable foci all over Germany, yet Germany did not suffer from any further epidemic outbreaks, only a few cases having occurred in a limited number of towns. In England Sir John Simon long ago insisted on the importance of considering cholera as a filth disease. It was now acknowledged that the prevention of cholera was to be achieved by isolating the patient, disinfecting or destroying all articles soiled by him, in order to prevent such filth getting into drinking water or food, and by insisting on thorough cleansing of the hands of persons coming in contact with such soiled articles. To put the matter shortly, the precautions were all directed to prevent the contagious principle being swallowed. Much had been done in this country, but we should not rest satisfied until every locality had been put into a proper sanitary condition, and had the necessary appliances for the isolation of patients and the disinfection of clothes and discharges. It was notorious that there were localities which, though they escaped a visitation of cholera last year, were in such an insanitary condition that if they were less lucky in the future they would pay for their negligence a heavy penalty in human life.

A COOL PROPOSAL.

An eminent ophthalmic surgeon in London has sent us the following curious letter received recently by him: "Dear Sir,—We are publishing, on behalf of a wholesale West End firm of opticians, a chart of the 'Human Eye,' and are desirous of introducing a few portraits of eminent ophthalmic surgeons, with their names, qualifications, etc. Should you have no objections to being one of these gentlemen, perhaps you will kindly oblige us with a good photograph (which shall be returned) to make the drawing from, a proof copy of which will be sent you before publication.—Yours faithfully, ——— ———." Lengthy comment on such a proposal is superfluous. The real object in view is sufficiently obvious. The cool effrontery of the "West End firm of opticians" (whose name is wisely withheld by their intermediary) in seeking to involve in an undignified position an eminent hospital surgeon, for the sole purpose of enhancing the sale of their wares is, we fain would hope, an exceptional trade device—to call it by no harsher term. It is scarcely necessary to intimate the nature of the reception and reply accorded to this missive by our indignant correspondent.

CONSULTANTS.

The valued correspondent who wrote on a previous occasion to express the opinion that giving up midwifery was one of the most important criteria of a consultant has written again to point out that by so doing he "not only gains time for hospital work (practical) and reading, but very much lessens competition with the general practitioner, and so far early differentiates status." Our correspondents seem only to have in mind consulting practitioners in "medicine" strictly so called. There is no reason why the prevalent distinctions between the fields of medicine, surgery, and gynæcology should be permanent; there is some reason to think a certain shifting of these limits might even be beneficial. But, taking things as they are, what about consultants in midwifery itself? Are they to give up midwifery? That in ordinary practice one aiming at consulting work in medicine or in surgery would be unwise to take

current midwifery we freely admit; we admit that he would thus dissipate his time for study, and endanger his relations with general practitioners. Whatever may be the limits of "special terms," a consultant is one who is called in as such by his medical brethren, whose interviews with patients, whether at his house, at the houses of patients, alone or in association with a colleague, are occasional rather than regular, and whose fee, usually paid at the time, is assessed on a higher scale. Such is "a consultant" proper, but we think that general practitioners should be a little more ready than they are to meet a courteous and honest professional brother, whether in general practice or not, or senior or junior to themselves, if a patient reasonably desires it and is prepared to pay the consulting fee.

LYING ADVERTISEMENTS.

A writer in the *Times*, drawing attention to what he terms "an audacious circular" which he had received from one of the quack fraternity, says "It might astonish even Mr. Hart whose brave words on the subject of patent nostrums you recently published in your columns." The days for astonishment are past, and it would now be difficult indeed for an advertising quack to show any smack of originality. The only trace of surprise suggested by these effusions is the never-ceasing wonder that a generation priding itself on its education and intelligence should comprise so large a multitude of fools as to make these acres of advertisements pay. The audacious circular referred to seems to have been widely distributed among head masters and mistresses of schools, and offers, in return for the trifling sum of 6s. 4d., to forward five boxes of pills "at cost price." It may be suggested that none but fools would accept the statement that the cost price of these pills was 6s. 4d.; yet this circular was gravely sent to the educators of our youth. Many other advertisers, however, seem to have discovered the great truth that such statements pay. Reasonable men must almost despair when papers will publish, advertisers will pay for, and presumedly a public of some sort will believe, assertions like these: "Rheumatism, sciatica, and neuralgia cured in twenty minutes." "Influenza! This terrible complaint cured in one day." "Will cure deafness (if the drum is not broken). Try it: it cannot fail." "Will cure typhoid fever, rheumatic fever, scarlet fever, measles, inflammation of the lungs, bowels, and kidneys, in twenty-four hours, or will forfeit £5 in every failure." "Will cure diseases of all forms." Ought we not to be somewhat ashamed of a civilisation so superficial as to leave people, from schoolmasters downwards, willing to be imposed on by such silly and obvious absurdities as these?

MILK SCARLATINA IN GLASGOW.

Dr. Chalmers has made a report of some interest on scarlatina and scarlatinal sore throat in relation to milk infection at Glasgow. In December last, 30 cases were heard of in the North Western district, 28 of which were in consumers of milk from two dairy farms. Dr. Chalmers traces the first attack to a milk boy at Farm A, recently come there, who suffered from sore throat in early December. Other farm servants fell ill with similar symptoms later in the month, the disease proving to be scarlet fever; and the fever was found also to be recognisable and almost wholly attacking consumers along the route of the cart delivery of milk from this farm, the cart being attended by the initial case, by a milkman who suffered similarly a week later, and by two other boys, one of whom sickened on December 22nd. In 80 families known to take the milk, 18 cases occurred, 11 households (13.7 per cent.) being invaded, 17 of the cases being among 50 families obtaining milk direct from the cart. On the seizure of one of the milkers, and his removal on December 21st, the sale of the milk was stopped. On Farm B, three girls, occupying the same bedroom, fell ill of scarlet fever, one on December 18th, keeping at work two days thereafter, one next day, and one on December 25th. Sale of the milk was stopped on December 26th, but in all, four households became invaded, 7 cases resulting. As to the initial case, the families and dependents on Farms A and B were on terms of familiar intercourse. Examination of cattle at the farms failed to detect any teat or udder eruption, or other unhealthy symptoms or suspicious circumstance.

FACTS AS TO VACCINATION AND SMALL-POX.

The prevalence of small-pox in the neighbourhood of Bristol is illustrative once more, to all who choose to learn, of the benefits of vaccination. Dr. James Young, the newly-appointed medical officer of health of St. George's Local Board, reports that he had 21 cases in the hospital, of which 7 were unvaccinated. Two of the 7 unvaccinated died, and of the other 14, 1, which showed no marks, though alleged to have been vaccinated in infancy, also died. One case occurred in a person who had been revaccinated, very imimperfectly in Dr. Young's opinion, twenty or more years before. Dr. Henry Grace, of the Kingswood Local Board, stated, with reference to an anonymous attack on him by an antivaccinator in a newspaper, that in thirty years of duty in the Bristol Workhouse Infectious Hospital, during which time he had treated all the small-pox that had occurred among the poor, no revaccinated case had been admitted, and no revaccinated nurse had taken the disease. In a former epidemic he had revaccinated 5,000 persons in three months, and numbers of these had since mixed with small-pox cases with impunity. In factories where, owing to the nature of the work, small-pox had often been introduced, the revaccinated workpeople always escaped. In Kidderminster the medical officer's report showed that there had been very little small-pox during the past years, and that three outbreaks had been stamped out. Alderman Harvey said "he thought the admirable way in which the vaccination laws were carried out by the guardians helped to account for the small amount of small-pox."

STAMMERING.

This defect of speech has been known from the earliest times. The production of voice has been the subject of speculation since the time of Hippocrates, but since the invention of the laryngoscope our views on the subject have attained greater precision, and we now know that for perfect speech there must be harmonious co-operation of the mechanisms of respiration, phonation, and articulation. The essential condition of the disorder is spasm of a greater or lesser degree, and the intermittent character of the affection points to derangement of nerve function without the existence of muscular or nerve lesions. The spasm may occur at the lips, at the point of the tongue, at the back of the tongue, and rarely at the larynx, producing varieties of defects of speech; after a time a spasmodic habit is acquired, which becomes more or less automatic, and passes from under the control of the will. Influences which produce shock to the nervous system, such as fear, fright, or ill-treatment, may produce the affection; hence parents should be careful neither to irritate nor punish children who suffer from it. Imitation is found to be the cause of many instances, so the importance of good example in the nursery is self-evident. Before proceeding to the actual treatment, it is necessary to remove all morbid conditions which may be present, such as adenoid growths of the naso-pharynx, enlarged tonsils, and intestinal worms, and to treat any nervous affection—for instance, epilepsy, hysteria, or chorea. The treatment consists in exercise of the respiratory, vocal, and articulating organs, conducted unremittingly and patiently until a correct habit of speech is established. For this purpose patients should be put under the care of competent teachers. There will be no difficulty in finding these when the suf-

ferer is able to pay handsomely for the instruction, but there are a large number who stammer and are able to pay nothing or only a small fee, and for these no provision is made. We have taken the trouble to inquire into the subject, and we find that there is no provision for such cases either in London or in large towns such as Liverpool and Manchester. The London School Board, which has taken up the instruction of feeble-minded children with great success, takes no notice of them. Every week we have applications from members of the medical profession inquiring where stammering patients of the poorer classes can be taught, and it is lamentable to know that nothing can be done for them. We commend this subject to the notice of the School Boards, feeling sure that when it is realised how many suffer from this affection, steps will be taken to provide a remedy. Of course, if feebleness of intellect be present, it will be necessary to put the case into a suitable home, where he can be scientifically treated.

SICKNESS IN THE MEDITERRANEAN SQUADRON.

Various telegrams have recently been published containing statements calculated to cause alarm in regard to the health of that portion of the Royal Navy which is engaged on the Mediterranean Station. From inquiries we have made, however, we understand that there is at the present no extraordinary prevalence of fever there, and that influenza is not now so rife as it has been during the past two years. We believe that, although it is true that Captain Acland has been invalided, his illness has had nothing to do with fever. It is unfortunately the fact that there is always a good deal of fever on this station, due probably to the extremely insanitary conditions of the ports in the Mediterranean basin. Owing to the comparative absence of tide, most of the harbours are in a very foul condition from accumulations of old sewage matters, and at every port of call the opportunities for catching fever are considerable. For the last couple of years the Admiralty have been actively engaged in dredging out the French creek, close to which the dockyard at Malta is situated, and carrying out to sea the old sewage deposit which has been gathering there for ages. Fever at that spot has since then much diminished, but over other ports we have no control, and their inhabitants seem content with a condition of affairs which is undoubtedly a danger to vessels calling at them.

CARBOLIC ACID AND THE PHARMACY ACTS.

We understand that the danger attending the present unregulated sale of carbolic acid has been made the subject of strong representation to the Privy Council by Sir Walter Foster, the Secretary of the Local Government Board, in which the opinion entertained by medical men and coroners has been made use of. It appears to be thought that the proposed addition of carbolic acid to the poison schedule of the Pharmacy Act, in accordance with the recommendation of the Pharmaceutical Society, is surrounded with considerable difficulties, and that it might be preferable to deal with this matter in a short Bill. We confess that we fail to appreciate the difficulties above referred to. The provision made by the existing Act for adding poisonous articles to the schedule is ample for that purpose, and the initiative taken already by the Council of the Pharmaceutical Society in recommending the addition of carbolic acid shows that there is need for it to be done. All that is now requisite for giving effect to the recommendation is the approval of the Privy Council. In view of the evidence furnished during recent years as to the fatalities caused by carbolic acid and the constant recurrence of accidents with this article, the obstructive position taken by the Privy Council appears unaccountable. Least of all can we recognise any need for having recourse to legislation for the purpose. The Bills formerly introduced by the Government had a wider scope, and their provisions were directed more especially to the subject of compulsory regulations as to the keeping and dispensing of poisons on which different opinions are held by the Privy Council authorities and the Pharmaceutical Society.

CRIMINALS AND CRIMINAL ANTHROPOLOGY.

The new school of criminal anthropology, as represented by Lombroso, Benedikt, and others, insists that criminals have the marks of physical "degeneracy" writ large upon them in certain peculiarities of size and conformation of skull and brain, ear, eye, and body generally. In other words, according to these observers, the criminal has a characteristic physiognomy whereby he can be known, and which, like the rattle on the tail of the crotalus horridus, should put society on its guard against them. That there is a solid basis of truth in the teaching of Lombroso and his followers no physiologist would deny, but it must, we think, be admitted that criminal anthropology is at present very far from being an exact science. It would be as unjust to condemn a man accused of a crime because he looked a Caliban as it would be dangerous to acquit another because, as Sydney Smith said of Francis Horner, he had the ten commandments written on his face. A good deal of dissatisfaction has been expressed by French scientific men that the body of the recently-guillotined anarchist Vaillant was not handed over to them for purposes of research. It may be doubted whether criminal anthropology has lost anything hereby. A writer in the *Revue de Thérapeutique Médico-Chirurgicale*, who for three weeks had daily opportunities of observing Vaillant, gives the following particulars of his appearance. He was of middle height and well-proportioned figure. With the exception of the head of an Indian surmounted by two crossed arrows tattooed on his right forearm, there was no mark or blemish on his body. His hands showed the usual marks of hard manual labour. His head was rather larger than the average, well developed, and presented no asymmetry. The forehead was high; at its base the supra-orbital ridges stood out in prominent relief. The nose was thick, and somewhat aquiline, of the type called by Adrien Marx "the thinker's nose." The jawbones were not disproportionately developed: the eyes were large, dark, and rather deep set, looking one full in the face with a bold, confident, but not violent expression. Altogether, Vaillant's physiognomy impressed the observer not unfavourably, and the stigmata of the criminal as described by the criminal anthropologists may be said to have been conspicuous by their absence. Vaillant's intellectual equipment, though very deficient, was more that of a clerk than a working man, and he had even something of the "artist" in his mental constitution. During his imprisonment, he showed a tranquillity of mind, an evenness of temper, and an indifference about the future which surprised those about him. Vaillant certainly seems to have had at least one characteristic of the artistic temperament—the love of notoriety. His "act," as he called it, was probably prompted more by this than by any desire to regenerate society by purging it of the *bourgeois* element. It was doubtless love of artistic effect which led Nero to make torches of Christians for the illumination of his gardens, and to set fire to Rome that he might see it burn to his own music. We cannot help thinking that the morbid love of notoriety fostered by the cheap newspapers of the present day with their blood-curdling "bills" and their puffing paragraphs, is responsible for more crime and is a greater danger to society than "atypical confluence" of the fissures of the brain and the other signs relied upon by criminological Zadigs.

THE COOMBE HOSPITAL CASE.

In the Exchequer Court, Dublin, on February 20th, the case of Hoey *v.* the Irish Independent Publishing Company came on for hearing before Mr. Justice Murphy. The plaintiff had been master of the Coombe Hospital, and he claimed £3,000 damages for libel. A large Bar was engaged on both

sides. The publications had reference to the recent changes at the Coombe Hospital, and it was charged that the defendants had insinuated that the plaintiff had performed an illegal operation. Dr. Hoey went into the box and swore that there was not a shadow of truth in that allegation. Upon this counsel for defendants interposed, and stated that the plaintiff having sworn that there was no truth in the insinuation, the defendants wished to withdraw unreservedly any words which they had used capable of the meaning attributed to them by the plaintiff. The defendants agreed to pay £40 as covering the plaintiff's costs, and the case terminated.

PHARMACEUTICAL RESPONSIBILITY.

THE technical knowledge required in the sellers of poison is a reasonable ground for placing restrictions upon the sale of such articles, and there is much reason for the opinion that medicines of all kinds should be sold only by properly qualified persons. But if the technical knowledge which legally qualified persons are supposed to possess is not exercised for the advantage of the public, the reason for restriction is done away with, and poisons as well as medicines might as well be sold by any one. We are led to refer to this point by the report of an inquest in *Lancaster Evening Express* of February 13th, where it is stated that a man who had been drinking heavily was found dead in his bed. Evidence was given to show that he had on the previous day obtained from two chemists in Preston sleeping draughts, opium pills, and laudanum, and excessive dosing with these narcotics was the cause of his death. One of the chemists from whom the laudanum and opium were obtained said that he could not refuse to supply laudanum. We think, however, in such a case as that referred to, it was the duty of the chemist to exercise his discretion by refusing to supply narcotics repeatedly to the same person without being satisfied that they were for a proper purpose. It is for the sake of preventing such occurrences that restrictions have been imposed upon the sale of certain articles, and if chemists treat the supply of poisons merely as trade transactions they defeat that object, and reduce the restriction in their favour to an unmeaning monopoly. We trust that cases such as that at Preston are rare; otherwise a strong argument would be supplied to those who contend that restriction of the sale of poisons is not conducive to the safety of the public.

SURGERY AT THE UNIVERSITY OF LONDON.

IT will be remembered that the report of the inspector and visitor of the General Medical Council on the examinations of the University of London for the degree of M.B. pointed out certain defects in the surgical portion of the examination. As the degree is a registrable qualification under the Medical Act of 1858, it appears to be obvious that all the parts of the examination should be brought up to the same standard, since a registrable qualification is, as laid down in the Act of 1886, a qualification in medicine, surgery, and midwifery. The matter will, we understand, be considered at the next meeting of the Senate of the University, and we venture to hope that no considerations, whether of past achievements or of prospects of early reconstruction, will prevent the Senate from immediately rendering the surgical part of the M.B. examination equivalent to the other portions. The matter is at the first glance complicated by the fact that the University grants also the degree of Bachelor of Surgery. This is, however, a separate and additional degree, granted only to those who have already passed the M.B. examination, and have been successful at the special examination for the degree of B.S. We believe that every other University has, since the Act of 1886, modified its regulations, and now grants the degrees of Bachelor of Medicine and Bachelor of Surgery after a single combined examination. It would seem to be a simple matter for the University of London to follow this precedent.

DEATH UNDER ANÆSTHETICS.

THE circumstances of the death of a man, aged 33, at the Adelaide Hospital, Dublin, on February 8th, present certain features of special interest, and we are glad to have been placed by Dr. Kenny, the coroner for the City of Dublin, in a position to give particulars, drawn from the sworn depositions taken by him at the inquest on February 9th. The man, who was a butler, presented a strong and apparently healthy appearance when admitted into the hospital on February 2nd, 1894, on account of necrosis of the left tibia, for which he desired an operation. The operation was accordingly undertaken on February 8th by Dr. John H. Scott, under whose care he was. The patient was prepared for the operation in the usual way. When placed on the table, Dr. Paul A. Piel, anæsthetist to the hospital, and a gentleman of large experience as such, observed that the action of the heart was somewhat tumultuous and that the patient gave indications of nervous trepidation. Dr. Piel auscultated the heart, but could find no evidence of disease other than the tumultuous action mentioned. He then proceeded with his usual method, which is to begin with chloroform in a carefully-regulated dose, and push it cautiously till spasm relaxed, and then to continue the anæsthesia with ether. When he had administered 50 to 60 minims of chloroform, noticing that the anæsthetic seemed to quiet the action of the heart, he asked his colleague, Dr. G. J. Peacocke, to examine the organ, believing the stethoscope might then detect any defects previously masked by the tumultuous action. Dr. Peacocke did so, but failed to discover indication of anything being wrong. As the patient, however, continued to be nervous and the colour and pulse were not good, Dr. Piel replaced the chloroform by ether, which seemed to be well taken. As after a few minutes the colour and pulse did not improve, all anæsthetics were discontinued and immediate steps were taken to improve the circulation. These at first seemed likely to be successful; but in a short time the pulse began to fail; other signs of syncope developed; he did not rally, and died about fifteen minutes after the commencement of the administration of chloroform. The necropsy showed that the heart had a considerable layer of fat and that its walls were thin and flabby; the valves were healthy; the right side was full of blood. The lungs, kidneys, and liver were healthy. Dr. Scott attributed death to cardiac syncope due to shock acting on a weak and flabby heart. He considered that there were two elements in producing the shock: nervous trepidation and the action of the chloroform. Until the symptoms of syncope showed themselves there was nothing to indicate special danger, as the hurried action of the heart could hardly be regarded as indicating more than nervousness. Dr. Kenny adds that the facts in this case as well as those of a death under chloroform which he had to investigate about two years ago confirmed the impression formed from general observation that nervous and excitable people are, as a rule, not good subjects for chloroform or any other anæsthetic. Such persons seem either to succumb too rapidly to the effects of chloroform or to resist its action so long that it has time to accumulate to an extent not consistent with perfect safety. The coroner adds that he entirely coincided with the jury's opinion that there had been no want of due care in the manner in which the anæsthetic was administered in this case.

DEATHS FROM SWALLOWING ARTIFICIAL TEETH.

AT an inquest recently held in the East of London, the medical evidence was to the effect that on *post-mortem* examination a plate containing four artificial teeth was found in the stomach on the right side, and that ulceration had occurred about it. The causes which lead to such accidents as this, and which bring them to a fatal termination, are seldom fully elucidated, and thus much valuable information is lost, and the mind of that section of the public who use artificial teeth is disturbed and left unsatisfied. It would

be well to take the opinion of a qualified dentist, which we believe would be readily and freely given. Precise information is wanted as to the conditions under which the plate had been worn, the substance of which it was made, and what metal (if any) entered into its structure; also the method adopted for retaining the plate in place, whether it was an upper or lower denture, and if the natural teeth to which it might have been attached were still present as they were when the plate was first placed in the mouth. All these facts would be of practical interest to the dentist, and have therefore a distinct public value. According to the evidence of the landlord, the man whose case has been mentioned was seized one morning in bed with a fit of coughing, and evidently swallowed his artificial teeth. It is more likely that the swallowing of the teeth produced the cough. This point, of some interest to those who wear artificial teeth and also to the dentist, might have been elucidated if a dentist in possession of the plate could have examined the mouth of the deceased. Failing the calling in of the dentist, such plates might be sent for examination to the Secretary of the Odontological Society, or to the Secretary of the Metropolitan Branch of the British Dental Association, at 40, Leicester Square. In either case much valuable information might be conveyed to the dental profession, and would in time be utilised to the public advantage.

SANITARY INSPECTORS' CERTIFICATES.

A conference took place on February 20th at the Local Government Board between Sir Walter Foster, M.P., Parliamentary Secretary of the Board, and representatives of the Sanitary Institute, the Incorporated Society of Medical Officers of Health, the British Institute of Public Health, the Association of Municipal and Sanitary Engineers, the Institute of British Architects, the Plumbers' Company, and the National Health Society. The object of the Conference was to discuss the best means of dealing with applications which had been made to the Local Government Board by various bodies for the recognition of certificates of competency as sanitary inspectors (inspectors of nuisances). The certificates of the Sanitary Institute granted after examination have been recognised by the Board, under the powers given to it by the Local Government (London) Act, 1891. An important question of policy arises as to the recognition of other bodies. The Victoria University is preparing to hold examinations and to grant certificates to sanitary inspectors, and it is possible that other Universities may follow suit. Apart from the Universities the number of bodies claiming recognition is very considerable, and if all were recognised as independent certifying bodies it is obvious that there would be considerable rivalry among them, and it is not unreasonable to fear that the effect of this competition might eventually have the effect of tending to lower the standard of examination. Further, there would be nothing to prevent the application of other bodies in the future, and some difficulty might not improbably be encountered in refusing such applications. We are threatened, therefore, with a condition of things under which a certificate ostensibly of the same value would be given after examinations held by perhaps some twenty bodies. The experience gained in connection with a somewhat similar state of things in medical education is sufficient to show that this would be highly undesirable. Sir Walter Foster's proposal, as explained at the Conference, was that a conjoint board for the purpose of certification of sanitary inspectors should be formed, consisting of representatives of all the various bodies approved by the Local Government Board. In this way it was pointed out that the conjoint board would give what would be tantamount to a State certificate. The proposal also meets the difficulty with regard to future applications from new bodies; such bodies if approved by the Local Government Board would be admitted to representation on the conjoint certifying board. The suggestion seems to be an admirable one, since it would have the effect of encouraging emulation in the excellence of teaching, while doing away with any chance of a downward competition in examination. The attitude of the members of the Conference representing the different bodies interested seemed to be, on the whole, very favourable to the proposal.

DEFENCE AGAINST CONSUMPTION.

The *Forum* for this month has an interesting article telling again the oft-told tale of the microbic nature of tuberculosis, the infective properties of the disease, and of how "to rob consumption of its terrors" by officially recognising it as contagious. The principal suggestions are: That the people should be instructed how to render the sputum innocuous; that the rooms occupied by tuberculous patients should be properly disinfected before they are used again; that hospitals should be established for the isolation, segregation, and treatment of the consumptive poor; that tuberculous persons should be forbidden employment in such occupations as shall expose others to danger, etc. Now, we have every sympathy with all these measures as part of a great effort to eradicate so direful a disease, but it must not be forgotten that a nation protected by such measures alone would really be no better off so far as liability to consumption goes if once these precautions were relaxed: nay, it is even possible that, by allowing a still feebler type of individual to survive, still more stringent precautions might be required in the future. Protection by abolition of the virus must always be but a temporary expedient, dependent on the abolition being maintained. For permanent defence these measures must be combined with such sanitary improvements as shall remove those conditions of life amid which we know that the disease now mostly thrives.

CERTIFYING FACTORY SURGEONS.

A conference was held recently at the Home Office between Mr. Sprague Oram, Chief Inspector of Factories, and Mr. Chas. J. Wright, of Leeds, President of the Association of Certifying Surgeons of Great Britain, Dr. W. H. Hughes, of Ashton-under-Lyme, Ex-President, and Dr. James Holmes, of Whitefield, Lancashire, Honorary Secretary of that Association. The following resolutions had previously been forwarded to Mr. Sprague Oram, and by him to the Home Secretary: "That this general meeting of the Association of Certifying Surgeons views with much concern the statements regarding the insanitary condition of some of the textile factories in Lancashire and Yorkshire, contained in Miss Abraham's report to the Labour Commission, which the experience of many certifying surgeons fully confirm. While conscious of the difficulties of carrying out any complete supervision over the sanitation of factories with the present number of inspectors, the members of this Association wish to record their desire to assist Her Majesty's Chief Inspector and his staff, by conference or otherwise, in the consideration of any scheme which may be proposed for the amelioration of a state of things which all certifying surgeons (who are constantly visiting mills in their daily work) cannot but regard with the gravest anxiety, but which, in the present state of the law, they are powerless to alter or improve." The Home Secretary, in reply, expressed the pleasure with which he heard "of the interest the certifying surgeons take in the amelioration of some of the textile factories in Lancashire and Yorkshire, and of their desire to co-operate in any measure adopted to attain such amelioration." At the conference these and other topics of importance were discussed, and subsequently Mr. Wright gave evidence before the Departmental Committee, which has under consideration the form in which the statistics relating to factories and workshops are at present used by the Home Office. When in 1891 the then Home Secretary proposed in a Bill before Parliament to abolish the office of certifying surgeon, we pointed out the retrograde character of this proposal, and showed

that the duties of these surgeons in regard, not only to certification on admission to work, but also to the general sanitary supervision of factories and workshops were likely in the future to be more and more appreciated by the Home Office officials. The proposals which are now on foot show that this opinion was well grounded, and that the action of the House of Commons in rejecting the clauses referred to saved the country from taking a backward step which it might have been difficult to retrace.

THE HEALTH OF MR. GLADSTONE.

A paragraph has been widely copied in this country from the London correspondent of the *New York Tribune*, professing to give a very circumstantial account of the opinion formed by Dr. Granger, of Chester, as to the condition of the eyesight of Mr. Gladstone, and containing a very picturesque description of the courage exhibited by the veteran statesman, who proposed to submit himself to immediate operation for the removal of a cataract. We are authorised to state that the conversation must be classed with those usually called "imaginary," and that the story told conveys a most highly exaggerated idea of the condition of Mr. Gladstone's sight, and causes premature and very unnecessary alarm.

DIPHTHERIA IN THE HOUSE.

A lecture on this subject was given at the rooms of the National Health Society on February 21st, by Dr. Arthur Newsholme, Medical Officer of Health for Brighton. He first gave an outline of the history of the disease, showing that it had been known for some two thousand years, varying in prevalence and mortality at different times. In the present century in this country it had apparently increased, more particularly in urban districts. In this particular it differed greatly from other diseases of zymotic type, which had been much mitigated in severity by sanitary improvements. This was due to the fact that we had been passing through a transition stage, and that many of the earlier so-called sanitary appliances were made use of in a most insanitary manner. Several striking instances of this were given. In some families there was an inherited proclivity. The disease affected chiefly the ages 2 to 10 years—the ages at which the tonsillar tissues were most active, and morbid conditions of the throat prevailed. The connection between diphtheria and preceding throat affections was most marked, and this was probably the most important link between various insanitary conditions and the diphtheria which sometimes broke out amid them. In this sense defective house sanitation was often a cause of diphtheria by producing a morbid condition of mucous membrane, which favoured the development of the specific bacillus; though in other instances there was reason to believe that the specific bacillus might be present in the sewers of a district and thence gain access to a house. Diphtheria especially clung about damp, dark, and unventilated houses. Exposure to sunlight and air quickly destroyed the bacillus. The importance of dry light airy dwellings as a preventive against the spread of the disease was insisted on. Personal infection was, however, by far the most common source of diphtheria. The infective material of diphtheria was most portable, and, under favourable circumstances, long-lived. School attendance was a common means of both direct and indirect infection. The atmospheric conditions of elementary schools and the dense aggregation were powerful factors in intensifying the poison. Milk was also a common means by which the disease was spread. It might become infected either from the cow or from the milkman, and the only means by which the public could protect themselves from this insidious danger was by boiling the milk. The details of nursing of diphtheria, the precautionary measures to be taken, and the methods of disinfection were also described.

THE ALLEGED INCREASE OF CANCER.

The correspondence on this subject, which has appeared in the British Medical Journal during the last few weeks, will give a clear conception of the difficulties surrounding its consideration and decision. The discussion arose out of a paper contributed by Mr. George King, F.I.A., and Dr. A. Newsholme to the *Proceedings* of the Royal Society. This paper, apart from the importance of the conclusions obtained, is an admirable example of the advantage gained by the co-operation of a skilled actuary in a medical statistical inquiry. The method of correction for age distribution of the respective populations investigated is, we believe, quite novel in medical inquiries, and the paper will be referred to for this, apart from the interest of its special subject. Furthermore, the graphic method which is employed enables deductions to be drawn from what would otherwise be unmanageable data. Incidentally it may be mentioned that the correction for variations of age distribution of the population at different periods enables the population at the present time to be fairly contrasted with that of thirty years ago, thus removing the fallacy arising from the fact that a larger share of the population now reach the cancer age than formerly. The larger number of survivors at the higher ages cannot, however, account for more than a small proportion of the increase in registered cancer deaths. It is not probable that any unanimity of opinion as to whether there is a real increase in cancer mortality or not is at present attainable. The reasons given by Mr. King and Dr. Newsholme against the supposed, and generally accepted, increase are, however, very weighty. They show that the increase is much less among insured lives than among the general population of Great Britain and Ireland, which is explained by assuming that the social position of the insured was, on the average, considerably higher than that of the mass of the population, and that improvement in diagnosis and certification would not operate to the same extent. They point out that the male and female curves in each set do not diverge as they might be expected to do were the increase real and not apparent, and were it, as might be expected in such case, fairly equally shared by the two sexes. They further quote figures from the unique statistics kept at Frankfort-on-the-Main, which clearly show that, while cancer of "accessible" parts of the body in the female sex did not increase in a long series of years, cancer of "inaccessible" parts showed a marked increase. An interesting example from the joint paper referred to above may be quoted. Cancer of the whole intestine showed a great increase, but, when cancer of the rectum was separated from the rest, no increase was manifested. Here the matter must be left. Its final solution cannot be obtained until accurate registration of cancer of all parts of the body has been obtained for a number of years, and until the various indefinite headings in the Registrar-General's returns, which still form a large, though diminishing, group, have entirely disappeared. Whether cancer has actually increased in proportion to population or not it is certainly a chief source of mortality beyond middle life. Careful consideration of the existing data, however, does not justify alarmist views as to its rapid increase.

Mr. Victor Horsley, President of the Medical Defence Union, will give an address, on March 6th, at Norwich to the medical profession of Norfolk and Suffolk on The Pressing Necessity to the Profession of Medical Defence.

Dr. John E. Mackenzie has been appointed Assistant Professor of Chemistry in the Heriot-Watt College, Edinburgh, in room of Dr. Bishop, who has been elected to the Chair of Chemistry in Travancore.

Hospital for Consumptives in Ireland.—The governors of the new hospital for consumptives, which it has been determined to establish in Ireland, have selected a site near Newcastle, co. Wicklow. There are to be eight residential blocks, accommodating 100 patients, but at present only two will be erected. The estimated cost is about £9,000.

THE FOURTH REPORT OF THE VACCINATION COMMISSION.

This report really consists of minutes of "evidence" taken during the year, from July, 1890, to July, 1891. The delay in its appearance is largely due, we believe, to a fire that took place on the premises of the printers. The whole volume constitutes an additional proof of the desire of the Commission to leave the opponents of vaccination no ground for complaint that they had not been sufficiently heard in support of their "cause." On turning back to previous reports we find that the case for antivaccination was opened so long ago as December, 1889, and that the great bulk of Volume III—from February to July, 1890—is also devoted to it. It is hardly imaginable that the Commission can be so foolish as to dream of satisfying Mr. Tebb's Society by any amount of yielding to their demands to occupy the witness chair. But it is probably justified in its determination to satisfy such of the general public, present and future, as choose to look into the matter, of its anxiety to give ample scope—or rope—to antivaccination. Whether it has had in mind the proverbial effects of a sufficiency of rope we do not pretend to say. Anyhow, of the fifty-three witnesses who disport themselves in the 500 double columned foolscap pages of this Blue Book, very nearly all give what we presume they would call "evidence" against vaccination. Opening the volume at random, we come on the examination of the Rev. Robert Caven, B.A., Baptist minister in Leicester. He being a university graduate and a member of a learned profession, it is, perhaps, doing more than justice to the side he represents to quote as a sample of the evidence adduced his views in his own words, premising that he here refers to 11 cases of small-pox that had occurred in his own congregation in Southampton in 1871, 9 of the 11 having been vaccinated, and 2 unvaccinated, and all of them ending in recovery.

[Mr. Hutchinson] You say that you formed the opinion that vaccination was useless; on what grounds did you come to that conclusion?—From the fact that such a large number of persons coming under my own experience had small-pox after vaccination.

Do I understand that eleven out of a congregation of three hundred had it?—Eleven.

Do you think that that is a large proportion?—I should have thought so.

They all recovered, did they not?—Yes, they all recovered.

[Chairman] The two out of the unvaccinated section of your congregation would be, probably, a much larger proportion than the nine out of the vaccinated section, would it not?—I should say that.

[Mr. Meadows White] Do you know whether there was a vaccination officer appointed in Southampton at the time?—I was living in the district, not in Southampton itself; there was a vaccination officer for the district.

[Sir James Paget] Did you at all inquire into what number of your congregation had not been vaccinated?—No.

You assumed that a very large proportion had been vaccinated?—I should assume that.

Without knowing what proportion had not been vaccinated why would you think that the two was a greater proportion than the nine?—I do not quite understand the question.

You say that you think that the vaccinated were a very large proportion of your congregation; would two cases in the unvaccinated imply a less proportion or a larger proportion than the nine among the vaccinated?—I have no means of knowing what the proportion of the unvaccinated would be, therefore it would be difficult for me to answer that question.

[Chairman] Were a number of people vaccinated at that time in consequence of the prevalence of the epidemic?—Yes, very shortly after this time a large number of persons were.

None of them prior to the time of this epidemic?—Yes, a very large number of persons were vaccinated at the time of the epidemic, or just about that time.

So that the question of the number of vaccinated would not depend merely upon the number who had been vaccinated in infancy, because a certain number would be vaccinated at a more advanced age owing to the prevalence of the epidemic?—It might be so.

[Mr. Picton] Your impression was that the vaccination simply made no difference?—My impression was that it was not a protection from small-pox.

So far as protection from small-pox was concerned it was a matter of indifference whether the people were vaccinated or not?—I had nothing to show that it made any difference so far as I could discover.

Here we have an example of the data which a presumably educated man goes up from Leicester to London to lay before a Royal Commission as the ground of his belief in the worthlessness of vaccination. In a population of 300 there were 11 cases of small-pox, 9 vaccinated, and 2 unvaccinated, all recovering. But Mr. Caven did not indicate when the 9 had been vaccinated, nor how they had been vaccinated, nor had he ever thought of inquiring how many of the 300 had been vaccinated and how many had not. Indeed, he frankly confessed that he hardly understood a question intended to elicit this particular point. One wonders whether Mr. Caven's views on other subjects are based on equally extensive data, thought out with equal care and consideration.

Looking through the index, we were interested to find the name of our old friend, Mr. C. H. Hopwood, Q.C., who in the House of Commons recently was good enough to compliment the medical profession in perhaps the only way that was open to him—by traducing it. Of course, independently of his attack on medicine, Mr. Hopwood's chief claim to fame as an antivaccinating champion consists in his notorious statistical returns, moved for in Parliament when he sat for Stockport, and as to which, in *Vaccination Vindicated*, the conclusion has stood unchallenged for some half-dozen years now, that "a more barefaced and hollow manipulation of facts and figures has rarely been attempted." Naturally one would suppose that Mr. Hopwood would seize so suitable an opportunity to patch up his discredited figures. But he makes no attempt to do so. He offers to "put in" the returns, and he recites the somewhat colourless titles of them. When he comes to state a list of twenty-six objections, he devotes exactly two lines to this part of the subject. "My twentieth point is that it is proved that syphilis and skin diseases have been inoculated by vaccination." What about convulsions and cholera, and diarrhœa, and diphtheria, and bronchitis, and pneumonia, and whooping-cough? Not a single word; these two lines are positively all: and, indeed, his twenty-first point is so very comical, that he was naturally anxious to get at it. Here it is, italicised by ourselves: "My twenty-first point is that the Legislature has not defined the vaccine permissible, and the authorities have added calf lymph, *which is not limited to the female, and is therefore not cow-pox as previously understood*." From which we opine that Mr. Hopwood would object to any legislation which included rams in the term sheep, or, what is perhaps more to the point, ganders in the term geese. But of such stuff are antivaccinators made.

LITERARY NOTES.

The *Journal of Pathology and Bacteriology* for February contains an appreciative sketch of the career of the late Sir Andrew Clark by Professor Sheridan Delépine. A complete list of the published writings of the late physician is appended. Clark's views on the relations of alveoli to air passages are discussed in a separate communication by the same author.

With the current number of the *Journal of Physiology* the publication passes out of the hands of the Cambridge Engraving Company into that of Messrs. C. J. Clay and Sons, the Cambridge University Press Warehouse.

Another new medical journal has recently appeared in France; it is entitled *L'Arsénal Médico-Chirurgical*, and is edited by Dr. Olivier.

The *Gaceta Medica de Guayaquil* is the name of the most recent addition to periodical medical literature in South America. It is published at Guayaquil, a city of Ecuador, and is edited by Drs. S. Mora, E. S. Roca, and C. Borja.

MM. J. B. Baillière et Fils (19, Rue Hautefeuille, Paris) have just issued, under the title *Bibliographie Gynécologique*, a catalogue of gynæcological books, which contains the titles and other particulars of more than fifteen hundred works, ancient and modern, and in various languages, dealing with the diseases of women.

Dr. Eugenio Augusto Perdigao, surgeon-major in the 2nd Regiment of Cavalry in the Portuguese army, is engaged on a history of military medicine in Portugal, a subject of which he has made a special study. By a decree dated December 22nd, 1893, the Portuguese Government has graciously authorised him to undertake this work, and has further granted him the privilege of doing so entirely at his own expense.

An index to the first twelve volumes (1857-89) of the *Royal London Ophthalmic Hospital Reports* is issued with the current number. The index has been compiled by Mr. W. G. Laws. In addition to an "author" and "subject" index, it has a list of the illustrations to be found in these twelve volumes, and also a reprint of the titles in the *Periscope of Contemporary Ophthalmic Literature* from vol. iii.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1894. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on April 11th, July 11th, and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, March 22nd, June 21st, and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. FRANCIS FOWKE, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

BATH AND BRISTOL BRANCH.—The fourth ordinary meeting of the session will be held at the Grand Pump Room Hotel, Bath, on Wednesday, February 28th, at 7.30 P.M.; R. Shingleton Smith, M.D., President. The following communications are expected: 1. On the Use of Chloralose, Mr. C. E. S. Flemming. 2. Notes of a Case of Disseminated Sclerosis, E. H. Biddlecombe, M.B. 3. Nasal Disease as a Factor in Affections of the Lower Respiratory Tract, P. Watson Williams, M.D. 4. A Case of Appendicitis, F. K. Green, F.R.C.S.Eng.—W. M. BEAUMONT, E. MARKHAM SKERRITT, Honorary Secretaries, Bath.

LANCASHIRE AND CHESHIRE BRANCH.—A special meeting of this Branch will be held at the Grosvenor Hotel, Deansgate, Manchester, on Friday, March 9th, 1894, at 4.30 P.M., for the discussion of a motion, to be moved by Dr. Rentoul, and seconded by Dr. W. Hughes (or other member), with regard to the "proposed new order of midwifery practitioners," and to appoint a committee "to watch the progress of and to oppose any proposed legislation for the registration of midwives."

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The annual meeting will be held at Chylton Lodge, East Cliff, Ramsgate, on Thursday, March 8th, at 2.45 P.M.; Mr. W. Curling in the chair. Agenda: Dr. Welsford will move a resolution as to the suppression of irregular and fraudulent practice. Dr. Frederick Eastes will advocate the claims of the Medical Defence Union and the Medical Sickness, Annuity, and Life Assurance Society to the support of members of the District. Dr. Styan and Mr. Raven: The Antipyretic Treatment of Acute Diseases. Mr. Raven will show a case of Myxœdema cured by Thyroid Tabloids. The Chairman will be glad to see members to luncheon at his residence, Chylton Lodge, at 1.30 P.M. Members intending to lunch with the Chairman are particularly requested to send acceptances by Tuesday, the 6th, or they will not be expected. Tea and coffee will be served after the meeting. All members of the South-Eastern Branch are entitled to attend these meetings, and to introduce professional friends.—THOS. F. RAVEN, Honorary District Secretary, Barfield House, Broadstairs.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—A meeting of this District will be held at the West Kent Hospital, Maidstone, on Tuesday, March 6th, at 4 P.M.; Dr. Joyce, of Cranbrook, in the chair. Communications:—Mr. Prideaux Selby: On the Diagnosis and Treatment of Perforating Ulcer of the Stomach. Dr. Tirard: Some Sequelæ of Diphtheria. Dr. Joyce: On the Differentiation of Tuberculous Disease of the Kidney from Renal Calculus. Mr. Hugh Smith: On Brain Syphilis. The dinner will take place at the Mitre Hotel at 6.30 P.M. Charge 6s. 6d., exclusive of wine. Gentlemen who intend to dine are requested to signify their intention to the Chairman (Dr. Joyce, of Cranbrook) not later than Monday, March 5th. All members of the South-Eastern Branch are entitled to attend this meeting and to introduce professional friends.—E. GROUND, Honorary Secretary, Ashford Road, Maidstone.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The spring meeting of this District will take place at Upper Norwood on Thursday, March 8th, at P.M.; Dr. Rice Oxley, of Streatham, in the chair. Members desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary at once.—HENRY J. PRANGLEY, Tudor House, Anerley, S.E.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT.—A meeting of the North London District will be held at the St. Pancras Infirmary, Dartmouth Park Hill, Highgate, on Wednesday, February 28th, at 5 P.M. Dr. McCann, Medical Superintendent of the Infirmary, will show interesting cases in the wards. Dr. Shuttleworth, of Richmond Hill, late Medical Superintendent of the Royal Albert Asylum, Lancaster, will read a paper on Types of Idiocy and Imbecility. Dr. Cleveland will preside.—HUGH WOODS, Honorary Secretary, Archway Road, Highgate, N.

METROPOLITAN COUNTIES BRANCH: SOUTH LONDON DISTRICT.—The next meeting will be held (by kind permission of the Treasurer) in the Court Room of St. Thomas's Hospital, at 8.30 P.M. on Wednesday, February 28th. A paper on Treatment of Recto-urethral Fistula and Growth of Rectum will be given by G. H. Makins, F.R.C.S. Cases of clinical interest from the wards of the Hospital will be shown, commencing at 8 P.M. All practitioners, whether members of the Association or not, will be heartily welcomed.—H. BETHAM ROBINSON, Honorary Secretary, 1, Upper Wimpole Street, Cavendish Square.

SOUTH-WESTERN BRANCH.

AN intermediate meeting of this Branch was held at Plymouth on February 14th, Dr. THOMPSON, of Launceston, Vice-President, in the chair.

New Members.—The following gentlemen were elected members: G. S. Barstow, L.R.C.P., L.R.C.S., Exeter; G. Evans, M.R.C.S., L.S.A., Seaton; H. Faulkner, L.R.C.P.E., M.R.C.S., Exeter; T. R. Macdonald, M.B., C.M., Kingskerwell; J. Mackeith, M.B., C.M., Exeter; L. Meade-King, M.B., B.S., Exeter; R. Martyn, M.R.C.S., L.R.C.P., Exmouth; Surgeon-Captain Mathias, A.M.D., Exeter; R. V. Solly, M.D., F.R.C.S., Exeter; C. W. Vickers, L.R.C.P., M.R.C.S., Paignton; G. S. Welsford, M.B., Tiverton; D. C. White, M.B., Ashburton.

Representative of the Branch at the International Congress.—J. Woodman, M.D., F.R.C.S., Vice-President, was appointed by the Council.

Communications.—Dr. R. THOMAS, Exeter, read a paper on Scarlatina in the Puerperal Woman.—Mr. PAUL SWAIN, Plymouth, read Three Cases of Hydatid Disease, and showed a case of Extirpation of the Tongue and Entire Lower Jaw.—Mr. W. SQUARE, Plymouth, read a paper on Roman Fever, and showed a specimen of Urethral Calculus.—Mr. ROPER, Exeter, read a paper on the Importance of Early Treatment of Squint.—Mr. LUCY, Plymouth, showed a case of Arthrectomy of the Ankle Joint.—Mr. HARRIS, Exeter, read a paper on Tetanus or Hydrophobia.—Dr. FOX, Plymouth, showed some cases of Cretinism treated by Thyroid Extract; also a case of Transposition of Viscera in a Boy suffering from Pseudo-hypertrophic Paralysis.—Dr. GORDON, Exeter, read a paper on Abdominal Compression of the Ureters as a Means of Diagnosis.

SPECIAL CORRESPONDENCE.

PARIS.

Socialism and the Sale of Drugs.—Medical Students and Military Service.—A Discovery at the St. Louis Hospital.—Bodily Infirmities and Military Service.—Want of Pure Wine as a Cause of Alcoholism.—Foreign Students in Paris.—Births and Deaths.

M. JULES GUESDE, the socialist deputy, intends bringing before the Chamber of Deputies the question of municipal dispensaries for the purpose of providing the poor population with medicine at cost price. The municipality of Roubaix has three times voted that such dispensaries should be organised, and each time the Prefect has vetoed the vote. The municipality in question has appealed to the Conseil d'État, which declares that the Assistance Publique can distribute medical and pharmaceutical aid to any extent, and no one has a right to prevent it. The *Journal de Médecine* argues that on legal grounds municipal dispensaries cannot be opposed, if they are organised and directed according to the laws relating to them. The pharmaceutical profession is not the only one that is threatened by State socialism. The new law on medical practice which has been passed will soon be supplemented by another concerning rural medical help, which will place medical men in the position of Government servants, like priests and schoolmasters.

The Senatorial Commission concerning the military service of medical students has not yet arrived at a decision on the subject. The Minister of War is opposed to Professor Cornil's proposals on account of the increase of expense which they would cause, and especially on account of the loss which they would entail on infantry regiments. M. Cornil combats these objections by stating that he does not ask for medical students the status of officers. Notwith-

standing their doctor's degree, he is content that they should serve for some months as common soldiers; all he asks is that after a few months in the ranks they should be allowed to complete their military service as *infirmiers* (male nurses). The increase of expense which is feared he declares would be very trifling, inasmuch as the first year's service would be as common soldiers, then if necessary as *sous-officiers*, which would cause an expense of only £8,000 a year. MM. Lourties, Cornil, and Labbé have been deputed by the Commission to interview the War Minister on the subject.

On January 31st an inspector from the Assistance Publique visited the St. Louis Hospital. After inspecting the kitchen, he proceeded to inspect the pantries, etc., and asked the sister attached to the kitchen to open a door that was locked. As she refused to do so, it was opened by the locksmith, and a stock of provisions discovered that almost suggests preparations for another siege of Paris. The following is a partial inventory of the "find": 30 kilos of *pâtes* for soup, 600 kilos of rice, 200 kilos of lentils, 18 kilos of butter, 16 kilos of figs, 40 kilos of sugar, 3 kilos of pepper, 20 kilos of dry cakes, 63 kilos of maccaroni, 10 kilos of raisins, 100 Comté cheeses, 300 kilos of flour, 343 kilos of bread, 50 kilos of haricots, 20 kilos of jam, 20 kilos of vermicelli, 300 kilos of salt, 365 kilos of meat, 78 kilos of French plums, 10 kilos of fresh fruit, 37 kilos of bacon, 1,000 eggs, etc. This discovery has caused a great sensation. The *Progrès Médical* regrets that legal proceedings were not immediately taken, and demands that M. Peyron should make a strict and exhaustive investigation into the question.

A soldier suffering from a hernia was condemned to a year's imprisonment because he refused to do military exercise on account of the intolerable pain. Dr. Noël makes the following revelation: Before entering military service, the smallest hernial sac is a reason for exemption from service; but, once enrolled, unless the sufferer is positively unable to walk, the condition is not taken into account. This regulation is evidently not based on pathological facts, but is a vestige of past times, when substitutes were paid to replace the rich, who preferred parting with their money than their ease; infirmities were then hidden in order to pocket the money, and afterwards ostentatiously brought to light, in order to be exonerated from service. Now those who wish to be exempt from military service are more likely to indicate their infirmities than to hide them; therefore the sentence is harsh to cruelty. The medical press urge the *corps de santé* to have this law abolished as a surgical heresy injurious to the army and justice.

The question how to supply the working classes with pure wine, though intimately connected with public health, is somewhat neglected by sanitarians. It is now being considered by the daily press. The duty on wine brought direct from wine growers prevents families who live from hand to mouth from protecting themselves against the adulteration practised by the middleman, who sells them retail wine alcoholised, and containing noxious substance. Thus the working classes, being unable to procure natural wine, seek stronger and stronger drink. A municipal councillor recently declared that before five years have passed Paris will be obliged to create special hospitals for its alcoholic patients. The responsibility for this will, he adds, lie at the door of the present *octroi* system.

The number of foreign students increases in Paris in the same proportion as that of French students. In 1893 there were 107 more than in 1892. Female students also increase; there are 155 women medical students, of whom 16 are French, and 6 at the Pharmaceutical School. In 1893 the Medical Faculty held 6,803 examinations, and the Pharmaceutical School 1887.

In 1890 there were 38,446 more deaths than births in France; in 1891, 10,505; in 1892, 20,041.

The Jefferson Medical College of Philadelphia has resolved unanimously to institute a compulsory four years' course with the session of 1895-96.

Mr. James T. Reynolds, late medical officer and public vaccinator of the Boxford District of the Cosford Union, has been awarded for the third time the Government grant for successful vaccination.

The French Congress of Otology and Laryngology will meet in Paris on April 30th.

CORRESPONDENCE.

THE PROPOSED TEACHING UNIVERSITY FOR LONDON.

Sir,—In considering the details of the scheme for a teaching university in London, we may with advantage inquire how far it meets the views of the British Medical Association on this subject. As you have correctly stated, it is held that the preliminary science and matriculation examinations of the London University, are a real obstacle in the way of our average medical students obtaining a degree in medicine. The question is, how does the scheme now before us deal with this difficulty?

The members of the Association were canvassed in 1880 as to their views regarding the nature and standard of examinations through which a student should pass before being allowed to enter his name on the *Register* of the General Medical Council. From the answers then received a report was drawn up, which was adopted at a general meeting of the Association, and I find it stated in this report "that in England the principle of demanding from students entering the profession a sound knowledge of English, of mathematics, and Latin up to a certain standard, is strongly insisted on, and there seems to be no diversity of opinion as to the advisability of committing these examinations to our university, and other educational authorities." This applies to students entering our medical schools, with the intention of obtaining a licence to practise. Regarding those who desire a degree it is stated, that "all students save those who have already matriculated at other universities should be required to pass the matriculation examination of the University of London, previous to entering at a London school." What we asked for was, that metropolitan students should have "facilities granted them for obtaining degrees in medicine, such as are enjoyed" by men graduating in other universities of the United Kingdom.

If we turn to the report of the Royal Commission on University Education in London, we find it is recommended that the scope of the entrance examination into the proposed university should be determined by the university, "having regard to the course of study which the student is to follow," the university having power to accept certificates from schools, or otherwise of examinations of equal standard. It will be observed, therefore, that the recommendations of the Royal Commission as regards matriculation meet the wishes of the members of the British Medical Association on this subject. I take it that it means if a man does not desire to pass the matriculation examination of the proposed University of London, he will be allowed pass Responsions at Oxford, or a corresponding examination in one of our other universities; having done this, he will be permitted by the London University to enter at one of the London schools, and proceed in due course to the science and other examinations for his degree. Our London students will thus be on all fours as to matriculation, with men going up to other universities, for they will have the same facilities for entering the London University as other students have of entering their universities.

With reference to the preliminary scientific examination, the Association in the report above referred to, state that this examination, has been the chief obstacle in the way of London students obtaining a degree, and that "this depends on the existing University not being in touch with the teachers in the metropolitan medical schools."

Under the scheme of the Royal Commission it is proposed that the teachers in our medical schools shall constitute the faculty of medicine, and that this faculty is to appoint a certain number of its members to form a board of studies. The examiners, on the part of the University, in those branches of science which appertain to medicine and surgery, are to be nominated by the board of studies. The Commission observe on this subject "that the University should have power to enter into arrangements with the Colleges of Physicians and Surgeons, for conducting in common examinations in such portions of the subjects included in the course for the degree as may be determined by common consent between the University and the Colleges." The examiners of the Royal Colleges are teachers in anatomy, physiology,

medicine, and so on, in the metropolitan schools; and as the University examiners are to be nominated by the representatives of these teachers, it follows that the candidates for the preliminary science and subsequent examinations, will be examined by the teachers under whom they have worked. The instruction imparted to the medical student, and the examinations through which he has to pass, will be conducted by the same persons; and these examinations will be upon the lines of those now instituted by the Royal Colleges for their Licentiateship and Membership. Somewhat more may be required for a degree, of which no one can justly complain.

The proposed scheme for a new University, therefore, meets the requirements laid down by the Association, as regards examinations for a degree in medicine for London students, and it seems admirably adapted in this respect to satisfy the wants of our metropolitan students.

Beyond this, the scheme under consideration contains a most important proposal with regard to the Society of Apothecaries. It is useless attempting to raise the standard of medical education in London, if any one of its four licensing authorities grant diplomas upon less complete examination than the other three bodies. This fact has been insisted on in all the reports issued on the subject by the Association since 1880; and the Royal Commission now concur in our views, and, what is more important, offer suggestions as to how this fault in our system may be rectified. It is proposed, that not only should the Society of Apothecaries have a seat in the senate of the new University, but that "it might be included in the arrangement for conducting examinations." And, further, that this Society "has expressed its readiness to concur in aiding the educational resources of the University." Under this scheme, therefore, the University of London, the two Royal Colleges, and the Apothecaries' Society, may combine for examination purposes, and so establish a one portal system for London students. There can be no question that a conjoint examining board of this description for metropolitan students, would be a decided advantage from an educational point of view; and I sincerely trust it will be carried into effect under the scheme for a teaching University in London.

Next week I propose referring to the scheme of the Royal Commission, in its bearing upon a more important subject even than examination, and that is the means by which it is proposed to secure the best methods of teaching, and courses of study in our London medical schools.—I am, etc.,

Grosvenor Street, W., Feb. 20th. N. C. Macnamara.

MEDICAL DEGREES FOR LONDON STUDENTS.

Sir,—Now that another degree-granting institution is on the *tapis*, I would suggest to the authorities the following curriculum and degrees in the medical department. A preliminary or preparatory medical course of, say, three years, comprising classics, science, anatomy, physiology, chemistry, materia medica, etc., at the completion of which, and after a satisfactory examination, a degree should be conferred, such as B.Sc. or B.Phil. The medical curriculum proper to continue for three years longer, at the completion of which the ordinary medical and surgical degrees (M.B. and B.Ch.) to be conferred. I would suggest, further, that the higher surgical degree should be D. Chir. rather than the ordinary Mag. Chir., and that the candidates should have the option of presenting themselves for the doctor's degree in any of the following elective subjects:

M.D. in: (1) Medicine, pathology, therapeutics, etc.: (2) mental and nervous disease, pathology, therapeutics, etc.; (3) obstetrics, gynæcology, etc.; and (4) hygiene and State medicine.

D.Chir. in: (1) Surgery, pathology, etc.; (2) ophthalmology, otology, etc.; and (3) dentistry, etc.

The professional subjects, such as anatomy, etc., of the preparatory course should be arranged so as to meet the requirements of candidates for either the medical, dental, or veterinary profession.—I am, etc.,

February 18th. A Student.

The Russian Government has granted a sum of 400,000 roubles (£40,000) for the erection of new clinical buildings in the University of Charkoff.

PUERPERAL SEPTICÆMIA.

Sir,—Permit me to reply to Dr. Clement Godson and Dr. Boxall in the British Medical Journal of November 18th and 25th, 1893. Dr. Godson's remarks, dealing as they do with vaginal injections only, are not relevant to the point at issue, because every obstetrician knows, or should know, that attention is at once directed, in the curative treatment, to the endometrium, the vaginal surface being quite of secondary importance. Dr. Godson in short has treated of the preventive instead of the curative treatment of septicæmia. As for the brilliant results attainable by the employment of the sublimate, I never denied them. I have only pointed to the dangers, and to the consequent condemnation of the drug by M. Tarnier, who, finding that he had eighteen deaths from its use in his own experience in eight years, dare not use it any longer.

As for Dr. Boxall's statements, I would first of all call attention to the fact that in my reply to Dr. Barnes I never mentioned the biniodide of mercury; nor yet in my first note calling attention to Tarnier's condemnation of bichloride on October 21st. Dr. Boxall's remarks therefore about "pots and kettles" are totally unnecessary. The discussion is upon the dangers of the sublimate, and the condemnation of it in consequence, by the majority of Continental obstetricians and surgeons. Now, as Dr. Boxall admits these dangers, and admits them freely, to deal with his reluctance to desist from using this deadly remedy is quite easy.

All that is needed to remove all danger is the addition of iodide of potassium to the corrosive lotion. Of course it no longer remains corrosive sublimate, for the biniodide is precipitated and dissolved in the excess of the potassic salt added. But Dr. Boxall and other advocates of the sublimate have been assured by Miquel and Rueff since 1888, by Sims Woodhead since 1889, and by Luff since 1889, that the biniodide has twice or thrice the germicidal power of the bichloride, and also that it does not precipitate albumen, by reason of the potassic iodide solvent of it having the property of not coagulating the albuminous elements of the blood, as shown by the retardation of fibrination. This should have been enough for all those gentlemen to whom I practically appealed in my letter of October 21st.

There is a great deal more to be said, and not the least is the fact pointed out by Dr. Woodhead in his *Laboratory Reports, Royal College of Physicians of Edinburgh*, vol. i, 1889, that the solution of the biniodide will not injure the most delicate instrument.

As regards the uses of the drug, I dealt most fully with them in my paper in the Therapeutic Section, at the Leeds meeting in 1889, and also in my book[1] upon the drug, published in 1888.

I have had the greatest assistance rendered in the various preparations and solutions of the biniodide, by Messrs. Burroughs and Wellcome, Messrs. Wyley, of Coventry; Messrs. Sumner, of Liverpool; and Mr. Legat, of Bolton.—I am, etc.,

C. R. Illingworth, M.D.(Ed.), D.P.H.(Lond.).

West Kensington, W., Feb. 15th.

We have received a number of communications on this subject, in addition to those already published; continuous pressure on space has rendered it impossible to publish all in full. In now bringing the discussion to a close, we append brief notes of the points raised by our correspondents:—

Dr. Edward C. Anderson is convinced that not a few cases arise in the way indicated by Dr. Playfair. One of the first steps taken by the physician should be to note the condition of drainage and ventilation, and insist upon atmospheric purity. He attributes his own good results to personal cleanliness, the cleanliness of all persons and things around the patient, and the constant exercise of the strictest supervision and precautions with respect to drainage and ventilation. He condemns as dangerous the practice of some nurses of allowing linen, etc., soiled during the confinement, to remain, perhaps for days in a contiguous room.

Dr. W. A. Bond (Deputy Medical Officer of Health for the City of London) holds that there is a large amount of clinical

[1] Published by Mr. H. K. Lewis, London.

experience that septic diseases, typhoid fever, and many other less-defined maladies, have resulted from sewer air. Miquel, Cunningham, and others have shown that sewer air often contains large numbers of microbes. Different microbes produce septicæmia, and such microbes have been found in normal fæces (Brieger, Bienstock), filthy water (Koch), putrid meat, purulent tuberculous sputum and saliva. Some of the microbes in sewer air must, therefore, be septic. Sewer air may contaminate the napkins; the damaged tissues and napkins soaked with lochia are excellent media for microbes.

Dr. Alex. Duncan, of Milwaukee, states that while practising in a rural district in Scotland he had the misfortune to have two cases of puerperal septicæmia, but that almost twelve months intervened between the two, and that both were distinctly traceable to sanitary defects. He also encloses the following very interesting narrative from Dr. Thomas's work, *Abortion and its Treatment:*

"Three or four years ago I was summoned to see, in consultation with an excellent and thoroughly well-informed physician, a graduate of this College, a wealthy lady residing in a flourishing town some ten miles from New York. She had had a perfectly normal labour, but was now suffering from a decided attack of puerperal fever. I questioned the physician thoroughly on every point likely to afford a clue to the origin of the trouble, but for a long time my efforts at finding out the source of the trouble were entirely unsuccessful. The doctor was constantly attending cases of midwifery, but had not had a single one in which there were any signs of septicæmia. In attending the lady he had taken the greatest care in regard to the condition of his clothing, his hands, and his instruments. The nurse was also thoroughly aseptic, and every possible precaution that he could think of was taken. Believing, as I do, that puerperal septicæmia is due to a special poison communicated from some septic source, I began to feel very much puzzled.

"I inquired where the watercloset was, and found that it adjoined the lying-in chamber, and that it was one of the old-fashioned pan closets still, unfortunately, so much in vogue. In speaking of these, Colonel Waring, one of our best authorities in matters of sanitation, says: 'Everything looks like a whited sepulchre above, and below there is a chamber of horrors.' I lifted the pan, and a horrible odour assailed my nostrils. On further inquiry I found that the patient had been in labour for twelve hours, and that during this time she had had three or four passages, each time going into the watercloset for the purpose. Now, at last, light began to break in upon the etiology of the case. Just think of the position in the act of defæcation or urination. With the downward pressure brought to bear, the labia are rolled out and the vaginal walls widely unfolded. Up from below, to come in contact with all this unfolded surface of mucous membrane, rise the emanations from the closet loaded with septic germs. Here was a woman in the pains of labour subjecting herself directly to the poison of the sewer pipe, for probably at least five minutes at a time, several times during the process of labour."

Dr. A. H. Freeb objects to Dr. Boxall's statement that the use of biniodide of mercury "entails the possible risk of iodism in addition to that of mercurialism," pointing out that such a thing is not likely to occur in the case of a solution of biniodide in iodide of sodium, where each is soluble in excess of the other. He also says that if any still persist in the use of the bichloride solution "they can obviate any tendency to mercurialism by the administration of daily doses of 0.25 gramme of iodide of potassium in about 400 c. centimetres of milk, as is done in some electrical works with entire success."

Dr. Hooker (Cirencester) attended a confinement, and the patient went on perfectly well for seven days, when she developed bad symptoms, with a temperature of 103°. A foul smell was noticed in the room, but there was no bad odour in the lochia. Under the bed, however, was found a parcel containing two trout in a most offensive condition. On removing her to another room all bad symptoms at once subsided. Dr. Hooker pertinently asks: "Is sewer gas less noxious than dead trout?"

Dr. Fitzgerald Isdell says that some fifty years ago one of the wards of the Rotunda had a mortality from puerperal fever constantly in excess of the rest of the house. On digging up the grass plot upon which the end of the ward looked an old cesspool was discovered containing sewage matter. As soon as the cesspool and its contents were removed the excessive mortality of that ward disappeared.

Dr. H. H. Sturge relates a case strongly suggesting the etiological importance of insanitary conditions of a house. On November 28th he attended a healthy young woman in her third confinement. Notwithstanding that labour was uncomplicated and that on the same day he attended three other confinements, all of which did well, this patient became ill on the third day, having fever, quickly followed by delirium. Ultimately sloughing of the calf took place, and she died with symptoms of pyæmia. In this case various gross defects were discovered in the house and its surroundings, and since then the house has been condemned by the sanitary authority as unfit for habitation, and the inference is fairly drawn from the good progress of the other cases attended on the same day that in this case the disease was not imported by the doctor, but arose from the insanitary conditions on the spot.

PROPOSED NEW ORDER OF MIDWIFERY PRACTITIONERS.

Sir,—In the British Medical Journal of February 3rd I asked the Secretaries of the Midwives' Registration Association if they would introduce a clause in the next Midwives Bill making it illegal for their so-called "midwife" to vaccinate, as, by Article 4 of the French Medical Act, 1892, midwives are empowered in France to vaccinate. In the Journal of February 17th they reply that "limits to their practice will, of course, be laid down." This plausible statement is not satisfactory; far from it. They go on to make a very unjust statement regarding the petition which was presented by me to the General Medical Council at its winter session, 1893. The Council did not, as they say, refuse to "seriously consider" my petition. The Council thinks that, as it had accepted a previous petition from us, and as it has appointed a Committee of the Council to consider any Midwives Bill referred to it, it has done what is necessary up to the present. The General Medical Council did accept my petition, and it was moved, seconded, and agreed to that it be entered upon their minutes (see minutes of the General Medical Council, 1893). At its November session, 1892, the General Medical Council accepted my previous petition, entered it on their minutes, and then passed the following important resolutions, moved by Sir William Turner, seconded by Mr. Wheelhouse, and agreed to: "That the Registrar be requested to inform Dr. Rentoul that the certificates referred to in his memorial are neither licences nor diplomas within the meaning of the Medical Acts, and possess no legal value." Moved by Sir William Turner, seconded by Mr. Wheelhouse, and agreed to: "That the President be requested by the General Medical Council to point out to the institutions and persons who grant such certificates that the certificate should be expressed in such a form as not to lead to the impression that it is a legal qualification to practice midwifery." Do these resolutions show, as Drs. Boxall and Humphreys unjustly suggest, that the General Medical Council has refused to "seriously consider" my petitions? I think not. Let us act honestly in this very serious discussion. Let me further inform Drs. Boxall and Humphreys that the General Medical Council, at its winter session, 1889, passed a most important resolution, to the effect that, supposing "midwives" were licensed and registered, the Medical Council would not undertake any of the duties for "licensing or controlling them."

Drs. Boxall and Humphreys take objection to my suggestion that they are trying, under the simple cry of "registering midwives," to create an independent order of midwifery, nay even of medical practitioners. If they are not, will they agree to have any Midwives Bill withdrawn from the House of Commons if it does not contain clauses making it illegal and punishable by a fine or imprisonment if a midwife:

(*a*) Uses forceps, turns, or performs any obstetrical operation; or (*b*) vaccinates; or (*c*) gives a certificate of the cause of death of a mother or infant; or (*d*) treats any medical or surgical disease of a mother or infant; or (*e*) dispenses and prescribes any medicines for a mother or infant; or (*f*) con-

ducts labours other than "natural;" or (*g*) acts as qualified midwifery assistant to a medical practitioner; or (*h*) employs an unregistered mi dwife to act as her assistant?

If Drs. Boxall and Humphreys will not agree to the above, then I contend they are endeavouring, under this cry of midwives' registration, to create a new and independent order of medical practitioners. I hold firmly that if we permit so-called midwives to be registered they will gradually develop into medical and surgical practitioners, just as the old apothecaries first were qualified to dispense medicines, then to practise medicine only and dispense, and now, by the Medical Act, 1886, to act as fully qualified medical practitioners.

Let me lastly inform Drs. Boxall and Humphreys that by our action we have kept two Midwives' Registration Bills from becoming law; we have given evidence before the Select Committee on Death Registration and Registration of Stillborn Children; induced the Registrar-General to issue a book of medical certificates for stillbirths; obtained the Parliamentary return "Stillbirth Registration Abroad;" given evidence before the Select Committee *re* Midwives' Registration and obtained the Parliamentary Return, No. 352, 1891, "Stillbirth Interments during 1890, in the Burial Board Cemeteries in England and Wales." Not a bad "show" for such unimportant persons.—I am, etc.,

Liverpool, Feb. 19th. ROBERT R. RENTOUL.

THE HYDERABAD CHLOROFORM COMMISSION.

SIR,—Will you kindly state that the letter from His Excellency the Prime Minister of His Highness the Nizam, addressed to us, among others, which you published in the BRITISH MEDICAL JOURNAL of February 17th, appeared without our knowledge?

As it has been made public will you be good enough to make public also the reply to it which we had sent to Hyderabad, a copy of which we append herewith.—We are, etc.,

W. H. GASKELL.
Cambridge, Feb. 20th. L. E. SHORE.

To His Excellency the Nawab Vikar-ul-Mura Bahadur, Prime Minister of His Highness the Nizam.

SIR,—We beg through you to thank His Highness the Nizam's Government for their appreciation of the work we have done in connection with the Hyderabad Chloroform Commission. We can assure you, on our part, that we feel it a great honour to have been invited to take a part in so important a scientific investigation as that initiated by His Highness the Nizam's Government. Our desire throughout has been to carry out our investigation in a scientific spirit by means of experiments on animals, approaching the question from the physiological point of view, entirely apart from clinical observations. Our primary object was to ascertain the cause of the fall of blood pressure which usually accompanies chloroform anæsthesia, and our experiments show, in our opinion, conclusively that this fall of pressure is mainly due to a direct weakening action of chloroform on the heart. We do not feel that the subsequent experiments conducted by Surgeon-Lieutenant-Colonel Lawrie and Dr. Chamarette, referred to in the eleventh and twelfth paragraphs of your letter, so far as we can judge from an account of them that has been published, have caused us to change our opinion on this point.

We consider, nevertheless, that the great value of the results of the Hyderabad Chloroform Commission in insisting upon the careful watching of the respiration during the clinical administration of chloroform still holds good, in spite of the results of our experiments as to the cause of the fall of blood pressure. At the same time, we feel that it is due to His Highness the Nizam's Government that we should state that we, as physiologists, attach but little importance, in deciding the question of the action of chloroform on the heart, to the oft reiterated observations of the Hyderabad Chloroform Commission that the respiration fails before the heart ceases to beat. From our knowledge of the nature of the nervous activity of the respiratory centre and of the nature of the contractile activity of the heart, it is clear to us that the delicate nervous centre for respiration would be expected to fail—as it does in the majority of cases of death—before the heart actually ceases to beat, even though the muscular activity of the heart be impaired by the action of such a drug as chloroform. We therefore consider that the cessation of the respiration before the cessation of the heart's beat which occurs as the result of chloroform poisoning is of itself of no value in supporting the conclusion of Surgeon-Lieutenant-Colonel Lawrie that the chloroform does not directly affect the heart in any way.

We have the honour to be, Sir,
Your obedient servants,
W. H. GASKELL,
L. E. SHORE.

*** The document published last week was received by us from Surgeon-Lieutenant-Colonel Lawrie, through his agents in this country, with a request for its early publication.

A NEUROLOGICAL Society has been formed at Baltimore, with Dr. Henry M. Hurd as its first President.

ASSISTANT MEDICAL OFFICERS IN ASYLUMS.

SIR,—The remarks in the BRITISH MEDICAL JOURNAL of February 17th on Asylums deserve the thanks of all medical men in these institutions. As an asylum medical officer of some years' experience I beg to endorse your views, but at the same time I must take exception to the classing of assistant medical officers with house physicians: there is no similarity between the two except in the case of small asylums, with a population of about 300 and an annual admission rate of about 50. In such the superintendent is really, and not only nominally, the only responsible medical officer, and the asylum medical officer may be classed as a house physician whose services can at any time be replaced by those of another young medical man seeking a year or two's experience in the speciality. In the large asylums, however, and particularly in the largest, the case is different. It must be admitted that the asylum medical officers are permanent and responsible officials as much as is the superintendent, and the large asylums owe their existence to the fact that this is the case, although the asylum medical officers do not receive the recognition such a state of things demands.

The career of the majority of assistant medical officers is one of the saddest pictures our profession affords. A young man enters the speciality, is well enough paid and provided for during the first few years, when he is gaining experience, but after that time he has little to keep him from sinking into the abyss of chronicity which yawns alike for patients and medical officers. There is a superintendency for only a very small proportion of assistants, and the men who do not reach the coveted goal find, when it is too late, that they have spent the best years of their life in a service that is not a service, as are the army, navy, and colonial services, and that unless they rise to the highest point all they can hope for is at the very best £300 to £400 a year, a very subordinate position, inability to marry, absence of home or independence, and a much inferior position to that which even this small income would command in general practice.

By all means pay the superintendents of large asylums a salary comparable to that earned by leading practitioners, but let it be remembered that no man manages an asylum with 2,000 or even 1,000 patients without a medical staff of whom one or two must be permanent and responsible and should be paid and treated accordingly, and only the very junior amongst the staff classed and remunerated as house physicians.—I am, etc.,

February 19th. AN ASYLUM MEDICAL OFFICER.

SIR,—I, in common doubtless with many others, have read with great interest your remarks in the BRITISH MEDICAL JOURNAL of February 17th on "Asylum Superintendents," especially those relating to assistant medical officers.

The general idea appears to be that asylum life is one of pleasure and ease, whereas, after fourteen years' experience, I can affirm that there is a constant round of worry, anxiety, and fatigue, which is not confined to the medical superintendent alone. It is quite true that the almost continual restraint and seclusion, and frequent lack of consideration both for social and professional position do tend to diminish interest and abolish energy and enthusiasm among assistant medical officers.

The outlook is black indeed, vacancies are few, and chances of promotion almost *nil*, added to which there is a tendency, as you will see from the enclosed extract, to limit the term of appointment and to cut down the already inadequate salaries.

If assistant medical officers in asylums are to be treated and regarded simply as house-physicians, how can they have any heart in their work, there being a feeling from the first that in a few months at most they will have to leave and start afresh? I am certain such changes would be detrimental to any institution and to the well-being of the patients.

I may mention that the term "imbecile" applied to certain large asylums in the neighbourhood of the metropolis is most misleading, as the majority of admissions consist of transfers from county asylums, the number of cases of chronic insanity exceeding by some hundreds those of simple imbecility and congenital mental enfeeblement. Would

there were more professional cohesion to combat such radical suggestions.—I am, etc.,

February 20th. M. U. A.

COOKING BY GAS: THE SANITARY ASPECT.

Sir,—There is one aspect of the gas-cooking question which the writer of the articles in the British Medical Journal has not touched on, namely, the sanitary. Gas cookers in most kitchens are very unhealthy. As a rule, the oven only is connected with a chimney, and that not always. The boiling burners on the top give off their fumes, acetylene when the pot is cold, carbon dioxide and perhaps carbon monoxide at other times, into the kitchen, from which the whole house is frequently permeated. Occasionally one finds a hood over the stove communicating with the chimney, but even then the fumes are frequently not completely carried off. In one case known to me two children in the nursery of a house suffered greatly in health, becoming languid, weak, and anæmic for no known cause. A few weeks after the discontinuance of the gas cooker in the kitchen they were in perfect health. The nursery here was at the top of the stairs leading to the kitchen. Another difficulty is that it is impossible with gas to consume the vegetable refuse which it is so necessary should be burned. The ashpit should be filled with dry ashes only, not decomposing potato parings and cabbage leaves. The first difficulty may be got over by fitting up the ordinary fire range for gas. This only requires a burner to be placed in the oven, a proper ventilating aperture being made, and a tray of boiling burners to stand on the top of the grate. This may be hinged so as to lie at the back of the space over the grate, and the stove may be used at a moment's notice for either fire or gas.

In the correspondence which has taken place respecting heating rooms by gas, no one has, I think, touched the principal points. I have used gas stoves continuously to heat laboratories for some years, and have carefully observed the effects. The best stoves are, I think, the simple tubular ones made by Fletcher and Co. If these are made of copper, they are very durable and gas tight. But there is a certain maximum of gas consumption which must not be exceeded if the air is to be comfortably warmed without being too dry. In one case, using a small stove (3 F in the catalogue), I found that at a pressure of 1½ inch it would burn about 25 feet per hour. At this consumption the air was unpleasantly dry, and the laboratory became very uncomfortable. On the other hand, up to 18 feet could be burned with good effect. In the case of a larger stove, the "drying room stove," I have never been able to burn it at its full power without making the room uncomfortable. It ought by right to be fitted with a regulator limiting the supply. Precisely the same thing applies to most of the coke stoves in use in England; when burnt at full power they become too hot, besides being very wasteful. True comfort and economy can only be secured by using a much larger stove, burned at about half the full power.

With regard to the economy of gas-heating stoves, Mr. Fletcher has recently given the cost of gas against coke for heating a small boiler as six to one.—I am, etc.,

Leeds, Feb. 17th. Ernest H. Jacob, M.D.

WATERBORNE CHOLERA.

Sir,—I have read with interest the address on waterborne cholera delivered by Mr. Ernest Hart last summer before the American Medical Association, and noted with especial interest some of the illustrative examples cited by him, among others the experience of the three Russian regiments encamped in 1892 on the bank of a cholera-infected stream near Samarcand.

Since reading these remarks there has come to my notice a most striking illustration in support of Mr. Hart's contention, the facts relating to which with your permission I will recite.

In the burying grounds of the quarantine hospital of this city, which institution is situated on the west bank of the Mississippi river, about twelve miles below St. Louis, is a monument, erected, as the inscription placed upon it reads, in memory of 175 non-commissioned officers and soldiers of the 56th United States Coloured Infantry, who died of cholera in 1866. This mortality in such a body of men seems excessive even for those days, and prompted inquiry by me into the circumstances attending it.

Through the courtesy of the War Department and the Surgeon-General, I have been furnished with information which, in brief, is as follows:

The regiment, 708 strong, embarked on two steamers at Helena, Ark., for St. Louis, on August 9th and 10th, 1866, having had unusual health up to that time, as the commanding officer states in his official report on the cholera epidemic among his men. One boat preceded the other a few hours, and by the time it reached Cairo, Ills., a distance of about 300 miles, it had thirteen dead bodies on board, and between 50 and 60 cases, all cholera, and all these dead and sick belonging to the command in question.

The disease increased so rapidly that over 50 men died on board the leading boat before it reached quarantine here (the trip occupying about four days), and by August 18th, about one week after the regiment left Helena sound and well, 139 deaths from cholera had occurred in the command, with the end not reached until the number noted on the monument had been recorded; and, I conclude from the data at hand, that scarcely a soldier in the regiment escaped an attack of the disease.

The true explanation of this outburst now seems easy, although current local (non-medical) opinion has advanced the view that it was caused by the free eating of raw sugar by the soldiers while on board the boats. At the time the regiment left Helena people were dying of cholera in St. Louis at the rate of over 100 a day, the reported deaths from cholera for the week ending August 18th numbering upwards of 900; and, of course, the cholera-laden sewage from the affected population was poured into the river, the stage of water in the channel being probably quite low at that season of the year.

As soon, apparently, as the boats swung out into the stream on their upward trip, and the soldiers began drinking the river water, cholera commenced its work with the fearful consequences already stated.

Trusting that what I have thus communicated may not be without interest, I am, etc.,

Geo. Homan, M.D.,

January 20th. Health Commissioner, St. Louis, Mo., U.S.A.

THE PREVENTION AND CURE OF AGUE BY OPIUM.

Sir,—Without considering myself one of the Indian medical authorities called upon by Dr. G. Thin for an opinion, and while hoping that those with more experience than myself will answer his pertinent inquiries on the above subject in the British Medical Journal of December 23rd, 1893, I would venture to point out that the distinction between the prevention and the cure of ague by opium, and its relative value as compared with other drugs, are not sufficiently laid stress upon. I know no doctor who would, if quinine were obtainable, prescribe opium either to prevent or to cure ague, though the two drugs combined are frequently more serviceable than either alone. It was stated by Surgeon-Major-General Rice, before the Royal Commission on Opium, that not 10 per cent. of the population of India ever consult a practitioner of any nationality practising the European system of medicine, and that not 20 per cent. ever even see one, and it is this fact which makes the widespread belief among such numbers to whom European medicines and advice are an absolute impossibility one worthy of acceptance, and at the same time one difficult to prove the scientific value of. Even if quinine were so cheap and easily distributed—as thanks to Dr. George King and the Government of Bengal it now nearly is in Bengal—that everybody could get it, it could never replace opium as a domestic remedy, since the latter, besides its use in malarial fever, is invaluable in bowel disorders, diabetes, etc.

Apart from the grave doubt as regards the truth of Dr. Thin's statement that "what is good for a (*vegetable feeding*) Hindu or a Chinaman must be good for a (*meat eating*) Englishman" (italics mine), the different clothing habits of the races must be considered. Europeans in India, particularly in unhealthy areas, dress more carefully and guard against changes in temperature by changes in their clothing, whereas

the natives are careless in such matters, and one generally sees them, after a heavy shower, in the rains, causing a rapid fall in temperature, going about in the same scanty, and often soaked, garments as before. In them, therefore, is best illustrated Lauder Brunton's idea of opium lessening the hypersensibility of the vasomotor centre with its consequent liability to chill, which appears to exist in malarial poisoning.

The probable reason why the opium-eating habit in India serves as a protection against malaria is the composition of Indian opium. It contains less morphine (1 to 1.868[1]) and much more narcotine (3.65 to 1[1]) than Turkish opium, and therefore a man who eats it regularly is consuming narcotine which, since, if not before, the time when Sir William O'Shaughnessy was opium examiner here, and wrote the *Bengal Dispensatory*, in 1841, has been recognised as a tonic and antiperiodic without any narcotic properties. Sir William indeed called it "a most important febrifuge remedy," and stated that its salts were "capable of arresting the paroxysms of intermittent and remittent fevers." In the days when quinine was much more expensive than it is now, the Government Medical Store Department in India issued narcotine on indent to the dispensaries.

All the same, no doctor would advise any man, European or native, in perfect health, to commence eating opium, even in malarious districts, knowing there are better antiperiodics, any more than he would, knowing that moderation may pass into excess, advise any man to commence using alcohol or tobacco, though he may fairly believe that either in moderation is beneficial, and may consider the fact that the most civilised and advanced nations have used both for centuries, a proof to the unprejudiced mind of their being advantageous to the progress of mankind. What alcohol and tobacco are to us, tobacco and opium are to the Eastern, the latter drug fully justifying its title as the "gift of God."—I am, etc.

F. P. MAYNARD, M.B.,
Surgeon-Captain, I.M.S.

Patna, Jan. 16th.

SPECTACLED CHILDREN.

SIR,—With reference to the paragraph on Spectacled Children in the BRITISH MEDICAL JOURNAL of January 20th, will you allow me to mention what is being done on this foundation? Three or four years ago I brought the question of the children's eyesight and other matters of health before the governors, and at their request Mr. Priestley Smith instructed teachers from the nine schools on the foundation in a simple type test. In this school—and I believe the same applies to the whole foundation—we now test the girls' eyesight on entry in the case of new pupils, and every autumn in the case of those already in the school. The results, along with statistics of height, weight, and hearing, are recorded, and we draw the parents' attention to all cases of appreciable deviation from normal vision, and recommend them to consult an oculist. They generally act on the recommendation, and I have reason to believe much good has already been effected, while we are accumulating valuable statistics. As the foundation educates more than 2,300 children of both sexes, an appreciable percentage of the children of Birmingham passes through our hands, probably 50 per cent. of all the children above the Board school class. I trust a knowledge of what is being done here may lead to the adoption of similar measures in other schools.—I am, etc.,

EDITH E. M. CREAK, B.A.
King Edward's High School for Girls, Birmingham, Feb. 10th.

COMPETITION AND UNDERSELLING.

SIR,—In reference to the paragraph in the BRITISH MEDICAL JOURNAL of to-day, entitled "Competition and Underselling," the following may be perhaps considered a typical case of the latter. A fully qualified man has lately settled here and has started a "Medical Aid Society," the members of which have only to pay one penny per week for medicine, attendance, and advice. He employs a collector who canvasses for members amongst the *bonâ fide* patients of the other medical men here, and who has a direct interest in getting whom he can, as there is an entrance fee of sixpence, which he (the collector) pockets for himself. Through, I conclude, a somewhat similar mode of action, the adult members of the various clubs here (chiefly colliers, many of whom earn £2 a week) only pay their doctor three shillings per head, per annum.—I am, etc.,

E. B. FFENNELL.

Kimberley, Notts, Jan. 27th.

[1] These ratios are taken from tables I recently placed before the Opium Commission.

PARISH AND DISTRICT COUNCILS.

SIR,—I see by the daily newspapers that all who hold an office for profit under a board of guardians are disqualified from being members of either the parish or district council. As nearly all medical men in the rural districts are compelled to take these appointments, this affects a great number of men who should be of great use in local government. You have always expressed yourself strongly in favour of the profession taking part in public affairs. This is also my humble opinion, and I therefore suggest that the Parliamentary Bills Committee take this matter into consideration and endeavour to find a way to allow the parish doctor to have some voice in the sanitation of highways, etc., of the county in which he resides.—I am, etc.,

RUSTICUS.

February 5th.

ACUTE INTUSSUSCEPTION IN CHILDREN.

SIR,—The third conclusion which Mr. Barker[1] deduces from a study of cases of this disorder, namely,

> .....that there is a certain proportion of cases among all the varieties of intussusception which no amount of injection will relieve, or in which injection would be dangerous, and these can only be dealt with by opening the abdomen,

seems to me to suggest that some modifications of his first and second conclusions may be desirable. They are as follows:

1. That in all cases of intussusception in children injection of water or manipulation should be at once resorted to *if the patient is seen within a few hours of the onset* of the strangulation.
2. That if these means fail after a fair trial, not too much prolonged, laparotomy should be at once done as the safest treatment.

As regards the first, I would urge the importance of considering not only the duration of time that has elapsed since the onset, but also the severity of the symptoms. Within twenty-four hours gangrene has been known to occur, the conditions having, of course, been for some hours previously such as would have rendered an injection not merely useless, but highly dangerous. It may be remarked that in any one case opinions would probably still differ widely as to what should be considered "a fair trial, not too much prolonged." When surgical registrar at the Hospital for Sick Children I made some experiments in this direction, having been led to do so partly by the remarkable vagueness of the directions given in treatises and textbooks, partly by having seen cases in which, contrary to some preceding ones, injection had been followed by unfortunate results. An account of these appeared in the *Lancet*, May 23rd, 1891, and the conclusions may be briefly thus stated—that whilst injection offers a fascinating possibility of success achieved by simple means it is liable to many serious objections, besides the obvious one of partial or complete rupture of bowel, and that under no circumstances should any method be employed which does not ensure steady, not intermittent, pressure, and estimation at any moment of the amount of force used. This can be done readily with tubing and an ordinary funnel, the latter not being raised more than 3 feet above the level of the abdomen. There is danger of rupture if this be exceeded.—I am, etc.,

J. D. MORTIMER,
Late Surgical Registrar Hospital for Sick Children, Great Ormond Street.

Horley, Feb. 17th.

MEDICAL CONGRESS IN RUSSIA.—On January 16th the ninth Congress of Russian Scientists and Medical Practitioners was opened at Moscow by the Honorary President, the Grand Duke Sergius Alexandrovitch. About 2,000 persons were present. Professor K. A. Timirjaseff was chosen President. No representative of medicine was on the committee, a circumstance which seems somewhat remarkable in view of the fact that the Congress is medical as well as scientific, and that of the eleven sections of which it consists three are purely medical.

[1] BRITISH MEDICAL JOURNAL, February 17th, 1894.

MEDICO-LEGAL AND MEDICO-ETHICAL.

POISONING BY CARBOLIC ACID.

The *Newcastle Daily Leader* reports a case of suicidal poisoning with carbolic acid which was the subject of an inquest on the previous day. This makes the eighth case of poisoning reported as having occurred during the present month, one of them being accidental. In one of the cases the coroner commented upon the frequency of this sort of poisoning, and expressed the opinion that the sale of the article required to be regulated like other poisons. He appears to have thought that an Act of Parliament would be requisite for this purpose, and not to have been aware of the fact that the existing Pharmacy Act provides for the addition of any poisonous article to the schedule of poisons, and for the application of restrictions to its sale. Neither does he appear to have known that several years ago the Council of the Pharmaceutical Society passed a resolution that carbolic acid ought to be added to the schedule, and that this resolution is still awaiting the approval of the Privy Council, before receiving which it cannot have the force of law as the Act provides. Under these circumstances it will be useful to point out, for the guidance of coroners, that it is to the Privy Council that they should communicate their views as to the necessity for surrounding the sale of carbolic acid with such precautionary regulations as may be effectual in preventing the frequent use of the article for suicidal purposes as well as the accidental deaths resulting from want of proper regulations as to its sale.

"TOILET ARTICLES, PERFUMES, ETC."

The most recent instance of the oft-recurring derogatory deviations from the time-honoured traditions and general custom of the medical profession by young practitioners, who would appear to have mistaken their true vocation, is that of Dr. G. S. Illingworth, the alleged proprietor of the "Medical Hall, Portland Buildings, Govan," in connection with which "toilet articles, perfumery, and other household requisites are sold at the lowest possible prices for cash." Such is the announcement in the circular before us. For such a procedure the one effective remedy is, as we have repeatedly pointed out, the rigid application of the disciplinary laws of the respective Colleges of which the offending practitioner is a member. We would suggest that our correspondent should, in the interests of the public and the profession, transmit to the Presidents one of the printed circulars in question, with a brief and courteous protest against the unprofessional proceeding, signed by himself and two or more local practitioners, with the view to emphasise it.

RESPONSIBILITY OF INEBRIATES.

In a recent address, Dr. J. F. Sutherland stated his opinion that alcoholic derangements short of insanity did not receive the attention which they merited. The extreme penalty of the law should be enforced against the poisoner, the assassin, or the burglar, but was out of place for drunkards who, under the influence of drink, committed savage and fatal assaults. An experience of thirty trials for murder and culpable homicide had satisfied him that in no case did the author of the crime deliberately, and with a knowledge of right and wrong, perpetrate the deed. In his view, when a state of mental derangement or weakness short of alcoholic insanity or delirium tremens could be established by ordinary and skilled evidence, the crime should, in murder cases, be reduced to culpable homicide, or, what was more accordant with common sense and reason, the accused, not knowing right from wrong, and having little or no memory of the act, should be dealt with for having taken from without into his body a physical agent which, in varying degrees, deprived him of self-control, and made him commit crimes which he had never thought of committing.

THE LINE OF FORCE IN FRACTURE OF GLASS.

Professor R. C. Kedzie recently reported the following case at a meeting of the Medico-Legal Society. Some nine years ago an elderly woman, wife of a Baptist minister, was so terribly burned by ignited kerosene that she died in a few hours. It happened one evening when her husband was conducting service in his church. The neighbours saw a sudden flash in Mrs. C.'s house and heard wild shrieks, and rushing into the house found Mrs. C. terribly burnt but conscious, and a broken glass lamp on the floor. Mrs. C. explained that Mrs. B. had entered the room whilst she was asleep, had assaulted her, broken the lamp, poured the kerosene over her clothing, and set her on fire, and that a terrible struggle had taken place between them, during which she had scratched and marked the face of Mrs. B., who, it may be added, was a member of her husband's congregation, and of whom she was jealous. Mrs. B. was at the church that evening, arriving there about twenty minutes after the accident to Mrs. C. On the strength of the charges against her by the dying woman Mrs. B. was at once arrested, and there was found a fresh scratch on her face, but it looked more like the mark of a pin than of a finger nail. There was absolutely no trace of kerosene about her. At the trial it was suggested for the defence that the lamp had exploded and thus caused the accident, and Professor Kedzie was requested to report on the subject. On examining the fracture it was found that the internal edge was sharp whilst the outer was conchoidal, in accordance with the law that the sharp cutting edge will always be nearest that part of the body that resists motion and remains fixed; and he brought into court an exploded lamp which showed a precisely similar fracture to that in the original lamp, and when they were placed side by side it was difficult to decide which was the original. The conclusion was irresistible that Mrs. C.'s lamp had exploded spontaneously, and Mrs. B. was acquitted.

"THE SKIN AND COMPLEXION": A DISCLAIMER.

The "Qualified Practitioner," referred to by a correspondent in the British Medical Journal of February 17th under the above heading, desires to say he is not responsible for the pamphlet alluded to falling into other hands than those it was intended for. The "pamphlet" was a "public lecture," printed and published at the express desire of many friends, and intended for them only.

"CHANGING THE DOCTOR."

Doubter writes: A. and B. are friends, and exchange visits. A. has a family doctor C. A. does not particularly care for C., but has not discharged him from attendance on his family. A. asks B. to prescribe for him (not an emergency). What course ought B. to pursue?

*** That A. has an indisputable right to change his medical adviser, and to consult B., is unquestionable. Nevertheless, until A., so far at least as he is individually concerned, has resolved to discontinue the professional services of C., B. will, in our opinion, act advisedly in courteously declining to prescribe for him, and, in so doing, to offer such explanation as he may deem judicious.

EMERGENCY SUBSTITUTE.

Member writes: A neighbouring practitioner has frequently, when away from home, sent his card to me, with a request that I would see any emergent cases for him. This I have always done. A few days ago I was away for a few hours, and being sent for by a new patient in a hurry, my servant sent the messenger to this gentleman with my card, and asked him to see the case for me. This he did, and has continued in attendance on the case. He has never attended the family before. I wish to know if he was justified in his action.

*** The incident related in the above instructive case is calculated to engender more or less professional ill-feeling. The following rule has a direct bearing on the case: "When a practitioner is called upon by the assistant, or servant of another, to attend to an accident or other emergency in a family to whom both are equally strangers, the former is not entitled to take charge of the case throughout, but should act and be remunerated in conformity with Rule 7, and resign the case."

THE LICENTIATES OF THE SOCIETY OF APOTHECARIES.

R. T. B. writes: "A. B." is a licentiate of the Society of Apothecaries (1890), and has no other qualification. Is he entitled to sign himself "A. B——, L.M.S., L.M., L.S.A Lond.," or to have his doorplate "A. B——, Physician and Surgeon, London"? Does L.S.A. not represent his full qualification?

*** A licentiate of the Society of Apothecaries, whose diploma is dated on or after July 1st, 1887, is entitled to call himself "surgeon," but is not entitled apparently, according to recent decisions, to call himself a "physician," although we doubt if on this ground alone any proceedings under Section 40 of the Medical Act, 1858, would be successful. Such a licentiate may use the abbreviations referred to in our correspondent's letter without incurring any legal penalty, but, with the exception of L.S.A.Lond., they have no significance as titles recognised by the *Medical Register*.

NAVAL AND MILITARY MEDICAL SERVICES.

ARMY MEDICAL TITLES.

We frequently receive communications from army medical officers relative to the remarkable ignorance displayed in the use of their titles, even by persons of liberal education, illustrated by grotesque combinations of military rank often found on their letters. All this might be avoided if it was kept in mind that the medical are simply the ordinary military titles, in gradation, with the prefix of "surgeon." Thus a medical officer is called surgeon-lieutenant up to three years' service, surgeon-captain from three to twelve years' service, surgeon-major from twelve to twenty years' service, surgeon-lieutenant-colonel after twenty years' service, brigade-surgeon-lieutenant-colonel on promotion, surgeon-colonel on promotion, surgeon-major-general on promotion. The exception, it will be seen, is under the head of brigade-surgeon, which, although a departmental promotion, does not alter the military rank. There ought to be no more difficulty to any intelligent civilian who chooses to keep his eyes and ears open in finding out the rank of a medical officer under the above simple scale, than in ascertaining whether Smith or Jones is a captain or a colonel. We do not allude to the army medical titles which preceded the above, and are still borne by many old retired medical officers, for they were not self-interpreting, and often very misleading.

Note.—As it is thought that officers of the Army Medical Staff may find it convenient to have some printed statement to transmit to friends and acquaintances, this article will be reprinted, and copies will be obtainable during the next two or three months on application.

THE NAVY.

FLEET-SURGEON N. T. CONNOLLY has been placed on the retired list, with the rank of Deputy Inspector-General, February 11th. He was appointed Surgeon October 8th, 1861, Staff-Surgeon May 13th, 1875, and Fleet-Surgeon September 25th, 1883.

The following appointments have been made at the Admiralty: CHARLES F. WARREN, Surgeon, to the *Kurrakatta*, February 22nd; ISAAC H. ANDERSON, M.D., Fleet-Surgeon, to Cape of Good Hope Hospital, February 16th; WILLIAM E. BRETON, M.D., Staff-Surgeon, to the *Trafalgar*, February 16th; S. T. O'GRADY, Staff-Surgeon, to the *Collingwood*, February 16th; ARTHUR W. RUSSELL, Staff-Surgeon, to the *Ganges*, February 16th; ROBERT M'IVOR, M.D., Staff-Surgeon, to the *Mersey*, February 16th; JOHN HUNTER, M.D., Staff-Surgeon, to the *Superb*, February 25th; W. H. PRYN, Surgeon, to the *Defiance*, February 16th; ERNEST J. FINCH, Surgeon, to the *Alecto*, February 16th; HENRY W. G. GREEN, Surgeon, to the *Nile*, February 16th; JAMES BRADLEY, M.D., Surgeon, to the *Speedy*, March 20th.

Staff-Surgeon JAMES ALEXANDER COLLOT, Her Majesty's ship *Collingwood*, died at Malta on February 11th, aged 44. He was appointed Surgeon March 31st, 1874, and Staff-Surgeon twelve years thereafter. He was Surgeon of the *Euphrates* during the Zulu war of 1879, and received the medal granted for that campaign.

ARMY MEDICAL STAFF.

BRIGADE-SURGEON-LIEUTENANT-COLONEL M. COGAN is promoted to be Surgeon-Colonel, *vice* C. H. Giraud, January 24th. He entered the service as Assistant Surgeon March 31st, 1864, became Surgeon March 1st, 1873, Surgeon-Major April 28th, 1876, attained the rank of Surgeon-Lieutenant-Colonel March 31st, 1884, and was made Brigade-Surgeon-Lieutenant-Colonel December 29th, 1888. He was in medical charge of a detachment of the 77th Regiment in the Hazara campaign of 1868, and served in the Afghan war of 1880, when he organised the Principal Base European Hospital at Candahar under the command of Major-General Phayre (mentioned in despatches, and thanked by the Governor-General in Council, medal).

Surgeon-Captain F. S. HEUSTON has left for China to take up the appointment of Professor of the Imperial Medical College at Tien-tsin. Surgeon-Captain Heuston is seconded for the foregoing service from February 4th.

Surgeon-Lieutenant-Colonel JOHN BARRY, M.D., is promoted to be Brigade-Surgeon-Lieutenant-Colonel, *vice* J. W. Maxham, M.D., January 11th. Brigade-Surgeon-Lieutenant-Colonel Barry's prior commissions are thus dated: Assistant-Surgeon, October 1st, 1867; Surgeon, March 1st, 1873; Surgeon-Major October 1st, 1879; and Surgeon-Lieutenant-Colonel, October 1st, 1887. He has no war record.

Surgeon-Lieutenant-Colonel J. RIDDICK is also gazetted Brigade-Surgeon-Lieutenant-Colonel, *vice* M. Cogan, January 24th. His previous commissions are contemporaneous with those of Brigade-Surgeon-Lieutenant-Colonel Barry. He was in the Afghan War of 1880, and received the campaign medal.

Surgeon J. H. DUNDAS, formerly of Her Majesty's 67th Regiment, died at Hamilton-on-Forth, Tasmania, on January 1st, aged 70.

The undermentioned Surgeons on probation are appointed Surgeons-Lieutenants, dated January 29th:—HAROLD VERNON PRYNNE, ALFRED EDMUND MASTER, M.B., GEORGE DANSEY BROWNING, ERNEST SHAW CLARK, M.B., KENNET BRUCE BARNETT, M.B., MICHAEL BOYLE, M.B., KENNETH MACKENZIE CAMERON, M.B., CHARLES MARLAY FLEURY, ARTHUR CLAUDE FOX, SEBERT FRANCIS ST. DAVIDS GREEN, WALTER TIBBITS, M.B.

ARMY MEDICAL RESERVE.

SURGEON-CAPTAIN HENRY F. STOKES is promoted to be Surgeon-Major, February 14th.

Surgeon-Captain THOMAS L. LAXTON, having resigned his volunteer appointment, ceases to be an officer of the Army Medical Reserve, February 21st.

VOLUNTEER MEDICAL STAFF CORPS.

MR. HOLBURT JACOB WARING, M.B., is appointed Surgeon-Lieutenant to the London Companies, February 17th.

THE YEOMANRY AND VOLUNTEERS.

SURGEON-LIEUTENANT H. W. MCCONNEL, M.B., Royal North Devon Hussars, has resigned his commission, which was dated May 29th, 1889.

Surgeon-Lieutenant T. BUSHBY, 8th Lancashire Artillery, has also resigned his commission, which bore date August 23rd, 1882.

MR. ROBERT OSWALD ADAMSON, M.B., is appointed Surgeon-Lieutenant to the 1st Lanarkshire Engineers, Fortress and Railway Forces, Royal Engineers, February 17th.

Surgeon-Lieutenant R. C. LEES, M.B., 1st Lanarkshire Rifles, is promoted to be Surgeon-Captain, February 17th.

MR. JAMES BERTIE SIMPSON, M.D., is appointed Surgeon-Lieutenant to the 1st Sutherland (the Sutherland Highland) Rifles, February 17th.

Captain J. E. C. BRADLEY, M.B., is appointed Surgeon-Lieutenant to the 16th Middlesex (London Irish), February 17th. Surgeon-Lieutenant Bradley was appointed a Captain in the corps February 20th, 1892, having previously served as a Captain in the Cambridge University Rifles.

THE VOLUNTEER OFFICERS' DECORATION.

THE following officers, among others, are awarded this decoration in the *London Gazette* of February 13th: Surgeon-Major T. L. GENTLES, 1st Volunteer Battalion the Derbyshire Regiment; Surgeon-Lieutenant H. H. B. WILKINSON, 2nd Volunteer Battalion the York and Lancaster Regiment; Surgeon-Lieutenant-Colonel ROBERT PATRICK, M.D., 9th Lancashire Artillery; Brigade-Surgeon-Lieutenant-Colonel T. M. WILLS, 4th Volunteer Battalion the King's Liverpool Regiment; Brigade-Surgeon-Lieutenant-Colonel E. POCKLINGTON, 2nd Volunteer Battalion the East Surrey Regiment; Surgeon-Captain R. J. STEWART, 9th Lanarkshire Rifles.

A MEDICAL COMBATANT.

THE French army at the present moment boasts of one combatant officer who is also a doctor. This is Brigadier-General Canonge, late Colonel of the 139th Regiment of the Line. This gallant officer, who has earned considerable distinction in the profession of arms, and who is well known to readers of military literature as the author of an important work entitled *La Guerre Contemporaine*, passed all the usual examinations and took the degree of Doctor of Medicine when he was a lieutenant.

LORD ROBERTS ON TEMPERANCE IN THE ARMY.

WE have repeatedly referred to the remarkable advance of temperance in the army in India, and we welcome the high authority of the universally and deservedly popular General Lord Roberts, at a meeting of the Army Temperance Association on February 19th, endorsing all our statements. The Association was formed about thirty years ago on abstinence lines, but latterly has included non-abstainers. Now, with the approval of the Duke of Cambridge, the Army Temperance Association fills a similar position to the forces at home and elsewhere. In India the members rose from 14,000 abstainers in 1890 to 20,000 in April, 1893, and from 300 to 3,000 non-abstainers, the latter roll amounting to one-third of the British forces in India. The value of such an increase in the temperance ranks as has been announced by Lord Roberts has, from a health point of view, been very great, amounting to no small practical addition to the fighting strength of the troops.

INDIAN ARMY REORGANISATION.

OBSERVER writes: The Army Medical Staff is hard hit in the new scheme. In Madras they have a surgeon-colonel transferred to Mandalay, the most undesirable place in India; they lose the favourite station of Bangalore for Secunderabad, and £240 a year which ought to fall for charge of the Hyderabad contingent; they lose the Madras Presidency for a surgeon-major-general, and with it Ootacamund. The three surgeon-major-generals are deprived each in pay of £360 a year. It would be interesting to know whether the combatant major-generals in India have any portion of their pay cut under the scheme, which could be easily found out by a question in the House of Commons. Further, the Medical Staff are to be superseded by officers of the Indian Medical Service, men of less seniority, and some of them with little or no knowledge of the European soldier. What between the authorities at home and their taskmasters in India, the Medical Staff has a lively time.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

REDE LECTURER.—Mr. J. W. Clark, Registrary of the University, and formerly Superintendent of the Museums of Zoology and Comparative Anatomy, has been appointed Rede Lecturer for the present year, in succession to Professor Foster.

EXAMINERS IN MEDICINE AND SURGERY.—The Special Board for Medicine report that the number of candidates for Parts I and II of the Third M.B. Examination has so greatly increased that further additions to the staff of examiners is necessary. The numbers in the last three years, 1891-93, have been respectively 193, 213, and 224. The Board accordingly recommend that four Examiners in Medicine and four Examiners in Surgery, together with the Regius Professor of Physic, the Professor of Surgery, and the two Examiners in Midwifery, be hereafter appointed annually. Provision is also made for obtaining the assistance of additional examiners should the number of candidates again increase.

DEGREES.—At the Congregation on February 15th the following degrees in Medicine were conferred: *M.B.*—Herbert Pulford, M.A., Trinity; William Nicolls, M.A., Peterhouse; Joseph Blumfeld, B.A., Caius; Francis Carr Bottomley, B.A., Caius; Arthur Maurice Collcutt, B.A., Caius; Arthur Martin Mitchell, M.A., Queens'; Wordsworth Poole, B.A., St. Catharine's; Hugh Milton Stewart, B.A., Christ's; William Reginald Grove, B.A., Sidney; John Aldren Wright, B.A., non-coll.

UNIVERSITY OF EDINBURGH.

UNIVERSITY COURT.—At the last meeting of this Court, held on Monday, February 12th, Dr. Heron Watson was reappointed a Curator of Patronage for three years from April 13th next; Mr. J. H. Burrage, B.A., was, on the recommendation of the Professor, appointed second assistant in Botany for the current academical year; an application by Henry E. Clark, Professor of Surgery in St. Mungo's College, Glasgow, for recognition as a teacher whose course of instruction in surgery qualifies for graduation in medicine in the University, was granted; an application by Alexander Miles, M.D., Edinburgh, for recognition as a teacher whose courses of instruction in anatomy and in practical anatomy qualify for graduation in medicine in the University, was granted. On the recommendation of the Finance Committee, a grant of £30 was made to the interim Lecturer on Embryology for the purchase of apparatus, etc.; and an annual grant of £35 to the Students' Representative Council as from October 1st last.

ROYAL UNIVERSITY OF IRELAND.

AT a meeting of the Senate, held on Friday, February 16th, 1894, the following were appointed Fellows of the University:

C. A. Letts, D.Sc., Queen's College, Belfast; V. Steinberger, M.A., Queen's College, Galway; E. Cadic, University College, Dublin.

The following were appointed Medical Fellows of the University:

Anatomy: A. E. J. Birmingham, M.D.; J. P. Pye, M.D.; J. Symington, M.D. Physiology: J. J. Charles, M.D.; C. P. Coppinger, M.D. Medicine; J. I. Lynham, M.D. Surgery: P. J. Hayes, M.D., M.Ch.; W. T. Stoker, M.D.

The following were appointed Examiners of the University for 1894:—*Classics:* T. W. Dougan, M.A.; C. H. Keene, M.A. *Celtic:* Rev. J. E. H. Murphy. *Hebrew:* Rev. R. H. F. Dickey, M.A., B.D. *Political Economy:* C. S. Devas, M.A.; W. Graham, M.A. *Natural Philosophy:* A. Anderson, M.A.; J. England, M.A. *Modern Literature:* A. M. Selss, LL.D. *Mental Science:* W. A. FitzHenry, M.A., LL.B. *Mathematics:* A. C. Dixon. *Biology:* Rev. L. M. B. Klein, D.Sc.; A. J. M. Blancy, M.B. *Geology:* J. P. O'Reilly, C.E. *Engineering:* A. Jack, D.Sc.; M. FitzGerald. *Music:* Miss A. W. Patterson, D.Mus.; T. R. G. Jozé, Mus.D. *Law:* R. B. Barry, B.A.; J. Donaldson, M.A. *Medicine:* J. F. O'Carroll, M.D. *Midwifery:* J. W. Byers, M.D.; A. J. Smith, M.B. *Materia Medica:* F. J. B. Quinlan, M.D.; W. Whitla, M.D. *Ophthalmology:* L. Werner, M.B.; J. W. Browne. *Medical Jurisprudence:* C. Y. Pearson, M.D.; A. Roche, M.D. *Pathology:* W. H. Barrett, M.B.; E. J. McWeeney, M.D. *Sanitary Science:* Sir C. Cameron, F.R.C.S.

OBITUARY.

WILLIAM WILLIS, M.D.Edin.

We regret to announce the death of Dr. William Willis, who in 1868 had a large share in the work of establishing the first medical school and hospital in the capital of Japan.

Dr. Willis, who was born in 1837, was the youngest son of the late Mr. George Willis, of Florence Court, County Fermanagh. After a distinguished career as a student he became a Member of the Royal College of Surgeons in 1858, and took the degree of M.D.Edin. in 1859. He was house-physician to the Middlesex Hospital, but in 1861 went out to Japan with Colonel St. John Neil's mission.

Sir Henry S. Parkes, K.C.B., thus describes Dr. Willis's career in Japan: "Dr. Willis was appointed Medical Officer to Her Majesty's Legation in Japan in 1861. During the troublous period which existed from that year to the close of the Revolution in 1868, he not only discharged the duties of his appointment with marked zeal and efficiency, but had many signal opportunities of rendering useful services to the foreign residents in Japan, and of assisting his Government in maintaining friendly relations with that country by volunteering for gratuitous services in the field at great personal hazard and with most successful results. At the end of 1868 he was lent to the Japanese Government at their special request, with the object of establishing a hospital and medical school at the capital, and later on he resigned his appointment in Her Majesty's service in order that he might devote himself to the same good work in the interior of the country. The cause of humanity and the progress of scientific medicine in Japan have been materially aided by his able and long sustained exertions. His chief work was done at a time when venturing into the remote interior of the island, undeterred by the animosity which was then entertained by many of the people and soldiery against foreigners, he did so with the knowledge that he carried his life in his hand. It is by such men that the reputation of England in the cause of science and of humanity is extended and illustrated in remote and semi-civilised regions."

Dr. Willis received the thanks of the Japanese and English Governments for his services to the Mikado's army, and was presented by the Mikado with the "imperial brocades," an honour conferred then for the first time on a European and a commoner. Last year the Japanese Government gave permission for the erection of a statue of Dr. Willis in the public park of Kagoshima, a token of esteem coming entirely from the Japanese, the bulk of the subscribers being native medical men who had been students under him. Dr. Willis was subsequently vice-consul at Yeddo, but returned to England in 1881 and took the diplomas of M.R.C.P.Lond. and F.R.C.S.Eng.

For a short time he practised in partnership with his brother, Dr. George Willis, of Monmouth, but in 1885 he accepted the post of physician to the Legation at Bankok, Siam. Here he took a deep interest in the welfare of the prison population, and succeeded in inducing the King of Siam to undertake important sanitary and moral reforms. In December, 1892, he returned to Europe on sick leave, and only last year obtained the Diploma of Public Health from the University of Cambridge. He went to spend Christmas with his brother at Florence Court, co. Fermanagh, where he was seized with an attack of bilious fever, which proved fatal on February 14th.

Dr. F. J. Tuohy, resident physician of the Cork Fever Hospital, died last week. Deceased was a graduate of the Queen's University, and early in his career joined the Indian Medical Service, but an attack of illness, resulting in temporary paralysis, obliged him to retire from the army. He returned to Cork, and became attached to the Cork Fever Hospital.

Deaths in the Profession Abroad.—Among the members of the medical profession in foreign countries who have recently passed away are Dr. Karl Wenzel, of Mainz, well known for his profound acquaintance with Romano-German archæology, and one of the founders of the National Romano-German Museum of Mainz; Dr. Vicente Garcia, a prominent medical practitioner and politician of Cartagena (United States of Colombia); Dr. Gouzée, formerly chief medical officer of the Belgian Army; Dr. Alexander Brugsch, a son of the distinguished Egyptologist, who practised at Cairo as an ophthalmic surgeon; and Dr. Pablo Valencia, some time professor of obstetric medicine in the University of Havanna.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns, including London, 6,351 births and 3,747 deaths were registered during the week ending Saturday, February 17th. The annual rate of mortality in these towns, which had declined from 23.5 to 19.1 per 1,000 in the preceding five weeks, further fell to 18.7 last week. The rates in the several towns ranged from 11.2 in Croydon and 11.6 in Derby to 25.4 in Liverpool and 27.0 in Wolverhampton. In the thirty-two provincial towns the death-rate averaged 18.7 per 1,000, and slightly exceeded the rate recorded in London, which was 18.6 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.1 per 1,000; in London the rate was equal to 2.5 per 1,000, while it averaged 1.9 in the thirty-two provincial towns, and was highest in Plymouth, Wolverhampton, and Birkenhead. Measles caused a death-rate of 2.5 in Birkenhead and 3.1 in Wolverhampton; scarlet fever of 1.1 in Burnley and in Huddersfield; whooping-cough of 1.5 in Salford, 1.6 in Swansea, and 3.0 in Plymouth; and "fever" of 1.1 in Derby. The 86 deaths from diphtheria included 56 in London, 4 in Leeds, and 3 in West Ham. Seven fatal cases of small-pox were registered in Birmingham, 2 in Bradford, and 1 in West Ham, but not one in London or in any other of the thirty-three towns. There were 78 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, February 17th, against 78, 82, and 77 at the end of the preceding three weeks; 17 new cases were admitted during the week, against 18 and 15 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,270, against 2,534, 2,491, and 2,387 at the end of the preceding three weeks; 199 new cases were admitted during the week, against 245 and 224 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, February 17th, 832 births and 548 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had been 21.0 and 19.7 per 1,000 in the preceding two weeks, declined to 19.2 last week, but was 0.5 above the mean rate during the same period in the thirty-three large English towns. Among these Scotch towns the death-rates ranged from 10.3 in Paisley to 27.4 in Leith. The zymotic death-rate in these eight towns averaged 2.3 per 1,000, the highest rates being recorded in Perth and Leith. The 257 deaths registered in Glasgow included 14 from whooping-cough, 6 from scarlet fever, and 5 from diphtheria. A fatal case of small-pox was recorded in Edinburgh and one in Leith.

ENGLISH URBAN MORTALITY IN 1893.

In the accompanying table will be found summarised the vital statistics for 1893 relating to the thirty-three large English towns dealt with by the Registrar-General in his weekly returns.

The 328,312 births registered during 1893 in these thirty-three large towns were equal to 31.9 per 1,000 of their aggregate population, estimated at rather more than ten and a quarter millions of persons. This rate corresponded with that recorded in the preceding year. In London the birth-rate was equal to 31.0 per 1,000, while it averaged 32.5 in the thirty-two provincial towns, among which it ranged from 23.8 in Huddersfield, 24.6 in Halifax, 25.4 in Brighton, and 26.2 in Croydon to 35.6 in West Ham and in Sunderland, 36.0 in Liverpool, 36.1 in Cardiff, and 36.5 in Gateshead.

The 222,178 deaths registered last year in the thirty three towns were equal to a rate of 21.6 per 1,000, against 20.7 in 1892; in London the rate

was 21.3, while it averaged 21.8 per 1,000 in the thirty-two provincial towns, among which it ranged from 16.3 in Croydon, 17.2 in Huddersfield, 17.4 in Halifax, and 18.2 in Derby and in Portsmouth to 23.3 in Wolverhampton, 24.1 in Salford, 24.9 in Manchester, 26.4 in Preston, and 27.3 in Liverpool.

During the year under notice 32,797 deaths were referred to the principal zymotic diseases in the thirty-three towns, equal to a rate of 3.2 per 1,000, which slightly exceeded the average rate in the preceding ten years. The lowest zymotic death-rates in these large towns last year were 1.2 in Huddersfield, 1.7 in Bristol and in Halifax, and 1.8 in Brighton and in Swansea; while in the other towns the rates ranged upwards to 4.0 in Leicester, 4.1 in Salford, in Blackburn, and in Hull, 4.7 in Bolton, and 6.0 in Preston. The 32,797 deaths referred to the principal zymotic diseases included 12,598 which resulted from diarrhœa, 4,977 from whooping-cough, 4,559 from measles, 4,423 from diphtheria, 3,015 from scarlet fever, 2,493 from "fever" (principally enteric), and 732 from small-pox. The rate of mortality from diarrhœa was equal to 1.21 per 1,000, and considerably exceeded the average; among the various towns this disease showed the highest proportional fatality in Leicester, Salford, Burnley, Blackburn, Preston, and Hull. The death-rate from whooping-cough was equal to 0.48 per 1,000, and was slightly below the average; in London the death-rate from this disease was 0.54 per 1,000, while it averaged 0.44 in the thirty-two provincial towns, among which the highest rates were recorded in West Ham, Birmingham, Norwich, Leicester, Birkenhead, and Bolton. The rate of mortality from measles was equal to 0.44 per 1,000, and was considerably below the average; in London the measles death-rate was 0.39 per 1,000, while it averaged 0.48 in the thirty-two provincial towns, among which this disease showed the highest proportional fatality in Plymouth, Bolton, Blackburn, Preston, Leeds, and Newcastle-upon-Tyne. The death-rate from diphtheria was equal to 0.43 per 1,000, and was more than double the average, owing principally to the epidemic prevalence of the disease in London throughout the year; while the diphtheria death-rate in the metropolis was as high as 0.76 per 1,000, it did not average more than 0.19 in the thirty-two provincial towns, among which the highest rates were recorded in West Ham, Croydon, Cardiff, Manchester, Salford, and Halifax. The rate of mortality from scarlet fever was equal to 0.29 per 1,000, and was slightly below the average; in London the death-rate from this disease was equal to 0.37 per 1,000, while it averaged 0.24 in the thirty-two provincial towns, and was highest in Leicester, Nottingham, Liverpool, and Burnley. The death-rate from different forms of "fever" (including typhus, enteric, and simple or ill-defined forms of fever) was equal to 0.24 per 1,000, and almost corresponded with the average; in London the "fever" death-rate did not exceed 0.17 per 1,000, while it averaged 0.30 in the thirty-two provincial towns, among which this disease showed the highest proportional fatality in Liverpool, Salford, Preston, Hull, and Sunderland. During the year under notice 732 fatal cases of small-pox were registered in the thirty-three towns, against 120 during 1892; of these, 206 occurred in London, 115 in Bradford, 71 in Birmingham, 65 in Oldham, 55 in West Ham, 48 in Manchester, and 35 in Halifax.

Infant mortality, measured by the proportion of deaths under one year of age to registered births, was equal to 181 per 1,000, against an average rate of 163 in the preceding ten years. In London the rate of infant mortality was equal to 164 per 1,000, while it averaged 193 in the thirty-two provincial towns, among which it ranged from 141 in Bristol and in Huddersfield, 155 in Croydon, 156 in Derby, and 164 in Portsmouth to 211 in Liverpool, 220 in Leicester, 223 in Burnley, 241 in Blackburn, and 269 in Preston.

THE RELATIONS OF SANITARY AUTHORITIES AND BOARDS OF GUARDIANS.

THE relative duties of Poor-law and public health authorities regarding cases of small-pox occurring among paupers are being discussed with some vigour in Bristol. The Local Government Board disclaims responsibility as to small-pox treated in workhouse infectious hospitals. At the same time, it points out to guardians that it is their duty to provide for the needs of destitute persons suffering from infectious disease, and that at the same time they should have due regard to the prevention of the spread of the disease. The Barton Regis Board (part of Bristol being situated in the Barton Regis Union) decided to admit no pauper small-pox patients to its infectious hospital, leaving the cases to be treated at home by the district medical officer, and leaving their isolation for the public safety in the hands of the sanitary authorities. In these circumstances, Dr. Davies reports that Bristol very properly looked on immediate isolation as of more consequence than disputation as to responsibility in regard to paupers within its own bounds. But other sanitary districts within the same Union, not being so well provided as Bristol with hospital accommodation, have been placed in considerable difficulty, especially Stapleton, which had made some months ago an ineffectual attempt to provide accommodation. Seeing that the costs, alike of Poor-law and of public health administration, have ultimately to come out of the public pocket, and that the benefits afforded by isolation are public benefits, it seems a pity that any friction or inefficacy of administration should be possible regarding this matter. It is obviously the duty of the sanitary authority to attend to the public health, and of the guardians to attend to the Poor Law; and where, as in the case of destitute persons attacked by infectious disease, both authorities become involved, a clear understanding as to responsibility should exist. The multiplication of infectious hospitals within districts so small as to be able to be served by one large and properly-equipped hospital, is to be deplored. Would not the case be met by the sanitary authority taking charge, in its hospital, of all infectious cases, and at the same time holding the guardians responsible at least for the costs of maintenance, etc., which would have been incurred had the cases been treated at home, by the guardians and their officers?

Analysis of the Vital and Mortal Statistics of Thirty-three of the Largest English Towns during the Year 1893.

Towns.	Estimated Population middle of 1893.	Births.	Deaths.	Annual Rate per 1,000 Living. Births.	Deaths.	Principal Zymotic Diseases.	Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-Cough.	Fever.	Diarrhœa.	Deaths of Children under one year of age to 1,000 Births.	Rate per cent. of Uncertified Death
33 Towns	10,327,846	328,342	222,178	31.9	21.6	3.2	32,797	732	4,559	3,015	4,423	4,977	2,493	12,598	181	1.8
32 Provincial Towns	6,021,435	195,377	130,642	32.5	21.8	3.3	19,574	526	2,898	1,419	1,158	2,647	1,774	9,152	193	2.4
London	4,306,411	132,965	91,536	31.0	21.3	3.1	13,223	206	1,661	1,596	3,265	2,330	719	3,446	164	0.9
West Ham	227,405	8,083	4,288	35.6	18.9	3.4	768	55	36	80	95	154	68	280	170	4.5
Croydon	108,997	2,852	1,772	26.2	16.3	2.2	240	1	20	11	85	27	12	84	155	—
Brighton	117,833	2,981	2,165	25.4	18.4	1.8	217	—	13	12	33	56	15	88	169	2.7
Portsmouth	167,277	4,709	3,039	28.2	18.2	2.8	469	—	113	33	29	37	52	205	164	0.8
Plymouth	86,781	2,590	1,839	29.9	21.2	2.8	240	—	85	22	14	46	10	63	169	0.5
Bristol	225,028	6,814	4,249	30.4	18.9	1.7	371	17	25	35	49	77	25	143	141	1.6
Cardiff	142,435	5,121	2,796	36.1	19.7	3.3	469	—	100	39	98	40	27	165	179	1.0
Swansea	93,816	3,285	1,836	35.1	19.6	1.8	172	—	17	33	5	30	19	68	170	2.0
Wolverhampton	84,298	2,802	1,956	34.5	23.3	2.8	239	1	21	26	5	4	28	154	208	1.0
Birmingham	487,891	15,916	10,693	32.7	22.0	3.0	1,481	71	50	68	63	320	98	811	198	4.9
Norwich	104,184	3,210	2,003	30.9	19.3	3.1	317	—	61	20	23	66	37	110	195	1.1
Leicester	184,547	6,006	3,683	32.6	20.0	4.0	727	15	52	80	20	113	46	401	220	3.7
Nottingham	220,551	6,642	4,061	30.2	18.5	2.6	577	4	25	81	15	59	69	324	170	1.7
Derby	97,341	3,123	1,771	32.2	18.2	2.1	201	7	17	14	7	44	22	90	156	0.8
Birkenhead	103,817	3,431	2,127	33.1	20.5	2.8	292	1	15	12	16	69	27	152	196	1.1
Liverpool	510,514	18,322	13,919	36.0	27.3	3.9	1,987	9	273	231	63	279	269	863	211	3.7
Bolton	117,278	3,874	2,821	33.1	24.1	4.7	544	7	166	34	12	77	36	212	199	0.8
Manchester	515,598	17,268	12,801	33.6	24.9	3.7	1,911	48	296	138	165	241	129	894	203	1.3
Salford	203,431	7,047	4,886	34.7	24.1	4.1	839	22	92	41	58	99	100	427	210	3.3
Oldham	136,469	3,896	2,860	28.6	21.0	2.5	338	65	29	16	18	55	26	129	187	1.1
Burnley	93,462	3,161	2,039	33.9	21.9	3.8	354	6	27	51	14	31	28	194	223	1.4
Blackburn	124,005	3,822	2,879	30.9	23.3	4.1	504	7	144	5	2	33	30	283	241	3.4
Preston	110,225	3,855	2,899	35.1	26.4	6.0	661	—	179	27	14	47	51	343	269	3.8
Huddersfield	97,549	2,313	1,673	23.8	17.2	1.2	121	—	23	25	3	13	12	45	141	2.9
Halifax	91,918	2,253	1,591	24.6	17.4	1.7	157	35	5	3	23	32	13	46	173	4.3
Bradford	221,611	6,132	4,632	27.7	21.0	3.4	757	115	69	70	23	110	49	321	197	1.5
Leeds	382,093	12,349	8,493	32.4	22.3	3.5	1,322	20	341	31	62	166	110	592	206	1.0
Sheffield	333,922	11,591	7,428	34.8	22.3	3.5	1,172	5	176	90	61	128	90	622	191	3.5
Hull	208,709	7,125	4,545	34.2	21.8	4.1	862	8	128	33	22	80	99	492	206	3.3
Sunderland	134,515	4,774	3,022	35.6	22.5	3.4	451	5	17	26	11	24	131	237	188	0.9
Gateshead	90,938	3,309	1,750	36.5	19.3	3.5	314	2	71	9	19	53	21	139	170	2.5
Newcastle-on-Tyne	196,997	6,624	4,126	33.7	21.0	2.5	500	—	212	23	31	34	25	175	174	0.9

PROSECUTION FOR NON-NOTIFICATION OF INFECTIOUS DISEASE.

At the Carlisle Town Hall a medical practitioner recently appeared to answer a charge laid by the inspector of nuisances that he, being a medical practitioner, attending a patient suffering from scarlatina, failed to notify the same to the medical officer of health. Some conflicting evidence was heard. It appeared that the inspector of nuisances, from what he was told and saw, came to the conclusion that the patient in question was suffering from scarlet fever. The medical officer of health stated that the conclusions to which he came was that the case had not been one of scarlatina or scarlet fever; the medical practitioner was also of opinion that the child had never had scarlet fever or scarlatina, but an infantile rash. The Bench decided to dismiss the case. It seems that when the question of prosecution was considered by the Health Committee, a member expressed the opinion that the authority should have more evidence before coming to a decision, an opinion which, in the light of the statements made at the hearing of the case, appears to be a reasonable one.

THE INFECTIOUS DISEASE (NOTIFICATION) ACT.

The Holsworthy sanitary authority have had under consideration the advisability of adopting the Infectious Disease (Notification) Act of 1889 in their district. One of the guardians pointed out that, if the Act were adopted, there would be some little stir in sanitary matters; and if the authority gave extra work to their officers they would want extra pay. He added that since he had been on the board he could not remember a case where the Act could have prevented the spread of disease. The board, moved by this weighty reasoning, decided that, in "view of the probable early passing of the District and Parish Councils Bill, this authority does not think it desirable to adopt the Infectious Diseases Notification Act for the present."

NOTIFICATION CERTIFICATES IN LONDON.

A correspondent writes suggesting that there should be a general printed form of certificate for the County of London, instead of every vestry having a special form, and that all certificates should be received by one central authority, which should inform the various vestries of the infectious cases in their districts. Our correspondent states that difficulty arises under the present system, inasmuch as medical men are apt to forward their certificates to wrong parishes.

There may be something in this suggestion. Existing arrangements, however, lead to the certificate being sent in the first instance to the authority concerned with taking such preventive measures as may be necessary; and any alteration, such as that referred to, would raise the question of complete reorganisation of the arrangements in connection with infectious disease in London.

ISOLATION AT EXMOUTH.

Not long ago we referred to some recent instances of activity on the part of the Exmouth Local Board, with regard to the enforcement of precautions against the spread of infectious disease. A correspondent sends us particulars of cases occurring in his practice, and within the board's district, in which the sanitary administration is not seen to advantage. It seems that cases of diphtheria and scarlet fever, housed under conditions inconsistent with proper isolation, were not removed, although the attention of the sanitary authority was called to them. In one instance diphtheria broke out in a household of eight persons, sleeping in two rooms. Four were attacked. It is not clearly stated what hospital accommodation for infectious cases exists at Exmouth. Health resorts, of all places, owe it to the public and to their own reputation to deal effectively with dangers of this class, and if the means of isolation are wanting or insufficient, the local board are to blame for their incompetent stewardship.

THE SMALL-POX EPIDEMIC.

There was no notable spread of small-pox during January. The old centres figured in the list of places invaded to the almost entire exclusion of fresh localities, save in so far as single or double attacks are concerned. London, in the five weeks ended on February 3rd, had 60 cases recorded, 4 proving fatal; West Ham having very nearly as many attacks and 5 deaths; other suburban districts recorded a few attacks also. In the midlands Birmingham had considerably over 200 recorded attacks, and 26 deaths, the manor of Aston adding quite a score more cases. Walsall had nearly 20 cases weekly, Handsworth a dozen in all, Leicester was not wholly free, whilst Nottingham had two score attacks and 2 deaths. Westward there were over 100 cases in Bristol and its surroundings, with 5 deaths in the city; Stroud continued to report attacks, some 30 families being in distress owing to stoppage of home work and other circumstances during the small-pox prevalence. Further west, Caldicot, near Chepstow, Aberavon, and Cardiff have each had experience of the disease. Northward, Oldham had 2 deaths, and some 40 cases; Bradford, 70 cases and 14 deaths; Wakefield, 30 cases; Halifax, half-a-dozen attacks, 1 proving fatal; and both Hull and Middlesbrough were freshly invaded, whilst Sheffield and Huddersfield were free. Not so Leeds, with over a score of cases and 1 death. Still northward, Gateshead had 5 cases and 2 deaths, Leadgate showing decrease of small-pox with but 4 attacks in the month.

THE DUTIES OF A CITIZEN.

The Manchester Corporation have set a most worthy example. The Chairman of Committees of the corporation, or the heads of the great departments of the municipality, have arranged to give a series of lectures to the ratepayers on the different departments of municipal administration. Thus in Ancoats, one of the most densely populated quarters of the city, lectures are being given by aldermen and others on such subjects as paving of the streets, water supply, pollution of rivers, etc. This is an excellent effort on the part of the civic authorities to educate the citizen in the duties of citizenship, more especially as related to personal health and comfort.

CORK UNION WORKHOUSE.

An inspector of the Local Government Board, who has recently visited this institution, has suggested the erection of an observation dormitory for epileptic and suicidal patients; and also expressed the opinion that if the patients in the house went on increasing, the time would soon come when a third resident medical officer should be appointed, the new officer to reside in the main building.

VACCINATION IN IRELAND.

According to the returns of vaccination received for the fourth quarter of the year 1893, there were 20,220 persons successfully vaccinated; in 3,418 cases the operation was postponed, and 28 children were reported as insusceptible of vaccination. The deaths of 1,575 unvaccinated children under 3 months old were registered during the quarter, making a total of 25,241 children with regard to whom particulars as to vaccination were ascertained.

A LIVING WAGE (?)

Enquirer writes: Would any member kindly inform me of the extent of the duties expected to be performed by a medical officer of health to a small urban sanitary district, where the salary is £20 per annum. My reason for asking is that the board whose medical officer I am seem to expect that I should devote my whole time to the office.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE HAMPSTEAD WORKHOUSE AND ITS NURSES.

All who wish to see the sick poor in workhouses well nursed will regret the difference which seems to have arisen between the Hampstead guardians and the Workhouse Nursing Association, by whom for the last nine years their nurses and probationers have been supplied. No one can doubt the great advantage which the poor have derived from this arrangement, and now it appears that all is to be upset by the appointment of a nursing superintendent who is not approved of by the Association. Their objection, according to the report before us of the meeting of the board of guardians, was that the new superintendent had not received a hospital training, and that if they decided to have qualified nurses to work under an untrained one they would have constant difficulties. The board, however, have decided to take their own course in the matter, to do away with the training of probationers, and to engage charge nurses and assistant nurses to do the work. They will advertise for them, and in the present chaotic condition of the nursing profession, what with the difficulty of defining a training school and the absolute divergence as to what constitutes a training, we can have no doubt that the Hampstead guardians will be inundated with applicants. The chairman of the board of guardians is reported to have said at the meeting that "in making the appointment the board certainly lost sight of the fact that Miss Sargeant was not hospital-trained." If so, it is to be regretted that fuller information was not obtained on so important a matter.

DUBLIN HOSPITAL SUNDAY FUND.

The annual meeting of subscribers to the Dublin Hospital Sunday Fund was held on February 9th. Collections were made in 269 places of worship (Protestant), the amount being £4,230 15s. 5d. A Visiting Committee inspected the hospitals to which grants are given, and the sums awarded were as follow: Sir Patrick Dun's, £486 2s. 2d.; City of Dublin, £551 13s. 6d.; Steevens's, £79 6s; Meath, £490 3s. 6d; Mercer's, £92 12s. 6d.; Drumcondra, £54; Rotunda, £166 4s. 11d.; St. Mark's (Ophthalmic), £92 11s. 11d.; Eye and Ear Infirmary (Molesworth Street), £205 7s. 3d.; Convalescent Home (Stillorgan), £191 4s. 11d; Cork Street (Fever), £75 14s. 1d.; Adelaide, £521 19s. 8d.; Monkstown, £341 14s. 3d.; Orthopædic (Brunswick Street), £200 3s. 3d.; National Children's (Harcourt Street), £287 5s. 4d.

SHEFFIELD PUBLIC HOSPITAL FOR DISEASES OF THE EAR, THROAT, AND SKIN.

We have in the past often brought under the notice of our readers this hospital, and made reference to its medical officer. The annual meeting has just now been held, and while regret was expressed at the serious illness of Dr. Hardwick, he and Dr. W. S. Bower were thanked for their past services. This last name is, if we mistake not, a new one to Sheffield, and if so we can refer him to our opinions of this hospital as expressed at different times during the last few years. The report before us makes no mention of the "cures" of cancer and lupus which at one time formed such a prominent feature.

HOSPITALS AND HOMES IN MANCHESTER.

According to the *Official Handbook* of the Manchester Corporation, taking "Greater Manchester" and Salford together, it appears that there are twenty-seven hospitals, asylums, and convalescent homes in Greater Manchester, two being in Salford, and practically all are free. The public charities of Manchester yield annually about £12,400, Salford charities £12,800.

The proposal to erect a new infirmary in Paisley is now assuming a definite shape. The directors have ample funds promised, and it is understood that they have practically secured a site of five acres in an eligible situation. The plans of the infirmary, which is to provide at once 120 beds for medical and surgical cases, have been entrusted to Mr. T. G. Abercrombie, architect. The Fever Hospital is now disconnected from the infirmary. As Paisley now has a population of about 70,000, and has been steadily growing during the last twenty years at the rate of over 1,000 a year, the new building will be so planned as to admit additions in the future.

MEDICAL NEWS.

A LARYNGOLOGICAL and Otological Society has been established at Buda-Pesth with Professor Navratil as President. The new Society held its first meeting on January 25th.

THE members of the St. John Ambulance First Aid Class (ladies), at Cowbridge, Glamorganshire, have presented the lecturer, Dr. A. Wilberforce Shepherd, with some valuable medical books and a silver pen rack.

DR. MURDOCH CAMERON, the recently-appointed Professor of Midwifery in Glasgow University, was entertained last week at a complimentary dinner by numerous lay and medical friends, under the presidency of Professor Cleland.

A "MEDICO-PSYCHOLOGICAL" meeting of the Neurological Society of London will be held at 8.30 P.M. on March 1st, at 20, Hanover Square, when Dr. D. Hack Tuke will read a paper on Imperative Ideas, and Dr. Rayner a paper on Outpatient Treatment of Incipient Insanity. A pathological meeting will be held on April 19th.

INFLUENZA IN ITALY.—Influenza is rife in Genoa and its neighbourhood. The hospitals are full to overflowing. The number of cases notified to the authorities in the city alone has been about 21,000. The daily average of deaths in Genoa, which in the summer months was from 12 to 15, has lately been as high as 50. Influenza is also very prevalent about Nervi and Pegli.

CHLORODYNE TIPPLING.—At an inquest on a woman, reported in the *St. James's Gazette*, evidence was given that the deceased was a habitual chlorodyne drinker, and had been supplied by a chemist with two or three 2-ounce bottles of chlorodyne a week. It is not stated how long this practice had been continued, but, in any case, it appears to be one which places the chemist's shop within measurable distance of the lowest kind of gin bar, and to manifest an absence of that discretionary action on the part of a seller of dangerous articles which is reasonably to be expected.

HOSPITAL CHAPLAINS' UNION.—The fourth anniversary meeting of this Union, which was founded for the mutual help and counsel of Chaplains of the General Hospitals in London, was held recently. A proposal to extend the Union to include chaplains of other than London Hospitals was discussed, but found to be impracticable at the present time. The Bishop of Rochester, at one of the quarterly meetings of the Union, expressed his warm sympathy with all "Institutional Clergy" in their comparatively solitary work, and we are asked to state that the Union would be glad to receive communications from the parochial clergy as to patients admitted into hospital. The honorary secretary is the Rev. W. King Ormsby, Summerside, Chislehurst.

SIR JOHN TOMES.—The veteran Sir John Tomes, whose services to the dental profession ought to cause his name to be ever held in remembrance, was, on the occasion of his golden wedding last week, the recipient of pleasing testimony of the esteem in which he is universally held. On that day a deputation representing the Odontological Societies and the British Dental Association presented him with an address setting forth the great services which he had rendered to the dental profession by his scientific researches, which had gained for him the honourable distinction of F.R.S.; his labours in promoting the Dentists Act; and his services in connection with the foundation of the Odontological Society of Great Britain and the British Dental Association. The presentation was made by Sir Edwin Saunders, and Mr. S. J. Hutchinson stated that, at the suggestion of Mr. T. Arnold Rogers, a "Tomes Scholarship" for original research in matters pertaining to dentistry, open to all qualified dentists, would be founded. At the same time a gold inkstand was presented to Lady Tomes.

SOCIETY OF ANÆSTHETISTS.—This Society held its third ordinary meeting on January 18th, Mr. F. Woodhouse Braine, the President, in the chair. Dr. Dudley Buxton read A Note on Cardiac Asthenia in relation to the use of Chloroform as an Anæsthetic. He said the effects of chloroform were due to overdosage. There was experimental and clinical evidence that the heart became profoundly affected during the use of chloroform. In some persons, notably in children after acute diseases, and especially after influenza, the heart showed a marked loss of resiliency and diminution of reserve of force; many deaths were, it was suggested, the result of this condition. Prolonged fasting, undue struggling, change from the supine to the sitting or standing postures were peculiarly dangerous. The President said he seldom gave chloroform now, preferring ether. Dr. Hewitt contended that, provided free respiration was maintained, cardiac asthenia need not be feared. Remarks were also made by Dr. Silk and Mr. Rowell, and Dr. Buxton replied.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY OF LONDON.—The annual general meeting will be held in the Society's Hall on Thursday next, March 1st, at 5 P.M. The Council's report and the Treasurer's statement will be submitted: a ballot will be taken for the election of officers and Council for the following year; and the President will deliver his annual address. The following is the list of nominations recommended by the Council:—*President:* *Jonathan Hutchinson, F.R.S. *Vice-Presidents:* *C. J. Hare, M.D., F. W. Pavy, M.D., LL.D., F.R.S., *J. W. Haward, T. P. Pick. *Honorary Treasurers:* *W. S. Church, M.D., J. A. Bostock, C.B. *Honorary Secretaries:* J. M. Bruce, M.D., R. J. Godlee, M.S., M.B., *Honorary Librarians:* S. J. Gee, M.D., J. W. Hulke, F.R.S. *Members of Council:* S. Coupland, M.D., *F. T. Roberts, M.D., *F. Taylor, M.D., G. Thin, M.D., *S. West, M.D., W. H. Bennett, A. H. G. Doran, *R. Harrison, *C. Higgins, *T. Fitz-Patrick, M.D. Those Fellows against whose names an asterisk is placed were not on the Council, or did not fill the same office last year.

MEDICAL VACANCIES.

The following vacancies are announced:

BACTERIOLOGICAL INSTITUTE, Cape Colony.—Medical Assistant. Salary, £350 per annum. Successful candidate will be provided with a free passage (first class) to the colony. Apply by letter to Mr. Charles Loudon, W.S., 54, Queen Street, Edinburgh.

BELGRAVE HOSPITAL FOR CHILDREN, 77 and 79, Gloucester Street, Pimlico, S.W.—House-Surgeon. Board, lodging, fuel, and light provided. Applications to Percy Gates, Honorary Secretary, by March 7th.

BURY DISPENSARY HOSPITAL, Bury, Lancashire.—Junior House-Surgeon, Salary, £60 per annum, with board, residence, and attendance. Testimonials to the Secretary, Henry Webb, Brentwood, Bury.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—House-Physician. Board, residence, and allowance for washing. Appointment for six months. Applications to T. Storrar-Smith, Secretary, by March 8th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Resident Medical Officer. Salary, £100 per annum, with board, etc. Applications to the Secretary, T. Storrar-Smith.

CITY ORTHOPÆDIC HOSPITAL, Hatton Garden.—Honorary Surgeon; must be a Fellow of the Royal College of Surgeons of England or of Edinburgh. Also Two Honorary Assistant Surgeons; must be either Fellows or Members of the Royal College of Surgeons of England or of Edinburgh. Applications, addressed to the Committee at the Hospital, by March 12th.

CLAYTON HOSPITAL AND WAKEFIELD DISPENSARY.—House-Surgeon (Junior); unmarried. Honorarium, £40 per annum. Applications and testimonials to the Honorary Secretary by March 6th.

COMBE LYING-IN HOSPITAL, Dublin.—Assistant Master. Tenure of office three years; premium to Master £200. Applications and testimonials to the Master, Coombe Hospital, Dublin.

COUNTY ASYLUM, Prestwich, Manchester.—Assistant Medical Officer; unmarried. Salary commencing at £100 per annum, increasing to £200 by successive yearly increments of £25, with apartments, board, attendance, and washing. Applications to the Superintendent.

COUNTY ASYLUM, Rainhill, Liverpool.—Assistant Medical Officer; unmarried, and not more than 30 years of age. Salary, £100 a year, with prospect of an annual rise of £25 up to £200, with further increase according to promotion, together with furnished apartments, board, attendance, and washing. Applications and testimonials to the Medical Superintendent.

COUNTY BOROUGH OF OLDHAM.—Medical Officer of Health. Salary, £400 per annum. Applications, with particulars of qualifications, to be sent to the Town Clerk, A. Nicholson, by February 20th.

COUNTY LUNATIC ASYLUM, Snenton, Nottingham.—Assistant Medical Officer, unmarried. Salary, £100 per annum, rising £10 annually to £150, board, lodging, washing, and attendance. Applications to the Chairman of the Committee of Visitors by February 27th.

COUNTY OF NORTHUMBERLAND.—Medical Officer of Health. Salary, £500 per annum, with travelling expenses. Appointment for three years. Applications and testimonials, endorsed "Medical Officer," to C. D. Forster, Clerk to the Council, by March 24th.

DENTAL HOSPITAL OF LONDON, Leicester Square, W.C.—Assistant Dental Surgeon. Applications to J. Francis Pink, Secretary, by March 12th.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Pathologist and Registrar. Honorarium, £40 per annum. Applications to the Secretary, Thomas Hayes, by February 27th.

FEMALE LOCK HOSPITAL, Harrow Road, W.—Assistant House-Surgeon. Board and lodging, but no salary. Appointment for twelve months. Applications and testimonials to the Secretary.

FRENCH HOSPITAL AND DISPENSARY, 172, Shaftesbury Avenue, W.C.—Resident Medical Officer; must speak French. Salary, £80 per annum, with board, furnished rooms, and attendance. Applications and testimonials to the Secretary, F. Sord, by March 1st.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway, N.—Physician to Out-patients; must possess the degree of M.D. or M.B., or Fellow or Member of Colleges of Physicians of London or Edinburgh, or King and Queen's College of Physicians Dublin. Applications and testimonials to the Secretary at the hospital, William T. Grant, by February 26th.

JOINT COUNTIES LUNATIC ASYLUM, Carmarthen.—Medical Superintendent. Salary, £500 per annum, with unfurnished house, garden produce, fire, light, and washing. Applications and testimonials to be forwarded to W. Morgan Griffiths, Solicitor, Carmarthen, by March 24th.

LONDON TEMPERANCE HOSPITAL, Hampstead Road, N.W.—Assistant Resident Medical Officer. Appointment for six months. No salary, but residence in the hospital, board and washing, and an honorarium of 5 guineas. Applications and testimonials to E. Witson Taylor, Secretary, by March 8th.

LONDON THROAT HOSPITAL, 204, Great Portland Street, W.—House-Surgeon; non-resident. Appointment for six months. Salary at the rate of £50 per annum. Applications to the Honorary Secretary of the Committee by February 28th.

MANCHESTER ROYAL INFIRMARY (Monsall Fever Hospital), Manchester.—Assistant Medical Officer; unmarried. Appointment for twelve months. Salary, £100 per annum, with board and residence. Applications and testimonials to the Chairman of the Board, Royal Infirmary, Manchester, by March 3rd.

MIDDLESEX HOSPITAL, W.—Clinical Assistant in the Out-patients' Department for Diseases of the Skin. Applications to F. Clare Melhado, Secretary Superintendent, by February 24th.

OWENS COLLEGE, Manchester.—Professor of Zoology. Applications to the Council of the College, under cover to the Registrar, by April 3rd.

OXFORD EYE HOSPITAL.—House-Surgeon. Appointment for one year. Salary, £50, with board and lodging. Applications to Mr. B. H. Baden-Powell, Honorary Secretary, 29, Banbury Road, Oxford, by February 24th.

PARISH OF PADDINGTON.—Medical Officer of Health. Salary, £600 per annum. Applications and testimonials to the Vestry Clerk, Frank Dethridge, Vestry Hall, Harrow Road, W., by February 26th.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications with testimonials to the Secretary, T. A. Fisher-Hall by March 10th.

ROYAL SURREY COUNTY HOSPITAL, Guildford.—House-Surgeon. Salary, £80 per annum, with board, lodging, and laundry. Applications to the Honorary Secretary by March 10th.

ROXBURGH DISTRICT ASYLUM, Melrose, N.B.—Assistant Medical Officer. Salary, £100 per annum, with board, lodging, and washing. Applications and testimonials to Dr. Carlyle Johnstone, Medical Superintendent.

ST. PANCRAS AND NORTHERN DISPENSARY, 126, Euston Road.—Honorary Physician; must be a Member of the Royal College of Physicians of London or a graduate in medicine of one of the Universities. Application with testimonials to the Honorary Secretary, H. P. Bodkin, 23, Gordon Street, Gordon Square, W.C., by February 24th, 1894.

MEDICAL APPOINTMENTS.

BREDIN, J. Noble, L.R.C.S.I., L.K.Q.C.P.I., L.S.A., appointed Medical Officer to the Staff, Great Eastern Hotel, Liverpool Street, *vice* — Beswick.

BREW, R. H., L.R.C.P.Edin., L.R.C.S.Edin., appointed Medical Officer to the Chew Magna District of the Clutton Union.

BROWNE, J. Walton, B.A., M.D., M.R.C.S.Eng., appointed an Examiner in Ophthalmology to the Royal University of Ireland.

BRUSH, S. C., M.B., C.M.Edin., appointed Clinical Assistant to the Hoxton House Asylum.

EYERS, John W., M.D., reappointed Examiner in Obstetric Medicine, Gynæcology, and Diseases of Children in the Royal University of Ireland.

CLARK, W. F., L.R.C.P.Edin., L.R.C.S.Edin., appointed Medical Officer to the Cheshunt District of the Edmonton Union.

EDWARDS, B., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer to the Ipswich District of the Samford Union.

LATHAM, Henry, M.B., C.M.Edin., appointed Junior House-Surgeon at the Stockport Infirmary.

LIGHTBODY, J. H., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer to the Wybunbury District of the Nantwich Union.

MODLIN, J. G., M.B.Edin., C.M., appointed Medical Officer of the Monkwearmouth (East) District of the Sunderland Union.

ROBINSON, Frederic Cecil, M.R.C.S.Eng., L.R.C.P.Lond., appointed Fifth Assistant Medical Officer to the London County Asylum, Colney Hatch, *vice* H. G. Shaw.

ROOK, A. E., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer to the Eastbourne Union.

WOOD, W. Dyson, L.R.C.P., L.R.C.S.Edin., appointed Medical Officer to the Bicester Local Board.

YOUNGER, Edwd. Geo., M.D.Brux., M.R.C.P.Lond., appointed Physician to the Finsbury Dispensary, *vice* Dr. J. W. Griffith, appointed Honorary Consulting Physician.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. W. Lang: Iritis. Bacteriological Laboratory, King's College, W.C., 3 to 5 P.M.—Lecture: Erysipelas and Suppuration. Practical work: Cultivations of Streptococci. London Throat Hospital, Great Portland Street, 8 P.M.—Mr. George Stoker: Post-nasal Growths and Enlarged Tonsils.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. Frederick Treves: Peritonitis (Third Lettsomian Lecture).

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr. Percy Smith: General Paralysis of the Insane.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M.—Dr. J. W. Washbourn: Cases of Pleurisy caused by the Pneumococcus, and with Constitutional Symptoms resembling those of Pneumonia. Mr. A. Symons Eccles: The Relationship between Disorders of Digestion and Neurasthenia (Dilatation of the Stomach and Constipation).

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 1 P.M.—Dr. Payne: Alopecia; its Varieties. Hospital for Consumption, Brompton, 4 P.M.—Dr. J. Kingston Fowler: Cases of Pulmonary Tuberculosis. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Stanford Morton: Optic Neuritis.

HUNTERIAN SOCIETY, 8.30 P.M.—Hunterian Society Lecture by Dr. Pye-Smith: Rational Therapeutics.

NATIONAL HEALTH SOCIETY, 53, Berners Street, W., 4 P.M.—Dr. George Reid: Infant Mortality and the Employment of Married Women in Factories.

METROPOLITAN COUNTIES BRANCH (NORTH LONDON DISTRICT), St. Pancras Infirmary, Highgate, 5 P.M.

METROPOLITAN COUNTIES BRANCH (SOUTH LONDON DISTRICT), St. Thomas's Hospital, 8.30 P.M.

POST-GRADUATE COURSE, West London Hospital, Hammersmith, W., 5 P.M.—Mr. Stephen Paget: Diseases of the Breast.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and the Epileptic, Queen Square, 2 P.M.—Dr. Gowers, F.R.S.: Clinical Cases. Hospital for Sick Children, Great Ormond Street, 3.30 P.M.—Dr. Penrose: Tuberculosis in Children. Central London Sick Asylum, Cleveland Street, 5.30 P.M.—Mr. Jonathan Hutchinson, F.R.S.: Cases in the Wards.

HARVEIAN SOCIETY OF LONDON, 8.30 P.M.—Dr. J. F. W. Silk: On the Use and Abuse of Anæsthetics.

FRIDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. J. Kingston Fowler: Cases of Valvular Disease.

WEST KENT MEDICO-CHIRURGICAL SOCIETY, the Miller Hospital, S.E., 8 P.M.—Sir Dyce Duckworth on Some Points in the Diagnosis of Pains, commonly called Gouty or Rheumatic.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY, West London Hospital.—8 P.M.: Special general meeting to consider certain alterations in, and additions to, the laws. 8.30 P.M.: Clinical meeting: Cases will be shown by Drs. Gardner, Dockrell, Masters, Abraham, Steer, Chapman, and Neville Wood.

SATURDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M. Dr. Hyslop: General Paralysis of the Insane.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTHS.

LENNOX.—On February 19th, at 144, Nethergate, Dundee, the wife of David Lennox, M.D., of a son.

OWEN.—On February 14th, at Crathorne, Teignmouth, S. Devon, the wife of Arthur D. Owen, M.R.C.S., Perak, Straits Settlements, of a daughter.

MARRIAGE.

WHEATLY—BOWRING.—February 19th, at St. Mary's, West Kensington, by the Vicar, the Rev. Bradshaw Foy, Arthur William Wheatly, M.B., to Alice, widow of the late John Founereau Bowring, of Coombe Royal, Kingsbridge, South Devon, and daughter of William Henry Marc, of South Kensington.

DEATHS.

GREENSILL.—On February 17th, at The Firs, Martley, near Worcester, John Nicholas Greensill, M.R.C.S., aged 74. Friends kindly accept this intimation.

WILLIS.—On the 14th inst., at Florence Court, County Fermanagh, Dr. William Willis, F.R.C.S.E., Physician to H.M. Legation, Bangkok, Siam, aged 57.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

SEA SICKNESS IN PREGNANCY.

L.R.C.P. writes: I should feel obliged if some of your readers who have experience in the matter would kindly inform me of the most effective preventive or remedy for sea sickness in a case of advanced pregnancy. Under ordinary conditions the lady is a fairly good sailor.

LEUCOPLAKIA.

ST. BEES asks for advice in the treatment of a case of leucoplakia under treatment for over six months. All ordinary mouth washes and local applications have been tried, stomach remedies also, without any effect. The only remedy of any use has been a citric acid and glycerine mouth wash, and it answers only for a time. The chief complaint the patient makes is severe burning pain, especially at the tip of the tongue.

MIDWIFERY AND AFTER-VISITS.

SURG.-LT.-COL. asks what number of visits are usually made in ordinary cases in connection with the fee agreed upon, and what is the general custom as to charges for subsequent visits and treatment after the recognised number of visits pertaining to the fee have been paid.

*** After ordinary confinements visits are usually paid for a fortnight or three weeks, and the fee includes these visits. If a prolonged illness follows confinement, attendance during this should be recognised by additional payments.

M.D. DEGREES.

C. S. asks (1) if there is any book giving hints on thesis writing for the M.D. of Edinburgh University, and also (2) if there is any board which grants the M.D. degree without having to pass Greek.

*** (1) We know of no such book. It would have to be almost encyclopædic in character. (2) The University of St. Andrews confers a limited number of M.D. degrees yearly. Particulars will be found on page 538 of the Educational Number of the BRITISH MEDICAL JOURNAL, published on September 2nd, 1893, or on pp. 86 and 87 of the Calendar of that University. An examination in Greek is not asked for, but it is imperative for the M.D. of all he other Scotch universities.

ANSWERS.

H. M.—The Opium Commission is expected to conclude its examination of witnesses in India this week. No official report of its proceedings has yet been issued.

G. F.—Morrhuol créosoté (Chapoteaut) is a preparation of well-known drugs made up in a certain way by a certain pharmacist, and advertised by him.

ANXIOUS.—Our correspondent will probably find that his needs will be met by Dr. Styrap's work entitled *The Young Practitioner, with Practical Hints*, etc. (London: H. K. Lewis. 7s. 6d.)

L.S.A. should furnish some documentary proof of his assertions, or bring the general question before his Branch of the Association. Vague and unsupported accusations are always dangerous.

C. C.—The cameras mentioned are not specially adapted for clinical work, but very good results can be obtained with the Frena. For the best work a good portrait lens is required, but such a lens is an expensive luxury. Negatives are permanent if properly treated.

SAPOO.—Physicians, in signing a prescription, append their initials; and surgeons generally sign their full name. As regards general practitioners, there is not, so far as we are aware, any general rule. The addition of "Chir." in the case of a "Surgeon and Apothecary" is not at all necessary, nor, we should imagine, usual.

STUDENS.—Information as to the conditions of admission as Fellow of the Chemical Society could, doubtless, be obtained on application to the Secretaries of the Society, Burlington House, Piccadilly. Our correspondent has, perhaps, in mind the Institute of Chemistry. Admission as an Associate of the Institute after a three years' course of study and examination. The Registrar and Secretary is Mr. G. H. Robertson, 9, Adelphi Terrace, Strand, W.C., who will supply all necessary information.

B. C.—Some children's hospitals will take probationers at the age of 21, but most of them give the preference to those who are a year or two older. Our correspondent might apply at the East London Hospital for Children, Shadwell; the Hospital for Sick Children, Great Ormond Street, W.C.; the Victoria Hospital, Chelsea, S.W.; the Royal Hospital for Women and Children, Waterloo Bridge Road; and at the North-Eastern Hospital for Children, Hackney Road, N.E. Applications are generally in excess of the vacancies, and the candidate, even if eligible and accepted, would most likely have to wait a few months.

RED TICKET draws attention to a newspaper account of a meeting of the Banbridge Board of Guardians in which the medical officer's report is inserted in full, stating among other things the operations which had been performed during the week. No doubt it is to be regretted that the ubiquitous modern journalist published details such as those referred to in the papers. At the same time, there are few public bodies which more require the stimulus of full publicity than boards of guardians, and we would not willingly suggest that their proceedings should be *in camerâ*. As to the details of the report, it is clearly necessary that, as between board and medical officer, a full report should be made, especially where, as is sometimes the case, the guardians pay a fee to the doctor who assists. After the report is once given in, we can hardly hold the medical officer responsible for the use to which it is applied by the newspapers.

ALLEGED COVERING.

C. B. W.—Our correspondent should lay his complaint and the proofs he is able to bring in its support before the President of the General Medical Council, 299, Oxford Street, London, W. The local registrar may be willing to let him examine the certificates.

A MEMBER.—Any arrangement by which a registered practitioner enables an unqualified person to practise as if he were qualified would come under the definition of "covering" adopted by the General Medical Council. Such a plan as that proposed by our correspondent would come very close to the limits of illegitimate practice. Though in form the arrangement might purport to "safeguard the doctor from attending cases which the chemist had ventured to prescribe for," it would be liable to break down disastrously if a mishap occurred in the chemist's practice; and the moral and professional responsibility would inevitably fall on the doctor associated with him.

ETIQUETTE AND INSURANCE.

B.A.—If a patient comes from the country for examination by the medical referee, he must of necessity be seen in the absence of his own medical man. But, as far as possible, it is desirable that the practitioner in attendance should be communicated with before the medical referee visits the patient; and, of course, no interference with the dressings is allowable in the absence of the former.

"THE NEW TONIC."

DR. J. MACKENZIE (Burnley).—We cannot say whether proceedings taken by our correspondent against the company who manufacture and advertise a nostrum as Dr. Mackenzie's wine would be successful or not. Having regard to the fact that our correspondent is the only Dr. Mackenzie in the town, the court might, we think, restrain the manufacturers or compel them to justify the use of the name. The Medical Defence Union would probably interfere in such a case were our correspondent a member of it. If not, he must proceed on his own initiative. The first step is to write to the makers, and, failing redress, to put the matter in the hands of a solicitor.

TREATMENT OF TAPEWORM.

H. C. M. writes: Dr. Fearnley may, perhaps, be reminded of pelletierine (an alkaloid obtained from the pomegranate root bark) as a remedy of reputed efficacy. Dr. Whitla[1] recommends it to be given in 2-grain doses, fasting (10 grains of tannin may be given immediately before), and states that "this plan of treating tapeworm has given better and more uniform results than any other." It should not be given to young children.[2]

DR DALTON TACEY (Doncaster) writes: The following suggestions I have found very successful during the last twenty years. Keep patient on liquid diet for two days. in the evening give a full ounce of castor oil. Let him have one ounce of *fresh* oil of male fern, directing him to take one teaspoonful every morning fasting, shaken up in hot milk until the male fern is finished.

CAISSON DISEASE.

A MEMBER.—A report of a case of this disease, with some interesting remarks on the subject by Mr. G. E. Twynam, of Sydney, New South Wales, was published in the BRITISH MEDICAL JOURNAL of January 28th, 1888, p. 190. The subject was discussed at a meeting of the Practitioners' Society, New York. Dr. Gilman Thompson read notes of some cases, and concluded that since in all cases of caisson disease the main danger lies in the too rapid change of pressure, the practice of allowing workmen to leave the caisson very rapidly cannot be too strongly condemned. For reasons of economy but one "lock" is sometimes placed between the atmosphere and the caisson, and the men are allowed to hurry in and out at a rate which implies criminal negligence. When four atmospheres of pressure are employed, there should be at least three "locks," with graduated air pres-

[1] *Pharmacy, Materia Medica, and Therapeutics.*
[2] See also *Practitioner* for February, 1880.

sure, and fully three-quarters of an hour should be consumed in entering or leaving the caisson, instead of five or ten minutes. The progressive character of the symptoms should be a warning to those who have had a first attack that they cannot with safety continue to work under the same conditions. Dr. Andrew Smith, who also described some cases, was of the same opinion. He observed that it was exceedingly dangerous for any man who had never been in a caisson to go down and stay during a few minutes. A student once went into a caisson where the pressure was only two atmospheres, and had a rather severe attack of the disease in question after a brief sojourn. Men who began work at the time when a tunnel was first started, and followed it up as it progressed, became accustomed to the increased pressure, and were much less likely to be affected by the caisson disease than those who began at a later period, when the pressure was already great. That had been observed during the building of the great Brooklyn Bridge. One of the men who lost his life succumbed on the first time that he entered the shaft.

NOTES, LETTERS, Etc.

The statement made in the British Medical Journal of July 8th, 1893, with regard to certain bequests left by Mr. W. F. Harvey to the Lincoln and certain other hospitals was incorrect.

Exclusion of Light in Small-pox.

In consequence of the publication in the Epitome, under date February 17th, of a paragraph (No. 138) containing an abstract of Finsen's paper as to the exclusion of the ultra violet rays from rooms in which cases of small-pox are being treated, Messrs. Thomas Christy and Co. have sent us samples of materials manufactured by them in the first instance for photographic purposes. They claim that the materials, which seem to be very carefully made, allow a large amount of purely non-actinic light to pass. The great objection to most red materials is that if effectual in cutting off actinic light they cut off also so much non-actinic light as to make the room very obscure.

"Undetected Stone in the Bladder."

Dr. A. H. Reinhardt (Battersea Park Road, S.W.) writes: I was the only practitioner called in to see the girl, and as I was only called to the case one day before death occurred, and when the girl was in a dying condition, due to old standing surgical kidneys, you will understand that your remark as to the medical attendant having been misled by the fact of previous hospital attendance rendering a searching examination unnecessary are wrong. As to the hospital attendance, the mother informed me she was a patient under one of the physicians at St. Mary's Hospital for two years, then discharged as incurable. On *post-mortem* examination the stone was found to be encysted; it had not perforated the bladder, the kidneys were completely disorganised, and the emaciation and cachexia extreme.

*** Our correspondent's letter makes it clear that he had no share in the mistake made in the case of undetected stone in the bladder referred to. The account which we had received of the case left this point vague. He will observe, however, that we attributed nothing to him beyond an inference which we expressly stated was a natural one The main point of our observations is untouched, or, if touched, is strengthened by our correspondent's letter, namely, the necessity in cases like these for repeated examination of the bladder.

A Sonnet on the Retirement of William Howship Dickinson, M.D., F.R.C.P., from the Working Staff of St. George's Hospital.

Physician thou for twenty years hast been,
To our St. George's School a faithful friend—
A teacher among teachers to the end;
And a great scholar, too, as all have seen.
In observation thou didst always lean
On Nature first, so thou couldst well defend
Thy theories. None ever saw thee bend
The blade of Truth to fit thy thought so keen.

Farewell! We will not write a song of praise
To thee, but rather store within our mind
A memory of thyself, for we did find
Duty and truth thy foremost aims. We raise
Our voice in one, that thy remaining days
Be full of joy, and Old Age to thee kind.

T. W. P.

A Narrow Escape.

Dr. A. Ledlie (Belfast) writes: On Friday, March 10th, 1892, about noon a cart, loaded with hay, came into contact with W. J., a boy, aged 7. A wheel of the cart knocked him down and then passed over his left thigh and head. I saw him a few minutes later. There was a contusion about two inches in breadth extending across the outer side of the lower third of the left thigh, from behind forwards and slightly upwards; also an abrasion of the scalp about the same breadth, extending from close behind the left ear to near the vertex. There were a few small contused wounds over the inner condyle of the left femur and over the right parietal eminence, evidently caused by counter pressure from the road. The femur was unbroken. There was a slight depression of the skull where the wheel had passed over it, but no fracture could be detected. There were marked symptoms of shock—sighing respiration and a sense of impending suffocation. He frequently complained that he could not get breath. He was placed in a warm bed, an aperient was given, and spirit lotion was applied to the thigh and head. He soon fell asleep and the symptoms of shock disappeared. On the following morning his temperature had gone up two degrees, but on the third day it had gone down again to the normal. For a few days he complained of tenderness of the contused parts, but made no reference to this after the sixth day. On that day he was able with some assistance to leave his bed and walk a little. At the end of a week he was able to walk without assistance, and all that remained to indicate that an accident had happened were a slight halt from weakness of the left thigh and absence of hair on the abraded portion of scalp. A week later the halt had entirely disappeared, and in less than a month the scalp had regained its normal appearance. To those who saw the accident the wonder is that the boy was not instantaneously killed. There were at least four eye-witnesses. The man in charge of the hay cart drove on and disappeared. A lady asserts that there were about two tons of hay on the cart. This is, probably, an unintentional exaggeration, but it indicates that the load was large. Probably the true explanation of the boy's marvellous escape from death is that the high position of the centre of gravity caused the cart and its load, like a huge inverted pendulum, to oscillate slowly from side to side as it advanced thus throwing the greater part of the weight first on one wheel then on the other and so on alternately, and that it so happened that at the moment when one wheel was passing over the boy almost the whole weight of the cart and its load was supported by the other wheel.

Recurrence or Relapse.

Mr. H. J. Roberts, M.R.C.S.Eng. (Penygroes, N. Wales) writes: I find in the British Medical Journal of February 17th an instance mentioned by Dr. T. B. Carlyon, of Tenbury, of a recurrence or relapse in three weeks in a case of scarlatina. I may also mention a somewhat similar instance. The facts are briefly thus:—A girl, aged 5 years, was taken ill with scarlatina about two months ago. The rash broke out well, and was accompanied with sore throat. Three other sisters living in the same house were attacked about the same time. The fever ran its usual course, and peeling of the skin took place. In five weeks from the date of the first attack this patient became very ill; a typical scarlatinal rash broke out again with a very severe sore throat. Ultimately she recovered, and is now doing well. Here, as in Dr. Carlyon's case, there was peeling of the skin and the rash out at the same time.

Dr. M. Greenwood (Hackney Road), writes: I have been much interested in reading the account of Dr. Carlyon, Tenbury, of an anomalous case of scarlatina. I should like to record a somewhat similar experience in my own practice a short time ago, but here there was a distinct interval with regard to the illnesses, so that it seemed like two distinct attacks of scarlatina in less than six months. G. C., aged 8 years, was attacked on September 26th, 1893, with marked symptoms of scarlet fever; the rash was well marked, and the throat typical of the disease; this was followed in due time by very complete desquamation, and convalescence in about six weeks from onset of the disease. On January 6th, 1894, I was called to the same patient, and found her to be suffering from pronounced febrile symptoms, sore throat, and a rash indistinguishable from the ordinary scarlatinal variety; complete desquamation followed after this second attack; also, the child becoming again convalescent in about five or six weeks. Now, I cannot help thinking that these two attacks were each scarlet fever, or at all events the second attack was indistinguishable in character from the first.

Maternity Clubs and Cottage Nurses.

Various papers relating to the Dorset Health Association, and its arrangements for nursing the poor, have been forwarded to us, regarding which we hesitate to express any decided opinion, seeing that, at a conference of medical men called to discuss these matters, the very proper course was adopted of asking the local Branch of the British Medical Association to allow the subject to be fully discussed at one of its meetings.

A matter of this sort is typically one to be discussed on the spot; the desirability, or otherwise, of any proposed course depending so much on a recognition of the possible alternatives. Ideas as to nursing differ in different districts, and perhaps what are called cottage nurses may be a great advance on anything at present attainable by Dorset labourers; but when it becomes a matter of midwifery we should be inclined to hesitate greatly before giving professional sanction to the employment of that sort of woman for the purpose. If there is any truth at all in modern ideas as the importance of obstetrics as a branch of medicine, it would seem almost better that the wives of poor people, whose wages do not exceed sixteen shillings a week, should throw themselves on the Poor Law, and that the guardians should be forced by public opinion to provide them with proper skilful help in their time of peril, than that they should be tempted to save out of their meagre earnings to pay for such attendance as can be given by the "cottage folk" whom the Association employs after a short training under a midwife at the York Road Hospital. This, however, is a matter on which local opinion may well be taken.

Poisoning from Home-made Wines.

Dr. C. S. Evans (Shaftesbury) writes: The notice in the British Medical Journal of December 3rd, 1893, respecting poisoning from home-made wines impels me to give a few facts in support of the statement and suggestions made. Yellow "crocks" made in Somersetshire with lead glaze are in universal use in cottages throughout this district for all purposes to which they can be applied. No year passes without cases such as mentioned by your correspondent coming to me with lead poisoning. A home brew of currant, rhubarb, parsnip, or "snag" (sloe) wine is very commonly made, and cider and hop beers are passed through these vessels; and those in use for some time generally show evidence of the solution of the glaze by roughening of the surface. Though some of the cottagers are aware of the danger incurred, the knowledge is by no means general. In one year I have notes of 10 such cases, in several instances leading to the serious results of chronic saturnism. Some such notice as that suggested, issued by county medical officers of health, Branches of the Association, or neighbouring medical men acting in concert, is certainly called for here in the west country.

Average Duration of Medical Study in France.

An analysis of the academical career of 663 students who took the doctor's degree in the Paris Faculty in 1888 and 1889, gives the following results as to the average duration of study. In 61 cases the *status pupillaris* lasted from four to five years; in 113 from five to six years; in 142 from

six to seven years; in 91 from seven to eight years; in 61 from eight to nine years; in 46 from nine to ten years, in 51 from ten to eleven years; in 98 more than eleven years. Thus, of these 663 graduates, more than half, for one reason or another, took more than seven years to complete their studies. This protracted studentship must not be taken as equivalent to "chronicity." It may be stated, as a general rule, that for the best class of students in France the average duration of study is from six to eight years; in the case of *internes* it may be put as high as ten years.

STREET NAMES.

THE Paris Municipal Council, which seems to be never quite happy unless it is changing the names of streets, has decided to give the names of some departed glories of French medicine, such as Wurtz, Vulpian, Charles Robin, De Quatrefages, and Paul Gervais, to certain thoroughfares now rejoicing in more picturesque but less distinguished appellations. This is not the first time the Paris Municipal Council has gone to the medical profession for sponsors in its rechristening of streets. Our own County Council might do worse than follow its example in this respect; it might in this way find a means of partial deliverance from what Falstaff might justly call the "damnable iteration" of such names as "King Street," "Queen Street," and "Duke Street" which now afflicts postmen, policemen, and the public.

TREATMENT OF INEBRIETY IN AMERICA.

IN the annual report for 1893 of Dr. T. D. Crothers, who as president and medical superintendent has directed the Walnut Lodge Hospital for Inebriates at Hartford, Connecticut, for 14 years, many interesting facts are stated. Fifty-seven cases were treated during the year. A new and striking feature was the reception of 31 inebriates who had "taken the various gold cure remedies and relapsed. Compared," says Dr. Crothers, "with others who had not used these secret remedies, they were more degenerate, depressed, and irritable. In treatment they recovered more slowly, and suffered more prominently from insomnia and hallucinations." Sixteen of the 49 patients discharged have done well, which is about the proportion of cases permanently cured in the experience of genuine homes for inebriates throughout the world. In addition, 21 were greatly improved and apparently practically recovered, though of the class of periodic and paroxysmal inebriates who are liable to relapse from any extra mental overstrain or special exciting cause. To heredity was attributed 32 of the cases, 9 to traumatism, 5 to exhaustion, 4 to environment, and 7 to other diseases. Six of the traumatic cases had been temperate up to the date of the injury or shock, 22 were periodic, 15 constant, and 9 irregular inebriates. About half the whole number were between 30 and 40 years of age; 48 were or had been married, while only 9 were single, a different experience from that of similar institutions in England; 44 had enjoyed a collegiate, university, or academic curriculum, 13 having received only a common school education. The patients are treated as sick and diseased persons, the principles of treatment being seclusion, protection, brain and nerve rest, building up, and restoring the organism.

THE DRINK BILL FOR 1893.

THE usual annual survey of the nation's bill for intoxicants appeared in the *Times* last week from the pen of Dr. Burns. As the estimated retail cost of the liquors consumed was in 1893 £138,854,829, and in 1892 £140,866,262, the net decrease has been £2,011,433, or rather under 1½ per cent. This amount is arrived at after taking into account a decrease on spirits of £1,830,104, and on wine of £412,716, as well as an increase on beer of £231,387. The average per head in the United Kingdom was £3 12s. 3d., the estimate of the population at midsummer having been 38,129,992. The total average expenditure on all kinds of intoxicants was lowest in Ireland, or £2 2s. 9d.; higher in Scotland, or £3 0s. 5d.; and highest in England, or £3 18s. Of beer each person bought in England £2 12s. 3d., in Scotland 19s. 9d., and in Ireland 15s. 7d. With spirits it was the reverse, each inhabitant spending in England 18s. 5d., in Scotland £1 14s. 2d., and in Ireland £1 1s. 5d. This estimate is based on data which have been generally accepted, the figures having been taken from the trade and navigation accounts.

TREATMENT OF PERNICIOUS ANÆMIA.

DR. J. T. NEECH (Tyldesley) writes: I was much interested in reading Dr. Russell's case of pernicious anæmia published in the BRITISH MEDICAL JOURNAL of February 10th because have had some experience in the treatment of that disease myself. I agree with Dr. Russell as to how necessary it is to follow the subsequent history of such a case in order to ascertain the permanency of the cure. In July, 1892, I had a similar case under my care. I gave the patient arsenic and iron and ordered a nourishing diet. Although his progress was slow he gradually got better, so much so that by the end of the year he was able to resume his work. He continued to follow his employment for about eleven months, when the disease returned, and this time no treatment had any effect. He got gradually worse and died within two months. Dr. Russell described the state of the blood previously to the treatment, but in the after-history of his case I think he has made an omission in not giving the subsequent condition of that fluid, because in my experience in various forms of anæmia improvement towards the uniformity of shape and size of the red corpuscles, together with a greater regularity of their arrangement in the formation of rouleaux, are good tests of the beneficial effects of remedies administered and of the progress of the blood towards the condition of health.

LETTERS, COMMUNICATIONS, ETC., have been received from:

(**A**) Dr. F. H. Alderson, London; Angina; Mr. A. J. M. Armstrong, London; An Asylum Medical Officer; Mr. T. W. J. Allen, Great Grimsby. (**B**) Mr. G. Boggon, Sunderland; Miss C. B. Beatty, London; Mr. A. E. Blacker, Ventnor; Dr. G. B. Batten, London; Dr. J. W. Browne, Belfast; Dr. R. H. Barker, Hungerford; J. Becker, M.B., Colchester; Mr. P. T. B. Beale, London; Mr. J. K. K. Benjamin, London; S. C. Brush, M.B., London; Dr. J. Braithwaite, Leeds; Mr. L. A. Bidwell, London; Dr. J. W. Byers, Belfast. (**C**) Messrs. T. Christy and Co., London; Dr. E. Casey, Windsor; A. F. G. Codd, M.B., Bromley; Mr. F. Cameron, Drumcondra; Dr. A. H. W. Clemow, London; Mr. A. Caddy, Calcutta; C. J. W.; Mr. R. H. Cogan, Bradford; Miss M. M. Caley, Selby; Mr. C. Campbell, Saddleworth; W. Cotton, M.B., Bristol; Mr. W. Connor, Kilwinning; Dr. P. M. Chapman, Hereford; Dr. E. Clarke, London. (**D**) Mr. E. C. De Secundo, London; Doubter; Mr. D. Deeley, Derby; Drug Trader for Forty Years; Dr. J. Dulberg, Manchester. (**E**) Mr. S. O. Eades, Ipswich; Sir Peter Eade, Norwich; Mr. J. L. Elliott, Cradley Heath; Mr. J. Edmondson, Derby; Mr. J. B. Endean, London. (**F**) Dr. E. Farkas, Buda-Pesth; Mr. R. Furber, London; Mr. A. Fournet, London; Mr. J. T. Fox, Bath; Mr. G. C. Franklin, Leicester; Dr. A. Foxwell, Birmingham; Mr. C. D. Forster, Newcastle-on-Tyne; Dr. R. Hingston Fox, London. (**G**) W. Gordon, M.B., Exeter; Mr. W. F. Gubb, Paisley; Mr. W. M. Griffiths, Carmarthen; Dr. W. H. Gaskell, Cambridge; Mr. F. M. Grainger, Chester. (**H**) Mr. W. J. H. Haslett, Sunbury-on-Thames; Dr. G. E. Haslip, London; H. C. M.; Mr. T. F. Hopgood, Sunderland; Mr. A. W. Hall, Warrington; H. M.; Mr. E. J. Howes, Liverpool; Messrs. Higginbotham and Co., Madras. (**I**) Dr. C. R. Illingworth, London. (**J**) Dr. E. H. Jacob, Leeds. (**K**) Dr. T. N. Kelynack, Manchester; Mr. J. E. Kenny, Dublin. (**L**) Mr. C. G. Lee, Liverpool; Mr. A. Ledlic, Belfast; L. L. A.; Mr. J. W. Lesslie, Toronto; Messrs. Sampson Low, Marston, and Co., London; L.R.C.P.; Dr. E. L. Lees, Bristol. (**M**) Mr. H. Maude, London; J. C. McClew, M.B., Leek; Dr. J. Mackenzie, Burnley; Mr. O. B. Murphy, London; Mr. H. J. Manning, Salisbury; Dr. R. Maclaren; Carlisle; J. D. Mortimer, M.B., Horley; Member; M.D.; Mr. E. W. Morris, Cardiff; M.D., M.R.C.S.; Mr. G. H. Makins, London; Mala Ultra Adsunt: Messrs. Meyer, and Meltzer, London; M.B. (**N**) Mr. E. Neild, Eccles; Mr. W. G. Nash, Bedford; Dr. A. Newsholme, Brighton. (**O**) Dr. J. Orton, Beeston; Mr. W. K. Ormsby, London; Dr. Otto Wiegand, Wurzburg; One of Them. (**P**) Mr. W. B. Patterson, London; Mr. J. Pollard, Wakefield; R. D. Pinnock, M.B., Ballarat. (**R**) Mr. R. Rawlinson, London; Mr. F. C. Robinson, London; Mr. A. H. Reinhardt, London; Mr. C. G. Rae, Wick; Dr. R. R. Rentoul, Liverpool; Mr. Ritchie, London; Mr. J. Rhodes, Keighley; Red Ticket; Mr. H. J. Roberts, Pen-y-Groes; Mr. C. G. Russwood, Southport; Dr. H. B. Robinson, London; R. J. Ryle, M.B., High Barnet. (**S**) Sir E. H. Sieveking, London; Mr. C. H. B. Shears, Liverpool; Dr. C. E. Shelly, Hertford; Student; Mr. H. A. Smith, London; Society of Anæsthetics, Honorary Secretary of, London; Mr. J. Startin, London; Mr. E. Snape, London. (**T**) T. W. P.; Mr. C. W. Thies, London; Mr. D. Tacey, Doncaster; Mr. J. Turton, Brighton; E. J. Tabor, M.B., Carnbrea. (**U**) Ubique. (**W**) Mr. J. T. C. Williams, Whitland; Messrs. W. Wesley and Son, London; Mr. G. W. B. Waters, Slaithwaite; Mr. C. J. Wright, Leeds; Mr. A. K. Willis, London; Mr. T. M. Wills, Bootle; Mr. W. A. Willis, Monmouth; Mr. J. Walsh, Nurney. (**Y**) Dr. E. G. Younger, London; etc.

BOOKS, ETC., RECEIVED.

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Dwelling Houses, their Sanitary Construction, and Arrangements. By W. H. Corfield, M.D. 3rd edition. London: H. K. Lewis. 1894. 3s. 6d.

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The Effect of the Lee-Metford Bullet on the Bones of Horses. By Veterinary-Captain F. Smith. (For private circulation only.)

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*** In forwarding books the publishers are requested to state the selling prices.

REMARKS
ON
AMBLYOPIA FROM DI-NITROBENZOL:

WITH REMARKS ON THE EMPLOYMENT OF THIS SUBSTANCE IN THE MAKING OF CERTAIN EXPLOSIVES, AND ITS EFFECTS ON THOSE ENGAGED IN THE MANUFACTURE.

BY SIMEON SNELL, F.R.C.S.EDIN., ETC.,

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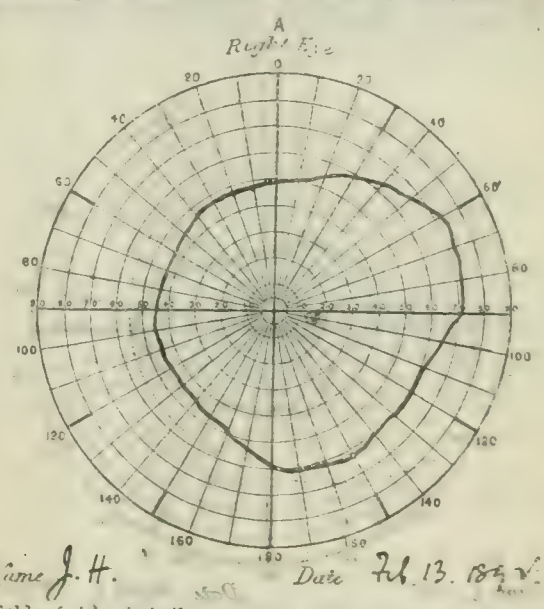
NITROBENZOL is used in the manufacture of aniline dyes and other products. Di-nitrobenzol is largely employed in the making of explosives such as roburite, sicherheit, etc. From the report[1] recently made to the Home Secretary by Dr. Dupré, F.R.S., and Commander Hamilton P. Smith, one of Her Majesty's Inspectors of Factories, it is to be gathered that nitrobenzol is not very injurious to those who work with it, notwithstanding the fact that, taken internally, it is undoubtedly poisonous. Benzol and toluol (coal tar products), treated with nitric and sulphuric acids at moderate temperatures, become nitrobenzol or nitrotoluol; further treated with the same acids at higher temperatures they become di-nitrobenzol or di-nitrotoluol, and assume a crystalline form at a temperature of from 158° to 176° F. The ordinary commercial substance is said to contain impurities some of which are more volatile than the di-nitro, while some are fluid at ordinary temperatures; they thus impart to it a more or less powerful smell resembling that of bitter almonds (due sometimes, but not always, to the presence of nitrobenzol), and render it more or less greasy to the touch, which the pure chemical should not be. The presence of the impure products spoken of increases the danger of working with di-nitrobenzol, not only on account of their vapours, but chiefly because the greasy characters tend to make the substance adhere more when handled, and thus promote absorption. At most of the explosive works the di-nitrobenzol is submitted to some sort of purification, which is necessary to comply with the requirements of the Explosives Department of the Home Office, but does not affect the impurities spoken of. The di-nitrobenzol acts as a poison whether ingested, absorbed by the skin, or inhaled into the lungs in the form of vapour or dust.

The di-nitrobenzol arrives at an explosive factory in slabs, say, of 15 inches square and about 4 inches thick. This is first ground in an apparatus with steam rollers not at all unlike a small mortar machine. In this process a good deal of dust is given off, and the men remark on the smell of bitter almonds. The next step is to take the yellowish powder thus obtained to the mixing shed, where it is put into a large pan, and mixed with oxydising salts and other materials, and heated with steam. It may be put into one of these pans, say, at 7.30 A.M., and be heated until noon. Then it is cooled by cold water being pumped on the outside of the shell. When cool the material is turned out of the "mixer." It is during the taking out of the material from the mixer that workmen are especially exposed to the vapour. The dangers are lessened by the adoption of a "cowl" to the mixer, and also by the use of fans. Thus prepared the explosive is put away in cylinders and kept until required. The next step is to take it to the filling room, where it is put into cartridges, weighed, and stamped, and finally it goes to the dipping shed, where the cartridges are waterproofed by dipping them in liquid paraffin wax.

The most injurious work is that of "grinding" and "mixing," especially the latter. Men are employed in these processes. For the "filling" of the cartridges, and for the dipping also, women and girls are employed. In the first named the powder is shovelled into the cartridges and directly handled; a good deal of dust is also given off. Respirators and gloves are used, as they are also by the men mixing or grinding. The "dippers" are the least exposed to the effects, it would appear, but they do suffer. The greasiness about the hands from the paraffin may also aid absorption. Here also gloves and respirators are worn. There is not much dust, the powder being confined inside the cases.

I will now proceed to detail the cases that have come under my observation suffering from amblyopia.

CASE I.—J. H., aged 35, presented himself on February 11th, 1892. He stated that just before the previous Christmas his sight commenced to fail. On reaching home at night he could not recognise his wife across the table. During the next few days it became much worse, and then deterioration was more gradual. Recently his vision has remained about stationary, and this, as will be explained, has been associated with an alteration of work. Vision in each eye is $\frac{6}{9}$, and he reads J. 16. Both optic discs are decidedly pale; the edges are quite defined, and there is no appreciable diminution in calibre of vessels. The field of vision is somewhat contracted concentrically, and there is a small fairly defined central scotoma for red and green. The pupils are normal in all ways. The patient has been a smoker for twenty years, consuming generally about 1½ oz. a week; he has not been smoking more nor less than usual lately; the kind of tobacco he smokes is cut cavendish. He takes very little alcohol, being almost a teetotaller. His face is pallid, lips bluish, and conjunctivæ yellowish. The finger tips are blue, looking like "cold fingers;" the nails are discoloured, of a fawn colour, darker at the ends, and gradually tapering towards the matrix. The toes are like the fingers, the nails being even more discoloured. The urine was free from albumen; specific gravity 1029; whilst he was engaged in the work to be mentioned it was dark like ink, but it has lately become clearer. The man's occupation properly is that of a blacksmith, but being out of employment and failing to get anything to do at his own trade, he went to work in July, 1891, for a company where explosives, in which nitrobenzol was used, were made. Previously to undertaking this work, he asserts that his health was perfectly good and sight excellent. He was employed at these works in the "mixing shed," and worked there in the way that has been described. He began this three days after joining the works. On the first day he asserts that he felt the effects of the benzol. He experienced giddiness and shortness of breath. A short time later he looked yellowish and his lips blue. The giddiness compelled him to sit down. Gradually he appears to have



The fields of vision in both eyes being closely similar, only the chart for one eye is given in each case.

become accustomed to these symptoms, and he does not seem to have suffered as severely as others to be mentioned. He kept out of the mixing shed as much as he could, and his residence being a good distance from his work he was compelled to take a good sharp walk. These are reasons, he thinks, why he suffered less than others. Before Christmas, however, he became worse; the shortness of breath increased; he tossed about in bed in his sleep, and suffered from great weakness. He experienced a feeling of want of sensation in his arms and legs, and they were "prickly feeling"; the legs were numbed to the knees and the arms to the elbows; there was a stiffness about the hands and feet, but especially the fingers; he finds a little difficulty in undoing his collar button. The patellar reflex is good (exaggerated?). When "mixing" he suffered from occipital headache a good deal, but has not had any vomiting. Memory, taste, and smell are all good. He was disturbed and restless in sleep, and was troubled with dreams and shouted out. A marked effect had been wrought on his sexual functions. He had lost desire, and he said that his wife told him "he would be no good until he had left off the work." He had not been amongst the powder for about a month. The only other point to mention is that he suffered from an attack of influenza before going to the explosives works. He was desired, to avoid all contact from the benzol compounds, and the firm provided an occu-

[1] On the Risks arising and Precautions to be adopted in the Manufacture and Handling of Nitrobenzol and Di-Nitrobenzol.

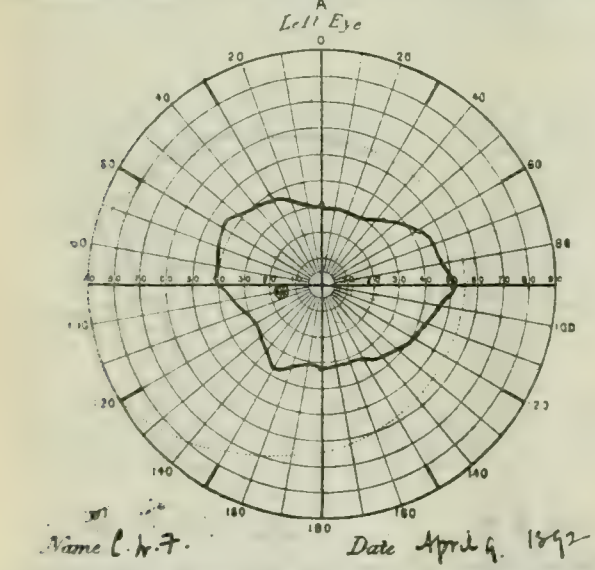
pation away from these for him. He was prescribed liq. strych. in a mixture. He was desired to continue his smoking precisely as he had been accustomed to do. Progress towards recovery was steady.

On March 12th V=$\frac{6}{12}$ in each eye. A few days later he said that his sexual functions were restored to normal. On April 21th V=$\frac{6}{6}$, and shortly after this he discontinued the strychnine. On May 20th vision still the same, taking no medicine. A final note may be recorded. November 19th no red scotoma, and field of vision good. Vision is excellent, and he reads J 1 easily and V=$\frac{6}{6}$. There is still some pallor of optic papillæ. He looks well, has a good colour, does not suffer from fatigue, and can work as hard as ever he could. He is still a little shorter in breath than formerly, and there is some remaining numbness in hands and toes.

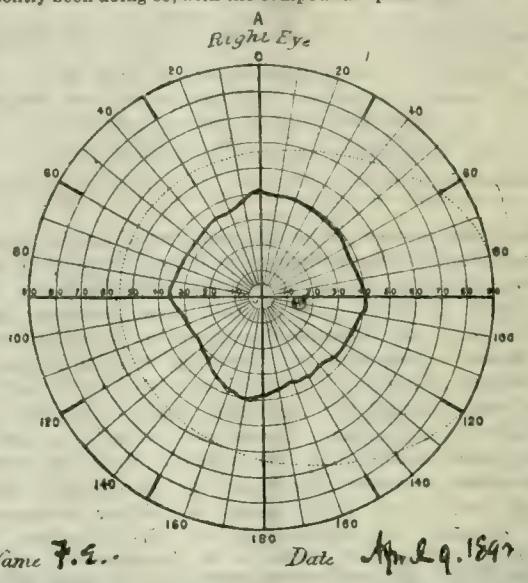
CASE II.—C. W. F., aged 38, came to see me on April 9th, 1892, complaining of defective sight. He had been employed at the same factory as the last patient. He had worked there as a "mixer" off and on for twelve months. His skin is jaundiced and the conjunctiva is distinctly yellow, and the lips markedly blue. He suffers from shortness of breath. After a day's work he experiences aching of forearms and of legs, and also tingling of fingers. Occasionally he has had vomiting and nausea. Sometimes at work, or after leaving it, he has felt as if he were drunk; weak, giddy, and staggering. He cannot drink anything now, because of the greater effect it has on him. His urine is black, specific gravity 1024. A specimen was examined by the spectroscope, and the result will be referred to further on. He had a pulmonary systolic murmur. His sight had been failing since the previous Christmas, about four months. Vision in the right eye was $\frac{6}{9}$, left $\frac{6}{12}$; both optic papillæ were somewhat pale. In each eye there was a central scotoma for red, and concentric contraction of field. He has been a smoker since the age of 17; for the last three years the quantity he has smoked a week has been 1½ ounce, before that time it was about 3½ ounces a week.

I have not had an opportunity of seeing this man again, but I have heard of him, and have made the following notes from information received as to his subsequent condition:

June 18th, 1892. After he had been over to see me he did very little work with the dinitro. He used it, perhaps, twice a week, but not for a long time together. Then he did "carrying." He left the place at the end of May. He was afterwards asked to go back for a day or two to "mixing," as the man who was employed at that work was too ill from the "powder" to go on with it. One day at "mixing" made him so ill that he could not get his breath. He was raving and unconscious from 5 in the afternoon to 10 at night. The doctor gave him up, but he recovered. His sight has been much better since he discontinued working at the factory. More recently I heard that he had re-enlisted into the army.



CASE III.—F. E. was seen on April 19th, 1892. He had been a "mixer" at the same explosive works as the cases already mentioned, but had left the place twelve months previously. Since then he had been employed as a labourer at some mills. When working with the nitrobenzol, after a day's labour he often had attacks of giddiness but no nausea nor vomiting. Before going to his work his health and eyesight were both good. After being employed there, however, for about seven months he noticed that his sight was affected. At first he had been engaged in the magazine handling the cartridges, and then he commenced to "mix." It was when he had been occupied with this latter kind of work for about two weeks that his sight became impaired. He relinquished the work altogether, for he feared he would become perfectly blind, and since discontinuing it he states his vision has become better. He has been a smoker for fourteen years, and is as much addicted to it now as ever he was; 2 ounces of "twist" a week is his usual quantity. When his sight commenced to fail he was smoking less because the breathlessness compelled him to do so; he was only at that time smoking about ½ ounce a week. In each V. = $\frac{6}{9}$; the discs are pale, but there is no diminution in calibre of vessels, and the edges of the papillæ are well defined. The visual field is contracted concentrically, but there is no scotoma for red. When working with the benzol he suffered from breathlessness, pains in the legs, and drer p He could not take drink because it made him feel so bad. On leaving after a day's work he often reeled so much, from the effects of the benzol, in his gait, that he was taken to be drunk. The knee-jerks are now somewhat exaggerated (?) The heart sounds are normal, and his colour is a decided contrast to those who are working, or have recently been doing so, with the compounds spoken of.



CASE IV.—S. E. C., aged 17, was first seen by me on the occasion of my visiting the works in February, 1892. Mention will further on be made of the inspection then made of the *employés*. The following note was entered:—"Has been 'filling' for six months. Marked shortness of breath; very anæmic; lips bluish; pulmonary systolic murmur; loud venous hum; tips of the fingers feel cold to the touch, although she is not apparently conscious of it herself."

She was seen again on March 10th and examined with the ophthalmoscope; it is stated that the retinal veins were full.

On April 12th she came over to see me for more complete examination. She had, it appeared, been employed at the works since August 12th, 1891. She now made no complaint of any impairment of sight and V=$\frac{6}{6}$ in each eye. The retinal arteries and veins were both rather full but especially the veins; the optic papillæ did not indicate any alteration. There was less difference in colour between the arteries and veins than usual; the veins were readily traced to the periphery. There was no scotoma for red. There was a faint systolic murmur over the pulmonary artery. She complained more of weakness than when she was first seen. She was away from work now on account of headache. She had loss of appetite but no nausea, there was numbness of feet which were also sore. She says now that she feels both feet and hands to be cold. There has been no injurious effect on menstruation, which has continued regular. Urine is black, almost like ink—specific gravity 1030. Urates: nothing to be seen under the microscope except amorphous urates; no blood detected with guaiacum test. The urine was submitted to spectroscopic examination, as was also the blood drawn from a needle prick of the finger; it was very thin and black looking. The results of this examination will be referred to presently.

July 23rd, 1892.—Her sight having become impaired she was brought to me to-day. She had been very ill on and off since her last visit in April. Yesterday afternoon she was taken ill and had to be sent home; she could not walk and had to be driven. She had pains in the abdomen with nausea, but could not vomit. The dizziness caused her to reel like a drunken person. She could not walk and even fell off a stool on which she was sitting and tumbled also on getting into the trap which was to take her home. Complains now of dyspnœa. She feels very ill and doubtless is, for she looks it.

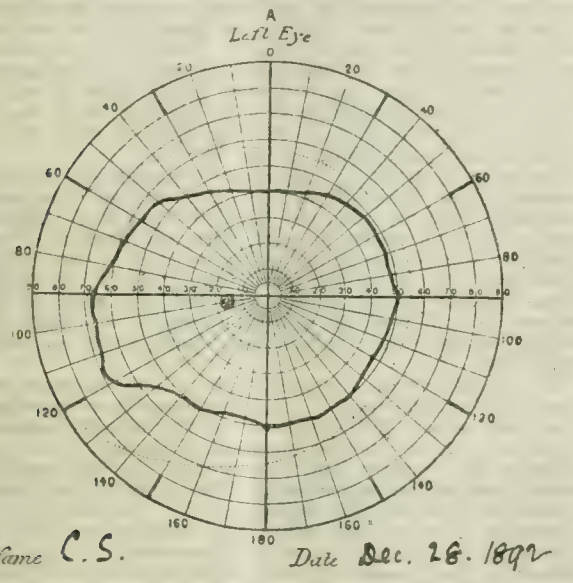
Her sight began to fail shortly after her visit to me in April. She could not read nor keep any account of the work which was done which was a part of her occupation. She does not think she is worse now than she has been for the last two or three weeks. There is increased pallor of face, mingled with a bluish tinge; the lips are blue. The colour of the hair has curiously altered from a golden to a sort of red. Urine has been very black lately. There is a hæmic murmur over the pulmonary artery, and a very marked *bruit de diable*; pulse is very soft and compressible; about 80, and regular. Vision: R. = $\frac{6}{9}$; L, $\frac{6}{12}$; she reads J 2 with each eye. Field of vision appears a good deal contracted concentrically; there is no scotoma for red or green, but there is a good deal of retinal hyperæsthesia, which interferes with trustworthy use of the perimeter. The retinal veins are full; the discs are pale, but the edges are sharp.

This patient could not be prevailed upon to enter the infirmary for treatment, and has not again been seen by me. I have, however, learnt that she has worked as much as she has been able, but has often been off at home ill; it seems as if these girls were almost compelled to continue working, as so many others are willing to do it. If complaints are made others will soon be found ready to take their places. Her sight when she was last heard of remained about the same as at my examination.

CASE V.—C. S., aged 50, was first seen by me on a visit to the explosive works on February 10th, 1892. He was then working as a "mixer," and he had been doing so for twelve months. The following note was then entered: "He is less asphyxiated-looking than the other men are. Headache

when a good deal in the fumes. Heart, normal. Notices that hands feel numb sometimes, and legs also up to knees. With ophthalmoscope retinal veins are seen to be much larger than arteries." Again on March 10th he was seen working at "mixing" and "grinding." He made no complaint of his eyesight at this time, but from what he told us later it would appear to have then attracted his attention. From other sources I heard of this man from time to time, and that he was suffering as it was said a good deal from the "powder." On December 28th, 1892, he came to me on account of his eyesight, which he said was failing. Notes in more detail were then made as to his work and as to his condition, as follows:

He had now been a "mixer" for two years, "the worst job about the place." On two occasions he had been obliged to consult the doctor; the first time, soon after joining the works, was on account of shortness of breath, and the second time, in the spring of this year (1892), for giddiness and staggering; he could not walk many yards without falling. This lasted three or four days; he had previously been working for some days continuously. He had often noticed shortness of breath and giddiness after close application to his work, on other occasions besides the one just named. He had never had any vomiting. He said he had numbness of feet, and thought they were getting weaker. His breath was very short after exertion, and his limbs ached after walking. A glass of beer after a day's work acted on him in such a way as to make him stagger as if he were drunk, but he said "he felt all right in his head." His urine was dark, like porter, and had always been so since he had



worked at the explosive works. The knee-jerks were normal; the sensation of the hands was normal, and there was no wasting of muscles. Nails were discoloured yellow, the conjunctivæ were yellowish, and there was a bluish tinge along the lips. He says his sight had been failing for twelve months, but it had been during the past few months that it had become so much worse. He could not now read the newspaper. V: L=$\frac{6}{36}$; R=$\frac{6}{9}$, and he read J 18. The optic discs were less rosy looking than normal, indeed somewhat greyish; the edges were also a little less defined; the veins were rather full, but there was no diminution in the calibre of arteries. The field of vision was contracted concentrically, there was no definite colour scotoma, but the central perception of red and green was somewhat dulled. He had been a smoker for forty years; the kind had been cut cavendish, and while formerly he consumed 2 ounces a week, for the last year it had been only 1 ounce a week. He had smoked less he told me because he had not had the inclination for it, and when he had been working in the mixing room he had scarcely had the "wind" for it.

It may be well here to refer to visits I was permitted to pay to an explosive factory. They enabled me to see the actual conditions under which the *employés* worked in the different processes; they afforded also opportunities for examining a number of those engaged in these processes with the benzol, and thus to gather further evidence as to its effect on the system. Dr. Cocking, Physician to the Sheffield General Infirmary, was kind enough to accompany me, and I am much indebted to him for a great deal that follows bearing on the medical aspects.

Men were seen engaged at grinding, and working in the mixing shed. They wore respirators over both nose and mouth. I saw also girls, several of them "filling;" respirators and gloves were employed, as with the men. There was a smell of bitter almonds in the shed. The powder was taken up with a small shovel, and put into cases made of waterproof paper, and afterwards it was rammed down with a rod. It was then weighed. The waterproofing or "dipping" was also seen. The cartridges were dipped into the liquid wax, weighed, and the weight stamped on each. The bitter-almond smell was also detected here, but much less so than in the mixing shed.

The following, who were engaged at work, were examined by us: Two men working as mixers; one C. S. has been already described (Case v).

R. C., aged 33, was another man engaged at "mixing." He looked half asphyxiated; face bluish; lips especially so. Shortness of breath and headache occasionally. Hands and fingers were discoloured, and toes also, but in a less degree. Heart: The apex beat was normal; faint pulmonary systolic *bruit*; marked *bruit de diable*, right less marked than left. Veins in the fundus oculi enlarged. Knee-jerk was normal. He was examined at a later date, especially with regard to the condition of the background of eye. Again, my note says veins decidedly larger than arteries, but arteries appear somewhat full. The urine was of a dark brown colour; specific gravity 1024.

Among the "dippers" and "fillers" the following were examined:

E. A., aged 17, has been working at "dipping" for two months; there is a venous hum and pulmonary systolic *bruit*. Has suffered from shortness of breath and palpitation; was badly affected a few days before examination. No complaint of numbness or dead feeling of extremities, but to the touch they feel cold; there is also blueness of finger tips. Here again the retinal vessels were noticed to be very full, but especially the veins.

A. H. had been five weeks "filling;" blue face, lips especially; pulmonary systolic *bruit*; no venous hum. Hands feel cold to the touch but she does not notice it herself. Breathlessness, especially on walking.

An opportunity of a more complete examination of this girl was afforded me a little later, and the following notes were then made:

She is 16 years of age, but has not yet menstruated. At the later date mentioned she had been working for four months. The retinal veins were found with the ophthalmoscope to be very much enlarged, like branches of trees; the arteries are less altered; the vessels somewhat obscure the discs. She makes no complaint of vision being affected; V=$\frac{6}{9}$ in each eye; there is weak degree of H. The edges of optic papillæ a little blurred; no red scotoma. Some blood was drawn from a needle-prick of a finger, and it was found to be very dark and thin. She has only been working three days a week lately, and the shortness of breath is less; no giddiness, no vomiting; the only complaint is shortness of breath; blueness of lips marked; the urine is very black; suffers from muscular weakness. Has been away from work for two days in consequence of "jumping of heart."

S. E. C., six months working as a "filler." The work with di-nitrobenzol has had no effect on menstruation. Her case (IV) has been detailed already.

E. A. B., a "filler;" pulmonary murmur and *bruit de diable*; retinal veins full, arteries not so much so; less marked than in most cases.

G. A., aged 18, has been working five months; is a "dipper;" pulmonary systolic and mitral systolic murmurs; has had rheumatic fever; no venous hum; no effect on menstruation.

E. W., aged 17, employed only three weeks; retinal veins full.

A. H., aged 16, working here for a week only; anæmia, shortness of breath; retinal veins very full, and arteries so, too, but in a less degree. She was taken ill as she was leaving the room at the works after my examination. She was afterwards seen by Dr. Twigg, the surgeon to the works, who kindly sent me a line as to her condition: "The girl whom you saw bad at the works the day you were there was taken very ill the same night. I was sent for and found her very delirious, complaining of great pain in her head (frontal) and shortness of breath, and I believe she had vomited several times before I saw her. The pulse was very quick (about 115), small, and compressible. I saw the retinal veins, which were very full."

M. W., aged 38, working for three weeks; retinal veins full, but less so than in other cases.

All these girls had the peculiar blue asphyxiated appearance; a typical one almost of the effects of the poison, but rather like that assumed often by those under the anæsthetic influence of ether.

The literature dealing with the injurious effects of nitro- or di-nitrobenzol is a small one. Isolated cases have been recorded. Messrs. Sykes and Twigg[2] mention the case of a man, aged 33, who came under their treatment on July 3rd, 1889, muddled, breathless, and cyanotic. He had begun to mix on June 28th (Friday), but Saturday and Sunday being holiday, he did not go again until July 1st. The same evening his wife noticed that he was blue, and he was unwell. They reported that the retinal blood vessels were "unusually dark and dilated." Mr. H. J. Knight reported in a succeeding number of the Journal (vol. ii, p. 244) another case, being that of a man, aged 37. He went to the same works on July 2nd, when he was quite well. For the next two days he was engaged crushing and sieving the ingredients; on the fourth and fifth he was steaming the mixture ("mixing"), and on the evening of the latter date he was taken ill. Dr. J. Stokes, now of Sheffield, also in the *Lancet*, vol. ii, p. 368, 1889, mentions a

[2] British Medical Journal, 1889, vol. ii, p. 127

case of poisoning from working with di-nitro from the same works. The first day at work the patient noticed that his hands and face were blue. The *Lancet*,[3] moreover, refers to the case of a man who met his death after cleaning out a flue over the mixing room at the Gathurst works. The contents of the flues were said to be nitrobenzol, which is a very soft crystallisable substance. The men had to clean out this dangerous flue by turns, and were paid double wages. These fatal cases could be multiplied; others are reported as occurring at the works situated near Denaby.

The most complete articles dealing with the subject of the injurious effects of di-nitrobenzol are by the late Dr. Ross[4] and Dr. Prosser White,[5] of Wigan. The former, whose observations were on men only who used explosives (roburite) in the mine, would appear to attribute the symptoms met with to a kind of peripheral neuritis. He makes no definite statement as to the effects of the poison on the eye. He mentions the case of a man who, on combing his hair, looked up "at a mirror which was placed above the level of his eyes; and if when engaged in combing they remained raised for a short time a film came over them, and he could not see. Upon lowering the eyes the sight at once returned." This has, of course, no connection with nitrobenzol. The man was a collier, and clearly enough on raising his eyes and maintaining them in that way, as Dr. Ross mentions, the oscillations characteristic of miners' nystagmus were occasioned. This would, indeed, be a usual way of demonstrating the nystagmus if suspected to be present in any given case. Dr. White has, however, treated the whole subject in a most complete manner, more so, indeed, than any other observer that I am acquainted with. As the medical officer to large works manufacturing the species of explosives which have been mentioned as consisting in great measure of nitro or dinitrobenzol, he has for several years had good opportunities of studying the whole subject.

Of many of the topics dealt with here he has also treated, and at more length than I have attempted. He has also discussed briefly the effects on the eye of the poisonous influence of the benzol. In his former paper he stated the eye symptoms as negative, and added that Mr. Williams "found the fundus normal, with no restriction of the field of vision or for colour." In his more recent and much more comprehensive article he again quotes Mr. Williams, and goes somewhat beyond his former statements. Mention is made of four cases, in all of which had been observed sight failure. Details are only given of two of these, and then only briefly. The condition of neither visual field nor of colour perception is given. Dr. White, however, sums up as follows:—

"I think it is evident from these cases that nitrobenzol is capable of producing a peculiar form of retinitis with great defect of sight. In three of the four cases there were well-marked and unmistakable ophthalmoscopic signs consisting in darkness of colour of the fundus, great tortuosity of the veins in one or both eyes, with distinct effusion in two of the cases."

It may be here remarked that the fulness of the vessels was observed in my cases; but, as has been already described, the examination of a goodly number of other workers who, though suffering from the poisonous effects of the nitrobenzol, made no complaint of loss of sight, showed that the vessels were also generally if not always found engorged.

The first, however, to bestow any attention on the visual condition met with in these workers was Nieden, of Bocham.[6] Twenty-five out of the 30 workpeople were more or less dangerously poisoned. They completely recovered. The symptoms observed were, he thinks, due to vasomotor paralysis in the heart and blood vessels and consequent overfilling of the veins—a theory which would account for the enlargement of the retinal veins, which in my observations was so generally found. In only one case did he find the eyes affected. He gives the case in the most careful detail. Vision was reduced to $\frac{1}{10}$; there was great concentric contraction of the visual field, but this was not the same for colours, which ran close up to that for white. He found venous hyperæmia of the retina, and effusion (circumscribed) surrounding the principal descending vein. The man slowly recovered and the ophthalmoscopic changes passed away.

We may now summarise the symptoms observed in the cases which have been here recorded. Taking the eye symptoms first, the characteristics are: failure of sight, often to a considerable degree, in a more or less equal extent on the two sides; concentric contraction of visual field, with, in many cases, a central colour scotoma; enlargement of retinal vessels, especially the veins; some blurring, never extensive, of edges of disc and a varying degree of pallor of its surface—the condition of retinal vessels spoken of being observed in workers with the di-nitrobenzol independently of complaints of defective sight. Cessation of work with the benzol leads to recovery. In Case II vision had continued defective, with contracted field, a considerable time after the exposure to di-nitrobenzol had ceased.

The symptoms mentioned are quite in accord with toxic amblyopia from other causes, whether it be tobacco, iodoform—as testified by the cases recently described by Priestley Smith[7] and Valude[8]—or bisulphide of carbon, of which several cases are on record. The general condition of the patients was at first suggestive of this latter poison, and in my earliest case inquiries were made when he was first seen as to the possibility of the bisulphide in any way coming into his work. It at once became clear that the agent at work was a different one.

A word as to tobacco. My men were smokers, but before coming under observation they had reduced the quantity consumed, because, as they alleged, they were unable to smoke as much whilst at work with the benzol. Further than this, it is interesting to observe that in the first case, which was well observed for a long period, not only did vision become perfectly restored, but the field of vision became normal and the central scotoma for colour disappeared, whilst the tobacco was persevered in without restriction.

The general effects appeared to be chiefly exerted on the blood and nervous system. In some cases there were gastric symptoms also. With reference to the blood changes, the occurrence of very marked anæmia in girls, who lived practically in the country, and who worked in well ventilated rooms, was particularly striking. The symptoms and physical signs of anæmia in men, working under the same hygienic conditions, were perhaps still more noteworthy. That some other change, however, in the blood was also present is evidenced by the blueness of the lips and finger tips, which was observed in several of the cases. The colour of the urine was also remarkable.

The chief nervous symptoms were numbness of extremities and unsteadiness of gait. The numbness was not very marked, and in every case tactile sensation was normal. The knee-jerks were certainly not diminished in any case which was tested; on the contrary, in two cases it was doubtful if they were not increased. The unsteadiness of gait was noticed especially at the close of a day's work in the factory, and was much aggravated by the slightest indulgence in alcohol. The evidence of peripheral neuritis, referred to by Dr. Ross, was of the slightest description, and the ataxy appears to be due to an interference with the cerebral co-ordinating centres rather than to any affection of the cord or peripheral nerves. The effects of the poison on the sexual system was in some cases quite marked, but in no instance did it appear to occasion any menstrual irregularity, and this notwithstanding the anæmic condition of the females.

The di-nitrobenzol may, it appears, either be absorbed through the skin, ingested, or taken in through the air passages. What the poison then becomes I do not think has been satisfactorily ascertained, but its action on the blood is definite. Specimens drawn from the fingers of two of my patients were found to be thin and black-looking. Dr. Mac-Munn, of Wolverhampton, very kindly examined some specimens which I forwarded to him, as he did also of urine which as has been stated in relating the cases, was dark, almost black like porter. He writes me thus: "Spectroscopically all the specimens of blood sent showed nothing abnormal.

[3] 1889, vol. ii, p. 81.
[4] *Medical Chronicle*, 1889, p. 89.
[5] *Prov. Med. Journal*, 1892, p. 462. *Practitioner*, 1889, vol. ii, p. 15.
[6] *Central. f. Augenheil.*, 1888.
[7] *Ophthalmic Review*, 1893, p. 101.
[8] *Rev. d'Ophtal.*, 1893, p. 231.

Microscopically there was a distinct departure from the normal in the presence of large coloured corpuscles—megalocytes—12 μ in diameter. The ordinary red corpuscles are smaller than normal, about 5 or 6 μ in diameter. The appearances were like those seen in pernicious anæmia. The urine of F. (Case II) was of a brown colour; this colour was not due to blood or bile, or to indican, but to some pigment belonging to the aromatic series—which, I cannot say. It also contained urobilin. I do not expect that we shall get any abnormal spectroscopic appearances from the blood except it should become so altered as to lead to the death of the patient. That is to say if the hæmoglobin was so broken up as to give a new spectrum life would not be possible."

These observations, which Dr. MacMunn so kindly made, are corroborated by those of Huber. In a lengthy paper in *Virchow's Archiv*[9] he details his numerous experiments with di-nitrobenzene on both cold and warm-blooded animals. The blood became of a dark chocolate colour, and the red corpuscles largely deprived of their pigment. Spectroscopic investigation showed an absorption band in the red reminding one of the similar band of acid hæmatine and of methæmoglobin, but not identical with either. He speaks of this as the di-nitrobenzene band, and considers that the benzene compound acts in a specific manner on the blood pigment. After large doses he found the urine to be brown in colour, and to contain a strongly reducing substance, and sometimes di-nitrobenzene itself was present. These animals referred to in Huber's observations were no doubt brought to the condition to which Dr. MacMunn refers as that in which spectroscopic appearances would be noticed in the blood.

The class of explosives under consideration find especial employment in coal mines, and this aspect of the subject remains for mention. The cases recorded by Dr. Ross in his article before alluded to were all men who were engaged in the mine, and became affected by the di-nitrobenzene in their employment underground. A fair number of miners have occasionally suggested to me that the roburite was injurious, more immediately after its first introduction than at present. I never was able, however, to get at any definite symptoms complained of. Generally the roburite was assigned as a cause of nystagmus instead of the commonly abused safety lamps.

Two important inquiries have taken place into the effects of roburite as representing the benzene group of explosives. At the Park Lane Colliery in Lancashire some two years or so ago the men alleged that working with roburite was injurious to their health, and they complained also of its greater cost as compared with gunpowder. A committee was appointed consisting of two medical men, nominated the one by the owners and the other by the men. Dr. N. Hannah and Dr. Mouncey were the medical men, and they selected as scientific assessor Professor H. B. Dixon, F.R.S., of Owens College. In a very able report the subject was treated completely. They were inclined to attribute the undoubted cases of nitrobenzene poisoning which had been brought under their notice to improper handling of the cartridges. They also insist on the need for insuring complete combustion, and after discussing the symptoms met with say that if stringent care is taken by the manager, shotfirers, and colliers, the use of roburite will not add to the harmful conditions under which the miner works. Means for removing the fumes from the working face were also insisted upon.

In Durham, too, the subject has been taken in hand. The Coalowners' Association and the Miners' Association in that county appointed a committee, who again selected Drs. Drummond and Hume, with Professor Bedson, as professional advisers. This report also is a very complete one. Professor Bedson deals in the fullest manner with the chemical aspect, and his examination of the fumes in the pit after explosion appears to have been most exhaustive. He says that "in some cases after the firing of roburite the odour of nitrobenzene was observed, but beyond this I obtained no evidence of nitrobenzene nor of any similar product." He further alludes to the danger in the case of roburite, as in similar explosives, to be found in the fact that the fumes produced are almost entirely gaseous, and their consequent invisibility may lead the miner to return to his work sooner than he would if, for instance, gunpowder was used. The fumes are, however, he finds by experiment, quickly dispersed, but he thinks a miner should not return to the coal face until five minutes have elapsed after the shot had been fired. The medical men give as their opinion that the nitrobenzene derivatives which give the fumes their characteristic odour exist in too minute quantities to be hurtful. But it is interesting to note the symptoms they found in the men who alleged that they had suffered through being exposed for lengthened periods to the fumes of roburite amongst the coal which had been brought down. "The symptoms described by them were such as are popularly spoken of as 'bilious symptoms,' and the more severe attacks seemed to have been accompanied by slight jaundice. They had headache, occasional vomiting, dizziness, want of appetite, want of sleep, or occasional drowsiness." They were disposed to think these are in great measure symptoms by no means uncommon in miners, and further they do not assign any of the ailments complained of by the men to any poisonous or specially hurtful influence of the explosive. For my part, I should be compelled to take a different view, and to recognise in the symptoms mentioned those which have been described in the earlier part of this paper as belonging to the milder effects on the system of di-nitrobenzene. And I should go further, for recognising the fact that the injurious influence of the poison can be exerted under certain conditions when explosives of which it forms a main constituent are employed in the mine, would look upon them as preventable, and urge attention to care in handling the cartridges, insuring perfect combustion and the ready escape of the fumes by ventilation from the working faces.

In conclusion, I will mention the suggestions for "prevention" I drew up at the invitation of Captain H. Smith and Professor Dupré for their report to which I have before alluded:

"The preventive means which may be adopted in places where the di-nitrobenzol is used may be placed under the following heads:—

"1. That the different processes should as much as possible be conducted in the open air, or in large, well-ventilated sheds.

"2. That in the 'mixing' closed vessels should as much as possible be employed.

"3. Fans, which have been adopted in other trades with great advantage, might also in this one be of service.

"4. Respirators are in use, but their employment is, as far as I am aware, optional. Those protecting both the nose and mouth are, up to a certain point, of service. I do not think they a sufficient safeguard against the fine vapour entering the respiratory system. It occurred to me that during the process of 'mixing' especially it might be possible to shut the workman off from the vapour and fine dust by means of a kind of diving-bell apparatus, with a communication behind to the outer air. A mask, such as has been used, I believe, in Germany, might answer the objects desired.

"5. Handling by the bare hand or direct exposure of the skin should be avoided. The 'filling' could perhaps be performed automatically. The hands should, moreover, be protected by gloves. These should be capable of being cleaned, and possibly india-rubber might be used by preference. The cleaning is an important matter, because gloves put on with any of the substances clinging to the interior, as would be the case after they had been in use for some time, would allow of absorption taking place under the still more favourable circumstances afforded by the warmth and moisture of the hand. Special clothing should be provided, the workmen and women being compelled to change their clothes on entering and retiring from work. Dressing rooms should be provided, and the importance of washing enforced. Food should only be partaken of away from the sheds where the 'mixing,' 'filling,' etc., take place, and particularly is it important to insist on a free use of washing before meals, and the special clothing should also be removed. These are measures which have been found of service in the different occupations in which lead, for instance, is employed.

"Lastly, as regards the use of these explosives in mines. Symptoms have been recorded as occurring in miners having to do with cartridges containing this substance in the pit. They have much resembled the milder symptoms met with among the workers at the factories where the explosives are

[9] Abstract in *Journal of Chemical Society*, March, 1892, p. 366.

made, though it has often appeared that care has been taken that the contents of the cartridges should not come in contact with those employing them. It has, however, been pointed out that in the manufacture the 'dippers' have been recognised as being liable to be affected, and, as has been said, it would appear as if the poison is a very subtle one. Not only, therefore, should means be taken to prevent any of the powder adhering to the outside of the cartridges, but it appears very essential that they should be made in such a way as to ensure that combustion should be complete, and that their use should be restricted as much as possible to well ventilated places, so that currents of air would speedily dilute and carry away any deleterious vapours."

As a result of the report by Dr. Dupré and Commander Hamilton Smith, the Secretary of State has certified (Factory and Workshops Act, 1891) that, in his opinion, the manufacture of explosives in which di-nitrobenzol is used is injurious to health, and notice to observe "special rules" has been served on the different manufacturers. These "rules" are those recommended in the report alluded to by Dr. Dupré and Commander H. Smith.

THE LETTSOMIAN LECTURES
ON
PERITONITIS.

Delivered before the Medical Society of London, January, 1894.

By FREDERICK TREVES, F.R.C.S.,

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Lecture III. Part I.—The Clinical Features of Peritonitis.

The general symptoms of peritonitis are so well known and have been so precisely described that they call for no special consideration in the present lectures. It will be necessary only to deal with the characteristics of certain individual symptoms and to define the clinical peculiarities of certain varieties of peritoneal inflammation.

I.—The Nervous Phenomena.

The general arrangement of the nerve supply of the parietes of the abdomen and of the abdominal viscera is somewhat peculiar. The skin over the greater part of the abdomen, over that part at least beneath which lie the chief viscera, is supplied by the lower seven dorsal or intercostal nerves. The same nerves supply the muscles of the belly, namely, the rectus, the two oblique muscles, and the transversalis. More than that, these identical nerves take a most important part in the nerve supply of the abdominal viscera and of the peritoneum.

There are certain great nerve centres within the belly with which the sympathetic is conspicuously concerned, and from which the organs of the abdomen are supplied. The chief of these centres are the solar, the cœliac, and the superior mesenteric plexuses, and it is most noteworthy that the contribution they receive from the spinal nerves is derived in whole or in greater part from the lower seven dorsal nerves through the splanchnics. It is further to be observed that these particular spinal nerves are concerned in the movements of respiration, since they supply the lower series of intercostal muscles. It thus happens that an arrangement exists for the most rapid possible conduction of reflex impulses. A cold hand is laid upon the abdomen, or a blow upon the part is threatened, and the muscles of the belly wall become rigid in a moment, or it may be that there is some sudden lesion of the peritoneum or of one of the abdominal viscera, and at once the muscles of the belly wall contract, and a more or less marked hyperæsthesia of the skin develops, and there is thus provided, by the tender integument and by the rigid muscles, that protection and that securing of rest which are the first elements in the natural treatment of a damaged part.

Absolute rigidity of the belly, a limitation of the abdominal respiratory movements, and a tenderness of the surface are among the very earliest symptoms of acute trouble within the abdomen. The tenderness of the belly wall is often excessive, and depends upon an actual hyperæsthesia of the surface rather than upon a tenderness within the abdomen. In some cases the hyperæsthesia is so extreme that the patient cannot bear the touch of the lightest hand, and is even afraid to allow the bedclothes to come in contact with the skin of the abdomen.

The rigidity of the belly and the sensitiveness of the surface vary within considerable limits, and are most marked in cases which are sudden and acute, and especially in those in which the peritoneum at the time of the outbreak was perfectly normal. The nerve condition of the individual has also to be taken into account. In chronic cases, in cases complicated with ascites, and in instances in which a sudden trouble falls upon a peritoneum which has long been exposed to irritation, the phenomena may be little marked. In certain examples of perforative peritonitis the contraction of the belly wall may be so extreme that the parietes sink in and appear almost as if resting upon the spine.[1] This great retraction of the belly is comparable with that sometimes met with in lead colic. It has been for the most part noticed in connection with perforation of the stomach.

As peritonitis advances, both the hyperæsthesia of the skin and the contraction of the belly wall lessen, and may almost entirely pass away. As the muscles yield, the phenomena of meteorism usually appear, and any tenseness of the abdomen which remains depends upon flatulent distension of the intestines. As soon as general septic symptoms become marked, both the contraction and the tenderness usually disappear. I have seen two cases of septic peritonitis due to trouble in the appendix, run their entire course with a flaccid belly wall, and with scarcely any tenderness. Both patients were men over 50, no morphine had been administered, and death took place from toxæmia within seven days in both instances. One man spent some hours in applying massage to his own abdomen, and the other drew frequent attention to the absence of tenderness by slapping the abdominal wall.

That pain which the patient feels to be actually situated within the abdomen has the peculiarity that it is not, as a rule, to be localised at first, but is commonly referred to the great abdominal nerve centres. In the early stages of strangulated hernia or of perityphlitis, for example, the patient very often refers the pain to the region above the umbilicus, and will sometimes place his hand or his finger exactly over the site of the solar or superior mesenteric plexus. I have known the pain in perityphlitis to be referred at first to the opposite or sound side. As symptoms progress, the localisation of the pain becomes usually more and more precise, assuming that the trouble still remains, to a certain extent, local. A patient who has had many attacks of perityphlitis gives a very hazy account of the situation of the pain in the first outbreak, but as time advances he often puts his finger directly over the diseased appendix. I have noticed the same phenomenon in intestinal troubles due to limited adhesions. The pain may be at first "all over," or be referred to the median line a little above the umbilicus. In due course, however, it becomes more and more accurately localised.[2]

Into the great question of the physiology of peritoneal shock I have no intention of entering. Certain symptoms, which are collectively known as the phenomena of shock, mark, almost without exception, the clinical beginnings of those cases of peritonitis which are abrupt in their onset, or acute, or even subacute, in their course. These symptoms are evidently entirely due to an impression upon the nervous system, and are independent of inflammation on the one hand or of septic intoxication on the other. Certain experiments by Reynier and Richel[3] may be mentioned as illustrative of this statement. They injected boiling water into the peritoneal cavity of a rabbit. The phenomena of shock were at once produced, the temperature sank to 29° C., and the animal died, collapsed, within twenty-four hours. The more extensive the scald the more marked was the shock. In no case was any peritonitis produced. The injecting of perchloride of iron led to like results. There was no pulmonary congestion, no formation of clot in the heart, and no peritonitis. If before the injection a nerve sedative, such as chloral, was administered to the animal, it would live for

twenty-four hours instead of dying at the end of six or ten hours.

In the human subject the shock attending a severe peritoneal lesion may prove fatal, and the patient may die with evidence of no important disturbance other than that wrought directly through the great nerve centres. The signs of sudden and grave disturbance of the peritoneum are pain, profound exhaustion, a distressful anxiety, pallor, a small, soft, quick pulse, cold extremities, shallow respiration, and vomiting. These phenomena vary in degree, and are not absolutely invariable. They often mark the earliest symptoms of an acute and suddenly produced peritonitis, or rather indicate the occurrence of a lesion which will lead on to peritonitis. It is interesting to note that these symptoms are in some degree common to all cases in which there has been a rude and abrupt impression made upon the nerve centres within the abdomen. It may almost be said that all quite acute troubles within the abdomen commence with the same train of symptoms. A student who is well versed in the rigidly formulated signs of abdominal lesions as given in textbooks is surprised to be told that until many hours have elapsed it is often impossible to say whether a sudden abdominal crisis is due to the perforation of a vermiform appendix, or to the bursting of a pyosalpinx, or to the strangulation of a loop of intestine, or to the passage of a gall stone. The twisting of the pedicle of an ovarian cyst has led to symptoms which have been mistaken for perityphlitis; a sudden peritoneal hæmorrhage has been confused with intestinal obstruction; and the rupture of a hydatid cyst has been diagnosed as a perforation of the intestine. It is quite possible—indeed, quite usual—for these various troubles to present at first symptoms which are common to them all, and which merely indicate that a shock has been communicated to the great abdominal nervous system. Often at first there are no differentiating symptoms. There may be features in the past history of the patient which indicate a diagnosis, but in the absence of such evidence the cautious surgeon is simply assured that some sudden emergency has occurred within the peritoneal area, and that he must wait for localising signs before he can offer a diagnosis. To these common phenomena of a crisis within the abdomen Gubler[4] has applied the convenient term of "peritonism."

In the symptoms which are associated with an actually advanced peritonitis it is quite evident that the nervous system plays a prominent part. A study of intestinal neuroses makes it easy to appreciate how important that part may be. Not only may colic and diarrhœa occur in instances in which there is no reason to suspect any actual intestinal lesion, but there are cases, more or less clearly proved to be neurotic, in which there were meteorism, fæculent vomiting, and even some signs of strangulation.[5] I have twice opened the abdomen in cases in which there existed the phenomena of obstruction of the colon, as shown by distension of the belly, vomiting, constipation, pain, and the appearance of visible coils of intestine. In neither instance was any evidence of disease discovered within the abdomen, and in neither case did the symptoms return after the laparotomy. Allusion may also be made to those cases of chronic diarrhœa which are readily cured by chloral or bromide of potash.

It is usual in peritonitis for the mental faculties to remain perfectly clear up to the very verge of death. Among the 100 hospital cases already alluded to there were only 11 examples of intense headache or delirium. In all of these a fatal result ensued. An examination of the clinical details in these 11 cases does not reveal any common train of symptoms. They were, for the most part acute cases, but by no means the most rapidly fatal, nor were they of necessity associated with high fever or severe symptoms, or the administration of unusual doses of opium. The ages of the 11 patients varied between 9 and 53 years.

A rigor does not often mark the commencement of peritonitis. Among the 100 cases this symptom was recorded in 13 instances. In 2 of these the peritonitis had started in the appendix, in 1 it followed laparotomy, and in 10 it had its origin in the pelvis. Of the 13 patients 10 died.

II.—Meteorism.

The degree of meteorism met with in peritonitis varies considerably, and is influenced by conditions which are not yet fully understood. When it exists its appearance is coincident with that relaxation of the abdominal muscles to which allusion has been already made. Meteorism may be absent throughout the whole progress of the case, and examples of this are not uncommon in instances of septic intoxication attended with symptoms of a low type. It is most marked in peritonitis attended by actual intestinal obstruction, in examples of perforation, in cases in which there is thrombosis of the mesenteric vessels, and also in instances in which opium has been freely administered. It appears to present no definable relation to the amount or degree of the vomiting. In experiments in which artificial distension of the gut has been brought about, not only do all intestinal movements cease, but peristalsis cannot be induced by any of the usual irritants.

It has been often assumed that meteorism depends upon obstruction in the lumen of the bowel, and that it is due to an accumulation of gases in the intestine above the occluded point. These assumptions are not supported either by clinical experience or by experiments upon animals. It is true that the distended gut is entirely paralysed, and that it remains "paralytically fixed" in the abdomen; but even when actual obstruction exists, it cannot be shown that the meteorism is the greater the lower down in the tube the occlusion is placed. In some examples of peritonitis not a little of the swelling of the belly depends upon distension of the stomach.

The elaborate and varied experiments of Kader[6] and others make it evident that gas may be developed in an intestine emptied of its contents, and that meteorism, as met with in disease, depends almost entirely upon gross disturbances in the circulation of blood through the affected portions of intestine. The series of experiments which bears most directly upon peritonitis is the following. The lumen of the gut is not occluded, but the circulation in a certain segment is controlled by a ligature applied at the root of the mesentery. The blood supply to the bowel is very greatly reduced but is not entirely cut off. The whole of the intestine so treated becomes rapidly distended with gas, and a condition of widespread meteorism is produced. The animal exhibits the symptoms of severe pain, with vomiting and diarrhœa, and death results with varying rapidity.

Diffuse peritonitis favours the development of general meteorism in cases in which an artificial strangulation of the bowel has been produced. It may be convenient here to mention that the following gases are normally found in the alimentary canal, namely, O, N, CO_2, CH_4, H_2S. The first three named are believed to be swallowed as air. CO_2 may originate in the stomach as a result of digestive disturbances. CH_4 and H_2S are normally met with only in the colon. The following are the results obtained by Bokai[7] by introducing these various gases into the intestinal canal of animals through a hollow needle: N has no effect. O causes the movements of the bowel to cease. CO_2 causes violent intestinal movements, and finally paralysis, if the action of the gas be prolonged. CH_4 and H_2S produce also vigorous movements of the bowel. Bokai believes that the purgative action of sulphur depends upon the liberation of H_2S in the intestine, and that the sedative action of bismuth depends upon its chemically fixing the H_2S existing in the bowel. Fever artificially induced in rabbits by injecting decomposing matter under the skin, causes a more or less complete paralysis of the intestine.

III.—Vomiting.

It has been many times remarked that there is no single distinctive sign of peritonitis. Could one single symptom be selected as the one more usually present in all cases of peritonitis it would probably be vomiting. In the 100 hospital cases vomiting is noted as very slight in as many as 23 per cent. of the examples. In some of these it is described as absent. This may be to some extent explained by the strict rules of dieting which are more rigorously insisted upon at the present day, and by the fact that a dresser or a nurse may not record the symptoms unless the vomiting be copious or very distressing.

By very slight vomiting is implied vomiting in which the amount actually brought up is trifling. Compared with the sickness attending intestinal obstruction the vomiting in

peritonitis generally may be spoken of as always slight. In a very large proportion of the cases which are carefully treated the patient will merely bring up a mouthful of fluid now and then. This is often accomplished with little effort, and many hours may elapse between the successive attacks. What is alarming and distressing in this slight degree of sickness are its persistence and the evil prognosis it suggests. The patient may be apparently improving, but there remains this periodical rejection of an ounce or so of fluid, which shows that the improvement is entirely delusive.

In some of the more insidious septic cases, and in such examples of peritonitis as occur in the aged or in the subjects of advanced visceral disease, the vomiting often amounts to little more than a slight irritability of the stomach. In the instances in which the sickness is excessive, and in which the vomited matter becomes intestinal, there is something more than a mere reflex disturbance concerned.

Nothnagel,[7] Lüderitz,[9] Bokai,[10] and others have described the manner in which an antiperistaltic action in the intestine may be induced by exceptional irritation, especially such as acts directly upon the bowel itself. The normal emptying of the stomach through the pylorus has been well described as a function of the intestine.

In the cases of peritonitis following upon strangulated hernia the vomiting is for the most part very marked and often copious, but it bears no constant relation either to the state of the gut, the degree of peritonitis, or the height of the fever.

In perforative peritonitis all symptoms are usually acute and pronounced. There is intense pain, and a corresponding degree of collapse, and in the larger proportion of the cases vomiting is conspicuous. It is usually absent in examples of perforation of the stomach. In the cases connected with typhoid fever the relation between the vomiting and the action of the bowels is notable. If all action of the bowels cease, then the vomiting tends to be marked; but if the loose motions are continued, then the sickness is for the most part slight. In the most rapid forms of perforative peritonitis an actual inflammation of the serous membrane plays but little part. Death is from shock or acute general toxæmia.

In cases of peritonitis depending upon disease of the intestine, including mischief in the appendix, vomiting is not, as a rule, a pronounced symptom. In the cases of pertyphlitis it is to be noted that it is least marked, as a rule, in the cases in which the bowels act with more or less regularity.

In peritonitis taking its origin from the pelvic viscera or parietes, vomiting is seldom very distressing. In the acute cases the symptoms are rather those of septicæmia, and in the chronic cases the disturbance has a great disposition to remain localised.

In peritonitis following upon operation or accidental wounds vomiting is rarely absent. It may not be marked, and may consist merely of an irritability of the stomach, but there it remains—a symptom which gives the greatest anxiety to the surgeon, and which no treatment appears capable of controlling. It may not be complained of by the patient; but, as already said, its gravity does not depend upon either its frequency or the amount ejected, but upon its deadly persistence.

IV.—Constipation.

Cessation in the action of the bowels is a conspicuous feature in peritonitis. The morphine which is often so very freely administered in this affection probably takes some share in the production of this symptom.

In the 100 cases of peritonitis from the London Hospital the bowels are classed as "loose" in 28 instances. In some of these 28 cases there was actual diarrhœa, in others the bowels acted with frequency and without artificial aid, while in a third series of cases a free action was maintained by enemata or by aperients. In 2 cases of peritonitis following hernia in which diarrhœa was met with, it is noteworthy that the peritonitis did not appear until after the diarrhœa had set in, a circumstance which suggests the action of the colon bacillus. In 8 cases of perforative peritonitis associated with a free action of the bowels at the time of the perforation—including 4 cases of typhoid—all passing of motions ceased in 5 examples when the lesion took place, while in the remaining 3 instances the bowels continued to act just as freely after the peritonitis began. In these three cases the vomiting was much slighter, both in frequency and in amount.

In the 22 cases associated with disease of the appendix, there was constipation in 9 cases (with 4 deaths), diarrhœa in 4 cases (with 1 death), while in the remaining 9 examples the bowels acted naturally or under the influence of enemata; in these 9 cases there was only 1 death. It would appear, therefore, that—other things being equal—a better prognosis attends the cases in which the bowels are acting, and that a specially evil prognosis must be associated with the cases marked by absolute constipation.

V.—Lung Complications.

In dealing with this feature of peritonitis mere congestion of the lungs and a slight degree of bronchitis have been disregarded.

Among the 100 cases, there were no fewer than 17 in which pleurisy or pneumonia appeared after the peritonitis set in. In the examples of peritonitis of intestinal origin, there were 7 cases, namely, 2 of right pneumonia, 1 of left, 1 of right pleurisy, 1 of left, and 2 of right pneumonia with double pleurisy; 5 out of the 7 cases were in instances of peritonitis associated with hernia or perforation. In the examples of peritonitis starting from the pelvic organs, or from sources outside the abdomen, there were 10 cases, namely, 1 of double pneumonia, 2 of right pleurisy, 5 of left pleurisy, and 2 of double pleurisy. In 6 of the instances the peritonitis had commenced in the pelvis—a notable fact—and in the remaining 4 it was due to a wound of the abdominal wall.

Pneumonia after herniotomy has been supposed to be due to infective thrombi. In two cases of pneumonia associated with gangrenous hernia, Fischer and Levy[11] found the colon bacillus and the staphylococcus albus in the hernial sac, and also discovered the same micro-organisms in the pneumonic patches in the lungs. Both patients died with peritonitis, and in the effusion in the abdominal cavity the bacterium coli commune was found.

The nature of the peritoneal exudation appears to have little bearing upon the lung complications, because in the 17 London Hospital cases the peritonitis is described as commencing in 3, as plastic in 3, as sero-purulent in 5, and as purulent in 6.

VI.—Fever.

The temperature in peritonitis is liable to fluctuations so numerous and extreme that it is difficult, if not impossible, to deduce any type of temperature which may be considered to be characteristic of the disease. Probably there is no affection attended with fever in which the temperature charts of a large series of cases exhibit fewer data for the establishment of a common standard of fever.

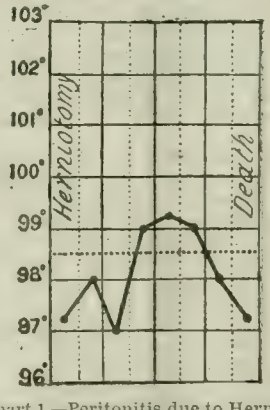


Chart 1.—Peritonitis due to Hernia.

A careful examination and analysis of the temperatures recorded in the 100 cases from the London Hospital makes it evident that the one symptom of fever can afford very little guide in estimating the gravity of the case or in forming a dogmatic prognosis. A comparison of the temperature charts

in the cases that recover with those that die leads only to a bewildering result. In some of the fatal cases the temperature has moved steadily upwards, in others it has moved steadily downwards, in the third series of cases an even line of high fever has been followed, while in a fourth set of instances the temperature has been about or below normal. It is quite evident that no marked or regular relation exists between the range of temperature and the character of the peritoneal effusion.

In very general terms it may be said that perforation leads at first to a sudden drop in temperature, and that if the body heat be at the time high the onset of diarrhœa is associated with a more or less rapid diminution of fever. Moreover, it may be remarked that the chart record which carries with it the stamp of an almost inevitably fatal result is that in which the temperature is for consecutive days below normal. The most robust evidences of fever are common in cases in which a plastic peritonitis, or one leading to well-encapsuled pus, is present; while the examples associated with a low range of temperature often mark the cases in which a general sepsis (as from the intestine) is more pronounced than the peritoneal inflammation.

The details of the temperature can best be illustrated by reference to the various forms of peritonitis. In peritonitis due to hernia the temperature is for the most part low and

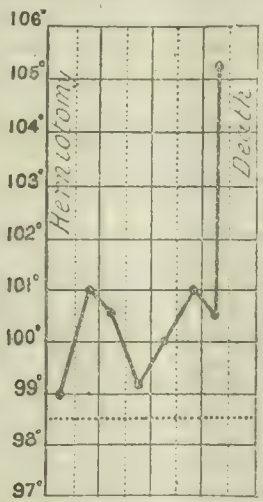


Chart 2.—Peritonitis due to Hernia.

does not rise in the majority of the cases above 99.5°. Chart 1 (from the case of a woman, aged 55, in whom a femoral hernia had been strangulated for three days before the operation) is

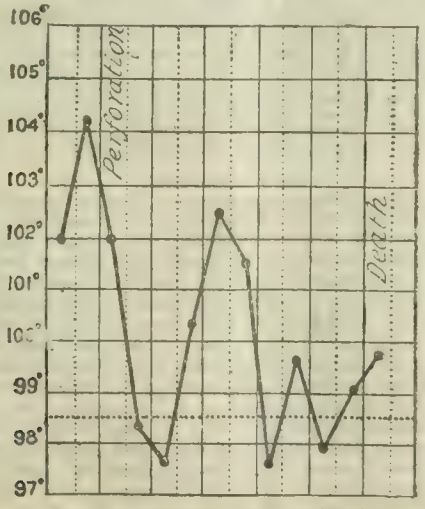


Chart 3.—Peritonitis due to Perforation.

fairly typical. In the necropsy the bowel was found to be slightly ulcerated. The other viscera were sound. Before death the temperature in these, as in other marked septic cases, usually sinks lower and lower. Occasionally it may spring up to 105 just before death, as shown in Chart 2 (from a case of ventral hernia strangulated two days in a woman of 35. The gut was black, but not perforated). This sudden elevation of temperature has been ascribed by some to a disturbance of the heat-controlling centres by the circulation through them of blood charged with septic matter. In the hernia cases the temperature ran highest (99° to 102° or 103°), in those instances in which the gut reduced into the abdomen was practically gangrenous, or was extensively ulcerated. The onset of diarrhœa led to a fall in the temperature.

In peritonitis due to perforation the temperature in the most rapid cases is that of collapse. If there be an existing high temperature at the time of the perforation it may slowly sink, especially in cases in which the bowels continue to act freely, or may sink for a time and then rise again, as is commonly noticed in examples in which all action of the bowels ceases after the perforation. This is shown in Chart 3 (from a lad of 19, with typhoid fever, and in whom perforation took place on the eighteenth day).

When the perforation is slowly brought about the temperature may rise at first and then sink slowly towards death. Chart 4 shows the four-hour record of fever in the case of a

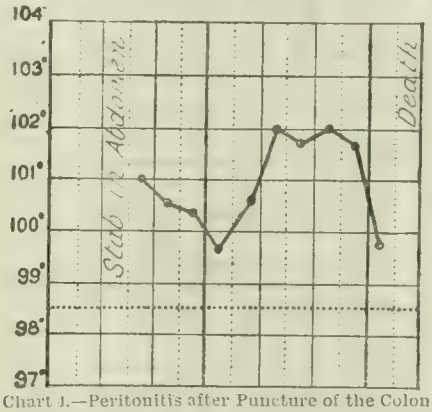


Chart 4.—Peritonitis after Puncture of the Colon

lad of 18, who was stabbed in the abdomen and in whom, after death, a small puncture in the ascending colon was discovered.

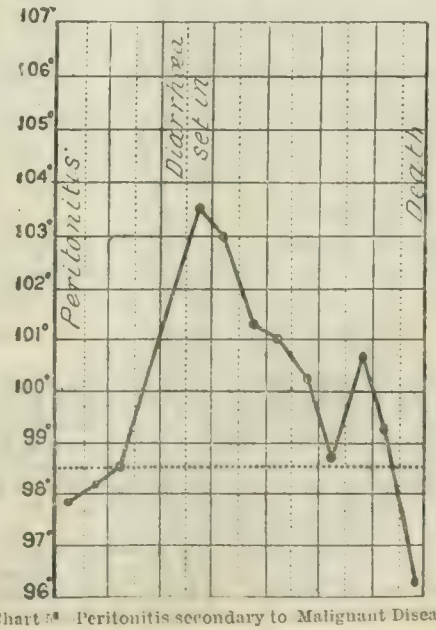


Chart 5.—Peritonitis secondary to Malignant Disease.

In peritonitis attended with gross disease of the intestine the temperature is disposed to rise steadily and then to drop somewhat abruptly before death. With actual gangrene of the bowel a high range of fever is common, and with profuse diarrhœa a lower range. Chart 5 belongs to the case of a woman, aged 49, with a growth in the descending colon and ulceration of the bowel above it (there was no perforation). Peritonitis set in where the chart begins. On the third day a copious diarrhœa began, and its apparent effect upon the temperature shows a common condition.

In peritonitis due to mischief in the appendix the fever is usually high and of the ordinary inflammatory type. Its average range is from 99° to 102° or 103°. Its duration varies greatly, and a lower range of temperature is generally met with in the cases attended by diarrhœa. Chart 6 is from a case of perityphilitis in a man aged 44, in which the earliest symptom was diarrhœa, and in which the bowels were kept open throughout by enemata. Chart No. 7 is from a case of perityphlitis in a youth of 17, who was treated with opium, and in whom there was very marked constipation.

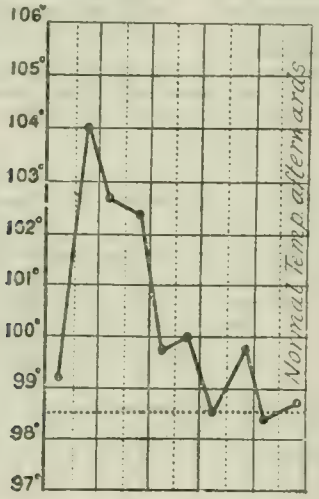


Chart 6.—Peritonitis in Perityphlitis.

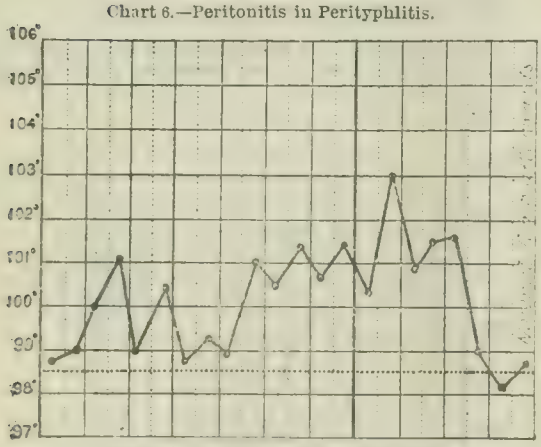


Chart 7.—Peritonitis in Perityphlitis.

In peritonitis starting from the pelvis (with which is included puerperal peritonitis), the temperature is rather that of septicæmia. Chart No. 8 has been selected as fairly typical. It belongs to the case of a man, aged 53, who developed peritonitis on the seventh day, after a simple operation for fistula in ano. The trouble began with a rigor. The necropsy revealed a general sero-purulent peritonitis with septic thrombosis of the pelvic veins.

In examples of peritonitis following wound of the abdomen the temperature is for the most part fairly high, running on an average between 99° and 101° to 102°. In 2 cases from the London Hospital series, it remained throughout below normal. Chart No. 9 is selected as an example of an uncomplicated case following laparotomy. The patient was a woman aged 26. The operation consisted in suturing a hydatid cyst to the abdominal wall. A general plastic peritonitis followed without any visceral complications.

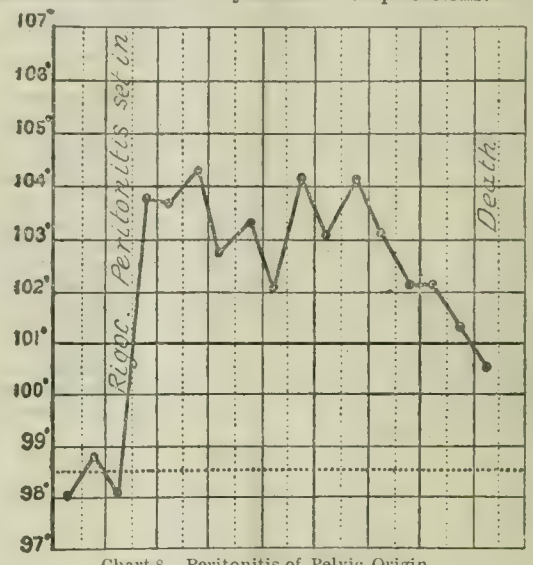


Chart 8.—Peritonitis of Pelvic Origin.

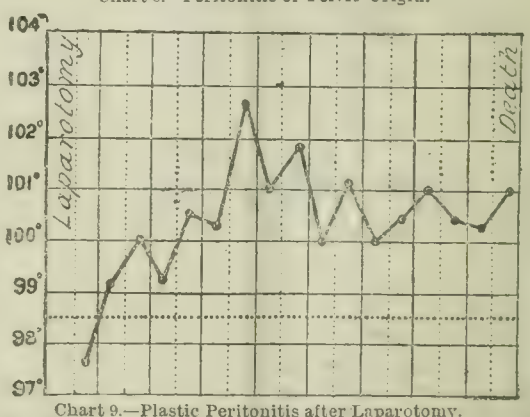


Chart 9.—Plastic Peritonitis after Laparotomy.

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(To be continued.)

THE MEDICAL FACULTY OF BERLIN.—The teaching staff of the Medical Faculty of the University of Berlin consists of 4 honorary professors without stipend, 15 ordinary professors with stipends varying from 4,500 to 8,400 marks (£225 to £428), 14 extraordinary professors with stipends varying from 600 to 3,600 marks (£30 to £180) and a percentage of students' fees; 19 extraordinary professors without stipend, and 68 *Privatdocenten*. Of the latter 17 have the title of Professor: 3 of them were formerly ordinary and 2 extraordinary professors in other Universities. There are also three professors belonging to the Dental Institute, and not belonging to the Medical Faculty; their academic rank seems to be indefinite. There would, therefore, seem to be "professors" of at least five different categories connected with the Medical Faculty of Berlin.

THE MILROY LECTURES
ON
DARWINISM AND RACE PROGRESS.

Delivered before the Royal College of Physicians.

By JOHN BERRY HAYCRAFT, M.D., D.Sc., F.R.S.E.,
Professor of Physiology, University College, Cardiff.

[Abstract.]

Lecture III.—Crime and Incapacity.

Many criminals, perhaps the greater number, are the creatures of accident, or of vicious training. Many are incapables, driven to crime through their incapacity. But over and above there are a band of innate criminals. The pedigree of many criminal families has been written, but perhaps the best known is that of the Jukes (written by R. L. Dugdale), who for seven generations contributed to the community as their share of effort an unparalleled history of pauperism and crime. In this, as in other cases, we have to eliminate the factor of personally acquired influence of parent upon child, of one companion upon another, and it is impossible to say how much of the residue is due to inheritance. We are bound, however, to assume this inherited tendency, for people of normal individuality tend by wider influences to adopt the average vices and virtues of the community in which they live. It is seldom that the history of crime can be traced, as in the Jukes family. Intermarriage, it might be assumed, is the most ready way of getting rid of criminal taints; but our inference is rather that the tendency has by intermarriage become in each case less, but that the cases are by so much the more multiplied. While we cannot cease to view the criminal as one organically diseased, we are also bound to provide that his strain shall stop with him, and not perpetuate itself. As Pitré remarks,[1] "Perpetual imprisonment of the irreclaimable—imprisonment not only nominally but really for life—would be among many causes of that change in the general tone of society which is shown by history to be the greatest preventive of crime as now understood."

Our forefathers were more discriminating in their treatment of "the poor" than we are, and even back into the reign of Henry VIII the line was drawn between "poor impotent sick and diseased folk, the sick in very deed and not able to work, who may be provided for, holpen and relieved, and such as be lusty, who having their limbs strong enough to labour, may be daily kept in continual labour whereby every one of them may get their living with their own hands." As physicians, we are compelled to draw still finer lines of distinction, and to separate the poor into classes. We have three distinct classes treated in the same way by the Poor Law: those brought to poverty by stress of circumstances, those who are by nature incapable of work, and those who are too lazy or improvident. Where laws or regulations are framed to deal with these three classes as if they formed one natural class, the greatest injustice of necessity follows. The law makers have to deal with the idle and vicious as well as with the deserving and distressed, and lumping these classes together and framing regulations to apply to all, some are of necessity treated more kindly than they deserve, and the others treated with unmerited brutality. To the habitual drunkards and criminals, to the idiots, insane, epileptics, and others suffering from severe constitutional defects, have to be added the vagrants who will not do, and cannot do, regular work.

We can hardly fail to see in this class in many cases the direct descendants of our more savage ancestry. These forefathers most probably have never mingled in the streams of civilisation that have flowed by their side. They have continued to exist by the primitive and precarious means adopted by early men to gain their livelihood. Here, clearly, is a case for segregation, as with the drunkard and others of this class. All are obviously unfit to perpetuate themselves, and in the interest of human kindness they should be prevented from so doing. But the criminal and incapable classes form only a small section of the community, and we have seen that in all classes, owing to the removal of selective agencies, physical deterioration is in progress; we have now to see how innate mental capacity and good conduct are being affected. As regards general good conduct, one can hardly doubt that the habits of the community are daily progressing.

The improvement in general morality may be a matter greatly of education, but this will react upon the race by the premium for goodness which this establishes, and by the fact that the man of personal goodness will always obtain this premium, while the man of selfish disposition will rarely be able to disguise this inherent trait. When we turn to a study of those conditions which are modifying the general intellectual capacity of the race, we find that we are certainly giving an extended advantage to those who are intellectually capable, and withdrawing artificial props to the incapable.

The Scottish University has been the teaching organ of the whole people down to the small farmer, while the more modern development in Wales holds out university privileges to any member of the community provided with a sufficiency of industry and intellectual capacity. As a result of this more open competition we shall find that from those occupations which require the least skill, or which are in their nature unpleasant or injurious to health, the more capable workers constantly pass to other pursuits of a more attractive nature.

The rapidity of selection is greatly retarded at the present time by another factor which must not be overlooked. The unambitious and not very capable man takes to some occupation requiring little skill, and rapidly earns the full current wages of his occupation. He marries in consequence of this, and has in all probability a large family. His more ambitious brother, aspiring to a calling requiring skill or extended knowledge, undergoes a long training; he naturally, and of necessity, marries late in life, and has a small family. While, therefore, we are drawing the more capable together into classes by themselves, we are compelling them to be relatively sterile.

When we turn to the practical outcome of our study, it seems to me that, provided we accept "selection," we are bound to endeavour to apply this remedy as a means for producing race progression. Even if the present physical deterioration be not so great as I am inclined to believe, even if there be no signs of deterioration at all, we have in selective agencies a certain and tried means of improvement. I venture to think that it is not premature to ask the public to consider seriously the question of segregation, and the prevention of the immigration of the incapables of other nations. The transmission of diseased or feeble strains is a real and tangible evil; we all know too well of its existence, and all would be willing to prevent it. Once people have learnt to look farther ahead, and realise how much of the happiness of the future depends upon their present action, I cannot but believe that this will affect their attitude in respect to marriage. Not only will the feeble and diseased realise fully the consequences of hereditary transmission and dread their consequences, but if they marry they will do so in face of public opinion, perhaps public rule.

[1] *A History of Crime in England*, vol. ii, p. 579 and 580.

ON THE USE OF SUBLIMED SULPHUR AS A LOCAL APPLICATION IN DIPHTHERIA.

By CHRISTIAN G. H. BÄUMLER, M.D., F.R.C.P.Lond.,
Professor of Clinical Medicine in the University of Freiburg i. B.

In No. 1714 of the British Medical Journal for November 4th, 1893, p. 992, Mr. Robert Fair Frazer recalls the attention of the profession to the local use of sulphur in the treatment of diphtheria. Since first recommended in 1866 by Lagauterie this remedy has repeatedly found supporters in various countries, but has never come into more general use. This may be due to the manner in which, and the circumstances under which, it has occasionally been used, partly perhaps also to the unfavourable opinion pronounced upon it by such men as Jacobi of New York and Oertel of Munich, than whom, it is true, few physicians can claim a more extensive experience with diphtheria. Nevertheless, having for years

had the opportunity of closely watching a great number of cases of diphtheria in my own hospital practice, I could not help being impressed by the effects of the application of powdered sulphur to the affected parts. These effects were infinitely better than those of any of the multifarious local applications which I had tried before, and having almost exclusively used it now for more than seven years, I do not hesitate to come forward in support of the renewed recommendation of this remedy by Mr. Frazer, and to plead for its more extensive use.

I was first induced to try it by the recommendation given to this local treatment by Professor von Liebermeister, in his lectures on *Special Pathology and Therapeutics* (Leipzig, 1885, vol. i, p. 232), where he says: "As a local application, I generally use powdering with crude sublimed sulphur, by abundantly applying with a thick, soft camel-hair brush the dry powder to the diseased mucous membrane. This powdering of the pharynx with sulphur is, according to circumstances, repeated every hour or every two hours, or only three or four times a day." On the strength of several years' experience I entirely concur with Professor Liebermeister's further remarks: "I have the impression that by this treatment, when commenced early, I attain more than by any other which I had tried before, and that with these applications the cases, on an average, take a considerably more favourable course than without it." I have repeatedly seen cases, in which gangrene of the uvula and part of the soft palate seemed unavoidable, take a favourable turn in a few days, the membranes becoming detached and the swelling going down, leaving much less loss of substance behind than was to be feared when first seeing the case. With less extensive disease we could frequently notice the first effects of the application to consist in a somewhat increased injection (not congestion) of the mucous membrane on the borders of the exudation, the latter becoming more sharply defined at its edges after a few applications, and then beginning to get loose and be detached.

In the majority of fresh cases of diphtheritic sore throat, as well as of lacunar tonsillitis, two or three applications a day seemed sufficient, the patients in the meantime, when able, gargling with a weak solution of permanganate of potash, and being subjected to such general treatment as the case required (cool baths or the wet sheet, or occasionally a dose of antipyrin when there was high pyrexia, and great care as to feeding by mouth, or, if necessary, by the rectum).

How the sulphur acts in these cases I am unable to say, and I may mention that there seems to be no particular difference in the action of sublimed or precipitated sulphur. Nor am I aware that, as yet, any experiments have been made with regard to the action of sulphur on the particular bacteria which cause diphtheritic and other kinds of sore throats (Loeffler's bacilli and streptococcus chiefly). But while anxious for the scientific explanation of the facts so frequently observed, we need not delay making the experience gained more generally useful.

The action of this remedy being a merely local one, its principal field of usefulness will be diphtheria of the fauces, where it can be applied directly and abundantly. The larynx, also, and in certain cases the upper part of the trachea, may be reached by using a curved insufflator for blowing in the powder. But no effect can, of course, be expected when the disease extends into the bronchial tubes, or when the general blood poisoning has gone beyond a certain degree, nor even locally, where extensive sloughing has already taken place in the throat, and when, in consequence thereof, rectal feeding is the only, and then mostly insufficient, means to prevent exhaustion.

I am unable to say whether remedies which have more recently been recommended, such as pyoktanin or the peroxide of hydrogen, which has found such warm supporters in America, give even better results than the sulphur, as, especially in severe cases, I did not feel justified in foregoing the benefits of a remedy of whose efficacy I have had ample personal experience.

PRESENTATION.—Dr. Arthur D. Hughes, on the occasion of his leaving Littleport, was presented with a purse of gold, a Louis XIV timepiece, and an illuminated address expressing the appreciation in which he was held at Littleport.

ON THE TEMPORARY SUSPENSION OF THE PILGRIMAGE TO MECCA AS A PREVENTIVE MEASURE AGAINST CHOLERA.

BY LOUIS VINTRAS, M.B., B.Sc., L.R.C.P., M.R.C.S.,
Resident Medical Officer French Hospital, London.

DR. THOLOZAN, physician to the Shah of Persia, and one of the best authorities on the question of cholera, in a communication read before the Académie de Médecine of Paris in September, 1892, recalls the facts that the epidemic of 1852 came from the boundaries of Poland and Germany, and that of 1869 from Ukrainia. To determine once for all the responsibilities of Mecca, there would be one practical test—to suspend for one year the great Mohammedan pilgrimage. This step might possibly be entertained if His Majesty the Sultan of Turkey and His Majesty the Shah of Persia, as supreme spiritual chiefs of the Islamic creed, would use their great influence in its favour. These two Sovereigns have always exhibited so enlightened an interest in all progressive measures that I think we are warranted in believing that, if no absolute religious objection exists to such a proposal, they would do their utmost by concerted action to guard their own people and Europe at large from the visitations of so dire a scourge. If even the weight of evidence was not sufficiently convincing as regards the Arabian origin of the disease, it would be in the interest of Mohammedans to prove thus the fallacy of the ideas entertained by Western nations. To find out what were the possibilities of such a scheme, I consulted two of the most prominent representatives of Eastern Powers in London. The objections presented by my first authority may be thus summarised:

1. That it is a law of the Koran that every Mussulman shall undertake the pilgrimage to Mecca once in his life.

2. That for many Mussulmans already advanced in years, the suspension of the right to journey to Mecca during one particular year may for ever deprive him of the chance of accomplishing this sacred duty.

3. That it is not only Turks and Persians who undertake the pilgrimage, but Mohammedans from Central Asia, India, and the southern coast of the Mediterranean.

4. That the pilgrimage is not a favour granted to the faithful by their spiritual or temporal chiefs, but a right they may all claim, and in the exercise of which they have only to follow the dictates of their own religious feelings.

5. That the adoption of such a measure would entail a great spiritual responsibility.

6. That one province could not be placed under a ban for a considerable portion of a year without greatly affecting the commerce of the entire empire.

7. That there was no absolute law precluding His Majesty the Sultan adopting such a measure, but that the Sultan alone could give a definite answer.

He added that naturally any opinion expressed on so grave a question could only be a personal one, as such a proposal had never been entertained before.

The second authority I consulted was much more sanguine as to the possibilities of such a scheme. He pointed out that though it was a law of the Koran that every Mussulman should undertake the pilgrimage once in his life, there was no law in existence enforcing that the pilgrimage should be held every year. He said that the question was purely a religious one, and depended much more on the high priests than on the Sovereigns of the two Powers; but that these could do much to favour the movement by convening a kind of religious conclave, at which the question could be mooted. The final decision must, however, remain with the priests. He bore personal testimony to the deplorable state of affairs existing at Mecca during the assemblage of the pilgrims; the absolute disregard of the most elementary sanitary precautions, the streets being nothing better than open sewers and cesspools, the great slaughter of sheep amounting to between 200,000 and 300,000 head, with absolutely no arrangements for the disposal of the carcasses and offal, and the fearful stench arising from these varied sources.

Reviewing now some of the objections raised against the scheme, we come first to the question of those Mussulmans advanced in years who might find themselves thwarted in

their desire to visit Mecca. How is it then, we may ask, that all Mohammedans do not undertake the pilgrimage this year in fear that death may overtake them before the next? As to the argument in favour of the independence of each member of the religion in this matter, it would hardly be rash to assume that any decision taken by the spiritual and temporal powers of the two nations more directly interested, for the welfare of all, could only meet with a deferential obedience. There would be no necessity to interfere with the ordinary commerce of the province, as the scheme would only aim at obviating a considerable concourse of people assembling on one spot at the same time.

The adoption of such a measure would not so much depend on the sagacious monarchs of the two great Mohammedan countries as it would on the high priests; but though their Majesties would not possibly like to interfere directly with so important a religious function, they might use their authority to bring about a conclave of the priests, at which the possibility of such a step could be considered.

If, however, there were insurmountable objections to an experiment of the kind proposed, it would be better for the European Powers to take in their own hands the sanitary supervision of the pilgrims on their way to Mecca, with a view of preventing the outburst of the disease, rather than in spending large sums of money yearly in establishing sanitary cordons in each country to prevent the invasion of cholera when it has once been kindled, and to bring such pressure to bear on the Turkish authorities as would make them realise the necessity of adopting and carrying out effectually stringent sanitary measures at Mecca. The outlay would certainly be much less than that required by the existing proposals to safeguard Europe.

SOME CLINICAL OBSERVATIONS ON THE BACILLUS OF TUBERCLE.

By G. HUNTER MACKENZIE, M.D.,
Teacher of Practical Laryngology and Rhinology, and Surgeon for Diseases of the Throat and Nose to the Eye, Ear, and Throat Infirmary, Edinburgh.

The general conditions which accompany but more especially follow the appearance of tubercle bacilli in the sputum appear to have received but scant attention. True, these organisms now seem to be recognised as of considerable diagnostic import in diseases of the respiratory organs and tract (which alone are considered in this paper), but in reference to the very important point of prognosis they are either left out of consideration altogether or are made the occasions of erroneous deductions. A prolonged study of this subject has led to the following remarks and deductions:

There are cases in which the presence of this organism in the sputum heralds early death, and cases, on the other hand, in which it appears to have slight appreciable effect upon the general health of the individual. Speaking generally these two classes of cases are distinguished from each other by certain outstanding features, the most important of which are (1) the presence or absence of fever, and (2) the locus of the bacilli.

The Presence or Absence of Fever.

It is an interesting fact that whilst these bacilli (in the sputum) are frequently accompanied by fever the well-known pyrexia of phthisis—in other instances, even when fairly numerous in the expectoration, the temperature of their hosts is normal for more or less lengthened periods. In the latter class of cases the mercury may now and again mark a slight increase of body heat, but this may not extend over more than a day or two at a time, and is not necessarily accompanied or followed by any appreciable general effect upon the individual. It thus happens that some non-febrile patients in whose expectoration bacilli were found seven, eight, and nine years ago are still alive, and fairly well. They are, however, probably more subject to colds and "catarrhs" than their healthy fellows.

Whilst the course of these chronic bacillary cases may be, on the whole, fairly favourable, it is not always so. A short and sharp accession of the disease may occur, followed by fatal collapse. In this connection I may direct attention to a communication by Dr. Tucker Wise,[1] on account of its reference to a case which illustrates this point, and whose history I am now in a position to finish. In abstracting this paper for the pages of a contemporary,[2] I appended the following remarks: "We would have been pleased if the author in his table (of cases recovered and improved) had shown in each instance the behaviour of the tubercle bacilli in high altitudes. We recognise in Case 6 a young lady in whose treatment we take an active part. Although in this case, as stated by Dr. Wise, 'remarkable improvement' has taken place, as indicated both by the general condition and by the local pulmonary signs, tubercle bacilli are still readily found in the sputum in spite of a residence of about two years in the Engadine, and about the same time previously in the Riviera and in Algiers. It is principally on account of the presence of these bacilli in the expectoration that this lady is now in the Alps." This patient, the subject of non-pyretic bacillary phthisis, after having, as here stated, passed several years under the climatic conditions presumably most favourable for getting rid of the tubercle bacilli, was in 1888 pronounced by a London physician in such a condition of improvement as to justify residence in this country. In the winter of 1890-91 an acute exacerbation of her disease set in, which rapidly proved fatal. During the whole course of her disease, which lasted eight years, was mainly non-pyretic, and was characterised by a considerable increase in body weight, tubercle bacilli were never absent from her expectoration.

The Locus of the Bacilli.

It may, I think, be taken as an axiom that the higher up the locus of the bacilli in the respiratory tract, the more unfavourable is the prognosis. Thus, when the larynx is their seat, the prognosis is more grave than when the lungs alone are affected, and a pharyngeal implication is the most unfavourable of all. One might expect the opposite to hold good, and that the more accessible the disease is to local treatment, the more favourable it ought to be. A simple chronic laryngitis may become tuberculous—an occurrence which, in the first instance, is revealed by an examination of the sputum only. I have already recorded one typical example of such a case.[3] A gentleman, aged 52, had suffered from hoarseness off and on for seven years; his chest had been carefully examined two years previously by an eminent physician, and pronounced sound; and even when I first saw him, although the presence of pain excited suspicion, the utmost that could be said of the laryngoscopic appearances was that they indicated a severe form of chronic laryngitis. The chest symptoms showed a bronchitic condition, with probably slight consolidation at the right apex. Tubercle bacilli were found in the expectoration and in the laryngeal secretion on its removal with a brush. The average of fifty thermometric observations was: Morning, 98.2°; evening, 98.6°. This case possessed many favourable features, such as the absence of pyrexia, but the unfavourable nature of the locus more than counterbalanced these, and he died in eleven months of well-marked pulmonary and laryngeal phthisis.

In considering the question of the diagnosis of laryngeal phthisis from the laryngoscopic characters, and also from the presence of tubercle bacilli in the sputum, it ought not to be lost sight of that, as one writer (Ruehle) puts it, "the larynx is the locality *par excellence* in which syphilis and phthisis intermingle and intersect each other." The possibility of syphilis being present in apparently pure laryngeal phthisis with tubercle-bacillary sputum ought always, therefore, to be borne in mind. I have witnessed a few examples of the concurrence of phthisis of the larynx and secondary syphilis of the pharynx and larynx.

Although the presence of tubercle bacilli in the sputum, when of purely pulmonary origin and not attended with pyrexia, may not gravely affect the prognosis—so far, at least, as life is concerned—it will be readily conceded that it is desirable

[1] The Treatment of Pulmonary Consumption at High Altitudes, British Medical Journal, November 5th, 1887.
[2] *Journal of Laryngology and Rhinology*, vol. ii, p. 57.
[3] *Lancet*, February 14th, 1885, p. 286.

to get rid of it, and this as rapidly as possible. The case already quoted (corroborated as it can be by many others) indicates how difficult this task is; for here we have an individual spending year after year under carefully selected climatic conditions, with "considerable improvement" of the local signs and general symptoms resulting, and yet with the bacilli apparently unaffected throughout. However pleasant it may be for such a patient to pass a winter in the sunny South, it is perfectly futile to expect that this short period of time is sufficient to influence these organisms. The too common practice of sending tubercle-bacillary subjects to spend a few months here or a few months there, in the hope that the bacilli will thereby be vanquished, is but dallying with the disease. Those who cannot afford to go in for a very prolonged, or may be perpetual course of climatic treatment, had far better husband their slender resources, and remain in this country in the society of their relatives and friends, and surrounded by home comforts.

THE FORCIBLE FEEDING OF THE INSANE.

By WM. W. HERBERT, M.D.,
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Asylum physicians, and all who have to treat the insane, will have read with interest Dr. Neil's lucid and eminently practical paper upon artificial feeding, in the British Medical Journal for January 27th. Therein the account of the general management of the patient prior to and during the operation is complete in every detail, leaving nothing to be added.

Regarding the method of feeding employed—namely, a tube with attached funnel passed by the mouth—this plan is one much used, and I note that Dr. Neil, whilst disclaiming perfection, still gives it preference over others.

I have for years employed a procedure which has given me so much satisfaction that I can confidently recommend it to the notice of those who have to resort to forced alimentation. The requisites are:

(1) A Tosswill's siphon stomach pump, with two or three detachable feeding tubes of soft red rubber (gauge millimetrique 25, 27, 29).

(2) A reservoir to contain the food. I use a large glass bottle that has once held sweets. To its mouth is fixed a leaden collar, with spout to steady tube and prevent acute flexion.

Use them thus (see accompanying photograph):—

(1) Place the patient on a bed on the floor, as described by Dr. Neil, underneath something upon which to hang the reservoir—for example, a gas bracket.

(2) Oil the tube well, and pass it by the nares. A twisting motion assists its descent, the head being kept flexed on the chest.

(3) Connect the feeding tube with that from the reservoir, set the siphon action going by pinching the tube and squeezing the ball, and the contents of the reservoir will run steadily and quickly into the stomach. I find that my arrangement delivers sixty ounces in as many seconds.

The advantages of nose over mouth feeding are:

(1) No injury is done to the mouth and teeth. However skilled the operator may be, the screw gag must cause more or less soreness and injury, especially when used for any length of time in a determined subject, and when *in situ* it frequently slips, embarrassing the operator and imperilling the tube.

(2) The patient seems to realise sooner that he is mastered.

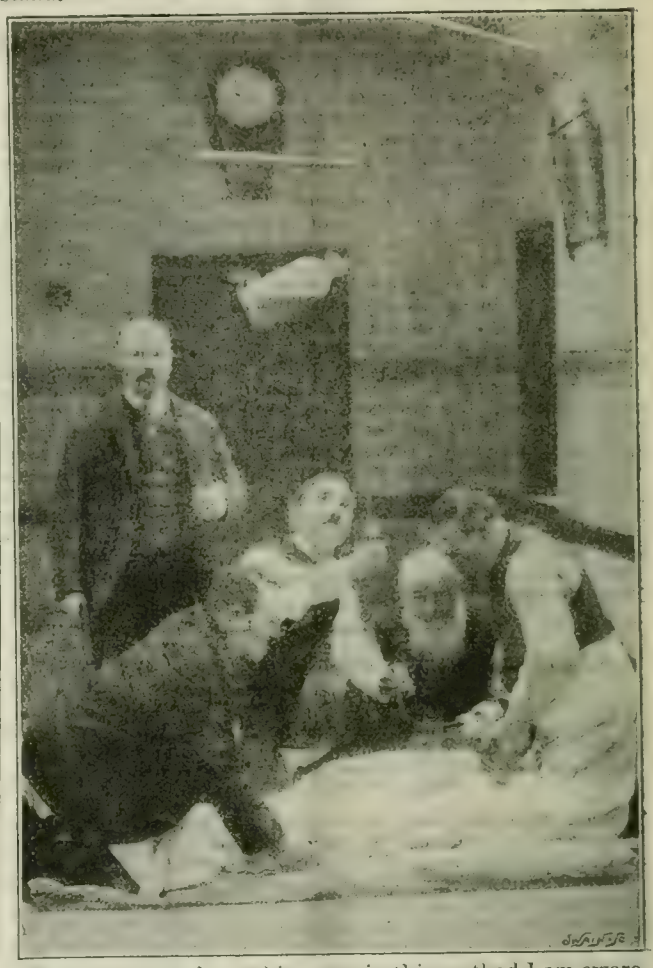
The advantages of the siphon and ball over the simple tube with funnel or pump are:

(*a*) A steady continuous flow, which can be diminished in volume, or rendered intermittent at will.

(*b*) Any obstruction in the tube is at once removed by squeezing the ball.

(*c*) The neatness and cleanliness of the operation, no messing or spilling of food being possible.

Tosswill's pump is simply a valveless Higginson's syringe, with piping several feet in length. By reversing the siphon action the stomach is unloaded rapidly and safely. Why complicated and expensive pumps are in use whilst such a simple and handy one is available I am at a loss to understand.



That there may be nothing new in this method I am aware, but my knowledge of its efficacy, and belief that it is not practised as its merits deserve, have led to my communication.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

FURTHER CASES OF DIPHTHERIA SUCCESSFULLY TREATED BY THE LOCAL APPLICATION OF SUBLIMED SULPHUR.

Since my contribution to the British Medical Journal of November 4th, 1893, I have attended 6 cases only, of all of which I now give particulars. They were of a severe type, and not far distant from each other.

Case I.—On November 20th, 1893, I visited F. A. H., aged 6, son of a police constable, who was suffering from diphtheria; temperature 101°. I blew sublimed sulphur on to the membrane by means of an extemporised insufflator as previously, and I ordered a mixture of perchloride of iron and glycerine, with a liberal supply of fluid nourishment. The application was repeated several times daily. On the third day the child was almost convalescent, and made a rapid recovery.

Cases II, III, and IV.—Next day I saw F. C., aged 11, temperature 104.2°; and W. J. C., aged 5, temperature 101.6°; and on the following day W. J. C., aged 8, temperature 100°, brothers, and children of a pharmaceutical chemist, suffering from diphtheria, with considerable prostration. I used the same application, mixture, and nourishment, also brandy, with

the result that in six days they were quite well. Towards the end, the temperature of the child aged 11, suddenly rose from normal to 103°, and again subsided.

Case v.—On December 4th I was asked to see A. C., aged 38, mother of the three last mentioned children. She had well-marked diphtheria, and was very ill and weak, having nursed her children throughout. The same application and mixture were used. On December 9th she was well, and I ceased attendance.

Case vi.—On November 8th, 1893, I visited A. E. B., aged 7, who had been ailing with "croup" for a couple of days. On examination no membrane could be seen, so he was treated for simple croup. On the 22nd I discovered a small portion of diphtheritic membrane low down in the larynx; but, notwithstanding that the sulphur was used, same mixture, beef-tea, brandy, milk, and egg, he expired on the 23rd, the temperature having suddenly fallen from 101° to 98°. Had the membrane appeared in view earlier he might have been saved, as I feel fully convinced that sulphur will destroy diphtheritic membrane when brought into contact with it.

I did not use the extemporised insufflator (which I destroy after each application) on all occasions, but simply threw the sulphur down the throat while the patient was in the recumbent posture. I might mention that in some of the cases a very small quantity of the sulphur was burnt in the room, chiefly as a disinfectant.

Robert Fair Frazer, L.R.C.P.I., L.R.C.S.I.

Lavender Hill, S.W.

A CASE OF OYSTER POISONING.

H. P., about 32 years of age, ate eight oysters for supper, remarking at the time that one of them was bad. Others of the same lot were eaten by other persons with impunity and appeared to be quite fresh. Symptoms of poisoning commenced about twelve or fourteen hours later with pain in the back, soon followed by violent pains in the stomach, frequent vomiting, and intense thirst. The bowels did not act. These symptoms continued until the following morning, when the pulse, which had been small and quick, became almost imperceptible, the fingers shrunken, the nails blue. The tongue was at that time dark and swollen, and swallowing difficult. There were occasional spasms of the arms. A little later the jaw became set and soon, after a sudden struggle for breath, he died, forty-one hours after eating the oysters.

At the *post-mortem* examination the heart was found to be very soft and relaxed and containing fluid blood. The kidneys and spleen were also very soft and congested. The stomach empty and darkly congested. The peritoneum was thickly studded with flecks of lymph.

Edward Casey, M.D.

Windsor.

THE TREATMENT OF LEUCOCYTHÆMIA.

In the British Medical Journal of July 16th, 1892, I described a case of apparent cure of splenic leucocythæmia by arsenic, administered in very large doses. It is time to give the sequel.

The patient had resumed work, in apparently robust health, in April of that year, and continued well up to June. In the following September I was called to see her again, and found her extremely anæmic, the skin being of a very dark tint. She was suffering from vomiting and diarrhœa, and on examination I found the spleen and liver again much enlarged.

She was at once confined to bed, and the arsenical treatment resumed. For about two months both organs continued to increase in size, until the spleen reached to within three finger's breadths of the pubes. It appeared to fill two-thirds of the abdomen, its anterior edge standing up like a rock. The liver extended down to the ilium. The spleen then commenced to recede in a remarkable manner. In one week it diminished 2 inches all round. Then it enlarged again in an unaccountable way. All sorts of variations and combinations of arsenic were tried, with quinine, iron, phosphorus, etc.; galvanism, faradism, and pancreatic feeding—as the motions were often oily or imperfectly digested.

In March, 1893, the patient was worse than six months before. So I tried a new departure in the administration of spleens. First sheep spleens raw and lightly cooked were tried; these soon disagreed with the patient. Next rabbit spleens; these were taken fresh, twelve at a time, and placed in 12 drachms of glycerine; one spleen with a teaspoonful of "juice" once or twice daily. At first there was an apparent improvement, each dose was followed by a rise in temperature of one or two degrees, and a feeling of warmth. As the patient was getting disgusted with them, Messrs. Brady and Martin kindly prepared an extract for hypodermic injection. This appeared to "do something" for a while, but no real benefit resulted.

I next tried (in May) if marrow would be of any avail. Yellow and red were accordingly prepared by slowly melting before the fire (1) the shafts of the leg bones, and (2) the heads of the leg bones and the vertebræ of mutton. Both preparations were readily taken, but without any result either as regards the general symptoms or the size of the liver or spleen. In despair I gave a trial to thyroid extract, and a prolonged test to the "*fluide testiculaire*." At first the patient appeared to derive decided benefit from the latter; but, like all other remedies, it failed, and the patient died in November last, apparently from mechanical ascites and exhaustion.

Now, from the last chapter something, I think, may be learned. During the two months prior to her death there was drawn from the peritoneal cavity not less than 60 pints of serum; yet after each tapping she rapidly, though temporarily, regained strength. The disease, therefore, is not "an error of nutrition."

Saddleworth. Colin Campbell.

RETAINED PESSARY.

The case published in the British Medical Journal of February 17th by Mr. Eastes brings to my mind a case of retained pessary, which presented itself to me while I was holding the appointment of resident obstetrical officer at Charing Cross Hospital some years ago.

The patient, a middle-aged woman, came to the out-patient room to have a Zwanke's pessary, which she had been wearing for some considerable time, removed. Finding unusual difficulty on attempting this, I had the patient anæsthetised, when I found the following condition: The anterior lip of the os uteri had passed through one of the fenestræ of the pessary and had become adherent to the vaginal wall below, so that the instrument was held by a loop formed of the cervix uteri, vagina, and adhesions. Having broken down these adhesions, I removed the pessary.

Brighton. James Turton, F.R.C.S.

EPIDEMIC JAUNDICE.

The remarks of Dr. W. Hall Calvert in the British Medical Journal of February 3rd have interested me greatly, as for some time I have been considering the same question owing to the similarity of several cases which I have had under my care to those which came under the notice of Dr. Calvert.

Between September 18th and October 21st, 1893, I had 7 cases of jaundice among my patients. Of these 2 were adults and the remaining 5 were children. On December 12th, 1893, I had an eighth case of jaundice, the patient this time being a little girl. The ages of the children varied from 2½ to 8 years.

Now in 5 of my cases, including the two adults, I have no doubt that the jaundice followed upon an attack of influenza. In all the symptoms of influenza and of jaundice were well marked. With regard to the remaining 3 cases I cannot speak so strongly. They were all in one family but at different times, one taking ill just after another got better. Two of the children showed no signs of influenza previous to the attack of jaundice, but only the *malaise* one often finds in children with a slight cold. The third child, however, certainly had a cold, but the symptoms were not such as to lead me to the conclusion that I had to deal with a case of influenza. Still there is an element of doubt in this last case.

Taking all these cases together I am forced to the conclusion that jaundice may be one of the sequelæ of influenza.

Garliestown. William Semple Young, M.B.Glas.

Pasteurism in New York.—The statistics of the Pasteur Institute of New York, published by the director, Dr. Paul Gibier, show that during 1893 the number of persons treated was 85, of whom 26 had been bitten by animals proved experimentally to be rabid, 11 by animals recognised clinically to be suffering from rabies, and 48 by animals suspected of being rabid. No death occurred.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

EAST LONDON HOSPITAL FOR CHILDREN.

GENERAL TUBERCULOSIS: DEATH FROM EXTENSIVE DISSEMINATED HÆMORRHAGES.

(Under the care of Dr. COUTTS.)

[From notes by J. MCGREGOR, M.B., C.M., House-Physician.]

S.F., a girl, aged 5¾ years, was admitted on October 30th, 1893. The family history revealed nothing of importance. The father, however, had been out of work for some time, and the child had suffered with the rest of the family from insufficiency of food. She had had measles at two years old, but had otherwise been a healthy child. The present illness commenced two weeks before admission, with sore throat and "cold." A week later she complained of pain in the chest and bad cough. She was losing flesh rapidly, and vomited after food. She had had diarrhœa for two or three days, but this had stopped.

She was a pale, unhealthy-looking child. There was slight right internal squint, but this the mother had not observed, and could not say whether it was recent or not. The lips were cracked and dry, and the tongue coated with whitish-brown fur. Over the chest, back, and abdomen were numerous rose-red spots, fading on pressure. The temperature on admission was 102.4° F., but shortly afterwards the child had a rigor, with rise of temperature to 104.2° F. She was somewhat apathetic. The chest was thinly covered; the movements were equal, and there was no flattening. There was dulness at the right base behind, extending to the angle of the scapula. *Râles* and friction were heard at both bases, but were more abundant at the right. Cardiac dulness was normal. There was slight blurring of the first sound at the apex, otherwise the heart sounds were healthy.

The abdomen was slightly distended and tender. The liver extended two finger's breadths below the costal arch. The edge of the spleen was just felt: the bowels were confined; the urine did not contain albumen. A provisional diagnosis of tuberculosis was made, although typhoid fever could not be altogether excluded.

On November 1st the spots were fading, the bowels were still confined; the tongue very dirty; the temperature had varied between 104.2° and 100.8°.

On November 6th the spots had quite gone; the spleen was one finger's breadth below the ribs. The whole abdomen was tender, but this was most marked over the regions of stomach and left flank. *Râles* and friction were still heard at the bases of the lungs behind. The child vomited after food, but there was no blood in the vomit; the lips were very sore. The child was very disinclined to do anything, or take food. The temperature had varied much, the limits having been 104.2° and 100°.

On November 10th a scanty purpuric eruption was noticed on the trunk, thighs, and legs. The child was weaker. There was some blood on the pillow; probably from the gums, which were very red. The bowels were still confined. The child wished simply to be left alone to sleep. The temperature had varied much, from 103° to normal.

On November 12th the temperature was slightly subnormal and the child died.

Post-mortem Examination.—Lungs: No excess of fluid in pleural sacs. No adhesions except a few recent ones at bases. Lungs congested at bases, and studded throughout with small hæmorrhages, these being, however, most numerous in the lower two-thirds. No tubercle was found in lungs or pleuræ. Heart: Pericardium normal, except for a few small hæmorrhages on visceral layer. Slight thickening of edges of tricuspid and mitral valves, but no signs of recent disease. Abdomen: The liver was enlarged, rather fatty; no hæmorrhage. The spleen was enlarged, congested, extremely soft; no hæmorrhage. The whole of the mucous membrane of the stomach was thick and sodden, and studded in every part with hæmorrhages, bright red, and apparently quite recent. There was no space as large as the diameter of a pea free from hæmorrhage. No blood was found free in the stomach. The small intestine was apparently normal until quite close to its termination. There one Peyer's patch just above the ileo-cæcal valve was much injected, and there had been apparently some slight hæmorrhage into the valve itself. In contrast to the small intestine, the large one was studded throughout with hæmorrhages varying from a pin's head to a split pea in size. These were recent and very numerous, though not so much so in the last respect as compared to the stomach, where hardly any normal mucous membrane could be found. One or two small hæmorrhages were found in the bladder walls. Brain: On removing scalp a rounded hæmorrhage about 1 inch in diameter was found under the skin over the margin of the forehead. Membranes and brain quite free from hæmorrhages. On the vertex, at the posterior extremity of the frontal lobe, was a small, recent patch of meningitis. This was somewhat gritty to touch, but no tubercles could be seen by inspection. There was some slight recent lymph formation and matting of adjacent parts at the base of the brain. The choroid plexus was very congested, and contained in its meshes a few semi-transparent tubercles of the size of a pin's head. The ventricles were not dilated, and contained no excess of fluid.

REMARKS BY DR. COUTTS.—That the child died from the shock of the internal hæmorrhages I entertain no doubt. It is true that unmistakable signs of tuberculous meningitis were found *post mortem* which would, in all probability, have proved fatal in itself in a short space of time. These manifestations were, however, so recent and slight that, coupled with the absence of dilatation and excess of fluid in the ventricles, it seems reasonable to exclude the meningitis from any immediate share in the death of the child, and to ascribe it directly to the hæmorrhages. In regard to this, too, it may be added that shortly before death it was conjectured that the child was sinking from internal bleeding. The cause of the hæmorrhages is hard to settle. Taking into consideration the semi-starvation the child had suffered at home for some time, and that after admission to the hospital her diet had mainly consisted of boiled milk, along with the condition of the gums, I cannot, personally, altogether discard an element of scurvy in the case. It is, of course, quite easy to say the child died of the complaint, of widely comprehensive etiology, known as purpura hæmorrhagica, but I fail to see that this renders any assistance in elucidating the ultimate cause of the hæmorrhages. One of my colleagues, who saw the results of the *post-mortem* examination, suggested the possibility of the case being one of ulcerative endocarditis, but, beyond the slight and old-standing thickening of the cardiac valves, I find nothing to support such a supposition. The cause of the hæmorrhage, however, is not the most interesting point in the case. Let this have been what it may, scurvy, purpura hæmorrhagica, or even due to emboli arising from ulcerative endocarditis, its absolute determination would still fail to throw any light on the peculiar distribution of the hæmorrhages. The extensive packing with hæmorrhages of the lungs, the stomach, and the whole of the large intestine, with the entire escape of the small intestine, and the almost complete immunity of the rest of the internal organs, is explainable to me by no conception as to the etiology. In regard to this distribution of the hæmorrhages the case is, to me, unique.

STATION HOSPITAL, SHEWBO, BURMAH.

CASE OF GUNSHOT WOUND.

(By CHAS. W. H. WHITESTONE, M.B., Surg.-Capt. A.M.S.)

ON September 30th, 1893, Private P., while standing with his back to the firing point screwing up a target which had accidentally fallen down, was struck by a Lee-Metford bullet fired from a distance of 800 yards. The bullet entered the anterior aspect of the right forearm half an inch towards the ulnar side of its centre, and 3½ inches below the internal condyle of the humerus, passing out through the dorsal aspect of the forearm 4½ inches below the external condyle of the humerus, closer to the ulnar than the radial border. The ulna was fractured completely across, one large fragment

being displaced towards the inner border, and slightly backwards. On making pressure with the tips of the fingers over the seat of injury, free crepitus could be obtained as if the bone had been greatly comminuted (as was doubtless the case). There was a gush of hæmorrhage immediately on receipt of the wound, but this soon ceased. The man had his sleeves turned up at the time, so there could be no lodgment of foreign bodies. The wound of entrance was clean cut, round, and very small. Its edges were slightly blackened. The wound of exit was irregular, being slightly everted and stellate, but also very minute.

The bullet passed on through the target, and was not obtained. On receipt of the injury the man became very faint, complaining much of pain running down his little and ring fingers. The wound was not washed, but an antiseptic first field dressing was applied on the spot, and the man taken to the hospital in a dooley, a distance of one mile.

On arrival at hospital the dressings, which had become saturated with blood, were removed; the wounds were dressed with lint soaked with perchloride of mercury lotion (1 in 2,000) and boric wool. A splint was applied along the inner border of the forearm, the broken portions of bone being pressed into place as far as possible at the same time.

During the two days following the injury he suffered much pain, and complained of the limb starting at night, while about an ounce of blood and serum flowed away from the wound. The arm became moderately swollen, and ecchymosis showed as far as the axilla. A vesicle formed over the centre of the radius, like those often seen in simple fracture of both bones of the leg. The dressings were kept constantly wet with perchloride of mercury lotion. From this time the patient suffered no pain. The temperature never rose above 99.8°. By the sixth day all swelling had subsided, but the ecchymosis had increased, and extended to a few inches above the insertion of the deltoid.

The wound of entrance was healed on the tenth day, but a quantity of perfectly pure dark fluid blood flowed away from the wound of exit: pressure on the limb increased the flow. This appeared to be blood which had become extravasated at the time of injury.

On the eighteenth day the wound of exit was healed, and the patient was convalescent.

On the twenty-eighth day the quantity of callus thrown out was very large, and bone seemed to be united; it was still kept in splints.

When last seen on the fifty-third day the callus seemed to have become more or less absorbed; a small gap could be felt along the inner border of the ulna. The union of the fracture is not yet perfect, but appears to be almost so. During the whole treatment no pus ever formed at either wound. Black powder was being used at the time, with the new Lee-Metford magazine rifle, and not cordite.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

W. S. Church, M.A., M.D., F.R.C.P., Vice-President, in the Chair.

Tuesday, February 27th, 1894.

Cases of Pleurisy caused by the Pneumococcus, and with Constitutional Symptoms resembling those of Pneumonia.

Dr. J. W. Washbourn, in this paper, described three cases. In Case I the symptoms were those of pneumonia, but the physical signs were not characteristic and the sputum was not rusty. The attack began suddenly with a rigor, and on the tenth day the temperature had fallen and the constitutional symptoms had disappeared. The patient was considered convalescent, but the physical signs did not clear, and the temperature subsequently rose. An exploration of the chest revealed the presence of pus. A drainage tube was inserted and the patient made a good recovery. The pus was found to contain the pneumococcus by the usual bacteriological methods. The case was at first regarded as one of pneumonia followed by an empyema, but, looked at in the light afforded by the other cases, the author believed that it was one of primary empyema. In Case II the constitutional symptoms were those of pneumonia, and included high temperature, cough, rapid breathing, delirium, and herpes. The physical signs, though not typical, yet were not more atypical than they often are in pneumonia. The patient died after a few days' illness. At the *post-mortem* examination the lung was found to be healthy, but there were 54 ounces of pus in the right chest. The pus contained the pneumococcus. In Case III, that of a child, there was double pleurisy with some effusion. A few ounces of fluid were removed by aspiration, and were found to contain the pneumococcus. The case terminated fatally, and at the *post-mortem* examination both pleuræ were found to be covered with thick tenacious fibrin. It was well known that the pneumococcus was the most common cause of croupous pneumonia, and the same organism had been found in pleurisy and empyema. Sufficient stress had, however, not been laid upon the fact that the pneumococcus might produce the same constitutional symptoms when invading the pleura as it did when invading the lung. The author believed that Case II showed that this was true. Case III was of interest inasmuch as the constitutional symptoms were similar to those of pneumonia. The patient might have recovered, and the case would probably have been considered as one of pneumonia. The author believed that many cases diagnosed as pneumonia, but with equivocal signs, were really cases of pleurisy caused by the pneumococcus. He pointed out the importance of exploring the chest in such cases, and urged the necessity of the bacteriological examination of the pus of empyemata, as it was possible that, when due to the pneumococcus, a simple aspiration would be sufficient.

Dr. Hale White said he had seen altogether 6 cases bearing on the subject of the paper. A man was brought to the hospital with the signs of pneumonia, and there was a loud rub which obscured the thoracic physical signs. The temperature, after falling, began to rise again, and he died suddenly. At the necropsy a small empyema was found at the base of the right lung. In another case, a girl, the temperature gradually fell, and after sudden death no signs of pneumonia were found, but much thick fibrinous lymph was found in the pleura. Other cases occurred in a middle-aged woman and a boy, in which, after the temperature fell, it began slowly to rise again, and, after the finding of pus, the patients recovered. In those cases of empyema due to the presence of the pneumococcus, and which at first resembled pneumonia, the following points were to be noted: (1) The signs of pneumonia were usually atypical, especially the local signs; (2) the temperature as a rule fell slowly; (3) the physical signs did not clear up readily, and the patient did not feel much better after the temperature had fallen; (4) there was often a further rise after the initial decline of temperature, and this second elevation was often associated with diarrhœa; (5) the disease caused by the pneumococcus was a general disease, and might affect the pleura, the lung, the meninges, the pericardium, etc.; (6) pericarditis, when it occurred, was due to infiltration of the pericardium by the pneumococcus, and was not attributable to extension from the pleura; (7) there was not always pus present to explain the physical signs.

Dr. Sansom thought that influenza had not been excluded. The bacillus of influenza was very apt, indeed, to be associated with other well-known bacilli, especially with that of tubercle, and this association might help to explain the aberrant physical signs, the general symptoms being severe and the local condition atypical. The influenza bacillus upset the trophic condition of the lungs, and thus enabled the pneumococcus to work to greater advantage.

Dr. Kanthack said that since October he had investigated 15 cases of uncomplicated pneumonia, and in all but 2 the pneumococcus of Fraenkel was present in pure culture. If the sputum of a patient before the crisis were injected into a rabbit or guinea-pig the animal would die of pneumococcus septicæmia, but if the sputum after the crisis were injected the animal was rendered immune from infection with the pneumococcus. He had investigated the pus from cases of purulent meningitis, ulcerative endocarditis, purulent peritonitis, and pericarditis, otitis media, and empyema of frontal sinus, and in all the pneumococcus was found.

The Chairman asked if the pus from ordinary typical cases

of empyema had been investigated to see whether the pneumococcus were present.

Dr. Hale White, in reply, said that the pneumococcus had been found in the pus of ordinary empyema. The pneumococcus did not seem to produce the toxic symptoms of pneumonia unless present in the thorax. People much affected with the toxin of the pneumococcus were liable to die suddenly.

The Relationship between Disorders of Digestion and Neurasthenia.

Mr. A. Symons Eccles said that he adopted the definition of Beard that "neurasthenia was a chronic functional disease of the nervous system, the basis of which was impoverishment of nervous force, and waste of nervous tissue in excess of repair." References were made to Thomson and Kowalewsky in support of the writer's contention that neurasthenia arose from disordered digestion. Motor inefficiency of the gastro-intestinal tract appeared to be the commonest factor in the production of nerve malnutrition. Out of 65 cases in which neurasthenia and disorders of digestion coexisted 19 presented signs of gastric ectasia, and 17 were examples of intestinal muscular atony. Of the remaining 29 cases 13 suffered from diarrhœa, and 16 from disorders of digestion, not associated with dilatation, constipation, or diarrhœa. Dilatation of the stomach had been recorded by Dujardin-Beaumetz, Champagnac, Germain Sée, Albert Mathieu, and others as coexistent with neurasthenia. The cases quoted by the author had been observed daily for periods varying from a fortnight to ten weeks, the dimensions of the stomach having been ascertained by physical and other tests. An appendix of cases in a tabular form accompanied the paper, but certain cases were detailed in support of the view that local abdominal disorder preceded and caused neurasthenia in a large number of cases, and diagrams illustrating these were appended. Those cases in which either dilatation of the stomach or coprostasis had induced malnutrition of the nervous system were considered; the record of 29 other cases of gastro-intestinal disease resulting in neurasthenia being reserved for a future communication.

Dr. Althaus preferred not to use the term "neurasthenia" on account of its unpleasant associations, and because it was an indefinite expression. As the exclusive seat of these troubles was the brain, he proposed to call the disease "encephalasthenia." The three principal areas affected were the intellectual sphere, the sensori-motor area, and the medulla. The gastric symptoms were referable to the gastric centre in the bulb; if this became unduly excited an irritable form of dyspepsia would develop, associated with heartburn and gastralgia; but if there were loss of power in the gastric centre, then atonic dyspepsia and retarded digestion were the rule. The influence of inherited neurotic transmission in these cases was great.

Dr. Herschell asked if the hydrochloric acid in the gastric juice had been estimated.

Mr. Eccles said, in reply, that he had followed the terminology of Beard. His view was that the cerebral centres suffered from malnutrition induced reflexly by peripheral irritation. The hydrochloric acid in the gastric juice had been estimated by Gunsberg's test.

CLINICAL SOCIETY OF LONDON.

J. W. Hulke, F.R.C.S., F.R.S., President, in the Chair.

Friday, February 23rd, 1894.

Multiple Toxæmic Neuritis.

Dr. F. W. Mott read this paper. W. H., aged 34, fruit salesman, was admitted under Dr. Green into Charing Cross Hospital, April 26th, for kidney disease. For some weeks he had suffered with chills, sweats, and epistaxis. He had pain, swelling, and redness in the right arm and leg, with patches of œdema and swelling of joints. The arm was stiff; there were albumen and blood in the urine, and the temperature was between 102° and 103.6°. No cardiac or pulmonary disease was detected. Dr. Mott found reaction of degeneration in the muscles of the right arm and leg, and a few days later, coincident with a pyrexial exacerbation, commencing reaction of degeneration was found in the left limbs. Moreover, there was marked anæsthesia, with analgesia in the paralysed parts. The bladder and rectum not being affected, multiple infective neuritis was diagnosed. The pyrexia lasted two months, and there was a decided relationship between the paralysis of groups of muscles and the pyrexial exacerbations. On many occasions the blood was examined during the pyrexia, and a great excess of leucocytes and micrococci was found. Cultivations were made under strictly antiseptic precautions of a diplococcus, but Dr. Arkle and the author were unable to produce any poisonous effects by the introduction of the chemical products or the organisms themselves into rabbits. The man was now alive and in good health. He had regained power of flexion and extension in the hip, ankle, and knee joints, but was still too weak to stand. The author was unable to assign the cause of the obvious septic infection, unless it was by a pyelitis; for he always had pus corpuscles and micro-organisms in an acid urine when it was examined.

Diphtherial Paralysis Suddenly Fatal Owing to Entrance of Tea into Bronchial Tubes.

Dr. Hale White read the account of a man who three weeks after a severe attack of diphtheria was attacked with paralysis. Food regurgitated through the nose and there was unilateral paralysis of the palate. Muscular and tactile sensation was slightly impaired. When drinking some tea he suddenly began to cough; this ceased in a few seconds and the patient became very distressed in his breathing exactly as if he had been suffering from asthma. There was at no time any evidence that the larynx was obstructed. The patient was dead in less than ten minutes from his taking the tea. The pulse continued good till the end. At the necropsy an ounce and a-half of tea was found in the bronchial tubes, and this was absolutely the only cause for death. Dr. Hale White pointed out that although there were very rare instances on record in which the impaction of solid food in cases of diphtherial paralysis had caused death, he had not come across any case in which such a small amount had caused death by spasm of the bronchial tubes, which was in all probability what happened in this patient, the result being no doubt favoured by the weakness of the abdominal and muscles of deglutition.

Dr. Sansom asked if it was not possible that the symptoms in Dr. Mott's case might be due to influenza. He mentioned two cases in which paralysis due to neuritis had probably followed influenza. There was, he considered, a strong analogy with beri-beri in Dr. Mott's case.

Mr. Parker was sceptical as to the paralysis in diphtheria being due to neuritis. It supervened generally in cases which had not been very bad, and after the diphtheria had otherwise entirely ceased. Although searching carefully, he had failed to find any appreciable pathological changes in the nerves.

Dr. Goodall said there were undoubted cases of diphtherial paralysis due to neuritis, as proved by Dr. Sidney Martin. Dr. White's case was very uncommon. Patients with abductor laryngeal paralysis, strabismus and intense dyspnœa during inspiration, had, after tracheotomy and intubation, completely recovered. Patients with laryngeal paralysis should be fed with a nasal tube.

Dr. Kanthack said that the paralysis of diphtheria was undoubtedly a neuritis, a primary nerve degeneration.

Dr. Percy Kidd inquired if the medulla oblongata was examined in Dr. White's case.

Mr. Gould related the case of a child with diphtherial paralysis who, whilst eating bread and butter, nearly died from suffocation. He instantly performed tracheotomy, whereupon the bread and butter ran out of the wound, and the child recovered.

Dr. Glover inquired if it was quite certain that the neuritis in Dr. Mott's case was not due to alcoholism, seeing that the patient confessed to drinking a quart of beer daily.

Dr. Mott thought his case had a septic source, which was probably in the urinary passages.

Dr. White said that his patient in dying had all the appearances of being seized with acute asthma. The medulla oblongata had not been examined. It had been absolutely proved that the nerve symptoms following diphtheria were due to degenerative neuritis.

Living Specimens.

Living specimens were exhibited by Dr. Sansom, Mr. Battle, Dr. Arthur Davies, Dr. Wilberforce Smith, Mr. Stanley Boyd, Mr. Bland Sutton, Dr. Calvert, Mr. Storer Bennett, and Dr. Fletcher Little.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Wednesday, February 21st, and Friday, February 23rd, 1894.

T. S. Clouston, M.D., and Joseph Bell, M.D., in the Chair.

Intracranial Surgery: Adjourned Discussion.

After cases, typical and illustrative, had been shown by Professor Annandale, Drs. Cathcart, P. McBride, R. McKenzie Johnston, McGillivray, Miles, Stewart (Leith), McPherson (Larbert), Gibson, and James,

The discussion was continued by Dr. John Duncan. He said detailed knowledge (minute and accurate) was needed as to localisation. Apparently the frontal lobes might lose much substance without any great disadvantage to the patient, who generally made a perfect recovery. On the nature of nerve action our knowledge, too, was still weak. Apparently one was justified in saying that an excess of pressure diminished nerve action. Epilepsy was by no means a pressure disease, but rather one of irritation. If there were depression, then, also, there was irritation. Another point was as to the conditions under which nerve action went on—in other words, nerve physics. The cerebro-spinal fluid was the most important and rapid factor in relation to brain surgery; its secretion and absorption were of great importance. The loss of fluid in spina bifida showed exceedingly well the great importance of this factor—sudden death if sudden drain of fluid—but also the ease with which this fluid might be put back into the general spinal cavity. The effects of increase in the amount of fluid were still more difficult of explanation, since they were so constantly associated with inflammatory conditions—hydrocephalus, for example, or alcoholic œdema. One must go back to their etiology to find out what kept up the increase. If the condition was evanescent, it could be cured; if permanent, it could not. It was quite apparent that drainage must be carried out, for a time at least.

Dr. Byrom Bramwell said that as regarded intracranial tumours, as far as his experience went (1) the number of cases fit for successful removal was very limited: (2) the symptoms were often very vague, and we could not get at the site of the tumour; and (3) in a certain small number of cases the symptoms were misleading for example, in a tumour deep down in the optic thalamus, in the basal ganglia, in the pons, in the corpus callosum: and such cases were not suitable for surgical interference, nor did cerebellar tumours give great hope of good results. Some tumours were affected by drugs, such as iodide of potassium or mercury. Many such cases were helped. The cure was no doubt imperfect; a scar on the cortex remained, and dementia or syphilitic insanity often ended the scene. Of 10,115 necropsies Dr. Bramwell had notes of, 8 per cent. were intracranial tumours. In one case there were no symptoms; in 18 no local symptoms, in 30 operation was impossible, or extremely improbable, in 2 the tumours were multiple, in 4 the tumours were malignant, in 2 there were associated lesions, in 17 treatment succeeded in producing improvement, in 74 out of 79 operations success could not possibly have followed, in 5 operations were hopeful, in 3 good, and in 2 doubtful. Of 28 cases of tumour he had seen as a pathologist, in all save one no operation could have been performed. It was, therefore, comparatively rare that a case was met with where operative treatment could be entirely successful, but certainly it might be palliative by relieving pressure, headache, and convulsions; in lessening optic neuritis and epilepsy. In local depression or injury operation was clearly called for. In idiopathic cases of epilepsy, if the case started in one definite way, operation was justified, but where there was no definite spasm or aura, probably the results were not good. In abscess there could be no question as to operation.

Dr. Batty Tuke said pressure was not a fixed quantity—it was the x of the equation and had to be determined. Pressure resulted in consequence of exudation occurring at a greater rate than it could be removed by the capillaries or lymphatics. In cases in which he had advised operation the dura bulged much further than in traumatic cases, and a layer of fluid was seen: in four cases the pia was distinctly congested. He held that having introduced bulging of pia, congestion of pia, and fluid under the pia, he had given a value to the x of the equation, and then operations were justified by the results in these four cases. Slow and gradual drainage was absolutely necessary.

After some remarks from Dr. Ireland.

Dr. Clouston said he was doubtful of pressure in general paralysis either at the beginning or end, save as a hyperæmia. Fluid between the dura and arachnoid meant, he believed, an absence or want of pressure.

Professor Chiene demonstrated his methods of determining the various localising points or centres with a view to operation.

Dr. Stiles gave an account of Professor Kocher's method of ascertaining the centres on the outside of the cranial vault, and showed how it gave the same results as Professor Chiene's method.

Dr. Cathcart demonstrated the method by which he arrived at the suitable points for trephining, and read notes of some of his cases.

After remarks from Mr. Caird and Mr. A. G. Miller, Mr. Cotterill exhibited some instruments which he was working with and gradually elaborating as his experience taught him.

Mr. Hodsdon spoke briefly, and Professor Annandale summed up the whole discussion.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Pathology.

J. A. Scott, M.D., President, in the Chair.

Friday, February 16th, 1894.

Mediastinal Tumour (Columnar-celled Cancer).

Dr. Finny exhibited a specimen of this rare intrathoracic tumour taken from a man aged 65, who had complained of weakness and emaciation for two years, and for three months before death of hoarseness and cough, with a small quantity of muco-purulent sputum. The left vocal cord was partially paralysed, without any tumour or inflammatory disease of the larynx; an enlarged gland was to be felt in the right and left supraclavicular regions, and a comparatively dull note on percussion was present over the manubrium. Œdema of the right neck and arm, then of the left and thorax, set in, while the lower half of the body and legs was unaffected, and general cyanosis of the face, with great varicosity of the surface of the chest, pointed to great obstruction of the superior cava. The œdema almost entirely disappeared during the last fortnight of the patient's life. The diagnosis of mediastinal tumour was confirmed by the necropsy, which revealed a very large hard tumour filling the anterior mediastinum, and extending back to the front and left side of the trachea. Its structure was tunnelled by the arteries springing from the arch, and by the ascending and transverse portions of the aorta, without the involvement of these vessels in the growth; but the veins were compressed. The left pneumogastric nerve ran through the malignant growth, and was widened and flattened, but the recurrent laryngeal could not be dissected out of it, although its course past the tumour was readily demonstrated. The microscopic examination by Dr. Earl showed the growth to be columnar-celled cancer, with a considerable amount of fibrous stroma.

Dr. Parsons said it had been suggested to him that it might have sprung from the remains of the thymus gland, and this he considered very probable.

Dr. Cox gave a short account of a similar case he had seen.

Specimens were exhibited by Dr. C. B. Ball, Dr. E. H. Bennett, and Dr. Myles.

Harveian—*Feb. 15th*—Mr. George Eastes, President, in the chair.—Mr. A. Quarry Silcock showed a case of tuberculous iritis in a boy aged 12. There were signs of phthisis in the right lung.—Mr. Juler said a question of great importance in such a case was whether, in the absence of signs of tubercle elsewhere in the body, such an eye should be excised in order to avoid general infection from this diseased centre.—Mr. D'Arcy Power showed a case of gummatous synovitis of the right

knee in a boy aged 14.—Dr. CAGNEY showed a case of progressive muscular atrophy with commencing bulbar paralysis in a man aged 58. The case showed a total absence of the spastic phenomena characteristic of amyotrophic lateral sclerosis, a condition upon which bulbar paralysis was said most often to supervene. The patient had been the subject of cystitis and incontinence of urine for two years before the spinal disease showed symptoms. Dr. Cagney also showed a case of hysterical attacks simulating partial epilepsy in a woman aged 32.—Dr. JAMES TAYLOR said bulbar paralysis and progressive muscular atrophy were diseases affecting analogous structures, in the one case the anterior horn cells in the cord, in the other the cells of the bulbar nuclei. Involvement of the bulbar centres was not uncommon as a late feature of progressive muscular atrophy, and in a case of Dr. Hughlings Jackson's which he had watched the converse was true.—Dr. W. R. DAKIN read a paper on modern methods of treating *post-partum* hæmorrhage. He said the two recently-established methods of dealing with *post-partum* hæmorrhage were (1) plugging the body of the uterus, and (2) the infusion of saline (inert) fluids into the circulation. These methods were fully described, and it was shown that they were both very simple, and required, with one exception (a cannula) no special instruments. They were also shown to be in accordance with physiological principles. Cases were described illustrating the valuable results obtained by their means, and reference was made to the experience of others. The advantages of plugging, in some cases of laceration of the body or cervix uteri, were shown, and the methods of treating the acute anæmia discussed. A summary of treatment was then suggested for severe cases of *post-partum* hæmorrhage as follows:—If the placenta is still unexpelled it must be removed. Expression failing, the hand (aseptic) is to be introduced as far as necessary, and the placenta removed from the uterus by peeling it off the placental site if necessary. If hæmorrhage occurs after the placenta has been expelled, order hot water to be in readiness; several quarts will be required. The temperature should be about 118° F. in the douche tin or vessel containing the water; when no thermometer can be obtained, the water should be almost as hot as the hand can bear. Place the patient on her back, and pass a catheter if there is time; then, in the order given, going on to the next as each one fails after a few seconds' trial: (1) Compress and knead the uterus through the abdominal walls with both hands, one hand lying along each side of the uterus with the fingers pointing to the pubes. (2) Keeping up the pressure against the vertebral column, with the left hand laid across the front of the uterus, pass the right hand up the fundus, clear out clots, and compress the uterine walls between the two hands. (3) Pass the internal hand into the posterior vaginal *cul-de-sac*, and press the fundus down out it with the external one, so that the uterus is squeezed in an anteflexed attitude. It can be thus held with little or no bleeding until the hot water is ready. (4) Inject the hot water into the uterus, passing the nozzle right up the fundus, and ensuring a free escape of the excess. If the uterus does not contract after two or three quarts have been used, or relaxes again after contracting, (5) plug at once as described. If the patient is suffering from severe acute anæmia and collapse, do transfusion. If she is moderately blanched do auto-transfusion, or slowly inject saline fluid into the bowel.—Dr. MILSON said he had found galvanism of great use in controlling *post-partum* hæmorrhage, and he had seen it apparently save life in two instances. A Gaiffé's battery could easily be carried in a midwifery bag. It had the advantage of being very simple in construction, could be started into action in about a minute, and, the generating agent being a powder of persulphate of mercury, there would be no risk of damage to the bag.—Dr. BOXALL proposed bandages of felted cotton, known under the name of "lintine," as a suitable material for packing the uterine cavity. If, after being rendered aseptic, the bandages were rolled and coated with a layer of gutta-percha tissue they took up little room, and in a compact form could be always available. As regards hot-water injections, it was not so generally recognised as it should be that the temperature of the water should certainly not be less than 110° F. nor more than 117° F., for if merely lukewarm, involuntary muscle was relaxed, and if too hot was paralysed by its action, and the hæmorrhage in either case was thereby increased rather than diminished. He would have included in the list of means at their disposal hypodermic injection of ergotinin as a valuable adjuvant to other measures.—Dr. HERMAN doubted whether plugging the uterus did actually cause contraction, and remarked that it was not invariably effectual in staying the hæmorrhage. From the reports of the series of cases in which this method had been adopted it was obvious that the majority were not cases of severe *post-partum* hæmorrhage. He laid stress upon the fact that the main element in the treatment of *post-partum* hæmorrhage was prevention rather than cure.—Dr. LEITH NAPIER said that in the BRITISH MEDICAL JOURNAL, December, 1892, there was an exceedingly practical paper by Dr. Herman on the subject. In discussing the advantages of intrauterine styptics, Dr. Dakin omitted to refer specially to that excellent styptic and antiseptic spirits of turpentine, which could usually be procured in any house. Swabbing out the uterus with an aseptic sponge or cloth saturated with turpentine was the best way to apply it. In the employment of iron the same method—using a solution of 1 of liq. ferri fort. in 4 of water—was better than an injection of a weaker solution. Few cases would require much after-treatment if due care in maintaining pressure over the uterus during, and for a time after, the completion of the third stage was adopted as an invariable practice. Intravenous transfusion could not be looked upon as a necessary part of the immediate treatment of *post-partum* hæmorrhage. For profound anæmia consequent on any great loss of blood it was very valuable. If the patient was dying from bleeding this must be at once arrested, and then, in a few cases transfusion might be advantageously employed.—Dr. HERBERT SPENCER had only once in 15,000 labours failed to check *post-partum* hæmorrhage from the placental site by the ordinary method of emptying the uterus, and compression and hot injections; that case he successfully treated with tampons soaked in solution of perchloride of iron. In a similar case he would now prefer to use iodoform gauze, though he thought that it was with extreme rarity that it would be necessary to plug the body of the uterus. For hæmorrhage from lacerations of the cervix (which was often overlooked) he had repeatedly employed iodoform gauze or iodoform wool tampons, and considered them an excellent means of immediately stopping the hæmorrhage, and this treatment far more practical than suturing the tear. For the collapse following *post-partum* bleeding, transfusion of normal saline fluid was very valuable. He believed he was the first to make a systematic use of this method of treatment. He exhibited his transfusion bottle and a wire clip, which, with a piece of tubing and a cannula, enabled an irrigating apparatus to be improvised from an ordinary jug or bottle.—After some remarks from Dr. A. ROUTH, Dr. DAKIN, in reply, said that no doubt distending the uterus with a plug was contrary to physiology, but in his experience the uterus had always contracted down quickly and compressed the gauze into a small mass, but allowing itself to be distended. As regards the admission of air into the vessels, this was a danger possible in all cases of manipulation in the recently emptied uterus at term, and could not be urged against plugging more than it could against the injection of hot water, for instance. It was, of course, far better to get the uterus to contract without plugging it, by stimulation in other ways; and this had been advised in the paper. He believed he had often had good results from the injection of water at 118° F. Ergotin acted too slowly, or not at all in very severe cases.

Laryngological—*Feb. 14th*—Dr. FELIX SEMON, President, in the chair.—Dr. CLIFFORD BEALE showed a patient, aged 22, who had been under observation for the last four years, suffering from chronic tuberculous disease of both apices. The throat had at first been affected with occasional attacks of simple laryngitis. During the last year a nodular swelling had formed at the posterior part of the right arytenoid cartilage, projecting into the larynx and covering the right processus vocalis. The firm character of the swelling, its position, its relation to the inactive disease in the lung, and the fact that it showed no tendency to disintegration placed it in the class of conglomerate tuberculous tumours of the larynx, described by Stoerck and others.—Remarks were made by Dr. TILLEY, Dr. DE H. HALL, and the PRESIDENT.—Mr. BUTLIN showed a miller, aged 52, with complete paralysis of the right vocal cord. The cord stood almost in the middle line, and its free border was incurved. The other cord moved well and came in contact with the paralysed cord, but the voice was gruff and unsteady. There were no signs of disease in the interior of the larynx, and the two cords were quite white and clean. The patient had become gradually hoarse in the course of June, 1893. A careful examination had been made in order to discover a cause for the paralysis, but without success.—The PRESIDENT thought it possible that the paralysis might be the forerunner of tabes.—Mr. BUTLIN showed for Mr. BOWLBY a man, aged between 40 and 50, with carcinoma of the right side of the larynx. The patient suffered much from pain, dysphagia, and occasional sharp attacks of dyspnœa. His whole symptoms dated from September, 1893, when he first began to experience pricking sensations about the right side of the larynx.—Dr. WILLIAM HILL exhibited a case of rhinitis fœtida, with antral disease and hypertrophy of the uncinate process and the mucous membrane covering it, simulating so called "cleavage," in a lady aged 45.—The PRESIDENT showed a case of obscure pharyngeal ulceration in a case of arrested laryngeal and pulmonary tuberculosis. The pharyngeal ulcers were now spontaneously subsiding.—In reply to Mr. SYMONDS, the PRESIDENT said he had used lactic acid without any result, but not after curetting. The fact that the larynx had healed under lactic acid made it appear that the pharyngeal condition must be due to some other cause besides tubercle.—Dr. SCANES SPICER showed a case of œdema of the arytenoid mucous membrane of uncertain origin in a man aged 51. The diagnosis appeared to lie between (1) perichondritis with secondary thickening and œdema; (2) malignant disease with secondary œdema; (3) tertiary syphilis with secondary œdema; (4) tuberculous disease with secondary œdema.—Dr. DE HAVILLAND HALL thought that the condition was one of perichondritis, and not of tubercle.—The PRESIDENT, Mr. BUTLIN, and Dr. TILLEY supported Dr. Spicer's view that the disease was tuberculous.—Mr. W. R. H. STEWART mentioned the case of a fireman suffering from multiple sarcoma, who had been exhibited by him at the first clinical meeting of the Society in April, 1893. At the suggestion of two or three members he had pushed the arsenic treatment, and within a month the patient was taking liq. arsenicalis mxv, t. d., and sometimes even larger doses. The glands in the neck gradually got softer and disappeared, the edges of the ulcers seemed to melt away, and the nasopharynx became fairly free. About six weeks after commencing the arsenic his fingers and toes began to feel numb, and it was left off until July 4th, when it was recommenced, but it could not be continued in such full doses again. The trouble in the throat had gradually become worse until it had reached its present condition, namely, much the same as it had appeared in April, 1893.—Dr. HALE WHITE showed a case of absorbed gumma over the right arytenoid cartilage, with impaired movement of the vocal cord, in a man aged 33.—Dr. WILLCOCKS showed a man, aged 27, with gummata on the epiglottis. He proposed to treat the case with iodide and mercury.

Manchester Medical—*Feb. 7th*—Professor DIXON MANN, President, in the chair.—The PRESIDENT delivered an address dealing with synthetically prepared drugs, with extracts obtained from animal tissues, and with germicides internally administered to combat septic diseases. At his request Mr. Benger had prepared an extract of the red marrow of bones for administration by the mouth in simple anæmia. The number of red corpuscles per cubic millimetre in each case was counted before and after the administration of the extract. The results obtained were encouraging, showing a marked increase—in some cases of more than one million red corpuscles per cubic millimetre—in from four to nine weeks.—Mr. EDWARD ROBERTS showed three cases of vascular tumour of the orbit: (1) A cavernous angioma, which had been successfully removed from the outer angle of the orbit in a child 2 years of age; (2) a large cavernous angioma in a girl 16 years of age: it had been growing thirteen years; electrolysis had been performed four times; the tumour had become more solid, but had not diminished in size; (3) probably a blood cyst in connection with a vein in a woman aged 29. During the patient's first confinement, ten years ago, the left eye became ecchymosed, and this disappeared, leaving a small tumour, dark blue in colour, and about the size of a filbert, beneath the skin of the lower

eyelid.—Dr. Railton read notes of a case of congenital rickets.—Dr. Hutton read notes of a case of psoriasis in a girl aged 11 years, treated with Benger's thyroid extract, with disappointing results. For a time no change occurred, then free desquamation took place. Later the condition became worse, and the child lost weight considerably. Treatment with chrysophanic acid ointment gave good results, the extract having been discontinued.

Nottingham Medico-Chirurgical—*Feb. 21st*—Dr. Walter Hunter, President, in the chair.—Dr. Tew read a paper on the minor causes of typhoid. He showed by means of charts, the decrease of mortality from typhoid fever during the last twenty years, and other points of interest. The disease was favoured by hot seasons, especially if followed by abundant rainfall. The *de novo* origin of the disease rested on supposition; mild ambulatory cases were sometimes an unsuspected source of danger. The prevalence of diarrhœa and of typhoid was greatest about the same period of the year. The germs could be borne by the air; the danger of leaving infected discharges exposed in ashbins, etc., was insisted on.—Messrs. Ransom, Anderson, Waring, Cattle, Tresidder, Miss Gray, and Messrs. Watson and Wood discussed the paper.—Mr. Waring read notes of two cases of uræmia in which the symptoms came on suddenly with vomiting, headache, and convulsions, but without suppression of urine. The cases were contrasted with two others in which there was much œdema, suppression of urine, and coma.—Mr. Anderson showed a girl, aged 13, from whom he had successfully removed a large and rapidly growing sarcoma of the ovary.—Dr. Wm. Ransom showed a man, aged 48, successfully treated with ergot for hæmaturia of two years' duration. The cause was probably a papillomatous growth of the pelvis of the kidney.—Specimens were shown by Dr. Handford, Dr. Wm. Ransom, Mr. Anderson, and Mr. Belcher.

REVIEWS.

A Treatise on Hygiene and Public Health. Edited by Thomas Stevenson, M.D., F.R.C.P., Lecturer on Chemistry and on Medical Jurisprudence at Guy's Hospital, and Official Analyst to the Home Office; and Shirley F. Murphy, Medical Officer of Health of the Administrative County of London. Vol. I. (London: J. and A. Churchill. 1892. Pp. 992. 28s.)

This, the first volume of a work which will be accepted as the standard English authority upon the broader questions of civil sanitary practice, deserves a cordial welcome, especially from those who are called upon to advise public bodies or to give evidence in court upon public health matters. Of smaller manuals of hygiene there are enough and to spare, and of the making of monographs and "contributions" upon the whole range of State Medicine there is no end, but the former are too short, and the latter too scattered, to meet the wants of those who desire anything approaching a complete, authoritative, and up-to-date account of any given branch of the subject. The very bulk of the volume now before us is a proof of the need for its appearance, for no one who has occasion to study it can fail to be struck by the degree of condensation which has been necessary, notwithstanding the comparatively heroic scale upon which the work has been planned and carried out. It is, of course, impossible to refer in any detail to the many excellent articles which form the present volume. The plan which the editors have adopted is that of chapters or sections, dealing with broad divisions of the subject, and on the whole the advantages of that course are obvious. Each section has been allotted to one or more well-known authorities, and, although absolute equality is not to be looked for, the standard is maintained at a high level, worthy of the reputation of the authors and of the editors.

Dr. Stevenson, one of the editors, gives a very complete account of all that is important in regard to water supplies. While expressing the opinion that "the danger attending the use of river water which has been antecedently polluted has been exaggerated," he refers to Dr. Barry's Tees Report as apparently showing that a flow of twenty miles is not sufficient to destroy the germs of typhoid fever. He regards the plumbo-solvent action of certain waters upon lead as possibly due to more than one cause, and seems to have little faith in any one panacea. Attention is directed to the corrosive action of some waters upon tin, a point which has received little notice from other writers on the subject.

Mr. Gordon Smith and Mr. Keith Young contribute an article on The Dwelling, in which they deal with the principles of construction and arrangement proper for all manner of inhabited buildings, including houses of every class, shops, schools, barracks, hospitals, workhouses, and prisons. The writers regard circular wards with some degree of favour. Isolation hospitals are discussed upon the lines which the unrivalled experience of the Local Government Board has shown to be expedient. Mr. Gordon Smith's official position as the adviser of the Board perhaps explains the absence of any expression of opinion as to the proper situation of small-pox wards with regard to other dwellings in general and to wards for the isolation of other infectious diseases in particular, a matter in which light and leading would be very welcome to many sanitary authorities just now. No mention is made of the not very successful attempts in this country to meet the difficulty by "disinfecting" the air passing from small-pox wards, although Dr. Billings's views on this point are stated briefly.

A very practical article by Mr. Howse on Hospital Hygiene goes fully into administrative details. Referring to the profound importance of scrupulous cleanliness in hospital wards, especially with regard to the prevention of septic diseases, Mr. Howse mentions an observation of Dr. Mahomed's, that at the London Fever Hospital, "after every time of purifying, white-liming, and repainting the wards, the patients with scarlet fever first received into them did better than those received into wards not so purified." Professor Lane Notter gives a concise account of Air, including the methods of chemical and bacteriological examination.

One of the most striking chapters in the whole volume is that upon Warming and Ventilation, by Mr. W. N. Shaw, F.R.S., which is admirably done and goes far beyond the bare and inadequate outline given in the ordinary textbooks. Professor Corfield and Dr. Parkes write upon the Disposal of Refuse, dealing fully and clearly with the various methods of collection, disposal, and treatment of solid and liquid refuse. In reviewing the effect of sanitary works upon the public health they state that "it is certain that diphtheria is little influenced by the sanitary improvements which have so marked an effect upon enteric fever"—a conclusion which is gaining in acceptance among those who have made a special study of the subject, but which is still regarded as revolutionary by the majority of sanitarians. An excellent chapter on Food, by Dr. Sidney Martin, leaves something to be desired in the way of a fuller account of the relation of milk to outbreaks of specific disease. Further information is, however, supplied in other sections. From Dr. Hope's guarded remarks upon tuberculosis in his article on Inspection of Meat it may be inferred that he is not an advocate for the condemnation of all carcasses in which localised signs of tubercle are found. The same writer deals also with Slaughterhouses. Meteorology has been left in the safe hands of Mr. Symons, who has limited himself to the practical side of the subject, that is, to the methods of observation, and succeeds in making even this part attractive. Next in order and in logical sequence comes an article, written by Dr. Theodore Williams, on the Influence of Climate on Health, which, again, is supplemented by Dr. Copeman's description of the Influence of Soil on Health—a most interesting chapter. Dr. Copeman regards it as proved that enteric fever poison can lie dormant in the soil for an indefinite period, and inclines to the same view with respect to diphtheria. Not less interesting are Dr. Poore's remarks on Clothing, in the course of which he wages successful war against many accepted notions as to the merits and demerits of divers garments and materials. Under the heading of Physical Education Mr. Treves writes of the different forms of exercise and physical recreation. He pronounces against cycling for women. Baths of all kinds are fully discussed in a chapter contributed by Dr. Hale White. Dr. Hime takes a broad view of Offensive and Noxious Businesses, and treats of trade processes which are liable to affect the health of persons employed in them, as well as those which tend to cause nuisance to the public.

The editors are to be congratulated upon the result of their labours, some idea of the scope of which may be gathered from the above sketch of the first volume. The second has already been published.

The International Meteorological Congress will meet at Upsala on August 20th. The last meeting was held at Munich in 1891.

Les Maladies du Soldat [Diseases of the Soldier]. Par Dr. A. Marvaud, Professeur Agrégé libre de l'École du Val de Grâce. Paris: Felix Alcan. 1894. (Royal 8vo, pp. 839, 20 fr.) Published in two parts.

(First Notice.)

Dr. Marvaud, who is already favourably known for several careful memoirs upon subjects connected with military hygiene, has in the present volume brought together much valuable information relating to the French soldier which hitherto has only existed in a scattered form in various journals and official reports. This work is to a certain extent unique, as it not only discusses the diseases met with in armies during peace and war from the etiological and prophylactic points of view, but also in their clinical and therapeutic aspects. The perusal of the book is greatly facilitated by the excellent arrangement of the subject matter. It is divided first into five books or principal parts, these again being subdivided into chapters.

The first book is devoted to a general study of the sickness and mortality of soldiers in the French army in special reference to the different conditions of military life; this includes a criticism of their health as compared with the sick and death-rates of the armies of other countries. These chapters are based upon facts gathered from the annual reports of the French War Minister extending over the period 1862-92, omitting 1870-71. Some very interesting facts are recorded in these pages, particularly those relating to recruiting, invaliding, and the prevalence of diseases in various corps and garrisons according to season and length of service. The nominal effective strength of the French army appears to be 507,360 men during peace, with an actual effective strength, after the elimination of sick and others, of 437,440. Some 308,000 conscripts are examined medically annually, and of these over 33,000 are exempted for disease or infirmity, herniæ, and various affections of the eye being the chief causes of rejection. Of 1,000 men present with the colours, 289 have less than one year's service, and only 44 per mille are under 20 years of age. The admissions to hospital per 1,000 have averaged during the past ten years 555: the greater number of these admissions are young soldiers of less than one year's service. Some garrisons, notably those in Tunis and Algiers, as might be expected, have a higher admission and death-rate than others; it is to be regretted that the author does not discuss the causes which give rise to these differences.

The corps which appear to yield the greatest number of non-effectives are those stationed in Algiers, Paris, and the larger towns. The corps of *Infirmiers Militaires*, corresponding to the Medical Staff Corps of our own army, show a relatively high sick and death-rate, due, according to the author, to the special morbid and contagious influences to which they are exposed. As in our own army, a notable reduction has taken place of recent years in the French army, not only in the mortality, but in the admissions to hospital, and in the average number of days each sick man remained under treatment. Although the death-rate in the home army has fallen from 9.42 per 1,000 in 1862 to 5.81 in 1890, still the Algerian and colonial figures show only a drop from 12.21 in 1862 to 11.9 at the present time.

The author's treatment of the difficult question of comparing the sick and death-rates of the military with the civil population in France is extremely lucid and judicial, being chiefly based upon Bertillon's arguments and facts. He concludes that notwithstanding the many improvements in the hygienic condition of the soldier's life which have taken place during late years, his mortality is still in excess of his civil brother of like age.

In attempting to compare the sick and death-rates of the French soldier with those of the men in other armies, the author awards the place of honour to Belgium, whose army appears to have so low a death-rate as 3.9 per mille, or a total effective loss from all causes of 20 per 1,000. This is a somewhat unsatisfactory chapter, and suggestive of fallacies, as the conditions of military service are so diverse in different countries and armies that comparisons are almost impossible. So far as we have been able to check them the figures quoted appear to be correct; and, judged by these comparative statistics, the non-effective loss in the French army compares favourably with that experienced by other countries.

When, however, we come to look into the nature and causes of sickness and mortality rates among French soldiers, the health of the French army appears in a less favourable light. Something like 70 per cent. of the sick treated annually in the military hospitals are grouped as "fevers," of which at least half come under the infectious group. These infectious diseases appear to furnish more than four times more deaths among soldiers in France than among civilians between the ages of 20 and 39; the greatest mortality in the army being from enteric fever. In a similar fashion measles and scarlet fever affect more severely the military population than the civilian. On the other hand the mortality from small-pox is four times less in the French army than among the civil population. Tuberculosis is five times less in the army than among civilians.

In a comparative statement of the incidence of infectious and other diseases among soldiers of different nationalities we find some interesting facts and figures which appear to be correct. Thus, while enteric fever yields 13 cases per 1,000 of strength and a mortality of 2.08 in the French, Russian, and Spanish armies, our own cases are as low as 1.1 per 1,000, with a mortality of 0.2 per mille. The German, Austrian, Belgian, and Italian armies hold intermediate positions. Tuberculosis appears to affect all armies more or less alike, while measles seems to have as much a predilection for French barracks as scarlet fever of late years has had for English. The figures relating to small-pox indicate a minimum prevalence in German garrisons, and a maximum in Italian and Spanish. It is humiliating to be told that the British army yields something like seven times more venereal disease than either the French or German. We have gone over the figures, and are unable to take exception to this statement. On this subject the author has some very apposite remarks upon the evil effects which clandestine prostitution has in increasing venereal prevalence, while, too, he shows the marked influence which urban populations have in the same direction as compared with rural districts. A short chapter is devoted to the effects of war and foreign service upon the soldier; in it are some curious figures dealing with the relative losses from disease and the enemy's fire during recent wars.

Descriptive Catalogue of the Anatomical and Pathological Specimens in the Museum of the Royal College of Surgeons of Edinburgh. By Charles W. Cathcart, Conservator, Fellow of the College. Vol i. The Skeleton and Organs of Motion. Edinburgh: James Thin. (Demy 8vo, pp. 606, 7s. 6d.).

The museum of the Royal College of Surgeons of Edinburgh contains a valuable collection of anatomical and pathological specimens, thanks to the industry and ability of numerous pathologists and surgeons who have been trained in Edinburgh. The first volume of the *Catalogue* is, in consequence, an important publication, and it is to be hoped that the compiler, who has done his work very well, will soon get the remaining volumes ready. The *Catalogue* is convenient for reference, and each specimen is, in most cases, fairly described. A title in all cases precedes the description; thus we find:—"3. 382. Bullet Lodged in the Outer Condyle of the Femur. Bones forming a right knee-joint—macerated, showing the bullet in position, etc." This is contrary to the principle of the English College catalogue, Hunter, and his successors to the present day relying entirely on description. Most of the catalogues of London hospital museums follow this principle, titles being only given to series. There are disadvantages in giving a title to each specimen; the practice is often carried out at the expense of perfect description, and the advance of science may show that the title is an error, or, at least, misleading. This is especially the case in series illustrating morbid growths. On the other hand, there are advantages in giving titles to each specimen; the practice facilitates reference, one of the first aims of a catalogue. Altogether, then, we cannot find fault with Dr. Cathcart on this score.

The series included in this volume are evidently valuable

for educational purposes. Amongst specimens of particular interest are bones with gunshot wounds from Culloden to the battle fields of the American Civil War. To Surgeon-General Billings the College is indebted for the American specimens. They show the action of rifle bullets on bone. Surgeon Tyrell, Madras Army, and Dr. James Aitchison, Civil Surgeon, India, contribute instructive specimens showing the ravages of mycetoma, and Mr. Edgar Willett has presented to the museum a jaw of an ox affected with actinomycosis.

NOTES ON BOOKS.

Philip's Anatomical Model. By Dr. Schmidt. English Edition by W. S. Furneaux. (London: George Philip and Son. 2s.)—This work is a small book of sixteen pages, with five woodcuts and three small cardboard models upon which are represented in various colours the different organs of the body. It is intended to give its readers a pictorial representation of the human body and its organs. The descriptive letterpress is by Dr. Schmidt, and consists to a great extent of the enumeration of the names of the various structures. The skeleton is first dealt with, and then follow the muscles, the heart and blood vessels, the internal organs, the brain and nerves, and then the organs of sense. In many places the short descriptions are somewhat ambiguous. The small intestine is described as a fleshy tube 60 feet in length, covered with a thin skin called the peritoneum, and lined with a mucous membrane. The contents of the intestine are called chyle, which is probably intended for chyme. A description of the generative organs and the external organs of generation is entirely omitted. The coloured models may serve to give an idea of the general way in which the body is built up, but from an anatomical point of view there are many inaccuracies. Thus the mode of division of the right lung into three lobes is quite incorrect as regards the middle lobe.

Die Krankheiten der Mundhöhle, des Rachens und des Kehlkopfes [The Diseases of the Mouth, Pharynx, and Larynx]. Von Dr. Albert Rosenberg. Berlin: S. Karger. 1893. (Roy. 8vo, pp. 339, 178 woodcuts and lithographic plates. M. 8.)—Dr. Rosenberg states that his textbook is based upon the records of 16,000 cases treated at the University Policlinic in Berlin. It is divided into three sections. The first deals with diseases of the oral cavity and its boundaries. A description of the anatomy of the part is followed by the physiology, and an account of the general symptomatology and pathology. The diseases are divided up into numerous classes. Thus under the heading of stomatitis exudativa nine different varieties are given. Special attention has been given to the parasitic diseases, actinomycosis being fairly well described. The second section deals with diseases of the pharynx. It is written in the same style as the first, but there are in addition preliminary chapters on methods of examination, and on general points in the diagnosis and treatment. Most of the instruments are shown by illustrations. In the third section the larynx is the part dealt with. Kilian's method of examination of the larynx is described and illustrated. Here the patient stands up with his head bent forward, the chin resting upon the chest, whilst the physician kneels down and looks directly upwards into the patient's mouth from below. The general mode of arrangement is the same in this section as in the two preceding. The work is characterised throughout by a minute subdivision of the diseases into numerous varieties. The clinical descriptions are for the most part short and clear, but in some cases the author has erred on the side of brevity. The book will be useful to German students, especially from an examinational point of view; but, as a complete treatise on the subjects with which it deals, it will be found to be too condensed to be of much value.

The Twenty-fourth Annual Report of the State Board of Health of Massachusetts. Boston: Wright and Potter Printing Co.—This is a Blue Book of over 800 pages, giving an account of the year's work of the State Board of Health. It is not, however, exclusively a record. One of the functions of the Board is to consult and advise with the authorities of cities, towns, etc., in regard to drainage and water supply, so as to protect the interests of other places which may be affected by such schemes, and thus a large space is devoted to the examination of various water supplies and to reports of experiments on the purification of sewage and the effect of sand filtration in purifying water. The reports on various epidemics of typhoid fever are of considerable interest, and it is curious to note how the same habits and customs which have made rivers so dangerous as sources of water supply in old countries, are repeated in the new, and how men can only be restrained by law from poisoning their neighbours. The various photographs of privies in intimate relation with streams are most instructive. A wooden platform is erected hanging out over the river, and on this is built a wooden privy. No scavenging is necessary, the stream does everything automatically, and the excreta are washed down into the water supply of the next town on the river's course. We have, then, in Massachusetts much the same set of conditions as Dr. Barry reported from the Tees valley, and the same distribution of typhoid fever among the drinkers of the water. The similarity is made even more striking by the fact that the careful report made by Dr. William T. Sedgwick met with just the same criticism as that which Dr. Barry's received at the hands of the London Commission, namely, an elaborate computation of the dilution which the dejecta must have undergone before distribution.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

CELLULOID FACEPIECES AND MASKS.

The value of celluloid in the construction of various surgical appliances is gradually being recognised. For the last two or three years Dr. Silk, anæsthetist and instructor in anæsthetics to King's College Hospital, has had in constant use a set of facepieces and masks made of this substance. They have, therefore, stood the test of time, and have more-



Fig. 1.

over, quite realised his expectations. The facepiece (Fig. 1) is made of the thinnest material possible, so that it is not only transparent, but can also be bent to adapt itself to the face; its shape is that represented in the figure. The face end is fitted with a removable rubber pad, inflated to exclude air, and is mostly used in the administration of nitrous oxide. The mask (Fig. 2) is made of quite stout material, and its shape is that which in leather is known as Rendle's mask. It is freely perforated at one end, and the other end fits lightly over the nose and mouth. A loosely fitting flannel bag serves both to protect the face and hold in position the honeycomb sponge upon which the anæsthetic is poured. This is the

mask that Dr. Silk usually employs for the administration of the A.C.E. mixture, or to maintain ether anæsthesia. The advantages claimed for these facepieces and masks over the

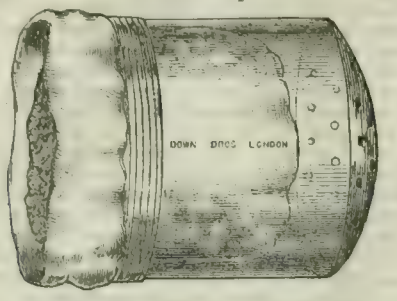


Fig. 2.

ordinary leather ones are: (1) They are more cleanly. Provided that warm water is not used they can be frequently washed and scrubbed. The material itself being absolutely non-absorbent, they can easily be kept quite free from unpleasant odour; with leather this is almost impossible, for even if covered with rubber, frequent washing quickly ruins them, and at best they are seldom free from smell. (2) The facepiece being transparent, a fair view can be obtained of the mouth, even during the induction of anæsthesia, and it can be seen, for instance, whether the mouth prop maintains its position. The masks, being made of thicker material and having a flannel bag, are of course not transparent; it is, however, but seldom that the mouth is propped open when this particular form of inhaler is likely to be used. (3) They are more sightly. This, of course, is a minor advantage; but it will not be the less appreciated either by patients or by those who administer anæsthetics at all frequently. (4) They are lighter.

In respect to the facepieces the advantage is about an ounce, and in respect to the masks nearly four ounces, in favour of the celluloid. As already stated, they should not be washed in warm water, or they will lose their shape; nor should they, for the same reason, be dried near a fire. In using the masks, too, the sponge should not be over-saturated, or the flannel bag will stick to the mask; but these are points against which no careful anæsthetist needs to be warned.

These facepieces and masks are made in several sizes, and kept in stock by Messrs. Down Bros., who have taken much care and trouble in working out the suggestions of Dr. Silk in the matter.

LAY PRACTICE.

The Amateur and the Quack.—The Prescribing Chemist and the Trading Doctor.—The Public and the Profession.—The Need for Self Help.—Hospital Abuse.—Abuse of Clubs.—Professional Respectability.—The Question of Fees.

IN his annual address to the Southampton Medical Society, Mr. J. F. BULLAR, M.A. M.B.Camb., F.R.C.S.Eng., dealt with questions of great interest affecting the social standing and pecuniary interests of the profession.

After referring briefly to amateur advice and the custom prevalent among ladies especially of handing prescriptions they have received themselves to others whom they suppose to be suffering from the same disorder, and after touching upon the proceedings of "locomotive impostors who draw teeth and jawbones with the key, and sell one infallible remedy for the cure of every complaint," he proceeded to consider the question of prescribing chemists. There was, he said, hardly a chemist who did not do a prescribing trade. He gave instances within his own knowledge—a powder prescribed for a wasting baby with no accompanying advice as to food, etc., an eye lotion without atropine for iritis with the result that the eye was seriously damaged, the chemist excusing himself on the ground that the man complained of "inflammation of the eye," and "medicine for a cough," sold to a lady who got out of a carriage and pair, and said her child had a cough. A vast number, not only of the poor, but of the well-to-do and so-called educated classes, regarded a chemist as a kind of doctor. This want of appreciation of the fact that there was a difference in kind, and not merely in degree, between doctors and chemists, was a real medical grievance, and a hindrance to the full usefulness of the profession. The real superiority lay in the power of the medical man to diagnose diseases, to seek for their causes in all the circumstances of the patients' lives, and to apply treatment accordingly.

It was useless to blame the chemists so long as the public were ready to go to them. In order to put a stop to prescribing by chemists the public, he continued, "must be educated, and when they cease to go to the chemist for prescriptions, the chemist will cease to prescribe. If the public are to be educated in these matters it must be done by the medical profession, and we may well ask ourselves what the profession does to promote this public education, and whether we are not, after all, the persons to blame for the confusion of ideas as to the functions of chemist and doctor. As I said before, our superiority to chemists in the matter of treating disease consists in our ability to diagnose diseases and their causes; certainly there is likely to be more success in the treatment of one patient whose case is diagnosed than in the dosing of ninety and nine for whom there is no diagnosis.

"I have a shrewd suspicion, amounting indeed to certainty, that a great deal of practice is done by members of our profession in a way that the public cannot be blamed for considering as identical with that done by chemists. We are all aware of the existence in our ranks of a certain class of medical men who treat their patients for such small fees that they can only make a living by seeing great numbers of patients, so many indeed that it is utterly impossible for them to give the time to make a diagnosis, or to do anything more than sell a bottle filled from the handiest jar. This style of practice cannot by any possibility be successful, and no wonder if the patients discover that the doctor's medicine has no more virtue than the chemist's or the quack's, and act upon the discovery.

"Very likely what the patient really wants is not medicine at all, but instruction and advice. This he does not get either from the doctor or the chemist, and hence the idea gains ground that the function of the doctor and chemist is one and the same, namely, to sell physic to people who say they are ill.

"The prescribing chemist I regard as an individual whose existence is explained by that of the equally undesirable trading doctor. I feel certain that, if all the members of our profession would go carefully into the details of each case and treat it to the best of their ability, there would not long remain any public doubt as to the relative capacity of doctors and laymen in treating disease, for the mistakes we make are nearly all avoidable, and due solely to careless and insufficient examination of the patient."

After referring to the unenviable position of the trading doctor, he observed that no one would accept the fee of sixpence for a professional visit unless there were some real or imaginary impediment in the way of his doing better. "The deplorable condition of the members of our profession," Mr. Bullar continued, "who fill the lowest places in it is sometimes attributed to the overcrowding said to be taking place in our ranks, but that explanation is hardly compatible with the notorious fact that the number of patients often treated in the cheapest practices is so great that it is impossible for them to be properly attended to. In a practice of the cheapest kind a man can hardly make a living except by scamping the work which should be done by two or three men, or by employing unqualified and therefore cheap assistants to the exclusion of professional men.

"I am inclined to think that the real cause of our troubles is to be found in the unfortunate want of unity which exists among us and in the shortsightedness which disables us from seeing that, if we wish to thrive, we must seek first the interests of our profession in order that we may be raised by it. By want of unity we place ourselves at the mercy of the public, by underselling each other we reduce those below us to a condition of slavery which it would be the height of meanness to regard as the outcome of anything but dire necessity.

"We are, I say, absolutely at the mercy of a thoughtless, if not unscrupulous, public—a public which has grown up under the unshaken impression that a doctor should work

for nothing and whose conscience is free from any qualms when it demands that he shall do so.

"Are we not to blame for being the only body of men who are regarded in this way? Are we not to blame for allowing a state of things to continue which necessitates a number of our brethren giving up every pretence of practising the healing art in order to compete in a desperate race with chemists, quacks, and pure rogues to sell bottles of medicine? Can we justly blame chemists for prescribing while members of our own profession so often get a living by poaching in the chemist's preserves? No doubt the public, through the agency of public bodies, clubs, and medical aid societies—all anxious to cut down to the lowest amount the emoluments of medical men—have contributed to the present state of things, and they have their reward in the scanty attention it is possible for them to receive at the hands of the men they over-work. But we must not expect any improvement of our condition to be forced upon us, or even suggested to us, from without. We must follow the example of every other class of men who live by their labour; we must become organised and co-operate for our mutual advantage or we shall be in danger of our profession falling still lower and being recruited from the lowest of the people. When the labourers have obtained their legal eight hours' day, does any rational being suppose their bowels will yearn with sympathy for the overworked club doctor, or that they will perceive that he is doing the work of half-a-dozen men and ought to have less work and more pay?"

Mr. Bullar observed that some members of the public appeared to seek to pay the medical profession by compliments to its noble character, and dwelt on the vicarious philanthropy which is shocked by the sight of pain and suffering, but, instead of helping with money, appeals to the medical profession to help without pay. He continued as follows: "Perhaps the way in which the profession loses most is by well-to-do persons belonging to clubs such as the Foresters, Oddfellows, Druids, etc. I have made inquiries in various towns. In Gloucester tradesmen well able to pay proper fees belong to the Druids, and pay four shillings a year for the doctor. There are also Conservative and Liberal clubs, or benefit societies. My informant, one of the medical men in that town, says: 'Benefit societies of this nature exist for men, women, and children—four shillings for adults and six shillings for wife and family, including physic. Any doctor's certificate will admit, and the medical officer has no voice in the matter. Naturally political clubs are anxious to get folk who are well off into the society; good farmers, tradesmen, and owners of houses are in, and claim medical attendance for the four shillings, no distance specified, so that the medical officer may have to drive out four or five miles to see a well-to-do farmer for four shillings a year.'

"In Gloucester there is also a lying-in charity where the doctor gets twelve shillings for midwifery. This charity is doubtless kept up by philanthropists, and an examination of its actual working might not improbably show that it is of no greater advantage to the poor than to the doctor whom it underpays. It has been said with great truth that many charities exist rather for the amusement and self-satisfaction of the committee than for the actual benefit of the poor, and it is notorious that persons employed by the committees of this kind are frequently underpaid and overworked. The committees, by aiming at cheapness, obtain inefficiency, and while congratulating themselves on the amount of vicarious work they have to report as done, take little or no pains to inform themselves whether it is even possible that it should have been done well. Gloucester is no exception to the rule, and I have no doubt you are all aware of instances of this kind nearer home."

The question of hospital abuse, Mr. Bullar thought, might be dealt with with comparative ease. Hospital authorities should exclude unsuitable cases. A hospital properly managed was not a source of loss to the profession; in the country, at any rate, the great majority of its patients belonged to clubs, so that any loss accidentally incurred was compensated by relief to the work of the club doctors. He thought that doctors should notify confidentially to the hospital authorities any cases in which they knew that the charity was being abused. "We are grossly imposed upon by the public," he continued, "and shall remain in the same state until we behave loyally to our profession, and until we become united by those bonds of common interest which can have been overlooked and neglected so long solely on account of the fact that their existence is obtrusively apparent.

"We have the means at hand to improve our position, a reasonable amount of trust and confidence in each other, and an agreement as to the charges we mean to accept would alone prevent our being imposed upon by clubs and public bodies. On all sides our complaint is the same—well-to-do men join clubs, and the club doctor has no voice in their election, but the club doctor can say 'I won't be medical officer to any club which has well to-do members.' The reason that he does not say so is that he has a poor, half-witted, myopic professional brother who will immediately take the post to his own and everybody else's loss. It is to the distinct advantage of every member of the profession that well-to-do people should be excluded from clubs; if they were so excluded they would call in private doctors of their own choice, the number of paying patients would be increased, and competition lessened.

"A mutual understanding that no club containing well-to-do people is to have a medical officer would bring the evil to an end. Can we not agree on a point so simple, so beneficial to ourselves, so desirable on public grounds?

"In every town and neighbourhood there should be a common understanding among all the medical men as to fees, payments to be received for clubs, etc. Such a thing as underselling should not be known among us; we should endeavour rather to raise our fees to such a reasonable figure as will allow us to do our work thoroughly, without being overdone by it. It is the drudgery of hard work and poor pay which makes the trading doctor, and grinds out of him the animating spirit of our profession. He is overcrowded with patients whom it is a physical impossibility to examine or treat properly, and he slides down and down till his highest ambition is to save trouble and avoid an inquest. At this stage of his career we, his more fortunate brethren, find him a convenient scapegoat to bear our sins into the wilderness beyond the hedge of respectability which he is supposed to have wantonly crossed. He is often pointed at as the origin of evil, whereas he may be, and doubtless often is, the unwilling outcome of our own foolish want of unity."

Mr. Bullar added that it was difficult to define professional respectability further than by saying that it was conduct which commanded the respect alike of the public and of the profession. There was a widespread feeling that the cheapest forms of practice were not respectable, but this was evidently a mistake. Many of the most honourable members of the profession had to work for less pay than the taking of the cheapest practices; as instances, he mentioned the sums received from clubs by general practitioners and the emoluments of casualty physicians and surgeons among the army of those who wait for hospital appointments and consulting practice in London. The respectability of any kind of practice really depended upon its good faith. It was disreputable to make money by false pretences, to rob the public by pretending to treat their ailments without sufficient examination as to what these ailments are. "It is my belief," he continued, "that duty and self-interest very seldom lead different ways. It is our duty to do the best we can for our profession, to do all in our power to make it possible for every member of it to do his work faithfully, and to raise the profession and himself in public usefulness and estimation. If we would do this, we must increase our fees to such an extent as to leave the possibility of an honest livelihood to those less fortunate than ourselves, and we must decline to treat by an unprofitable contract those who are able to pay proper fees. Everyone has to begin. An inexperienced man may rightly accept a small fee, but as he gets on in experience and in reputation, it is both his duty and his privilege to raise his fees and get more money for less work. It is his duty to raise his fees in order to avoid an ungenerous competition with his younger and still struggling brethren, and it is his privilege to reap the fruits of his labour, and to enjoy comparative ease while suffering no diminution, but rather securing an increase of income.

"In our profession a beginner must generally either eat his head off during years of painful waiting and competition on

unfair terms with men of established reputation, or make a living by accepting lower fees. Thus each new comer is tempted to undersell the last.

"In London the position of the young consultants is tragic in the extreme: they are the victims of hope deferred, and their forlorn aspect wrings the heart of any unaccustomed beholder. The struggle for hospital appointments has resulted in the development of a race of hospital physicians and surgeons of a toughness that never fails, and whose birthdays seem to recur with ever diminishing frequency as they approach the sixty-fifth, that happy day which means another vacancy on the staff. It is the uniformity of fees which is to blame. How can a young man compete with a well-known leader of the profession if they both charge the same? Why should a leader of the profession have his time wasted and the soul ground out of him by a crowd of uninteresting patients, and laboriously make an income which he could double and make far more easily by simply raising his fees?

"I am told that the reason why the great consultants still charge so little is partly a want of unity among themselves, and partly a fear that they might be cut out by the younger men, of whose capacity they appear to stand in perfectly needless awe. It does not require a great power of observation to perceive that the public are but indifferent judges of capacity, or that they usually take a man at his own valuation. A general raising of fees by those at the top of the tree would render them still more attractive to the public, and larger incomes would be made, with more leisure in which to give the results of experience to the profession, while the younger men would have some scraps to stay their stomachs and less time to waste in wishing their elders in heaven.

"It might well be the custom that a surgeon on appointment to a great hospital should raise his fees, and in the country the same thing is desirable; on attaining a certain position a general practitioner should decline to take less than a certain minimum fee. The fact of his doing so would tend to raise him in public favour, and he would benefit himself and his professional neighbours without injuring the public.

"I have tried to take a general view of the profession, but I think here in Southampton we might well do something in the direction of medical reform. I suggest, for your consideration, the desirability of this society taking the initiative in establishing a general understanding among the neighbouring practitioners as to fees and the management of clubs and as to the utility of a 'black list,' to contain the names of persons who systematically leave our bills unpaid. I have a letter in which a sketch of the working of such a 'black list' is given, and the idea is one well worthy of careful attention. We must remember that in Southampton things are changing; there is every prospect of further growth, and we shall do well to prepare ourselves to promote and take advantage of the change by a united determination to do our work thoroughly and to be properly paid for what we do."

THE CENSUS OF INDIA, 1891.

Mr. J. A. Baines has drawn up a general report of the census of India taken in February, 1891, from which the more salient conclusions are summarily presented in this article. Points capable of being so illustrated have been graphically indicated in the accompanying diagram, which represents, except in two instances specially pointed out on the plan, proportions per cent.

Extent of the Census.—The enumeration included British provinces and settlements and feudatory states, but did not embrace Sikkim, Manipur, British Baluchistan, the Cis-Salwin Shan States, Burmah frontier tracts and Rajputana hill tracts, the population of which is estimated at 1,119,578. The States of Nipal and Bhutan are likewise excluded, as also the territories under French and Portuguese government, the population of which latter is entered as 844,307 souls.

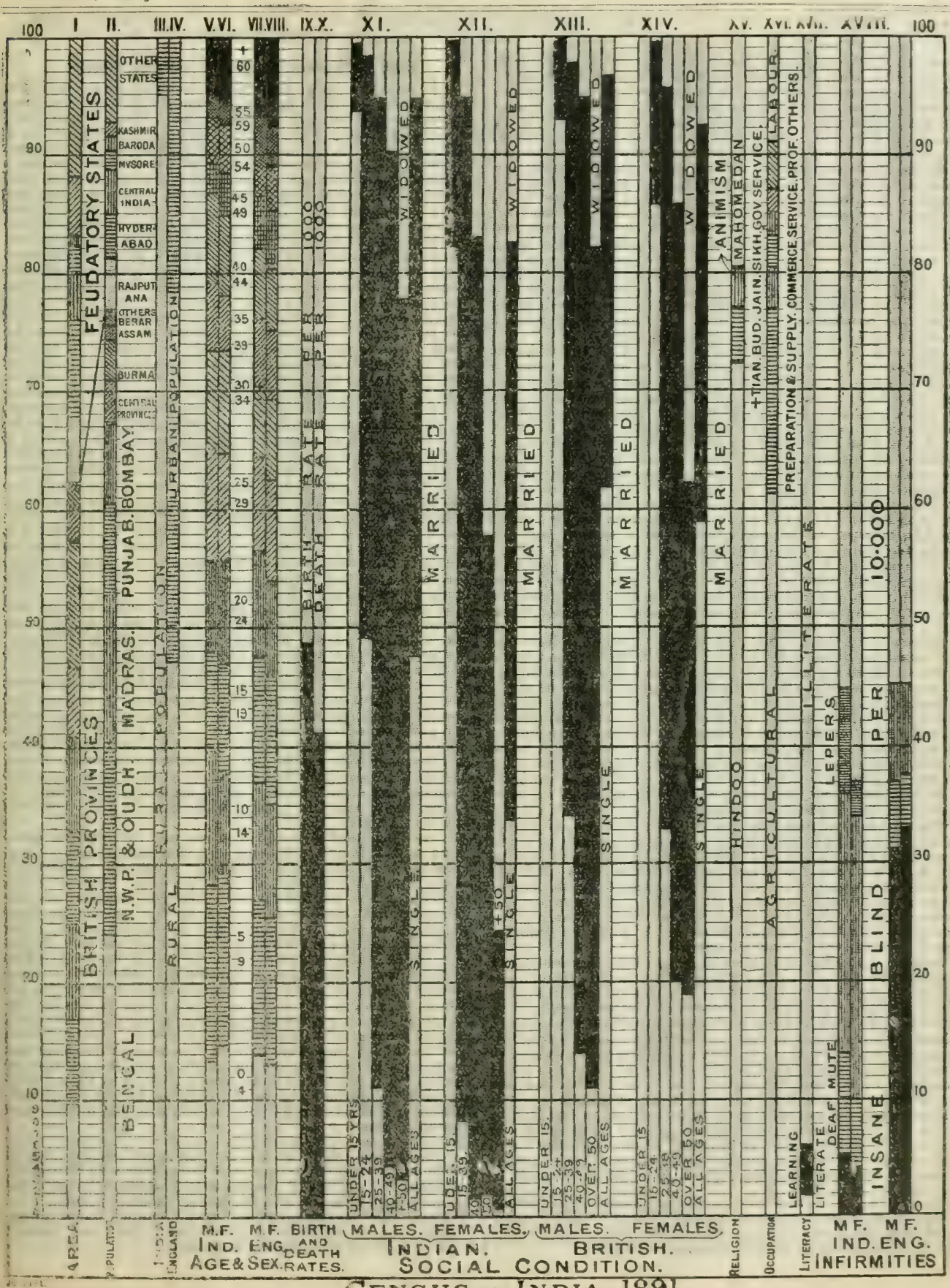
General Result.—The population thus enumerated amounted to 287,223,431, which is spread over an area of 1,560,160 square miles: the inhabitants of Hindustan constitute about one-fifth of the population of the world, located in an area covering about 3 per cent. of the estimated land surface of the globe. Adding the territories excluded from the census the sum total rises to 289,187,316, and, if we include Nipal and Bhutan and probable omissions and suppressions, it reaches not very far short of 300 millions.

Density of the Population.—Column I of the diagram shows how the area of Hindustan is divided into Provinces and States, and Column II how the population is distributed to these. A comparison of the two columns indicates the relative density of the population of the sections specified. The mean density of the whole is 184 persons per square mile, 33 per cent. of the population occupying 69 per cent. of the area fall below, and 67 per cent., on 31 per cent. of area, above the mean. The mean density of British provinces is 230 and of feudatory States 111. These mean numbers focus a wide amplitude when district units are considered, ranging from 930 to 4 in the case of the British provinces, and 583 to 7 in the the case of the feudatory States. The density of England and Wales is 500, and in India 100 millions of inhabitants exceed that density, while 37½ millions are packed into less than an acre apiece. Density is, however, an arithmetical product. The pressure of population on the sustaining powers of the land is the real question. This depends on the nature of the soil, on clearance and cultivation, the proportion of cultivated and cultivable land, the rainfall, irrigation, roads and railways, migration, available industries other than agricultural, peace and protection, and other conditions. After carefully reviewing these, Mr. Baines concludes that "the population of India, two-thirds of which is agricultural, is not pressing too closely on its means of subsistence, except in a few special localities."

Urban and Rural.—The population of India, being mainly agricultural, is chiefly distributed in hamlets and villages, only 9.48 per cent. living in "towns" of 5,000 inhabitants and upwards, and 4.84 per cent. in 227 towns of 20,000 and over; the corresponding figure for England being 53 per cent. (Columns III, IV). The average number of persons per house is found to be 5.4. In large cities higher figures are attained.

Sex and Age.—The returns under these heads are vitiated by concealment and inaccuracy; 958 females were entered in the schedule for every 1,000 males. In England the proportion is 1,064 females. There seems, therefore, to be in India 6¼ millions of males in excess of females. Male births in India, as in Europe, exceed female, and the disparity of sexes in favour of the male must, therefore, be due to omission to enter females—girls and young wives especially—or, if the returns are approximately correct, to excessive mortality among women. The age return is vitiated by ignorance and a preference for round numbers and special figures. In Columns V, VI, VII, and VIII of the diagram the numbers living of each sex within quinquennial periods of age are shown in comparison with similar data for England. The comparative paucity of Indian girls of 10 to 14 years, and women of 35 to 44, is well shown, and the greater number of old women than of old men in the population of both countries. In England the numbers living at higher ages are, as might be expected, in excess.

Gain and Loss.—The census of 1891 revealed a gain of some 28 millions of population over that of 1881, or 10·96 per cent. in ten years—9.70 for the British provinces, and 15.52 for the feudatory States. The gain is almost entirely due to the large birth-rate which Mr. Baines estimates at 48 per 1,000 (Column IX). He places the death-rate at 41 per 1,000 (Column X). Registration is still very imperfect throughout India, and these ratios are derived from special inquiries, and are seldom reached by the figures actually rendered by registration. The approximate accuracy of the birth-rate is attested by the number of children under 1 year enumerated, to which must be added one-third to supply the place of some 26 per cent. of births which die within the year. War, famine, and disease are the great agents of life destruction of India. During the decade war and famine were practically absent, but disease, both habitual and epidemic, was rife. The average duration of life in India is put down at 24 years, against nearly 44 years in England. The Census Commissioner takes a sanguine view of the future in respect of prevention of famine and epidemic disease. Of 100 deaths he estimates that 66 are caused by fever, 6 by cholera, 2 by small-pox, 5 by bowel complaints, and 21 by injuries and other causes. Migration has little to do with



CENSUS OF INDIA—1891.

changes of population in the country at large. Of 10,000 inhabitants, 9,977 were born within the limits of the empire, 19 in other parts of Asia, and only 4 elsewhere. The number of emigrants outside the boundaries of Hindustan was only 130,483 in ten years. Accessions come mainly from other countries of Asia and from Africa, and these, though trifling, seem to be increasing, as also accessions from Europe, America, and Australasia. These latter hold to Asiatics a ratio of 1 to 2,591, the ratio of Europeans to the rest of the population being 1 to 2,851. A good deal of migration (agricultural, commercial, matrimonial, etc.) occurs, however, within the limits of the empire, and the Provinces and States interchange inhabitants, to some extent, the flow being in favour of the States. The rate of increase in towns was found to be less by about 1½ per cent. than of the population at large. Comparing the increase of population with the statistics of wealth and commerce, Mr. Baines concludes that "the present rate of increase amongst the people of India is well within their means of subsistence."

Marriage.—Columns XI, XII, XIII, and XIV of the diagram represent the facts as regards marriage for India as contrasted with Scotland. Males and females are shown separately, and the results for all ages and for the age periods, under 15, from 15 to 25, from 25 to 40, 40 to 50, and over 50—are indicated in each case. The higher proportion of the married and widowed in India, the earlier age at which men, and still earlier women, are married, and the great number of Indian widows are well exhibited. The large proportion of the married explains the high birth-rate, but there are circumstances which check prolificity, even under the peculiar customs and conditions of India. Very early maternity tends to impair general health and reproductive capacity in Indian women, and the prejudice against widow marriage leaves a very high proportion of possible female fecundity unused. The disparity in the ages of the married is often a bar to production of large families. Mr. Baines shows that the doctrines of Malthus are subject to important modifications and qualifications in their application to India.

Language, Religion, Race, and Caste.—These subjects are discussed in great detail, but a very brief summary must suffice. There are some 150 "languages" spoken in India; 75 per cent. belong to the Indic-Aryan type, the tongue of the invader; 20 to the Dravidian, the speech of the indigenous or aboriginal tribes, and the remaining 5 per cent. include all others. English is represented by 9 in 10,000. The religions of India are shown in Column XV. Brahminism or Hinduism embraces 72.3 per cent. of the population, and 20 per cent. profess the Mahommedan faith; 3.2 are Animists or worshippers of spirits; and 2.5 Buddhists. Christianity is acknowledged by 8 per 1,000 of the population.

Occupation.—Column XVI.—Agriculture is the chief or sole employment of 61.06 per cent. of the people, and an added or associated concern of a large share of the remainder. Ministering to domestic and social requirements (food, clothing, housing, ornaments, etc.), employs 15.43, general labour includes 8.87, and personal service 3.91. Administrative defence and public service account for 2.36, commerce and transport 2.91, and the professions 2.02. Medicine employs 514,074 practitioners of various sorts.

Literacy.—The vast labour in store for the schoolmaster of the future is well shown in Column XVII. Only 8.66 men per 100 and 4 women per 1,000 can read and write, and 2.25 boys per 1,000 and 1.5 girls per 1,000 are under instruction.

Infirmities.—The return under this head includes the insane, deaf-mute, blind, and leprous. The results are of doubtful accuracy, but Column XVIII shows well the great excess of insanity in England as compared with India, and the great number of blind and leprous in the latter. Deaf-mutism was found to be associated with goitre and cretinism.

Expectancy.—Selected statistics were referred to Mr. Hardy, F.I.A., for the purpose of determining the value of life in India. The general result is the demonstration of the lower expectation of life in Hindustan. At birth a male has an expectation of some 25 years, and a female of 26, against 41.35 and 44.62 in England.

DR. JUAN MAGÁZ Y JAIME, Professor of Physiology, and some time Dean of the Medical Faculties both of Barcelona and Madrid, has been created Marquis of Magáz.

THE PROPOSED NILE RESERVOIRS.

THE Commission of experts which is about to assemble for the purpose of examining and pronouncing upon the comparative merits of the various projects which have been advanced for storing the precious waters of the Nile, has a task of no ordinary weight to encounter and overcome. Geological, engineering, economical, financial, sanitary, political, and sentimental considerations must be taken into account, and special questions on which past experience can throw but a very dim light grappled with. Five schemes have been advanced by the able irrigation engineers in the employ of the Egyptian Government, four of which contemplate the damming of the Nile in Upper Egypt at different points of its course, and one the formation of an artificial lake in the natural hollow of Wady Rayan. The constructive questions turn mainly on the breadth of the river at the places where it is proposed to erect the dams, the nature of the river bed, the material of which the dams are to be made, the arrangements for permitting the outflow of surplus water, and, in the case of the lake, the nature and length of the supplying cut and the character of the retentive barriers.

The question of distributing canals for purposes of utilisation appertains to both schemes. The economical and financial questions embrace the cost of the works, compensation to be paid for submerged tracts, and the increased rental which is likely to be obtained for improvement of the land by extended irrigation. This latter would depend on the extent of area to be benefited, and it is important to note that while the lake project would benefit Lower Egypt only, the damming projects would benefit Upper and Middle Egypt as well. Indeed, it is in contemplation eventually to construct a series of dams on the Nile, so as to waylay and retain its waters at different points, and so extend the area of irrigation. The sanitary problem concerns the effect of the artificial accumulation of the Nile waters, on the purity of the fluid which will remain in existing channels, and of that which will be stored and distributed in and from the new reservoirs. We lately adduced figures which prove incontestably that the health of Egypt depends largely on the purity of the Nile water, and it is incumbent on the Commission to approach the matters submitted to its judgment from that point of view, nor should the allied question of the possibility of diverting drainage and sewage from existing and new channels be lost sight of. The political questions relate to the preservation of the new works from mischievous interference by the tribes which occasionally invade Upper Egypt. The sentimental considerations refer to the possible submergence of antiquities, more especially the temple at Philæ, which would be covered with water by the erection of a dam at Assuan.

It is probable that constructive and economical questions will principally engage the attention of the Commission, but we would earnestly press the importance of the sanitary aspects of the question. For however captivating the possibilities of extended irrigation and increased wealth and revenue may be, the old maxim *Salus populi suprema lex* is as applicable to this as to any other public undertaking. We are not apprehensive that stagnation, even should it be absolute, which will probably not be the case, would under proper precautions affect seriously the quality of such large bodies of water as these reservoirs are meant to contain, nor that, with due arrangements for conservancy, the water flowing in distributing channels would acquire a dangerous access of fresh impurity. Nevertheless, it is eminently desirable that, in discussing these schemes, every possible effort should be made to obtain an assurance that the waters which will in future be used by the inhabitants of Egypt for potable and culinary, as well as for agricultural purposes, will be as pure as it is possible to make and maintain them.

AT the last meeting of the Laryngological Society of London the following honorary members were elected: Sir George Johnson, M.D., F.R.S.; Professor B. Fraenkel, Berlin; Professor von Schroetter and Professor Stoerck, Vienna; Dr. Wilhelm Meyer, Copenhagen; Dr. J. Solis-Cohen, Philadelphia; Dr. G. M. Lefferts, New York; Professor Massei, Naples; and Dr. E. J. Moure, Bordeaux.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1894.

Subscriptions to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, MARCH 3rd, 1894.

WATERBORNE DISEASE.

I.—Zooparasitic Disease.

The belief that the specific germs of such diseases as cholera, typhoid, and dysentery gain access to the human body through the medium of drinking water has been arrived at more often by a process of deduction from a great number of data than by direct observation of the act of infection itself. The entire sequence of events which take place from the moment a disease germ leaves one human body to the moment it enters another has very rarely been the subject of direct biological observation. There are gaps in the line of observed fact which have to be filled in by reasoned deduction. The same may be said of the conclusions that many of the animal parasites attacking man are similarly introduced, only in their case the data are more definite and more easily observed; and the conclusions drawn from such observations have, moreover, in the case of the zooparasites the additional support derived from the analogies and experiments supplied by general helminthology.

Of the three diseases we have mentioned, we can usually detect the microbe in the human body, and also, in many cases, in the discharges shortly after their escape, and we can trace the microbes into the water supply of a community; but here our observed knowledge of their progress abruptly stops. Owing to their minuteness, the vast number of other and similar organisms with which they become associated in the human body, and their diffusion in an unmanageable amount of medium, it becomes hard, or almost impossible, to find and follow them. The best evidence we can get—the only evidence in most cases, in fact—that such microbes are actually present in a water supply, is the outbreak of characteristic disease, chiefly or wholly diffused, among those using it.

In the case of the germs of the animal parasites, they themselves, their ova, or their embryos have not only been traced into water, but the various metamorphoses some of them have to undergo necessitate that they should live for a time in water, and these metamorphoses have been followed out in water by many observers. Further confirmation has been supplied by the administration of water containing these parasites to the lower animals, and, although experiment has not often been made on man, yet the certainty of positive results in every properly conducted experiment on the lower animals justifies our applying the principles so ascertained to the explanation of the facts of human helminthology. More especially are we obliged to fall back on such observations on the lower animals in the case of the more dangerous human parasites, with which experiment of this description is hardly justifiable. For example, it is well known that one of the phases of the life history of the liver-fluke of the sheep is passed in water. The ova of this parasite are hatched out in this medium, and the ciliated embryo can be seen swimming about in the water, and subsequently penetrating the tissue of a certain fresh water mollusc—limnæa truncatula; the metamorphosis of the embryo in this its intermediate host can be traced, and so can its subsequent exit, encystment, and final transfer to the alimentary canal of the sheep. There cannot be the slightest doubt that, acting on this knowledge, experimental liver-fluke disease or "rot" can be induced in the sheep at will. Like the sheep, man in many parts of the world is liable to be infested by trematodes of different descriptions. Throughout the greater part of Africa he is often the victim of bilharzia hæmatobia and the grave disease of the urinary organs and neighbouring viscera which this parasite induces. Now, although direct and intentional experiment has never, so far as we are aware, been applied to the demonstration of the fact, there can be little, if any, doubt that bilharzia enters the human body by a process closely resembling that pursued by the liver-fluke in the case of the sheep. We can follow the ova in their escape by way of the urine from the body of the primary host. We can trace them into water; we can watch the hatching out of the ciliated embryo therein; and we can remark that this ciliated embryo is constructed for an aquatic life. To this extent the parallelism between bilharzia and the liver-fluke is complete; but beyond this point, until lately, there was a gap in the life history of bilharzia, which had to be filled in by analogy supplied from our knowledge of what takes place in the case of the liver-fluke and other trematodes of the lower animals. That the application of this analogy was justifiable has been shown very recently. Sonsino, working in Tunis, has succeeded in tracing the ciliated embryo of bilharzia into the bodies of certain arthropodes, which appear to play the part of intermediate host in the same way as limnæa truncatula does for the liver-fluke. Doubtless, the subsequent transference to the alimentary canal of man is effected in the same or a similar way, and, therefore, most probably by drinking water. In the same way, a combination of observation and analogy teaches us that the embryo of distoma Ringeri, which gives rise to a peculiar form of hæmoptysis in Japan, Corea, Formosa, and probably elsewhere, has to pass through a like metamorphosis: and that it, too, gains access to its definitive human host in a similar manner, and through the same medium—water. Just as with the liver-fluke and with bilharzia, we can hatch out the ova of this lung-fluke in water; we can see its ciliated embryo swimming about and evidently at home in this medium; and we therefore may conclude that it works out its destiny on similar lines. Extended research will, in all probability, reveal that a closely similar history applies to the distoma sinense, the distoma crassum, and several other trematodes infesting man in warm countries, which recent observations in India would seem to show are by no means the rarities they were at one time supposed to be.

Passing to another and even more important group of animal parasites—the nematodes—the same necessity for

temporary sojourn in water is still more apparent, and there is even less doubt that drinking water is in their case the usual medium in which most—the only medium in which many—are transferred to man. Thus in the case of that formidable parasite—the filaria medinensis or guinea-worm—which in some parts of Africa and India is so prevalent that it affects at times nearly one-half the population, a study of the embryo it emits at once determines the fact that it is aquatic in habit: in fact, it is now firmly established that its first steps in development are made in a fresh water crustacean. From these facts the inference that the parasite is transferred to man by being swallowed in water is justifiable. And so with the still more formidable filariæ sanguinis. In the case of one of these—filaria nocturna—the progress of the embryo through the body of the mosquito, and so into water, has been followed step by step, and no reasonable doubt can be entertained that it is in this way it enters the human body. Trichocephalus dispar—possibly the most frequent of all the intestinal parasites affecting man, particularly in the tropics—is also transmitted by water. Leuckart and others have proved this. At the time the ovum leaves the intestine the embryo is not yet differentiated; development remains in abeyance until the egg is carried into water or some very damp medium. This happening, development proceeds rapidly, and on the egg being swallowed by man in drinking water, the shell is dissolved by the gastric and intestinal juices, and the liberated embryo attaches itself to the mucous membrane of the cæcum. Something similar happens in the far more important parasite, the ankylostoma duodenale; the parasite in this case, however, passes through a rhabditiform phase before it is finally transferred either in water or in damp earth to the human stomach. Part of the life cycle must be passed in damp earth, too often in the damp soil which forms the gathering ground of the drinking water of villages and similar communities. From the soil to the well is but a short step, and now muddy dirty drinking water is a well-recognised cause of ankylostomiasis. The presumption that rhabdonema intestinale is similarly transmitted is very strong, although as yet absolute proofs are not forthcoming. There are other human zooparasites to which, although their life histories do not absolutely demand a residence even for a time in water, water nevertheless is the usual, or at all events the common, medium by which they reach their final resting place. Thus the ova of the common ascaris lumbricoides probably in the majority of instances reach the human alimentary canal in this way. And in the case of hydatids—the dangerous offspring of tænia echinococcus—the evidence is equally strong that the ova of the canine tapeworm are frequently in the first instance washed into water or blown into it as dust, and so through this medium gain access to the human stomach, by-and-bye to develop into the hydatid tumours which are so great and so common a danger in such countries as Australia and Iceland.

It may be safely laid down as a general rule that with one or two exceptions, such as ascaris vermicularis, trichina spiralis, and the tapeworms, drinking water is the principal medium by which the entozoa of man pass from one human being to another. In great measure the same remark applies to the entozoa of the lower animals. We have already alluded to the well-established facts of the life history of the liver-fluke. Similar and very elaborate observations have been made on a number of other distomata, particularly on one species, distoma echinatum, a parasite very common in the domestic duck and other aquatic birds. These observations demonstrate that water and its associated impurities are a necessary medium for its evolution and its transmission from one bird to another. The ova leaving the intestine of the affected bird pass with its dung into water, where a ciliated embryo is hatched out. This in its turn enters the bodies of various species of aquatic molluscs, and, after undergoing in these the remarkable metamorphoses characteristic of the distomes, becomes encysted or perhaps passes into other fresh-water animals, and while in this state is finally transferred to the alimentary canal of its definitive host. The nematodes of the lower animals also supply many instances of transmission by water. The sclerostoma armatum, or palisade worm of the horse, which gives rise to those dangerous verminous aneurysms of the mesenteric arteries of equines, is an instance in point. The mature parasite lives in the cæcum; its ova pass out in the dung, the embryos hatching out in the course of a few days if kept in a damp place. The embryo continuing to grow, undergoes various changes, and finally, in water, is swallowed by the horse. Thus it finds its way first into the intestine, next by migration into the mesenteric arteries, then by further migration into mucous cysts, which it forms in the cæcum, from which it finally emerges, becoming sexually mature when free in the bowel. Forms of anæmia of parasitic origin—resembling very closely in their course, cause, and symptoms the ankylostomiasis of man—not infrequently occur in our domestic animals. Thus in Germany, where the disease is known as "Wurmseuche," in Britain, and in the United States, epizootics of this character are not uncommon, and are produced by strongylus contortus, a parasite which lives on the blood it sucks from the mucous membrane of the abomasum. Its embryos are taken in with drinking water contaminated by the excrements of other animals similarly affected. Another nematode, sclerostoma hypostoma, which has a similar life history, and is similarly acquired, is said to cause a fatal anæmia in sheep and goats.

Still more remarkable is that form of anæmia to which packs of sporting dogs are liable, and which is brought about by crowds of parasites closely resembling in appearance and habit a duodenale. The uncinaria trigonocephala and, uncinaria stenocephala, according to Leuckart, who has studied the subject very carefully, are hatched out from ova which have been dropped into or washed into the drinking water of the kennels in the fæces of affected animals. The rhabditiform embryo passes directly, and without entering an intermediate host, into the stomach of the dog in the drinking water, and, after undergoing various changes, attaches itself to the mucous membrane of the duodenum, draining the dog of blood and producing all the symptoms of ankylostomiasis. We might mention another form of parasitism to which our domestic animals are liable, and which is also produced by a waterborne entozoon. We allude to what is known as bronchial and pulmonary strongylosis. This disease is the result of the presence in the air passages of certain species of nematodes belonging to the genus strongylus. Although the life history of these parasites is not known in all its detail, yet the facts distinctly point to water as the medium by which the parasites

are diffused. In the case of the strongylus filaria, which often proves a deadly foe to sheep and calves, it is believed that the ova from the strongyles in the bronchi are coughed up, fall into water, and there undergo developmental changes, till finally, by means of this medium or by damp grass, they pass into the stomach and thence into the lungs of other members of the herd. So, probably, with the strongylus micrurus which is so fatal to calves, and which sometimes extends as an epizootic over large tracts of country.

These and many similar facts which helminthology could supply are amongst the most powerful arguments that can be adduced in favour of a pure water supply. It is astonishing that they are not more frequently urged in illustration and to strengthen the case in discussing this point in connection with such diseases as cholera, typhoid, and dysentery. These facts ought to be familiar, not only to the profession but also to the lay public; for nothing would tend to make reform in our water supply so easy as a general appreciation of such facts as we have alluded to. Graham, in his recent work on *Hydatid Disease*, makes some very sensible observations on this point. He says: "Natural history, as applied to human parasites and the diseases which they cause in man, should form part of every school curriculum, and every opportunity should be taken to remind the inhabitants of those countries where this disease (hydatids) specially prevails that a terrible calamity may befall them by disregarding those precautions which require to be taken in order to avoid the risk of infection." These remarks are applicable to every disease whose germ is waterborne. The amount of good which their thorough appreciation and practical application might effect is incalculable.

MEDICINE IN THE NEW UNIVERSITY.

The report of the Royal Commission on University Education in London has at length been published, and we give on another page an outline of its provisions so far as they have not previously been given in these pages. We have already remarked upon the general features of the University scheme which the Commission has devised.

While taking the evidence upon which their general proposals were based, the Commission appointed special committees of its members to consider "the courses of study and the appliances in the several Faculties." The reports made by these separate committees, after revision and alteration by the entire Commission, are printed as Part II of the Commission's report, and some will be found of considerable interest. The personality of these various committees is not revealed, and as their reports are expressly stated to have been altered in the general meetings, we have no means of judging how much of their tenour is to be credited to the committees themselves, and how much to the Commission at large. As regards the report on medicine, to whomsoever it is due, we must confess to feeling not a little disappointed with it, especially after comparing it with the far ampler and more suggestive sections devoted to the Faculties of Arts, Science, and Law. A succinct account of the means of medical training available in the metropolis, of the schools in which it is given, of their constitution, financial arrangements, and complex relations with the great system of medical charity in London, would have been of no small value to lay readers, to whom the subject is *terra incognita*, while a comprehensive survey of the requirements of medical education in the present day at the hands of such capable authorities as were included among the Commissioners would have been of equal interest to the profession. For both of these we look in vain, and the report on medicine as printed, which we quoted in full on February 10th (p. 306), can hardly, we think, fail to appear somewhat jejune and incomplete in the position which it occupies.

One-third of the single page which suffices for it is, indeed, occupied by the proposal to "concentrate" systematic teaching which we discussed last week, and upon which Mr. Macnamara further comments to-day. The next paragraph embodies a recommendation which it surely needed neither ghost nor Royal Commission to make, since it has been pressed repeatedly in these columns and elsewhere for many years past, and its desirability has never been questioned: the recommendation, we mean, that the metropolitan lunatic asylums should be made available for clinical study. Had the report discussed the difficulties in the way of doing so, and shown by what power or authority they might be overcome, it would have done a material service; but on these matters the Commissioners are discreetly silent.

Upon this follows a recommendation that "candidates for degrees in medicine should be required to go through the prescribed courses of instruction in admitted or recognised medical schools,"—a recommendation which we should pass over with tacit assent were it not for the unexplained presence of the article "the" in the sentence. Is this merely a slip in drafting, or do the Commissioners intend to express their opinion that the entire course of instruction for a degree in medicine must be pursued in a school? If the latter, the proposal will be regarded by many as a retrograde step, and one likely to render the University degrees of less practical value than the qualifications of the Conjoint Board, which now requires candidates, before presenting themselves for final examination, to have approved themselves in the actual discharge of professional duties, whether in connection with a school or elsewhere.

This exhausts all that the Commissioners find to suggest or remark on with regard to the curriculum, the methods and appliances of medical education. The brief remainder of the report is occupied with the conduct of examinations, and proposes that, as the examinations of the University and those of the other licensing bodies in London must needs run to a great extent on the same lines, they might, in order to "prevent an undue multiplicity of examinations," be so far conducted in common, "a somewhat higher standard of knowledge, more particularly of scientific knowledge" being required for a degree than for a diploma. To this proposal, which differs in some respects from the arrangement made between the existing Senate and the Royal Colleges in 1891, we can see no valid objection, it being understood that the compact between the bodies concerned is both optional and terminable.

We are glad that the Commissioners do not limit this proposal to the Royal Colleges, but include the Apothecaries' Society in its scope. We have already pointed out the special importance of this inclusion. With the words "more particularly of scientific knowledge" we should also

agree if we felt sure that by "scientific" the Commissioners meant only exact and systematised knowledge based on accurate observation. But if by "scientific knowledge" is meant the knowledge acquired in the laboratory as opposed to that gained in the hospital ward, we must venture again to express our dissidence. We fail to see why proficiency in the higher and more difficult parts of the medical curriculum should be regarded as a less important qualification for a university degree than proficiency in the more rudimentary parts. In the eyes of the public a degree in medicine is an index of superior attainments, not in chemistry or biology, or in any other branch alone, but in medicine as a whole; and unless the higher standard exacted be clinical as well as theoretical, the London degree will, without doubt, soon fail of the significance which it ought to possess. This trivial phrase is not the only indication which leads us to fancy that the attractive vision of crowded lecture rooms and well-equipped laboratories, elsewhere dwelt on in the report, had somewhat diverted the Commissioners' eyes from the less showy, but equally important, topics of wards, surgeries, and out-patient rooms. They have duly noted the defective provision which in some places exists for the study of physiology and chemistry, but seemingly have had no eyes for the opposite defect—not altogether unknown in London—of hospitals too small for the number of students they undertake to teach. To this aspect of the subject we propose to return on a future occasion.

Professor Mikulicz, of Breslau, is spoken of as most likely to be chosen to succeed the late Professor Billroth in the Chair of Clinical Surgery at Vienna.

The date of the Croonian Lecture of the Royal Society, to be delivered by Professor Ramón y Cajal, has been altered from March 1st to Thursday, March 8th. The honorary degree of Doctor of Science will be conferred by the University of Cambridge on March 6th.

Owing to the indisposition of Dr. Bristowe, President of the Medical Society, Mr. Arthur E. Durham, Treasurer and Past-President, will take the chair on the occasion of the anniversary dinner of the Society at the Whitehall Rooms, Hôtel Métropole, on Thursday, March 8th.

We are glad to be able to state that Sir William Broadbent, who has been suffering from a sharp attack of influenza complicated by pneumonia, is now convalescent. After feeling unwell for a day or two and working in spite of such illness, he became decidedly ill, with high temperature, on February 16th. On February 19th and 20th his condition was somewhat alarming, but he has since made steady improvement under the care of Dr. W. M. Ord.

The Sanitary Council at Alexandria has decided that vessels arriving from the East or the Red Sea shall be subject to medical inspection at Suez, and, if found in a satisfactory condition, allowed to pass through the Canal without delay. This regulation took effect on February 27th, and is in accordance with the understanding come to at the International Conference at Venice.

The name of Dr. Adolf Meyer, First Assistant in the Clinic of Professor Schönborn at Würzburg, must now be added to the ever lengthening martyrology of medicine. This promising member of the profession died on February 8th of diphtheria contracted from a patient on whom he had performed tracheotomy. The tube was blocked with membrane, and the patient being in danger of suffocation Dr. Meyer sucked the obstructing material out with a glass tube.

We propose to commence in an early number publication of a series of letters on the climate of Tangiers by Mr. Ernest Hart, who is at present spending a short holiday in this the nearest African health resort. Mr. Hart had placed at his disposal, for the purpose of this publication, special facilities both by the French and the English colonies. The members of the British Medical Association at Gibraltar, we learn from a letter from the Rock, propose to entertain Mr. Hart on his way home. This friendly and graceful compliment will, we feel sure, be as satisfactory to the members of the Association as it must be gratifying to the recipient.

TYPHUS FEVER NEAR LIVERPOOL.

Some cases of typhus fever have lately occurred at Tuebrook, a suburb of Liverpool, under the control of the West Derby Local Board. The outbreak is attributed to unusual destitution among workmen employed at the railway coal yards arising in consequence of the coal strike. Some of the cases have been removed to hospital and no further spread of the disease is anticipated.

THE IRISH COLLEGE OF SURGEONS AND THE APOTHECARIES.

At the last meeting of the Council of the Royal College of Surgeons in Ireland a motion proposing to terminate the conjunction between the College and the Society of Apothecaries came up for consideration. It was believed from what was rumoured outside that the motion would be carried. After a long discussion, however, an amendment was adopted by one vote, postponing the matter for six months.

THE MARCUS BECK MEMORIAL FUND.

A sum of £800 has recently been paid over to the Committee of University College Hospital by Mr. Christopher Heath, treasurer of this fund, to endow a bed in memory of the late Mr. Marcus Beck. The fund will shortly be closed, but it is confidently hoped that it will amount to £1,000 at least, and that it may be possible to erect a memorial tablet in one of Mr. Beck's old wards.

FACTORY STATISTICS.

The Committee which is now sitting at the Home Office to report upon factory statistics consists of Mr. Gould (Superintending Inspector of Factories), Mr. J. A. Redgrave (Inspector), Mr. J. G. Legge (Home Office), and Dr. Arthur Whitelegge (Medical Officer to the West Riding County Council). The Committee is charged to inquire as to the use which can be made of the statistics received by the Home Office from Her Majesty's inspectors and from the certifying surgeons, and to advise as to whether any additional formation should be required.

THE CHELSEA HOSPITAL FOR WOMEN.

The Chelsea Vestry seem determined to obtain an investigation into the management of this hospital. At their last meeting Dr. Parkes, the medical officer of health, laid before them various serious allegations contained in statements which had been made to him by persons regarding whose *bona fides* he had no doubt; and a motion was carried in favour of forwarding copies of his report to the Local Government Board and to the Home Secretary. It was also resolved that attention should be drawn to the matter in the House of Commons.

SUNDAY MILK.

"The better the day, the better the deed," would seem to be the motto of Paddington milksellers. Mr. Stokes, the public analyst for the parish, regards it as customary to find one-third of milk samples collected on Sunday to have been manipulated by the aid of the water tap, against one-sixth of week day samples. During the last three months of 1893, of shop samples, 21 per cent. were found to be adulterated in respect of week-day collection, and 40 per cent. of those taken on Sunday; the respective percentages being 6.5 and 27 in the case of itinerant milk vendors. Mr. Stokes has done a public service in thus directing attention to this form of fraudulent Sunday trading.

HEALTH IN THE "HOUSE."

An easy familiarity with microbes seems to be an essential element of social equipment in these days, and sensational rumours, in which the fashionable organism plays a prominent part, are common even out of the "silly season." One of these has lately been hatched at St. Stephens, and gives an alarming picture of the precautions taken to put the House of Commons into sanitary order, and exorcise the infective demon which is supposed to have assumed possession of the air which our legislators must breathe. We are in a position to state, on the best authority, that there is no foundation for these reports, and that what was done during the recess was nothing more nor less than the cleaning up which follows every sederunt, be it long or short. Scrubbing and airing and disinfection are vigorously carried out by Mr. Prim, and his staff make careful search for any flaw in the working of the ventilation and drainage. We understand that complaints are rarely if ever made now, as formerly, of bad smells and depressing atmospheric conditions, that the health of the members of the House continues to be remarkably good, and that a high standard of sanitary efficiency continues to be maintained below as well as above ground.

LIVERPOOL UNIVERSITY COLLEGE.

The Earl of Derby was installed last week as President of the Liverpool University College, in succession to the late Earl, who held that office since the foundation of the College fifteen years ago. While congratulating the College on the remarkable progress it had made and on the high efficiency it had already attained in its teaching staff and in its appliances, the President pointed out the urgent and growing need that exists for the rebuilding of the medical school and for the endowment of chairs of anatomy and pathology. He expressed the hope that the citizens of Liverpool would soon put the medical department on such a basis as to enable the teaching to be carried on in the most efficient manner.

JOHN HUNTER AND ANDREW CLARK.

The annual oration of the Hunterian Society was delivered on the anniversary of the birth of Hunter by Dr. Dundas Grant, who took for his subject "Aspects of Medical Life, John Hunter, Andrew Clark." He drew some interesting parallels between the lives of these two distinguished men—their nationality, length of life, uncertain health, work in the royal services, untiring industry, accuracy in detail, generosity, and death in the midst of their work. Striking contrasts in the way of general culture and courtesy were equally well brought out. Dr. Dundas Grant attributed much of Hunter's greatness to his allowing his original intelligence free play without the trammels of educational tradition, to his habit in youth of observing and studying natural objects instead of reading about them, but in a very large measure also to the teaching and influence of his highly-cultured brother William. Sir Andrew Clark owed much to having received a high general education in surroundings which, though not poor, were certainly far from luxury, but which fostered habits of industry, self-denial, and devotion. In conclusion, Dr. Grant commented on the "dignity of the profession," condemning those who talked about and did nothing to maintain it, and recommended all who really valued it to study the lives and works of such men as John Hunter and Andrew Clark.

MORISON LECTURES ON INSANITY.

The third lecture of this course was given by Dr. Batty Tuke on February 21st, when the changes in the cells of the pre-frontal convolutions in diseased conditions were described as of a granular character, and more probably the result of impaired transformation of energy in the Rolandic area than of active morbid processes in the pre-frontal convolutions. The consequence was general atrophy. The causes of "milky arachnoid" at the vertex, the action of Pacchionian villi, the action of exudates on nerve fibre, Miles's observations on "colloid bodies" and "miliary sclerosis" were in turn discussed. Next the effects of certain poisons on nerve fibres, the functions of cerebro-spinal fluid, and the consequences of interference with its ebb and flow were described. Lastly, the somatic symptoms produced by morbid cerebral hyperæmia, and congestion, the nourishing functions of the brain, the methods of production of degradation of the general system, the errors liable to arise out of etiological classifications were explained.

THE BRITISH MEDICAL ASSOCIATION IN SCOTLAND.

A successful meeting of the Glasgow and West of Scotland Branch was held in the Western Infirmary on February 6th, when interesting communications were made by Dr. McCall Anderson, Professor George Buchanan, Dr. Walker Downie, Dr. Paterson, Drs. Ernest Thompson and W. R. Jack, and Dr. Joseph Coats, some of which we propose to publish in an early number. Dr. Whitelaw, of Kirkintilloch, presided, and this being the annual meeting, the secretaries' and treasurers' reports were submitted, the latter showing a satisfactory balance to the credit of the Branch. Professor McCall Anderson was elected President of the Branch for the ensuing year.

MEMORIAL TO JOHN HUNTER AT ST. GEORGE'S.

Mr. Alfred Gilbert, R.A., has undertaken to prepare the memorial to be erected in St. George's Hospital, to perpetuate the memory of the connection of John Hunter with the institution. The subscribers to the fund, who at a numerously attended meeting presided over by the Earl of Cork and Orrery, K.P., unanimously approved the action of the Executive Committee of the fund, may be congratulated on having enlisted the sympathy and co-operation of a sculptor so eminently fitted for the task. Mr. Gilbert proposes to execute a large bust, probably in bronze, with hands, placed on a suitable pedestal. Hitherto scant justice has been done to John Hunter in sculpture, and the rendering of an artist so original in his treatment as Mr. Gilbert, cannot fail to be of the highest interest. It is proposed that the bust shall be placed, tentatively, at least, in the central hall of the hospital. We are informed that a sum of about £20 is still required, and with so admirable a prospect of a worthy monument to the great pathologist and surgeon, there ought to be no difficulty in raising the amount.

CHARGES AGAINST THE ABERDEEN CITY HOSPITAL MANAGEMENT.

Our Aberdeen Correspondent writes: As was fully expected in medical circles, the Aberdeen Town Council disposed of the charges against the management of the hospital by Professor Matthew Hay, exonerating him completely in every point. The charges, which seemed to be formulated by a body of more or less irresponsible individuals who constitute a sort of vigilance committee, were for the most part frivolous in their nature—for example, the removal of patients by circuitous routes to the hospital;

questions regarding the death of a patient from convulsions after admittance; the absence of Professor Hay—after leave had been granted—at the trial of Monson; and the delegation of his duties during his absence to his assistant. It is difficult to understand what motive induced the individuals to prefer such charges beyond the itch for popularity in a certain section of the public, which is too often ready to make reckless allegations from mere ill-nature. And the subcommittee of the Town Council rendered a service in carefully and fully sifting each charge, and finding each groundless. The following motion was proposed and carried by a very large majority: "In laying this report before the Town Council, the Committee considers it only right to express its sense of the zeal and ability displayed by Dr. Hay in the discharge of his duties, and to record its satisfaction with the manner in which the City Hospital is conducted and managed. It further desires to express its regret that such allegations should have been formulated without proper inquiry having previously been made into the circumstances of each particular case." The finding of the Committee has given the greatest satisfaction, and Dr. Hay hardly needs to be congratulated that he has maintained the confidence which his conduct has ever inspired in all sections of the public where rectitude and devotion are appreciated.

THE APPOINTMENT OF HOUSE-SURGEONS.

We have received an article from the *Bedfordshire Times* of February 17th reporting a meeting of the governors of the Bedford General Infirmary, to discuss a proposal for the alteration in the method of election of the paid officers of the institution. Hitherto these officers have been elected by the general body of governors, with the result, as we are informed, that, out of the five last house-surgeons, four have been local candidates. The alteration proposed is to put the election into the hands of the Committee of Management, which consists of eighteen governors and the medical staff, consisting of two physicians, two surgeons, and two consulting surgeons. We are surprised, however, to see that an alteration so obviously for the better has met with some opposition, on the very poor pretext that it would increase the influence of the medical staff and deprive the governors *pro tanto* of some of their "privileges"—surely a very feeble contention! The medical staff, even if they all attend and are unanimous, constitute only a quarter of the whole committee. The regulation, if we understand aright, applies only to the house-surgeons and to the matron, and it is only in respect to the former that the medical staff can possibly have any views different from those of the lay governors. But, if there be any such difference, are not the medical staff almost sure to be in the right? They have the professional knowledge which the others do not possess, and they have a keen interest in the selection of an officer on whose industry and efficiency they depend for so much of the success of their practice and of their own comfort in the discharge of their duties, to say nothing of the interests of their patients; besides which the lay governors can always make them give their reasons for preferring one candidate to another, and are in a sufficient majority to render any personal intrigue impossible. The method of election is one which prevails at a very large majority of similar institutions, and we trust that no silly class jealousy will prevent its introduction at Bedford. The only "privilege" which a governor ought to look for is the privilege of doing the most he can for the interests of the patients.

A VETERINARY COLLEGE IN DUBLIN.

Mr. John Morley, replying to the application of a deputation which last month urged that the Government should aid in the establishment of a veterinary college in Dublin, has written to Dr. C. J. Nixon stating that Parliament will be asked for a sum of £15,000 as a grant in aid. It does seem strange that a country like Ireland, producing so large a number of horses, horned stock, and sheep should have been so long without a college of this kind. But the undertaking is a much larger one than the promoters appear to think. It goes without saying that the grant proposed would be entirely insufficient to build a college and a hospital, and to pay the large staff of teachers which would be necessary. Where the rest of the money is to come from is not clear. We have looked at the scheme which has been drawn up for the establishment of this college. It does not appear to be the work of one very friendly to the veterinary practitioners. One of the sources of income will be from "subscribers' fees." For a sum of two guineas any person can have an unlimited number of animals admitted to the hospital at the cost of their keep; have the opinion of one of the professors without fee regarding the condition of any diseased animal; and have five animals examined as to soundness. There would doubtless be many subscribers on these conditions, but what is to become of the unfortunate practitioner outside? He will have little to do in Dublin at least. This part of the scheme is certainly crude and unfair, and it has helped to provoke the hostility of veterinary surgeons generally to the whole of the proposals. We should like to know how the medical men who were on this deputation would receive like proposals regarding their own hospitals and schools. It is a pity that the veterinary practitioners do not appear to have been taken into confidence in this matter. The object is undoubtedly a good one, and we shall be glad to see it attained, but with the co-operation of those who in a professional sense are best qualified to speak.

THE DEFENCE OF RORKE'S DRIFT.

A valued correspondent has suggested that our recent remarks on Mr. Rider Haggard's account of the defence of Rorke's Drift might have been further emphasised by reference to the honours Surgeon-Major Reynolds received at the hands of his own profession during the year 1879. He was awarded the gold medal of the British Medical Association, under the following resolution of the Committee of Council, dated July 9th, 1879: "That in consideration of the extraordinary professional services rendered at Rorke's Drift, Zululand, South Africa, on January 22nd and 23rd, 1879, in his constant attention to the wounded under fire, in consideration of his eminent bravery in voluntarily conveying ammunition across an open space under a heavy cross fire, and also of the remarkable intelligence, coolness, and tact evinced under circumstances of great danger, the gold medal of the British Medical Association for distinguished merit be, and hereby is, awarded to him." The medal was presented at the annual meeting held at Cork on August 7th, 1879. During the same year Surgeon-Major Reynolds was also made LL.D. (*honoris causâ*) of the University of Dublin, and presented with a mounted revolver by his friends of Trinity College; he was also entertained at several public dinners and received numerous congratulatory addresses. Indeed, the name of Reynolds was at the time quite as prominently before the public, both military and civil, as that of any officer engaged in the memorable defence. All this makes the omission of his name from what purports to be a "true tale" of the fight, written in 1893, the more inexplicable and, we fear, inexcusable. If Messrs. Haggard and Lang can hardly plead ignorance, then what is the explanation of the omission?

THE FACULTY OF PHYSICIANS AND SURGEONS, GLASGOW.

Last week the Faculty of Physicians and Surgeons of Glasgow took a step which other medical corporations might follow with advantage by bringing together within its walls, in a social capacity, the profession of Glasgow and the West of Scotland. A professional *conversazione* the gathering was called, and the hosts were the Council of the Faculty. Some 500 guests responded to the invitation and were received by the President (Dr. Yellowlees) and the members

of Council. The President welcomed his guests in a vigorous little speech, in which he spoke of the Faculty as the meeting ground and rallying point of the general practitioners—the men whose links with their *Alma Mater* have grown weak through time or distance, and who need such an institution to keep alive both their scientific tastes and their professional friendships. Besides the ordinary accompaniments of a *conversazione*—a buffet and a band—which may quicken friendship, but are not obviously scientific, there were provided in the library, reading, and adjoining rooms a series of demonstrations and exhibits, arranged and set forth with great skill and thoroughness. Dr. Coats gave, with the projection microscope a demonstration of the pathology of the skin and spinal cord. A lantern demonstration of the bacteriology of diphtheria was given by Dr. Glaister. Mr. James Thomson had a beautiful exhibit of corals, which he also demonstrated with the lantern. A magnificent array of microscopes, arranged by Drs. Coats, Lindsay Steven, and Workman, illustrated minute organisms; the Brumsviga calculating machine was shown in action; surgical instruments were exhibited by Messrs. Down Bros. and Ash and Sons, and pharmaceutical products and preparations by Mr. John McMillan; while old books, manuscripts, engravings, coins, and jewels added variety and interest. A specially interesting feature was Dr. John Macintyre's exhibition of a number of new electrical instruments and micro-phonographic records. He demonstrated a number of cough sounds and varieties of hoarseness due to different pathological conditions. He also gave instructive demonstrations of the use of the microphone for medical purposes. In the whole history of the Faculty, which embraces a term of 300 years, no such gathering has been held.

THE BRITISH INSTITUTE OF PREVENTIVE MEDICINE.

Sir Joseph Lister and the Council of the British Institute for Preventive Medicine are to be congratulated on the success which has been attending their efforts to establish in London an institute similar to the hygienic institutes in most large continental towns. The task of raising a sum sufficient to build such an establishment appeared to be a hopeless one, but an impetus was given to the work when the trustees of the late Mr. Berridge promised a sum of £20,000 provided £40,000 were raised from other sources for land and buildings. Thanks to the liberality of the late Earl of Derby, the Duke of Westminster, the Duke of Devonshire, Mr. L. Mond and many others, the requisite sum was obtained. The Grocers' Company showed their usual appreciation of scientific work by subscribing £10,000 to the funds of the institute. The Duke of Westminster was then approached with regard to a site, and gave further help by granting nearly an acre of land on the Chelsea Embankment at a price below its actual value. This situation, easily accessible from all parts of London, is an excellent one, as all the laboratories will look due north. Lastly, Dr. Armand Ruffer has been appointed a director for a period of three years, and Professor Macfadyen lecturer on bacteriology; Mr. Alfred Waterhouse, R.A., has been appointed architect. At the request of the Council, Dr. Ruffer retains his post as honorary secretary, which he has held since the project was first mooted. It was not to be supposed that the antivivisectionist agitators would remain silent. The occasion was too good a one to be lost; therefore, as soon as they heard that a site had been obtained, the inhabitants of Chelsea were saturated with the usual vituperative circulars. The champions of the antivivisection cause came to the fore, and the Chelsea press gave room to these "communications." In spite of the efforts of the antivivisectionists the Chelsea public remained indifferent when an effort was made by the Rev. Mr. Haweis, one of the Vice-Presidents of the Victoria Street Society, to galvanise the agitation into life by a circular letter, which is a repetition of the old false charge that medical men are propagators of disease. The Rev. Mr. Haweis, however, adds certain statements of his own which are absolutely erroneous. The purport of Mr. Haweis's letter is that the institute will be a place for inoculating dogs with hydrophobia and that the flies of the neighbourhood will carry this disease to the inhabitants around. The whole letter is couched in a peculiar phraseology which we need not reproduce here. It is a scandal that a person in Mr. Haweis's position should have made such statements without first ascertaining whether they were true or not. On looking at the official documents issued by the British Institute of Preventive Medicine we find it stated that it is not contemplated to inoculate for hydrophobia at all, as there is every facility for sending patients to Paris. Moreover, the document says "it is hoped that rabies, being a contagious disease, the country will soon be persuaded that the occurrence of such an affection propagated chiefly by contagion, is a disgrace to civilisation and that practical applications of preventive measures applied to dogs will stamp out this affection for ever." Even were the application of M. Pasteur's treatment contemplated Mr. Haweis might have ascertained that dogs would be the last animals in the world which would be used for the production of the virus. With regard to the propagation of hydrophobia by flies, we challenge Mr. Haweis to name a single case where this has been effected. If Mr. Haweis had taken the trouble to read up the subject before writing about it he would have known that the transmission of disease by flies is among the rarest of medical curiosities and that such an incident can occur only when the bodies of animals are allowed to putrefy in the open air. Mr. Haweis might also have been aware that in an institute like the one contemplated the avoidance of all possible sources of contamination is imperative, and on the lowest grounds the workers in the laboratory would be most anxious to enforce such cleanliness, as they would be the first to suffer were any precautions to be neglected.

POISONING BY CARBONIC OXIDE.

The death of two boys from the fumes of burning coke, which took place last week at Ashdown, draws attention afresh to the dangerous nature of the gases produced whenever carbon in any form is burned with deficient access of air. Carbon monoxide, the gas produced under such circumstances, is a deadly poison, and differs *in toto* from carbonic acid, which, except in considerable proportions, is practically harmless. A very small dose of carbon monoxide causes unconsciousness and rapid death. Deaths from the use of portable slow combustion stoves are common enough in Paris, and no better imitation of these lethal arrangements could well be devised than the iron bucket filled with red-hot coke by which these unfortunate boys were killed. It is worth bearing in mind, in regard to the various methods of banking up fires for the night, that if the transit of air through the fuel is over-much retarded, carbon monoxide is formed, and unless the chimney draught is very good is apt to permeate the chamber. The amount of this gas required to produce evil effects is so small that even an open window is no sufficient safeguard. A small bright fire, well surrounded with brickwork, and made to burn from the surface with free access of air, as in the Teale or Abbotsford grates, will keep in many hours and can do no harm, whereas a large fire, made to burn slowly and dully by admixture with ashes, etc., by which the passage of the air is retarded, is always risky, and if the chimney fails is dangerous.

"FOUNDER'S DAY" AT MASON COLLEGE.

"Founder's Day" of Mason College, Birmingham, was celebrated on February 23rd by a dinner, at which Lord Kelvin presided. Among those present were the Mayor of Birmingham (Alderman Johnson); the Rev. Dr. Percival, Head Master of Rugby; Mr. Oliver Pemberton, President of the Council; Mr. R. Chamberlain; Professor R. S. Heath, Prin-

cipal; Professor Bertram Windle, Dean of the Medical Faculty; Professor Barling, Sub-Dean; Professors Allen, Bostock Hill, Saundby, Tilden, Withers, and many others. After the usual loyal toasts the Chairman proposed "The College" in an eloquent speech. He said they had met to celebrate the 99th anniversary of the birth of Sir Josiah Mason. It was a happy idea that the germ of a university should be founded in Birmingham, and it would be interesting to the citizens to know that it was their present mayor who suggested to the founder the idea of establishing a college on university lines. The fourteen or fifteen years of successful efficiency of Mason College had shown how well it had carried out the object of its founder. The Medical School of Queen's College, incorporated with Mason College only two or three years ago, had been a great success, and was destined to greater success if they could make it more powerful. The case was very strong for a Midland University—the University of Birmingham or the Midland University of England. Lord Kelvin went on to say that he thought the citizens of Birmingham might take more advantage of the College than they did. Instead of the present number of students, considerable as it was, there ought to be at least 2,000. Where could they learn science better? Where could they learn the elements of the subjects taught in the Arts classes better than in that College? The toast was acknowledged by Professor Heath and Professor Windle. Speeches were also made by Mr. R. Chamberlain, the Mayor, Professor Tilden, the Rev. Dr. Percival, and Mr. Oliver Pemberton.

PARISH AND DISTRICT COUNCILS.

We have received numerous letters on the point raised by "Rusticus" as to the disqualification of Poor-law medical officers as members of parish and district councils, on the ground that they hold office for profit under a board of guardians. The provisions of the Bill on this subject are as follows: A person will be disqualified for being elected or being a member or chairman of a council of a parish or of a district other than a borough, or of a board of guardians if he holds any paid office under the parish council or district council or board of guardians as the case may be. We have reason to believe that the view of this provision taken by Mr. Fowler and Sir Walter Foster, who are in charge of the Bill in the Commons, is that a person will be disqualified for being a guardian on any board of guardians under which he holds a paid office; the Bill expressly provides that a person disqualified for being a guardian shall also be disqualified for being a rural district councillor, but the holding of a paid office under a board of guardians or a rural district council will not disqualify for election as a parish councillor or an urban district councillor.

THE PARIS SANITARY CONFERENCE.

There is reason to fear that the proceedings of the International Sanitary Conference now sitting in Paris are not working quite so smoothly as was hoped might be the case. The main aim of the Conference was to consider the question of pilgrimages to Mecca in relation to the spread of cholera. The subject was presented to the Conference under the four following heads: (1) The superintendence and inspection of vessels, conveying pilgrims, at the points of departure; (2) the medical inspection of such vessels after entering the Red Sea at the lazaretto of Camaran, and the improvement and extension of the sanitary station there; (3) a more rigorous inspection of pilgrims returning from the holy sites, and of the vessels conveying them home; and, lastly (4), the designing of measures for the defence of the ports, especially those on the Persian Gulf. The question of the regulation of Red Sea traffic, with special reference to vessels conveying pilgrims from India, was referred to a Committee of the Conference. The questions connected with the Persian Gulf traffic were also referred to a Committee; the report of this Committee, drawn up by M. Jacobyloff, one of the Russian delegates, was presented to a plenary sitting of the Conference on February 28th. We understand that the proposal to regulate the pilgrim traffic after landing at Jedda, and the sanitation of the holy places, has encountered strong opposition from the Ottoman delegates. The vast importance of this question was fully brought out in the address on "The Nurseries of Cholera," published in the last two numbers of the British Medical Journal, and we believe that the views there advanced were the foundation of the propositions formally submitted by the French Government, and have had the support of the British delegates. It is understood that the obstructive tactics of the Ottoman delegates has received unexpected support from the attitude of the delegates of the United States, who have shown themselves obstinate supporters of the most retrograde proposals for enforcing quarantine restrictions of the most obsolete kind. This course of action is attributed to the anxiety of the United States to obtain some sort of international sanction to the imposition of stringent restrictions against immigration into the United States.

THE SALE OF POISONS FROM A CHEMIST'S POINT OF VIEW.

The *Pall Mall Gazette* has another article on this subject, professedly written by a chemist, and it shows a somewhat better acquaintance with the existing law relating to the sale of poisons than the previous article did. The gist of the article is contained in the opening sentence, that "the ease and facility with which certain poisons may be purchased is a matter which calls for the careful consideration of those who have the care of the public safety." And who are they but the chemists who are constituted by the Pharmacy Act the custodians of public safety in regard to poisons? They are made by that Act the sole lawful vendors of the articles deemed to be poisons within its meaning. They are entrusted with the power of regulating the keeping, dispensing, and sale of these articles, and yet the majority of them have refused to exercise that power. Through the Pharmaceutical Society they have also the power to add to the poison schedule other articles of a poisonous nature, but that power, also, has been but little exercised. On the other hand, we find evidence of sales of poison by chemists which are reckless, and, if they are not actually illegal, reflect discredit upon the whole body. The existing law, if adequately observed by chemists and enforced as it should be, would amply suffice for the protection of the public, and also for the protection of chemists' interests. It is in this direction that there is urgent need for improvement in the exercise of the powers conferred upon chemists, so as to justify the privileged position in which they have been placed.

PASTEURISM IN RUSSIA.

Dr. Goldenbach, chief physician to the Alexander the Third Hospital at Moscow, to which a Pasteur Institute is attached, reports that the number of persons treated there during 1892 was 907—613 males, 294 females. Of these, 178 were bitten by animals proved experimentally to have been rabid; 439 by animals proved to have been rabid by the results of *post-mortem* examination or by veterinary observations; and 290 in which the existence of rabies was made probable by the circumstances of the bite. The animal which inflicted the injury was in 769 cases a dog, in 45 a wolf, in 70 a cat, in 11 a horse, in 8 a cow, and in 2 a pig; in 2 cases the biter was a human being. Of the 907 patients, 6 died, giving a mortality of 0.66 per cent.; 6 cases in which death occurred before the completion of the treatment and 12 in which treatment was prematurely discontinued are not included. One patient in the latter of these groups has since died.

THE ROYAL COMMISSION ON UNIVERSITY EDUCATION IN LONDON.

The Report of the Commissioners Appointed to Consider the Draft Charter for the Proposed Gresham University in London,[1] which was presented to both Houses of Parliament some little time ago, has now been published, and can be obtained from the Queen's printers, or through any publisher, price 6d. The delay which has taken place in the publication of this report appears to be somewhat inexplicable. We have already published the main provisions of the report as they affected the medical schools and medical education in London.[2]

One University.—The report, after a brief preliminary statement as to the documents referred to the Commission, proceeds to give a retrospect of the recent history of the movement for the reconstitution of the University of London. The Commissioners then proceed to state that the large majority of their number were in favour of one university only in London to be established through the reconstruction of the existing university, so that it might be able to carry out the work properly required of a teaching university for London without interfering with those important duties which it has hitherto performed as an examining body for students presenting themselves from all parts of the British Empire. The Commissioners, as already stated, recommend that the reconstitution should be carried out through a Commission with statutory powers appointed by legislative authority.

Internal and External Examinations.—The next section of the report deals with the questions relating to concurrent internal and external examinations, and it is pointed out that in the University of Dublin a system of examinations for degrees in arts and science has long prevailed which is open to external students as well as to those who have attended courses of instruction in the University.

The Scope and Teaching Bodies of the New University.—Then follow two long sections on the enlarged scope of the University, and of the relation of the University to teaching institutions. It is hoped that the schools of the University will under this arrangement form organic parts of the University, and that the institutions which, in whole or in part, are admitted as schools, "while in other respects retaining their autonomy, will thus be brought into close and intimate relations with the central body, and will form natural centres of university teaching and development."

Endowment of Research.—Under this section, and under that on "additional facilities for research," which follows immediately, the Commissioners clearly contemplate the extension, either by means of private endowment or public moneys, of facilities for higher education. If, however, it is added, "the University is to become a teaching university in a sense worthy of its metropolitan seat, it is evident that its means for providing teaching and opportunities for research must be greatly increased; and we believe that no mere supplement to the resources of existing institutions will adequately meet the requirements of modern science. . . . We do not wish to dilate on the very large sums of money spent in Germany and other countries in order to keep abreast of the great scientific movements of the present day; but we think it our duty to state that for the condition of things in London, as compared with the facilities given, for instance, by so small a state as Zurich, no excuse can be found. We see no way in which the existing defects can be supplied except by establishing special institutions."

University Professorships.—The report proceeds to point out that the University of London, which was for many years supported by the State, is now able to pay its way, and the Commissioners express the very reasonable hope that should the University be reconstituted on a teaching basis, the support given to it from the public funds may be largely increased. They recommend that any institutions which may be established for the purposes of research should be open to the teachers in the University, and to other persons qualified to carry out investigations. They favour the creation of University chairs, leaving the question whether they should be independent of the teaching institutions or not to be determined by the University.

Schools and Teachers.—The next two sections deal with the institutions to be admitted as schools, a list of which was published in the British Medical Journal of February 10th, and with the outline of the constitution of the University. Under the heading "The Position of Teachers in the University" the report, after stating that the teachers of the University who would constitute the faculties would consist of two classes—professors, readers, and lecturers appointed by the University, and recognised teachers of the various university schools—proceeds to consider that part of the scheme of the Association for Promoting Professorial University for London. The Commissioners consider that the strong distinction made in this scheme between university professors and other university teachers cannot be sustained. They accept, however, the view that a select body of teachers should be formed to which (with some reservations) executive powers should, subject to the ordinances of the University, be entrusted. It was the adoption of this view which led the Commissioners to recommend the formation of the Academic Council, which they intend to be a body capable of acting with power, facility, and speed, and possessing the greatest possible flexibility and freedom of spontaneous action without the need of working on every occasion through boards and committees. It is with this object in view that the number of its members was limited.

The Academic Council and the Boards of Studies.—In the next section of the report it is expressly stated that the Boards of Studies should not possess any administrative or executive functions, except such as may be expressly delegated to them by the Senate or the Academic Council. The functions of a Board of Studies would, in fact, be limited to reporting to the Academic Council either upon matters referred to it by the Council or Senate, or *proprio motu*. "Speaking generally, therefore, and apart from their representation on the supreme governing body of the University, the organ through which the teachers of the University will exercise their influence will be the Academic Council with its group of consultative Boards."

Individual Teachers and the Faculties.—The Faculties, however, which would comprise all the teachers, would have power to elect a Dean, who would summon a meeting of the Faculty when directed to do so by the Academic Council, on a requisition to do so by one-third of the members of the Faculty, or upon his own motion. This is designed in order that no teacher may be deprived of the right to a hearing upon any subject that lies within the province of his Faculty. A meeting of the Faculty would be empowered to consider, either by itself or by the delegation to a board of studies, any matters concerning courses of study, examinations, degrees, diplomas, certificates, and teaching in subjects within the province of the Faculty, and to report thereon to the Academic Council.

The New University and the Corporations: The Senate: Convocation.—The next section of the report deals with the relation of the University to existing public bodies. The recommendations of the report, so far as they affect the medical corporation, have already been stated in the British Medical Journal. The constitution of the Senate is next discussed, and in the fourteenth section we find observations on the arrangement for examinations and degrees: and here, again, all those parts which affect medical interests have been published in the Journal already. Part I of the report terminates with a section dealing with the constitution, and the very limited powers of Convocation.

Science Teaching and Research.—Part II of the report contains six sections devoted to the special requirements of art, science, medicine, law, theology, and music respectively. The section dealing with medicine has already been published in the Journal: that on science contains much interesting matter, but the Commissioners in the recommendation which they have ventured to make have been hampered by the knowledge that the fund at the disposal of the University, for some time to come at least, will be inadequate to cover the whole field as it ought to be covered, and as it is covered by "the Johns Hopkins University at Baltimore, and the great

[1] Eyre and Spottiswoode, East Harding Street, Fleet Street, E.C., and and Westminster, S.W.; John Menzies and Co., 12, Hanover Street, Edinburgh, and 90, West Nile Street, Glasgow; or Hodges, Figgis, and Co., Limited, 104, Grafton Street, Dublin.

[2] British Medical Journal, February 10th, p. 305, *et seq.*

institutions for higher education in science at Paris, and by some of the universities of Germany and Switzerland." In an interesting footnote some particulars are given of the sums expended in connection with instruction and research in the Universities of Zurich and Strassburg. The population of the canton of Zurich is 237,000: the expenditure of the University for instruction is £9,776, for research £3,400. The total cost of the reconstruction and equipment of the University of Strassburg was £711,000, and the annual expenditure is £50,607. As regards pathology, the Commission observe that the two Royal Colleges have provided an excellent laboratory for pathological investigations on the Victoria Embankment, and that there is a prospect that space may be made there for a laboratory of pathological chemistry. "At King's College much attention is paid to physiological chemistry, but no endowment exists for it there or elsewhere. For the study of chemistry applied to pharmacology there is an admirable small laboratory at the Pharmaceutical Society, where, in addition to educational work, much valuable research has been done. It suffers much from want of funds, and requires extension so as to provide for work which cannot for want of space be carried out. The Garden at Chelsea would also be valuable for the study of pharmacology, in connection with which it was originally founded." Initial steps, it is added, have been taken with regard to chemistry as applied to hygiene and sanitary science: a sum of money has been received by University College which will be available for instruction in hygiene, and the Institute of Preventive Medicine may also provide for instruction in certain departments of the subject.

Summary.—The third part of the report consists of the summary of recommendation and the suggestions with respect to the proposed Statutory Commission which have already been published.

NOTES.

Religious Tests.—The dissentient and other notes occupy eight pages. The first note, which is signed by five Commissioners, objects to the University being fettered by a proviso "forbidding the grant of money for any purpose in respect of which any privilege is granted or disability imposed on account of religious belief." The matter is put into a nutshell by Canon Browne, who writes, "If and so far as the report is interpreted as going beyond the principle of the Universities Tests Acts, I join in the above note."

Endowment of Chairs.—Lord Reay's note is far from being dissentient; its main argument is that since the Academic Council will inevitably determine the character of the University, it is "essential that the Academic Council should be representative of the highest development of English learning and science. In order to attain this result the University and the admitted institutions must have sufficient funds to enable them to offer a remuneration which will attract and retain teachers whose appointment or recognition will do honour to the University."

Objections to a Single University.—The notes appended by Bishop Barry and Professor Sidgwick are distinctly dissentient—indeed, Professor Sidgwick begins his note in the following uncompromising manner: "Although I have signed this report, I am decidedly opposed to the fundamental principle on which it is framed—namely, the principle of combining the ordinary work of a university with the function, now performed by the so-called University of London, of impartially examining students from all parts of the United Kingdom, and awarding degrees and honours on the results of such examination." Bishop Barry's main objection is of the same nature, but as both have signed the report we may presume that they agree that the experiment should be tried. The note by Mr. Anstie, Q.C., takes an entirely opposite view, and states that in his judgment that part of the report which deals with the question of examination "materially over-estimates the difficulties connected with the conduct of the same body of the examination and graduation of internal and external students."

THE experiments with the Hermite system of electrical treatment of sewage were commenced at Worthing on February 26th, under the direction of M. Hermite. The Mayor of Worthing proposes to invite representatives of a large number of municipalities to witness the experiments.

ESSAYS ON STATE MEDICINE.

UNDER this title it is proposed to reprint from time to time, and publish in separate volumes of convenient size, essays on various social questions of the day, affecting the welfare of the people at large and of the medical profession in its relation to the State, which appear in the BRITISH MEDICAL JOURNAL. These essays are prepared with the greatest care, and are as a rule founded upon information specially furnished by expert correspondents all over the country, and placed freely at the disposal of Mr. Ernest Hart as Chairman of the Parliamentary Bills Committee of the Association. The circumstance of their periodical publication in various numbers of the BRITISH MEDICAL JOURNAL has rendered them somewhat inconvenient for reference, and has sometimes prevented them from reaching many who, although not members of the medical profession, are yet, as members of county or city councils, or of sanitary authorities, deeply interested in certain aspects of the questions discussed.

The first volume,[1] which has just been issued, contains three parts, dealing with compulsory vaccination and small-pox in relation to vaccination. The first part is introductory, and deals with some recent aspects of the subject, touching especially upon such points as the need for compulsory revaccination, the comparative protective merits of good as compared with imperfect vaccination, the alleged evil results attending vaccination, the decline of small-pox since vaccination, and especially since compulsory vaccination, the administration of the existing law, and concludes with a series of recommendations.

The second part of this volume is a reprint of an essay on Vaccination Penalties: the Principle of Compulsion in Vaccination, prepared in 1880, at the time when Mr. Dodson, then President of the Local Government Board, had introduced his Bill to amend the Vaccination Act. This essay reviewed the whole question down to the date of its issue, and its arguments are completed and extended in the essay which forms the third part of the present volume. This is entitled Small-pox in Relation to Vaccination and the Cost of Small-pox Epidemics. It was printed in the BRITISH MEDICAL JOURNAL of May 20th, 1893, and is founded upon returns received from medical officers of health whose sanitary districts were known to have been invaded by small-pox in 1892 to any great extent. These returns, which were willingly rendered to Mr. Ernest Hart by the officers of thirty-two districts concerned, gave statistics as to the total number of cases of the disease coming to their knowledge and the deaths therefrom registered during the year. The statistics indicated the distribution of the disease and deaths among persons vaccinated, unvaccinated, not known to have been vaccinated, and those who had been revaccinated. The result of the study and analysis of these statistics affords striking evidence of the efficacy of vaccination and revaccination, and we trust that they may have a wide circulation, not only among members of the medical profession, whose opionion upon these points is so frequently sought, but also among members of the local authorities responsible for the administration of the Vaccination Acts.

To these gentlemen also the concluding portion of this essay, which deals with the cost of small-pox epidemics, will be most interesting and instructive. There can be little doubt that the estimated cost in most instances largely understates the actual sum expended, but even as they stand the figures afford eloquent evidence of the serious pecuniary burden laid upon the ratepayers by the unreasoning and unreasonable crusade conducted by the antivaccinators.

Two other essays are now in the press, and will be issued shortly, bound together in one volume. The first of these deals with the working of the Infectious Disease (Notification) Act. It is founded upon statistical data as to the notified cases, and registered deaths from each notifiable disease, and the amount of fees paid during the year 1892. On March 31st, 1892, the Act of 1879 was in force in 1,051 sanitary districts and in London, and 50 towns had a system

[1] *Reprints from the* BRITISH MEDICAL JOURNAL. *Essays on State Medicine.* I. Compulsory Vaccination and Small-pox in Relation to Vaccination and the Cost of Small-pox Epidemics. By Ernest Hart, D.C.L., Chairman of the Parliamentary Bills Committee of the British Medical Association, and Editor of the BRITISH MEDICAL JOURNAL. London: British Medical Association, 429, Strand. 1894. (Demy 8vo, pp. 48 with Table, 2s.)

of notification under local Acts. The aggregate population in England and Wales thus placed under compulsory notification was very nearly 83 per cent. of the total population.

It is shown that the Act has worked smoothly, but several amendments are advised, especially the statutory enforcement of universal compulsory notification. It is pointed out that the figures with regard to diphtheria show that medical science is still only on the fringe of knowledge in relation to this malady, and that much still remains to be learnt before measures for its prevention can be effectually applied. Allegations as to concealment of cases of this disease and of scarlet fever in rural districts merit serious attention. There is evidence, also, that many cases of puerperal fever and erysipelas go unrecorded.

The second essay in the volume which is about to be issued deals with the demand made on behalf of certain port sanitary authorities for State aid towards expenses incurred in connection with threatened cholera epidemics, a subject to which we shall probably have occasion to recur.

INTERNATIONAL MEDICAL CONGRESS.

The South-Eastern, and London, Chatham and Dover Railway Companies have agreed to issue tickets to "guests" of members proceeding to the International Medical Congress at Rome at the same rates as to members themselves.

The Secretary to the English Committee (Mr. G. H. Makins, 47, Charles Street, Berkeley Square, W.), issues passes, etc., only to members of the medical profession and their relatives. Persons wishing to join the Congress under Statute 17 as being interested in one of the sections, must apply direct to "The Secretary-General, XI International Medical Congress, Rome."

The Secretary-General (Professor Maragliano) has forwarded documents for identification on the journey to all enrolled members. Any persons who have by mistake not yet received the above documents, should apply for passes, instructions, etc., to the Secretary of the English Committee. Full particulars as to the documents required, and as to the general arrangements of the Congress, were published in the British Medical Journal of February 24th.

We are requested to state that the South-Eastern Railway Company, in conjunction with the French and Italian Railways concerned, will issue to members of the Congress and their families, special through return tickets to Rome from Charing Cross and Cannon Street stations at practically a single fare; the tickets will be available for the return journey up to May 10th, and will be issued to each traveller only on presentation of his or her personal letter of invitation. These tickets will be available either *viâ* Boulogne or Calais, Paris, and Modane or Vintimille.

THE LONDON COUNTY COUNCIL AND THE WATER SUPPLY.

The Water Committee of the County Council has issued a memorandum by its Chairman and a series of reports by the principal officers of the Council on the report of the Royal Commission on Metropolitan Water Supply.

The Want of Finality in the Commission's Recommendations.

Mr. Bassett Hopkins, in his memorandum, insists strongly on the narrowness of the scope of the inquiry by the Royal Commission, and points out that mischievous consequences may follow, and the Council may be grievously hampered in its action if people accept the idea that the report was the result of an all-embracing investigation of the general subject. The real question which is of most interest to Londoners is what is the best course for London to pursue under the circumstances? But this never entered into the reference to the Commission, and in considering their report it has constantly to be borne in mind that whatever they say in support of the prospective sufficiency (for forty years only) of the watersheds of the Thames and Lee has no bearing on the real question whether new gathering grounds ought not to be sought for outside that area altogether.

Considerable stress is laid on the shortness of the term of forty years to which the Commission have limited their forecast. The capacity of the Thames and Lee watersheds as sources of supply may be expected to have reached, or nearly reached, their limit about the year 1931, and then it will be impossible any further to delay turning to some outside source. By that time, however, the best gathering grounds in the country, which "are already being rapidly taken possession of by other municipalities," may be lost to us. In regard to this one has to bear in mind the long time which is required for the execution of the vast works necessary in large water schemes, and Mr. Binnie, the Council's chief engineer, says plainly that the people of London "will, at some not very distant date (probably twenty years hence) have to contemplate the exhaustion of the supplies which can be obtained in the Thames Valley," and the necessity of looking elsewhere for an increased supply.

"One of the greatest blots upon the finding of the Royal Commission" is that "it can in no way be considered a final settlement of the case." This limitation of forecast to forty years is all the more curious in view of the fact that two members of the Royal Commission, giving evidence before the House of Lords on the Birmingham water scheme, gave much longer periods as the time for which estimates should be made, Mr. G. H. Hill stating that provision for a large town should be for a period of not less than fifty years, and Mr. James Mansergh, the engineer to the scheme, indicating that he calculated his supply for some sixty-four years, and on that basis laid out the works which the Corporation of Birmingham are now carrying out.

The Effect of Dry Seasons.

Mr. Binnie shows in a striking way the difference between averages and actualities in regard to the flow of water down a river bed. The Royal Commissioners contemplate taking 300 million gallons from the Thames daily, trusting to the fact that the average daily flow at Teddington weir is about 1,350 million gallons; but Mr. Binnie shows that during certain dry months the total average flow would often only slightly exceed the amount of water required by the companies, and in such a case as that of September last year the total flow would not come up to the requirements. If the extreme minimum flow per twenty-four hours is taken, the difficulty of providing a supply both for the river and the metropolis is still more apparent.

Tests Not to be Relied on.

There is a good deal of common sense in some of the remarks in the reports about the safety, or otherwise, of polluted waters. Mr. Binnie draws attention to the fact that "the Royal Commissioners received, although they do not quote it, some very strong evidence from one of the highest authorities, namely, Sir G. Buchanan, M.D., F.R.S., late Chief Medical Officer to the Local Government Board." This evidence was to the effect that neither chemical nor bacteriological tests were to be relied on as to the purity of water, that we did not know how small an amount of morbific material, if it gained access to the water, might set up disease, and that the way to gain information as to purity and safety was to search out the conditions surrounding water courses and water services. Asked what would be his treatment of the water if it were found to be polluted, he could only answer that "there was nothing for it but either to boil the polluted water, or else to leave it alone."

In face of such evidence from such an authority we turn with interest to the paragraphs in Mr. Binnie's report summarising the pollutions of the Thames water, which the Commission thinks good enough for London. It seems that at the census of 1891 there was a population of 1,056,415 persons draining into the river above the intakes, and that in the last thirty years this population had increased from 816,814 to its present number. That, however, gives but a poor idea of the increase which is going on in the urban population living on the banks of the Thames and its tributaries, many of these towns having more than doubled their size in thirty years. "Besides this human population there are probably 1,600,000 animals inhabiting the above area. Consequently it is clear that if the Thames is to be

retained as a source of water supply, the people of London must drink the more or less clarified excreta of this vast population."

To show what is likely to happen in the future, it is mentioned that in the present session of Parliament "the authorities of Swindon, and Tilehurst, Pangbourne and district are applying for further water powers. What must be the result? They will either pump from wells or the river comparatively clean water which now flows down to supply London, and after defiling it by passing it through their bodies and waterclosets will return it directly or indirectly into the Thames to flow down and be drunk by the people of London."

Impossible to Keep Out Sewage.

Now about the purification of this water. Dr. Frankland is quoted as saying "That it is practically impossible to keep sewage or sewage effluents out of the river."

"There is no positive evidence that the filtered water is unwholesome, but the lives of a large community ought not to be dependent on the efficient filtering plant of commercial companies. Under present circumstances, a serious epidemic of typhoid or cholera in the Thames basin, above the intakes, would be attended with great risk to the water drinkers of London. Such experiments should not be tried upon large communities."

It would appear, then, that while Edinburgh, Glasgow, Liverpool, Manchester, and Birmingham find it necessary "to go to great distances to secure undoubtedly pure and uncontaminated water, even to the extent of excluding the flow from cultivated land, yet it is quite sufficient for the people of London to supply them with the effluent water of their neighbours' waterclosets."

Other Towns Seek Purer Water.

The oddity is that at the very time the Royal Commission was sitting some of its members were giving evidence on this very point of polluted gathering ground, showing how the matter had been looked at by other municipalities, and how in certain cases reservoirs, collecting grounds, and plant had had to be abandoned in consequence of increasing pollution of the watershed. Speaking of the Trent, a member of the Royal Commission says: "It is a river that flows through an enormous tract of agricultural country, producing water which nowadays one would not think of supplying." And yet poor London would be thankful if the Thames did but drain only an agricultural district; unfortunately the Royal Commission received ample evidence of the pollution of the river not only by towns but "by cesspools, privies, sewage farms, house-boats, and manufacturing and manurial refuse," and also had before them the evidence of Sir G. Buchanan, who assured them that to judge of the purity of water they must go and see where it comes from. The extraordinary thing is that the Commission, after seeing where it came from, and with what it was befouled, still maintained that it was good to drink.

We shall consider the other reports, including that by Mr. Shirley Murphy, medical officer to the County Council, on another occasion.

LITERARY NOTES.

Dr. Pye-Smith is preparing for publication in book form his Lumleian Lectures on *Certain Points in the Etiology of Disease*, together with a reprint of his Harveian Oration, to which will be added some historical notes.

Science Progress is the name of a new monthly review of current scientific investigation, which made its first appearance on the journalistic stage on March 1st (Scientific Press, 428, Strand). It will be edited by Professor J. Bretland Farmer, with the assistance of an editorial committee, consisting of Professor H. E. Armstrong, F.R.S., Professor C. S. Sherrington, and others. Among the contributors to the earlier numbers will be Professors Burdon Sanderson, Halliburton, Ray Lankester, and Dunstan.

The *Contemporary Review* for March contains a paper by Lieutenant-Colonel Elsdale on the scientific problems of the future. He selects four, some if not all of which will, he thinks, certainly be solved in the next generation if not in our own. The first of these is aërial navigation, and he almost persuades us to believe that in a few years we shall be travelling through the air from London to New York in a couple of days. The second, the necessity for which would almost be abolished if the first were accomplished, is the great diminution of resistance offered by water to a ship's hull; this he supposes may be achieved by making the surface of the hull scaly like a fish. The third is the utilisation of the stored energy of coal, not by combustion but by using it as one of the elements for the production of an electric battery. The fourth is the reduction of vegetable foods, which at present are only adapted to animals like the cow or the sheep, to a condition suited to the human digestion and to the human palate. "The chemical constituents," he argues, "of these vegetable foods, such as grass, are similar to those which we now consume in various existing foods, and they are adapted to the requirements of the human frame. It is only a question of digestion." The same issue of the *Contemporary Review* contains an article on Marriage in East London, by Mr. H. Dendy, which describes once more the serious social consequences of the reckless early marriages so commonly contracted by East Enders. They help to fill workhouses and infirmaries and to swell the ever-increasing numbers who crowd our hospitals. The writer suggests that the establishment of well-conducted boarding houses for young men and women, where they might find reasonable comfort and privacy, is an experiment which ought to be tried, as he believes that many improvident marriages are contracted to escape from home conditions which become impossible when a girl is past the age of puberty.

Another monthly periodical devoted to disease in children, *La Médecine Infantile*, has made its appearance in Paris. It is edited by M. Jules Comby, with the co-operation of Dr. J. Weill-Mantou. The English "collaborators" are Dr. Abercrombie of London, and Dr. Ballantyne of Edinburgh. The editor states that he intends his journal to have a thoroughly practical character. Among the original articles in the first number is a paper by the editor on "Ganglionic Fever," and an elaborate article by Dr. Bourneville, describing the method of educating idiot children followed at the Bicêtre Hospital. Among the abstracts which form the second part of each number we note the names of English, American, and Italian writers, as well as French and German.

A new journal, entitled *Monatschrift für Unfallheilkunde*, and dealing with accidental injuries in their relation to questions of compensation and assurance, and their treatment especially by "mechanotheraphy," has recently appeared in Berlin. It is edited by Dr. H. Blasius, G. Schütz, and C. Thiem. The first number contains, among other articles of interest an important communication by Dr. H. Blasius, on the Value of Photography for the Estimate of Accidental Injuries.

The *Medical Chronicle*, published at Manchester, which has for a number of years been carried on by various editors, is about to change hands. The guarantors of the *Chronicle* have offered the journal to the Council of Owens College, and we understand this offer has been accepted. On April 1st the *Chronicle* will be issued by Owens College, as a monthly medical and surgical periodical. Each of the professors, or those who are heads of departments of medicine taught in the medical school will be responsible for the proper representation of the progress of his subject in the pages of the journal. Thus it is hoped that the journal will not only become the medium of original articles, but it will also give critical reviews and abstracts, and present a chronicle of the most recent advances in all departments of medicine, surgery, and midwifery and the allied sciences on which these are based.

The *Annals of Ophthalmology and Otology* has again been enlarged, as the prospectus states, "in size, in scope, and in diversity of contents." The January number contains 136 pages, consisting of original articles and of "practical matter gleaned from the professional experience and writings of the world's scientific workers in ophthalmology, otology, rhinology, and laryngology." We congratulate the able and enterprising editor, Dr. James Pleasant Parker, of St. Louis, on the continued success of his valuable journal.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1894. ELECTION OF MEMBERS.

Meetings of the Council will be held on April 11th, July 11th, and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, March 22nd, June 21st, and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. Francis Fowke, *General Secretary*.

BRANCH MEETINGS TO BE HELD.

Lancashire and Cheshire Branch.—A special meeting of this Branch will be held at the Grosvenor Hotel, Deansgate, Manchester, on Friday, March 9th, 1894, at 4.30 P.M., for the discussion of a motion, to be moved by Dr. Rentoul, and seconded by Dr. W. Hughes (or other member), with regard to the "proposed new order of midwifery practitioners," and to appoint a committee "to watch the progress of and to oppose any proposed legislation for the registration of midwives." "That in view of the fact that a 'Midwives' Registration Association' has been formed, ostensibly for the purpose of promoting legislation for the registration of midwives, but in reality for the creation of an independent order of midwifery practitioners, this meeting, while anxious to improve the training of monthly nurses, and recognising that duly qualified medical women already exist, records its emphatic protest against any such proposed legislation, as such would (*a*) endanger the lives of pregnant women and infants, (*b*) interfere with the training of medical students in practical midwifery, (*c*) repeal the educational sections of the Medical Act, 1886, and (*d*) prevent newly qualified practitioners from perfecting their knowledge of obstetrics and diseases of infants. That a copy of this resolution be sent by the Branch Secretary (1) to the General Medical Council, (2) to our five direct representatives on the General Medical Council, (3) to our Branch representatives on the Council of the British Medical Association, (4) to the Council and Parliamentary Bills Committee of our Association, (5) to each Branch of our Association, (6) to each medical society, (7) to the medical members of Parliament, and to the members of Parliament for the counties and boroughs, earnestly requesting them to consider and strenuously oppose such proposed legislation."

South-Eastern Branch: East Surrey District.—The next meeting of the above District will be held at the Queen's Hotel, Upper Norwood, on Thursday, March 8th, at 4 P.M., A. J. Rice Oxley, M.D., of Streatham, in the chair. Dinner at 6 P.M.; charge 7s., exclusive of wine. Members intending to be present at the meeting should give notice to the honorary secretary, and also notify if they will remain to dinner. Agenda: (1) To appoint place of next meeting and the chairman thereat. (2) Election of honorary secretary. (3) Nominations for representatives on the Council of the Association. The following papers, etc., will be read: Dr. Stephen Mackenzie: On the Classes of Cases in which Indian Hemp is of Special Service. Mr. Treves: The Treatment of Constipation and its Allies. Dr. Herman: The Early Diagnosis of Uterine Cancer. Members desirous of exhibiting or reading notes of cases are invited to communicate at once with the Honorary Secretary. All members of the South-Eastern Branch are entitled to attend and to introduce professional friends.—Henry J. Prangley, Honorary Secretary, Tudor House, Anerley, S.E.

South-Eastern Branch: East Kent District.—The next meeting will be held at Chylton Lodge, East Cliff, Ramsgate, on Thursday, March 8th, at 2.45 P.M.; Mr. W. Curling in the chair. Agenda: Dr. Welsford will move a resolution as to the suppression of irregular and fraudulent practice. Dr. Frederick Eastes will advocate the claims of the Medical Defence Union and the Medical Sickness, Annuity, and Life Assurance Society to the support of members of the District. Dr. Styan and Mr. Raven: The Antipyretic Treatment of Acute Diseases. Mr. Raven will show a case of Myxœdema cured by Thyroid Tabloids. The Chairman will be glad to see members to luncheon at his residence, Chylton Lodge, at 1.30 P.M. Members intending to lunch with the Chairman are particularly requested to send acceptances by Tuesday, the 6th, or they will not be expected. Tea and coffee will be served after the meeting. All members of the South-Eastern Branch are entitled to attend these meetings, and to introduce professional friends.—Thos. F. Raven, Honorary District Secretary, Barfield House, Broadstairs.

South-Eastern Branch: West Kent District.—A meeting of this District will be held at the West Kent Hospital, Maidstone, on Tuesday, March 6th, at 4 P.M.; Dr. Joyce, of Cranbrook, in the chair. Communications:—Mr. Prideaux Selby: On the Diagnosis and Treatment of Perforating Ulcer of the Stomach. Dr. Tirard: Some Sequelæ of Diphtheria. Dr. Joyce: On the Differentiation of Tuberculous Disease of the Kidney from Renal Calculus. Mr. Hugh Smith: On Brain Syphilis. The dinner will take place at the Mitre Hotel at 6.30 P.M. Charge 6s. 6d., exclusive of wine. Gentlemen who intend to dine are requested to signify their intention to the Chairman (Dr. Joyce, of Cranbrook) not later than Monday, March 5th. All members of the South-Eastern Branch are entitled to attend this meeting and to introduce professional friends.—E. Ground, Honorary Secretary, Ashford Road, Maidstone.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

The fifth meeting of the session 1893-4 was held on February 8th; Dr. Rickards, President, in the chair.

New Members.—Mr. H. Linigan, M.R.C.S., and Mr. Guy Grindlay, M.B., were elected members of the Branch.

Specimens.—Mr. Lawson Tait showed a number of Gall Stones (there were over fifty in all) removed from a girl aged 19, in whom there was nothing but the subjective history. The diagnosis was made by Dr. Purchase, of Newtown, who sent her for operation. Recovery was speedy. Mr. Lawson Tait also showed a remarkable specimen of a Calculus, which had doubtless been originally formed in the appendix vermiformis, and had given rise to prolonged ill-health, with several relapsing illnesses, which were regarded as typhoid fever. The calculus (about an inch and a-half long, and as thick as a slate pencil) was removed from a cystic cavity containing fœtid pus, and formed of a distended tubular structure lying behind the uterus and intimately adherent to it. The patient was making an excellent convalescence.—Mr. Jordan Lloyd showed five Phosphatic Calculi, weighing 4 ounces, removed by suprapubic lithotomy from the bladder of a man, aged 65, who had been cut for stone on three previous occasions; twice through the perineum and once above the pubes. The patient sat up on the third day, and made a quick recovery.—Dr. Leslie Phillips showed cultures of Staphylococcus Pyogenes Citreus and Aureus derived from a case of frozen-meat impetigo. The patient was a salesman of frozen meat, and the present was the second attack within three years of the disorder, which affected only the hands and forearms. The impetigo left scars, and was not accompanied with erysipeloid erythema.

Cases.—Mr. F. Marsh showed a girl, aged 20, upon whom he had performed resection of the right lobe, isthmus, and part of the left lobe of the thyroid, for the relief of pressure symptoms caused by a bilateral parenchymatous bronchocele. The part removed, which weighed 16½ ounces just after operation, was also shown.—Mr. Bennett May showed a young man on whom he had performed thyroidectomy, removing the right lateral lobe and isthmus for the relief of pressure symptoms and stridor with a successful result.

Papers.—Dr. Pietersen read a paper on "Mental Disorder as a Symptom in Diseases of the Nervous System."—Mr. Marsh read a paper on the Treatment of Bronchocele, with notes of five successful cases of Thyroidectomy.

SPECIAL CORRESPONDENCE.

PARIS.

The Small-pox Epidemic.—Sanitation of Workshops and Factories.—Hospital Staffs and Administration.—Burial versus Cremation.—A Criminal's Brain.—The Disposal of Paris Sewage.—General News.

M. Hervieux, in his report on the small-pox epidemic in France, which is now dying out, stated that it broke out at the end of 1892 and was at its height in December, 1893. He considers that this recurrence of the epidemic is due to the extreme facility of communication between England and France. In England there is a powerful antivaccination league which serves to spread smallpox in England and indirectly in France. M. Hervieux quotes the following statistics as to vaccination: In 32 districts attacked by small-pox the mortality was 3.5 per cent. among the vaccinated patients, 3.7 per cent. among the revaccinated, among the non-vaccinated 35 per cent.

The Conseil d'État has decided on the observance of the following sanitary regulations previously approved of by the Comité Consultatif d'Hygiène and the Committee of Arts and Manufactures: In all factories the floors are to be swept once a day, the walls and ceilings are to be frequently cleaned and the varnish to be frequently renewed. In those factories where organic matter easily putrifying is prepared the ground is to be rendered impermeable, the walls are to be covered by

a varnish which is easily washed, the ground and walls are to be frequently disinfected and thoroughly cleansed once a year, and the decomposing residue is to be quickly removed. The minimum aëration is to be in the proportion of six cubic metres. It is forbidden to take meals where the hands work, all dust is to be removed, the factory owners are to provide dressing rooms, wash-hand stands, and filters for drinking water; during rest hours the work rooms are to be aired. Machinery is to be surrounded by railings; precautions are to be taken that machinery may not involuntarily be set in movement; a sufficient number of staircases must be provided. An external staircase of incombustible materials can be imposed by ministerial decree.

On the suggestion of M. Perier, the Society of Hospital Surgeons has formed a *Conseil de famille*, which is to investigate the subjects of dispute which may arise between the members of the Society and the Administration. One of the members of the *Conseil de famille* is the Society's representative in the *Conseil de surveillance*.

The cremation of the body of Victor Considérant, the disciple of Fourier, has attracted attention to the subject. M. Jules Rochard, in the *Union Médicale*, passes in review the reasons for and against this method of disposing of the remains of the dead. Cremation is said to be expensive, and to afford facilities to criminals. Besides, the inhumation of dead bodies represents an enormous proportion of organic matter which has been borrowed from the earth, and ought to return to it. It may be painful, M. Rochard says, to regard our dead as manure, but hygiene must keep clear of sentiment. He admits that cremation is a greater safeguard against the spread of infectious germs than burial, but maintains that cemeteries are not so unwholesome as they are said to be.

The brain of a criminal, Sabourin, who was guillotined for the murder of his sister, has been examined by Dr. Prétay, who found three distinct tuberculous foci situated at the apex of the convex portion of the brain. The membranes were adherent to the brain substance, which was torn by their removal. The cerebral convolutions were remarkably flattened instead of standing out in relief. The right cerebral hemisphere was one-third larger than the left; the principal cerebral fissures were shallow and faintly marked.

The question of the disposal of Paris sewage is now for the fourth time before the Chamber of Deputies. The Chamber was nearly deserted during the debate. M. George Berger declared the sum of 468,000 francs voted is insufficient, that the Gennevilliers and Méry-sur-Oise fields ought to be sold, the Achères field let, a further 8,000,000 francs added, and the sewage conveyed to the sea by canalisation. M. Bourgoin, member for the Ardennes department and a distinguished engineer, energetically opposes this scheme, and cites London as an example of its inefficacy. He contends that the soil is the only purifier; it is the best filter. He adduces the example of the rabbits and pigeons placed in trenches dug in the Montparnasse cemetery as a proof of the sanitary influence of earth. These animals throve better than others petted at Alfort.

The Assistance Publique has decided gradually to laïcise all public hospital institutions, and has consequently taken possession of several houses in the Rue de la Seine, where the Saint Vincent de Paul Sisters were lodged. The Sisters resist this, and the case will be settled in a law court.

The Eastern Railway Company warms its carriages by means of vapour and compressed air. This addition to heated vapour constantly clears the pipes, regulates the pressure, draws in condensed water, but prevents it from freezing.

At the last competitive examination for the post of *interne*, a son of the President of the Republic was a candidate, and succeeded in gaining a position among the *internes provisoires*, that is to say, those who may be called on to do duty in place of any of the titular *internes* who may be incapacitated or resign.

ON January 1st the total number of students in the University of Charkoff was 1,209, of whom 740 belonged to the medical faculty. At the same date there were 2,326 students in the University of Kieff. During 1893 the latter University granted the licence to practise medicine to 194 candidates.

CORRESPONDENCE.

THE PROPOSED TEACHING UNIVERSITY FOR LONDON.

SIR,—I propose in this letter, as concisely as possible, to answer the question as to whether the proposed new University in London is likely to secure the best methods of teaching and course of study for our medical students.

The number and composition of the Senate from our point of view mainly turns on the question as to whether the medical members will be sufficiently numerous and of such a character as to form a strong board. A board of this kind, constituted of members of the Senate, must not only be formed, but from the nature of things will exercise a preponderating influence on the governing body of the University in all matters relating to medical education. Under the scheme now before us the Senate is to contain eleven members belonging to our profession, four elected by the Faculty of Medicine, four by the Royal Colleges, two by Convocation, and one by the Society of Apothecaries; it is quite possible that an additional medical member may be sent by the Academic Council to the Senate. The constitution, therefore, of our representatives on the Senate, and their numerical strength, would seem to be all that could be desired to form a strong board, and if this be true it matters little how many other members there may be on the Senate; the larger their number the greater probably will be the influence of the medical board on the Senate.

The Academic Council is to contain three medical representatives. Five might have been preferable, but an unequal is better than an equal number, as it is not improbable these gentlemen will at times differ from one another in their views concerning questions relating to medical education. The Board of Studies, without whose opinion no really important step can be taken by the University, is to be formed of lecturers and teachers engaged in the actual work of teaching in our London medical schools.

We may now endeavour to pick out from among the details of the scheme those recommendations which define the functions, as far as medical education is concerned, to be performed by the above-mentioned constituent parts of the University.

The Senate.—The medical schools of the metropolis being constituted schools of the University under the proposed scheme will be subject to visitation, that is inspection, by the Senate. The governing body of the University will have power to remove an institution from being a constituent school, if the work done in such an institution is not up to university rank. The number of students attending a school who are going up for a degree, the financial position of the school, and other considerations will influence the Senate in taking action in this direction. The Senate in conjunction with the Board of Studies will appoint the professors and teachers in their schools, these gentlemen having first been recognised by the Academic Council as teachers in an admitted school of the University. The Senate will also have to determine the duties of the teachers, demonstrators, and assistants in the schools of the University.

The Academic Council, together with the Board of Studies, will determine the curricula of study, and the courses to be pursued at any school of the University, after consulting with the authorities of such institution. This Council will also regulate the teaching, examinations, and discipline of the University.

The Boards of Studies must be consulted before any change can be made in the curricula, or respecting examinations; on these points also the Faculty of Medicine will have to be referred to, so that no important step can be taken regarding medical education or examination without the teachers in the constituent schools of the University having expressed their opinion on the subject.

It would hardly seem possible to devise a scheme better calculated to draw the metropolitan medical schools into concerted action through means of their professors and teachers, the whole being under the salutary influence of the governing body of the University. It may fairly be said that without this controlling influence the combination of the teachers would be inoperative: and, on the other hand,

without co-operation among the teachers the University could never pretend to be a teaching university. Under the proposed scheme wise provision is made to leave the ordering and controlling of medical education in London practically in the hands of those actively engaged in the work of teaching, and this, in an ever-advancing art such as ours, is essential to success. At the same time the Royal Commission seem to have done their best not to interfere unnecessarily with those medical institutions in London which have done, and are still doing, excellent work in the cause of medical education.

With regard to the smaller London medical schools, as you observe in your article of February 24th, the Commission think it most desirable that in certain subjects these institutions should combine into one or two schools; the reasons given by the Commission for their opinion are to be found on page 42 of their report. Not only have similar views been frequently expressed by those best acquainted with the subject, but futile efforts have been made on several occasions to bring some of these schools to concentrate for purposes such as those mentioned by the Commission. With reference to the eleven subjects which the Commission think it desirable should be studied in one or two institutions, seven are subjects which must occupy the time of our students before they commence their work in the wards or out-patient departments of our hospitals. There will be no necessity whatever, therefore, for these students to travel several times a day between their laboratory and hospital. The Commission point to the fact that by concentrating the work done in these seven subjects in one or two institutions it would be possible to secure the services of professors of admitted reputation as lecturers, and also a staff of assistants who would be able to give their individual attention to students, which is so essential to a sound system of education. The British Medical Association in their letter to the Privy Council of June 16th, 1891, observe on this subject that "we contend the method by which medical education in the metropolis may be improved is by co-ordinating the educational power which exists in the metropolis." Again, "It is through the co-operation of London schools and colleges that the teaching may be raised so as to enable our students to pass their examinations for a degree without lowering its scientific character." And this, I take it, is the principle which underlies the scheme of the Royal Commission; and the means through which it is proposed to carry this principle into effect coincide with those which the Association urged on the existing University of London as far back as April, 1885.

It is impossible that a scheme such as the one now before us can be carried out without affecting the interests of some of the institutions concerned; but are our London students to wait for the advantages offered them under this scheme of a higher standard of education, together with degrees, until all the contending educational establishments in London are satisfied? If I rightly comprehend the wishes of the members of the Association on this subject, that is not their desire; and if so, I hope we shall give our loyal support to this scheme as a whole. For my own part, I approached the study of the report of the Royal Commission with an open mind, and have arrived at the conclusion that the scheme before us is capable of solving the difficult problem of forming an efficient teaching university in London, which at the same time will afford facilities by which all industrious London students may obtain degrees, and also, in the course of time, raise the teaching of medicine and its allied sciences in the metropolis to the highest possible standard.—I am, etc.,

Grosvenor Street, Feb. 24th. N. C. Macnamara.

PROPOSED NEW ORDER OF MIDWIFERY PRACTITIONERS.

Sir,—In answer to Dr. Rentoul's letter in the British Medical Journal of February 24th, we desire to point out that the expression in our letter of the previous week, to which he takes exception, refers not to "his petitions," but to "a petition" drawn up by him, which we definitely specified. The petition in question was accepted by the General Medical Council, and directed to be entered on their minutes.[1]

But we still maintain that by their subsequent action the Council refused to consider seriously the petition. For when on December 5th, 1893, it was proposed to refer the petition to the Executive Committee or to the Standing Committee of the Council, mentioned by Dr. Rentoul, for consideration, the motion fell through for want of a seconder, but the petition itself evoked severe criticism.

Dr. Rentoul, in his recent letter, having said, "Let us act honestly in this very serious discussion," proceeds immediately to put forward his version of the attitude of the General Medical Council to the question of registration of midwives in the following terms: "Let me further inform Drs. Boxall and Humphreys that the General Medical Council, at its winter session, 1889, passed a most important resolution to the effect that, supposing 'midwives' were licensed and registered, the General Medical Council would not undertake any of the duties for 'licensing or controlling them.'" In order to afford your readers an opportunity of judging how inadequately this interprets the feeling of the General Medical Council on the question, we quote *in extenso* the authoritative statement of the President:[3] "The pronouncement already made by the Council on the subject of midwives is so clear, so decided and expressive, that I venture here to repeat the following two resolutions passed in 1889: (1) 'That this Council regards the absence of public provision for the education and supervision of midwives as productive of a large amount of grave suffering and fatal disease among the poorer classes, and urges upon the Government the importance of passing into law some measure for the education and registration of midwives.' (2) 'That if any department of Her Majesty's Government were constituted controlling authority in relation to local arrangements made under statute for the licensing and registration of midwives, the General Medical Council would, if the Government Department so wished, be willing to advise as to the general rules of education, examination, and discipline which ought to be established in the matter; but the Council would not be able to discharge, and therefore would not be prepared to undertake, any duties of detail as to the registration of midwives, or as to the local arrangements for licensing or controlling them.'" Comment on our part would be superfluous.

Dr. Rentoul professes to be dissatisfied with our statement that limits to the practice of midwives will be clearly laid down, and asks if we would agree to have any Midwives Bill withdrawn from the House of Commons if it does not contain certain restrictions which he specifies. The Executive of our Association have already devoted much careful attention to the subject of midwives' registration; but the precise limitations to the practice of midwives, and the means of enforcing compliance with regulations framed for this purpose, which the Executive will be prepared to recommend, have not yet been finally considered and decided upon by them. Any expression of opinion, therefore, at the present moment upon our part would be premature. In due course, however, we hope to be in a position to put forward certain suggestions as to the principles upon which legislation should be based. We see no reason to doubt that a scheme will eventually be framed which, if carried into effect, will save the poor from the dangerous practices of incompetent midwives, and at the same time will duly safeguard the interests of the medical profession and do justice to the midwives themselves.

The other matters referred to by Dr. Rentoul in his letter call for no especial reply from us.—We are, etc.,

Robert Boxall, M.D.
Rowland Humphreys.

Midwives' Registration Association, Feb. 26th.

ASSISTANT MEDICAL OFFICERS IN ASYLUMS.

Sir,—The picture drawn by an "Asylum Medical Officer" and "M. U. A.," dark and gloomy though it be, falls short of the reality; and small wonder, for even under the shelter of anonymity, an assistant may well shrink from divulging the whole truth. In the brief remarks of your correspondents on

[1] Minutes of the General Medical Council, November 28th, 1893.

[2] See report of proceedings of the General Medical Council in British Medical Journal and *Lancet*, December 9th, 1893.

[3] President's Address at the opening of the 55th session of the General Medical Council. Minutes, November 28th, 1893.

this and on previous occasions, there occur expressions which, to the uninitiated, indicate only a vague discontent, but which those who know the *vie intime* of asylums can interpret but too well.

In an asylum there is only one medical officer—the superintendent namely. The terms "senior medical officer," "principal medical officer," "physician-in-chief," and the like, applied to the superintendent, and the terms "medical officer," "colleague," "junior medical officer," and the like, applied to the assistant, are hollow euphemisms serving only to mislead; they are used chiefly by assistants, who are loth, for very shame, to call their own anomalous and humiliating position by its proper name. The truth is that the superintendent is absolute master, and the assistant is, to the extent of abasement, his serf, his man Friday. "The assistant shall on no account quit the asylum without the express permission of the medical superintendent, and shall return when ordered by him," say the rules of our asylum, and I believe the rules of all asylums are to the same effect. The quarters and rations of the assistant are under the control of the superintendent. The medical treatment of the patients is entirely in the superintendent's hands. In the large asylums he must, perforce, delegate much of it to his assistants, but he can interfere when and how he chooses, and many, perhaps most, superintendents interfere in a way that soon kills all zeal for work in the unhappy assistant. The superintendent has little feeling for his assistant, whom he regards as a necessary evil, except jealousy, and he acts accordingly. If the cases in which the professional careers of assistants have been injured beyond repair by superintendents were all made known the revelation would be a startling and shameful one.

A few years ago a paper was read before the Medico-Psychological Society on the status of assistants. The paper was the joint production of three or four assistants who had apparently taken heart from the company of each other. Some discussion followed the paper. It was pitiful to note the cowed and apologetic tone in which the assistants pleaded for some amelioration of their lot, and their manifest dread of rousing the ever-wakeful jealousy of their masters the superintendents. It is certain that the superintendents will regard with dislike any serious attempt to improve the position of assistants, just as they regarded with dislike proposals to improve the positions of attendants and nurses. But they may make their minds easy, for under the present lunacy laws no real elevation of the assistant is possible.

In the rare cases where an assistant obtains a superintendency his promotion is generally due to a chapter of local accidents, and to most assistants the chance never comes at all.—I am, etc.,

February 25th. EXPERIENTIA DOCET.

THE MEDICAL DEFENCE UNION.

SIR,—We are instructed by the Council of the Medical Defence Union to point out that at the present time the actions in which the Union is involved, and which have recently been the subject of comment in the public and medical press, are *sub judice*, and that, pending the hearing and decision of these actions, it would be improper to discuss in the public press details regarding them. At the close of the pending litigation every facility will be afforded to the profession to obtain correct information and data on which to form a judgment.—We are, etc.,

HEMPSON AND ELGAR,
35, King Street, Cheapside. Solicitors to the Union.

CONTAGIOUS OPHTHALMIA IN SCHOOLS.

SIR,—I think that: (1) Contagious ophthalmia in our high-class schools is the same as seen in pauper schools and workhouses, etc. (2) Epidemic follicular ophthalmia is due to one cause, and if neglected will end in trachoma. (3) Follicular conjunctivitis may run into granular lids. (4) Slight enlargement of the follicles is a personal peculiarity, and not an evidence of disease. (5) Numerous cases of enlargement of the follicles exist with no symptoms of previous inflammation, no inconvenience to the patient, and no secretion. (6) Catarrhal ophthalmia runs through families, and is attended by patchy congestion of ocular conjunctiva. (7) Catarrhal ophthalmia is contagious, but is more easily cured, and runs a shorter course, and when follicles are enlarged they are secondary.

Is a dry condition of the eye, with no secretion, and slight enlargement of the follicles free from infection? I think it is. Medical men in charge of large schools might report as to the condition of the boys, and state their opinion if slight elevation of conjunctiva, with enlarged follicles without secretion, justify them in saying they suffer from the first symptoms of trachoma.—I am, etc.,

Sunderland, Feb. 28rd. THOMAS F. HOPGOOD.

STATE AID IN POISONING.

SIR,—I should much like to know on what ground the State interferes at all with free trade in poisons. If it be with the object of preventing the poisoner from committing his dastardly crimes, or to prevent accidents from the administration of poisons by mistake, or to remove temptation from the way of the suicide or murderer by sudden impulsion, these would be good objects; but does the law, as at present put in force, effect them? No doubt the Sale of Poisons Act puts certain difficulties in the way of the innocent person who wants a little prussic acid to poison a dog with, or a little perchloride of mercury with which to demonstrate some fact in chemistry for the edification of his children; but to the path of the poisoner such trifling stumbling blocks offer but small obstruction. Photography is now everyone's pastime, and the dealers in photographic apparatus will supply, to all and sundry, chemicals which will serve with ready impartiality for the taking of a portrait or the taking of a life. No register is produced, no stupid formalities are gone through; the purchaser puts down his 5d. and walks off with his ounce of corrosive sublimate, or pays his half-crown and carries away enough potassium cyanide to poison a whole village. Of course this is not law, but a law which is not enforced had better not exist. But outside the schedule there is a whole crowd of poisons the sale of which no law interferes with, so that while anyone who likes can buy from a dealer substances capable of producing most horrible forms of death, the conscientious chemist wastes his time in formalities over every pennyworth of laudanum which he sells. The fact is, it is impossible to restrain the wilful and ingenious poisoner.

What, then, does the present condition of the law do to prevent poisoning by misadventure? Liniments of all sorts lie about in every house; some of the vilest poisons, such as carbolic acid, are not even in the schedule, and can be purchased by anyone without even a warning on the label. Noxious patent medicines, often protected by a Government stamp, which seems to the ignorant to endorse all the lying statements on the wrapper, are sold by grocers, oilmen, drapers, etc.; and, although they exhibit no sign upon their labels of their dangerous nature, frequently contain large proportions of chloral, morphine, and other deadly poisons. No one knows the number of deaths caused every year by such State aid to the poisoner; the voices of the murdered infants cry aloud from their tiny graves against a state of law which encourages such deeds. Certainly the present condition of the law gives no protection against accidental, or so-called accidental, poisoning.

Nor can it be truly said that the suicide is protected against himself. Carbolic acid, the agent most favoured by the suicide, is not by law a poison at all, and can be sold by anyone: and as for laudanum, opium, etc., the next favourites on the list, it is generally easy enough to buy a poisonous dose, and if any difficulty be experienced it can be overcome by going from shop to shop and getting a small quantity at each. It is, however, easier still to purchase euthanasia by means of one or other of the sedative compounds protected by a kindly Government stamp. It seems to me that, as at present administered, the law concerning the sale of poisons is but an interference with the business of the chemist without being any real protection to the public. If, however, all patent medicines were labelled with their true composition, and, when containing poison, were marked and dealt with as such; if the sale of poisons were handed over entirely to chemists and the schedule were enlarged as new poisons came into the market: if the use

of a standard poison bottle were enforced; and if, as suggested by the *Pall Mall Gazette*, the purchaser had to be accompanied by a witness to whom he was known—then many of the evils of the present state of affairs would be greatly lessened. The crafty poisoner is, however, I fear, too subtle a creature to be much restrained by any law however stringent. I am, etc.,

S.

THE TREATMENT OF CANCER OF THE BREAST.

Sir,—The researches of Johnson,[1] Beadles,[2] and Stiles[3] show that any part of the affected mammary region may contain microscopic cancerous foci, any of which might, if left, start a recurrence. But do they, in actual fact? If in many cases of recurrence after removal of the breast alone the glands or internal organs have been next attacked, such microscopic foci must surely sometimes lie dormant, or even succumb to the resistance of the tissues.

As regards the analogy to the antiseptic treatment and "fighting the invisible:" Surgeons rarely if ever secure absolutely sterile conditions of skin, dressings, etc.;[4] but the method rightly holds the field because in practice it results in primary union and freedom from septic infection. So, I think, the ultimate decision of how much tissue around cancerous growths should be removed cannot be settled by the microscope alone, but by careful comparison of facts as to recurrence at the site of operation. I doubt if we can at present get much further in formulating rules than this: operate as soon as diagnosis can be made, cutting through healthy tissue; remove all organs and glands known to be affected, and any discoverable foci; watch for recurrence and treat it immediately: and in applying these rules in each case, we must surely use common sense in weighing the probability of recurrence (not its possibility) against the risk, loss, and suffering of the operation proposed.

The picture which the researches quoted reveal of a spongy gland, and loose areolar region saturated with possibly infective lymph, leads one to ask: What becomes of such lymph as must be spilt into the operation wound; and is there no hope of aspiration of the tumour so as to drain the surroundings before removal, and of disinfection of the remaining lymph by a germicide, as accessory means of treatment?

Strathpeffer Spa, N.B., Feb. 14th. J. Tregelles Fox.

BRITISH MEDICAL ASSOCIATION.

SIXTY-SECOND ANNUAL MEETING.

The sixty-second Annual Meeting of the British Medical Association will be held at Bristol on Tuesday, Wednesday, Thursday, and Friday, July 31st, August 1st, 2nd, and 3rd, 1894.

President: George Hare Philipson, M.D.Cantab., D.C.L., F.R.C.P., Professor of Medicine in the University of Durham.

President-Elect: E. Long Fox, M.D.Oxon., Consulting Physician to the Bristol Royal Infirmary.

President of the Council: J. Ward Cousins, M.D.Lond., F.R.C.S., Senior Surgeon to the Royal Portsmouth Hospital.

Treasurer: Henry Trentham Butlin, F.R.C.S., D.C.L., Surgeon to St. Bartholomew's Hospital, E.C.

An Address in Medicine will be delivered by Thomas Grainger Stewart, M.D.Edin., Professor of the Practice of Physic and Clinical Medicine in the University of Edinburgh.

An Address in Surgery will be delivered by James Greig Smith, M.B., F.R.S.E., Surgeon to the Bristol Royal Infirmary.

An Address in Public Medicine will be delivered by Sir Charles Cameron, Medical Officer of Health, Dublin.

A. Medicine.—*President:* Frederick T. Roberts, M.D. *Vice-Presidents:* E. Markham Skerritt, M.D.; R. Shingleton Smith, M.D. *Honorary Secretaries:* W. T. Brooks, M.D., 32, Holywell, Oxford; J. Michell Clarke, M.D., 28, Pembroke Road, Clifton, Bristol.

B. Surgery.—*President:* W. Mitchell Banks, M.D. *Vice-Presidents:* Nelson C. Dobson, F.R.C.S.; Professor Victor Horsley, F.R.S. *Honorary Secretaries:* G. A. Wright, M.B., 8A, St. John Street, Manchester; James Swain, M.D., 14, Buckingham Place, Clifton, Bristol.

C. Obstetric Medicine and Gynæcology.—*President:* Professor J. G. Swayne. *Vice-Presidents:* E. Malins, M.D.; A. E. Aust-Lawrence, M.D. *Honorary Secretaries:* R. Boxall, M.D., 29, Weymouth Street, London, W.; Walter C. Swayne, M.D., 3, Leicester Villas, St. Paul's Road, Clifton, Bristol.

D. Public Medicine.—*President:* Professor W. H. Corfield, M.D. *Vice-Presidents:* J. Lane Notter, M.D.; S. Davies, M.D. *Honorary Secretaries:* B. H. Mumby, M.D., Town Hall, Portsmouth; J. C. Heaven, M.R.C.S., 2, Queen Square, Bristol.

E. Psychology.—*President:* G. F. Blandford, M.D. *Vice-Presidents:* S. R. Philipps, M.D.; Fletcher Beach, M.D. *Honorary Secretaries:* C. S. W. Cobbold, M.D., Bailbrook House Asylum, Bath; R. S. Stewart, M.D., Glamorgan County Asylum, Bridgend.

F. Pathology.—*President:* G. Sims Woodhead, M.D. *Vice-Presidents:* Joseph Frank Payne, M.D.; M. A. Ruffer, M.D. *Honorary Secretaries:* Norman Dalton, M.D., 4, Mansfield Street, London, W.; C. A. Morton, F.R.C.S., 24, St. Paul's Road, Clifton, Bristol.

G. Ophthalmology.—*President:* F. R. Cross, M.B. *Vice-Presidents:* H. E. Juler, F.R.C.S.; Simeon Snell, F.R.C.S. *Honorary Secretaries:* C. H. Walker, M.B., 3, Leicester Villas, St. Paul's Road, Clifton, Bristol; J. Tatham Thompson, M.B., 24, Windsor Place, Cardiff.

H. Laryngology and Otology.—*President:* P. McBride, M.D. *Vice-Presidents:* W. H. Harsant, F.R.C.S.; Barclay J. Baron, M.B. *Honorary Secretaries:* P. Watson Williams, M.D., 2, Lansdown Place, Victoria Square, Clifton, Bristol; W. Milligan, M.D., 28, St. John Street, Deansgate, Manchester.

I. Dermatology.—*President:* A. J. Harrison, M.B. *Vice-Presidents:* Stephen Mackenzie, M.D.; H. Waldo, M.D. *Honorary Secretaries:* J. Hancocke Wathen, M.R.C.S., 16, York Place, Clifton, Bristol; H. Leslie Roberts, M.B., 46, Rodney Street, Liverpool.

J. Diseases of Children.—*President:* W. Howship Dickinson, M.D. *Vice-Presidents:* John Edward Shaw, M.B.; Frederic S. Eve, F.R.C.S. *Honorary Secretaries:* R. W. Murray, F.R.C.S., 15, Rodney Street, Liverpool; Bertram M. H. Rogers, M.D., 11, York Place, Clifton, Bristol.

[1] British Medical Journal, January 9th, 1892.
[2] *Loc. cit.*
[3] British Medical Journal, September 24th, 1892.
[4] British Medical Journal, January 28th, 1893 (Professor Lister's address on Antiseptics).

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

Fleet-Surgeon William Rogerson White, B.A., M.B., of the *Raleigh*, was with the force which recently suffered a reverse near Bathurst, West Africa, and was slightly wounded. He entered the Royal Navy in 1871, and became a Staff-Surgeon in 1883 and a Fleet-Surgeon in 1892. His recent appointments have been: in 1885 to the *Sylvia*, surveying vessel; in 1887 to the troopship *Orontes*; in 1890 to the *Collingwood* in the Mediterranean; in 1891, for a short period, to the *Hotspur*, guardship at Harwich; and in September, 1891, to the *Raleigh*.

ARMY MEDICAL STAFF.

Surgeon-Major-General A. F. Bradshaw, C.B., and Surgeon-Colonel A. C. Gaye have been appointed Honorary Surgeons to Lord Elgin, Governor-General of India.

List of successful candidates for commissions in the Medical Staff of Her Majesty's army at the recent examination in London:

	Marks.		Marks.
Evans, P.	2,849	Milner, A. E.	2,360
Silver, J. P.	2,462	Sweetnam, S. W.	2,360
Buist, J. M.	2,391	Dove, F.	2,345
Vaughan Williams, H. W.	2,389	Morgan, C. K.	2,282
Walker, J.	2,365	Thom, G. H. C.	2,178

VOLUNTEER MEDICAL STAFF CORPS.

Surgeon-Captain D'A. Power, M.B., the London Companies, has resigned his commission, February 24th. Mr. Howard Decimus Buss is appointed Surgeon-Lieutenant in the same Companies, February 24th.

THE VOLUNTEERS.

SURGEON-LIEUTENANT-COLONEL J. W. BARNES, 2nd Middlesex Artillery, has resigned his commission, with permission to retain his rank and uniform, February 24th.

Surgeon-Lieutenant H. LOCKWOOD, 4th West Riding of Yorkshire Artillery (Western Division Royal Artillery), has also resigned his commission, February 24th.

Mr. CAMPBELL BOYD is appointed Surgeon-Lieutenant to the 3rd Volunteer Battalion the Queen's Royal West Surrey Regiment (late the 6th Surrey), February 24th.

Surgeon-Lieutenant E. G. BARNES, M.D., 2nd Volunteer Battalion the Suffolk Regiment (formerly the 6th Suffolk), has resigned his commission, February 24th.

Surgeon-Major H. F. HOLLAND, M.D., 3rd Volunteer Battalion the Bedfordshire Regiment (late the 1st Bedfordshire), is promoted to be Surgeon-Lieutenant-Colonel, February 24th.

Mr. JAMES MARR, M.B., is appointed Surgeon-Lieutenant to the 2nd (Berwickshire) Volunteer Battalion the King's Own Scottish Borderers (late the 1st Berwickshire), February 24th.

Surgeon-Major W. R. SMITH, M.D., 3rd Volunteer Battalion the Queen's Own Royal West Kent Regiment (formerly the 4th Kent), is promoted to be Surgeon-Lieutenant-Colonel, February 24th.

Surgeon-Lieutenant A. T. CAMPBELL, M.B., 1st Volunteer Battalion the Highland Light Infantry (late the 5th Lanarkshire), has resigned his commission, February 24th.

INDIAN MEDICAL SERVICE.

LIST of successful candidates for commissions in Her Majesty's Indian Medical Service at the recent examination in London:

	Marks.		Marks.
Ramsay, G.	3,120	Moore, H. M.	2,462
Sutherland, D. W.	2,754	Russell, A. W. F.	2,384
Selby, W.	2,606	Johnston, D. C.	2,301
Bamfield, H. J. K.	2,604	Pearce, C. R.	2,304
Hayward, W. D.	2,565	Grant, J. W.	2,294
Moorhead, A. H.	2,475	Bennett, V. B.	2,246
Granger, T. A.	2,470	Scott-Moncrieff, W. E.	2,192

Surgeon-Colonel G. C. CHESNAYE, Surgeon-Colonel R. HARVEY, M.D., D.S.O., Brigade-Surgeon-Lieutenant-Colonel D. O'C. RAYE, M.D., Brigade-Surgeon-Lieutenant-Colonel D. D. CUNNINGHAM, M.D., C.I.E., and Surgeon-Lieutenant-Colonel A. J. WILLCOCKS, M.D., all of the Bengal Establishment, have been appointed Honorary Surgeons to Lord Elgin, Viceroy and Governor-General.

THE EFFECT OF THE LEE-METFORD BULLET ON THE BONES.

WRITING in the *Journal* of the Royal United Service Institution for January, Veterinary-Captain F. Smith describes the effects of the Lee-Metford bullet on the bones of horses as deduced from some recent observations made by him at Aldershot when using the full powder charge. The paper, illustrated with photographs, explains that the observations were made partly on the carcasses of suspended horses and partly upon disjointed limbs or individual bones. The nett result goes to show, what was tolerably well known before, that at short ranges—that is, up to about 300 yards—these small bore bullets have an explosive effect upon the bones, pulverising them into hundreds of pieces; at longer ranges this severity of action is less well marked, the nature of the injury to a bone being either a comminuted fracture if striking the dense shaft of a long bone, or a comparatively clear cut hole if impinging on the relatively loose structure as found in the ends of bones. Mr. Smith concludes his paper by observing that the original object of his inquiry was to demonstrate the effect of these bullets on the bones of the horse, and we think he has done this remarkably well. It is open to question whether observations of this kind made upon dead carcasses and on bones under unnatural conditions are of any practical value to the surgeon. The conditions of tissue tension and resisting power of the living body are vastly different from those of the inert dead mass, while the resistance offered by bones of men and those of beasts of burden are possibly not the same. We are inclined to attach far greater value to a few well recorded notes of cases of gunshot injury occurring in the living subject than to any number of similar injuries arbitrarily made on the dead body of a horse or bullock.

HONOURS TO THE ARMY MEDICAL STAFF IN BERMUDA.

WE have great pleasure in recording the following honours conferred on three officers of the Medical Staff, and four men of the Medical Staff Corps, serving in Bermuda, by the Emperor of Germany, in recognition of signal and skilful services afforded to the frostbitten, shipwrecked sailors of the German bark *Hyon*. The thanks of the German Government were conveyed through Lord Rosebery to the above, together with the following letter to the Consul at Bermuda, which we copy from the *Bermuda Royal Gazette*:

"Foreign Office, Berlin, September 26th, 1893.

"With reference to the correspondence of April 13th of this year regarding the Elsfleth bark *Hyon*, I beg to inform you that His Majesty the Emperor and King, through Highest Order of July 12th of this year has bestowed gifts of honour and of money upon the herein mentioned persons, in recognition of their good services and care rendered the seamen of the Elsfleth bark *Hyon* during March of this year:

"1. Brigade-Surgeon-Lieutenant-Colonel Comerford; the Surgeon-Captain S. H. Creagh; the Surgeon-Captain G. F. Gubbin (of the Medical Staff), each a gold scarfpin.

"2. The Staff Sergeant, Medical Staff, E. Massie, a gold watch, embossed with His Imperial Majesty's portrait and monogram.

"3. The Privates W. Singleton, F. Grantham, E. Payton (Medical Nursing Staff), to each a sum of £5 sterling.

"The Imperial Ambassador in London has been commissioned to have transmitted to the respective recipients these proofs of His Majesty's favour.

"(Signed) THE CHANCELLOR OF THE EMPIRE.

"The Imperial Consul, W. Eugene Mayer,
"Bermuda."

In the publication of the foregoing, and in distributing the handsome gifts, His Excellency the General Officer Commanding in Bermuda expresse shis satisfaction at this proof of His Majesty's appreciation of the care taken of the invalid German sailors.

We cannot but express much satisfaction that personal medical services are still appreciated in the highest quarters; the value of these "gifts of honour" is doubtless much enhanced by the manifestly spontaneous, gracious, dignified, and precise (no blundering over titles) letter in which the intimation conveyed.

COMPOUNDERS OF MEDICINE IN THE MEDICAL STAFF CORPS OF THE ARMY.

ONE OF THEM writes: It is fit that the medical profession and the public should know the qualifications of passed compounders in the Medical Staff Corps, in order that those of them who revert to civil life may have equal chances of employment in dispensaries, etc., with those holding the qualification of the Pharmaceutical Society. Before admission to the compounders' examination, they must have a second-class education certificate, have been instructed in stretcher drill, and have passed an examination in elementary anatomy, surgical first aid, bedside and ward duties for all classes of patients, administration of food and drugs, use of external appliances, knowledge of surgical instruments, use of meteorological instruments, etc. The after examination for compounder comprises: familiarity with ordinary Latin phrases in prescriptions, reading of prescriptions, knowledge of the various articles of the *Pharmacopœia*, appearances, uses, and doses of the more important and active drugs; preparation of decoctions, tinctures, etc.; practical compounding; the use of a chemical cabinet; best means of preserving instruments, etc. Surely a man holding a qualification under such an examination is fit for many dispensing positions in civil life, equally with one holding the minor qualification of the Pharmaceutical Society; at all events they ought to have equal chances.

*** We believe there are many retired army compounders, whom the profession and public institutions might employ with much advantage.

MEDICO-LEGAL AND MEDICO-ETHICAL.

BLOXHAM *v.* THE MEDICAL DEFENCE UNION (LIMITED).

High Court of Justice, Chancery Division, February 24th.

(Before Mr. Justice CHITTY.)

THIS was an application for an interlocutory injunction arising in connection with an action instituted in the Queen's Bench Division in consequence of a dispute which had arisen between Dr. Bloxham and Dr. Collie. The injunction prayed for was to restrain the defendant Union from contributing towards the costs and expenses of a member of the Union in litigation with another member, and in particular from making any such contribution in the case pending in the Queen's Bench Division. It appears from the report in the *Times* that Dr. Bloxham and Dr. Collie, both members of the Union, had entered into a partnership agreement and the dispute arose in connection with this agreement. The plaintiff rested his claim to an injunction on the ground that the Union in undertaking the cause of a member when litigating with another member was acting beyond the scope and power of its memorandum and articles and raised also a subsidiary point, namely, that the acts complained of were unlawful maintenance or that the articles were open to the objection that they promoted such maintenance of action.

Mr. Justice Chitty, in delivering judgment, dealt first with the question whether the action of the Union was *ultra vires*. He said that some time in August last a dispute arose between the plaintiff, Dr. Bloxham, and Dr. Collie. Dr. Bloxham wrote to the Secretary of the Union informing him that he was contemplating taking proceedings against Dr. Collie, and asking for the advice and aid of the Union. In answer to this a reply came for a concise statement of facts with a form to be filled up. Dr. Bloxham replied by furnishing a statement and filling up a form. On August 14th, however, Dr. Bloxham determined not to proceed with this application and wrote a letter to the effect of a request not to take any further proceedings in his case against Dr. Collie until further notice. On August 24th the dispute between the two doctors culminated in the commencement of two cross actions. The actions were consolidated and involved some question as to a breach of a partnership agreement. Beyond that nothing was disclosed. There was, however, apparently some question involved in the actions of professional principle. The defendants had not put in any definite evidence upon the subject, and their ground, as stated at the bar, for not doing so was that the actions were shortly coming on for trial. On October 11th the Council of the Union determined to undertake the defence of Dr. Collie in the action, and on the 12th the Secretary, by the Council's direction, wrote to Dr. Bloxham informing him to that effect, and saying that the solicitors of the Union would act on their behalf. The evidence showed that the Council did arrive at that decision after serious consideration. It had been suggested at the bar that Dr. Collie, himself a member of the Council, must be taken to have influenced the decision. In his opinion there was no ground for any charge of the kind against Dr. Collie. He evidently took no part in the discussion at the Council board, retiring before the matter was brought on. In January, 1894, the Council presented their annual report to their members, in which, after stating that the Union had consistently declined acting as legal advisers in questions such as partnership agreements, which did not involve questions of professional principle, they added that an exception had been made on one occasion when the actual difference causing abrogation of the agreement had arisen out of some professional act. This referred to the matter in dispute between Dr. Bloxham and Dr. Collie. At the annual meeting of the members of the Union, held in February, an amendment to the resolution adopting the report was proposed, censuring the Council for its action in the then pending legal proceedings between Dr. Bloxham and Dr. Collie. The amendment was lost,

and the resolution carried. The action of the Council in the matter thus became the action of the Union in general meeting assembled. The words in Art. 3, Subsec. III, of the memorandum, stating that the objects of the Union comprise that of advising and defending or assisting members of the Union in proceedings, were not limited to defending or assisting members in proceedings in connection with persons who were outside the Union. Then came Article 39, which spoke of such assistance, etc. This article, too, could not be limited to cases between members and outsiders, not even by implication. In the present case Dr. Bloxham, having at one time desired the advice and aid of the Union, afterwards recalled his application and changed his mind, as he was entitled to do. That the assistance of the Union could only be given to a member seemed a proposition which scarcely required to be stated. Whether it was advisable to interfere between members was a matter of policy for the Council, and one with which, in point of law, the Court was not concerned. The words "due investigation" in Article 39 did not involve a hearing if the member himself was not desirous of obtaining the aid of the Union. Moreover, in his opinion, the Council had a discretion, even if he had asked to be heard. As to the argument that the assistance in Union amounted to an unlawful maintenance of another man's litigation, the answer to that was that the action was not a maintenance action of any form. There was, moreover, nothing in the affidavits or any suggestion that the motion involved a question of maintenance. Consequently the defendants had not come prepared to meet such a case.

A DEFINITION OF "INFAMOUS CONDUCT IN A PROFESSIONAL RESPECT."

ALLINSON *v.* GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.

Court of Appeal, February 23rd, 1894.

(Before the Master of the Rolls, Lord Justice Lopes, and Lord Justice Davey.)

THIS was an action for a declaration that the decision of the defendants directing the erasure of the plaintiff's name from the *Medical Register* was invalid and void; for an injunction to restrain the defendants from erasing the plaintiff's name, or allowing the same to remain erased from the *Medical Register*, and from publishing such decision; and for a *mandamus* to compel the defendants to restore the plaintiff's name to the *Medical Register*. Upon the complaint of the Medical Defence Union, Limited, the plaintiff received notice on May 14th, 1892, to appear before the Council and answer a charge of "having been guilty of infamous conduct in a professional respect," the particulars of the alleged conduct being that the plaintiff had systematically sought to attract practice by a system of advertisements. Dr. Philipson was a subscribing member and vice-president and guarantor of the Medical Defence Union, and an active member thereof, and as vice-president was *ex officio* a member of the executive committee thereof, and the Medical Defence Union intrusted the management of their affairs to the executive committee. On May 3rd, 1892, Dr. Philipson was elected a member of the General Medical Council, when he gave notice for resignation of his membership of the Medical Defence Union, but by the rules of the Union the resignation did not take effect for two months. Dr. Philipson took no part in the proceedings of the Executive Committee of the Medical Defence Union, and did not take part in getting up the complaint against the plaintiff. The Secretary of the Medical Defence Union appeared before the defendant Council in support of the complaint. Dr. Philipson attended the inquiry as a member of the Council on May 28th, 1892, and the Council directed the plaintiff's name to be erased from the *Medical Register* upon the ground that he had been guilty of "infamous conduct in a professional respect." The present action was tried before Mr. Justice Collins, who gave judgment for the defendants. The plaintiff appealed.

The Master of the Rolls, according to the report in the *Times*, said that the question was, Could Dr. Philipson reasonably be suspected of bias? Technically, perhaps, his resignation would not be complete for two months, but, looking at the substance of the thing, he had, as far as in him lay, resigned his membership. Under these circumstances Dr. Philipson could not reasonably be suspected of bias, and this contention failed. The second point raised was that there was no evidence that the plaintiff was guilty of infamous conduct in a professional respect. The Master of the Rolls was prepared to adopt a definition prepared by Lord Justice Lopes, not as exhaustive, but as applicable to this case—namely, if a medical man in pursuit of his profession had done something with respect to it which would reasonably be regarded as infamous by his professional brethren of repute, that would be evidence of infamous conduct in a professional respect. The question was not whether that which the medical man had done would be infamous if done by someone outside the medical profession. The conduct must be infamous "in a professional respect." There must be conduct which, if done by a medical man in his profession, either as regards his patients or his professional brethren, might be infamous conduct in a professional respect. In his opinion there was evidence upon which the defendants could say the plaintiff had tried to defame his brother practitioners, and had tried to induce suffering people to refrain from going to them, and, instead, to come to him, and thus to enable him to get the fees which otherwise they would have got. Therefore, there was evidence upon which the defendants were justified in finding that the plaintiff was guilty of infamous conduct in a professional respect, and their decision was final, and could not be reversed. The Lords Justices delivered judgment to the same effect.

PATENTS.

A PATENTEE BUT NOT A PRACTITIONER.—Lest our correspondent's designation of himself should prove misleading, we deem it well to remark that, although not in actual practice, he is nevertheless an old graduate of a distinguished University, and holds an official medical appointment.

With reference to the subject of his letter (which, consisting of 5 closely written large 8vo pages, is too long for insertion in our limited space), in which he observes: "Surely, if it be a code which is to be binding on the intelligence and consciences of such a body as the medical profession, we should at least know something as to its origin and the grounds on which its claims to obedience are founded," we are tempted to ask: Can it be that he has not even seen, much less read, the work? Such would appear to be the case, otherwise he may have noted in the preface the true nature of its origin and general purport, the principles on which it is based, and its assumed claim to the confidence of the profession. Moreover, after being critically revised and approved by several distinguished members of the profession in Great Britain and Ireland (including the late Sir Thomas Watson, who accepted the dedication, Sir George E. Paget, Sir Robert Christison, and other eminent representative practitioners, living and deceased), it has been in continuous use for fourteen years, and so far valued as not only to have passed through three editions, but impelled the "Ordine dei Sanitarj della Provincia di Milano" to solicit, through the medium of Dr. Giuseppe Colombo, of Milan, permission to translate it into Italian. A copy of this, as also of the English Code, is in the British Medical Association Library. Further, if our correspondent had been, as stated, "a diligent peruser of the BRITISH MEDICAL JOURNAL," he could scarcely have failed to have seen our reviews of the work. In reference, also, to the "editorial deliverances on ethical matters being so frequently based upon the Code," a legitimate reason, therefore, may be found in the reply to a correspondent which appeared in the BRITISH MEDICAL JOURNAL of November 12th, 1892, p. 1087, under the heading of "Repeated Inquiries on the same Subject."

As regards the one material point in the impugned Code, namely, the prohibitory rule to hold a patent for a surgical instrument, we referred the question to the author, who, in reply, observes that the prohibition was, he believes, introduced into the original Code issued by Dr. Percival, at a period (1807) when patents were very costly, and would have so enhanced the retail price as to have virtually inhibited its use. The interdiction, moreover, was embodied in the Code of the American Medical Association in 1847; he, therefore, did not feel justified in excluding it from the one in question. In view, however, of the present greatly diminished cost of a patent, he sees no valid reason for retaining the prohibitive rule, and proposes its abrogation.

YOUNG PRACTITIONER (Bournemouth), and MEDICO (co. Clare).—For an answer to our respective correspondents on the subject of patents, we would refer them to the concluding paragraph in above.

A MEMBER.—In view of the fact that the husband A. has notified B. that he does not desire him to attend his family, and will refuse to make any further payment, we apprehend that B. would not be able to enforce payment for any future attendance.

A. E. D. asks whether he can legally secure a fee under the following circumstances: I was engaged by a lady to attend her in her approaching confinement. I agree to do so, and take a note of the engagement, with the probable date when it was expected to occur. She some time afterwards engaged another medical gentleman for the same purpose. The confinement comes off, he attends, and I get no information.

*** An action would probably lie for breach of contract, although it is very doubtful if more than nominal damages would be recovered. We are not aware of any action of the kind having been brought.

SENEX.—Whether payment could be legally enforced or not is a question for a solicitor; it is obvious that our correspondent is bound in honour to carry out his agreement.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

HONORARY DEGREE.—The degree of Doctor of Science, *honoris causâ*, will on March 6th be conferred on Dr. S. Ramón y Cajal, Professor of Histology in the University of Madrid, who is to deliver the Croonian Lecture at the Royal Society on March 8th.

ELECTORAL BOARDS.—The following appointments of electors to professorships are announced: *Chemistry*, Lord Rayleigh; *Anatomy*, Sir G. M. Humphry; *Downing of Medicine*, Dr. D. MacAlister; *Physics*, Sir G. G. Stokes; *Surgery*, Professor J. Chiene, Edinburgh; *Pathology*, Sir James Paget.

PHYSIOLOGY.—We regret to learn that Dr. A. Sheridan Lea is prevented by ill-health from examining in physiology for the Natural Sciences Tripos and Second M.B. Examination. Dr. Shore, of St. John's College, has been appointed in his place.

ADDENBROOKE'S HOSPITAL.—At a General Court of Governors, held on February 26th, a new body of rules and by-laws for the government of the hospital, prepared by a committee consisting of Dr. D. MacAlister, Dr. Waraker, Dr. Besant, and Mr. Hattersley, and introducing many valuable improvements, was unanimously adopted and confirmed.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

FELLOWSHIP EXAMINATIONS.—The following gentleman having passed the necessary examination has been admitted a Fellow of the College:—Mr. William John Russell, L.R.C.P.I. and L.R.C.S.I. The following gentlemen have passed the primary part of the examination for the Fellowship of the College:—Mr. Patrick Thomas Bolyer, L.R.C.P.I. and L.R.C.S.I., and Mr. Jeremiah Dowling, L.R.C.P.I. and L.R.C.S.I.

THE ordinary receipts for the year 1893, exclusive of legacies, were £4,264 14s. 5d., while the expenditure was £10,102 14s. 3d., the deficiency being met by utilising various legacies received during the year. The chairman announced that the rebuilding of the front and the new laundry was making satisfactory progress, and that the committee hoped to arrange for the opening ceremony to take place in the autumn. In the meantime he urged all present to assist in raising the sum of about £7,000 still needed to meet the expenses incurred in connection with the works, and thus enable the new buildings to be opened free from

debt. The committee of management, finance committee, treasurer, and auditors were elected for the ensuing year, and a vote of thanks to the chairman brought the meeting to a close.

SOCIETY OF APOTHECARIES OF LONDON.

PASS LIST. February, 1894. The following candidates passed in:

Surgery.—T. W. W. Burgess, St. Bartholomew's Hospital; J. C. Cook, Middlesex Hospital; R. Evans, University College; R. S. Fairbank, King's College; J. Friend, Leeds; H. E. E. M. A. Greene, Royal Free Hospital; W. G. R. Macaulay, St. Thomas's Hospital; W. Mettham, Sheffield; D. S. Owen, London Hospital; G. H. Pearce, St. Thomas's Hospital; P. L. G. Skipworth, St. Bartholomew's Hospital; F. E. A. Webb, St. Bartholomew's Hospital; C. J. Wills, Liverpool.

Medicine, Forensic Medicine, and Midwifery.—C. P. Allen, Middlesex Hospital; F. R. S. Cosens, London Hospital; A. Douglas, Birmingham; H. A. Julius, St. Thomas's Hospital; F. W. Rock, St. Bartholomew's Hospital; J. A. Stainsby, London Hospital.

Medicine and Forensic Medicine.—D. W. Jones, Charing Cross Hospital.

Medicine and Midwifery.—F. E. A. Webb, St. Bartholomew's Hospital.

Medicine.—E. S. Chilcott, St. Mary's Hospital.

Forensic Medicine and Midwifery.—F. E. H. Keogh, St. Mary's Hospital; E. Smallwood, Liverpool; W. S. Webb, London Hospital.

Forensic Medicine.—E. S. L. Lovell, Charing Cross Hospital; F. L. Taylor, Aberdeen.

Midwifery.—H. Andreae, University College; H. E. E. M. A. Greene, Royal Free Hospital; H. R. Walker, King's College.

To Messrs. Allen, Andreae, Evans, Fairbank, Pearce, Smallwood, Stainsby, Walker, Wills, and Miss Greene was granted the diploma of the Society.

OBITUARY.

WILLIAM LEISHMAN, M.D., F.F.P.S.G.,

Emeritus Professor of Midwifery in the University of Glasgow.

LAST week we recorded with much regret the death of Dr. Leishman, who, until lately, occupied the Chair of Midwifery in the University of Glasgow. Dr. Leishman was, as they say in Scotland, "a son of the manse," his father being minister of Govan, one of the best parishes in Scotland, and now occupied by the Rev. Dr. John Macleod. Born in 1833, Dr. Leishman became a student of Glasgow University, where he graduated M.D. with honours in 1855. He began practice in Glasgow as a general practitioner, devoting, however, special attention to midwifery and gynæcology. An early appointment to the professorial staff of Anderson's College, that training school of many of the older, and some of the present, professors of the University, marked him out as a specialist in the department he had chosen for particular study, of which he soon became an acknowledged authority and ornament. When the Chair in the University, occupied for twenty-eight years by Dr. John M. Pagan, became vacant, it fell by natural selection to Dr. Leishman, who in turn held it for a quarter of a century.

As early as 1860 he had contributed various articles dealing with obstetrical subjects to the journals of the time, but four years before his appointment to the University a more ambitious product of his pen appeared in the form of an essay entitled the "Mechanism of Parturition," and in 1870 he published his well-known *System of Midwifery*, of which there have been four English and three American editions. Dr. Leishman was engaged on a fifth edition when his health gave way, necessitating, a year and a-half ago, a retirement from work, which all hoped to be only temporary, but which, six months ago, compelled his resignation of the Chair and of other public duties, and which has, so soon afterwards, been followed by his death.

Dr. Leishman was a Licentiate of the Royal College of Surgeons of Edinburgh and a Fellow of the Glasgow Faculty of Physicians and Surgeons; he was Vice-President of the Obstetrical Society of London, and a Corresponding Fellow of the Obstetrical Societies of Edinburgh and London. In Glasgow, he was Consulting Physician to the Maternity Hospital, Physician to the Dispensary for Diseases of Women of the Western Infirmary, and to the Sick Children's Hospital.

But however admittedly distinguished and esteemed in his profession, Dr. Leishman was held in honour on much less restricted grounds. A man of wide reading, familiar with more than his native tongue, and his familiarity with it revealed itself in the simple grace of all his speech, his bearing and conversation spoke as clearly of a high culture, which reading, however much and varied, cannot always impart. Intellectually stable, physically dignified, courteous, if reserved, in manner, he possessed a combination of qualities that could hardly fail to command attention and ensure respect. It was not, therefore, only because of his professional eminence that his brethren held him in honour, nor simply the lucidity of his teaching that wrung respect from his students, in a day when students were not too prone to respect a professor simply as such. He never seemed to forget that his students might learn from him much more than the mere subject which it was at the moment his business to teach. Students could not fail to observe the scrupulous care with which, while demonstrating some diseased condition in the person of a patient, he endeavoured to avoid as much as possible adding to the unpleasantness of the situation to the person concerned without losing the benefit of what is euphemistically called "clinical material." Indeed, if his students criticised at all his clinical instruction, it was on the ground that his affection for "clinical material" was held in too tight a check by his respect for the personal sufferer.

In his later years Professor Leishman was enabled, owing to the confidence reposed in him by his professional brethren and his colleagues, to render much service to the profession in the General Medical Council, and to the University in the Court and Senate. This brief notice of his work cannot be closed better than by quoting part of a graceful tribute to his memory paid by one of his oldest colleagues. Of him Professor Gairdner writes: "He was almost an ideal councillor, but it was necessary to have lived and worked alongside of him for a number of years to learn the secret of his combined strength and suavity. It was not at all because Dr. Leishman disliked or was afraid of controversy that his words were usually, if not always, on the side of peace and harmony, and yet carried great weight. It was because they carried great weight, and were always kept studiously free from personal considerations, that they tended on the whole in the direction of peace and amity. He liked to look at a subject all round, and to see what was reasonably to be said on every side of it. He had strong convictions—personal, political, and academical—and never hesitated in expressing them; but he was entirely above, and incapable of, the exaggerations that spring from a heated and ill-considered partisanship. Hence among his colleagues his judgment was felt to be one that could be relied upon in all circumstances. It was safe, and in the main conciliatory, without being weak or colourless. And even his enemies (if he had any) must at once have come to know that here was a man whom it was of no use to try to fight with the weapons of detraction and abuse, because he not only did not use these himself, but surrounded all his words and his doings with an impersonal atmosphere against which such venomous shafts fell powerless, because the man himself was invulnerable in his sense of duty and public spirit."

Dr. Leishman has left a widow, three daughters, and a son, surgeon-captain in the Army Medical Staff, at present on service in India.

WE regret to announce the death of Professor ALBERT LÜCKE, one of the leading surgeons in Germany, which occurred on February 20th. Dr. Lücke was Professor of Surgery in the University of Strassburg. He was the colleague of Billroth in the editorship of that remarkable work, the *Deutsche Chirurgie*, and contributed largely to surgical literature in other ways.

DEATHS IN THE PROFESSION ABROAD.—Among the members of the medical profession in foreign countries who have recently passed away are Professor J. Uffelmann, Director of the Hygienic Institute in the University of Rostock; Dr. H. A. Abelin, Emeritus Professor in the Carolina Medico-Chirurgical Institute of Stockholm; Dr. R. B. S. Hargis, of Pensacola, Florida, some time President of the Florida Medical Association, a noted authority on yellow fever, and a considerable contributor to medical literature, aged 75; Dr. J. F. Hartigan, United States Consul at Trieste, and formerly for many years Coroner's Physician for the District of Columbia; Dr. J. W. Pittinos, of Philadelphia, formerly lecturer on chemistry and materia medica in the Medical College of that city; and Dr. J. C. Armentrout, Professor of Physiology in the Keokuk (United States) Medical School.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE DEATH-RATES OF LONDON SANITARY DISTRICTS DURING 1893.

In the accompanying table will be found summarised the vital and mortal statistics of the forty-one sanitary districts of the metropolis, based upon the Registrar-General's returns for the year 1893. The mortality figures in the table relate to the deaths of persons actually belonging to the respective sanitary districts, and are the result of a complete system of distribution of deaths occurring in the public institutions of London among the various sanitary districts in which the patients had previously resided. By this means alone can trustworthy data be secured upon which to calculate reliable rates of mortality.

The 132,965 births registered in London during the year 1893 were equal to an annual rate of 30.9 per 1,000 of the population, estimated at 4,306,411 persons in the middle of that year. This rate corresponded with that recorded in the preceding year, but, with two exceptions, was lower than in any of the past fifty years. In the various sanitary districts the birth-rates showed the usual wide variations, owing principally to the differences in the age and sex distribution of their populations. In Kensington, St. George Hanover Square, St. James Westminster, Hampstead, St. Martin-in-the-Fields, and London City the birth-rates were considerably below the average; while in St. Luke, Bethnal Green, Whitechapel, St. George-in-the-East, Mile End Old Town, Newington, and Bermondsey the birth-rates showed a marked excess.

The deaths of persons belonging to London registered during the year under notice were 90,060, equal to an annual rate of 20.9 per 1,000 of the population, against 21.1 and 20.3 in the preceding two years. During the eight years 1885-92 the death-rate averaged 20.0 per 1,000. The lowest death-rates in the forty-one sanitary districts during last year were 12.9 in Hampstead, 14.6 in Lewisham (excluding Penge), 15.2 in Wandsworth, 16.1 in St. George Hanover Square, 16.4 in Plumstead, 17.6 in Kensington, and 17.8 in Paddington; in the other districts the rates ranged upwards to 26.6 in Clerkenwell, 27.1 in Holborn, 28.2 in Limehouse, 28.4 in St. George Southwark, 30.0 in Strand, and 30.8 in St. Luke and in St. George-in-the-East.

During the year under notice 13,091 deaths resulted from the principal zymotic diseases in London; of these, 3,436 were referred to diarrhœa, 3,196 to diphtheria, 2,327 to whooping cough, 1,658 to measles, 1,587 to scarlet fever, 701 to different forms of "fever" (including 5 to typhus, 675 to enteric fever, and 21 to simple and ill-defined forms of continued fever), and 186 to small-pox. These 13,091 deaths were equal to an annual rate of 3.0 per 1,000, against 2.9, 2.3, and 2.8 in the preceding three years. This rate was, with one exception, higher than that recorded in any of the preceding eight years, 1885-92, during which the zymotic death-rate averaged 2.7 per 1,000. In the various sanitary districts the rates ranged from 1.3 in Hampstead and in London City, 1.5 in St. Martin-in-the-Fields, 1.6 in St. George Hanover Square, 1.7 in Lewisham, 1.8 in St. James Westminster, and 2.0 in Westminster to 4.1 in Bethnal Green, 4.6 in Shoreditch, 4.7 in Limehouse, 4.8 in St. George Southwark, 4.9 in Clerkenwell and in St. George-in-the-East, and 5.6 in St. Luke. Compared with the preceding year, the mortality from measles and whooping-cough showed a decline, while that from each of the other principal zymotic diseases showed a marked increase. The 186 fatal cases of small-pox registered in London during last year exceeded those recorded in any year since 1885; during the preceding six years only 59 deaths from small-pox of London residents had been registered. Of the 186 fatal cases last year, 13 belonged to Rotherhithe, 13 to Greenwich, 12 to Poplar, 12 to Battersea, 11 to Camberwell, and 10 to Kensington sanitary districts. During the year under notice 2,481 small-pox patients were admitted into the Metropolitan Asylums Hospitals, and 82 remained under treatment at the end of December last. Measles showed the highest proportional fatality in Pancras, Clerkenwell, St. Luke, Shoreditch, Bethnal Green, St. George-in-the-East, and Greenwich; scarlet fever in Strand, St. Luke, Limehouse, Poplar, and St. George Southwark; diphtheria in Strand, Clerkenwell, St. Luke, Shoreditch, Bethnal Green, St. George-in-the-East, Limehouse, Poplar, Bermondsey, Battersea, and Plumstead; whooping-cough in Clerkenwell, St. Luke,

Analysis of the Vital and Mortal Statistics of the Sanitary Districts of the Metropolis, after Complete Distribution of Deaths occurring in Public Institutions, during the Year 1893.

SANITARY AREAS.	Estimated Population middle of 1893.	Births.	Deaths.	Annual Rate per 1,000 Living. Births.	Deaths.	Principal Zymotic Diseases.	Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-Cough.	Typhus.	Enteric Fever.	Simple and Undefined Fever.	Diarrhœa.	Deaths of Children under 1 year of age to 1,000 Births.
LONDON	4,306,411	132,965	90,060	30.9	20.9	3.0	13,091	186	1,658	1,587	3,196	2,327	5	675	21	3,436	164
West Districts.																	
Paddington	120,421	3,010	2,141	25.0	17.8	2.3	275	4	30	33	70	60	—	21	—	57	150
Kensington	167,029	3,671	2,942	22.0	17.6	2.1	348	10	21	52	83	65	—	17	—	100	169
Hammersmith	103,044	2,966	1,872	28.8	18.2	2.4	246	3	4	36	53	50	—	15	2	83	160
Fulham	104,735	3,711	2,024	35.4	19.3	3.3	342	2	12	33	64	82	—	17	—	132	176
Chelsea	98,182	2,854	1,955	29.1	19.9	2.7	268	1	23	32	52	68	—	17	2	73	158
St. George Hanover Square	76,043	1,496	1,228	19.7	16.1	1.6	118	3	2	25	34	14	—	12	2	26	133
Westminster	54,829	1,358	1,290	24.8	23.5	2.0	110	—	5	25	14	15	—	7	1	43	188
St. James Westminster	24,000	528	471	22.0	19.7	1.8	43	1	4	2	14	8	—	6	1	7	146
North Districts.																	
Marylebone	139,726	4,379	3,192	31.3	22.8	2.7	382	5	32	68	94	78	—	20	1	84	151
Hampstead	73,380	1,507	948	20.5	12.9	1.3	97	2	1	20	38	6	—	8	—	22	102
St. Pancras	283,936	7,044	5,138	30.1	22.0	3.3	761	9	154	100	201	106	—	27	—	164	172
Islington	327,919	9,750	6,405	29.7	19.5	2.8	930	2	129	94	200	197	1	47	1	259	164
Hackney	240,584	6,911	4,532	28.7	18.8	3.0	724	4	57	74	206	165	—	53	1	164	152
Central Districts.																	
St. Giles	38,641	1,094	925	28.3	23.9	2.4	93	4	6	14	22	18	—	6	—	23	131
St. Martin-in-the-Fields	14,034	223	298	15.9	21.2	1.5	21	2	1	2	8	2	—	1	—	5	188
Strand	23,788	594	713	25.0	30.0	2.9	68	1	2	19	22	11	—	1	—	12	219
Holborn	32,690	864	886	26.4	27.1	3.3	109	1	18	12	22	16	—	13	—	27	214
Clerkenwell	65,589	2,106	1,745	32.1	26.6	4.9	319	—	79	30	76	51	—	10	—	73	202
St. Luke	41,577	1,770	1,282	42.6	30.8	5.6	232	1	58	28	46	40	—	12	—	47	174
London City	35,870	627	843	17.5	23.5	1.3	48	3	11	8	11	4	—	—	1	10	132
East Districts.																	
Shoreditch	123,440	4,450	3,153	36.1	25.5	4.6	568	3	129	39	137	80	—	16	1	161	178
Bethnal Green	129,620	4,756	3,257	36.7	25.1	4.1	527	7	83	71	136	60	—	25	—	145	177
Whitechapel	75,178	3,096	1,916	41.2	25.5	3.1	235	5	37	32	61	28	—	8	—	66	168
St. George-in-the-East	45,493	1,966	1,403	43.2	30.8	4.9	221	1	32	14	62	23	—	4	—	85	209
Limehouse	57,115	1,953	1,613	34.2	28.2	4.7	269	8	21	35	61	64	1	18	—	61	205
Mile End Old Town	108,041	4,146	2,430	38.4	22.5	3.3	361	8	39	40	80	44	—	29	—	121	149
Poplar	169,141	5,918	3,905	34.9	23.1	3.8	639	12	32	105	168	74	1	62	—	185	169
South Districts.																	
St. Saviour Southwark	26,854	780	649	29.0	24.2	3.1	82	—	6	18	17	20	—	3	—	18	154
St. George Southwark	59,953	2,169	1,700	36.2	28.4	4.8	286	7	35	42	45	74	—	13	—	70	206
Newington	117,672	4,345	2,856	36.9	24.3	3.7	432	6	34	51	93	109	—	13	—	126	176
St. Olave Southwark	12,903	412	312	31.9	24.2	2.2	29	1	1	6	7	3	—	2	—	9	141
Bermondsey	84,246	3,202	2,004	38.0	23.8	3.3	275	4	36	30	80	46	1	8	—	70	168
Rotherhithe	46,020	1,379	927	34.5	23.2	3.4	136	13	10	16	31	33	—	8	—	25	165
Lambeth	280,284	9,212	5,740	32.9	20.5	2.7	761	5	113	69	185	151	1	36	4	197	149
Battersea	158,105	5,225	2,980	33.1	18.9	3.6	570	12	93	40	167	114	—	22	—	122	169
Wandsworth	172,143	4,589	2,617	26.5	15.2	2.5	422	1	36	53	113	81	—	18	1	119	142
Camberwell	245,143	7,472	4,724	30.5	19.3	2.5	619	11	83	73	130	109	—	27	—	186	161
Greenwich	171,120	5,377	3,510	31.4	20.5	3.5	606	13	103	71	147	100	—	28	1	143	165
Lewisham	77,473	1,899	1,133	24.5	14.6	1.7	135	5	19	11	53	8	—	8	1	29	128
Woolwich	41,854	1,302	842	31.1	20.1	2.4	101	4	14	16	8	20	—	5	1	33	160
Plumstead	94,596	2,874	1,547	30.4	16.4	3.0	285	2	53	48	85	32	—	11	—	54	137

Shoreditch, Limehouse, St. Saviour Southwark, St. George Southwark, Newington, and Rotherhithe; and diarrhœa in Fulham, Clerkenwell, St. Luke, Shoreditch, Bethnal Green, St. George-in-the-East, Mile End Old Town, Poplar, and St. George Southwark. The mortality from "fever" showed no marked excess in any of the sanitary districts. The number of scarlet-fever patients in the Metropolitan Asylums Hospitals, which had been 3,168 at the beginning of 1893, was 2,871 at the end of December last; 14,640 new cases were admitted during 1893, equal to a weekly average of 282 throughout the year. There were 3,189 admissions of diphtheria patients into these hospitals during last year, and 283 remained under treatment at the end of December.

Infant mortality in London during 1893, measured by the proportion of deaths under one year of age to registered births, was equal to 164 per 1,000, and exceeded by 11 the average proportion in the preceding ten years 1883-92. While the rate of infant mortality did not exceed 102 in Hampstead, 128 in Lewisham, 131 in St. Giles, 132 in London City, 133 in St. George Hanover Square, and 137 in Plumstead, it ranged upwards in the other sanitary districts to 188 in Westminster and St. Martin-in-the-Fields, 202 in Clerkenwell, 205 in Limehouse, 206 in St. George Southwark, 209 in St. George-in-the-East, 214 in Holborn, and 219 in Strand.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns, including London, 6,286 births and 4,002 deaths were registered during the week ending Saturday, February 24th. The annual rate of mortality in these towns, which had declined from 28.5 to 18.7 per 1,000 in the preceding six weeks, rose again to 20.0 last week. The rates in the several towns ranged from 12.2 in Portsmouth and 14.6 in Derby, to 25.7 in Preston and 29.4 in Wolverhampton. In the thirty-two provincial towns the death-rate averaged 20.0 per 1,000, and corresponded with the rate recorded in London. The zymotic death-rate in the thirty-three towns averaged 2.4 per 1,000; in London the rate was equal to 2.6 per 1,000, while it averaged 2.3 in the thirty-two provincial towns, and was highest in West Ham, Plymouth, and Wolverhampton. Measles caused a death-rate of 3.0 in Birkenhead and 5.5 in Wolverhampton; scarlet fever of 1.1 in Burnley and in Sunderland; and whooping-cough of 2.1 in Cardiff, 2.2 in Bolton, and 3.0 in Plymouth. The 84 deaths from diphtheria included 42 in London, 11 in West Ham, 7 in Manchester, and 4 in Salford. Four fatal cases of small-pox were registered in Birmingham, 3 in West Ham, 2 in London, 2 in Bristol, and 1 in Nottingham, but not one in any other of the thirty-three towns. There were 81 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, February 24th, against 82, 77, and 78 at the end of the preceding three weeks; 18 new cases were admitted during the week, against 15 and 17 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,181, against 2,491, 2,387, and 2,270 at the end of the preceding three weeks; 180 new cases were admitted during the week, against 224 and 199 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, February 24th, 871 births and 588 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had declined from 21.0 to 19.2 per 1,000 in the preceding three weeks, rose again to 20.6 last week, and was 0.6 per 1,000 above the mean rate during the same period in the thirty-three large English towns. Among these Scotch towns the death-rates ranged from 9.6 in Paisley to 30.8 in Perth. The zymotic death-rate in these eight towns averaged 2.6 per 1,000, the highest rates being recorded in Leith and Perth. The 271 deaths registered in Glasgow included 25 from whooping-cough, 9 from diphtheria, and 3 from scarlet fever.

LONDON STREETS AND BUILDINGS BILL.

A Handy Abstract of the Clauses of the Bill, with an index to the principal provisions, and a table comparing the Bill with the existing law, has been prepared by Henry C. Jones, Clerk to the Board of Works for the St. Giles District, assisted by George Wallace, F.S.I. (1894. Published at 197, High Holborn. Demy, 8vo, 70 pages. Price 2s.).

This abstract forms, as designed by those who prepared it, an easy and inexpensive means of becoming acquainted with the more important details of the Bill. In some respects it fails to give an adequate idea of these details, notably, for example, in the case of Section 30, a most important section, and one the significance of which will not be gathered from the abstract here given of it. Those who are desirous of thoroughly understanding the measure in all its bearings will be content only with the Bill, the whole Bill, and nothing but the Bill. Even to experts, however, this abstract may prove of use as a compendium of the provisions of the measure. The table comparing the Bill with the existing law appears to be in some respects faulty. The sections which deal with open space in connection with buildings are described as new legislation. This is, of course, true, but there is no hint given that any provisions with regard to this matter are contained in the existing law.

SUBURBAN ISOLATION HOSPITALS.

THE proceedings at the meeting of the Edmonton Local Board only serve to emphasise what we said last week regarding the absence of all proper means for dealing with infectious diseases in certain portions of the outer ring of the metropolis. Whatever the shortcomings of London in this matter, many of the suburbs are infinitely worse, for they are totally unprovided with any means whatever for isolating their sick. At this meeting the report of Dr. Green, the medical officer for the Edmonton District, was read, in which he drew attention to the want of hospital accommodation. The Board, he said, have at their disposal absolutely no accommodation for the isolation of infectious cases, and the want of such provision is much felt in the district. As a rule the Board's applications, in cases of special difficulty, for assistance from other bodies have proved unsuccessful, and, however unsuitable the accommodation, the cases have had to remain wherever they happened to arise.

The Board, however, did not accept the suggestion in an amicable spirit. One member is reported to have resented what he regarded as an attempt on the part of the medical officer to dictate to the Board, while another, who apparently has but vague conceptions regarding the duties of public officials, actually suggested that the passages in the report which related to the want of an isolation hospital should be expunged before it was sent to the Local Government Board. As a measure of the sort of men who sit on these local boards, we may mention that a certain Mr. Wiggs is reported to have said at this meeting that many cases which were notified as scarlet fever were really only children's complaints! Alas for the children under such rule! And these are the men who constitute a sanitary authority, and to whose management the health of a district is handed over.

We believe that the Local Government Board has already made several representations to the Edmonton authority on this subject; but what is really wanted is some more stringent power to compel these little suburban boards to combine to form hospital districts, of such size as to be able to support well equipped institutions, properly fitted for the treatment and isolation of their infectious patients.

THE COST OF SMALL-POX EPIDEMICS.

IT appears from the records of the Pudsey small-pox experience of last year that the 17 cases which occurred cost the rates an average of £10 15s. each. It may be remembered that in the BRITISH MEDICAL JOURNAL of May 23rd of last year we showed the average cost of 1,165 cases of the disease in various parts of Great Britain to be £8 11s. each.

THE STATE OF THORPE OLD RIVER.

AT the instance of the Norfolk County Council, the Local Government Board directed Dr. Mouckton Copeman to make a report on the state of Thorpe Old River. His report shows that the old river at Thorpe has become befouled in a serious manner, the "new cut" in the River Yare having become the main stream, there is relative stagnation of the old course of the river. The accumulations of years in the old river, containing as they do a large amount of putrescible matter, constitute a standing menace to Thorpe village. Dr. Copeman regards them as in great measure due in the past to the sewage discharged higher up by Norwich, although now no sewage from the town enters the river prior to passing through the sewage farm. But Thorpe is and has been by no means blameless, and hence the desirability of joint amicable action between the two sanitary bodies. For the rest, Dr. Copeman has little that is good to say of Thorpe village—water supplies, lack of sewage, excrement disposal, house drainage, and sanitary administration alike calling for serious comment.

NEW INFECTIOUS HOSPITAL FOR BIRKENHEAD.

THE foundation stone of the new hospital for infectious diseases for Birkenhead was laid on February 24th by the mayor. The site chosen is at Flaybrick Hill, an elevated open spot at a distance from any houses. It will be remembered that about three years ago the old fever hospital was found to be in a highly unsatisfactory state. The new hospital will consist of an administrative block, three double public wards, and one double private ward, giving forty-four beds in all. There is also room left for additional wards to contain sixty beds should further accommodation be found necessary at any future time.

THE SANITARY WANTS OF AMBLE.

THE local board of Amble are to be congratulated on possessing a health officer able and ready to speak plainly on the sanitary shortcomings of the district. A sufficient and safe water supply, greater care in regard of defective sewers laid in a porous soil from which the present water supply is drawn, the adoption of the compulsory notification system, and the provision of hospital accommodation—all these are "wants," and Dr. Smyth demonstrates the necessity of each. Fatal typhoid has existed in relation with a befouled water service, and the absence of notification has foiled him in his attempts to obtain full particulars of the matter. The district has been specially visited by a Local Government Board medical inspector, Dr. Thompson, and has therefore had the benefit of expert advice in addition to that of its own health officer.

SMALL-POX IN RELATION TO VACCINATION.

THE experience of Birmingham in the matter of small-pox in relation to vaccination during the fourth quarter of 1893 is a repetition of the old story. In the three months 584 attacks were recorded, and of these 504 were of vaccinated persons, 63 not vaccinated, and 17 doubtful as to vaccination. The records of death were as follow:

504 vaccinated cases,	22	deaths;	mortality	4.4 per cent.
63 unvaccinated	„ 19	„	„	30.1 „
584 all classes,	43	„	„	7.4 „

Two deaths were of persons having no scars visible, whilst of the fatally attacked vaccinated cases the "vaccination was for the most part very imperfect, only two marks, or less, being found in 14 cases." Comment seems needless.

TOWN COUNCILLOR OR MEDICAL OFFICER.

AT a meeting last week Dr. Menzies, medical officer of the Burgh of Inverkeithing, who it will be remembered had been elected a town councillor, intimated his resignation of the latter office. A communication had been sent to the Board of Supervision, asking if it was legal for the medical officer to fill the post of town councillor. In reply, an extract from a minute of the Board had been sent, stating that he would be well advised to tender his resignation of the office of councillor. In a letter subsequently received it was said: "In the view of the Board the legality of a member of the local authority holding the office of medical officer is open to doubt. Even if it were decided to be legal, the Board are clearly of opinion that it is very inexpedient."

SPECIAL FEE FOR DIFFICULT MIDWIFERY.

A Member B.M.A., in Poor-law practice, writes to say he is in doubt as to what fee he ought to claim for attendance on a case of midwifery, which he believes was one of pelvic presentation, and gave him great trouble in delivery, and which was moreover followed by an attack of phlebitis affecting both legs.

*** We consider that by Art. 183 (Consolidated Order, July 24th, 1847), a fee of £2 is payable for this case, and this for two reasons: (1) on account of the difficulty in delivery; (2) on account of the subsequent phlebitis, which must be considered a puerperal malady entailing long subsequent attendance.

MEDICAL OFFICERS OF INFECTIOUS HOSPITALS.

Ubique writes, asking whether there is any law or reason by which a medical officer of health is precluded from holding the appointment of medical officer to an infectious hospital in his own district in addition to his health appointment. Such a conclusion has, "Ubique" states, been arrived at in one place without, as he thinks, due consideration.

*** Of course, everything depends upon the terms of tenure of office of the medical officer of health in question. If his salary is paid entirely by the sanitary authority, and he is appointed only from year to year, he would appear to have no option but to accept the decision or resign his appointment.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.

The Eyesight of Seamen.—Mr. Mundella, in reply to Dr. MacGregor, said that the Board of Trade had decided upon the new regulation for testing the eyesight of seamen. They would be issued shortly, and would contain provisions for testing form vision as well as colour vision. Correspondence on the subject was in print, and would be presented forthwith.

Poisoning by Carbolic Acid.—In reply to Mr. Picton, Sir Walter Foster said that the Local Government Board was in communication with the Privy Council, with whom rested the duty of imposing restrictions as to the sale of poisons, with regard to carbolic acid. He had been informed by the Registrar-General that in the period between December 30th, 1893, and February 10th, 1894, out of a total of 28 deaths from accidental poisoning in London one was from carbolic acid, and out of 98 cases of suicide 7 were due to carbolic poisoning.

HOSPITAL AND DISPENSARY MANAGEMENT.

NATIONAL HOSPITAL OF CONSUMPTION FOR IRELAND.

The Board of Governors have signed a contract with Messrs. Collen for the erection of the hospital buildings near Newcastle, co. Wicklow, for a sum of £8,956. The plans provide for the erection of an administrative block and eight residential blocks for patients, capable of accommodating 100 inmates. Orders have at present been given for the erection of the administrative block and two residential blocks for patients, capable of accommodating 12 male and 12 female patients.

CORK DISTRICT LUNATIC ASYLUM.

During 1893, 260 patients were admitted to the asylum. Among the cases were 4 examples of general paralysis, which disease is almost unknown in Ireland. The total under treatment numbered 1,352, and the deaths 165, equal to 9.1 per cent. on the average number resident. In June last a tender was accepted for building six annexes, considerably enlarging the laundry, erecting a passage of communication between the new and old buildings, constructing a main sewer in the front grounds, building a lodge at the eastern entrance, and a mortuary. The total expenditure amounted to £22,850 14s. 8d., or £20 12s. 1d. per head.

INDIA AND THE COLONIES.

INDIA.

The Hemp Drugs Commission.—The Commission on Indian Hemp Drugs appointed by the Government of India has been prosecuting its inquiry in the Madras Presidency. It appears that the consumption of such drugs in the Madras Presidency is pretty well limited to Malabar, Trichinopoly, Madras, North Arcot, and Bellary, and that even in these districts its use is restricted. The chief consumers are believed to be Sepoys, especially Mahommedans and their dependents.

The Subordinate Medical Service.—A Committee has been appointed to advise the Government of Bengal as to proposals for reorganising the Bengal Subordinate Medical Service. The members of the Committee are Surgeon-Colonel Harvey, Sir A. W. Croft (Director of Public Instruction), and Surgeon-Major G. Bomford (Principal of the Medical College, Calcutta). The points to which attention will be specially devoted are with regard to the civil hospital assistants, whether their present position is such as to attract and satisfy a sufficiently good type of students, and whether, if better pay and prospects are advised, they should not be made contingent on a higher standard of attainments. The latter point will open up the whole question of existing vernacular medical education. The Committee will also make regulations for the training of female medical students who may possibly before long become an important part of the student class.

Vaccination in the Central Provinces.—The triennial report of the vaccine operations in the Central Provinces and their feudatory States and zamindaries for the period ending with 1892-3 by Surgeon-Colonel G. C. Ross, Administrative Medical Officer and Sanitary Commissioner of the Central Provinces, shows that in 1892-3 420,891 primary vaccinations and 42,955 revaccinations were performed, giving a total of 453,846 operations. Successful primary vaccinations have increased, a result which is said to be partly due to the introduction of the new system of animal vaccination, the opposition to which is rapidly disappearing. The annual mortality from small-pox in most districts of the Central Provinces has been very small.

Vaccination in Madras.—The triennial report of Surgeon-Lieutenant-Colonel J. A. Laing, Sanitary Commissioner of Madras, on the working of the Vaccination Department, shows that vaccination has been making steady progress in the Presidency during the last five years. The total number of vaccinations in 1892-3 was 1,164,541 being an increase as compared with 1891-2 of 111,121 cases, or 10.5 per cent. The cost of successful cases was reduced by 2 pies, and stood at As. 3-5, a result which is ascribed to the use of glycerine paste instead of lymph taken direct from the calf. The total number of operations performed with animal lymph was 884,525; of these, 832,021, or 94.1 per cent., were successful. The total number of vaccinations performed during the year was 32.5 per mille of the population (excluding Bangalore and Secunderabad cantonments), according to the census of 1891. Infantile vaccination was 31.1 per cent. of the total number of births registered. Vaccination was compulsory in fifty-two municipalities, having been introduced in five of these during the year 1892-93.

BURMAH.

Vaccination in Burmah.—The triennial report on vaccination in Burmah for the years 1890-91 to 1892-93, by Surgeon-Major P. W. Dalzell, Officiating Sanitary Commissioner and Superintendent-General of Burmah, shows that considerable progress has been made in both Upper and Lower Burmah during the last three years. In 1892-93, 101,540 primary vaccinations and 18,609 revaccinations, making together 110,149 operations, were performed in Upper Burmah, and 117,178 primary vaccinations and 38,938 revaccinations, making together 156,116 operations, in Lower Burmah. In Lower Burmah the proportion of successful primary vaccinations to the total number performed in 1892-93 was 86.65 per cent., and in Upper Burmah 86.09 per cent. The Vaccination Act was in force in all the large municipalities of the province, and in most of the smaller ones. The attitude of the people towards vaccination is described as generally antagonistic.

NEW SOUTH WALES.

Leprosy.—There are at present thirty-six lepers confined in the lazaretto at Little Bay, near Sydney, of whom nineteen are Chinese.

Mr. Cann, Member of the Legislative Assembly, has brought in a Bill to amend the Mining Act of 1874, by making provision for the issue of regulations for the prevention of lead poisoning, or poisoning by any other fumes, in conducting mining operations.

QUEENSLAND.

The Government has decided to establish a Stock Institute at Brisbane for pathological and bacteriological purposes.

VICTORIA.

Dr. Aubrey Bowen, formerly of Melbourne, whose death was announced in the British Medical Journal some months ago, has left estate consisting of £66,500 personalty, and £6,000 realty. He has bequeathed £100 to the Melbourne Ladies' Benevolent Society, £100 to the Victorian Eye and Ear Hospital, and £20,000 to be distributed among the charitable or benevolent institutions of Victoria at the discretion of his widow.

As we learn from the *Australasian Medical Gazette*, a meeting of medical practitioners was lately held at Melbourne, Dr. Pinnock, of Ballarat, being in the chair. It was resolved to form an "Australasian Medical Association." Dr. Florence, of Mooroopna, and Dr. Scott, of Ballarat, were appointed to act as interim secretaries, and were empowered to draw up a constitution for approval by the various branches which may be formed.

A meeting of the Medico-Pyschological Association will be held at the Faculty Hall, Glasgow, on March 8th, at 2 P.M. A discussion on the history of an experiment in dealing with reported cases of insanity in the Barony Parish, Glasgow, will be opened by Dr. Carswell. Dr. Urquhart will raise the question of possible joint action by the Scottish Asylums in relation to the Royal National Pension Fund for Nurses, and papers will also be read by Dr. W. W. Ireland and Dr. Oswald. The members will subsequently dine together at the Windsor Hotel.

Notification of Infectious Diseases in Belgium.—The Belgian Superior Council of Hygiene, having been requested by the Government to consider the question of the compulsory notification of infectious diseases, has reported in favour of dual notification—by the medical practitioner in attendance and by the head of the family or the principal occupier of the house—of small-pox, scarlet fever, diphtheria, typhoid fever, and cholera. The Council also recommends the immediate isolation of cases of these diseases and the establishment of places for the purpose. It also suggests that the disinfection of the rooms and belongings of patients and of the patients themselves if necessary should be made compulsory.

MEDICAL NEWS.

The sixteenth annual meeting of the Home Hospital Associations will be held at the Fitzroy Home, at 4 P.M., on March 15th, when Mr. Christopher Heath will take the chair.

At the Council meetings held since the vacation of the London and Counties Medical Protection Society about 500 new members have been elected. At one meeting over 150 were accepted. A large number are now awaiting election.

The annual Congress of the British Institute of Public Health will be held in London from July 26th to 31st next. It will be arranged in five sections: Preventive Medicine, Chemistry and Climatology, Engineering and Building Construction, Municipal and Parliamentary, and Naval and Military Hygiene.

St. Petersburg Medical Society.—The St. Petersburg Medical Society, at its annual meeting on February 6th, elected Dr. W. Stolz President, and Dr. W. Ocks Vice-President. The Society now numbers 18 honorary, 71 ordinary, and 21 corresponding members. During the ten years it has been in existence the Society has held 120 meetings.

The late Dr. Cranstoun Charles.—At the adjourned inquest on the late Dr. Cranstoun Charles, concerning whom an obituary notice appeared in the British Medical Journal of February 3rd, evidence was given by Dr. Stevenson, who stated that in his opinion Dr. Charles had taken between one and one and a-half grains of morphine, which poison would be especially fatal with anyone suffering, as the deceased was, from lung disease. To one accustomed to take morphine this would not appear an excessive dose. The jury returned a verdict of accidental death.

Swiss Universities.—The total number of students in the medical faculties of the universities of Switzerland at present is 1,009, of whom only 643 are Swiss. The students are distributed among the several schools as follows: Basle, 157 men, 3 women; Berne, 172 men, 43 women; Geneva, 173 men, 67 men; Lausanne, 83 men, 21 women; Zürich, 216 men, 74 women. Professor Laskowski's statistics, recently quoted in the British Medical Journal, with the gloomy prognosis which they imply, do not appear to have driven the female students entirely away from Geneva.

Free Sanitary Lectures.—Dr. Hunter, in his annual report for 1893 to the Pudsey Local Board, makes mention of a series of free lectures for the people, given by himself in his official capacity, and by four health officers of neighbouring sanitary districts, the five representing the areas joined to maintain the Calverley Joint Hospital, namely, Eccleshill, Calverly, Farsley, Idle, and Pudsey. The subjects chosen were "The Germs we Suffer From," "The Water we Drink," "The Food we Eat," "The Air we Breathe," and "The House we Live In." Each health officer repeated his lecture in each of the five towns, and the courses were well attended. The experiment, which deserved the success which attended it, is worthy of being repeated elsewhere.

Sanatoria for Tuberculous Patients in France.—There are ten seaside sanatoria for tuberculous patients in France. The oldest, largest, and best known of these is at Berck-sur-Mer; it contains 1,034 beds. Then comes one at Arcachon, with 300 beds; one at Banyuls-sur-Mer, with 200; the Pen-Bron hospital opposite Croisic, with 160; the departmental Asylum of Ste. Eugénie at Cap Breton, with 100; the René Sabrant Sanatorium at Hyères, with 100; the Saint-Pol Sanatorium, near Dunkirk, with 80; the Jean Dolfus Sanatorium at Cannes, with 45; and two small sanatoria at Cette and at Ver-sur-Mer in the department of Calvados. The total number of beds in sanatoria for tuberculous patients in France is therefore about 1,800.

The Hunterian Society.—At the annual meeting of the Hunterian Society a vote of thanks was passed to the President, Mr. F. Gordon Brown, and to the other officers of the Society. The officers for the ensuing year were then elected as follows: *President:* C. J. Symonds, M.S., M.D. *Vice-Presidents:* John Poland, Henry J. Thorp, John S. E. Cotman, Peter Horrocks, M.D. *Treasurer:* F. Charlewood Turner, M.D. *Trustees:* H. I. Fotherby, M.D.; F. M. Corner. *Librarian:* Arthur T. Davies, M.D. *Orator:* Patrick Manson, M.D., C.M., LL.D. *Secretaries:* R. Hingston Fox, M.D.; T. Horrocks Openshaw, M.S. *Council:* F. Gordon Brown, James Galloway, M.D.; Hope Grant, T. Mark Hovell, Francis R. Humphreys, Thomas Marshall, M.B.; G. Newton Pitt, M.D.; George W. Potter, M.D.; F. J. Smith, M.D.; R. G. Tatham, Alfred H. Tubby, M.S.; John F. Woods. *Auditors:* S. H. Appleford, M.D.; Francis R. Humphreys, R. Clement Lucas, B.S.; F. J. Smith, M.D.

The National Dental Hospital.—The new hospital recently erected at the corner of Great Portland and Devonshire Streets was formally opened on February 24th by the Duke of York. After an introductory speech by the Earl of Strafford, His Royal Highness said he was glad to hear of the good work done by the National Dental Hospital. Whatever might be the criticism sometimes passed on the establishment of so-called "special hospitals," he felt sure that dental hospitals could not be open to objection. He dwelt on the practical nature of the instruction given to students at the institution, and referred in graceful terms to the munificent action of the Dowager Lady Howard De Walden, who had borne the entire cost (nearly £10,000) of building the hospital. The Duke and his party were shown over the building by the Dean of the hospital, Mr. Sidney Spokes, and expressed satisfaction with the excellence of the arrangements.

Prize.—A prize of 10,000 roubles (£1,000) is offered by Count Orloff-Davidoff for the discovery of a remedy "perfectly certain to cure or to protect horned beasts against cattle plague." The efficacy of the remedy is to be proved by the same standard as those known to science as protective against small-pox, anthrax, swine fever, etc. The award of the prize is in the hands of the Curator of the Imperial Institute of Experimental Medicine of St. Petersburg acting on the advice of a committee of experts selected for the purpose. The competition is open to the whole world with the exception of active members of the above named institute. The description of the proposed remedy must be clear and complete; it must be sent in, under the ordinary conditions as to concealment of the identity on the part of the author, on or before January 1st, 1897. The award of the prize will be made on January 1st, 1899. If no remedy satisfies the Committee, a further competition will take place, and the award made on January 1st, 1902.

American Jottings.—Dr. W. V. Cooke, of Evansville, Indiana, while making bacteriological investigations accidentally infected himself, and died of tetanus.—Ohio has 18 medical colleges, Missouri and Illinois 17 each, and New York 16.—The total number of medical societies in the United States is given as 1,260. Of these New York has 175 and Ohio 90.—The State Legislature of Virginia at present numbers 8 medical practitioners among its members.—The American papers report that on December 29th, 1893, the operation of putting up a fracture of a femur in a lion was successfully performed at the New York College of Veterinary Surgeons. The formidable patient was kept quiet by a hypodermic injection of morphine.—The New York Courts have decided that no newspaper or institution has a right to use the name or portrait of any individual for advertising purposes without his consent.—Judge Richard Clark, of the Atlanta Criminal Court, has abolished the custom of witnesses being sworn by kissing the book.—According to the *American Lancet* the authorities of the military and naval schools at West Point and Annapolis are so impressed with the dangers of football as played in these days that they have forbidden the cadets to play it.—The *Boston Medical and Surgical Journal* of January 4th states that on November 21st, 1893, a man, aged 31, suffering from severe spinal symptoms, was admitted into St. Luke's Hospital, New York. The man stated that fifteen months before he had shot himself in the back of the neck with a pistol. After his death, which occurred on December 20th, 1893, a bullet was found embedded in the base of the skull. The cause of death was pressure on the spinal cord by vertebral dislocation together with spinal meningitis, the lesions being the result of the injury caused by the bullet, which had remained in the body for sixteen months.

Professor Kovács of Buda-Pesth.—Dr. Joseph Kovács, Professor of Clinical Surgery in the University of Buda-Pesth, celebrated the twenty-fifth anniversary of his appointment to that chair on February 25th. The event was made the occasion of much congratulatory ceremony and festivity on the part of the pupils and numerous admirers of the eminent Hungarian surgeon. He was presented with his portrait and a *Festschrift* of papers by his former assistants, many of whom are now teaching in the two Hungarian universities, which will form a permanent record of the jubilee. The King of Hungary (more generally known perhaps as the Emperor of Austria) has conferred on Professor Kovács the Commander's Cross of the Francis Joseph Order in recognition of his distinguished services. Professor Kovács has taken a leading part in the promotion of measures for improving the status of the medical profession in Hungary, and it is mainly due to his influence and exertions that medical councils for the protection of the rights and interests of the profession, and for the maintenance of a high standard of professional ethics, are about to be established by the Hungarian Legislature.

Medical Society of London.—The following is the list of the officers and councillors for the session 1894-5, as nominated by the Council. The ballot will take place at the general meeting to be held on Monday next, March 5th, at 8 P.M. : *President*: Sir William Bartlett Dalby. *Vice-Presidents:* Frederick T. Roberts, M.D., Frederick Treves, Sidney Coupland, M.D , and Henry Hugh Clutton. *Treasurer:* Arthur Edward Durham. *Librarian:* William Henry Allchin, M.D. *Honorary Secretaries:* Charles B. Lockwood and Amand Routh, M.D. *Honorary Secretary for Foreign Correspondence:* Heinrich Port, M.D. *Council:* William Anderson. Henry Frederick Bailey. W. Mitchell Banks (Liverpool), Howard Barrett. William Henry Bennett. John Syer Bristowe. M.D.. F.R.S., G. Buckston Browne. John Cahill, F. Swinford Edwards, E. Hurry Fenwick, Archibald E. Garrod, M.D., F. de Havilland Hall, M.D., Frederick W. Hewitt, M.D., Edward D. Mapother, M.D., William Marshall, M.D.. William A. Meredith, H. Montague Murray, M.D., Edward J. Nix, M.D., William Pasteur. M.D., Charles H. Ralfe, M.D.

MEDICAL VACANCIES.

The following vacancies are announced :

BELGRAVE HOSPITAL FOR CHILDREN, 77 and 79, Gloucester Street, Pimlico, S.W.—House-Surgeon. Board, lodging, fuel, and light provided. Applications to Percy Gates, Honorary Secretary, by March 7th.

BRADFORD CHILDREN'S HOSPITAL.—House-Surgeon (to dispense); doubly qualified. Salary, £70, with board, residence, and washing. Applications and testimonials to C. V. Woodcock, Secretary, by March 12th.

CARLOW DISTRICT LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £100 a year, and emoluments valued at £100 per annum. Election on March 9th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—House-Physician. Board, residence, and allowance for washing. Appointment for six months. Applications to T. Storrar-Smith, Secretary, by March 8th.

CITY ORTHOPÆDIC HOSPITAL, Hatton Garden.—Honorary Surgeon; must be a Fellow of the Royal College of Surgeons of England or of Edinburgh. Also Two Honorary Assistant Surgeons; must be either Fellows or Members of the Royal College of Surgeons of England or of Edinburgh. Applications, addressed to the Committee at the Hospital, by March 12th.

CLAYTON HOSPITAL AND WAKEFIELD DISPENSARY.—House-Surgeon (Junior); unmarried. Honorarium, £40 per annum. Applications and testimonials to the Honorary Secretary by March 8th.

COOMBE LYING-IN HOSPITAL, Dublin.—Assistant Master. Tenure of office three years; premium to Master £200. Applications and testimonials to the Master, Coombe Hospital, Dublin.

COUNTY ASYLUM, Prestwich, Manchester.—Assistant Medical Officer; unmarried. Salary commencing at £100 per annum, increasing to £200 by successive yearly increments of £25, with apartments, board, attendance, and washing. Applications to the Superintendent.

COUNTY OF NORTHUMBERLAND.—Medical Officer of Health. Salary, £500 per annum, with travelling expenses. Appointment for three years. Applications and testimonials, endorsed "Medical Officer," to C. D. Forster, Clerk to the Council, by March 24th.

DENTAL HOSPITAL OF LONDON, Leicester Square, W.C.—Assistant Dental Surgeon. Applications to J. Francis Pink, Secretary, by March 12th.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, Bloomsbury, W.C.—House-Surgeon to Out-patients (non-resident). Appointment for six months, but the holder will be eligible for a second term of office. Salary, 25 guineas. Applications and testimonials to Adrian Hope, Secretary, by March 20th.

JOINT COUNTIES LUNATIC ASYLUM, Carmarthen.—Medical Superintendent. Salary, £500 per annum, with unfurnished house, garden produce, fire, light, and washing. Applications and testimonials to be forwarded to W. Morgan Griffiths, Solicitor, Carmarthen, by March 24th.

LONDON HOSPITAL, E.—Physician. Applications must be sent to G. Q. Roberts, House-Governor, by March 5th.

LONDON TEMPERANCE HOSPITAL, Hampstead Road, N.W.—Assistant Resident Medical Officer. Appointment for six months. No salary, but residence in the hospital, board and washing, and an honorarium of 5 guineas. Applications and testimonials to E. Witson Taylor, Secretary, by March 8th.

MILLER HOSPITAL AND ROYAL KENT DISPENSARY, Greenwich Road, S.E.—Junior Resident Medical Officer. The post is tenable for six months, with prospect of re-election for the same period. Salary, £30 per annum, with board, attendance, aad washing. Applications and testimonials to Major-General G. R. Roberts, Honorary Secretary, by March 10th.

OWENS COLLEGE, Manchester.—Professor of Zoology. Applications to the Council of the College, under cover to the Registrar, by April 3rd.

ROXBURGH DISTRICT ASYLUM, Melrose, N.B.—Assistant Medical Officer. Salary, £100 per annum, with board, lodging, and washing. Applications and testimonials to Dr. Carlyle Johnstone, Medical Superintendent.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road, E.C —House-Physician. Appointment for six months. Salary at the rate of £40 per annum, with board and lodging. Applications and testimonials to the Secretary by March 14th.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications with testimonials to the Secretary, T. A. Fisher-Hall by March 10th.

ROYAL SURREY COUNTY HOSPITAL, Guildford.— House-Surgeon. Salary, £80 per annum, with board, lodging, and laundry. Applications to the Honorary Secretary by March 10th.

ST. THOMAS'S HOSPITAL.—Resident Assistant Physician. Applications and testimonials to Mr. E. M. Hurdy, Treasurer's Clerk, by March 10th.

SIR PATRICK DUN'S HOSPITAL, Dublin. — Honorary Assistant-Physician in charge of out-patients. Applications to C. B. Ball, M.D., by March 8th.

TORBAY HOSPITAL, Torquay.—Honorary Ophthalmic Surgeon. Applications and testimonials to the Honorary Secretary by March 17th.

TOWER HAMLETS DISPENSARY.—Resident Medical Officer. Salary, £120 per annum, with furnished rooms, coals, gas, and attendance. Applications to D. F. Matheson, Secretary, Tower Hamlets Dispensary, White Horse Street, Stepney, E., by March 7th.

TUNBRIDGE WELLS GENERAL HOSPITAL.—Resident House-Surgeon. Also to act as Secretary. Must be unmarried. Salary, £100 per annum, with board, furnished apartments, gas, firing, and attendance. Applications and testimonials to Henry Harris, Assistant Secretary at the General Hospital, by March 13th.

MEDICAL APPOINTMENTS.

Adam, Walter, M.B.Edin., appointed Assistant Medical Officer to the Grahamstown Asylum, Cape Colony.

Arnold, G. J., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Special Department for Diseases of the Throat of St. Thomas's Hospital (extension).

Baber, E. Cresswell, M.B.Lond., appointed Surgeon to the Royal Ear Hospital, Frith Street, W.

Boyd, R., M.B., C.M.Glasg., appointed Assistant House-Surgeon to the Infirmary for Children, Liverpool.

Caldwell, J. C., M.B.Edin., appointed Resident Medical Officer to the Albany General Hospital, Grahamstown, South Africa.

Carver, J. R., M.A., M.B., B.Sc.Cantab., appointed Clinical Assistant in the Special Department for Diseases of the Ear of St. Thomas's Hospital.

Cheatle, A. H., F.R.C.S.Eng., appointed Assistant-Surgeon to the Royal Ear Hospital, and Aural Clinical Assistant to King's College Hospital.

Collcutt, A. M., M.A., M.B., B.C.Cantab., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Special Department for Diseases of the Ear of St. Thomas's Hospital.

Corbould, V. A. L. E., M.R.C.S., L.R.C.P., appointed Resident Obstetrical Officer at Charing Cross Hospital.

Cuff, A. W., B.A.Cantab., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Special Department for Diseases of the Throat of St. Thomas's Hospital.

Deyns, C. J., M.R.C.S.Eng., L.S.A., appointed Medical Officer for the 5th District of the Newport Pagnell Union, *vice* J. S. Johnson, resigned.

Dickson, A. H., L.R.C.P., M.R.C.S., appointed Assistant House-Surgeon to St. Thomas's Hospital.

Dunn, D. S., M.D , appointed Medical Officer to the Warboys District of the St. Ives Union.

Hainsworth, E. M., B.Sc.Lond., L.R.C.P., M.R.C.S., appointed House-Surgeon to St. Thomas's Hospital.

Hewett, J. W., L.R.C.P., M.R.C.S., appointed Assistant House-Surgeon to St. Thomas's Hospital.

Hicks, T. W., L.R.C.P., M.R.C.S., appointed Senior Obstetric House-Physician to the St. Thomas's Hospital.

Hooper, George H., M.R.C.S., L.R.C.P., appointed House-Physician at Charing Cross Hospital.

JAFFÉ, C. S., M.B., B.S.Lond., L.R.C.P., M.R.C.S., appointed Junior Obstetric House-Physician to St. Thomas's Hospital.

LEVICK, H. D., M.R.C.S., L.R.C.P.Lond., appointed Medical Officer of the Whitechapel Union, *vice* R. J. Marshall, resigned.

LODGE S., jun., M.D.Durh., appointed Special Assistant-Surgeon to the Bradford Eye and Ear Hospital, *vice* Andrew Little, M.B., C.M.Aberd.

MACKINTOSH, W. A., M.B.Edin., C.M., appointed Medical Officer to Simpson's Asylum, Plean, Stirling, *vice* George Leslie, M.D., deceased.

MAXWELL, Raymond, M.B., C.M.Edin., appointed House-Physician to the Northern Hospital, Liverpool.

MERRY, W. J. C., M.A., M.B., B.Ch.Oxon, appointed Resident House-Physician to St. Thomas's Hospital.

MILTON, A. R. O., L.R.C.P., M.R.C.S., appointed House-Surgeon to St. Thomas's Hospital.

MUIR, Robert D., L.R.C.P.Lond., M.R.C.S., appointed Medical Officer to the Out-Patients at the Miller Hospital, Greenwich, and Royal Kent Dispensary.

MUSSEN, A. A., M.B., B.Ch.Dubl., appointed Assistant House-Surgeon to the Northern Hospital, Liverpool.

O'DEA, M.B., B.Ch., appointed Medical Officer of the 3rd District of the Abingdon Union, *vice* J. H. Daly, deceased.

OFFORD, J. A., M.R.C.S.Eng., L.R.C.P.Lond., appointed Government Medical Officer at Fiji.

OLDMEADOW, L. J. H., M.B., C.M.Edin., appointed House-Surgeon to the Northern Hospital, Liverpool.

PATERSON, D. R., M.D., M.R.C.P.Lond., appointed Honorary Physician to the *Hamadryad* Seaman's Hospital, Cardiff.

PERSHOUSE, F., L.R.C.P., M.R.C.S., appointed Non-Resident House-Physician to St. Thomas's Hospital.

PRESTON, Lionel L., M.B. and B.S.Dunelm, appointed Honorary Medical Officer to the Ryde Dispensary, and Medical Officer to the Ryde Provident Dispensary, *vice* J. Menham Pletts, M.D., resigned.

RICHARDSON, S. W. F., L.R.C.P., M.R.C.S., appointed House-Surgeon to St. Thomas's Hospital.

RUSSELL, A. E., L.R.C.P., M.R.C.S., appointed Resident House-Physician to St. Thomas's Hospital (extension).

SANDALL, T. Edward, B.A.Cantab., M.R.C.S., L.R.C.P., appointed House-Surgeon at Charing Cross Hospital.

TAYLOR, Gerard C., M.A., B.C.Camb., appointed Senior House-Surgeon to the Infirmary for Children, Liverpool.

THOMPSON, G. W., B.A., M.B., B.C.Cantab., L.R.C.P., M.R.C.S., appointed House-Surgeon to St. Thomas's Hospital.

WHITAKER, J. Ryland, B.A., M.B.Lond., L.R.C.P. and L.R.C.S.Edin., appointed Lecturer on Anatomy at the School of Medicine, Minto House, Edinburgh, *vice* Dr. Symington, resigned.

WHITFIELD, David W., M.R.C.S., L.R.C.S.I., appointed Medical Officer and Public Vaccinator to the Ironbridge District of the Madeley Union, *vice* James Procter, M.R.C.S., L.S.A., deceased.

WINDSOR, W. C., M.A., M.B., B.C.Cantab., appointed Non-Resident House-Physician to St. Thomas's Hospital.

WINSTON, W. B., B.Sc.London., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Special Department for Diseases of the Skin of St. Thomas's Hospital (extension).

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. W. Lang: Squint. Bacteriological Laboratory, King's College, W.C., 3 to 5 P.M.—Lecture: Tetanus, Rabies, and Cholera. Practical work: Examination of Comma Bacilli, Chemical and other Tests. London Throat Hospital, Great Portland Street, 8 P.M.—Mr. George Stoker: Impaired Movements of the Vocal Cords.

MEDICAL SOCIETY OF LONDON, 8 P.M.—General Meeting for the Election of Officers and Councillors. 8.30 P.M., Ordinary Meeting. Dr. Lewis Jones: On the Electrical Treatment of Infantile Paralysis. Dr. Wallis Ord and Mr. Herbert J. Waterhouse: A Case of Acute Meningitis, diagnosed as Tuberculous, treated by Trephining and Drainage of the Subarachnoid Space.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN, 8 P.M.—Mr. T. E. Constant: Pental. Casual communications.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr. Corner: Impulsive Insanity, Homicidal Insanity, Moral Insanity.

PATHOLOGICAL SOCIETY OF LONDON, 8.30 P.M.—Adjourned Debate on Rodent Ulcer by Dr. Radcliffe Crocker, Dr. Colcott Fox, Mr. Walter Spencer, Dr. Norman Walker, Mr. Rubert Boyce, Mr. H. B. Robinson, Mr. Cecil Beadles. Mr. J. Hutchinson, jun.: Deformity of Shoulder Girdle. Card specimens: Mr. Cecil Beadles.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 1 P.M.—Dr. Payne: Ringworm and Vegetable Parasitic Diseases. Hospital for Consumption, Brompton, 4 P.M.—Dr. C. Theodore Williams: Diagnosis of Pulmonary Tuberculosis. Royal London Ophthalmic Hospital, Moorfields, 8 P.M.—Mr. A. Stanford Morton: Ocular Paralyses.

OBSTETRICAL SOCIETY OF LONDON, 8 P.M.—Specimens will be shown by Dr. William Duncan, Dr. Leith Napier, and others. Dr. Robert P. Harris: A Plea for the Practice of Symphysiotomy, based upon its Record for the past Eight Years (communicated by Dr. Lewers). Dr Gow: On the Relation of Heart Disease to Menstruation.

NATIONAL HEALTH SOCIETY, 53, Berners Street, W., 4 P.M.—Dr. Solomon Smith: The Prevention of Consumption.

POST-GRADUATE COURSE, West London Hospital, Hammersmith, W., 5 P.M.—Dr. Aldren Turner: Some Syphilitic Spinal Lesions.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and the Epileptic, Queen Square, 2 P.M.—Mr. Victor Horsley, F.R.S.: Surgery of the Nervous System. Hospital for Sick Children, Great Ormond Street, 3.30 P.M.—Dr. Lubbock: Selected Medical Cases. Central London Sick Asylum, Cleveland Street, 5.30 P.M.—Mr. John Hopkins: Cases in the Wards.

BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M.—Specimens: Mr. Jessett: (1) Uterus removed *per Vaginam* for Malignant Disease; (2) Uterus removed *per Vaginam* for Multiple Fibroma. Dr. Purcell: (1) Uterus removed *per Vaginam*; (2) Portion of Uterus removed by Supravaginal Amputation—both for Malignant Disease. Dr. Macnaughton Jones: A Gynæcological Question of Importance in Forensic Medicine relating to the Hymen.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—Living and card specimens at 8 P.M. by Mr. Spencer Watson, Mr. J. B. Lawford, Mr. H. Work Dodd, Mr. Juler, Mr. Cowell and Mr. John Griffith, and Mr. Priestley Smith. 8.30 P.M., Continuation of the Discussion on Mr. Jonathan Hutchinson's paper on School Ophthalmia. Mr. Hill Griffith: Some Cases of Orbital Tumours. Mr. R. Williams: (1) A Case of Rapidly Growing Tumour of the Orbit; (2) A Case of Epicanthus, with Photographs; (3) A Case of Double Optic Neuritis.

NORTH LONDON MEDICAL AND CHIRURGICAL SOCIETY, Great Northern Central Hospital, 9 P.M.—Dr. Patrick Manson: On the Diagnosis of Tropical Diseases seen in London, illustrated by lantern slides. Mr. Evan Jones: On Tubal Pregnancy, Rupture, Abdominal Section, Recovery.

FRIDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. C. Theodore Williams: Varieties of Pulmonary Cavities.

CLINICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. Mansell Moullin: A Case of Cerebral Abscess. Mr. Battle: Three Cases of Extradural Hæmorrhage. Mr. C. B. Lockwood: Excision of Part of a Dislocated Internal Semilunar Fibro-cartilage of the Knee: Account of Result Twenty-one Months Afterwards. Dr. W. Cayley and Mr. Bland Sutton: A Case of Perforation of the Bowel in Typhoid Fever, treated by washing out the Peritoneal Cavity and excising the Perforation. Mr. Christopher Heath: Two Cases of Rectangular Ankylosis of the Hip-joint treated by Operation.

SATURDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M.—Dr. Percy Smith: Lunacy Law.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTHS.

BELL.—At 14, Hope Street, Edinburgh, on February 19th, 1894, the wife of J. S. Bell, M.B.Edin., The Green, Lockerbie, of a daughter.

HOUSEMAN.—At the Manor House, Houghton-le-Spring, Durham, on February 15th, the wife of James Gilpin Houseman, M.D., prematurely, of a son, stillborn.

PUGH.—On January 23rd, at 3, Upper Rock Gardens, Brighton, the wife of J. W. Pugh, M.B.Lond., M.R.C.S., L.S.A., of a son.

WASHBOURN.—On February 12th, at 15, Trinity Square, S.E., the wife of J. Wychenford Washbourn, M.D., of a daughter.

MARRIAGES.

LIVINGSTONE—WATSON.—At Renfield Free Church, Glasgow, on February 21st, by the Rev. Wm. M. MacGregor, M.A., assisted by the Rev. J. Irving, M.A., Innellan, and Rev. T. Crerar, North Leith, Jno. Livingstone, M.D., Barry, Glamorganshire, to Mary Evelyn Bissett, second daughter of J. Watson, Esq., Cluniter, Innellan.

KENNEDY—COX.—At Foggyley, Dundee, on February 28th, by the Rev. A. B. Connel, D.D., assisted by the Rev. Theodore Marshall, M.A., James Martin Kennedy, M.D., Aberford, Leeds, to Annie Elizabeth, second daughter of William Cox, of Snaigow, Dunkeld.

TAYLOR—HODGKINSON.—February 28th, at St. Philip's Church, Sheffield, by the Rev. W. Lechmere Tudor, B.A., E. Edmund Taylor, M.D., to Ethel, youngest daughter of Mr. George Hodgkinson, of Upperthorpe. No cards.

DEATHS.

VAUGHAN.—On February 24th, at Crewe Cottage, Crewe, Lilian, the beloved wife of Alfred Ellis Vaughan, aged 29.

WASHBOURN.—On February 26th, at 15, Trinity Square, S.E., Nellie Florence, the wife of J. Wychenford Washbourn, M.D., aged 22.

WHEELER.—On February 26th, at 11, Museum Terrace, Chelmsford, Daniel Wheeler, M.R.C.S.Eng., L.S.A., aged 75.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

Communications for the Current Week's Journal should reach the Office not later than Midday Post on Wednesday. Telegrams can be Received on Thursday Morning.

Communications respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the Journal, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the Journal be addressed to the Editor at the Office of the Journal, and not to his private house.

Authors desiring reprints of their articles published in the British Medical Journal are requested to communicate beforehand with the Manager, 429, Strand, W.C.

Correspondents who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

Correspondents not answered are requested to look to the Notices to Correspondents of the following week.

Manuscripts forwarded to the Office of this Journal cannot under any circumstances be Returned.

Public Health Department.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* British Medical Journal *are devoted will be found under their respective headings.*

QUERIES.

Vibrio asks for opinions as to the best water filter for domestic use.

O. W. would be glad to be recommended to the best history or histories of the science and art of medicine, in English, French, or German.

Junior would be glad if any member could tell him of a book that would be of use in preparing lectures to pupils studying for diploma of London Obstetrical Society.

Treatment of Infantile Convulsions.

P. J. S. asks for advice in the treatment of violent convulsions in a boy of 6½ years, lasting thirty-eight hours, probably due to brain trouble. Hot baths, injections of bromide of potassium and chloral failed; whiffs of chloroform relieved for a time, but the convulsions recommenced on arresting inhalations. What doses of bromide and chloral could be given with safety?

The Medical Staff of Hospitals.

W. F. G. writes to say that at the infirmary to which he is attached the visiting staff consists of three physicians and three surgeons, each of whom serves for two years and is off one year; he adds that this arrangement is objected to by some.

*** The arrangement is, we believe, most unusual, and appears to be very undesirable. In some hospitals the senior members of the staff have found it convenient to take full charge of the wards only for certain months of the year: when this is the case, one of the junior members replaces the senior during the remainder of the year. This arrangement has been found to work very well, but its success must depend very largely upon local circumstances.

ANSWERS.

J. F. E.—We find that the name of Daniel Sutherland, registered as L.F.P.S.G. 1871, L.R.C.P.Ed. 1871, and L.R.C.S.Ed. 1871, was erased from the *Medical Register* on May 20th, 1885, by order of the General Medical Council, for "infamous conduct in a professional respect."

H. D.—It is now considered both derogatory and unprofessional to issue such prescription forms as that enclosed. They cannot but be regarded as advertisements. With regard to the use of dispensing labels with the name and address thereon, although there may be a little more doubt on this question owing to the extreme frequency of the practice a few years ago, the present feeling of the profession is distinctly opposed to it.

Sea Sickness in Pregnancy.

Dr. Richard Owen (Ashford, Kent) writes: I think from my experience that "L.R.C.P." will find the use of ingluvin and an effervescing citrate of caffeine with small doses of cocaine will prove successful.

Inhabited House Duty.

There has been no decision in the matter of a house partly used for professional purposes being assessed to inhabited house duty. The law, which is very clear upon the matter, is fully explained in *Inhabited House Duty: How to Appeal*, which can be obtained from the Income Tax Repayment Agency, 25, Colville Terrace, W.

Caisson Disease.

A Member.—In addition to the information given in a reply to our correspondent last week, we may mention that the subject of caisson disease was discussed by Dr. Theodore Williams in his third Lumleian Lecture, published in the British Medical Journal on April 1st, 1893. The lectures will be issued in book form by Messrs. Macmillan and Co. in a few days.

Touting Firms.

In answer to Dr. Charles J. Tabor, we can only suggest that the offer to pay for information as to the address, etc., of persons who have lost a limb, or part of a foot, comes from some maker of artificial limbs or other appliances. The very fact that the offer was made to the porter is a small, although in these days of push an almost unexpected, tribute to the incorruptibility of the profession. If the question had been one of philanthropy, a member of the staff would probably have been applied to, and we may be pretty sure that no remuneration would have been offered.

The Training of Male Nurses.

We have received recently inquiries from several correspondents who were anxious to obtain information as to existing facilities for the training of male nurses. We have made inquiries in various directions from which it would appear that no such facilities exist. None of the general hospitals undertake the training of male probationers in a systematic way. Special hospitals and lunatic asylums afford a more or less special training to a limited number, but it is incomplete for general nursing. The Hamilton Association for the Supply of Male Nurses, whose office is at 57, Park Street, Grosvenor Square, W., tried to train men in co-operation with certain civil hospitals, but found it did not answer. Many of the best men of this Association have been trained in naval and military hospitals and are very capable male nurses in cases unsuited for female nurses.

Leucoplakia.

Dr. H. Oliphant Nicholson (Kirkcaldy, N.B.) writes: "St. Bees" should regard the condition as a neurotic affection of the lingual epithelium, and treat the nervous system accordingly. An impairment in the nutrition of a portion of the surface of the tongue, whereby the epithelium dies and forms a white patch, accompanied by burning pain, and possibly some hyperæsthesia, is, in my opinion, quite sufficient to mark the disease as zona (herpes zoster) in one of its many manifestations; the peculiar burning sensation seems almost distinctive, and one or two herpetic vesicles might appear on the lower surface of the tongue during the course of the disease. Local applications can only be of temporary service, and internal remedies for zona are often unavailing. I would certainly advise a trial of tinct. ferri perchloridi (m 25-30 t.d.s.) in every case of zona. In a case of many years' standing, affecting the tongue, which I had unusual opportunities of observing, this preparation of iron in large doses seemed to relieve the burning pain and improve the condition of the lingual epithelium in a remarkable manner when everything else failed. The beneficial effects were maintained most satisfactorily with a reduced dose. A grain or two of quinine sulphate may be added to each dose of the perchloride. Hilton Fagge used vinum colchici, and in certain cases a course of arsenic might be advantageously exhibited.

Medical Women as Workhouse Doctors.

We have received protests from various correspondents against medical women being appointed as assistant medical officers in workhouse infirmaries, and one gentleman asks us for a definite expression of opinion as to the advisability of such appointments. Now, a matter of this sort must be approached with a large amount of common sense and forbearance. We repeat that it seems very unlikely that, amid the hurry of daily work and the competition of general practice, women doctors will restrict themselves to the treatment of women and children; and we believe it is the fact that many of them do at the present time see male patients. But whether it be wise of them to seek for appointments in workhouse infirmaries is not clear. In private practice a case which is distasteful can be referred, and no patient is forced to accept services which he does not like. But under the Poor Law it is different; the officer must do the work, and the patient must accept the service. No doubt in very large infirmaries, where there are several assistants, it might be possible to arrange the duties so that a lady should not have to do what would be uncongenial; but where this cannot be managed we think that guardians, before electing a woman to such a post, should carefully consider to what they are condemning her; and, if they are in doubt, they might ask to be allowed to accompany the medical officer some morning when he goes round the male lock ward. We do not wish to raise obstacles in the way of women in the exercise of a profession to which they have been admitted, but a little common sense will tell men that there are certain physical difficulties in the way of the treatment of certain cases in the male by women, to say nothing of the not unnatural objection of the men to be so treated, an objection which certainly should be considered by guardians of the poor. In applying for such a post as assistant medical officer to a workhouse infirmary, a medical woman should inquire whether there would be a division of duties, and, if that should not be the case, she would be well advised in retiring.

NOTES, LETTERS, Etc.

A communication has been received from a Mr. O. B. Murphy of Dublin, but his address is illegible.

Midwifery and After-Visits.

Several correspondents have called in question an opinion expressed in reply to a correspondent under this head in our last issue. The period mentioned was not laid down as a definite and absolute rule for all cases, but was merely suggested as an outside limit having reference to the circumstances of the case submitted. The obstetric tariff necessarily admits of considerable latitude in regard to the fee, consequent on the oft prolonged and harassing attendance in cases of difficult labour, and the varying pecuniary position of the several classes of society. The fee, moreover, from long-established custom, is generally understood to include a visit or two during the first and second week after delivery, if within the prescribed distance of an ordinary visit, but for any indisposition in the mother or child subsequent thereto, or when any serious ailment occurs to either within that period, a charge should be made for each visit and detention, as in ordinary cases of disease.

STAMMERING.

MRS. EMIL BEHNKE (Earl's Court Square, S.W.) writes: I have read with interest your article in the BRITISH MEDICAL JOURNAL of February 24th, and fully agree with all you say. If the benevolent could realise the misery and the terrible drawback to progress in life which stammering causes, an endowment fund would speedily be raised to assist sufferers to obtain relief from their speech bondage. For my part, I am willing to commence small classes for adult stammerers who are too poor to pay more than a trifling fee if those who join have a sufficient similarity of speech trouble to be taken together. Each stammerer has peculiarities and idiosyncracies of speech requiring individual attention, which makes class teaching difficult in many cases. Last winter I had a class of working men, varying in ages from 18 to 56 years, who all made excellent progress, and I have now a workman, sent me from one of the hospitals, who is nearly cured after only nine lessons. The poor fellow would have been dismissed from his situation if he could not have got rid of his stammering.

As regards children, my experience has been that they require incessant watchful care for at least three months, during which time it is advisable that they should be separated from their families and schoolfellows. Lessons once or twice a week would be useless to them. I most emphatically endorse your opinion that all morbid conditions must be removed before educational treatment can be of permanent use, and this was also the opinion of Emil Behnke, my late husband, who invariably refused to undertake the treatment of a case until all obstructions in the respiratory passages had been removed.

MR. RICHARD KERSHAW (Secretary to the Central London Throat and Ear Hospital, Gray's Inn Road, W.C.) writes: In your article on Stammering, in the BRITISH MEDICAL JOURNAL of February 24th, the statement is made that for the poor there "is no provision for such cases either in London or large towns." Permit me to say in all such cases that have applied at the Central London Throat and Ear Hospital during the past fifteen years we have had the advantage of the co-operation of Mr. William Van Praagh, who holds a staff appointment, which I venture to think is unique, as instructor for defects of speech. This gentleman sets apart a stated time each week to receive such patients for the purpose of imparting instruction, of course subsequent to a proper physical examination, and, if needed, surgical treatment. The great difficulty experienced is to prevail upon the patient to persevere in his attendance, for it not infrequently happens that the sufferer being engaged in some daily employment which he cannot afford to sacrifice does not devote sufficient time to the instruction which is offered to him. It is, moreover, almost impossible to impress upon the parents of those who are younger the importance of early and thorough training. Fortunately the proportion of the poor who suffer from speech impediment is very small as compared with the well-to-do.

COOKING AND HEATING BY GAS.

C. J. W.—It was pointed out in the article of February 17th that the estimate of 8d. per day was for "cooking and heating water supply of house," and that the comparison made was "specially applicable to the summer season, when there is no necessity to light a fire for the purpose of heating the kitchen."

Our correspondent states that the kitchen fire is required "nine months of the year." In London and the greater part of England the kitchen fire could well be dispensed with at least six months of the year—April to September. Dr. Wharry is quite correct in stating that during the winter months a fire would be required to heat the kitchen; but for this purpose a very small quantity of fuel would suffice, as there would be no necessity to heat the ovens or boiler; the statement regarding there are six months of the year holds good when a kitchen fire is a positive discomfort.

RIBERI PRIZE.

THE Turin Academy of Medicine announces the conditions of competition for the ninth Riberi Prize. It consists of a sum of 20,000 francs (£800), which will be given to the author of a work, printed or manuscript, or of a discovery in the interval between 1892 and 1896. The work or the discovery must relate to one of the following medical sciences: Anatomy, Physiology, Pathology, Pharmacology. Works dealing with the history of medicine since the Renaissance will also be admitted to the competition.

ALVARENGA PRIZE.

THE Hufeland Society proposes the following as the subject for the next award of the Alvarenga Prize: Auto-intoxications from the Intestinal Tract; their Prevention and Cure. Essays, which may be in German, English, or French, should be sent on or before March 1st, 1895, to the Secretary of the Society, Markgrafenstrasse 7, Berlin, W. The award will be made known on July 14th, 1895.

THE LAW OF LIBEL.

IN a paper on this subject read before the American Association of Medical Editors, Mr. Clark Bell pointed out that it is libellous to impute to any member of a learned profession that he does not possess the technical knowledge necessary for the proper practice of such profession, or to state that he has been guilty of professional misconduct. It is the right, and may be said to be the duty, of newspapers and journals to discuss measures relating to the health, morals, welfare, comfort, and happiness of the people. But this confers no right to publish libellous matter. A journal stands on precisely the same footing that an individual does. A medical editor is justified in warning the public against advertised new modes of treatment or "best and only cures" of diseases, and in exposing the absurdity of their professions, providing he does so fairly with moderation and judgment, and without malice.

LETTERS, COMMUNICATIONS, ETC., have been received from:

(**A**) Mr. R. B. Anderson, London; Messrs. Allen and Hanburys, London; A. M. (**B**) Mr. F. L. Brander, Edinburgh; Dr. J. Barr, Liverpool; Mr. H. F. Burns, London; Mrs. Emil Behnke, London; Mr. Lennox Browne, London; Dr. J. H. Buchanan, Thirsk; M. O. Berthier, Paris; Mr. H. H. Brind, London; Dr. R. Boxall, London; Mr. W. G. Bower, Sheffield; Dr. E. G. Barnes, Eyo; Mr. L. A. Bidwell, London. (**C**) Messrs. T. Cook and Son, London; Dr. P. M. Chapman, Hereford; Dr. J. Clapperton, Winchester; Mr. A. H. Cheatle, London; Mr. A. Cooper, Leeds; Mr. J. S. Cowley, Upton-on-Severn; Canada; Mr. G. G. Clarke, Walton; Messrs. Crossley, Moir, and Co., London. (**D**) Mr. H. G. Dain, Birmingham; D. C.; Mr. F. H. C. Day, London; Dr. A. Duke, Cheltenham; Mr. J. Davies, Newtown; Mr. T. J. Dewar, London. (**F**) Mr. G. B. French, Edinburgh; Dr. F. Fergus, Glasgow; Mr. J. T. Fox, Strathpeffer Spa; Dr. A. Foxwell, Birmingham; Mr. T. Fletcher, Warrington; Dr. W. Fenton, London; F.R.C.S. (**G**) Dr. G. de G. Griffith, London; G. N. S.; W. Gordon, M.B., Exeter; Mr. J. F. Gummow, Wrexham; Dr. J. Griffiths, Cambridge. (**H**) Mr. J. S. Hurdell, London; Mr. T. F. Hopgood, Sunderland; Mr. M. B. Huish, Lincoln; Mr. M. Hoff, Hamburg; Mr. C. Hanbury, London; Messrs. W. Hely and Co., Sevenoaks; Dr. J. G. Houseman, Houghton-le-Spring; Dr. C. F. Hutchinson, Monte Carlo; Mr. A. D. Hughes, Dunstable; Dr. T. P. Harvey, St. Leonards; Mr. L. Harris-Liston, Stafford; Mr. E. Hicks, Loughborough; Mr. F. J. Hawthorn, Wolverhampton. (**I**) G. S. Illingworth, M.B., Glasgow. (**J**) B. B. Joll, M.B., London; Mr. G. F. Jones, Southsea; Mr. H. Jackson, Manchester; Junior. (**K**) Mr. J. F. King, Edinburgh; Mr. R. Kershaw, London; Mr. C. G. Kingswood, Southport. (**L**) Messrs. Lindsay and Son, Oxford; Sir Joseph Lister, London; Mr. J. G. Lock, Tenby; L.R.C.P.; Lancashire County Councillor; H. Lund, M.B., Manchester. (**M**) M. G. Masson, Paris; Mr. A. Main, Glasgow; Mr. W. Marriott, London; Dr. H. H. Murphy, Twickenham Mr. B. F. Meadows, Hastings; Mr. J. M. F. Miles, Dingle; Mr. J. Mackie, London; Mr. J. D. Menzies, London; Dr. J. L. Maxwell, London; Mr. C. P. Mathew, Exeter; M.D.Durh.; Dr. E. J. Moore, London; Dr. W. Murrell, London; Medico-Member; Mr. S. B. Mason, Pontypool; D. Mitchell, M.B., Renton; Dr. C. F. Marshall, London; M.B.; M.B., M.A.; Professor E. Maragliano, Genoa; Dr. T. Maccall, Liverpool; J. S. Muir, M.B., Glasgow; Dr. S. R. Macphail, Derby; Dr. H. J. Macevoy, London; Mr. G. H. Makins, London. (**N**) Dr. J. Neil, Oxford; H. O. Nicholson, M.B., Kirkcaldy; Dr. J. B. Nevins, Liverpool. (**O**) Dr. R. Owen, Ashford; O. W. (**P**) Dr. D. R. Paterson, Cardiff; Mr. C. E. Parry, London; Mr. C. S. Palmer, Redhill; Mr. W. J. Prangley, London; Practitioner; Dr. T. Partridge, Stroud; Mr. A. Porter, Manchester; P. J. S.; Dr. T. Patterson, Oldham; Mr. R. S. F. Pearse, Southport; Dr. C. J. Power, Nailsworth. (**R**) Dr. A. Robinson, London; Messrs. Reynolds and Branson, Leeds; Mr. G. Rendle, London; Mr. T. F. Raven, Broadstairs; Herr S. Radleur, Berlin; Mr. J. G. Rajn, Cairo; Mr. O. Roch, Dublin. (**S**) Scientific Press Limited, London; Dr. T. Smith, Lancaster; Dr. J. F. J. Sykes, London; Dr. F. F. Schacht, London; Mr. J. H. Squire, Bristol; Mr. H. T. Sells, Northfleet; Mr. A. P. Stevenson, Nottingham. (**T**) Mr. J. O. Tuckey, London; Mr. C. W. Thies, London; Mr. H. H. Tomkins, Brighton; A. H. Tubby, M.B., London; Mr. H. J. Thompson, Beverley. (**V**) Vibrio. (**W**) Mr. W. Williams, Dublin; Dr. L. Wainwright, Folkestone; Mr. A. E. Weightman, Devonport; Mr. W. B. Willans, Much Hadham; Why not, Please?; Mr. W. R. Williams, Preston; Mr. T. H. Waller, Chelmsford; Mr. D. Williams-Jones, London; Mr. D. W. Whitfield, Trowbridge; Mr. F. Wright, York; Mr. H. T. Wood, London; Dr. C. T. Williams, London; Messrs. Walters and Co., London. (**Y**) Young Practitioner; etc.

BOOKS, ETC., RECEIVED.

Verhandlungen der zehnten Versammlung der Gesellschaft für Kinderheilkunde. Von Dr. E. Pfeiffer. Wiesbaden: J. F. Bergmann. 1894. M. 4.60.

Experimentelle Studie über galvanolytische-kataphorische Einwirkungen auf das Auge. Von Dr. Schoeler und Dr. Allbrand. Wiesbaden: J. F. Bergmann. 1894. M. 1.

Meine Erfahrungen über Staar und Staaroperationen in 25 Jahren. Von Dr. A. Bäuerlein. Wiesbaden: J. F. Bergmann. 1894. M. 4.80.

Injuries and Diseases of the Jaws. By Christopher Heath. 4th edition. Edited by H. P. Dean. London: J. and A. Churchill. 1894. 14s.

Normal Labour as conducted in the Frauen-Universität-Klinik, Berlin. By M. Flynn. Leicester: John Richardson and Co. 1894.

Anatomischer Atlas der Geburtshilflichen Diagnostik und Therapie. Von Dr. O. Schaefer. Band II. München: J. F. Lehmann. 1894. M. 8.

Grant College Medical Society. Retrospective Address for the Year 1893. By R. N. Khory, M.D. Bombay: J. B. Karani and Co. 1894.

Grundriss der Sprachstörungen: deren Ursache, Verlauf und Behandlung. Von Dr. L. Treitel. Berlin: August Hirschwald. 1894. M. 2.

Die Behandlung der tuberkulösen Lungenschwindsucht. Von Dr. A. von Székely. Berlin: August Hirschwald. 1894. M. 2.80.

La Famille Névropathique. Par Ch. Féré. Paris: Félix Alcan. 1894. Fr. 4.

La Médication par l'Exercice. Par Dr. F. Lagrange. Paris: Félix Alcan. 1894. Fr. 12.

Petit Manuel d'Anesthésie Chirurgicale. Par F. Terrier et M. Péraire. Paris: Félix Alcan. 1894. Fr. 3.

*** In forwarding books the publishers are requested to state the selling prices.

THE LUMLEIAN LECTURES
ON
HEART INFLAMMATION IN CHILDREN.

Delivered before the Royal College of Physicians.

By OCTAVIUS STURGES, M.D.Cantab., F.R.C.P.,
Senior Physician to the Hospital for Sick Children, Great Ormond Street; and to the Westminster Hospital.

I.

When I was honoured by the invitation of the Censors' Board to deliver these lectures many doubts arose in my mind. None of these, however, had reference to the subject upon which to discourse. That point is, indeed, largely settled by custom, but it is determined more imperatively in my case by the knowledge that for me there was but one way of fulfilling the allotted task. Could I but rehearse, with tolerable fidelity, some of the clinical experience of past years, especially could I do so in reference to some branch of practice to which chance has given me fuller access than that which falls to everyone, then and then only could I hope to interest an audience such as this; and so I chose the subject of heart inflammation in children.

The study of heart disease in childhood, busy as it has been of late years, had hardly a place in the early observation of such lesions. Seventy years ago—within the memory of one at least of the Fellows of this College—when Laennec was announcing the physical signs of heart disease, little mention was made of children. Fifty years ago, when Rilliet and Barthez wrote what was long the best known book about children, the part devoted to heart disease was meagre and halting; and pericarditis (which we now know to be common with children) was spoken of as of rare occurrence and obscure signs. And, coming to later times and our own country, it is curious to note how the great workers upon this subject—Stokes, Latham, Watson, and Walshe—almost ignore little children.

The cause of this delayed study is obvious enough. The man was an easier subject than the child. The adult heart, moderate in pace, of decided rhythm, and with a clear distinction of sounds and their intervals, is the easiest to appreciate in health, and to detect and define in disease. Moreover, chronic valve defects, both evident and enduring, occur most in adult life. Hence it was that Laennec and his contemporaries concerned themselves most with the physical signs and symptoms of gross structural lesions. But the very beginning of heart disease, the active stage of its inflammation as it occurs in young subjects was imperfectly known to these early observers. It was, in fact, largely pieced out by the bold assumption that the physical signs of chronic disease might be made to apply, with some modification, to that which is more recent.

It is now frankly admitted that the early diagnosis of heart inflammation is among the most difficult problems of practical medicine, and that, at the first, it depends largely upon the presence or absence of pericardial rubbing, a sign of inflammation to us now (speaking generally) gross and palpable, but of which the significance was for long altogether missed. Laennec was not ignorant of the now familiar sound made by pericarditis. He heard and described it; but for reasons not hard to understand he missed its meaning. "For some time," said he, "I thought that this noise, like the cry of the leather of a new saddle under the rider, might be a sign of pericarditis, but I have since convinced myself that it is nothing of the sort." And so, when in actual touch of the truth, he goes off upon theories of sound-producing gases, leaving others, and especially three distinguished Fellows of this College—Latham, Watson, and Stokes—to recover the path and pursue it to the end.

Thus, of the two main factors of cardiac inflammation, while pericarditis had to await investigation until a comparatively recent period, endocarditis may be said to await it still; at the same time, the conflicting opinions of to-day upon many questions of physical diagnosis, upon the displacement of the heart in pericardial effusion; upon the meaning of doubled sounds; upon the proper signs of pericardial adhesion or the earliest indications of mitral stenosis—these, with other instances, supply evidence enough that to this hour we are seeking more light.

My purpose in these lectures is (1) to signalise some clinical forms of heart inflammation, forms both insidious and perilous, which are chiefly to be observed among children; (2) to consider the physical indications of such inflammation, their significance and modes of origin; (3) to review the main facts of heart inflammation, as it shows in children with reference to its prognosis and treatment.

It would seem at first sight that children were the most promising subjects for the study of heart inflammation. In the case of adults, there are many hindrances to accurate observation of the heart—fatness, great muscular development, the interference of emphysematous lungs. But in the child, with all these obstacles away, with but a thin wall of separation between the heart and your finger tips, and the organ within touch, almost within handling, its position, its shape and its acts can be measured and felt; all that is wanting is the actual sight of it. The heart of a little child, I say, at the first blush would seem to be as simple in physical as it is in moral respects, but experience teaches otherwise. The child's heart holds as many secrets as the man's, and is even more deceiving.

Cardiac inflammation in children, as is well known, occurs chiefly in connection with rheumatism; if young children be excluded almost wholly in that connection (Table A). Yet

Table A.—*One Hundred Cases of Heart Disease Examined Post-mortem during Eleven Years.*

Rheumatic (boys, 22; girls, 32)	54	100
Non-rheumatic (boys, 22: girls, 24)	46	
Ages of the Rheumatic.		
Between two and four years	2	54
„ four and six years	4	
Six years	6	
Between six and twelve years	42	
Ages of the Non-Rheumatic.		
Four years and under	32	46
Between four and six years	5	
Above six years	8	
Age omitted	1	

the rheumatism is often ill expressed in the way of arthritis, and sometimes spares the joints altogether. Strictly speaking, carditis—inflammation, that is to say—both exocardial and endocardial, is exclusively rheumatic. Pericarditis alone, as the table (Table B) shows, is met with in tubercu-

Table B.—*Distribution of 83 Cases of Heart Inflammation Examined Post-mortem: I. Periendocarditis (Carditis). II. Pericarditis. III. Endocarditis.*

I. Periendocarditis (carditis)	48	One was a case of phthisis, and in 1 the rheumatism was doubtful: with these two exceptions all were rheumatic. In 11 of the cases the endocarditis was old.	
II. Pericarditis (without endocarditis)	28	Tubercle	5
		Empyema	5
		Pneumonia	4
		Septic	3
		Diphtheria	2
		Meningitis	1
		Bronchitis	1
		Chronic arthritis	1
III. Endocarditis (without pericarditis)	7	Old mitral disease	3
		Slight beading on tricuspid in baby with broncho-pneumonia	1
		Slight beading on mitral	1
		Pyæmia (newborn child)	1
		Chorea	1

losis, in empyema, in pneumonia, and in septic conditions. Endocarditis alone is met with in children far less than in adults, and, were we to take *post-mortem* evidence alone, with remarkable rarity, cases of chorea alone excepted. The rheumatic heart inflammation of children when pericardial is always endocardial as well, and when endocardial is extremely likely, with the recurrence of rheumatism, to involve the pericardium also. Thus, in the heart as elsewhere—as in catarrhal inflammations and tuberculous development—the differentiation of morbid processes is less marked in the

child than in the adult, and a common sympathy more apparent.

The rheumatic carditis of childhood differs from that of later life in other respects besides those already mentioned. It is, or it seems to be, less intimately connected in time with arthritis; its clinical course at the outset is therefore more insidious, and its immediate mortality is far higher.

Three forms may be roughly indicated—the active, the passive, and the chronic—terms perhaps not without objection, yet sufficient for the purpose of labelling.

Active carditis—rare in adults—has some special characters in childhood, and, owing to its sudden origin, rapid course, and high mortality, claims our chief attention.

Passive carditis—similar to the first in its physical signs—is without its symptoms and without its danger. It is free from cardiac pain or distress, and, but for auscultation and facial aspect, might even escape notice in the course of rheumatism. It is, in fact, the form of carditis which is commonest in the acute rheumatism of the adult, but it differs in two points: One, that the attending joint pain is less acute; the other, that there is much higher probability of acute carditis supervening.

Passive carditis shows less in the child than in the adult because the rheumatism on which it depends shows less. It is less acute and less enduring. In the adult, however little the special cardiac signs may intrude, they are secure of observation, because the severity of the illness keeps the patient to his bed and the state of the heart is carefully noted from day to day for a length of time. So, it is true, may it be sometimes with children; only the rarity with them of what is sometimes called "frank" rheumatism—one of the many phrases by which we dictate to disease what it ought to be—their slighter pyrexia and fugitive joint pains serve to remove these young patients the earlier from observation, and so in the absence of rheumatic pain apparent convalescence may be reached and the child accordingly dismissed when the cardiac inflammation is in full swing.

Of chronic carditis (or pericarditis) I shall have little to say. The amount of effusion may be measured from day to day and week to week by percussion, alternately increasing and decreasing, with no active distress, no pyrexia, or any other suffering than which is due to some dyspnœa. It is not special to childhood, but the constant alternations of fluid—which eventually may disappear altogether—and the rarity of signs calling for paracentesis are its distinguishing features at that time of life.

Active or acute carditis has for us now, for the reasons just stated, the chief interest. It is of this kind. In the course of a slight rheumatic attack, or it may be following it with an interval of apparent health, active carditis is suddenly announced by restlessness, increased pallor, and a curious aspect of anxiety, together with dyspnœa, delirium, and sometimes obstinate vomiting. Such symptoms suddenly transform a trivial illness into one of extreme gravity. Often there is heart pain; and tenderness over the heart region is a common and important symptom. There may be little rise of temperature and not much quickening of breath or pulse, but the act of respiration is distressing and accompanied by the short expiratory grunt so characteristic of the acute chest affections of young children. Along with these symptoms there is a preference for the raised position, and some children with great distress for breath will lean forwards in search of relief.

The posture, the pallor, the restlessness, and look of alarm, coupled with dyspnœa due mainly to enfeebled inspiratory effort, all these are symptoms so characteristic that active carditis in a child may be detected almost at sight. Certainly when the chest is bared, and both eye and hand take part in the observation, the character of the heart's action will remove any doubt that may remain. And when these symptoms rapidly progress to a fatal end, as they often do, it is sometimes prostration, sometimes delirium, sometimes persistent vomiting that shows the most conspicuously. But the main source of the symptoms, however these may arrange themselves, is manifestly cardiac failure—failure which is often so sudden that it is not possible to attribute it to texture degeneration.

Of these several forms of carditis, anatomically similar yet widely differing in clinical characters, it is the acute alone that threatens death as an immediate result. We are wont to regard them all—whether active, passive, or chronic—as having a common origin in rheumatism. Without impugning the correctness of this belief, it must be insisted that premonitory symptoms are by no means confined to the joints. They are, in fact, so various that it is difficult to name any of them that is invariable or common to the whole series. Sometimes, for example, it is not articular but limb pain that accompanies or precedes the heart inflammation; sometimes it is dyspnœa or cardiac pain; sometimes in the recurrence of an attack, which at the first was articular and obviously rheumatic, the old pyrexia will reappear, but in the fresh attack the heart will be actively concerned, while the joints escape altogether.

In no small proportion of cases wasting and sweating are the main premonitory symptoms, and the history of antecedent rheumatism will be extremely vague. Even in those instances, the majority no doubt, where the rheumatic nature of the affection is beyond question, it is noticeable in children how soon joint pains recede, and the condition of the heart occupies the whole attention, whether from the changeful character of its physical signs, or else owing to the sudden appearance of those urgent symptoms of heart failure of which I have just spoken.

The mortality of these patients is considerable. I cannot state it precisely, for in cases got together with a view to showing characteristic symptoms the death-rate is likely to be higher than when the object of the collection is to illustrate the good results of treatment.

A single example will serve to bring before you the special characters of this active and dangerous form of carditis in childhood, a form so rarely observed in after life.

A girl, aged 7 years and 10 months, anæmic and ill-nourished, was admitted to the Children's Hospital on April 28th, 1893, with a history of six weeks' pains in the limbs, and for the last three days swollen and painful joints. These symptoms had attracted but little notice in the family until twelve days before admission, when the child complained of pain at the heart, was seen to be short of breath, and had to be propped up in bed. The girl had never had rheumatism before, and was not of rheumatic family.

On admission, respiration was 36, pulse 120, regular both in force and frequency; temperature 99°. There was marked pulsation in the vessels of the neck, but no venous enlargement elsewhere. The area of cardiac dulness was not increased. A systolic thrill could be felt at the apex, and a loud blowing systolic murmur heard at the same place and conducted round to the back. Inside the nipple and a little above it the second sound was inconstantly reduplicated. For the following three or four days no particular change occurred. The child soon ceased to have pain. The area of heart dulness did not alter, nor did the heart sounds. The child was quiet, restful, but lethargic. Anæmia was more extreme. On the fourteenth day of residence, however, a marked change occurred. It begun with an attack of nose bleeding followed by a sleepless night. The child complained of headache; temperature rose to 102°, although there was no return whatever of joint pain.

The heart was tumultuous in action, its impulse forcible and diffuse, apex apparently in fifth space; the murmur was now of harsher pitch, so-called "musical" in character, and audible a finger's breadth outside nipple line, where it abruptly ceased. Within the nipple a very slight diastolic sound was heard, the commencement, as it seemed, of distinct friction. The urine was now found to contain a trace of albumen and some blood.

Hereupon (we have now reached the thirty-first day from the first heart pains and dyspnœa) the most characteristic signs of active carditis appeared; that is to say the child, though free from actual pain, and without marked dyspnœa, was anxious and restless, the little sleep she got being disturbed by muttering and painful visions. A friction sound (to and fro) was now audible, its maximum intensity at the ensiform cartilage, but distinctly heard as high as the second costal cartilage. The pulse, 140, was still regular; temperature 100° to 101°. The area of cardiac dulness now for the first time began to enlarge, transgressing the left border of the sternum to the right and a finger's breadth outside the left nipple to the left, the upper *bruit* reaching the third space. It continued to enlarge somewhat for a while, as shown in the figure, but presently receded, and at death was hardly larger than on admission.

Without staying to record daily changes— s the distinctive friction rub and thrill, varying character of apex murmur, the heart's action now more now less forcible and excited, while the veins of the neck began to show marked reflux, the patient being restless, moody, without continued sleep, free of pain but tender on percussion over the cardiac area—we come to May 31st, the forty-second day from the first heart symptoms and within five of death. It was on this day that vomiting set in and it persisted. The area of cardiac dulness rapidly decreased; the rub was but indistinctly heard. There was increased restlessness, difficult groaning, yet not very rapid breathing, intense anæmia, constant sickness, *pericardial effusion rapidly diminishing the while.* The regurgitation in the neck veins increased, and now first, a few days before death, œdema of the legs and signs of pulmonary œdema were noticed. So the story closes June 5th. At the latest stage considerable engorgement of the lungs perhaps accelerating death by a little.

The whole duration of the carditis was forty-seven days; the more active symptoms occupied thirty-six days, and the most urgent symptoms (constant vomiting being the most prominent, pericardial effusion disappearing the while) lasted less than a week.

Of the *post-mortem* examination, it will suffice to say that the heart weighed 9½ ounces, and showed both dilatation and hypertrophy, the latter as regards right auricle and ventricle. The mitral valve admitted three fingers, and at its extreme edge were some minute granulations. The other valves were normal. The pericardium was universally adherent, both anteriorly and posteriorly. No fluid remained, and the surfaces were separated with difficulty.

Time will not admit of separate mention, even in this brief outline, of other examples of a similar kind. They have a strong family likeness, but the end does not always come in the same way in the fatal cases. In a certain number (of which I have had two well-marked cases within the last year, one fatal and one recovering) typhoid prostration is the main feature, the patient lying apathetic and but partially conscious. In the recovering case, a boy of 9, the prostration was so extreme that for some days the motions were passed into the bed.

Within the last three years I can recall sixteen examples of active carditis of this pattern, all patients of my own. Six were boys and ten girls; four only recovered. As many as eight—half the number—were under 7; the four oldest were between 10 and 11. The pericardium was adherent in all the fatal cases, and in only one was there extensive valve disease. In most the endocardial change was limited to small granulations on the mitral valve.

It is not easy to summarise the several symptoms. It may suffice to say that in one case alone were joint pains prominent and long continued. In one pain affected the limbs but not the joints. In two slight rheumatic pains were suddenly replaced by prostration, the while the physical signs indicated pericarditis. Four were admitted for cardiac pain and dyspnœa, rheumatism in its articular form being a thing of the past. In three wasting and sweating were the most prominent symptoms. In one a condition of drowsiness and apathy had followed epigastric pain and dyspnœa occurring six weeks before, no obviously rheumatic symptom having been noticed for the past three months. There was a history of former rheumatism in twelve; subcutaneous nodules were noted in four.

In the fatal cases, as I have elsewhere shown,[1] it is the rule to find adhesion, and the exception to find the heart free. At the same time, it is the rule to hear exocardial rubbing, often continued until death, and the exception to hear none. Diagnosis, therefore, upon this point is as likely to be wrong as to be right. Yet it may reasonably be supposed, as regards recent adhesion, that the mere act of dying favours it; so that taking all the cases together, fatal and non-fatal, adherent pericardium may be a less frequent event of rheumatic carditis in childhood than our *post-mortem* records would lead us to suppose.

Table C.—*Sixteen Cases of Acute Carditis.*

Boys, 6; Girls, 10.
Average age, 8.
The 3 youngest, 4.2 (D); 4.8 (D); 5 (R).
The 3 oldest 10.5 (D); 10.8 (R); 11 (D).
Recovered, 4—Boys, 1; Girls, 3.
Died 12—Boys, 3; Girls, 9.
Previous attacks of rheumatism in 12.
" " acute carditis in 2.
Duration of acute symptoms: longest, 8 days; shortest 1 day, except 1 recovering after 9 days' acute symptoms, and 1 who had prostration 3 weeks before death.

Table D.—*Pericardial Adhesion in Relation to Friction Sounds.*

A. Characteristic friction sounds heard shortly before death in 29:	
Pericardium adherent "universally," "generally," "entirely," "everywhere," "universally and firmly," "extensively" in	15†
Pericardium "adherent and also to chest wall," "partly and recently adherent," "a few adhesions" in... ...	5*
Pericardium not adherent, but there exists "pericarditis," or "roughened pericardium," or "shaggy cords" in	5*
No adhesions mentioned (probably none existed) in ...	4*
B. No friction sounds audible in 17:	
Pericardium "adherent throughout" in	6*
Pericardium "adherent at apex" and "partially adherent" in	3†
Pericardium contains "excess of fluid" in	3*
Pericardium soft buttery lymph in	1*
Recent flakes of lymph in	4†

† Physical signs misleading in 22.
* " " informing in 24.

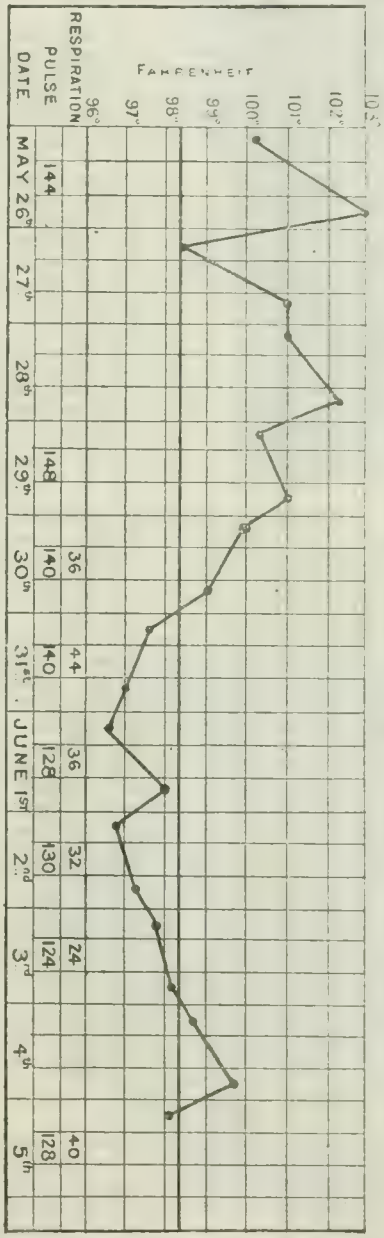
In some instances the *post-mortem* examination discloses unusual conditions whether of peri- or endocardium, such as may probably have influenced mechanically the mode and the distress of dying.

[1] *Rheumatic Carditis of Childhood.*

Thus, in a girl under 5, who became very blue and suffered a sort of anginal attack just before death, the appendices of both auricles were pretty firmly adherent to the adjacent portion of the heart.

In another instance, a girl of 4 years old, there was sudden collapse and death; *post mortem*, besides pericarditis, a continuous decolorised clot extended through the tricuspid valve from auricle to ventricle of the right heart.

The pulse in these cases is small and of low tension. The sphygmographic exhibition of pulse tracings is less satisfactory than in adults, but in some of the examples of acute carditis of which I am now speaking there is marked dicrotism with some unevenness. It is Dr. Sansom's opinion



Cardiac dulness increases; very rapid action, friction less loud.

Marked venous regurgitation, friction less audible, vomiting.

Vomiting prominent symptom, acute cardiac dulness again decreases, regurgitation in neck, friction feebler.

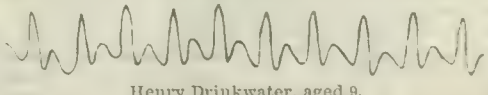
Heart dulness much diminished, friction more distinct, constant vomiting, fed by enemata.

Sinking, sickness and rub the same, lung œdema and some of feet.

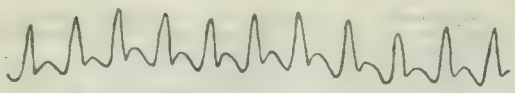
Very restless, vomiting frequently, cardiac dulness the same, no rub audible.

Vomiting ceased and child could be fed shortly before death, heart dulness not increased, no distinct friction sound.

that excessive degrees of dicrotism are not met with unless a severe form of endocarditis be present. It may be so; but I



Henry Drinkwater, aged 9.
December 20th.—A.C.D. increasing. Loud friction. Patient pale and prostrate.



January 1st.—A.C.D. much decreased, pulse 32. Still markedly dicrotic. Patient slowly mending.



January 9th.—Slowly recovering. A.C.D. fixed, and as on January 1st. Dicrotism still marked.

doubt whether the degree of dicrotism is an accurate measure of the patient's condition and progress, for in some instances, as in the one here represented, there was but little difference in this respect between the tracing on a day when the child was at his worst, almost unconscious, and nine days later, when, although still prostrate, he was plainly on the way to recovery.

The body heat in acute carditis is seldom much raised, and its variations are difficult to interpret. So long as the articular pains remain—which, as has been said, is not long—we have the irregular pyrexial trace of acute rheumatism. Later on, and when the heart has begun to claim chief attention, there is a fall of temperature to the normal or a little above or a little below normal, the only constant feature being irregularity of temperature from day to day.

The two charts here shown refer to two children. The first is the one whose case I related, and who had a long period of prostration. The second, also fatal, was admitted with joint pains, which very suddenly disappeared, leaving the child much exhausted and with severe heart pain. In the first of these cases, as in two or three others, hæmaturia was observed during the activity of the carditis.

Of the physical signs of rheumatic carditis in children, whether active or passive, the pericardial are the more obvious and the more immediately important. The concurrent endocarditis—whose presence may be assumed—difficult enough to appreciate in any case at an early stage, is more or less masked by the presence of exocardial signs.

The course of pericarditis, like that of other serous inflammations, is conventionally divided into distinct stages, which are described as successive but are in fact concurrent. Thus the plastic exudation of pleurisy hardly precedes fluid effusion. The minute crepitus of commencing pneumonia is heard side by side with the signs of consolidation. There is no orderly passage of the inflammation as a whole from stage to stage. There may be more of plastic or more of fluid exudation, or either the one or the other. In the case of pericarditis especially, it is important to notice that its earliest physical signs are conjoint, due partly to the distension of its fluid product, and partly to the audible attrition of the product that is more consistent.

Pericardial inflammation indeed at the first neither distends the sac nor causes audible rubbing. It is recognised, or rather it is suspected, by fallible signs such as altered rhythm, with quickened and tumultuous cardiac action. Extra area of cardiac dulness does not appear until the fluid is sufficient to push aside the edges of the lungs; friction rubbing does not appear until the earliest exudation has acquired some consistency. But the two signs, friction and extended area of dulness, appear together "not at the first blush of pericarditis," as Sibson's phrase is, but a day or two later.

And observe that from this point, from the earliest physical evidence of pericarditis to the very end of it, the progress is measured not by the rub, but by the daily changes in the area of cardiac dulness. In the acute cases the increase of fluid is usually rapid, and reaches its term within three or four days when the tide turns, the ebb being slower than the flow. In the chronic cases the changes of area are also frequent, but the frequent alternations of fluid, now more, now less, now again more, may occupy much time.

Pericarditis is thus analogous to pleurisy both in the signs that discover it and the mode of its measurement. But the effect of the fluid pressure is quite different in the two cases. In pleurisy the yielding lung is compressed into smaller and smaller space as effusion increases. In pericarditis, as we shall presently see, the effect of pressure upon the heart is not always the same. Commonly the organ is displaced upwards into the narrower portion of the thorax, where it presses against the sternal and costal cartilages, and friction is not abolished, but made more loud and grating.

But though the area of friction and its intensity are apt to be greatest when effusion is at its height, there is no rule with regard to rubbing sound that is without exception. The increase of fluid may separate the ventricles, saving the upper part of the right ventricle and the great vessels (that is, from the first to the third spaces) from the chest wall by a layer of fluid, a layer so thin that firm pressure with the stethoscope will serve to bring the pericardial surfaces in contact and restore the friction sound.

It is within the experience of every clinical student that pericardial friction is a fitful sound, coming and going with absolute suddenness. It may be so fugitive that on the same day, even within the same hour, one will chance to hear it and not another. Moreover, as I have shown, rubbing sound is not inconsistent with extensive adhesion.

Thus the hazard of friction rub as a physical guide is both early and late—early, because at first it is only by happy chance that we hit upon it; and late, because exocardial sound rub-like may be still audible when actual attrition is rendered impossible by firm adhesion. And it may be said further of this friction sound as of other things in Nature, that the noise it makes is not proportionate to its importance. The slightest scratching early in the disease may be the prelude to severe, perhaps fatal, carditis; on the other hand, loud and extensive rubbing sound may become audible when effusion is subsiding, and the improved aspect and manner of the child clearly indicate that the danger has passed.

Fallible as it is, let us make the most of it. Observe especially the cardiac tenderness that accompanies it in acute cases, a most suggestive sign; the change that it undergoes (or rather the changes) with varying pressure of the stethoscope, and sometimes also with altered position and with time.

There are some morbid sounds of the heart apt to be imputed when not actually present, notably presystolic murmur, as I shall presently try to show; there are others more often recognisable than recognised; of these latter, friction rub is the chief; and the main reasons for its being overlooked are:

1. That at its beginning and at its end it is often murmur like.

2. That it is often fitful and only encountered by chance; and

3. That the observer does not always employ the right methods for eliciting it, namely, varying pressure, frequent examination, comparison of its character to-day and to-morrow in various positions of the patient.

In some instances a rub-like exocardial sound will be heard when *post-mortem* examination discovers nothing to make it. The occurrence in the case of extensive and firm adhesion of the pericardium is not uncommon, as has been shown. But rarely what is taken for friction by expert observers is found after death to consist with a smooth and apparently healthy pericardial surface.

Thus a girl, aged 12 (N. H., August 26th, 1893) had a double rub at the junction of the fourth left costal cartilage with the sternum audible four days before death. *Post mortem*, the pericardium, which was very thin, and contained an excess of clear fluid, was smooth, and without trace of deposit. Again, a boy (J. R., aged 8) with extreme anæmia, suddenly developed a loud double friction rub which did not long continue, and which, on his death some time later, was entirely unexplained on *post-mortem* examination.

Happily, then, pericardial friction rub is not the only physical sign of pericardits; there is pericardial distension as well. These signs, as has been said, arise together, but neither of them is appreciable at the very beginning of the inflammation. It takes time, both for the exudation to grate and for the fluid to distend its sac. The very first physical indication of pericarditis is quickened tumultuous uneven action of the heart, which, because it is difficult to express in precise language, because it varies more or less in individual cases; because, moreover, its precise significance, whether as "threatening" endocarditis or actually signifying, it may be open to question. But a little later and of more definite

physical indication there are these two: the rubbing of the inflamed surface of the heart and the ever so slight displacement of its apex.

There are certain characters, both clinical and anatomical, which distinguish these cases and deserve a moment's consideration.

Clinically.—(1) The cardinal feature is rapid, sometimes quite sudden cardiac failure, failure which the physical signs very imperfectly explain, being precisely the same as may occur with passive carditis where there is no similar failure and no threatening symptoms whatever; (2) the general symptoms are mainly cerebral, or at least nervous—delirium, constant vomiting, sudden prostration. (3) The fatal cases very closely resemble the non-fatal in clinical respects: but when death is escaped, recovery is complete and sometimes rapid.

Anatomically.—(1) The pericardium is always adherent, often extensively and firmly adherent, the adhesions being more or less recent. (2) The endocardium, generally speaking, is but little affected, the tiny granulations upon the mitral valve (which is the characteristic appearance) being quite insufficient to render the valve incompetent. (3) The muscular substance of the heart undergoes but slight degenerative change.

Why do these patients die, and what makes the difference between living and dying? Physical signs, no doubt, are the more threatening when they show exocardial inflammation, or when the heart is already diseased owing to earlier attacks. Changeful endocardial murmur with tumultuous action, yet with no general disturbance, may at any time suddenly exhibit pericarditis together with all the symptoms of active carditis. But the first notice of danger comes not so much from the heart's physical state as from certain ominous general symptoms, restlessness, dyspnœa, delirium, prostration, vomiting—for the most part sudden and quickly fatal, which for no reasons known to us attack some rheumatic patients and spare others. The early appearance of such nervous symptoms is the best of all guides as to the future. Thus a child admitted with signs of carditis, but quiet and reposeful, had hallucinations as to people visiting him. Some days later he became prostrate and then unconscious, and narrowly escaped death; and just as physical signs are of small service in prognosis, so *post-mortem* examination fails to explain the fatal event. The heart failure is too sudden to be explained by muscular degeneration, and, as a matter of fact, this is not present to any great extent. The myocardium is chiefly implicated when the inflammation has been of long standing. Old adherent pericardium perhaps shows it best, but in recent inflammation, according to Dr. Byrom Bramwell and other high authorities, fatty changes in the muscular fibres are not generally observed. "The muscular fibres are swollen and their striæ indistinct, and leucocytes and blood corpuscles are seen in the spaces which separate the individual fibres."

I have here a series of very faithful drawings by my friend, Mr. d'Esterre, showing (1) the normal cardiac muscle; (2) the cardiac muscle from a child who died very quickly of cardiac failure within two days of pericarditis being superadded to endocarditis; the muscle is but little altered, its striæ being distinct; a second drawing from the same subject, less magnified, shows well the inflamed pericardium; (3) by way of comparison with the last is a drawing showing the degenerate muscle of old adherent pericardium, where striation is absent and the fibrillæ are widely separated. (4) Midway between these is a specimen showing distinct myocarditis, inflammatory elements being present in abundance; the specimen is taken from a boy who lingered some time in a condition of extreme prostration.

In consideration of the marked and agonising degree of dyspnœa shown by some of these cases of acute carditis, Dr. Lees suggests the question, "Is there a dextrocardiac respiratory centre?"[2] In the absence of any disease of the lungs, and with but little defect in the aëration of the blood, how, he asks, "is this very obvious dyspnœa, the result of pericarditis and of nothing else, produced?" Some might be content to answer that there is not pericarditis alone, but carditis also, and that the implication of the whole substance of the heart must so weaken it as to account for the symptom in question. But the extremity of the dyspnœa would seem better explained in Dr. Lees's view by "the working of an automatic reflex from the right ventricle to the respiratory centre. Such reflex is called into action by the acute failure

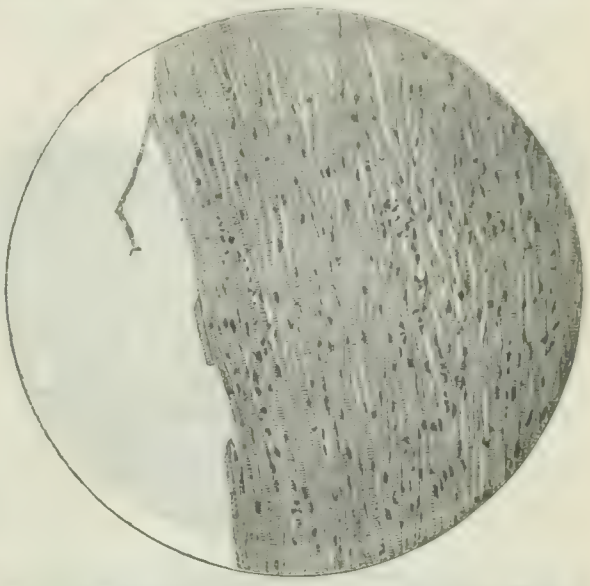


Fig. 1.—Normal cardiac muscle. E. M., aged 13, longitudinal section; the muscle fibres run parallel without much separation, striation distinct, nuclei normal in size and number, some nuclei seen between the muscle fibres as well as in them. Stained with hæmatoxylin, Ziess D, ocular No. 2. From a drawing by D. d'Esterre, M.B.

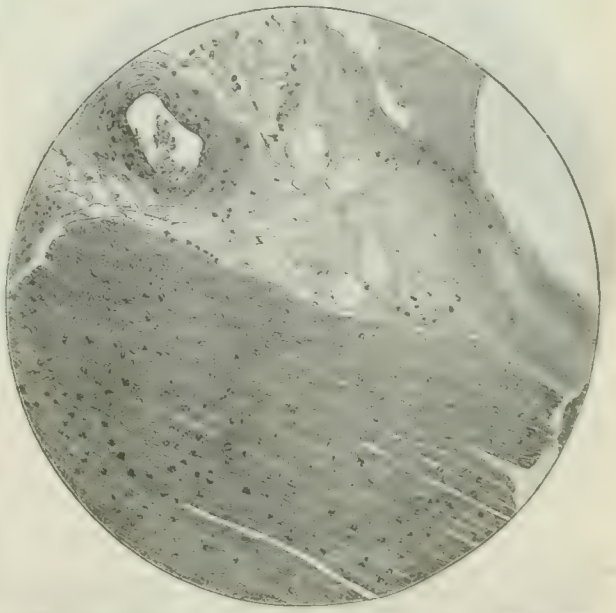


Fig. 2.—Pericardium and cardiac muscle in acute pericarditis. D. B., aged 8, muscle fibres in longitudinal section normal in appearance, no signs of inflammation, distinct striation, nuclei normal in size and number. Stained with eosin and hæmatoxylin, Ziess D, ocular No. 2. From a drawing by D. d'Esterre, M.B.

of the right ventricle resulting from the pericarditis or by irritation of the pericardial nerves." The paper is formally addressed to physiologists, and it is for them to answer.

In conclusion, something remains to be said of passive

[2] "Is there a Dextro-cardial Respiratory Reflex?" *Lancet*, October 28th, 1893.

carditis—of the signs of inflammation, that is to say, whether endocardial or exocardial, appearing without active general symptoms in the course of rheumatism, as is habitually the case with the adult. There is no more striking or

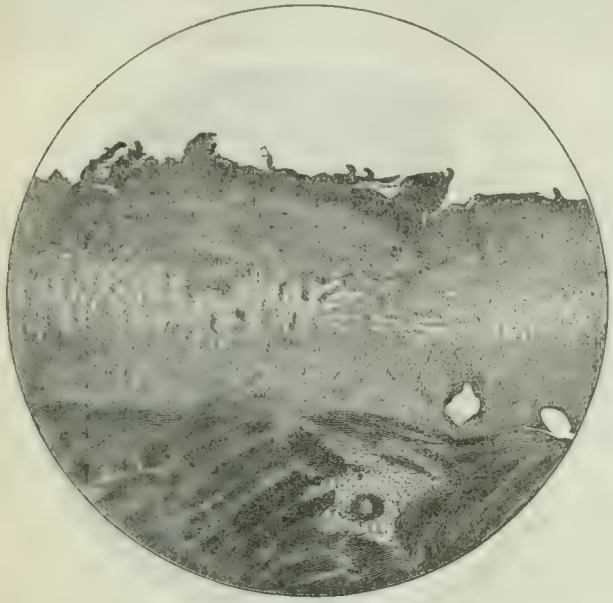


Fig. 3.—D. B. Showing thickened pericardium with ragged surface of lymph; muscular substance seen beneath. Power 2 in., ocular No. 2.

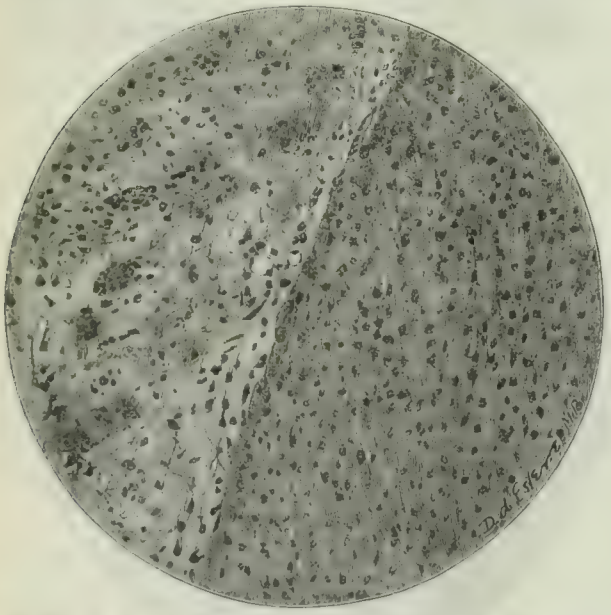


Fig. 4.—T. B. Myocarditis pericarditis. The muscle fibres are swollen, and their outlines indistinct; they stain less readily than normal. The nuclei are numerous and swollen. Zeiss D, ocular No. 2.

more important feature of heart disease as it happens to children than the close relation between endo- and pericarditis. A recent rheumatic endocarditis, fully developed in the case of the adult, leaves little fear of pericarditis presently supervening; with the child that fear is never absent, while in some instances, as we shall presently see, owing to the peculiar character of exocardial inflammation, it remains



Fig. 5.—W. B. Old adherent pericardium. Muscle fibres wavy and more than usually separated by fibrous tissue, in which the nuclei are numerous and distinct. No striation seen. Zeiss D, ocular No. 2.

doubtful to the end whether or not the pericardium has been implicated. This near sympathy makes the distinction between endo- and pericarditis less discernible in children, and, so long as the inflammation is recent, justifies the term carditis as applied both to the active and the passive form.

A CASE OF ENCEPHALOCELE: REMOVAL: HYDROCEPHALUS: DEATH.

By WM. MACKIE, M.A., M.B., C.M.Aberd.,
Elgin.

On July 14th, 1893, I was called to Mrs. O., a thin, anæmic woman, with an external strabismus of one eye and a chronic ulcer of the leg. Her confinement was expected about the middle of August, but labour had already commenced. Examination revealed a normal presentation, but in addition a fluctuating tumour, the nature of which could not be determined with certainty. A few sharp pains, however, soon cleared up the diagnosis, for the child (female) was speedily born, and presented a large fluctuating tumour attached to the occiput. This, as events afterwards proved, was an encephalocele. It was lemon-shaped, and in size almost, if not quite as large as the child's head. Both from the mother's reckoning, and its general appearance, the child was evidently premature—I should say from three to four weeks. It was unable to take the breast, and had to be fed with a spoon. On the third day, the covering of the tumour showed unmistakable signs of congestion and ulceration, and a slough was in the act of separating when removal was determined on in the barest hope of prolonging the child's life.

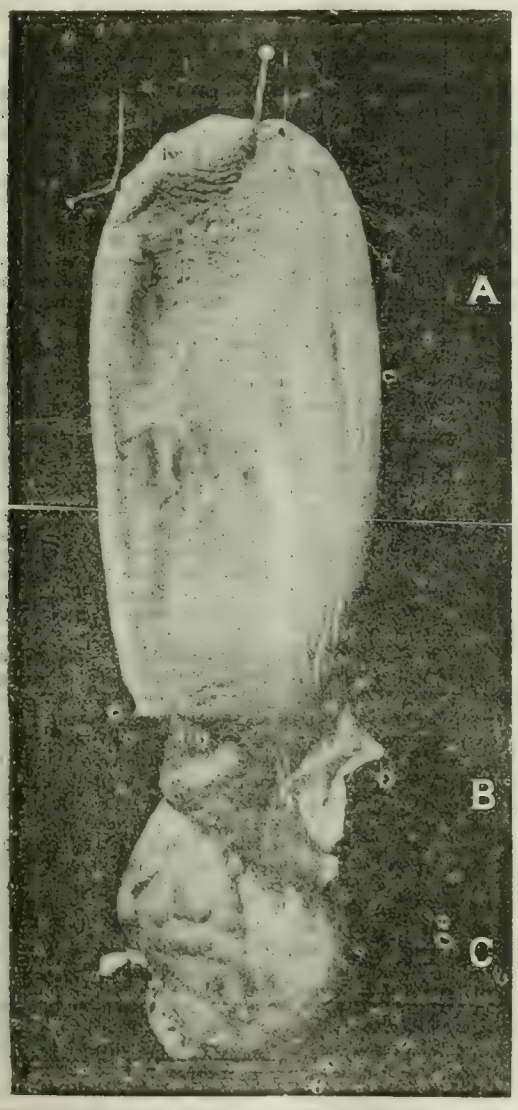
With the aid of Dr. Taylor of this town I passed a strong catgut through the centre of the pedicle, tied a Staffordshire knot, and then quickly detached the tumour. It was found, however, that the ligature included brain substance. Stitches were accordingly passed on each side, the stump of brain matter pushed inwards, and the scalp firmly stitched over the opening in the bone, the Staffordshire knot meanwhile serving to restrain the hæmorrhage, which altogether was but trifling.

Within the next twenty-four hours the child had several fits, in which both eyes were turned towards the left shoulder.

The right eye, however, in some of these fits remained closed, while the left stared in the direction indicated. The right foot was also observed to be rotated inwards. The fits were of short duration, and entirely passed off in the course of the next day, and from this time till within a few hours before its death it was quite free from them.

At the end of a fortnight the scalp wound had healed, all but a minute point, from which a drop of clear cerebro-spinal fluid exuded at intervals. This fistula closed in a few days. Shortly after the end of the fifth week the child began to waste, and hydrocephalus made itself manifest, and rapidly advanced. From this cause it died on September 12th, having survived the operation fifty-seven days, and lived in all sixty days.

Examination of the tumour, a photograph of which is here reproduced, showed that it contained a considerable slice of brain matter in the form of a little sac, measuring on its ex-



Tumour: A, covering on which a partially detached slough is seen; B, membranes; C, brain with convolutions.

ternal surface 2½ by 2¼ inches. When removed it contained a dark blood clot. Its sacculated condition showed that already at least one of the ventricles of the brain contained excess of fluid. The external measurements of the covering of the tumour after several months' immersion in spirits is still 4½ by 4 inches. No *post-mortem* examination was obtained.

ABSTRACT OF

THE GOULSTONIAN LECTURES

ON THE

PHYSICS OF THE CIRCULATION.

Delivered before the Royal College of Physicians.

By PAUL M. CHAPMAN, M.D.Lond., F.R.C.P.,

Physician to the Hereford General Infirmary.

Mr. President and Fellows,—It would be impossible to treat the whole subject of the physics of the circulation in three short lectures, and some explanation is due from me as to the selection of my title, for which I must ask your indulgence. The aim of these lectures is to commend as strongly as possible a more close and accurate observation of the state of the circulation in the sick than is now employed in clinical medicine.

It is the conviction of others besides myself that the employment of the cardiograph alone may give us definite proof of conditions otherwise not recognisable. Still more, that the combined use of the cardiograph with the sphygmograph may be the only means in certain cases of arriving at a definite diagnosis. It is especially for the latter method of observation that these lectures are intended to be some preparation, and this can only be done by entering somewhat largely into the subject of the physics of the circulation, which will be dealt with in a kind of summary of our present knowledge.

In discussing the mechanism of the circulation it is of the first importance to accustom the mind to regard all changes in blood flow through any particular blood vessel or cavity as conditioned by variations of pressure. I shall, therefore, whenever possible, speak of blood flow in any individual as being immediately conditioned by variations of blood pressure, though, in comparing different individuals, it must never be forgotten that a stream meeting with little obstruction may, with less driving power behind it, attain the same velocity as a stream driven with much greater power if the obstruction is correspondingly great.

Heart Sounds.

The latest contribution to the study of the mode of production of the first heart sound is furnished by Dr. Kasem-Bek[1] by experimental inquiry conducted in the laboratory of Professor Joh. Dogiel, of Kasan. First a dog's heart was rapidly removed and, with the apex uppermost, was slightly compressed in the hand. It was then put into the retort apparatus described by Dogiel and Ludwig. Since, according to Guttmann, the valves might be made tense even in a heart emptied of blood, Kasem-Bek excised a portion of the auricular wall, and thrust short gutta-percha tubes shaped like ear specula into the auriculo-ventricular openings, with the funnel-shaped expansion above and the narrow ends within the ventricles; these were either fixed in position by pins or by closing the auricles over their expanded ends. After every experiment he ascertained that no blood was in the ventricle. When the heart was now auscultated he heard with strong and regular contractions a loud and well-continued tone, which differed little from that heard over the apex before the experiment, except that the sound was louder in the excised heart.

In his second series of experiments, with the heart *in situ*, he opened the pericardium, and passed one index finger round the aorta and pulmonary arteries, the thumb being in front at the auriculo-ventricular limit. When the thumb and finger were compressed so as to prevent blood entering the heart, on auscultation through the uninjured chest wall on the left side, a first and second sound were heard once, then the second sound disappeared, while the first sound persisted, though less loud than before. Dr. Krehl, in a work *Ueber den Herzmuskelton*, 1889, comes to the same conclusion as Kasem-Bek.

The consideration of the first sound as a muscle sound persisting in a measure throughout the systole originated with

[1] *Pflüger's Archiv*, Bd 47 1890

Turner in 1829, and the same view was held by C. J. B. Williams and the Committee of the British Association in 1836. It is, I think, after the experiments I have related, as far as possible proved that the first sound is a muscle tone, to which, indeed, other sounds are superadded, especially those arising from the vibrations of the mitral and tricuspid valves, from the vibrations of the semilunar valves also, and from the vibrations of the blood column immediately above them.

With regard to the second sound, it will suffice to say that it disappears when the valves are destroyed, and that it consists of two sounds united, due respectively to the closure of the semilunar valves and to the vibrations of the blood column above them.

Vierordt,[2] by placing between the ear and the chest wall a column of thin india-rubber discs, and estimating how many of these discs have to be interposed before the sound vanishes, has estimated the relative intensity of the heart sounds. It appears that the first sound is relatively louder on the left side, especially in childhood. That the second sound, on the contrary, is considerably louder over the pulmonary artery, diminishing up to the age of 40. After that age the aortic second sound becomes slightly louder than the pulmonary second sound.

We must assent, I think, to the summing up of Tigerstedt: "So much is certain, that our theory of the normal heart sounds, and, in dependence therewith, our explanation of heart murmurs is still in many essential points confused, and not to be depended on for the more delicate diagnosis of organic heart lesions."

As to the production of the apex beat, we have to consider the changes of position and of form of the heart during systole. An interesting experiment was performed by Haycraft[3], who noticed that if a needle is inserted through the chest wall into the base of the heart the end projecting from the thorax moves upwards at each systole. If the needle is passed through the thorax nearer to the apex, the excursion of the needle is less. If it is inserted into the apex very little movement is communicated to the needle. As may be seen by direct inspection of the exposed heart, during systole the base approaches the apex, and the latter is the least movable point of the heart.

Whether distension of the aorta or recoil from the rush of blood can play any part in the production of the apex beat is to me doubtful. No blood can pass into the aorta until the intraventricular pressure is raised sufficiently to overcome the pressure in the aorta; for this a certain time is necessary. That the contraction itself is very sudden will appear from the fact that the rapidity of propagation of the wave of contraction throughout the heart has been estimated by Dr. Waller at about 5 metres per second. We may therefore assume that the apex beat occurs at the commencement of systole, or at least at such a time as to exclude the supposition that it is caused by elongation of the aorta owing to its reception of the contents of the heart.

The idea is commonly held that the pulmonary and aortic valves are closed by the regurgitation of blood against them owing to the relaxation of the ventricles, and the consequent alteration in pressure on the two sides of the valves. This is not exactly the case. During systole the blood is forced through the orifices, which at that time are mere chinks, owing to the pads of muscle which take their origin from all sides of the ostium. Vortices are thus created in the space between the arterial root and the edges of the valves. These vortices tend to press the edges of the valves together, and the valves consequently close the moment the blood actually ceases to stream through the narrow crevice. By this means all regurgitation is avoided, the valves being already closed before the recoil of the blood column against them. Were it not for this, some little regurgitation would be constantly occurring; and indeed, if the necessary muscle pads which support the semilunar valves are insufficiently developed, an aortic insufficiency may appear, in spite of perfectly normal valves.[4]

The muscular arrangement at the venous orifices has also its uses in favouring blood flow. When fluid flows out of an opening in the bottom of a vessel, the lateral pressure forces the fluid through the opening in a funnel-shaped stream, so that the mean section of the stream is smaller than that of the opening. During relaxation of the auricles the venous orifices are slightly enlarged, so that the largest possible amount of blood may flow through the orifices in a given time.

Owing to the disturbance produced in the heart by the insertion into it of sounds through the jugular or carotid it is difficult to estimate by this means the maximum pressure within the cavities. In the right auricle of the dog this is estimated at about 20 mm. Hg.[5] Jager's estimate, from three experiments, is as follows:

	I.	II.	III.	
Left ventricle ...	234	174	176	mm Hg
Aorta	212	162	158	
Right ventricle ...	28	44	72	

The pressure in the right ventricle as compared with that in the left, according to different authors, is as 1-3, 1-4, or 1-5.

POSITION OF OPENING AND CLOSURE OF VALVES ON THE CARDIOGRAM.

It is known that the auriculo-ventricular valves close at the commencement of ventricular systole; the time of their opening is inferentially assumed to occur at the commencement of diastole. In considering the arterial pulse wave it is important to know at what point of the heart tracing the semilunar valves open and blood enters the aorta, and also at what point the valves close. The arterial pulse can, if this be known, be divided into a systolic and a diastolic portion.

With regard to the opening of the semilunar valves after ventricular contraction commences, a certain time must elapse before the pressure within the ventricle rises to such a point as to overcome the pressure within the aorta. Until this point is reached the semilunar valves must necessarily be assumed to be closed. According to Chauveau and Marey, in the horse the rise of pressure in the aorta begins about 0.1 second after the commencement of ventricular contraction,[6] and the pressure curve of the ventricle does not show a disturbance at this juncture. We must take into consideration that the pressure remaining within the ventricle at the end of diastole may influence the length of time which elapses between the commencement of contraction in the ventricle and the rise of pressure in the aorta. The state of the auriculo-ventricular valves, therefore, and the blood pressure within the auricle and pulmonary veins may also affect the time of delay before the aortic rise. The time of delay is, however, little noticeable in comparison with large variations in pressure.

By comparative simultaneous tracings of the heart's apex and the carotid pulse in man and allowing for the delay in transmission along the artery, from the semilunar valves to the point of the carotid, whence the tracing is taken, we find that the semilunar valves open about the summit of the first rise in the cardiac tracing, and that while the blood is entering the aorta the direction of the tracing is changed, continuing more or less parallel with the base line or horizontal.

The delay in transmission from the semilunar valves to the carotid is thus accounted for inferentially. At every beat of the heart blood enters the aorta and a wave is set up in the arteries, this being of course felt earlier in the carotids than in the radial artery, the time difference between these two points being about 0.786 second. The length between the two points is about 60 cm. The length of vessel from the semilunar valves to the carotid is about one-third that from carotid to radial, that is about 20 cm., and the time occupied in traversing it is inferentially one-third of 0.0786 second or 0.0262 second, and from semilunar valves to radial 0.0786 second + 0.0262 second = 0.1048 second.

If one takes a synchronous tracing of the apex beat and carotid pulse it is found that the apex curve begins to rise considerably earlier than the carotid pulse, much earlier than 0.0262 second, more like 0.1182 second. Subtracting 0.262 second for the the time of transmission between semi-

[2] *Die Messung der Intensität der Herz öne*, Tübingen, 1885.
[3] *Journal of Physiology*, 1891.
[4] Hesse *Arch. f. Anat u. Phys.*, 1880, p. 338, and Krehl, *Abhandl. d. Sächs. Gesels. d. Wiss.*, 1891, p. 348.
[5] Goltz and Gaule, *Arch. f. d. ges. Physiol.*, 1878, p. 106; Magini, *Arch. Ital de Biologie*, 1887, p. 127.
[6] *Mém. de l'Académie de Médecine*, 1863, pp. 305-3.

lunar valves and carotid, a time 0.092 second remains, which must be purely cardiac—this is the time during which the intraventricular pressure is rising to overcome the aortic pressure; in other words, it is the time from the commencement of ventricular contraction to the opening of the semilunar valves. This time is called by German authors the "Anspannungszeit" (time of extension or stretching) or "Verschlusszeit" (time of confinement), and by Keyt, more conveniently and clearly, the "præsphygmic" interval.

Since in observations on the heart and pulse it is frequently necessary to consider or to eliminate the præsphygmic interval, Tigerstedt gives the estimations for the interval of various authors:

Præsphygmic Interval.	Author.
0.1 second	Marey.
0.073 ,, ...	Rive.
0.097 ,, to 0.087 second	Edgren.
0.07 ,, ...	Grunmach.
0.054 ,, ...	Keyt.

The interval varies inversely as the pulse frequency, being, according to Keyt, about one-tenth of the systolic period.

The semilunar valves must close when the aortic pressure exceeds that in the left ventricle. Whether the second sound is coincident with their closure is not made out; it may occur just subsequently to their closure by the vortices set up behind the valves, the second sound being coincident with their tension, though not with their closure. The time of closure is to be found by comparative estimation of the pressures in the ventricle and aorta. By this means v. Frey has estimated the closure to take place in the upper half of the drop in the apex tracing. Hürthle[7] places it shortly after the commencement of relaxation of the ventricle. These estimations are probably correct, though Chauveau and Marey place it much lower down the limb.

The outflow of blood from the ventricle lasts then from the opening of the semilunar valves to this point. This period is termed by German authors the "Austreibungszeit," or time of expulsion. Hürthle remarks that the duration of this period only varies very slightly if the pressure within the aorta is increased (0.178 to 0.195 second, dog).

According to Roy[8] the fibres of the heart wall shorten less during contraction when the arterial blood pressure is high. This is not to say that their persistence in contraction or, in other words, the duration of systole, is shortened. The effect, however, of the diminished shortening of the muscular fibres of which Roy speaks is to increase the quantity of residual blood which is left in the ventricle at the end of each systole. Ordinarily, during systole, "the lower part of the ventricular cavity closes completely, the musculi papillares coming into contact with one another; the upper part of the cavity, however, lying between the valves and the papillary muscles, does not become emptied."[9] This residual blood being increased in quantity, compensation has to occur by increased dilatation. Up to an undefined point this dilatation may be physiological; but it is easy to see that it may become pathological. It may, indeed, in excess, lead to deficient closure of the auriculo-ventricular valves, so that we can in this manner obtain a mitral incompetency from simple increase in the aortic blood pressure. Since cardiographic tracings are readily obtainable it is important to consider the apex beat somewhat closely, and to see how far the curve represents a curve of intraventricular pressure, and in what way it varies with an increase of frequency.

Cardiogram in Relation to Intraventricular Pressure.

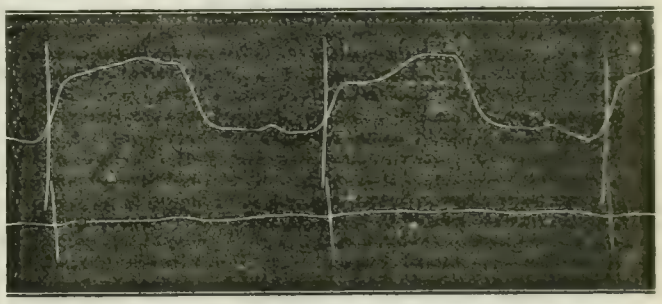
The heart's apex tends to fall away from the chest wall when the patient is lying flat on his back. When in this position, if he rolls over on to the right side, the apex beat may disappear under the sternum. If he rolls to the left the apex comes more closely into apposition with the chest wall. On this account, and because when so lying the respiratory movements of that side of the thorax are limited, the last is the most convenient position for taking cardiographic tracings, the left arm being flexed, and the palm of the hand lying under the left cheek.

The tracing of the apex beat is, by comparing it with tracings taken from the wall of the exposed heart, shown to be a tracing of ventricular muscular contraction. How far this is modified by the blood pressure within the ventricles becomes a matter of exceeding interest, the question whether the heart tracing is any guide to a knowledge of intraventricular states being all important if it is to assist us in our physical examination of the sick.

The general correspondence of synchronously-obtained curves of ventricular contraction and of intraventricular blood pressure is so close as to be in favour of the view that a ventricular apex curve or "cardiogram" is indeed, to some extent, a curve of intraventricular pressure

Hürthle[10] thinks that the duration of the cardiogram sufficiently corresponds to the pressure curve of the heart, while v. Frey also thinks that the cardiogram and contraction curve taken from the exposed heart are of about the same duration.

From the cardiogram nothing can be learned as to the time of closure or of opening of the auriculo-ventricular valves. The time of opening or of closing of the semilunar valves has been the subject of continual discussions. I am glad to be able to show a tracing which I have myself obtained from a patient, which is of much interest in this relation. A sharp "knick" was felt by the finger when pressed into the second intercostal space near the sternum, clearly corresponding to the closure of the semilunar (pulmonary?) valves. Together with an apex cardiogram, a simultaneous tracing was obtained from this point by means of a spring and air transmission. It will be seen that the "knick" in question corresponds in time with the lower part of the descending limb of the cardiogram.

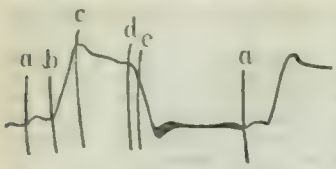


About half way down the descending limb of the cardiogram a slight bulge is often found. On Edgren's tracing of a normal curve he gets this lower down the limb, so that it appears almost to be an upheaval at the end of the drop. Neither of these points, however, appear to be synchronous with the closure of the semilunar valves, and the appearance is probably caused by the rush of blood from the auricle into the ventricle, due to the relative change of pressure between the two cavities, owing to ventricular relaxation.[11]

Previous to the great main rise in the cardiogram there is an upheaval corresponding to the contraction of the auricle, which immediately precedes, and is even in continuity with, ventricular systole. In my experience this may lead to error in measurement of the duration of ventricular systole. With light pressure of the cardiograph it may often merge into the ascending limb, and being measured as systolic an excessive length of ventricular systole may be simulated. For all purposes of measurement it is important that the cardiogram should be very sharp and clear, and the main systolic rise should take place from a distinct angle, showing that it is due to a marked and sudden change. The upheaval due to auricular contraction is by no means always to be obtained. It is necessary to have a favourable case, a sensitive instrument, and the luck which is born of experience.

In a cardiographic tracing we have therefore the following points to consider:

[7] *Arch. f. Phys.*, 49, p. 45.
[8] *Practitioner*, 1888, p. 347.
[9] British Medical Journal, December 15th, 1888, p. 1324.
[10] *Loc. cit.*, 49, p. 9?.
[11] Frederi?q, *Centralbl. f. Physiol.*, 1892, p. 257.



a — b auricular systole; *b — c Verschlusszeit*, or time of confinement; *c — d Austreibungzeit*, or period of expulsion; *d* cessation of contraction. Here a drop occurs, at the bottom of which is a notch owing to inertia of the lever, after which a slight rise takes place owing to gradual filling of the ventricle.

As to measurement of the duration of ventricular systole. If we assume the valves to close somewhere in the line of the descending limb, it should, to be exact, be measured from *b* to this point. Since this point is not visible on the tracing, and since we know that the angle (at *d*) where the sudden drop begins certainly corresponds to the cessation of active contraction of the ventricle, it seems to be more prudent to measure to the angle of drop when comparing relative "durations of systole" one with another. This measurement, from beginning of main systolic rise to angle of drop, has the great authority of Hürthle and of Dr. Burdon Sanderson, and whenever speaking of "duration of systole" I mean, and think we should for practical purposes be understood to mean, the time measurement between these points.

"The apex curve" (I quote from Tigerstedt) "as was first remarked by Chauveau and Marey, represents a combined pressure and volume curve of the ventricle. It is a pressure curve, for the knob placed against the chest wall exerts a pressure against which the heart by systole performs work. At the same time it is a curve of volume, in so far as it is also influenced by the changes in volume of the heart. By the filling of the heart during diastole the curve gradually rises from the abscissa; by the sudden emptying of the ventricle, when the semilunar valves are opened, the pressure of the heart against the chest wall will be somewhat less, and the lever can now no more follow the progressive increase of ventricular pressure, but describes a plateau."

It will be realised that it is very important to determine some standard of duration of systole for different pulse frequencies. Only by so doing, or by attempting so to do, shall we be able to institute useful comparisons of the cases we meet with. So long ago as 1882, in a report to the Scientific Grants Committee of the British Medical Association, August 19th, I endeavoured to give the average duration of systole for every increase of five beats in pulse frequency per minute, from 46 to 130, the measurements being taken from the initial systolic rise to the sharp angle of drop, which, as I have said, is taken by Burdon Sanderson and by Hürthle as the termination of outflow of blood from the ventricle. The range was from 0.36 to 0.21 second. There is no absolutely fixed rate of diminution. For every five beats the diminution is about 0 0085 second. My table, which has been republished in *Landois and Stirling's Textbook of Human Physiology*, p. 97, has, however, been of the greatest use to me for purposes of comparison and for establishing abnormalities, and its general correctness becomes more evident to me as my experience becomes more extended. I therefore give the table again, together with another table which is artificial and diagrammatic, but which will immensely facilitate the calculations which have to be made in measuring cardiograms and estimating pulse frequency per minute:

Experimental Table.

Frequency per Minute.	Duration of Systole.	
130	0.2100 sec.	(exertion)
116 to 120	0.2350 ,,	(mixed cases)
111 ,, 115	0.2475 ,,	(mixed cases)
106 ,, 110	0.2675 ,,	(exertion)
101 ,, 105	0.2543 ,,	(Turkish bath)
96 ,, 100	0.2540 ,,	(Turkish bath)
96 ,, 100	0.2730 ,,	(normal)
91 ,, 95	0.2690 ,,	(mixed cases)
86 ,, 90	0.2800 ,,	(Turkish bath)
86 ,, 90	0.3200 ,,	(exertion and normal)
81 ,, 85	0.3030 ,,	(Turkish bath)
81 ,, 85	0.3250 ,,	(exertion and normal)
76 ,, 80	0.3032 ,,	(Turkish bath)
76 ,, 80	0.3300 ,,	(exertion and normal)
71 ,, 75	0.3033 ,,	(Turkish bath)
66 ,, 70	0.3200 ,,	(mixed cases)
61 ,, 65	0.3200 ,,	(mixed cases)
56 ,, 60	0.3460 ,,	(normal)
56 ,, 60	0.3200 ,,	(Turkish bath)
51 ,, 55	0.3425 ,,	(normal)
46 ,, 50	0.3600 ,,	(normal).

Diagrammatic Table for Facilitating Calculations.

Time of Total Revolution.	Systole.	Diastole.	Pulse rate per Minute.
1.333 sec.	0.3600 sec.	0.9733 sec.	45
1.200 ,,	0.3515 ,,	0.8185 ,,	50
1 0909 ,,	0.3430 ,,	0.7479 ,,	55
1.000 ,,	0.3345 ,,	0.6655 ,,	60
0.9230 ,,	0.3260 ,,	0.5970 ,,	65
0.8570 ,,	0.3175 ,,	0.5395 ,,	70
0.8000 ,,	0.3090 ,,	0.4910 ,,	75
0.7500 ,,	0.3005 ,,	0.4495 ,,	80
0.7060 ,,	0.2920 ,,	0.4140 ,,	85
0.6680 ,,	0.2835 ,,	0.3831 ,,	90
0.6316 ,,	0.2750 ,,	0.3566 ,,	95
0.6000 ,,	0.2665 ,,	0.3335 ,,	100
0.5701 ,,	0.2580 ,,	0.3121 ,,	105
0.5454 ,,	0.2495 ,,	0.2959 ,,	110
0 5217 ,,	0.2410 ,,	0.2807 ,,	115
0.5000 ,,	0.2325 ,,	0 2675 ,,	120
0.4800 ,,	0.2240 ,,	0.2560 ,,	125
0.4615 ,,	0.2155 ,,	0.2160 ,,	130
0.4440 ,,	0.2070 ,,	0.2374 ,,	135
0.4286 ,,	0.1985 ,,	0.2301 ,,	140
0.4138 ,,	0.1900 ,,	0.2238 ,,	145
0.4000 ,,	0.1815 ,,	0.2185 ,,	150
0.3871 ,,	0.1730 ,,	0.2140 ,,	155
0.3750 ,,	0.1645 ,,	0.2105 ,,	160
0 3636 ,,	0.1560 ,,	0.2076 ,,	165
0.3530 ,,	0.1475 ,,	0.2055 ,,	170
0.3428 ,,	0.1390 ,,	0.2038 ,,	175
0.3333 ,,	0.1305 ,,	0.2028 ,,	180
0.3246 ,,	0.1220 ,,	0.2026 ,,	185
0.3158 ,,	0.1135 ,,	0.2023 ,,	190
0.3077 ,,	0.1050 ,,	0.2027 ,,	195
0.3000 ,,	0.0965 ,,	0.2023 ,,	200

The time of rest and of work in the day, and the considerations thereto belonging, and the influence on fatigue of the heart muscle by merely slowing the pulse by means of drugs, or by lengthening the systole or diastole relatively to each other, become extremely interesting when viewed from this point.

Diastole.

With regard to the behaviour of the heart during diastole. Until the last fifteen years it was generally assumed that the ventricle relaxed, but did not actively dilate, and exerted no suction power during diastole. Goltz and Gaule in 1878 found there was a negative diastolic pressure in the dog's ventricle when acting well and strongly. De Jager[12] found in the right ventricle a negative diastolic pressure of 5-38 mm. Hg., and in the right auricle a negative pressure of 2-6 mm. Hg. In all these experiments the heart was laid bare, to avoid suction due to respiratory movement.

It is difficult to understand how the elasticity of the muscular fibres can suffice to bring this about. Stefani in 1891, for the elucidation of this point, performed an ingenious experiment. He filled the pericardium with water, and estimated the pressure which was necessary to hinder the diastolic expansion of the ventricle. He found that this must be much greater when the vagi were intact than when they were divided. The vagi, therefore, appear to influence the active expansion of the ventricle.

Gaule and Mink[13] refer to the arterial openings. Here the muscular fibres take their origin from the fibrous ring in which the aorta is sunk, and surround the ventricle in spiral fashion, so that at the moment when the ring is widened by the filling of the aortic sinus after the occurrence of the closure of the semilunar valves, an unfolding of the point of origin of the muscular fibres occurs, and thereby an unwinding of the spiral.

Lastly, the flow of blood into the coronary arteries tends to straighten their curve, and so leads to an enlargement of the ventricular cavity.[14]

Work of the Heart.

The amount of blood expelled from the heart, and the method by which the estimation is arrived at, are familiar to everybody from the textbooks of physiology. If we assume the quantity expelled to be 4 ounces, and we know the velocity attained by the blood to be about 0 5 second metre

[12] *Arch. f. d. ges. Phys.*, 1883.
[13] *Centralbl. f. Phys.*, 1890.
[14] Brücke, Rolleston.

per second, and the pressure in the aorta to be about 150 mm. Hg. we can, by multiplying these together, estimate the amount of work performed by the heart. If there were no obstacle arising from the high pressure in the aorta, the amount of force necessary for the expelled blood to attain a velocity of 0.5 second metre would be very small, namely, 0.64 to 1.28 gramme-metre. To overcome, however, the high aortic pressure, a force of 102.0 to 204 gramme-metres is needed. The total work of the heart is, therefore, a union of these two, namely, 102.64 to 205.28 gramme-metres.

By far the largest part of the work of the heart is therefore expended in overcoming the obstacles in the vascular system. We do not sufficiently realise to ourselves what a very small part of the heart's work is available for imparting to the blood its requisite velocity. It is but about 1-200th part of the whole work of the heart. The importance of treasuring this small margin of force, and the readiness with which the blood flow can be diminished by any increase in the vascular pressure, should be continually borne in mind.

According to physiological experiments, while the force of contraction varies, the duration of ventricular systole is independent of arterial or venous blood pressure. My own table seems to show considerable discrepancies between lengths of duration of systole under exertion (when the blood pressure is high) and under the influence of the Turkish bath (when the pressure is low, and the cardiogram and pulse tend to dicrotism), but the shortened systole may be due to nervous influences. In an experiment made by me some years ago both the subclavians and crurals and the abdominal aorta were simultaneously compressed without altering in any way the duration of systole. I have met with very short systole in pernicious anæmia and in fatty heart. In these, as in all other cases, it is probable that marked alterations in the duration of ventricular systole must be taken as *evidence of want of nutrition or of the presence in the blood of toxic substances.* A rise or fall of pressure in the aorta will, on the other hand, affect the *frequency* of the pulse, which sinks by rise of pressure and rises by fall of pressure, through the influence of stimulation of the vagus centre or of the inhibitory nerves respectively.

An interesting observation was made by Lichtheim, who found that after ligaturing completely one pulmonary artery the same amount of blood continued to reach the left heart, and the aortic pressure was not diminished. Even after a large part of the remaining pulmonary artery was rendered impervious by the creation of artificial emboli, not until about half the lung was rendered bloodless did the aortic pressure sink at all.[15]

The pulmonary artery appears to be subject to very wide variations of distension. The actual work done, however, by the left ventricle is subject to much greater variations than that done by the right ventricle. Dr. Waller,[16] by exciting the spinal cord, obtained a very strong contraction of the peripheral vessels of the systemic circulation, whereby the aortic pressure was greatly increased and the left ventricle could not empty itself. By this means the pressure in the left auricle was raised from 25 to 30 mm. Hg., and its walls ceased to contract. During all this time the right auricle and ventricle continued to contract normally. The distensible capacity of the pulmonary artery relieves it from any great variation in pressure. Tigerstedt remarks that this capacity and distensibility play the same *rôle* in the smaller circulation as the liver in the larger. The blood collects in either, to the relief of the cardiac circulation, which would otherwise be constantly embarrassed.

It is clear that, to maintain an equable circulation, the heart must be supplied with the same quantity of blood as is driven from it at each systole. It is customary to imagine that the difficulty of return to the thorax of a column of blood extending from the foot to the heart is very great, and that it is only overcome by the suction power of inspiration and of cardiac diastole, combined with the effect of lateral pressure of the acting muscles and of the pulsating arteries against the blood column in the veins which lie in contact with them. That the difficulty is not so great as is generally imagined will be apparent from the consideration that the mechanical obstruction to the return of fluid in the ascending limb of an arc is neutralised by the increased facility offered for the flow of blood in the descending limb. When the thorax is opened so as to exclude any inspiratory suction power the blood returns to the heart without the least difficulty. The return is indeed favoured by the greater sectional area existing in the larger veins compared with that in the arteries.

Before entering upon the study of the pulse wave in the arteries it is well to consider what obstacle the capillaries offer to the wave of impulse sent through the blood. Is the wave lost before it reaches the capillaries? If not, what is the nature of the obstacle which they offer to the impacting wave? Part of this question will be considered when we discuss the movements of waves in elastic tubes; but some facts relating to the capillaries should be recapitulated.

Owing to our visual memory of the capillary network, as seen through the microscope, we are inclined to imagine the length of the capillaries, that is to say, the distance between the finest arterioles and the extreme venous radicles to be much longer than is the case. The distance has been estimated at about 0.2 mm. Through this short distance the red corpuscles move with a velocity of a millimetre in one second or in half a second. They travel flat to the stream, with their shortest diameter parallel to the direction of blood flow.

We know that the velocity of blood flow in the aorta is from 0.3 to 0.5 up to 1.0 metre per second, while in the same space of time the blood in the capillaries traverses only about as many millimetres. This is owing partly to the much larger section of the whole capillary system compared with that of the aorta, partly to the loss of velocity through friction, which, indeed, is not a "loss" in the ordinary sense, since it becomes disposable as heat.

It is now known that the capillary walls are contractile, and that the diameter of the capillaries varies independently of the arterial blood pressure. When they thus vary it is probably in response to the chemical constitution of the blood, which is altered in correspondence with the varying conditions of tissue change in the part. Irritation of the nerves which supply the capillaries has not yet been directly shown to influence their diameter, though variations in their diameter may assist the arterioles in regulating the blood supply to an organ.

Owing to the independence in contractility shown by the capillaries and to the large size of the individual red blood corpuscles compared with their lumen, together with the fact that we are not here dealing with a mere channel of conveyance, but with a part actively engaged in tissue changes, to which the variations in the conditions of the arteries are merely subservient and contributory; also considering the fact that pulsation is not felt in the veins on the other side of the capillary network, we may be sure that if an impulse wave arising in the aorta is of such a length as to reach this point it will meet with such an obstacle as to be possibly reflected back again along the channel by which it came.

Still carefully distinguishing between velocity of blood flow and velocity of transmission of pulse wave, which latter will be considered later, we find, by the use of Ludwig's stromuhr the mean velocity of the blood in the arteries in one second of time to be about 0.3 m. to 0.5 m. per second.

The blood pressure alone gives no indication of the velocity of the blood, which may be slow or quick with a high pressure, according as the obstacle is greater or less. This is excellently and usefully shown by Dr. Waller's table[17]:

	Heart.	Arterioles.	Blood Pressure.	Blood Flow.
1	Force constant ...	Resistance increased...	—	—
2	Force constant ...	Resistance diminished	—	—
3	Force increased..	Resistance constant ...	+	+
4	Force diminished	Resistance constant ...	—	—
5	Force increased..	Resistance diminished	+	+
6	Force diminished	Resistance increased...	—	—
7	Force increased..	Resistance increased...	+	+
8	Force diminished	Resistance diminished	—	—

[17] *Handbook of Physiology*, p.

(To be continued.)

[15] *Die Störungen des Lungenkreislaufs*, Berlin, 1876.
[16] *Arch. f. Anat. u. Phys.*, 1888.

THE LETTSOMIAN LECTURES ON PERITONITIS.

Delivered before the Medical Society of London, January, 1894.

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LECTURE III. PART II.—THE TREATMENT OF PERITONITIS.

(*Concluded from p. 458.*)

BEFORE dealing in detail with this matter a very brief reference may be made to the treatment as carried out in bygone years. Inasmuch as peritonitis, as an individual disease, was not recognised until the beginning of the present century, even the most elaborate review of the subject cannot extend very far back.

An excellent account of the treatment of the disease as practised in England eighty years ago is to be found in a gossiping tract on *Peritonitis*, by Thomas Sutton, M.D., late Physician to the Forces, and Consulting Physician to the Kent Dispensary.[12] His lines of treatment were as follows—first, absolute rest: second, purgatives; third, abstinence from food: fourth, cold to the abdomen; fifth, bloodletting in the acute cases; and sixth, opium to be given only occasionally and very sparingly. Dr. Sutton was not a believer in opium in peritonitis, except in the presence of intense pain. He made a great point of securing an action of the bowels when possible, and made frequent use of sulphate of magnesia. Benjamin Travers, writing in 1812, advocated the same measures. He considered an evacuation of the bowels to be a matter of primary importance, but he appears to have relied largely upon enemata, and to have inclined towards warm fomentations.

The history of the surgical treatment of peritonitis is well given in the article on peritonitis in the *Dictionnaire Encyclopédique des Sciences Médicales*. Its modern developments are too well known to need detailing. Some credit in the past must be given to Jobert, who, in 1836, advised that in peritonitis with effusion the abdominal wall should be incised and water at blood heat injected. Guérin, ten years later, recommended a copious washing out of the abdomen in generalised puerperal peritonitis. The peritoneal fluid was, however, to be drawn off with an aspirator, and warm water injected and withdrawn until it came back clear.

In considering the treatment of any grave affection it is well to recollect that certain of the so-called symptoms of a disease are not crass evidences of a disturbing evil within the body, but are rather the natural expression on the part of the organism of an attempt to rid itself of a trouble. Many symptoms are, in fact, curative acts, and are the measures of a natural treatment, and not the mere purposeless signs of an unnatural disturbance.

The cough and expectoration in bronchitis afford a means of ridding the lung of the products of a catarrh, set up in the bronchi by some irritant. The photophobia and lachrymation in ulcer of the cornea serve to keep the inflamed part moist and to protect it from the irritation of exposure and of light. The vomiting in poisoning has for its purpose the evacuation of the substance which has caused the disturbance. In any one of these cases the treatment consists, not in an attempt to suppress these symptoms, but in an endeavour to encourage them.

In peritonitis the exhaustion, the rigidity of the belly wall, the pain, the vomiting, and the not infrequent sense that the bowel needs to be emptied of flatus would suggest the recommendation of absolute rest, of attempts to relieve pain, of starvation, and, under certain circumstances, of means to relieve the intestine. If, in contemplating a patient with peritonitis, one could regard his more conspicuous symptoms as natural attempts to afford relief, they would appear to be in the direction of securing quiet within the enclosure of the abdomen and of effecting an evacuation of the alimentary canal. In the account which follows of the treatment of peritonitis this suggestion from the therapeutics of Nature is not disregarded.

I.—REST.

Absolute rest in the recumbent position appears to be the first obvious indication. The knees may be flexed over a pillow to lessen the tension on the abdominal walls, and to favour the patient's instinct to assume that posture. The upper part of the chest and the ever restless upper limbs should be protected by a woollen jacket, and no reasonable restraint offered to the patient's inclination to hold the hands above the head. This favourite posture, by acting upon the lower part of the thoracic wall, assists also in diminishing the tension within the abdomen. It is cruel to insist that the hands should be kept beneath the bedclothes. The state of misery in peritonitis is acute enough without being increased by purposeless and rigid formulæ. Cold hands do not cause death, but as on exposure they tend to become cold they should be covered up. The wretchedness of restlessness has a natural relief in little movements.

II.—FEEDING.

The old rule of eighty years ago of giving as little food as possible by the mouth cannot be improved upon. The stomach is not in a condition to receive nourishment, and what is taken usually remains unutilised, and is returned unchanged. The practice sometimes met with of laboriously plying the patient with teaspoonfuls of this meat extract or of that, recalls the legend of the Danaïdes, who spent their energies in pouring water into pitchers without bottoms. Two extremes are to be avoided. The first is the rigid, unreasoning, and often needlessly cruel prohibition of food of any kind by the mouth; and the second is the reckless and intemperate use of ice or iced fluids.

Thirst is often a most terrible symptom in peritonitis. It is not always quite relieved—at first at least—by rectal injections. The patient is ready to give his life for a drop of cold water. If he takes it he is sick, but he is much relieved. This little indulgence does not introduce anew the symptom of vomiting: it is there, but it is latent, and the drop of cold water only makes it evident. The patient will not die of vomiting, and simply because a rigid exclusion of all fluid by the mouth does not render the symptom apparent it does not render it non-existing. The man would sooner vomit than endure his thirst. Very often great relief is given by allowing a fairly copious draught of fluid, which is soon rejected, and which—as it were, by washing out the stomach—leaves the patient for awhile infinitely comforted. On the other hand, the perpetual sucking of ice is as bad as the perpetual teaspoonful of useless jelly or of decomposible meat juice. The filling of the stomach with iced water does undoubtedly add to the general depression of the patient, especially when vomiting has been brought into abeyance by morphine.

The right course appears to lie between these two extremes. There should be no rigid formula except this—let the patient take as little food as possible by the mouth. If there be a raging thirst, let him have a little ice—and very little suffices—or a little iced milk and soda water; or if, as is common, the inclination lies towards something warm, let him take a few spoonfuls of hot water or of weak tea made hot, or of beef-tea at a like temperature. It is not the nourishment that is needed (and I imagine that the nourishment in beef-tea is merely an ancient but cherished fiction), but some fluid in the stomach. It is better within reasonable limits to be guided by the patient's own instincts than by a blind formula founded upon a doubtful physiology. This same physiology has added very much to the miseries of death from peritonitis.

As regards actual feeding—in the usual sense—that should be carried out by rectal injections. The injections should be small in amount, should be weak, should be made of some peptonised meat extract or infusion, should be given slowly, and should be of the temperature of the body. An injection of two to two and a-half ounces of peptonised beef-tea with half an ounce of brandy appears to answer well, and may be given every three or four hours. Thirst is better relieved by an injection of half a pint of warm water given alone, than by diluting the nutrient enemata to that extent. I do not think that nutrient suppositories are so well suited for cases of peritonitis as is the ready-made fluid injection. Irritability of the rectum may be to some extent met by

washing it out now and then, and by a weak injection of cocaine. In the more advanced cases, the sphincter begins to relax as the loss of power progresses, and then very usually nothing can be retained. It is undesirable to harass the last hours of a dying man by nutrient enemata, simply because it is the custom.

If there be diarrhœa, or if the bowels be acting freely, then rectal feeding cannot be adopted, but, fortunately, in these cases the vomiting is slight, as a rule, and fluid and a certain amount of nourishment can be taken by the mouth. It is, perhaps, needless to add that in cases, with or without diarrhœa, in which there is no vomiting, all that is given may be given by the mouth. Much complaint is often made by patients with peritonitis of the horrible state of the mouth. The tongue is dry and stiff, and such sense of taste as remains is only capable of appreciating a bitter nastiness. Something can be done to relieve this by keeping the teeth brushed, by washing the mouth out with a 1 in 80 carbolic lotion, or with a mixture of eau de Cologne and water, by actually cleaning the tongue and by keeping it moist with glycerine and water.

III.—Opium.

Here again the old practice appears to be the best. Give as little opium as is possible. In the early stages of acute peritonitis, and especially in the perforative forms, and in those depending upon appendix troubles, morphine in the form of a hypodermic is absolutely necessary. In the worst instances it may certainly avert death from shock. Under its influence the patient revives, and the more intense symptoms become greatly modified. Morphine should never become a feature in the routine care of peritonitis. It masks the symptoms, hinders the natural process of cure, and hampers treatment. The indication for it is actual pain, and not mere restlessness and misery. In the really septic forms but very little morphine is called for, and often none at all. Its evil effect in the after-treatment of cases of abdominal section has been amply demonstrated. In quite hopeless cases there can be no objection to its freer employment, but in other instances the administration and the dose of the drug must be sanctioned and measured by the one symptom—pain.

I have noticed that in those who are dying of general peritoneal sepsis, a greater sense of relief usually follows the hypodermic injection of strychnine than attends the use of morphine. The strychnine appears to act as a stimulant would—the patient revives for a while and feels more hopeful under its influence, his moanings cease, his miseries are less unendurable, and for the twentieth time he thinks he may get better.

IV.—Aperients.

At the commencement of the century the use of aperients was a necessary element in the routine treatment of peritonitis. By aperient treatment may be understood the obtaining of an action of the bowels by either drugs or enemata. After a certain number of years the practice altered, and the dictum went forth that when any signs of peritonitis were present, aperients were to be absolutely forbidden.

Within the last few years the more ancient method has been revived, but it has been revived with very radical modifications. To Mr. Lawson Tait the profession is indebted for this return to an almost forgotten practice, and, above all, for the employment of that practice with the new element of discrimination. Mr. Tait's measure has been frequently spoken of as "the treatment of peritonitis by aperients," and it has been assumed by some (and probably with disaster) that a purgative is necessary in every case of peritoneal inflammation. Mr. Tait's precise words on this subject are as follows:—"I have never said that the purgative treatment will cure peritonitis, for peritonitis, once it is completely established, is a practically incurable disease, and almost uniformly fatal."[13] It is on this very point that the centre of the position with regard to this treatment turns.

Aperients can never be adopted in the routine treatment of peritonitis. In the larger proportion of cases this measure is entirely useless, and in the great series of the septic forms it is more or less impracticable. In most of these septic examples enemata of any kind may be administered, and purges of any character may be given, and the probability is that the bowels will not act at all, and if they do respond it is more than probable that the treatment will not affect the prognosis in the least, and certainly not in the patient's favour. If the aperient could eliminate the fatal poison which is circulating in the patient's system then good may follow, but even the most enthusiastic advocates of purging cannot credit their drugs with this power.

There is no doubt but that there is within the intestine an amount of noxious or poisonous matter which remains harmless so long as the viscus retains its normal condition, but which may lead to septic symptoms if certain changes are induced in the wall of the bowel, or possibly in its contents. This has been especially shown in connection with the potentialities of the colon bacillus, and it is clear that these noxious elements include not only simple chemical substances, but also various micro-organisms and their hurtful products.

Equally evident does it appear to be that the injurious matters within the disordered bowel can, within certain possibly narrow limits, be got rid of by the action of aperients. In acute intestinal strangulation death may follow in a few days. The patient in such cases dies neither of pain, nor of vomiting, nor of the obstruction to his bowels. After his death there may be found no signs of peritonitis, or evidences only of the slightest form of that condition. He dies of general septic intoxication, and the poison is derived from his intestine.

This poison is rendered potent by the abrupt and gross changes which the strangulation has produced in the intestine. Mere retention of the contents does not explain the disastrous results. In examples of chronic obstruction the bowels may not act for six or eight weeks and yet the patient may recover. The subject of a constipation of this degree will, it is true, exhibit some signs of poisoning. He is languid and apathetic, he vomits, the taste in his mouth disgusts him, he has headaches, his breath is rendered intensely offensive by reason of the matter, probably gaseous, which has been absorbed from his intestine, and is to some extent discharged from the blood through the lungs.

Some gross disturbance in the complex mechanism of the bowel wall is needed to render the poisonous contents of the intestine acutely poisonous and to favour its ready introduction into the system. Of the effect of a thorough evacuation of the alimentary canal in such an instance surgical experience can testify. Such a case as the following must have come within the knowledge of every surgeon who has dealt with many cases of intestinal obstruction. Some years ago I was called to see a vigorous man of 45 who had suffered from acute intestinal obstruction for some three days. I opened the distended abdomen, and I recognised that peculiar faintly-stinking peritoneum with which such operations soon make one familiar. Immediately beneath the incision was revealed a single omental band which had caused the trouble. This was divided and the abdomen was closed. The operation lasted a few minutes. Still the man died, and the necropsy revealed no perforation and no gangrene of the bowel, and no abnormal change in the peritoneum save a little stickiness. The patient died, not because his bowels were obstructed, but because that obstruction allowed septic matter to be absorbed from his intestine. His trouble was not outside his bowel but within it. Had I made an opening in the gut and allowed the poison-loaded viscus to relieve itself the result may have been different. Such an operation would have been comparable to the washing out of the stomach after an active poison had been swallowed.

It is a fact that the most successful treatment of acute obstruction of a certain grade is that which provides for a thorough evacuation of the loaded gut. A blindly-executed enterostomy, with an utter ignoring of the cause of the obstruction, has been attended by better results than have operations in which the agent of the obstruction has been discovered, after elaborate search, and has been satisfactorily dealt with. This treatment of acute obstruction by the evacuation of the bowel before all things we owe to Benjamin Travers, the father of intestinal surgery. In cases of strangulation of a certain degree he insisted that the bowels should be cut into and emptied, even after the obstructing band had been removed. He considered that the operation was not complete until this had been done: he urged that safety was

only to be obtained by an evacuation of the gut, and he supported his views by numerous cases and experiments.

Another illustration of these selfsame points is afforded by perityphlitis. In a previous section of these lectures I have shown that those cases of perityphlitis in which there is diarrhœa, or in which the bowels act naturally or under the influence of aperients, are attended with a much lower mortality than are the cases in which constipation is marked. In my own experience I am convinced of the value of the aperient treatment in the earliest stages of these cases, and of the pursuit of the same measure throughout in selected instances. In some cases, however, nothing within reason will bring about an action of the bowels. The subjects of repeated attacks of perityphlitis are aware themselves of the evil effects of constipation, and many of them have learnt that they can ward off an attack, or minimise it, when it comes, by a prompt aperient.

A further illustration of the subject from the same standpoint is afforded by that alarming intestinal condition which is sometimes met with after abdominal operations, and which was at one time spoken of as peritonitis. The exact nature of this condition was, I believe, first recognised by Dr. Malcolm.[14] It has been fully dealt with subsequently by Olshausen[15] and Verchère.[16] The former writer has applied to it the convenient name of "pseudo-ileus." The symptoms are these: On the second or third day after a not necessarily severe abdominal operation the abdomen becomes distended, the patient becomes uncomfortable, and complains of "wind." The distension increases; vomiting sets in. At first only the contents of the stomach are rejected; very soon the matter becomes bilious, and finally there is copious "coffee-grounds" vomiting, and this may present a fæculent odour. The vomiting tends to become worse and worse, and is much more copious than is common in peritonitis. The pulse becomes smaller and feebler, the temperature usually sinks, and exhaustion increases with alarming rapidity. On the fourth or fifth day after the operation the patient may die. At the necropsy the peritoneum may be found to be practically unchanged, or to exhibit so trifling a degree of peritonitis as not to account for the symptoms, nor for the fatal result. Various explanations of this condition have been given. There is no doubt that the nervous disturbance which attends any abdominal operation leads to some degree of intestinal paralysis. This paralysis, attended as it is by vasomotor changes in the bowel wall, is favourable to the absorption of septic matters from the intestine. The paresis may be slight and may disappear spontaneously, or it may subside if the distension of the bowel can be relieved by the introduction of a rectal tube. If it persist it appears to permit of a filtration through the intestinal walls of septic materials, of bacteria or of their products. These latter are readily taken up by the peritoneum, and a septicæmia commences. This is the explanation given by Olshausen, Verchère, and others, but it is not accepted by Dr. Malcolm.

Anyhow, it was pointed out by Mr. Tait, and has been made evident to most surgeons who have followed his teaching, that if an action of the bowels can be obtained at the outset of the symptoms, either by the administration of a purgative or by an enema, the trouble in a large proportion of cases passes away and the patient makes a good recovery. It cannot be said that this good result follows in all cases, and it is evident that the purgative, like the emetic given in acute poisoning, can only bring about an arrest of the symptoms within certain limits.

It only remains to point out that when once general peritonitis has established itself, an aperient is without avail. In those septic cases in which diarrhœa occasionally sets in, this is only too apparent. An example such as the following serves to illustrate this point:

A woman, aged 43, was seized with symptoms of acute abdominal trouble some hours after eating a very heavy meal. She was admitted into the London Hospital on the fourth day after the onset of the attack. She had then the symptoms of peritonitis. A laparotomy was performed, and an enterostomy was carried out without any attempt having been made to discover the cause of the inflammation. The patient died in two days, and before that time the bowel had entirely emptied itself through the artificial opening. The symptoms of peritonitis were in no way influenced, and I imagine that the patient's death was neither hastened nor delayed. The jejunum was found to be gangrenous in two places, as a result of very acute enteritis. There was general peritonitis, but no perforation.

In conclusion, therefore, it must be said that aperients—in the ordinary sense—are of no avail in established general peritonitis. That in the peritonitis following hernia, or associated with acute intestinal obstruction, the complete evacuation of the bowel is desirable, for reasons which are apart from the peritonitis. In septic peritonitis—in the usual acceptation of that term—aperients are useless, and the same may be said of their employment in true perforative peritonitis.

In a large proportion of examples of perityphlitis, and in the pseudo-ileus which may follow after operation, the prompt evacuation of the bowels is often attended with the very best results.

On both theoretical and clinical grounds the thorough emptying of the intestine before any abdominal section is performed may be regarded as absolutely essential.

V.—Blood-letting.

This measure of treatment may with advantage be more extensively employed. It is no longer likely to be used in the unreasoning and mechanical fashion of bygone days. In robust forms of localised peritonitis blood-letting is attended with admirable results. In perityphlitis the application of half a dozen leeches often acts with magical effect. In the older accounts of the treatment of peritonitis by bleeding no good appears to have followed in cases in which the inflammation was diffused, except, perhaps, in some examples due to injury. On theoretical grounds this is precisely what would be expected.

VI.—Operative Measures.[17]

These are represented by incision and drainage, with or without irrigation. This treatment must be considered as it applies to peritonitis, under two entirely different aspects. In one series of cases there is vigorous well-defined inflammation, the local symptoms are marked, pus is produced, and may be considerable in amount, and the exudation is more or less clearly localised. Examples under this heading are afforded by peritonitis started by mischief in the vermiform appendix, by many forms of peritonitis within the pelvis and in the subphrenic region, and by certain cases of limited inflammation following upon injury or perforation. In the other series of cases the peritonitis is diffused, the constitutional symptoms are more prominent than the local ones, the changes in the serous membrane—so far as evidence of inflammation is concerned—are comparatively slight, and are out of proportion to the general disturbance. This form is illustrated by cases in which there is a general septic intoxication starting from the peritoneum, by peritonitis due to perforation, or following after strangulated hernia or enteritis, by puerperal peritonitis, and by examples of genuine peritonitis following operations upon the abdomen. In the first series of cases surgical interference by incision and drainage ranks with the procedure of evacuating a large abscess. In the second series the cut into the abdomen and the subsequent flushing out or drainage are to be compared with the washing out of the stomach after an active poison has been swallowed. In the one case the body has to be rid of the products of a robust and possibly limited inflammation; in the other case an attempt has to be made to remove from a cavity a poison which has already wrought no little harm. The operation in the latter instance is directed not so much against an inflammatory outbreak as against a progressive poisoning.

The operative treatment of suppurative peritonitis, especially when the effusion is localised, has been remarkably successful. Records of the operation extend back into the eighteenth century, and all that modern surgery can lay claim to is the application of the treatment with greater boldness, with greater frequency, and with infinitely less delay.

The operative treatment of general diffused non-tuberculous peritonitis has, so far, no record to boast of and little progress to chronicle. I am doubtful if a single human life has been saved by surgical interference in a genuine case of peritoneal toxæmia. Surgical treatment has been most discouraging in acute peritonitis following upon gangrenous hernia, upon operation, and upon puerperal infection. It has met with but little better results in cases of perforation, in which the serous inflammation has been well established.

The somewhat imposing lists of cases of success after laparotomy for acute suppurative peritonitis afford sorry matter for congratulation when submitted to a careful scrutiny. The following may be cited as illustrative of this:

Krecke[18] gives a list of 119 cases of generalised purulent peritonitis treated by operation, and attended with only 68 deaths. In 18 instances the cause of the peritonitis was unknown, and in 36 cases it was due to trouble in the appendix, and it is among these 54 examples that the greater number of the successes are to be found. All the cases of peritonitis associated with hernia or with perforation of the stomach died.

Steinthal[19] gives a list of 20 cases of perforative peritonitis treated by operation. There were 10 recoveries, but in no fewer than 7 of these cases the pus was encapsuled, and was apparently dependent upon perityphlitis; at least it is stated that in 11 cases out of the 20 the perforation was in the appendix. Some of the cases are remarkable enough, but they are not examples of that form of generalised peritonitis which is usually associated with perforation.

Kaiser[20] has collected 30 cases of operation in perforative peritonitis, with 11 recoveries. In 5 of the examples of cure the locality of the perforation was unknown.

Körti,[21] after pointing out the fallacy of statistics and the fact that the successful cases are probably all reported while the failures are commonly left in obscurity, gives a list of 40 consecutive cases operated upon by Mikulicz, Krönlein, and himself for purulent peritonitis. Out of this number there are 11 recoveries, and these include no fewer than 7 cases of perityphlitis.

Kriege[22] gives a case of perforation of the stomach, which was treated successfully by an operation carried out twenty-four hours after the viscus was supposed to have given way, but in this instance there was no peritonitis. He incidentally alludes to 6 other recorded cases, all of which ended in death.

Some very excellent results have attended early operation for injury of the bowel and other abdominal viscera, but these results cannot justly be considered in connection with laparotomy for fully established peritonitis.

As to the actual mode of operating adapted for the different varieties of peritonitis, I would venture to draw attention to the following points. In all cases it is to be assumed that the skin over the operation area is cleansed and prepared in a suitable way, and that the surgeon adopts those measures which students, in their examination papers, are so fond of describing as "strict antiseptic precautions."

In cases of localised purulent peritonitis an incision should be made into the collection by the most direct route. When the pus has escaped, a rubber drainage tube of suitable size and with stiff fenestrated walls should be passed to the bottom of the cavity. A dressing of some absorbent material, such as Tillmann's paper, sal alembroth, or cyanide gauze is then applied. I have seen no advantage attend either the fuller evacuation of the pus by squeezing or the immediate irrigation of the cavity, and I am confident that distinct harm may be done by scraping the wall of the enclosure, by persistent searching for a diseased appendix or other cause of the trouble, and by stuffing the exposed space with a considerable quantity of gauze. At the end of twenty-four or thirty-six hours the irrigation of the cavity may be commenced and continued twice daily, and now and then a little iodoform emulsion may be introduced.

In some examples of perityphlitis a well encapsuled collection of pus is not exposed, but the knife enters into an ill-defined district containing a variable quantity of thin, greenish, and often offensive matter, which appears to saturate the tissues. In such circumstances I have been in the habit of using a drain composed of strips of iodoform gauze, which are carefully introduced into the lowest accessible recesses of the region.

In cases of generalised peritonitis, the procedure adopted must obviously depend upon the cause and degree of the trouble. If the exudation be serous it will suffice if the fluid be evacuated, if the peritoneal cavity be gently dried in its most dependent parts by means of gauze sponges, and if the abdomen be closed without drainage.

When the exudation is sero-purulent or purulent, it is in many cases desirable that the cavity be irrigated. The fluid which appears to be best suited for this purpose is a sterile 0.6 per cent. salt solution made warm. The details of irrigation will be discussed later on. After the washing the depths of the peritoneal cavity are dried, so far as is possible, with sponges; iodoform powder is (except in children) dusted over the portion of the serous membrane most involved, a long, rubber, fenestrated drainage tube may then be introduced, and the abdominal wound closed. Any treatment directed against the cause of the peritonitis will be independent of these measures. In the treatment of the ascitic forms of tuberculous peritonitis the best results have followed simple incision without either irrigation or drainage. The use of the rubber drainage tube is apt to be followed by an obstinate sinus.

There are cases in which the peritonitis is more plastic in character. The intestines are found to be matted together with greyish lymph, which may be present in considerable quantity. The breaking down of these adhesions causes no little amount of bleeding, and such a step is evidently destructive of a certain desirable process of repair. Still, in order to search for the cause of the peritonitis, assuming such search to be indicated, and to set free an amount of exudation which is imprisoned between the attached coils, this freeing of adhesions must be at a certain, very limited extent carried out. There will probably be a sero-purulent exudation in the belly cavity, and the gentlest movements of the fingers among the recently attached intestines will set free more fluid, which will be probably less opaque. A clump of adherent intestines will often cover and protect a perforation, and the ubiquitous lymph will many times close such an opening with more speed and security than are provided by any system of suturing. As the surgeon, therefore, reaches what appears to be the starting point of the peritonitis, he must proceed with the utmost caution, and be not only prepared, but rather inclined to leave the actual *fons et origo mali* undemonstrated. The main purpose of the operation is to allow a noxious exudation to escape, and, if possible, to free the peritoneum of the cause of its trouble. In the class of case now under discussion, a perforation will be very often the starting point of the peritonitis; the lapse of time and the plastic character of the inflammation afford evidence that the perforation is for the time being closed. If the operator can rid the serous cavity of the effects of the perforation, he may very often leave the breach itself to be dealt with by natural means.

The wisdom of doing no more than is necessary, or as little as is obvious, is well illustrated by these cases. It is a very striking fact that some of the best results in the treatment of perforative peritonitis have been obtained in instances in which the exact site of the perforation was never ascertained. In Kaiser's statistics already alluded to, there were 6 such examples, and of these 5 recovered. In this form of peritonitis a liberal dusting of the serous membrane with iodoform should be carried out (except in cases in children). Drainage is seldom required, and when employed is best provided for by strips of iodoform gauze passed among the intestinal coils to the necessary depth. Irrigation is certainly not suited to this class of case. Gauze mops or sponges in holders form the best means of clearing the peritoneum under the circumstances named.

It only remains to consider what means may be taken during the performance of an abdominal section to prevent the onset of peritonitis, and to discuss the two vexed questions of irrigation and drainage. "The Modern Laparotomy," as Döderlein[23] presumes to call it in a recent elaborate paper, is a procedure which has evidently not yet reached the stage of recognised formulæ, nor attained to the position of a stereotyped process.

A perusal of the numerous writings upon the *technique* of the operation leaves an impression that the opening of the abdomen is still regarded with an almost superstitious awe, and if still approached by many with a fussy and meaningless ceremonial, that elaboration of detail may be carried to a degree which is merely fatuous, but that although surgeons differ greatly in their methods, they differ but little in their results.

An infinitely elaborate *technique* is no substitute for lack of skill in operating, and the power of the human body to resist the effects of injury is not capable of unlimited extension by artificial means.

It is needful in the first place that the operation room should be surgically clean, that the patient should be clean, and that the operator should be clean. The attaining of this end appears to be as satisfactorily accomplished by the charwoman, the laundress, and the nailbrush, as by complex chemical processes. There seems to be no imperative need that the operation chamber should be capable of being washed out in the same manner as the interior of a cup, nor do results show that it should be so constructed as to be con-

vertible into a vacuum or so ventilated as to admit only a stream of sterilised air. The skin over the abdomen can be prepared by a liberal scrubbing with soap and water, followed by washing with ether and the final application of a carbolic compress, which is applied some hours before the time fixed for the laparotomy.

Ligatures and catgut are, I think, best kept in an ethereal solution of corrosive sublimate. They can be dipped into sterilised water just before they are used.

The methods of rendering instruments surgically clean are legion. I adopt the practice of placing them in a 1 in 20 carbolic solution for fifteen minutes previous to the operation. Just before they are used the solution is diluted with sterilised water until it represents 1 in 80 or 1 in 100 in strength. To take an instrument direct from a strong carbolic solution and use it within the abdomen is to bring a caustic and damaging irritant into contact with the peritoneum, inasmuch as some of the solution must drop from the knife or forceps so employed.

Gauze sponges do fairly well for the peritoneum if properly prepared. They are best left to soak for some time in a 1 in 20 carbolic solution, which is very freely diluted with boiled water just before the sponges are passed through the roller. Ordinary sponges in holders are better adapted for the depths of the cavity. As they are not readily cleaned after use they are burnt as soon as they have been once employed. This disposes of many uncertainties.

It is obvious that the less the peritoneum is touched, stretched, rubbed, and handled the better. Now and then it may be desirable to repair, with a continuous suture, any rent made in its surface.

I have tried every method of closing an abdominal wound of which I have had any knowledge. I believe the best plan is to steady and straighten the wound edges with blunt hooks while the needle is being passed, to sew up the peritoneum with a continuous suture of fine silk, and to close the rest of the parietal wound with a single row of silkworm gut sutures which embrace all the soft parts, excepting the serous membrane, and which are passed by means of straight needles.

Any damaged surface of peritoneum should be well dusted with iodoform, and into the ragged cavity left after the removal of an adherent kidney or a sessile tumour, a liberal quantity of the same powder may be introduced. I have reported certain cases which encourage the impression that some security against peritonitis is to be obtained by the free use of iodoform within the abdominal cavity.[24] Iodoform should, however, not be used in the case of children as it is very apt in them to produce symptoms of poisoning.

It is needless to say that the peritoneal sac should be left as dry and as clean as possible; that all bleeding should be carefully arrested, and all clots, pus, cyst fluid, and the like should be thoroughly removed. It is possible, however, that these ends may be attained at too great a cost, and that the "toilet of the peritoneum" may become a very uncouth and barbaric process. Within certain limits, I believe it is often less injurious to leave some blood clot in the abdominal cavity than to persist in an obstinate determination to remove it at any sacrifice.

An ounce or so of cyst fluid in the peritoneal sac would, I think, do less harm than an attempt to complete the toilet of the peritoneum as carried out by a mechanically conscientious man. This toilet is often a Brobdingnagian affair, and when strong antiseptics and countless sponges are employed it degenerates into mere violence, and is rather of the nature of an assault. If the infinitely tender character of the peritoneum be held in mind, this toilet—as sometimes practised—is comparable to the removal of a foreign body from the eye by means of a scrubbing brush and plenty of washing soda.

IRRIGATION.

Mere blood is better removed from the peritoneal cavity by sponging than by irrigation. If the operation area be well circumscribed by sponges, if the shoulders be raised so that blood will reach the more dependent tracts, and if a sponge be introduced into the pelvis at an early stage of the procedure, there is little trouble with blood clot. Coagulated blood is certainly very much more easily and certainly removed by means of gauze sponges than by a stream of water. The same observations apply to what may be termed healthy cyst contents, to fluid from hydatids, to bile, and to matter escaping from the stomach or intestine. With careful plugging and a watchful use of sponges a widespread extravasation is uncommon. If it does take place the gauze can usually reach it. Irrigation would possibly have the effect of spreading the noxious fluid—as, for example, intestinal matters—over a still wider area. It may be said, therefore, that if certain precautions be taken the cleansing of the peritoneal sac may be best and most safely accomplished by dry sponging.

If there be a considerable outpouring of such a material as putrid pus, or if there be a copious escape of gut contents, as from the giving way of a distended bowel above a point of obstruction, then it may be better that the whole peritoneal cavity be irrigated. In such a case the amount of the extravasated fluid and its wide distribution would render its complete removal by sponging difficult.

This irrigation is best conducted by the following means: The fluid used is a sterile 0.6 per cent. salt solution at blood heat. It is introduced at low pressure, but in a wide stream. The irrigating tube is of soft rubber, and may have a diameter of three-quarters of an inch. The tube itself is introduced into the belly cavity. The flow through it can be regulated by a clip. Any form of rigid nozzle is to be most strongly condemned. The solution should flow gently into the abdomen. The peritoneal cavity is to be flooded, and not to be scoured out with a violent stream of water, which hisses and rushes from a vulcanite nozzle as from a miniature firehose. When the belly cavity is quite full of fluid the surgeon's hand, which is already in position, is moved to and fro among the intestines with great gentleness. The coils of bowel are thus rinsed. By a movement of the hand and by pressure here and there the fluid overflows from the wound, and is replaced by the steady stream. As the water which escapes becomes clear the upper end of the operation table is raised, so that the shoulders are much elevated, and then little has to be done but to wash out the most dependent parts, including especially the pelvis, and to allow the upper parts to drain. Finally, what fluid remains in the pelvis is removed with sponges, and a sponge in a holder is retained in the bottom of the pelvis during the introduction of the stitches, and only withdrawn at the last moment.

In the actual process of irrigation it is important that the temperature of the fluid be constant, that the abdomen be never over-distended, and that the stream be not directed against the diaphragm. If these precautions be neglected alarming dyspnœa and even asphyxia may take place.[25] If the shoulders be well raised, as already advised, these respiratory complications are less likely to occur. Polaillon has observed 3 cases of cessation of respiration in the human subject during irrigation.

Many surgeons have written of late on the subject of irrigation, and the general bias of these communications is very strongly against irrigation. Fluids of all kinds have been used, such as solutions of carbolic acid, of corrosive sublimate, of boric acid, and of salicylic acid. The two last named are the most in favour. Many operators employ boiled water, and not a few a weak preparation of alcohol. It is evident that whatever fluid is employed, it cannot be used as a germicide, and that all that can be aimed at is a solution which is sterile and non-irritating.

It has been urged that irrigation serves to spread the infective material, which it is required to remove, over a wider area, and that it seriously diminishes the resisting power of the peritoneum. Reichel[26] strongly insists upon the latter objection. He found that in artificially produced peritonitis in dogs he was never able to ward off death in any case in which it was to be assumed that the animal, if left alone, would die. He introduced fæcal matter into a dog's peritoneum, and, having closed the wound, he reopened it after a while and employed irrigation in some cases and sponging in others. He found neither method entirely successful in cleansing the serous cavity, but was convinced that sponging was the more efficient of the two. Even when from 10 to 15 litres of fluid was used a quantity of infective matter was still found to have been left behind. He irrigated the healthy peritoneum in certain animals with boiled water. All the animals so treated recovered, but some were ill for a

long time, and some had urgent dyspnœa. These simple irrigations produced a blood-stained exudation in the peritoneal sac, and many minute hæmorrhages into the intestinal portion of the membrane.

Lauenstein,[27] on the other hand, considers that irrigation is theoretically better than sponging, although he acknowledges that in practice he has not found the procedure attended with good results. He thinks that as much damage may be done to the peritoneum by determined sponging as by the irrigator, and in this he is no doubt right.

Into the peritoneal cavity of three corpses Pölchen introduced some fæcal matter fifteen minutes after death. He employed immediate irrigation, and found that the material adherent to the bowel after the operation was sterile. When flushing is employed, so much fluid remains behind that some sponging becomes necessary. Other things being equal, irrigation involves more time than the mopping out of the serous sac. Stuehlen[28] is among the comparatively few recent writers who consider that irrigation can efficiently cleanse the peritoneum.

Kinscherf[29] has carried out a series of experiments which add an additional feature to this subject. He points out that a considerable quantity of fluid may be absorbed by the blood during irrigation, and that the amount may be such that the absorptive power of the peritoneum may be reduced to *nil*. He repeated Delpet's experiments, and irrigated the abdominal cavity of an animal for ten to twenty minutes with a 6 per cent. solution. He then introduced more sulphate of strychnine than was sufficient to produce tetanus in a control animal of the same weight. No effect followed. Kinscherf used a 1 in 2,000 corrosive sublimate solution after the flushing process, and found that no symptoms of poisoning followed, although toxic phenomena were always produced when irrigation had not been previously carried out.

It is, of course, a matter of question how far experiments such as these can be used as arguments *ad hominem*, but of the unsatisfactory results which have followed upon the indiscriminate use of irrigation after operations in man there can be no doubt. In not a few instances it would certainly appear that irrigation has hastened death.

Drainage.

It will be allowed by most that drainage is necessary, when either an actually noxious material is left in the peritoneal cavity, or when it is assumed that an extensive effusion will follow upon the laparotomy. Considerable differences of opinion must exist as to what constitutes, either in substance or in amount, a noxious material, and also to what extent a possible effusion is to be met by drainage. There seems little to commend the employment of a glass drainage tube passed into the fundus of Douglas's pouch. I have ceased to use this appliance, and it would not appear that it is used with any frequency by the majority of those who are much concerned in abdominal operations.

A stout rubber drainage tube of large size and well fenestrated, passed into the midst of the area which is the most disturbed, appears in most cases to answer all reasonable purposes. It is not suited to tuberculous cases, and has in many instances been followed by an obstinate sinus. In any case the sooner the tube can be removed the better. It must be assumed that the surgeon has no objection after the operation to frequent, and perhaps extensive, changes in the patient's position, for the purpose of assisting the process of drainage. I have myself seen no harm arise from a liberal fulfilment of this object. In certain instances, some of which I have already indicated, a gauze drain appears to be better adapted for the case than a rubber one. This drain is simply composed of a long strand of iodoform gauze about an inch and a-half wide and some five to six layers thick. It appears to have been first advocated by Bardenheuer. In a case of purulent peritonitis, Jalaguier[30] has passed these strands of gauze in all directions among the intestinal coils from the diaphragm to the pelvis with good result. A like proceeding in like cases is advocated by Steinthal.[31] The great objections to the iodoform drains are these. They may induce symptoms of poisoning if very extensively employed; they are most difficult to remove unless there be a free discharge, and their use is apt to be followed by ventral hernia. Iodoform tampons used to close a breach in the peritoneum which cannot be closed by sutures involve much distress in their removal, and, if left in for a few days, may become quite covered in with lymph. If retained long enough to ensure a complete occlusion of the peritoneal cavity their removal is not so difficult, but a hernia is almost inevitable. The so-called Mikulicz drain is an open bag of iodoform gauze, which is stuffed with strips of the same material. It is used when an actual cavity has to be drained, and the size of the tampon is often alarming. The bag is slowly evacuated, piece by piece, after the first forty-eight hours, and by the fifth or sixth day it is empty, and the gauze sheet itself is then removed. The cases must be few which call for the employment of this formidable tampon.

Some surgeons, either to supplement or to replace drainage, allow the wound to gape, or support it merely by a few quite loose sutures.[32] This measure has been especially advocated in the treatment of perforative or purulent peritonitis.

In conclusion, it only remains to be said that the surgical treatment of peritonitis has not yet reached a position which is either satisfactory or secure. There has been lack of boldness in the measures used, and little sense of discouragement at the results obtained. Surgical enterprise has been directed against effects and against damage done rather than against causes and the beginnings of evil. The surgeon holds the same position in regard to peritonitis which was held some thirty years ago in regard to wounds and more accessible forms of inflammation. At that time he dealt only with the consequences of pathological wrong-doing, just as now he concerns himself with the prevention of troubles which he has learnt to control. Peritonitis will be more successfully treated when measures can be directed against the sowing of the wind rather than, as now, against the curbing of the whirlwind.

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Fees for Graduation in Medicine in France.—By decree dated February 14th, 1894, the following fees will be payable by all candidates for the M.D. degree in a French Medical Faculty after November 1st, 1895:—Sixteen "inscriptions" at 32.50 francs, including library subscriptions, 520 francs. Practical classes, payable quarterly for four years, 160 francs: first year, 60 francs; second, 40; third, 40; fourth, 20. Seven examinations at 30 francs, 210 francs. Seven certificates of having passed these examinations at 25 francs, 175 francs; thesis, 100 francs; certificate for thesis, 40 francs; diploma, 100 francs. The total amount payable for the degree is, therefore, 1,305 francs (a little more than £52).

Alcohol in Enteric Fever.—A paper was read by Sir B. W. Richardson, at a recent meeting of the British Medical Temperance Association, on "Enteric Fever," in the course of which it was stated that the actual mortality among patients treated for this disease at the Temperance Hospital had been 14.5 per cent., as against 15.2 per cent., the latter being the average percentage in other hospitals generally. Much was also said in praise of the cold bath treatment. Dr. Bond said that in 380 typhoid cases at the Southern City Hospital, Liverpool, the percentage of deaths had been 8.68; 71 had received alcohol. The cases extended over three years, and the amount of alcohol given had been lessened during the two succeeding years, with a correspondent lower proportion of deaths. Drs. Hingston Fox, Robert Pringle, Norman Kerr, J. J. Ridge, Drysdale, Shuter (of Melbourne), and Paramore took part in the discussion.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

THE TREATMENT OF BREAST CANCER; MARROW INFECTION.

While appreciating the hopeful spirit in which Mr. Watson Cheyne writes of this disease, and cordially endorsing his general remarks on the operative surgery thereof, I would take leave to challenge *in toto* the statistical portion of his able address, and to point out that three years is wholly inadequate as a probationary period, supposed to demonstrate cure. The peculiar and insidious marrow infection, which attends the great majority of cases of breast carcinoma, may not develop palpable lesion anywhere, commonly for four to five years, more rarely for eight to ten. Thus:

Case I.—E. N., aged 51, had a scirrhous tumour as large as an orange, with extensive deposit in the axillary glands, excised in October, 1879. Left breast; stated duration six months. No "recurrence" till 1890; then operation at a provincial hospital. I examined her on January 1st, 1894. A healthy-looking woman, with no tumour formation anywhere perceptible, but with well-marked physical signs of marrow deposit, which will some day prove fatal. More than fourteen years since first operation.

Case II.—F. D., 40. Left breast, with enlarged axillary glands, excised in June, 1887, for scirrhous tumour of six to twelve months' duration, size of walnut. In December, 1892, marrow infection became obvious, but no palpable disease until December, 1893. I then found two nodules, not larger than pins' heads, at edge of sternum. In January, 1894, gland in right axilla enlarged. All these have just been removed.

Case III.—J. B., 51. Left breast, with glands, excised for scirrhus of eighteen months' duration, in January, 1881. Marrow phenomena detected in March, 1884, and followed by deposit in both axillæ, February, 1885.

Case IV.—E. F., 61. Removal of scirrhous right breast, with glands, July, 1886. Duration, one to two years. In June, 1893, enlarged glands in left axilla. In September, 1894, death from paraplegia due to deposit in vertebræ. No trace of recurrence on right side.

These brief notes serve to show how long the insidious marrow deposit may hold the sword suspended over its victims. I have selected only cases in which obvious cancer deposit was long absent. Permanent immunity from breast carcinoma can only be hoped for when both the breast and contents of axilla are freely excised within six to eight weeks of inception, that is, before the advent of marrow infection. I hope shortly to publish successful cases.

Gloucester Place, W. Herbert Snow.

CASE OF ACUTE DILATATION OF THE STOMACH.

Mrs. P., aged 56, sent for me at 10.30 A.M. on January 28th, saying she had been very ill all night with violent pains in the stomach, with slight sickness. I found her lying on her back, with a drawn expression of countenance; her face was dusky, eyes sunken, hands and feet cold and bluish-black. Pulse extremely slow and feeble. She complained of a violent pain in the epigastrium, which got worse at intervals. The pain "worked up and down in the middle" line from the ensiform cartilage to the umbilicus, "and shot through to her back." On auscultation over the region, which was extremely tender, a deep metallic tinkling sound and some splashing on manipulation were heard. The stomach was enormously dilated, and extremely tender, especially in the mid-epigastric region. She dated her attack from 12 P.M. on January 27th, and attributed it to a lump of cheese which she had eaten at 9 P.M. (some of which she had vomited during the night).

I applied turpentine stupes and internal remedies calculated to produce contraction of the dilated organ without success. However, I managed to produce a more active circulation than she had had previous to my attendance. At 3 P.M. I persuaded her to allow me to pass a soft rubber tube into her stomach through the mouth. I succeeded in doing this after three attempts, as she pulled up the tube every time I introduced it, saying "she could not bear it." The gas on my last attempt escaped freely for about one minute in a continuous stream, after which I washed out with warm water some bilious fluid similar to what she had previously vomited, but before I had finished this operation she again pulled up the tube. However, she was almost immediately relieved, and within half an hour she was in a comfortable sleep, with a thoroughly restored circulation, and an easy expression of countenance. She has since remained fairly well.

Previous History.—She had been dyspeptic for years, and within the last year she had had rheumatic fever, with four relapses. Her heart has never been robust since I first made her acquaintance five years ago. I attended her for true anginal attacks about three years ago, apparently due to engorgement of the right ventricle, which was dilated, as evidenced by epigastric pulsation, etc.

Armstrong Todd, M.B., B.Ch., B.A.O.

Lymehurst, Market Drayton.

ARTIFICIAL FEEDING IN ACUTE MELANCHOLIA.

In the paper by Dr. Neil on the above subject in the British Medical Journal of January 27th he says of a feeding tube, "as thick as a smallish finger.....an accident can hardly happen with such a tube; *it is too large to enter the larynx.*" The italics are mine. This statement is not, in my experience, correct, and, if implicitly trusted, may at any time lead to disaster. The size of the tube is rather vaguely indicated, but I can say that a large sized Jacques's rubber tube (No. 23) is not too large to enter the larynx. My experience of feeding insane persons is considerable, and in the course of it I have, not once or twice, but many times passed such a tube into the larynx. In some cases the difficulty was rather to keep it from going in. Of course, I could always tell when it had gone into the larynx, and rectified it accordingly, but it will not do to take it for granted that the tube, if it goes anywhere, must infallibly go into the stomach.

I should just like to add a caution against oiling rubber tubes; they are thereby completely spoiled in a very short time. Dipping the tube in the food will lubricate it sufficiently.

Southport. J. C. Russel, M.D.Edin.

EPIDEMIC JAUNDICE.

The recent communications on the above subject from Drs. Calvert and Bartlett in the British Medical Journal recall to my mind a more extensive epidemic of the same nature which I was called upon to investigate some ten years ago. The epidemic occurred in a sparsely inhabited district on the Welsh border, and, although it extended over a considerable area, was, so far as came to my knowledge, confined to children attending three different schools. The constant and most salient symptom was jaundice. Various theories were suggested as to its pathology and etiology; the most plausible of which were as widely apart as diet and meteorology. Personally it has always remained in my mind as an instance of an epidemic which I could not satisfactorily explain. I have, however, thought it worthy of record as evidence that epidemics of jaundice do occur. I may add that I mentioned the occurrence in a report to the Local Government Board at the time. W. N. Thursfield, M.D.

Shrewsbury.

Drs. Calvert's and B. Pope Bartlett's cases recently reported in the British Medical Journal may make the following similar cases worth recording.

Last March I saw in Kingstown, co. Dublin, a boy, aged 8 years, complaining of sick stomach, and slight tenderness over it on pressure. The following day he had well-marked jaundice, porter-coloured urine, clayey stools, slight headache. Two days subsequently his elder sister, aged 10 years, complained, and the following day was jaundiced. The next day both the younger children, aged 6 and 4, were affected in the same way, and became jaundiced. All the children in the family were now affected. They all recovered in a week or ten days under simple treatment, regulation of diet, mild aperients, diuretics and poultices over duodenum. I looked upon the cases as mild catarrhal jaundice. The possibility of its being a manifestation of influenza occurred to me, but they had no other symptoms of that disease, and there were no cases in the family. I examined carefully into the diet and habits of the children, but could find at first nothing to account for it. They were people in good position and well

looked after. It appeared, however, they had bought a canary some time ago, and the children had, unknown to their parents, eaten a considerable quantity of the bird seed. It is not improbable this set up the gastro-duodenal irritation and catarrh.

Dublin. ANTONY ROCHE, M.R.C.P.I.

WITHIN the last three years I have have had two sets of cases in my practice of what may be epidemic jaundice. In one instance in November, 1891, in a family consisting of six children, father, mother, and two servants, the three younger children alone had jaundice, and they alone had eaten a quantity of highly-coloured, cheap sweetmeats (red and yellow). In the second set of cases two children first had jaundice (seen first on January 11th, 1894), and then a third child began, after an interval of sixteen days. In this instance these children, and these alone, had been eating the same class of cheap sweets. I do not say that the sweets were the cause of these cases, but the coincidence was remarkable. There were no other cases in the neighbourhood, and as the two houses where these cases occurred are a mile and a-half away from one another, nothing local would seem to account for them. It would be interesting to know if there was any chance of any such factor in Dr. Calvert's and Dr. Pope Bartlett's cases.

Oaken, Wolverhampton. F. J. HAWTHORN.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

CROYDON GENERAL HOSPITAL.

TWO CASES OF ABDOMINAL SECTION.

(Under the care of Mr. T. RICHARDSON, Surgeon to the Hospital.)

[For the notes of this case we are indebted to Mr. A. H. GODSON, M.B., B.C., House Surgeon.]

CASE I.—CARCINOMA OF SMALL INTESTINE.

G. C., aged 60, was admitted on the afternoon of January 9th, suffering from acute intestinal obstruction.

History of Illness.—The scanty history obtainable was this. He had been under medical treatment for some weeks for vomiting and constipation, and had alternately improved and got worse, till four days before admission, when he vomited some very foul yellow material, and nothing could allay this trouble. All food was promptly ejected from the stomach. The sickness was incessant, the same foul yellow vomit being brought up. The bowels were opened the day the sickness began, but not again before admission to the hospital.

Condition on Admission.—He looked extremely ill and emaciated. The vomit had a distinctly fæcal odour, and was in colour and consistency much like pea soup. The pulse was very rapid and feeble, the tongue dry and thickly furred. The abdomen was irregularly distended, and on its surface several coils of intestine could be mapped out undergoing strong peristalsis. The patient told us that he had things "in the stomach that moved like adders" for a fortnight. Rectal examination revealed nothing in that viscus to account for obstruction, though outside the lumen of the gut a hard mass could be felt on the left side. No definite conclusion as to its nature was arrived at.

Operation.—During the evening, with the strictest aseptic precautions, Mr. Richardson opened the abdomen in the median line. The distended gut was found to be small intestine, and, tracing it downwards, the cause of obstruction was found in the pelvis in the mass felt from the rectum. It proved to be a growth of the small gut, quite solid to the touch, 2¼ inches long and 3 inches in circumference. Owing to the precarious condition of the patient, Mr. Richardson decided not to resect the gut, but, with a view of getting the best drainage at once with least risk of infecting the peritoneum, he made an incision as for colotomy in the right inguinal region, through which he brought out a loop of gut, including the growth. The patient was turned over towards the right side and the distended gut exposed in the wound emptied by pressure, and then compressed by thin rubber tubing. A small incision was then made into it and a glass tube—in imitation of Mr. Paul's, which were not to hand—tied in. To it a piece of rubber tubing was fixed and the gut allowed to empty itself into a vessel by the side of the table. The median wound was then dealt with, the intestines, now greatly reduced in size, returned, and the abdominal wall brought together with silkworm gut sutures. The loop of bowel was secured in the inguinal wound with a few silk sutures. Dressings of blue gauze were applied, and the patient returned to bed.

After-History.—Next morning he had recovered from the operation, and had only been sick once. The bowels acted well through the tube. He said he felt very comfortable. His condition was fairly satisfactory, but the pulse feeble and rapid. He was fed by nutrient enemata, with a little ice to suck, and some soda and milk in small doses by the mouth to allay thirst. He continued in much the same condition till the fourth day, when he complained of some pain in the abdomen, and became restless. The wounds were dressed, and found to be in a satisfactory state. The laparotomy wound having united, a collodion dressing was applied, and the abdominal walls supported by strapping. The glass tube was withdrawn from the gut in the inguinal wound, which was dressed as an ordinary colotomy, the gut orifice being well outside the incision. In spite of every effort the patient did not improve; he became more restless, and the pulse more rapid and feeble. On the fifth day after operation, at 6 P.M., his temperature, which had never been above 99°, ran up to 104°. Very shortly after that he died.

Post-mortem Examination.—There was no peritonitis. Both wounds were clean and free from pus. The growth, a hard columnar carcinoma, was 6 feet above the ileo-cæcal valve, and for a space of 2 inches narrowed the lumen of the gut so as to admit a small goose-quill only, while at the lowest point only a fine probe could be got through.

CASE II.—LARGE OVARIAN TUMOUR.

C. B., aged 80, was admitted on December 7th, 1893, for a very large abdominal tumour. She had always been very well and active till the beginning of the year, when she noticed she was becoming much stouter. The increase was so great that in April she consulted a medical man, who told her it was a tumour. It had grown steadily larger, till discomfort, caused by distension, had compelled her to come to the hospital for relief.

Condition on Admission.—Her general health was good. The abdomen was hugely distended and generally more prominent than a nine months' pregnancy. Dulness on percussion was universal. The abdomen was elastic, but not uniformly so. A thrill was transmitted from flank to flank. On the right side, in the umbilical lower part of the lumbar regions, a large and hard lobulated mass—the size of a large Jaffa orange—could be felt. Besides this there was a foul, blood-stained, vaginal discharge, which had existed for some time. It cleared up, however, under douches of weak carbolic lotion. The cervix was rather high up, the os uteri patulous. The cervix was close up behind the symphysis, and rather towards the left. The sound passed 2¾ inches, with the concavity to the left. It caused no bleeding. Nothing was to be felt in either fornix. The tumour could be moved independently of the sound.

Operation.—On January 3rd, 1894, Mr. Richardson removed the tumour, which was found to spring from the left ovary, and to consist of one huge cyst, in the walls of which were large masses of smaller cysts. The cyst weighed 3 lbs., and the fluid it contained (rather more than 11 lbs.) measured about a gallon. There was no drainage.

After-History.—The wound healed by first intention, and convalescence proceeded without a bad symptom till the tenth day, when there was a sharp rise of temperature to 101°. This followed on her getting out of bed one cold night when the nurse's back was turned for a moment. At the same time her urine was noticed to be of a very peculiar colour, due to indicanuria. The temperature rose at night to 100° to 101° several times, but it soon became normal, and re-

mained so. She went out well on the twenty-first day after the operation. There was, however, some indican still in the urine when discharged.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

F. W. PAVY, M.D., F.R.S., President, in the Chair.

Tuesday, March 6th, 1894.

RODENT ULCER.

THE debate on this subject was resumed by

Dr. KANTHACK, who observed that it was generally agreed that rodent ulcer was a carcinoma arising either in the sebaceous glands, the hair follicles, or the sweat glands; the origin would make a difference in the structure, as might be judged by analogy from carcinomas of the breast, which differed as they arose in the acinous or the duct epithelium. His opinion was that the disease arose in the sebaceous glands, and it was mostly easy to exclude its origin from the hair follicles or sweat glands. The cell groups resembled those of sebaceous glands in an early stage of their development; certain of the groups might become hollowed out, and this added confirmation to their glandular origin. There were clinically rodent ulcers in which the cell groups were disposed as a network, and possibly such originated in another structure—the rete or sweat glands. The absence of secondary gland infection might arise from there being no loose cells in the stroma, as in the case of ordinary squamous-celled carcinoma. He had seen one example arising in a pigmented mole, where the sebaceous glands were the starting points of the carcinoma. In other cases pigment was met with in rodent ulcers, and was derived from the hair follicle.

Dr. COLCOTT FOX regarded rodent ulcers as a distinct clinical group of lesions, and the lymphatic glands were never involved in true cases. The ulceration was sometimes extremely superficial, and the disease might be attended with atrophy and the formation of scar-like tissue without ulceration. He had seen a good instance of the nodular variety—a growth the size of a split walnut—on the cheek, which suddenly underwent necrosis and led to a typical ulcer. As to age, he knew of more than one case where the patient was only 14 years old. He had also observed instances where the lesions were multiple on the face; in one such the scars of small-pox, contracted when the patient was a boy, became the seats of papillary formations, and some apparently of rodent ulcers, the condition being combined with the presence of other typical ulcers. In regard to the histology, the central cells of the groups never underwent keratinisation, but they might soften and lead to cavities. There were minor differences in the form of the cell groups, which might be acinous or tubular. He regarded one of Mr. Bowlby's specimens as a squamous-celled carcinoma, which clinically presented the characters of a rodent ulcer. Mr. Stanley Boyd had made a similar observation. He (Dr. Fox) could not form a clear conclusion as to the seat of origin of rodent ulcer, for examination was nearly always made late, and though sebaceous glands and hair follicles were in cases involved, he could not be sure that it was in these the growth began. The adenomata of sweat or sebaceous glands, unlike rodent ulcer, were not accompanied by an inflammatory condition of the surrounding tissue.

Mr. W. G. SPENCER exhibited a specimen in which an origin of the disease was shown in the rete Malpighii. He considered that the chief differences between rodent ulcer and common epithelioma lay in the different resistance offered by the tissues to the extension of the growth. There was an absence, in the family history, of carcinoma in the case of patients suffering from rodent ulcer. In lupus there seemed to be a certain resistance to the growth of the tubercle bacillus. The tissue resistance in rodent ulcer was high, and numerous large plasma cells, or macrophages, were present about the cell groups; though in a sebaceous adenoma of a dog's foot he had observed a similar condition.

Dr. NORMAN WALKER observed that in cases when the histology was atypical a close scrutiny would show that there were also deviations from the clinical type. He had in one instance by means of a series of horizontal sections traced the origin of the growth from a sweat gland, the duct became lost in the growth. He inclined to think this was the usual origin, he did not believe it arose from the epidermis. As to sebaceous glands, he pointed out that in paraffin cancer the disease commenced in the sebaceous glands and here the disease was squamous-celled. He did not deny an origin of rodent ulcer in the sebaceous glands, though he had observed atrophy of these on the approach of the new formation. The small size of the cells, the slow growth of the formation, and the absence of keratinisation pointed to an origin in the sweat glands. He referred to a multiple case and thought it possible that squamous-celled carcinoma might develop on rodent ulcer. The crateriform ulcer of Mr. Hutchinson was a squamous-celled carcinoma, arising, he thought, in the sweat glands; in this view he agreed with Mr. J. Hutchinson, jun. The frequency of rodent ulcer at the border of the nose was possibly connected with the formation of the lachrymal duct, with the presence of abnormal elements in the tissue. Dr. Walker illustrated his views by means of lantern slides.

Dr. RUBERT BOYCE also exhibited a series of lantern slides, in which he showed that in the earliest stages the disease arose altogether away from the sweat glands, in the tissue of the corium, and also that it could not be directly traced to the sebaceous glands or hair follicles. His conclusion was that it arose in abnormal structures in the corium, of which little was at present known, and this he based on observations made by Dr. Muir Evans.

Mr. H. B. ROBINSON had observed in all cases of typical rodent ulcer a marked enlargement of the neighbouring sebaceous glands; but in the growth itself there was no evidence of similar enlargement. He had observed distinctly a continuity of the growth with the rete. He had reported in the Society's *Transactions* a case of "rodent ulcer" in which a secondary growth occurred in a lymphatic gland, but this proved to be a carcinoma arising in sebaceous glands, and did not correspond in structure with rodent ulcer.

Mr. CECIL F. BEADLES had examined a case of rodent ulcer that had been present for fifteen years, and in which secondary gland infection occurred, this secondary growth being a glandular carcinoma; the lesion of the skin resembled a scirrhus of the breast. He thought that rodent ulcer had its source of origin in the outer root sheath, or the duct of, as distinguished from the sebaceous gland itself.

Dr. J. F. PAYNE had many years ago taught that rodent ulcer was a glandular carcinoma; but he did not think the evidence was clear as to what glands were concerned. Its seats on the upper part of the face, upper lip, chin, and middle of back—as in Mr. Bowlby's case—suggested an analogy with common acne, the positions of which closely corresponded; the latter was a disease involving the sebaceous glands, but really arising in association with rudimentary hairs, whence he suggested that it was in imperfectly-formed structures that rodent ulcer began, possibly in imperfectly developed glands.

Dr. MUIR EVANS pointed to certain observations he had made as possibly affording an explanation of the common situations of rodent ulcer, at the inner canthus, in the supramaxillary region, about the ear, and on the chin. The disease was a glandular carcinoma; but why was it not met with on the scalp? In the higher mammalia he had studied the situations, etc., of the "tear pits," which were aggregations of acinous and tubular glands situated before the eyes, in the maxillary or supraorbital region, behind the ear, or on the chin; in these seats they occurred in the sheep, goat, and antelope. He therefore suggested that rodent ulcer arose in abortive representatives of such glands in the human subject; the presence of pigment in certain rodent ulcers corresponded with the presence of pigment about the ducts of these structures.

Dr. F. PAUL, in replying, thought that the term precancerous, to which Dr. Kanthack had objected as dangerous, was highly useful from the clinical point of view. He could only suggest the shrinkage of the stroma of the growth as explaining the absence of secondary glandular infection. Every structure of the skin was ultimately involved; and Dr. Walker's specimen was not one at a very early stage.

The growth, though arising in the sebaceous glands, did not necessarily destroy or replace the whole of the glandular apparatus.

Mr. Anthony A. Bowlby had brought forward as quite exceptional one instance of what was typically a rodent ulcer, and which yet showed keratinisation. He had seen one example of rodent ulcer on the chin, but none on the limbs.

Card Specimen.

Mr. F. Cecil Beadles: Deformity of Shoulder Girdle.

MEDICAL SOCIETY OF LONDON.

Frederick Treves, F.R.C.S., Vice-President, in the Chair.

Monday, March 5th, 1894.

After the conclusion of the business of the annual meeting the following communications were made:

The Electrical Treatment of Infantile Paralysis.

Dr. Lewis Jones read this paper. Since his appointment in the electrical department of St. Bartholomew's Hospital he had had opportunities of observing cases of infantile paralysis over long periods of time, and he formulated the following conclusions in respect of the results to be obtained by the electrical treatment: (1) It is important in every case of infantile paralysis which has lasted over four weeks to try electrical treatment, continuing it for six months or a year: (2) it is an exception for a muscle to be so completely destroyed by poliomyelitis as to have no functional fibres left: (3) great development of the remaining fibres may be gained by persevering stimulation of them; (4) where the electrical reactions are reduced to the very lowest flicker, or even entirely abolished, some improvement may still be hoped for: (5) where the electrical relations are not altered in quality it is not good practice to leave the case to take care of itself; (6) electricity acts only as a stimulant, but it is superior as such to any mechanical treatment by rubbing or massage, though it may advantageously be combined with these; (7) the form of electrical stimulation to be employed is of less importance than persistence in its employment; (8) the induction coil, with or without the bath, is easily arranged for use by the mother or nurse.

Dr. Cagney thought many cases diagnosed as anterior poliomyelitis were instances of peripheral neuritis. They ought not to rely on electricity alone, and he himself had found the effects enhanced by subcutaneous or intramuscular injections of strychnine.

Mr. Walsham urged the propriety of tenotomy in order to remedy the contraction which often took place of the muscle.

Mr. Lockwood alluded to the fact that the existence of normal electrical reaction in the affected muscles did not always afford a guarantee that the muscles would not waste after tenotomy. He suggested that anterior poliomyelitis was probably not so much a disease *per se* as the result of an acute febrile affection probably of infective origin.

Dr. James Taylor did not deny the occurrence of peripheral neuritis in children, but he had never seen it except in association with anterior poliomyelitis.

Dr. Lewis Jones, in reply, pointed out that the treatment required to be carried out so frequently, and for such long periods of time, that no medical man could be expected to devote sufficient time to it.

Tuberculous Meningitis Cured by Drainage.

Dr. W. Wallis Ord and Mr. H. F. Waterhouse read notes of a case of tuberculous meningitis in a child, aged 5, relieved by drainage. The child was admitted in an apathetic condition, with double optic neuritis. From time to time she uttered a piercing scream, and the *tâche cérébrale* was well marked. Symptoms of intracranial pressure having supervened and the child being on the point, apparently, of passing into a condition of coma, Mr. Waterhouse trephined through the cerebellar fossa of the occipital bone, giving exit to a small quantity of fluid. A drainage tube was left in, and the wound was closed, the fragments of bone being replaced by Macewen's method. The child did well, and the symptoms subsided, though at one time the wound seemed to have been infected by tubercle. The question of diagnosis was discussed, and it was pointed out that for success to be hoped for it was necessary not to wait until the child was actually comatose.

Mr. Walsham referred to a similar case in which he had made the aperture through one of the cervical vertebræ, a position which he considered presented several advantages over the occipital bone. The child died, and on *post-mortem* examination it was proved not to be tuberculous, though the intracranial pressure was very considerable.

Dr. Joll asked if the fluid had been examined.

Dr. Pasteur said that drainage was the routine practice at the Middlesex Hospital whenever there were symptoms of excessive intracranial pressure. They made the opening in the lumbar region, which answered well enough, though, as the operation was not performed until the patient was comatose, the benefit obtained only proved to be temporary.

Mr. Battle insisted on the necesssity for the surgeon's services being requisitioned earlier in these cases. It was indispensable to provide for continuous drainage. He thought the replantation of the pieces of bone was an unnecessary complication.

Mr. Bidwell said that in the *post-mortem* examination of children who had died without any symptoms of meningitis, though there was a history pointing to a past attack, he had discovered calcified tubercles. Many of the cases of so-called tuberculous meningitis were in reality due to middle-ear disease.

Mr. Waterhouse explained the motives that had guided them in the selection of the occipital orifice, and agreed as to the importance of continuous drainage. He hoped that this line of treatment would be extended in future to the treatment of other affections.

Dr. Ord pointed out that in tuberculous meningitis the aperture communicating with the spinal canal was often blocked as a consequence of the inflammatory changes. He admitted that the keynote of success in these cases was continuous drainage. The fluid had not been examined.

MANCHESTER PATHOLOGICAL SOCIETY.

F. A. Southam, F.R.C.S., President, in the Chair.

Wednesday, February 14th, 1894.

Scurvy Rickets.

Dr. Railton mentioned three cases of scurvy rickets, and showed a specimen.

Tubal Pregnancy.

Dr. Arthur Helme and Dr. Ritchie showed the parts removed by abdominal section from a case of tubal pregnancy. The chief points mentioned were: (1) Intraperitoneal rupture had occurred at the fifth or sixth week, although the pregnancy was in the middle third of the tube: (2) the rupture was almost completely plugged by the ovum, which remained protruding through the hole; (3) microscopic examination of the mole showed chorionic remains.

Spread of Tuberculosis through the Lymphatics.

Professor Sheridan Delépine presented a communication on a certain mode of spread of tuberculosis through the lymphatics. He referred to a previous paper,[1] in which he had pointed out how the lymphatic ganglion on the course of the lymphatics coming from the infected region became affected in the guinea-pig after inoculation on the inner aspect of one knee. He had never found either at the end of two, three, or even four months that all the lymphatic ganglia below the diaphragm on the side not inoculated were tuberculous. It seemed evident, therefore, that even at those advanced dates the diffusion of the bacilli had not taken place through the blood vessels to any great extent. He then stated that after the first month out of twenty guinea-pigs which showed well-marked evidence of tuberculosis of all the lymphatics below the diaphragm on the side inoculated, fifteen showed evidence of tuberculosis of the ganglion on both sides of the body above the diaphragm. In seven there was tuberculosis of the superficial inguinal, in two of the deep inguinal, in two of the sublumbar (in one through some abnormality), in none of the popliteal ganglion on the opposite side of the body. He suggested that only two methods of extension could account for this peculiar mode of invasion of the lymphatic system: (1) An extension along the course

[1] British Medical Journal, September 23rd, 1893.

of some lymphatics in a direction opposite to that of the stream, a kind of regurgitation towards the opposite side, probably after more or less complete obliteration of their lumen at their point of junction with the main lymphatics affected; (2) an extension through the lacunar system of lymphatics. He contended that of the two theories he advanced the latter was the more probable, as it accounted for the invasion of superficial lymphatics far from the point of inoculation at an earlier date than that of deep lymphatic ganglia, which, like the lumbar, were almost in contact with diseased ganglia. Even this explanation was not without difficulties. These Professor Delépine was endeavouring to solve with Mr. Radcliffe, one of his pupils, by inoculation in certain regions, for instance, in that of the tonsils, in order to discover how the process extended from the cervical glands of one side to those of the other. Cultivations of tubercle bacilli obtained from organs of inoculated animals, microscopical preparations, and dissections were also exhibited.

SPECIMENS.

Card specimens were shown by Dr. DICK, Dr. H. S. WANSBOROUGH JONES, and Dr. HARRIS.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF SURGERY.

EDWARD HAMILTON, P.R.C.S.I., President, in the Chair.

Friday, February 23rd, 1894.

NEPHRECTOMY AND NEPHRORRHAPHY.

MR. M'ARDLE related a case in which he applied a supporting lumbar suture for the relief of floating kidney. He did not advocate cortical incision or nephrorrhaphy for every floating kidney, nor did he hold with those who explored this organ every time they came across it enlarged or movable. Apart from the dangers arising from sepsis, and from the lethal phlebitis to which this operation exposed the patient, there were other, less widely recognised, but nevertheless very real, mishaps attendant on these procedures. One of these was well shown in a specimen demonstrated at the last Congress of German Surgeons by Barth. There was a necrotic centre found in the kidney owing to the occlusion of one of the arterial arches by the anchoring suture. A similar condition had been noted as the result of puncture. One of the large arteries was obstructed, hæmorrhagic infarction took place, and ultimately necrosis. Mr. M'Ardle next read notes of a case in which he successfully removed a kidney with a large cystic (monolocular) tumour. He said the semilunar line was the best for reaching the renal vessels, which should be double ligatured and cut before attempting to enucleate the organ. He advocated closure of the outer layer of the mesocolon, and complete suture of the abdominal wound. The mucous lining of the ureter should be snipped off, and the end rendered aseptic by corrosive sublimate solution. Partial removal of the kidney for malignant disease he considered unjustifiable. In reference to operations for sarcoma of the kidney in children, he was of opinion that surgeons should persist in their efforts, even though statistics showed that the percentage of recoveries was exceedingly small. The communication concluded with a reference to the nephrectomies—12 in number—which Mr. M'Ardle found had been carried out in Ireland. Of these only 1 died from the effects of operation, 1 from coexisting pelvic cellulitis; of the others, 1 died of phthisis, another of recurrent sarcoma, while 8 remained perfectly healthy up to the present for periods varying from one to seven years.

MR. WHEELER had performed nephrectomy in 10 cases, 2 of which ended fatally, while the others recovered. In most cases the anterior incision was the best, as it was the easiest, and obviated the risk of tearing the inferior vena cava. He recollected a case of horseshoe kidney in which *post mortem* both kidneys were found healthy, while the connecting band contained two calculi. In this case a lumbar incision would have been useless. With regard to the oozing of blood which sometimes occurred after removal of the kidney, he found that hot sponges were sometimes effectual in stopping it.

Cases were also related by Sir WILLIAM STOKES, and various points arising out of the communication were discussed by Mr. TOBIN, Dr. A. L. SMITH, Mr. KENDAL FRANKS, and Mr. THOMSON; and Mr. M'ARDLE replied.

Royal Academy of Medicine: Section of State Medicine—*Feb. 9th*—Dr. D. EDGAR FLINN, President, in the chair.—The PRESIDENT read a paper on recent developments in State medicine, in which he said that during the last ten years considerable improvements and developments had taken place in public health administration. The passing into law of such useful measures as the Housing of the Working Classes Act, the Infectious Diseases (Notification) Act, the Open Spaces Act, the Contagious Diseases Act, the Factory and Workshops Act had had a useful and far-reaching influence. The establishment of county councils in England had been an impetus to the advance of State medicine, and it was possible that in the near future a similar reorganisation on the basis of county councils might obtain in Ireland. The interests and the duties of the Irish officer of health most frequently lay in direct antagonism to each other; the consequence was that the State lost directly by the maladministration of its own enactments.—Dr. DONNELLY read a paper on sanitary administration in Dublin. He proposed that, in addition to the present staff, two assistant medical officers of health be appointed—one for the north and one for the south side of the city—and four specially skilled sanitary inspectors, to examine all the houses in every street periodically, to secure that the house drains be kept in perfect order. A system of main drainage should be carried out without further delay.—After some remarks from Dr. ROCHE and Sir C. CAMERON, Dr. GRIMSHAW said that Old Dublin could not be pulled down and rebuilt in a day. Although many improvements had been made, the death-rate was not diminished. The drainage was the cause of this, and that there were not sufficient means of removing the enormous quantity of polluted water in the city.—Drs. S. M. THOMSON, FALKINER, and DELAHOYDE also spoke; and Dr. EDGAR FLINN and Dr. DONNELLY briefly replied.

Epidemiological—*Feb. 21st*—Dr. J. F. PAYNE, President, in the chair.—Dr. FRANK CLEMOW read a paper on "Cholera in Russia in 1892-3." In 1892 it was introduced from Persia, and caused over 296,000 deaths among some 600,000 cases; the epidemic of 1893 was but a recrudescence of the previous one, and less severe, except in Ukraine and Podolia, and its incidence was, on the whole, inversely to that of 1892. Throughout, the influence of human intercourse and polluted water was obvious, other alleged causes being inappreciable. First there was the annual migration of the peasants from the northern and central provinces in search of work on the rich corn lands of the south, whence they usually returned after the harvest. In June, 1892, they met the cholera, and fled back panic stricken *vid* the great waterway of the Volga and its tributaries, carrying the infection to the remotest villages. Then the *pominki* or funeral "wakes," which among the lower classes were accompanied by excessive indulgence in *vodka* or rye spirit, and the beggars who followed the funerals for alms, and among whom the clothes of the deceased were commonly distributed, were active agents in spreading the disease, while on a larger scale the fairs held in every town, some of which, especially that at Nijni Novgorod, drew thousands of traders not only from every country in Europe, but from the remotest regions of Asia, almost rivalled those of India as foci whence the epidemic was carried by rail, caravan, or boat. The earth floors of the peasants' dwellings saturated with excreta, their woollen clothing and dirty habits, and the universal pollution of water supplies, aided by ignorance, fatalism, and resentment at sanitary interference, and the alternations of want and of excess, especially of unsound fruit and coarse food and drunkenness, all tended to maintain an epidemic until it had exhausted the mass of more susceptible individuals. There was ample evidence that the extreme dilution which the evacuations must have undergone in such rivers as the Volga and its feeders did not render them harmless.—Dr. F. PARSONS said the Yorkshire woollen manufacturers were anxious to know whether dried rags were likely to convey infection, and many of the sporadic cases of cholera in that county were locally ascribed to the eating of fish from Grimsby.—Dr. PRINGLE said that in addition to human intercourse and water, a third factor, call it "atmospheric" or what one liked, must be recognised.—Dr. KENNETH MCLEOD severely criticised cholera maps, which represented the march of the disease as regular, and its distribution over an area as uniform, whereas a great epidemic was preceded by sporadic cases, and its distribution from and around each focus would be more correctly represented by mottling. The great Central Asian Railway would have a great effect on the progress of the future epidemics.—Dr. WILLOUGHBY observed that the personal factor was essentially the reaction of the stomach, the normal acidity of which was sufficient to kill the bacilli which found in the alkaline mucus present in gastric catarrh or after excesses an excellent culture fluid.

Medical Officers of Health—*Feb. 19th*—Dr. WOODFORDE, President, in the chair.—A discussion on vaccination and the laws relating thereto was opened by Dr. SEATON, who expressed the opinion that any changes in the law that might follow from the report of the Royal Commission would be in the direction indicated by Mr. J. Stansfeld in his evidence, namely, decentralisation of control and "moderate" compulsion, whatever that might mean. Mr. Stansfeld would transfer the powers now exercised by the Local Government Board to the councils of counties and county boroughs, and the supervision to their medical officers of health, the county councils themselves being responsible to the Local Government Board. Dr. Seaton would further transfer the executive duties from the boards of guardians to the sanitary authorities, for the suggested association with pauperism tended to prejudice the masses against vaccination. He was, however, not very sanguine as to the results of the proposed change, for the county councils had not as yet displayed much interest in public health, and few had appointed medical officers of health or even availed themselves of expert advice ready to hand. It was in the actual presence of an epidemic that the advantages of decentralisation would be felt, and if the authorities of large towns would open establishments for the supply of calf and other lymph the suppression of local outbreaks of small-pox would be greatly facilitated.—Dr. L. PARKES believed that more vaccination would be effected without than with compulsion.—Dr. SYKES would on no account

relax compulsion; he approve the transfer from the Poor-law to the sanitary authorities, but had no faith in county councils or in any elected bodies when money had to be spent.—Dr. Wightwick said vaccination might be popularised by persuasion, explanation, and a reform in its performance, which should be with strict antiseptic precautions and entrusted to competent men with fixed and liberal salaries.—Dr. Vacher admitted that much private vaccination was insufficient. The fear of syphilis was justified, and he held that conveniences should be provided for the stripping of child vaccinifers. — Dr. Willoughby criticised the present form of certificate. As the law stood it was quite possible for an unscrupulous practitioner, with the connivance of the parents, to go through the form of vaccination with infinitesimally diluted lymph or pure glycerine or water three times, and then certify insusceptibility. But he demanded not only sufficient and compulsory vaccination in infancy, but, as in Germany, compulsory revaccination at puberty or before leaving school.—After some remarks by Drs. Harvey Littlejohn, Sidney Davies, and Ed. Haughton, Dr. Seaton replied.

West London Medico-Chirurgical—*March 2nd*—Dr. Donald Hood, President, in the chair.—Dr. Neville Wood related a case of hæmophilia in a male child, aged 14 months, who had suffered from the disease since he was three days old. The father only of his progenitors was a bleeder.—Mr. S. Paget showed a case of myositis ossificans in a boy aged 5.—Mr. Keetley thought it was secondary to some inflammatory action, and that it was a specific disease.—Dr. Clemow advocated the empirical use of thyroid extract.—Dr. Chippendale and Mr. Bidwell made some remarks.—Mr. Bidwell showed a case of alveolar cyst in connection with the stump of an upper bicuspid.—Dr. Morgan Dockrell showed two cases of psoriasis successfully treated with thyroid extract. One case, a child, aged 12, was cured in four weeks; the dose was half a tabloid three times daily at first, and subsequently increased to one tabloid three times daily. The other was almost cured, the case having lasted six months In neither was there any local treatment.—Drs. Abraham Gardner and Mr. Bidwell cited cases.—Mr. Steer showed a case of myxœdema treated with thyroid juice for ten weeks. The patient was then quite well.—Dr. Gardner showed a series of photographs of a case of myxœdema treated with thyroid extract.—Dr. Chapman showed a case of hæmoptysis with mitral stenosis in a man. There was no phthisis, and improvement was taking place under strophanthus and iron.—Dr. Abrahams showed (1) a case of lupus, which was now relapsing after having been, as he considered, cured by Koch's tuberculin three years ago; (2) a girl, who had been shown as a case of complete alopecia areata in December, and who now presented quite a good crop of young hair after treatment with germicide ointments; (3) a man with a peculiar secondary syphilide.

Kidderminster Medical—*Feb. 23rd*—Mr. Samuel Stretton, President, in the chair.—Mr. J. L. Stretton showed a case on which he had operated for an abscess in the lumbar region; and later on, as pus and blood were found in the urine, explored the kidney without result. Subsequently a patch of caries was discovered on the side of the body of one of the mid-dorsal vertebræ; this was scraped, and the patient was now quite strong, and able to follow his occupation as a gardener. There was still a trace of albumen in the urine.—Dr. Evans showed a case in which he had removed the upper epiphysis of the left thigh bone; fibrous union had taken place, and the girl could walk comfortably.—Dr. W. H. Moore showed a case of enchondroma behind the angle of the jaw on the right side; it had existed for six years, and caused considerable deformity.—Specimens were shown by Dr. Evans and Mr. P. E. Davies.—Mr. J. Lionel Stretton read a paper on amputation following injury.

Liverpool Medical Institution—*March 1st*—Mr. Chauncy Puzey, President, in the chair.—Dr. Macfie Campbell read notes of a case of myxœdema with glycosuria treated by thyroid extract. The patient first came under observation in June, 1887, her condition being most deplorable. In 1892 she was put on Murray's thyroid extract. Improvement was rapid and satisfactory so far as the myxœdema was concerned, but there was not much change in the glycosuria.—Drs. Craigmile Carter and Burns Gemmel made remarks on this case.—Mr. Paul related a case of adenoma of the fauces in a woman of 42. It had probably originated in the tonsillar region. The growth was easily shelled out from its capsule, and the patient left the infirmary in ten days. Mr. Paul also referred to a case of complete obstruction of the bowels of eight days' duration in a man of 22. Kinking of the bowels from localised peritonitis was diagnosed. The abdomen was opened in the middle line below the umbilicus, a distended coil of intestine was withdrawn, and a small-sized glass drainage tube inserted and fixed. Within three weeks the patient was up and fairly well again.—Mr. Banks read notes of two cases of gastro-enterostomy for cancer of the pylorus, both of which terminated fatally Mr. Banks said these cases showed the great seriousness of the operation, and how such diseases as cancer of the pylorus sapped and undermined the vital power of the patient. He did not intend to perform this operation again in such cases, but in future to pass Symonds's tubes into the œsophagus, and, when this failed, to have recourse to morphine.—Dr. Arthur Wiglesworth read a paper entitled Isolation in Scarlet Fever Unnecessary and Inexpedient. In his opinion carbolic acid, given internally and in sufficient doses, was a specific in scarlet fever. He had used it for the last thirteen years, and each succeeding year had confirmed his opinion of its inestimable value. Recently he had used carbolic acid as a preventive. He considered that if a patient was properly carbolised from the initial stage of the fever, and all non-infected persons took small doses of carbolic acid, the risk of infection was very slight, and if an attack occurred it was invariably a mild one.—Drs. Carter, Robertson, Hope, N. Roberts, Archer, Drysdale, Dickinson, Bradshaw and others took part in the discussion which followed. The opinion was very generally expressed that the exposure of healthy children to the infection of scarlet fever, even though they took carbolic acid, was both dangerous and unwarrantable.

Midland Medical—*Feb. 21st*—Mr. A. H. Evans, President, in the chair.—Dr. Carter showed the colon of a woman, aged 27, who had been attacked with typhoid fever; and died three months after the onset from intercurrent broncho-pneumonia. The colon was deeply and extensively ulcerated from cæcum to anus.—Mr. Christopher Martin showed a child enveloped in the unruptured bag of membranes. The first stage of labour lasted about forty-eight hours, and was followed by a rapid second stage. The child, a fœtus of between six and seven months, when first born, was living, and could be seen struggling for breath, but the woman in attendance had not the sense to rupture the membranes. There was no *post-partum* hæmorrhage.—Mr. Chavasse showed a miner, aged 29, with a large popliteal aneurysm extending into the right calf. Extensive aortic disease was coexistent. Mr. Chavasse also showed a dissected left leg taken from a man, aged 51, who suffered from traumatic aneurysm of the peroneal artery, the result of a fractured fibula untreated for a month.—Mr. J. W. Taylor showed a specimen of omentum removed from a case of ovariotomy. The omentum was largely adherent to the cyst, and had become in many places fenestrated by the growth of the tumour. As the omentum in this condition might readily have proved a subsequent cause of intestinal strangulation, a large portion, weighing 15 ounces, was removed *en masse*. The pedicle was twisted. The patient was now convalescent. Mr. Taylor also showed two specimens removed from cases of hysterectomy performed by the method described by him at the British Gynæcological Society in December, 1893. Mr. Taylor also read a paper on high-lying pyosalpynx concealed by retroversion of the uterus.

Clinical (Manchester)—*Feb. 20th*—Mr. E. Stanmore Bishop, President, in the chair.—Dr. M. P. Ledward showed a case of disseminated sclerosis in a boy, aged 8. The patient had been treated with subcutaneous injection of an extract from the grey matter of the brain, during a period of seven weeks, without any benefit.—Dr. Judson S. Bury showed two cases, brothers, aged 30 and 35, the subjects of idiopathic muscular atrophy, the facio-scapular-humeral type.—Dr. Milligan made some remarks upon recent improvements in the *technique* of mastoid operations. A short historical sketch of the operation was given, followed by an anatomical description of the mastoid portion of the temporal bone, and of the relations of the mastoid antrum and middle ear to important neighbouring structures. The indications for the performance of any mastoid operation varied according as the case was running an acute or a chronic course. With regard to the selection of the *modus operandi*, that should depend upon the pathological condition of the middle ear and adnexa, and in every case careful examination should be made, in order to determine, as far as possible, the extent and situation of the coexisting bone trouble. Schwartze's, Kuster's, von Bergmann's, Stacke's, Stacke's modified operation, and Lucae's methods of operating, were then fully detailed, and cases illustrative of these methods were shown.

Sheffield Medico-Chirurgical—*Feb. 15th*—Mr. Richard Favell, President, in the chair.—Mr. Pye-Smith showed: (1) A woman, aged 34, with a tumour of ten years' growth attached to the hard palate, which it entirely covered; (2) a woman, aged 46, with a cystic growth in the left axilla of one year's duration, and an enchondroma of the little finger of the same side which had been present unaltered as long as she could remember; (3) the right temporal bone and the lungs from a case of pyæmia following subdural abscess and septic thrombosis consequent upon old disease of the middle ear and antrum in a boy, aged 10. The antrum was cleared, the abscess evacuated, the sinus opened and plugged with iodoform gauze, and the internal jugular tied in the neck.—Dr. Keeling showed specimens of ovarian and vaginal cysts, calciform cancer of cervix, and retained placenta from a case of abortion, and made remarks on some points of interest in the cases.—Dr. Martin showed two multilocular ovarian cysts. Both patients made good recoveries.—The President showed an ovarian cyst which had undergone acute axial rotation.—Dr. Hunt gave particulars of a severe case of psoriasis cured by extract of the thyroid gland.—Dr. Kite read notes of a case of idiopathic tetanus cured by sedative remedies.—Dr. Crochley Clapham read a paper on insomnia. He objected to the use of bromide of potassium or chloral in cerebral anæmia, especially when occurring in melancholia. Alcohol and opium were more suitable. He recommended bromides in insomnia due to overwork and chloral hydrate in sleeplessness with sustained high blood pressure, or when distinct pyrexia was present. Of the newer hypnotics he preferred chloralamide and sulphonal. All hypnotics, however, were edged tools.—Dr. Laver, Dr. Sweeten, Dr. Hunt, Dr. Kite, Dr. Samson Mathews, and the President made remarks.

REVIEWS.

A Contribution to the Pathology of the Vermiform Appendix. By T. N. Kelynack, M.D. London: H. K. Lewis. 1893. (Royal 8vo, pp. 235, 10s. 6d.)

This volume, written as a thesis for the degree of M.D., is of considerable interest and merit; it is somewhat too concise in expression to be pleasant reading, and consists rather of a catalogue of the opinions of others than a record of those of the writer.

Perhaps one of the most interesting chapters, both to the physician and surgeon, is that in which Dr. Kelynack describes the varieties of position which the appendix may assume, how it may rest almost under the liver, and be mistaken, if diseased, for inflammations either of that organ or

its gall bladder; how it may be lower down in the neighbourhood of the kidney, and simulate a perinephric abscess; or how it may be further down still in the close proximity of the pelvis. Such cases have been separately described on a good many occasions, but we are not aware that anyone has previously attempted to group them all together, and show how dependent they are on the degree of malposition of the intestine. Intestinal surgery has given a stimulus to the understanding of intestinal abnormalities, and Dr. Kelynack has made an important addition to the subject.

The pathological aspect of the question is more fully dealt with than the medical. There is an excellent index and bibliography which makes reference both easy and simple.

A PRACTICAL TREATISE ON MATERIA MEDICA AND THERAPEUTICS. By ROBERTS BARTHOLOW, M.A., M.D., LL.D. Eighth edition, revised and enlarged. London: H. K. Lewis. 1893. (Demy 8vo, pp. 848. 21s.)

DR. BARTHOLOW states in his preface that a new edition of his book has been necessitated by the recent decennial revision of the *United States Pharmacopœia*. The first edition appeared in 1876, and attained at once so large a degree of professional favour that it is now widely known, and any detailed description or praise of the general arrangement and character of the work is therefore superfluous. The plan, and the greater part of the information contained in such a systematic treatise must always remain somewhat similar in succeeding editions, but on comparing this with former ones we think we may justly complain that the author has taken little trouble to keep the work up to date, or to improve the old text in many matters of detail. The eighth edition is to a large extent word for word a reprint of the seventh (1889), while the authorities quoted and the references given mostly date back to the time of the first edition. It is true a few short articles have been added, such as those on methylene blue, asaprol, and the injection of organic liquids, but taken altogether they form but a small addition to the work.

The text and many of the statements contained in it stand greatly in need of detailed revision. Several substances are described as "new" which may have been so at the time of former editions, but certainly not now, and under ergot an investigation is mentioned as "published last year," whereas it is seven years since the paper referred to appeared. The articles on antipyrin, exalgine, cocaine, mineral acids, iron, and many other subjects stand exactly as they did in former editions, although our knowledge has greatly increased within recent years. Besides this there are scattered throughout the book many trivial mistakes and hasty and unconsidered statements which should have disappeared from an eighth edition. Considering the popularity and large sale which the work has enjoyed, a more effectual and careful revision on the part of the author does not seem an extravagant demand.

THE PHYSIOLOGY OF DEATH FROM TRUAMATIC FEVER; A STUDY IN ABDOMINAL SURGERY. By JOHN D. MALCOLM, M.B., C.M., Fellow of the Royal College of Surgeons of Edinburgh, etc., Surgeon to the Samaritan Free Hospital. London: J. and A. Churchill. 1893. (Demy 8vo, pp. 136. 3s. 6d.

THIS scientific treatise is based on the author's experience of the treatment of patients after abdominal section. He has not that extreme belief in the widespread influence of sepsis which so largely prevails amongst authorities in abdominal surgery. In 1887, high temperature followed by death during the first and second weeks after ovariotomy were attributed to septic peritonitis alone. Mr. MALCOLM showed that obstruction from paralysis of the bowel might be the sole cause of the fatal termination of the case. His arguments will be found in his memoir on "The Condition and Management of the Intestine after Abdominal Section, considered in the Light of Physiological Facts," published in the *Medico-Chirurgical Transactions*, vol. lxxi, 1888.

The author, in the work now under consideration, traces traumatic fever to sources other than sepsis or sapræmia, though he explains how a poison aggravates the fever. In his former monograph he held that intestinal distension after abdominal section was not due to peritonitis, but directly followed the severe stimulation which it received during the operation. He likened this phenomenon to the constipation which succeeds purgation by certain drugs. In the volume before us Mr. Malcolm traces the phenomena of that condition to peripheral stimulation. A partial devitalisation of the divided tissues follows an operation. A certain amount of stasis occurs in the vessels involved in the wound, and this sets up local changes which increase that stasis. The condition of the irritated tissues affects the general circulation and the production of heat. A reflex physiological contraction of the arteries throughout the rest of the body causes a determination of blood to the damaged tissues where the vessels are dilated. The author then argues that the solid constituents of the blood in the wound are largely destroyed, a change which may produce general effects. Contraction of the arteries throughout the system might be caused or aggravated by intestinal obstruction, due, in cases of abdominal operations, to a cause above mentioned. Hence obstruction must greatly aggravate the fever. The peripheral irritation which sets up the local and general changes in the vessels is, according to the author, the true source of the fever. How the changes may be lethal we can well understand, though this work is rather an essay on traumatic fever in general than a sketch of the course of fatal cases. This treatise should be read by the operating surgeon as well as by the physiologist.

NOTES ON BOOKS.

The Microscope and How to Use it. By T. CHARTERS WHITE, M.R.C.S., late President of the Quekett Club. Second Edition. London: R. Sutton and Co. 1893. (Cr. 8vo, pp. 136. 2s.).—Ever since the microscope has become a recognised means of scientific investigation, it has in great measure ceased to be the object of interest to lay workers that it was in the days when to demonstrate the fact that a spider had claws on its legs was an achievement to be proud of. It is certainly to be regretted that an instrument of such great educational value should have been removed almost entirely from the list of scientific amusements, and it is the more to be wondered at in these days when a few pounds will purchase an instrument that is capable of doing as much work as one that would formerly be within the reach of the few. The second edition of Mr. White's manual will have achieved a good object if it prove to be the means of restoring the instrument of which it treats to its former position. Mr. White avowedly writes for the tiro and would-be microscopist; consequently we find that more attention is given to the methods of preparation of artistically and technically beautiful objects than to special technique of limited application. All the elementary methods are, however, treated in detail, and the directions given are such as would enable the merest beginner to make successful preparations; and in addition to the usual routine of staining, mounting, and section cutting, the more special branches—diatom mounting, micrography, and photo-micrography receive each their share of attention. As might be expected in a book of this description, considerable space is given to the methods which find most favour with beginners, namely, the processes involved in displaying the minute anatomy of insects and the usual objects found in collectors' cabinets. We congratulate the author on the clearness and lucidity of his directions. The book is illustrated with excellent examples of what may be achieved in the application of photography to the delineation of microscopical preparations. It should be the means of inducing many who possess a microscope for the sake of the amusement it affords, to turn their attention to the more laborious but far more interesting work of original investigation.

THE Imperial Ottoman Government has, we are informed, sent three young Turkish women to France to study medicine. One of them has been sent to Montpellier, another to Nancy, and the third to Lille.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

PYROZONE.

Peroxide of hydrogen contains an atom of oxygen in such a loose state of combination that heat or contact with organic matter immediately decomposes it. It is thus a powerful oxidising agent, and as such has received a number of applications in medicines. It has been proved to be of great value as a deodoriser; it is a local astringent and antiseptic—painless, does not stain, and is not poisonous. A strong watery solution of peroxide of hydrogen is difficult to keep from decomposition; ether restrains the change, and an etherial solution is in use under the name of ozonic ether.

Messrs. McKesson and Robbins, manufacturing chemists, 91, Fulton Street, New York, have sent specimens of various solutions of peroxide of hydrogen, to which they have given the name of pyrozone. Our examination shows that the quantity of H_2O_2 is present as stated, and that they are in this respect perfectly reliable. Pyrozone 3 per cent. is a watery solution of H_2O_2, intended to be used as an antiseptic, either internally or externally. It is stated to be of value as a diagnostic agent in the detection of pus in deep-seated wounds, as it decomposes with great rapidity, causing effervescence. Pyrozone 5 per cent. is a solution in ether. This is a very powerful antiseptic, and is used as an application to ulcerations, and as a bleaching agent in the treatment of the teeth. The 25 per cent. pyrozone solution is also an etherial one, and is intended for use as a caustic. In order to prevent evaporation the 5 and 25 per cent. solutions are put up in sealed tubes, which when required for use can easily be transferred to a glass-stoppered bottle.

Messrs. McKesson and Robbins also send specimens of apparatus to be used for the application in various ways of pyrozone. The atomiser is a very convenient instrument for spraying pyrozone solutions. The tubes forming the spray are of glass, so that the liquid does not come in contact with any metallic parts or organic substance. A glass tube termed a pyrozone spray shield can be used for localising the spray. The glass syringe designed for injecting pyrozone solutions has a glass ring at the end of the piston, so that it is possible to operate with one hand by holding the syringe between the first and second fingers. Thy pyrozone inhaler is a U-shaped glass tube, with unequal limbs terminating in bulbs. By means of this instrument the diluted 3 per cent. pyrozone solution can be snuffed up through the nasal passages, and into the throat if required.

FLUID EXTRACT OF COCILLANA.

Messrs. Parke, Davis, and Co., 21, North Audley Street, W., have sent us a specimen of fluid extract of cocillana. It is prepared from the bark of an undetermined species of guava (nat. ord. Meliaceæ) growing in Bolivia, and is recommended as an expectorant, tonic, and laxative. It is said to reduce the night sweats of phthisis, and to be superior to ipecacuanha in diseases of the air passages. The dose is 10 to 30 minims, and the clinical evidence in favour of it recommends it for trial.

Repression of Alcoholism in Switzerland.—The new penal code now going through the various phases of legislative evolution in Switzerland contains the following clauses relating to crimes committed by inebriates: Art. xxv. If the crime is attributable to the abuse of spirituous liquors, the judge shall have power to prohibit the admission of the accused to public houses for a period of from one to five years. Art. xxvi. If the admission of the drunkard to a special establishment is indicated, the judge orders it on medical advice, independently of a period of detention varying from six months to two years. A further clause provides that the time during which a convict is kept in an establishment where he undergoes treatment shall be deducted from his term of imprisonment.

THE LONDON COUNTY COUNCIL AND THE WATER SUPPLY.

[Second Notice.]

The report of the Parliamentary agent, Mr. H. L. Cripps, begins by drawing attention to the fact that in the proceedings before the Commission the witnesses were not cross-examined, and that, although the evidence records a valuable series of opinions upon different sides of many questions, its value is less than would have been the case had it been tested by cross-examination.

The Growth of Riverside Population.

The similarity of the estimates, made by the Royal Commission and the County Council, as to the future rate of growth of London, makes it probable that the result arrived at is fairly correct, namely, that in 1931 a population of about eleven and a quarter millions of persons will have to be provided for. There is no reason, however, to believe that this great multitude will be evenly spread over the area under consideration, and if the growth of London should largely extend up river, if with improved railway facilities the population of the Thames basin should increase at the rate at which some of the riverside urban districts have lately done, it may easily happen that the water of the river may become unmanageably foul even before it fails in quantity. Mr. Cripps, however, points out that, taking the estimate of the Commission, our respite even as regards quantity, is really not for forty years. Three years have already gone by, and considering the length of time which would be necessary for working out and executing any scheme for fetching water from a new source of supply, he thinks that it would be impossible for the governing authority of London to defer the selection of some such new source more than fifteen or twenty years.

A Definite Policy wanted.

Under these circumstances, and in view of the Bills introduced by the water companies in the present session, he considers it imminently imperative that a definite declaration of the Council's policy should be arrived at in regard to the question, "Is the Council to be responsible to London and its constituents for providing and supplying water?" or "Will the Council abnegate such responsibilities, and leave the responsibility with the companies, or with any other body?" The report and evidence of the Royal Commission have, he thinks, made the present time appropriate for a definite decision.

Mr. Cripps emphasises the fact to which we drew attention at the time of the issue of the report of the Commission that, although they "do not believe that any danger exists of the spread of disease by the use of" the river water, this is only "provided that there is adequate storage, and that the water is efficiently filtered before delivery to the consumers;" the provision of this would not only cost a very large sum of money, but would take a considerable time. As to the recommendations for preventing the pollution of the river, it is pointed out that the cost of the complete inspection of the watershed by no means covers the total expense which would be incurred in providing Londoners with a potable water. At every point inspected increased expenditure would be forced on the ratepayers of these districts in respect of drainage, sewage purification, and the prevention of pollution. "No doubt there will be a strong opposition on the part of the riparian inhabitants, not only to the imposing upon them of further obligations, but especially if it were proposed that they should be subjected to further expense in keeping the river pure in the interests of the water drinkers of London."

The Quality of Present Sources of Supply.

Mr. Shirley Murphy, Medical Officer to the County Council, confines his observations to that portion of the report of the Royal Commission which relates to the quality of the present sources of supply. The Royal Commission had before it evidence, he says, which showed that the rivers from which the water companies draw their supplies receive from the towns situated on their banks at varying distances above the intakes sewage effluents, which, after treatment of the sewage, either by filtration through land or by chemical processes,

enter the rivers. In addition to these numerous pollutions from smaller populations discharging into cesspools and ditches reach, untreated, the streams at times of heavy rainfall. Such sewage must not infrequently contain the excremental matter of persons suffering from typhoid fever and may not improbably in the future contain from time to time the excreta of persons suffering from cholera. The virus of both these diseases has been found by past experience to have been disseminated by water and to have produced fatal results in persons drinking such water.

"Not only are these diseases known to be waterborne, but experience has shown that a very small amount of the excremental matter of persons suffering from them is capable under favourable circumstances of infecting vast volumes of water."

Insufficiency of Natural Purification.

After describing the various circumstances which are shown by the Commission to contribute to the purification of the rivers, Mr. Murphy says: "The fact may be accepted that these powers exist and are operating in the Thames and Lee to an extent which contributes in no small degree to the safety of the London water consumer." Yet the Commission evidently does not look upon these natural processes as in themselves sufficient to render the water fit for domestic purposes, but is only satisfied if such agencies and the operations of the water companies combined, suffice to ensure that wholesome water is supplied to the consumer.

As it is probable that the completeness of the future operations of the water companies may depend upon the necessity which can be shown for efficient filtration, it is a matter of great importance that the natural processes of purification should not be held to be more deserving of confidence than they really are.

After a careful study of the statements in the Commission's report, Mr. Murphy is led to think that some of the reasons given for assuming that the London population is not exposed to risk are less deserving of acceptance than appears at first sight.

Dilution of Polluting Matter.

The Royal Commission has evidently been much impressed by the dilution to which any excremental matter must be subjected in the rivers. Taking the smallest annual flow in the Thames over Teddington weir in any one year, from 1881-91, and the largest estimated number of cases of enteric fever in any one of those years, they show that this would give 294 million gallons to one case. But, as Mr. Murphy says, the risks to London water supplies are less from the average number of cases of enteric fever in the water area in a year than from the occurrence of a number of cases at one time in a community discharging its sewage into the river. Typhoid is not distributed equally throughout the year, and regard must always be had to the possibility of some exceptional outbreak—due to milk, for example—giving rise to hundreds of cases of the malady in towns situated a limited number of miles above the intake, and discharging their sewage into the rivers; for there has been experience of a town having to discharge its sewage, untreated, into the river owing to temporary failure in its machinery for treatment, and this at a time when the town was suffering from an epidemic of enteric fever.

Comparison between Wells and Rivers.

The Royal Commission would appear to admit that, in the case of the Caterham well, the typhoid poison was waterborne; but, appealing to the arithmetical test of dilution, they maintain that no argument derived from that case can be applied to a river, in which the volume of water is so much greater. But Mr. Murphy shows that we have no accurate knowledge of the amount of water which a single case can render virulent, and that certainly no safe deduction of this kind can be made from the occurrence at Caterham; for the man who there gave rise to the infection was only employed in the well during a portion of the day, and in his evidence he insisted that, when in the well, he always used the bucket, and that his evacuations were sent to the surface. The contamination may therefore have been due to mere splashings from the bucket, and may have been extremely small. Moreover, we have no proof whatever that in this case it contaminated as much water as it was capable of doing. While, then, the Caterham case may fairly be taken as proof of the water carriage of typhoid poison, it can in no way be taken as indicating the concentration necessary to enable it to maintain its virulence.

The Commission elaborately calculates the number of typhoid fever cases which must exist in the Thames valley to foul the London water to the same extent as was assumed to be the case in the Caterham well, and shows a result which is obviously absurd; but Mr. Murphy cleverly paraphrases the same calculation for the purposes of the Tees valley and shows the result there also to be equally absurd; and yet, as we all know, typhoid fever in that case did break out from the use of the water notwithstanding all the calculations.

Dr. Barry and the Commission.

Mr. Murphy carefully criticises the action of the Commission in putting on one side the conclusions of Dr. Barry in regard to the Tees epidemic, which, he says, "I am satisfied must be accepted as certainly as the evidence concerning the Broad Street well of 1854 and the Caterham well of 1875, evidence which the Royal Commission evidently accepts as amounting to proof."

Although there are important differences between the Tees and the London rivers, the fact that filtration failed to protect the consumers of the Tees water raises questions as to the dependence which can be placed on filtration for complete and uninterrupted protection.

This question of the power of filtration to produce uninterrupted supplies of good water from foul sources is, and will continue to be, of the supremest importance to Londoners so long as their supplies are drawn from the river, and we cannot but think that, while the present supply is made use of, the London people, as represented by their County Council, would do well to endeavour to get into their own hands the right to inspect the whole process of filtration and summarily to debar the access of foul water to the pipes. It is abundantly clear that it is wrong to trust to the examination of the water in bulk. The product of each filter bed must be continuously watched, and unhesitatingly refused if below the standard; and it is not improbable that a short experience of the difficulty of providing a continuously pure water under such circumstances would soon lead to a general acceptance of the necessity for new sources of supply.

WATERBORNE FEVER IN TRENT VALLEY.[1]

The evidence which has of late been adduced by the Medical Department of the Local Government Board in the matter of waterborne outbreaks of enteric fever has been remarkable both as to its nature and amount. We have especially in mind the cases of Rotherham with its specifically polluted town well and its very unsafe gathering grounds; Chester-le-Street, with its sewage-polluted stream leading to the collecting main of the water service solely implicated in the disseminations of fever to the exclusion from suspicion of a second public supply; Atherstone, with its supplementary supply of water drawn from adjacent common land under conditions which left no doubt as to liability of the service to pollution; and in the matter of river-derived water—Rysdale, with its riverside villages bearing the brunt of the fever; King's Lynn, with its supply drawn from the Gaywood river, a waterway subject to all sorts of filth pollution on its flow to the town; and the Valley of the Tees, with its two recent outbursts of fever of an epidemic character associated in unmistakable manner with the use of water from the sewage-polluted river.

And now other evidence is forthcoming, in the nature of a report by Dr. Bruce Low, on the circumstances of the River Trent in the counties of Lincoln and Nottingham, with special reference to the association of use of its water and enteric fever. In its flow of 154 miles through a drainage area estimated at 4,000 square miles, the river receives much

[1] Dr. R. Bruce Low's Report to the Local Government Board on the circumstances of the River Trent in Lincolnshire and part of Nottinghamshire, with special reference to the Water Supplies of Populations resident on or near the Banks of that River. Messrs. Eyre and Spottiswoode, East Harding Street, E.C. 44 pp. and 5 maps. Price, 1s. 6d.

crude sewage. For example, its tributary, the Derwent, has the crude sewage emptied into it of such towns as Bakewell, Matlock Bridge, Matlock Bath, Belper, Derby, and Alvaston, with a combined population of nearly 120,000 persons. We hear of Nottingham sewers at times flowing direct to the Trent; of Nottingham excrement manuring the districts draining to the river, fever being endemic in the town; of Newark and Gainsborough sending their sewage untreated into the river, the latter not far above villages drinking the Trent water; of Huddersfield, Sheffield, and Lincoln night soil being heavily spread on ground draining to the river and its adjacent waterways; and of the dejecta of the crews of numerous trading boats being passed into the river, canals, etc., thus further adding to their befoulment. Looking to the mass of filth finding its way to the Trent directly and indirectly, and to the amount of fever among the populations involved, we can only wonder that more harm than is shown has not occurred to the riverside populace. As showing the abominable state of the Trent, Dr. Low says: "A medical man informed me of an instance where an enthusiastic admirer of Trent water in a riverside village was led to abate his enthusiasm after drawing a pailful of water from the river to fill his teakettle; on this occasion he found solid fæces in the pail, and he has since discontinued the use of river water in his household."

Dr. Low tells us that Newark and Gainsborough have both abandoned the river as a source of reply, and that use of the water is now considerably less than in past years, though there is still a strong feeling against disuse of the Trent, in the riverside villages especially; but then in places it seems customary to boil all the water, this precaution having doubtless had much to do with comparative absence of fever in those places. Persons freshly coming into the valley seem to be more commonly attacked than those whose lives have been spent in the district and who have been drinking for years of the river, the explanation being that "in all probability many native Trentsiders have had enteric fever in early life, and that perhaps the constant use of Trent water by those who have not had the fever enables them in some way to resist more or less this disease."

On the subject of fever prevalence in association with Trent water, Dr. Low's facts, briefly stated, are as follows: In the Gainsborough rural sanitary district in the four years and a-half ended June, 1893, there were 192 known cases of fever, of which 167 occurred in 10 villages, with 5,700 inhabitants, using mainly water from the Trent or Chesterfield canal, the latter being also grossly polluted. There were only 25 cases in 51 villages, with over 13,000 people, using well water. The respective attack rates were 29 and 2 per 1,000 living. Of the 25 cases, 4 may be deducted as imported, and other 2 as probable users of Trent water. In Newark, of 53 cases of fever in 1890, 73 per cent, used the public water services; of 125 cases in 1891, the percentage was 91; of 69 cases in 1892, it was 68; and of 50 cases in the first half of 1893, 82 per cent. used the public supply; the percentage of sufferers doing so being 78.5 in the whole period of 3½ years. The public service here in question was from wells and culverts on the banks of the Trent subject to admixture by the river water. All other probable causes of fever could be eliminated.

Probably the above very brief sketch of Dr. Low's detailed and amply illustrated report will suffice to show the conditions prevailing in a locality embracing half a million souls. We could wish to have treated the report more fully; but are glad to find it made purchasable. We only give ourselves space for one more quotation from Dr. Low's pages, leaving it to convey its warnings without further comment.

"Sand and gravel are taken from the river bed between Newark and Gainsborough, and removed to towns for renewing the filtering materials of some public water supplies. Unless previous to use they are subjected to careful preparation, such materials might themselves become a source of danger. Should cholera be introduced into this country at any time, and be carried to any of the towns or villages situated on the banks of the Trent or its numerous tributaries, the people who drink Trent water lower down would be in danger of catching the disease. I am informed that in some previous cholera visitations the Trentside populations suffered heavily."

LITERARY NOTES.

A new monthly journal devoted to diseases of the throat, nose, and ear, has recently appeared in Italy. It is entitled *Rivista di Patologia e Terapia delle Malattie della Gola, del Naso e dell' Orecchio*, and is edited by Dr. Toti, teacher of laryngology and otology at Florence.

Dr. N. P. Ivanoff is engaged in the compilation of a "Russian Almanac of the National Watering Places, Health Resorts, and Sanatoria," which will be published by Schotschepanski, of St. Petersburg.

A new periodical devoted to diseases of the mouth, the *Revue Mensuelle de Stomatologie*, has recently begun to appear in Paris. It is edited by Dr. Magitot.

In the second edition of his work entitled *Consultations Médicales sur quelques Maladies Fréquentes*, which has just appeared, Professor Grasset, of Montpellier, has laid down the lines of a code of medical ethics (or, as the French call it, "medical deontology"). The general principles agree with those accepted in this country.

The *Verhandlungen* of the tenth meeting of the German Society for Children's Diseases, held in Nuremberg last September, has just been issued by the publishing house of J. F. Bergmann, in Wiesbaden. The volume, which is edited by Dr. Emil Pfeiffer, contains nearly 200 pages, and to some of the papers reference has already been made in the Epitome. A very elaborate paper on "The Etiology of Chlorosis," by Meinert, of Dresden, is illustrated by reproductions of over 70 photographs showing a more or less vertical position of the stomach, and depression of the transverse colon in a series of cases.

In a book recently published by M. R. Vallery-Radot, *Un Coin de Bourgogne, le Pays d'Avallon* (Paris, 1893), some curious information is given as to the introduction of inoculation for small-pox in France. Even after the method had come pretty extensively into use in England inoculation was regarded as a criminal proceeding in France. The inoculators were called executioners and the inoculated were looked upon as dupes. Meanwhile the havoc wrought by small-pox was terrible. Whole families were carried away by the disease. In 1723, 20,000 persons died of small-pox in Paris. It was calculated that a fifth part of the population in France either died of the disease or bore the marks of it. Voltaire, who himself suffered from small-pox in 1723, wrote thirty years later: "If inoculation had been practised in France the lives of thousands of men would have been saved." The Chevalier de Chastellux was the first Frenchman who submitted to the experiment in his own person. In spite of his example the practice met with the greatest opposition before it gained a footing in France. When Chastellux was admitted a member of the French Academy, Buffon, who received him, recalled this act of philanthropic devotion among the new academician's titles to fame. "I do not know," said the great naturalist, "any soul possessed by a more ardent zeal for the good of humanity."

A recent number of the *Indian Medical Gazette* gives the following extracts from Susrata and other Sanscrit writers, as explaining the reticence of lepers regarding their family history: "They say that leprosy originates from murder of Brahmins, women and good men, theft, and such like acts" (*Susrata, Nidanasthánam*, Chap. v). "Those who insult Brahmins or elders, and commit other sins, get leprosy" (*Charaka Sámhitá*, Chap. vii, "Treatment of Leprosy"). "The Stealer of Brahmins' goods gets bad nails; the alcohol drinker gets black teeth; the murderer of a Brahmin gets consumption; and the violator of the wife of a *guru* (spiritual guide) gets leprosy (*Manu Sámhitá*, Chap. xi, 49th *Sloka*). "The wife who commits adultery is an object of contempt in this life, and becomes a jackal or gets leprosy and other sin-begotten diseases in the life to come" (*Manu Sámhitá*, Chap. v, 166th *Sloka*). Of the kind of punishment thought fit for a man who had debauched the wife of his pastor, the following may give some idea: "The violator of the wife of a *guru*, after confessing his guilt, must lie on a hot iron bed and embrace a red-hot iron female effigy till death, which will purify him" (*Manu Sámhitá*, Chap. xi, 104th *Sloka*). This is purification by fire of a kind not contemplated by St. Paul. The following passages show how fully the doctrine of heredity and contagion was accepted:

"Women and men, having their blood and seminal fluids corrupted from leprosy (not of the white kind) get their offspring lepers" (*Susrata*). And again: "The diseases named below are transmitted from one person to another by sexual intercourse, by touch, by the breath, by taking meals in the same dish, by sleeping in the same bed and sitting on the same seat, by putting on the same garments, by wearing the same garland, and by using the same ointments—leprosy, fever, consumption, ophthalmia, and small-pox of different kinds."

The Philadelphia *Medical News* of February 17th contains an interesting "memorial address in honour of Dr. Ephraim McDowell" by Dr. L. S. McMurtry, of Louisville. In speaking of McDowell's first ovariotomy, performed in December, 1809, and first reported in the *Eclectic Repertory and Analytical Review*, October, 1816, the author points out that McDowell in his report omits to mention of what material the ligatures which he used were composed, and adds that he was informed by a friend of McDowell's now dead, who was a great deal about the latter's office in his boyhood, that the ligatures employed were made of shoemaker's thread, waxed thoroughly before they were used. Adhesive strips and a bandage completed the dressing; the rest of the treatment consisted, to quote McDowell's own words, of "a strict observation of the antiphlogistic regimen." Five days after the operation he visited the patient (Mrs. Crawford), and much to his astonishment found her engaged in making up her bed. In twenty-five days she returned home. Mrs. Crawford was 47 at the time of the operation, and died in 1841, aged 78. Perhaps the most striking thing to our *fin-de-siècle* notions is that McDowell should have waited seven years before publishing his case.

A *Handbuch der speciellen Therapie innerer Krankheiten* is about to appear under the editorship of Professor F. Penzoldt, of Erlangen, and Professor R. Stintzing, of Jena. The work, which will be published by Gustav Fischer, of Jena, is to be completed in six volumes, the first of which will appear almost immediately, the last before the end of the present year. The first volume is devoted to infectious diseases, the subjects being distributed as follows: General Prophylaxis, Professor Gärtner, of Jena; Protective Inoculation, Professor H. Buchner, of Munich; General Treatment, Professor von Ziemssen, of Munich; Infectious Diseases in which Constitutional Infection Predominates (Typhus, etc.), Professor von Ziemssen; Yellow Fever, Dr. Jerome Cochran, of Montgomery, Alabama; Infectious Diseases chiefly affecting the Skin—Measles, Rötheln, Scarlet Fever, etc., Professor O. Vierordt, of Heidelberg; Small-pox, including Vaccination, Dr. L. Pfeiffer, of Weimar; Infectious Diseases chiefly affecting the Upper Air and Food Tracts—Diphtheria, Whooping-cough, and Mumps, Professor Ganghofner; Infectious Diseases chiefly affecting the Intestine—Cholera Nostras and Asiatic Cholera, Professor Rumpf, of Hamburg; Dysentery, Dr. Kartulis, of Alexandria; Malarial Diseases, Professor Maragliano, of Genoa; Infectious Diseases Transmitted from Animals to Man—Splenic Fever, Glanders, etc., Professor Garré, of Tübingen; Hydrophobia, Professor Babes, of Bucharest; Trichinosis, Dr. G. Merkel, of Nürnberg. The second volume will deal with Poisons, Diseases of the Blood and Lymph, and Disorders of Metabolism; the third with Diseases of the Respiratory and Circulatory Organs; the fourth with Diseases of the Digestive Apparatus; the fifth with Diseases of the Locomotor Apparatus, Nervous System, and Mind; the Sixth with Diseases of the Sexual and Urinary Organs, Venereal Diseases, and Diseases of the Skin.

We have received the first part of the first volume of the *Dermatologische Zeitschrift*, a new journal, which, as stated in the prospectus of the editor, Dr. Oscar Lassar, is intended to be a record of progress in our knowledge of "the anatomy and physiology, pathology and therapeutics of the skin, and of the science of the specific infections in general." The number before us contains an interesting article on the position and aims of dermatology by the Editor; a paper on the pathogenesis of pemphigus bullæ by Dr. E. Kromayer; one on angiokeratoma by Dr. Max Joseph, of Berlin; one on the hyaline degeneration of cancerous epithelium by Dr. P. G. Unna; experiments on the treatment of tuberculosis with special reference to the action of creasote by Dr. L. Friedheim; one on the treatment of lupus with tuberculin by Dr. H. Kossel; one on the histology of the sweat glands by Dr. Benda, etc. We congratulate Dr. Lassar on the appearance as well as on the contents of his journal. It is excellently printed, and the illustrations are numerous and in their way works of art. The *Dermatologische Zeitschrift* is to appear in parts—"about every two months." Six parts go to a volume. Single parts will not be sold.

Professor Ollier, of Lyons, in an inaugural address (*La Chirurgie il y a Cent Ans et La Chirurgie Aujourd'hui*) which he has just republished, compares surgery as it is now with what it was a century ago. At the end of the eighteenth century he tells us the supremacy of French surgery was, thanks to the Académie de Chirurgie, fully established. At that time medicine and surgery were still in a relation of active antagonism to each other; now they are thoroughly united. A hundred years ago there was no anæsthesia, no antisepsis, and the means of controlling hæmorrhage were very defective; every operation was an atrocious torture to the unfortunate patient, and generally ended in his death. The progress in surgery made during the present century is attributed to the labours of Morton and Jackson, Pasteur, A. Guérin, Lister, and "other scientists of all countries."

Portugal seems to be suffering from a mild outbreak of new medical journals. Quite recently we chronicled the appearance of one at Lisbon; now we have to announce the eruption of three others. One of these is *A Medicina Moderna*, which is published at Oporto under the editorship of Dr. Oliveira e Castro. It is to come out once a month, and its special "platform" is to rescue the city, whose name has such sinister associations for the gouty, from the condition of "quasi-mutism" in which, it would seem, it has till lately been sunk as far as the "medico-scientific movement" is concerned.—The same pious wish seems to have inspired another citizen of Oporto, Dr. Magalhaes de Lemos, who has decided to resuscitate the *Archivos de Historia de Medicina Portugueza*, which has been defunct for some four years. It is to appear every two months, and we gather that, although it will chiefly concern itself with matters of historical interest, it will not disdain the new medical learning.—The third of the new comers is to be an advocate of the Hahnemannian heresy, and as such its name would be offensive to orthodox ears.

The most interesting paper in the first number of the *Psychological Review*, the appearance of which was recently announced in this column, is "The Case of John Bunyan," by Professor Josiah Royce, of Harvard. The present is only the first instalment of the article, so that we must wait for the solution of the psychological riddle which we are told Macaulay, Taine, Froude, and Bunyan's biographers generally have failed to solve. In the meantime, we may be content with knowing that the immortal author of the *Pilgrim's Progress* is not to be labelled as an interesting variety of the great wits to madness near allied. Professor Royce speaks "only as a student of psychology." In this character he has his little joke, as is natural, at the students of mental pathology, and as a professor of philosophy he may be forgiven if he "jocks" with a certain amount of "deefficulty." "The names and subclasses of these morbidly-insistent kinds of feeling, thought, or volition," he says, "have occasionally been multiplied beyound any reason, until, in view of the endless '*manias*' and '*phobias*' that some writers have been disposed to dignify with special titles, I myself have sometimes wondered whether it would not be wise for someone in the interests of good sense to try to check this process by defining as a peculiarly dangerous type of insistent impulses, a 'new mental disorder' to be described as the 'mania' for multiplying words ending in *mania* and *phobia*." The rest of the contents of this number of the *Psychological Review* are, as Huck Finn said of the statements in the *Pilgrim's Progress*, "interesting but tough."

Negotiations are said to be in progress between Dr. Billings, on behalf of the United States Surgeon-General's Office, and the family of the late Professor August Hirsch, of Berlin, for the purchase of the library left by the latter, which consists of about 10,000 volumes. The *Vossische Zeitung* calls on patriotic Germans in a position to play the part of Mæcenas to come forward and prevent this valuable collection of books from leaving the Fatherland. The *Berliner klinische Wochenschrift* points out that they might find a suitable home in the Library of the Berlin Medical Society.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

Subscriptions to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, MARCH 10th, 1894.

DEGREES FOR LONDON MEDICAL STUDENTS.

Compromise is so thoroughly of the essence of English public life that the scheme of the Royal University Commission need not be blamed because, like most successful English institutions, it represents an attempt to meet, as far as possible, several widely conflicting views. The Commissioners have taken note of the view of those who simply wished a University brought into touch with existing London teachers, of those who aimed at a great professorial establishment of the Continental type, and of those whose main object was the encouragement of research. It will not be without interest to consider how far also the real nature of the medical demand has been appreciated by them.

In December, 1892, the Metropolitan Counties Branch unanimously recorded its opinion "that a degree in medicine, based on a sound, thorough, and practical standard, should be placed within reasonable reach of students educated in London." This resolution, on which we commented at the time, fairly expresses the essential element of the medical requirement. A degree in medicine can no longer, consistently with the interests of medical education, be treated as a distinction only for the exceptional man. The standard which our day demands of the merest pass-man represents, perhaps, a larger aggregate of knowledge than would have satisfied the most exacting requirements of half a century ago. The main purpose of establishing a degree, we take it, is to encourage good teaching in teachers and good learning in students. The standard for it must, therefore, be strict, but at the same time, if its influence is to reach the general body of students, it must be such as the average student can with reasonable industry hope to reach. The *gravamen* of the medical charge against the present University of London is that its influence has not managed to reach the average man; that its requirements have not due regard to the actualities of education, and that its degree has been to most students unattainable, less by the difficulty than by the impracticability of the conditions on which it is given. Let us trust that whatever new University is founded in London will be free from the danger of repeating this error.

The medical curriculum for the average man must necessarily be to a great extent a compromise between what is theoretically desirable and what is practically possible. Time is the great difficulty to surmount. The five or six years which is all that most students can be expected to give to the course for an M.B. degree are too few to admit of a complete mastery of the score of "subjects" which are now regarded as essential to it. Some amount of give and take, some balance of the conflicting claims of a number of equally important branches of science, must be looked on as an unavoidable necessity.

But there are certain departments of the curriculum which admit of no compromise, whose claims cannot consistently with the public interest be satisfied otherwise than in full. There is an irreducible minimum of practical clinical knowledge which is indispensable for every qualified medical practitioner to possess, unless he is to be a source of danger rather than of succour to his patients, and even this minimum forms an aggregate of knowledge which requires no small allowance of time adequately to acquire. Every medical man, it will be conceded, must be trained with a view to general practice, however he may specialise subsequently. Of what utility in general practice could be a graduate, however qualified in other respects, who is not familiar, for example, with the diagnosis and treatment of fractures and dislocations, who cannot pass a catheter, perform tracheotomy, or administer anæsthetics, who is not competent to deal with a complicated midwifery case, or is not quick to recognise the manifestations of typhoid or exanthematous fevers? When, too, we reflect that one-fifth of the adult deaths in this country are due to pulmonary tubercle, that pulmonary tubercle is a tractable disease if attacked in its earliest stages, and that its onset may often be recognised by ear and finger, even before bacillary evidence is available, is it possible to exaggerate the importance of acquiring a high degree of competence in the *artes longæ* of auscultation and percussion?

We not only admit, but would urge, that the fabric of clinical skill should be built on a solid foundation of anatomy, physiology, and pathology. We fully allow that for the comprehension of these sciences a knowledge of physics, chemistry, and biology is necessary, but we would at the same time urge that the profoundest knowledge of physical science cannot compensate for ignorance on any one of the points we have named or many similar. We wish the modern student to receive the very best training in the contributory sciences that the conditions of the case admit of, but essentials must needs be first met. The student must not be allowed *propter scientiam sciendi perdere causas.*

Those who share our sense of the weighty importance to be attached to the place of practical medicine and surgery in a medical curriculum will scrutinise with anxious care the constitution of the proposed new University, into whose hands, if it is founded, the guidance of the medical education of the metropolis will be virtually committed.

The Academic Council to which it is proposed to convey, within the limits of general statutes and ordinances, the all-important functions of framing curricula of study and requirements of examination for degrees, medical among the rest, is designed to be a compact body of fifteen teachers (in addition to the Vice-Chancellor as chairman), elected in varying proportions by the faculties or bodies of recognised teachers of the University. To this Council the direction of the degree-conferring functions of the University is in effect given. Of the fifteen members, science and art together are to command an actual majority—four representatives each. The faculty of medicine is to elect three.

But the faculty of medicine is not a body of physicians and surgeons purely. It is to include teachers of physics, chemistry, biology, anatomy, and physiology, as well as of the branches more exclusively medical. One of the three "medical" members, it may probably happen, will belong rather to the faculty of science than to that of medicine, leaving but two to speak for the paramount interests of clinical study. We have no wish to condemn too hastily a scheme elaborated with so much patience and trouble. We have no wish to throw any obstacles in the way of the establishment of a real teaching university in London. But we feel bound to ask that a question of such essential detail should be seriously considered—whether the interests of medicine and surgery in the medical curriculum are safe under such a constitution?

In the framing of the curriculum and at each reframing, the pressure of the exponents of every subject, urging that greater importance be assigned to it, will inevitably be felt. To the pleas of the teachers of academic sciences there cannot fail to be a large body of sympathetic listeners in the Council. Are the essentials of the curriculum, as a preparation for practice, under adequate safeguard? The Academic Council, as contemplated, is to be an autocrat without appeal. It is true, as Mr. Macnamara has pointed out, that it is required to consult a Board or Boards of Studies before deciding on any question at issue; but the constitution of these very Boards is to be at the mercy of the Council, which is, moreover, to appoint one-fourth of their members. It is true, also, that the faculties are to be allowed to make representations to the Council on matters within their scope. Were the Council a Board of impartial laymen, the privilege might be of some service, but it needs no great acquaintance with academic human nature to know that a small committee of professors is about the last body in the world to pay any particular attention to the opinions of brother teachers, when they happen to conflict with its own.

The matter appears to be one in which the British Medical Association, representing as it does the great body of practical clinical workers and practitioners, must necessarily take a deep interest. If the Legislature appoints a Statutory Commission, as the report of the Royal Commission recommends, we fully hope that an opportunity will be afforded for a full investigation of this subject, and for the adequate representation of the opinions of the practising members of the medical profession in England.

THE PENAL CLAUSES IN THE MEDICAL ACTS.

The recent prosecutions to which we referred in the British Medical Journal of February 10th at Houghton-le-Spring, in the county of Durham, under the Medical Act of 1858, and at Plymouth under the Dentists Act of 1878, have drawn attention to the nature of the penal clauses in these Acts. Interest in the question has been increased by the perusal of a pamphlet issued by the Incorporated Council of Safe Medicine, Limited, and signed by one D. Younger, M.D. (Bc.), President-elect. The fact that a man dares in this barefaced and impudent manner to give his name as M.D. to a document that is a tissue of nonsense and falsehood from beginning to end is a matter of serious moment. A comparison between the Medical Act of 1858 and the Dental Act of 1878 shows how utterly unprotected are the public and profession against quacks who use titles which lead people to believe they are professional men. By Section 40 of the Act of 1858 the prosecution has to prove that the defendant has wilfully and falsely pretended to be, taken, or used certain styles and descriptions, implying that he is registered under the Act, or that he is recognised by law as a medical practitioner. The burden of proving fraud is always a dangerous and difficult task. Without entering in detail into the cases that have been decided under the Act, we do not think that we shall be stating the proposition too broadly if we say that the quack, like the dog, is allowed one bite. The framers of the Dentists Act, 1878, no doubt had these difficulties in their mind when they drafted the Act; and profiting to some extent by the experience that was gained by the administration of the Medical Act, the penal clause, Sec. 3, was drafted. By this section, the mere fact of a man taking or using a title or description implying that he is on the *Register*, or that he is specially qualified to practise dentistry, is made an offence; that is to say, the necessity of proving fraud is done away with, while the offence implying that he is specially qualified is added.

The importance of that addition will be appreciated when the next Act in the series is considered. Following at the heels of the Dentists Act came the Veterinary Surgeons Act of 1881. In that Act a lesson was taken from the Dentists, and the result is a penal clause that is more explicit and better drawn, although no new offence is created. The section is almost the same as the one in the Dentists Act. It contains the phrase "stating that the individual is specially qualified to practice veterinary surgery or any branch thereof." In 1892 the Divisional Court, in the case of R. C. V. S. *v.* Robinson, was asked to say that the use of the phrase "veterinary forge" was a statement that the man was specially qualified. The Court held that the phrase "specially qualified" was used in a colloquial and not a technical or scientific sense. The consequence of that decision is that not merely a man's description of himself but of his premises is held under certain circumstances to come within the meaning of the penal clauses. Hence the importance of the phrase in the Dentists Act. It should be pointed out that Section 3 of the Dentists Act, 1878, was more clearly expressed by an amendment contained in the Medical Act, 1886. These remarks are sufficient to show the inefficiency of the provisions of the Medical Act, 1858, and if the Legislature has seen fit to make such provisions with regard to dentists and veterinary surgeons, *a fortiori* should some similar enactments be enforced with regard to medicine and surgery.

It is difficult to see by what plea the claim of the medical and surgical professions to be placed on an equal footing as regards statutory protection as veterinary surgeons or dentists can be refused. So far as the protection of the public is concerned, as Parliament has passed in the public interest such penal clauses as are contained in the Acts of 1878 and 1881, it cannot refuse a like clause in the case of those professions in which the practitioners daily treat patients for injuries or illnesses that involve life or death. At the same time it must be remembered that from what we have learnt by seeing the administration of the Dentists

Act, it should be possible to draft a clause that will both in the case of medicine and dentistry carry out the objects of the Acts. Experience shows the way in which the Acts are evaded. The clauses are penal, and every man has a right to dodge a penal statute. But as the Acts are passed in the interests of the public, it is necessary that the evasion should be made as difficult as possible. At the present time it is easier to evade the Acts that relate to medicine or surgery in any of its forms than it is to get round those that deal with solicitors and barristers. But then the lawyers have always been capable of taking care of themselves. And yet it might be thought that good health is as valuable as doubtful law.

THE PUBLIC HEALTH DEPARTMENT OF THE LONDON COUNTY COUNCIL.

Five years ago the sanitary government of London entered upon a new era. The London County Council came into existence, with limited powers of administration and initiative, and still more limited powers of supervision over the work of the vestries. From many points of view there was good reason for doubt as to the practical effect of the change. On the one hand, there was a possibility, such as had never before presented itself, of laying the foundation of a sanitary organisation worthy of the greatest city in the world. On the other hand, the new body began its career without either experience or precedents to guide it, and there was danger of unwise and ill-directed action, which would have been fatal to further development. The election of Lord Rosebery as their first chairman went far to inspire confidence in the future of the Council. Then came the all-important question of the appointment of officers, in which they were not less fortunate. It was with some dismay that the medical profession found that the Council rated the sanitary work which lay before them so lightly as to attach to the appointment of medical officer of health a salary obviously inadequate for the services required, and comparing strangely even with the not extravagant remuneration offered to their other scientific advisers. In one sense they were justified by the event. Had the commencing salary been doubled, they could not have made a happier choice than that of their present medical officer, Mr. Shirley Murphy, whose accession to office at Spring Gardens at once gave assurance of the success which has followed. Since then there has been no looking back, so far as the Public Health Department of the Council is concerned, every year having added largely to its usefulness and responsibility. The greatest credit is due to the Council for the important sanitary work which they have already undertaken; but throughout the whole of it, and particularly between the lines of the London Public Health Act of 1891, it is easy to trace the evidence of an intimate knowledge of the sanitary conditions and needs of the metropolis and of a clear perception of the means of remedy. Probably the committees most immediately concerned would be the first to acknowledge the extent of their indebtedness to the experience and counsel of their medical officer in their work under the Housing of the Working Classes Act and the Public Health Act, as well as in those matters, such as the pending question of the London water supplies and the effective action taken with regard to cholera last summer, in which his name has come more directly before the public.

At last, after five years, the Public Health and Housing Committee seem to have realised the inadequacy of the recognition of the value of Mr. Murphy's services, and upon their initiative the General Purposes Committee by a large majority recommended that his salary should be increased from £1,000 to £1,250, without waiting longer for protest or application from him. No reason seems to have been suggested for the smallness of the increase or for the delay in according it. At all events, the recommendation was made, and came before the Council on February 27th—only to be referred back to the Committee for further consideration. We may assume that it will speedily be brought forward again and passed as an act of tardy justice. It is difficult to understand why it should have been postponed at all, unless for the purpose of offering a more substantial increase. At the same meeting the Council showed themselves willing to deal fairly by their engineer, whose salary was advanced from £1,500 to £2,000.

If the London County Council are prepared to continue their work as it has been begun, they have before them a field of unlimited usefulness in the sanitary government of the metropolis; but they cannot afford to make mistakes, and they must secure and retain the assistance and advice of the best officers that can be got. Their present medical officer had made his reputation and position in the very foremost ranks of the public health service long before the Council was constituted, but, so far as salary goes, the appointment remains a second or third rate one of its kind, and it is neither right nor expedient in the public interest that such an anomaly should be allowed to continue. A democratic body ought to be able to realise the paramount importance of public health in spite of the vagaries of the faction who clamour for "economy" at any cost.

At the eighth annual general meeting of the Institute of Chemistry, Dr. W. J. Russell, F.R.S., Lecturer on Chemistry at St. Bartholomew's Hospital, was elected President.

We are glad to be able to state that Sir William Broadbent has continued to improve during the past week, and that he is now able to spend most of the day on a reclining chair. The temperature is now normal.

A meeting of the executive committee of the Andrew Clark Memorial Fund was held at the Royal College of Physicians of London on March 6th, when the arrangements for holding a public meeting at an early date were discussed.

A Reuter's telegram from Gibraltar reports that the members of the medical profession there—civil, military, and naval—gave a dinner on March 2nd in honour of Mr. Ernest Hart, who is visiting the Rock. The Governor was present. It was afterwards resolved to establish at Gibraltar a Branch of the British Medical Association.

Dr. W. H. Dickinson, who recently retired from the active service of St. George's Hospital, has accepted the office of Baillie Lecturer in Physic in connection with the medical school. In this capacity he will deliver in each summer session a short course of lectures on some special province of medicine. The subscription list of the Dr. W. H. Dickinson Testimonial will be closed on March 31st. Intending subscribers should send their subscriptions to Mr. T. Lawrence Read (Honorary Treasurer), at 11, Petersham Terrace, Queen's Gate, S.W., before that date.

THE Ingleby Lectures will be given at Mason College, Birmingham, this year on March 15th and 22nd, at 4 P.M., by Professor Robert Saundby, M.D. The subject of the lectures is the Pathology and Treatment of the Common Dyspepsia of Women.

AN extraordinary meeting of Convocation of the University of London is summoned for April 10th at the University building, for consideration of the recommendations of the Royal Commission recently issued, and a report thereon which is being prepared by the Annual Committee of Convocation.

THE Senatus Academicus of the University of Edinburgh has offered the honorary degree of LL.D. to W. H. Gaskell, M.D.(Camb.), F.R.S., Lecturer on Physiology, University of Cambridge; James A. Russell, M.A., M.B., B.Sc., Lord Provost of Edinburgh; and George Wilson, M.A., M.D.(Edin.), Medical Officer of Health, Mid-Warwick.

THE INTERNATIONAL SANITARY CONFERENCE.

THE International Sanitary Conference has adopted the measures proposed for the Persian Gulf, with the modification of a few points. The Commission on the Red Sea Navigation sat on Friday, March 2nd. It is not expected that the Conference will have brought its deliberations to a close before Easter. The members of the Conference paid a visit to M. Pasteur at the Pasteur Institute the other day. M. Pasteur received them surrounded by his staff—Drs. Roux, Metchnikoff, and Chantemesse. The delegates were presented to M. Pasteur by Professor Brouardel. They were afterwards shown the laboratories, the vaccination service, and the various other services attached to the Institute.

DANGEROUS FUNERAL OBSERVANCES.

PROFESSOR HAY, of Aberdeen, has published some very sensible remarks on the subject of attendance at funerals. He points out the frequent chills that, at a season like the present, when March winds pipe high, are caught at funerals. He states that the habit of changing clothes of a warm and heavy texture for those of the thinner and the supposed more seemly black suit is provocative of disease, and he suggests a liberalising in the nature of the dress in which we mourn for the dead. He also deprecates the absurd delay often experienced in waiting around the door of a house for the starting of the funeral, and hints that the clergymen, by dint of punctuality and a certain brevity, might assist in this much needed reform. The number of old people, who often form a large percentage of the mourners, contracting chills from such causes is very great, and when it is remembered that the vital energies are often lowered owing to prolonged vigils and grief, it is easy to see the danger. Dr. Hay does good service in thus stating that while paying respect to the dead no harm were done in having greater regard to the living.

SMALL-POX AT THE ESSEX COUNTY LUNATIC ASYLUM.

WE are indebted to Dr. George Amsden, Medical Superintendent of the Essex County Lunatic Asylum at Brentwood, for the following particulars of the outbreak of small-pox which has occurred at that asylum. In all, 28 persons have been attacked, and the earlier cases were of a very virulent type. There have been 6 deaths from small-pox in conjunction with other diseases. Four attendants who have been under treatment for the disease are doing well. The disease is at present confined to Block F. for male patients, and the first case occurred in the infirmary, which practically became an infected area. There have been sporadic cases in some other wards of the same block, but principally among these who on convalescing from other affections had been transferred from the infirmary before the nature of the disease was ascertained. All cases have been isolated, and are treated in the infirmary and an empty house within the grounds, the infirmary being cut off from the rest of the asylum. Although there is no infection on the female side of the institution, the leave of all attendants has been stopped, no visiting is permitted, and no new cases of insanity are admitted. All the patients, attendants, and employees have been vaccinated as fast as lymph could be obtained. Only mechanics and farm hands leave the gates. Many patients in the infirmary were successfully vaccinated, and yet were seized with small-pox, showing that the vaccination was performed too late to afford protection.

THE MEDICAL OFFICERSHIP OF HEALTH FOR SHOREDITCH.

WE learn that Dr. Bryett was elected medical officer of health for the sanitary district of St. Leonard's, Shoreditch, at the meeting of the vestry on March 6th. It is unnecessary to go into the somewhat obscure history of the delay which has taken place in filling up this appointment. The vestry is to be congratulated on electing to the post a candidate whose competence for the post has been shown during his tenure of office as deputy medical officer for the last eighteen months. The name of the successful candidate was not among those selected by the committee of the vestry, and was, we are informed, only placed among the competing candidates by a special resolution of the vestry when they had assembled to make the election. The election excited a great deal of local interest. Another name was sent up to the Local Government Board last autumn, but the salary was objected to as inadequate, and the nomination was not ratified. The vestry subsequently gave way on this point, and the salary is now £500 a year.

THE BRITISH MEDICAL ASSOCIATION IN THE EAST.

A FAREWELL dinner was given to Deputy Inspector-General Turnbull, R.N., by the members of the Hong Kong and China Branch of the British Medical Association on January 26th. The dinner was well attended by officers of the naval and military medical services at the station and by members of the general profession in Hong Kong. The toast of the evening was proposed by the President, Dr. Atkinson, who observed that, though one of the youngest Branches of the Association, the Hong Kong and China Branch had been most fortunate in its officers. To no one was the Branch more indebted for constant watchfulness, keen attention, and kindly care than to Dr. Turnbull. He recalled the foundation of the Branch in 1891, and spoke of the ability with which Dr. Turnbull had filled the office of President in 1892 and of Vice-President in the following year. The hope was expressed that Dr. Turnbull would remain a member of the Branch, and assist it in the future as he had done in the past.

THE NEW MEDICAL OFFICER OF HEALTH FOR MANCHESTER.

THE departure from Oldham of Dr. James Niven, who has resigned the office of medical officer of health for that town on appointment to succeed Dr. Tatham as medical officer of health for Manchester, was made the occasion by the medical men of Oldham of giving a remarkable proof of the esteem in which Dr. Niven is held. He was entertained at dinner by the Oldham Medical Society last week. Dr. Fawsitt, who presided, in proposing the health of Dr. Niven, referred to the great improvement in the sanitary condition of Oldham, and to Dr. Niven's success in coping with the various epidemics which the town has experienced. The good work accomplished by Dr. Niven in the face of many difficulties and some opposition would cause his name to be long remembered. Dr. Fawsitt referred also to Dr. Niven's study of tuberculosis from the public health point of view, and expressed his regret that the sanitary committee of the town council had not seen

its way to adopt the recent resolution of the Society in favour of notifying phthisis. Dr. Niven, in reply, expressed his thanks to the medical men of Oldham for their help in times of epidemic, and referred in particular to the assistance he had received in investigating epidemic influenza. He sketched some of the sanitary improvements which had been effected, but added that there was still much work of that kind to be done.

EDINBURGH ROYAL INFIRMARY.

At the weekly meeting of the managers of the Edinburgh Royal Infirmary on March 5th the Law Committee reported with reference to the remit as to the powers of the Board to attach conditions to future staff appointments: "The Committee are of opinion that the Board has power to limit the tenure of office of members of its staff to one year and to attach to the appointment such conditions not inconsistent with the Charter or Act of Parliament as it sees fit." Dr. Batty Tuke expressed great surprise that the Law Committee had not touched the crux of the question, whether the Board had the right to limit the franchise to any body that sent members to the Board. He therefore moved that the matter be referred back to the Committee for further consideration, but as no seconder was found the report was agreed to. Some of the members of the Law Committee were understood to say that the equal and unlimited franchise of the various electing bodies could not be interfered with. In that case the Board is left on the horns of a dilemma. It is to be hoped that both the University of Edinburgh and the Royal College of Physicians will at next election return members of the staff to the the Managing Board. If the Board chooses to refuse to accept such members the electing bodies are powerful enough to look after their own interests, and further the contributions to the hospital will at once show an unmistakable diminution.

THE LOCAL GOVERNMENT ACT, 1894.

The Royal assent was given to the Local Government Act, 1894, on March 5th, and on the same day the Local Government Board issued to boards of guardians and urban sanitary authorities other than town councils in England and Wales a circular letter drawing attention to the provisions of the new Act in so far as they affect the election of guardians and members of urban sanitary authorities during the present year. It is pointed out that urban and rural district councils will take the place of urban and rural sanitary authorities, and that parishes in any rural district will be represented on the boards of guardians by the persons elected as rural district councillors, guardians as such being only elected in parishes in urban districts. The first elections under the Act will take place on November 8th, 1894, or at such later date or dates in 1894 as the Local Government Board may fix, and will come into office on the second Thursday after their election, or on some day not more than seven days earlier or later, to be fixed by the Board or in pursuance of its rules. The guardians and members of urban sanitary authorities who would have gone out in April will remain in office until November and will then retire, to be replaced by the newly-elected members.

SICK NURSING IN WORKHOUSES.

One of the great difficulties which is met with in introducing systematic nursing into workhouse infirmaries is that few guardians seem to understand or appreciate the fact that technical skill is required. They recognise readily enough that pauper labour of every sort requires constant superintendence, and are willing to appoint a proper nurse to look after the pauper helps, but that they should pay nurses to do the work, while able-bodied paupers sit twiddling their thumbs, is beyond them. In fact, one of the great difficulties in the management of a workhouse is to find occupation for the more weakly able-bodied women, and it has become a sort of tradition in workhouse administration, sanctioned by the rules, that the proper sphere of these people is to pass their time in nursing, until they become so feeble that they have to be nursed in turn. This point is well put in the annual report of the Workhouse Infirmary Nursing Association. "The nurse is still looked upon as the superior official placed over a band of pauper helps, and when in gentle remonstrance one endeavours to point out to the guardians that there must be a proportion of trained nurses to the number of beds, they will urge that the nurse can have as much more help from the able-bodied inmates as she wants. It is not a number of lay figures in pauper dress, tumbling over each other in the wards that is required, but an increase in the number of responsible women, who have learnt, or are in the process of learning, their work."

DEATH OF DR. JACOB OF LEEDS.

To the intense regret of his friends and colleagues, Professor E. H. Jacob, M.A., M.D.Oxon., of Leeds, succumbed to suppurative meningitis following on inflammation of the middle ear on Friday, March 2nd. Dr. Jacob had not been well for some time, but even on the Sunday before his death he played the organ as usual at the Infirmary Chapel, and up to the Tuesday night he was undertaking a certain amount of work; in fact, he died in harness. For eighteen years Dr. Jacob had been connected with the Leeds Infirmary, and the numerous friends and representatives of different societies who attended his funeral testified that his wonderful knowledge was not confined to his profession alone, but embraced art, music, and architecture, as well as medicine.

A LOCAL BOARD AT PLAY.

We often have occasion to comment on the curious doings of the local boards which form the sanitary authorities to whom the health of a large portion of our population is entrusted. Only a few weeks ago it was a board which wanted to expunge some unwelcome details from their medical officer's report before forwarding it to the Local Government Board; now we find a board laying their medical officer's report upon the table in due form, but refusing to have it read, and then, for fear of the reporters getting hold of it, playing a little game of hunt the slipper, during which the unfortunate manuscript was shuffled into various quarters, tossed from hand to hand across the table, hiding it in the most literal sense, and finally passed out of the room for fear the reporters should get hold of it! And yet these things are said by the *Western Morning News* to have happened last week at Teignmouth. "The Chairman told our reporter," says this paper, "he could have it if he could get it," and then this sedate and sober local board began its little pranks, which we should call childish were it not essential to the game that the player should be of such rotundity as with his nether end to cover a sheet of foolscap. How much better that he should have worn the fool's cap in the ordinary way!

THE KINDERGARTEN SYSTEM AND FOREIGN LANGUAGES.

The difficulty which the ordinary adult experiences in learning a foreign language and the comparative ease with which the acquisition may be made by a child are well known. The difficulty, however, of teaching a child a foreign language by any of the methods in use until lately is almost equally well known. To the youthful mind the dry bones of a grammar and a vocabulary are excessively distasteful; Balbus delights him not, no, nor Scholastikos with his ancient jokes neither, and against the wearisome iterations of Ollendorf his gorge rises. It seems only recently to have dawned upon the adult mind that if we are to teach languages successfully we must follow as closely as may be the system upon which the infant acquires his mother tongue. The sound and the object are ever presented to

him at the same time, until gradually the two sense impressions become linked together in the higher centres, and the sight immediately suggests the sound and *vice versâ*. Various systems have been suggested in recent years on the lines just indicated, and one of the most thorough-going is a plan devised by Madame Vignal, the widow of M. Vignal, D.Sc., whose recent death from phthisis, contracted during the course of his researches into the pathology and bacteriology of tuberculosis, has been so great a loss to French science. This system has already been applied by her to the teaching of English to French children with most encouraging success. In her preliminary course she utilises the system of object lessons: every object mentioned is shown, and the English name for the whole and for each part and quality is clearly pronounced and repeated by the pupils. From this basis the teacher gradually passes to what she terms lessons of co-ordination, in the course of which the pupil is led to associate English words with general and abstract ideas, the help of the eye being called in so far as the subjects permit. The system seems to be founded on a rational physiological basis, and deserves all the success which must be wished to every effort to diminish the height of the barriers which now separate the nations of Europe from each other.

INANITION.

The subject of death from starvation has been discussed by Professor Tarnier in an interesting clinical lecture on the uncontrollable vomiting of pregnancy. In the first place he insists on the truth of the prevalent idea that men cannot bear absolute starvation so long as women. He does not attempt to explain this fact. Perhaps, he suggests, this is because women habitually eat less than men. Death occurs about the fourteenth day in cases where adult males have been subject to complete starvation. Children bear starvation worst, sinking on the fifth or sixth day. True starvation not rarely occurs in infants, when the breast they suckle happens to be sterile—a condition not always recognised by the mother. Professor Tarnier once had to treat a woman who, under the influence of religious mania, attempted to starve herself to death. She was forcibly fed by M. Tarnier himself, and grew stout. Then she was left to the care of a *locum tenens*. He was rich and careless, and gave gratuities to her nurses, promising more every week if the patient fed herself. At the end of three weeks she died of inanition. She had really swallowed nothing during all that time, and managed to live a week longer than a starved man would have lived. Professor Tarnier seems to believe in the long fasts of cataleptics, and he notes that a man has been known to live sixty days on a little daily dose of syrup of orgeat; and a little water, taken surreptitiously or otherwise, will support life for an equally long period.

THE ART OF BREATHING.

On March 2nd Surgeon-Captain A. L. Hoper Dixon gave a lecture at the Royal United Service Institution, on "The Art of Breathing as Applied to Physical Development." There can be no doubt that a man's capacity for exertion depends largely on his power of getting rid of the carbonic acid produced during the action of his muscles, that is, upon his respiratory capacity, and the training of the external muscles in all sorts of gymnastic exercises, while those of respiration are left to develop themselves in disorderly fashion just as they happen to be led by want of breath, is very like putting the cart before the horse, for it is certainly the fact that men fail in athletics as much from want of "wind" as from want of muscle. In a large number of cases this is due to false methods of breathing, hunching up the shoulders, and pushing out the sternum, instead of using the diaphragm and the abdominal muscles. In ordinary respiration expiration is entirely an elastic rebound, but for the forced respiration necessary in active exercise this is not sufficient, and by far the most effectual respiratory machinery is the alternating action of the diaphragm and the abdominal muscles, by means of which both inspiration and expiration are performed by muscular action, and are fully under control. This machinery, however, requires to be trained and exercised like any other gymnastic movement, and it was rendered very clear by Surgeon-Captain Hoper Dixon that by such training not only can a man's "wind" be greatly increased, but that his physical development can be much improved. It is quite clear that the ordinary drill-sergeant's teaching to hold up the shoulders, push out the chest, and keep in the belly is exactly the opposite of what is requisite for good breathing, and it was pointed out in the discussion after the lecture that even while standing still in the position of "attention" a man might be almost deprived of breath by the rigid fixity of his respiratory muscles. The training required is very much what is now taught by some teachers of voice production, namely, a series of exercises calculated to develop the power and range of motion of the diaphragm and abdominal muscles, combined with certain movements performed during the process of expiration. Considerable emphasis was laid on the advantage of practising abdominal respiration in the recumbent position while the abdomen is covered by an arrangement of weights, a sort of dumb-bell for the diaphragm, the total weight of which, however, should not exceed 3½lbs. General Fielding, after the lecture, expressed a hope that Surgeon-Captain Dixon would be able to devise a simple breathing drill which might be found of easy general application.

THE SOUTH AFRICAN LEPROSY COMMISSION.

In consequence of a resolution passed by the House of Assembly on August 15th, 1893, and a further resolution adopted on January 2nd by the South African Medical Congress, held at Cape Town, to which the matter had been referred for an opinion, the South African Government has appointed a Leprosy Commission consisting of seven medical men from different parts of the colony, to consider and report upon a list of questions submitted to them. The members are: Charles Frederick Kennan Murray, M.D., F.R.C.S., Chairman; Alexander Edington, M.B., C.M.; William John Dodds, M.B., C.M.; Christian Lawrence Herman, M.B., C.M.; Josias Mathias Hoffman, M.B., C.M.; Frederick Fismer, M.D.; and John Baldwin Smithson Greathead, M.B., C.M. The questions submitted for consideration refer chiefly to the following points: Whether leprosy is contagious; whether it ever arises spontaneously, or is caused by particular kinds of food; whether it is ever spontaneously or as a result of treatment arrested or cured; whether heredity affects its spread, and, if so, by what means; what is the duration of the incubation period; whether the system of segregation, as at present carried out, should be continued, or requires modification; whether lepers can, under any circumstances, be allowed to remain at large without danger of spreading the disease; and whether Robben Island offers the best available conditions for segregation?

THE PREVENTION OF CONSUMPTION.

This formed the subject of a lecture given at the rooms of the National Health Society, on March 7th, by Dr. Solomon C. Smith, Physician to the Westminster General Dispensary. The diffusion of tuberculous dust was pointed to as the principal means by which infection was carried from man to man and the necessity for the conscientious and persistent use of the spitting cup and of various easily burned substitutes for handkerchiefs was strongly insisted on. At the same time great stress was laid on the importance of predisposing influences, such as heredity, moisture of soil, dampness of house, want of light, deficient ventilation, overcrowding, occupation, food, poverty, etc. In conclusion he hoped he had given sufficient prominence to the *rôle* of the bacillus and to the importance of dealing with the sputa

and preventing the diffusion of tuberculous dust, but he had thought it only right to insist on the fact that the bacillus was not everything and that in the prevention of consumption we had also to deal with those large questions which affect the health of the individual and the resisting power of the community. Our knowledge of the bacillus was recent and as regards any practical attempt to deal with tuberculous dust, even talk on the subject was quite of to-day and any action in that direction was a mere drop in the bucket. Yet consumption was diminishing as a result not of treatment of the sputa but of general improvements in the sanitary conditions of the population. Dividing the years from 1861 to 1885 into periods of five years each the consumption death-rate per 1,000 living was seen to run a descending scale as follows: 2.5, 2.4, 2.2, 2.0, 1.8; or taking still earlier and later statistics and putting them in a different way a steady diminution of the deaths from phthisis was found to such an extent that while in the period 1851-60 one-eighth of all deaths were put down to that cause the proportion had fallen in 1855 to one-tenth, and in 1890 to one-eleventh. Undoubtedly progress had been made, and it had been due to amelioration of the conditions of life. It was right to isolate so far as may be the hopeless consumptive and to enforce such measures of cleanliness as should prevent those who were going about from infecting their neighbours; by all means preach a gospel of spittoons and spitting cups, but do not end there. Consumption was a disease of degenerate tissues in a degenerate race, and to prevent it everything must also be done to promote the health of the homes, the salubrity of the workshops, and the vigour of the frames of the people.

THE ROYAL SOCIETY OF EDINBURGH.

At the meeting of the Royal Society on March 5th, Sir William Turner, Vice-President, in the chair, Professor Cossar Ewart read a paper "On the Second and Fourth Digits in the Horse, their Development and Subsequent Degeneration." Professor A. R. Simpson communicated an obituary notice of the late Professor W. M. Graily Hewitt, M.D.

THE INDIAN MEDICAL CONGRESS.

The first Indian Medical Congress will be held at Calcutta at the beginning of January, 1895. At a meeting of the Calcutta Medical Society on January 25th last, the preliminary arrangements were discussed, and a general plan sketched out. Medical men practising in every part of the world will be invited to take part in the Congress, but the co-operation of those practising in India and the East is especially hoped for. In each province of the Indian Empire local secretaries, native as well as European, will be appointed to co-operate with the Calcutta secretaries. The Congress will comprise the following sections: 1. Medicine, including Pathology; 2. Surgery; 3. Obstetrics and Diseases of Women and Children; 4. Public Health; 5. Medico-legal Medicine and allied subjects.

THE PUBLIC AND THE ADULTERATION OF FOOD AND DRUGS ACT IN THE CITY.

Dr. Sedgwick Saunders, the Public Analyst of the City of London, comments in his annual report upon the indifference of the public to the working of the Act. It may therefore be well to point out that under Section xii of the Sale of Food and Drugs Act, 1875, any person is entitled to have any drug or article of food purchased by him in a district analysed by the public analyst on payment of a sum not exceeding 10s. 6d., and to receive a certificate of the result of the analysis. Dr. Saunders states that not a single application has been made to him for an analysis of either food or drugs during the year, and that but for the periodical collection of samples by the inspectors his returns would be blank. Dr. Saunders also comments on the discordant penalties inflicted by magistrates. In Excise prosecutions a heavy fine is generally inflicted, while the adulteration of milk is usually looked upon as quite a trivial offence. Offences of a like kind it is clear should be dealt with in a uniform way.

CREMATION AND CHOLERA.

The Cardiff Port Sanitary Authority have acted wisely, under the local conditions obtaining, in erecting a crematorium for the disposal of the dead from cholera. Two alternative schemes—the one for interment of the bodies on Flat Holm Island, the other for their disposal in the Bristol Channel—could not well be carried out because of the unsuitability of the island soil and the crowded state of shipping in the approaches to the port. Not only, however, will the authority be enabled thus to cremate corpses, but they will also be able to destroy infected excreta, clothing, and waste refuse from the cholera hospital in the furnace. The authority have further agreed to cremate cholera-infected bodies for the Bristol and Gloucester port districts at a charge of seven guineas each. The crematorium has been erected by Messrs. Goddard and Massey, of Nottingham.

THE RITUAL OF THE FEE.

An American contemporary, in an account of the late Sir Andrew Clark, after mentioning his large practice, goes on to say: "He never received fees in person, but with a gentle wave of the hand indicated that his secretary would attend to that. As the visitor was ushered out he would pass a large silver bowl on an onyx stand in the hall. It was always kept half filled with sovereigns. Into this famous cup the patients would drop their 25 dollar or 100 dollar consultation fee." Though for complex inaccuracy of statement it would be difficult to beat this, the passage we have quoted opens up a question interesting to patients not less than to practitioners. How should the fee be paid? is a problem which vexes the minds of many patients of the meeker sort. Some, from an overstrained feeling of delicacy, surround the simple operation with a quite unnecessary mystery. They slip the fee into the practitioner's hand shamefacedly, as if they were afraid of letting their own left hand know what their right was doing. We have known a young doctor under such circumstances, misconceiving the situation, effusively shake the hand of a noble lord who particularly objected to this form of salutation, with the result that the proffered sovereign—for your true aristocrat apparently thinks *noblesse oblige* to keep back the vulgar shilling—rolled on the floor, and gave rise to an exciting game of hide-and-seek before it could be recovered. The common practice of tendering the fee neatly done up in paper has sometimes been taken advantage of by unscrupulous persons. After the death of Jobert de Lamballe, who was known to be very careless about fees, a considerable number of packets supposed to contain rouleaux of gold coins were found to consist entirely of bronze money except at the two ends. Some persons drop the fee furtively on any article of furniture in the consulting-room which may lie convenient to their hand; under such circumstances it may happen that the fee finds its way into the waste paper basket, or is gleaned by the wrong hand. We have even known a fee put down in this way, picked up afterwards—doubtless in a moment of *abstraction*—and pocketed by the patient himself. It is difficult to see why any ritual should be considered necessary in what is purely a matter of business. If the young physician blushes when he receives a fee, the old one, as has been well said, blushes when he does not get one. In the eye of the practical man the one thing necessary is that the patient perform his part of the contract; the exact mode of such performance is of secondary importance. Yet if physicians had a "secretary," corresponding to the barrister's clerk, who

should "collect" their fees for them, matters would be greatly simplified. This would, at any rate, remove the snobbish objection to medical peerages attributed to an eminent statesman, that it would be impossible to make a man a lord who had held out his hand for guineas. Ricord used at one time to have a "secretary" in his consulting room, to whom all fees were paid, but the supposed secretary was a man in possession. What is to be done with the patient who "remembers to forget" the fee? Some sit at the receipt of custom with a suggestive pile of coins beside them. Dupuytren had a particular way of ringing his bell which was an instruction to his hall porter to refresh the memory of the departing guest, and so zealously did that functionary discharge this duty that a distinguished English general had on one occasion to leave his gold watch as security for the fee. An eminent foreign physician is said to stimulate his patients' memory by the presentation, at an early stage in the consultation, of a bowl containing the offerings of previous pilgrims to the same shrine. Perhaps this was the origin of the myth about Sir Andrew Clark's onyx bowl. In the matter of fees, his practice was, as in everything else, simple and straightforward. The terms on which he might be consulted were clearly set forth on a card in his waiting rooms. As to the fee itself, no man could have been more generous; he took what was offered him—except when he thought it too much. Perhaps this was pushing somewhat too far that "indifference as regards money" which Coleridge looked upon as the distinguishing mark of a gentleman, but it was characteristic of the man.

CHRONIC LEAD POISONING FROM FUMES.

AN experienced correspondent has written to draw attention to a possible source of obscure lead poisoning, which does not appear to have been generally recognised. All over the country the business of melting down old lead into bar lead or ingots is carried on, and in some, if not in many cases, in very unsuitable apparatus. Sometimes a wooden shed is put up against a party wall, an apparatus like a washhouse boiler is built in this shed, and fitted with a stalk perhaps 20 feet high. It takes two or three hours to heat such a boiler, and when red-hot all the old lead gathered in the district from housetops, waterclosets, and so on, is thrown in, with the result that much filthy smoke is emitted as is also a certain quantity of lead. All this is let out into the atmosphere at the lowest convenient level. Sometimes the work of melting is carried on actually inside a dwelling house, and the fumes sent up an ordinary chimney. Persons exposed to these fumes in neighbouring houses have been observed to suffer from nervous, digestive, "rheumatic," and cutaneous disorders, but paralysis is rarely observed, nor is a blue line formed on the gums. In some cases loss of teeth which appeared sound was noticed. Colic has frequently been observed, as have also flatulence, constipation, and thirst. In the "rheumatic" cases persistent pain was noticed, especially about the head of the radius, the heel, and the ball of the great toe. Onychia was observed, in some cases ending in loss of the nails. The lower animals have been observed to suffer, horses in particular, from colic and joint pains. Dogs suffered from rheumatism, loss of teeth, and blindness. Vegetation also was damaged. In human beings, a certain tolerance seemed to be established after a time, and some cases of anæmia even seemed to improve.

THE COST OF DAY NURSERIES.

ONE of the suggestions made by Dr. Hugh R. Jones and Mr. Herbert E. Davies in a paper published recently[1] was the establishment by county councils of "a widespread system of day nurseries." At present county councils have no power to establish *crèches*, in fact no public authority has, so that an Act of Parliament would be necessary, and we have in the recent Isolation Hospitals Act a precedent which might be followed for entrusting to county councils the duty of initiating and supervising such institutions. That some part of the excessive infant mortality is due to the neglect or drugging which the infants of mothers who go out to work have to endure cannot be doubted. In one small colliery village in North Wales, we are told that it is a frequent practice for a mother before going to work in the morning to brew a "punch" for her infant. Placing a lump of sugar in a small teacup, one, two, three, four, or five drops of laudanum are poured on it, according to the age and previous habits of the child, a teaspoonful of hot water is added, and the dose administered to the child, who sleeps until the mother returns. In most large towns "soothing syrups" are in extensive use for the same purpose. The chances of an infant left to the care of a brother or sister a few years older, or to that of a neighbour already overburdened with babies of her own, are not much better. Well managed day nurseries, under proper inspection, would undoubtedly be a great boon, but can they be made self-supporting? Two day nurseries, established by the Liverpool Children's Aid Society, had an average attendance of 44 a day, and cost nearly 6d. a head a day. The highest charge which could be made was 1s. a week, so that there was a deficit of 2s. or 2s. 6d. a head a week. Dr. Reid, M.O.H. for Staffordshire, is of opinion that a sufficient charge might be made, in most cases, to cover expenses, for, as he has pointed out, married couples in Lancashire and Staffordshire earn from 40s. to 50s. a week, and therefore, it would not be reasonable to ask the public to contribute to the maintenance of their families, especially as there is no real necessity in such cases for the mother to neglect her home duties to work in the factory, as her husband's wages should suffice to keep the family, provided less was spent in drink than is the case at present. M. Ch. Marsillon, in a recent article on the Paris *crèches*,[2] states that the cost was 93 centimes a head a day. Some *crèches* were free, but in the majority the mothers paid 20 centimes a day. The *crèches* are divided into two classes, "approuvées" and "libres." The first class are governed by rules approved by the Minister of the Interior, and receive a subvention from the State. The annual sum thus paid by the State to the *crèches* of Paris and its suburbs is now 36,000 francs, while the Municipal Council distributes 70,000 francs; the Société des Crèches raises 15,000 francs in subscriptions, and distributes this sum among the various institutions. In addition many of the *crèches* are maintained in whole or in part by religious communities. The *crèches* are open from 7 A.M. to 7 P.M. On arrival the infants' clothes are changed for a complete set belonging to the *crèche*. Each child has reserved for its use a special bottle, or spoon and plate. At 10 A.M. the infant population has its first meal of milk, pap, or *bouillie*, according to age; at 11 A.M. it is put to sleep in cradle or bed; at 2 P.M. it feeds again, on bread with chocolate, butter, or jam if old enough, and again between 4 and 5 P.M. on soup. The milk given to the infants is sterilised in separate bottles in Soxhlet's apparatus. There is a superintendent of each *crèche* who has under her a certain number of trained attendants. The number of these "berceuses" varies from one to ten infants where revenues are small, to one to six in richer institutions.

SCHOOL BOARD INSTRUCTION IN NURSING.

THE School Board of Maryhill, near Glasgow, has initiated a movement which may turn out to be one of great importance. Urged thereto by Dr. Muir, of Possilpark, they have undertaken the teaching of sick nursing as part of the educational scheme. All girls of the fifth and sixth standards will in future go through a course on this subject which will be compulsory and free. The instruction will be practical

[1] *Liverpool Medico-Chirurgical Journal*, January, 1894.

[2] *Rev. Gen. des Sciences pures et appl.*, 1894, No. 2.

by means of demonstrations, models, and diagrams, and will include the administration of food and medicines, the changing the patient, the making of the bed, applying bandages and poultices, taking temperatures, etc., with some elementary sketch of physiology and hygiene. It will not involve any home work. Perhaps it may be urged by some that girls of the fifth and sixth standard are too young to benefit much by such instruction, but it must be borne in mind that they are just of the age when knowledge gained is most likely to stick, and as a matter of fact quite little girls do a great deal of the nursing among the working classes, and there is much reason to believe that it is a subject in which they will take great interest and which may be made truly educational. Few things are more striking in the life of working class communities than the readiness which the women display to bear a hand in nursing, especially in acute cases, and if they could but receive some dogmatic teaching on the subject when young before their judgment has been warped by tittle tattle and tradition the problem of nursing the sick among them would be vastly lightened. The district nurse, however, will not find her occupation gone, but her duties will become more those of superintendence and instruction. She will be a teacher rather than a doer of the nursing. This experiment is one which will be watched with very great interest. We understand that two medical women—Miss M'Laren and Miss Pace—have been appointed teachers, and if the scheme turns out well and the girls are found to take practical interest in the work we can have no doubt that it will be largely copied in other centres.

LEPROSY IN NORWAY.

From official statistics recently published by Dr. Bentzen, it appears that the total number of lepers in Norway known to the authorities at the end of 1885 was 1,377, of whom 522 were in one or other of the different leper hospitals. At the end of 1890 the number of known lepers was 960 (of whom 484 were men and 476 women), of whom 507 were in the hospitals. In 1885 the lepers were scattered among 187 parishes, in 1890 among 161 parishes. It is only in the seven departments on the west coast from Stavanger to Nordland, and especially in that of Nordne-Bergenhus, that the disease, although diminished in frequency, is still relatively common. Of the 960 lepers known in 1890, 470 suffered from the tubercular form, 444 from the anæsthetic form, and 96 from the mixed form of the disease. Of 993 cases under treatment, 13 recovered; 317 (including 1 not suffering from leprosy) died; 154 were discharged, and 509 remained under treatment at the end of the year. The duration of the disease in 265 cases of death was 12.5 years: in 182 tubercular cases it was 10.4 years, and in 72 anæsthetic cases 17.7. The total number of known lepers during the 35 years 1856-1890 was 7,635. Of this number 186 recovered, 6,173 died, and 316 emigrated, leaving 960, as already said, at the end of the year 1890.

MIDWIFERY RETAINERS.

Another case is reported in which a medical practitioner has had to sue for fees due to him in respect of a midwifery case, for which his services had been retained, but in which they were not actually required, and the patient's husband consequently declined to pay. The sympathies of the county court judge (Judge Snagge) were evidently with the plaintiff, whom he considered to have been badly used: but he thought that the contract relied on was not proved, and consequently he gave judgment for the defendant, but ordered him to pay the costs. It is difficult, from a short newspaper report, to form an accurate idea of what facts were proved in this case; but, apparently, the plaintiff proved a definite engagement of his services by the defendant's wife, who, in such matters, is certainly her husband's agent, and there was no evidence to contradict it, for the wife was not called as a witness. If this was the effect of the evidence, his honour's decision on the facts was apparently wrong. The law is perfectly clear that where there is a definite contract to render services, whether medical or of any other kind does not matter, and one party to the contract holds himself in readiness to render those services, the other party is bound to pay the stipulated, or a reasonable, remuneration to him. The difficulty is in satisfying the court that the contract was made, and as to its precise terms. In all cases where the contract is made verbally, especially if no witnesses are present, the fact of its having been made at all, or the terms in which it was made, may be disputed. County court judges are but human, and are quite as liable as other people to make mistakes. Judge Snagge, in the recent case, thought rightly or wrongly that the agreement deposed to by the plaintiff was not sufficiently specific, and so declined to give it any legal effect. If all practitioners were to insist on having their midwifery retainers in writing, either, as is frequently the case, by letter, or else on a printed form signed by the person bespeaking their attendance, this loophole for losing fees would be closed. If medical men are content to depend on loose verbal statements often made by irresponsible persons they must expect occasionally to be disappointed in obtaining payment.

ENTERIC FEVER IN THE TEES VALLEY.

We have received a letter from Dr. John Mitchell, of Barnard Castle, in the course of which he expresses his dissent from Dr. Barry's view that the outbreak of typhoid fever in the Tees valley was due to waterborne infection. He contends that Dr. Barry's report is principally defective by dealing with one outbreak of fever, whereas the common report is that while typhoid is extremely rare, and some years totally absent from the upper parts of the valley, the towns of Middlesbrough, Stockton, and Darlington are never many months free from the disease. The bad sanitary conditions of the latter town, described by Dr. Barry himself and previous inspectors, plainly indicated that the disease was more than probably endemic. Dr. Mitchell suggests that a commissioner should be appointed to go through the statistics for several years and investigate the facts locally. Dr. Mitchell omits to state what in his opinion really becomes of the liquid sewage and solid excremental refuse of Barnard Castle, which Dr. Barry verbally, and the photographs—which Dr. Mitchell describes as "libellous"—pictorially represent as passing into the river Tees. So far as the evidence has come to our knowledge, all observers hitherto have agreed that there is serious pollution of the Tees at Barnard Castle, and that such pollution is objectionable from the point of view of those who consume water taken from the river lower down. Among other testimony to that effect we have not only that of Dr. Barry and the scientific experts called in by the water boards, but also that of Mr. Wilson. Dr. Mitchell himself clinches one part of the argument by insisting, very properly, that the drainage even of non-populous places into water supplies is by no means free from danger. But danger of what? How can Dr. Mitchell consistently plead the verdict of the Royal Commission as a reason for holding Barnard Castle guiltless of any share in the causation of the epidemics in the lower Tees valley without accepting their assumption of the innocuousness of distant excremental pollution? He has mistaken, not only the question at issue, but also the authorities who are in conflict, as well as the position of the British Medical Journal. No one, except himself, has suggested that gross pollution does not occur at Barnard Castle and at other riparian places along the Tees. No one has ventured to say that excremental pollution is not fraught with danger to water consumers. No one has denied that epidemics of enteric fever—a disease sometimes conveyed by water—occurred in districts largely supplied from the Tees. The question is simply whether the Tees water, admittedly polluted at several points up the river, of which Barnard Castle

is one, stood in a causal relation to the epidemics which admittedly occurred. Dr. Barry and Dr. Thorne Thorne say "Yes," the manager of one of the implicated water authorities says "No." The Royal Commission elect to regard these conflicting opinions as of equal weight, and the questions in dispute as beyond their power of investigation. In the article to which Dr. Mitchell takes exception we gave a summary of Dr. Barry's demonstration, and pointed out that it is in accordance with established and hitherto unquestioned processes of etiological reasoning. We gave also a summary of Mr. Wilson's criticisms and counter-hypothesis, and the obvious reasons for regarding them as scientifically indefensible.

MR. GLADSTONE'S HEALTH.

We are authorised to state that Mr. Gladstone, probably as the result of a chill caught in walking home from Brooks's Club on Tuesday, is suffering from hoarseness and bronchial catarrh. His temperature on Thursday morning was 99°; he was taking food well, and, although his cough was troublesome, he had slept well during the night. He was staying in bed, and it was extremely probable that his visit to Brighton would have to be postponed. In regard to his eyesight, we understand that there is a cataract in the eye which was injured some time ago, and that during his stay at Biarritz, probably in consequence of the bright sunlight, the visual defect forced itself a good deal upon his attention; it by no means, however, follows from this that the malady has lately made any special progress. It will be a satisfaction to his friends and to the medical profession in England to learn that we have good authority for stating that arrangements have been made for Mr. Gladstone to consult a leading London ophthalmic surgeon in regard to the condition of his eyes. We believe also that we are correct in saying that the proposal to visit Germany with the object of consulting a specialist there, about which there have been many rumours lately, has been given up.

OUTBREAK OF TYPHOID FEVER AT CATERHAM BARRACKS.

For about three weeks enteric fever has been prevalent at Caterham among the troops in the Guards' Recruiting Depôt and in the adjoining Lunatic Asylum. Fourteen or fifteen cases are already known to have occurred among the troops, and several other suspicious cases are being kept under observation. Some of the cases, both among the troops and in the asylum, have ended fatally. The general sanitation of Caterham is, we are informed, fairly good, though there has lately been some question of overhauling the drainage of the barracks. The origin of the present outbreak is attributed to the water supply. The water both for the barracks and the asylum is obtained from a well within the asylum grounds. The water is now under examination. In the meantime every precaution is taken to limit the spread of the disease among the troops, and in particular all water and milk are boiled before use. The outbreak already shows signs of subsiding. During the last ten days hardly any fresh cases have been admitted to hospital.

DR. GILBERT AND THE THEORY OF MAGNETISM.

At a recent meeting of the Manchester Medical Society, Mr. Henry Wilde, F.R.S., gave a demonstration of the uses of the corporation's supply of electricity for illustrating communications to the Manchester Literary and Philosophical Society. He prefaced the demonstration by a short address on the part which the medical profession has taken in the advancement of natural knowledge, and observed that there was scarcely any department of science which they had not enriched. To Galvani, the illustrious physician of Bologna, the world, he observed, is indebted for the first manifestation of electric currents, and Dr. Gilbert, who was President of the Royal College of Physicians, is justly considered the father of magnetic philosophy. His ever memorable *De Magnete*, published in the year 1600, is a work which contains almost all the information concerning magnetism which was known for nearly a century afterwards. It relates chiefly to the natural loadstone and to artificial steel magnets which have acquired similar properties. He regarded the terrestrial globe as a great magnet, the directive power of the compass needle being produced by the action of magnetism of a contrary kind to that which exists at the extremity of the needle directed towards the pole of the globe. He gave the name of "pole" to the extremities of the needle which pointed towards the poles of the earth, conformably to his views of terrestrial magnetism. Gilbert's book created a powerful impression at the time, and is still considered one of the finest examples of experimental and inductive philosophy that has ever been presented to the world. The work contains a great number and variety of experiments instituted by himself with considerable labour and expense. Gilbert's experiments showed very clearly the action of the earth in giving a polar direction to the magnetic needle, and also the cause of the dip and its variation in different latitudes. He was mistaken in attributing the variation to the inequalities of the earth's surface, for the secular change of the variation was not known in his day; but, while the primary cause of the variation is independent of the earth's inequalities, Mr. Wilde's own researches had shown that it is largely influenced by them. Gilbert's loadstone, "terrela," was the prototype of Mr. Wilde's magnetarium, in which were embodied many discoveries in magnetism and electricity of the last two hundred years. As Gilbert's magnetical work was built on the sure ground of observation and experiment, he did not conceal his contempt for those pretenders to philosophy who preceded him in attempting the problems of terrestrial magnetism by *a priori* methods. He is particularly severe on one Luca Gauricus, an Italian astrologer and mathematician of some reputation, for holding that the directive force of the magnetic needle is caused by a loadstone beneath the tail of Ursa Major; Luca also says that the loadstone belongs to the sign Virgo, and with a vein of mathematical erudition covers many similar absurdities. Gilbert was one of the earliest Copernicans as to the rotation of the earth, in striking contrast to Bacon, who not only strongly opposed Gilbert's magnetic philosophy in the *Advancement of Learning*, but therein declared that the extravagant idea of the diurnal rotation of the earth can be demonstrated to be most false.

THE DOWNING PROFESSORSHIP AT CAMBRIDGE.

Dr. J. Buckley Bradbury, Linacre Lecturer of Physic at St. John's College, Cambridge, was on March 3rd elected to the Downing Professorship of Medicine, vacant by Dr. Latham's resignation. Professor Bradbury was a scholar of Downing College, and took a first class in the Natural Sciences Tripos in 1864. He studied medicine at Cambridge and at King's College, London, and took his degree of M.D. in 1870. He was Medical Lecturer in Downing College for ten years, and in Gonville and Caius College from 1875 to 1880. For twenty-five years he has held the position of Physician to Addenbrooke's Hospital, and for twenty-one years that of Linacre Lecturer, in which he succeeded the late Sir G. E. Paget. At various times he has been Examiner for the Natural Sciences Tripos, and for the several M.B. and M.D. examinations. During the memorable visit of the British Medical Association to Cambridge in 1880 Dr. Bradbury delivered in the Senate House the Address in Medicine. He has been Secretary of the Cambridge and Huntingdon Branch, and President of the Cambridge Medical Society. He has contributed many papers on therapeutics and clinical medicine to this Journal. In accordance with the traditions of the chair, Professor Bradbury

will devote himself chiefly to therapeutics in both its scientific and its practical aspects, and we understand that he proposes to make arrangements for the prosecution of pharmacological research in the laboratory of Downing College. His position in Addenbrooke's Hospital will enable him to illustrate by clinical teaching and observation his systematic lectures, and to apply to the actual treatment of disease the pharmacological knowledge acquired in the laboratory. The University has done well to recognise by this election the importance of associating medical practice with scientific investigation.

THE CROONIAN LECTURE.

THE MINUTE STRUCTURE OF THE NERVOUS CENTRES.

New Histological Methods.—Minute Anatomy of the Cerebral Nerve Cells.—The Path of Nerve Currents in the Brain.—Cerebral Gymnastics.—The Anatomical Basis of Mind.—The Anatomical Changes Produced by Education.

The Croonian Lecture before the Royal Society was delivered by Professor Ramón y Cajal, of Madrid, on March 8th.

Professor Ramón y Cajal, who spoke in French, took for his subject the minute structure of the nervous centres. After sketching the methods employed by the earlier investigators, he enlarged upon the important advance achieved by Golgi by means of the method of staining which he published in 1880. He then proceeded to describe the main results of his own investigations during the last five years into the structures of nearly all the nervous centres, which, he said, had led him (1) to conclude that there was an interstitial nervous network; (2) to make a distinction between sensory and motor cells; and (3) to hold that the protoplasmic prolongations were nutritive. He observed, however, that the protoplasmic prolongations as well as the substance of the nervous cells themselves may serve as conductors of nervous currents.

He then proceeded to a minute discussion of various histological appearances, and described at length the connections of the olfactory nervous fibres, and those of the visual fibres and of the retinal cells, and drew the conclusion that not only do the protoplasmic expansions act as conductors, but also that the nervous current is inward towards the cell in these expansions, and outwards from the cell in the axis-cylinder. "In other words, the nerve cell has in the dendritic expansion and the cell body an apparatus for the reception of currents, an apparatus for transmission in the prolongation of the axis cylinder, and an apparatus for repartition or distribution in the terminal nervous ramifications." He thought also that it was legitimate to conclude that there was an increasing diffusion of currents as the more central organs were reached.

He next proceeded to describe anatomical observations bearing on the course followed by the nervous currents, discussing at considerable length the observations recently made as to the paths between the higher centres. In bringing his lecture to a conclusion, he ventured on a hypothesis which he thought would enable us better than any other which had been put forward to understand intellectual development produced by a well-directed mental education, inherited mental excellencies, special professional adaptations, and the formation of artistic aptitude.

"Cerebral gymnastics" could not, he said, improve the organisation of the brain by increasing the number of cells, for, as had been fully established, the nerve elements lost their power of proliferating after the embryonic period. But it may be admitted to be very probable that mental exercise stimulates in those regions of the brain which are most exercised a greater development of the protoplasmic apparatus and of the system of collateral nervous paths. In this way associations already in existence between certain groups of cells would be notably reinforced by means of the multiplication of the minute terminal branches of the protoplasmic expansions and of the collateral nervous paths. Further, absolutely new intercellular connections might be established by the formation of new collateral connections and protoplasmic expansions.

"An objection will immediately present itself to your mind: 'How can the volume of the brain,' you will say, 'be maintained unaltered if there is a multiplication and even a new formation of the terminal branches of the protoplasmic appendices and of the collateral nervous connection?' In answer to this objection it may be said that there is nothing to prevent our supposing either a correlative diminution of the cell bodies or a proportional shrinking of those parts of the brain whose functions are not directly related to the exercise of the intelligence. We may thus explain family talent by supposing an hereditary transmission to the immediate or, by atavism, to the more distant descendants of this superior organisation of the connections of the pyramidal cells.

"Many other deductions are permissible. Thus in the case of those men, of whom an example is furnished by Gambetta, in whom talent is coincident with a brain of small size, the nerve cells would be less numerous, or perhaps simply smaller, but, on the other hand, they would present a very complicated system of protoplasmico-nervous associations. On the other hand, the excessively large brain so often associated with inferior intelligence, or even with imbecility, would contain a greater number of cells, but the connections between them would be very imperfect. This is, perhaps, the case in the large brains of the whale and of the elephant.

"This anatomico-physiological hypothesis is not original in principle, for physiologists and psychologists have already looked for the anatomical characteristic of intellect in the richness of the cellular association, but it possesses this new point that it is based upon actual facts of structure, and not upon pure suppositions with regard to the actions and the associations of the nerve cells.

"Compared with the theory of networks, that of the free branching of cellular expansions capable of growth appears not only more probable, but also more encouraging. A continuous network, pre-established—a sort of fixed telegraphic grillwork into which it would not be possible to introduce either new stations or new lines—it is a thing so rigid, so immutable, so unmodifiable that it does violence to the feeling which we all have that the organ of thought is, within certain limits, plastic, and susceptible of being improved, especially during the period of its development, by well directed 'mental gymnastics.' If I did not fear to abuse the method of comparisons, I might support my conception by saying that the cerebral cortex is like a garden full of innumerable trees, the pyramidal cells, which in response to intelligent cultivation can increase the number of their branches, strike their roots over a wider area, and produce ever more varied and more exquisite flowers and fruits.

"For the rest, I am far from believing that the hypothesis which I have just sketched out, taken alone, can explain the great quantitative and qualitative differences which cerebral action presents among different animals and in the same animal species. The morphology of the pyramidal cell is but one of the anatomical conditions of thought. Now, this special morphology will never suffice to explain to us the enormous differences which exist from the functional point of view between the pyramidal cell of a rabbit and that of a man, any more than between the pyramidal cell of the cerebral cortex and the stellate cells of the cord or the great sympathetic. Also, in my opinion, it is very probable that besides the complexity of their relations, the pyramidal cells possess an intraprotoplasmic structure which is peculiar to them, and which in intellects of the higher order is still more elaborate, a structure which does not exist in the corpuscles of the cord or of the ganglion."

French Society of Otology and Laryngology.—The French Society of Otology and Laryngology will hold its annual meeting in Paris on April 30th. The questions proposed for discussion are: 1, Treatment of Mastoid Suppurations (to be introduced by MM. Lubet-Barbon and A. Martin, of Paris); 2, Treatment of Mucous Polypi of the Nose (to be introduced by MM. Délie, of Ypres, and Wagnier, of Lille.

THE VACCINATION COMMISSION'S FOURTH REPORT.

[SECOND NOTICE.]

THE evidence of Mr. J. T. Biggs, of Leicester, occupies a considerable part of the fourth report of the Commission. He enters at very great length into matters of detail as to the prevalence and practice of vaccination at various periods in Leicester, his general object being to show the trustworthiness, as to matters of fact, of a series of tables and diagrams prepared with the view of showing the relationship between vaccination and various birth-rates, marriage-rates and death-rates in Leicester during the same period. The lamented death of Dr. Tomkins, Medical Officer of Health for Leicester, deprived the Commission of the benefit of local evidence in reply to Mr. Biggs. Dr. Tomkins knew all about Leicester and its facts and methods, and yet remained to the end a strong and ardent supporter of vaccination, and indeed endeavoured, not very long before his death, to teach the people of Leicester, by means of a parallel, by showing how in Montreal vaccination had been recklessly neglected, and how after years of small-pox absence the town was smitten by the pestilence in a manner reminiscent of last century experiences. In the absence of such evidence as Dr. Tomkins could have given, it is surprising to note how many flaws the Commission were able to discover in Mr. Biggs's figures, by the simple method of cross-examining the witness on statements of fact, and of sending him back to Leicester to verify, or try to verify, his own statistical tables. As a result, we have throughout his diagrams a large correction indicated for admitted error.

Mr. Biggs's evidence was given previous to the recent prevalence of small-pox in Leicester, and we hardly think, had he been aware even of the comparatively gentle test to which the Leicester method was to be subjected, he would have ventured to make some of the statements recorded in the minutes. Readers of the BRITISH MEDICAL JOURNAL are aware of the anxious alarm which has prevailed in Leicester since small-pox began to threaten it. They have read of the extraordinary breakdown of its hospital accommodation, and especially of the frantic *sauve qui peut* order which, in the presence of small-pox, was issued to the occupants of the scarlet fever wards, with the resulting widespread extension of that disease throughout the community, all as part of the penalty payable for the local antivaccination fad. They have read, also, of the 300 or more cases of small-pox that did occur, and how, even with so comparatively few cases to manage, the quarantine accommodation proved utterly insufficient and enormously expensive, so that exposed persons had to be put under observation, not at a station provided for the purpose, but at their own homes. They have read, also, of the rush and scramble for the much-despised Jennerian prophylactic on the part of the panic-stricken parents of unvaccinated children, and of the persistent reappearance of small-pox in the district around the hospital, and of the unsuccessful efforts on the part of the Leicester Council to find some locality outside of the town willing to become the *corpus vile* on which to test the truth of current opinions regarding the influence of small-pox hospitals; and of how even the proposal to treat small-pox on the same farm with the town sewage broke down, owing to difficulties raised by the owner of the ground.

In presence of all these facts, the reader of Mr. Biggs's evidence will be amused to find that the Leicester system is to be considered perfect. Indeed, it has been perfect for the past dozen years or so, for Diagram C and Table 8 are adduced to show, *inter alia*, that "Vaccination being practically abandoned, and the 'Leicester method' of sanitation, isolation, quarantine, disinfection, etc., being meanwhile perfected, small-pox mortality entirely disappears after 1883....."

Similarly, Diagram E is designed to illustrate "The general abandonment of vaccination by the Leicester people, when small-pox mortality rapidly disappears." This is a fresh illustration of an old antivaccination sophism. Many years ago a Mr. Gibbs prepared a table relating to France, to show that where there was little vaccination there was little small-pox, where there was more vaccination there was more small-pox, and where there was most vaccination there was most small-pox. Two or three years ago, before the present Commission, so reputable a witness as Dr. Alfred Russell Wallace was put up to show the same thing again with regard to France. The pitiable breakdown which he made under cross-examination must have given pain even to those whose duty it was to sift out the truth, and so expose the blunders and the fallacies to which a distinguished man may commit himself when he allows himself to become the mouthpiece of a league of cranks.

The meaning of the figures and curves is the same, as to France and as to Leicester. Wherever there is no genuine legislative compulsion to get vaccinated, the compelling agency will be the presence of small-pox. "When the cat's away the mice do play." When small-pox is absent, vaccination is neglected. Hence in epidemic years there is a rush for vaccination, and the amount of vaccination gives a rough indication of the amount of the existing danger. In Leicester, vaccination is practically optional, so that, reversing Mr. Biggs's sentence, we may say, "When small-pox mortality rapidly disappears," there is "general abandonment of vaccination by the Leicester people." Lately there have been, as above mentioned, over 300 cases of small-pox, and therefore there has been a good deal of vaccination, so that, ten years after this, an antivaccinator may be able to tell a short-memoried public how in 1893 there was a considerable increase in vaccination, and a corresponding increase in small-pox.

It is noteworthy that, fallacious as are the statements accompanying Mr. Biggs's diagrams, he is quite aware of how the matter stands, and has no difficulty in explaining that, "owing to the small-pox epidemic which prevailed, there were 4,320 additional public vaccinations in 1863-64."

All through his evidence the witness is bound hand and foot by the ever youthful *post hoc propter hoc* fallacy, or at least he appears to desire that those who read his evidence and look at his diagrams should be so bound.

Diagram K shows, he says, "that the lowest death-rate per 1,000 living coincides with the general abandonment of vaccination." But Diagram J shows, similarly, that in 1871-72 the marriage-rate reached 23 and 24 per 1,000; while since the "practical abandonment of vaccination" it has fallen to 15 and 16; and, if he were so minded, it would now be open for him to argue that the great increase in small-pox and scarlet fever in 1893 followed, or resulted from, forty years' steady and continuous increase in "sanitary orders," representing, in his mind, sanitary work done and improvements accomplished. If Mr. Biggs is in want of a family crest, may we suggest to him that Tenterden steeple would make a neat and effective design?

Even his own figures, if he would only read them aright, might give him some inkling of the truth about vaccination. From Table 45 we learn that in Leicester, in 1838-42, 5 of every 6 small-pox deaths were under 5 years old, while in 1868-72 only 1 death in 3 was under that age, or, taking the relative percentage of the per million rates, 85.14 in the earlier period and 46.50 in the later. Similarly, in the earlier period, only 6 per cent. of the cases were over 15 years old, while in 1868-72, in presence of general primary vaccination, 43 per cent. exceeded that age. From Table 48 it appears that, in 1849-52, small-pox, though much less prevalent than in 1868-72, contributed 3.16 per cent. of all deaths under 5 years of age, while, in the later period, embracing the great epidemic, it contributed only 1.7 per cent. The attempt to explain away this by a comparison of fevers under 5 years (Table 47) is very weak, looking to known changes in nomenclature and classification, and even here the contribution of the age period 0-15 years to the small-pox deaths at all ages falls from 92.8 per cent. to 57 per cent. as between the earlier and the later period, while fevers remain practically stationary at 49.38 and 49.31 per cent. And if Mr. Biggs studies Dr. Barry's Sheffield report he will find similar results recorded there. It is indeed a pity to see so much time and trouble wasted by Mr. Biggs in the hopeless task of establishing a case against vaccination.

A NEW hospital has been opened by Lord Belper at Ilkeston. The locality abounds in collieries, ironworks, and factories.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Annual Meeting.

The annual meeting of the Royal Medical and Chirurgical Society was held on March 1st; Dr. W. S. Church, Vice-President, in the chair.

Report of Council.

The senior Honorary Secretary (Mr. R. J. Godlee) read the report of the Council. After a reference to the loss the Society had suffered by the death of its late President, Sir Andrew Clark, it was stated that the financial position of the Society had been under the very serious consideration of the Council, and a committee was appointed to investigate the subject. Various suggestions were made for the increase of the Society's income. None of these were adopted, but certain measures of economy were carried out. The most important of these were (1) an alteration in the method of issuing the *Proceedings*; and (2) the abandonment of the plan of producing the electric current on the premises. Dr. Frederick Taylor had been elected a trustee in the room of Sir Andrew Clark. Arrangements had been made with Messrs. Macmillan for the publication of the report of the Committee on the Medical Climatology and Balneology of the United Kingdom. The part dealing with the climatology of the South Coast was being pressed for publication and was now practically complete, and the portion dealing with balneology would be completed shortly. The Committee on Suspended Animation had held several meetings and performed experiments on the dead body, but were not yet in a position to make any report. The report of the Honorary Librarians referred with regret to the loss the Society had suffered by the death of Mr. Richard Coldrey, who had been in its service for forty-five years. Mr. Archibald Clarke had been appointed Sub-librarian in the place of Mr. Coldrey, and Mr. H. H. Swinny had been appointed Accountant, thus relieving the Resident Librarian from non-scientific work. The sum of £200 had been expended on additions to the library.

Treasurer's Report.

The Treasurer's report stated that the total receipts for 1893 from its normal sources of income had been £4,052 14s. 1d., and its payment on current accounts £3,883 9s. 3d. Several rather considerable items connected with the structural alterations of the premises had been paid off, and the net result was an excess of income over expenditure of £59 19s. 7d. for 1893. The subscriptions during 1893 had amounted to £1,367 2s. The roll of the Society now contained 500 resident, 269 non-resident, and 19 honorary Fellows, or a total of 788.

On the motion of the Chairman, the report of the Council, together with the treasurer's and auditors' statement of accounts, was adopted, and ordered to be printed in the next number of the *Transactions*.

The late Sir Andrew Clark.

The following interesting extract from a letter addressed by Mrs. Gladstone to Mr. J. Y. W. MacAlister, the Librarian, was read:

> The first time I had the privilege of meeting Sir Andrew Clark was in the London Hospital during the outbreak of cholera in 1866. I was at that time a visitor in the wards, and circumstances thus led to my seeing a great deal of Dr. Clark, whom, as senior physician of the hospital, I constantly met. More and more I was struck during that time of grave anxiety by his ability, his zeal, his tender ministrations among the sick. The Convalescent Home at Woodford was the outcome of that cholera epidemic, there being thirty years ago a crying need for such an institution. I was deeply indebted to Dr. Clark for his invaluable aid in setting on foot the Woodford Home. He devoted much of his time and thought to it, and drew up the rules by which ever since it has been managed. I cannot better express the effect he produced on my mind than by saying I became convinced that my husband's health would be safe in his hands. Our son Herbert, then in his early youth, was, however, the first member of the family who came under his care, and we feel that, humanly speaking, his present excellent health is largely due to Sir Andrew's advice. From this beginning arose a long and most valuable friendship. Not only was his professional devotion untiring; he was also a man whose strong religious character made him a rock to lean upon in all times of anxiety and strain. When I first introduced Dr. Clark to my husband as the physician I wished him to consult, my words were simply: "You would be safe in the hands of that great Dr. Clark."

Votes of Thanks.

After the Chairman had delivered the annual address, Sir Edward Sieveking moved "That the best thanks of the Society be given to the Senior Vice-President for his valuable and important services, and for the address." This was seconded by Dr. Kenneth MacLeod, and carried by acclamation. In returning thanks, Dr. Church expressed his great obligations to the Honorary Secretaries, and especially to the Resident Librarian, Mr. MacAlister, for the assistance they had given him. A vote of thanks was then passed to the retiring Vice-Presidents, Dr. Church and Mr. Power, for their services to the Society during their term of office. Dr. Vivian Poore moved: "That the most cordial thanks of the Society be given to the retiring Senior Treasurer, Dr. Hare, for his most important and valuable services to the Society during a most critical period in the history of the Society." This was seconded by Mr. F. Durham, and carried by acclamation. Dr. Hare made a suitable reply, in which he congratulated the Society on the choice of a successor in the person of Dr. Church. A vote of thanks was also passed to the retiring members of Council—Dr. Duffin, Dr. Pye-Smith, Dr. Eastes, Dr. Whipham, Mr. Davies-Colley, and Mr. Pearce Gould.

Election of Officers and Council.

The result of the ballot for new officers and Council was announced as published in the British Medical Journal of February 24th.

THE REGISTERS FOR 1894.

The "Medical Register" and the "Medical Students' Register."

The *Medical Register* has been issued this year much earlier than usual, and we may congratulate the Registrar, Mr. W. J. C. Miller, on having accomplished the task of revision with so much speed and accuracy. The new *Register* contains 1,054 more names than the last. The actual number of new names is 1,579, and of this number 770 were registered in England, 638 in Scotland, and 171 in Ireland. The loss by death was 546, as compared with 558 in the previous year. The growth of the profession as evidenced by the increase in the bulk of the *Register* is portentous. The increase has been nearly 50 per cent. since 1876. In that year there were 22,200 registered practitioners; the *Register* for this year contains 31,644 persons, an increase of 9,444 in eighteen years. A marked and comparatively novel feature in the *Register* is the number of licensing bodies in the Colonies and India which have been recognised by the General Medical Council as granting qualifications entitling to registration in the Colonial List. The bodies thus newly recognised are the Universities of Adelaide, Calcutta, Madras, and the Punjab, and the Ceylon Medical Congress.

The *Medical Students' Register* has also made its appearance earlier than usual, and in an improved form. It contains some interesting statistics bearing on the future growth of the profession. It is pointed out that the number of entries of students fell by 734 in 1892 as compared with 1891, owing probably to some extent to the influence of the imposition of the five years' curriculum. A contrary tendency appears now to be at work, for the number of students registered in 1893 was 1,747, or 76 more than in 1892. A table is given showing the number of students registered from 1863, and it appears that 49.54 per cent. of such registrations were made in England, 30.35 in Scotland, and 20.11 in Ireland. These percentages may be contrasted with the percentages of registered qualifications, which are—England 48.8, Scotland 40.5, Ireland 10.8. We shall not attempt to draw any conclusions from these percentages, which are certainly not a little puzzling as they stand. We may pass on to note that the number of students registered after having passed preliminary examinations conducted by licensing authorities other than universities has fallen from 176 in 1892 to 131 in 1893. This appears to show that the desire of the General Medical Council that examinations in preliminary education should be left to the general educational bodies rather than conducted by the medical corporations is gradually coming nearer to realisation.

During 1893 Father Kneipp had 10,899 patients under treatment, a fact which seems to show that a good many people still agree with Pindar that "water is the best."

ARE MINISTERS OF RELIGION RIGHTLY ENTITLED TO THE GRATUITOUS SERVICES OF THE MEDICAL PROFESSION?

The following reasons are submitted why indiscriminate gratuitous attendance on ministers of religion and their families, which for a long period more or less prevailed in this country, should no longer obtain:

1. In the true interest of the minister.
2. In the true interest of the practitioner.

1. Such a practice is inexpedient on the part of the minister, inasmuch as he cannot well, under the circumstances, have a free choice of practitioners and *de facto* make an independent selection of his medical attendant, nor readily effect a change should he become dissatisfied therewith, neither can he morally insist on such attendance as he may wish or deem necessary. If, for instance, he sends for the one of his choice—a popular doctor mayhap—at an opportune time and more or less disengaged, he would no doubt receive prompt and courteous attention. Should he, on the other hand, happen to send when the practitioner is tired and weary, or the weather cold and inclement, or during the night, it may be that the doctor, on finding who it is that wants him, would elect to remain at home; whereas, if it were not for the irrational custom in question of according gratuitous attendance his professional services would have been willingly rendered.

Again, inasmuch as the minister would, where the unwise practice still partially lingers, have to regard the attendance of the doctor simply as an act of benevolent professional courtesy, he in return for such would, as a matter of course, have to select as his medical adviser a member of his own church rather than, possibly, a more able practitioner of another denomination. Moreover, since he is not to attach a monetary value to the doctor's services, but merely to incur a moral obligation, if he be a man of feeling and delicacy he would be restrained from saying to him: "Doctor, just call at my house this morning, will you?" but it will be: "If not too busy, will you please to call at my house some time to-day?"

Further, when a medical man's services are needed they are generally wanted with as little delay as may be, and if you deprive the patient of the moral right of enjoining prompt attention you may almost as well inhibit him sending for one. A minister, moreover, by accepting (even as an assumed prescriptive right) the gratuitous services of a medical practitioner places himself in the anomalous position of—so to speak—a clerical mendicant, and must act accordingly; in fact, he appears before the public as a beneficiary, and thereby not unnaturally incurs to a greater or less extent a loss of the respect due to him from the community.

Again, in the true interests of religion the minister's stipend should at least be adequate to defray the ordinary and needful expenses of living and to compensate others for essential services, for if the stipend be very limited and insufficient for his bare subsistence it would necessitate him seeking as suppeditary to his ministerial functions a congenial vocation by which he could add to his pecuniary resources, but at a sacrifice of time that should be devoted to the sacred duties of his mission. Under the assumed prescriptive usage in question, moreover, if a minister or his family lost confidence in the attendant doctor it would be found not a little embarrassing to call upon him to discontinue his attendance and supersede him by another; whereas if it were based on a *quid pro quo*, or, in other words, pecuniary remuneration, the desired change could be more readily effected.

2. The alleged prescriptive custom, moreover, is morally objectionable from its effect on the practitioner. Although no medical man should practise his profession merely for its money value, still but very few could afford to pursue it without remuneration. Even admitting that the exceptional idea of gratuitous attendance did not originate in the natural desire to secure the moral and social influence of the clergy—in other words, a reciprocity of benefits received—nevertheless, such is the practical working of the custom, and, constituting, as it does, a pernicious and deceptive system of practice, is derogatory to the profession. The attendance of a medical practitioner in a case of illness should be based either on a purely charitable or the ordinary remunerative principle, with a like deep interest under either circumstance in the successful treatment thereof.

In concluding these remarks it seems pertinent to ask, Why should hard-worked and ill-paid medical men, any more than other business men, be expected to render payless, yet often priceless, services, or otherwise specially contribute to the essential personal needs of ministers of religion and their families? Be the answer what it may, it is difficult to see the justice or reasonableness of such a custom, and the members of the faculty would act wisely in simply carrying out the principle laid down in the suggested rule, which, after being submitted to and approved by divers eminent representative practitioners (including the late Sir Thomas Watson, the clergy's friend), was published in the British Medical Journal several years ago to the following effect:

> That, in respect to charges for professional attendance on the clergy, beneficed or unbeneficed, there is no special general rule other than the simple "unwritten" one (a time-honoured and "true Samaritan" principle, alike applicable to other classes), by which the faculty have long been self-guided, namely, although fully and justly entitled to a commensurate remuneration for professional services accordant with the patient's position in life, to, nevertheless, make a greater or less reduction according to the circumstances of the individual case to such as may fairly be classed among the "poor clergy" (beneficed or unbeneficed), specially so called, in contradistinction to the well-endowed and independent clergy, which latter should be charged as ordinary and not exceptional patients; by a conscientious fulfilment of which advisory rule the medical faculty will, as a profession, have discharged their moral obligations to the ministers of religion.

PORT CHOLERA EXPENSES.

Dr. Armstrong, in his annual report for the past year to the River Tyne Port Sanitary Authority, discusses the opinions formulated by Mr. Ernest Hart in the British Medical Journal of January 13th on the subject of State Aid in Relation to Port Cholera Expenses.[1]

We understand Dr. Armstrong to contend that opinion should be based on the requirements of ports in the face of cholera, and not on the outlay actually made. He goes so far as to assert that port authorities have withheld that which was needful to place their districts in a state of preparedness to resist cholera because Imperial aid had been denied them. We presume this must be so since Dr. Armstrong speaks of it as having "actually" being the ground for inaction "in some districts," but we may be pardoned for expressing our astonishment at such a suicidal policy on the part of a port with any regard for its commercial interests. Surely it cannot be seriously put forward that, putting aside for a moment the grave matter of cholera importation, the local outlay of a few thousands is to be placed on a par with the unknown, and it may be vast, general loss to maritime trade such as would ensue upon a declaration of the port by foreign Powers as "dangerous" or "infected" because of the advent of cholera cases owing to absence of means of defence such as the local outlay would have provided? If it be that in the past cholera year some ports have refrained from action of a defensive character for the reason given by Dr. Armstrong, we can only wonder at the short-sightedness of the policy which has admitted of such false economy. Again, if the aim of such inaction is to force the hands of the Government, can it be supposed that the best way of showing the necessity for State aid is to have exhibited a do-nothing policy? Rather we would expect Imperial sympathy to be invoked by the burden of actual expenditure of a necessary character. We cannot imagine that the way to express a want is to have done without it. There is such a thing as action under protest.

With reference to Dr. Armstrong's views on the exemption of hospital accommodation, ambulance provision, and disinfecting apparatus from any participation in State aid, we would remind Dr. Armstrong of the fact that Mr. Ernest Hart places these together as being in the nature of requisites at all times, and that for this reason he puts them on quite a different footing to objects like steam launches, extra inspec-

[1] The article has been republished in the second volume of *Essays on State Medicine*, to be obtained at the office of the British Medical Association, price 1s.

torial staff, disinfection, etc. We cannot admit Dr. Armstrong's contention as to the relative smallness of port hospitals required for current infectious diseases as opposed to cholera hospitals. It seems to be quite as likely for multiple cases of home diseases to be shipborne as for cholera patients to be found numerously in any vessel. After the experience of 1892 in the matter of Hamburg boats, this seems the more certain. In any case, a port district will always be wise to provide hospital accommodation in excess of its probable minimum requirements. And be it remembered that on the situation of a port hospital depends much of its usefulness.

Touching Mr. Ernest Hart's suggestion for a county general cholera fund to meet all cholera (abnormal) outlay, Dr. Armstrong regards the proposal as "in principle no whit different" from State aid. Surely there is an essential difference. If Northumberland does the work of cholera prevention remarkably well, should that county be called upon to pay towards the measures of combating the extension of cholera in (say) Lincolnshire, where laxity of administration has enabled the disease to gain a footing? If each county be entrusted with its own defences, we may hope to have localities with a backbone rather than numerous invertebrate sections of the country depending upon the national purse to do for A what B has already done as a matter of true local economy. Is not county administration daily and properly making vast strides; and are not financial matters coming more and more to be looked upon as proper for local (county) control?

Lastly, referring once again to Dr. Armstrong's evident anxiety that State aid should be forthcoming in respect of cholera expenses on our coasts, we would draw attention to the fact that he lays stress upon the requirements of seaboard districts, not so much on their present condition of preparedness. Let us meet him on his own ground. Cholera, it is feared, will this year make its reappearance in England. In what way? As a shipborne disease? It may be; but chiefly? We think not. From what has happened in 1893, the probability is that the cholera already sown in our midst will spring to life with the advent of warm weather. If so, how then about the requirements of our ports? Of course they will remain what they are to-day. But will they amount in importance to the extreme vigilance, care, and expense requisite to guard our inland districts from cholera extension? Our waterways, our water supplies, and a hundred and one matters of sanitary import will need unremitting attention. Let those counties which in the past have been at pains and expense to place their constituent areas in a state of sanitary efficiency be exempt from the burden of their inactive neighbours.

THE INTERNATIONAL MEDICAL CONGRESS.

The Secretary to the English Committee (Mr. G. H. Makins, F.R.C.S., 47, Charles Street, Berkeley Square, London, W.) asks us to state that the tickets issued by him in the first instance in response to applications for admission as member (or guest) of the International Medical Congress, which commences in Rome on March 29th, are "travelling vouchers" only. Notice is then given to the Italian authorities, and the "provisional cards" (white for members, red for guests) referred to in the circular (printed blue) are sent from Rome.

He has made application to Rome for a supply of the "provisional cards," and if this request is complied with it will be possible to save time in the future.

We are further requested to state that the Secretary to the English Committee particularly requests that all intending applicants for tickets would write to him as soon as possible in order to avoid difficulties which may arise from issuing a large number of tickets hurriedly at the last moment.

Information has been received that the Sleeping Car Company (46, Rue Mathurins. Paris) has now accorded the same proportional reduction (50 per cent.) as that already made by the railway company.

Nearly all the universities and colleges of the United Kingdom and most of the principal medical societies have appointed delegates to represent them at the Congress. Among the most recent nominations are those of Professor W. C. Arnison and Dr. James Murphy to represent the Faculty of Medicine of the University of Durham; and of Dr. W. F. Pavy, to represent the Pathological Society of London.

Messrs. Cook and Son (Ludgate Circus, E.C.), announce the following return fares to members of the Congress and guests who produce the official letter of invitation:—

	First Class.	Second Cls.
Vid Dover and Calais:	£ s. d.	£ s. d.
London to Rome and back, *vid* Modane (Mont Cenis) both ways	10 8 3	7 6 6
London to Rome and back, *vid* Vintimille (Riviera) both ways	11 14 6	8 4 0
London to Rome, out *vid* Modane, home *vid* Vintimille, or *vice versâ*	11 1 6	7 15 3
Vid Newhaven and Dieppe:		
London to Rome and back, *vid* Modane both ways...	8 17 7	6 6 2
London to Rome and back, *vid* Vintimille both ways	10 6 8	7 3 6
London to Rome, out *vid* Modane, home *vid* Vintimille, or *vice versâ*	9 13 8	6 14 10

These fares appear to be slightly lower than those previously announced.

Historical Medical Exhibition.

During the sitting of the Congress a historical medical exhibition will be held of objects connected with the medicine and surgery of past times. The Committee has issued an appeal to the directors of national museums and to owners of private collections for their co-operation in the matter. Instruments, coins, medals, statues, inscriptions, etc., whether originals or reproductions, will be gratefully received. Great care will be taken of any objects entrusted to the Committee for exhibition. A certificate of honour will be given to all exhibitors, and medals will be awarded to collections of special interest. Communications on the subject should be addressed to Dr. Sambon, Exposition de Médecine, Rome.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A meeting of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 11th day of April next, at 2 o'clock in the afternoon.

Francis Fowke, *General Secretary.*

March 8th, 1894.

NOTICE OF QUARTERLY MEETINGS FOR 1894.

ELECTION OF MEMBERS.

Meetings of the Council will be held on April 11th, July 11th, and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, March 22nd, June 21st, and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. Francis Fowke, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

Metropolitan Counties Branch: East London and South Essex District.—The next meeting will be held, by kind invitation of Dr. Adams, at Brooke House, Upper Clapton, on Thursday, March 15th, at 8.30 P.M. The chair will be taken by Dr. Aveling, Vice-President of the District. Dr. Beevor will give a demonstration of cases of Nerve Disease. Visitors will be cordially welcomed.—H. E. Powell, Honorary Secretary, Glenarm House, Upper Clapton.

METROPOLITAN COUNTIES BRANCH: HERTFORDSHIRE DISTRICT.—The next meeting of this District will be held at the Red Lion Hotel, Hatfield, on Wednesday, March 14th, at 5.30 P.M. Mr. Henry Power, F.R.C.S., President of the Branch, will occupy the chair. Business: Clinical Cases. Mr. H. H. Clutton, F.R.C.S., Surgeon to St. Thomas's Hospital: Diseases of Bladder and Urethra and their treatment. Election of members. Supper will be provided at about 8s. Members wishing to be present are requested to communicate with A. MACLEAN, Assistant Secretary, Harpenden Hall, Herts.

WEST SOMERSET BRANCH.—The spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Friday, March 30th, at 5 o'clock; dinner at 5.30. The subject for discussion is Common Diseases of the Eye as met with in General Practice. Mr. Cosens will open the discussion. Any member having any communication to bring forward should send me notice of its title, and also kindly inform me if it is his intention to be at the dinner.—W. M. KELLY, M.D., Honorary Secretary, Taunton.

STIRLING, KINROSS, AND CLACKMANNAN BRANCH.—The spring meeting of this Branch will be held in the Crown Hotel, Falkirk, on Friday, March 16th, at 4.15 P.M., Dr. Currie, President of the Branch, in the chair. Professor Gairdner, of Glasgow, will give an address entitled Reminiscences of Medical Practice. Dinner will be served in the hotel immediately after the meeting, and those intending to stay for it should give notice to the Honorary Secretary on or before March 14th. All members of the British Medical Association in the counties are cordially invited to attend.—C. J. LEWIS, Honorary Secretary, Stirling.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT.

A WELL-ATTENDED meeting of this District was held on February 28th at the St. Pancras Infirmary, Highgate, under the presidency of Dr. CLEVELAND. The members and others who attended were hospitably entertained by Dr. M'Cann, the Medical Superintendent, and the medical staff of the infirmary, who also showed a number of interesting clinical cases in the wards.

Types of Idiocy and Imbecility.—Dr. SHUTTLEWORTH made some remarks on this subject. Starting with the assertion that from the physiological standpoint deficient nerve power (and especially brain power) was the general characteristic of such cases, there were two modes of manifestation of such deficiency: (1) Apathy, that is, imperfect reaction; (2) irritability, that is, imperfect control. Idiocy was, therefore, not merely, as officially defined, an "affection of the mind:" it was a vice of the entire organism. Both in stature and in weight, idiot children were inferior to normal children of similar age; and their low vitality was evidenced by their excessive mortality, which between 9 and 20 was nine times that of the ordinary population of the same age. Mere size of brain was not an unerring criterion of capacity; quality must be taken into account as well. The study of physical features was, however, a help in classification, which, however, was best made on an etiological basis. Thus the broad division was made of congenital and non-congenital cases, the former being the most numerous; and then there was an intermediate group of cases which Dr. Langdon Down called developmental. Of congenital cases, the chief types were microcephalic, hydrocephalic, scrofulous (including "Mongol" cases), sensorial, primarily neurotic, paralytic, choreiform, cretinoid. The developmental types were eclampsic, epileptic, syphilitic, post-febrile: whilst the non-congenital were traumatic, toxic, and emotional. In addition, there is a large class in which types were mixed. Numerous photographs illustrating typical groups were exhibited, also drawings of brains, etc., and a series of casts showing defects of the palate in idiots, made by Dr. Telford Smith, Dr. Shuttleworth's successor at the Royal Albert Asylum, Lancaster.—A discussion followed.

Votes of Thanks.—Votes of thanks were passed to Dr. Shuttleworth for his instructive paper, to the staff and managers of the infirmary, and to the President, Dr. Cleveland.

BATH AND BRISTOL BRANCH.

THE fourth ordinary meeting of the session was held at Bath on February 28th, 1894. Dr. R. SHINGLETON SMITH, President, in the chair. Thirty-nine members were present, and one visitor.

New Members.—The following gentlemen were elected: W. T. C. Pratt, M.R.C.S., L.R.C.P., Clifton; E. H. Warner, M.D., C.M., Bristol; J. L. Firth, M.D., B.S., F.R.C.S., Bristol; J. Wallace, M.B., C.M., B.Sc., Weston-super-Mare; T. M. Carter, M.R.C.S., L.R.C.P., Clifton; H. A. Benham, M.D., C.M., Stapleton; G. A. Harrison, M.R.C.S., L.R.C.P., New Plymouth, New Zealand.

Papers and Case.—Mr. C. E. S. FLEMMING read a paper "On the Use of Chloralose," which was discussed by Dr. WATSON WILLIAMS and Dr. SHINGLETON SMITH.—Dr. WATSON WILLIAMS read a paper entitled "Nasal Disease as a Factor in Affections of the lower Respiratory Tract."—Dr. BIDDLECOMBE read "Notes of a Case of Disseminated Sclerosis," and the following gentlemen joined in the discussion which ensued: Dr. SPENDER, Dr. SHINGLETON SMITH, and Mr. BEAUMONT.—Mr. F. K. GREEN gave details of a case of Appendicitis, which was discussed by Mr. P. BUSH.

SPECIAL CORRESPONDENCE.

PARIS.

Assistant Surgeons.—Tuberculous Meat.—Mortality from Tuberculosis in France.—The Prevention of Tuberculosis.—Dangerous Preservative Substances.—General News.

THE new law creates a new order of assistant surgeons complementary to the regular hospital staff. The assistant surgeons will be chosen from among those who have competed, but for whom there is no vacancy. They are called "Bureau Central surgeons." There are in the Paris hospitals 42 surgical services. In 16 of these, "Bureau Central" surgeons assume the duties of "chef." Five of the 42 services are faculty clinics, and are therefore provided with a "chef de clinique." Thus there are 37 services to be considered. In 7 of these there is not sufficient work for an assistant surgeon. The remaining 30 have the right, according to the new law, to demand an assistant surgeon, chosen from the "Bureau Central surgeons," but there are at present only 8 or 10 available.

Dr. Deshayes revives in the *Revue d'Hygiène* the question of the danger of the use of meat from tuberculous animals as food, and gives some interesting facts concerning it. The Comité Consultatif d'Hygiène has decided that, unless an animal is thoroughly invaded by tubercles, it is not to be condemned, but the diseased portions are to be removed and the rest sold for food. Dr. Deshayes protests vehemently against this practice. According to M. Lefevre, veterinary surgeon at Havre, the minimum of tuberculous animals killed at the principal French slaughterhouses amounts to 4,000; of these, only 1,600 were condemned: therefore 2,400 were offered for sale after the parts presenting tuberculous lesions had been removed.

M. Lagneau states that the maximum of mortality from tuberculosis is among the sedentary professions. The proportion is 400 per 1,000. In large cities the mortality is twice that of cities below 100,000 inhabitants: three times greater than in cities of 5,000 inhabitants. Baron Larrey urges the Paris Academy of Medicine to create a prize for tuberculosis statistics to encourage investigations on the mortality of phthisis, on the lines laid down by M. Lagneau.

The *Revue d'Hygiène* urges that the same precautions should be taken in French hospitals with regard to the sputa of phthisical patients as those observed in English hospitals.

The latest decision concerning the water supply of Paris is, according to M. Lesévrien, insufficient. The water supplied is not always spring water, nor even Marne water, notwithstanding the increased supply derived from the Avre and Eure rivers. Seine water is supplied to every Paris district in its turn during twenty days. Seine water at the least contaminated points contains 500 microbes by cubic centimetre, at others 5,000, up to 116,000.

There are two products used for preserving meat which are condemned by the Conseil d'Hygiene, acting on the advice of M. Roche. One is called *liquide conservateur*, the other *poudre conservatrice*. The first contains 99 grammes 20 centigrammes of sulphurous acid per litre added to lime; the second contains 32 per 100 of sulphurous acid. As a sodium bisulphate mixed with sea salt they are advertised as not dangerous.

The Oran *Echo* declares that panther flesh is excellent food. The Mayor of Ain-Tédelés sent to the staff of that journal

quarters of panther, and all declared the meat to be delicious, tender, and juicy.

The Duke of Rochefoucauld-Doudeauville has taken legal proceedings against Madame Mongruel, a somnambulist, who has "a *cabinet magnétique*" on the Boulevard Montmartre. In testimony of her ability in her advertisements she mentions a considerable number of certificates received, among which is a letter from the Duke of Rochefoucauld-Doudeauville, the father of the present duke, but, as no date is mentioned, it has been attributed to the latter.

On July 25th the International Seaside and Hydrotherapeutic Congress will meet, and continue its sittings until the 29th. The hygienic value of seaside treatment and marine products will be discussed in all their bearings, and in relation with different forms of disease.

Four hundred and sixty-seven pupils among the male and female Paris hospital nursing staff have passed examinations in elementary instruction (*enseignement primaire*), and in professional instruction; 334 nursing diplomas will be given, which, added to those already gained, reaches 1,753. Most of these diplomas have been gained by the Paris hospital nursing staff.

The Conseil d'Etat has classed among unhealthy and dangerous dwellings all those containing stores of carbolic acid exceeding 100 kilos, establishments where old tin boxes and other similar articles are burned, storehouses for raw celluloid containing more than 300 kilos.

BOSTON.

Cessation of the Epidemic of Small-pox.—No Medical Act in Massachusetts.—The Harvard Medical School.—Progress of the Cremation Movement.—Antiseptic Midwifery at the Boston Lying-in Hospital.

ONE of the chief medical events that has excited the interest of Boston has been the occurrence and subsidence of the recent small-pox epidemic, which is now practically at an end, testifying to the thoroughness of the measures adopted for the control of the disease in Boston. In October several cases were found which had come over from England on the ss. *Catalonia*. A second group subsequently developed which could not be traced to the steamer cases, and cases appeared from these two sources in all parts of the city. Up to January 1st there were 26 cases and 4 deaths. We may contrast with this Reading, Pennsylvania, a city of 70,000 inhabitants, where, in 1893, there were 678 cases. The Boston record shows how thoroughly the epidemic can be controlled by a well-officered board of health. In Boston during the epidemic public vaccinating stations were opened for two weeks, and in that time over 40,000 persons were vaccinated. That the epidemic has subsided is shown by the fact that in the week ending February 7th there were only 2 new cases reported and only 9 patients in the small-pox hospital. In some four months the total number of cases did not reach 50, although cases of small-pox were found in all parts of the city. This is of especial interest in connection with the fact that children are obliged to be vaccinated before attending the public schools.

The close of another year without any legislation in Massachusetts to restrict or in any way regulate the practice of medicine is of significance. In this state no physician is required to show any credentials or any diploma before he can practise. A tailor or a baker has as much right as a graduate of the Harvard School to call himself "Dr.," and to practise medicine, surgery, or midwifery. There is no registration board, no examiners, no censors. It is a free and open profession to all who choose to call themselves doctors. It must be surprising to outsiders that such a state of affairs is allowed to exist in a well-regulated community, but the profession is apathetic and without legislative influence. From time to time an attempt is made to pass a law, but the irregulars and quacks fight much harder against it than the better men do for it, and it is now some time since even an attempt was made to secure a law. Massachusetts is one of the few States still without protection. There is a State Society open only to graduates of regular schools, for admission to which examination before a board of censors is necessary, but membership in the State Society carries little weight or privilege, except that of standing well in the eyes of one's fellow practitioners. Most of the States have some responsible examining board, who license those who show themselves qualified to practise, and this furnishes a certain protection to the ignorant public, who are the worst sufferers. Some States have efficient laws, which are well enforced, and in these States the quacks find it difficult to secure a foothold, but other States, with good laws, are practically as badly off as is Massachusetts, because the registration laws are not enforced. But the fact that one of the leading States, from an educational point of view, such as Massachusetts, is absolutely indifferent to the existing state of affairs must be surprising to English practitioners.

At the Harvard Medical School, after 1895, a knowledge of French or German will be required from applicants for admission who do not hold the degree of A.B. The number of the students in the school is now 446. Dr. Henry P. Bowditch, for many years dean of the school, has resigned, and his place has been taken by Dr. William L. Richardson, Professor of Obstetrics. It can hardly be expected, however, that next year will show as large an attendance as this year has, because of the prevailing hard times which affect every business and profession. The University has already dismissed several professors from the Academic Department, and the medical school cannot escape the effects of the financial depression. An indication of this tendency was shown in the entrance examinations, where 99 men were admitted but 29 failed to register, presumably on account of the hard times.

A society formed for the purpose of encouraging cremation has opened a crematory in one of the city cemeteries, and already several bodies have been burned there. Formerly it was necessary to send the bodies of persons who had desired cremation to some distance, but this crematory is evidence of a popular interest in the matter, as it was built by subscription, the subscribers holding shares in the establishment.

No institution in Boston is better known than the Boston Lying-In Hospital, which has just finished its first year in its new quarters. The work of the hospital, from a scientific point of view, is known to the American profession, but perhaps the remarkable record which it holds may be of interest. The institution, although originally organised in 1832, was not prominent until 1873, when it occupied part of the present location. Since then, up to 1893, 6,168 cases have been treated, with a loss from all causes of only 120 out of the entire number; and in the eight years since the introduction of the antiseptic treatment, notwithstanding the difficult and complicated character of the cases and the serious emergencies under which many of the patients have been received, but 28 out of the 3,507 patients treated have from any cause died, and since the introduction of antiseptics in 1885 there have been no deaths due to septicæmia occurring in patients who were under the care of the hospital from the beginning of the labour. In the year just ended (1893) the number of women confined in the hospital was 501, the number discharged well was 500; 1 woman died of chronic Bright's disease; 1,352 women were confined at their homes under the care of the hospital, being attended by the students of the Harvard medical school under the supervision of the hospital; of these 1,352 women, 1,346 were discharged well; 3 were sent to general hospitals, of whom 2 recovered and 1 died; 3 died at their homes, 2 of pulmonary embolism and 1 of eclampsia. When it is considered that these 1,352 women were delivered in dirty tenement houses, in filthy surroundings for the most part, it is demonstrated how complete is the organisation under which the students work. Each student in the school is required to deliver at least 6 women at their homes before applying for his degree. An adjacent house, connected by a bridge with the main hospital, contains the superintendent's chamber and parlour, chambers for the junior house officers and *externes*, also for the assistant matron and for additional nurses. The whole expense was about 90,000 dollars. Accommodation is thus provided for 60 patients. Women pregnant with second illegitimate children are refused admission, neither are syphilitic patients admitted. The hospital is in charge of Professor Wm. L. Richardson, who holds the place of physician, and who has a corps of assistants. The hospital thus approaches in its

organisation the German system more than the American. To this compact organisation much of the excellence of the work must be attributed.

CORRESPONDENCE.

EPSOM COLLEGE.

SIR,—On behalf of the Council of the Royal Medical Benevolent College, we earnestly appeal for aid to enlarge the chapel, which will no longer accommodate the pensioners, the pupils, and the staff. It is absolutely necessary to put in hand with as little delay as possible the requisite enlargement of the building, the cost of which will amount to about £3,000. No further extension of the school can take place until this want is supplied.

It is intended, with the direct sanction and approval of Lady Derby, to associate the name of Earl Derby, our late President, with a part of this addition. A transept will be especially associated with the past pupils of the College, and it is intended that it shall be practically a memorial transept, in which shall be placed tablets or brasses in memory of old pupils who have distinguished themselves.

The present pupils and the members of the staff have undertaken to provide a new organ, in recognition of the unswerving devotion of the Rev. Dr. Rowton to fostering a taste for music in the College throughout a long series of years.

We shall be grateful for any donations or subscriptions. Moneys so given will confer the same privileges as if given for the general purposes of the College.

An erroneous impression is prevalent that the munificent legacy received by the College under the will of the late Mr. Pugh has improved the financial position of the institution. This is not the fact. The income derived from this source must be entirely devoted to increase the number of non-resident pensioners—an extension of their charitable work, which the Council most gratefully undertake.

We beg to append a list of those who have already contributed to the Chapel Fund.—We are, etc.,

C. HOLMAN,
Treasurer to the College.
HENRY MORRIS.
Treasurer to the Chapel Fund.

Royal Medical Benevolent College Office,
37, Soho Square, W., March 5th.

EPSOM COLLEGE CHAPEL FUND.

List of Contributions.

	£	s.	d.
Alexander, Mrs. W. C. ...	5	0	0
Allfrey, J. O., Esq. ...	2	2	0
Anonymous	105	0	0
Ashby, Dr., and Mrs. Alfred	5	5	0
Ashcombe, Lord	100	0	0
Ashwell, A. H., Esq. ...	1	1	0
Ayling, Dr. A. H. W. ...	1	1	0
Badham, Mrs.	3	3	0
Barlow, Mrs. A. A.	1	1	0
Banks, W. M., M.D.	3	3	0
Batt, Miss Barbara H. ...	10	10	0
Baxter, Mrs.	10	10	0
Bowes, W. H., Esq.	1	1	0
Brewer, R. E. Wormald, Esq.	10	10	0
Broadbent, Sir W., Bart., M.D.	10	10	0
Butterworth, J., W., Esq.,	3	3	0
Byass, R. N., Esq.	10	10	0
Cadge, W., Esq.	10	10	0
Clark, Sir Andrew, Bart., M.D.	21	0	0
Clark, Andrew, Esq. ...	10	10	0
Collins, F. Stratford, Esq.,	10	10	0
Corbett, J., Esq., J.P. ...	1	1	0
Corbett, Mrs.	3	0	0
Corsellis, Miss Marion J....	31	10	0
Croft, G., Esq.	25	0	0
Croft, Mrs.	10	10	0
Croft, John, Esq.	10	10	0
Cumberbatch, A. E., Esq.	10	10	0
Deacon, W. S., Esq.	10	10	0
De Tatham, Surg.-Maj. H., M.D.	1	1	0
Durham, A. E., Esq. ...	2	2	0
Elcum, Rev. C. C.	10	10	0
Elliot, Dr.	1	1	0
Fayrer, Sir Joseph, M.D., K.C.S.I.	5	0	0
Fowler, R. S., Esq.	2	2	0
Freeman, R. Esq.	2	2	0
Freshfield, Miss	1	11	6
Goodhart, Dr.	10	10	0
Gould, A. Pearce, Esq. ...	10	10	0
Growse, W., Esq.	1	1	0
Hart Smith, Rev. T. N. ...	25	0	0
Hatfield, G., Esq.	5	0	0
Hayward, M. C., Esq. ...	1	1	0
Hemming, Sir A. W. L., K.C.M.G.	10	10	0
Holman, Dr.	25	0	0
James, W., Esq.	2	2	0
Jenner, Sir William, Bart., M.D., G.C.B.	10	10	0
Jowers, Mrs.	50	0	0
Leigh, Wm., Esq.	1	1	0
Lister, Sir Joseph, Bart. ...	20	0	0
Lowndes, Miss	0	10	0
Manvers, The Earl of ...	5	0	0
Martin, Miss	2	2	0
,, ,, (2nd donation)	3	3	0
Montefiore, Mrs.	10	10	0
Moore, G. F., Esq.	10	10	0
Morris, Henry, Esq. ...	21	0	0
Napper, A. A., Esq.... ...	10	10	0
Oldaker, F. A., Esq. ...	1	1	0
Ord, Dr. W. M.	10	10	0
Paget, Sir James, Bart. ...	10	10	0
Pickersgill-Cunliffe, Mrs..	10	10	0
Pollard, Bilton, Esq. ...	3	3	0
Powell, Dr. Douglas ...	10	10	0
Rivington, C. R. Esq. ...	3	3	0
Rosebery, Lord, The Right Honourable	50	0	0
Saunders, Sir Edwin ...	10	10	0
Secretan, L., Esq.	1	1	0
Secretan, the Misses ...	5	0	0
Sloman, Rev. A.	1	1	0
Smiles, C. L., Esq.... ...	10	10	0
Smith, Thos., Esq.	10	10	0
Stephenson, Sydney, Esq..	1	1	0
Stewart, Sir Michael Shaw, Bart.	5	0	0
Stilwell, George R., Esq....	1	1	0
Stocker, Dr. Sherwood ...	3	0	0
Surrey, The High Sheriff of, pro J. Colman, jun., Esq. (3rd donation) ...	10	10	0
Tayler, H. P., M.B.	1	1	0
Taylor, W. Bramley, Esq....	3	3	0
Taylor, C. R., Esq.	1	1	0
Thornton, Knowsley, Esq.	25	0	0
Thornton, The Hon. Mrs. Knowsley	25	0	0
Thursfield, W., M.D. ...	1	1	0
Wagstaffe, W. W., Esq. ...	1	1	0
Walford, Mrs.	2	2	0
Walker, Mrs. Louisa ...	5	5	0
Warren, Rev. John ...	2	0	0
,, ,, ...	3	0	0
Watson, Mrs. Gordon ...	5	5	0
Webster, Sir R., Q.C., M.P.	10	10	0
Wynter, Dr.	10	10	0

CHELSEA HOSPITAL FOR WOMEN.

SIR,—Following the letter of Dr. Eden, the secretary of the medical staff of this hospital, of February 13th, I am instructed by the Board of Management to write you as promised.

It is from no want of respect to the BRITISH MEDICAL JOURNAL that a full reply to your article of February 10th has not been forthcoming till now. You are aware, as stated in that article, that the vestry of Chelsea had asked of the Home Secretary and the Local Government Board an inquiry into the management of the hospital during the past year. Both these authorities have refused to institute such an inquiry.

The Board of Management and the medical staff would have welcomed the most searching investigation by either the one or the other. However, the vestry's demands having been refused by the Home Office and the Local Government Board, we are free to address you. Herewith are presented to you full and accurate details of the four classes of operations as to which the medical officer of health for Chelsea makes special reference, and they are tabulated in such a way as to answer the five questions he asks as to each class. Moreover, the name of the operator is appended to every case. We make our reply in this form, as you have endorsed his queries, although we do not for one moment admit the right of any medical officer of health, however distinguished in his own speciality, to set himself up as a judge of the operative work of this or any other hospital in his district. We venture to submit that to do so would be to set up a most dangerous precedent.

We believe this is the first instance where any medical officer of health has, in a statement made professedly as to the insanitary condition of a hospital, taken occasion to make an attack upon the entire medical staff, reflecting upon their professional probity and skill. It is needless to say that had these reflections been directed against any single member of the staff, Dr. Parkes would have been proceeded against for libel and defamation of professional character, from which even his official position would not protect him.

During the year under review, 28 patients remained in the hospital from the previous year, and 636 new cases were admitted, making 664 under treatment. Of this number, 373 required operation. Thirty-five women died, a general percentage mortality of 5.2 per cent. Of the 35 deaths, or 36, as has been alleged, including a prematurely born child; 13 never were operated upon at all. The death-rate amongst those not operated upon was, therefore, 4.9 per cent. This proves to demonstration that during 1893 the class of cases brought to us for treatment was one of patients in the last stages of illness. Our books show that the ordinary formalities of obtaining letters had again and again to be dispensed with, and that desperate cases were admitted simply in the common cause of humanity. Doubtless in this way some unsuitable cases were received, but it must be remembered that an accurate diagnosis cannot be made of obscure internal disease till after admission. Once admitted, we felt the responsibility of doing our best must be borne, and that it would be inhuman to turn the poor creatures out again merely to keep our statistics in a condition favourable to the medical staff. In this way at least 14 cases more or less septically infected before admission came into our wards and unquestionably exerted a malign influence on some of our other cases. It is manifestly unfair to take one year's work, and upon that to credit us with a death-rate of so many per cent. for this or for that operation.

It is no more right for the medical staff to be specially

blamed because the percentage of deaths of ovariotomy cases has been higher in 1893 than in any previous year, than it is for them to claim undue praise because in 6 cases of extra-uterine gestation operated on in the same year there were absolutely no deaths. The whole question thus raised as a side issue to the insanitary condition of the hospital bristles with fallacies. As to the sanitary report as laid before the vestry of Chelsea by Dr. Parkes, it involves that gentleman in a serious charge of misrepresentation and neglect. We do not stop to dwell upon the fact that he has recommended that the main drain of the hospital be carried inside the building, whereas it has been hitherto outside, nor that on many other points he is in conflict with other distinguished sanitary authorities. Nor do we stop to plead that everything and every appliance that was regarded as sanitarily perfect was used regardless of expense when the hospital was built fourteen years ago.

The gravamen of his charge is that he made his way into the hospital, that he discovered the insanitary condition of the hospital, and that he felt compelled to apply to the vestry to close the hospital on February 6th, 1894. Whereas the first case of scarlet fever occurred on December 27th, 1893, the hospital was closed on the initiative of the treasurer on December 29th, 1893, five weeks before he presented his report, be it noted. No patients were ever infected. Three nurses were laid up with the fever, not four, as he states; so promptly were they isolated and removed that in three days the outbreak was over.

After closing, steps were taken to clear the hospital as speedily as could be done with due regard to the safety of convalescent patients; on January 15th the hospital was empty. In the meantime it had been resolved to place the institution in the hands of the medical officer of health for disinfection and general inspection. On January 17th, 19th, and 20th the medical officer of health inspected the hospital, and on the 22nd, by invitation, attended a meeting of the house committee, making a verbal report and generally advising. On January 24th his written report was received as to suggested sanitary improvements. Plans and specifications were forthwith got out and tenders invited.

On February 3rd, 1894, the treasurer of the hospital wrote to Dr. Parkes to the effect that his recommendations would be carried out. On February 2nd, 3rd, and 5th the sanitary engineer of the hospital waited upon Dr. Parkes with the plans embodying his suggestions, and was refused an interview on each occasion. Yet, in the face of all this, regardless of what injury it might do to an institution which had been established twenty-one years, officered by men all working with the common object of saving life and relieving suffering, he thinks fit to present a report to a body of laymen reflecting on the professional probity of certain of his medical brethren, and asking for powers to close a hospital which he well knew had been shut for five weeks, and in which he knew public money was being expended to carry out loyally every recommendation, reasonable or otherwise, which it had seemed good to him to make.

So serious a view does the board of management take of Dr. Parkes's proceedings, that they are making representations embodying all these facts to the Home Secretary, the President of the Local Government Board, and the Chelsea Vestry.

I wish I could have made this letter shorter, but the wide scope of the charge makes a brief reply impossible.—I am, etc.,

HENRY E. WRIGHT,
Treasurer.

Chelsea Hospital for Women,
Fulham Road, S.W., March 6th.

*** Accompanying this letter is an elaborate series of tables setting forth all the operations performed during the year, with their results, and giving details in regard to all the deaths. Of this we think the following is an impartial summary; but it must be borne in mind that the arrangement of the cases in the four classes asked for by the medical officer of health groups together diseases and operations of very different gravity; we have, therefore, so far as we could, traced out the mortality of such operations as are specially indicated in the tables: 636 cases were treated in the hospital during the year 1893, and 373 operations were performed: 35 women died, 23 after operations; 14 deaths after operation were due to sepsis, and in 6 of these the septic condition commenced before admission to the hospital. Of ovariotomies, 25 were successful, 6 unsuccessful, showing a mortality of 19.3 per cent.; 3 patients in whom exploratory incision was performed lived, 2 died. Of removal of diseased ovaries and their appendages, including 6 cases of extra-uterine gestation, 15 were successful, 1 unsuccessful, a mortality of 6.2 per cent.; all the extrauterine gestation cases, however, recovered. Operations for tumours of the womb, including fibroid fibrocystic, malignant tumours, and polypi, 33 were successful and 9 unsuccessful, a mortality of 21.4 per cent.; 8 of the cases were hysterectomies, of which 3 recovered and 5 died. Of operations to relieve prolapse of the womb, including ventro-fixation of the womb, perineorrhaphy, kolporrhaphy, and kolpo-perineorrhaphy, 68 were successful and 2 died, a mortality of 2.9 per cent.; of these cases, 10 were for ventro-fixation of the womb, of which 8 recovered and 2 died.

INFECTIOUS DISEASES (NOTIFICATION) ACT, 1889.

SIR,—May I point out what must be regarded as a grave defect in the Infectious Diseases (Notification) Act, 1889, and one which I have little doubt will have to be remedied sooner or later? I refer to the facility it affords for grave misuse by putting in the hands of the smallest sanitary authority, and hence into the hands of their advisory and executive officers, the power to summon vexatiously, and on totally inadequate evidence, respectable medical practitioners to appear as defendants in a police court, with its inseparable criminal associations.

Unreasonable prosecutions under the Act are becoming unpleasantly common. In one instance a purely unintentional omission to notify, an omission which any medical man in busy practice can understand may readily happen, led to such a police-court prosecution.

Moreover, it has become common for village medical officers of health to so misread their powers as to visit the patients of their brethren, and to assume that it is one of the functions of their office to sit in judgment on the diagnosis of their fellow and rival practitioners. In a recent case the Local Government Board issued a letter pointing out the impropriety of such action, but this surveillance on the part of the medical officer of health has led to several recent prosecutions and threats of prosecution.

The members of small authorities not infrequently think they constitute a proper tribunal to decide obscure questions of diagnosis, and regard their medical officer of health as their skilled assessor. Consequently a word from him is sufficient for them to decide on a prosecution under the Act. As an example of the confusion and improprieties which take place, I quote another case. A small sanitary authority because, as they allege, "their medical officer had carefully diagnosed the case" (*sic*) of another practitioner, refer the matter to a still smaller committee with a view to prosecution under the Notification Act for the non-notification by the practitioner of disease which in his opinion did not exist, and this in spite of one clear-headed member of the board, who, although personally unacquainted with the practitioner in question, protested that a committee is not competent to deal with such a matter, and who publicly maintained that many of these prosecutions "were the result of caprice, personal feeling, and animus on the part of the officers, and perhaps some of the members of the board."

Again, prosecutions have followed omission to notify cases in which the signs render a certain diagnosis absolutely impossible; and one learned clerk to an authority is reported to have delivered himself thus: "The Act was passed in order that diseases which in the opinion of medical men were likely to develop into one of those mentioned in the Act might be notified at once." This in spite of the clear language of Section 3, which says:

> Every medical practitioner . . . shall forthwith, on becoming aware that the patient is suffering from an infectious disease . . . send to the medical officer of health . . . a certificate.

What I ask, Sir, is this. Is it right, reasonable, or conducive to the maintenance of its honourable status, that the members of a generous and public-minded profession should be subject to the indignity of a police-court prosecution instituted by an authority acting under the guidance of officers who can read the plain English of Section 3 in this

way, or of medical officers equally fallible as themselves, and whose worldly interest is to discredit their rivals?

Let us have notification by all means as a basis for isolation, but let the profession have some security and protection from persecution originating in ignorance, conceit, rivalry, or other improper motive. The remedy is to amend the Act so that the veto of prosecution shall be vested in the Local Government Board. This is the only feasible way to save an otherwise beneficent Act from ultimate inevitable repeal.—I am, etc.,

Birmingham, March 5th. LESLIE PHILLIPS, M.D.

ASSISTANT MEDICAL OFFICERS IN ASYLUMS.

SIR,—That assistant medical officers of public asylums have just grievances I admit. But we must know what it is we want before we can hope to obtain any amelioration. To me it seems the chief grievance is that having embarked on a public service, for which many of us are quite unfit, we find that after a number of years we have made no headway; and, what is more serious, have made ourselves useless for general practice. Three things might be done: 1, build smaller asylums than those cumbrous machines we find in London and some other places; 2, the time spent as assistant medical officer might be allowed to count towards a pension; 3, assistant medical officers might be more carefully selected, and those who are found unfitted for the position might be compelled to resign at an early stage of their career. The strictures of your correspondent on superintendents I consider unjust and uncalled for. Abuse is not argument, and must only damage a cause it is intended to befriend.—I am, etc.,

March 5th. A. M. O.

THE PROPOSED NILE RESERVOIRS.

SIR,—In an article in the BRITISH MEDICAL JOURNAL of March 3rd it is stated that five schemes have been advanced by the able engineers in the employ of the Egyptian Government for storing the precious waters of the Nile; but practically these five schemes may be reduced to two. Four are identical in principle, and only differ from each other in detail. From a hygienic point of view there is little or nothing to choose between them; and the whole four are equally open to the same fatal objections. The fifth is the only project that contemplates storage of the purest water available, and it is round this project that true sanitarians should rally to a man.

As it is desirable to bring the question down to the narrowest possible limits, I will endeavour to avoid all side issues, though some of these are very important, and confine myself to the main point.

1. As the water that is to be stored will be employed for potable and culinary purposes by some seven or eight millions of people, there is no argument necessary to prove that it ought to be as pure as practicable.

2. It is an essential and unavoidable feature in all the river bed schemes that the first part of the Nile flood shall be allowed to flow through the barriers. A very slight knowledge only of the circumstances is required to render this fact obvious.

3. The rising Nile is swollen at first almost exclusively by storm water from the Abyssinian mountains, and, owing to the rapidity of its course along the Atbara, the silt-laden fluid reaches Egypt in the purest condition possible as regards organic matter.

4. By the time the current has moderated sufficiently to enable the sluices to be closed, the greater part of this uncontaminated Abyssinian supply will have passed away, and the slowly accumulating stock in the river bed reservoirs will consequently be derived mainly from the little known regions of Central Africa, the home of bilharzia hæmatobia and many more zooparasites, to say nothing of such diseases as dysentery, typhoid, and fevers generally.

5. It has been shown with sufficient clearness, in your columns and elsewhere, that low Nile water is distinctly unwholesome. The supply ponded up behind the river bed dams would essentially resemble low Nile water.

6. All these objections vanish in the case of the Wady Raiyan scheme. The lake could be filled and replenished at the most propitious moment—when the accumulated impurities of the year had been washed away from the channel, and while the current was still at its height.

7. I am quite unable to agree with the statement that stagnation, even should it be absolute, which will probably not be the case, would, under proper precautions be without serious effect on the quality of such large bodies of water as these reservoirs are meant to contain. In the Raiyan scheme no precautions whatever would be needed. The pure storm water once admitted, the desert itself would do all that was necessary in the way of protection.

Stagnation *per se* would no doubt be without effect, were the water pure *ab initio*, but in the case of a germ-laden supply it could not but lead to disastrous consequences.

8. Opponents of the Raiyan scheme lay much stress on the irrigation of Upper and Middle Egypt. There is no reason whatever that small dams should not be constructed in order to bank up the comparatively trifling quantity of water required for that purpose. For Lower Egypt and the Delta, however, it would be absolutely flying in the face of Nature if advantage were not taken of the site discovered by Mr. Cope Whitehouse. The matter is of such importance—affecting the lives of thousands, and the well-being of millions—that all extraneous considerations should be rigorously excluded. The Raiyan scheme is apparently not more costly than the other. Even if it were the gain in health, and consequently in prosperity, would very soon repay double the outlay required for the *barrage* schemes, were this necessary. The rival projects are as different as light from darkness, as antidote from poison.—I am, etc.,

March 3rd. PYRAMID.

COOKING BY GAS: THE SANITARY ASPECT.

SIR,—Dr. Jacob, in quoting a statement made by me as to the cost of gas as a fuel, has unfortunately omitted the basis on which my statement was made. For heavy and continuous use, both fuels being used with equal economy, one pound of coke or coal, is equal in heating power to about 19 cubic feet of ordinary coal gas, the actual comparative cost depending on local prices. For irregular work, such as cooking, gas is in practice a far cheaper fuel than coke or coal. Dr. Jacob says truly that "gas cookers in most kitchens are very unhealthy," but the reasons he gives are not the correct ones. Acetylene and carbon monoxide are not found in the products of combustion from a gas cooking range which is in condition fit to use. If Dr. Jacob would examine the cooking ranges complained of, he would most probably find that they had never been cleaned since the day they were first put into use. I have myself seen, in kitchens where everything else was kept in perfect order, an accumulation of over three inches deep under the boiling burners, of old decomposing scraps, the dried up remains of soup boiled over, and general accumulations, the stench of which was sickening when heated. The Gas Light and Coke Company remove all ranges out on hire every year for thorough cleaning. If Dr. Jacob would take the trouble to look at the state of many of these when removed, he would not be surprised at anything. When gas-cooking ranges are kept reasonably clear from ancient accumulations, and the pans are kept clean outside, there is absolutely no smell from gas cooking, and it is impossible to detect whether gas is or is not used in the kitchen. That an unpleasant smell exists in many houses where gas is used for cooking is an unfortunate fact, but it is caused by the grossest carelessness, and there is not the slightest necessity for it. We use gas for cooking, bread baking, bath heating, washing, ironing, and, to a certain extent, for fires. Any of your readers who may find it convenient may at any time, without notice, come and try if they can detect the faintest trace of smell or nuisance, and, if they do, they are perfectly at liberty to publish the fact. We have no special arrangements for ventilation, no hood, and no flue from the oven.—I am, etc.,

Grappenhall, Warrington, Feb. 26th. THOS. FLETCHER, F.C.S.

THE ACTION OF ANTISEPTICS ON THE INFLUENZA BACILLUS.

SIR,—In the BRITISH MEDICAL JOURNAL of February 17th there is an account of some experiments reported to have been made by Dr. E. Klein, F.R.S., from which it is con-

cluded that "'sanitas' fluid and absolute phenol do not by their presence in the least interfere with the growth of the influenza bacillus," a statement to which I beg, with your permission, to give the most emphatic contradiction so far as "sanitas" fluid is concerned. A careful perusal of the article shows that the experiments do not justify the conclusion which was drawn from them, for Dr. Klein did not expose the bacillus to contact with "sanitas" fluid, but simply made the experiment upon the assumption that "sanitas" fluid is a volatile disinfectant. If the experiment had been made with "sanitas" oil, which is volatile, no doubt Dr. Klein would have observed that the vapour of that substance is not only inhibitive, but also destructive, of influenza bacilli. Similarly when they are placed in real contact with "sanitas" fluid, they are destroyed.

I will ask you to publish this letter, because many of your readers, lightly glancing over the article in question, might otherwise be deceived as to the real facts of the case.—I am, etc.,

C. T. Kingzett, F.I.C., F.C.S.,
Managing Director and Chemist Sanitas Company.

Bethnal Green, E., March 5th.

EPIDEMIC JAUNDICE.

Sir,—The communications by Dr. Pope Bartlett and Dr. Young which my memorandum has elicited are both very interesting, and help to a conclusion on this somewhat obscure condition. Dr. Bartlett's cases, though occurring while no influenza existed in his neighbourhood, yet developed during a period in which influenza was endemic in the country. Dr. Young's cases favour decidedly the view of their association with influenza. The majority of his cases, like the majority of mine, clearly were post-influenzal manifestations.

I am much indebted to Dr. E. Meinert, of Dresden, who has most kindly sent me a paper which he wrote on this subject. The epidemic comprised 180 cases, and he and the other physicians from whom he obtained his facts agreed that the relationship between influenza and jaundice in this form was undoubted. Very often it was a post-influenzal manifestation. There were cases in which no actual history of influenza could be obtained. His conclusions, therefore, were that in this epidemic, which occurred in the autumn of 1889 and continued into the spring of 1890, influenza left behind it a condition very favourable to the development of jaundice; that while influenza was prevalent, many might develop jaundice without an evident attack of influenza; that its development seemed to be favoured by open, mild, wet weather in the autumn; if the winter continued mild, jaundice would go on appearing until the spring.

Dr. Young's cases and my own corroborate strongly the conclusions of Dr. Meinert. I think we are now warranted in coming to the conclusion that jaundice is not an uncommon attendant and sequela of influenza.—I am, etc.,

Melrose, March 3rd. W. Hall Calvert, M.D.Edin.

THE OPIUM QUESTION.

Sir,—Now that the "Analysis of Original Documentary Evidence," etc., has been completed, I crave space for a few words on the other side.

Our claim is twofold. First, as to the Indian people, we ask no more than that the sale of opium in India should be restricted as in this country. Surely there is nothing in this to call for such epithets as "faddists," "fanatics," etc. If it is needful to insist upon such restrictions as exist among ourselves, it is still more needful among the people of India. We claim to have more self-control than they have, and if we must guard ourselves by Parliamentary enactment, it is not unreasonable that with their weaker *morale* they also, as far as possible, should be guarded in a similar fashion. It is scarcely consistent that on one page of the British Medical Journal we should have such earnest pressure for restraint on the sale of "opium and its preparations" in England, and on the very next page a plea for a perfectly free sale of the same drug in India. Apart, altogether, from the alleged evils of the opium habit, the large number of suicides in India from opium is a fact that is closely related to its free sale, and it is one which is not creditable to our rule: and the further fact under present conditions it is impossible to put any check upon child murder by opium is one which ought to urge upon us the necessity of restrictive legislation. The argument that these things must be tolerated because of the value of the drug in malarial districts is not one which medical men of these days ought to admit. For, apart from the entire unbelief with which so many of us who have practised in malarial regions regard the opium prophylaxis theory, no one is ready to give opium an equal place with the cinchona alkaloids; and, from the professional point of view, our duty is to urge forward the wider use of quinine, about which there is no question, rather than to uphold, and even encourage, the free sale of a drug which is associated with much evil.

Our second claim, however, is the really important one. It is that the export of opium from India to China should cease. There is no hiding of the fact that it is here that the financial shoe pinches, and that the real struggle on the part of the Indian Government is to preserve this lucrative trade.

The Government of India has steadily developed the growth of the poppy and the manufacture of opium for the purposes of export. The trade amounted to 2,000 chests of opium per annum at the beginning of the century. It now amounts to about 85,000 chests, each containing 140 lbs. weight of the drug. If this trade should cease, the growth of the poppy in India would at once dwindle by no less than five-sixths of its whole amount, and the Indian question, *re* India, would be well within manageable proportions. There would be no occasion for any violent forcing of a solution. Reasonable restrictions on its sale are all that would be required. Similarly the dangers of smuggling would, by reason of the immensely limited area of cultivation, be largely diminished and much more easily guarded against. The settlement of this large opium question turns upon the China trade. It is for this trade that £2,000,000 is laid out without interest by the Indian Government, in order to encourage the ryots to cultivate a poppy. And manifestly there can be no adequate restrictive legislation in India as long as this trade goes on.

Why should the export of opium to China cease? So far as I am personally concerned, the answer to this question is easy. Here is a sample of my experience. In six months, in the work of a general dispensary in China, I would have as many as 250 patients whose only disease was the opium habit, and whose one reason for coming to me was to seek help to overcome it. The reason alleged for seeking such help was in not a few the steady impoverishment which the habit was bringing upon themselves and their families. In others it was that it was ruining their health. They were lean, dyspeptic, and incapable of steady work. Others were brought by their relatives or friends, who were urgent upon them to give up a habit which sooner or later would ruin them. All were convinced that they could not themselves give up the habit. And yet the great majority of these men—working men—were smoking only a drachm or two drachms of chandul in the day, an amount which the Chinese regard as the lowest average of the habitual opium smoker. Also they were, I may say without exception, tobacco smokers, though they never dreamt of asking a cure for that. They were men living in one of the most malarious regions of China—namely, South Formosa—but none of them thought of their malarial seizures as a reason why they should not cease to smoke opium; and dealing, as I had to do during ten years of work in South Formosa, with thousands of opium smokers, it is passing strange that my patients should have been so utterly ignorant of its supposed prophylactic value. Further, it was Indian opium, and only Indian opium, which these men smoked, so that they had all the advantage of the narcotine which is lauded so much at present for its febrifuge properties.

Now, Sir, ten years of such experience, and my experience is multiplied to-day wherever in China medical men are at work among the Chinese, taught me to regard the habit of opium smoking as essentially bad, and to look upon my country's connection with such a trade as immoral. Nor have I the least doubt that our opponents, had they themselves to face the same positive experience, would be perfectly willing to be regarded as "fools," "fanatics," and "faddists," if only the mischief could be stopped.

Again, whatever may be the case in India, no man who has mingled much with the Chinese can have any hesitation in saying that Chinese popular opinion brands both trade

and habit as evil. We cannot be mistaken in this, even while we freely acknowledge the terrible fascination which the habit exercises in China, and the fact that in many places the opium pipe, of course only for a brief space, precedes the transaction of business, and that it is fashionable in many houses to make it an accompaniment of the feast. The mass of the community deplore it as a terrible curse upon their country. I say nothing here of the disgraceful history of our opium relations with China, though it cannot be forgotten in any honest consideration of our duty, our national duty, towards a great Eastern people.

But it is said: *Cui bono?* The Chinese now grow far more than we send them, and the stoppage of the Indian export would be of no benefit to China. I dissent utterly from any such conclusion. China's hands are not free, nor shall we, as long as we cultivate a million acres of poppy for her people, ever give her such a guarantee of freedom as is rightly required by her Government before taking action. I have the fullest conviction that a stoppage on our part of the Indian export would be the signal in China for a great movement of reform.

Two of the emphatic conclusions of the analysis are so glaringly misleading that I only mention them. "Not less," we are told, "than half the revenue of the Government of India, about ten millions sterling, would cease to be (by the abolition of the opium trade), and would have to be replaced either by doubling the taxes, or not at all." The revenue from opium is not ten millions sterling. Last year it was about four millions, and this year it will be considerably less. The net revenue of India is not twenty millions sterling, but nearer fifty millions, and it would be much nearer the truth to speak of the opium revenue as one eleventh or one twelfth of the whole, and not one half.

The other point is that to stop the growth of opium would put half a million of cultivators out of work, take away their income, and bring about a rebellion. Does the writer of the analysis forget that six years ago, on account of the overcrowded opium factories, the Government of India reduced the acreage of poppy by 100,000 acres, that the same Government did not give a single farthing of compensation to the ryots whom she had thus put out of work and income, and that the result, on the part of the 100,000 cultivators, was neither rebellion nor even the suggestion of a riot, but an immediate application of their fields to other crops.

Finally, Sir, we have never urged, but protested against, increase of taxation in India as the one means of meeting a deficit. The salt tax in India is disgrace to us enough without anything more of the same kind. If there is no room for retrenchments in the military and civil expenditure of India we must be prepared to help.—I am, etc.,

Highbury Park, N., March 5th. JAMES L. MAXWELL, M.D.

REVIVAL OF A PORTUGUESE MEDICAL SOCIETY.—The Uniao Medica, a medical society of Oporto, which seems to have been in a condition of hybernation since 1886, has lately shown signs of reviving animation. A meeting was held on December 30th, 1893, under the presidency of Dr. Agostinho Antonio do Sonto, and a resolution was passed that the time had come for the Society once more *superas evadere ad auras*. Dr. J. de Andrade Gramaxo was elected President of the "Administrative Council," and economic, professional, and scientific committees were appointed, so that the resurrection of the Society may be looked upon as complete. The first scientific subject which engaged the attention of the Society was the schedule of questions relative to leprosy sent out not long ago by the Sociedade das Sciencias Medicas de Lisboa.

THE MEDICAL PROFESSION IN GERMANY.—According to official statistics recently published the total number of medical practitioners in the German Empire is now 21,621, being an increase of 5.46 per cent. as compared with the previous year, and 22.5 per cent. as compared with five years ago. The practitioners are distributed as follows: Prussia, 12,851; Bavaria, 2,431; Saxony, 1,563; Baden, 855; Würtemberg, 739; Alsace-Lorraine, 632; Hamburg, 429; other provinces less than 200. The proportion of doctors to population in the whole empire is 4.37 per 10,000; the ratio in 1892 was 4.15.

OBITUARY.

GEORG ALBERT LÜCKE, M.D.,

Professor of Surgery in the University of Strasburg.

GEORG ALBERT LÜCKE, who has so soon followed his friend and collaborator, Billroth, to the grave, was born at Magdeburg in 1829. His first intellectual bent seems to have been towards poetry and the fine arts, but finally he chose medicine as a career, because it seemed to him to offer so many problems of great practical importance to be cleared up. He began his professional studies in the University of Heidelberg, afterwards migrating, as is the custom in Germany, to Göttingen and Halle, where he graduated in 1854 with a thesis: "De Monstro Quodam Humano." After taking his degree he travelled for a time in Italy, France, and Algeria. On his return to Germany he was appointed assistant to Blasius at Halle. In this post he had Volckmann as a colleague. In 1860 he left Halle for Berlin, where he became assistant to Von Langenbeck, a position which he continued to hold till 1865. He accompanied Langenbeck in the Schleswig-Holstein campaign in 1864, acquitting himself so bravely in the field that he won a medal "For Valour," and gathering a rich harvest of surgical experience.

In 1865 Lücke was offered the chair of surgery in the University of Berne. This he occupied till 1872, when, on the opening of the new German University at Strassburg, he accepted an invitation to become professor of surgery there. This post he continued to hold to the greater glory, it may be said, not only of the new University, but of Germany surgery, till his death.

Lücke was remarkable, even among German professors, for his power of hard work. He used to say that while he was Langenbeck's assistant in Berlin he often did not leave the clinic the whole day, interrupting the research he was engaged upon only to snatch an improvised meal. His literary and scientific activity up to 1888, when his health began to fail, was prodigious. His earliest investigations were on the nature of the fluid of hydatid cysts and the presence of hippuric acid in human urine, both published in *Virchow's Archiv* in 1860. In the same journal appeared papers on "Atheromatous Cysts of Lymphatic Glands" (1861), "Blue Pus," and "The Theory of Resections" (1862).

Among his other contributions to medical science may be mentioned his paper on the "Origin and Growth of Tumours during Pregnancy" (1862), "The Nature of Tumours" (1863-66), his investigation in collaboration with Klebs on "Ovariotomy and our Knowledge of Abdominal Tumours" (1867), "Congenital Clubfoot" (1871), and the "So-called Inflammatory Flatfoot" (1872). Lücke wrote for Pitha and Billroth's *Handbuch der allgemeinen und speciellen Chirurgie* a monograph on "Tumours" (1869), and another on "Diseases of the Thyroid Gland" 1875). His experience of military surgery in the Schleswig-Holstein campaign, which had been embodied by him in his *Kriegchirurgische Aphorismen*, published in 1865 was largely extended during the Franco-German war of 1870, when he was in charge of a hospital at Darmstadt. Here between the middle of August and the end of October about 1,000 wounded passed through his hands, and how well he made philanthropy serve as the handmaiden of science on this occasion may be seen in his valuable *Kriegschirurgische Fragen und Bemerkungen* (1871).

In 1872 Lücke, in collaboration with C. Hueter, founded the *Deutsche Zeitschrift für Chirurgie*, which he continued to conduct till his death. In this appeared a number of papers from his pen on subjects ranging over the whole field of surgery. Among these may be mentioned Resection of the Second Branch of the Trigeminus (Bd. 4, 6), Nephrectomy (Bd. 15), and Laparotomy and Suture of the Intestine in Perforating Typhoid Ulcer (Bd. 25).

In 1879 he undertook, in collaboration with Billroth, the great work, *Deutsche Chirurgie*, of which 66 parts have appeared. The section on Tumours is from Lücke's own pen, and the whole work bears the impress of his editorial care and ripe literary and surgical experience.

Lücke was a brilliant teacher, and as a surgeon he was not less skilful with the knife than with the pen. He was greatly beloved by his pupils and by all who had the privilege of knowing him intimately. His home life was happy, but in

the later years of his life it was darkened by calamities of a kind peculiarly afflicting to his affectionate nature. Not long after his removal to Strassburg he lost two children from diphtheria, and ever after it was observed that he had an especial horror of that disease, and in particular he always showed great reluctance to perform tracheotomy.

Lücke's early taste for art remained with him throughout life, and the "occasional verses" with which he relieved his graver studies had a touch of genuine poetic inspiration that only needed cultivation to have earned for him a niche in the noble Gothic cathedral of German poetry.

Deaths in the Profession Abroad.—Among the members of the medical profession in foreign countries who have recently passed away are Dr. James E. Wendel, for more than half a century one of the leading practitioners of Nashville, U.S.A., aged 81; Dr. C. Wurth, one of the founders of the Société Médico-Chirurgicale of Liége, and a leading practitioner of that city, aged 64; and Dr. Casimiro Sperino, Senator of Italy, Emeritus Professor of Ophthalmology in the University of Turin, one of the leading ophthalmic surgeons in Italy, aged 82.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

The following appointments have been made at the Admiralty: J. D. Menzies, Surgeon, to the *Euphrates*, February 21st; Robert Bentham, Staff-Surgeon, to the *Raleigh*, February 26th; Daniel J. P. McNabb and Christopher L. W. Burton, Surgeons, to the *Raleigh*, February 26th; Samuel W. Johnson, M.B., Surgeon, to the *Impregnable*, February 27th; George B. D. Levicke, Morris C. Langford, and Percy H. Boyden, M.B., Surgeons, to the *Victory*, additional, February 27th; Alfred H. Jeremy, B.A., M.B., to Plymouth Hospital, February 27th; Henry N. Stephens, Surgeon, to the *Victory*, additional, March 10th; Thomas D. Halsham, B.A., M.B., Surgeon, to the *Pembroke*, March 12th; James P. Willis, M.B., Surgeon, to the *St. Vincent*, additional, March 16th; Walter R. Knightley, Surgeon, to the *Excellent*, additional, March 16th; Edward A. Rogers, Surgeon, to the *Vivid*, additional, March 16th; Arthur Gaskell, Surgeon, to the *Excellent*, additional, March 23rd.

Surgeon W. G. K. Barnes, M.D., having served twelve years, has been promoted to be Staff-Surgeon, February 27th.

Surgeon Alexander G. W. Bowen, has been appointed to the *Colossus*, March 1st.

Surgeon Charles Dickinson, late of H.M.S. *Victor Emanuel*, Hong Kong, died at West Brighton on February 28th. His commission dated from February 28th, 1887.

Surgeons J. R. McDonnell and C. L. W. Bunton left Plymouth in the *Pembroke Castle* on March 4th for service in West Africa.

Surgeon Martin Henry Atock, M.D., has been permitted to withdraw from the service, with a gratuity. He was appointed Surgeon, February 18th, 1886.

ARMY MEDICAL STAFF.

Surgeon-Captain R. C. K. Laffan is promoted to be Surgeon-Major, March 7th. He entered the service, February 5th, 1881, and served in the Egyptian war of 1882, being present at the battle of Tel-el-Kebir (medal with clasp and Khedive's bronze star), and with the Nile expedition in 1884-85 (clasp). He was nominated to the 3rd class of the Order of the Osmanieh for his services as Inspector of Hospitals to the Egyptian Sanitary Department.

INDIAN MEDICAL SERVICE.

The Queen has approved of the admission of the following gentlemen to be Surgeon-Lieutenants, dated January 29th, 1894:—*Bengal:* George Lamb, Henry Burden, John Fisher, Edward Surman Peck, Charles Harford Evans, Stanley Arthur Harriss, Ewan Cameron MacLeod, Charles Thomson. *Madras:* Alfred Eugene Berry, Herbert St. John Fraser. *Bombay:* Bernard Henry Frederick Leumann, Hugh Bennett.

Surgeon-Colonel G. C. Chesnaye, Bengal Establishment, has retired from the service, which he entered as Assistant Surgeon February 10th, 1859, attaining the rank of Surgeon-Colonel January 14th, 1889. He served in the Hazara campaign in 1868 (medal with clasp), and in the Looshai expedition in 1872 (mentioned in despatches, clasp); also throughout the Afghan war of 1878-80 as Principal Medical Officer, and in charge of the Staff 1st Brigade 1st Division, being present at the attack and capture of Ali Musjid (received the thanks of the Governor-General and of the Commander-in-Chief in India in General Orders), and in the advance to Cabul under Brigadier-General Charles Gough; was Principal Medical Officer at the Bala Hissar during the winter of 1879-80; Principal Medical Officer of the expedition under Major-General Ross against the Wardaks, and present in the engagement at Saidabad; accompanied Sir Frederick Roberts in the march to Candahar as Brigade-Surgeon under Brigadier-General MacGregor, and present at the battle of Candahar, and on the following day was placed in charge of all the native wounded (mentioned in despatches, medal with three clasps, and bronze decoration). He also served with the Marri expedition as Brigade-Surgeon and Principal Medical Officer (mentioned in despatches).

The appointment of Surgeon-Colonel B. Franklin, Bengal Establishment, to be Surgeon to the Governor-General, is officially announced.

Brigade-Surgeon-Lieutenant-Colonel J. C. G. Carmichael, M.D., Bengal Establishment, is granted the temporary rank of Surgeon-Colonel from January 22nd, while officiating as Principal Medical Officer, Presidency District.

Surgeon-Colonel G. Thomson, Bengal Establishment, officiating Principal Medical Officer, Presidency District, is appointed Principal Medical Officer Lahore District, in succession to Surgeon-Colonel G. C. Chesnaye, who completed his tour of service on January 4th.

Surgeon-Colonel L. D. Spencer, Bengal Establishment, officiating Principal Medical Officer Punjab Frontier Force, is confirmed in that appointment, *vice* Surgeon-Colonel R. Harvey, D.S.O., transferred to civil employment in the Presidency District.

THE VOLUNTEERS.

The under-mentioned gentlemen have been appointed Surgeon-Lieutenants to the corps specified, all dated March 3rd: Hubert Housse-Mayne du Boulay, 1st Dorsetshire Artillery (Southern Division Royal Arlillery); Samuel Archibald David Gillespie, M.B., 1st Ayrshire and Galloway Artillery; James Aitken Clarke, M.B., the Queen's Rifle Volunteer Brigade, the Royal Scots (Lothian Regiment); William Watkins Jones, M.B., 3rd Volunteer Battalion the Welsh Regiment (late the 2nd Glamorganshire); Charles Joseph Arkle, M.D., 14th Middlesex (Inns of Court); Alfred Eddowes, M.D., 24th Middlesex.

Surgeon-Lieutenant G. D. Todd, 1st Volunteer Battalion the Prince of Wales's Own West Yorkshire Regiment (late the 1st West Riding of Yorkshire) is promoted to be Surgeon-Captain, March 3rd.

Surgeon-Lieutenant-Colonel H. F. Holland, 3rd Volunteer Battalion Bedford Regiment, has been nominated for Brigade-Surgeon-Lieutenant-Colonel of the Home Counties Brigade.

THE OPERATIONS IN WEST AFRICA.

Despatches have been received from Colonel A. B. Ellis, commanding the troops on the West Coast of Africa, relating to the expedition against the Sofas, and detailing the unfortunate mischance by which a party of French native troops under Lieutenant Maritz, of the French army, attacked the British forces. Reporting the subsequent progress of the expedition, Colonel Ellis thus refers to the medical officer under him: "Surgeon-Major A. H. Morgan, of the Army Medical Staff, was Senior Medical Officer of the expedition, and, owing to the miscarriage of a letter sent to the medical officer at Kommendi, was in sole charge of the wounded from December 19th to January 7th. The difficulties in transporting the wounded in hammocks over a country such as the expedition traversed, and where the cutlass was constantly required to cut a way, seemed to me at times almost insurmountable, and that the expedition was not greatly delayed was entirely due to Surgeon-Major Morgan's great personal energy."

THE MEDICAL STAFF MESS AT HONG KONG.

We greatly regret to learn that this mess has collapsed. It had only been four years in existence, and quite recently, through no little trouble and expense on the part of its members, was both a military and a social success. It has failed, we fear, through want of official encouragement and support, as evinced by the following statement: In 1890 the Royal Engineers also instituted a mess at Hong Kong, and promptly received a grant of 720 dollars annually towards house rent; but although a similar grant was applied for by the Medical Staff, it was refused by the general officer commanding. The mess, nevertheless, was started, and conducted at the medical officers' own expense, and was located by a sort of cruel irony next door to the duly subsidised Royal Engineer mess. The difference accorded to the two bodies of officers is so glaring as hardly to be explained away by official quibbling. It cannot be because the medical are better paid than the Engineer officers, for they are not; the latter officers in various allowances and extra pay in some cases draw considerably more public money than the former. We by no means say the Engineer officers are overpaid; but as far as remuneration is concerned, if their system of total pay entitles them to mess allowance, then the sooner the totals of medical pay are calculated in a similar fashion the better. The invidious treatment of the Medical Staff in these matters is so pronounced, unfair, and absurd that the sooner it is brought before Parliament and the public the better.

DEGRADATION OF MEDICAL OFFICERS.

A correspondent learns that a new general officer commanding at Karachi directed that at his inspections only combatant officers will wear swords. Matters seem growing worse and worse. Will no one put a stop to these insults heaped on the medical service?

*** If, as stated, the general officer in question made any such direction then he grossly exceeded his powers. He has no right to set aside the dress any more than other of the Queen's regulations. A true soldier would not attempt or dream of attempting to override regulations; that is only tried on by the feeble-forcible type of man when unfortunately elevated to command.

CUSTOMARY ABBREVIATION OF TITLES.

Stutterer remarks: It has ever been the custom in the army to drop colloquially all prefixes to the rank of colonel or general. Whoever heard a lieutenant-colonel or a lieutenant-general otherwise addressed colloquially than colonel or general? Why, then, should medical officers choke themselves and their friends with such mouthfuls as surgeon-lieutenant-colonel, brigade-surgeon-lieutenant-colonel, or surgeon-major-general? Let them stick to established military customs.

*** There is much force in our correspondent's very obvious remarks.

DEPARTMENTAL REORGANISATION.

Common Sense submits the present anomalous condition of the Army Medical Department should be remedied in one of two ways:

A. By constituting (1) Surgeons to the Forces, classified for seniority among themselves, as are army chaplains, and with no responsibility outside their strictly professional duties. (2) Army Hospital Corps, resuscitated; under its own officers for command, discipline, pay, drill, and equipment. (3) Nursing Sisters.

B. A Medical Corps, formed by the organic union of the Medical Staff and Medical Staff Corps; divided into field hospitals and bearer companies, having, possibly, some territorial connection with the leading medical schools; pay to consist of corps and professional pay.

*** The first alternative is probably somewhat cynically suggested; the utter impracticability of a dual hospital control system, which existed between 1873 and 1879, is not yet forgotten; and its expense Of course the second is the real common sense alternative.

MEDICO-LEGAL AND MEDICO-ETHICAL.

LONDON AND COUNTIES MEDICAL PROTECTION SOCIETY, LIMITED.

THE registered office of this Society will be removed after March 31st from 13, Royal Avenue, London, S.W., to 12, New Court, Lincoln's Inn, W.C. Messrs. Le Brasseur and Oakley, of this address, have been appointed solicitors to the Society. A standing Legal Committee was appointed at a meeting of the Council on February 27th. It will consist of ten members to whom matters of a legal or defensive character will be referred; this Committee was instructed to revise and consider the Articles of Association, and report to the Council in April. A vote approving the prosecution of the "Indian oculists" was passed unanimously.

CONTRACTS NOT TO PRACTISE.

A MEMBER asks for an opinion on the following question:—A. sells to B. sixteen years ago, usual terms, not to practise within five miles, etc. How long is this binding?

*** It is usual in such cases to make the prohibitory clause in the agreement for transfer for a long period, practically prohibiting the vendor from again practising within the radius at any time without the consent of the purchaser, or his executors, administrators, and assigns. He is not expected to sell his practice and again return to it at a future time unless by special contract. The agreement or deed of transfer ought to leave no doubt on this question.

CHANGING THE "DR."

F.R.C.S.—If our correspondent had carefully considered the surrounding circumstances of "Doubter's" case, as submitted for an expression of our views, we venture to think that instead of impugning "our abstract opinion," he would have acknowledged the soundness of the advice tendered. Be that as it may, we would suggest that F.R.C.S. should, for the moment, mentally assume the position of "Doubter," and endeavour to work out the problem presented, namely, whether it were the wiser and better part for the latter to decline courteously, for assigned reasons, to prescribe for a would-be-patient, or to run the chance of putting himself in very strained relations with the supplanted practitioner. Such was the problem as we viewed it.

AN OVERSIGHT (?).

SURGEON writes: A. is a medical practitioner who has recently settled in a small village, distant five miles from a town where B. holds the union appointment, in which A.'s district is included. Late at night a message comes to A., from a lady who resides near, to request him to see W., who is a union patient of B.'s. A. at once calls on the lady and fully explains matters to her, and hearing that W. is in great suffering and is not expected to live many hours, consents to see him for B., and does so, fully explaining that the visit is made without charge both to the friends of the patient and to the lady, his patroness. A. then writes to B. and explains his action fully. B. does not so much as answer the letter. Was A. justified in his action? Where can the *Code of Medical Ethics* you so frequently quote be obtained?

*** In response to "Surgeon's" query we may note that "A.", under the circumstances related, was fully justified in visiting the patient, and in so doing acted in strict accord with the calls of humanity and the true ethics of the profession; and it is to be regretted that "B." should have ignored the usual courtesy of life, and omitted to acknowledge "A.'s" explanatory communication. The *Code* is published by Mr. H. K. Lewis, 136, Gower Street, W.C., price 3s.

FEES FOR MIDWIFERY ENGAGEMENTS.

MR. JOHN CORNBILL, M.R.C.S., & L.A.C. (Ilfracombe) writes: As regards the question raised by "A. E. D." concerning midwifery engagements, I think it due to the profession to state that in a case which occurred in my practice some years ago, in which I was engaged by letter, and informed subsequently that the labour had terminated quickly without medical assistance being required, I recovered the fee in the county court, after my proposal to compromise the matter by accepting a moiety thereof had been declined.

AT the monthly meeting of the Anglo-Russian Literary Society in the Imperial Institute on March 6th, Dr. Frank Clemow read a paper upon Russia and the Cholera, which was followed by a discussion.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF OXFORD.

ALTERATION OF REGULATIONS.—The Board of the Faculty of Medicine has given notice that, in consequence of the recent change of statute, candidates in the second examination for the degree of M.B. will be required, in and after Michaelmas term, 1895, at the time of entering their names with the Secretary to the Board of Faculties, to produce the following four certificates:

I. In Mental Disease.—A certificate, signed by the proper authority, showing: (1) That the holder has attended a course of lectures, with clinical demonstrations, in connection with one of the recognised medical schools, or (2) that he has attended for three months the clinical practice of a lunatic asylum recognised by the Board. With regard to (2) the Board will recognise for this purpose: In England and Wales, the county and borough asylums and public hospitals for the insane; in Scotland, the district and public asylums for the insane; in Ireland, the district asylums.

II. In Infectious Diseases.—A certificate, signed by the proper authority, showing that the holder has attended for not less than two consecutive months on the clinical practice of a fever hospital or asylum recognised by the Board. The Board will recognise for this purpose: In England, the infectious hospitals under the control of the Metropolitan Asylums Board; in Scotland, the Edinburgh Fever Hospital; in Ireland, the Dublin (Cork Street) Fever Hospital.

III. In Vaccination.—A certificate from a public vaccinator appointed by the Local Government Board and authorised by them to give certificates of proficiency.

IV. Of Attendance on Labours.—A certificate, signed by the proper authority, of (1) having attended twenty labours in (*a*) the maternity department of a recognised medical school, or (*b*) the Rotunda Hospital in Dublin, or (2) of having attended thirty cases under the superintendence of a duly registered medical practitioner. The certificate to state that the holder has in all cases been present at the time of the birth of the child.

UNIVERSITY OF CAMBRIDGE.

IN presenting for the degree of LL.D. *honoris causâ*, the Right Hon. the Earl of Kintore, G.C.M.G., Governor of South Australia, the Public Orator referred to the fact that in his recent expedition through Australia, a province "of more than four times the area of the whole of France and the whole of Germany," his lordship had "as a distinguished companion in his great journey a medical graduate of Cambridge, whose very name recalls to memory a fortress of his native land." The allusion is to Dr. E. C. Stirling, C.M.G., Lecturer on Physiology in the University of Adelaide. The Public Orator went on to speak of the scientific discoveries of the expedition.

DOWNING PROFESSORSHIP.—The choice of the electors has fallen on Dr. J. B. Bradbury, Physician to Addenbrooke's Hospital, University Examiner in Medicine, and Linacre Lecturer of Physic at St. John's College.

M.B. EXAMINATIONS.—The plan of these examinations for the Easter term is published in the *University Reporter* of March 6th. The third examination begins on Tuesday, April 24th; the first and second on Friday, June 8th.

DEGREES.—At the Congregation on March 1st the following medical degrees were conferred:—*M.B. and B.C.*: A. W. Cuff, B.A., St. John's; B. H. Lees, M.A., St. John's; E. W. Parsey, B.A., Peterhouse: A. L. Roper, B.A., Clare; W. J. Fenton, B.A., Caius; L. Slater, B.A., Caius; H. Menzies, B.A., Jesus; W. W. Wingate, B.A., Jesus; J. C. Gardner (formerly stroke of the University eight), Emmanuel,

The following is the speech delivered by the Public Orator, Dr. Sandys, on March 6th, in presenting for the degree of Sc.D. *honoris causâ* Dr. Santiago Ramón y Cajal, Professor of Histology and Pathological Anatomy in the University of Madrid:

Hodie laudis genus novum libenter auspicati, Hispaniæ gentis civem nunc primum salutamus. Salutamus virum de physiologiæ scientia optime meritum, qui inter flumen Hiberum montesque Pyrenæos duo et quadraginta abhinc annos natus et fluminis eiusdem in ripa Cæsaraugustæ educatus, primum ibidem, deinde Valentiæ, deinceps Barcelonæ munere Academico functus, tot honorum spatio feliciter decurso, nunc denique in urbe, quod gentis totius caput est, histologiæ scientiam præclare profitetur. Fere decem abhinc annos professoris munus Valentiæ auspicatus, fore auguratus est, ut intra annos decem studiorum suorum in honorem etiam inter exteras gentes nomen suum notesceret. Non fefellit augurium; etenim nuper etiam nostras ad oras a Societate Regia Londinensi honoris causa vocatus, muneri oratorio, virorum insignium nominibus iampridem ornato, in hunc annum destinatus est. Omitto opera eius maiora de histologia et de anatomia conscripta; prætereo etiam opuscula eiusdem quadraginta intra lustra duo in lucem missa; hæc enim omnia ad ipsa scientiæ penetralia pertinent. Quid vero dicam de artificio pulcherrimo quo primum auri, deinde argenti ope, in corpor humano fila quædam tenuissima sensibus motibusque ministrantia per ambages suas inextricabiles aliquatenus explorari poterant? In artificio illo argenti usum, inter Italos olim inventum, inter Hispanos ab hoc viro in melius mutatum et ad exitum feliciorem perductum esse constat. Si poeta quidam Romanus regione in eadem genitus, si Valerius Martialis, inquam, qui expertus didicit fere nihil in vita sine argento posse perfici, hodie ipse adesset, procul dubio popularem suum verbis suis paululum mutatis non sine superbia appellaret:

"Vir Celtiberis non tacende gentibus
Nostræque laus Hispaniæ,
Te *nostri Iberi ripa* gloriabitur,
Nec me tacebit Bilbilis."[1]

Duco ad vos virum et in Hispania et inter exteras gentes laudem merito adeptum, histologiæ professorem insignem, Santiago Ramón y Cajal.

[1] Martial, i 49, 1—2; 61, 11—12.

UNIVERSITY OF ABERDEEN.

HONORARY DEGREES.—At a meeting of the Senatus Academicus of the Aberdeen University the honorary degree of LL.D. was conferred on the following members of the medical profession: Professor T. R. Fraser, M.D., F.R.S., for his work in pharmacology and therapeutics, especially in reference to his investigation on the antagonism of drugs; Sir William Guyer Hunter, for his distinguished professional career in India; and Dr. Thomas Keith, as a recognition of his eminent services in the surgery of abdominal diseases, his skill as an operator, and for the important share he has taken in the work which has achieved many of the great triumphs of modern surgery.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns, including London, 6,251 births and 4,110 deaths were registered during the week ending Saturday, March 3rd. The annual rate of mortality in these towns, which had been 18.7 and 20.0 per 1,000 in the preceding two weeks, further rose to 20.5 last week. The rates in the several towns ranged from 13.8 in Leicester and 14.2 in Swansea to 25.5 in Plymouth and 33.1 in Wolverhampton. In the thirty-two provincial towns the death-rate averaged 20.2 per 1,000, and was 0.8 below the rate recorded in London, which was 21.0 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.4 per 1,000; in London the rate was equal to 2.7 per 1,000, while it averaged 2.2 in the thirty-two provincial towns, and was highest in Burnley, Birkenhead, and Wolverhampton. Measles caused a death-rate of 2.0 in Birkenhead, 2.2 in Leicester, and 4.3 in Wolverhampton; scarlet fever of 1.2 in Wolverhampton; whooping-cough of 1.8 in Plymouth, in Bristol, and in Cardiff; and "fever" of 1.2 in Nottingham. The 85 deaths from diphtheria included 59 in London, 6 in West Ham, and 5 in Manchester. Seven fatal cases of small-pox were registered in Burnley, and one each in London, West Ham, Bristol, and Bradford, but not one in any other of the thirty-three towns. There were 81 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, March 3rd, against 77, 78, and 81 at the end of the preceding three weeks; 17 new cases were admitted during the week, against 17 and 18 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,188, against 2,387, 2,270, and 2,181 at the end of the preceding three weeks; 239 new cases were admitted during the week, against 199 and 180 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, March 3rd, 879 births and 558 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had been 19.2 and 20.6 per 1,000 in the preceding two weeks, declined again to 19.6 last week, and was 0.9 per 1,000 below the mean rate during the same period in the thirty-three large English towns. Among these Scotch towns the death-rates ranged from 17.7 in Paisley to 25.2 in Dundee. The zymotic death-rate in these eight towns averaged 2.5 per 1,000, the highest rates being recorded in Dundee and Leith. The 202 deaths registered in Glasgow included 34 from whooping-cough, 11 from scarlet fever, and 6 from diphtheria. Two fatal cases of small-pox occurred in Leith, and 7 of whooping-cough in Dundee.

THE LICENSING OF BAKEHOUSES.

A CASE heard at the Worship Street Police-court on March 3rd not only shows the conditions amid which the baking trade is often carried on, but points to the desirability of instituting some system of licensing as recommended by Dr. Waldo, rather than trusting, as at present, to inspection and prosecution.

The sanitary inspector found a watercloset divided from the bakehouse by a rough partition, the approach to the place being by a dark passage with wooden walls. All along the passage, says the report in the *Daily Telegraph*, and percolating through the wooden sides into the bakehouse, sewage matter was flowing inches deep. There were forty-eight people living or working in the house. A notice was served on the defendant to do away with the nuisance, but when the place was visited again two days later nothing had been done, except, indeed, the making of tarts, which was going on the same as ever.

The defendant said he was only a weekly tenant, and could not do the work. He paid 33s. a week for the shop, bakehouse, and sleeping room, and had paid the landlord £30 to get possession. The inspector said that the house was rated to a foreigner, who rack rented it to various tenants, one of whom was the defendant.

A place of this sort would never have received a licence, whereas at present a nuisance must be proved before anything is done. The deficiency here was not in the mode of conducting the business, for which a tenant might be held responsible, but was a structural defect in the building, which unfitted it for the purposes for which it had been let. The inspector said it was usual to visit bakehouses twice a year, but an inspection of that sort had but small terrors for the landlord, who, if one tenant fails him, can readily get another who will take the risk of being found out. A licence, however, would apply not to the tenant but the house, and would throw the responsibility for the state of the building on the man who makes a profit by the letting of it; surely a better plan.

THE HEALTH OF HASTINGS.

IN the fourth quarter of 1893 the corrected death-rate was 16.57 per 1,000, as compared with 17.30 in the previous year; and the zymotic death-rate 1.67, against 2.08 per 1,000 of population in 1892.

MEDICAL INSPECTION OF SHIPPING IN THE THAMES.

A SYSTEM of medical inspection of shipping, by which the removal of infectious cases to hospital was increased tenfold, was in operation in the port of London during the latter half of 1893, as appears from Dr. Collingridge's report. It seems that the annual average of less than 6 such removals gave place to 26 in the six months in question, during which the Customs officers permitted joint port medical and Customs inspection of every vessel coming "foreign." Of the 26 there were 16 cholera cases, and 10 cases are recorded in which infectious disease was found on board after the vessel was cleared by the Customs quarantine officer. Dr. Collingridge points out that this joint inspection, whilst instituted on account of cholera prevalence, has thus been instrumental in the detection of other diseases, and has thus avoided the passage to London of infectious cases which aforetime escaped the vigilance of non-medical inspection by the Custom House; and he argues very properly that all port sanitary inspection of vessels should be of a medical character. Arrangements with this end in view are urged as matter of prime importance, and such as should be made the subject of a conference with the Government.

Another matter which Dr. Collingridge would gladly see placed on a different footing is action in regard to yellow fever and plague transferred from the Privy Council to port sanitary authorities. Of the soundness of this view there can be no reasonable doubt. The erasure of our present quarantine law from the Statute Book cannot be made too early.

THE SANITARY STATE OF SOUTHEND.

THE town of Southend is to be congratulated upon its death-rate of 10.91 per 1,000 of average population during last year, or 12.33 if visitors be excluded. The zymotic rate of mortality was 1.94 per 1,000, but the number of fever attacks, 119, was large, the chief incidence being thought of as due to defective sewerage. Dr. Jones, the health officer, seems sanguine that the new sewerage and outfall scheme will remove the danger of a like recurrence of disease, and no doubt the equally important matter of house drainage will receive the unremitting attention which it deserves. Flushing and cleansing seem the order of the day; private wells are being closed, watercloset enforced, scavenging looked after, and general sanitary activity manifested. Doubtless the coming season will find the town council striving to maintain a good name for their town. We trust there may be no cause for anxiety.

DUAL NOTIFICATION.

THE duty of heads of households towards the Compulsory Notification Act is perfectly plain, but little carried out, and complaints by health officers are by no means infrequent as to the discouragement which avoidance of this duty too often affords. Where cases of disease obviously of an infectious nature are not medically attended it seems to be the one desire of only too many persons to maintain a selfish silence concerning the matter. We entirely agree with Dr. Hollings, the health officer of Calverley, that the prosecution of defaulters should be undertaken in a few instances with the view of securing general compliance with a statutory requirement not seldom of great moment to the public health.

SMALL-POX IN MANCHESTER IN 1893.

THERE were 619 reported cases of small-pox last year, of which 600 occurred in the first half. The cases were at the rate of 1.2 per 1,000 of population. Only 4 cases were notified during the last three months of the year.

MEDICAL NEWS.

DR. THOMAS CARR has been presented with a handsome brass inkstand by the members of his ambulance class.

DR. MAURICE TRESTON has been presented with a salad bowl and service by the ambulance class at Sparkhill, Birmingham.

AT a meeting of the North London Medical and Chirurgical Society at the Great Northern Central Hospital on March 8th, a paper illustrated by means of the lantern was read by Dr. Patrick Manson on the Diagnosis of Tropical Diseases seen in London.

SANITATION SUNDAY.—The Church Sanitary Association has recommended that the Seventh Sunday after Trinity should be a "Sanitation Sunday," on which the hygienic necessity of personal cleanliness, fresh air, abundant light, pure water and food, and safeguards against infectious disease should be spoken of from the pulpit.

AT the close of the ambulance classes held at the Shawlands Academy, in connection with the Pollokshaw centre of the St. Andrew Ambulance Association, Dr. Ritchie, who had instructed the ladies' class, and Dr. W. Walker, who had taught the men's class, were presented with objects of art by their several classes.

MEDICAL STUDENTS IN PARIS.—During 1893 nearly 5000 students were registered in the Medical Faculty of Paris. Of these 1,358 were foreigners, and 155 were women; of the latter 14 were Frenchwomen. The total number of examinations passed was 6,803.

THE INSTITUTE OF CERTIFIED SANITARY INSPECTORS.—We have received the annual report of the Institute of Certified Sanitary Inspectors, which seems to have started into existence under good auspices and with considerable vigour. While, however, sympathising with this body in the objects of its formation, and congratulating it on its report, we cannot shut our eyes to the fact that, as matters stand at the present time, it is an outcome of one only of the many bodies which now claim the right to give certificates to sanitary inspectors. The natural and the proper outcome of the present condition of affairs in regard to this question is that proposed by Sir Walter Foster, as mentioned in the BRITISH MEDICAL JOURNAL of February 24th namely, that a conjoint board for the purpose of certification of sanitary inspectors should be formed, consisting of representatives of all the various bodies approved by the Local Government Board. If this were done the Institute of Certified Sanitary Inspectors might, without any alteration of rules, become truly representative of the certified sanitary inspectors of the country.

REVOLVER ACCIDENTS.—Mr. Wightman, Coroner, at an inquest at Wath-on-Dearne recently, made some strong yet apposite remarks on the easy manner in which firearms can be procured and the accidents and deaths which in consequence resulted. A boy, aged 12, had been in this case shot in the head; the revolver went off accidentally as his brother was taking it out of his pocket. The coroner described the indiscriminate sale of these weapons not only to boys and young persons but also to adults as criminal. He could not too strongly condemn the practice. Murders were committed, accidents frequently resulted, and a premium was placed upon suicide by this reckless sale of firearms. He hoped a prohibitive tax would some day be placed upon their sale. Here was a case where a tradesman had sold a revolver to a boy without knowing anything about him or having the slightest idea what he was going to do with it. If the boy could not have bought a cheap, but dangerous thing like that the poor little twelve-year-old brother would be alive now. He regretted he had not the power to punish the person who sold the weapon. A revolver was useless except to the policeman or soldier, and the sooner the indiscriminate sale was stopped the better.

MEDICO-PHYSIOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.—An adjournment of the annual meeting of this Association was held at Oxford on February 15th, under the presidency of Dr. J. M. Lindsay. The report by the Rules Committee was further considered, the proposed rules being discussed *seriatim*, and after some amendments adopted. The ordinary meeting of the Association was held the same afternoon. The following resolution, proposed by Dr. Conolly Norman and seconded by Dr. Savage, was passed unanimously: "That this meeting has learnt with regret the retirement of Mr. Cleaton from his post as visiting member of the Lunacy Commission after a long and distinguished service. The Association feels that Mr. Cleaton's kindliness and clear judgment have been of the greatest service in his work in the Lunacy Department, and hopes he may live long to enjoy his well-deserved leisure." It was announced that the next annual meeting would be held in June, the precise date to be fixed by the President-elect, Dr. Conolly Norman. Eight candidates were admitted member of the Association. Papers were read by Dr. Weatherly and Dr. Menzies, and a paper by Dr. Chapman was taken as read. In the evening the member dined together at the Randolph Hotel.

MEDICAL VACANCIES.

The following vacancies are announced:

BAILIEBOROUGH UNION, Termon Dispensary.—Medical Officer. Salary, £30 per annum, £12 10s. as Medical Officer of Health, together with registration and vaccination fees. Applications to the Rev. Walter Peyton, Chairman, Billis Grange, Virginia. Election on March 14th.

BIRMINGHAM GENERAL DISPENSARY, Birmingham.—Resident Surgeon. Salary, £150 per annum, with an allowance for cab hire, and furnished rooms, fire, lights, and attendance. Applications and testimonials to Alex. Forrest, Secretary, by April 11th.

BOLTON INFIRMARY AND DISPENSARY.—Junior House-Surgeon; age not to exceed 25. Salary, £80 per annum, with furnished apartments, board, and attendance. Applications and testimonials to Peter Kevan, Honorary Secretary 12, Acresfield, Bolton, by March 20th.

BRADFORD CHILDREN'S HOSPITAL.—House-Surgeon (to dispense); doubly qualified. Salary, £70, with board, residence, and washing. Applications and testimonials to C. V. Woodcock, Secretary, by March 12th.

CITY ORTHOPÆDIC HOSPITAL, Hatton Garden.—Honorary Surgeon; must be a Fellow of the Royal College of Surgeons of England or of Edinburgh. Also Two Honorary Assistant Surgeons; must be either Fellows or Members of the Royal College of Surgeons of England or of Edinburgh. Applications, addressed to the Committee at the Hospital, by March 12th.

COUNTY OF NORTHUMBERLAND.—Medical Officer of Health. Salary, £500 per annum, with travelling expenses. Appointment for three years. Applications and testimonials, endorsed "Medical Officer," to C. D. Forster, Clerk to the Council, by March 24th.

DENTAL HOSPITAL OF LONDON, Leicester Square, W.C.—Assistant Dental Surgeon. Applications to J. Francis Pink, Secretary, by March 12th.

DEVONSHIRE HOSPITAL, Buxton, Derbyshire.—Assistant House-Surgeon. Salary, £50 per annum, with furnished apartments, board, and washing. Applications and testimonials to Joseph Taylor, Secretary, by March 19th.

EYE AND EAR INFIRMARY, Liverpool.—Honorary Assistant Surgeon. Applications and testimonials to Reginald Haigh, Honorary Secretary, by March 12th.

GENERAL HOSPITAL, Birmingham.—Two Assistant House-Surgeons. Appointments for six months, and may be held by re-election for a further period of three or six months, but no longer. No salary attached to the posts, but residence, board, and washing will be provided. Applications and testimonials to Howard J. Collins, House-Governor.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, Bloomsbury, W.C.—House-Surgeon to Out-patients (non-resident). Appointment for six months, but the holder will be eligible for a second term of Office. Salary, 25 guineas. Applications and testimonials to Adrian Hope, Secretary, by March 20th.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, 26, Margaret Street, Cavendish Square, W.—Honorary Visiting Physician; must reside within one mile of the Institution. Particulars of qualifications to be obtained at the Infirmary.

JOINT COUNTIES LUNATIC ASYLUM, Carmarthen.—Medical Superintendent. Salary, £500 per annum, with unfurnished house, garden produce, fire, light, and washing. Applications and testimonials to be forwarded to W. Morgan Griffiths, Solicitor, Carmarthen, by March 24th.

MILLER HOSPITAL AND ROYAL KENT DISPENSARY, Greenwich Road, S.E.—Junior Resident Medical officer. The post is tenable for six months, with prospect of re-election for the same period. Salary, £30 per annum, with board, attendance, and washing. Applications and testimonials to Major-General G. R. Roberts, Honorary Secretary, by March 10th.

NATIONAL ORTHOPÆDIC HOSPITAL, 234, Great Portland Street, W.—Assistant Surgeon; must be Fellow of the College of Surgeons of England. Applications and testimonials to the Secretary by March 12th.

OWENS COLLEGE, Manchester.—Professor of Zoology. Applications to the Council of the College, under cover to the Registrar, by April 3rd.

ROYAL COLLEGE OF PHYSICIANS.—Milroy Lecturer. Applications to Edward Liveing, M.D., Registrar, by April 9th.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road, E.C.—House-Physician. Appointment for six months. Salary at the rate of £40 per annum, with board and lodging. Applications and testimonials to the Secretary by March 14th.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications with testimonials to the Secretary, T. A. Fisher-Hall, by March 10th.

ROYAL SURREY COUNTY HOSPITAL, Guildford.—House-Surgeon. Salary, £80 per annum, with board, lodging, and laundry. Applications to the Honorary Secretary by March 10th.

ROYAL SURREY COUNTY HOSPITAL, Guildford.—Assistant House-Surgeon. No salary, but board, residence, and laundry provided. Applications and testimonials to the Honorary Secretary, by March 10th.

ST. THOMAS'S HOSPITAL.—Resident Assistant Physician. Applications and testimonials to Mr. E. M. Hurdy, Treasurer's Clerk, by March 10th.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.—Assistant House-Surgeon; doubly qualified, registered, and unmarried. Salary, £65 and £50 respectively, with board, lodging, and washing. Applications and testimonials to Dr. Sinclair White, Honorary Secretary Medical Staff, by March 12th.

TAUNTON AND SOMERSET HOSPITAL.—Assistant House-Surgeon. Appointment for six months. No salary, but board, washing, and lodging in the Institution. Applications and testimonials to the House-Surgeon by March 24th.

TORBAY HOSPITAL, Torquay.—Honorary Ophthalmic Surgeon. Applications and testimonials to the Honorary Secretary by March 17th.

TUNBRIDGE WELLS GENERAL HOSPITAL.—Resident House-Surgeon. Also to act as Secretary. Must be unmarried. Salary, £100 per annum, with board, furnished apartments, gas, firing, and attendance. Applications and testimonials to Henry Harris, Assistant Secretary at the General Hospital, by March 13th.

WEST-END HOSPITAL FOR NERVOUS DISEASES, Etc., 73, Welbeck Street, W.—Anæsthetist. Appointment for twelve months. Candidate eligible for re-election. Applications to H. Ansell, Secretary.

MEDICAL APPOINTMENTS.

BAINES, Eustace W. P., M.B., appointed House-Physician to the Hospital for Women, Soho.

BROWN, Stanley M., M.B.Lond., L.R.C.P., appointed House-Surgeon to the Salford Royal Hospital, *vice* G. E. Newby, resigned.

BROWNE, Edgar A., F.R.C.S.Edin., appointed Consulting Surgeon to the Liverpool Eye and Ear Infirmary.

CLARK, W. F., M.R.C.S.Eng., L.S.A., appointed Medical Officer to the Cheshunt District of the Edmonton Union, *vice* J. H. Russell, resigned.

DUNN, D. S., M.D., M.Ch., L.M., appointed Medical Officer to the Warboy District of the St. Ives Union, *vice* T. L. Lawson, resigned.

EDWARDS, B., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer of the Ipswich District of the Samford Union, *vice* G. C. Edwards, resigned.

GREY-EDWARDS, C., B.A., M.B., B.Ch.Univ.Dubl., appointed Public Vaccinator to the No. 1 Anglesey District of the Bangor and Beaumaris Union.

HOOTON, W. A., L.R.C.P.Lond., M.R.C.S., L.D.S., appointed Honorary Dental Surgeon to the General Hospital for Sick Children, Manchester.

KNIGHT, Ernest, M.R.C.S., L.R.C.P., appointed Junior House-Surgeon to the Salford Royal Hospital, *vice* S. M. Brown.

LACK, H. Lambert, M.B., F.R.C.S., appointed Demonstrator in Surgery to King's College, London.

LIGHTBODY, J. H., M.D.Vict., M.B. and Ch.B., appointed Medical Officer to the Wybunbury District of the Nantwich Union, *vice* G. L. Travis, resigned.

O'SULLIVAN, Michael, M.B.R.U.I., appointed Pathologist and Anæsthetist to the Children's Hospital, Temple Street, Dublin.

ROOK, A. E., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer to the Eastbourne Union, *vice* H. D. Farnell, resigned.

RUBRA, H. H., M.R.C.S., L.R.C.P., appointed Assistant House-Surgeon to the Cumberland Infirmary Carlisle.

SHEARS, Charles H. B., M.R.C.S.Eng., L.R.C.P.Lond., appointed Surgeon to the Liverpool Eye and Ear Infirmary.

DIARY FOR NEXT WEEK.

TUESDAY.

ROYAL COLLEGE OF PHYSICIANS, 5 P.M.—Dr. Octavius Sturges: The Lumleian Lectures on Heart Inflammation in Children. Lecture II.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M.—Mr. T. H. Morse: Ruptured Gastric Ulcer treated by Laparotomy, Gastric Suture, and Washing Out of the Peritoneum: Recovery; communicated by Mr. Barwell. Mr. C. B. Lockwood: A Case of Resection and Immediate Suture of Intestine, which had been Strangulated Eighty-one Hours: Recovery.

WEDNESDAY.

NATIONAL HEALTH SOCIETY, 53, Berners Street, W., 4 P.M.—Sir Douglas Galton: House Sanitation.

POST-GRADUATE COURSE, West London Hospital, Hammersmith, W., 5 P.M.—Mr. Percy Dunn: Foreign Bodies in the Eye, and Ophthalmic Cases.

HUNTERIAN SOCIETY, 8.30 P.M.—Pathological evening. Specimens will be exhibited by Dr. William Ettles, Dr. Turner, Dr. P. Manson, Dr. James Galloway, and Mr. Charters J. Symonds.

METROPOLITAN COUNTIES BRANCH: HERTFORDSHIRE DISTRICT, Red Lion Hotel, Hatfield, 5.30 P.M.

LARYNGOLOGICAL SOCIETY OF LONDON, 20, Hanover Square, W., 5 P.M.—Papers will be read by Dr. J. B. Ball, Dr. De Havilland Hall, Dr. A. A. Kanthack, Dr. Percy Kidd, Dr. Felix Semon, Dr. Scanes Spicer, Mr. W. R. H. Stewart, Mr. Charters J. Symonds, and Dr. H. Tilley.

THURSDAY.

ROYAL COLLEGE OF PHYSICIANS, 5 P.M.—Dr. Octavius Sturges: The Lumleian Lectures on Heart Inflammation in Children. Lecture III.

HARVEIAN SOCIETY OF LONDON, 8.30 P.M.—Discussion on Influenza, to be opened by Dr. Samuel West.

SOCIETY OF ANÆSTHETISTS, 20, Hanover Square, 8.30 P.M.—Mr. Richard Gill: On the Relation of the Pupil to Anæsthesia.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT, Brooke House, Upper Clapton, 8.30 P.M.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTH.

GWYNNE.—On February 27th, at 182, Jamaica Road, S.E., the wife of Dr. Gwynne, of a daughter.

DEATHS.

MACPHERSON.—On March 1st, at 251, Bath Street, Glasgow, Robert Macpherson, M.D., aged 39 years.

SHAW.—On February 18th, at Carr Lane House, Slaithwaite, Thomas Shaw, L.R.C.P., L.R.C.S., Lieutenant 2nd V.B.W.R. Regiment, aged 43 years. Interment St. James's Church, Slaithwaite.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies.*

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

ALEX writes: Will you or any of your correspondents kindly furnish me with information as to the prospects of practice in the South of France, Switzerland, or Italy, and the regulations (if any) under which British medical men are allowed to practise?

S. T. would be glad to know the special significance (if any) of somewhat sudden dilatation of facial venules occurring in a gentleman past middle age, energetic, but engaged in sedentary occupation, and mentally overstrained. Patient is hypochondriacal, but not melancholic. No reason to suspect alcoholism. Would any local treatment be likely to improve matters?

SLEEPLESSNESS IN BOYS.

A COUNTRY SURGEON writes: My son, 12 years of age, cannot sleep at night. It is often 3 or 4 o'clock in the morning before he can get off. He is healthy, very active, and quick at picking up anything, whether lessons, cricket, or football. He has had change of air (seaside and other places), with no good result. He sleeps no better during holidays than when at school. I have not given him drugs to procure sleep, but should be thankful if any of your readers would suggest a remedy of any kind.

ANSWERS.

NIHIL: A MEMBER.—Information as to conditions of practice in foreign countries will be found in the Educational Number of the BRITISH MEDICAL JOURNAL, published on September 2nd, 1893, p. 546.

W.W.—Dunglison's *Dictionary of Medical Science*, of which the twenty-first edition has recently been published, will no doubt answer our correspondent's purpose.

X.—The Degree of Doctor of Medicine obtained from a French faculty of medicine is required under the new medical law by everyone wishing to practise in France.

HARD UP.—A German qualification is necessary for anyone wishing to practice in Saxony. The *Staatsexamen* (the only qualifying examination in the German empire) must be passed in German, and no interpreter is, we believe, allowed. There is no school of medicine at Dresden.

TRAINING OF MALE NURSES.

WE are informed that Mr. S. Osborn, Chief Surgeon of the Metropolitan Brigade of the St. John Ambulance Association, has just concluded a course of nursing lectures to men at St. John's Gate. These lectures were the same as those given by him at the Herbert Hospital during the Egyptian war. Information as to the next course can be obtained from Mr. Church Brasier, St. John's Gate, Clerkenwell, E.C.

SHIP SURGEONCIES.

A M.O.M.—The round voyage to the Cape or Natal and back usually occupies about nine weeks. Surgeons are engaged by the voyage, and the Castle Line Company are said to be inundated with applications for the appointment. As in other first-class lines, considerable influence with the management is generally required to obtain the position, and our correspondent should obtain this if possible and forward his application with letters of recommendation to Messrs. Donald Currie and Co., 3 and 4, Fenchurch Street, E.C.

M.D.LOND. IN STATE MEDICINE.

I.W.P. will find the following works useful in preparing for this examination:—Textbooks, Introductory: *Hygiene and Public Health*, Louis Parkes; *Hygiene and Public Health*, B. A. Whitelegge. Books of Reference: *A Treatise on Hygiene and Public Health*, Stevenson and Murphy; *A Manual of Public Health*, Wynter Blyth; *Our Homes*, Shirley Murphy; *Parkes Practical Hygiene*, Lane Notter; *Lectures on Sanitary Law*, Wynter

Blyth; *Vital Statistics*, Newsholme; *Manual of Bacteriology*, Sims Woodhead; Corfield's *Treatment and Utilisation of Sewage*; Stratton's *Public Health Acts*; *Model By-laws of the Local Government Board*; *Pocketbook for Medical Officers of Health*, Willoughby.

NOTES, LETTERS, Etc.

THE PASSAGE OF THE CATHETER IN PROSTATIC DISEASE.

DR. J. F. M. MILES (Dingle, co. Kerry) writes: The manipulation described by Dr. W. Donovan is as old as the hills. I have been practising it for the last twenty-five years, and I think it was my old master, the late Dr. Tanner of Cork, that first suggested the idea to me.

RECURRENCE OR RELAPSE.

A MEDICAL OFFICER OF HEALTH writes: I had a boy (A.), a young man (B.), and a young woman (C.), develop scarlet fever in the order mentioned on successive days. Each case as it occurred was removed from the house to another house, isolated, and placed under the care of a trained nurse. All went well to the twenty-first day, when B. had a fresh attack of scarlet fever with high temperature, sore throat, and rash. The next day C. (her 21st day) was ill with measles, temperature 104.2° F., and a copious rash. Both patients had been up and were peeling. The boy A. remained perfectly well. I may add that in neither of the three patients was there, on any occasion, the slightest sign of albumen. All are now convalescent.

CREASOTE AND CLIMATE IN THE TREATMENT OF PHTHISIS.

DR. E. H. HICKS (Wymeswold, Leicestershire) writes: In the BRITISH MEDICAL JOURNAL of February 10th I see a letter from Mr. A. J. Garland advocating the claims of creasote in phthisis in high altitudes. During my residence in Bogota, South America, 8,750 feet above sea level, I had several phthisical patients under my care. The conclusions I came to were that those who came to the city or plateau already suffering from the disease in marked form, such as hæmoptysis, night sweats, muco-purulent expectoration, improved greatly even without any creasote. The disease became apparently arrested, and the patients could lead fairly active outdoor lives. In a few very advanced cases of pulmonary tuberculosis I believe that creasote had a retarding action on the disease. Those cases that developed the disease in the city or on the plateau showed no improvement whatever under the creasote treatment.

OPIUM AS A PROPHYLACTIC AGAINST MALARIA.

M.D.ABERD. writes: In view of the inquiry going on at present into the use of opium in India, and whether or not it is of use as a preventative of malarial fever, the following quotation from Kingsley's *Alton Locke* may be of interest: "I assured him that I never drank fermented liquors. 'Aw? eh? how can you do that then? Die o' cowd i' the fen, that gate yow would. Lord love ye then! they as dinnot tak' spirits down thor tak' their pennord of elevation, their womenfolk especial.' 'What's elevation?' 'Oh, ho, ho! yow goo into druggist's shop o' market day into Ceambridge, and you'll see the little boxes, doozens and doozens a' ready on the counter, and never a ven-man's wife goo by but what calls in for her pennord of elevation to last her out the week. Oh, ho, ho! Weel it keeps womenfolk quiet, it do; and its mortal good agin agoo pains.' 'But what is it?' 'Opium, boi alive, opium!' 'But does it not ruin their health? I should think it the very worst sort of drunkenness.' 'Ow, well, yow moi say that; mak'th 'em cruel thin then, it do, but what can bodies do i' th' agoo?'"[1] Kingsley certainly knew of the use of opium in the fens to ward off ague.

THE DANGERS OF THE CIGARETTE.

"AN anti-cigarette movement" has been started in San Francisco to check the wide-spread evil of cigarette smoking among minors. According to the statement of the Superintendent of Schools, reported in the *Occidental Medical Times*, the habit is not confined to boys, and boys and girls are being asked to sign a pledge to abstain from cigarette smoking until 21 years of age. A committee appointed by the Board of Education has recommended that all persons engaged in selling cigarettes should be obliged to take out a licence, costing about £5 a year, that a document setting out the evils of cigarette smoking should be signed by all the medical men in the locality and circulated in all the schools, and that there should be a cigarette Sunday, on which all the clergy should preach against the habit. An analysis of several brands of cigarettes retailed in San Francisco showed that in addition to tobacco they contained ammonium chloride, nitre, a large quantity of woody fibre which was not derived from the tobacco plant, and a soft material apparently the pith or root of some plant which was not tobacco. Perhaps the most characteristic part of the movement is that the children who have signed the pledge have been encouraged by seeing their names in lists published in the newspapers.

LETTERS, COMMUNICATIONS, ETC., have been received from:

(**A**) Messrs. R. Anderson and Co., London; Mr. F. J. Atkins, Birmingham; Mr. C. Adams, Nice; An Army Surgeon; A. F.; A. J.; Mr. J. P. Aston, Bradford; J. M. Atkinson, M.B., Hong Kong; Mr. H. Ansill, London; A. M. O. (**B**) Mr. R. T. H. Bodilly, Woodford; Dr. J. R. Black, Greenock; Mr. F. J. Burman, Rotherham; B. D. S.; Dr. J. C. Burkitt, Whitwick; Mr. W. M. Beaumont, Bath; Mr. R. Beasley, London. (**C**) Dr. M. Charteris, Glasgow; Dr. J. O. Closs, Dunedin; Mr. J. Cornhill, Ilfracombe; Mr. J. H. Croudace, Stafford; Mr. S. W. Churchill, Atherstone; Country Surgeon; Dr. W. A. Carline, Lincoln; Dr. W. H. Calvert, Melrose; Dr. P. M. Chapman, Hereford; Dr. T. Churton, Leeds; Clark's Bread Company, Brighton. (**D**) Dr. C. Dukes, Rugby; Dr. J. Davy, Halifax; Mr. D. Deeley, Derby; A. C. Dutt, M.B., Whitby; Mr. H. de B. Dwyer, London; S. Delépine, M.B., Manchester; Dental Hospital of London, The Secretary of the, London. (**E**) Epidemiological Society, The Secretary of the, London; Mr. K. A. S. Eden, Bradford. (**F**) Mr. W. Fairbank, Windsor; Mr. R. F. Fraser, London; Mr. J. F. Foveaux, London. (**G**) Dr. J. Gairdner, Crieff; Mr. J. A. Gray, London; Mr. J. H. Gillam, Worcester; Mr. J. H. Gwynne, London. (**H**) Mr. W. A. Hooton, Manchester; Mr. A. Hay, Salford; J. Hodgson, M.B., Oldham; Mr. R. H. Hemsted, Whitchurch; Mr. W. Hind, Stafford. (**I**) Iota; Inquirens. (**J**) Dr. E. Jepson, Durham; Jar. (**K**) Mr. C. T. Kingzett, London; Dr. G. C. Kingsbury, Blackpool; Mr. P. Q. Karkeek, Torquay; Dr. W. M. Kelly, Bath. (**L**) Dr. C. J. Lewis, Stirling; Mr. E. Little, Wimbledon; Mr. H. L. Leek, London; The J. B. Lippincott Co., London; Mr. C. H. Leet, Seaforth. (**M**) Much Obliged Member; Mr. W. C. J. Miller, London; Dr. J. Murphy, Sunderland; Mr. L. A. Mitchell, London; Mr. G. H. Makins, London; M.B., L.S.A.; Mr. W. L. Mullen, Melbourne; Mr. F. H. Moore, Ely; Mr. D. McCohn, Glasgow; Mr. A. F. B. Mills, Cardiff; Dr. J. L. Maxwell, London; Mason College, The Secretary of, Birmingham. (**N**) Herr Nothnagel, Vienna; (**O**) Observer; Old Member; Dr. J. Oliver, London; Mr. S. Osborn, Datchet. (**P**) Dr. E. F. Potter, London; J. W. Pugh, M.B., Brighton; Dr. S. R. Philipps, Virginia Water; Probatum Est; Mr. M. Palmer, Burton-on-Trent; Mr. J. H. B. Pinchard, Taunton; Persevere; Mr. W. S. Penberthy, Nottingham; M. A. D. Pithie, Lymington; Mr. H. E. Powell, London; G. S. Perkins, M.B., London. (**R**) Mr. R. Rauschke, Leeds; Dr. E. S. Reynolds, Manchester; D. Rorie, M.B., Cardenden; Mr. J. Rhodes, Glossop; Mr. A. L. Rawlinson, Manchester; R. M. D.; T. Redmayne, M.B., Hastings; Dr. A. Ruffer, London. (**S**) Mr. M. K. Soutter, London; Dr. S. H. Snell, Grays; Stutterer; Dr. E. M. Sympson, Lincoln; Mr. S. N. Scott, Plymstock; Mr. G. G. Sinclair, Durham; S. T.; Mr. W. B. Saunders, Philadelphia; Mr. W. E. S. Stanley, Bath; Mr. M. Sullivan, Dublin; Dr. J. F. W. Silk, London; Mr. C. H. Sheers, Liverpool; Messrs. Street and Co., London. (**T**) Mr. C. Thamodarampillay, Maradana; Mr. D. W. Treston, Birmingham. (**U**) Universal Digestive Tea Company, Manchester. (**V**) J. F. Vince, M.B., Birmingham. (**W**) Dr. J. H. Williams, Flint; J. D. Wynne, M.B., Clonmel; Mr. H. Wilkins, Coventry; E. Withington, M.B., Kingston-on-Thames; Mr. H. E. Wright, London; Dr. R. Wood, Driffield; etc.

[1] *Alton Locke*, chap. xii.

BOOKS, ETC., RECEIVED.

Précis d'Obstétrique. Fascicule I et II. Par A. Ribemont-Dessaignes et G. Lepage. Paris: G. Masson. 1894. Fr. 30.

A Handbook of Medical Pathology. By W. P. Herringham, M.D.; A. E. Garrod, M.D.; and W. J. Gow, M.D. London: Baillière, Tindall, and Cox. 1894. 7s. 6d.

Congenital Affections of the Heart. By G. Carpenter, M.D. London: John Bale and Sons. 1894. 3s. 6d.

Dr. Chesterfield's Letters to his Son on Medicine as a Career. By Sir W. B. Dalby. London: Longmans, Green, and Co. 1894. 1s.

An Illustrated Encyclopædic Medical Dictionary. By Dr. F. P. Foster. Vol. IV. London: Sampson Low, Marston, and Co. 1894.

Clinical Lectures on Recent Surgery. By A. T. Norton. London: Baillière, Tindall, and Cox. 1894. 2s. 6d.

Disinfection. By Mary Truman and Edith Sykes. London: Roxburghe Press. 3d.

St. Bartholomew's Hospital Reports. Edited by Dr. W. S. Church and W. J. Walsham. Vol XXIX. London: Smith, Elder, and Co. 1893.

Zeitschrift für physiologische Chemie. Herausgegeben von F. Hoppe-Seyler. Strassburg: Karl J. Trübner. 1894.

An Essay on the Chief Causes of Disease and their Prophylactic or Preventive Treatment. By C. Thamodarampillay. Colombo: *Times of Ceylon* Steam Press. 1894. Rs. 1.50.

A Treatise on Hygiene and Public Health. By Dr. T. Stevenson and Shirley F. Murphy. Vol. II. London: J. and A. Churchill. 1893. 32s.

The National Dispensatory. By Dr. A. Stillé, J. M. Maisch, C. Caspari, and H. C. C. Maisch. Fifth edition. London: J. and A. Churchill. 1894. 36s.

International Clinics. Vols. I-IV. London and Philadelphia: J. B. Lippincott Co. 1894.

The Medical Register, 1894. London: General Medical Council.

Medical Students' Register. List of Medical Students Registered during the year 1893. London: General Medical Council.

Man an Organic Community. By J. H. King. Vols. I and II. London: Williams and Norgate. 1893. 15s.

Beiträge zur Lehre vom Stoffwechsel des gesunden und kranken Menschen. Von Dr. Carl von Noorden. Heft II. Berlin: August Hirschwald. 1894. M. 4.

Aëro-Therapeutics or the Treatment of Lung Diseases by Climate. By Dr. C. T. Williams. London: Macmillan and Co. 1894. 6s.

Food and Drink Rationally Discussed. By Dr. T. Dutton. London Hirschfeld Bros. 1894. 3s.

*** In forwarding books the publishers are requested to state the selling prices.

THE LUMLEIAN LECTURES
ON
HEART INFLAMMATION IN CHILDREN.

Delivered before the Royal College of Physicians.

BY OCTAVIUS STURGES, M.D.CANTAB., F.R.C.P.,
Senior Physician to the Hospital for Sick Children, Great Ormond Street; and to the Westminster Hospital.

II.

MR. PRESIDENT, FELLOWS, AND GENTLEMEN,—In my first lecture I attempted some classification of rheumatic heart inflammation in childhood, dwelling especially on that acute form of carditis which, while it is almost peculiar to that time of life, is at once so insidious and so dangerous as to demand special attention. Reference was made to the great diversity in its earlier symptoms, the trivial character of its arthritis, and the absence sometimes of any distinct evidence of rheumatic origin. Further, the prominence of nervous phenomena was alluded to, and the suddenness of cardiac failure was contrasted with the very slight anatomical changes found in some instances after death.

I would now shortly consider some points of physical diagnosis, already incidentally mentioned, in reference to pericarditis; and proceed thence to the more controverted question of the earliest recognisable signs of endocarditis in children.

In most instances of pericarditis, if not in all, there is slight displacement outwards of the heart's apex. The sign, however, is of some delicacy even when the heart is of normal size, and the patient seen early, and it needs for its appreciation accurate notions of the natural position of the apex at various ages.

Much labour has been expended on the determination of this point. In his observations upon the locality of the apex beat in 300 healthy children between a month and 14 years of age, Stärck[1] found that in many cases the position was difficult to determine. Up to the fourth year it is, in his estimate, just outside the nipple line; from 5 to 6 it is *in* the nipple line; and after 6 inside that line. As to the cardiac area of superficial (not deep) dulness he found it diminish with the years both as to its upper and left boundary, falling by the width of a rib (that is, the fourth left rib) between the sixth and the twelfth year. Stärck recognises three types of superficial cardiac dulness corresponding with 1 year old, 6 years, and 12 years. It is sufficient for our present purpose to notice the second and third types. The deep dulness at both 6 and 12 years is practically the same (dotted line). The superficial dulness is, as here represented, lower at 12 years by the width of a rib (darker area), and having its left border on the parasternal line.

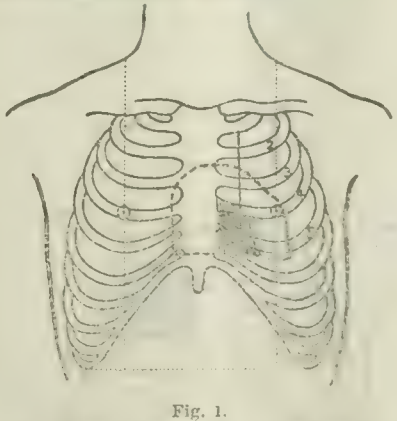


Fig. 1.

My friend Dr. Garrod has been good enough to investigate the subject of the superficial cardiac area dulness, and the lifesize tracings here produced are the result. They accord generally with Stärck's conclusions. "The observed peculiarities are explained," Dr. Garrod believes, "by a more horizontal or recumbent position of the heart in children than in adults, the heart gradually becoming more erect as the child grows."

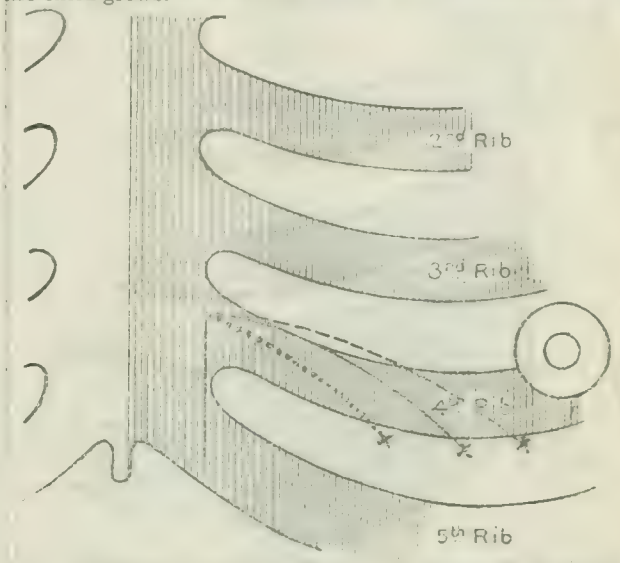


Fig. 2.—Influence of position on cardiac dulness; ——— outlines of dulness in erect position; - - - - outlines of dulness when lying on the left side; ..... outline of dulness when lying on the right side. E. L., 11 years. Physiological albuminuria; heart natural.

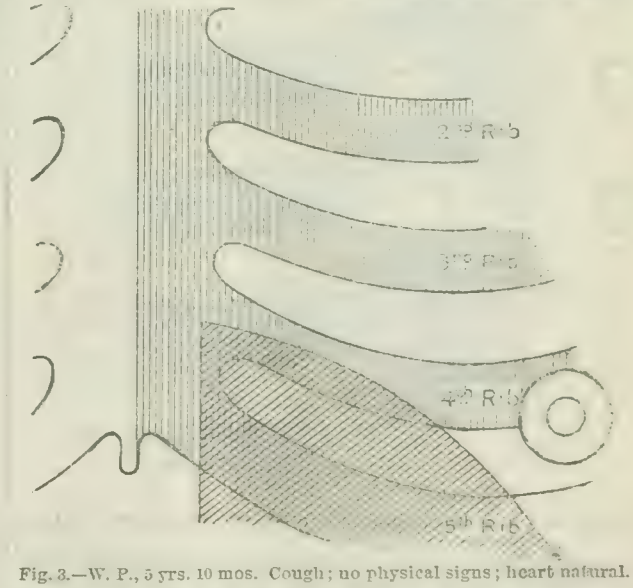


Fig. 3.—W. P., 5 yrs. 10 mos. Cough; no physical signs; heart natural.

Another point included in Dr. Garrod's tracings concerns the amount of displacement of the child's heart in different positions. It was observed of a patient of my own (L. H., aged 8) that the displacement to the left, following the child being laid upon that side, was maintained for some minutes after the dorsal position had been resumed. Drs. Ringer and Phear record a similar observation in a recently published paper.[2] They noted further a similar delay in movement lasting a minute or two on the first disturbance of the patient from the back to the left side.

Dr. Walsham, at the same hospital, has made observations not only as to the movements of the heart right and left, but also in the inverted position, upside down. In the case of four boys, aged 5, 7, 8, and 9, he found that no change whatever occurred in the cardiac area when they were placed head downwards. One of these boys, aged 8, as I myself witnessed

[1] *Archiv für Kinderkunde*, 1888

[2] *Lancet*, February 10th, 1894

at Dr. Walsham's invitation, remained in that position five minutes. At the end of that time the cardiac area, that had been carefully marked out before, had in no way altered.

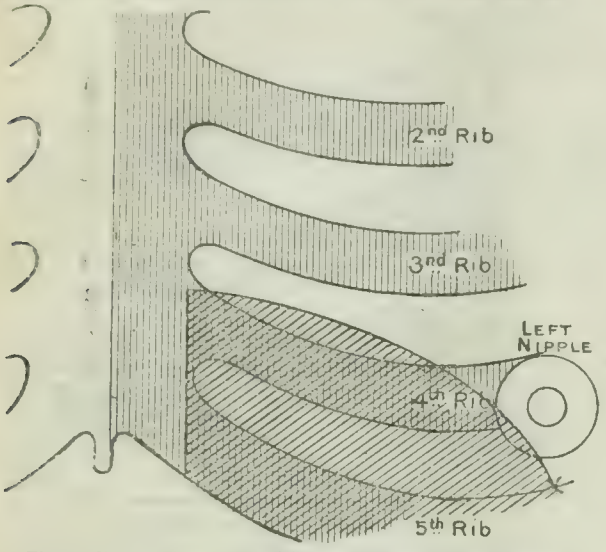


Fig. 4.—E. M., 7 years. Debility; no evidence of heart lesion.

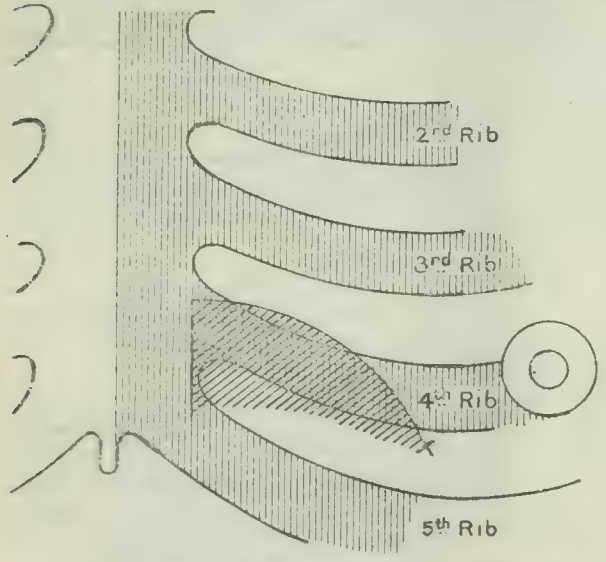


Fig. 5.—E. E., 10 years. Headache, vomiting; no sign of cardiac lesion.

In a proportion of cases of acute pericarditis the variations in the area of cardiac dulness due to fluid are but slight. There is a little widening and a little heightening of this area, neither of these changes being of long duration. The period occupied by the three stages of effusion—its advance, acme, and decline—is included within a fortnight. The time of decline is apt to be longest and the acme or period of greatest effusion the shortest. Sibson (p. 11, vol. iv), who made minute study of this point, found that in as many as 30 of 44 cases, the period of acme (or greatest area) lasted but a day. In chronic pericarditis these periods may be long exceeded; but even in the most prolonged the change in area of cardiac dulness will be found to vary from day to day, now increasing, now decreasing, now increasing again.

And where effusion is considerable there is, besides that which percussion makes out, what the eye best measures, namely, widening of the left intercostal spaces from the second rib downwards, with accompanying elevation of these spaces. An appearance of raised flatness is thus produced, contrasting strongly with the natural contour of ribs and spaces of the right chest.

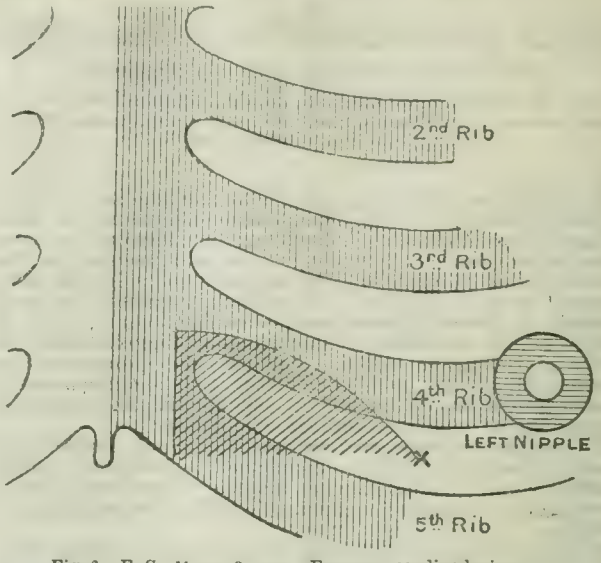


Fig. 6.—E. C., 11 yrs. 8 mos. Eczema; cardiac lesion.

It may seem at first thought a tedious task to map out from day to day by percussion the several fluctuations of pericardial effusion. But it is not so, for two reasons: one, that the patient is a child, small, thin, and easily handled; the other that, with certain precautions to be presently mentioned, the upper boundary of cardiac dulness taken

L. H., aged 8. Changes with position.

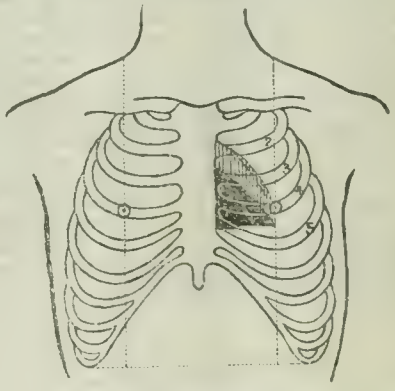


Fig. 7.—On back.

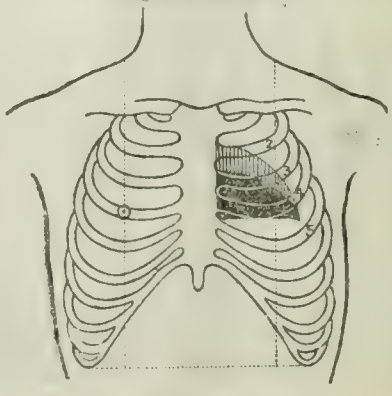


Fig. 8.—On left side.

alone indicates sufficiently by its rise and fall the daily course of effusion.

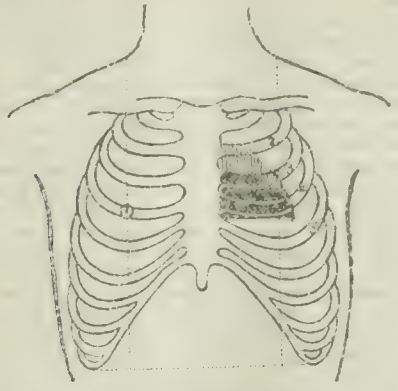


Fig. 9.—Immediately after being turned on back from left side.

It need not be said that the limits of the heart's superficial dulness—upper, right, and left—are not equally defined. The right border is the most abrupt in case of slight enlargement, owing to the interference of the sternum. The left and the upper borders of superficial dulness are bounded by narrow regions of lessened dulness due to the interposition of thin edges of lung, overlying the left ventricle in the one case and the upper portion of the heart and great vessels in the other. In extreme heart enlargement the left border is carried so far out as to be lost, so to speak, in the lateral region which is itself dull owing to the contiguous left ventricle. The upper margin of cardiac dulness is best estimated by approaching it gradually in percussion from the clavicle downwards; the right and the left borders by first seeking the apex place or "centre" of dulness, and thence percussing outwards in both directions.

With the percussion signs and signs that the eye notes there concur others not less important, which the palms and fingers perceive. But these latter will be found to vary with the amount of effusion and consequent displacement of the heart.

The manner of this displacement has been much discussed. Sibson, in his later work, lays much stress on the fact that the heart in effusion is displaced "upwards into the higher and narrower portion of the chest." He thus explains the elevation of apex—which he was the first to point out—and the close apposition of the heart to the anterior chest wall as well as the vibrations and grating friction. "When the effusion lessens," he adds, "the thrill disappears, the creak vanishes, friction sound softens." In his first article on pericarditis, however, in 1849 (vol. iii, p. 20), Sibson clearly described the effect of distension of the sac as causing the fluid to rise so as to cover the heart in front, separating successively the ventricles, right auricle, and vessels from the pericardium. This earlier view of Sibson is that which is now generally accepted. Thus Dr. Bristowe (p. 496) asserts that "the heart in effusion is necessarily carried backwards, and consequently away from the anterior thoracic wall"; while Balfour and others believe that the rise of the apex is only apparent. "What we feel," says Balfour (p. 325) "is not the apex, but the part of the ventricle lying above it, and appearing to rise as more and more of the heart is separated from the anterior wall, with which the base of the heart always remains in contact."

Latham and Walshe are in substantial agreement with Sibson's later views, believing that with extensive effusion the heart is pushed upwards to the fourth, third, and second interspaces, the rub, thrill, and vibration being all correspondingly raised.

There is yet another view of the conduct of the heart in effusion, adopted by those who question the fact of the organ being pushed either upwards or backwards. It is that which maintains that the heart in such cases remains where it was. Dr. Rotch seeks to establish this conclusion partly by experiment, and more cogently by the argument in which Balfour preceded him—namely, that the visible impulse "need not be that of the apex, but of the tumultuous right ventricle above it."[3]

Professor Henoch, in his well-known lectures on children, does not allude to this particular subject, deeming it, perhaps, unsuited to his dogmatic method.

In my own belief, the opinions just quoted, though apparently conflicting, are in fact reconcilable. They all express the truth in various circumstances. The heart may be moved either forwards, upwards, or backwards in effusion: or it may remain where it was; and of the factors that determine its conduct, pericardial adhesion—here or there, temporary or permanent—is the chief.

I have repeatedly in fatal cases of pericardial effusion inserted needles, just before the *post-mortem* examination, into the proper apex place, and above the fifth right costal cartilage, close to the sternum, without being able to detect upon opening the chest any dislocation of the heart. The validity of such experiments may be questioned; but there are clinical facts to show that the early pushing forward of the heart, with consequent pericardial friction, increasing in area and intensity, although it may be the rule, is not without exception. The fluid may cover the heart from the first, and no friction be audible until it has been absorbed.

This was so in the case of a child, aged 9 (E. R.), who during the time of her acute symptoms showed the physical signs of pericardial effusion merely. The first sound of friction concurred with an abatement of the worst symptoms, and lasted on almost to convalescence.

The diagrams before you and on the table are illustrations of the several ways in which the normal area of cardiac dulness is deformed and the apex displaced in effusion. It is by design that I omit minutiæ such as the exact changes of shape in the cardiac area from roughly triangular to roughly square. What I would impress is the sort of heart percussion required in the daily routine and practice no more and no less. In most cases the utmost degree of effusion is soon reached. It continues in that stage but for a short time, often less than a day, receding in many cases only to return, so that, without corresponding change in the general symptoms, the alternate ebb and flow of pericardial effusion may be watched over a considerable period; the upper margin of cardiac dulness higher or lower sufficing, as I have said, as the daily gauge. In the more lengthened attacks the pericardial sac is observed to widen disproportionately to its heightening, and it is in such cases, when newly observed, that much difficulty may arise in distinguishing between a dilated heart and a fluid-laden pericardium. It is, in fact, by the daily changes and not by the particular shape or extent of cardiac dulness at a given time, nor yet by any necessary distinction in the character of the heart's sounds in the two cases, that this differential diagnosis between effusion and dilatation is safely made.

It has been shown by Rotch and others that cardiac dulness transgressing the right margin of the sternum, and apparent in the fifth right interspace, makes fluid effusion probable, and paracentesis has been successfully made in that region, as, for example, by Dr. Dickinson in a case of purulent effusion;[4] but the sign is not infallible even when this extension to the right is both rapid and recent.

Thus, in a case of carditis to be presently mentioned (Babbage), the area of cardiac dulness remaining unaltered, it was conjectured that the pericardium might be adherent. Presently pericardial rubbing became audible, and with this the right border of cardiac dulness extended well into the fifth interspace. The child quickly died. Yet was there no fluid whatever to account for the sudden widening of cardiac area. That change was due to rapid dilatation of the right side of the heart at the time of its sudden failure. The pericardial surfaces were adherent everywhere, with no interposing fluid whatever.

In this instance the fact that the area of cardiac dulness, though widened to the right, was not heightened, might suggest dilatation rather than effusion, but there are cases (like that of Thomas) where rapid pericardial adhesion seems to arrest the ascent of the upper margin of dulness.

In another case of markedly dilated heart of such width as

[3] *Keetly, Cyclopædia*, p. 865.
[4] *Clin. Soc. Trans.*, 1889, p. 50.

to be clearly perceptible in the fifth right space, extensive friction rub arose some days after admission; yet was there no accompanying increase of cardiac area. *Post mortem* a notable amount of fluid was found surrounding the heart; it lay round it, so to speak, in such manner as to make discovery during life impossible.

Dilatation Simulating Effusion.

D. B., aged 8. October 21st (on admission) slight increase of A. C. D. November 28th (two days before death) sudden extension of A. C. D. to right (dotted line).

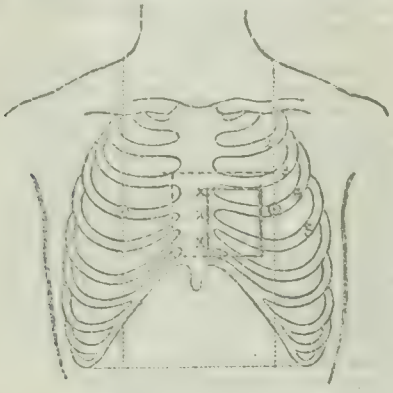


Fig. 10.

Post-mortem, pericardium universally adherent. No fluid in sac. Visceral and parietal pericardium covered with lymph. Heart's weight 9½ ounces.

Such is often the manner of cardiac empyema where pus surrounding the heart makes no perceptible change in its apparent size or shape. How rarely is this condition recognised until *post-mortem* examination discloses it!

Of the difficulty of founding a prognosis upon the observation of the fluctuations in the area of cardiac dulness, a good illustration is afforded by two children, one of whom (Bishop) died, and the other (Drinkwater) eventually recovered. In the fatal case, the worst symptoms concurred with increasing area of dulness. In the non-fatal, but very severe and prolonged case, the boy was at his worst, unconscious, and passing motions into the bed, with rapid decrease of the same area.

Other diagrams on the table illustrate the same point; as, for example, Thomas, the case related in the last lecture, where the area of dulness decreased for some time before death.

It is very rarely that the pericardial effusion of rheumatic children becomes so extreme as to need paracentesis. In the whole of the cases I am now reviewing, there was no such occurrence.

While the signs of rheumatic heart inflammation are in full progress as regards the pericardium, the endocardium, as we know, is suffering also. But just as pericarditis does not show at the first either by increased cardiac dulness or audible rubbing, so endocarditis, at its commencement, does not impair the efficiency of the valves so as to permit reflux. In other words, the obvious and familiar physical signs we are in the habit of associating with endocarditis refer less to it than to its consequences.

The early observers were not ignorant of the fact that mitral reflux might occur late. Latham especially, though regarding the advent of such murmur as of itself and without qualification indicating endocarditis in cases of rheumatism, was fully persuaded that the first onset of mitral valve inflammation might precede this particular sign. His were the days of enthusiasm for physical signs when a single one was held sufficient to indicate a particular disease state. Mitral murmur in the course of rheumatism was for Latham the signal for bringing into play the whole array of antiphlogistic remedies, just as the subcrepitant *râle* was warrant enough for a like treatment in lung disease. But no one was more alive than he to the significance of certain cardiac signs antecedent to murmur, and he often saw reasons for commencing his remedies before this sound appeared.[5]

"There may as yet," said he, in 1845, nearly fifty years ago, "be no endocardial murmur, but the systolic sound may be unnaturally prolonged and unnaturally rough. I hardly ever knew a case in which unnatural length and roughness of sound such as a practical ear could well discriminate has not become an unequivocal murmur in twenty-four hours. How often have I anticipated that the murmur would be formed to-morrow. It is almost as certain a sign as murmur itself. I no sooner perceive it than, without waiting for the murmur, I begin the treatment of endocarditis at once."

A period prior to any audible murmur may, in Latham's opinion (pp. 72, 73) cover all the essential morbid processes of the disease and even outlast the time when it can be successfully treated. And accordingly, with a precision and accuracy not exceeded in the present day, Latham goes on to describe three distinct relations of mitral murmur in respect of endocarditis. Thus:

1. In some murmur is coincident in time with the very commencement of the inflammation, the natural sound is changed into the genuine murmur without notice or preface.
2. In some (and most frequently) murmur does not arise until inflammation has somewhat advanced.
3. In some (and least frequently) murmur does not arise until inflammation is on the decline or has ceased.

Since the days of Latham and Watson the earliest physical indications of endocarditis have been much discussed, and the general conclusion seems to be that no single sign—perhaps no combination of signs—indicates with certainty the very beginning of endocarditis. And if this be said of a first attack, how much greater is the difficulty with subsequent attacks?

Time only serves for one or two quotations in testimony of this obscurity.

Walshe (2nd Edition, 615-617) would base the diagnosis of endocarditis on "febrile action, cardiac uneasiness, and endocardial murmur, occurring in a person presumably free from prior cardiac disease." At the same time, and along with this reservation, he alludes to the possible occurrence of dynamic murmurs, and admits that "endocarditis may exist without murmur."

Rosenstein believes that the diagnosis of endocartis is purely arbitrary.

Bristowe (p. 528) frankly admits that the symptoms of endocarditis are not striking, and that it is by the development of the valve lesion that we mainly assume its presence and trace its progress.

Professor Potain,[6] of La Charité Hospital, is more confident. Admitting the great diversity of opinion as to early endocardial signs, he considers all those hitherto put forth as absolutely unreliable. What *is* reliable, according to this authority, is the change which takes place in the quality (*timbre*) or tone of the normal sounds. This change, expressed in a word, is progressive obscurity of sound. Sometimes the first sound is obscured, sometimes the second, sometimes both. Its gradations may be thus expressed: "Slightly muffled," "muffled," "obscure," "very obscure," "inaudible." In a certain proportion he admits the changes were very slight, and considerable experience and a practised ear were needed for their detection, nor "was it possible to form an opinion, except by comparison of the day before." The professor goes on to describe the several morbid changes productive of these altered sounds, but, inasmuch as death very rarely occurs at this early stage, we may safely assume that the description is no more than conjecture.

My own experience, as I shall presently relate, does not coincide with that of M. Potain, except as regards the changeful character of the heart sounds and rhythm, and the value of successive observations from day to day. Inaudible first sound is familiar to all of us in connection with enteric fever, and was first pointed out by Stokes. It is met with, no doubt, in some cases of rheumatic endocarditis, but, according to my observation, occurs late rather than early.

In a recent instance, however, partial and very temporary effacement of the first sound preceded by some days the

[5] Latham, p. 65, vol. ii, Sydenham Soc.
[6] *La Semaine Médicale*, December 8th, 581.

signs of pericarditis. The patient was a girl of 13, admitted with a third attack of acute rheumatism, with old mitral murmur. Fourteen days after admission, when the temperature had been normal for ten days, pulse was steady at 68, and the joints free of pain, the first sound became very indistinct. A week later temperature rose, without any return of joint pain, and four days later, when the first sound had regained all its distinctness, but there was increased fever. Some indistinct friction could be heard for two days, the patient making rapid recovery. In this case Professor Potain's sign was not distantly imitated, but an interval occurred between the obscuring of the first sound and the earliest obvious signs of carditis. It may be added that Dr. Barr, of Liverpool, considers "a dull first sound with delayed radial pulse amongst the earliest signs of endocarditis."

Midway between such frank expressions of imperfect knowledge as I have just quoted, and the more confident statements of the French professor, we may place the elaborate researches of Sibson in the same field. "His are tentative conclusions," as his pious editor, Dr. Ord, remarks (I, xii): "conclusions such as a man would arrange before him to aid his final judgments; a multitude of facts in which the reader finds himself lost, and is conscious that in many points he is not put in possession of clearly-stated inferences."

For such reasons it is difficult to estimate the precise value of Dr. Sibson's work, and not always easy even to follow him. Yet without doubt we owe much to this indefatigable worker—the vivid description of the aspect and demeanour of commencing endocarditis; the minute and accurate account of the several declensions from the normal sounds, from such as are to be regarded as "threatening" endocarditis to those which, in their further development, make the actual presence of that inflammation "probable," thus precisely defining the degrees and the limits of knowledge in this respect. And we may notice by the way, and with gratitude, Sibson's very careful and guarded—it may be too guarded—use of the word "presystolic," a term which I believe, except in one place, he hardly allows himself without qualification.

On the other hand, it may seem to some that he gives no very clear account of the physical signs of mitral narrowing; that he exaggerates (vol. iv, p 242) the frequency of tricuspid murmur, mistaking it sometimes for the true presystolic, "grave and even vibrating," as he puts it, "beginning with an accent or shock," and that he is somewhat inconsistent in placing tricuspid murmur among the signs indicative of the very commencement of endocarditis, and also as coinciding "in almost all the cases with great general illness" (p. 244).

These may be shallow criticisms, and in any case we are to remember, as Dr. Ord remarks, that "the hand of the artist was stayed while he was still engaged in fashioning his work—that we have but the clay model for a work in marble."

On the threshold of this subject of the early signs of endocarditis so exhaustively discussed by Sibson, it is well to remember what he so well urged, namely, the fact that both from the structure and action of the mitral valve, as well as from the situation of the inflammatory product as seen after death, it is apparent that blood reflux is not an early but a late result of endocarditis (vol. iv. 234). "The border of contact in systolic closure is not a mere edge, but a surface or line of adaptation, made up of small bead-like cells that dovetail into each other along the margins of the flaps. Endocarditis affects not the very edge or rim of the flaps, but the line of contact just within the edge. When the mitral valve is inflamed it is this border of contact that shows a frill of small beadlike granulations, quite insufficient at first to prevent accurate and complete closure. Presently, however, each of these little prominences gets capped with fibrin, and it is by this addition, sooner or later, that adequate adaptation of the valve flaps becomes impossible, and reflux begins."

This early condition of endocarditis is seen best not in rheumatism but in chorea. For in rheumatism death seldom occurs without further morbid changes, which chorea, as such, does not share. In fatal cases of chorea, apart from rheumatism, we see endocarditis in its purity, so to speak, and it is well known that the bead-like granulations often found in chorea, chiefly in connection with the mitral valve, have sometimes sufficed to produce mitral murmur and sometimes not.

But there yet remain some special circumstances of childhood which help to explain why in their case the earlier physical signs of endocarditis should so often escape notice. In the first place, the early joint pains seem so trivial that the child is seldom brought to hospital on account of them. In the second place, a large proportion of the patients have had previous attacks of rheumatism, which have so changed the heart as to confuse conclusions. It is rare to meet with a child at an early period of its first rheumatic attack. So it happens that the physical signs we get to associate with endocarditis belong properly not to its early and active stage, but to its results and consequences.

Having dealt thus far with the views of well-known authorities as to the earliest recognisable signs of endocarditis, and thus shown by their want of accord the difficulty of the subject, I shall venture to add some experience of my own as to the manner in which endocarditis comes about in the case of rheumatic children, and its several modes of development.

The earliest physical indications of endocarditis in children are only trustworthy when associated with rheumatism. Tumultuous, quickened, and uneven heart action sounds, that are changeful from day to day, especially the first; sounds reduplicated, especially the second at and above the apex (not at the base); a temporary tricuspid murmur; marked accent commencing the first sound, whether mitral or tricuspid; these are amongst the commonest of such signs.

But it is not in all cases that endocartitis signs are thus gradually developed. Sometimes mitral reflux arises very early, without previous notice or warning. Thus a child of 3 years and 8 months (R. E.) was admitted, October 4th, 1893, for some general œdema, but without albuminuria or cardiac murmur. There was no history of scarlatina, sore throat, or rheumatism. In two days the œdema disappeared, and the child seemed well. Ten days later, however (that is, on the 16th), some desquamation was found over the legs, and the child was thereupon removed, the heart sounds at the time being perfectly natural. On November 1st, that is, fourteen days after the examination of the heart, the child was again admitted with swollen and painful joints of five days' duration, the temperature being 102°. And now there was well-marked blowing murmur at the mitral which was conducted into the axilla, and accompanied at first by an occasional "squeak."

In this instance, it seems almost certain that a period of no more than five days at the utmost sufficed to develop a blowing and conducted mitral murmur having all the characters of regurgitation. In the more usual course, the progress is gradual, and it is nearly followed in the case of chorea. It is generally admitted nowadays that the heart signs of chorea, or at least the more pronounced of them, are due to endocarditis. Now these signs are in their order of occurrence, uneven rhythm, slight and inconstant mitral murmur, murmur that is constant, murmur both constant and conducted, though not always or even often permanent. Never thrill, rheumatism being absent; never accentuated beginning of the first sound; never any sound that its most passionate advocate could mistake for "presystolic." There can be little doubt that these signs concur with an endocarditis having a much more limited history than the rheumatic. They represent the utmost of choreic endocarditis, and but an early stage of the endocarditis, that is, rheumatic. But at this moment of time their physical indications are identical.

Endocarditis, there is reason to believe, occurs along with the joint pains, and not (as it seems to occur in the case of children) at some indefinite period afterwards. But the first heart signs are obscure and ambiguous, while the joint pains are early, slight, and brief. And so it habitually happens, as I believe, that the gradual development of endocarditis signs in the first rheumatic attack, the passage from the "threatened" to the "probable," and from the "probable" to the "certain" signs of that inflammation, concur with the time when the child, apparently recovered, has returned and is out of medical reach.

All this is well shown in the case of a girl (R. E.), aged

9 years, admitted to the Westminster Hospital, October 5th of last year, with her first attack of rheumatism, the joint pains being of two weeks' duration. The pain was trifling, and disappeared altogether in two days, as did the slight pyrexia. The patient, unlike most children with rheumatism, was of ruddy complexion and well nourished, but it was reported that she sweated much at night. With the pressure of more urgent cases I do not know that for this symptom alone the child would have long remained an in-patient; but for what I am about to relate and in view of these lectures she remained with us several months.

Now on October 14th, when the child was to all appearance well, the finger placed along the fourth space detects with ease and nicety the variable character of impulse and the unequal intervals between one revolution and the next. The ear confirms the finger, and adds these further signs—a lengthening of the first sound, or what some would call a just perceptible systolic murmur, and along with this reduplication of the second sound not at the base (where it is wished to be for the sake of explanation, but rarely is) but at a little above the apex.

Two days later the signs have altered. The uneven rhythm remains, the reduplication of the second sound has disappeared, and now there is an undoubted blowing murmur following the first sound. On the two next days the heart's action became almost regular, but it faltered occasionally: pulse was 96, perceptibly uneven, the mitral murmur less obvious.

During the succeeding three weeks (the patient continuing in bed, though bright and cheerful and without fever), the murmur varied, and the pulse was ill sustained; it was even as to rhythm, but unable to maintain an even force through the minutes, a feature which only becomes apparent when the observer will have the patience to keep his finger on the wrist for two or three minutes at a time.

This child, as has been said, was kept under notice from early in last October until late in January. Not to weary you with repetitions, let me call attention to two points: 1. That at the end of our watching a loud blowing murmur was established, together with signs of some heart enlargement; 2, that for a considerable time murmur, quite apparent in the recumbent position, ceased when the girl was erect. Thus mitral murmur was not fully established in this case until quite two months wholly free from disturbed health, and for some time after its establishment it was dependent on position, insomuch that were the child attending as an out-patient the discovery of valve lesion might have been long delayed.

This gradual development of mitral murmur applies, I believe, to a considerable number of rheumatic children, and is the source of much misconception. The patient is dismissed, as this child might have been, heart whole. He returns presently with a second attack of rheumatism and a mitral murmur. This latter has, in fact, developed very slowly and insidiously in the interval between the two attacks; it is the sequel of endocarditis not endocarditis itself; but the physician consulting the notes of the first admission takes it for new; he quotes it as proof that a first attack may fail to touch the heart, and that permanent reflux is not always the work of time. Both statements are, perhaps, true, but they have fewer illustrations than at first seems.

The influence of posture both upon murmur and reduplication of the second sound may often be observed in these early cases. At first with the upright posture a more vigorous systole serves altogether to abolish these morbid sounds. After a while this effect is only accomplished for a short time, the murmur appearing so soon as the effort of sitting up causes fatigue, and at last the murmur becomes permanent, and position affects it but little. In noticing such posture changes, Dr. Walshe asks: "Is this changeableness of a murmur proof of its inorganic nature? My experience," he answers in his laconic way, "would support the negative."

I have presently to speak of varying murmur which at last almost disappeared; and if once more we make comparison between the endocarditis of chorea and that of rheumatism, allowing for their distinctive characters, it might seem that what is the common event in the one case is the less common event in the other. In chorea the murmur grows, it becomes distinctly blowing, and is conducted into the axilla; it is then recognised by most of us as a sign of endocarditis. But presently it begins to lose these characters, and eventually the normal sounds return. Such is the common experience of chorea, rheumatism apart. We are not without evidence that similar recovery sometimes obtains in rheumatic endocarditis. But, for reasons to be presently mentioned, we are without accurate information upon this point.

ABSTRACT OF

THE GOULSTONIAN LECTURES

ON THE

PHYSICS OF THE CIRCULATION.

Delivered before the Royal College of Physicians.

By PAUL M. CHAPMAN, M.D.Lond., F.R.C.P.,

Physician to the Hereford General Infirmary.

(Continued from page 515.)

When fluid is driven into elastic tubes by intermittent rhythmical action, as it is into the arteries, special considerations arise. The fluid driven into the tube has not to displace the whole mass of fluid beyond it at one time. The blood driven into the aorta from the heart meets, it is true, with the inertia of the mass of fluid against which it impinges, the friction in the many arterial branches, and the obstruction of the capillaries, but the root of the aorta is distended by the increase of blood volume. This distension exerts a pressure on the enclosed fluid, which continues when the heart has ceased to contract, and consequently the blood continues to stream onward until the root of the aorta has returned to its former tension. The force of the heart is, in fact, transmuted into terms of elastic tension, which acts during the period of the heart's rest. The expenditure of work is therefore much less than if the whole mass of blood had to be moved forward *en masse*, as would be the case if the tubes were rigid.

Clinical Use of the Sphygmomanometer.

That many difficulties lie in the way of measuring, with complete accuracy, the blood pressure in the sick, is not a reason why any approximate estimation of the pressure should be completely neglected, as is now almost universally done. A useful sphygmomanometer can be made for a few shillings, and its application would in most cases be accurate enough if we could always feel, at the wrist or elsewhere, an easily accessible artery lying on a flat and rigid bed. It is better to employ a slight extension of the wrist, as, owing to the increased tension put upon the fascia, the amount of yielding beneath will then be reduced to a minimum. I have been using a sphygmomanometer made by myself on a simple plan suggested to me by Dr. Waller. A U-shaped piece of glass tubing, one limb of which is bent at a right angle, is connected, by means of a perforated india-rubber cork, with an ordinary india-rubber finger stall. This is fixed on an upright frame scaled in millimetres. When the finger stall is applied over an artery pressure is exerted until the distal pulse beyond it is no longer perceptible. The ulnar artery should always be compressed to avoid the recurrent pulsation through the palmar arch, to which attention was first called by Dr. Waller, and which has since been described by Dr. Dickinson and by Dr. Douglas Powell. Since I have used the sphygmomanometer I have met with recurrent pulse so frequently that I have ceased to consider the phenomenon to be of much clinical significance, though Dr. Douglas Powell has described it specially in connection with the pulse of high tension.

By direct measurement in mammals we know that the mean blood pressure is remarkably independent of the kind or size of the animal. By analogy we may assume that the aortic pressure in man varies between 100 and 200 mm. Hg., the mean pressure being about 150 mm. Hg.

In using the sphygmomanometer which I have just described we must allow for certain errors. According to v. Basch,[18] in order to occlude an artery through the over-

[18] *Berl. klin. Woch.*, 1887.

lying skin it is necessary to apply a pressure of 6 to 8 mm. Hg. higher than when the artery is exposed. Again, a certain amount of pressure is necessary to occlude even an empty exposed artery. V. Basch estimates this to be about 1 mm. Hg. for a normal, and about 5 mm. Hg. for a sclerosed artery. We have therefore to allow for:

	Minimum. Mm. Hg.	Maximum. Mm. Hg.
1. The overlying skin	6	... 8
2. Unfavourable position of artery	20	... 60
3. Compressibility of arterial wall	1	... 2
4. Difficulty in estimating disappearance of pulse	5	... 5
	32	... 78

It is clear that, given an accessible artery, a much more accurate knowledge of the blood pressure in the radial can be gained by the manometer than by the sense of touch, and I have used it as an indication for treatment with the best results.

In clinically considering a low blood pressure we have to remember that the arterial blood pressure sinks:

1. When the quantity of blood expelled from the heart in a unit of time is less.
2. When the energy of the heart declines.
3. When the vascular obstacles are less.

And that it rises when either of these is in excess.

Since the *duration* of ventricular systole remains unaltered by high aortic pressure, any diminution of *work done* is to be expressed not in terms of the time employed in ventricular contraction, but in terms of the reduced amount of blood expelled into the aorta, which, otherwise expressed, means that a larger amount of residual blood remains in the ventricle.

Alterations in the arterial pressure by variations in the quantity of the whole mass of blood, through blood-letting or through transfusion, are very transient. After blood-letting, fluid is quickly absorbed from the interstitial tissues, while the secretions from the kidneys, salivary glands, etc., are diminished. Transfusion, on the other hand, if excessive, may lead to rapid heart failure; if moderate, blood will collect in the distended liver and abdominal veins, while the urinary secretion is increased. Alterations in arterial blood pressure are, in short, much more dependent on the dilatation or contraction of the arterioles, arising from vasomotor or other influences, than from these causes.

"Positive" and "Negative" Waves.

Before entering upon the study of the graphic representation of the pulse wave, it is of advantage to consider shortly the nature of the wave movements of incompressible fluids when these are set up, first, with free surface, and, secondly, in elastic tubes. The general fact that the particles of the fluid set in motion describe an elliptical path, but are not themselves propagated onward with the travelling wave, is sufficiently familiar to need no further mention. The terms "positive" and "negative" wave require, however, some notice. Separating clearly the idea of an onward moving mass of fluid from the onward movements of a wave set up in it, we find that the particles of fluid participating in the wave describe, successively, elliptical paths, each of which may be divided into two kinds: (1) one which lies above the ordinary level of the fluid, (2) the other which lies below the ordinary level of the fluid. The first is termed the *positive* wave, the second the *negative* wave. In the positive wave the particles of fluid are moving in the direction in which the wave is propagated, in the negative wave they are moving in the reverse direction.

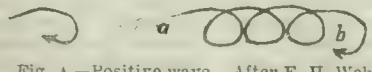


Fig. A.—Positive wave. After E. H. Weber.

Owing to friction, the wave will be less in extent the farther it is from the commencement of the tube, and will be so far deformed that the rise and fall will be less steep.

Now, if an elastic tube is filled with water, a wave may be set up in it either by suddenly injecting an addition of water at one end, or by pinching the tube, in which case a positive wave will be caused, as in Fig. A; or a wave may be caused by suddenly removing any compression from the other end. In the latter case, although the mass of fluid streams out of the tube in the same direction as it does in the first instance, a wave is propagated in the reverse direction towards the central end. This is a negative wave, and can be better understood by reference to another figure.

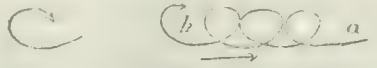


Fig. B.—Negative wave. After E. H. Weber.

If a stream is set flowing through an elastic tube open at its peripheral end, and the stream is then suddenly *interrupted*, a negative wave is set up, which is carried onward to the periphery. If, again, water is thrown rhythmically into the tube from the central end, at every impulse a positive wave is propagated in the direction of the periphery, and at very cessation a negati ve wave is propagated in the direction of the periphery. Both these are called *primary* waves, though the first is accompanied by a rise and the second by a fall of pressure. If the elastic tube is not long enough for the wave to be wholly extinguished by friction, and the peripheral end is closed, other waves, in a reverse direction, will be reflected from the closed end. For the sake of avoiding all confusion these reflected waves are not called "negative" waves; indeed, they are often "positive" in character, but centripetal waves. A centripetal wave, in its turn, may reach the central end, and be reflected from the central end again towards the periphery in the same direction as the primary wave. These are called secondary centrifugal waves. If a reflected wave is accompanied by a rise of pressure it is a positive wave, if by a fall it is a negative wave.

From the considerations already mentioned as to the state of the capillary circulation it is conceivable that such reflected waves may readily occur in the arterial system from the impact of a primary wave. Possible reflection may also be imagined from the points of division of the artery. It is also conceivable that a wave reflected back from the periphery along one artery may not only course to the heart, but may take a centrifugal direction along some other artery at a convenient point of junction. So many possibilities of interference are there, owing to the many branches of arterial division and the varying states of the circulation in the different organs of the body supplied by them, that it is difficult to imagine any but the most clearly dominating form of wave surviving the confusion. One can assume that the primary and main secondary waves are propagated without much change of character through all the arterial branches.

The pressure movements caused by these waves are accurately recorded by means of Marey's well-known sphygmograph, and although it is a form of sphygmograph not much used at the present day, it furnishes a typical pulse curve or sphygmogram which will serve as a basis for description. It represents the course of pressure in the artery, but not the amount of pressure. This is, perhaps, only to be obtained by means of manometrical observation in the physiological laboratory. Even should the whole series of curves under observation show a rise to a higher level, this is no evidence of a rise of intra-arterial pressure, since simple turgor of the skin may raise the lever.

The curve, however, shows the course of pressure in the artery, and presents peculiarities as it is taken from different arteries, but it has certain definite points peculiar to all pulse curves.

First, there is the steep rise, corresponding to a primary positive wave, from the streaming of blood into the aorta. The slowness with which the rise takes place is some measure of the obstruction to the inflow of blood. After the summit of the primary wave is reached there is a drop to the dicrotic notch, following which there is a rise corresponding to the dicrotic wave. Between the summit of the first wave and the dicrotic notch there is an upheaval, which is usually on the falling line between the first summit and the dicrotic notch. This upheaval may, however, in some cases reach a higher level than the initial rise. In this case the curve is called anacrotic, in the first case katacrotic. According to Roy and Adami, the upheaval corresponds to the continuance of outflow from the ventricle, and it is by them termed the "outflow remainder wave," and by others the "tidal" wave. The dicrotic notch is caused by a fall of pressure following on the first distension of the vessel, and the subsequent dicrotic

upheaval is caused by a centrifugal positive wave; according to some, arising from the recoil of blood at the root of the aorta against the closed semilunar valves. V. Kries and v. Frey agree that it is a positive centrifugal wave, but say it is a secondary wave, arising from a centripetal wave reflected from the periphery, which is again reflected from the semilunar valves.

According to some authors (Grashey and Hoorweg), the dicrotic wave is propagated onwards, in all arteries, with the same velocity as the primary wave. Hürthle finds also that it occurs at almost the same period after the beginning of the primary wave; on the other hand, Landois, v. Kries, and Edgren find that the dicrotic wave occurs somewhat later in the lower extremity.

Origin and Nature of Dicrotic Wave.

Whether the dicrotic wave owes its origin to central causes alone, that is to say, from a recoil of blood at the root of the aorta impacting against and reflected from the semilunar valves; or whether, on the other hand, it arises from a peripheral wave reflected back, and a second time reflected, has been much discussed. V. Frey and v. Kries have opposed altogether the theory that the dicrotic wave can be of central origin; while Grashey, Edgren, and Hoorweg, and also Hürthle, incline to the central origin of the wave, and deny that it is conditioned by the central reflection of a centripetal wave from the periphery.

To prove this point Hoorweg devised an ingenious experiment. Through an elastic tube provided with valves he sent the contents of a suddenly compressed ball, which was suddenly relaxed. The sudden closure of the valves which followed also closed an electric circuit, and a spark was obtained from a Ruhmkorff's coil which bored a sharp hole from the point of the writing lever through the smoked paper of the recording cylinder. This perforation corresponded with the point of dicrotic upheaval. When the valves were taken away no upheaval occurred. Hürthle has made like and confirmatory experiments.

With regard to these experiments and the deductions therefrom, v. Kries objects that they presuppose a recoil at the commencement of the tubes, and that it is a question whether a recoil of sufficient amplitude to cause the dicrotic wave can in fact arise at the root of the aorta. If we assume that the recoil occupies a very small fraction of time, it would give rise to nearly nominal pressure movements, unless the quantity of blood thrown back against the valves were very great. In the latter case, the rise of the dicrotic wave would be very sharp and steep, whereas the dicrotic wave is extended and broad-topped. Moreover, in the typical dicrotic pulses of nitrite of amyl and of fever we should have to assume a long period of time occupied in recoil, with an attainment of great velocity of secondary wave, equal, as I have said, to the velocity of the direct primary wave, which can scarcely be the case.

Tigerstedt thinks the following view the most in accordance with known facts. Through the sudden influx of blood from the heart into the aorta a first positive wave arises, which corresponds to the first upheaval in the pulse curve. When the blood ceases to flow out of the heart a negative wave is propagated from the root of the aorta in a centrifugal direction through the arterial system. Another negative wave follows immediately on this, when the heart muscle relaxes, and the semilunar valves are no longer supported by their underlying muscular bundles, and by the blood remaining in the ventricle. These two negative waves are commingled, and are propagated in a centrifugal direction through the arterial system. At the same time with the second centrifugal negative wave a portion of the aortic blood streams backwards towards the heart, strikes against the closed semilunar valves, and sets up a second centrifugal positive wave which occasions the dicrotic upheaval. He explains the slight upheaval on the falling limb of the curve of the cardiogram, and of the curve also of intracardial pressure, in the same way. The sudden shock of blood against the semilunar valves drives the valves to a certain extent into the heart and raises the intraventricular pressure, and the whole heart suffers a certain change of position.

He also believes in the possibility, under favourable circumstances, of a secondary upheaval caused by wave reflection from the periphery. If the reflection occurs as a positive wave it will add to the height of the dicrotic wave. Whether as a rule the reflected wave occurs without change of sign is difficult to say.

Views of v. Frey.

The matter is so interesting, and is so important for the understanding of the sphygmogram, that I must enter at a little more length into the views of v. Frey and Hürthle. V. Frey as well as v. Kries commence the discussion concerning the form of the original primary wave with the changes in velocity at the root of the aorta.

It is desirable to separate the wave into a systolic and a diastolic portion. In the systolic portion the change of pressure is very sudden; it is this portion of the wave which, according to v. Frey, gives rise to reflection from the periphery, and it is this portion therefore which is now to be considered.

The systolic wave spreads into the arterial system with a velocity of several metres per second; the beginning of the rise of pressure therefore reaches the place of reflection before the heart is emptied of blood. "One must get rid of the idea that the pulse wave is a short wave which is propagated from part to part along the artery, and clearly understand that the pulse wave is of such a length that, under normal circumstances, one whole pulse wave has not room to extend from the root of the aorta to the artery of the great toe." The first part, or head, of the primary wave therefore reaches the periphery during the cardiac systole before the remainder of the wave, or tail, has left the root of the aorta, and there is ample time for the wave to be reflected from the periphery and to interfere with the oncoming primary wave. The interference wave (which is a centripetal wave of the first order) will, the nearer the sphygmographic tracing is taken towards the periphery, unite itself to the primary pressure rise, while diminishing the velocity. The nearer the tracing is taken towards the centre, the further will the interference wave be from uniting itself with the primary rise, whose summit will, through division into its two component parts, become anacrotic or katacrotic as the case may be. This first centripetal or interference wave reaches the heart and is reflected from the now closed aortic valve, becoming a so-called centrifugal wave of the second order. It is this which, according to v. Frey, when united to a second centripetal wave set up by it, is the cause in the peripheral arteries of the dicrotic upheaval. He thinks it likely that, in arteries near the centre, the dicrotic upheaval belongs to the type of secondary interference waves.

We have, then, the dicrotic wave, which is an expression of a positive centrifugal wave. This may originate either at the root of the aorta owing to a recoil against the valves following on the first expansion of the aorta, or as a wave reflected from the periphery and again reflected from the semilunar valves in a centrifugal direction; forming, so to speak, the tail of the pulse tracing, of which the first primary wave forms the head.

Views of v. Kries.

As reflex waves we have also to recognise both the first centripetal wave (reflected from the periphery), and the waves which may be assumed to be reflected from the periphery at first in a centripetal direction, but which subsequently take a centrifugal direction along some branch or branches, without journeying to the heart at all. It is clear that the first of these waves must cause a diminution of velocity, though possibly raising the pressure within the vessel. V. Kries places this wave as the first slight upheaval on the falling limb of the radial curve, and says that pressure and velocity there show the most marked difference. The second slight upheaval on the falling limb before the dicrotic notch v. Kries considers to be a centrifugal wave, but one which, in its origin centripetal, has been reflected along some branch of junction. These conditions, if present, must necessarily give rise to considerable variations in the pulse tracings from different arteries. In the femoral tracing the dicrotic upheaval is much more spread out than in the radial tracing. The cause of this is not to be sought in the varying distance of the two points from the root of the aorta, since the distance of the two points from the root of the aorta is much the same in both cases, but in the fact that reflected

waves from the abdominal vessels must considerably modify the femoral tracing.

The amount of the heart's activity cannot be gauged by the amplitude of the pulse curve, as this amplitude is but the expression of wide variations in the internal pressure. The tone of the arterial wall and the amount of peripheral obstruction do to some extent influence the pulse tracing. A pulse, of course, shows more "dicrotism" the higher the dicrotic wave and the lower the preceding fall of pressure, and is to some extent the expression of pressure varying largely at the instant, and usually goes therefore with low blood pressure, though in fever and other conditions where the tone of the vessel walls is diminished dicrotism may arise even with an increase of blood pressure, as has been specially noted by Roy and Adami.[19]

Velocity in Various Parts of Pulse Tracing.

Of equal interest in connection with sphygmography would be any successful effort to measure the velocity of the various parts of the pulse wave which are delineated in the sphygmogram. Vierordt attempted to do this in 1858 by applying the principle of inserting a pendulum into the blood stream, and estimating the variations of velocity by the varying deviations of the pendulum. Chauveau and Lortet employed the same device, conveying, however, the movements of the pendulum by transmission to a Marey's tambour. By his hæmodromograph Chauveau made the following measurements:

Carotid (horse) velocity during systole ...	...	520 mm. per sec.
" " diastole ...	...	150 " " "
" " of dicrotic wave		220 " " "

Of equal interest, partly on account of their extreme ingenuity, are the methods employed by Fick and others. By inserting the forearm in a Mosso's plethysmograph, variations in the volume of the arm during each heart beat can be registered. The curve obtained has a general likeness to a pressure curve. That it represents a different series of events is apparent from the following considerations: The outflow of the blood from the forearm through the veins is constant and uniform, its quantity or rapidity being uninfluenced during the time occupied by a heart beat owing to the interposition of the capillaries. Though the mere increase in the volume of the forearm is due to increased quantity of blood injected into it through the arteries, the velocity of blood in the limb may diminish as the size of the arm increases. Any variations in the steepness of the volume curve can, however, only be due to increased or diminished velocity of blood entering the limb in a given time. For the blood only flows out of the limb at one steady and uniform rate. From the changes in direction of the volume curve, therefore, or, in other words, from the different angles of inclination of the various parts of a volume curve one to another in juxtaposition, one can deduce the velocity of the various parts of a pressure tracing taken synchronously from the pulse by means of a sphygmograph.

The pulse tracing, it must be reiterated here, obtained from applying pressure to the side of an artery, merely gives indications of the alterations of pressure within it; it being conceivable that a return wave from the periphery along the artery in the direction of the heart may increase the pressure within the artery while diminishing the velocity.

Any external pressure applied to the arteries of the forearm will consequently slightly vitiate the volume curve obtained by Mosso's apparatus, and it is necessary to eliminate this source of error, for the air within Mosso's cylinder exerts a pressure on the arteries of the forearm when the volume of the contained limb is increased, the elastic membranes which close the cylinder contributing to convert the apparatus somewhat into a pressure instrument.

The whole difficulty has been most ingeniously avoided by v. Kries, who has almost succeeded in obtaining a pure direct velocity curve. In his gastachograph, v. Kries has connected the interior of Mosso's cylinder with the external air by leading a tube from it into a wide gas jet. Any steady increase in the volume of the forearm would lead to no movement in the flame of the jet, but alteration in the steadiness would lead to unsteadiness in the flame—in other words, the flame would rise in correspondence with an increase of velocity, and sink with a diminution of the velocity. By photographing the movements of the flame, v. Kries, therefore, claims to have obtained a direct tracing of the velocity of blood flow during the various parts of the pulse wave.

For the criticism of this method I must refer to an article by Hoorweg,[20] who thinks that there is so much delay in transmission and in response, with difficulties owing to interference with the approach of gas to the flame, as to destroy the value of the tracing for purposes of exact measurement. If disappointing in their result, the conception of these experiments by v. Kries cannot but excite our admiration.

Hürthle's Experiments.

We are in great part indebted to Hürthle[21] for what proof there may be of the sequence of events in the arteries, and the modifications introduced into the pulse tracing by different conditions. The changes of pulse, especially those which accompany blood pressure variations, can by the use of his manometer be measured in conjunction with the pulse wave. The blood pressure was raised by irritation of the sympathetic in the neck of the rabbit, and lowered by irritation of the depressor nerve of the vagus.

Hürthle follows Marey in distinguishing between an upward and downward limb of the pulse curve, as well as between a single or double summit. He divides the curve into a systolic portion from the commencement of the rise to the dicrotic notch, and a diastolic from this point onwards.

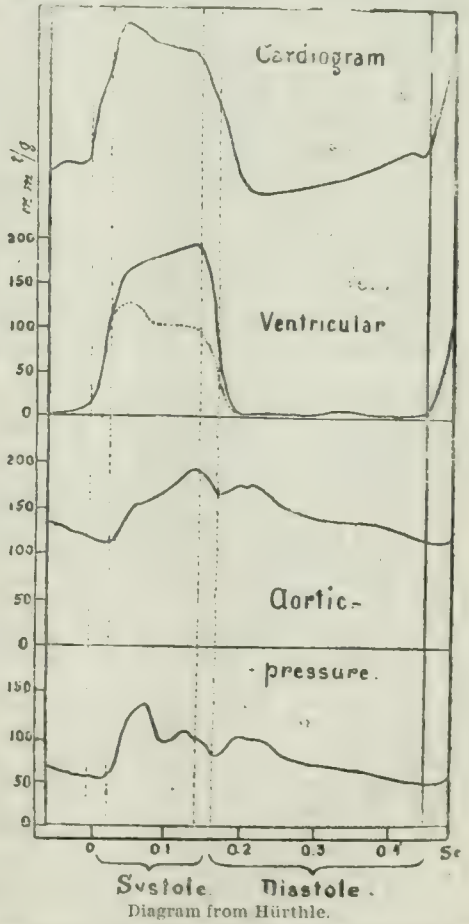


Diagram from Hürthle.

With regard to the double summit, if the second summit is higher than the first, so that the first appears upon the rising limb, the pulse is termed anacrotic; if the second summit appears on the falling limb between the first summit and the dicrotic notch the pulse is termed katacrotic.

[19] *Practitioner*, 1888, p. 423, *et seq.*

[20] *Arch. f. d. ges. Physiolog.*, 1890-92.

[21] *Pflüger's Arch.*, vol. xliii, 1888, 1 vol.; xlvii, 1890; vol. xlix, 1891.

He discards all terms of signification in naming the secondary waves, such as "outflow remainder wave" or "tidal" wave, since the terms have not met with universal recognition, and simply names them, in their succession, first secondary wave, second secondary wave, and so on. The side pressure in the aorta was always obtained by inserting the glass tube of his manometer into the carotid.[22] The animals were always narcotised by morphine.

The pressure movements varied during pulsation between 100 and 130 mm. Hg., so that the pulsatorial increase of pressure amounted to not quite one-third of the minimum pressure. He found the curve reached its first summit on an average in 0.025 seconds, and, in about the same time sank to a quarter or half the whole pressure movement to rise again to the height of the first summit. This second summit is the first secondary wave, and appears 0.05 second after the commencement of the primary wave. The curve sinks again from the second summit to a point either above or under half the height of the pulse, where a further upheaval occurs, which, however, does not attain to the same height as the foregoing. The second secondary wave occurs 0.12 second after the commencement of the curve.

Since the descent of the second secondary wave is more rapid than the rest of the descending side of the curve, we can distinguish yet a third secondary wave, which often comes out as a distinct rise. Finally, before the commencement of the next pulse a fourth secondary rising is noticeable, which is quite short and low, but clearly distinguishable.

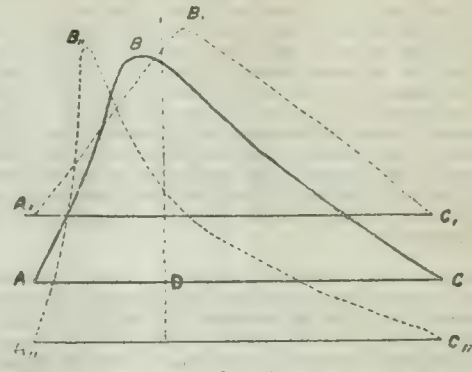
A characteristic appearance of the pressure curve is furnished by different conditions of the vascular system. If the cervical sympathetic is irritated the second summit appears to raise itself some seconds after the commencement of irritation, more and more above the first, and so changes the appearance of the pulse curve that what was the first summit is only recognisable as a bend in the upward limb of the curve; by this means the limb becomes longer and ascends less rapidly, and the angle at the curve summit becomes more obtuse. When the depressor nerve is irritated there is a different change; the curve attains its summit very quickly, although the rise is higher than normal; thereupon follows just as sudden a sinking to beneath the level of the pulse height, so that the angle of the summit is very sharp; the first secondary wave now occurs from 0.05 to 0.01 second later than normal. The other secondary waves do not change their place in so constant a manner on irritation of the sympathetic and depressor.

These experiments clearly prove that changes of the lumen of the peripheric vessels cause certain changes in the pulse form. The estimation of blood pressure in the various forms of pulse scarcely allows a doubt but that the change of the tone of the vessels can only change the pulse form by means of the blood pressure. A change of pulse form is never to be seen without simultaneous rising or falling of the blood pressure. The tension of arterial blood alters with the tone of the vessels, through increase or diminution of the obstacles which oppose themselves to the blood stream. Thus in irritation of the sympathetic the minimum pressure is raised about 10 mm. Hg.: the pulsatorial excursion is in comparison somewhat smaller. In irritation of the depressor nerve the minimum decreases 10 to 50 mm. Hg., and the pulsatorial excursion becomes greater.

Hürthle found that the height to which the primary curve reached in a given time under a low pressure could amount to more than four times as much as the curve rises to under a high pressure. It has been already said that with high blood pressure the ascending limb rises more slowly. These time variations are suggestive, and enable us to form some idea as to the varied form of the primary wave, as seen in the accompanying diagram from Hürthle.

If A B C is the primary wave under normal blood pressure, then, on rise of the blood pressure, it is converted into the less excursive and more slowly rising form A' B' C' whilst under low pressure the rapidly rising and more excursive form A" B" C" is produced. The descending limb of the pulse curve falls more quickly under low pressure than under high.

By accurate time measurements Hürthle found that the first secondary wave occurred somewhat sooner than the primary under high pressure than under low. If the first



secondary wave occurs at the time point D under normal blood pressure, then the double pointed form of the pulse form A, B, C become anacrotic; on the other hand, if the wave appears under lower pressure, it occurs later, low in the descending limb of the pulse form A" B" C". With regard to the nature of the first secondary wave, Hürthle says, "If one can apply the results of the experiments made by Fick and v. Kries on human beings to the pressure pulse of the rabbit, then the first secondary rising which follows the summit must be regarded as a positive wave, reflected from the periphery of the vascular system. The change which occurs in the time appearance of this wave with the alteration of blood pressure agrees with this assumption, for the velocity of propagation of the waves in the vascular system increases under increase of pressure, and *vice versâ*." Hürthle moreover repeated his experiments on the cat, with a like result.

(To be continued.)

[22] A full description of his manometer will be found in *Pflüger's Arch.*, 1888, vol. xliii.

ABSTRACTS FROM

THE INGLEBY LECTURES ON THE COMMON FORMS OF DYSPEPSIA IN WOMEN.

Delivered at Mason College, 1894.

BY ROBERT SAUNDBY, M.D.EDIN., F.R.C.P.LOND.,

Professor of Medicine, Mason College; Physician to the Birmingham General Hospital.

LECTURE I.

AFTER some preliminary observations, in the course of which he said that he would devote his attention to the consideration of the nature and treatment of the disorder present in the well-known type of dyspeptic woman which constituted two-thirds of the adult female patients in our hospital out-patient medical departments, and must form a considerable part of the daily work of every general practitioner, Dr. Saundby continued as follows:

A very great step has been made towards the clear understanding of stomach disorders in the method introduced by Küssmaul of examining the contents of the stomach during digestion, or a given time after the ingestion of food, by means of the stomach tube. By this and other means recently discovered, we can investigate the size of the stomach, the condition of its muscular wall, the quantity and quality of the gastric juice, and the presence in the stomach of abnormal substances which may injure its glandular mucous membrane, impair its function, and give rise to pain, flatulence, and other troubles.

If we wish to estimate the functional capabilities of an organ, we try to measure the work it does: and if it is a secreting gland, we obtain some of the secretion, and submit it to various chemical and other tests in order to determine its quantitative and qualitative characters. There is no better example of this method than the kidney, which has been the subject of close study for the last sixty years, so that we now possess a vast amount of theoretical and practical

knowledge of its function and secretion, which is put to daily use by everyone of us. It would not seem unreasonable to expect that a similar line of study if directed to the stomach, its functions and secretions, would lead to equally definite and perhaps equally valuable results; and the only reasons that I know which have hindered this investigation have been the inherent conservatism of our professional methods, and an exaggerated notion of the difficulty of carrying out such examinations.

The problems we set ourselves to solve in a given case where there is dyspepsia—that is, where the function of digestion is slow and painful, attended with the evolution of gases abnormal in quantity or quality, or by signs of irritation of the mucous membrane of the stomach—are: Is the muscular wall active, and capable of discharging the stomach contents in due time? Are pepsin and free hydrochloric acid present in sufficient quantities, and does the gastric juice possess its normal power?

Atony and Dilatation.

The motor functions of the stomach may be determined by a series of observations upon the length of time after a meal of determined nature at which a distinct residuum of food could be extracted from the stomach by means of a tube or an emetic. But, although this has been done, a more convenient method has been devised, which depends upon two facts: (1) That the normal stomach contents are acid, but become alkaline after being mixed with bile in the duodenum; and (2) that salol (a compound of phenol and salicylic acid) breaks up in the presence of alkalies into its component parts, which are excreted in the urine, where their presence may be demonstrated in the usual manner by the perchloride of iron test. The dose is fifteen grains, given about one hour after food, by which time the stomach contents have become distinctly acid. According to the careful observations of Ewald, in from forty minutes to one hour and a-quarter the urine should give the characteristic reaction, while thirty hours later there should be none. If the reaction has not appeared in the time first mentioned, or has not disappeared at the end of the time stated, we are justified in inferring that the muscular wall of the stomach is defective in the performance of its function, and if there is no evidence of pyloric obstruction, this must be due to atony of the muscular wall. This condition of atony leads in time to more or less dilatation, which may be demonstrated in various ways. It may be possible to map out the stomach by palpation and percussion when distended by food or fluid, and in the latter case we may elicit a distinct succussion splash, but in less-marked cases this is not easy, and the thickness of the abdominal wall may interfere greatly with the precision of our manipulation. Some assistance may be derived by distending the stomach with a spray producer attached to a stomach tube introduced into its cavity. This method does not cause pain, and by the altered resonance on percussion gives very fair indications. The old plan of distending the stomach by administering an alkali and an acid separately is not to be recommended, as the carbonic acid gas evolved causes spasmodic closure of the cardiac opening, and great pain, and even fainting, may result from over-distension.

Gastric Contents.

The examination of the gastric contents is rather more complex, but is based on even simpler principles. We give the patient—say at 8 A.M.—a breakfast consisting of 4 ounces of bread and a pint of weak tea without milk or sugar. Numerous observations made by Ewald and Boas have shown that for the first half or three-quarters of an hour lactic acid preponderates in the contents of the stomach; then distinct traces of hydrochloric acid begin to be present, together with lactic acid, and at the end of an hour the lactic acid disappears, and free hydrochloric acid alone is present. Therefore, one hour after the administration of the test breakfast the stomach tube, a soft long tube with a large fenestra, is introduced, and the contents of the stomach removed, an operation which is very easy, and is facilitated by voluntary compression of the abdominal muscles by the patient. In this way a few ounces of gastric contents are obtained, which consist of the remains of food mixed with the secretion of the gastric mucous membrane, with saliva, and possibly with a little bile. This material is filtered, and its reaction tested with litmus paper. If alkaline or neutral, it indicates a very abnormal state of the gastric secretion, such as is only met with in a few cases of advanced organic disease. It is, as a rule, acid, and we have next to determine the nature of the acid present.

The test for lactic acid is made by adding to a 1 per cent. solution of carbolic acid a few drops of perchloride of iron, and diluting this, if necessary, with distilled water, until we possess a solution of a pale amethyst colour. On adding a little of the filtered stomach contents, the amethyst blue turns to a canary yellow if lactic acid be present. This reaction is given by lactates as well as by lactic acid, and by other substances, such as alcohol; but under the conditions of our experiment these fallacies are of no importance. If the solution turns pale yellow with a reddish or brown lustre, butyric acid is present; but this, too, is not important in the case of our test breakfast, though the fact is of value in the examination of vomited matter, for butyric acid is a product of fermentation in the stomach, and is a very powerful irritant of the gastric mucous membrane.

Whether or not lactic acid is present, we have to determine if there be any free hydrochloric acid in the gastric contents—that is, whether the secretion of hydrochloric acid by the peptic glands of the stomach has been sufficient to supply all the chemical affinities present in the food, and to leave a surplus, as should be the case in healthy digestion. There are many reagents which have been employed for this purpose, but I invariably make use of Günzburg's test, consisting of two parts of phloroglucin, one part of vanillin, and thirty of absolute alcohol. If I dip a splinter of wood in this solution, and then touch it with hydrochloric acid, it turns red. If we put a few drops of the solution into a capsule together with a few drops of filtered gastric contents, and warm them gently over a lamp so that the fluid is evaporated, the appearance of streaks and patches of bright red indicates the presence of free hydrochloric acid, and this test is so delicate that it will detect less than 0.05 part of free hydrochloric acid per mille.

Our next business is to determine whether the gastric juice contains a sufficiency of pepsin; and if we have proved that there is a due supply of hydrochloric acid, we must conclude that, if pepsin is not absent, peptone should be found in the filtrate. The test for peptone is what is called the biuret reaction, the rose red colour on adding peptone to Fehling's solution; but of late years it has been shown that the albumoses, which are a transition stage between albumen and peptone, give this reaction, so that we must first get rid of these by saturating the filtrate with ammonium sulphate, allowing it to stand twenty-four hours, filtering it, and perhaps saturating it again, warming it gently, and again filtering before we have a fluid in which we can with certainty affirm the presence of peptone.

Not very uncommonly it happens that the result of this proceeding in cases of dyspepsia is negative, yet we are not thereby enabled to conclude that pepsin is deficient, unless albumoses also are absent. It becomes necessary to carry our investigation a stage further by employing our filtered gastric contents as a digestive agent in an artificial digestive experiment. For this purpose we stamp out with a cork-borer a number of little discs of white of egg, and place an equal number of these—let us say six—in four test tubes. To the first of these we add only the filtered stomach contents; to the second, the gastric contents *plus* a few drops of 0.2 per cent. hydrochloric acid; to the third, gastric contents and pepsin; to the fourth, no gastric contents, but hydrochloric acid and pepsin. These are all placed in an oven and kept at the temperature of the stomach—100° F.—for three or four hours. At the end of that time they are examined separately for peptone. If the first shows peptone, the gastric juice was active but a little weak; if the second only or better than the first, that the hydrochloric acid was insufficient; if the third only or distinctly better, that pepsin was deficient; while the fourth is the control tube, by which we are enabled to assure ourselves that the hydrochloric and pepsin used, and the other conditions of the experiments, were good and efficient.

We have met with a good many cases of anachlorhydria or deficient secretion of hydrochloric acid, but only one in which pepsin was absent. Hydrochloric acid was as a rule absent in

cases of chronic gastritis and dilatation, but in only one where there was no evidence of such organic disease. It is known that the secretion of this acid may fail from nervous causes, and even without giving rise to dyspeptic symptoms, so long as the motor function of the stomach remains normal. The persistence of pepsin in sufficient quantity depends probably upon the small amount actually necessary, and agrees with the results obtained by Leube and others, but is strikingly in opposition to popular pathology, to judge by the large number of people who think themselves benefited by the use of preparations of pepsin.

This work necessarily takes up a good deal of time, and I do not suggest that every busy practitioner can investigate his cases so completely. In the majority of instances it is not necessary to do so; but I hope before very long it will be as easy to get assistance, where needed, in such investigations as it now is to have microscopical or chemical examinations made of urine, sputa, or morbid growths. All that would be required of the practitioner would be to order the test breakfast, attend to remove it at the proper time, and then seal up the fluid obtained in a bottle and send it for examination and report.

Results.

A great number of experiments have demonstrated that atony of the stomach, involving delay in the transfer of the gastric contents into the intestine, is the most constant, the earliest, the most important factor in the production of the common dyspepsia of women. When the muscular wall of the stomach fails to act properly, it, in the first place, does not mix and churn the food so as to ensure all parts of the mass coming into proper contact with the gastric juice, so that the reduction to chyme is imperfectly performed.

It has been observed in experiments upon artificial digestion that the continuous peptonisation of albumen only occurs if the peptones already formed are removed, as they are formed, by dialysis, so that the accumulation of peptones in the stomach constitutes an obstacle to the further digestion of albuminous matter, and as little or no absorption takes place through the wall of the stomach, any delay in the discharge of gastric contents through the pylorus must be attended by this. It also gives rise to more or less stagnation of the blood and lymph currents, impairing the function of the glands, and leading to insufficient secretion of hydrochloric acid, as we have found in many of our in-patients. The defective movements of the muscular wall also lead to incomplete admixture of the gastric juices with the ingesta. By-and-bye the stomach becomes slightly dilated; a residue of food remains in the stomach until the next meal is taken, and this liquid organic matter, which contains normally many micro-organisms and is deficient in its natural antiseptic, hydrochloric acid, undergoes fermentative decompositions, giving rise to the formation of lactic and butyric acids, which cause irritation of the gastric mucous membrane, discomfort and pain, and are attended by the evolution of gases, which cause flatulence and often smell offensively. A stomach in such a condition is very prone to attacks of subacute gastritis.

This inflammatory reaction is slight at first, but it weakens the resistance of the membrane, renders it more prone to acute or subacute exacerbations, manifested by what are called bilious attacks, and, in course of time, determines atrophy of the glands of the stomach, with consequent diminution of the gastric juice, and as it extends through the mucous and submucous coats to the muscular layer further weakens this, leads to increased atony, and some degree of permanent dilatation. When this is established the vicious circle is completed and all the evils I have enumerated are intensified and the stomach troubles become very serious.

The initial evil—atony of the wall of the stomach—arises from many conditions, which are especially liable to occur in women:—from anæmia, from over-work, want of sleep, and anxiety, which are the lot of so many women in the course of the duty of bringing up a family; from superlactation, want of sufficient food, confinement to the house, and irregular meals; from acute diseases and want of proper rest, good food, and fresh air during convalescence. Does not the recital of these causes remind one too forcibly of the common lot of most of the women in our great towns, not only the wives of artisans or of the middle class of clerks, warehousemen, and shop assistants, but of the wives of many who are in fairly comfortable circumstances, but on whom sickness makes demands which they are not in a position to meet with all the resources of wealth?

Simple atony of the stomach due to debility, originating as has been described, constitutes the essential and sole lesion in the majority of women suffering from so-called dyspepsia. The symptoms commonly met with are pain between the shoulders, weight at the pit of the stomach coming on some time after taking food, and sometimes relieved temporarily by a meal. Flatulence and constipation are usually present, but the tongue is clean, and the secretions of the mouth are normal. The diagnosis may be made by the administration of a dose of salol, as already described, one hour after food, and the examination of the urine passed one hour and a-quarter after the dose of salol (gr. xv) has been taken.

A bilious attack is subacute gastric catarrh, but it is remarkable how little the subjective symptoms indicate the severe disturbance of the stomach; hence, I suppose, the general unwillingness to recognise the true nature of the lesion. This is very well illustrated by one of Beaumont's classical observations upon Alexis St. Martin.

St. Martin had been drinking ardent spirits pretty freely for eight or nine days. Two days later he had an uneasy sensation with tenderness at the pit of the stomach, some vertigo, and dimness and yellowness of vision on stooping down and rising again; he had a thin yellowish brown coat on his tongue, and his countenance was rather sallow, but he felt otherwise well, his appetite was good, and he slept as usual. Now mark the state of his stomach, as described from direct inspection. The inner surface of the stomach showed extensive erythematous livid patches, from the surface of which exuded small drops of grumous blood, large and numerous aphthous ulcers, the whole covered with thick mucus. The gastric fluids when extracted were mixed with a large proportion of thick ropy mucus and considerable muco-purulent matter, slightly tinged with blood, resembling the discharge from the bowels in some cases of chronic dysentery; yet with a stomach in this state he would have eaten anything!

It is easy to understand that once the patient has arrived at this stage it is only a question of time before the gastritis becomes chronic and the dilatation permanent and pronounced.

Where the nervous trouble produces marked hyperæsthesia, especially common in anæmic girls, the symptoms are pain immediately after food, epigastric in position, sharp in character, followed and relieved by vomiting; and these cases, as already mentioned, are very liable to be mistaken for ulcer of the stomach. It is noteworthy that the chemical and motor functions of the stomach do not necessarily suffer even in most severe cases of chlorotic anæmia—a fact which we have recently had several opportunities of demonstrating.

Closely allied to anæmic gastralgia is the condition which has been called anorexia nervosa, where there is entire loss of appetite for food, generally induced by the pain which has followed its ingestion. In this state the patient becomes extremely wasted, and may die from inanition. In most instances they recover rapidly when put to bed and properly fed; but they are apt to relapse, especially where there is a hysterical element in the case.

Ulcer of the stomach is undoubtedly a common occurrence in anæmic young women, but it has such a well-known pathological and clinical history that I need only allude to it here and elsewhere for the purposes of contrast and comparison. Undoubtedly until hæmatemesis has occurred it is impossible to differentiate ulcer from anæmic gastralgia, but this is no disadvantage, as both should be treated in precisely the same way.

German Universities.—The following figures show the number of students in the medical faculties of each of the universities of the German Empire during the present (1893-94) semester: Berlin, 1,279; Munich, 1,114; Leipzig, 788; Würzburg, 746; Griefswald, 380; Freiburg, 342; Erlangen, 338; Strassburg, 299; Breslau, 287; Kiel, 257; Bonn, 247; Tübingen, 235; Halle, 234; Königsberg, 230; Heidelberg, 218; Marburg, 216; Jena, 196; Göttingen, 192; Rostock, 120; and Giessen, 96. The total number of medical students in the twenty universities is therefore 7,714, being a decrease of 335 as compared with the corresponding period of 1892-93.

The fourth Italian Congress of Chemists and Apothecaries will be held at Naples on September 2nd and five following days.

RADICAL CURE OF HERNIA AND OTHER CLINICAL CASES.[1]

By GEORGE BUCHANAN, M.A., M.D., LL.D.,
Professor of Clinical Surgery in Glasgow University.

I.—Radical Cure of Hernia.

The patient I show you, aged 45, was operated on six weeks ago. The wound healed by first intention, and the man has been at the Lady Hozier Convalescent Home for a fortnight. At present you observe that the internal ring is completely plugged, the external quite closed except where the cord escapes, and the walls of the canal firmly fixed together. A vigorous cough betokens the strength of the abdominal buttress. The cure is perfect just now, with every prospect of a permanence.

In this case, and in another operated on eight days ago, which you will see in the adjoining ward, I performed the open operation which I described in the British Medical Journal for May 25th, 1879, an important feature of which is plugging the internal ring with a ball formed of the rolled-up sac. An incision was made from the external ring down over the front of the hernia, the bowel having been returned and retained by the finger of an assistant placed over the internal ring. Layer after layer was divided till the sac was exposed. With a forceps and end of a director the sac was separated from the cord, was lifted up till it was like the empty finger of a glove coming out from the external ring. It was now pulled upon till its neck was accessible from the external ring, when a thin catgut ligature was tied round it. When the tension was relieved, the tied neck recoiled back into the internal ring. I twisted the sac and rolled it up into a ball, which I pushed up the canal beyond the epigastric artery, so that it was now a plug blocking up the site of the internal ring. The stitches were introduced thus. A curved Wood's needle was passed through the external pillar of the canal from without inwards, opposite the site of the internal ring, was made to pass through the lower part of the rolled up plug, was pushed underneath the edge of the internal pillar for at least a third of an inch beyond its lower edge, so as to pick up and pierce what could be included of the internal oblique border, and then made to emerge through the aponeurotic pillar. A catgut ligature was then put through the hole in the needle's point, and withdrawn so that the ligature was passed through the external pillar, the ball plug, some part of the internal oblique, lastly, the internal pillar. Two other stitches were introduced lower down, of course, not including the plug. A last stitch, to which I attach much importance, was introduced as low down as to close the external ring just over the cord. This I passed through Poupart's ligament, near where Gimbernat's ligament is reflected from it, and on the upper side of the ring made it pass deep below the upper pillar, gripping up what is accessible of the conjoined tendon, and then made it emerge far inwards, even through the tendon of the rectus, to make it take a firm hold as a retaining suture. The catguts were now all drawn tight and tied, and so the inner ring was plugged, the walls of the whole canal were brought together, and the external ring closed.

In my own experience and that of others who have adopted the above method, the results have been so satisfactory that I have seen no reason to alter any of the details.

In 1879 some surgeons had already performed an operation for the radical cure, by stitching together the pillars of the external ring, after an operation for strangulated hernia. Others had adopted, now with antiseptic precautions, some modification of the old open operation by dissection in cases of reducible inguinal hernia, as a substitute for the subcutaneous operation with thick silver wire, introduced by Mr. Wood, of King's College, in 1862. In 1867 Sir Joseph Lister adduced two cases of radical cure of umbilical hernia, as illustrations of his new method of dealing with wounds on antiseptic principles (the application of which he had shown to me, in his first cases in Glasgow, in 1865). But, so far as I am aware, no one had practised or published the operation which I described, the distinguishing feature of which is the plugging of the internal ring with a ball formed of the rolled-up sac.

II.—Large Piece of Bone which was Impacted in the Larynx.

The man I show you, aged 55, was, eight days ago, taking his dinner of sheep's head broth. While his mouth was full his boy made a joke, which caused him to laugh; the back-draught of the laugh sucked a piece of bone into his wind-pipe, where it stuck; he tried to cough it out, but could not succeed. The bone was so placed that he could breathe, though with difficulty, so that he did not send for a doctor at first, but did so at night. The fauces were tickled to induce vomiting, but without success. Next morning he came to the infirmary. He could breathe, but not well, and had occasional spasms of the glottis.

My son, Dr. George Burnside Buchanan, who is acting as house-surgeon in my wards, examined with the laryngoscope, and saw a white piece of bone projecting up through the rima, but it was so firmly held that it could not be moved or extracted with the laryngeal forceps, so I was sent for. After the trial which had been made, it was hopeless to use more force, so I directed my son to perform tracheotomy. This he did, making a large crucial incision in the trachea, so as to admit the point of the little finger. This he passed up into the ring of the cricoid, and felt and moved the bone. A pair of dresser's forceps was passed up and grasped the bone, which was extracted by a little shaking and pulling.

The bone which I show you measures, length, 1 inch; greatest transverse, $\frac{1}{2}$ inch; vertical throughout, $\frac{1}{3}$ inch. It is evidently a piece of the cellulated ethmoid, and in shape resembles a truncated wedge, the smaller end of which measures $\frac{1}{4}$ inch across, and the two inclining sides are almost plane surfaces. Had it not been for the narrower end of the wedge presenting downwards, it could not have passed through the glottis.

The patient is now quite well, the wound closed; he will be dismissed to-morrow.

III.—Spinal Curvature.

This patient, P. R., aged 33, was two years ago in perfect health. At that time he went to Egypt as a marine engineer. While there he had an attack of pleurisy, but it must have been of a very subacute kind, as he was never laid up. Three months after he came to this country and consulted Dr. Snodgrass, of Partick, and also Dr. Gemmell, who both told him he had still some pleurisy; but it must have passed off, as he was able to follow his trade—fitting engines in a dock-yard at Renfrew. Shortly after that he became aware of a prominence on his back between the shoulders. He found it out himself, not by any pain or uneasiness, but because he felt something preventing him sitting upright against the back of a chair or a pew in church; but he said nothing about it to his wife or his doctor. About six months ago he was conscious that the prominence had become much more projecting, and soon after he began to feel pains round the waist, shooting down to his legs, with occasional cramps. He now mentioned his state to Dr. Donald, of Paisley, who at once detected a pronounced angular curvature of the spine in the upper three dorsal vertebræ. Soon after other well-marked signs of some lesion of the cord became developed, and within a few weeks there was paraplegia below the umbilicus, complete loss of sensation in both limbs, loss of voluntary motion, cramps and twitching of the calf, loss of power over the bladder and partly of the rectum. When he came to the infirmary on September 6th all these conditions were well marked. The reflexes, patellar and ankle, were greatly exalted, so that the least touch below the patella caused the limb to be jerked up from the bed, while he could not make a voluntary movement. On gently pressing up the great toe the ankle clonus was exhibited to an extreme degree.

Dr. Beatson, who was acting for me at that time, ordered him to be laid on a water bed, and applied extension to the feet by weight and a pulley. Within a month he had so much improved that sensation was beginning to return, and slight power of movement. The improvement went rapidly on, so that by January 1st he could move his legs in bed and could feel quite well, and the function of urination was quite normal, while the bowels acted regularly. The reflexes were almost normal. But as he still felt the girdle pains when he moved his body, a plaster-of-paris jacket was applied. Since that date the pain has disappeared. Already he has been tried out of bed, and can stand, but he has been so long confined on his back that it will be some time before he is able to walk.

[1] Shown at the meeting of the British Medical Association, Glasgow Branch, held in the Western Infirmary on February 6th. The cases are from hospital records by George Burnside Buchanan, B.A.Cantab., M.B. and C.M., House-Surgeon, Western Infirmary.

You now see that he can lift his legs and kick them freely about, and when I touch the ligamentum patellæ there is no response, and pushing the foot up firmly by the ball of the great toe does not produce any shaking of the foot or ankle.

The man was perfectly well two years ago, was completely paraplegic six months ago, and now you see him restored to a fairly healthy condition.

The pathology of this case is rather obscure. I believe it is an example of rapidly-occurring rarefying osteitis or dry caries of the bodies of the three upper dorsal vertebræ. There is no evidence of tuberculosis and no signs or symptoms of any abscess. I think it unlikely that the nerve symptoms arose from osseous pressure on the cord; I think it more likely that the subacute inflammatory condition which resulted in such softening of the vertebral bodies as allowed of their being crushed together extended to the membranes of the cord; that these became thickened and pressed on the cord as long as he was allowed to move himself; and then the perfect rest of the spine and some extension, with subsequently the plaster jacket, secured the subsidence of the inflammatory action and allowed of the absorption of the effused products which were pressing on or constricting the cord.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

LARGE FIBRO-LIPOMA.

The accompanying photograph represents a case I operated on successfully about a month ago. The patient was a young



man, aged 26, and the tumour—which weighed when cut off slightly over 50 English pounds—had been growing for eleven years. The weight of the tumour was so great that he, when walking, had to bend forward in order to support it hanging over his left hip. The neck of the tumour was about 17 inches in circumference, and it hung from underneath the left scapula. The tumour was composed of fatty tissue with bands of fibrous connective tissue running through it. On the skin covering the tumour were a great number of papillomatous growths, and on one or two places were patches of eczema due to the friction of the clothes. He was rather emaciated, as the photograph shows, but took his food well and was otherwise healthy. In operating the tumour had to be slung up to a beam in the roof as it was so unwieldy. The hæmorrhage during the operation was not very great, and the patient was able to be out in the street four or five days afterwards.

T. L. Brander, M.B., C.M.Edin.

Jinjow, Manchuria, N. China.

ACUTE INFLAMMATION OF ANTRUM IN INFLUENZA.

Cases of acute inflammation of the antrum of Highmore being exceedingly rare, the following close parallel to Dr. Semon's own case[1] may be of interest:

Mrs. T. was seized with influenza on February 10th. Early on February 12th she complained of great pain in the left side of the face, attended with swelling, tenderness of the skin over the cheek bone, and abundant lachrymation from the left eye.

Excruciating pain continued without intermission till February 15th, when, during the act of drinking, a sudden rush of yellowish-green fluid from the left nostril was followed by immediate relief. Pain returned as before, and was again very severe till recurrence of discharge again gave relief. This happened three or four times in the course of the next four days, with gradual subsidence of symptoms.

In addition to the early stage of the influenza, at which the antrum became affected, the following points were noteworthy. The discharge of fluid on each occasion occurred, or was favoured by, the upright position. Lowering the head greatly increased the pain, and gave no vent to the discharge.

The pupils showed no abnormality at first, but after two days the left pupil was found to be decidedly smaller than the right, and to react slowly to light. This condition persisted for two or three days, There was no opportunity for transillumination.

Hadley, Barnet. R. J. Ryle, M.B.Oxon.

PUERPERAL ERYTHEMA SIMULATING SCARLET FEVER.

On July 18th 1893, I delivered Mrs. C. of her second child, a son; she did well; on the fourth morning they sent for me hurriedly, the temperature had gone up to 100° and a red rash had appeared on the thighs and lower portion of abdomen. This at first sight seemed like the true scarlet fever rash; there was, however, no sore throat and the discharges were perfectly normal; the rash spread rapidly, the patient the next day being covered from head to foot—a brilliant red—but the temperature had come down to normal: after this the rash rapidly faded, the patient recovering without a bad symptom and getting up on the tenth day; there was no peeling. On inquiry I found that when a girl she had suffered several times with erythema; this I believe to have been the case in this instance although she had no symptom of it in the first confinement.

Woodbury, Essex. R. T. H. Bodilly.

THE FORCIBLE FEEDING OF THE INSANE.

Perusal of the interesting articles by Drs. Neil and Herbert, in the British Medical Journal of January 27th and March 3rd, would seem to me to give an exaggerated idea of the complexity and gravity of the operation of forcible feeding. The experience of some years leads me to believe that the operation, when conducted with care, is attended with little risk, even in extreme cases, and does not require any complicated apparatus to be carried out. I have the patient seated in a low armchair; one attendant standing behind the chair holds the head and gag; a second attendant, facing the first, grasps the patient's wrists, and holds them firmly down against the lower end of the thigh, at the same time pressing

[1] See British Medical Journal, February 3rd.

his knees firmly against the patient's to prevent the latter from forcing himself forward out of the chair. The arms of the chair prevent any movement sideways. Having the patient thus under control, I place the gag, giving it to the first attendant to hold, and then pass a long flexible rubber tube, with an ordinary tin funnel at its upper end, through the mouth to the stomach, first having moistened the tube with the food that is to be administered. The operation thus conducted is simple; food is very unlikely to regurgitate along the tube; the patient has not to be "thrown"; it can be carried out very rapidly, and never requires the help of more than three attendants, rarely of more than two. Slight lacerations of the lips do at times occur, but slipping of the gag and bruising of the patient are accidents easily avoided with care and trustworthy assistants. Where several patients have to be fed two or three times a day, the employment of these means will be found to effect a considerable saving of time, with a minimum of risk—a not inconsiderable item in the busy life of an asylum worker.

William Penberthy,
Assistant Medical Officer, Nottingham Borough Asylum.

With regard to the question which has lately been the subject of correspondence in the British Medical Journal by Drs. Neil and Russel, perhaps you will kindly permit me to add a few remarks as the outcome of thirty-four years' experience among the insane, and the performance of the operation in question many thousand times under all the varied phases of insanity.

As I write a notable case recurs to me, in which it fell to my lot to keep a particularly resistful young lady alive by forcible feeding alone for three years and a-half.

When a feeding tube is passed into the œsophagus through the nares, or through the central opening of the ordinary mouth gag, or rather I should say when an attempt is made to pass the tube into the œsophagus in this manner, the operator necessarily loses control in a great measure over the direction the tube may take when it disappears from his sight and from his digital direction through either of these openings. It seems to me, therefore, that a means which will ensure the passage of the tube in the right direction, that is, direct into the œsophagus, without the risk on the one hand of passing it into the larynx, or on the other (when the tube has been passed through the nostrils) of being guided by the patient's tongue back through the mouth instead of into the œsophagus, such a means, I venture to say, is preferable to either of the methods referred to, and such result, I think, is assuredly certain by the procedure I proceed to narrate here.

In a struggling resistful case it is in the first place absolutely necessary in order to avoid accident and insure the patient's safety to secure the patient firmly and thus also prevent all chance of resistance to or interference with the operator. This, I am aware, is sometimes accomplished by means of mechanical chairs or other apparatus, but I prefer properly applied manual control upon the patient whilst in a supine condition with the head slightly raised on a pillow and the particular care of the head entrusted to the most skilful assistant present.

A wooden wedge is easily inserted between the teeth on the side furthest away from the operator. This enables the operator to pass his finger side by side with the tube to the back of the pharynx, and a slight guidance slips the tube with certainty into the œsophagus; the liquid food may then be passed either by means of a funnel or inverted bottle or the stomach pump.

In cases of regurgitation of food the risk of its passing into the larynx must be obviated by the immediate withdrawal of the tube and turning the patient on his side.

In all those years I have never met with an untoward circumstance when pursuing this method. A soft elastic tube about a third of an inch in diameter has been used. No tenderness of the passages even arises when this soft tube is properly applied, and the horrible sloughing of the pharynx of some thirty years ago under the long-continued use of the old stiff tube is now, happily, never witnessed.

Welbeck Street, W. James Adam, M.D.

SECOND ATTACKS OF SCARLET FEVER.

[Communicated by the Director-General, R.N.]

Several examples of the above have recently been reported in the British Medical Journal, though all textbooks state that such are rarely met with, but probably they are more common than is generally believed. During a couple of minor epidemics of usually mild cases occurring among the boys under training in H.M.S. *Impregnable*, at Devonport, in 1892 and 1893, at least two examples of second attacks fell under my notice in a total of about 35 cases.

The first case, H. K., aged 16, was sent to the Royal Naval Hospital suffering from scarlet fever on March 13th, 1892; returned to duty May 13th, 1892. On February 1st, 1893, this same boy was sent to hospital with another attack of the same disease. He returned to duty April 14th, 1893.

In the second case the disease recurred after a very short interval. A. E., aged 16, was sent to hospital on September 16th, 1892, with scarlet fever. He was discharged to duty on October 28th, 1892. Three days later he was again attacked, and was under hospital treatment till December 13th, 1892. There cannot be much doubt as to diagnosis in these cases, as they were seen by the medical staff on board and also in hospital. Whether any of the other cases referred to had had attacks before joining the navy I cannot state.

H. B. Beatty,
Surgeon, R.N.

REPORTS
ON
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

WESTERN INFIRMARY, GLASGOW.

(Throat and Nose Department.)

EPITHELIOMA OF THE LEFT VOCAL CORD REMOVED BY LARYNGOTOMY SEVENTEEN MONTHS AGO.[1]

(By Walker Downie, M.B., Surgeon, Throat and Nose Department.)

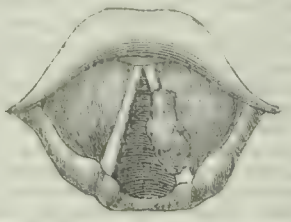
History.—The patient, who first came under my observation in August, 1892, was then 56 years of age. He had complained of huskiness for close on six months, but had given his condition little attention, as he considered it to be the result of a cold, and expected that it would pass away. Latterly he had complained of being readily tired, and as the huskiness had become aggravated, though unaccompanied by pain, he came to the Throat and Nose Department. At that time I was on a holiday, and he was seen by Dr. Rutherfurd, who found the whole larynx to be deeply injected, with the ventricular bands considerably and equally swollen, as if the result of catarrhal inflammation. He accordingly prescribed a hot sedative inhalation.

At the end of ten days, when I saw him, the general swelling had subsided, and a tumour of the left vocal cord was readily brought into view. It occupied the centre of the cord, and its length was equal to half the full length of the cord. It was irregularly circular in outline, bluish-grey in colour, and the substance of the central half of the cord was incorporated with the new growth. The free portions of the left cord, anterior and posterior to the tumour, were, apart from slight injection, normal in appearance. Looking down on the tumour with the laryngeal mirror in the ordinary position, it appeared about the size and shape of a small horse bean, but on examining it laterally it was seen to be greater in bulk than the view from above led me to infer. This, however, is the rule. The sketch here given of the tumour in this case would serve for several such cases which I have seen, the position, the size, the form, and the colour being almost identical in each. On my strong recommendation he submitted to extirpation of the growth.

Operation.—On September 13th, 1892, I performed tracheotomy, which, on account of the short thick form of his neck, and from the presence of an unusually large median vein, was somewhat difficult; and it was found impossible to

[1] Read at a meeting of the Glasgow and West of Scotland Branch of the British Medical Association on February 6th.

go as low down as is desirable in tracheotomy preliminary to thyrotomy. On September 20th I opened the larynx, completely dividing the cricoid and thyroid cartilages in the middle line. When the cartilages were separated and the tumour fully exposed, the larynx was illuminated by means of a Trouvé lamp, the whole of the left vocal band carefully dissected off the cartilage, and the surrounding surface cauterised.



Epithelioma of left vocal cord in a man, aged 56, removed by laryngotomy.

After-History.—The tracheal cannula was removed on the fourth day, and the wound in the neck was practically healed at the end of a fortnight from the date of thyrotomy. Now, seventeen months after operation, the man is well in health, has been regularly at his work in a shipbuilding yard since leaving hospital, and is 14 pounds heavier than he was one month before operation. The larynx is readily examined, and appears healthy; there is no evidence of recurrence of the disease; and in the production of his voice, which is fairly clear, the right vocal cord crosses the middle line and rises to meet the free edge of the left ventricular band, which has here assumed the *rôle* of a true vocal cord.

On February 6th, 1894, the patient was exhibited before the members of the Glasgow and West of Scotland Branch of the British Medical Association, several of whom examined the larynx, as well as sections of the tumour prepared by Dr. Sutherland, which had all the characteristics of a typical epithelioma.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

JONATHAN HUTCHINSON, F.R.S., President, in the Chair.

Tuesday, March 13th, 1894.

THE meeting was opened by Dr. CHURCH investing Mr. Jonathan Hutchinson, the new President, with the insignia of office.

Mr. HUTCHINSON thanked the Society for the great honour they had conferred on him in electing him President.

RUPTURED GASTRIC ULCER SUCCESSFULLY TREATED BY ABDOMINAL SECTION AND SUTURE.

Mr. T. H. MORSE (Norwich), who read this paper, was introduced by Mr. R. BARWELL. The patient, a young lady, aged 20, having had symptoms of gastric ulcer was suddenly seized with pain followed by faintness and vomiting. The pain, which was of a burning character, commenced over the region of the stomach and gradually extended all over the abdomen. Abdominal section was performed nearly five hours after the commencement of symptoms; the contents of the stomach were found in the peritoneal cavity. The stomach was withdrawn and a perforation found on the anterior surface close to the cardiac orifice. The organ was washed out and the perforation closed with Lembert's sutures, the stomach was returned, the peritoneal cavity washed out, and the wound united. No food was given by the mouth for sixty hours, and at the end of three weeks the patient was quite well. The author had not up to the present seen a record of any other successful case of this kind in this country, though cases had been reported by Drs. Penrose and Dickinson, also by Mr. Gilord and Mr. Barling, and by Mr. Warrington Haward, references to which were to be found in the BRITISH MEDICAL JOURNAL of the past year.

Mr. BARWELL said he had been able to find 25 cases on record of closing a rupture in the stomach wall, and there were at least 4 others. In 1 of the 25 cases there was a localised abscess close to the small curvature; this abscess was opened, and that was all that was found to be necessary. He then described Kriege's case.[1] Mr. Barwell suggested the following points, which he thought might point the way to success: First, to operate as soon as possible; secondly, that the incision through the abdominal wall should be to the left of the middle line; thirdly, to search very thoroughly the front wall of the stomach, as in these cases the opening was for various reasons liable to be hidden by lymph, puckering, etc. He suggested that it might be advisable to introduce into the patient's stomach some coloured fluid, such as coffee, for this purpose. He could not agree with Mr. Haward that it was necessary to cut away the margin of the ulcer before suturing the stomach. He thought that Mr. Morse had done very wisely in washing out the stomach and also in eschewing antiseptics in washing out the peritoneum. Mr. Barwell had seen very good results by washing out the peritoneum with warm distilled water in restoring patients from collapse during abdominal operations.

Mr. WARRINGTON HAWARD congratulated Mr. Morse on his case. He thought that where perforation occurred suddenly, without the presence of previous adhesions, the ulcer would almost certainly be found to be on the anterior surface of the stomach; also that necessity for prompt action was clearly shown; in fact the danger to the patient was proportional to the time which elapsed between the moment of rupture and the operation, as some of the irritating material from the stomach which escaped through the opening in its wall was rapidly carried by the lymphatics through the diaphragm to its upper surface, where it was liable to produce pleurisy or pneumonia. Should symptoms of pleuritic or lung trouble supervene a careful exploration should be undertaken. The position of the incision through the abdominal wall was not probably a point of very great importance. He was not sure that washing out the stomach would always be advisable, but there was no doubt as to the extreme importance of washing the peritoneal cavity out thoroughly, and it was particularly interesting that the flushing out with hot water had relieved the collapsed condition of the patient.

Mr. PAGE mentioned that he had sent an account of some cases of this description, which would shortly be published in full. He mentioned that his colleague, Mr. Pepper, at St. Mary's Hospital, had experienced the greatest difficulty from washing out the stomach through the rupture during the operation. His friend, Dr. Maclaren, of Carlisle, had sent him an account of 3 cases, 1 of which had been successful. In the first case the operation was undertaken within twelve hours of symptoms of perforation, but the patient died three days later. In the second the abdomen was opened nine hours after the first onset of symptoms, and the patient was now, three weeks after the operation, convalescent. In the third case the operation was undertaken four hours after the rupture, but the patient died three days later, and at the necropsy suppurative peritonitis was found, and also some fluid far back, which had evidently escaped from the stomach through the ulcer, death in this case being probably due to imperfect washing out of the peritoneum.

Dr. LEE DICKINSON had examined the *post-mortem* records of St. George's Hospital for the last fifty-three years with reference to perforating ulcers of the stomach. Out of some 50 cases, in half only was there any circumscribed abscess. In the other half death had resulted from the rupture, without the presence of a subphrenic abscess, but in a large number of these there were limiting adhesions. At the time of the perforation the stomach was almost certainly distended by gaseous and other contents. These, as Dr. Haslam had shown, caused the anterior surface of the stomach to become the superior surface, and thus the escape of the contents was quite easily limited to the upper part of the peritoneal cavity. He had that day made a *post-mortem* examination on a case, in which he had found a pool of gastric contents lying behind the cardiac end of the stomach. This was not a very unusual occurrence, but was one which would be liable to cause surgeons some difficulty in dealing with it.

Mr. GODLEE agreed on the importance of operating as soon

[1] *Berl. klin. Woch.*, December, 5th, 1892.

as possible. If left for many hours there was probably but little chance of saving the patient. In one case in which he had operated fifty hours after the rupture, he found no difficulty in sewing up the opening in the stomach through a median incision from the ensiform cartilage to the umbilicus. In his case the difficulty had been to wash out the peritoneal cavity, and this would, no doubt, be much more easily managed in cases which could be attacked early.

Dr. Penrose said that the diagnosis was by no means easy, as in many cases in which there was a subphrenic abscess the onset of symptoms was as acute as in those of direct perforation. He had seen Mr. Haward's operation, and noticed that there had been in that case no great difficulty in getting at the opening in the stomach through an incision in the middle line of the abdomen.

The President congratulated Mr. Morse on his success.

Mr. Morse, in reply, said that there was no necessity to introduce a coloured fluid into the stomach, as it was quite easy by squeezing that viscus to find where the rupture was. His reason for washing out the stomach had been to empty it so as to keep it as quiet as possible, as well as to prevent further extravasation. He had made his incision slightly to the left of the middle line, to enable him to withdraw the stomach completely out of the abdomen whilst suturing the rupture. In washing out the peritoneum he had used a large glass tube to act as a drain, and by moving this and the supply tube about together he had been able thoroughly to flush the whole of the peritoneal cavity. Apparently, in nearly all the fatal cases, the want of success was due to insufficient washing out, and it was owing to the difficulty of effecting this that success was directly proportional to the shortness of time elapsing between the rupture and the operation.

Resection and Immediate Suture of Intestine which had been Strangulated Eighty-one Hours: Recovery.

Mr. C. B. Lockwood read this paper. This was the first case in which the author had had the opportunity of practising resection of intestine damaged by strangulation since he advocated that treatment in a communication to the Royal Medical and Chirurgical Society in 1891, now printed in their *Transactions*. The case had a claim to attention because it seemed that none other had been successful after such a long strangulation as eighty-one hours. The patient was a youth, aged 17, who was seized suddenly with symptoms of acute intestinal obstruction due to a strangulated inguinal hernia. Taxis had been tried, and kelotomy was done eighty-one hours after strangulation had begun. The loop of intestine was rough and macerated, deeply engorged and infiltrated with blood, and gangrenous and perforated at the seat of constriction. About 4 inches were resected, and the ends united by Czerny-Lembert's method, and the wound drained and closed. An uninterrupted recovery ensued. The reasons for choosing resection in preference to the formation of an artificial anus were given. The former had a smaller mortality, and the latter exposed the patient to (1) non-relief of the obstruction, (2) spread of the gangrene or ulceration, (3) spread of the septic peritonitis, (4) death from inanition, (5) a further operation for the closure of the artificial anus. The reasons for choosing the Czerny-Lembert method in preference to methods which required unusual apparatus were stated. Lastly, the factors which conduced to success were mentioned—namely, the care taken to avoid death from shock by the cessation of the anæsthetic; the application of warmth and stimulants, and speed in operating; the disinfection of the sac, and protection of the peritoneum from infection; and, lastly, the absence of intestinal paralysis at the time of operating.

The President congratulated Mr. Lockwood on his success, and pointed out how his previous researches had enabled him to secure it.

Mr. Treves also congratulated Mr. Lockwood. He pointed out that the statistics of primary resection, and the formation of an artificial anus were liable to be fallacious, from the fact that all successful resections were published, whereas he did not expect that all the successful cases of the other class had been recorded. Primary resection was a plastic operation, and he doubted if it was advisable to subject patients with a gangrene of the gut to an operation of this character. Owing to the differences of the gut above and below the strangulated loop the operation was an extremely difficult one. In his own experience the best results had been obtained by a secondary resection a fortnight or three weeks after the first operation of making an artificial anus. It was a good sign that bone plates and other apparatus were being discarded, and that the pieces of intestine were now joined in the ordinary way by sewing them together.

Mr. Lockwood, in reply, stated that two or three years ago he had felt many of the difficulties that Mr. Treves had mentioned. The various dangers, to which he had drawn attention in his paper, that a patient with a primary artificial anus were exposed to were not imaginary. Out of 44 cases at St. Bartholomew's Hospital only 4 had recovered, and he had other statistics on which his conclusions were based: 250 cases collected by Mr. Kendal Franks, and over 500 collected by foreign observers. Many cases died because no relief was obtained through the artificial anus. Undoubtedly secondary resection was more successful than primary suture, but it could only be undertaken when the patient had passed through the serious perils of non-relief by the artificial anus, peritonitis, spreading gangrene, and inanition a week or two after the primary operation.

CLINICAL SOCIETY OF LONDON.

J. W. Hulke, F.R.C.S., F.R.S., President, in the Chair.

Friday, March 9th, 1894.

Cerebral Abscess.

Mr. C. Mansell Moullin related this case. A boy, aged 14, received a blow upon the right mastoid region. Headache supervened, and an abscess was opened (superficial to the periosteum) with relief. A week later the abscess was reopened and the periosteum incised, again with relief. Some days later symptoms of cerebral pressure, with right optic neuritis, came on. The skull was trephined over the temporo-sphenoidal lobe; the dura was healthy, but bulged into the wound. A trocar and cannula were inserted in various directions without result. The bone was then removed from over the cerebellum, and an exploration carried out there with equal want of success. Finally, a few drachms of fluid were drawn off from the descending cornu of the lateral ventricle through the temporo-sphenoidal lobe, and pulsation returned. Twenty-four hours later the patient died comatose. *Post mortem* a very old encysted abscess was found in the left temporo-sphenoidal lobe. Nothing else abnormal was found. The abscess must have been latent for a long time, and suddenly roused into activity by the blow.

The President remarked on the absence of high temperature in cases of abscess of the brain.

Mr. Barker asked if it was quite certain there was no middle ear disease on both sides: it was often overlooked: and when lighted up afresh was considered a case of acute disease. The drainage of the ventricle was often highly beneficial in such cases.

Mr. Clutton said the trocar and cannula had failed in his hands in exploring for pus in the brain. In one case two abscesses were found after death in the temporo-sphenoidal lobe and in the cerebellum, though a trocar had been used unsuccessfully in searching for them during life.

Mr. Moullin, in reply, also considered the trocar and cannula a very defective instrument for such explorations.

Extradural Hæmorrhage.

Mr. Battle read notes of three cases operated on by him during the past few months. The first was that of a woman, aged 59, with compound depressed fracture of the skull and other injuries. There was some oozing from the fracture of skull, but nothing to indicate the presence of the large clot of blood which was found at the operation, except marked shock. Operation was done for the depressed fracture. The clot found had compressed the right hemisphere to such an extent that no expansion followed the removal of the clot. The shock gradually passed off, and the patient left after a residence of thirty-five days. The second case was that of a boy, aged 5, who fell on his head from a coster's barrow. There had been no interval of consciousness. There was a swelling in the scalp over a simple fissured fracture of the skull. The diagnosis was fissured fracture of vault, with extradural hæmorrhage. Operation was done by a semilunar

flap, removal of sufficient bone, and application of silk ligature to the anterior branch of the middle meningeal artery by means of a needle passed through the dura mater round it. The anterior end of the fracture ran forwards into the orbit. Recovery was perfect. In the third case the patient, a big strongly-built man, fell from a scaffold. There was a fissured and slightly depressed fracture in the right parietal region. Operation was performed, and a large blood clot found over the right side of the cerebrum. Much bleeding went on. Bone was, therefore, removed, when an opening was found in a large vein of the dura mater, near the posterior superior angle of the parietal. This was closed with a silk ligature passed by means of a curved needle. There was no expansion of the brain, and the man died four hours later, not having recovered consciousness.

Mr. CROFT thought Mr. Battle quite justified in operating in his first case, because he removed 4 ounces of clot. In some cases, however, with symptoms due to clot, the symptoms all disappeared after a time without operation. If the loss of motor function lasted for some hours the surgeon should interfere. In a case of his own in 1857 he removed 4 ounces of clot under a star-shaped fracture of the left parietal, and the patient recovered.

Mr. EVE asked what were the differences that made both pupils dilated in one case and only one pupil dilated in the other. He related two cases bearing on the point, and said that where the blood was beneath the dura mater it found its way to the base of the brain, and possibly there affected the pupils.

Mr. BATTLE replied.

EXCISION OF PART OF A DISLOCATED SEMILUNAR FIBRO-CARTILAGE OF THE KNEE.

Mr. LOCKWOOD said the patient was an engineer, who injured his knee at football. Nothing could be felt, but the joint was apt to lock under circumstances which entailed danger to life. Pain was felt on pressure over the internal semilunar fibro-cartilage, which also seemed too movable, and had probably been injured. The joint was opened by a vertical incision, and the anterior third of the internal semilunar fibro-cartilage was found to have been torn from all its tibial attachments. It was removed, and the remainder was sewn down to the tibia. The operation was followed by slight synovitis, and the patient was up at the end of a fortnight; a month later he walked thirteen miles. Subsequently, after football, he had an attack of synovitis, but no locking; the joint was perfect for wrestling, running, swimming, or bicycling. He was afraid, however, to play tennis or football, because he feared a sudden twist. Nearly two years had elapsed since the operation. Mr. Lockwood considered that as asepsis was easy in the case of the knee, the operation was attended with small risk and little anxiety.

Mr. H. ALLINGHAM had opened the knee-joint thirty-five times, in only one of which had anything gone wrong, when it became stiff. In some cases of chronic rheumatic arthritis he had drained the joint, with great benefit.

Mr. CROFT believed that in 1888 he read the first case in which the semilunar cartilage was designedly cut away. That man was now quite well, and capable of really hard work. Since then he had had another case equally successful.

Mr. MOULLIN said that in two cases in which he had sutured the cartilage to the tibia the symptoms had recurred after three and six months. In five cases he had removed the cartilage, and the patients had all recovered.

After some remarks from Mr. BLAND SUTTON, Mr. LOCKWOOD replied.

EXCISION IN TYPHOID PERFORATION.

Dr. CAYLEY and Mr. BLAND SUTTON contributed this case. The patient, a man aged 25, was seized with symptoms of perforation about the twenty-fourth day of what seemed to be a mild attack of typhoid fever. The conditions appeared favourable for operative interference. Accordingly, five and a-half hours after the accession of the symptoms, the collapse having passed off, Mr. Bland Sutton, assisted by Dr. Berkeley, opened the abdomen. On withdrawing a coil of intestine from the pelvis a perforation was found in the centre of an oval ulcer, the outline of which was plainly apparent through the intestinal wall. The ulcer was excised by an oval incision, and the cut edges of the mucous membrane drawn into apposition by a continous silk suture. Then the serous surfaces were brought together by eleven Lembert sutures, the peritoneal cavity freely irrigated with warm water, and the stitched portion of the gut laid immediately under the wound in the abdominal wall, which was then closed in the usual manner. At the end of the operation, which lasted nearly an hour, the patient was much collapsed, but gradually rallied, and lived till the sixth day. He suffered no pain, and there were no signs of peritonitis. The sutured section of bowel was found adherent to the edges of the incision through the abdominal wall. The perforation was situated 12 inches above the ileo-cæcal valve. In any future attempt it would probably be better not to excise and suture the ulcer, but, after washing out the peritoneal cavity, to attach the perforated bowel to the abdominal incision, and leave a fistula, which could be dealt with subsequently.

Mr. H. ALLINGHAM had had a case of the kind in which the openings in the bowel were so rotten that he brought them up to the abdominal opening and stitched them there, but the patient died.

After remarks by Mr. EVE, Mr. BATTLE said 20 cases had now been recorded—all fatal. He thought it better to use sutures than to bring the openings to the wound in the abdominal wall.

Dr. GOODALL thought the best treatment was opium and ice. In Murchison's book 17 cases so treated had recovered.

Mr. SUTTON, in reply, said that, had he satisfied himself with an artificial anus, he thought the patient might have recovered. He was surprised to hear that cases had recovered with medical treatment alone, because in his case he found the pelvis flooded with fæces. In perforation the collapsed bowel usually fell into the pelvis, and might be found there, as it was in his case.

Dr. BURNEY YEO thought the removal of the ulcer might lead to subsequent stricture of the intestine.

Dr. CAYLEY thought recovery impossible after perforation, where there was much extravasation, unless surgical treatment was adopted.

OBSTETRICAL SOCIETY OF LONDON.

G. E. HERMAN, M.B.Lond., F.R.C.P., President, in the Chair.

Wednesday, March 7th, 1894.

SYMPHYSIOTOMY.

A PAPER by Dr. ROBERT P. HARRIS, of Philadelphia, entitled "A Plea for the Practice of Symphysiotomy, based upon its record for the past eight years," was read. Mention was made of the unfavourable statistics of symphysiotomy from 1777 to 1858, and the great reduction of mortality in both mothers and children since its revival by Morisani in 1866. The success obtained by this operator and by Novi and others in Italy showed that the operation was founded on a rational basis. The results obtained in other countries were very encouraging. The best conditions for the performance of symphysiotomy in view of saving the child's life were that the woman should be operated on in good season; the true conjugate should not measure less than 2¾ inches. The child should be very carefully, not hurriedly, delivered by the forceps applied to the sides of the head, and if asphyxiated it should be carefully treated for its restoration.

Dr. LEWERS said his own case operated on last year was the only one published in England since the revival of the operation. He thought that some of the early mortality was due to the operation having been performed in extreme cases of pelvic contraction, and much to the want of asepsis. He pointed out the difference in rigidity of the pelvic joints in pregnant and in non-pregnant women, and that in the former a gain of three-quarters of an inch in the conjugate was possible. The indications for operation were failure to deliver with forceps in a slightly-contracted pelvis; strict asepsis was necessary. He estimated the present mortality of symphysiotomy at 7 per cent.

Dr. HORROCKS, after mentioning the three alternatives in the case of a living child which could not be delivered alive—namely, craniotomy, Cæsarean section, and symphysiotomy—said that craniotomy should have a mortality of *nil*, and he believed the mortality of the second alternative to be less

than that of the third—certainly more children were saved. He had witnessed one case of symphysiotomy, and was astonished at the wide separation of the halves of the symphysis; he was only able to surmise what state the sacro-iliac joints must be in. The woman had been unable to work since, and was now, he had heard, in an infirmary. He should recommend a patient, under the conditions named, to have craniotomy performed; or, if she were anxious to have a living child, and willing to take the extra risk, Cæsarean section in preference to symphysiotomy.

Dr. Griffith had not yet found, although he had about 3,000 cases of labour annually under his charge, the conditions necessary for its performance present—namely, the patient in labour, a moderate degree of contraction (C.V. not less than 3 inches), the fœtus alive, and delivery impossible with forceps properly applied. He believed the total risks of Cæsarean section were less than those of symphysiotomy.

The President said the percentage mortality appeared to be about 10, not lower than that of favourable Cæsarean section. The latter operation could be combined with sterilisation, but the best way of doing this had not yet been established. Symphysiotomy might be required many times in the same patient. We had no information as to whether frequent division of the symphysis could be done on the same woman with good union each time, and the after-histories of symphysiotomy cases were as yet wanting. He was inclined to think Cæsarean section preferable to symphysiotomy.

Remarks were made by Dr. Cullingworth and Dr. Leith Napier.

On the Relation of Heart Disease to Menstruation.

Dr. Gow read this paper. Particulars with regard to menstruation of 50 cases were given. In 28 the menstrual flow was unaltered; in 17 it was absent, or scantier than before; in 5 it was either more profuse, or recurred more frequently than before. In no case was there good evidence that heart disease gave rise to severe menorrhagia. It would seem that either amenorrhœa or scanty menstruation was a far more common accompaniment of heart disease than menorrhagia. A further analysis of these cases seemed to point to the fact that heart disease led to relative sterility, and also that it greatly increased the tendency to premature expulsion of the ovum. In conclusion, it was pointed out that a large number of women suffering from valvular disease of the heart passed safely through the period of pregnancy and labour. For convenience, these cases might be further analysed as follows:—(1) Mitral stenosis (22 cases): In 9 cases menstruation regular, and amount lost unaltered; in 5 cases menstruation regular but more scanty: in 4 cases there was amenorrhœa; in 4 cases menstruation was either more frequent or more profuse. (2) Mitral incompetence (15 cases): In 10 cases menstruation unaltered; in 4 cases menstruation more scanty; in 1 case amenorrhœa. (3) Mitral stenosis and incompetence (7 cases): In 4 cases menstruation unaltered; in 1 case menstruation more scanty; in 1 case amenorrhœa; in 1 case slightly increased menstrual loss. (4) Aortic incompetence and obstruction (2 cases): In both cases menstruation unaltered. (5) Aortic and mitral incompetence (3 cases): In all cases menstruation unaltered. (6) Aortic incompetence and obstruction and mitral incompetence (1 case): Menstrual loss more scanty than before.

Dr. John Phillips had examined the hearts of 656 women consecutively, whose ages varied between 18 and 44, in the out-patient room at King's College Hospital, and had observed 15 cases of organic heart disease. In none was there menorrhagia, in most a tendency to amenorrhœa, and in 2 aortic cases the patients attended in consequence of amenorrhœa and breathlessness. He agreed with Dr. Gow in all his conclusions, except that he thought, perhaps, a woman conceived as readily with a damaged heart as with a healthy one. The tendency to abortion was undoubted.

Dr. Horrocks thought more accurate knowledge could be obtained by comparing the menstrual history of a patient with the condition of the heart found *post mortem*. Most of the author's cases were instances of mitral stenosis, and it was only when tricuspid regurgitation occurred that any marked effect could be expected in the uterus. In the cases where the tricuspid valves were incompetent there was no menorrhagia. All the facts were in favour of Dr. Gow's conclusions.

The President had made some observations on the effect of venous congestion from heart, lung, and liver diseases on menstruation, and his results in the main agreed with those of Dr. Gow. The textbooks said that heart disease caused uterine hæmorrhage, but the clinical lectures of Dr. Matthews Duncan were an exception to the rule.

Dr. Griffiths had met with an instance of menorrhagia coexisting with mitral regurgitation.

Dr. Gow replied.

Specimens.

Specimens were shown by Drs. Duncan and Leith Napier.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

D. Argyll Robertson, M.D., F.R.S.E., President, in the Chair.

Thursday, March 8th, 1894.

Orbital Tumours.

Mr. Hill Griffith related some cases of orbital growth, showing photographs and preparations. The first represented the successful removal from the upper part of the orbit of a man, aged 35, of an encapsuled adeno-sarcoma which was causing downward displacement of the eye. The second was the removal of what afterwards proved to be a hypertrophied lachrymal gland from the orbit of a young girl. When seen six years later a large irregular exostosis (?) filled up the space between the frontal arch and the eyeball. Probably the lachrymal gland had been pushed out of position by the slowly growing mass, and had been erroneously regarded as the cause of the trouble. The third was a symmetrical tumour in a similar position in an otherwise healthy young man, which was regarded as an acute hypertrophic inflammation of the lachrymal glands. The fourth was one of very slow and painless protrusion of the eyeball in an otherwise healthy young woman, in whom a portion of growth could be felt in the upper and outer part of the orbit. Seventeen months after the first visit the tumour was removed together with the orbital contents, the nature of the growth being doubtful. The last two cases were malignant growths in which the orbital contents were removed, death occurring in one case twelve months later from extension of what proved to be sarcoma, and in the other from meningitis on the twenty-fourth day after operation. The author stated that in all such cases he had found pressure sufficient for the arrest of hæmorrhage, and warned others against the use of the actual cautery with this object.

Mr. McHardy questioned the value of the horseshoe incision in these cases, involving, as it did, so much more stitching.

Mr. Juler stated that he had exhibited a similar case, in which a portion of the growth had been removed and subjected to microscopic examination, the opinion being expressed that it was sarcoma. A suspicion of syphilis, however, was aroused, and the patient recovered completely under mercury.

Mr. Adams Frost mentioned a similar case.

The President described a case of symmetrical orbital tumours, both of which had been removed at different times and places, but recurred and finally disappeared under iodide of potassium.

Dr. Little mentioned a case similar to the foregoing in a gentleman, aged 55. The tumours had existed two months, and on removal looked like sarcoma.

Mr. Hill Griffith, in reply, said the horseshoe incision was only adopted in order to give more room where the tumour was very extensive.

School Ophthalmia.

In resuming the adjourned discussion on school ophthalmia, Mr. Hutchinson said that in his paper, so far from exaggerating the frequency and severity of the attacks, he had rather understated them. At the school with which he was mainly concerned, many of the cases had fulfilled the exact tests of workhouse ophthalmia, having frequently relapsed, and lasted six to eight months, developing a most definite condition of granular lids. He was of opinion that there was no

initial difference between the epidemic of which he was now speaking and what had been long known as workhouse ophthalmia, except that the cases being taken in hand at once, the severer after-consequences were less frequent. With regard to the suggestion put forward by Mr. Nettleship and supported by Dr. Stevenson, that there were two forms of the disease, of which one had severe consequences and the other not, the *onus probandi* rested with them. He himself could find no means of distinction. Inquiries among the public schools had failed to elicit any evidence of previous epidemics. An important question was whether the infection was conveyed directly from eye to eye, or whether it resided in the walls and hangings of the rooms; he was himself inclined to the former view. With regard to the question of certificates, it was extremely difficult to say when the disease was actually present in the early stage, or when it was quite cured. He was not disposed to throw any great responsibility on practitioners in this matter.

The PRESIDENT pointed out that the points on which the opinions of members of the Society were desired were: (1) as to the increase of the disease; (2) whether there was more than one form; (3) mode of conveying contagion; and (4) the necessity for certificates.

Mr. JULER said that there had been a widespread increase of ophthalmia in the past year, owing to the long, hot, and dry summer. He demurred to speaking of this disease too closely in connection with granular lids, since the majority of the cases did not so develop; and he mentioned an instance in which he had seen 100 boys on one occasion suffering from purulent ophthalmia together, of whom the majority recovered under appropriate treatment in three weeks, but 30 subsequently had granular ophthalmia. This might have been present in a mild degree before the purulent ophthalmia was superposed.

Mr. DOYNE said that during last autumn there had been an epidemic of eye trouble all over the Oxford district. The ophthalmia was usually cured in a week, and left no sequelæ. He thought follicular conjunctivitis meant very little, but eyes so affected might suffer more from a muco-purulent ophthalmia than such as were quite smooth. Among notes of 12,000 cases he had only 21 of trachoma, of which 11 had been imported. In 7 of the 21 only one eye was affected, and 1 had been for a year in a workhouse school without any extension of the disease to others.

Mr. SIDNEY TAYLOR (Norwich) stated that during 1893 he had seen no cases of trachoma, but that since the beginning of the present year 6 cases had come under his notice.

Mr. NELSON (Belfast) mentioned cases which had come under his care with enlarged follicles and asthenopia following measles, and continuing for two years. He suggested the possible conveyance of trachoma from one case to another by the brush in painting lids.

Mr. CRITCHETT agreed that there was evidence of increase of ophthalmia in the autumn of 1893, and of a more severe form than usual, but the cases did not relapse, and he had not seen granular lids resulting from it.

Mr. PRIESTLEY SMITH said there were a large number of lids with enlarged follicles which might only represent the tendency to adenoid development so often met with in the pharynx in children, especially in towns. Such enlargement was often excited by atropine, but there was no evidence of its contagiousness. These children might be more liable to conjunctivitis, of which more cases had occurred in a recent six months than in the previous six years. He did not connect this with trachoma, which, according to the recent German theory, was the result of a specific germ infection allied to gonorrhœal ophthalmia. The present epidemic, he thought, was due rather to bad hygiene than to contagion, which produced this follicular enlargement associated with more widespread purulent ophthalmia.

Mr. MCHARDY enumerated three forms of granule met with in the lids—follicular, trachomatous, and papillary. He recommended separating the different classes of cases and improving the hygienic conditions.

Dr. LITTLE said that among the cases which had come to him from the public schools he had not noticed any increase in trachoma. He often met with follicular enlargement with irritation, which he thought was made worse by the application of caustic. It was better treated by hygienic measures.

Mr. STEVENSON did not accept two epidemic forms of follicular conjunctivitis. Among the cases he had examined 94 per cent. exhibited follicular enlargement, and only ½ per cent. trachoma. In the public schools muco-purulent ophthalmia commonly occurred in the spring and autumn. There was no trachoma, which he thought should not be diagnosed without material evidence.

Mr. NETTLESHIP disclaimed any belief in two forms of school ophthalmia. The tendency to development of adenoid tissue varied with conditions of life, being greater in children, town dwellers and certain races; it was also favoured by defective sanitary conditions. Should an outbreak of conjunctivitis occur among such subjects, a considerable proportion might be expected to develop a granular condition of lids, and then too many precautions could not be taken. Certificates should be given by the school doctor.

Mr. HUTCHINSON, in reply, said the severity of the outbreak in the school with which he was concerned was attested by the fact that all the boys had been sent home for two months, and that the affected ones had returned in a worse condition than that in which they left; also that the outbreak had lasted eight months before he was called in. He thought it was of the greatest moment to appreciate the significance of these cases in the early stage, when they were curable, as it was through neglect that the severe and incurable forms of granular lids arose. He did not accept the theory of the gonorrhœal origin of trachoma, and thought it had nothing to do with workhouse ophthalmia. It was an open question whether there was both an ordinary and a specific form of catarrhal ophthalmia. Practically it was advisable to separate the affected boys from the healthy, placing the severe cases under rigorous treatment.

CASES AND SPECIMENS.

Cases and card specimens were shown by Messrs. SPENCER WATSON, J. B. LAWFORD, H. WORK DODD. JULER, COWELL, JOHN GRIFFIN, PRIESTLEY SMITH, ADAMS FROST, and ROCKLIFFE.

Harveian—*March 1st*—Mr. GEORGE EASTES, President, in the chair.—Dr. SILK read a paper on the uses and misuses of anæsthetics. After alluding to the uses of anæsthetics, he said with regard to their misuses that there were grounds for believing in the growing tendency to the formation of "a chloroform habit." He could not agree with the conclusion arrived at the end of 1889 by the Hyderabad Commission that "chloroform anæsthesia is free from risk." More or less danger attached to all forms of anæsthesia. In the years 1888 and 1889 the total death rate from anæsthetics in England was 33 and 36 respectively, the chloroform death-rate for each year being 32, whereas in the two following years the totals went up to 42 and 69 and the chloroform rate to 36 and 62. Inattention and overdosage were undoubted misuses, and dilatory induction and under-anæsthetisation nearly as bad errors, and the existence of these troubles afforded a powerful argument in favour of the recognition of the systematic teaching of anæsthetics as a necessary part of the medical curriculum. He thought shock was seldom completely abolished under any anæsthetic, or in any stage of narcosis, though much might be done to mitigate the evil by subjecting the patient to a careful preparatory *regime*, taking care not to underfeed him, and if necessary to give a nutrient enema just beforehand.—After remarks by the PRESIDENT, Dr. T. R. ATKINSON, and Mr. RICKARD LLOYD, Dr. HEWITT said he had seen all grades of surgical shock during anæsthesia, and was by no means prepared to say that such conditions could be avoided by keeping the patient very profoundly anæsthetised. He had indeed met with numerous cases in which, during operations upon exhausted and anæmic subjects, a light anæsthesia seemed to be attended with less disturbance of the circulatory and respiratory functions than a moderate or deep anæsthesia. Patients who were in a bad state of health at the time of operation were fortunately rather tolerant than otherwise of a rather light anæsthesia. As to the preparation of the patient for the administration, he fully agreed with Mr. Woodhouse Braine that it was wrong to give patients any food by the stomach for at least several hours beforehand.—Dr. H. F. LANCASTER said it should be a constant rule to anæsthetise the patient fully, prior to any incision being made.—Dr. HAZEL said it was his experience that women were less able to bear the pains of labour now than formerly, and therefore required the use of an anæsthetic. Deep anæsthesia was rarely necessary. In cases where the os uteri was rigid, he generally gave 10 gr. doses of chloral every half-hour for three doses, after which he found that but little chloroform was required to produce anæsthesia.—Mr. G. EVERITT NORTON had noticed when the patients took a long time to get under the influence of the anæsthetic they often caused some trouble during the operation by faintness. He considered five minutes the average time required for producing anæsthesia. With regard to the preparation of patients, he did not hold with too long fasting.—Mr. WOODHOUSE BRAINE also took part in the discussion.—Dr. ROBERT BOXALL remarked that the frequent use of anæsthetics might lead to "chloroform habit," and quoted some cases in support of this view. He considered chloroform preferable to other anæsthetics in labour, especially when the head was

passing over the perineum. He substituted ether for chloroform if any operative measures had to be undertaken during the course of labour.—Dr. Silk replied.

Wigan Medical —*March 8th*—Mr. G. H. Marks, jun., President, in the chair.—A paper was read by Mr. Ferd. Rees on pulmonary embolism and thrombosis in the puerperal state.—The Honorary Secretary related a fatal case of puerperal embolism.—A discussion followed.—Mr. Mitchell Roocroft showed a case in which he had wired the humerus six weeks after fracture, with a successful result.—Mr. Graham showed a successful case of sutured patella three weeks after fracture. Mr. Graham also showed a case in which he had opened the knee-joint to remove a loose cartilage.

Aberdeen Medico-Chirurgical—*March 1st*—Dr. Angus Fraser, President, in the chair.—Dr. Fraser read a paper on a case of sarcoma of the lung in a man of middle age. Examination revealed evidence of disease of the thorax, and although two and a-half pints of fluid were removed from the left side, a solid condition remained. Dr. Fraser stated that he was guided in giving as his opinion before death that the case was one of sarcoma and not cancer of the lung, because he had an idea that in sarcoma of the lung there was an elevation of temperature greater than in cancer of the lung, and because there was an absence of red-currant sputa.—Dr. John Gordon read notes of a case of cancer of the os uteri with pregnancy in a woman, aged 39. When pregnant with her tenth child, she noticed about the sixth month a frequent blood-stained, foul-smelling discharge. When examined in the seventh month of pregnancy, a well-marked condition of cancer of the os uteri was diagnosed. The cancerous tissue invaded the whole circumference of the os; the other parts were not affected. The condition of the heart and kidneys did not allow of active surgical interference, and the case was allowed to go on to full term. After about twenty hours of labour, during which the os had dilated greatly and softened, the forceps were applied; there was some fissuring, but without much trouble the woman was delivered of a live child. Little hæmorrhage took place. During the first four days there was an elevation of temperature in the patient (102° F.), feeble pulse, and vomiting. After that time, the recovery from the puerperal state was rapid and continuous, the patient having left her bed on the fourteenth day. During the later months of pregnancy the growth of the cancerous condition was fairly rapid, and since delivery the invasion of the deeper tissues had taken place.

Bradford Medico-Chirurgical — *March 6th*—Mr. J. Appleyard, President, in the chair.—Dr. Logan showed an arrangement of combined evacuating and injecting syringes communicating with a single half-curved double-channelled needle; it was intended to minimise pitting in small-pox by early evacuation of the vesicular contents, and replacement by aseptic fluid.—Dr. Goyder read notes of a case of extensive warty growths of the neck, shoulders, and breast, of a young lady which had been treated with thyroid tabloids internally, and disappeared in the course of five or six weeks.—Dr. Rabagliati read a paper on salpingo-ovaritis, showing specimens, and giving details of peracute and mild cases occurring remotely after miscarriage.—Mr. Horrocks showed a specimen from a patient with recurring attacks of vomiting and stoppage of the bowels. An incision was made in the right linea semilunaris, and the colon was found bound down at the hepatic flexure; two small nodules were felt in the wall. An anastomosis was made between the small intestine a few inches from the ileo-cæcal valve and the transverse colon. The patient did well at first, but died six weeks later from ulceration of the seat of stoppage; fæces had continued to pass into the short-circuited part of the colon, but were prevented returning by the cæcal valve.—Mr. Wood read notes of a case of nephrectomy in which, owing to the slipping of the ligature on the pedicle, there was great loss of blood, the patient becoming collapsed and pulseless. Two pints of saline solution were thrown into the veins, and oxygen inhalations given, the patient at once rallying and making a good recovery.

REVIEWS.

Hygiene and Diseases of Warm Climates. Edited by Andrew Davidson, M.D., F.R.C.P.Edin. Edinburgh and London: Young J. Pentland. 1893. (Royal 8vo, pp. 1046. 31s. 6d.)

A good work in the English language on the diseases of warm climates has long been a desideratum. We have had many books in recent years treating of special groups of tropical diseases, particularly of such as are met with in India, but hitherto we have had no work in which anything like a comprehensive and catholic treatment of this important class has been attempted. Our neighbours, both French and German, as usual in such matters, have been before us, and in the works of Hirsch, Corre, Roux, and others, have for a considerable time been in possession of admirable treatises. But, although our English work is somewhat late in the field, we can with considerable confidence claim for it, in most respects, the first place as a textbook on tropical diseases. We heartily congratulate Dr. Andrew Davidson, not only on the excellence of his own articles, but also on having received such efficient co-operation from his band of collaborators, and on his success as an editor.

The work commences with chapters on the influence of warm climates on the constitution (Dr. Edward A. Birch), hygiene of the tropics (Dr. J. Lane Notter), and tropical naval hygiene (Dr. R. W. Coppinger). These subjects are ably handled, and each of the articles contains much information of value not readily accessible to the ordinary medical reader.

To these succeeds the editor's able essay on malarial disease, in which this important subject is treated with unusual judgment and literary skill. The most approved modern doctrines on paludism are lucidly and succinctly detailed. Altogether this is, perhaps, the best essay on malaria and malarial diseases—in the English language at any rate. One or two improvements might be suggested. A more detailed account of the methods for demonstrating the malaria parasite might be given with advantage. It is not sufficient to say, "The layer of blood to be examined should be thin, so as to display the individual elements." Instruction should be afforded as to how to set about preparing this thin layer. This is a small matter, apparently, but we believe it to be one of extreme practical importance; we are convinced that it has been mainly from the absence of such instruction that so few have succeeded in finding this important parasite, and that so many are still sceptical about its existence. Golgi's views of the life cycle of the malaria parasite are somewhat too closely followed; while giving them, Dr. Davidson might have sounded a word of caution about accepting them as fully proved. Certainly the charts he gives do not bear out in a very convincing way Golgi's double tertian and treble quartan theory of the quotidian fevers. We also think that the section devoted to non-malarial fevers ought not to have been interpolated into this article, but that it deserved a chapter to itself. Under the heading of pernicious attacks we see no allusion to hyperpyrexia as a cause of death in malarial fever, nor to its treatment by the continuous cold bath—an important omission. We should have liked, also, to see some allusion to the treatment of malarial disease by Warburg's tincture, iodine, carbolic and salicylic acids, capsicum, methylene blue, and other remedies which, though by no means so effective, as a general rule, as quinine, are nevertheless not devoid of therapeutic value, and are sometimes of service where quinine fails. We do not endorse Dr. Davidson's sweeping condemnation of these drugs. The malarial orchitis of French writers is not referred to; and it seems to us that the pernicious lymphangitis of Rio and Mauritius is the same that Dr. Manson refers to as a form of filarial disease.

Surgeon-Captain Whitehead's article on tropical typhoid, which might have been more suitably designated typhoid in the tropics, is of interest principally from the etiological standpoint. Once more the extreme liability of the young soldier to typhoid on entering the tropics is dwelt on. Here and there in this article we remark unnecessary repetition, and some diffuse writing and obscurity of expression. Although there are many valuable hints on diagnosis there is no mention of the employment of the microscope in attempting the diagnosis of typhoid from malarial fever—often a matter of no small difficulty and importance in the obscure fevers so common in the tropics.

Than Surgeon Captain David Bruce there is no one more competent to treat of that peculiar form of chronic recurring fever, which in this work is somewhat unfortunately designated Malta fever. We would point out that local names for this and other diseases are confusing and ought to be abandoned. Thanks in great measure to Dr. Bruce's writings, the vague ideas about this disease simmering for many years past in the medical mind have at last taken definite shape, and henceforth this form of fever—under a somewhat better name, let us hope—will find a permanent niche in systematic works. Like Dr. Whitehead, Dr. Bruce, although he is evidently a skilled bacteriologist, ignores the microscope as a diagnostic agent in differentiating in practice this fever from malaria.

Dr. Sternberg's article on yellow fever is likewise an excellent one. His elaborate pathological and clinical studies of the disease, undertaken at the instance of the United States Government, and his eminence as a pathologist fully justified the editor's choice. The judicious way in which the bacteriological section is handled is excellent. His criticism of the

work of Freire. Finlay, and Gibier reminds us of the masterly and effective way he slew that figment of the minds of Klebs and Tommasi-Crudeli—the bacillus malariæ—now many years ago. Sternberg is one of the few bacteriologists who, when they go out into the wilderness of pathology to find a bacillus, have sufficient moral courage when they return empty-handed to admit failure. The Sternberg treatment for yellow fever is novel, and so far as experience has yet gone, seems to promise good results. The only fault we have to find with this article is in the appended illustrative cases; they ought either to have been altogether omitted or one or two only should have been given and these in greater detail.

Dengue is handled by Dr. Davidson in the same lucid thorough manner characterising the article on malaria; few facts of importance are omitted, and there is not a word too much. The article on plague by Dr. Montagu Lubbock is scholarly, but wants that freshness of treatment which can only be applied by one who has been a frequent eye-witness of the thing he essays to describe.

The important chapters on cholera and leprosy, undertaken by Mr. N. C. Macnamara, are on the whole very well done. Exception may, however, be taken to the inordinate space devoted to the history of the various cholera epidemics. The article occupies 72 pages; of these 35 are devoted to ancient history. As a consequence the more modern questions connected with the disease are starved. Only two pages are devoted to treatment. Haffkine's cholera vaccination is dismissed in three or four lines, and the reader is referred to our columns for the information he may be anxious to acquire. This is flattering to us; at the same time we hardly believe that every lonely station in India or China, to which this work ought to find its way, is supplied with a complete file of this JOURNAL. The subject of intravenous injections is not alluded to. A similar want of proportion in the construction of the article on leprosy—otherwise an excellent one—is also apparent. Nearly half of it is devoted to history and geographical distribution—subjects which might very well have been dismissed in a few lines. In the remarks on the discovery of the leprosy bacillus we looked in vain for Hansen's name; the entire credit of this important discovery is assigned to Klebs. It is true that some one called "Armauer" is said to have demonstrated the bacillus in the lepra cells. Is this intended for Armauer Hansen?

The article on beri-beri, from the pen of Dr. Manson, is thoroughly well arranged and comprehensive. He defines the disease as a specific endemo-epidemic multiple neuritis of uncertain extent, duration, severity, and course. The results of the bacteriological investigations with regard to the disease are fully stated, but Dr. Manson points out certain difficulties in the way of accepting the doctrine of a causal relationship between Pekelharing and Winkler's micro-organisms and beri-beri. As he says, it is at present necessary to suspend judgment, though if the observations were found to be correct they would undoubtedly lead to a very great advance in our methods of dealing with beri-beri epidemics. We sympathise entirely with Dr. Manson's astonishment that neither the Indian nor any of our colonial Governments have taken the matter up, for, as he observes, "in many of our colonies there are few diseases which so seriously tax Government hospitals, or which so seriously hinder the expansion of the agricultural, mining, and other industries on which the prosperity of these communities depends." The article is well illustrated by drawings and diagrams. Dr. Manson also contributes the article on negro lethargy, which appears to contain all the information at present available upon a subject to which Dr. Manson has given special attention.

The chapter on framboesia, by Dr. William Prout, is short, concise, and well arranged. Dr. Rat's views are fully given, and in other respects the article is up to date. The photograph is not very well reproduced; as is the case with one of the photographs in Dr. Manson's article on tinea imbricata: it fails to convey any idea of the appearance of the disease.

Sir Joseph Fayrer treats of tropical diarrhœa. He does well to impress on his readers the advantages of a pure milk diet in this disease. The article is supplemented by notes on the bacteriology, by Drs. Martin and Macfadyen. Dysentery is dealt with by the editor and Surgeon-Captain D. M. Davidson. It is an admirable presentment of this difficult subject. Amœbic dysentery is described at some length, but, unfortunately, there is no careful description either of the amœba itself or of the method of finding and demonstrating it. This ought to be remedied. In this connection we would allude to what we consider a weak point in this book, and one which the editor might have guarded against. There is a good deal of overlapping in the treatment of many of the subjects, several authors describing the same thing partially, but none of them thoroughly. Thus, this same amœba is discussed in no fewer than five places—under dysentery, under tropical diarrhœa, under hepatitis, under abscess of the liver, and under intestinal entozoa—but nowhere thoroughly. The amœba might be said to have fallen between five stools. Similarly with liver abscess which is discussed under dysentery, under hepatitis, and by Sir Joseph Fayrer in a separate chapter. What with this and the space devoted to such subjects as the history of cholera, details of cases, and one or two articles which might very well have been left out in a work on diseases of warm climates, more than a hundred pages are wasted which might have been devoted to important subjects which have either been entirely left out or imperfectly treated.

In Dr. Cayley's brief but excellent article on tropical diseases of the liver we read: "We seldom meet with cases of hepatitis or liver abscess among total abstainers." We doubt whether general experience will support this statement. A beautiful, and doubtless expensive, coloured plate of multiple abscesses of the liver produced by gall stones is, we think, out of place in this work; it throws no light on the pathology of tropical liver abscess, and gall stones are by no means confined to tropical climates or particularly prevalent there. Tropical liver abscess is dealt with by Sir Joseph Fayrer somewhat too briefly. The pen which wrote this article and that on tropical liver disease should have been the same, and further, twenty-two closely-printed pages of cases are too much even for a conscientious reader. The same remark about the wealth of case illustration applies to Sir Joseph Fayrer's article on sunstroke—otherwise an excellent and most readable performance.

Dr. F. N. Macnamara's paper on goitre we do not understand, nor do we understand why goitre should have figured in this work at all. It is not a disease of warm climates, being as common in many cold or temperate countries as it is in India. Nor, after all, is the subject fully treated; only one side of it—the etiological, and even that in a very partial manner, and merely as affecting India—is referred to.

The subject of filarial disease is treated by Dr. Manson in a masterly article which will remain classical. It is clearly and systematically written, comprehensive, and well illustrated. The same writer contributes a short article on pulmonary and cerebral distomiasis, and also an essay on diseases of the skin in tropical climates, which is in its way a model of accuracy and terseness.

Of Dr. Sonsino's articles on the intestinal, hepatic, and portal entozoa, and associated diseases we cannot speak too highly. The author is himself a distinguished and successful worker in this very difficult line of research, and a master of his subject. So far as we know, nowhere in English literature have anchylostomiasis, bilharzia disease, and rhabdenomeniasis been so fully and scientifically discussed. Notwithstanding that he writes in what to him is a foreign language, Dr. Sonsino has contrived to express himself clearly and even elegantly. The illustrations are of much practical value, but we should like to see figures of the ova of the rarer parasites such as d. crassum, a. hominis, etc., as it is these rarities that are so difficult to identify when met with. We confidently anticipate, as a direct result of the diffusion of helminthological knowledge by Dr. Sonsino's article, that there will be a speedy and great advance in tropical helminthology within the next few years.

In a work on tropical disease we looked for one or more papers from Dr. Vandyke Carter, more particularly for one on mycetoma, a subject with which his name is so intimately associated. Dr. Carter is not among the contributors to the present volume, nor is there any notice whatever of mycetoma. Doubtless there are very good reasons for these omissions. We should also have liked to see some notice of epidemic dropsy, of tropical neuroses, and of several other subjects the scattered information about which requires

focussing. A better bibliography would have been welcomed by workers. A complete bibliography was not necessary, but a list of the literature subsequent to Corre's or Hirsch's works would save students many a weary and often fruitless hunt.

Though we have ventured to criticise this book somewhat freely, it is, as we have said, the best work, taken as a whole, which has hitherto appeared in any language on the subject; and we believe it will be, for Englishmen at all events, the beginning of a new departure in the study of tropical disease. It should be the daily companion of every medical man in warm countries, and should be thoroughly mastered by all who aspire to be the teachers of the rising generation of medical men.

System of Diseases of the Ear, Nose, and Throat. Edited by Charles H. Burnett, A.M., M.D. Two vols. London: H. K. Lewis. 1893. (Vol. I, imp. 8vo, pp. 790; Vol. II, imp. 8vo, pp. 860. 48s.)

Dr. Charles H. Burnett, of Philadelphia, the well-known aural surgeon, has conceived the idea of issuing a practical work on the diagnosis and treatment of diseases of the ear, nose, naso-pharynx, pharynx, and larynx, composed, as he says, of papers by eminent authorities. He has carried out this idea in the volumes before us. The contributors number forty-three, and include many well-known names.

We gather from the preface that the authors have aimed at giving practical conclusions arrived at by other investigators and by themselves, rather than at discussing theories. On the whole this character is well maintained by the articles, although occasionally one of them seems rather too bibliographical in character and to contain too little of the author's own experience.

In a large work like this it is, of course, impossible to criticise each monograph separately.

It is perhaps inevitable that in a "system" a certain amount of repetition should occur. For example, tuberculosis and lupus of the nasal cavities are described by Dr. Major in his article on this subject in Vol. i, and again by Dr. Carl Seiler in Vol. ii, p. 23. Foreign bodies in the nose are not only described in the chapter so headed in Vol i, but also on p. 32, Vol. ii, although the treatment is not mentioned in the latter place; and adenoid vegetations are twice described, by Dr. Gorham Bacon (Vol. i, p. 282), and by Dr. Seiss on p. 648 of the same volume.

An improvement which we might suggest for a future edition is that the names of the different authors should be printed at the top of every (or every other) page, for in reading a book by so many writers it is constantly necessary to turn back in order to see whose remarks are under consideration. There are numerous illustrations, but many of them are borrowed from other works. Considering the size of the book, there are wonderfully few misprints.

NOTES ON BOOKS.

Some Annual Works of Reference.

We have received several well-known works of reference, among others the 30th annual edition, dated 1893, of *Herbert Fry's Royal Guide to the London Charities*, edited by Mr. John Lane. It contains in alphabetical order the name, date of foundation, address, objects, annual income, chief officials, and other information with regard to the whole long list of London charities, medical and other. It is published by Messrs. Chatto and Windus, price 1s. 6d., and in every respect entirely fulfils the object with which it has been compiled.

The new issue of *Bourne's Handy Assurance Directory* (1894) is edited by Mr. William Schooling, F.R.A.S., who states that he has checked over every figure of the life assurance accounts, every valuation summary, the fire, accident, and marine accounts for recent years, and every calculation in the book, and finds that while errors pure and simple scarcely exist, even discrepancies of treatment are very few and slight. The volume contains a great mass of information from which an opinion may be formed as to the relative merits of the various insurance companies, and will be found extremely convenient for reference. It is published at Trafalgar Buildings, Northumberland Avenue, W.C., price 2s.

The sixty-ninth issue of *Dod's Parliamentary Companion* (London: Whittaker and Co., price 4s. 6d.), contains biographical particulars of the present Parliament. To the new edition has been added a list of the Acts which receive the Royal assent in the session of 1893-4.

Clark's Civil Service Annual (London: Civil Service Book Depôt, and Simpkin Marshall and Co., price 2s.), is a guide to candidates for the Civil Service. It contains particulars of appointments to be obtained by competition, together with specimens of examination papers, etc.

Hospital Reports.

The twenty-ninth volume of *The St. Bartholomew's Hospital Reports* is edited by Dr. W. S. Church and Mr. W. J. Walsham. The first article in it is a paper by Mr. Harrison Cripps on the abdominal operations done in the women's ward. The earlier part of the paper is occupied by a description of the special operating ward, and is illustrated by drawings of the ward, and of the various special appliances in use. This paper is followed by a critical essay on the removal of the uterine appendages by Dr. Champneys. It would be impossible within the limits of our space to notice all the papers in the volume, which number twenty-eight; but we may especially note an elaborate paper by Dr. W. P. Herringham on chronic peritonitis, and Mr. Butlin's account of a year's surgery, in which he not only gives his results, but also describes the special precautions which he takes and requires his dressers to take to prevent septic intoxication. A descriptive list of specimens added to the museum in 1893 is contributed by Mr. Edgar Willett, and bound up with the volume are the usual statistical tables prepared by the medical and surgical registrars.

The second volume of the *Philadelphia Hospital Reports*, edited by Drs. Charles K. Mills and James W. Walk, has as a frontispiece a portrait of the late Dr. D. Hayes Agnew. There is a brief obituary notice of Dr. Agnew, and Dr. J. William White contributes a biography of Miss Alice Fisher, the English lady who as supervising nurse took part in the foundation of the training school for nurses. The volume contains over thirty medical and surgical papers mainly founded upon work done in the hospital, and contains descriptions of many remarkable and interesting cases, among which we have only space to mention a very striking case of general paresis with arthropathies with a photograph and description of *post-mortem* appearances by Dr. James Hendrie Lloyd.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

BLAUD'S TABLOIDS (SUGAR-COATED).

Messrs. Burroughs, Wellcome and Co., Snow Hill Buildings, E.C., have introduced a sugar-coated compressed form of Blaud's pills. The essential ingredients, ferrous sulphate and sodium carbonate, are mixed in a dry condition, so that the decomposition which results in the formation of ferrous carbonate occurs only when the tabloid comes in contact with the fluids of the stomach. This is a certain method of obtaining unoxidised moist carbonate of iron in a condition very suitable for absorption. The tabloids are quickly acted upon by water, and being sugar-coated are pleasant to take. The manufacturers also prepare Blaud's tabloids combined with aloin and arsenic, for use in the treatment of anæmia, chlorosis, etc.

LANOLINE PINE TAR SOAP.

Our observation of this soap shows that it is of good quality, non-irritating, and that it possesses antiseptic properties. It has a marked odour of pine tar. It is sold by Messrs. Burroughs, Wellcome and Co., Snow Hill Buildings, E.C.



Tangier from the Shore.

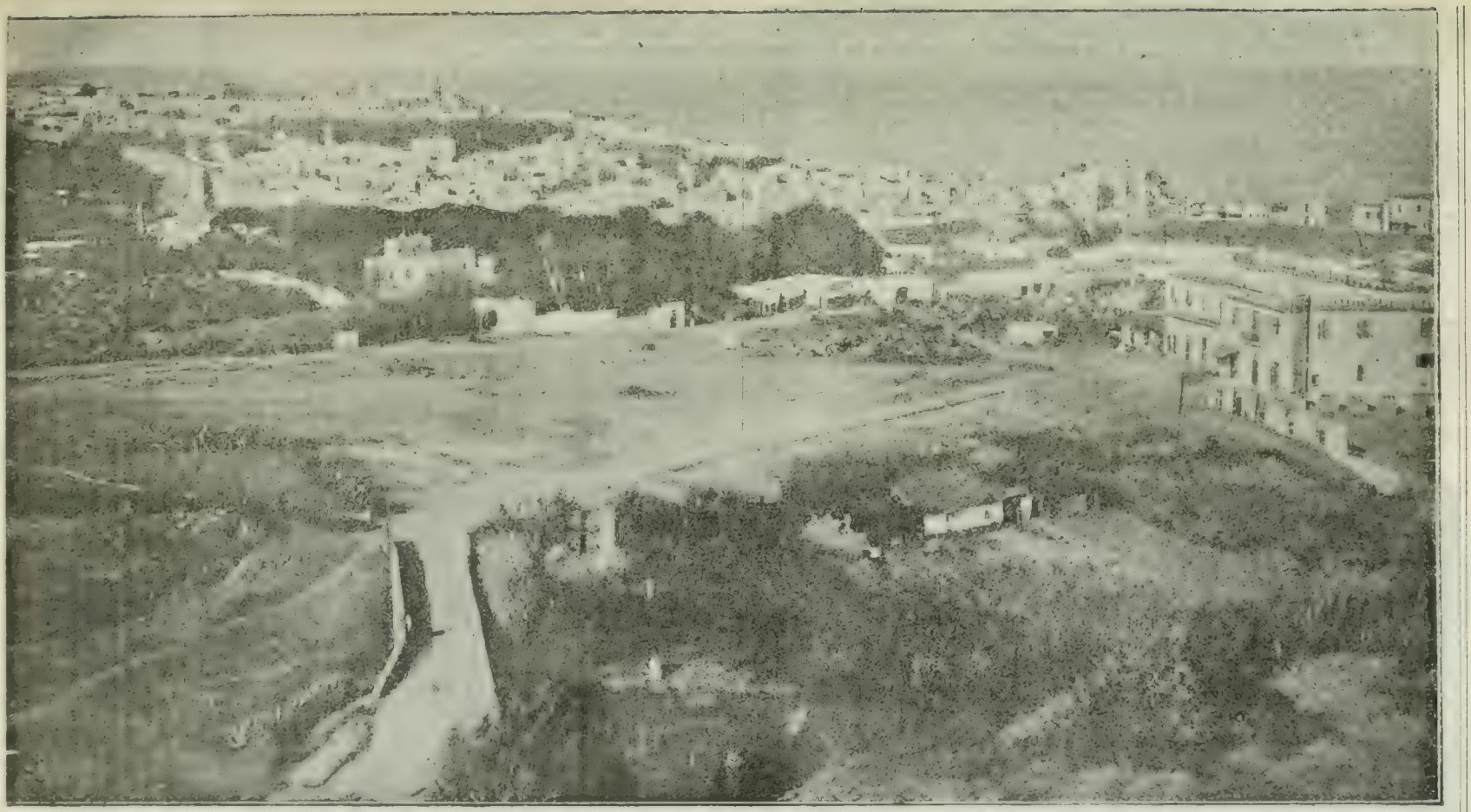
THE NEAREST AFRICAN HEALTH RESORT.

The Theory of a Winter Holiday.—From Tilbury to Gibraltar by P. and O.—The White Tangier.—"A Pearl Set in a Violet Girdle."—Street Scenes from the "Arabian Nights."—El Sokko.—Moorish Women, Water Sellers, and Snake Charmers.—The Tethered Camels.—Leared on Climate.—A Moorish Marriage.

To the professional man life in London is often compassed with conventionalities and ear-marked by etiquette; his customs are those of the code; to him the consulting room is a cage, and his daily round of duty is deadened by much monotony and often weighted with weariness, when not darkened by disaster. To him, therefore, among many others, escape for however short a holiday from the fogs, the darkness, the drizzle, and the various ferocities of a British winter is a welcome respite and refreshment, a recreation of the mind and a "renewal of life" to the body. The wholesome occasions and localities for a winter holiday have been not infrequently advocated and exemplified in these columns. It is happily becoming better known and more frequently enjoyed than heretofore by the busy practitioner. The foxhunter and the fowler beguile themselves with field sports: the idler and the man of fashion lose all the glories of an English autumn and summer, and betake themselves abroad at the season when the fields and fells, the gardens and the commons, the rivers and the hillsides of our own country are for the time radiant with the summer sun or reflect the cloud-flecked glories of an English sky in lake and river. Such are the follies of fashion; such the exigencies of a mechanical social convention, dictated originally by the conveniences and conventions of classes, which at one time so completely dominated custom and opinion that they were followed blindly by those who in no way benefited by them. Doctors now determine for themselves their own dates for holiday making. To my mind, and I believe to that of many others, there is no time so opportune as the dreary British winter time, and the months from January to March, when the recollections of the shining sun have almost faded from the memory, and the depressing influence of months of dull darkness needs to be dispelled by a brief holiday beneath brighter and bluer skies. Brighton, Bournemouth and the South Coast towns, the Isle of Wight, Torquay, Ilfracombe, offer attractions to those whose tastes are wholly centred in English life and scenery or who are tied by the leg with short tether; but a far more complete change can be found farther afield, either at Cannes or other towns on the Riviera, at Teneriffe or at Madeira—all of them places of pleasant winter resort for those to whom a short sea journey has no terrors, and for whom the semi-tropical scenery of the feathery palm, the spiked aloe, and the quaint cactus have a charm—as well as for those who love to bask for a few winter weeks in floods of sunlight lasting from early dawn to late evening.

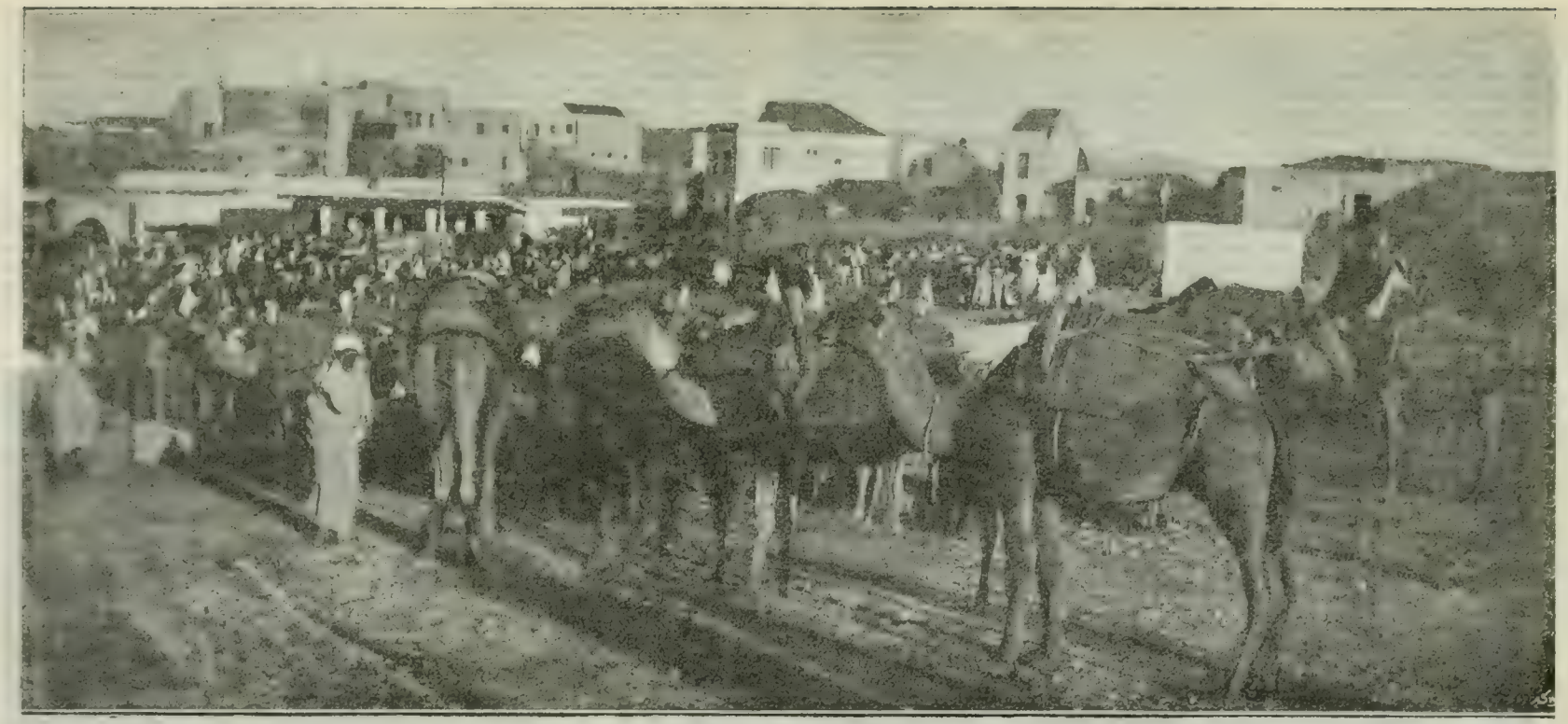
The nearest African health resort within reach of Londoners is one but little known, and visited by few. It is Tangier, the westernmost point of Africa, which offers to everyone who has a few weeks of winter or spring holiday at disposal one of the most strange and picturesque survivals of old Mohammedan life, with its brilliant artistic costume, and its strange, weird, and fantastic customs. For invalids, convalescents, health-seekers, and idlers alike, it has the charm of a climate of unsurpassed equality and moderation, equally delightful in summer as in winter, of a great wealth of sunlight, and of a picturesqueness to which the brush of artists, such as Regnault, Fortuny, and Constant, Moore, and Discars have done justice, but which words are impotent to paint. Dr. Leared, Dr. Rohlfs, and Dr. Hooker, well-endowed medical travellers, have had much to say of its climatic merits, its natural beauties, its rich and varied fauna, and its strange survival of feudal Mohammedanism; but their works, I fancy, are not very widely read. The past deficiency of accommodation, recently much amended, has helped to divert the stream of travel to cities more conventional, but in some respects better equipped. What Cairo is to Cannes, Tangier is to Cairo. It is a city more full of Oriental surprises than the capital of Egypt, less crushed by the social conventions of Europe, richer in colour, more striking in scenery, more vivid and animated in its street life.

The Oriental glories of Cairo are quickly passing away. The Cairo of to-day is much duller and more commonplace than when I first knew it twenty years ago. Even its



Tangier from the Hill.

climate is becoming more cloudy and colder and more subject to rainfall since the opening of the Suez Canal. So largely has Europe imposed itself upon the Egyptian capital that Cairo is partly masked and marred by the colourless costume of the people and the stuccoed façades of French provincial architecture; and the senses are staled with Cockney costumes, and society slang in all its streets and sidelets. Eggs and bacon, beefsteaks and bitter beer rule in the restaurants. The old Mousky Street has lost its timber roofing, the native shops are superseded by French *boutiques*, with plate glass windows, filled with the goods of Manchester, Birmingham, Paris, and Vienna. Only some of the old bazaars, the dilapidated mosques, and caliphs' tombs remain to remind the ten thousand who resort there of the past glories of the city. Beyond the city, however, tower the eternal Pyramids. There are still the desert, the Serapeion of Thebes, Luxor and its temples, and the cataracts, unapproached among the delights of winter travel, although desecrated by tourists steamers and personally conducted parties. Harry and Harriet, however, have not yet invaded Tandja-el-Taib, and the great white city of Tangier, with its Moorish quarters, its stretching plains and glittering hills beyond, and still more the lovely city of Tetouan, the sanctuary town of Wazan, Mogador, Marakesch, and the cities of Morocco and Fez afford to the holiday maker scenes which survive from the twelfth century; and which gather attraction from their age and novelty, from their unchanged aspect of old-world stability. From the medical point of view, the coast towns and many cities of the interior possess peculiar properties of climate, which all observers have declared to be unsurpassed. "The climate of Tangier," says Dr. Leared, "is so very equable and pleasant that I have formed a high opinion of its suitability for invalids suffering from chest affections. Its maritime position, and the protection of mountain ranges on the south secure it against the scorching heat to which the inland parts of Morocco are exposed. The desert winds, which are so objectionable in Algiers and other places on the Mediterranean littoral, are here almost unknown. The ordinary summer temperature ranges between 78° F. and 82° F., and the latter is rarely exceeded. The summer heat is main-



The Market Place, Tangier

tained until the autumnal rains are established. As an example of the steadiness of temperature it may be stated that of twenty-three observations made by myself at almost every hour of the day and night between September 15th and 23rd inclusive, the thermometer in my bedroom ranged between 72° F. and 78° F., while the mean was 74.2° F. During this time the weather had broken, and on one day there was a heavy rain. The mean temperature of winter is about 56° F., and fires are sometimes acceptable at night. Frost never occurs, and in addition to the indigenous palms and other trees and shrubs of warm climates, many tropical plants, such as the banana, flourish throughout the year in the open air."

As this accomplished physician spent a great deal of time in the country, and as his writings are marked by much clearness of statement and impartiality, his judgment is worth noting; and it was largely under the influence of his book and of the recent paper by Dr. Wood, of Tangier, published in the British Medical Journal of January 13th that I determined to utilise the few weeks at my disposal in the middle of a winter of very hard work, to seek the sunshine scenery and surroundings of the East in "El-Moghreb-Al-Aksa," the far west of the Arabs, which they regard as the extremity of the African world, as we speak of Japan as the Far East, and the Americans of Texas as their Far West. I have by no means been disappointed.

Returning now, therefore, refreshed by a whiff of Mediterranean air and a brief glimpse of Eastern life and scenery, which have for me a personal charm, I think it opportune to offer a few notes—very hasty but carefully prepared—of a visit all too short, favoured by access to the best sources of information and gladdened by the warm welcome of Europeans as of natives of the best classes, to whom my coming had been communicated.

First, I may be permitted to linger in the streets of Tangier, and endeavour by some sun pictures rather than by word pictures to give some idea of its unchanged Orientalism. It is characteristic of this comfortable climate that the success of my camera shots was often compromised by the difficulty of giving sufficiently short exposure in an atmosphere so transparent, and with light so all pervading.

Striking contrasts await the traveller, who, after four days' lounging on the luxurious quarterdeck of one of the Peninsular and Oriental Company's superb steamers, enjoying all the comforts of an incomparable floating hotel, reaches Gibraltar before much more than half a week is over, and finds himself translated from the Thames to Tangier. Crossing the Straits in a well-appointed steamer bearing the old Moorish name of Gibraltar, *Gebel-el-Tarik*, the rock of the great Moorish conqueror Tarik, and passing in view of the promontories of Trafalgar, and between the pillars of Hercules, one comes quickly into view of the roadstead of this outpost and last stronghold of Islam. The stretching sandy bay and glittering city of Tangier with its tiers of flat roofs and its pierced minarets are reached in less than three hours.

The old English mole of this city, which, like Bombay, was a dower city of the wife of Charles II, was blown up when, under the cowardly counsels of the Duke of York, it was abandoned by the English, so that it shows only above the water as a dangerous reef, and one lands in

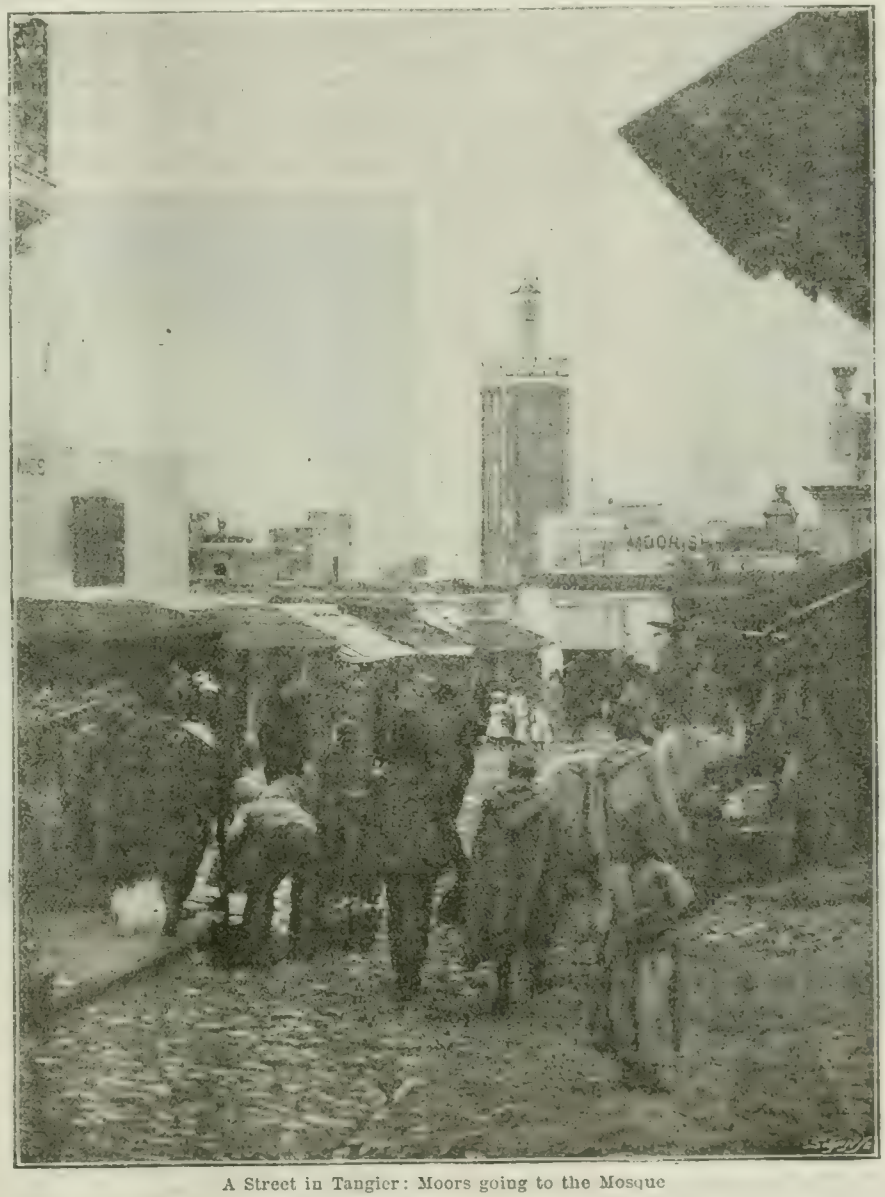
boats amidst the Babel of an Oriental seaport, on a small quay. Here are seated cross-legged on their cushions three stately Moors, one of them of singularly handsome presence, draped in snowy robes and blue *jelhab* and white turban wound round a scarlet fez. After a polite pretence at the examination of luggage, you pass to the hotel, threading in single file the steep and sinuous streets, built to keep out the sun, in the shadow of lofty whitewashed walls of houses, which seem made to hide rather than to house their residents. Here two loaded donkeys are scarcely able to pass abreast.

At every step figures flit by which seem to come out of the pages of the *Arabian Nights*. Here is our old friend the water seller, picturesque but insanitary, with his goat-skin bag. Wandering presently in the market place, it is found to be covered with a moving multitude of motley Moorish, Arab, Negro, and Jewish type and garb; here is the Eastern story-teller with his circle of excited and deeply interesting auditors; here are the veiled women, the strings of camels, and the patient donkeys of Eastern life.

The sunshine is everywhere, making the darkest corners radiant with luminant shadow, and clothing in glory the sandy beach, the rugged market ground, the torn rags of the beggar, and the gorgeous robes of the wealthy merchant. In a few minutes one is translated from the comforts of a well-appointed European hotel (for Ansaldo's Continental Hotel at Tangier is one of the best in southern Europe) into the very heart and centre of a Mahommedan fanaticism, the home of the Moorish saints and sinners who resist all European encroachment, spit at the passing Christian, and curse his shadow as he goes. The contrast is in itself a mental refreshment, and the novelty and brilliance of the street scenes are at once recreative and invigorating to the mind, as is the sunshine and soft sea breeze to the body.

No better epitome of the climate of Tangier and of its social surroundings at its best and at its worst, nor any better index of its amenities, could perhaps be given than by reference to the climatic conditions and the amusements of the two days which have just passed. Yesterday, February 20th, there blew a heavy gale from the Straits; the sea ran high, swelling breakers boiling into surf broke upon the shore; the boats were all beached; the Gibraltar steamer stood out, and ran under shelter, and passengers could be landed only with difficulty. We were reminded, as invalids need to be, that the season is that of winter, although the sun is that of an English summer. The skies were grey with heavy cloud masses, and twice during the day there was torrential rain. In the intervals, however, it was possible and pleasant to make excursions through the town, and in the evening I went out amid a mild rain to be present at the coming home of a bride to the house of her betrothed, as a preliminary to the next day's marriage ceremony. The temperature was never below 60°, and during the day ranged from 65° to 67°. As I went to the marriage ceremony I must have cut a quaint figure, mounted on a donkey picking its way through the narrow, dark, and slippery streets, with a hooded Moor wrapped in his brown monkish cloak (*jelhab*), and preceded by a like hooded figure carrying a large lantern, with which he lighted the footway. I could but contrast this strange "going to the wedding" with the light and warm London brougham, with its foot-warmer and electric lamp: for I was in full evening dress, on ass back, covered by a light frieze ulster. On entering the covered *patio* of the house to which we were bound, we found there, standing about the tiled courtyard and beneath its arched and fretted colonnade, a parti-coloured press of people, assembled in the true instinct of Oriental fellowship, rich and poor alike. A party of Moorish musicians were seated in the corner, cross-legged on their mats. They were chanting love songs and praises of the beauty of the bride; to the wild music of the tum-tum, the two-stringed guitar, *gimbri*, the mandolin, and the tambourine; sipping frequently cups of syrupy green tea, flavoured with spearmint and perfumed with verbena.

The text of the songs was but slightly intelligible to me or



A Street in Tangier: Moors going to the Mosque

to any around me. Such little Arabic as I possess is of the classic school, and hardly enables me to comprehend the mongrel dialect of the Moorish singers. In the gallery above the scene was much more brilliant. The wedding was with a great Jewish family, long resident among the Moors, and there were the matrons of the party richly dressed in silks and satins, with embroidered vests and the head completely covered with brilliant kerchiefs knotted over the forehead and fastened with filigree gold ornaments, in which were set large emeralds, a favourite stone for nuptial and auspicious festivities.

The canopy was ready. It was of crimson velvet heavily embroidered with gold thread, after the manner of the Turkish and Fez embroideries. Over the canopy hung a bright silk scarf, *taleth*. It is the custom for the bride to be brought to the house of the betrothed on the night previous to marriage



A Water-seller.

with great ceremony; and there, surrounded by her family, she sleeps in the bridal chamber, and the wedding ceremony is performed on the next day. Her appearance is striking. She arrives at the door carried in a close box—perhaps, to the bridegroom, a box of Pandora—and her bearers chanted Moorish hymns as they came. As they entered the courtyard a loud shrill cry was uttered by the women—a quavering screech, long continued and piercing, resembling no other sound I have ever heard, and known here as the "*Taghareet*." It is the Moorish cry of welcome, and is as much a speciality as the wail of the Irish mourners. As she passed into the courtyard, preceded by her escort, she was a striking figure. Tall, handsome, dressed in a red crimson velvet robe, of which the skirt was heavily embroidered in semi-circular lines of goldwork in the front, and the bodice was covered with gold tracery, her eyes were closed, and the eyebrows and eyelashes were darkened with kohl; on her head was a high tiara studded with jewels, from which hung a long veil closely covering the face and falling nearly to the ground.

The family were under German protection, and, as the leading guests, the German Ambassador was invited to take her by the right hand and I with the left, and slowly lead her with the eyes closed, motionless, and the face set to a fixed expression like a mask, her head steadied by relatives from the back till we reached the canopy. On this she was seated, still with closed eyes and looking, as etiquette demands, like an inanimate statue than a living woman. She sat motionless, whilst the friends gathered around to offer felicitations to the parents. We were shown the bridal chamber, which was decked with flowers and laden with the trousseau and with the presents of friends, and so, as Pepys says, home.

This morning all is changed. At 6 o'clock the sun is rising, and quickly, with windows thrown wide open, I begin at 7 o'clock to make these scattered notes. The balmy breezes of the morning sweep into the room, and bring with them



A Moorish Lady.

something of the saltness of the sea, something of the perfume of the mountains which lie in front shimmering with the opal sheen of the early morning sun, dissipating the vapours of the valley, which rise along the hillside. The distant sand dunes glisten, the wind has abated, and the sea reflects the glories of a blue sky flecked with gilded clouds. I can with difficulty persuade myself that it is still full winter, and that yesterday the heavens were lowering and the breakers impassable to boats.

At the wedding of which I speak, the contrast was great between the dignified bearing of the father, with grizzled beard and turbaned head, and flowing robes of richly coloured stuffs, with some of the younger members of the family dressed in ill-made gowns of European muslins and silks.

Ernest Hart.

(To be continued.)

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

Subscriptions to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, MARCH 17th, 1894.

AN ACADEMIC QUINDECEMVIRATE.

The curious student of history may amuse himself by tracing a parallel between the provisions of the University scheme just put forward by the Royal Commission and the sagacious policy by which the second Cæsar, eschewing the name and trappings of royalty, established an unimpugnable autocracy under the forms of a popular constitution. The Senate of the new University, we find, like its Roman namesake, is to enjoy the title and dignity of a supreme governing body. The teachers, massed in their Faculties, are to be allowed the freest right of discussion, and will be at liberty to frame and express their united opinion without let or hindrance on any subject within their scope; a veritable republic of learning to outward appearance is about to spring into being; but, the Commissioners presently reflect, a convenient executive would be a not unhandy appendage to the scheme, "a central organ,' as is said, "to deal with the numerous and complex questions which must arise," and straightway, by a few slight and skilful touches, the essential powers of the University are withdrawn from Senate and from Faculties, and securely lodged in the hands of a compact commission of fifteen professors, whose calm deliberations those troublesome and importunate persons, the teachers and practitioners of medicine and surgery, shall hardly be allowed to disturb.

This potent quindecemvirate—an attempted copy, perhaps, of the Senatus Academicus of the University of Edinburgh—is to possess, as we have previously pointed out, the power of laying down the curriculum qualifying for degrees in all the faculties. It is bound, by a provision, truly Augustan, to consult before doing so a board or boards of studies whose number and composition it is itself empowered to prescribe; it may, moreover, consult and is bound to receive expressions of opinion from the Faculty or Faculties concerned in the matter, but it is absolved in terms of studied plainness from any obligation "to conform itself to the views expressed by the bodies which it consults."

Even the powers of the Censorship, which enabled the politic Octavius to mould to his wishes the very assembly in whose name he exercised authority, is not, it appears, to be withheld from the Academic Council. The personality of the Faculties which are to elect the Council is to depend very largely on the Council itself. Only the professors and lecturers appointed by the University (if its funds allow it to appoint any) are to sit upon the faculties by right. Teachers in the colleges and medical schools admitted as schools of the University are only to be University teachers or members of a Faculty by grace of the "recognition" of the Academic Council, a "recognition" which, it seems, the Council is at full liberty to withdraw for any reason that it may approve. It is not surprising that the representative committee of the medical schools of London should have had this question under most serious consideration, as we understand is the case. This provision would certainly seem to place it in the power of the Academic fifteen practically to extinguish any one of the schools at any moment by declining to recognise one or more of the teachers essential to its completeness.

The fate, however, of individual schools is of less concern to the profession at large than the general constitution of the Faculty of Medicine, through which medicine and surgery are to be represented both in the Senate and in the Academic Council; but this, again, seems to be designed to be much at the Council's mercy. In the case of the medical schools, for instance, shall all the members of their hospital staffs be recognised as university teachers and members of the Faculty or only the lecturers on certain subjects? What teachers, again, of the physical sciences included in the medical curriculum shall be members of the Faculty of Medicine? These and other similar questions, not without important bearing on the views of medical education entertained in the University, are questions the settlement of which once more is to be left to the all-powerful fifteen, amongst whom our profession is to claim so few.

We by no means object *per se* to a censorship over university teachers in medicine; we regard it, on the contrary, as a provision of a salutary nature; but it is one that we think would be better placed in the hands of a body more judicial and less open to charges of partiality than a small professorial committee, whose members, in many cases, will be the rivals of the very men of whose qualifications it is proposed to make them the judges.

These are matters which doubtless either the London schools or the powerful professional organisations existing in the metropolis will take care to bring to the attention of the Government should it seriously undertake to carry this scheme through Parliament. The *popularis aura* which is needed to stimulate modern Governments to difficult tasks is at present not very strong. Whatever opinions may be entertained of the scheme, it certainly cannot be said as yet to have awakened anything approaching enthusiasm in any quarter, unless it be in the Council of the Royal College of Surgeons, a body which could hardly fail to applaud a onstitution so closely resembling its own.

ON WATERBORNE DISEASE.

II—Dysentery.

From the earliest times impure drinking water has been regarded as at least one of the causes of dysentery and other forms of intestinal flux. Hippocrates held this view, as also did Galen and many of the medical writers of the Middle Ages. Modern experience tends to confirm this opinion of the ancients—in a qualified sense, however. Dysentery,

being now somewhat rare in modern centres of medical activity, has not received the same amount of attention from pathologists and clinicists as have our more common native diseases; consequently our knowledge of its intimate nature and of the causes leading up to the dysenteric state is not quite in line with the more advanced pathology of the day. This much, however, we are beginning to realise, namely, that the inflammatory conditions of the lower bowel which give rise to the congeries of symptoms we call "dysentery" differ much in character in different cases and epidemics, and that they result from a variety of causes; and that therefore, both in an etiological and in a pathological sense, there are several specifically distinct forms of colitis included under the term "dysentery." Thus we have of late years been enabled to separate several specifically distinct types; we now recognise the malarial, the scorbutic, and, quite recently—thanks to the labours of Kartulis, Councilman and Lafleur, and others—the amœbic form. All of these differ from each other both in symptoms, course, and cause. These, however, embrace but a small proportion of the cases of dysentery; the great mass of cases is made up of endemic, epidemic, and sporadic forms, the cause or causes of which are still to seek. It is probable, considering the great diversity as regards the gravity of the various types of the endemic and epidemic disease, and the varying character of the symptoms and lesions, there are still many forms and specifically distinct types to be separated; and when these have been determined it will be found that each type has a specifically distinct cause. Until these causes have been ascertained with precision it is impossible to say with certainty what may be the exact medium by which they are introduced into the human body. Nevertheless, as was the case in typhoid fever, in cholera, and in some other diseases, a number of empirical observations distinctly indicate drinking water as one, if not the only or most important, medium by which dysenteric germs are introduced.

Hippocrates and the ancients considered that the water of marshes and stagnant pools containing much vegetable matter in solution or suspension produced this disease, and more modern writers have incriminated water similarly defiled with animal matters. But the evidence in either case pointing to the fact that such waters, simply on account of the presence of vegetable or animal matters, or both as the case may be, and not otherwise and specifically contaminated, have the power to cause dysentery is very incomplete. Doubtless such waters, as well as those waters which contain large proportions of various mineral salts, may give rise to forms of intestinal catarrh, and in this way weaken the resistive powers of the intestinal mucous membrane, and render it more liable to the invasion of specific germs; but without the introduction of specific germs there is little reason for believing that they can produce an ulcerative colitis of the type known as dysentery. It is otherwise, however, when such waters are contaminated—as they are very apt to be—with fæcal matter, particularly with fæcal matter emanating from a pre-existing case of dysentery. Then they become highly infective, and to such waters many epidemics of the disease have been distinctly traced. Thus in 1870 the soldiers of a regiment stationed at Metz suffered excessively, and disproportionately as regards the rest of the garrison, from a grave form of dysentery. The source of the disease was believed to be the water of particular wells contaminated by soakage from a neighbouring latrine. The wells were closed and the epidemic immediately ceased. In 1881 the same wells were reopened, and dysentery appeared again among the soldiers using the water. Again the wells were closed, and again the epidemic ceased. In February, 1831, an epidemic of dysentery broke out among the crew of the French corvette *Creole* anchored off the coast of Oran. Three-fifths of the crew were attacked and 13 men died, 8 of them with abscess of the liver. The outbreak was traced to water taken in from a small river into which the sewage of a town was discharged. Other men-of-war were anchored alongside the *Creole*, but in none of them did dysentery appear; they were supplied with water brought from France. Many similar cases are on record.

No better evidence of the influence of a pure water supply is forthcoming than the marvellous improvement in the health as regards dysentery of the crews of British men-of-war in tropical countries since the stringent regulations regarding their water supply have been put in force. Quite recently similar testimony comes from French Cochin China, which at one time enjoyed an unenviable notoriety as a home of dysentery. In Saigon, for long after the occupation had commenced, the mortality from dysentery and diarrhœa was enormous. But of late years things have very much improved in this respect, the improvement being attributable, according to Calmette, to the almost universal use among Europeans there of the Chamberland filter. Similar evidence of the importance of a pure water supply as a preventive of dysentery comes from Calcutta, Madras, Hong Kong, and many other Eastern cities.

The peculiar physical characters of the germ of amœbic dysentery point to water as its *habitat* when outside the body, and, therefore, to water as the probable medium for its introduction into the human body; and it is more than likely that many of the cases of dysentery said to have been the result of infection from simple proximity to other cases of the disease were really contracted through infected water or food supply.

We have little doubt that time will show that the germs of many of the as yet undifferentiated forms of dysentery are also waterborne, in this respect resembling those of typhoid, cholera, and other diseases of the intestinal canal similarly characterised by flux.

THE MEDICAL STAFF OF THE METROPOLITAN FEVER HOSPITALS.

THE questions as to the salary and status of the assistant medical officers of the fever hospitals belonging to the Metropolitan Asylums Board, which have recently occupied the attention of the General Purposes Committee, and have been referred back to them again for further consideration, are of very great importance to Londoners, and extend far beyond the aspects of the matter raised in the discussion which took place lately at the meeting of the Board. If it were a mere question of the sort of remuneration which would induce young men, fresh from the medical schools, to serve for a time in the Board's hospitals, we might not feel called upon to discuss it, because in such a case the

salary would clearly not be the only, nor perhaps the chief, attraction. But even under such circumstances we should demur to a policy of cutting down remuneration to a mere competition level, forgetful of the risks run, and the responsibilities undertaken, by those who enter the service. When, however, we consider the matter from the public rather than the professional point of view, and see how intimately the thorough efficiency of this service touches the lives and the affections of the great mass of dwellers in the metropolis, we cannot shut our eyes to the fact that there are weighty reasons why a very large liberality should be exercised, in regard both to salaries, status, and general treatment of these officers, so as not only to attract to the staff of the Asylums Board the best type of junior practitioners, but to retain their services during a considerable period.

It has been said that the assistant medical officers are mere subordinates—house-surgeons, in fact—that the real responsibility rests on the medical superintendents, and that for such junior appointments a very moderate salary ought to suffice. Anyone who believes this utterly misconceives the position of affairs in these great State hospitals, some of which contain from 400 to 500 beds apiece.

It is quite impossible for any one man, if the work is to be efficiently performed, to undertake the treatment of 500 patients; the superintendence of so large an establishment, together with a very general supervision of the treatment, is quite as much as he is likely to be able to manage: and it must be the case that the actual treatment of many of the cases is in the hands of the assistant medical officers. If the superintendent sees, with them, the more serious cases, acting somewhat the part of a consultant, he will even then be pretty fully occupied; anything like actual charge of all must be quite beyond his powers.

The public, then, has to face the facts that it lives under a law under which anyone suffering from a fever, and not able to satisfy a magistrate that he has proper lodging and accommodation, may be compulsorily removed to one of these hospitals, and that even where compulsion is not exercised people are being every year more and more driven to them by custom and necessity; that, when once they enter, there is no escape; that they become part of a system which is largely shut off from independent inspection and from the influence of public opinion; that, for good or evil, they must go through the mill with the rest, however finely it may grind; and that into this mill the wives and children of ratepayers of many grades may at any moment have to enter.

Under these circumstances the public may well consider it worth while to make sure of obtaining the best medical help when this trouble comes upon them. It is far too much the habit of many people to say that, after all, it is only nursing that is wanted in the treatment of fevers. In very mild examples this may be partly true, but there are few diseases which more test the powers of a physician, and in which the patients more depend for their lives on his possessing a well-trained mind and a large experience, than severe fevers, or by which his courage, his manipulative skill, and his unwearied watchfulness are more severely tried than by cases of diphtheria. Nor does the fact that so many cases do depend much on nursing lessen the responsibility of the medical staff. Moreover, nursing arrangements in fever hospitals must necessarily be very different from what are found in those which are permanently occupied, where everyone has, by a process of natural selection, gradually dropped into his or her proper place. When an epidemic is bounding up, when patients are pouring in, and ward after ward is being opened, nurses are gathered together from the four quarters of the globe; doubtless the best of those that offer, but strangers to each other, unknown to the sisters and to the superintendents, forming no part of the system, and showing every possible variety of training and experience. Under these circumstances, no one who knows anything of human nature will believe that the nursing is uniformly good; and not the least responsible and anxious part of the work of the medical officers is that of assuring themselves that the nursing is thoroughly done, and that their orders are properly carried out. The medical officer is the one individual to whom, under all circumstances, the patient can appeal. When people consider the practical ostracism from society which these officers must submit to, the risks they run, the wearing anxiety of dealing with such an endless stream of serious and often desperate cases, and the fatigue and loss of rest which they must put up with in epidemic times, and remember that to their skill unhelped by any chance of consultation from outside, the lives of the sick are absolutely handed over; and that, when a man once enters the ambulance, neither he nor his friends have any further say as to where he goes or what is done with him, we feel sure that people will perceive that the money to be paid for such services should be quite a secondary consideration, and that every effort should be made, almost regardless of expense, to secure not only skill and enthusiasm, and conscientious service, which we have no doubt they readily obtain, but also that most precious thing, experience, which can only be got by paying for it. And after all, what are the few score pounds required to make the medical service thoroughly efficient, compared with the hundreds of thousands of pounds which the hospitals cost every year to maintain? It is all very well to say that the hospitals are supported by the rates for the sake of isolation, but what each individual enters them for is treatment.

It seems to us that there is no escape from the alternative: either the Board should pay handsome salaries, and make the service thoroughly attractive, so that the fever-stricken of the metropolis, if they must go to closed hospitals, shall have the services of the best help that mere money will secure, or the hospitals should be thrown open, and be officered by a proper staff of visiting physicians, with resident physicians and clinical clerks, like other institutions. As things are at present, not only do the students of to-day find it difficult to obtain any practical teaching in the fevers they will afterwards have to treat, and will be compelled by law to diagnose, but physicians in private practice are debarred from enlarging their knowledge of these diseases; and in a few years we may find that practical experience in them is locked up in the hands of a few superintendents, who are restricted from practising outside their own hospitals—a sufficiently ludicrous conclusion.

It is notified that in future the appointment of Honorary Assistant Surgeon to the Viceroy of India will be for a term of five years only.

WHY DO WE DRINK SEWAGE?

We endeavoured in a recent article to show that sewage was not good to drink, and ventured to regret that the conclusions of the Royal Commission on metropolitan water supply practically condemned Londoners to drink river water—and river water contaminated in all sorts of ways—although we admitted that much is done in the way of doctoring it by means of filtration before the water companies distribute the fluid to their consumers. The question has engaged the attention of many Commissions. We must go back to the conclusions of the Duke of Richmond's Commission and to the reports of the earlier Commissions. We find in the report of the Royal Commission (ordered May 18th, 1865, report March 29th, 1866) that the proper inspection of the "whole river," in order to prevent it being polluted, was distinctly recommended. In reference to the Thames it was proposed "that the whole river be placed under the superintendence of one governing body." As to finance, it was pointed out that the water companies should provide the necessary funds. "Still more would the water companies profit from measures to prevent the pollution of the Thames." The river, instead of being as at present, throughout the length of its course, the receptacle of every sort of impurity, would be saved from town sewage and factory refuse, subjected to systematic scavenging, and jealously guarded from all pollution; and the water companies would then be able to supply their customers with purer and more wholesome water. That, under "these circumstances, metropolitan and other water companies abstracting water from the Thames should be called upon to contribute to the cost of maintenance of the river, seems to us not unreasonable" (5,464 to 5,470).

Following this came the Commission ordered April 6th, 1868, which resulted in the "sixth report," the original Commission to which we have referred having been revoked and determined on February 14th. The Commissioners reported on June 30th, 1874. Practically their recommendations was summed up in the words "In our opinion, therefore, the Thames and Lee ought to be abandoned as sources of metropolitan water supply." This conclusion was opposed to that of the Duke of Richmond's Commission.

Previously to the foregoing report, however, on May 6th, 1867, the second report of the Royal Commission of 1865 was issued; referring to the River Lee and the supply of water to London therefrom. The practical recommendations of this report were, as in the case of the Thames, that the "entire watershed" should be put under the charge of a conservancy board, "furnished with complete powers." As to finance, again, "the expense would rightly fall upon those most interested in the purity of the river—namely, the metropolitan consumers of water derived from the Lee, and these consumers would be most conveniently reached by the charge being in the first instance thrown upon the water companies who supply them." The result of this report was the establishment, by the Act, July 31st, 1868, of the Lee Conservancy Board, the first board of conservators in the kingdom to whom was entrusted the sole charge of an entire watershed area.

As to the river Thames, and the steps which the conservators of that river took to prevent the pollution of the main river (for the first report, hereinbefore noticed, did not deal with the tributaries), reference may be made to the report of the recent Royal Commission (ordered March 13th, 1892, report September 8th, 1893). In it we find Section 174: "As regards the Thames Conservancy Board, its effectual action is hindered by several causes. In the first place, its jurisdiction over the tributary streams is limited to a distance of ten miles from the main river, so that any pollution may occur higher up with perfect impunity. Secondly, it is evident that no really satisfactory supervision can be exercised over several hundred miles of waterway without a considerable staff of inspectors, and the staff which the conservancy at present maintains, and which consists of two chief inspectors, two assistant inspectors, and four river keepers, appears to us to be utterly inadequate for the purpose, especially when it is borne in mind that these officials have other duties to perform besides that of inspection." It is recommended that "the staff engaged in inspection should be very considerably increased, the necessary funds for the purpose being provided by the water companies or such other bodies as are permitted to take water from the river." This section concludes with the following words: "Though in the above remarks we have specially referred to the Thames, we intend our recommendations to apply equally to the Lee and its tributaries."

The quality of the water supplied to London has been referred to in a former article. Why, then we ask, do people drink sewage? Is it not clear from the evidence given before the several Commissions that the main reason is that there is not efficient supervision of the sources from which drinking water is drawn with the view of preventing pollution of all kinds as far as possible? The remedying of this deficiency should be the first aim of the water companies.

We find in the evidence before the recent Royal Commission that in the case of the Lee (Appendix B 17), Mr. George Corble, clerk, after giving £1,000 as the maximum sum paid by the New River and East London Water Companies to carry the Act of 1868 into effect, added: "This sum has been found to be insufficient. In the Bill of 1868 it was originally put at £3,000, but it was cut down by the opposition of the water companies." Mr. Corble also stated that "In 1871 the conservancy appointed a special officer—Major Lamorock Flower—to act as sanitary engineer, to attend to the work of preventing pollution of the water, and that gentlemen has been engaged in it up to the present time." Thus we find the same parsimony in the case of the Lee as of the Thames, and although in the Lee we have a special officer—one who is known to have practically spent his life in the cause of sanitation—engaged upon a special duty, we ask is it possible that one man can, without a sufficient staff, maintain an efficient control over the 600 square miles which are included in the watershed of the river Lee?

We do not propose to follow out the question further than is necessary to emphasise the point upon which we started. The Duke of Richmond's Commission (1869) approved of the Thames and Lee as sources of London water supply, provided always that efficient means were adopted to prevent pollution of those rivers. Major Lamorock Flower, in his evidence given before the County Purposes Committee of the City of London (the report of which was presented on

October 16th, 1890) made the following suggestion: "To ensure a perfect control over the joint watersheds of the Thames and Lee I propose the appointment of an officer, who should be styled the 'Inspector of the Sources of Supply.'" His duties would embrace the inspection of the whole of the watersheds above the intakes of the water companies, leaving to the boards of conservancy the protection of the purity of the water, in the interests of public health and recreation, below the said intakes. The matter should be dealt with as a whole, and by an authority armed with larger powers than those which the conservators possess, acting under the authority of the Local Government Board, which ought to instruct all the officials and authorities appointed under any Act of Parliament affecting the public health to afford every assistance to the inspector.

If this recommendation were carried into effect, we should at least stand a better chance of securing a realisation of the conclusions at which the Royal Commissioners on London Water arrived in 1828: "That a constant supply of pure and wholesome water is essential to the health and comfort of the inhabitants of this great and thickly-peopled metropolis."

The ordinary meeting of the Clinical Society of London, which should be held on Friday next, will not take place on that day, which is Good Friday, but has been postponed until the following Friday, March 30th. The President announced last week to the members that there is a large number of papers now in hand waiting to be read and discussed.

THE NEW UNIVERSITY FOR LONDON AND THE ROYAL COLLEGES.

A meeting of the Fellows of the Royal College of Surgeons of England is summoned for 4 P.M. on Monday next (March 19th), at the College, to consider the following resolution adopted by the delegates of the Royal Colleges of Physicians and Surgeons:

> That the delegates of the two Royal Colleges do cordially approve of the general provisions in the report of the Gresham University Commission, particularly in so far as they relate to the said Colleges, regarding them as being in accordance with the principles which the Colleges have hitherto affirmed and accepted, and as constituting the most comprehensive and academic scheme hitherto proposed.

As the Council of the College considered it desirable that the Fellows of the College should be conferred with at as early a date as possible, the rule requiring twenty-one days' notice of motions to be made at meetings of the Fellows has been suspended, and notices of motion, if in order, will be entered on the agenda of the meeting, if received by the Secretary before 1 P.M. on Saturday, the 17th instant.—A meeting of the Members of the College will be held at the College on Tuesday next (March 20th), at 3 P.M., in order to afford to Members an opportunity of expressing their views on the position which the College should hold in the scheme for the reorganisation of the University of London.

THE NEW PRESIDENT OF THE LOCAL GOVERNMENT BOARD.

It is difficult for anyone outside the circle of officialism to appreciate the necessity for the card shuffling that is an invariable attendant on Ministerial change. Whenever a political leader has been particularly successful in a particular department, he is sure to be transferred elsewhere when opportunity offers, with results which are not always beneficial to the public service. But brilliant as Mr. Henry Fowler's administration undoubtedly has been, no one can grudge him his promotion, or doubt his capacity to work the delicate and difficult office, with which he has now been entrusted, wisely and well. We have complete faith in Mr. Shaw Lefevre's business capacity, and in his appetite for patient and continuous work. It is true that he has not had any special training in sanitary matters, but he is an expert in rural and agricultural affairs, and has already done excellent service in connection with allotments and open spaces; and with the judicious tact and ample knowledge of Sir Walter Foster and the able and experienced professional staff of the Local Government Board to guide him in hygienic and medical questions, we do not think that we are wrong in looking forward with hopeful expectation to his future labours in the cause of State medicine.

THE SALE OF POISONS.

One of the distressing results of the sale of secret poisonous compounds under the cover of a Government medicine stamp is the facility with which victims of the morphine habit can obtain supplies. We have received a distressing letter from a correspondent who says, "My home has been wrecked and my happiness destroyed by chemists supplying my wife with this horrid compound, and this on credit, unknown to myself, and in many cases in spite of personal remonstrance." Unhappily this is by no means an exceptional experience; it is, however, an additional reason why chlorodyne and all proprietary poisons, sometimes called "patent medicines"—apparently because they are not patent—should be dealt with as poisons under the Act.

WATERBORNE TYPHOID IN PARIS.

The epidemic of typhoid fever which at present prevails in certain parts of Paris was again the subject of discussion at the Académie de Médecine on March 13th. It had been pointed out on a previous occasion that the part of Paris affected is that supplied with water from the river Vanne, and it had been suggested that the water had become contaminated owing to some admixture with water from the Seine. This, however, was stoutly denied by the officials charged with the supervision of the water supply. M. Bucquoy informed the Académie on March 13th that two physicians at Sens had informed him that typhoid fever had developed in that town some days before it made its appearance in Paris. Now Sens, which is near the source of the Vanne, draws its water supply from that river. M. Léon Colin stated that he had received identical information from the army surgeon at Sens. There has been a disposition in some quarters in Paris to trace the spread of the epidemic in some way to the barracks. M. Colin had no difficulty in showing that the epidemic began among the soldiers in Paris at the same time as among the civil population. The larger number of attacks among the military as compared with the general civilian inhabitants of Paris was to be attributed to the fact that the former class consisted almost entirely of young adults of the age at which typhoid fever was particularly liable to be contracted. This, therefore, is another instance in which the spread of typhoid fever at first attributed to the operation of some mysterious or unusual agency, in the present instance by some people to the eating of too many sweetmeats on Mardi Gras, is traced on a fuller knowledge of facts to pollution of the water supply. The Sanitary Committee of the Seine are making a special inquiry with the view of ascertaining how the headwaters of the Vanne became polluted.

INFECTIOUS DISEASES HOSPITALS.

We have before drawn attention to the irresponsible manner in which the various suburban districts are supplying their deficiencies in regard to the isolation of infectious diseases. A very cursory inspection of the map will show what difficulties these districts are brewing for themselves by the course which is being pursued at present. The more progressive localities set up little hospitals for their own wants, and thus chop up the area in such a way that the Act of last year, enabling sanitary districts to combine for hospital purposes becomes in-

creasingly difficult of application. At the present moment the Local Government Board has under consideration an application, made by the local board districts of Acton, Chiswick, and Hanwell, to establish a joint hospital for infectious diseases. Now the natural geographical centre of these districts is Ealing, but then Ealing is a progressive district and has already provided for its wants, and so has interposed a barrier between the eastern and the western halves of the proposed combined district. This, however, is only an example; the same thing is happening all round. The Act gives power to the county councils to move in the matter, and it seems very important that each county should at once map itself out into a workable scheme of combined districts before its area is irrevocably broken up by the isolated action of the various authorities.

DEATH IN THE TOOTHBRUSH.

Il faut souffrir pour être belle, say the French, and such as have any teeth of their own left must not spare the toothbrush, though it excoriate the gums and leave its bristles sticking in unsuspected corners of the mouth, "like quills upon the fretful porcupine." Most of us are content to grin and bear these minor miseries of the toilette with such grace as we may, while seeking perseveringly for the ideal toothbrush, which is as elusive as the philosopher's stone. A serious view of the matter, however, is suggested by a case recently reported in an American journal, in which an operation for appendicitis is said to have revealed the fact that the disease was due to the presence of toothbrush bristles in the vermiform appendix. The operator, who practises in Albany, expressed the opinion that these "unconsidered trifles" are responsible for many obscure throat, stomach, and intestinal ailments. The moral appears to be that it is an ill-judged economy to use cheap toothbrushes in which the bristles are simply glued on, and that after the ordinary ceremony of tooth cleaning has been gone through, a subsequent "lustration" of the mouth is advisable for the removal of migratory bristles.

SMALL-POX ISOLATION PROBLEMS.

DR. SADLER, the health officer of Barnsley, relates in his report for 1893 the fact that the Town Council had applied to the Local Government Board for permission to fence off the present small-pox block of the Kendray Hospital, providing the block with a sufficient administrative department of its own, separate entrance, special staff, and the like. This scheme, Dr. Sadler states, has been approved by the county medical officer of health, but has not yet been heard of as approved by the Board at Whitehall. However distinct may be the wards and their administration, the fact would remain that small-pox and other infectious diseases would under the arrangement be isolated, or rather housed, on the same site; and the risk of aërial conveyance of infection would not be the less because of the suggested precautionary measures. Revaccination of fever patients could possibly be practised when small-pox cases were admitted, but the practicability of this proceeding may be questioned. In any case the treatment of small-pox and other infections on the same site is not a method to be encouraged, having regard to the accumulating experience in the matter.

THE ASYLUMS BOARD AND ITS SMALL-POX HOSPITALS.

THE action of the Metropolitan Asylums Board in deciding to build a hospital on land for the treatment of acute cases of small-pox is one which will receive the cordial approval of all who recognise the difficulties attendant on the use of hospital ships for the purpose. The river ambulance service and the arrangements for removing cases of small-pox from their homes have been brought to great perfection, but the hospital accommodation is not only small, but unsatisfactory. There are only about 300 beds for acute cases, and although convalescents are quickly drafted off to Gore Farm, this is but a small provision for so large a population as that of London. Nor can the ships themselves be looked on as the most desirable places for the treatment of acute disease, besides the constant danger of fire and other risks inseparable from floating structures, the cost of maintenance, and the difficulty of communication with the shore, where the nurses' home and a considerable portion of the administration are situated. The Asylums Board has therefore entered into arrangements for the purchase of the March Street Farm, an area of about 200 acres contiguous to the present moorings of the ships; and on March 13th the Local Government Board held an inquiry at Dartford in reference to the proposal. As regards the site chosen, it is obviously very desirable that any extension of the accommodation for small-pox should be so placed as not to disturb the existing ambulance arrangements, and equally so that it should not be far from the Gore Farm Hospital, which practically limits the managers to the spot they have selected.

OUR BOYS AND OUR QUACKS.

IT must, we should think, soon become obvious, even to Government, that something must be done to check the obscene quackery which overruns the land and intrudes itself into every social relationship. While in the better of our schools everything is done, not only to instil learning, but to inculcate a good tone and healthy morals, we find the boys' minds beguiled by dirty literature showered upon them through our Government post-office by those filthy Government-protected vendors of quack medicines, who, trading on the fears and self-questionings so common at the age of puberty, do not hesitate to wreck the happiness of growing boys for the sake of the money they can screw out of the doubts and apprehensions started by their vile suggestions. A member of the council of a large school has forwarded to us an abominable circular which was addressed to one of his boys, offering to pay 10s. for every name and address of male persons suffering from any complaints of the generative organs, kidney or bladder diseases, or nervous debility in any form whatsoever—that is, if, after this unfortunate creature has been flooded with circulars, an order is received. Can nothing be done to stop this sort of thing? It is bad enough that adults should have their conscience played upon by these harpies, and should be assailed on every side by threats of insanity or consumption because of their youthful indiscretions unless they spend their hard-won earnings on some wretched Mexican or Siberian remedy; but that our boys at school should not only have their minds—full of curiosity as they are at that age—turned to the investigation of their generative organs, but that the lads should actually be bribed into becoming the touts of these quacks is really more than should be allowed. Men of the world, of course, know well enough that this nervous debility trick is a mere swindle. There are, however, plenty of people about who are young enough and innocent enough to make this sort of swindling a very paying business. It is well, therefore, that those who feel inclined to open their hearts and their pockets to the members of this fraternity should remember what a hornet's nest of swindling and extortion the whole trade is, and it is not amiss to know, as a type of the doings of these gentry, that the Joseph Holmes Remedy Company finds dupes so remunerative that it is willing to pay 10s. for each introduction.

DUBLIN MEDICAL STUDENTS.

THE medical students of the Royal College of Surgeons in Ireland, numbering over 300, have drawn up a statement of grievances which they have laid before the President and Council. They object to the rule which is occasionally enforced that a rejected student may be required to attend a further course of instruction in the subject in which he is deficient. They ask for a reduction of the re-examination

fee from three guineas to one guinea: and there are some minor matters of purely local interest. The rule which is complained of in relation to further courses for ignorant students is a very useful one, although it has very seldom been enforced. It exists in other licensing bodies, and it is a requirement of the General Medical Council. Most stress is laid, however, upon the fees, and probably the Council will find itself coerced to make a reduction. The payments in the Irish, English and Scotch conjoint licensing bodies (physicians and surgeons) stand in this order: £42, £36 15s., £26 5s. The difference is an unfortunate one, and the Irish student finds that his patriotism is unable to resist the attractiveness of Edinburgh, where he can get his qualification and save £15 15s.

THE HUMOURS OF A CONTESTED ELECTION.

Dr. Dabbs has been elected county councillor for Shanklin, Isle of Wight, after a severe controversy with a Mr. Brown, chairman of the School Board. The result is the more satisfactory inasmuch as some of the arguments used to support the cause of the defeated candidate were of the most offensive kind. Dr. Dabbs came forward as an independent candidate, who, having been medical officer of health for six years, was well acquainted with the sanitary needs of the district. At one of Mr. Brown's meetings a Mr. Varty, according to a report in the *Isle of Wight Guardian*, after some obscure allusions which we interpret to be insinuations against the conduct of Dr. Dabbs as a magistrate, and a suggestion that the degree of M.D. could be bought at Aberdeen for 5s., proceeded to deliver himself of the following enlightened sentiment: "Very few doctors wanted perfect sanitation; it didn't pay them. If they had faulty sanitation in their town the people got sore throats, diphtheria, typhoid fever; that paid the doctors." The innuendo is as offensive as it is historically untrue. For the progress which has been made in this country in sanitary matters the people have to thank the medical profession. It is due to the insistence of medical men, whether belonging to the public health service or engaged in private practice, and to the unwearied advocacy of sanitary reforms in the medical press, that public opinion has been aroused, and that we find proposals for sanitary legislation in the Imperial Parliament taken out of the sphere of political controversy.

FEEDING AFTER ABDOMINAL SECTION.

When the antiseptic system was first discussed before the medical societies a general surgeon once observed that on one point the most extreme opponents always agreed. Their later results were more satisfactory than their earlier results. In other words the results depended on the man, that is to say, on his skill and experience and not on his system. Since those words were spoken by Sir William Savory several hundred operators have gained special experience in abdominal surgery. What is now specially remarkable is the stress which they lay on after-treatment, yet the principles and practice of after-treatment pursued by any two successful operators are often diametrically opposed to one another. One gives beef-tea injections with opium as a routine practice, another objects to nutrient enemata, another has "the greatest dislike to morphine after any operation." One operator will starve his patients on principle, and will allow not even a spoonful of water. This practice is defended on physiological grounds. Dr. Byron Robinson has contributed to the *Journal of the American Medical Association*, February 10th, 1894, an important letter on this subject. On the ground of experience he protests against this. He now administers warm water to the patient in all cases of abdominal section. This is a practice carried out by several British operators. His arguments in favour of fluid nourishment *versus* starvation are very forcible. Nevertheless the starving operators have apparently as good results as the fluid-giving operators, and those who rely on rectal feeding for the first few days seem equally fortunate. On the other hand, the less experienced lose cases, "though such-and-such a treatment was strictly followed." Hence it is evident that the man's experience is more important than his system. It would also appear that patients tolerate severe abdominal operations far better than was once supposed. Still the beginner must bear in mind that very slight errors may kill the patient, that such errors are almost unavoidable amongst the inexperienced, and that more is required to ensure success than a faithful imitation of the practice of a great and successful authority.

TUBERCLE AND ENCYSTED WORMS IN CATTLE.

Mr. Archibald Park, Chief of the Veterinary Department, Tasmania, has made some valuable observations on the occurrence in cattle of spiroptera reticulata. On examining cattle killed in his district, said to be suffering from tubercle, he found this particular kind of worm encysted in the brisket and in other parts of the body. The worm becomes surrounded by fibrous tissue and a large number of leucocytes, epithelioid cells, giant cells, etc., which form the cyst wall. When it is hampered in its movement it gives birth to an innumerable number of embryos, whilst the parent dies as a rule. On examining these cysts in section Mr. Park found that he had to deal with a case of mixed infection, for the cyst contained a bacillus exactly resembling that of tubercle in a state of almost pure cultivation, but in a great many animals the spiroptera was the only case of the lesion found. Mr. Park very properly points out the danger of classing under the name of tubercle all lesions which to the naked eye resemble this disease, and the wholesale condemnation of meat as food when the naked eye diagnosis has not been verified by the microscope. It appears evident, too, taking Mr. Park's investigations in conjunction with those of Charrin and Roger, that great care must be exercised before a diagnosis of tubercle is made, as there are several diseases of cattle which resemble it in their naked-eye characters though they differ from it in being due to other micro-organisms.

INFANT MORTALITY AND FACTORY LABOUR.

A lecture on this subject was given in the rooms of the National Health Society on February 28th by Dr. George Reid, Medical Officer of Health to the Staffordshire County Council. He referred to the statistics of the past fifty years, which showed that, previous to the passing of the Public Health Act, 1872, the rate had remained practically stationary, but that after that date a gradual improvement had taken place, amounting during the decennial period 1881-90 to nearly 8 per cent. This decline in the infant death-rate was not so satisfactory as that in the general death-rate; but it must be remembered that the drifting of the rural population into urban districts had considerably increased the relative proportion of town-born children, in whom the mortality was always much greater. Although the rural mortality was less by one-half than that of many urban districts, it was still much higher than it should be. The large majority of infants who died were either starved to death for want of proper food or poisoned by impure air and unwholesome surroundings. Usually, however, both these causes coexisted and co-operated. Diarrhœa, for example, which was responsible for so many infant deaths, was intimately associated with organic contamination of the soil immediately surrounding houses, but as a predisposing cause improper feeding was very largely to blame. Statistics prepared by Dr. Hope, of Liverpool, showed that for every death which occurred from diarrhœa among breast-fed infants under 3 months old, 15 occurred amongst those who received other food in addition, and 22 among those reared exclusively on artificial means. The practice of mothers leaving their homes during the day to work in factories was shown to be responsible

in Staffordshire alone for the deaths of 300 infants annually. In that county, in towns where women largely worked in factories, out of every thousand children born 195 died during the first year of life, as compared with 152 in towns similar as regards sanitary conditions, but differing in the fact that in them women labour was not common. These figures had been verified to a considerable extent by an inquiry which embraced 101 towns throughout England. As regards the remedies suggested, we could not push on faster than we were doing in the direction of improving the dwellings of the poor, but inducements might be offered to the artisan classes in the shape of cheap railway fares to leave the crowded town districts for the more open country. We must look to education, however, to effect the greatest reform. Elementary hygiene should be taught in every school. To remedy the evil consequences of women working soon after their confinement legislation was necessary. The period of one month's enforced absence of the mother from factory work after the birth of her child might with advantage be extended to three months; but what was really wanted was a short Act of Parliament enabling local authorities to establish *crèches* in districts where it is common for mothers to work in factories, such institutions to be as far as possible self-supporting. In a certain number of cases, no doubt the whole or a portion of the payments would have to be defrayed out of the rates, but in the vast majority no such help would be called for.

THE SECRETARYSHIP OF THE ROYAL COLLEGE OF SURGEONS, IRELAND.

THE *Medical Press* announces that on March 8th the President and Council of the College received and accepted with regret the resignation by Dr. Jacob of his position of Secretary of the Council, which he has held since the year 1884. They also voted to him a continuance of his salary until the termination of his year of office, the first week in June. Dr. Jacob succeeded his father, Dr. Arthur Jacob, as a member of the Council of the College, in the year 1869, and served in that capacity for fourteen successive years, with the exception of a portion of one year. On the death of Dr. James Stannus Hughes, in the year 1884, Dr. Jacob was elected Secretary, and has since been unanimously re-elected in each June for ten years. Meanwhile, the secretarial functions had so greatly increased by reason of the development of the conjoint examination system, and under the Medical Act of 1886, to which the Council of the College has been obliged to devote almost continuous attention for several years, and the work of administration of the amalgamated schools now merged in the school of the College has required such constant attention by the Council that, although the President and Council recognised the increased duties by increased salary, Dr. Jacob did not feel able, having regard to other avocations, to retain the office. The Council has ordered that the election of a Secretary of the Council shall be proceeded with at its meeting on April 5th. No candidate is admissible under the by-laws save a Fellow of the College. No salary is as yet finally fixed, but it is suggested that a saving of the collegiate finances shall be effected by reducing the salary to £150 or £100 a year. Dr. Jacob has also resigned the secretaryship of the Committee of Management of the Examinations, held by the College and the Apothecaries' Hall of Ireland. It will be hard to find another officer equally capable, experienced, and zealous.

THE WATER SUPPLY AND THE HEALTH OF CALCUTTA.

THE report of the Health Officer of Calcutta for the year 1892 supplies a most important demonstration of the beneficial influence of a supply of pure water on the prevalence and mortality of cholera in an Eastern city where the disease is endemic. The reduction of cholera mortality in the town of Calcutta consequent on the opening of the new waterworks in 1870 is a well known and well-established fact. The annual totals of deaths which have taken place since that event have amounted to about one-half of the preceding average. Fluctuations have occurred, but these have maintained a lower level, and have been proved to be largely dependent on the efficiency of the water service. The experience of Calcutta has been repeated in other Indian towns. Until quite recently the suburban townships which encircle Calcutta have remained unreformed in respect of water supply, the inhabitants mostly resorting to filthy tanks and wells, or drawing from the polluted Hooghly, and cholera continued to prevail with unabated virulence. In the year 1889 this outer suburban area was amalgamated with the city of Calcutta for purposes of municipal administration, with the best results. Works were at once undertaken for distributing to this "added area" the filtered water which has been such a boon and blessing to the central city. These works were completed in 1891, and in August of that year the distribution was commenced. Dr. Simpson's report refers to the larger Calcutta of the present time, and proves without a shadow of doubt that the supply of pure water to the suburban townships has resulted in a most striking abatement in cholera mortality; 1891 was a bad cholera year for both town and suburbs on account of the *Ardhodoya Jog* festival. One thousand five hundred and fifty-three deaths were registered in the town, and 1,402 in the suburbs, of which 523 and 633 took place in February, the month of the *Jog*. The totals for 1892 are 1,267 for the town, and 762 for the suburbs, a slight abatement for the former, and a most decided fall, amounting to nearly one-half, for the latter. Now, the suburb of Howrah, which is on the opposite side of the river Hooghly, did not participate in the new water supply. Hitherto Howrah has had less cholera than the other suburbs, but in both places the rise and fall have always been remarkably consentaneous. In 1892 Howrah had a very unusually large cholera mortality (771), higher than all the other suburbs combined; 1892 was also a very bad cholera year for the whole of Bengal; so that the suburban decrease cannot be attributed to seasonal or epidemic or climatic influences, which would, of course, have affected Calcutta proper, Howrah, and the province generally, as well as the suburban area. Nor can the abatement be attributed to improved drainage, for the drainage of the suburbs is as bad as it can be, and the conservancy arrangements were also unaltered and exceedingly defective. The abatement of cholera mortality can therefore be attributed to no other cause or influence than the improved water supply, which has also exercised a marked effect for the better on the general mortality of the area. Dr. Simpson's report is full of interesting matter. He shows that fevers continue to exact a terrible tribute of deaths in both towns and suburbs, and urges with indisputable force the necessity of improvement in drainage, and the enacting of building regulations which shall prevent the terrible overcrowding and irremediable filthiness which result from it in some parts of Calcutta. The improvement of *bustis* has been a great and good and very costly work; but in the absence of proper rules for preserving regularity and space, new buildings are being run up and huddled together in such manner that the *busti* nuisance is being supplanted by a much more formidable and dangerous nuisance, consisting in the agglomeration of tall houses without adequate arrangements for ventilation, conservancy, and cleansing.

QUARANTINE ABSURDITIES.

AMONG other useful purposes which may be served by the report on cholera in London in 1893, recently presented by Mr. Shirley Murphy and Dr. Klein to the London County Council, is that of showing to other countries the absurdity of those measures of quarantine which were instituted against London last year. Only four cases in all were found, as the result of deliberate study, to have been Asiatic cholera, and during the period covered by their occurrence

it should have been perfectly plain that no cause was given for even the slightest interference with maritime trade. Yet we saw Spain and the Canary Islands at the end of August deeming it essential, the one to impose a quarantine of ten days and the other of periods varying from seven to fifteen days on London, the former including 165 kilometres round the port. Then in September Uruguay imposed eight days' quarantine on all British ports, and Portugal one of seven days on London, afterwards increased to fourteen days and including all Thames ports. How long is such folly to be permitted because of the existence of four cases of Asiatic cholera and a score of choleraic attacks among a population of four millions of persons? Mr. Shirley Murphy's report ought to suffice to clear this country in the eyes of the world of all future mistrust in the matter of concealment of cholera, and put a stop to all such useless and intolerable quarantines. The same is true of England generally.

MR. GLADSTONE.

We are glad to be able to report that Mr. Gladstone has suffered no evil consequences from his somewhat risky venture in journeying to Brighton on Monday. He stayed in the house till Wednesday, when, the weather being very fine, he much enjoyed a drive. He sleeps well, enjoys his food, and retains his vigour, but he still suffers from bronchial catarrh, and his cough persists. His temperature remains normal, the tongue clean, and there are no signs of any mischief in the lungs, although some bronchial *râles* still persist in the lower part of the chest. If the weather continues fine there is every hope that he may get out of doors every day, and may return to town some time next week.

THE VACANT CORONERSHIP.

The vacancy which has occurred in the office of Coroner for North-East London will no doubt attract many candidates. Those at present in the field are Bernard O'Connor, M.D., who is also a barrister-at-law; Major Greenwood, M.D., LL.B.; and Charles Gross, M.D., M.S. London, who is also a barrister-at-law. It is not, however, certain that the new coroner will have charge of the same area as that over which the late Dr. Macdonald presided, as it is understood that, as vacancies occur, some revision may be instituted in the distribution of the work; it is too early, however, at present to state precisely how far these alterations of duty will extend.

THE OPIUM COMMISSION.

We understand that the report of the Indian Opium Commission will not be written until after the return of the members of the Commission to this country. The report will probably be presented some time during the autumn. The Commission has finished the taking of evidence in India, but the only member of the Commission who has as yet reached home is Sir William Roberts.

THE CHELSEA HOSPITAL FOR WOMEN.

As will be seen by the letter from Dr. Parkes in another column, he is preparing a report in reply to the very strong statement by Mr. Wright, the Treasurer of the Chelsea Hospital for Women, published in the British Medical Journal on March 10th, and the full statistics which have been issued by the medical staff, giving the details of all fatal cases in the hospital during the period dealt with. The statistics indicate a death-rate after operation which does not appear to be excessive when compared with other hospitals. We have hitherto refrained from expressing any opinion on the question, contenting ourselves with reporting the proceedings of the public body which has been moved to take action in the matter. We must still defer comment, but it must be confessed that the course taken by Dr. Parkes involves questions of very great importance to all hospitals, and indeed to the profession at large. It will have been seen that the committee of the hospital had already taken steps to remedy the sanitary defects pointed out, and are prepared to welcome any further inquiry.

THE DIAGNOSIS OF TYPHUS FEVER.

The outbreaks of typhus fever which have lately taken place in Liverpool bring into prominence the difficulty which sometimes occurs in making a definite diagnosis in the early stages of the disease. Dr. Hope, in reporting a series of cases to the Liverpool Health Committee, has drawn special attention to the imperfections of the notification. It is an interesting fact, he says, that out of 25 cases of typhus fever removed to hospital during the week ending February 24th not a single one was notified as such. Two were notified as typhoid fever, 7 others were sent into the workhouse as suffering from various non-infectious ailments, and the remainder were traced by the staff of the sanitary department. It is nowhere, however, stated that all these cases had been seen by medical men, some in fact appearing to have been moved on suspicion for the sake of isolation. To the laity it may seem strange that such a thing as this can happen without considerable fault or carelessness, but it must be remembered that the diagnosis of typhus fever is by no means always a simple affair. The epidemic in Paris and the north of France last year is a case in point. The disease lay chiefly among tramps and thieves, the frequenters of prisons and night refuges, persons who when ill were treated in hospitals by skilled physicians, yet for many months the nature of the disease remained undetected, although on looking back it was plain that it had been typhus all the time, carried by tramps from town to town, and infecting the gaols and the low lodgings which they occupied. Typhus fever has, indeed, been of late years so little seen that one need not be surprised that it is not always recognised even when fairly developed, and it must be borne in mind that during the first few days of its course, however strong suspicion may be, diagnosis is impossible, especially a diagnosis so positive as to justify the removal of the patient to a fever hospital full of infectious cases. Till the rash appears there is nothing absolutely distinctive, and it is not altogether surprising that, in the absence of epidemic prevalence, cases should sometimes be mistaken for other diseases. The quick pulse, the furred tongue, the pains in the head and back, together with the flushing of the face—are all such as occur in pneumonia, and although the respiration is not such as is typical of that disease, still it is generally more or less hurried, and, as to physical signs, one must not forget that examinations are often performed under great difficulties in the dwellings of the poor. When, however, the rash appears the whole aspect of the case is changed, and a case the diagnosis of which, on the evening of the fourth day of apparent illness, may appear to the most careful practitioner to hover between pneumonia, typhus, relapsing and even a somewhat later stage of enteric may on the next morning, especially after a warm bath, stands forth to the merest tiro as an obvious and undoubted case of typhus. While, then, we would urge medical men always to bear typhus in mind, notwithstanding its rarity, and would venture to remind them that the rash must be looked for on the trunk and backs of the hands rather than on the face, we would also strongly insist on the difficulty of early diagnosis, and on the importance of sanitary authorities not too readily imputing blame to practitioners who find it impossible at first sight to label all their cases with appropriate names. We would also suggest that reciprocity of notification would be a great advantage, and that the sanitary authorities would be doing a good service if they in turn notified to medical men the localities in which certain diseases were more or less prevalent.

ROMAN FEVER.

I.—ITS NATURE.

VISITORS to the Eternal City are apt to be alarmed by the very name of "Roman fever." What any disease answering this name may be is a question very difficult to determine in Italy. Amongst the natives one never hears of "Roman fever," but *la malaria* is recognised as an affection in no way peculiar to the capital. The ague of Sicily or the Maremma might as well be termed "Sicilian" or "Maremma fever," though in fact it differs little if at all from that found at many spots on the Mediterranean seaboard. It is an illustration of the truth of the saying, *omne ignotum pro terribili*. Every time a visitor falls sick in Rome his illness is attributed by his friends to the mysterious "Roman fever." The report is willingly spread by the landlords of hotels in other towns, who are not sorry to detain those whose steps are directed to the city, towards which all roads lead. The profession at home comes to hear of these repeated cases of illness amongst travellers, and through want of personal knowledge is disposed to accept the idea that there is a dangerous form of fever peculiar to, and of common occurrence in, Rome.

Now, taken in this sense, there is no such fever. The term has been recklessly applied to cover a variety of ailments, sometimes in ignorance by a terrified traveller to a common cold, and possibly by an interested landlord to a case of typhoid fever, in order to distract attention from his insanitary hotel. If used at all it should be limited to a type of fever produced by malarial poisoning. This type is neither distinctly intermittent nor remittent, but has been well described by Baccelli as "subcontinuous malarious fever." It more readily attacks the young than those of maturer years; this is due to their greater imprudence and natural tendency to contract fevers. Persons over 40 years of age are seldom affected, unless they have already suffered from ague. Other predisposing causes are general debility, anxiety, fatigue, and chills. Tourists are much more frequently affected than members of the Anglo-American colony in Rome; this may be due to the latter having become gradually acclimatised, or to the fact that they do not rush about sightseeing in an overwrought and frequently exhausted condition. The period of incubation is short, varying from two to three days, and generally following a distinct chill. The onset is rapid, and is ushered in with more or less shivering, and within a few hours the temperature may be 103° or 105° F. The symptoms present great variety. The duration is indefinite, varying from several days to several weeks. The three stages of ague—cold, hot, and sweating—are never very distinct.

The ague fit is not marked, and varies from shivering to a sense of chilliness. Sweating is constant, but rarely excessive; it does not always come on in the morning, but may do so at erratic hours; occasionally it is entirely absent except during the lysis. The temperature remains raised after the initial rise until the fever abates, or is controlled. During this period it shows rapid variations, sometimes several in the twenty-four hours, and the remissions are not necessarily in the morning. It may pass into a remittent fever, but as a rule it is of a continuous form, with rapid variations of temperature.

Baccelli describes special forms as the bilious, the pneumonic, the rheumatic, and the typhoid; but in the mild attacks from which the well fed and well housed visitors suffer these marked varieties are unknown.

With regard to typhoid fever, it is as definite a disease with as typical symptoms in Italy as in Great Britain. It is no commoner in the towns of the peninsula than in many more sanitary cities of the north. The defects of drainage are partly counterbalanced by the wonderful air and sun. *Sol illuminatio nostra est, sol salus nostra, sol sapientia nostra.* In Roman malaria the bowels are usually constipated; when diarrhœa does occur it is due to hepatic engorgement or intestinal atony and irritation. Iliac tenderness is not marked. Undoubtedly much of the fear attached to the name of "Roman fever" is due to its having been mistaken for typhoid, as well as to the fact that cases of the latter have (to save the reputation of a hotel) been reported as malarial.

While "Roman fever" is in no sense a "typho-malaria," undoubtedly cases do occur in which the two poisons are blended. This will be readily understood when it is remembered that the tourist in his rapid changes of hotels may be exposed to the specific poison, may arrive in Rome with the feeling of the incubation fatigue on him, and, anxious not to miss any of the sights, may become exhausted and so readily fall a prey to the malarial virus. In such a case the typhoid poison gives the more characteristic symptoms of intestinal trouble and rash while the malarial virus gives rise to an erratic and prolonged course.

Roman fever may thus be defined as a form of subcontinuous malarial fever, of short incubation, rapid onset, indefinite duration, and varying symptoms.

It is not a very fatal disease. During the twelve years 1882 to 1893, the entire number of deaths due to malaria was 3,668, a yearly average of about 305. The present population of Rome is 440,596. In 1882 the census gave 304,458. Taking an average population of 380,000 for these twelve years, the annual mortality from malaria was less than 0.9 per 1,000. Of these 3,668 deaths, 1,002 were amongst the dwellers in the Campagna, shepherds and labourers who are miserably fed and clothed, and of whom many sleep on the ground in wretched hovels. Deducting these, the death-rate would fall to a little more than 0.6 per mille. Further, it must be remembered that the fatal cases are chiefly amongst the poor who have had malaria several times, and are worn out with cachexia. During these twelve years, the number of deaths from malaria amongst English and American visitors amounted to 6, an average of 1 death in two years. When it is remembered that some thirty to forty thousand Anglo-Saxons visit Rome annually, the awe and terror inspired by the dread name of "Roman fever" appears unnecessary. Not only is it rarely fatal, but it is even of uncommon occurrence. During six years active practice in the capital an English physician only attended 45 cases.

Typhoid fever is answerable for a larger death-rate. During these twelve years 17 deaths amongst the Anglo-Americans were due to *tifo addominale*. Considering the large number of visitors and the careless way they overwork themselves, this is not a large percentage, although, of course, there are no means of calculating how many recover from the disease, or contract it in Rome and succumb elsewhere.

WANTED, A UNIVERSAL LANGUAGE.

EVERY now and again the scientific investigator, finding a "lion in his path" in the form of an important paper in an unknown tongue, utters a bitter cry for a universal language. It would assuredly save a great deal of time and much vexation of spirit if the learning of German, for instance, could be dispensed with, and it is fair to assume that retrenchment of cerebral expenditure in this direction would leave more intellectual energy for use in more fruitful directions. But where is a universal language to be found? English, which is spoken by the largest number of civilised men, and which, apart from the anarchical confusion of its pronunciation is one of the simplest of known tongues, has the best claims to the position. For the present, however, national jealousies place such a consummation outside the sphere of practical politics. To meet the difficulty various kinds of *lingua franca* have been suggested. The most recent of these with which we are acquainted is the invention of Herr P. Steiner, who has devised a universal speech which he calls *Pasilingua*, and which is professedly based on English.[1] Our language is, however, according to Herr Steiner, defective in its declension and very irregular in its conjugation, and the pronunciation does not conform to the spelling. Herr Steiner thinks he has been able to remedy these defects, and as he puts it, *pasilinguistically*, "If mis prosperarires tu corriger teçe faltas, te English lengwisha growarir te feinist lengwisha." We are bound to say that the new "lengwisha" strikes us as being decidedly easy for English people; but it would probably be just as troublesome as the real thing for a foreigner to acquire, and he would probably prefer—and we cannot find it in our heart to blame him—to learn the language of Shakespeare rather than that of Herr Steiner. Another suggestion, made by Dr. Achilles Rose, of New

[1] Pasilingua (Neo-Anglie) die Sprache von Pan-Amerika und die Universal-Sprache auf Grund einer Neuenglischen Grammatik. 1 Heft. Gedruck und in Commission bei Louis Heuser im Neuwied.

York,[2] is that Greek should be chosen as the language of medicine and science. He pleads that Greek is still a living tongue, and that it forms the basis of medical terminology; further (and here he will have the support of Professor Blackie), that it is not a difficult language to learn if it is studied as a living language. The "stream of tendency" runs with too strong a current against Greek for this suggestion to have much chance of being adopted. Indeed, we fear that if Dr. Rose were to make such a proposal seriously before an assembly of academic youths in this country he would run some risk of being summarily dealt with, like a modern Socrates, for attempting to corrupt the minds of schoolmasters. Another proposal is contained in a Latin letter[3] addressed by representatives of the medical profession in India to the General Secretary of the International Medical Congress shortly to be held in Rome. To this letter 760 names are attached; the signatures include 16 medical officers of the Army Medical Staff, 135 medical officers of the Indian Medical Service, 219 practising physicians, 64 civil surgeons, 121 assistant surgeons, and 205 army apothecaries. For the Latinity of the letter Miss Florence Holland, M.A., of the Calcutta University, is said to be responsible. The document is a curious one, and refers to Macaulay, the Marquis Wellesley, Quintus Curtius, Tippoo Sahib, the Japanese *Pharmacopœia*, the Pope, and many persons and things besides. The only part of it that concerns us at present, however, is the proposal made in it that Latin should be restored to its old position as the universal language of medicine and science. It is suggested that an "officina centralis" should be established where an epitome should be made in Latin of all scientific books and papers as they are published. Rome, it is argued, is the natural place for this international scientific clearing house. Another suggestion is that the meeting of the Congress should be made the occasion of founding an international medical journal to be written in Latin. For this periodical the name of "*Salernum*" is proposed, to commemorate the fact that Salerno was the first modern scientific school of medicine in Europe. If want of funds—that sad obstacle to journalistic enterprise—should stand in the way of the realisation of this beautiful dream, the Congress is gravely invited at least to exchange its present cumbrous designation for the severe simplicity of "Salernum." *(Potestisne saltem nomen invenustum Congressum Sanitatis seu Medicinæ inter omnes gentes tollere, et eum breviter Salernum nominare?)* We do not know what reply Professor Maragliano has made to the amiable enthusiasts who sent him the remarkable letter from which we have quoted, but we gather that the suggestion as to the change of name at least has not been favourably received. As to the proposal to revive the use of Latin as the official language of science there is a good deal to be said for it, and it is a pity that it should be made to look ridiculous.

THE REMUNERATION AND PENSIONING OF NURSES.

Guy's Hospital Trained Nurses' Institution.—Salaries and Pensions.—Profit Sharing.—Results.

We have received from the Lady-Superintendent the ninth annual report of the Guy's Hospital Institution for Trained Nurses, the "institution" being the staff of nurses employed upon private nursing, the headquarters of which are to be found in St. Thomas's Street. Except in so far as only nurses trained at Guy's Hospital are placed upon the private nursing staff, the management of the hospital and institution at Guy's has always been kept separate, nor in spite of the impecunious condition of the former has any part of the nurses' earnings been diverted to augment the funds of the charity. We think that this is as it should be, and we are glad to notice that the scale of remuneration paid to nurses has risen with the increasing prosperity of the institution. At the present time, when a nurse has completed her training, and is placed upon the permanent staff, she receives £25 for the first year, £30 for the second year, £35 for the third year, and £40 for the fourth year. In addition to this salary the institution takes out for her a policy in the Royal National Pension Fund for Nurses, to produce for her an annual pension of £11 5s. at the age of 50 years, the nurse herself being required to take out a policy for £7 10s. at the same age. Moreover, an institution nurse is supplied with uniform, has her washing and medical attendance free, and whenever she is not employed upon a case she has a home provided for her without expense in the headquarters of the institution.

During the past year, however, a further development has been made, which provides for an annual division of any profits which remain after the salaries have been paid amongst those nurses who have been on the staff of the Institution for four full years subsequently to the completion of three years as probationers. For this purpose the surplus profits at the end of each year form a bonus fund, in which nurses are entitled to share in proportion to their length of service, nurses of five years' service receiving four shares, and those of nine years' service eight shares from the fund, continuing to receive this number of shares till they reach the age of 50. The annual bonus is not, however, paid directly to the participating nurse, but is invested for her benefit with the Royal National Pension Fund for Nurses for the purchase of a pension, to begin at the age of 55; nor are nurses allowed to obtain possession of the sums annually invested for their benefit in the fund, though should a nurse die before attaining the age at which her pension falls due, the money standing to her credit is paid out of the fund to any person whom she may nominate, or, if she should become permanently incapacitated from following her avocation, the money is applied for her maintenance or for her benefit in such manner as may be deemed expedient.

It is claimed that the scheme thus sketched out is in a great measure novel, and that "amongst other obvious advantages, it appears to be consonant with the sound principle that the earnings of nurses should be equitably divided amongst themselves, and at the same time to afford adequate security that these earnings should be so utilised as to furnish due provision for their declining years." The profits of 1893 have been sufficient to allow of a division of £5 per share, which will give to the nurses who are of standing to participate bonuses varying from £20 to £40. We have thought it well to give some prominence to this experiment, inasmuch as at the present time there is much discussion as to the best way of securing for nurses the results of their labours, and the authorities at Guy's have endeavoured to solve the problem in a manner which, so far as we know, has not been attempted elsewhere. As to the merits of the solution opinions will probably differ, but we can quite believe that the report states no more than the fact when it says that "the plan has been the subject of much anxious thought, and has been drawn up after very careful consideration of the conditions under which nurses carry on their profession."

EPIDEMIC INFLUENZA IN HOLLAND.

The report of the Special Commission on the Influenza Epidemic of 1890 in Holland[1] elicited the following data:

General Features.—The epidemic made its appearance about the middle of December and lasted nearly four months. It spread from the west towards the east and the north. Statistics show that at least 37.5 per cent. of the population was attacked, the fatal cases being 2.67 per mille; the death-rate of the entire population was about 1 per mille. Children and old people proved on the whole more immune than adults, although in old age the recovery was slow, and the after-complications led more often to fatal results. The fact that male patients were more numerous than females was accounted for by the daily occupations of the former exposing them to greater variations of temperature.

Clinical Types.—From the diversity of its symptoms the epidemic is classified under three distinct forms: the catarrhal, the intestinal, and the nervous: in the last named are included the rheumatic and neuralgic as well as the apoplectic and meningitic forms described by Professor Pel. The intestinal form was least frequent and least virulent. The organs of respiration were most seriously affected; 90 per cent. of the collected observations point to bronch-

[2] *Griechisch a's allgemeine Sprach der Aerzte und Gelehrten überhaupt.* New York, 1892.

[3] Published in the *Indian Medical Record*,

[1] *Weekblad van het Nederlandsch Tydschrift von Geneeskunde*

itis either as symptom or complication of influenza, and pneumonia as its sequel—with this physical distinction, however, that the sputa essentially differed from the rust-coloured viscous sputa of genuine pneumonia. Many references are made to complications of the organs of circulation.

Cardiac Complications.—The direct action of the virus on the heart led in several cases to sudden death through the failure at the mitral valve, but more often still at the tricuspid. The question arises how far this is attributable to the vagus, as in several cases the signs of paralysis were entirely wanting. As to the hæmorrhages from all parts of the body, they must be considered as the consequence of an acute hæmorrhagic diathesis produced by the direct influence of the poison on the system. The tendency to venous thromboses during influenza, first described by Leyden, may afford an explanation of this peculiar complication.

Diabetes.—The observation of the occurrence of glycosuria and diabetes mellitus after an attack of influenza in persons who had been considered in perfect health before is interesting. It is not impossible that the action of the toxic agent on the nervous element in the floor of the fourth ventricle produces a passing glycosuria or a lasting diabetes mellitus. Another striking particular is the increase of delirium tremens during the epidemic. It would seem from the reports as if influenza was particularly disastrous to habitual drunkards.

Treatment.—Quinine and antipyrin in their several preparations head the list of the therapeutic agents. Most of the older practitioners prescribed diaphoretics. As sedatives and hypnotics general preference was given to bromide of sodium. Calomel proved not only beneficial in intestinal troubles, but was in several instances credited with a salutary influence on the whole course of the disease.

ARCHÆOLOGICA MEDICA.

VI.—JOHN WOODALL: THE STATUS AND PAY OF LAND AND SEA SURGEONS UNDER THE EARLY STUARTS.

SURGICAL science in the first half of the seventeenth century was at a very low ebb in England. From the time of Clowes to that of Wiseman the only surgeon of repute was John Woodall, who says that for "forty years past no surgeon of our Nation hath published any book of the true practice of Surgery to benefit the younger sort, these my meane Treatises only excepted." Woodall was born about 1569, and at the age of twenty served in the expedition sent by Elizabeth under Lord Willoughby to render assistance to Henry IV of France. He then travelled for many years through France, Germany, and Poland, living by the practice of his profession, until his familiarity with the plague tempted him to settle in London in the great plague year of 1603. He picked up many interesting facts in the course of his wanderings; amongst others, he tells us that abroad

Everie City, Town Corporate, or place priviledged, hath a constant rule, as by ancient tradition of the allowing of onely an usuall accustomed number of Chirurgions thereunto appertaining, so that for one instance if the Citie of Hamburg hath twelve Chirurgions belonging thereto, although a thousand pound should be tendered in any way to produce a freedome for a thirteenth Chirurgion, it could not prevail, nor would be taken there; as likewise generally it is so all over Germany, and each Chirurgion is bred and must be a Barber, and so are all Barber-chirurgions; and if any one die, his office, Art, and place rests in the power or disposing of his wife, to the use of her and hers, so that whoso marrieth her, or compoundeth with her of whatsoever Nation or countrey soever he be ..... he is capable of a place void, having first made his masterpiece, and performed some Manuall exercises usuall with them in his Art of Chirurgerie, thereby to give a sufficient testimony to the world of his answerable skill in his Art or Science, as namely, either by grinding and setting a delicate lancet, and therewith opening severall veins smoothly, for the more manifest effecting whereof to the brethren of his calling, one will lend him his vein, namely one on the thumb, one on the foot, and one on the arme, one another on the forehead, as also by the neat and exact making an artificiall Emplaster, Unguent, or the like; which done being by the rest of the masters of the Citie approved of, and some other rites and ceremonies answering to his calling by him performed, according to the custome of the place that he intendeth to reside in, he is then being esteemed a Regular person, and also having made the Brotherhood of the place and himself well drunk once, twice, or thrice, he is, I say (ipso facto) admitted to be a Brother, and freely to use his function and is styled by the name and honour of a Master of his profession. Thus much of their custome. But our customes are far different from theirs, and are farre better, namely our Companie of Chirurgions of the Citie of London, in the Hall of the Society, have a more commendable custome, for we not onely examine Chirurgions and try their skils in that way . . . but also we have profitable, learned, and experienced Lectures read amongst us.

Shortly after his return to England Woodall was appointed by Sir Thomas Smith Surgeon-General to the East India Company, and on January 9th, 1616, he was elected Surgeon to St. Bartholomew's Hospital. His appointment as Surgeon-General was the immediate cause of his first work, published in 1617, and called *The Surgion's Mate*. For he says:

Seeing by my experience that many young Surgions (who by reason of their youth and lacke of practise haue not attained to that perfection of knowledge that were requisite) yet neuertheless are imployed in the East India and other voyages in places of Chirurgions and Mates, I haue thought it a part of my duty in the place I haue undertaken to giue some directions to the weaker sort of such Surgions.

The general plan of the work is first an enumeration of all the instruments, utensils, and medicines of a surgeon's chest. Next comes a brief description of their uses and qualities, and then certain separate chapters upon some of the most important parts of military and naval practice, for it is to be remembered that at this time and long afterwards the services were not separate and distinct as is now the case, but an admiral might be called upon to lead land forces and a general might take command at sea.

In July, 1628, he published *The Viaticum: being the Pathway to the Surgeon's Chest*, and in the revised edition of this work, in 1639, he tells us the following facts about the state of the navy and of the medical service in 1626.

First his Highnesse [King Charles I] was graciously pleased to augment the mouethlie wages of each Surgeon and Surgeon's mate in his service by sea and land, to above a third penny from former custome: namely, from nineteen shillings fourepence a moneth to thirty shillings. He hath also been pleased graciously to give a free benevolence to the Surgeons in all his sea services as followeth, viz. To all Surgeons that serve in his Highnesse own ships, I meane towards the furnishing of their surgeons' chests with physicall drugs and medicaments, I say for each of them ten pounds; and to each merchant ship five pounds, and to each Newcastle ship or Colliars ship serving in his Highnesse his affaires three pound. And neverthelesse all the Surgeons in his Highnesse service have as formerly by the head of all men that are in pay in any of his ships or Land service two pence of each man by the moneth. And for the surgeons in his land service, hee alloweth to the Surgeon Major of the whole Campe five shillings a day; and for his two mates or servants foure shillings a day. Also his Majestie alloweth to each Surgeon two shillings and six pence the day, which is three pounds and fifteene shillings the moneth, and to each Mate three pound a moneth and moreover allowed, and gave to each Surgeon appointed to 250 men a surgery Chest of 17 pounds valew, free of account: And moreover his Majestie alloweth to the Surgeon Major a Store Chest or Magazeen Chest of 48 pounds valew, for a supply to furnish upon al wants and occasions.

Woodhall then proceeds to give a list of the different rates of several of his Majesty's ships as they were rated by the officers of the Navy in 1626. He divides them into:

Great ships of the first and second rank specifying eighteen of them by name, and showing that the surgeon on each received £17 10s. Ships of the third rank, naming six, and each receiving £12 10. Ships of the fourth rank, naming three, who receive £8 10. Ships of the Fifth rank termed generically Lyons whelpes, and individually First whelpe, second whelpe, &c., who receive six pounds apiece. And His Majesties Pinaces who receive £5 10. each. Great Merchant men in His Majesties service received at the rate of his Majesties great ships, viz., £17 10s. Ordinary Merchant men at the rate of his Majesties ships of the fourth rank aforesaid, namely, 5 pound free gift, and three pound 10s. imprest. New Castle ships or Colliers, at the same rate with her Majesties Pinnaces.

Good as the pay of the surgeons in the services was at this time, their position was not equally satisfactory, for the following significant note appears at the end of the particulars of the surgeons' chest: "If the Surgeon's mate cannot trimme men, then by due consequence there is to be a Barber to the ship's Company, and he ought not to be wanting of these following necessaries." The list which is then given shows that the surgeon's mate was expected to act as barber and chiropodist, and in addition he was to be provided with one "eare-picker," which suggests that he was expected to perform still more menial services.

Little is known of Woodall's life. He served as Master of the Barber-Surgeons' Company in 1633, and complains in 1639 that time had overtaken him, "so that now I am forced to conclude, having run through the cares of 69 years: old age being an enemy to study, for my sight being weakened, my memory much impaired, and my capacity utterly unable to perform so hard a task" as the continuation of the surgical treatises.

He died in October or the early part of November, 1643.

A new Roumanian *Pharmacopœia* has just appeared. It is edited by Professor Maldarescu and MM. Trausch and Rossin.

LEAD POISONING IN NEW SOUTH WALES.[1]

From the Broken Hill silver lead mines (New South Wales) are obtained large quantities of carbonate of lead ore. Amongst the miners as well as the smelters there has been a considerable amount of sickness. Some of the cases of plumbism terminated fatally. It was with the view of recommending "measures to remove the unsatisfactory state of things" that a commission was appointed to gather the best information possible. This commission or "Board" was in all respects fully representative. The duties of chairman were ably discharged by Dr. Ashburton Thompson. He was supported by Mr. W. M. Hamlet as analytical chemist, by a representative of the proprietors of the mines, and by the District Secretary of the Amalgamated Miners' Association. These gentlemen visited the mines and took a large body of evidence from the employers of labour as well as from those employed. In addition, several medical practitioners were examined and veterinary surgeons.

Broken Hill is a low long outcrop of manganiferous ironstone, which springs abruptly from a barren plain. Supplies have to be brought from a distance of nearly 300 miles.

A metallic taste in the mouth, constipation, and colic are the earliest manifestations of plumbism met with amongst the lead miners and smelters, and following these wrist drop. Epilepsy occurs amongst the workmen, and insanity from plumbism is met with. It is an interesting observation that in New South Wales, as was pointed out by Dr. Oliver in regard to the white lead workers in the north of England, though rheumatism is met with, gout is said to be extremely uncommon, several practitioners of experience not having met with a single case amongst those engaged in lead mining or smelting. Attention is drawn to the susceptibility of certain individuals to plumbism, and of the tendency of alcohol to increase it.

From the fact that lead is volatile at high temperatures, and that large quantities of fume escape from the smelter stack, day and night, several of the houses in the north part of Willyama are frequently enveloped in smoke. As a result various forms of lead are found deposited on the soil and on the roofs of the houses. In the water that supplies the town there was found from $\frac{1}{4}$ to $\frac{1}{2}$ grain of lead per gallon. The greatest facilities exist, therefore, for the development of lead poisoning on a large scale. Death directly traceable to plumbism, however, is said to be extremely rare, although ill-health attributable to the metallic poison is common.

As to the fate of animals grazing at a moderate distance from the hill, there is the greatest unanimity of opinion. Milch cows suffered; some of them died. Those that recovered only did so after their removal from the neighbourhood. A high mortality is said to have occurred amongst cats, dogs, and fowls, and it is clearly demonstrated that this mortality diminished the greater the distance these animals lived from the mines. There is no doubt in the minds of those who sat on the Board as to the existence of illness connected with this particular locality, the diameter of which measures from 2 to 4 miles. In the body of a dog that had died in the neighbourhood lead was found, and in several samples of the surface soil there were distinct traces of the metal. According to the proximity of the schools to the smelting stacks so were the children affected. It was not that they presented such symptoms of plumbism as colic, but that they exhibited a pallor of countenance sufficient to attract attention. The report clearly shows how injurious fumes of lead are to the general population.

In most of our industries it is the inhalation of dust that is provocative of harm to the workpeople. Amongst the Broken Hill miners it is shown that the carbonate of lead ore is dangerous in proportion to its dustiness; whilst the working of the sulphide of lead ore or galena is, as in our own local mines, practically unattended with risk to health, it is with lead mines as with factories in which white lead is either made or manipulated. From those that are well kept and thoroughly ventilated, in which the regulations are strictly adhered to, and upon which money is reasonably spent in improvements, there come few cases of plumbism.

The recommendations made by the Board are ample, and if faithfully carried out will contribute largely to a diminution of lead poisoning. Female labour is made illegal. No boy under 16 years of age is to be employed. A plentiful supply of wholesome drinking water, the sprinkling of water to lay the dust, the provision of baths and clothes for the workpeople, and the wearing of respirators in certain departments, particularly in cleaning out the flues, have due prominence assigned to them. We would have welcomed as an additional recommendation that no man should be allowed to work in a flue for more than an hour or two at a time. It is most desirable, as the report states, that only the minimum of carbonic acid should be allowed in the mines, and that thorough ventilation should be seen to by the inspectors. As preventives against lead poisoning, liberal allowances of milk are suggested; also that men should never begin work upon an empty stomach.

[1] Report of Board appointed to Inquire into the Prevalence and Prevention of Lead Poisoning at the Broken Hill Silver Lead Mines to the Honourable the Minister for Mines and Agriculture, New South Wales Legislative Council, 1892-93. Sydney: Charles Potter. 1893. (Foolscap folio, pp. 150, 4s. 6d.)

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A meeting of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 11th day of April next, at 2 o'clock in the afternoon.

Francis Fowke, *General Secretary.*

March 8th, 1894.

NOTICE OF QUARTERLY MEETINGS FOR 1894. ELECTION OF MEMBERS.

Meetings of the Council will be held on April 11th, July 11th, and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, March 22nd, June 21st, and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. Francis Fowke, *General Secretary.*

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

Members are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the Office.

BRANCH MEETINGS TO BE HELD.

Gloucestershire Branch.—The next ordinary meeting will be held at the General Infirmary, Gloucester, on Tuesday, March 20th, at 7 P.M., under the presidency of Mr. G. Arthur Cardew. Agenda:—Dr. Watters (Stonehouse): Experiments in Hypnotism. To be followed by a discussion upon the paper on Hypnotism read by Dr. Watters at Cheltenham on February 20th.—S. T. Prüen, M.D., Sherborne Lodge, Cheltenham.

West Somerset Branch.—The spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Friday, March 30th, at 5 o'clock; dinner at 5.30. The subject for discussion is Common Diseases of the Eye as met with in General Practice. Mr. Cosens will open the discussion. Any member having any communication to bring forward should send me notice of its title, and also kindly inform me if it is his intention to be at the dinner.—W. M. Kelly, M.D., Honorary Secretary, Taunton.

GLASGOW AND WEST OF SCOTLAND BRANCH.

THE annual meeting of this Branch was held at the theatre of the Western Infirmary, Glasgow, on February 6th.

Communications.—Professor M'CALL ANDERSON showed a Case of Splenic Tumour.—Professor GEORGE BUCHANAN showed, in addition to the cases reported in full at p. 573, the following: (*a*) Patient, who had an enormous Hydronephrosis, which was emptied by aspirating through the anterior wall near the umbilicus, where it was distending the abdomen; (*b*) Specimen: Avulsion of Thumb with the Long Tendons.—Dr. PATTERSON showed photographs and cases.—Dr. ERNEST THOMSON and W. R. JACK demonstrated a case of Hysterical Amblyopia.—Dr. WALKER DOWNIE showed the patient whose case is reported at p. 575.—Dr. JOSEPH COATS gave a demonstration in the Pathological Class Room of Microphotographs and of ordinary Photographs of Pathological Structures.

Officers and Council.—The following gentlemen were elected office-bearers for the ensuing year:—*President:* Dr. M'Call Anderson. *President-elect:* Dr. Crawford Renton. *Vice-Presidents:* Dr. Alexander Napier (Crosshill), Dr. Whitelaw (Kirkintilloch). *Representative Member of Council:* Dr. Goff (Bothwell). *Members of Branch Council:* Dr. H. E. Clark, Dr. Robert Pollock, Dr. Caskie (Largs), Dr. Miller (Crosshill), Dr. Goldie Stevens (Renfrew), Dr. Alexander Robertson, Dr. J. B. Russell, Dr. W. L. Reid, Dr. M'Leod (Kilmarnock). *Honorary Secretaries:* Dr. Fergus and Dr. Parry.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

THE 130th meeting of this District was held on March 8th at Ramsgate, Mr. W. CURLING in the chair. Twenty-two members and visitors were present.

Chairman for Next Meeting.—Dr. PARSONS, President of the Branch, was appointed Chairman for the next meeting (annual) at Canterbury in May.

Branch Representatives on Council.—Dr. J. H. Galton, Dr. Parsons, and Mr. Verrall were nominated representatives of the Branch on the Council of the Association.

The Association and the Suppression of Irregular Practice.—Dr. WELSFORD moved the following resolution: "That the Council of the British Medical Medical Association be invited to obtain the views of the Branches and Districts as to the necessity of suppressing fraudulent and irregular practice, and of enforcing the law against quackery as it stands. Also that, if at the annual meeting of the Association a day were set apart for the consideration of the grievances affecting the medical profession, much good would result. And that a copy of this resolution be sent to the Council."—This was seconded by Mr. WHITEHEAD REID, and carried.

Medical Sickness Assurance Society, etc.—Dr. F. EASTES advocated the claims of the Medical Sickness, Annuity, and Life Assurance Society and the Medical Defence Union to the support of the members, and a resolution recommending the claims of these Societies to the members of the District was moved by him, seconded by Mr. HICKS, and carried.

Communications.—Dr. STYAN read a paper on the "Antipyretic Treatment of Acute Diseases." He expressed his opinion that during recent years an exaggerated importance had been given to the condition of pyrexia, and a fictitious value placed on the action of antipyretic drugs. He deprecated the use of these drugs except in a small proportion of cases, and he mentioned many natural and non-medicinal methods of reducing high temperatures which were efficacious and much safer. Antipyretic drugs, in his opinion, did not shorten the total duration of febrile illness, and frequently retarded convalescence.—Mr. RAVEN followed with a paper on the same subject. He deprecated the giving of antipyretics whenever pyrexia showed itself; more especially he condemned the practice of antipyresis prior to diagnosis. From an empirical point of view there could be no doubt of the value of salicylate of sodium in rheumatic fever, and of antipyretic methods in prolonged enteric fever, nor of their absolute necessity in hyperpyrexia. He disputed the value of antipyretics in acute pneumonia, and he considered that the icebag treatment of this disease was irrational and opposed to scientific therapeusis, and unsupported by experience.—Mr. HICKS showed a case of Myxœdema treated with Thyroid Glands.—Mr. RAVEN showed a case of Myxœdema treated with Thyroid Tabloids.—Mr. BERRY showed a Bristle which had been extracted from one the joints of the foot of a lady who had been suffering from symptoms resembling gout for some months. There was no history to account for the presence of the bristle in this singular position.—The CHAIRMAN exhibited some old trephining instruments and other relics of the late Sir William Blissard.

LANCASHIRE AND CHESHIRE BRANCH.

THE REGISTRATION OF MIDWIVES.

A SPECIAL meeting of this Branch was held at the Grosvenor Hotel, Deansgate, Manchester, on March 9th, at 4.30 P.M., Mr. JAMES TAYLOR, President, in the chair. There were over 100 members present.

The SECRETARY (Dr. James Barr, of Liverpool) read the notice summoning the meeting. He also read a letter from Dr. Arthur Wiglesworth expressing regret at being unable to attend the meeting, and condemning the resolutions which Dr. Rentoul was bringing forward. Dr. Wingate-Saul sent a telegram to say that he was in favour of the resolutions, but would be unable to attend the meeting.

The PRESIDENT then called upon Dr. RENTOUL, who moved the following resolutions:

That in view of the fact that a "Midwives' Registration Association" has been formed—ostensibly for the purpose of promoting legislation for the registration of midwives, but in reality for the creation of an independent order of midwifery practitioners—this meeting, while anxious to improve the training of monthly nurses, and recognising that duly qualified medical women already exist, records its emphatic protest against any such proposed legislation, as such would (*a*) endanger the lives of pregnant women and infants; (*b*) interfere with the training of medical students in practical midwifery; (*c*) repeal the educational sections of the Medical Act, 1886; and (*d*) prevent newly qualified practitioners from perfecting their knowledge of obstetrics and diseases of infants.

"That a copy of this resolution be sent by the Branch Secretary—(1) to the General Medical Council; (2) to our five direct representatives on the General Medical Council; (3) to our Branch representatives on the Council of the British Medical Association; (4) to the Council and Parliamentary Bills Committee of our Association; (5) to each Branch of our Association: (6) to each medical society; (7) to the medical members of Parliament, and to the members of Parliament for the counties and boroughs of Lancashire and Cheshire, earnestly requesting them to consider and strenuously oppose such proposed legislation.

That the undersigned members of this Branch be constituted a committee of this Branch (with power to add to their number), to watch the progress of, and to oppose any proposed legislation for, the registration of midwives:

Alfred Godson, M.B., Cheadle.
Leyland Roe, L.R.C.P., M.R.C.S., etc., Eccles.
Shelton Daly, L.R.C.P.I., L.R.C.S.I., L.M., 225 Stretford Road, Manchester.
Joseph Thornley, M.D., M.B.Ed., J.P., Bolton.
G. T. Schofield, L.R.C.P., L.R.C.S.E., J.P., Mossley.
F. H. Worswick, M.R.C.P.Edin., Manchester.
Colin Campbell, M.R.C.S., Uppermill, Saddleworth.
S. M'Nair, L.R.C.S. & P.Edin., 289, Regent Road, Salford.
C. Torbitt, L.R.C.P. & S., L.S.A., 253, Eccles New Road, Salford.
Henry Horbury Preston, L.R.C.S., L.R.C.P., 145 and 147, Church Street, Pendleton, near Manchester.
James John Foulds, L.F.P.S.G., 97, St. George's Road, Bolton.
J. J. O'Hagan, M.B., Ch.B., Viet., Clarendon House, Garston.
John C. Nichol, M.D., 11, Withington Road, Brook's Bar, Manchester.
B. Jones, D.S.Sc., Leigh, Lancashire.
E. A. Doyle, M.B., C.M., Leigh, Lancashire.
Lindsay Barrett, L.R.C.P., L.R.C.S.Ed., Leigh, Lancashire.
B. Marshall, L.R.C.P., L.R.C.S.Ed., Atherton, near Manchester.
Wm. Duncan, M.D., Tyldesley, near Manchester.
Geo. F. Dixon, M.R.C.S., etc., Tyldesley, near Manchester.
R. J. Martin, M.D., Atherton, near Manchester.
James T. Neech, D.S.Sc., Tyldesley, near Manchester.
Wm. Valentine, L.R.C.P., L.R.C.S.Ed., 34, Haydock Street, Earlestown.
Arthur Handyside, L.R.C.P., L.R.C.S.Ed., Earlestown.
John N. Patterson, L.S.A., Earlestown.
J. J. Kent Fairclough, M.D., Thorncliff, Old Trafford, Manchester.
Jno. Sutcliffe, M.R.C.S.Eng., J.P., Stalybridge.
John Brown, M.D., Viet., Burwood House, Bacup.
Wm. Hugh Hughes, M.R.C.S.Eng., J.P., Ashton-under-Lyne.
Thos. J. Carson, L.F.P.S.G., Oldham.
W. H. Barr, L.R.C.P., L.R.C.S.Ed., Bury.
J. C. Eames, M.D., Stoneclough.
James Holmes, M.D., Whitefield.
Thos. Clifford, M.B., Stalybridge.
H. Colley March, M.D., Rochdale.
R. R. Rentoul, M.D., Liverpool.

These resolutions were seconded by Dr. W. H. HUGHES and supported by Drs. JOHNSON MARTIN, F. H. COLLINS, G. H. BROADBENT, JOHN BROWN, JOHN KERSHAW, R. W. DALY, B. MARSHALL, J. B. BRIERLEY, and J. THORNLEY.

The following amendments were moved by Dr. T. E. HAYWARD, seconded by Professor W. J. SINCLAIR, and supported by Drs. FAWSITT and WALTER:

That this meeting recognises:

1. That the medical profession exists for the public, not the public for the profession, and that the ultimate solution of this vexed question must be decided on the principle of the greatest good to the greatest number.
2. That great evils and very serious dangers exist from the present extensive practice of midwifery by entirely untrained and ignorant women.
3. That it is impossible to expect any legislative enactment which shall end the practice of midwifery by women.
4. That it is practicable and desirable to look for such legislative action as shall mend this practice by ensuring that no woman shall call herself a midwife without having had such a course of instruction and training as shall enable her to conduct a natural labour on correct principles and to recognise in time the dangers and complications which demand the skill of a qualified medical practitioner.
5. That it is desirable and necessary for the good of the public that the education and registration of midwives should be strictly under the control and supervision of the medical profession.
6. That the practice of midwives should be guarded by strict limitations and proper penalties.

On a division twelve voted for the amendments and fifty-eight against. The original resolutions were then carried with twelve dissentients.

This terminated the business of the meeting.

LEEWARD ISLANDS BRANCH.

The fourth annual meeting of this Branch was held on January 17th at St. John's, Antigua. There were present Drs. W. H. Edwards, F. Forward, J. S. Gabriel, J. Freeland, F. J. Freeland, L. Wykham, A. E. Edwards, A. A. Mackie, A. G. McHattie, G. E. Pierez, and G. H. Mapleton (St. Kitts). There was also a large and influential gathering of the general public, including his Excellency the Governor and Lady Haynes-Smith, the Bishop and Mrs. Branch, the Colonial Secretary and Mrs. Evans, Mr. Justice Danavall, Mr. Justice and Mrs. Baynes, and several other ladies and gentlemen.

President's Address.—The President for the current year, Dr. J. Freeland, delivered an interesting address upon Preventive Medicine.

Communications.—January 18th and 19th were occupied by the members in the reading and discussion of some important papers.

New Members.—The following were elected: Sidney Senhouse, M.B., C.M., Dominica, and J. H. S. Grant, M.B., C.M., Tortola, Virgin Islands.

Officers and Council.—The following were elected office-bearers and members of the Council for the year:—*President:* J. Freeland, M.R.C.S. *President-elect:* P. T. Huggins, M.D., Nevis. *Vice-Presidents:* A. E. Edwards, F.R.C.S.Edin.; W. Rees Williams, M.R.C.S. *Honorary Treasurer:* A. E. Edwards, F.R.C.S.Edin. *Honorary Secretary:* G. E. Pierez, M.D.Edin. *Members of Council:* F. Forward, F.R.C.S.Eng., Antigua; P. Numa Rat, M.R.C.S., St. Kitts; J. H. Cook, M.B., B.Ch., Nevis; R. S. Earl, M.B., B.C., Dominica; M. P. Duke, M.K.Q.C.P.I., Montserrat.

SPECIAL CORRESPONDENCE.

PARIS.

Typhoid Fever in Paris and the Water Supply.—Changes in Hospital Administration.—The Overcrowding of the Paris Medical School.

It is only a short time ago that M. Rochard furnished statistics demonstrating the decrease of typhoid fever, which gave grounds for hoping that with the supply of pure water the disease would disappear from Paris. Immediately afterwards, however, there was a sudden outbreak. M. Bucquoy stated at the Paris Academy of Medicine that on one day he had admitted twelve typhoid fever patients into the Hotel Dieu. Since then he has had eighteen patients in his wards, and he is convinced that the contagion is transmitted by water. MM. Lancereaux and Lereboullet have made similar statements. At a meeting of the Municipal Council, M. Lerolle asked if it were true that Seine water had been mixed with the Vanne water. "M. le Directeur des Eaux" answered indignantly, "That is expressly forbidden." This is quite true, but nevertheless Dhuys water has been mixed with Marne water through the whole month of February. The administration may reply that it is water from the Saint Maur waterpipe, without making clear the fact that this pipe is only one metre from the Marne, and in direct communication with it. To make the danger greater, the neighbouring country is transformed into an immense kitchen garden, and superb melons are thriving, covered by thick layers of manure. The Marne water thus contaminated is sent direct into Dhuys reservoirs and distributed as spring water. A Commission, with M. Brouardel at its head, has been appointed to inquire into the matter.

According to the new regulation patients applying for admission to a hospital must show that the said hospital is within the radius allotted to the neighbourhood they live in. Patients with special diseases treated in wards or hospitals set apart for these diseases are exceptions to this rule. The Paris hospitals will be divided into two sections with a receiving hospital in each. The Lariboisière Hospital for the north section and the Charité Hospital for the south. The *chefs de service* who examine and treat the out-patients can on the list drawn up indicate those who are to be sent to their own wards, but the number of interesting cases thus chosen must not exceed the number of beds vacant. Hospital surgeons and physicians can be replaced only in case of illness or when a holiday has been accorded by the director of public assistance. *Chefs* who have been in office more than ten years can, if public duties render it necessary, obtain leave of absence. These regulations are irrespective of the autumn holidays, which extend from July 15th to October 15th; during this period *chefs* are replaced by those of the Bureau Central, and if necessary by those who are half way on their examination to be admitted to the Bureau Central.

The Minister of Instruction has sent a circular to all the rectors of French universities and faculties, in which he states it is impossible to provide in Paris for the increasing crowd of students which flock there to study medicine, and asks why the students coming from the provinces do not pass their years of preliminary education at Dijon, Caen, Nantes, etc. These medical schools offer all the necessary advantages. The minister promises to return to the subject and treat it more fully. It is impossible, he declares, to meet the requirements created by the presence of 5,000 students at the Paris Faculty.

CHICAGO.

Expert Testimony in Some Recent Cases.—Criticisms of the Press.—Reforms Proposed by the Practitioners' Society.—Meeting of the Medico-Legal Society.

Probably no professional topic has of late so occupied medical minds, or been so much discussed as that of expert medical testimony. Two noted criminal cases have recently been undergoing trial, in both of which there has been a demand made for expert medical opinion; in the one instance upon the cause of the death of the late Dr. Cronin, who was murdered by political opponents, one of whom has been undergoing a second trial upon the charge of being a party to the crime; and the other case being that of the slayer of Mayor Harrison. The Pendergast case was touched upon in my last letter; suffice it to say, therefore, that there was an undignified squabble by the attorneys over the conflicting medical opinions advanced upon the stand. To be sure it is unfortunate there is not a greater unanimity of thought upon leading questions, but it is more unfortunate that, confessing fallibility, the great medical profession should be held up to ridicule by unscrupulous individuals; and that, too, without the least chance of explanation or defence. This was particularly shown in the Pendergast trial by both a general and personal attack upon medicine and its disciples. Thus the two most striking features of the Pendergast case, from a medical point of view, may be said to have been the discrepancy of the medical testimony and the libel to the profession vouchsafed by the legal advocates. Passing now to the "Cronin Trial"—as it is is commonly spoken of—we find almost the same cast of character. When dignified members of the profession go upon the stand, and compromise both themselves and their honourable calling by an attempt to throw darkness about

the cause of death in a case so evident, so clear, and so well recognised that even a little child would unhesitatingly know what sort of an answer to make, and would readily make it; when such a burlesque upon professional dignity and learning takes place, contumely may well be provoked. The whole body suffers for the error of the few.

The lay press of the city rained hard epithets upon medicine at this juncture of the case and because of this provocation; and I am not exactly sure it was ill deserved, if those directly interested are to be held as representatives. Thus we come to two striking points of professional interest upon reviewing the late Cronin trial—namely, sharply-conflicting expert medical testimony, followed immediately by a wholesale denunciation of the entire medical body by the public press of the city. But there is this difference between the professional aspects of the two instances cited: in the Pendergast case the maledictions of the lawyers were quite unjust and ill-founded; in the Cronin case we have nothing to say.

The subject has taken a deep hold upon the professional mind, and a reform is reasonably possible. It was the subject for after-dinner discussion at the last meeting of the Practitioners' Club, when, under the general chairmanship of Dr. DeLaskie Miller, a committee was formed to agitate the matter by bringing it up before all the other local medical bodies of influence, and securing the appointment of conference committees which shall unite to form one large representative committee seriously to take up a reformatory movement. The precise direction of measures for relief may not now be indicated, there having been no unanimous action, nor the adoption of any generally accepted plan; but the keynote was struck when Dr. DeLaskie Miller, in his closing utterances at the meeting above named, said that the court should have the power of calling a member of the profession of high skill and integrity to whom the court should address a hypothetical question embracing all the medical points at issue in the given case. This authority should be open to examination for the purpose of making clear to the jury, or not, as the case might be. Surely there should be no "badgering" of the expert, and his statements should be given the same weight as that possessed by any utterance of the court itself. This would establish practically a court of medical reference composed of the most intelligent and reputable members of the profession within a specified district.

At a very largely-attended meeting of the Medico-Legal Society, held at the Grand Pacific Hotel on the evening of February 10th, this same subject was discussed for three hours. The expression of the International Society of Forensic Medicine at a late session held at Paris was presented by the President, Dr. Daniel R. Brower, which met with universal commendation. The proposition favours the calling, by the court, of two high medical authorities who would be expected, independently and without bias, to determine the medical importance and bearing of the case in question. According to our present law, this cannot be accomplished; and therefore a movement is on foot, by the creation of a large joint committee, to secure such legislative action in the near future as will make this relief possible. In the profession one and all decry the present abominable system, and no doubt there will be a hearty support given to efforts towards a higher and more becoming condition.

A WILLESDEN and District Medical Society has been formally constituted, with Dr. Milner Burgess, of Harlesden, as President, and Drs. A. Bindley and Wm. Butler, of Harlesden, as Honorary Secretaries. An inaugural meeting will be held at Harlesden College on March 29th, at 8 P.M., when Mr. Jonathan Hutchinson, F.R.S., will deliver an address on "Dermatology, the Threshold of Medicine."

A MUTUAL DISSECTION SOCIETY.—The Société d'Autopsie Mutuelle, founded by Dr. Condereau in 1876, is now presided over by Dr. F. Laborde. The membership is limited to 100. The Society has a museum which contains the brains of several distinguished men, such as Broca (of "Convolution" fame), Bertillon, Fauvelle, Gambetta, and Eugène Véron. We are not aware, however, that the disinterested labours of the Society have as yet added much to our knowledge of the higher nerve centres.

CORRESPONDENCE.

WANT OF UNITY.

SIR,—I have just read Mr. J. F. Bullar's address to the Southampton Medical Society in the BRITISH MEDICAL JOURNAL of March 3rd. What a charming thing theory is, and how woefully it deceives one when we put it into practice. *Crede experto.* Let me tell my experience, and if its recital saves some brother from the dark waters into which I have fallen it will not be in vain.

I am a general practitioner, and had a large village practice unopposed, holding, among other appointments, that of surgeon to an Oddfellows' club. Among the members I had to attend at 4s. per head per annum were most of the leading tradesmen, several large farmers, and two or three manufacturers and merchants. I could certainly pick out twenty members of the club who are better off in this world's goods than I am.

Now, about two years ago, I declined to attend certain of these well-to-do members as club patients. I also declined to go five miles for 2s. per member per annum for the juvenile branch. Result: Certain members of the committee of the club enter into correspondence, resulting in another medical man being brought here, who is at once elected surgeon to the club, at a meeting carefully packed by the secretary, without any notice being given to, or any complaints made against me. This gentleman now carries on an active, and not over-scrupulous, opposition to me, resulting in much worry and bother to myself, and the loss of a good slice off a by no means large income.

Now, I am not growling, but only stating plain facts in the hope that if any young member contemplates taking a high stand, and believes it when he is told that "he will be better off in the end," he will pause and count the cost. One thing I should like to point out to him. He will get no help from his colleges; he will get no help from the General Medical Council, or even from our excellent Association. But he will make powerful enemies, and probably be told he is a fool for his pains. Such, at least is, the experience of

March 7th. A MEMBER, B.M.A.

MEDICAL AID SOCIETIES AND THE GENERAL MEDICAL COUNCIL.

SIR,—I should like to know what the position of medical men holding medical aid appointments is, with regard to the opinion of the General Medical Council. For I read in the resolution passed on the report by the General Medical Council "That the investigation by the Committee of the question of the conduct of medical aid associations has not disclosed the prevalence of any offences with which it falls within the statutory province of the Council to deal, but that the report of the Committee with reference to certain evils which it describes cannot fail to be instructive to the executive committees and medical officers concerned, and that the President be requested to transmit copies of the report to these committees and officers."

It seems to me that even now after all this labour of the Special Committee and after the expenditure of extra brain power by the General Medical Council that we are not one whit more advanced than before, and that those who are supposed to enlighten and instruct us in the way we should go have left us even in ignorance of their conclusions on the matter. The point is this: Are medical aids derogatory to the dignity of the medical profession or are they not? Yes or No.—I am, etc.,

Worthing, March 13th. P. J. LE RICHE.

OUT-PATIENT HOSPITAL ABUSE.

SIR,—An experience of nearly twenty years as clinical teacher and physician to out-patients in London, both at a general and special hospital, may give me a claim to have some practical knowledge of the subject at present being discussed in the BRITISH MEDICAL JOURNAL. Most of your correspondents have attacked the system from a financial standpoint, and from the view of the general practitioner. While these have been quick to detect defects, they fail to recognise the difficulties of carrying out the reforms they

propose. I suppose it is a consciousness of the seeming hopelessness of arriving at a satisfactory solution of the problem, the many complications and conflicting interests involved, and a reluctance to interfere with existing arrangements for fear of going from bad to worse, that has hitherto discouraged hospital physicians themselves from taking an active part in the public discussion on the subject. I think this is to be regretted, as no one is more competent to throw light on the question than those who practically work at it, and can therefore appreciate alike the advantages and the defects of the system. As the subject is of importance to the suffering poor, the charitable public, medical education, and to professional men in both hospital and private practice, reform is only to be obtained by temperate investigation and discussion, in which every side of the question is adequately represented, and not by one-sided denunciations.

Those who plead that money is kept out of their pockets by the number of applicants for sick relief who flock to the hospitals, the treatment of whom they consider they are well qualified to undertake, use an argument more plausible than real. It is admitted that abuses exist, which is only to say that the practice as at present carried out, as the evolution of a long-standing system, is not a perfect one, and that it is advisable that, if possible, remedial measures should be instituted. But without here entering into the general questions of public charity, or pauperising of the sick poor, from a professional point of view there have to be considered the interests of (1) the lower orders who require medical assistance, general or special; (2) the general practitioner; (3) the hospital staff; and (4) medical education. In discussing the subject a distinction should be made between the general and the special hospitals.

My personal experience of the large general hospitals of London is that the so-called financial abuses are much exaggerated, and that for practical purposes they do not exist. The large mass of the patients consist of the working classes, or the lower ranks of clerks, shop assistants, and the like, none of whom could afford to pay adequate fees to a private doctor. Doubtless there are exceptions, and it is always easy to multiply individual instances of gross abuse, but these I maintain are of comparatively exceptional occurrence. The fact is the defects of the present sytem fall, not on the general practitioner, but on the patient, the hospital staff, and the student. Owing to the enormous crowds which demand attention, many of whom are suffering from trivial complaints, and the limited number of medical officers to deal with them, the deserving patient runs the risk of failing to receive the time and consideration his case merits, the physician is overwhelmed with an incongruous mass of material, most of which requires no skilled knowledge and is of little use for clinical instruction. The work is of necessity carried on at high pressure, and hence liable to be hurried and superficial. The student suffers, inasmuch as such an example of practice is unsound and unscientific. I am far from insinuating that excellent work is not carried on even under these circumstances, but I maintain that this is done under adverse conditions, at the cost of immense labour, and an unnecessary expenditure of energy which might well be utilised in other directions. These evils have been more or less recognised, but it has hitherto taxed in vain the efforts of hospital politicians to grapple with them, and those who so loudly call for reformation fail to appreciate the embarrassing complications of the situation. Any simple limitation of the number of patients is a hardship to those dismissed, and the weakest and most deserving are the most likely to go to the wall. Reduction by means of selection of cases is eminently unsatisfactory, as such a procedure, which demands the highest skill and experience, would have to be relegated to junior officers. The same holds good of the proposed affiliated provident dispensaries scheme, at which patients are to pay according to their means and are to be treated by stipendiaries, who at their discretion are to forward selected cases to the hospital. These presumably would be officered by the young and inexperienced, as the scanty emoluments and official position of such an establishment would scarcely attract men of the highest reputation or ability. Moreover, in such a case the hospital staff and student would fare badly, as it would not be human to expect the doctor in charge of the dispensary to hand over all the good and clinically useful cases to the hospital, and retain only the trifling and uninteresting ones for himself. Here we should have a repetition of the parish infirmaries, which are now serious rivals to the voluntary hospitals in both surgical and medical practice. Again, in such an institution what arrangements would be made for those who could not pay at all? The establishment, therefore, of such affiliated provident dispensaries would in no way serve to put money into the pockets of the general practitioner, but only of the limited few associated with them.

Even the entire abolition of the hospital out-patient system would only transfer the public from one institution and staff to another. I am far from saying that some scheme on these lines might not be found to improve the position, but if affiliated dispensaries are to be instituted it would be preferable that they should be fed from the hospitals rather than *vice versâ*.

Neither is the proposal that small payments be added to the funds of the hospital by patients a satisfactory one, as, although such might reduce the actual numbers, it would only encourage the well-to-do at the expense of the really poor, and the machinery necessary to control such a plan would be invidious and costly. A money gauge is no safe basis to act upon in bestowing charitable relief, as one man may be "passing rich on fifty pounds a year," while another with the same sum might be in a state of extreme poverty.

With regard to special hospitals, it must be admitted that a considerable percentage of the patients are persons who can pay more or less for medical attendance, and who, if they obtain what they desire, are willing to do so. But here, again, we are faced with another difficulty. The diseases to be investigated and treated, such as those of the eye, ear, and throat, are precisely those which the average practitioner, for obvious reasons, is less capable of dealing with than the specialist. Hence these patients, unable to afford the charges of the latter at home, are compelled to apply to him at the hospital where his services are offered gratuitously. Here, doubtless, there is room for abuse, and many cases might be cited as instances, although here, also, I think the evil has been exaggerated. Granted, however, that such exists to a certain extent, it is the cause of little injury to the practitioner, and he who may legitimately complain is the specialist himself, who is compelled to see such people without payment.

This defect in special hospitals the authorities have endeavoured to meet by making their out-patients pay on a scale according to their means, the sum thus realised to be added to the funds of the institution. In this way the honorary medical staff not only give their services gratuitously, but by their exertions they directly contribute to the income of the hospital. However meritorious this may be on their part—and for this they rarely get much thanks—it is no doubt an unsound financial position from a professional point of view. How this is to be obviated it is difficult to determine. To pay the staff according to their earnings would be a new and possibly doubtful departure from the traditions of hospital practice. To hand such cases over to dispensaries would be to deprive them of skilled advice, and would moreover not encourage specialists of high standing to seek hospital appointments, and thus both they and the public would suffer.

It will thus be seen that although defects in our hospital system exist, and reform in some measure is imperative, the claims of those who look on the matter from a purely financial aspect are sometimes unfair, their propositions impracticable, and incapable of fulfilling the ends desired. My object has not been to impede reform, but, on the contrary, to promote public discussion and a thorough ventilation of the subject in all its bearings, through which alone remedial measures are likely to be arrived at. I have therefore ventured to present the matter from a point of view which, it seems to me, has not been taken into consideration by your correspondents.—I am, etc.,

Wimpole Street, W., Feb. 13th. A. Hughes Bennett.

Presentation.—Dr. H. L. Hoops, of Eccles, near Manchester, has been presented with a handsome silver teapot with a suitable inscription by the members of the Baxendale Co.'s ambulance class.

ASSISTANT MEDICAL OFFICERS IN ASYLUMS.

SIR,—The editorial article headed "Medical Superintendents," and the facts asserted by your correspondents, are, unhappily, only too true. That the future advancement of psychological medicine stands imperilled under conditions at present existing in asylums cannot be questioned. There is a tendency to least neurological knowledge in institutions where neurology is consigned for special treatment. In endeavouring to ascertain its cause, the question may be fairly asked: Has the system of medical superintendents killed scientific research in such institutions? The answer certainly goes very near the affirmative. Nay, in some asylums it has not only killed scientific research, but has made the practice of psychological medicine as nearly approach expediency as the practice of medicine may go in that direction unchallenged. The present policy of autocratic and exclusive management enforced by the Legislature, and scrupulously acted upon by medical superintendents, has created a system of intense individualism, under which the speciality has sickened, and been reduced to the practice and advancement of domestic comforts simply. To the convenience of management everything is sacrificed, and a rigid routine is not only encouraged but occasionally enforced in medical treatment. Psychological pathology comes to be viewed and treated from a basis of established usage frequently a quarter century old, and surgery as a therapeutic agent has no meaning beyond the application of splints.

It avails little for the assistant medical officer to be better equipped with means for his medical duties; the experience of many a stinging humiliation soon teaches him never to cross the bar of "established usage." Criticism is never invited here, much less tolerated, and any effort directed towards innovation soon attracts an official snub. Possibly the medical superintendent is the victim of a system in which he finds himself placed. How can any original research be fostered from a position which mainly expends its energies in organisation, and which depends for its support on a committee of laymen who only understand the "maintenance sheet?"

A combination of circumstances soon allows the "enthusiast" to realise the hopelessness of his position. Looking at the situation from a more personal and, perhaps, selfish standpoint, the medical superintendent is constituted judge and mentor of his assistant. He has the ear of the committee, which errs in the belief that one medical man never permits the interests of another to suffer. In consequence, everything the superintendent may represent to the committee affecting the assistant medical officer rises in their minds above suspicion. In this manner gross hardships are perpetrated which committees are ignorant of, and which the assistant medical officer has no means of remedying except by the most disagreeable. The forces at work in an asylum are directly opposed to conditions conducive to widening the field of psychological research, though the material is superabundant. To an earnest and active mind the necessity imposed on it of divesting itself of all modern academic prepossessions and convictions when entering lunacy practice, so operates to demoralise and destroy both his energy and individuality, that he early becomes as inefficient as his chief for any scientific ends.—I am, etc.,

March 6th. PROBATUM EST.

SIR,—"Experientia Docet," who writes in the BRITISH MEDICAL JOURNAL of March 3rd, is evidently unfortunate in his asylum. That something should be done to improve the position of the assistant medical officers is quite my opinion, and the question might well be raised at the annual meeting of the British Medical Association.—I am, etc.,

SUTHERLAND REES PHILIPPS, M.D.

St. Ann's Heath, Virginia Water, March 6th.

THE PROPOSED NEW ORDER OF MIDWIFERY PRACTITIONERS.

SIR,—As I have been asked How can poor women have the necessary care during their confinements unless there are so-called "midwives?" I shall address myself to this question.

The existing conditions are more than sufficient to supply every poor woman with the services of a registered medical practitioner during her confinement. First, there is the Poor-law Medical Service. Articles 182 and 183 of the Order of the Poor-law Commissioners, issued July 24th, 1847, are as follows: "The cases in which any medical officer, either for the workhouse or a district, shall be called on by order of a person legally qualified to make such order to attend any woman in, or immediately after, childbirth; or shall, under circumstances of difficulty or danger, without any order, visit any such woman actually receiving relief, or whom the guardians may subsequently decide to have been in a destitute condition, such medical officer shall be paid for his attendance and medicines by a sum of not less than ten shillings, nor more than twenty shillings, according as the guardians may agree with such officer." "Provided that in any special case in which great difficulty may have occurred in the delivery or long subsequent attendance in respect of some puerperal malady or affection may have been requisite, any district medical officer shall receive the sum of forty shillings." By the Act of George III, c. 59, 1819, and by the Poor-law Act, 1834, guardians may grant relief as a loan to the poor, and attach wages in repayment. By the Medical Relief Disqualification Act, 1885, no person now loses either their power to vote at Imperial or municipal elections because they have received medical relief at the expense of any poor rate. A few guardians make their medical officers contract themselves out of the above Order. This should be brought to the notice of the Local Government Board; while all guardians should pay not less than £1, as they are empowered to do so, for each confinement. Over 1,000,000 persons receive medical relief in England and Wales each year, so that it cannot be said that persons show any shyness in accepting it. Dr. Mouat has shown that during ten years —1871 to 1880—no fewer than 87,726 women were delivered in the Poor-law infirmaries of England, this number not including the out-door Poor-law maternity cases. Secondly, there are our voluntary medical charities, these having given medical assistance to 51,049 women in their confinements during 1889. Here I would call attention to the capital arrangements in connection with the lying-in hospitals at Newcastle and Oxford. At Newcastle they have ceased to employ midwives. The town is divided into two districts, a practitioner being appointed to each. He is paid a yearly income of £70, and 10s. 6d. for each confinement attended. At Oxford each practitioner is paid £40 yearly, and 10s. for each confinement. This example should be followed in every large town. In this way each practitioner appointed could have one or two fifth-year medical students as his pupils in practical midwifery. He could give them valuable instruction as well as obtain serviceable pupilage fees from them, while district nurses could look in to see to the mother and infant. This plan must eventually come into general use. There need be no question of funds, as the charitable portion of the public would supply these. Besides, I have found that at twenty-two lying-in hospitals these paid in one year £4,193 to their midwives. These could be gradually superseded by properly educated and qualified medical practitioners. Thirdly, we have friendly societies, such as the Hearts of Oak, National Provident, and Royal Standard, in which each member is given a grant of from 30s. to 40s. when his wife is confined. Fourthly, there are the provident dispensaries, at which, by a weekly or monthly payment made in advance of about one shilling per month, a woman can insure for the services of a medical practitioner during her confinement. Fifthly, we have a large number of respectable medical practitioners who are now compelled, owing to the downward and degrading competition of medical charities and midwives, to accept so small a confinement fee as from 7s. 6d. to 10s., this including from four to seven subsequent visits. We should not object to such small fees if the social position of the patients makes it impossible for them to pay more. Many, however, can pay more, only the present downward competition seemingly favours them.

The above facts clearly show that, with an efficient Poor-law medical service, properly conducted voluntary medical charities, friendly societies, provident dispensaries, and the overabundance of medical practitioners, the portion of the community who cannot pay a high midwifery fee are more than amply provided for without creating a new order of

midwifery practitioners, a class who should be allowed to become as extinct as the old bonesetters and medical herbalists. Let each lying-in hospital follow the example set by Newcastle and Oxford.—I am, etc.,

Liverpool, March 11th. Robert R. Rentoul.

INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

Sir,—There is probably no good thing without its drawback, and Dr. Leslie Phillips has emphasised one of these in connection with compulsory notification. Like all penal measures the Act requires to be administered with discretion. That "what is left to a man's discretion is left also to his indiscretion" is no less true if we substitute "authority" for "man." Dr. Phillips is inclined to call for fresh legislation. Even if this could be had, it could not be had at once. But there is a remedy in our own hands which can be applied immediately; it consists in a little more confidence in one another's honesty and good faith on the part both of the practitioner and the medical officer to whom he has to report. Should the latter hear of a case in which he thinks his *confrère* has forgotten to notify, a friendly reminder (say a blank certificate form if he has no time to write) would probably bring by return the legal notification and a kindly note of thanks for the reminder and apology for its oversight. This would effectually bar any legal proceedings.

On the other hand, if all men in practice would show, as my own experience would lead me to say they nearly all do show, a desire to help their official colleague in his work, there should be no difficulty, when one of them comes across a case about the exact nature of which he is not quite sure, in his sending a little note explaining, or merely mentioning, his hesitation. This small act of courtesy would be well received, and no local authority would dream of prosecuting where such private and unofficial announcement had been given.

I know a great many men in the health service, whole-time men and men in practice, but I do not know one who would not do everything in his power to keep a brother practitioner out of the clutches of the law.—I am, etc.,

Leeds, March 12th. J. Spottiswoode Cameron.

THE ENFORCED FEEDING OF THE INSANE, AND OTHERS.

Sir,—I have read with much interest the papers of Dr. Neil and Dr. Herbert in the British Medical Journal of January 27th and March 3rd, and, as I think we are apt to lose sight of good old-fashioned, simple methods, I purpose to describe a plan I first adopted when I was assistant medical superintendent to the Three Counties Asylum, Bedfordshire, more than twenty-five years ago.

To explain the operation: We will imagine the patient to be lying on his back with the counterpane across his body. Unless he be exceptionally powerful and violent, two assistants only are necessary, and no apparatus is required—unless a feeding cup can be so styled. The assistants face one another; one kneels astride the patient's thighs, sitting lightly on his knees, and seizes his wrists through the counterpane. The other kneels at the head of the patient in such a way that his knees rest on his shoulders and at the same time keep the head steady without undue pressure. He then inserts a forefinger of each hand into the corresponding side of the patient's mouth, between the closed teeth and the buccal mucous membrane, and with the thumbs and middle fingers, which are outside against the cheeks, seizes each cheek and pulls it upwards, thus forming the mouth into a cup. It is now only necessary for the surgeon to compress the nose of the patient between the thumb and forefinger of the left hand, and with his right hand pour in the liquid from a feeding cup or jug and wait till it is swallowed. Of course the patient cannot make use of his lips to spit out the food, nor can he breathe without swallowing it. As soon as it disappears more is poured in, and so on until the desired quantity has been administered.

I am convinced that I have saved several lives by instructing the parents of obstreperous and obstinate children in this method of administering medicine, etc. I generally direct the mother to sit on a chair and to take the child in her lap; the father sits on a chair on her left and takes charge of the child's head and mouth; a third person, on her right, looks after the hands and legs, and the mother has the privilege of pinching the child's nose and giving the medicine—an operation that I have often observed appears to afford many mothers supreme satisfaction.—I am, etc.,

Gloucester Road, N.W., March 7th. Edward Gray, M.B., C.M.

CHELSEA HOSPITAL FOR WOMEN.

Sir,—A letter containing similar charges to that preferred against me by Mr. Wright, Treasurer to the hospital, in the British Medical Journal of March 10th, has been sent to the Chairman of the Chelsea Vestry and to the Local Government Board. This letter has been referred to me by the Vestry for report, and no doubt also the Local Government Board will require to be furnished with a report. Under the circumstances it is impossible for me to reply to the assertions made in Mr. Wright's letter to you, and I must ask your readers to suspend their judgment as to the truth of the allegations for the present.—I am, etc.,

Cadogan Square, S.W., March 10th. Louis C. Parkes.

PYOCOCCI IN FROZEN MEAT IMPETIGO.

Sir,—May I correct the report on page 489 of the British Medical Journal? The cultures shown by me were those of staphylococcus pyogenes citreus and of streptococcus pyogenes, not of the staphylococcus aureus as the report furnished to you states. The occurrence of the citreus is interesting since the aureus is usually stated to be present, while the absence of erysipelatoid erythema is notable since the streptococcus was present. The association of these two micro-organisms in a scar-leaving impetigo associated with the handling of frozen meat is the point of interest which led me to call attention to the matter.—I am, etc.,

Birmingham, March 3rd. Leslie Phillips.

HYGIENE IN UNIVERSITY LOCAL EXAMINATIONS.

Sir,—The time has now come for me to ask your efficient aid in bringing to a successful issue the task on which I have been engaged for the last ten years. The task is this—to cause the all-important subject of domestic and personal hygiene to become an integral part of the education of every English woman.

No words of mine are, I trust, needed to point out the national importance of such an object. Our triple line of defence against disease is still strangely defective. It is true that the public barrier, consisting of our invaluable health Acts, is being strengthened every day, but the professional barrier still consists of an army of medical men that are as yet but very partially occupied with the prevention of disease; while the third, the private barrier, can never be efficiently erected until such an object as I have in view becomes an accomplished fact.

The praiseworthy efforts of first aid and nursing classes do not touch the subject, which is not the cure but the prevention of disease. What is wanted is that every woman shall possess, as the most cherished result of her education, a practical knowledge of the laws of health as they bear on the individual, the family, and the house.

Experience has shown me that the only way to obtain this is to make hygiene a subject (at first optional) in all our leading examinations. My petition, therefore, at present before the delegates at Oxford, and shortly to come before a similar body at Cambridge, is as follows: "That elementary physiology and domestic and personal hygiene become optional subjects at the Senior Girls and Intermediate Women's Local Examination." With regard to primary education I may add that an influential deputation is being formed to wait upon the School Board to press this matter, that so closely concerns the health of the people, upon their attention.

I should be very glad, Sir, to receive your support in this matter. I would also ask any in sympathy with this far-reaching project to send me their names in support of it and to do all they can to assist in these petitions being granted in Oxford, Cambridge, and London.—I am, etc.,

Alfred T. Schofield, M.D.,
Member National Health Society,

Westbourne Terrace, W., March 14th.

"AMENDMENT OF THE MEDICAL ACTS."

SIR,—I have received a letter from a solicitor on behalf of Mr. Abrams, of New Malden, from which it appears that Mr. Abrams considers that my letter, which you published in the BRITISH MEDICAL JOURNAL of February 17th, is a libel on him. I hope you will allow me at once to state through the JOURNAL that my letter was not in any way intended to refer to or reflect on Mr. Abrams, nor did I in any way intend to include him in the class of persons I referred to. I much regret that Mr. Abrams should have thought that my letter reflected on him, or that it should have caused him any annoyance.—I am, etc.,

New Malden, March 14th. EDWIN CHILD.

*** Understanding that the previous letter of Mr. Child has been supposed by Mr. Abrams to apply to him, we are glad to give publicity to the above disavowal on the part of Mr. Child at the earliest opportunity, and to express our regret if the publication of the former letter has occasioned any pain to Mr. Abrams.

THE MEDICAL DEFENCE UNION.

SIR,—As no report of the annual meeting of the Medical Defence Union has appeared in the columns of the BRITISH MEDICAL JOURNAL, will you kindly afford us this opportunity of drawing the attention of members generally to the fact that the report of the Council was by no means unanimously adopted, and that in consequence a special meeting will shortly be called to discuss certain alterations in the Articles of Association.—We are, etc.,

A. L. ACHARD,
EDWD. C. BOUSFIELD,
J. HENRY CHALDECOTT,
J. H. GWYNNE,
ERNEST SNAPE,
SEPTIMUS SUNDERLAND,
DAVID WALSH.

March 10th.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

THE following appointments have been made at the Admiralty: G. D. B. LEVICK, Surgeon, to the *Wanderer*, March 14th; MORRIS C. LANGFORD, Surgeon, to the *Sealark*, March 14th; HENRY N. STEPHENS, Surgeon, to the *Martin*, March 14th; PERCY H. BOYDEN, M.B., to the *Seaflower*, March 14th; SAMUEL J. ODDIE, M.B., Surgeon, to the *Nautilus*, March 14th; EDWARD A. ROGERS, Surgeon, to the *Pilot*, March 14th; EDWARD T. MEAGHER, Surgeon, to the *Liberty*, March 14th; THOMAS E. HONEY, M.D., Surgeon, to the *Jason*, March 12th; J. CUNNINGHAM to be Surgeon and Agent at Newbiggin.

Staff-Surgeon ROBERT MUNGLE died at Edinburgh on March 8th, aged 68. He was appointed Surgeon December 31st, 1846, and Staff-Surgeon January 14th, 1857, retiring from the service December 23rd, 1870.

ARMY MEDICAL STAFF.

SURGEON-MAJOR HENRY COLE PIPPIN died at Ivy Bank, near Weymouth, on February 13th. He entered the service as Assistant-Surgeon November 9th, 1857, and became Surgeon-Major April 1st, 1873. He retired on half-pay July 9th, 1879.

INDIAN MEDICAL SERVICE.

SURGEON-MAJOR G. S. ROBERTSON, Bengal Establishment, has been appointed substantively British Agent at Gilgit, *vice* Lieutenant-Colonel Durand.

THE YEOMANRY AND RIFLE VOLUNTEERS.

SURGEON-CAPTAIN R. H. BARKER, M.D., Berks Yeomanry, has resigned his commission, with permission to retain his rank and uniform.

M. SAMUEL LODGE, M.D., is appointed Surgeon-Lieutenant to the 2nd Volunteer Battalion the Prince of Wales's Own West Yorkshire Regiment (late the 3rd West Riding), March 10th.

Surgeon-Lieutenant W. M. ABBOT-ANDERSON, M.B., 3rd London, is promoted to be Surgeon-Captain, March 10th.

VOLUNTEER MEDICAL STAFF CORPS.

SURGEON-LIEUTENANT A. S. GREENWAY, M.D., of the Woolwich Company, is promoted to be Surgeon-Captain, March 10th.

ARMY MEDICAL TITLES.

PERSEVERE writes: The official title is no doubt cumbrous and cacophonous, but still can be used in all official correspondence without difficulty, but the use of the titles in social and colloquial life should be settled one way or another. The title of "Dr." cannot be justified, as it has nothing to do with military rank or designation. The mere colloquial use of military titles in no way trenches on the question of combatant privileges or command; else, how come they to be used without prejudice to paymasters, commissariat officers, and inspectors of schools? Urge this point, and the question will be settled.

MEDICO-LEGAL AND MEDICO-ETHICAL.

ACTION FOR DAMAGES FOR CERTIFICATE OF FEVER: NONSUIT OF PLAINTIFF.

ON March 9th, at Clerkenwell County Court, Judge Meadows White, Q.C., and a jury tried an action in which a clerk named Harry Russell, of Highgate, sought to recover £24 as damages for alleged negligence from Dr. W. E. Cree, of Pemberton Villas, Upper Holloway. Mr. Frank Beale, solicitor, appeared for the plaintiff and Mr. Horace Browne was counsel for the defendant, being instructed by Messrs. Hempson, on behalf of the Medical Defence Union, Limited.

The plaintiff's solicitor said that on January 21st Dr. Cree was the medical officer for the district of the Provident Clerks' Association, of which the plaintiff was a member, and told him that he had scarlet fever. He advised him to go home immediately, and certified that he was "suffering from scarlet fever, and is at present unable to follow his employment." Plaintiff's friends did not like the idea of his going to Homerton Hospital, and, after consulting Dr. Crowdy, of Highgate, arrangements were made for his removal to the London Fever Hospital. Upon his arrival there the following morning, Dr. Hopwood, the resident medical officer, examined him, and ordered his removal to the isolation ward. While this examination was being made Nurse Garthorne said: "This is not scarlet fever." The doctor concurred, and the card left in his room stated that the disease the plaintiff was suffering from was "erythema." After twelve and a-half days at the hospital Dr. Hopwood certified that, in his opinion, plaintiff had not had scarlet fever, and he was discharged. In answer to the judge, plaintiff's solicitor said only negligence was alleged against the defendant, not malice. He should have visited the plaintiff. He would not have then been sent to the hospital, and a lot of expense would have been saved.

Dr. Hopwood was then called, and Mr. Beale asked to be allowed to cross-examine him as he would a hostile witness. He had refused to give him an opportunity of taking proofs of his evidence, and had been in conference with counsel on the other side. At the same time he also complained that he had not been allowed to interview the nurse he had subpœnaed.

His Honour said he was quite sure it would not be found necessary.

Dr. Hopwood stated that he sent the patient to the block that was used as an isolation ward, as it was a doubtful case. He communicated the following day with Dr. Cree that, in his opinion, it was not a case of scarlet fever, and a correspondence ensued. He detained the patient to see what developed for nearly a fortnight, and then discharged him.

Dr. Crowdy said he did not see the plaintiff. In his opinion it was impossible to diagnose the disease by gaslight. The spots were so deceptive that it was absolutely necessary to have a good light. It was important that a patient should not be sent to the hospital if there was the slightest doubt as there was a risk of taking the fever there.

His Honour said he could not see where the negligence came in.

Mr. Beale said he had other witnesses to call.

Mr. Browne said his client would state that he made a proper examination, and that he was convinced the plaintiff was suffering from scarlet fever. He certified accordingly to that effect. Had he not done so he would have been liable to a penalty.

Mr. Beale asked that if his Honour intended to give a non-suit he would do so then, and so save the expense of a further hearing.

The foreman of the jury said they did not see any proof of negligence, and they would give a verdict for the defendant.

Mr. Beale said he hoped that, as his client had been put to needless expense, costs would not be given. The plaintiff, a clerk, was fighting a rich association of about 25,000 members.

His Honour said that costs must follow the event, otherwise it would not be fair to the defendant, but suggested that it was a matter for arrangement afterwards. He therefore non-suited the plaintiff with costs.

*** As this case really amounted to a charge of gross and culpable neglect on the part of a medical man, the result is eminently satisfactory. If such prosecutions were successful, it would be as dangerous for medical men to incur the risk of certifying a case of infectious disease without being indemnified against future proceedings, as it is under the Lunacy Acts. No prosecution ought to be permitted except under the fiat of the Local Government Board after due investigation. We congratulate both Dr. Cree and the Medical Defence Union on their successful resistance in this case.

"MIDDLEMEN'S PRACTICES."

DR. S.—Our correspondent is perfectly right in assuming that the limited company and the other society mentioned, both of which carry on medical aid business, offer appointments such as "one cannot accept without loss of one's professional self-respect." We strongly advise our correspondent to have nothing to do with either. It is hoped that steps will presently be taken to prevent any medical man associating himself with these middlemen's practices. It would not, however, be wise for our correspondent to "write a short letter to the local press" to inform the public why he does not hold these appointments. The public have their own means of obtaining information as to his professional status and position, both of which will be considerably lessened by accepting such offices.

PATENTS.

A Patentee but not a Practitioner.—Inasmuch as no practical benefit whatever can, in our opinion, result to the profession from a review of our correspondent's contentions in relation to "patents, surgical books, and consultants' prohibitory fees," we are reluctantly constrained, in view of the ever-increasing pressure on our limited space, to decline further discussion on the subject, especially as, after admitting that he has never even seen the impugned book, he yet does not hesitate to disparage it and its author.

J. D.—Although far less sanguine than our correspondent in regard to the vital influence that the proposed abrogation of the ethical rule in relation to patents is calculated to exert on the creative genius and inventive faculty of the medical profession, no one will hail with more cordial appreciation than ourselves any successful effort of skilled or other medical inventors of surgical instruments or mechanical appliances for the relief of suffering humanity.

OPPOSITION BY ASSISTANTS.

A Member.—Our correspondent forwards a circular in which Dr. X. informs his patients that Dr. Y. is now residing at such-and-such an address in a certain village, and will be pleased to attend professionally whenever required. On this we may remark that although, as a simple notification, we fail to recognise any valid objection thereto, yet taken in conjunction with the alleged surrounding circumstances and its assumed especial object, we are constrained to regard it as contravening the injunction to do unto others as we would wish to be done by. If we are rightly informed, it relates to the introduction by a reputed well-to-do practitioner in a neighbouring city of a new assistant into a district some five miles distant, wherein there have long been one or more resident medical men. If such be the fact, the incident in question speaks for itself.

PRINCIPAL AND ASSISTANT.

J. writes: A. has an assistant, B., who, during the discharge of his duties, contracts scarlet fever. A. being afraid to keep him in his own house takes an empty house for him and engages a trained nurse, etc. Owing to complication, B. remains there eight weeks. A. now expects B. to pay the whole of the expenses. Is this right?

*** Although we believe that from a strict legal view of the circumstances, A., the principal, would not be liable for the extra cost entailed by B.'s illness, we have no hesitation in saying that, from a professional point of view, the principal would always be expected to bear a fair share of these expenses. It is obviously unfair that all the cost should be on one side, as the arrangement was for mutual convenience, it being highly desirable for the principal to get a case of infectious disease away from his house. We should therefore advise A. and B. to settle this matter equitably between themselves, A. not forgetting that the disease was contracted by B. in his service, while B. at the same time must remember that A. has probably been put to serious inconvenience and expense by his mishap, which was one of the necessary liabilities of the service which B. took when he entered into A.'s employment.

A MOST EXTRAORDINARY DECISION.

A correspondent writes that he brought an action in the county court against a man for attendance on his child. The attendance commenced nine days after the delivery of the mother, and after our correspondent had paid her his last visit. The judge having elicited that the plaintiff was a physician at once gave a verdict for the defendant on the grounds that a physician cannot recover fees in a court of law. It was pointed out that this applied to Fellows of the College, and not to Licentiates, on which the merits of the case were gone into. The judge entered a verdict for the defendant on both points, namely, that as a physician the plaintiff could not recover, and that the attendance was a continuation of the confinement and therefore included in the fee. Leave was asked to appeal, but this was declined.

*** On the first point, as to a Licentiate of the College of Physicians being debarred from recovering his fees in a court of law, the county court judge was clearly wrong, the decision being contrary to the express words of Section 6 of the Medical Act, 1886. The decision on the second point depends on the effect of the evidence given in the case. It is impossible to say whether this decision was right or wrong without seeing a full report of all the evidence. Even if wrong, it would be on a question of fact, as to which there could be no appeal. Our correspondent will doubtless be glad to know that the judge of whom he complains has been moved to another district. His successor may perhaps give more satisfactory decisions.

LUNACY FEES.

S. E. W. writes: A patient admitted to a hospital for insane, not having been previously seen by a justice, desires to see one, and formal notice to that effect is sent to the magistrate's clerk, who replies as follows: "If you will send a conveyance down to-morrow at noon, I think I shall be able to find a justice willing to see this patient." Accordingly the justice visits the patient, bringing with him the magistrate's clerk, who is a solicitor. An account of £2 2s. is subsequently sent in, with a statement that these charges should be paid out of the lunatic's estate. Such fees would not accrue personally to the magistrate's clerk. I should be glad to know whether there is any justification for the incurring of any expense on behalf of the hospital or of the patient's representatives in the carrying out of the provisions of the Lunacy Act under Section 8.

*** We do not observe anything in the Lunacy Act, 1890—under which the proceedings described were taken—which directly justifies the charge of £2 2s. made in the case in question. The provisions of Section 9, Subsection (2), of the Act might be taken to cover the point; but the intention of this part of the Act appears to refer to the fixed remuneration of the "officers"—their annual salary—in the few instances in which the Act would materially increase their duties. The "justice" mentioned in the foregoing letter is in this case the "judicial authority" referred to in the following words of the Act, from the Section above named: "Every judicial authority shall, in the exercise of the jurisdiction conferred by this Act, have the same jurisdiction and power..... as if he were acting in the exercise of his ordinary jurisdiction, and shall be assisted, if he so requires, by the same officers as if he were so acting, and their assistance under this Act shall be considered as fixing their remuneration."

DOCTOR OR SURGEON-DENTIST.

Observer writes that an M.R.C.S. took a house and put up a large brass plate with his name and hours of consultation in large letters, and then a lamp with the name Dr. ———. A little later another brass plate appeared with the words "Surgeon-Dentist," and cards were left bearing his name, with the addition of the words "Surgeon-Dentist," with many persons in the neighbourhood, including, Observer states, the patients of other doctors in the neighbourhood.

*** The action of the practitioner mentioned is professionally unwise, for, if persisted in, it cannot fail to end sooner or later adversely to his interest, and, not improbably, subvert his future prospects in medical life. Need we add that a satisfactory practice is not to be acquired by such indefensible tactics?

FEES OF MEDICAL WITNESSES IN THE COLONIES.

J. J.—The rights of a witness in a British colony must depend on the law of that colony. That law in most cases is the common law of England modified by colonial enactment. Where the English summary jurisdiction Acts are in force a witness is entitled to a tender of a reasonable sum for his expenses with his subpœna, and is liable to no penalty for refusing to attend the court unless such sum has been tendered. If, however, he does attend he may be compelled to give evidence in spite of his protests. In cases where there is any doubt as to fees being paid the effective course is to disregard the subpœna and stay away from the court.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.

The Queen's Speech.

The measure promised in the Queen's speech which has the most direct bearing upon medical and sanitary matters is "the establishment of a system of local government in Scotland on the same basis as that recently accorded to England and Wales."

The promised legislation for the establishment of direct local control over the liquor traffic may eventually have an important influence upon the public health, and the measure for the equalisation of rates in London is a part of the reform in the local government of London which has already borne fruit in the advancement of sanitary reforms.

New Government Bills.

Among the Government Bills of which formal notice was given on the first day of the session are:

Sir George Trevelyan: A Bill to establish a local government board for Scotland, make further provision for local government in Scotland, and for other purposes.

Mr. Asquith: A Bill to amend and extend the law relating to factories and workshops.

Mr. Mundella: A Bill to consolidate the enactment relating to merchant shipping.

The Lord Advocate: A Bill to make provision for public inquiry in regard to fatal accidents occurring in industrial employments and occupations in Scotland.

Mr. Burt: A Bill to provide for inquiring into accidents in certain employments in England.

The Chancellor of the Exchequer: A Bill to establish local control over the traffic in liquor.

Private Members' Bills.

Among the Bills of which notice has been given are:—

A Bill for the national registration of plumbers, by Mr. Knowles.

A Bill to facilitate the operation of the Housing of the Working Classes Act, 1890, in so far as it relates to rural sanitary districts, by Mr. Stern.

A Bill to amend the law relating to the sale of intoxicating liquors, by Mr Courtney.

A local veto Bill for England, by Sir Wilfrid Lawson.

A compulsory vaccination abolition Bill, by Mr. Hopwood.

A Bill to amend the Factory and Workshops Act, 1891, by Sir Henry James.

An early closing Bill, by Sir John Lubbock and Mr. Cameron Corbett.

A Bill to empower magistrates to forbid the sale of intoxicating liquors to persons previously convicted of drunkenness, by Major Darwin.

A Bill to make better provision for the regulation and control of cemeteries, by Mr. Sidebottom.

A Bill to amend the Coroners Act, 1887, by Mr. Godson and Mr. Robinson.

Several Merchant Shipping Act Amendment Bills.

Margarine Act Amendment Bills, by Mr. Horace Plunkett, Mr. Penrose Fitzgerald, Sir Richard Paget, Mr. Smith Barry, Mr. Macartney, and Mr. Barton.

Notice was given also of a large number of local veto and Sunday closing Bills, and of a still larger number of eight hours Bills.

THE LOCAL GOVERNMENT ACT, 1894.

The Local Government Act, 1894 (56 and 57 Vict., ch. 73) has now been issued, and can be purchased from the Queen's printers in London, Edinburgh, Glasgow, or Dublin, or through any bookseller, price 9½d. It fills with its 89 sections and 2 schedules 72 pages super-royal octavo. The second schedule contains a list of enactments repealed, in whole or in part. These Acts, are 26 in number, and range in date from the fifty-fourth of George III, C. 91, which was the chief Act amending the Act of Queen Elizabeth with regard to the appointment of overseers of the poor, to the Public Libraries Act of 1892. The whole of 54 George III, cap. 91, is repealed, and the greater part of some of the other earlier Acts, but the parts of the later Acts repealed are often short, and in some cases the repeal only amounts to verbal alterations.

Mr. Cobb, we notice, has already given notice that he intends to apply for leave to bring in a Bill to amend the Act.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

MIDWIFERY.—Dr. W. S. A. Griffith having resigned the University Lectureship in Midwifery, Mr. E. H. Douty, M.A., M.B., of King's College, Senior Demonstrator of Anatomy, has been appointed in his place.

DELEGATES.—Professor Foster has been appointed a delegate of the University to the International Medical Congress at Rome; Dr. B. Anningson and Dr. D. MacAlister have been appointed to represent the University at the International Congress of Hygiene and Demography to be held at Buda-Pesth in September, 1894.

ELECTORS.—Mr. F. Darwin, M.B., has been appointed an Elector to the Professorship of Botany, Professor Ray Lankester an Elector to the Professorship of Zoology and Comparative Anatomy, and the Right Hon. T. H. Huxley an Elector to the Professorship of Physiology.

NATURAL SCIENCE CLUB.—This Club, founded in March, 1872, by the junior students of science in the University, celebrated its 500th meeting by a *conversazione* held in the Physiological and Anatomical Laboratories on March 12th. The senior honorary member (Alex Hill, M.D., Master of Downing) and the President, Mr. J. H. Widdicombe, received the guests at 8 15. The laboratories had been transformed by graceful decorations and electric lamps into a fairy-like succession of beautiful chambers, and "all Cambridge" thronged the rooms and galleries. Dr. Ramon y Cajal demonstrated his preparations illustrating the minute structure of the nervous system; Dr. A Russell Wallace explained his latest views on zoological geography; Mr. Martin Conway displayed the astonishing series of photographs he had brought from the highest Himalayas; and Professor C. V. Boys showed the latest developments of photography as applied to flying projectiles. Innumerable scientific curiosities crowded the tables of the smaller rooms, and displays of the most recent work in physics, chemistry, bacteriology, physiology, and anthropology were made by their authors. Music and refreshments were not wanting, and when the evening came to an end there was a universal feeling of gratification at the unprecedented success of the gathering and of congratulation to the youthful committee who had organised it so handsomely. Such gatherings serve, among other things, to bring home to the literary section of the university world some notion of the extent and variety of work quietly carried on by the scientific schools. To many of those who are engrossed in the older studies natural science implies little more than repeated appeals for funds. It is well that from time to time they should see for themselves how well the funds are expended.

LINACRE LECTURESHIP.—Dr. Donald MacAlister, Fellow and Tutor of St. John's College, has been appointed Linacre Lecturer of Physic, in succession to Dr. Bradbury.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns, including London, 6,356 births and 3,983 deaths were registered during the week ending Saturday, March 10th. The annual rate of mortality in these towns, which had increased from 18.7 to 20.5 per 1,000 in the preceding three weeks, declined again to 19.9 last week. The rates in the several towns ranged from 11.1 in Huddersfield and 14.3 in Norwich to 23 9 in Wolverhampton and 25.1 in Liverpool. In the thirty-two provincial towns the death-rate averaged 19.5 per 1,000, and was 0.9 below the rate recorded in London, which was 20.4 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.3 per 1,000; in London the rate was equal to 2.6 per 1,000, while it averaged 2.2 in the thirty-two provincial towns, and was highest in Wolverhampton, Cardiff, and Birkenhead. Measles caused a death-rate of 5.4 in Birkenhead; scarlet fever of 1.1 in Gateshead; whooping-cough of 1.8 in Cardiff and 2.4 in Plymouth; and "fever" of 1 1 in Burnley. The 82 deaths from diphtheria included 53 in London, 5 in Manchester, 4 in Cardiff, 4 in Liverpool, and 3 in Wolverhampton. Four fatal cases of small-pox were registered in Bradford, 3 in West Ham, 2 in Birmingham, and 1 each in Bristol, Oidham, and Leeds, but not one in London or in any other of the large towns. There were 87 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, March 10th, against 78, 81, and 84 at the end of the preceding three weeks; 24 new cases were admitted during the week, against 18 and 17 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,153, against 2,273, 2,181, and 2,188 at the end of the preceding three weeks; 212 new cases were admitted during the week, against 180 and 239 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, March 10th, 846 births and 601 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had been 20.6 and 19.6 per 1,000 in the preceding two weeks, rose again to 21.1 last week, and was 1.2 per 1,000 above the mean rate during the same period in the thirty-three large English towns. Among these Scotch towns the death-rates ranged from 15.9 in Leith to 27.4 in Perth. The zymotic death-rate in these eight towns averaged 2.7 per 1,000, the highest rates being recorded in Paisley and Dundee. The 296 deaths registered in Glasgow included 21 from whooping-cough, 6 from diphtheria, 5 from "fever," and 5 from scarlet fever.

THE VALUE OF ANTIVACCINATIONIST ASSERTIONS.

As a rule medical men pay no heed to the vapourings of antivaccinators in local newspapers. The average feeling is that foolish people must pay for their folly and that it is a waste of time to contradict the hydra-headed misstatement which constitute the usual case against vaccination. Once in a while, however, some one does take the trouble to nail a fable to the counter, and we observe from the *Stroud Journal* that Dr. Partridge has done so in a thoroughly effective way in the case of a Stroud parson who had been talking at large at an anticompulsory vaccination meeting. The question was as to the truth or untruth of a statement made by Dr. Partridge regarding the non-vaccination of a fatal case of smallpox and the entire withdrawal by the Rev. Allen Redshaw of the assertion which he had publicly made should not be without its use in Stroud in indicating the value to be attached to the sayings even of clerical opponents of the existing law.

SMALL-POX IN FEBRUARY.

DURING the four weeks of February ended March 3rd, there were 64 new attacks of small-pox recorded in London, and 3 deaths registered from the disease. Several outbreaks have been noted round the metropolis. We have already adverted to the numerous cases, with 6 deaths, in the Essex County Lunatic Asylum, Great Warley. Besides this, the town of Romford contributed 6, and the surrounding rural areas 24 attacks, Ilford also having multiple cases. Then West Ham had over 60 cases and 6 deaths, East Ham having 42 attacks to record. In the Midlands Birmingham had 22 deaths registered from small-pox, 1 to each 11 attacks coming to light in the period. Many cases occurred in the outlying districts, Aston Manor having nearly 40. Nottingham had 1 death and 12 cases. Walsall had 27 new cases and Handsworth 17, Stone and West Bromwich also having multiple attacks. Westward, Bristol and adjacent districts had over 60 case. 3 deaths taking place in the city. Northward, Manchester had 8 attacks and Oldham 50. Halifax had 1 death and Bradford 4, being 8 per cent. of attacks, whilst Leeds and many other towns recorded cases. Still further north small-pox was present in Gateshead, South Shields, Consett, and Leadgate, where 1 death was registered.

FEVER AT ASHTON-IN-MAKERFIELD.

THE repeated prevalence of fever in this town has called for medical inspection by the Local Government Board. Dr. Wheaton now reports that the district, with its 13,000 people, does not seem to contain a single uninhabited house anywise fit for habitation, whilst overcrowding is much aggravated by the custom of taking lodgers. In 1892 and to October, 1893, there were 93 cases of fever recorded, 48 per cent. being above the age of 15 years, the majority being males. Three districts were the chief centres of fever in each year, 84 per cent. of the cases in 1892 and 82 last year being found in these districts.

Dr. Wheaton discusses at some length the differential points of diagnosis of typhus and typhoid fever, since it had been thought that typhus had been in question. He arrives at the conclusion that whilst a few stray cases of the graver malady may have been in question, the disease was almost entirely of an enteric nature. The circumstances in which the prevalence occurred lend themselves to the view that defective sewers and drains were the chief media of spread, though infection by personal intercourse between sick and healthy appears to have played no small part. It is well that excreta from early cases did not gain access to the water service, since we learn that up to June, 1892, the water was derived entirely from the surface drainage of cultivated land "manured with the contents of the privies and middens of the district." The practice has since been discontinued, and the supply augmented by Liverpool water, but it is not pleasant to be informed that upwards of 10,000 people at one time drank a diluted form of their own commingled excreta. The district appears to require sanitary activity in many other directions.

TYPHOID FEVER IN BARNSLEY.

BARNSLEY was visited in 1893 by a severe and continued prevalence of typhoid fever, incapable of being traced to any one cause. The cases numbered 234, with 36 deaths, the bulk of the attacks originating in the town, and upwards of half occurring in one locality where almost all the houses are old and crowded. Moreover, the closets, though reconstructed, are mostly of the old type, permitting of storage of filth, often for long periods and too near dwellings. No cases arose in houses having slop waterclosets, and only in two having ordinary waterclosets. Badly kept yards, insufficient flushing, privation following on the coal strike, want of cleanliness, and atmospheric conditions, all seem to have lent their aid in disseminating the fever. But neither water supply nor any particular milk service could be thought of as operative. On the

other hand, Dr. Sadler states that one marked feature of the outbreak was that the disease showed an unusual tendency to spread by infection, there having been 81 cases, or more than 25 per cent. of the whole, in eighteen houses, as many as 6 cases appearing in some houses. This disposition on the part of typhoid fever seems to be becoming more and more prominent, the infectious quality of the disease in its transmission from person to person having been noted by various observers during several years past.

THE SANITARY CONDITION OF ST. SAVIOUR'S, SOUTHWARK.

The inquiry by the Medical Officer of Health of the London Council, at the request of the Local Government Board, into the sanitary condition and administration of St. Saviour's, Southwark, substantiates the representations of the Mansion House Council on the Dwellings of the Poor, as to the conditions of houses in the district. Before the medical officer of health commenced his inspection, the sanitary authority of the district had set to work to try to remedy some of the defects, but, in spite of doubling its staff, it is still insufficient to carry out the systematic inspection of workshops and lodgings. The work undertaken by the sanitary authority since the complaints made by the Mansion House Council has been remarkable for its thoroughness. Of the 561 houses to which attention had been directed, in more than half the defects had been remedied when the London Council's officer came to inspect, and in the remaining houses notices had in almost every case been served, and in many instances the houses had been closed or works were in progress. The population of St. Saviour's is poor, and it is noteworthy that, while its population had increased in each successive census year from 1831 to 1861, it has since the latter year diminished, so that the population in 1891 is actually smaller than in 1831.

The general and zymotic rates of mortality of St. Saviour are greater than those of London, and they compare unfavourably with those of all the surrounding districts, with the exception of St. George-the-Martyr. Sixteen bakehouses in the district have been inspected, the majority of which are situated in the basement. In particular instances there was some want of cleanliness. In one instance an open dustbin and an unenclosed watercloset were found in the bakehouse. There is still much to be done to improve the district; amongst other things, a proper mortuary is required and a better disinfecting oven.

MEASLES NOTIFICATION.

Dr. Bostock Hill reproduces in his annual records for 1893, in respect of the borough of Sutton Coldfield, a special report which he wrote in June of last year on an exceptional prevalence of measles. The epidemic lasted from late November of 1892, to April, 1893, and embraced 620 notified attacks, with 9 registered deaths, all last year, and representing a per case mortality of only 1.4 per cent. All the deaths but one were in children aged 5 years and under, six, indeed, being in children of or under two years of age. Early in the epidemic school closure was adopted in the locality chiefly affected, and also at a later period in other districts, but without much avail. Dr Bostock Hill regards notification as having played a very small part in the prevention of the spread of measles, but he says: "I am of opinion that much good was done in the control that was exercised on patients by the visit of the inspector, and that in this way exposure to chill was prevented in many cases, with the result that the mortality was diminished."

But just at this point two interesting questions arise. Did notification really bring about the visit of the inspector, or was it information furnished by school lists? If the former, was it the parents or a medical attendant who notified? If the parents, the experience is unique and noteworthy. If the latter, was it not the advice of the doctor in attendance rather than the inspector to which credit is due? These questions seem sufficiently important. We put them down in no captious spirit, but really as a means of ascertaining how the matter of measles notification stands in relation to the prevention of disease.

THE ASYLUMS BOARD AND TOOTING BEC.

At last the Local Government Board has given consent for the utilisation of the Tooting Lodge Estate by the Metropolitan Asylums Board, but only for the purpose of erecting an infirmary for pauper imbeciles, and on condition that it be not used for the reception of patients suffering from infectious disease.

MEDICAL OFFICERS OF HEALTH AND NOTIFICATION FEES.

Medicus, who is a medical officer of health in a rural district, writes asking whether he is entitled to a notification fee under the following circumstances: A suspected case of scarlatina is reported to him by the vicar of the parish. He visits the case and finds it to be one of scarlatina.

*** "Medicus" apparently visited the patient in a purely official capacity, and there is some doubt, therefore, as to whether he can be described as the "medical practitioner attending on or called in to visit the patient." His claim to a fee is doubtful.

The International Congress of Hygiene and Demography.—Good progress is being made with the arrangements which are being made for this Congress, which will be held in Buda-Pesth at the beginning of September. The number of adhesions already received from foreign countries is considerable, and the papers actually promised from countries outside Austria-Hungary amount to 440, all but 78 dealing with hygienic questions. The prospects for the success of the Congress are so promising that the local Committee have extended considerably the list of excursions. Fuller details will be published at a later date.

OBITUARY.

ERNEST HENRY JACOB, M.A., M.D.Oxon.,

Professor of Pathology, Yorkshire College, and Physician to the Leeds Infirmary.

The profession and the public at large in Leeds and in the West Riding have suffered a severe blow in the death, at the early age of 44, of Dr. E. H. Jacob, while upon his colleagues at the Yorkshire College and the Leeds General Infirmary his premature decease has left a sense of personal bereavement which cannot soon pass away.

Early in January he began, somewhat suddenly, to suffer from earache, which was found to be due to a small abscess in the membrana tympani; this was incised, and for three weeks there was a continuous discharge from the meatus, but beyond a short period of marked giddiness there was nothing to suggest that the deeper parts of the ear were involved. For a fortnight before his death he had been free from any manifestations of ear disease, and, though much pulled down by prolonged confinement to the house, he was so much improved in health that arrangements had been made for him to go into the country to recruit, when quite unexpectedly, on February 27th, he had a sudden attack of pain in the head, with vomiting, and on the following day became rapidly comatose. It was at once determined to explore the cranial cavity. Mr. Secker Walker, who had attended his colleague with the greatest care and devotion throughout his illness, at once operated in the mastoid and temporo-sphenoidal region, but without success. An exploration of the cerebellum was then made by Mr. Edward Ward, but with a like result. Mr. Walker and Mr. Ward had the advantage of the presence and assistance of Mr. Teale throughout their operations, and it was with the greatest sorrow that they determined that nothing further could be done. The patient never regained consciousness, and passed quietly and painlessly away a few hours later. A *post-mortem* examination showed death to have been due to acute diffuse arachnitis. No trace of the initial ear disease was to be seen.

Ernest Henry Jacob was the youngest surviving son of the late Archdeacon of Winchester, and was born on April 5th, 1849. He was educated at Twyford School under the present Dean of Winchester, for whom he always had the warmest regard, then at Winchester under the late Bishop of Salisbury and the present Bishop of Southwell. He entered in January, 1868, at his father's college (Corpus Christi), and obtained a second class in classical moderations and a first in natural science. It was not till he was 23 years old, and had taken his B.A. degree that he decided to enter the medical profession. After four years spent at St. Thomas's Hospital he was appointed resident medical officer to the Leeds Infirmary, and at the end of three years of hard work in that capacity he established himself in practice as a consulting physician. In a few months he was appointed physician to the Leeds House of Recovery and to the Leeds Public Dispensary. In 1881 he was appointed demonstrator of physiology in the Leeds School of Medicine, and threw himself heart and soul into teaching. He succeeded after a few years to the lectureship in physiology, which post he held till the union of the school with the Yorkshire College, when he was translated to the professorship of pathology, a chair which he continued to hold until his death. His connection with the Leeds Infirmary was renewed in 1884, when he was elected assistant physician, and in 1892 he succeeded to the full physiciancy. For many years he acted as one of the secretaries of the Leeds and West Riding Medico-Chirurgical Society, and it is not too much to say that much of the present strength and success of that Society is due to his untiring industry and zeal.

In spite of the enormous amount of professional work which thus devolved upon him, he found time for other and equally useful and arduous pursuits. He was a most active and responsible member of the Managing Committee of the Leeds Mechanics' Institute, an ardent and successful photographer, an enthusiastic musician, and a recognised authority on matters connected with heating and ventilation, and a great student of architecture. During his illness he revised the proofs of a small work on the warming and ventilation of

public buildings, which will shortly be published by the Society for Promoting Christian Knowledge. Everything that he touched he made his own. He was a man of wide culture and extensive learning, not only in medicine, but in all departments of science and art.

In his profession his devotion to work was only equalled by his forgetfulness of self. His opinion was always much valued by his colleagues. During later years, though never posing as a specialist in the modern acceptation of the term, he devoted much time to the study of laryngology, and in this department, as in general medicine, he had made for himself a considerable reputation.

In his private life, to those who really knew him, Dr. Jacob was one of the gentlest and truest of friends. Though equal to most in his humour and vivacity, he fell at times into a somewhat minor key, which led occasionally to a hypercriticism that masked the real kindness of his nature, but as was said of one of the great physicians of a past century, with whom he had many points in common; "His very sarcasms were the satirical strokes of good nature; they were like flaps of the face given in jest, the effects of which might raise blushes, but no blackness after the blows."

In the moral and social duties of life no man could exceed him, and the community in which he lived is the poorer by one upright and fearless citizen.

Dr. Jacob was married last September, and leaves a widow to mourn his untimely death.

JOHN KELLOCK BARTON, M.D., F.R.C.S.I.,

Senior Surgeon to the Adelaide Hospital, Dublin.

WE regret to announce the death of Dr. John Kellock Barton, of Merrion Square, Dublin, who died at Mentone on Saturday, March 10th, aged 64. He had been for two or three years in ill-health, suffering from a renal affection, and he had sought the benefit of a mild climate for two successive winters. But the disease steadily progressed, and it was known for a few weeks that the end was near.

Dr. Barton was educated at Trinity College, Dublin, and took his degree of B.A. in the respondents class in 1854. He then studied at the medical school and at the Richmond Hospital, and became Fellow of the College of Surgeons in 1859, and M.D.Univ.Dub in 1861. He was University Anatomist for some years, and Surgeon to the Adelaide Hospital until his death. In 1883 he became President of the Royal College of Surgeons. He was a frequent contributor to the journals, and he published a work upon syphilis.

As a surgeon he held an excellent position and enjoyed considerable practice. In all the relations of life he was a man of unblemished honour, and he justly held the respect and affection of his brethren in the profession.

WE regret to announce the death of Mr. JOSEPH HAYTON INMAN, of Garsdale, Yorkshire, at the age of 60. He became M.R.C.S.Eng. in 1858, and L.S.A. in 1857. His early education was obtained at Glasgow and Edinburgh. He practised as a surgeon in the romantic and peaceful village of Garsdale for thirty years. There he gained for himself a high reputation as a skilful surgeon and an accomplished accoucheur. On February 10th Mr. Inman was summoned to see an important case at Dent. Having seen his patient, he commenced his return journey homewards, travelling over the most dangerous portion of Rise Hill, a route for many years usually taken by him. It is conjectured that he was driven out of his course by gusts and heavy storms which had arisen. He had evidently sunk from exhaustion into a peat bog. After a most vigilant search by bands of earnest seekers his body was recovered some three or four days after death. He will long be remembered by the inhabitants of Garsdale and adjoining districts with much affection and regret. He leaves a widow and two children to mourn his loss.

DR. A. DUNLAP, of Springfield, Ohio, who died recently, was one of the pioneers of abdominal surgery in the United States. He graduated in the Cincinnati Medical College in 1839, and two or three years later, before anæsthetics in the modern sense were heard of, performed ovariotomy with a successful result. On offering a report of the case to the editor of the *Cincinnati Lancet Clinic* (to which we are indebted for these facts) the paper was returned to the author with an intimation that the operation had been of so unjustifiable a nature that if the patient had died the operator would have been prosecuted for manslaughter. The result of this editorial "boycott" was that Dr. Dunlap vowed he would never publish the report of another case. In this way the record of an exceptionally ripe surgical experience was lost to medical science. Dr. Dunlap performed more than 400 ovariotomies, but kept his word, and remained a mute but not inglorious surgical Milton to the end.

DR. AUGUSTE OLLIVIER, of Paris, who passed away a few days ago at the age of 61, after a long and painful illness, was born at Sarthe, and took his degree in 1863. He was appointed *agrégé* in 1869, and was successively physician to the Necker and St. Louis Hospitals and to the Enfants Malades. He was elected a member of the Academy of Medicine in 1887. For many years he had a large practice, particularly in the province of diseases of children, but he found time to contribute largely to medical literature. He wrote on the physiology and pathology of the cerebellum, saturnine albuminuria, pemphigus neonatorum (in conjunction with Ranvier, who had been his fellow *interne*), rheumatic encephalopathy, etc. His papers have been republished in a collected form under the titles of "Etudes de Pathologie et de Clinique Medicales" and "Leçons Cliniques sur les Maladies des Enfants." In the early part of his career Dr. Ollivier was for a time Librarian to the Faculty of Medicine, and in 1872-73 he did duty for Professor Daremberg as lecturer on the history of medicine. He was an accomplished physician, and an able and thoroughly upright man. His funeral, which took place on March 8th, was very largely attended by his professional brethren; but, in obedience to his express desire, there were none of the customary farewell speeches at the grave.

WE regret to announce the death of Mr. C. NIEL GRIFFITHS, of Cheltenham, which took place under sad circumstances on March 10th. Mr. Griffiths had never been well since September last, and latterly he had fallen into a state of great despondency. He had made arrangements to take a month's holiday, but shot himself the very day he should have started. Mr. Griffiths, who had held posts at several special hospitals in London, practised as a specialist in diseases of the throat, nose, and ear. He was educated at King's College, and became Member of the Royal College of Surgeons in 1874 and a Licentiate of the Edinburgh College of Physicians in the following year.

DR. FRANK J. DAVYS, of Swords, who was the coroner of North Dublin, died on March 11th, in Dublin. He resided in Swords, where he held several appointments, and where he was very popular. He also acted for some years as an examiner in general education at the Royal College of Surgeons in Ireland. He was a Fellow of the latter institution, and a justice of the peace for the co. Dublin.

DEATHS IN THE PROFESSION ABROAD.—Among the members of the medical profession in foreign countries who have recently passed away are Dr. Victor Revillout, of Paris, for twenty years editor of the *Gazette des Hôpitaux*; M. Paul Bataillard, keeper of the Archives of the Paris Faculty of Medicine, and a man of great erudition; and Dr. Magin Bonet, Professor of Chemical Analysis in the University of Madrid, and a member of the Spanish Royal Academy of Sciences.

PRIZES.—The Spanish Royal Academy of Medicine offers its annual prize for the best essay on the following subject: "Clinical and Therapeutical Study of Chronic Affections of the Intestine." The A. E. G. Cano Prize will be awarded for awarded for the best essay on Infectious Endocarditis. Essays may be written in Spanish, Portuguese, French, Italian, German, or English, and must be sent to the Secretary of the Academy, 22, Montera, Madrid, before September 15th, 1894.

MEDICAL NEWS.

A chair of Bacteriology is to be established at Erlangen. Dr. Hauser, now *Privat-docent* in that University, will, it is stated, be invited to occupy it.

A Congress of Midwives.—The midwives of Switzerland recently held a congress at Zurich for the purpose of taking steps to found a Swiss Society of Midwives.

The Italian Government has decided to suppress six small universities—those of Messina, Catania, Modena, Parma, Sassari, and Siena—the academic population of which is from 100 to 400.

The Semmelweiss Memorial will be unveiled at Buda-Pesth on the occasion of the Congress of Hygiene and Demography to be held there next September. The funds collected for the purpose by international subscriptions amount at the present time to 8,217 florins.

Mr. George Owen Mead, L.R.C.P., M.R.C.S., etc., of Mentmore, Newmarket, has been appointed Coroner for the Newmarket and Haverill Division of West Suffolk by the County Council. Mr. Mead is a Captain in the West Suffolk Militia, and the eldest son of Dr. George B. Mead, L.R.C.P., of Newmarket.

Postal Transmission of Small-Pox.—Dr. Karkeek, the health officer of Torquay, records in his report for last year the occurrence of two cases of small-pox in which the infection was conveyed by correspondence from a nurse in a small-pox hospital. One of the cases occurred ten years back, and the other last April, the patient falling ill two days after leaving Torquay. His friends had suggested risk from reception of letters written by a hospital nurse engaged in attending small-pox cases, but he had pinned his faith on supposed disinfection of all letters. How far he was mistaken in his supposition was shown by the sequel.

The Medical Defence Union in East Anglia.—A meeting of the profession, attended by over a hundred medical men, was held on March 6th at the Norfolk and Norwich Hospital, under the presidency of Dr. Beverley. Addresses were given by Mr. Victor Horsley and Dr. Bateman. Subsequently the following resolution was adopted unanimously: "That in the opinion of this meeting a professional organisation for defensive purposes is essential; that the Medical Defence Union meets this want, and the profession in East Anglia are invited to give it their cordial support." Dr. Beverley (President for Norfolk) entertained about 100 members at luncheon before the meeting.

Medical Society of London.—The 121st anniversary dinner of this Society took place on March 8th in the Whitehall Rooms of the Hôtel Métropole, with Mr. A. E. Durham, treasurer and past President, in the chair. About 120 Fellows and guests attended, amongst whom were the President of the Royal College of Physicians (Dr. Russell Reynolds), Mr. Jonathan Hutchinson, Dr. S. Wilks, Sir Joseph Fayrer, and Professor Karl von Bardeleben, of the University of Jena. The toast of the evening, "The Medical Society of London," was given by the Chairman, who showed how well the objects which the founders of the Society had in view—namely, the cultivation of medical science and the promotion of good fellowship between the members of the profession, had been advanced by the Society since its earliest days. The toast of "The President" was proposed in highly felicitous terms by Dr. Theodore Williams, who alluded feelingly to Dr. Bristowe's absence on account of ill-health. The whole meeting joined heartily in drinking renewed good health to the retiring President. In reply, a letter from Dr. Bristowe was read by the Chairman, which thanked the company in anticipation for the toast, and stated that the writer's health was now improving. Mr. Bryant proposed the toast of "The President-Elect," Sir W. B. Dalby, who replied in a happy speech. Mr. Howard Marsh proposed "The Visitors," for whom Mr. George Eastes, President of the Harveian Society, and Professor von Bardeleben responded. The latter drank to the alliance between theoretical and practical medicine and surgery. Dr. Douglas Powell proposed "The Retiring Officers and Members of Council;" and Dr. Cullingworth and Dr. Pasteur replied. Finally, Dr. F. T. Roberts proposed "The Chairman," which was drunk with musical honours, to which Mr. Durham responded.

American Jottings.—Large meetings of women have recently been held in San Francisco to protest against so-called medical advertising in the daily press.—A Bill now before the Virginia Legislature provides for female physicians for the female patients in each asylum for the insane in that State.—Dr. E. L. Trudeau, of Saranac Lake, has been given 10 000 dollars for the equipment of a laboratory on the experimental study of tuberculosis. He has also at his disposal a fund of 1,500 dollars for the prosecution of the work.—"Gazocution" is the latest achievement of the philanthropic imagination in search of a substitute for hanging and other more or less violent methods of exacting the last penalty of the law. The criminal, having been duly forewarned of the euthanasia in store for him, is ushered into a kind of "lethal chamber," where he is supposed to fall asleep. In this condition he is gently absorbed into the infinite with the help of carbonic acid gas. It is somewhat surprising in these humanitarian days that chloroform, or the charcoal method so dear to sentimental persons in France, has not been proposed as a means of enabling malefactors to make their forced journey *cito, tute et jucunde*.—The Philadelphia *Press* of December 11th, 1893, contains the following remarkable advertisement: "Wanted a physician to travel with medicine company to lecture, experience not necessary; prefer one who can play the organ; a steady, pleasant, and lucrative position offered. Address ————." We have not yet got that length on this side of the Atlantic, but, as Shakspeare wisely says, "We know what we are, but know not what we may be."—It is reported from Alaska that the Calawash Indians have asked permission to burn an Indian "doctor" at the stake. The "doctor" has been treating a chief's son without success. The nature of the distinguished patient's disease is not stated, medical bulletins being apparently not sanctioned by professional etiquette among the Calawashes. The Indians think the patient will recover and the tribe be released from an evil spirit if the "doctor" is burnt. The prognosis of the case seems to be unsatisfactory—for the practitioner.—Dr. W. O. Roberts recently reported to the St. Louis Clinical Society the case of a man from whose thigh he removed a bullet which had been imbedded in the limb for thirty-two years. The man, whose age is 55, was struck by a shot just above the knee at the battle of Shiloh; the wound was probed soon after the battle to a depth of 6 or 8 inches in an upward direction, but no bullet was found. He was in hospital for six months before the sinus closed. He then went back to duty, but becoming lame was again sent to hospital, where again free incision failed to discover the bullet. After this he had no further trouble till he came under the care of Dr. Roberts, who found a tumour about the size of a guinea-fowl's egg just at the outer side of the right inner hamstrings. This was cut down upon, and proved to enclose the bullet, which was covered on one side with a phosphatic deposit.

MEDICAL VACANCIES.

The following vacancies are announced:

BETHLEM HOSPITAL, Lambeth Road, S.E.—Two Resident Clinical Assistants. Applications and testimonials, endorsed "Clinical Assistant-hip," to the Treasurer, Bethlem Hospital, Lambeth Road, S.E., by March 31st.

BIRMINGHAM GENERAL DISPENSARY, Birmingham.—Resident Surgeon. Salary, £150 per annum, with an allowance for cab hire, and furnished rooms, fire, lights, and attendance. Applications and testimonials to Alex. Forrest, Secretary, by April 11th.

BOLTON INFIRMARY AND DISPENSARY.—Junior House-Surgeon; age not to exceed 25. Salary, £80 per annum, with furnished apartments, board, and attendance. Applications and testimonials to Peter Kevan, Honorary Secretary 12, Acresfield, Bolton, by March 20th.

BOOTLE BOROUGH HOSPITAL.—House-Surgeon. Salary, £80 per annum, with board, washing, etc. Applications and testimonials to W. B. Brooker, Clerk, by March 20th.

CARNARVONSHIRE AND ANGLESEY INFIRMARY, Bangor.—House-Surgeon. A knowledge of the Welsh language is desirable. Salary, £70 per annum, with board and lodging in the house. Applications and testimonials to the Secretary by April 7th.

COUNTY CARLOW INFIRMARY.—Surgeon. Salary, £94 per annum. Applications to the Secretary to the Governors by March 20th. Election on April 3rd.

COUNTY OF NORTHUMBERLAND.—Medical Officer of Health. Salary, £500 per annum, with travelling expenses. Appointment for three years. Applications and testimonials, endorsed "Medical Officer," to C. D. Forster, Clerk to the Council, by March 24th.

DARENTH SCHOOLS FOR IMBECILES, near Dartford, Kent.—Assistant Medical Officer. Salary, £160 per annum, rising £20 annually to £200, with board, furnished apartments, attendance, and washing. Will be subject to annual re-election after the completion of his third year of office. Applications and testimonials to T. Duncombe Mann, Clerk to the Metropolitan Asylums Board, Norfolk House, Norfolk Street, Strand, W.C., by March 20th.

DEVONSHIRE HOSPITAL, Buxton, Derbyshire.—Assistant House-Surgeon. Salary, £50 per annum, with furnished apartments, board, and washing. Applications and testimonials to Joseph Taylor, Secretary, by March 19th.

DOWNPATRICK UNION, Clough Dispensary.—Medical Officer. Salary, £120 per annum, £20 as Medical Officer of Health, with registration and vaccination fees. Applications to John M. Perry, J.P., Honorary Secretary, Perrymount, Clough. Election on March 22nd.

EAST LONDON HOSPITAL FOR CHILDREN, Glamis Road, Shadwell, E.—House-Physician. No salary, but board, lodging, and washing are provided. Applications and testimonials to Thomas Hayes, Secretary, by April 4th.

GENERAL HOSPITAL, Birmingham.—Two Assistant House-Surgeons. Appointments for six months, and may be held by re-election for a further period of three or six months, but no longer. No salary attached to the posts, but residence, board, and washing will be provided. Applications and testimonials to Howard J. Collins, House-Governor.

GUEST HOSPITAL, Dudley.—Assistant House-Surgeon. Appointment for six months. No salary, but board, lodging, and washing in the hospital. Applications and testimonials to E. Poole, Secretary, by March 28th.

HACKNEY UNION.—Dentist. Salary, £100 per annum. Applications and testimonials to J. Owen-Perry, Clerk to the Guardians, by March 21st.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, Bloomsbury, W.C.—House-Surgeon to Out-patients (non-resident). Appointment for six months, but the holder will be eligible for a second term of Office. Salary, 25 guineas. Applications and testimonials to Adrian Hope, Secretary, by March 20th.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, 26, Margaret Street, Cavendish Square, W.—Honorary Visiting Physician; must reside within one mile of the Institution. Particulars of qualifications to be obtained at the Infirmary.

JOINT COUNTIES LUNATIC ASYLUM, Carmarthen.—Medical Superintendent. Salary, £500 per annum, with unfurnished house, garden produce, fire, light, and washing. Applications and testimonials to be forwarded to W. Morgan Griffiths, Solicitor, Carmarthen, by March 24th.

LONDON HOSPITAL, Whitechapel Road, E.—Assistant Physician; must be M.R.C.P Lond. Applications and testimonials to G. Q. Roberts, House-Governor, by March 17th.

METROPOLITAN HOSPITAL, Kingsland Road, N.E.—House-Physician, House-Surgeon, and Assistant House-Surgeon. Appointments tenable for six months. The House-Physician and House-Surgeon will receive a salary of £60 per annum. Applications and testimonials to Charles H. Byers, Secretary, by March 26th.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Albany Memorial), Queen Square, Bloomsbury.—House-Physician. The present Junior House-Physician is a candidate, and applicants should state whether they are prepared to accept either appointment. The salary of the Senior House-Physician is £100 and of the Junior £50 per annum, with board and apartments. Applications and testimonials to B. Burford Rawlings, Secretary, by March 31st.

NEW HOSPITAL FOR WOMEN, Euston Road, N.W.—Female Assistant Anæsthetist. Applications and testimonials to Margaret M. Bagster, Secretary, by March 28th.

NORFOLK COUNTY ASYLUM, Thorpe, Norwich.—Junior Assistant Medical Officer. Salary, £110 per annum, increasing £10 annually to £150, with board, lodging, and washing. Applications and testimonials to Dr. Thomson, Medical Superintendent by March 20th.

OWENS COLLEGE, Manchester.—Professor of Zoology. Applications to the Council of the College, under cover to the Registrar, by April 3rd.

ROYAL COLLEGE OF PHYSICIANS.—Milroy Lecturer. Applications to Edward Liveing, M.D., Registrar, by April 9th.

TAUNTON AND SOMERSET HOSPITAL.—Assistant House-Surgeon. Appointment for six months. No salary, but board, washing, and lodging in the Institution. Applications and testimonials to the House-Surgeon by March 24th.

TORBAY HOSPITAL, Torquay.—Honorary Ophthalmic Surgeon. Applications and testimonials to the Honorary Secretary by March 17th.

UNIVERSITY COLLEGE, Bristol.—Medical Tutor. Salary, £125 per annum. Applications and testimonials to E. Markham Skerritt, Dean, by April 4th.

WEST-END HOSPITAL FOR NERVOUS DISEASES, Etc., 73, Welbeck Street, W.—Anæsthetist. Appointment for twelve months. Candidate eligible for re-election. Applications to H. Ansell, Secretary.

WEST LONDON HOSPITAL, Hammersmith Road, W.—House-Physician and House-Surgeon. Appointments tenable for six months. Board and lodging provided. Applications and testimonials to R. J. Gilbert, Secretary-Superintendent, by March 30th.

YORKSHIRE COLLEGE, Leeds.—Professor of Pathology. Particulars from the Secretary of the College.

MEDICAL APPOINTMENTS.

BANNATYNE, Gilbert A., M.D.Glasg., M.R.C.P.Edin., appointed Honorary Physician to the Royal Mineral Water Hospital, Bath, *vice* Dr. Spender, resigned.

COLLIER, Hubert, M.D.Brux., L.R.C.P.Lond., M.R.C.S.Eng., L.S.A.Lond., appointed Medical Officer to the Great Yarmouth Workhouse, *vice* J. C. Smith, resigned.

DOUTY, Edward H., M.A., M.B., appointed Lecturer on Midwifery in the University of Cambridge, *vice* Dr. W. S. A. Griffith, resigned.

FARR, E. A., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer of the First District of the Andover Union.

LAKE, Wellington, D.P.H.Camb., M.R.C.S.Eng., appointed Medical Officer to the Guildford, Godalming, and Woking Joint Board Isolation Hospital.

LUMLEY, C. Armstrong, M.R.C.S.Eng., L.R.C.P.Lond., appointed District Surgeon to Kentani, in the Transkei Cape Colony.

MONTIZAMBERT, F., M.D., appointed General Superintendent of the Canadian Quarantine Service.

MOORE, E. Coleman, M.B., C.M.Edin., etc., appointed Surgeon to the Edinburgh Ear and Throat Dispensary.

RORIE, David, M.B.Edin., C.M., appointed Surgeon to the Denend and Dundonald Collieries, Cardenden, Fife.

RYAN, John, M.D., appointed Medical Officer of the Broadford, Bridgetown, and Clontara Dispensary Districts.

SYMONDS, C. P., M.R.C.S.Eng., L.S.A., appointed Medical Officer to the Lathom Local Board.

WESTMACOTT, F. H., M.R.C.S., L.R.C.P., appointed Resident Medical Officer to the Manchester Royal Infirmary Convalescent Hospital at Cheadle, *vice* J. E. Platt, F.R.C.S., resigned.

DIARY FOR NEXT WEEK.

MONDAY.

SOCIETY OF MEDICAL OFFICERS OF HEALTH, 20, Hanover Square, W., 8 P.M.—Discussion on Death Certification and Registration, in which Dr. F. W. Lowndes (Liverpool), Dr. E. Hill (Durham), Dr. Farquharson, M.P., Mr Noel Humphreys, Dr. A. Newsholme, and others will take part.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Dr. F. J. Wethered: The Diagnosis of Diphtheria by Bacteriological Cultures. Dr. C. H. Ralfe: Milk Diet in Albuminuria.

TUESDAY.

PATHOLOGICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. J. Hutchinson, jun.: Deformity of Shoulder Girdle. Mr. Cecil Beadles: Histological Changes in the Breast associated with Carcinoma. Dr. W. W. Ord and Mr. Shattock: Left Hemisphere from a case of Aphasia. Mr. Charters Symonds: Epithelioma of Bladder involving the Entire Urethra. Mr. L. Bidwell and Dr. Abraham: Sections of Skin formed after Thiersch's Grafts. Dr. Rolleston: Glandular Inflammations causing Stenosis of the Bronchi.

WEDNESDAY.

NATIONAL HEALTH SOCIETY, 53, Berners Street, W., 4 P.M.—Mr. Ernest Hart: Afternoon Tea, After Dinner Coffee, and Morning Chocolate.

EPIDEMIOLOGICAL SOCIETY OF LONDON, 11, Chandos Street, W., 8 P.M.—Dr. S. W. Wheaton: On Certain Affections of the Mucous Surfaces and their Relation to Diphtheria.

ROYAL MICROSCOPICAL SOCIETY, 20, Hanover Square, 8 P.M.

POST-GRADUATE COURSE, West London Hospital, Hammersmith, W., 5 P.M.—Mr. Bidwell: Lupus.

ROYAL METEOROLOGICAL SOCIETY, 25, Great George Street, Westminster, 8 P.M.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTHS.

HILLSTEAD.—On March 12th, at 71, Upper Richmond Road, Putney, S.W., the wife of Herbert J. Hillstead, of a son.

JOHNSON.—On March 4th, at 20, Weymouth Street, W., the wife of Raymond Johnson, M.B., F.R.C.S., of a daughter.

MYDDELTON-GAVEY.—On March 13th, at Lingwood, Weybridge, the wife of E. H. Myddelton-Gavey, M.R.C.S.Eng., of 94, Wimpole Street, W., of a daughter.

DEATHS.

BURNS.—On March 10th, at Borstal Villas, Rochester, John James Douglas Burns, R.N., M.D., M.R.C.P., J.P., aged 78.

DAVIES.—On Friday, March 9th, at Abercerí, Newcastle Emlyn, South Wales, David Davies, J.P., M.R.C.S., aged 72, late Medical Officer of Health for the City and Port of Bristol.

GRIFFITHS.—On March 10th, at 2, Hatherley Villas, Cheltenham, Cecil Neil Griffiths, M.R.C.S.Eng., L.R.C.P.Edin., Associate King's College, London, fourth son of the late Rev. Henry Griffiths, of Elm Lodge, Cheltenham, in his 42nd year.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

OLD MEMBER asks what is considered the simplest and most effective appliance to be worn daily for the reduction of a small prolapsus ani, and where it can obtained.

TREATMENT OF CHYLURIA.

AN ARMY SURGEON asks for advice in the treatment of chyluria. Perchloride of iron and salicylate of iron have not given good results. Gallic acid (20 and 30 grains) gave apparent relief at first, but failed subsequently.

PRACTICE IN SOUTH AFRICA.

'VARSITY asks for information as to practice in South Africa, as to (1) capital required to start a practice; (2) pay of assistants; (3) expense of living; (4) climate; (5) names of any local medical papers, or others, who would accept advertisements.

MORNING CONGESTED CONJUNCTIVÆ.

MEMBER B. M. A. writes: My wife and I, aged respectively 45 and 51, since we came to reside in our present house—low lying, near a river—awake every morning with very heavy congested conjunctivæ. She does not read at night; I do so, with glasses. The bedroom windows are open all night. I do not drink or smoke. Servants and visitors complain of same symptoms. Will anyone kindly suggest remedy?

DISINFECTION OF CLOTHES.

R. D. S. asks to be referred to pamphlets concerning steam laundries and the disinfection of clothes.

*** We do not know of any such pamphlets, but work of this kind is, we believe, executed in London by Mr. Lacy, of Townmead Road, Fulham, and by Messrs. Armfield, of 15, Lower Belgrave Street, S.W., from either of whom our correspondent would probably obtain information.

ANSWERS.

A. W.—Commodes are practically obsolete in London hospitals. If our correspondent will write to Mr. John Carter, 6A, New Cavendish Street, Portland Place, W., he will be able to get a catalogue containing numerous illustrations of commodes, from which he will perhaps be able to choose one suitable for his purpose.

A. L. R.—France having refused reciprocity with the English faculty, a doctor of the faculty of medicine of Paris would have no legal status in this country. To legalise his position, it would be necessary for him to obtain an English, Scotch, or Irish diploma, and to register it with the General Medical Council. The examinations are conducted in English. Further particulars will be found in the Educational Number of the BRITISH MEDICAL JOURNAL, published on September 3rd last.

H. D.—In reply to our correspondent's supplementary questions, we see no objection to the simple address and hours of attendance being printed on the paper forms alluded to, if limited to such. How far, however, it would be expedient for a general practitioner to couple the prescriptions with "rough notes of the case" thereon to the respective patients is a question which it may be judicious for him to consider. With reference, moreover, to the so-called "B—— Dispensary," he may, we think, consult with advantage the opinion expressed in the *Ethical Code*, Chap. ii, Sect. 1, Rule 4.

SLEEPLESSNESS IN BOYS.

EXPERIENTIA DOCET writes: In answer to "Country Surgeon's" query, let the boy eat a biscuit at bedtime, and when in bed have a hot bottle placed to his feet. The resulting hyperæmia of the digestive organs and of the feet will cause a diminution of blood supply to the head, with diminished cerebral activity. Sleep will follow.

"MATTHEW BAILLIE'S PILL."

W.R. asks some St. George's man to give the prescription of Matthew Baillie's pill, efficacious in cardiac dropsy.

*** The name seems to be unknown at St. George's Hospital, but our correspondent probably refers to the following, which we take from the *St. George's Hospital Pharmacopœia*: PIL. DIGITALIS CO. R Digitalis Foliorum, gr. ½; Scillæ, gr. j; Pilula Hydrargyri, gr. 1½. Fiat pilula. Signa: "One for a dose, repeated as often as three times daily."

FIRST EXAMINATION FOR F.R.C.S.ENG.

A MEMBER.—We find on inquiry at one of the principal London medical schools that the following books are those generally recommended: *A Treatise on Human Anatomy by various Authors*, edited by Henry Morris, M.A. M.B. (London: J. and A. Churchill, 40s.); *Quain's Elements of Anatomy*, edited by E. A. Schäfer and G. D. Thane (London: Longmans, Green and Co.); *A Textbook of Physiology*, by M. Foster, M.A., M.D. (London: Macmillan and Co.); *An Introduction to Human Physiology*, by A. D. Waller, M.D. (London: Longmans, Green and Co.); *The Chemical Basis of the Animal Body*, by A. S. Lea, M.A., D.Sc. (London: Macmillan and Co.); *Essentials of Chemical Physiology*, by W. D. Halliburton, M.D. (London: Longmans, Green and Co.); *Elements of Human Physiology*, by E. H. Starling, M.D. (London: J. and A. Churchill); *The Physiologist's Notebook*, by A. Hill, M.D.

EXHIBITIONS AT UNIVERSITY COLLEGE, LIVERPOOL.

JAR.—The following scholarships and exhibitions are open to students of the medical faculty of University College, Liverpool.

On Entrance.—The Lyon Jones Scholarship, value £21 per annum for two years, payable at the end of first and second year. The holder is required to proceed to a Victoria University degree in Medicine. *Completion of Second Year.*—Lyon Jones Scholarship, £21 per annum for two years. Examination includes anatomy, physiology, chemistry, and materia medica. *Fourth or Fifth Year.*—The Derby Exhibition, £15 for one year. Examination in clinical medicine and surgery. *After Qualification or in Senior Years of Curriculum.*—The Holt Tutorial Scholarship, £100 a year for one year. The scholar is required to devote fifteen hours a week to teaching and to private study in a special department of the medical school. It is said that the Victoria degree can be obtained more cheaply than a diploma, although the curriculum is more extensive. This is owing to the cheapness of the examination fees. Further information will be found in the Educational Number of the BRITISH MEDICAL JOURNAL published on September 3rd, 1893.

NOTES, LETTERS, Etc.

A NARROW ESCAPE.

DR. WILLIAM A. WADSWORTH (Belfast) writes to point out that Dr. Ledlie did not see the accident he describes himself, and that the true explanation is probably this—that the wheel of the cart struck the boy on the thigh, knocking him down and grazing his head as it advanced, and did not pass over the thigh and head.

ALLEGED OVARIAN PREGNANCY.

MR. LAWSON TAIT (Birmingham) writes: If the details of the case as given by you in par. 197 of the EPITOME of March 10th be carefully compared with the conditions described by me in a paper in the *Medico-Chirurgical Transactions* for 1892, entitled "Note on the Alleged Occurrence of Ovarian Pregnancy, being an explanation of some cases which have been published as belonging to this variety of Ectopic Gestation," I think it will be granted that Dr. Larsen's case falls fully within my explanation, and that it really was a broad ligament pregnancy.

MALE NURSES' CO-OPERATION.

WE are asked to state that a Co-operative Association of Male Nurses has been formed: it has offices at 8, Great Marylebone Street, Portland Place, W. We gather that it has been organised by a certain number of male nurses in active private employment, who hope thus to render themselves independent of the agents, who have hitherto, in many instances, absorbed a large percentage of the salaries earned. All the nurses, it is stated, are total abstainers.

SULPHUR IN DIPHTHERIA.

DR. ROBERT FAIR FRAZER (Lavender Hill, S.W.) writes: Kindly allow me, through the medium of the BRITISH MEDICAL JOURNAL, to thank Professor Bäumler, of Freiburg, for his courteous and encouraging article on the treatment of diphtheria by the local application of sulphur, which appears in the same number (March 3rd) as my second contribution of six cases. With his remarks I entirely agree, more particularly that "no effect can be expected when the disease extends into the bronchial tubes," which I tried to demonstrate. Had I been aware that Professor Bäumler had given it a trial, and that Lagauterie had recommended its use in 1866 (some years before I entered the profession), I would gladly have given them the full credit of it, but I was totally ignorant of the facts, and used it first in an extreme emergency without any previous knowledge.

THE INFLUENCE OF TEMPERATURE ON PHARMACEUTICAL PREPARATIONS.

MR. CHARLES BLAKE, M.P.S.Q. (Brisbane), writes: The article "An Imperial Pharmacopœia," in the BRITISH MEDICAL JOURNAL of December 16th, 1893, prompts me to offer a suggestion. In view of the probability of the *British Pharmacopœia* continuing to be accepted as the authority throughout the British Empire, some provision should be made for the proportion of hard and soft paraffins, fats, oils, etc., used in ointments, being adjusted in accordance with differences of temperature. An ointment made in Canada would be much harder and in Australia much softer than the same ointment made in England. Better that some rule be formulated than that the matter be left to the discretion of each individual pharmacist. Maybe this question of the influence of temperature on pharmacopœial preparations might be considered with reference to other than ointments.

MEDICAL WOMEN AS WORKHOUSE DOCTORS.

DR. E. WINIFRED DICKSON (Vienna) writes: In reference to your remarks on "Medical Women as Workhouse Doctors" on page 503 of the BRITISH MEDICAL JOURNAL for March 3rd, I should like to ask the following questions from a woman's view of "common sense."

1. Where is the ethical difference between forcing the attendance of a man upon a woman in a charitable institution, and that of a woman upon a man?

2. In a certain class of cases it is more congenial to the patient's feelings to have a medical attendant of his or her own sex; but why should the women be left out of consideration when an officer is being appointed under the Poor Law?

3. Again: Why should a woman doctor feel more strongly about attending a certain class of cases in men, than men doctors do in gynæcological work? In neither case should sentiment come in; it is simply a question of professional duty.

APPOINTMENTS AND THE COMPENSATION OF CANDIDATES.

A CORRESPONDENT writes to call attention again to the hardship suffered by candidates for medical appointments in public institutions declared to be vacant, but for which a particular candidate has already been practically selected by the election committee. He suggests that the selected candidates should in all cases receive a reasonable honorarium to cover expenses.

THE PASSAGE OF THE CATHETER IN PROSTATIC DISEASE.

DR. WILLIAM DONOVAN (Erdington) writes: Permit me to answer Dr. J. M. F. Miles's letter in the BRITISH MEDICAL JOURNAL of March 10th. I hold a certificate of having acted as dresser to the late Dr. Tanner in 1867 and 1868, and I never heard the method in question described by him. I have looked through all the surgical textbooks available, and find no mention of it. I think Dr. Miles must either be in error or have failed to grasp the difference between the method in question and that heretofore recommended. If Dr. Miles has practised this method of passing the catheter in prostatic disease for "twenty-five years past," I think it is to be regretted he did not give the profession the benefit of his experience.

RECURRENCE OR RELAPSE.

DR. J. DARLEY WYNNE (Clonmel, Ireland) writes: I have no doubt in my own mind that relapses do occasionally occur in scarlet fever, though very little mention of them can be found in the ordinary textbooks. Thus Fagge says: "Relapses are seldom or never seen"; and Ashby and Wright state that they are said to occur, but that in the cases they have observed there has been considerable doubt as to the correctness of the original diagnosis. I suppose no one who has been in charge of a fever hospital will have failed to note many instances in which the fever has developed after a few days' stay in hospital, no symptoms having been observed on admission. These cases are, of course, in no sense relapses, but what must inevitably occur if due care is not taken as to the original diagnosis; and I fear if a record of them were published, it would not be flattering to the diagnostic powers of the medical profession.

During my term of office as medical officer to the Nottingham Isolation Hospital, I collected notes of 600 consecutive cases of scarlet fever, among which there were 10 cases of recurrence of rash with rise of temperature, sore throat, and other typical scarlatinal symptoms. These all occurred during the period of desquamation, namely, 2 in the second week, 4 in the third week, 2 in the fourth, 1 in the sixth, and 1 in the seventh week of the original attack. Most of these relapses pursued a mild course, and occurred in patients in whom the original attack was mild, but albuminuria occurred in 3 of them. In one case I had the opportunity of observing the whole course of the disease. The child was sent into hospital as a case of scarlet fever but there was no rash. This appeared, however, on the seventh day after his admission. The fever pursued a mild course, and the skin peeled as usual; but on the twenty sixth day, while desquamation was going on, a fresh rash occurred, with a slight sore throat, and temperature 101·2°. This attack passed off in a few days, but convalescence was somewhat delayed.

The proportion of relapses in my cases will probably be considered excessive, but I have carefully excluded all those in which there was any doubt as to the fact of the patient being originally the subject of scarlet fever, and must either conclude that my experience has been exceptional, or that relapses from their very mildness are frequently passed over, though probably others who have been in charge of fever hospitals may have had a similar experience to mine.

FEMALE MEDICAL PRACTITIONERS IN JAPAN.

WITH reference to a paragraph in the BRITISH MEDICAL JOURNAL of December 16th, 1893, in which Miss Suganiana was mentioned as being the first female practitioner in the dominions of the Mikado, Dr. Thomas L. Stedman, of New York, writes to say that a Chinese lady, Miss Y. May Kin, a graduate of the New York Medical School for Women, has been in practice at Kobe, Japan, since 1887 or 1888. Miss May Kin was a ward of Dr. McCartee, for many years a medical missionary in China, and now resident in Japan.

THE MEDICAL PROFESSION IN THE UNITED STATES.

ACCORDING to a list recently issued in New York the total number of medical practitioners in the United States is 118,453. They are distributed among the several States as follows: New York, 11,171; Pennsylvania, 9,310; Ohio, 7,571; Illinois, 8,002; Missouri, 6,178; Texas, 5,288; Kentucky, 4,063; Tennessee, 4,379; Massachusetts, 4,457; Michigan, 4,057; Iowa, 4,434; Kansas, 3,089; Arkansas, 2,586; Maryland, 2,120; Virginia, 2,806; West Virginia, 1,061; Georgia, 2,725; Maine, 1,222; New Hampshire, 720; Vermont, 696; Rhode Island, 654; Connecticut, 1,267; New Jersey, 2,030; Delaware, 232; Indiana, 5,006; Wisconsin, 1,966; Minnesota, 1,584; Nebraska, 1,730; California, 3,300; Colorado, 1,165; Nevada, 66; Oregon, 909; District of Columbia, 831; North Carolina, 1,798; South Carolina, 1,422; Florida, 789; Alabama, 2,117; Mississippi, 1,782; Louisiana, 1,412; Arizona Territory, 108; Idaho, 176; Indian [illegible], 11; Montana, 299; New Mexico Territory, 147; Utah Territory, 273; Washington, 910; Wyoming, 75; N. Dakota, 272; S. Dakota, 150; and Oklahoma, 267.

LETTERS, COMMUNICATIONS, ETC., have been received from:

(A) Messrs. R. Anderson and Co., London; Mr. G. Armstrong, London; Dr. Adam, London; A.M.S. (B) O. A. Browne, M.B., London; Dr. G. A. Bannatyne, Bath; Dr. J. Brown, Bacup; Mr. J. B. Berry, Ramsgate; Dr. W. C. Beatley, Newcastle-on-Tyne; Mr. W. Berry, Wigan; Mr. H. Bonner, Bury St. Edmunds; Dr. W. Brown, Bristol; Mr. E. C. Barnes, London; Mr. L. A. Bidwell, London; Mr. T. A. Bennett, London; Mr. A. S. Barling, Lancaster; Mr. C. Blaker, Brisbane; Dr. J. Barr, Liverpool. (C) Mr. L. J. G. Carré, London; Mr. E. G. Cadland, New Amsterdam; Dr. H. Collier, Great Yarmouth; Dr. C. H. Cattle, Nottingham; Dr. H. Crutchley, Alsager; Dr. W. Child, London; Mr. C. Campbell, Saddleworth; Dr. J. S. Cameron, London; Cork Eye, Ear, and Throat Hospital, The Secretary of the, Cork; Dr. C. Creighton, London; Dr. W. A. Carline, Lincoln; Chelsea Hospital for Women, The Secretary of the, London; Mr. E. Carnall, London; Messrs. C. J. Clay and Co., London. (D) Mr. J. D. Davies, Ryde; Dr. G. Dabbs, Shanklin; Mr. G. Dickinson, Leamington; Dr. W. Donovan, Erdington; E. H. Douty, M.B., Cambridge; Mr. N. F. Davey, Abergavenny; Dr. D. S. Davies, Clifton. (E) Ethies; Epidemiological Society, The Secretary of the, London. (F) Dr. E. L. Fox, Plymouth; Mr. A. Fournet, London; Dr. T. Fisher, Clifton; Mr. E. P. Furber, Oxted. (G) E. Gray, M.B., London; Mr. A. Gibbins, Wigan; Mr. J. F. Gummow, Wrexham; Mr. J. A. Gray, London; Messrs. Goodman and Young, London; Mr. F. G. Gade, Christiania. (H) Mr. H. L. Hoops, Eccles; A. H. Holmes, M.B., Steeple Aston; Mr. R. J. Hughes, Cromer; H. B.; W. Hardman, M.B., Blackpool; Dr. J. A. Hutchinson, Northallerton; Mr. A. Hands, Wolverhampton. (I) Inquirer; Insomnia. (J) B. B. Joll, M.B., London; Mr. E. Jackson, Manchester; Mr. C. A. James, London; Dr. J. Jenkyns, Belize; R. Johnson, M.B., London. (K) Dr. J. Kerr, Bradford; Mr. G. C. Karop, London; Dr. T. N. Kelynack, Manchester; Messrs. J. King and Co., Liverpool. (L) Mr. J. J. Langston, Grantham; Mr. W. W. Lake, Guildford; Dr. W. Lattey, Leamington; J. Logan, M.B., Glasgow; Mr. P. J. Le Riche, Worthing; Mr. C. A. Lumley, Transkei; Dr. E. Lloyd, Rhyl; Mr. J. N. Langley, Cambridge; Mr. C. H. Leet, Liverpool; Mr. G. R. Lawless, Sligo; Liquor Carnis Company, Tring. (M) Member B.M.A.; Mr. G. H. Mapleson, London; E. C. Moore, M.B., Edinburgh; Dr. C. Müller, Buda-Pesth; Medicus; J. F. MacGregor, M.B., Oban; Medical Journalist; Mr. N. H. Mason, London; Microscope. (N) Nemo; Nottingham Medico-Chirurgical Society, The Secretary of the, Nottingham. (O) Dr. B. O'Connor, London; One who doesn't Know; Observer. (P) Mr. E. Pocklington, London; Dr. L. C. Parkes, London; Dr. R. Paterson, Cardiff; Mr. E. Poole, Dudley; Dr. A. Paterson, Bridge of Allan. (R) Mr. J. Rouse, London; J. C. R. Richardson, M.B., Staplehurst; Royal Microscopical Society, The Secretary of the, London; Dr. T. H. Redwood, Rhymney; Dr. A. M. T. Rattray, Portobello; Dr. T. L. Raven, Broadstairs. (S) Sir E. H. Sieveking, London; Mr. J. Smith, Bangor; Dr. E. Snape, London; Surgeon-Major A.M.S.; Dr. A. Stewart, Pendleton; Surgeon-Lieutenant-Colonel; Spes; Surgeon-General; S. E. W. (T) Mr. P. T. Tolputt, Northwich; T. L. S; Mr. T. Turner, Stamford; Mr. Lawson Tait, Birmingham. (V) A Victim. (W) Mr. R. S. Wadsworth, Belfast; Mr. E. Williams, Llangefni; Mr. F. F. White, Coventry; Mr. C. H. Whiteford, Coventry; Messrs. G. S. Woodthorpe and Co. Portsmouth; W. R. T.; Mr. O. G. Watkin, Manchester; Dr. A. G. Welsford, Dover; W. R.; Mr. J. P. Wightman, Rawdon; Mr. T. R. Wolfe, Melbourne. (Y) Yorks; etc.

BOOKS, ETC., RECEIVED.

The Student's Introductory Handbook of Systematic Botany. By J. W. Oliver. London: Blackie and Son. 1891. 4s. 6d.

Burdett's Hospital and Charities 1894. London: Scientific Press, Limited. 5s.

English Tenant Farmers on the Agricultural Resources of Canada. Part I. Published by the authority of the Government of Canada. 1894.

The Student's Handbook of Medicine and Therapeutics. By Alex. Wheeler. Edinburgh: E. and S. Livingstone. 1894. 10s. 6d.

Catechism Series: Physiology. Part III. Edinburgh: E. and S. Livingstone. 1s.

The Rectum and Anus: their Diseases and Treatment. By C. B. Ball. Second Edition. London: Cassell and Co. 1894. 9s.

Handbuch der speciellen Therapie innerer Krankheiten. In sechs Bänden. Herausgegeben von Dr. F. Penzoldt und Dr. R. Stintzing, Erste und Zweite Leiferung. Jena: Gustav Fischer. 1894.

Clinical Manual for the Study of Diseases of the Throat. By J. B. Downie, M.B. Glasgow: J. Maclehose and Sons. 1894.

Medicinische Bibliothek für praktische Aerzte. Nr. 31-33. Asepsis in der Gynäkologie und Geburtshülfe. Von Dr. M. Sanger und Dr. W. Odenthal. Leipzig: C. G. Naumann. M. 1.50.

*** In forwarding books the publishers are requested to state the selling prices.

A CLINICAL LECTURE
ON A
CASE OF PSORIASIS TREATED BY THYROID EXTRACT.

Delivered at the Edinburgh Royal Infirmary.

By BYROM BRAMWELL, M.D., F.R.C.P.Edin.,
Assistant Physician to the Edinburgh Royal Infirmary.

This patient, who has just recovered from a severe and obstinate attack of psoriasis, was admitted into Ward 5A on September 7th, 1893.

The disease had been in existence for three months before the patient came under my care, and for five or six weeks a variety of internal and external remedies had been employed in one of the other wards of the hospital without any alteration or improvement having taken place.

For the first week after her admission to my ward the patient was confined to bed, no treatment of any kind being employed, the object being to allow us to form an opinion as to the natural condition, so to speak, of the case.

On September 13th Brady and Martin's extract of thyroid—5 minims once daily—was prescribed. The dose was increased to 10 minims on September 20th, to 15 minims on September 27th, and to 20 minims on October 5th.

On October 14th 1 drachm of Duncan and Flockhart's extract was substituted for Brady and Martin's preparation, which had run short. This dose was rapidly increased to 5 drachms, corresponding to five-eighths of a thyroid gland daily. This dose was continued from November 8th to 25th.

On November 25th Burroughs and Wellcome's tabloids were given instead of Duncan and Flockhart's liquid preparation, the dose being rapidly increased from 1 to 5 tabloids. From December 13th to 28th the patient took 5 tabloids (=to $\frac{5}{8}$ of a gland) each day.

On December 28th the thyroid treatment was suspended because of an attack of influenza. It was resumed again on January 2nd. The eruption had entirely disappeared on January 14th.

The following notes show the result of the treatment: September 14th (the day after the commencement of the treatment). There is no change in the condition of the eruption. September 19th. Some scales are beginning to separate on the back and abdomen; there is no change on the arms and legs. September 20th. On the back and arms the eruption is less scaly and red; on the head the crusts are breaking and cracking, and look as if they are about to be detached; there is no change on the legs. September 27th. The eruption is less extensive, but the improvement is slow. October 5th. Still improving, more especially on the back; there is little change on the limbs; the scalp is much clearer. October 14th. The improvement still continues, but it is very slow. (Duncan and Flockhart's extract commenced.) October 20th. Eruption much *in statu quo*. October 27th. No improvement since last note. The left arm was encased in cotton wool. The photographs represented in Figs. 1 and 2 were taken on this day.

My reason for covering up the arm was this. A short time previously I had been asked by Mr. Caird to see a patient who was suffering from a very severe psoriasis of some thirteen years' duration. The eruption was diffused, not in the form of isolated patches, but uniformly over almost the entire body. The patient was admitted to the Infirmary on account of a fracture of the leg. Thinking that the case would be a good test case for the thyroid treatment, Mr. Caird kindly asked me to see it with him. I entirely agreed with his opinion. The thyroid treatment was accordingly commenced forthwith, thirty drops of Brady and Martin's liquid extract being given to the patient each day. In the course of a fortnight a marked improvement had taken place in the condition of the skin, a profuse desquamation of small scales being produced. About this time the leg was examined in the ordinary course of surgical procedure, and a very curious thing—and this is the point I wish you to note—was observed. On removing the splints, the whole of the skin on the front of the leg became detached with the cotton wool in the form of a large scale; it measured 8 inches in length, by $4\frac{1}{2}$ inches at its broadest part.

It occurred to me that it would be worth while trying whether the detachment of the scales in other cases of psoriasis might not be hastened by the same procedure. This girl's arm was therefore covered up, as shown in photograph 1, first with ordinary cotton wool, and then with salicylic cotton wool. The experiment was not a success. On November 17th, when the salicylic cotton was removed, the uncovered arm looked the better of the two (see Fig. 3). The arm, which had been protected from the atmosphere, was thickly covered with dense white scales, *which were loose and quite easily detached*. The photograph represented in Fig. 3 shows the appearance.

The cotton wool was not reapplied; and in the course of a few days both arms were practically in the same condition, the loose scales on the left arm having become detached.

The only effect produced by covering up the arm seemed to be the retention of the scales. On the uncovered arm the scales were detached as soon as they became loose: on the covered arm they were retained. Consequently, when the cotton wool was removed at the end of three weeks, the left arm appeared to be worse than the right.

November 20th. Milk diet was to-day ordered, and a dose of cascara each night prescribed, as the bowels have of late been constipated.

November 25th. There has been little or no improvement since last note. On the head and face the disease is worse, a new crop of scales having developed during the past month, namely, during the time that the patient was taking the dilute liquid extract. (I am strongly inclined to think that the arrested improvement was due to the inefficiency of this diluted extract. I shall refer to this point again presently.) Tabloids to be substituted for the liquid extract.

November 27th. The milk diet was discontinued, as the patient says that she is very hungry, and that it does not satisfy her. To have convalescent diet: fish, chicken, etc., but no butcher's meat.

December 3rd. A marked improvement has occurred since the tabloids were commenced; the scales of eruption are being detached from the back, arms, and front of the trunk.

December 10th. The improvement continues. All parts of the body look much better.

December 17th. Rapidly improving.

December 24th. Face, back and front of the trunk almost clear; arms greatly improved; legs also much better.

December 29th. The patient feels very sleepy, and complains of headache and sore throat. The tongue is furred; the temperature 101°: the throat and pharynx are red and injected. The febrile attack was diagnosed as influenza; there have been several cases in the ward. The thyroid treatment was discontinued, and three grains of quinine with five grains salicylate of soda every four hours were prescribed. The occurrence of the influenza is unfortunate, for the skin disease is almost well.

December 31st. The attack of influenza has been a slight one; the temperature is to-day normal; the patient feels weak, but otherwise well.

January 2nd. The thyroid treatment was resumed, 5 tabloids per diem. On this day I had the pleasure of showing this and some other patients who were under the thyroid treatment to Drs. Crocker, Allan Jamieson, and Norman Walker. The back, face, arms, and front of the trunk were practically clear. The head was still thickly covered with dry, mortar-like crusts, but they were loose; the scalp underneath was quite clear and healthy. The legs are still covered with copious small scaly patches. Dr. Crocker remarked that local treatment would very rapidly clear them off.

January 14th The face, back, front of the trunk and arms have been quite clear for the past week, and the legs are now free from scales. On the arms and legs the skin is quite smooth and healthy, but pigmented at those places where the eruption previously existed.

In this, as in the first two cases in which I tried the remedy, not only did the eruption disappear, but the skin was left in a beautifully soft and healthy condition. On January 17th the patient was shown to the Medico-Chirurgical Society. On January 20th the photographs, which are reproduced in Figs. 4 and 5, were taken.

The final result in this case has been very satisfactory. The cure must, I think, be chiefly attributed to the thyroid treatment. The case was an obstinate one, and the improvement was effected much more slowly than in some of the other cases in which I have employed the remedy. A change for the better was indeed noticed almost immediately after the thyroid treatment was commenced, but the improvement during the first month of the treatment, during the time that the patient was taking moderate doses of Brady and Martin's liquid extract, was not great. During the next six weeks (Duncan and Flockhart's more dilute extract) there was no improvement: in fact, a fresh crop of eruption appeared on the scalp. The patient was then placed on milk diet: after four days the milk diet was discontinued, and convalescent diet, a daily dose of cascara and the thyroid tabloids were prescribed. From that date a very marked and rapid improvement occurred, and in the course of a month the patient was practically well.

It is, of course, impossible to say definitely and positively how much of the success ought to be attributed to the change in diet and to the careful regulation of the bowels, and how much to the thyroid treatment. All three were probably effective, but the chief credit must undoubtedly, I think, be given to the thyroid treatment. Although in some cases a psoriasis disappears after a change of diet, such a result is quite exceptional. In this very obstinate case the change of

diet and the regulation of the bowels probably helped the treatment, and enabled the thyroid extract to take effect. In the course of a month the cure was practically complete, no local remedies of any kind having from first to last been applied to the surface of the skin.

In this case the solid thyroid tabloids proved more efficacious than the liquid extracts, and the strong extract more efficacious than the more dilute extract. I have had the same experience in other cases. I am disposed to think that the solid extract in the form of tabloids is the most effective and reliable preparation which has as yet been produced.[2] I am inclined to think that the active principle is apt to become weakened and deteriorated in the liquid extracts, and that the more diluted the liquid extract the more rapidly does this deterioration take place.

I was induced, as I stated in my previous paper in the BRITISH MEDICAL JOURNAL of October 28th, 1893, to try the thyroid treatment in psoriasis because I had noticed that in some cases of myxœdema a very marked desquamation of the skin occurs during the process of cure. In the first case of myxœdema which I treated by thyroid feeding the skin peeled off from the hands and feet, just as it does after a severe attack of scarlet fever. The very profuse desquamation which took place in that case (see Fig. 6) was, I believe, due to the large doses of the fresh thyroid gland which were employed. Desquamation has occurred in every case of myxœdema and sporadic cretinism (see Fig. 7), in which I have had the opportunity of carefully observing the effects of the thyroid treatment. It has never been so profuse as it was in my first case; in fact, in most of the subsequent cases it has had to be looked for; but it has always been quite noticeable, when looked for, on the heels.



Fig. 2.—The case of psoriasis described in the text. Back view, showing the condition on October 27th.

The remedy is of undoubted value not only in psoriasis but also in lupus and ichthyosis, possibly also in exfoliative dermatitis, and perhaps in other varieties of skin disease as well. Fortunately the first case of psoriasis in which I employed the remedy improved straight away in a most remarkable way. I say this was fortunate, for, as I shall afterwards have to tell you, some cases of psoriasis do not seem to be beneficially affected by the remedy, and, had I chanced to begin with one of them, I might perhaps have hesitated to continue the trial. My first case of psoriasis was exhibited at a meeting of the Medico-Chirurgical Society of Edinburgh, which was held on February 16th, 1893, for the purpose of discussing the subject of myxœdema.[3] Dr. Arthur Davies, who happened to be present, was so much struck with the result which had been produced in the course of a few days' treatment that he determined to try the remedy when he got back to London. He has since published some cases confirmatory of my results.

The photographs showing the results in my two first cases were published in the BRITISH MEDICAL JOURNAL of October 28th, 1893. When I last saw these patients (six months after their discharge from hospital) they were both absolutely well. In both cases the skin of the entire body was beautifully soft and healthy, like that of a baby. In the first patient one little spot of psoriasis, the size of half a pea, had developed on the left elbow; it appeared shortly after the patient's discharge from hospital, but it has remained stationary in size, and no new patches have developed since.

The three cases in which the result has been so successful have been treated in hospital. I am disposed to think that confining the patients to bed or to a hospital ward—that is to say, to an equable temperature—is, perhaps, an important adjunct to the

[2] Solid tabloids are made by several chemists—Messrs. Duncan and Flockhart; Allen and Hanburys; Burroughs, Wellcome and Co.; etc.

[3] *Edinburgh Medical Journal*, May, 1893, p. 1052.

treatment. Some slight cases of psoriasis which I have treated as out-patients have not improved, or have for a time improved and again relapsed. It is possible, I think, that one reason why out-patients do not improve is that they go about and expose themselves to changes in temperature and weather, and that that, perhaps, to some extent interferes with the therapeutic effect of the remedy. But that is certainly not the only explanation of the failures: for in three cases which I have treated in hospital the remedy did not effect a cure. One of these, the third case reported in the British Medical Journal of October 28th, 1893, improved remarkably for a time, and then relapsed. Another, a comparatively slight case, did not seem to derive any material benefit from the treatment.



Fig. 1.—The case of psoriasis described in the text. Front view, showing the condition on October 27th.

I do not say that thyroid extract is a specific in all cases of psoriasis, but I do deliberately say that it is a most efficacious remedy in some cases of the disease. A man who claims to obtain therapeutic results, which the subsequent experience of independent observers fails to confirm, necessarily and deservedly loses credit and comes to be looked upon as an untrustworthy observer. I have no wish to place myself in that position. My experience enables me to say definitely that some cases of psoriasis can be cured by thyroid extract, and by thyroid extract given alone. In all of the cases in which I have employed the remedy, absolutely nothing has been applied to the skin. All the cases which I have published have been treated in a public hospital, and closely watched by many independent observers. In the first two cases no change was made in the dietary. In the



Fig. 3.—The case of psoriasis described in the text, showing the condition of the left arm on November 17th, after it had been covered up for three weeks in salicylic wool.

case which I have brought before your notice to-day a change in diet was made before the improvement commenced. It is probable, I think, that that change may in some degree have helped the treatment, but for the reasons I have already given you I believe the successful result must be chiefly attributed to the thyroid treatment.

I have some other cases of psoriasis under observation, both as out-patients and in private practice. In some of them the treatment has been successful, but I do not propose to enter into details regarding all of these cases on the present occasion. The results in every case in which I have

employed the remedy, whether successful or the reverse, will be published in due course. I repeat that, as the result of my own observation, I am disposed to think that in some cases of psoriasis the thyroid extract exerts such a rapid and beneficial effect, that, *for them*, it may without any exaggeration be termed a specific, but that in other cases the effect is comparatively slight, and that in some cases the remedy seems to be useless. But whether the last conclusion is correct or not, I unhesitatingly affirm that thyroid extract is a



Fig. 4.—The case of psoriasis described in the text. Front view showing the condition on January 20th.

most valuable addition to our means of treating psoriasis. I fancy that the quickest way of curing most cases of psoriasis would be:—to confine the patients to an equable temperature, either in their own homes or in the wards of a hospital: to give them a milk, fish, chicken diet (that is, a diet from which sweets and red meats are excluded); to regulate carefully the condition of the bowels: to apply locally some of the external remedies which experience has shown to be useful in the treatment of the disease: and to administer internally the thyroid extract or, preferably, thyroid tabloids, in as full doses as the peculiarities of each case will allow. The last part of the treatment is, perhaps, the most important.

In the cases which I have published nothing has been applied externally, for the simple reason that I am testing a new remedy, and I do not want to complicate my experiments. My object has been to determine whether the thyroid extract exerts a beneficial influence upon psoriasis and other skin diseases. Now, if this is so, if thyroid extract can cure some severe cases of psoriasis without any external application, it is only reasonable to suppose that it will facilitate and hasten the cure of the disease when combined



Fig. 5.—The case of psoriasis described in the text. Back view showing the condition on January 20th.

with local treatment and external remedies which experience has shown to be beneficial. In other words, cases which do not yield to internal treatment alone, and cases which do not yield to external treatment alone, will be more quickly cured by the combined use of thyroid treatment internally and local remedies externally than by either method of treatment separately. I think it is quite possible that in some of the cases which have been reported, in which a speedy cure was effected by external or other internal remedies (such as arsenic) after the thyroid treatment had apparently failed, the preliminary course of thyroid extract

may have paved the way, as it were, for the action of other remedies, and in reality facilitated the cure.

In what proportion of cases of psoriasis the thyroid extract will cure the disease without the aid of any external applications I am not prepared to say. My observations are at present quite insufficient to allow of any reliable statement on this point.

A number of observers in different parts of the world are giving the treatment a trial. I have received a large number of inquiries regarding the thyroid treatment from medical men, not only in this country, but abroad. Some observers have already published their results. Some have been successful with the remedy, some have not. Dr. Abraham, who was one of the Secretaries to the Dermatological Section of the British Medical Association, in which I read a paper on the subject at the Newcastle meeting, has not had much success, but his patients were out-patients, and, from the statement which he has published, I am inclined to doubt whether he employed the remedy with sufficient perseverance and in sufficiently large doses to get the best results.



Fig. 6.—Foot from a case of myxœdema under thyroid treatment, showing desquamation.



Fig. 7.—Feet from a case of sporadic cretinism under thyroid treatment, showing desquamation on the heels.

The case which I now record shows that some cases only yield to the remedy after large doses have been given for long periods of time. From the observation of this and other cases, I have come to the conclusion that the best method of giving the remedy in cases of skin disease is to give as large doses as each individual patient can bear. Some patients can take much larger doses than others. The problem is to determine, in each individual case, the maximum dose of thyroid extract (in the form of liquid or, preferably, I think, in the form of tabloids) that the patient can take without being upset. The best therapeutic guide to the dose which each patient can take is, I think, the condition of the pulse. In cases of myxœdema and sporadic cretinism thyroid extract raises the temperature and pulse, and, when given in large doses, is apt to produce profound depression, headache, aching pains in various parts of the body, nausea, vomiting, gastro-intestinal disturbance, and diarrhœa. In healthy persons, and in patients who are suffering from psoriasis and many other skin diseases (lupus, ichthyosis, etc.), larger doses can usually be given (than in myxœdema) without producing any bad effects. Many patients who are suffering from skin diseases can take a quarter of a gland daily for long periods of time. A larger dose than this usually raises the pulse above 100 or 110, and is apt to produce headache, nausea, gastro-intestinal disturbance, etc. In a remarkable case of ichthyosis which is in the ward, and about which I shall have a good deal to say on some future occasion, large vesicles and inflammatory patches were produced on the surface of the body. But in that case a very large dose was given (60 minims of Brady and Martin's extract, and 4 of Burroughs, Wellcome, and Co.'s tabloids every day). In that case 60 minims of Brady and Martin's extract produced no increase in the pulse rate; it was not until 4 tabloids were added to the extract that the pulse rose in frequency, the stomach became upset, and the inflammatory lesions in the skin were developed. I would advise you, then, in cases of psoriasis and other skin diseases, to take the pulse as your guide, to begin with small doses, and to increase gradually the dose until the pulse reaches 100 or 110, and then to stop. A larger dose than this is apt to upset the patient (that is, to cause headache, gastro-intestinal catarrh, vomiting, suppurative lesions in the skin, etc). If headache, nausea, and vomiting or other untoward symptoms are produced, the dose should be reduced immediately, or the remedy suspended altogether for a few days. I have not found that it is necessary to decrease the dose when an increase in the pulse rate is the only manifestation of thyroidism, Provided that the patient feels quite well—that the appetite keeps good, and the tongue remains clean, the remedy may, so far as my present experience enables me to judge, be continued, even although the pulse rate is 100 or 110.

Having found by experiment, as it were, the maximum dose which each individual patient can take, the remedy should be persistently given for long periods of time. In cases of psoriasis and other forms of skin disease, it is premature, I think, to conclude that the treatment is a failure, unless the maximum dose which the patient can take has been given for at least a couple of months; and in some skin diseases — lupus, for example—a much longer period than this may be required to produce any very decided effect in the way of cure. In one of the cases of lupus which we have in the wards, the patient has been almost continuously under the thyroid treatment, either in or out of hospital, for twelve months.

In some cases of psoriasis there is no improvement until distinct symptoms of thyroidism are produced; a rapid and continuous improvement then results. (I append at the end of these remarks the notes of a case in point.) This is a very important point; it is only what one might expect, for the full therapeutic effect of many remedies is not observed until their physiological effects are produced.

I expect that in a considerable percentage of cases of psoriasis a marked improvement, and in many cases a complete cure, will take place, provided that the remedy is given in the way I have just described—the maximum quantity that the patient can bear, administered every day persistently for a couple of months or longer, the patient being confined to bed, or, at all events, to an equable temperature during the course of treatment. As I have already stated it is premature to conclude that the remedy is a failure until the therapeutic action of the drug (thyroidism) is produced. It is impossible that the cures which I have obtained can be mere coincidences. The immediate improvement which is produced in some cases conclusively shows that the thyroid extract exerts a most marked beneficial effect in some cases of the disease; but, as I have already said, I do not claim that this beneficial influence is produced in all cases. The different effects which the thyroid extract produces in different cases of psoriasis will perhaps be a means of enlarging our knowledge of the disease. There must be some explanation of the fact that, in some cases, an immediate and markedly beneficial effect is produced, while in others there is little or no improvement; indeed, in some cases, the disease is said to have been aggravated by the treatment, for in some of the cases which have been reported the eruption extended and increased after the administration of the remedy. Whether these differences are due to actual differences in the character of the disease, or merely to differences in the soil (the constitution and temperament of different patients) on which the disease (the psoriasis) is, as it were, engrafted, I am not at present present prepared to say. I suspect that in some cases, in which the eruption extended and the disease appeared to be aggravated by the treatment, the extension was only the beginning of a cure; and that, if the remedy had been persisted with, improvement and cure would probably have followed. One effect of the remedy seems to be to quicken the functional activity of the skin. In some cases of psoriasis large flakes of skin are desquamated during the process of cure. It is, I think, quite possible that in some cases the first effect of this increased nutritive activity of the skin is the enlargement of the patches—in other words, a temporary, but merely apparent, increase in the severity of the disease. So far as my present experience enables me to judge, actively developing cases are much less amenable to the treatment than old standing ones in which the eruption is stationary.

I have said that different individuals react to the thyroid extract in a very different way; some persons are exceedingly susceptible to the drug. In a case of myxœdema which I had repeated opportunities of seeing with Dr. David Menzies, one-eighth of a tabloid—equivalent to $\frac{1}{1\frac{1}{2}\frac{1}{8}}$ of a gland—produced a profound reaction—a rise in temperature to the extent of a degree or a degree and a-half, increased rapidity of the pulse, flushing of the face, profuse sweating, and great prostration. This result was repeatedly observed within half an hour of the administration of the remedy. It was so remarkable, that on different occasions the dose of thyroid ($\frac{1}{1\frac{1}{2}\frac{1}{8}}$ of a gland) was given to the patient without her knowledge with exactly the same result. The remarkable idiosyncrasy which this patient exhibited is fortunately quite exceptional; but it shows that large doses of the remedy should not be rashly prescribed. Dr. Menzies told me that he believed a large dose would have killed this patient, and I am disposed to agree with him.

NOTE.—The thyroid treatment of lupus and ichthyosis will be considered in future communications.

ADDENDUM.

Notes of a Case of Chronic Psoriasis Cured by the Thyroid Treatment; the Improvement being coincident with the production of Thyroidism—the Physiological Effect of the Remedy.—Mrs. A., aged 51, was sent to me by Dr. Lennox, of Dundee, suffering from a severe psoriasis of three and a half years' duration. The eruption was more or less diffused over the whole body, the face, palms, and soles being, however, spared. It consisted of scaly patches of a deep purple-brown colour. The patches varied in size from a sixpence to the size of the hand, or even larger, the largest being situated on the sacrum and adjacent parts of the buttocks, the sides of the abdomen, and the calf of the right leg.

The patient had been treated by several different medical men, and by a variety of external applications and internal remedies (see Dr. Lennox's letter which follows). The general condition of the patient was good. She was occasionally troubled with rheumatism, but, so far as she knew, was not gouty. There was no hereditary tendency to gout, psoriasis, or other constitutional disease in her family. The disease had appeared after the cessation of menstruation.

I wrote to Dr. Lennox advising that a thorough trial should be given to the thyroid treatment. At the same time, I expressed a doubt whether it would be efficacious in this particular case. The long duration of the disease (three and a-half years), the obstinate way in which it had resisted all forms of treatment, and the special characters of the eruption (dark purple colour, dry, with few scales), led me to think that the result might be unfavourable. The character of the eruption closely resembled that which was present in the third case which I have recorded in the BRITISH MEDICAL JOURNAL of October 28th, 1893. In that case, although the thyroid treatment for a time produced a marked improvement, the disease ultimately relapsed.

On November 9th, 1893, Dr. Lennox wrote me to say that the treatment had not as yet produced any substantial effect in the way of cure, but that the redness and itching were distinctly less. I replied advising him to increase the dose, and give the remedy a further trial.

I heard no more of the case until the end of January, when I had the opportunity of seeing the patient with Dr. Lennox, at Dundee. The eruption had then entirely disappeared. The result was entirely due to the thyroid treatment.

The following letter which Dr. Lennox has kindly sent me gives full details with regard to the history and progress of the case:

"144, Nethergate, Dundee.
"January 24th, 1894.

"DEAR DR. BRAMWELL,—In accordance with my promise made when you called the other day, I give you a summary of my notes on a case of psoriasis treated by thyroid gland preparations. The first appearance of psoriasis in Mrs. A. was in May, 1889. At that time papules, with scales on a hyperæmic base, developed on the olecranon aspect of the elbows and on the extensor aspect of the legs. Gradually but continuously the disease extended both in severity and extent. One year and a-half ago the trunk and scalp were invaded; and at the time of being placed under thyroid treatment the whole body was affected, with the exception of the face, palms, and soles. At first the papules were distinct, but soon they became in many place confluent, forming patches of greater or less extent over the extent over the skin. The two largest patches were over the front, outer, and posterior aspect of the middle of the right leg and over the sacrum. The former measured 7 inches vertically (that is, in the axis of the limb) and $7\frac{1}{2}$ inches in the circumference of the limb; the latter 8 inches vertically and $7\frac{1}{2}$ inches horizontally. Under the patch on on the leg slight varicosity of the veins could be observed. The scales, at first like tissue paper, became latterly a thick scruff, and the subjacent hyperæmia passed from a bright red to reddish brown. Itching was a constant and troublesome symptom, causing much distress and loss of sleep.

"The family and personal histories of the patient indicated a tendency to rheumatism, but no gout, nor has another case of psoriasis been known in the family, although dryness and itching of the skin is not uncommon. Apart from slight manifestations of rheumatism, the patient's health has been always good. All the organs of the body are healthy. The menopause had just been completed shortly before the psoriasis appeared. The patient, although stout, is very temperate and careful of her diet, and has always strictly avoided alcoholic beverages. She attributes her illness to an emotional shock she had in April, 1889, and whatever significance, if any, is to be attached to this, it is certain that during the course of the disease she had been subject to much mental anxiety. A tendency to nervous diarrhœa and an undue susceptibility to the action of neurotic drugs are peculiarities of her temperament, indicating her constitutional condition.

"Since the commencement of her illness medical treatment has been almost constantly persisted in. At first alkaline tonics were given internally and emollient applications used externally. Afterwards, when the disease had become established, preparations of tar were employed, such as ung. picis liquidum, β naphthol, and liquor carbonis detergens. Then, alkaline baths of carbonate of potash were used in conjunction with the application of oleum declinæ. These signally failed, and chrysophanic acid was tried with no better result. Meanwhile arsenic was given internally, and pushed to its full therapeutic effect.

"In September, 1890, Dr. Allan Jamieson, of Edinburgh, was consulted. He recommended washing the parts with Unna's overfatty potash soap, followed by an ointment of chrysarobin, liquor carbonis detergens, and ammoniated mercury, and arsenious acid internally. But the disease continued. During the summer of 1891 Mrs. A. tried a course of waters at Strathpeffer, and again in 1892. Feeling herself no better, she tried Bath in 1893, but without much benefit. After this, mercurial inunctions were persevered with for some time, and an elastic bandage was worn over the affected part of the right leg. And finally, before adopting the thyroid treatment, she had some relief from itching by the local use of carbolic acid and liquor carbonis detergens.

"It was under these circumstances that she was sent to consult you on October 6th, 1893, when you recommended five drops of Brady and Martin's thyroid extract to be taken twice a day, special precautions being observed to obtain fresh supplies. This she did, as reported in my letter of November 8th, increasing the doses up to twenty drops twice daily without much effect. A slight reduction in the hyperæmia and a variable relief of the itching were distinctly noticed. Following your advice in your letter of November 9th, an increase in the dose of thyroid was given. For a fortnight she tried thirty drops twice a day, and then forty drops. Meanwhile she was kept in bed, and some of the patches of psoriasis were painted with collodion. No definite result followed.

"By this time the patient was losing confidence in the treatment, and I was inclined to believe that the therapeutic virtue of the thyroid gland would be better preserved by the process employed in making tabloids than by that in making extracts. Moreover, I was determined to produce thyroidism before finally abandoning this mode of treatment in the case.

"Accordingly, on December 9th, the patient was given four of Burroughs, Wellcome and Co.'s thyroid tabloids. Next day thyroidism was present. The patient was suffering from dyspnœa and palpitation. She was languid and easily fatigued, and her pulse was 103. On the 11th

a single tabloid was given, but, the pulse keeping about 100 and the other symptoms being still marked, the drug was stopped for four days until the pulse had fallen to 80 and the dyspnœa allayed. Two tabloids were then given for two days, the pulse rising to 90. Since that time only one tabloid has been administered each day. During the first fortnight of treatment with the tabloids the patient lost flesh although her appetite never failed, but since then she has entirely regained her usual appearance. The patient was allowed out of bed on December 21st, and has been going about her customary avocations ever since.

"So much with regard to her general condition under the thyroid tabloids; now with regard to the psoriasis. On December 10th, that is to say the day when the thyroidism manifested itself, the itching was greatly reduced. In a day or two the hyperæmia became more dull, and then the scruff, which had always re-formed when it was removed, ceased to reappear. In each patch the same sequence of events took place. The itching was first lost, then the redness, and eventually the scruff. Improvement everywhere has been general and rapid. The smaller spots yielded first and the largest patch has been the last to go. And now only blotches of pigmentation mark the sites of the patches of psoriasis, and these blotches themselves are daily becoming less distinct. The tabloids are still being given.

"I may add that at first the diet in Mrs. A.'s case was restricted to plain food with no condiments, and an injunction was given to partake of animal food sparingly; but during the treatment with the thyroid tabloids ordinary diet was allowed in any proportions the patient thought fit to take. Her appetite was always good.

"I regret that, owing to a natural reluctance on the part of the patient, I am unable to furnish you with photographs or drawings of the case.

"Believe me,
"Faithfully yours,
"D. Lennox."

THE LUMLEIAN LECTURES
ON
HEART INFLAMMATION IN CHILDREN.

Delivered before the Royal College of Physicians.

By OCTAVIUS STURGES, M.D.Cantab., F.R.C.P.,
Senior Physician to the Hospital for Sick Children, Great Ormond Street and to the Westminster Hospital.

III.

Mr. President, Fellows, and Gentlemen,—In the last lecture we were led to consider the service of percussion in estimating the area of cardiac dulness at various ages and in several conditions, together with the manner of the heart's displacement with the gradual increase of pericardial fluid.

The earlier physical signs of endocarditis were then discussed, and the opinion was expressed that these signs, varying widely in various cases, and feebly expressed by words, become significant in their combination and by the comparison of to-day with yesterday. Finally, examples were given both of the sudden and of the gradual development of morbid sounds, mitral murmur occurring not seldom as the sequel, and not the accompaniment, of a child's first rheumatic attack of short duration and no severity. It remains to consider some further signs of endocarditis referable to the right and uninflamed side of the heart; to estimate the nature and frequency of mitral narrowing in the child as compared with the adult: and, in conclusion, to add but a few words on prognosis and treatment.

Endocarditis does not at first, we say, produce regurgitation, or at least does not produce it by any defect on the part of the mitral valve itself. Muscular incompetence and the share in closure belonging to the muscular fibres surrounding the mitral orifice are laid out of the case. Yet, inasmuch as endocarditis concerns the fibrous structure of the left side of the heart and extends to the papillary muscles and their tendinous cords, it is of necessity that this inflammation should produce effects beyond the valve itself. And the effect is this: The muscular weakening of the inflamed left ventricle impedes the onflow of blood and tends to engorgement of the pulmonary vessels. This in its turn reflecting on the right ventricle, as Sibson points out, leads to accumulation of blood therein, which is relieved by tricuspid reflux—what has been called "safety-valve" action. If this be so, it follows that in endocarditis it is not the left and inflamed side of the heart that will give the first note of suffering; it is the right and uninflamed side, and tricuspid murmur is the early signal of inflammation as well as a token of relief.

There are some obvious reasons why this early occurrence of tricuspid murmur should often be overlooked, such as the presence of old valve murmur; the short duration of this sign and the speedy oncoming of a louder mitral murmur to drown it. It is only, therefore, in a first attack of rheumatism, and with the happy chance of early observation, that tricuspid murmur gets noticed. Something also must be allowed for the habitual neglect of the right side of the heart in the affection we are discussing, neglect due to the knowledge that the actual seat of disease is assuredly the left ventricle not the right. Yet with all this allowance, it may still seem that, upon the hypothesis, tricuspid murmur should be met with more often than it is as an early sign of endocarditis.

The explanation is, I think, that there is a concurrent or even a yet earlier effect of endocarditis, namely, disturbed action and rhythm of the heart. However early the transmitted effect of left-sided endocarditis upon the right ventricle, the immediate effect as regards the left ventricle itself must be earlier still. This effect is no other than an irritability of the heart muscle due to the altered relation between the inflamed endocardium and the blood that visits it. Tumultuous action, variability, reduplication of the second sound and altered (lengthened, it may be, or of altered tone, such as I know but cannot put to words), these are joint signs of this irritability. Tricuspid murmur in these circumstances may so soon be followed by mitral as to escape notice. But, given a previously healthy heart, early access to the patient, and, it must be added, due respect for the right ventricle, and care to discriminate between tricuspid and mitral, and there can be no doubt that the sign upon which Sibson laid so much stress is not seldom met with.

H. W., a boy of 11, was admitted to the Westminster Hospital October 24th of last year, having been ill three days with his first attack of rheumatism. Pain was in knees and ankles, and temperature 102°, but there was neither swelling nor redness of any joint, and on the fourth day of the illness, that is a few hours only after admission, the fever left him. After three days' residence the boy seemed well. The area of cardiac dulness was normal, and it was not until the fifth day from the first joint pain (26th) that anything abnormal was noticed of the heart. On that day the rhythm became uneven, and a slight systolic murmur (not blowing) was heard at the ensiform cartilage, less audible at the apex. Pulse was 84 and ill sustained, varying in force, that is to say, remarkably when continuously felt over three or four minutes. A week later (November 6th) the tricuspid murmur was still audible with that rough beginning which some christen presystolic. At the apex the first sound was lengthened and murmurish. It happened with this boy as with the girl Edmunds, previously quoted, that upon repeated experiment the murmur was always lost in the erect posture.

Shortly after this patient, whom we were not able to retain long, a girl of 18 was admitted on the ninth day of her first attack of acute rheumatism. There was pericardial rubbing, and at the ensiform cartilage a distinct systolic (tricuspid) murmur. Both joint pains and pericardial friction quickly disappeared, and on the girl's discharge, after three weeks' residence, a soft apex murmur had taken the place of the rougher tricuspid *bruit*.

A third case might be quoted to the same effect, a boy of 10, in his first attack of rheumatism with some heart pain. At first no cardiac murmur was audible, and the earliest physical sign of valve lesion was again tricuspid in seat and character.

And just now, in the nick of time, comes another boy, aged 12, in the third day of a slight rheumatic attack. A systolic murmur was audible at first at the ensiform cartilage: but after three days' continuance it shifted its place, and became distinctly mitral.

It is true that in practice we cannot afford to depend upon so precarious a sign as tricuspid murmur: true also that the signs we do trust we often fail to describe. Many have laboured at their description from Sibson to Potain, and all have consciously failed: they are to be learnt not from the book, but at the bedside. Thus there are many varieties of first sound, all of them more or less indicative of commencing endocarditis. The prolongation of such sound right up to the second is a precise definition enough. Not so "the accent" which begins it, while the several changes of quality—changes which every student soon learns to recognise for himself—he cannot impart to another. It is knowledge that is not transmissible, but remains each man's secret in

spite of his best efforts to reveal it. Such words as "booming," "rolling," "rattling," and many more, even if they satisfy their authors, hardly suggest to a novice what manner of sound he is to listen for, but presently the sound itself will strike upon his own ear, and become his possession for ever.

While this is true of modified sounds there is less difficulty in describing the precise place and time in the heart's cycle of added sounds; but even this is not to be decided in a moment. In the child especially the exact sequence of sounds and pauses is ill expressed. In timing the heart's acts by the ear it is not always realised that these acts are represented partly by sound and partly by silence, and that defective action is detected as well by the silence being broken as by the sound changed. In the long silence especially—silence which is not rest—in the period, that is, of ventricular diastole, whatever noise intrudes is morbid.

But let the patient be a child, with action rapid and impulse obscure, and it becomes a nice point to decide whether intruding sound is just without or just within the long silence; whether, in other words, such sound coincides with quite the end of diastole or just the beginning of systole, whether it be presystolic or early systolic. These two murmurs concur respectively with distinct acts of the heart, with dilatation and contraction, yet they both join on to the first sound, and in some cases neither is much conducted.

The term "presystolic" is made use of just now with little precision, and when no more is intended than that the first sound begins with an accent. Presystolic murmur is far from common among children; it depends upon structure changes that need time to accomplish. Early systolic murmur, on the other hand, a harsh commencement of the first sound, converting "who" into "through," is commoner with them than with their elders. It will sometimes arise early in the course of rheumatism, and in a first attack of it, presently to disappear, or toning down into a soft blowing systolic murmur.

I have no intention of entering upon any matter of doubt or controversy. All who had the opportunity of listening to Dr. Chapman's Goulstonian Lectures must speak with new deference of the mechanism of heart sounds. But the light-hearted way in which this word "presystolic" is flung about nowadays, coupled with some facts I am about to relate referring to mitral stenosis in children, may, perhaps, excuse a few words upon this subject.

The real presystolic murmur is express, as are the causes on which it depends. It indicates not only difficulty in the auriculo-ventricular passage, but the particular way in which that difficulty is overcome, namely, by the suddenly aroused energy of the auricle towards the end of its work. Arising precisely as such conditions would lead us to expect, within the period of ventricular dilatation, where properly there is silence, this murmur grows and gathers right up to the first sound, which abruptly ends it, extra pulmonary resistance being next indicated by over-distinctness of the second sound at the second left cartilage.

For the production, therefore, of presystolic murmur there needs not merely a contracted mitral orifice, but the service of a hypertrophied auricle. When either of these elements is wanting, whether the narrowed passage or the extra power necessary to overcome it, there is no sound heard within the proper silence, no audible pushing, so to speak, with a view to supplying the ventricle efficiently with the blood upon which it will presently close—no presystolic murmur. And so it is common to meet with extreme constriction of the mitral after death where no presystolic murmur has been audible in life. That is the case, said one of wide experience (Dr. Hilton Fagge), "in the large majority of cases." It is usual also to find the auricle failing temporarily or permanently to perform its extra work, and in that case, inasmuch as every stenosed mitral is also incompetent, presystolic murmur gets replaced by regurgitant murmur.

No murmur is to be called presystolic unless it can be demonstrated that it precedes the impulse. I know that some observers have demurred to this test, asserting that in mitral stenosis it is the right ventricle that initiates con-contraction, the left being a thought behind.[1] But all are agreed as to the difficulty of timing the sound. "It must not be thought," says Dr. Sansom, "that the question can be determined without considerable care and difficulty;" "difficulty so great," said Dr. Stokes, long before, "that we cannot resist altering our opinion from day to day as to which is the first sound and which the second." It must be exceedingly dangerous, therefore, to accept diastolic mitral murmur occurring anywhere within the long silence as being evidence of "a degree" of stenosis.

While the well-marked presystolic murmur, with its thrill, gathering force, sudden end, and accentuated pulmonary second, are reliable signs of notable mitral narrowing, we cannot trace by physical means the successive degrees of this change or watch the progress of stenosis from little to much.

Now, as a matter of fact, it can be shown that the conditions necessary for the production of presystolic murmur are not often met with in children. The *post-mortem* experience of eleven years at the Hospital for Sick Children supplies, so far as I can find, but a single example of "button-hole" contraction of the mitral valve; and this one, a boy of 9 with cellulitis, was not known to have had rheumatism. In that connection there are but two cases of marked (not "button-hole") mitral narrowing; one of these had and one had not presystolic murmur in life. "Slight" stenosis, with what was named presystolic murmur, was possibly present in five, not all accurately described. But the same term, presystolic, is by no means confined to these. It appears in the histories of at least nine (probably eleven) of the children who *post mortem* exhibited no stenosis whatever. In my own clinical notes of the past three or four years I find the following illustrations of this point. There was marked stenosis with its proper physical signs in one; slight stenosis with "presystolic" in one; in five, thrill and "presystolic" murmur (so-called) showed no corresponding stenosis *post mortem*; in five, "presystolic" murmur, noted at the first, disappeared later on.

"Presystolic" Murmur in Connection with Mitral Narrowing.

A.—POST-MORTEM SUMMARY.

I. Marked stenosis ("button-hole") with presystolic murmur (not rheumatic)	1
II. Stenosis without presystolic murmur	1
III. A degree of stenosis with presystolic murmur in ...	5
Very "slight" in	2
"Some" in	1
"Mitral admits thumb" in	1
"Stenosis," not further described, in	1
IV. No stenosis with "presystolic" murmur in	11

N.B.—In 8 out of 19 mitral thickening noted, not stenosis.

B.—CLINICAL SUMMARY.

The murmur disappeared in 5 (1, 2, 6, 10, 11).
The murmur appeared within two or three weeks of first rheumatic attack in 3 (3, 5, 11).
No narrowing was found *post mortem* in 4* (4, 7, 8, 9)).
* In 2 of these mitral was thickened.

If we take by contrast the case of adults, it will be found that the "button-hole" form of stenosis is by far the commonest. Thus, in cases collected by Dr. Fagge, 46 were of that kind against 1 funnel-shaped; while in 40 of Dr. Sansom's, 19 were of that form against 15 funnel-shaped and 16 not particularly described. It may be added that the same authority found rheumatic antecedents in but half the cases, and Sir Dyce Duckworth in 60 per cent.

It thus appears that *post-mortem* evidence upon the question of presystolic murmur wears a somewhat special aspect in the case of children, owing to the rarity of that chink-like narrowing of the mitral orifice, which, together with auricular hypertrophy, can alone be depended on to produce the combined physical indications of stenosis.

Now, the chief form of rheumatic mitral endocarditis met with in children at an early stage consists, as is well known, of a ring of minute granulations edging the valve but not appreciably constricting it. These effect no more, after the active stage of inflammation has passed, than to cause the blood to pass over a rough surface instead of a smooth one. A later stage is not in the way of narrowing but of stiffening as regards the mitral flaps and chordæ tendineæ. Such a condition seems fitted rather to produce tardy closure than any material hindrance to the onward blood flow. "It is the case of a valve delayed in its closure by rigidity," as Dr. Dickinson expresses it, "but which yet shuts at last." Valves so circumstanced permit regurgitation at the first part of systole; they are slowly raised during that act, and in the rising the stiffened valve apparatus itself may emit

[1] Dr. Barr, *Liverpool Medico-Chir. Journal*, January, 1894.

sound. The early thrill is caused, as Dr. Seymour Taylor has pointed out,[2] by these stiffened flaps "held edgeways to the regurgitant stream."

The rough or accented beginning of the first sound has nothing to do with stenosis. I do not say that it is unconnected with some hindrance, often temporary, to the onflow of blood, or that children who exhibit this physical sign may not get mitral stenosis later on. But the early stages of this chronic process do not suffice for the production of a true presystolic murmur but only for its rough counterfeit. Early rheumatism no doubt favours eventual mitral narrowing, but the notion that mitral stenosis can be watched through all its stages from early childhood onwards is, I am persuaded, erroneous. Without denying, therefore, the special significance of those signs of stenosis first pointed out by Fauvel and Gairdner, there is evidence enough, both clinical and anatomical, that these signs are met with sparingly among children, hardly ever among very young children.

Of all the morbid sounds of the heart whose meaning we guess at with more or less of probability, there is none that to me seems more obscure than true diastolic murmur at the apex. In the easy language of the wards, we often hear of "double mitral," what is meant being sometimes a presystolic with a systolic murmur, and sometimes, and most often in the case of children, a rough accent commencing the first sound and a blowing murmur following it. But neither of these is properly "double mitral." That phrase must imply murmur with the first sound, murmur with the second sound, and both at the apex. It is so far comparable with the double aortic murmur whose mechanism everyone understands. How can a diastolic murmur at the mitral exactly replace the second sound? Walshe meets the difficulty by observing that the diastolic murmur is rarely loud enough to cover the second sound completely. "It is commonly spoken of," he says, "as diastolic in rhythm, but in point of fact is rather post-diastolic and presystolic that precisely coincident with the diastole." Another suggested explanation, and in some instances no doubt the right one, is hardly applicable to children. It is that the diastolic murmur, apparently mitral, is in fact aortic. "In a small proportion of cases," says Dr. Bristowe, "systolic murmur is associated with a true diastolic mitral." This true diastolic, however, he defines as "running up from the second sound, and tending to die out in the diastolic silence." "It may be confounded," he adds, "with the diastolic aortic." And in Dr. Bristowe's[3] view, Laennec's diastolic mitral (and probably Hope's also) was in reality aortic. But what of the little children with whom aortic disease is rare and double mitral common?

Dr. Dickinson, as is well known, does not so interpret Hope's murmur, but regards it as in fact mitral diastolic, and clearly distinguishable from the so-called presystolic, which in his hearing is really a reflux murmur as determined by its relation to the impulse. "The early part of the sound," he says, "is obscured or replaced by the murmur; the terminal slap or knock is the only part of the second sound that remains. It is caused by the delayed closure of the mitral valve, which puts an end to the murmur which is truly mitral regurgitant."

I have tried to show that in the case of children at all events *post-mortem* evidence is all in favour of such an explanation of that rough and early murmur which habitually goes by the name of presystolic. Yet still true mitral diastolic exactly covering the second sound is unprovided for; and still, as I cannot but believe, mitral stenosis together with hypertrophied auricle—a disease of women rather than of children—has physical signs of its own, and that these have been accurately defined by Gairdner.

Mention may be made in this place of a morbid sound noticed by Laennec, and, so far as I know, not greatly enlarged upon since his day—a creaking like that of a rusty hinge or an ill-greased wheel. It is not accurately in time with the cardiac sounds, and, owing to its peculiar quality, easily audible over and above these. This metallic "squeak," which is not constant, is sometimes so loud as to be heard away from the chest, and I know an instance in a child where from time to time it disturbs the family quiet, though causing no distress to its subject. Laennec avers that this squeak is sometimes loud enough to be heard in the next room. Usually it seems to be mitral in place, but I have a striking example where it was diastolic aortic, occurring in a boy, to whom it gave very little inconvenience. It is a curiosity, and has no significance apart from that of the valve disease (usually mitral) that it accompanies.

A few words will suffice for all that can be usefully said of prognosis. Rheumatism we say is the main cause of heart inflammation in children. But what is rheumatism? What definition can be contrived to compass the whole of it and yet retain distinct form? Of late years its area has been more and more extended, and in the process its substance has so thinned out that its proper shape is hardly discernable. Pleuritis, pneumonia, tonsillitis may all be rheumatic, we are told, though unattended by joint or limb pains.[4] And further, if further there can be, Sir Dyce Duckworth, in a lecture[5] published this very week, announces "rheumatism of the brain" (probably of the cortex), of which the chorea of children is the outward and visible sign, a trifling ailment for so alarming a lesion. It is not as yet anatomically known, but it is thus foreshadowed; the effect is familiar, the assumed cause awaits subsequent discovery. Rheumatic phenomena being thus indefinitely multiplied, who shall say what rheumatism is in itself? The forms of gout are multiform, but they are held together in some sort by reference to urinary changes common to them all. Nothing holds rheumatism: it has been hunted to death. There is an "idea" of rheumatism, but it is fast becoming an abstraction, like the eternal *Noumenon* of the old philosophy.

But if rheumatism, whatever its criterion, be the cause of carditis, what is its own cause? Not a tithe of the cases, even of unequivocal acute polyarthritis, have their origin in exposure. In 608 consecutive examples collected by my friend, Dr. Syers, only 33 could be thus attributed.[6] Let us double that number, and even so hardly a tenth can be so counted. In the great majority the cause of rheumatism is conjectural, like so much else connected with it, so that in particular cases of carditis little help towards prognosis is likely to come from consideration of the nature of the rheumatism that attends it.

Yet there are certain circumstances of undoubted service in prognosis; for example, age, previous attacks, and the disposition to rheumatism, whether more or less, which these imply; and as applying to the particular case; nervous implication; the presence of subcutaneous nodules; the changeful or the fixed character of the physical signs; the prominence or otherwise of heart pain or uneasiness, and of præcordial tenderness; the degree of pallor, and the rate of wasting.

As for age, rheumatism occurring at an unusually early period of life, say at 4 or 5, is very nearly allied to carditis, and sometimes shows itself chiefly by heart inflammation. It may be said without qualification, other things being equal, the younger the child the greater the peril to life. There is a form of rheumatism, almost peculiar to children, which carries, I believe, a special danger. It is when a succession of attacks come so near together that they are often reckoned as one prolonged attack. Sometimes there is a sort of periodicity in such seizures, the mother saying that they happen every month or every fortnight. If we reckon, as in the case of a young child we safely may, that every successive attack of rheumatism, however little severe in itself, is a fresh injury to the heart, the effect of these multiple attacks is obvious. Older childhood is far less subject to this same frequency of rheumatic visitation; and on that account, as well as because the increase of years of itself lessens the danger of carditis, the child past 8 or 9, the subject of acute carditis, is far more secure than he would be at an earlier age. In the same bad category must be placed cases such as I have already quoted, where an acute rheumatic attack is presently repeated in respect of its pyrexia and

[2] *Lancet*, November 12th, 1887.
[3] *Lancet*, November 12th, 1887.
[4] Mitchell Bruce, British Medical Journal, April 28th, 1890.
[5] *Clinical Journal*, March 14th, p. 307.
[6] *Westminster Hospital Reports*, 1881-89.

sweating, but this second time the symptoms are cardiac and not articular.

Of physical signs in their bearing on prognosis, it may be said that so long as such signs are recent and refer only to the endocardium the fear of pericarditis and of the development therewith of the active signs of carditis is more or less—it can never be absent—according as the heart's conduct varies or does not vary from day to day. So long as the physical signs, any or all of them, that I tried to describe as indicative of early endocarditis are changeful, so long, in my experience, however quiet and restful the child, there is real danger, a danger which only lessens with the settling down, so to say, of the heart. In a case I have already quoted these changeful physical signs continued for forty days with no general symptoms whatever to cause anxiety. But on the forty-first day pericarditis appeared, with constant vomiting, delirium, and extreme restlessness; the right ventricle became extremely dilated, and the child very quickly died.

It thus appears, both in regard to external and internal inflammation of the heart, that the physical signs of both gain significance from their changefulness; so long as endocardial murmurs and cardiac rhythm are altering their character from day to day, so long is there active endocarditis; and in the same way, as was shown in the last lecture, daily changes in the area of pericardial effusion, whether of increase or decrease, are chiefly significant as showing that the inflammation is still acute.

It has been abundantly shown how largely the nervous element enters into the natural history of carditis in children and affects its mortality. The appearance, therefore, of such symptoms in whatever degree at an early stage of endocarditis—vomiting, severe headache, weariness, passing delirium, uneasy sleep with night terrors—ought properly to cause anxiety, however favourable the child's progress in other respects.

In one of the cases of acute carditis already quoted, a boy of 9, in his first attack of rheumatism with endocarditis, had on admission some passing delusion as to his father being at his bedside. At the time he had no other bad symptom; but presently acute carditis developed and he narrowly escaped death.

Finally, my experience fully accords with that of Dr. Cheadle, so ably detailed in his Hunterian Lectures on Rheumatism in Children as to the evil import of subcutaneous nodules.

The clinical picture of carditis in children, gloomy as it is, is not without light. We call to mind a large number of rheumatic children, appearing and reappearing in their successive attacks, with shorter and shorter intervals of ease. We see them presently as chronic sufferers, and at last they either perish quickly with acute suffering or else linger on with hearts incompetent and attending dropsy and other distress. Long observation of these children in their coming and going, the hope of recovery repeatedly disappointed, the growth of friendship between doctor and child as time passes—all these things make our memory of such patients peculiarly distinct and vivid and their fate distressing. But we are to consider that it is only those that thus decline that are thus remembered; the rest are forgotten. There is no returning to give thanks on the part of those that recover. Thus, whatever the number of these, circumstances conspire to make them seem less than they are. And there is at least this happy feature in the child's case which age may envy: Children have no future, and the anxiety and despondency of their elders in like state are unknown to them.

I would add a few words on the treatment of active carditis. So undoubting was the reliance on drugs fifty years ago that Dr. Latham, of whose labours and success in search of the very earliest signs of the disease I have already spoken, exclaims in an ecstasy: "The gain of a single day in the treatment of endocarditis is a gain indeed!" In quite a different spirit an eminent physician of our own day, replying to a practitioner who regretted that he had overlooked pericarditis in a case of rheumatism they were seeing together, is reported to have said—perhaps not quite seriously—"Make no apologies; there is no harm done; if you had discovered it you might have treated it."

It is of interest now to observe the point of view whence rheumatic carditis was once regarded and the plan of treatment that resulted therefrom. It is of yet greater interest to note the remarkable fact that the characteristics of child's rheumatism, and notably its moderate fever and brief pain, did not serve to exempt children from all the rigours of the antiphlogistic treatment.

"I know of no disease," says Latham,[7] "in which febrile heat is greater and the pulse harder and more forcible than in acute rheumatism. What are the signals for copious bloodletting if these are not? There is no disease in which pain is more prominent, abiding, and characteristic; hardly any in which it is more severe and more extensive." That this is no picture of child's rheumatism need not be said. It seems to follow that treatment might reasonably be modified in the case of children so as to suit the symptoms. But the old authors admit of no exception. A single passage throws vivid light on the treatment of those days and its consequences. "In eighteen cases of pericarditis," says the physician I have just quoted, "I lost three. All were treated by mercury, some were brought under its sensible influence very largely and some very slightly, but all in a certain degree except two—two of the fatal three. These two, healthy subjects in the prime of life, would not become salivated. Though mercury was given in large quantity and for a long period, yet was there no sensible ptyalism, no fœtor of the breath, no complaint of soreness of the gums. Every conceivable circumstance was present which could promise success to medical treatment: healthy subjects in the prime of life, and the disease happily detected as soon as it arose, not a moment was lost in the application of remedies. They were venesection, cupping, leeches and blisters, and opium, and, from first to last, mercury. But the mercury did not produce the peculiar effects of mercury in the slightest appreciable degree." They would not become salivated, and so (as is inferred) they died. Here is the keystone to the treatment of that day. Bleeding was beginning to be used with some restraint, but bleeding alone would not suffice, mercury must go along with it; and this not in stated doses, but in such amount as would as quickly as possible "touch the gums." When this particular symptom of mercurial poisoning was delayed the drug was "pushed" to the utmost degree. Yet some (these two healthy patients in the prime of life, for example) would die unsalivated.

It is easy to criticise at this safe distance of half a century. Therapeutics is a healing art, and there is abundant evidence of the shrewd and careful observation of the old masters. Nevertheless, with our later experience, it may be open to doubt whether the early advent of salivation, with the consequent suspension of mercury, did not bring a blessing to the patient less by virtue of its healing than of its poisonous qualities.

Contemplating the old antiphlogistic treatment, we are, perhaps, too much in the habit of assuming that the rate of mortality of certain acute diseases, notably of pneumonia, is less now than it was early in the century. It is a delusion, as statistics prove. But in the case of pericarditis, anyone who will read its literature will, I think, become convinced that it was more fatal under the old methods than now. The whole portraiture of the disease gives evidence of this. One of its chief and earliest historians, Sir Thomas Watson, speaks of the great danger that belongs to every case of acute pericarditis;" of "the danger of speedy death," and so forth (speaking, remember, of the adult, not of the child). Such language would be inappropriate at the present time. No one doubts the gravity of rheumatic pericarditis as regards the future, but, putting children aside, the immediate danger to life is very small.

Such considerations would seem to furnish reason enough for departing from ancient traditions without more ado. But it is not so. Fearing to break away altogether from the old practice, we have toned it down, reduced it to a dead formula, and catch at every excuse for evading it. Latham's treatment was at least precise, emphatic, uncompromising, and it lingers still, robbed of all those characteristics. We have in place of it an uncertain voice and some disagreement. For example: "Blood may be taken from the arm," says one textbook, "but preferably by cupping or leeching" (Roberts, 501). "Venesection is never admissible," says another. A

[7] New Sydenham Society, vol. I, p. 116.

few leeches may sometimes be applied to robust subjects, but as a rule heat and moisture are to be preferred, though whether heat or cold is the better application is matter of "doubt" (Bristowe, 580). "Counter-irritation is of considerable value," says one; "Blisters should be shunned," says another. Finally we are told not to treat pericarditis at all as such (Balfour, 326). "Its treatment merges itself in the treatment of some other disease." All these are literal quotations from as many recognised textbooks of the present time.

With all their difference what is it that they concur in indicating? Is it not that the treatment of pericarditis just now, like the treatment of pneumonia, of pleuritis, of meningitis, is the treatment of symptoms and nothing more? The old remedies are still invoked, but there is no ring of sincerity in the invocation: and what we really believe more and more, what Parkes, Hughes Bennett, Gull, and others pointed out is that disease processes are not arrested, but may in a measure be directed. The easing of pain by local appliances, the procuring of sleep therewith, the timely withdrawal of blood to relieve venous congestion and cardiac dyspnœa, all these are measures that are truly life-saving; but the course of inflammation is little if at all affected by such means.

Commenting upon such opinions as contrasted with those of the past, Dr. David Lees, in an able and interesting paper on the treatment of pericarditis, pertinently writes:[3] "How many of the old formidable measures are in use to-day? Three or four leeches or a single small blister represent the maximum therapeutic attack on the disease from without, whilst a little morphine alone remains as the representative of the active medication of former days. That is to say, that we have given up the idea of curing pericarditis."

Most truly; and in the modern sense of that word "cure," we have given up the notion, not merely of curing pericarditis, but any visceral inflammation whatever. But without at all disputing the formidable—even the dangerous—nature of the old measures, especially in the case of pericarditis, I would urge that Dr. Lees does some injustice to such means of relief as we possess by lumping together without distinction as of equal value bleeding, counter-irritation, morphine. In the abstraction of blood (by leeching, as a rule) we possess, in my belief, the most potent means of relief for those sudden dyspnœa attacks which in the case of children are apt to be so rapidly fatal. Blisters do neither good nor harm, and it is pretty plain that the textbooks think so in urging as a sufficient objection to their use the interference with the use of the stethoscope.

Digitalis, still to quote my own opinion (though it is that of high authorities as well, notably of Dr. Stokes), is worse than useless in the acute cases we are now considering. For the rest I should be in full agreement with Dr. Lees as to nursing and the means of relieving pain, though demurring a little to the statement that "we have made the discovery that the salicylates are curative of the rheumatic process." "Have we then," says Dr. Lees, "no means of combating pericarditis as a local inflammation?" And he answers himself; "I maintain that we have. It is the local persistent application of cold."

Time will not serve for stating the arguments or the evidence upon which this opinion is based. All who are acquainted with the author will be prepared to find in his paper a lucid, logical, restrained, if somewhat enthusiastic, statement of the case, and yet I cannot persuade myself, looking back upon many cases of fatal carditis, that chilling the surface of the chest by means of ice would have saved them, or some of them. My trials of that remedy have not, as a matter of fact, had that result. The application of the ice bag, whether to pericarditis or to pneumonia, is, in my experience, sometimes grateful and soothing, sometimes taken with indifference, and sometimes so strongly resented by the patient, that no one would think of persisting in its use. It has seemed to me to be of greater service in relieving the distressing pleural "stitch" of pneumonia than in pericarditis, where pain is less common and more fitful. Everything depends on the selection of cases, and surely there is no disease whatever wherein it is easier to separate critical cases from the rest. Passive carditis, be the physical signs what they may, does well enough. It is precisely at the moment when such symptoms intrude as I have repeatedly dwelt upon—restlessness, dyspnœa, delirium, that danger begins, and very grave and immediate danger. If by the application of ice to the heart in cases like these the children habitually recover, Dr. Lees's contention is made out, but only so. Recovery without classification of cases proves nothing. The efficacy of the remedy can only be tested when the need for it comes.

[3] *Lancet*, July 22nd, 1893.

In conclusion, it may be said with confidence that the outlook of pericarditis where adults are concerned is much more favourable than it used to be: and if it be true also that children have not as yet shared in this improvement it must be remembered that there has been some neglect in their case and less time for accurate observation. There is strong hope for the future in the pathology of heart inflammation, for it represents, as I have shown, an organ for the time disabled, yet structurally but little altered. The condition is one that especially invites therapeutical aid, and already there are indications that such aid is forthcoming. Sober investigation, however, is of slower pace than the demands and assertions of the drug market. Hopeful work is being done, and with drugs, but it is yet too early to announce conclusions.

In bringing these lectures to an end I cannot omit mention of the ready help and co-operation of my colleagues, especially of Dr. Garrod, Dr. Batten, Dr. Walsham, and Mr. Winckworth—indeed, I have been helped by so many that, could I but be certain that they would warrant my facts and accept my inferences what has been put before you might be taken as a joint contribution. It only remains for me, Mr. President, to express to you and to this audience my thanks for the kind attention with which you have honoured me.

AN ADDRESS
ON
APPENDICULAR COLIC.

[With Coloured Plate.]

Read before the Leeds and West Riding Medico-Chirurgical Society.

By T. R. JESSOP, F.R.C.S.,

Consulting Surgeon to the Leeds General Infirmary.

The objects I have set before myself in writing this paper are to urge a closer attention than has hitherto been given them, in this country at least, to those conditions of the vermiform appendix which stop short of, or precede, the peritonitic complications described under the heads of "appendicitis," "typhlitis," "cæcal abscess," etc., and to advocate a more precise and discriminating nomenclature by which these early conditions may be indicated. There is no need to dwell upon the advantages to be derived from a recognition of those pathological changes within the cavity of the appendix which, whilst they may prove to be of fleeting or of only a temporary importance, may yet be the precursors of an acute peritonitis productive always of serious illness, and not seldom leading to a fatal termination.

The exciting causes of appendicitis are probably various. We are familiar with the foreign bodies, stercoral concretions, melon or grape seeds, cherry stones, and the like, because we meet with them when, in the later stages, they are cast off along with the inflammatory products they have given rise to, or when we incise the abdominal wall for the evacuation of pus collected around the vermiform appendix; but these, so unmistakeable when recognised, are comparatively rare. It is not to these I would ask your attention, but rather to those commoner varieties in which there is no such obvious causation—cases presenting all the signs of a so-called acute typhlitis clearing up, it may be, without leaving a trace behind, or characterised by recurrences more or less frequent and of varying severity, or again ending in the formation of abscess, which wherever, or in what way soever, evacuated presents no features by which its origin may be divined.

The opportunities for observing the pathological beginnings and changes in the cases I am referring to must necessarily be few.

It is less than two years since my attention was specially directed to this subject by an example, the phenomena of which, to be hereafter described, could only be explained on the supposition that the cæcal appendage had become the seat of a recurring spasm such as we know takes place in other musculo-membranous ducts, as the intestinal canal, the biliary ducts, the ureter, and the urethra, when from any cause their lumen has become narrowed or partially obstructed.

The condition I refer to has not altogether escaped the observation of English writers. So long ago as 1857 Dr. Wilks, in his lectures to the students at Guy's, pointed to the fact that the appendix is often found to contain an unnatural quantity of mucus. Treves, in his admirable little pamphlet, published in 1890, says: "The symptoms of typhlitis may depend upon the distension of a distorted appendix by retained mucus;" and again, under the head of relapsing typhlitis, he remarks that "the trouble is due to a retention of mucus within the vermiform process."

Kelynack, in his recently published *Pathology of the Vermiform Appendix*, devotes a short chapter to what he terms "cystic dilatation of the vermiform appendix," in which, however, he states that he has himself only met with one well-marked example, whilst the Manchester Infirmary *post-mortem* reports do not contain one single recorded case.

But the author who has, more than any other, succeeded in accurately observing the early indications of inflammatory disease in the appendix, and in making intelligent deductions therefrom, is the French physician Talamon, whose admirable and complete monograph has just been translated into English by Dr. Berry of Edinburgh. Talamon enumerates a group of well-known symptoms which have been frequently ascribed by the numerous writers on this subject to a simple or stercoraceous typhlitis—in other words, to an inflammation of the cæcum induced by the mechanical irritation of solid masses of fæces arrested in their passage towards the colon, and he shows most conclusively that whilst exactly the same symptoms arise from certain pathological changes in the vermiform appendix, the presence of fæcal masses in the head of the colon has never been proved by examination before or after death to have been associated with them. To these symptoms he gives the name "appendicular colic."

In thus transferring to the appendix the origin and seat of this hitherto-named "simple typhlitis," he has completed as it were the deposition of the cæcum from all the claims, which from time immemorial it has maintained, to the possession of a pathology of its own.

How difficult it is to expunge a name which has long been supposed to be descriptive of a disease is well illustrated by the deliberate retention by Treves of the term typhlitis as being "conveniently" applied to an affection which, with rare exceptions, has its origin not in the cæcum but in a neighbouring organ, and which, in the cases under consideration, may indeed from first to last be confined exclusively to the vermiform appendix.

From the time when, in his lectures on Pathology already referred to, Wilks pointed out that, however intense or extensive the surrounding peritonitis, the cause was usually found in the appendix, there has been an ever-increasing accumulation of evidence to show that the cæcum is involved only by proximity, and that it has no more claim to assume the title *rôle* than has the ileum, the ascending colon, or any other organ which may chance to be implicated. It may be safely prophesied that, just as the terms "salpingitis" and "pelvic peritonitis" have supplanted the almost obsolete "pelvic cellulitis," so will the more correctly descriptive name "appendicitis" and "appendicular peritonitis" replace the misleading "typhlitis," "perityphlitis," "pericæcal abscess" and the like.

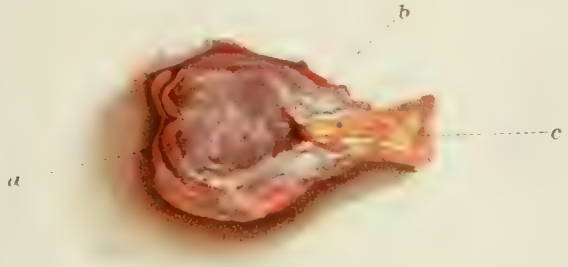
I know no more striking illustration of the fallacy of basing a pathology upon *post-mortem* evidences alone than is to be found in the history of appendicular disease as written by the host of observers—Kelynack appends to his essay a list of upwards of a thousand of them—who have devoted their attention more or less to this interesting subject. Surgery has of late years done much towards elucidating the early history of this as of other abdominal diseases, and there remains for it yet much more to unfold. It is by closely watching the beginnings and not *only* the destructive changes which mark the later stages that we are ever likely to arrive at an accurate knowledge of appendicular disease, and, as I have already said, the opportunities for such observation are rare. One such occurred to me when, on February 10th, 1892, I was consulted by

C. W. D., a policeman, aged 26, on account of repeated attacks of abdominal pain, the first of which took place in September, 1891. By it he was incapacitated for two weeks. He described the pain as of very sudden onset whilst he was on his beat, confined to the lower part of his body on the right side, and preventing him from maintaining the erect posture. At first it increased in severity, and subsequently slowly subsided, leaving him gradually with a feeling of soreness, and otherwise apparently none the worse. He was not sick and the daily action of his bowels was not interrupted. He found relief from hot applications of various kinds and from medicine supplied by his doctor. In the November following he had a very similar experience, and was again off duty for a period of a fortnight. In January, 1892, a third attack was of longer duration and greater severity, laying him up for three weeks, and after this, when he had worked no longer than three days, he was compelled to give in once more owing to a fourth onset of the same pain, from the effects of which he was just recovering when he sought my advice. An examination of his abdomen revealed the presence of a small lump of the size of a filbert, somewhat movable and tender, situated at a spot about two finger's breadths distant from the middle of Poupart's ligament in the direction of the umbilicus. Having satisfied myself that it was pathological, and accepting his statement that it was the centre of his pain, I sent him into the infirmary for an exploratory operation. This was performed a few days later, and it revealed an enlarged appendix, narrow at its cæcal attachment, bulbous at its free extremity, having no adhesions, showing no signs of inflammation, but evidently tightly distended. I removed it in the usual manner, and the operation was followed by a complete cessation of the painful attacks.

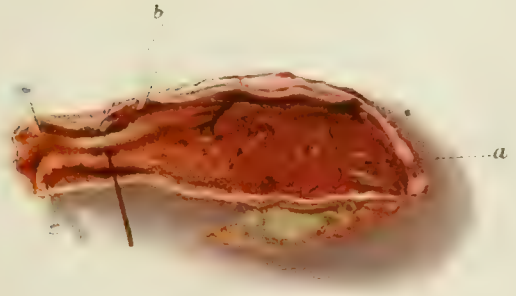
That which is here reproduced (see coloured plate) was a coloured drawing made from it when fresh by Mr. Haigh, of the Yorkshire College. It will be seen that the distal free end is expanded. In the fresh state it was tightly filled with a clear mucus, whilst the proximal or attached portion is narrowed so that it will admit only a fine bristle. Herein, I apprehend, lies the explanation of the attacks. The lumen of the average appendix will admit an ordinary probe, and will allow of the painless escape into the cæcum of the natural secretion of the appendix mucosa. Something occurs: A plastic exudation, a cicatrising ulcer, a wedged-in foreign body, in this instance apparently a condition of slower development not dissimilar from an ordinary urethral stricture; some impediment is formed to the free escape of the appendix contents, which therefore accumulate, and then there follows a true colic of the appendix, a painful spasmodic contraction of the distended organ forcing its contents through the partially blocked passage. We are irresistibly reminded of what takes place in those very common examples of biliary colic without jaundice, dependent upon some obstruction in the cystic duct, in which the gall bladder filled with its own secretion, at irregular intervals, inhibited we know not how, makes violent and painful contraction with the result of overcoming the obstacle, wholly or in part, or it may be merely exhausting itself without appreciable diminution of its contents.

The physics and dynamics in the two cases are alike, whilst the anatomical features are almost identical. With universal consent the phenomena in the one case are included under the term biliary colic; let us, with Talamon, accept the term "appendicular colic" as sufficiently descriptive of the other. As an opportunity of dealing with a somewhat similar condition of the appendix has fallen in my way since the case of C. W. D. was completed, I will here give an outline of its history.

A. O., aged 20, first came under observation on November 14th, 1892, when she had already been a sufferer at intervals for a period of eighteen months. She described herself as subject to attacks of pain "somewhere inside," and chiefly in the right iliac region. The attacks commenced suddenly at all hours, often waking her from sleep. Two to three hours after the commencement of the pain she vomited a quantity of green bile, and this was repeated from four to eight times, after which the pain, hitherto very acute, continued first as an aching, then as a mere soreness, for a period of about forty-eight hours, when it would cease, leaving her quite well. There were no rigors, no alteration in the appearance of the skin, except on the first occasion, when its colour was observed to be blood red, no change in the urine, and no derangement of the regular action of the bowels. The intervals between the attacks, at first about eight weeks, were shortened to six, then to four, and latterly to two weeks. The abdomen presented no unnatural features. A careful examination enabled me to say there was no lump and no hardness to be felt, and I failed to elicit any signs of a tender spot except on one occasion, when shortly after an attack she complained of a general soreness



Specimen removed from C. W. D.; *a*, expanded distal end; *b*, fibrous deposit forming stricture; *c*, appendicular canal in section.



Specimen removed from A. O.; *a*, expanded distal end; *b*, fibrinous deposit obstructing canal.

TO ILLUSTRATE MR. T. R. JESSOP'S ADDRESS ON APPENDICULAR COLIC.

to the touch more or less over the whole cæcal region. From November to February I kept her under regular observation until satisfied both of the nature and severity of the attacks, which indeed by February had become intolerable to herself and most distressing to her friends. On February 17th, 1893, I removed the appendix under ether. The organ was readily found in its normal position, and free from all unnatural attachment. It was tightly distended to about twice its natural diameter, and when removed was found filled with fæcal-stained mucus. Its attached extremity was narrowed by a fibrinous deposit, so that a very fine probe could, with care only, be made to find its way through. The accompanying coloured plate (Fig. 2) was made for me from the fresh specimen by Mr. Haigh, and well represents the appearances seen. The patient recovered, and has since remained perfectly free from the attacks.

Anyone examining the specimens removed from these two cases would be forced I think to the conclusions:

1. That the symptoms complained of were due to the spasmodic, difficult, and prolonged emptying of the distended tube set up periodically by a reproduction of the mucus.

2. That the character in each case of the obstructing material was such as to render its spontaneous removal highly improbable.

3. That unless the operation had been undertaken the patients would have continued indefinitely subject to recurrences of the attacks, or the appendix would have become the seat of an acute inflammation involving the peritoneum and the neighbouring organs.

It is not improbable, I think, that these cases are of more frequent occurrence than might be supposed, that a not inconsiderable proportion of the so-called relapsing typhlitis would more properly be classed under the head of appendicular colic; and again, is it not possible that in dealing with those which have terminated in suppurative inflammation of the peritoneum, we may lose sight of the early history, when possibly recurring colic may have formed an important feature?

On February 3rd, 1893, Dr. Walker, of Middlesbro', summoned me to confer with him in the case of M., aged 37, in whose right iliac region was a circumscribed fluctuating swelling, red and tender, of three weeks' formation, giving rise to pain, fever, and constipation. Under ether we opened and emptied a considerable cavity of several ounces of fœtid pus, searched in it not too perseveringly and without success for foreign body or appendix, irrigated it with antiseptic solution till satisfied of its purity, drained and covered it with dry sterilised dressings. His recovery was quick and complete. For two years before the formation of an abscess he had been subject to attacks of severe pain in the region of the appendix, recurring every three, four, or five weeks, partially incapacitating him for one or, at the most, two days, and then wholly disappearing. During each attack he was conscious of a swelling above the middle of Poupart's ligament, and there was constipation.

The pertinence of this case lies in its early history, and its importance for us in the fact that it terminated in suppurative inflammation, thus demonstrating the existence of a risk to which the subjects of appendicular colic are more or less liable so long as the cause of the colic remains; but just as the causes themselves are variable in kind, so is there reason to believe there are differences also in degree and persistence, some being permanent and irremovable, whilst others are more or less transient. It will hardly be questioned, I think, that in the case of C. W. D. there existed a permanent condition of narrowing, which might at any time have been superseded by such a complete occlusion as to determine a further distension of the appendix until such time as its ultimate capacity had been reached, or meanwhile an inflammatory catastrophe had supervened, not necessarily, it should be borne in mind, as in Dr. Walker's case, limited to the locality of its origin. Unfortunately as yet we have no means of distinguishing the permanent from the transitory, otherwise there would be less difficulty in assigning the appropriate treatment to each. In what respect, for instance, does the following case differ from those already related in such manner as to justify a more favourable prognosis?

On July 26th, 1893, H. M., aged 30, was sent to me for advice under the following circumstances: In the previous February he had been seized with a pain in the right iliac region which for a day or two increased and then slowly diminished, incapacitating him for a period of ten days. Throughout this period his bowels were constipated, and on the day following the onset of his attack he vomited. For the time being his recovery appeared complete. In June a second similar attack, though of shorter duration, occurred, and from that time he had continued to feel a degree of uneasiness in the neighbourhood of the appendix. Upon examining him, I could roll beneath my fingers at a spot about 2 inches above the centre of Poupart's ligament an elongated cylindrical body which he believed to be the centre of his suffering, and which I had no doubt was a distended appendix. I advised attention to diet, freedom from great exertion, regulation of the bowels, and in case of continued repetitions of the attacks removal of the appendix. His medical adviser, Dr. Christopher Fleming, of Worksop, writes me December, 1893, that since his visit to me in July he has had no further suffering.

The attacks would appear to have been not less severe than in any of the former, and not to have differed essentially in kind, whilst there was physical evidence to show that the appendix still remained distended. They had, let it be borne in mind, been only two in number, whilst in each of the others they had recurred more frequently and at increasingly short intervals. Herein, I take it, in the present state of our knowledge lies the chief guide which must influence us in determining the question of surgical interference. The removal of an appendix whose disease is confined within its own limits must, in competent hands, be considered a comparatively safe operation. And when the time has arrived at which, through persistence of recurrences or through their increasing frequency and severity, we are impelled to a belief in the permanency of the occluding cause, we should no longer hesitate, I think, to undertake the removal of the offending organ.

Conclusions.

In conclusion, I will lay down certain propositions as some guide to discussion:—

1. The vermiform appendix is liable to partial occlusion of its canal from various causes, some of which are permanent whilst others are transient.

2. The symptoms by which such incomplete obstruction is to be recognised are those of "appendicular colic."

3. In cases of recurring appendicular colic, and especially if there be at the same time an increasing severity, our practice should be to recommend the removal of the appendix.

4. The time has arrived when such misleading names as typhlitis, perityphlitis, cæcal and pericæcal abscess should no longer be applied to diseases having their origin in the vermiform appendix, seeing that appendicular colic, appendicitis, and appendicular abscess more correctly and quite as euphoniously and concisely describe the conditions in each case referred to.

ABSTRACT OF

THE GOULSTONIAN LECTURES

ON THE

PHYSICS OF THE CIRCULATION.

Delivered before the Royal College of Physicians.

By PAUL M. CHAPMAN, M.D.Lond., F.R.C.P.,

Physician to the Hereford General Infirmary.

(Concluded from page 570.)

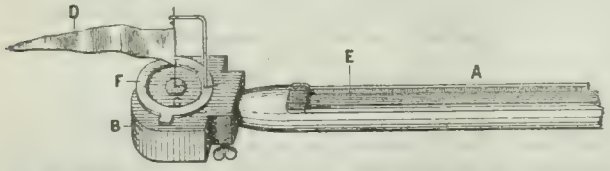
Clinical Application.

To come to the possibility of the clinical application of all these facts. The pressure movements caused by the intra-arterial waves are accurately recorded by means of Marey's well-known sphygmograph. The pulse of high tension and the pulse of low tension there show their own distinct peculiarities. It has fallen into disuse for various reasons. To begin with, it does not admit of obtaining a record of a long series of pulsations, nor of pulsations of sufficient amplitude for the accurate measurement of their component parts, nor is it provided with a time recorder for this purpose. But its chief defect for clinical use is that it does not admit of obtaining simultaneous records from different parts of one artery, nor from two different arteries, nor from the heart's apex and one or more arteries. For these purposes it is necessary to use an ordinary recording cylinder with a large surface, and in the highest degree convenient to employ the principle of air or water transmission through flexible tubes. With suitable apparatus of the latter kind the pulsations of the artery can be conveyed to an ordinary tambour, one or more of which can be fixed on the same upright, and their levers, by a slight rotation of the upright, can be brought, all at once, into the same uniformly light contact with the surface of the recording cylinder. When the cylinder is stopped the points of all the levers can be moved through any part of the tracings of which it is desirable to obtain a synchronous measurement, and the distances between the various points can be measured at leisure. The cylinder should revolve at a known speed, but for the purpose of measurement of the

synchronous tracings so obtained it is not sufficient to trust to the uniformity of speed obtainable by clockwork. The upright should, if possible, itself carry a time recorder; for this purpose an electric interrupter is the most accurate, but for ordinary clinical purposes it is too cumbersome and too expensive, and not sufficiently portable. A vibrating tuning fork of sufficient size is too heavy and difficult to manage. The necessity of obtaining a light and accurate time recorder which would fit on to the upright and thus permit adjustment to the surface of the cylinder, together with the lever points, during the rotation of the cylinder, led me to consult with Mr. Horace Darwin of the Cambridge Instrument Company, who, amongst other suggestions, suggested to me the employment of a harmonium reed. Ultimately Mr. Darwin made such an instrument for me in a very ingenious manner.

CHRONOGRAPH.

An ordinary harmonium pipe, its pitch being the low C, vibrating 64 times in the second, is attached to a short flexible tube carrying a mouthpiece. Through this the reed can be set in motion by the breath. The other end of the pipe is connected with a tambour covered with a thin india-rubber membrane. To the membrane is attached a vertical pin carrying a very light and thin metal pennant. The pipe can be fixed on the upright, and the point of the pennant can therefore be brought into contact with the surface of the recording cylinder at the same time with the lever points. The vibrations of the reed are conveyed to the surface of the elastic membrane, and the tracing obtained is very beautiful and surprisingly accurate. Both up and down strokes can be easily measured, and a graphic time record is thus obtained which gives measurements to $\frac{1}{128}$sec., or in decimals 0.0078125sec. The extreme convenience of such an arrangement is obvious. It is inexpensive, easily worked, and lasting, and can be easily repaired. The experiment can be arranged, the lever points and time recorder adjusted in contact with the cylinder against a check, and then removed, as one piece, from the cylinder by a slight rotation of the upright. The cylinder is then set in motion, and, at a favourable moment, a current of air is blown by the mouth into the reed, and the upright is rotated against the check; a simultaneous record being at once obtained which can be accurately measured at leisure.

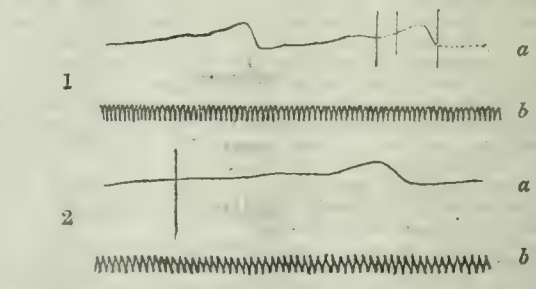


A sphygmograph *à transmission* was also devised for me at Cambridge. It consists of a wooden frame which rests on the front of the wrist, and which is kept in position by bands of inelastic material fastened behind it. Attached to the frame is a flat steel spring, carrying a button at its free end which is applied against the artery. The upper surface of the free end of the spring is jointed to a small vertical prop, which transmits the pulse movement to a tambour containing air. This tambour is made like a kettledrum, in that by turning some screws arranged round the circumference the tension of the membrane can be varied. The interior of the tambour is connected, by means of a thick-walled elastic tube of small calibre, to an ordinary Marey's tambour of the Cambridge pattern fixed on the upright. The steel spring can be depressed below the frame upon the artery by means of a screw; since this action also depresses the vertical prop, and with it the membrane of the tambour, the tambour itself is made to rise or fall on a vertical steel rod. The tension of the membrane and of the contained air can thus be modified. By introducing a T-piece into the elastic tube connecting the two tambours, further modifications of tension can be obtained. The amplitude obtained by this instrument is not great, but it appears to be almost entirely free from movements of inertia. The response to stimuli is exactly as quick as that of a Sanderson's cardiograph.

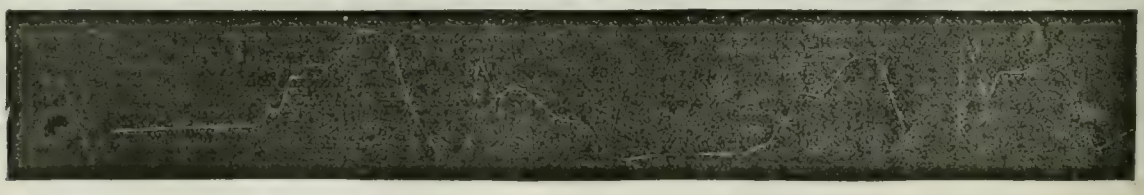
For ordinary purposes of demonstration the most suitable sphygmograph is that made by Petzold, of Leipzig. This, however, is a spring and lever apparatus with no air transmission, consequently the writing lever cannot be fixed upon the movable upright, and, though it is possible to use it simultaneously with the other levers, it has to be adjusted independently. This is a great inconvenience, for the recording clock must either be started from rest after the writing points have all been adjusted against it or else the clock must be approached to the writing levers after it has been set in motion. Though the difficulty is by no means insurmountable, it offers a great trial of patience, and I think it is one which, for the attainment of simultaneous tracings, will always interfere with the ordinary clinical employment of Petzold's instrument. Still more trouble is experienced in marking off the simultaneous ordinates and abscissæ previous to measurement. No physician in active practice could, I think, afford time for the employment of other than transmission apparatus. When this is suitably contrived there should be no difficulty in the combined use of cardiograph and one or more sphygmographs in the daily practice of any physician who wishes to make a closer study of the state of the circulation, and who has the little careful patience necessary to attain the requisite skill.

SPHYGMOGRAPHS.

Some of the advantages of Petzold's instrument can, however, be transferred to a transmission apparatus. An immense advantage can be at once gained by using the frame furnished with Petzold's apparatus. It is figured on page 23 of v. Frey's *Die Untersuchung des Pulses*. The runners which lie on the wrist do not slip, as they lie in adaptation to almost any curve and are covered with velvet. The metal spring is of just the right flexibility, and conveys the pulsations still more accurately and with greater amplitude than the spring of the instrument made for me at Cambridge. I have therefore obtained from Petzold two transmission sphygmographs which combine all these advantages, and which are beautiful examples of mechanical skill. As in his direct lever sphygmograph, there is an arrangement on the frame of these which permits of considerable latitude of horizontal adjustment after the frame is fixed by the bands which keep it in position. By this means the most favourable position over the artery is readily obtained, and the instrument will not then slip.



Radial Pulse, 1 quick, 2 slow rotation of drum; *a*, sphygmogram; *b*, harmonium reed.



Combined Method.

The value of the combined method is strangely neglected, the results being most valuable for the purpose of diagnosis, as I hope to make clear before the conclusion of these lectures.

The velocity of propagation of the pulse wave and the length of the pulse wave may be taken together. The velocity of propagation of wave is to be clearly distinguished from velocity of blood flow. The two things are quite independent of each other. For instance, a high blood pressure is accompanied with diminished blood flow in one, five, and six of Waller's table, but a high blood pressure conditions a greater velocity of pulse wave. As already stated, the mean velocity of blood flow in the large arteries may be taken as 0.3 metre, or a little over 1 foot per second. The velocity of blood wave is about 28½ feet per second.

Keyt gives "the following results regarding the pulse transmissions along different routes: carotid femoral time 0.0797 second, with a distance of 18 inches, gives a pulse velocity of 226 inches per second; carotid radial time 0.0797 second, which, with 23 inches distance, gives a pulse velocity of 288 inches per second; femoral posterior tibial time 0.0606 second, which, with 33 inches distance, gives a pulse velocity of 544 inches per second." Other things being equal, it must be remembered that wave velocity is inversely proportional to the size and elasticity of the tube, and that these variations in velocity may be partly explained by the larger size of the aorta compared with the peripheral vessels.

Since the less the elasticity of the tube the greater is the velocity of the pulse wave, it might be expected *a priori* that the velocity of wave is greater in old people than in young. Keyt found the pulse wave velocity in a child of 4½ to be 216 inches per second; in a young man of 25, 306 inches; in a man of 40, 416 inches per second. Again, taking the carotid and posterior-tibial interval in each case, he found the velocity in a child of 5 to be 196 inches; in a boy of 9, 247 inches; in a man of 21, 350 inches; in a man of 55, 510 inches per second. He attributes these variations to the increased rigidity of the arterial walls with the progress of age. In the very rigid arteries of calcareous or atheromatous degeneration, the velocity is largely increased.

According to Keyt, increased or diminished intra-arterial blood pressure on the other hand does not appear to modify the pulse-wave velocity to any considerable extent, neither is the pulse-wave velocity sensibly modified by variations of pulse frequency. The factors which chiefly influence pulse-wave velocity are the size of the artery traversed, and the amount of rigidity of the arterial wall. The carotid radial interval has been thus given by various observers:

Time Difference.	Velocity of Propagation of Pulse Wave in Metres per Second.	Author.
0.034 sec.	6.70	Czermak, 1864
0.076 ,,	8.29	Grunmach, 1879
0.080 ,,	7.37	Keyt (died), 1885
0.079 ,,	7.63	Edgren, 1889.

My own measurements almost exactly correspond with those of Keyt and Edgren, being 0.078 second, 7.9 metres (27⅔ feet). In *Jour. of Phys.*, vol. iii, No. 1, Dr. Waller has much the same results. Grunmach[23] found that when the arm was immersed in water at a temperature of 104° F., the delay of the carotid radial interval was increased from 0.07 second to 0.096 second, owing to the local relaxation of the blood vessels. Both Grunmach and Edgren have noticed a greatly diminished interval in arterial sclerosis and in chronic Bright's disease.

The length of the wave is calculated in the following way. Assuming that a ventricular systole lasts ⅓ second, and that the velocity of propagation of the pulse wave is 8 m. per second, the length of wave set up by each systole would reach to a distance of ⅓ × 8 = 2⅔ m (5 feet). "It follows, therefore, given this presupposition, that only the longest arterial paths are long enough to receive the whole length of a pulse wave, and that the end of the pulse wave is still in the aorta when the first part of it has already reached to the periphery."

From this point of view, the formation of the dicrotic wave by reflexion has been already discussed.

[23] *Arch. f. Anat. u. Phys.*, 1829.

It must be remembered that, where there is lessened rigidity of vascular wall, as in parts affected with vasomotor paralysis, or where there is somewhere an increased width of the arterial path, as in parts affected with aneurysmal dilatation, the time of appearance of the distal pulse is delayed.

Presphygmic Interval.

Supposing that we now take simultaneous tracings from the heart's apex and from the radial artery, the cardio-radial interval will be found to be about 0.17 second. Of this time we will assume 0 08 second to be occupied in the transmission of the pulse wave from the carotid to the radial. We may further deduct 0 02 second for the time occupied in the transmission of the wave from the semilunar valves to the point of the carotid whence our tracing is taken. This will leave a period of 0.07 second, which we must take to be the time occupied between the commencement of ventricular systole and the opening of the semilunar valves. In other words, this is the time, the "Anspannungszeit," occupied in raising the intraventricular pressure sufficiently high to overcome the aortic pressure. This period of time is appropriately named by Keyt the presphygmic interval. He, however, considers the time occupied in the transmission of the wave along the path from the semilunar valves to the carotid to be so brief compared with the whole cardio-carotid interval, that it may practically be neglected, and he therefore, in speaking of the presphygmic interval, must be understood to mean the interval between the commencement of the ventricular systole and the carotid pulse. For a pulse frequency of 70 Keyt's presphygmic interval would be about 0.08 second. In his very interesting paper[24] Notes of Observations on the rate of Propagation of the Arterial Pulse Wave, Dr. Waller estimates this interval to be between 0.06 second and 0.09 second, and remarks: "this considerable delay affords a reason for the distinct postsystolic character frequently recognisable as belonging to murmurs of aortic obstruction. It also explains why a first sound heard undivided at the heart's apex is often as it were split into two portions if listened to above the clavicle, the first portion being the transmitted first sound, the second the arterial rush beneath the stethoscope."

Keyt states that the presphygmic or cardio-carotid interval is normally about ⅓th the duration of the pertaining pulsation. "Thus a pulse of 60, 1 second long, will give for the interval ⅓th second; a pulse of 72, ⅔ths second long would give ⅓th, and so on."

To everyone who has taken many tracings cases in which the presphygmic interval is greatly diminished or even absent must afford matter for thought. My own attention was first called to it by the case of a man, aged 55, suffering from emphysematous asthma and bronchitis. Wheezing and sibilus with loud rhonchi entirely obscured all sounds at the base of the heart. The apex beat in a certain recumbent position was, however, plainly to be felt. The arteries were hard, tortuous, and atheromatous. A heart radial tracing was easily obtained. The duration of cardiac systole was 0.2578 second, the pulse rate being 75 per minute. This duration being 0.03 second shorter than the shortest variations of normal systole for this pulse rate. The heart radial delay was 0.1328 second to 0.1406 second, as compared with a normal interval of about 0.17 second. A simultaneous carotid radial tracing was then obtained, the carotid radial delay being 0.10157 second. Subtracting this from the heart radial interval, the heart carotid or presphygmic interval was shown to be greatly diminished, 0 039 second to 0.031 second, as compared with a normal presphygmic interval of 0.080 second. Reflecting much over this case it occurred to me that, since the presphygmic interval represented the time occupied in raising the intraventricular pressure to an excess over the aortic pressure, and that a pulse wave could not appear in the arteries until the semilunar valves were opened, there must in this case be some condition present whereby intraventricular pressure was equal to the aortic pressure at the commencement of systole. Such a condition would exist under the supposition that the semilunar valves were incomplete, whereby the aorta and ventricle formed one cavity. During diastole blood would freely regurgitate into the ventricle. At the end of diastole the intraventricular pressure would

[24] *Journal of Physiology* vol. iii, No. 1.

therefore be equal to that in the aorta, and at the commencement of systole a wave would straightway appear in the aorta without the intervention of a presphygmic interval.

A simultaneous tracing was then taken from the heart and subclavian, when this interval was found to be practically *nil*. At the time I had met with no mention of this possibility among German authors, and I referred with much interest to Keyt, whom I found to have clearly recognised this abnormal shortening of the presphygmic interval in aortic insufficiency. The fact was first demonstrated to the Société de Biologie as long ago as March, 1878, by François-Franck. Keyt's tracings furnish a further proof which seems to me conclusive. In my own case there was a "to-and-fro" rough double murmur, only to be heard at the apex owing to the wheezing and *râles*, which obscured all sounds at the base. I could not satisfy myself by auscultation that the murmur was mitral. The tracing, therefore, was most valuable as a means of diagnosis, and satisfied me that my patient was suffering from aortic incompetency, with ossification at the base of the heart. The case is especially interesting, since I do not know of any other method than the graphic by which a correct diagnosis could have been made.

If we accept, as I am disposed to do, that marked aortic insufficiency is always accompanied by great diminution of the cardio-carotid interval, it follows that in cases where marked aortic insufficiency is known to exist, and there is either no alteration from the normal delay, or, still more, when there is an increase in the delay, we must assume the presence of some other retarding influence, of which the most obvious is aneurysm. François-Franck,[25] in discussing the well known and accepted delay of the pulse due to an aneurysmal dilatation somewhere in its path, says that the retarding effect of the aneurysm may be counterbalanced by the inverse influence of aortic insufficiency, the combined results of the two opposing effects being the conservation of the normal delay.

PULSE DELAY.

Suppose now that simultaneous tracings are taken from both radials. If the radial pulses are synchronously delayed, we may assume that the unseen and unsymptomed aneurysmal dilatation involves the ascending or transverse part of the aorta. Should the right radial show delay, there is a probability in favour of the dilatation affecting the innominate and the vessels arising from it. Should the delay be on the left side only, the aneurysm is located further along the arch. In fact, delay affecting any artery may be an important step towards the localisation of a presumable aneurysm in a part beyond the reach of direct observation. I think, for those who require some immediate proof of practical use from any study, this should give the combined use of sphygmograph and cardiograph a distinct claim on their attention.

Keyt, by means of experiments with a schema, and from observations of cases of mitral regurgitation, was led to formulate another proposition, that "the presphygmic interval is abnormally lengthened in mitral insufficiency." He laments that his announcement attracted but little attention, and that his observations have neither been confirmed nor disproved by others.

I think it is as well to discard all experiments with a schema if by them we think to imitate with any accuracy the behaviour of our own extremely complicated organism. The assumption to which such experiments have led Keyt is that the intraventricular blood pressure will not rise to an excess over the aortic pressure so soon as normally, if some of the ventricular blood can escape back into the auricle owing to incompetent mitral valves. No one can deny the possibility of his proposition in some instances. That it can be accepted as a general proposition applicable to all cases I cannot think. It would, even theoretically, need innumerable qualifications. It would be necessary always to know exactly the amount of blood pressure in the aorta, and the relation of aortic pressure to the length of the presphygmic interval. To say the least, this has not yet been worked out. The varying amount of blood flow from the auricle and the varying pressure within it at the end of diastole, the state of the auricular muscular walls and the time of auricular relaxation, the changes also in the pulmonary circulation owing to various causes, would all have to be considered.

Keyt, however, distinctly asserts that by the aid of this sign a positive diagnosis may be made at once, in any stage of the case, and without waiting for the development of sequences and symptoms; and that by the amount of retardation we may measure the amount of the regurgitation. One can but look wistfully at such a possibility. I do not think Keyt's tracings in this particular are very convincing.[26] Moreover, I have not myself obtained definite results in either direction, having in some cases met with cardio-carotid delay, but in others, where the mitral incompetency was very considerable indeed, I have failed to obtain any variation from the normal.

DEFINITION IN DIAGNOSIS.

I have spoken of Dr. Waller's description of the post-systolic character given to a murmur of aortic obstruction owing to the intervention of the presphygmic interval, the murmur following immediately after, though almost with the first sound. The assumption here—and I think very probably a correct one—is that the first sound concurs with the commencement of contraction, being a muscular rather than a valvular sound. Is it possible that the murmur of aortic obstruction, when there is also aortic insufficiency, may, the presphygmic interval being absent, antedate the first sound? Keyt thinks it may, but we should have to assume in this case (1) that the first sound was purely due to valvular closure, and (2) that the closure occurred some time after the commencement of ventricular contraction; both of which assumptions are contradicted by physiological experiments.

An interesting tracing which I obtained in a case of renal disease well illustrates a point which I mentioned in an early part of these lectures, and gives an explanation of some cases of what, to the ear, appears to be an independent action on the part of the two ventricles. Usually one pulse is felt to each pair of contractions. The heart appears to "tumble" in its action, and two first sounds may be distinctly heard in close sequence, followed by one second sound.

The descending limb of the first of each pair shows no distinct angle of drop, and the descent is slow, as if during relaxation of the ventricle the heart was still distended with blood. There is, however, a distinct auricular systole preceding the first rise. The auricular systole is absent from the second of the pair, which is more like a typical cardiogram. The first effort of the heart here is no doubt imperfect and tentative, and the ventricle is not emptied. A second, more complete, contraction follows, whereby the ventricle is emptied of blood, the pulse appears in the arteries, and a second sound duly occurs. It will always be a matter of regret to me that at that time I had not sufficient knowledge of methods to obtain a simultaneous pulse tracing, which would have placed the explanation beyond the possibility of doubt. It is, however, quite clear that the heart makes two distinct contractions, and that the appearances on the tracing are not due to independent action of the two ventricles. It is an effort at compensation of a curious, and hitherto unnoticed, kind.

CONCLUDING REMARKS.

These lectures must now come to a close. I should like publicly to recognise the enlightened spirit of the Board of Management of the Hereford General Infirmary, who granted me £25 for the improvement and purchase of apparatus, and to return my thanks to the Scientific Grants Committee of the British Medical Association for the sum of £5 for minor details. Finally, I must thank the College for entrusting these lectures to me. It has been my effort to be clear rather than literary, but the difficulty of my subject is great, and I fear that I can scarcely have succeeded in either attempt. The honour of giving them has, however, been something to me; and the feeling that they might be of use has made me think the task light indeed. I can only hope that you in hearing them, as I in writing them, have gained some clearer vision of things still lying in much obscurity.

[25] *Journ. de l'Anat. et de la Physiol.*, vol. xv, March to April, 1879.

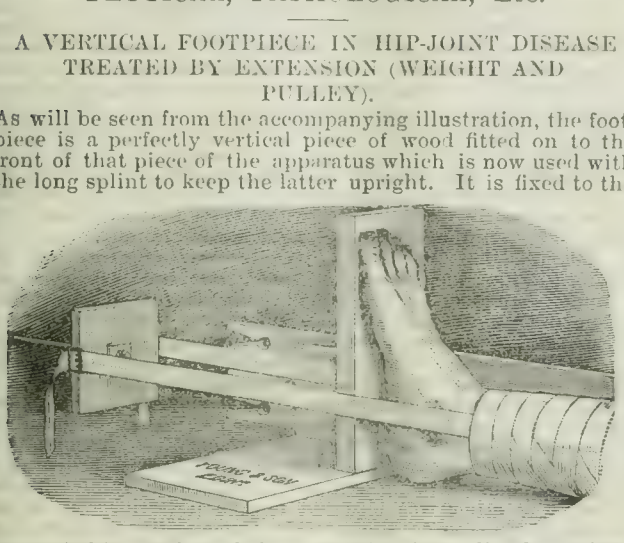
[26] P. 19, *loc. cit.*

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

A VERTICAL FOOTPIECE IN HIP-JOINT DISEASE TREATED BY EXTENSION (WEIGHT AND PULLEY).

As will be seen from the accompanying illustration, the footpiece is a perfectly vertical piece of wood fitted on to the front of that piece of the apparatus which is now used with the long splint to keep the latter upright. It is fixed to the



front of this portion of the apparatus immediately against one of the pieces of wood which forms the groove for the long splint. I have now used this footpiece in several successive cases which have been treated successfully for hip-joint disease, with the weight and pulley extension method, with manifest advantage both to the patients at the time of treatment and to the ultimate issue of the cases. The advantages that I claim for it are that by keeping the foot straight and nearly vertical it prevents (1) the production of the form of equino-varus often seen after prolonged treatment, (2) the weakening of the internal lateral ligaments of the ankle-joint, (3) the contraction of the extensor muscles of the foot, more especially the gastrocnemius (which in one case that came under my observation appeared likely to be permanent), and (4) it saves the bandaging of the foot to the splint, otherwise necessary, and thus greatly adds to the comfort of the patient, and consequently to the facility of the treatment, especially in the young.

It may be argued that the chief objection to the use of a footpiece is that it will counteract in some measure the extension. My answer to this allows me further to explain the application of the principle. In using this footpiece, it is never put so that the heel can rest against it. The ball of the foot, therefore, rests against it only, and the ankle-joint acts like a spring; what little pressure there is, therefore, is never in the line of traction which produces the extension. I have the first splint used by me with this method on a boy, aged 7, and the marks of his foot show most conclusively that the ball of the foot alone has been in contact with the vertical piece by the fact that the upper part is very much soiled while the lower part is perfectly unmarked. Of the last three cases I have treated in this method, two were "up" for twelve weeks and one for thirteen weeks. In one of the cases the shortening, which was 1 inch, was entirely reduced. In another case the shortening was 1½ inch, and the patient was allowed to get up after thirteen weeks, the shortening having been reduced to ¼ inch. Both cases, so far as the active joint disease went, were entirely cured without any bad symptoms other than those produced by physiological changes due to prolonged confinement.

Alloa, N.B. Edmund E. Dyer, M.B.Edin.

TREATMENT OF SEVERE CHOREA BY CHLOROFORM AND MORPHINE.

A girl, aged 17, was admitted into the Leeds General Infirmary in November last with moderately severe chorea. She had a rheumatic history but no existing arthritis. The movements increased rather rapidly in violence, unchecked by chloral in frequent doses of 20 grains. Beginning with ⅓ grain of morphine hypodermically immediately followed by inhalation of chloroform for a few minutes, and gradually increasing the dose of morphine to ½ grain, always aided by chloroform, the movements were kept under control with the greatest ease. The smaller doses produced sleep lasting only from one to three hours, the patient awaking no better; but after the ½ grain dose she slept almost uninterruptedly for nine hours, and was then so greatly improved that she required no further medication except by the mouth—in fact, became an ordinary mild case, and left the hospital well in about six weeks.

With moderate doses of morphine there is often a delay of many minutes before sleep occurs; the inhalation of chloroform for two or three minutes produces immediate sleep, which is continued by the morphine. If necessary, the chloroform may precede the injection of morphine.

T. Churton, M.D.,
Physician to the Leeds General Infirmary.

THYROID EXTRACT IN WASHERWOMAN'S ECZEMA, AND AS A LOCAL APPLICATION.

(Communicated by the Director General, Medical Department, R.N.)

S. H., aged 42, a washerwoman, was placed on the sick list on January 27th. The patient was suffering from an acute attack of typical eczema, of the impetiginous type, with intolerable itching and exudation. The legs and arms were chiefly affected. She was unable to stand or do her daily work. She was treated with the ordinary remedies for a week, and these failing to do her any good, I determined to give thyroid tabloids a trial.

On February 6th three tabloids were daily prescribed. The result was most gratifying. In twenty-four hours she began to peel, and when I visited her on February 9th the epidermic scales and crusts filled the bed and littered the floor. The patient expressed herself much improved by the medicine, and the soreness about her limbs had disappeared. The eruption still further yielded to treatment, and on February 12th she was able to attend at the out-patient department practically convalescent.

This patient occupied a small room in a back court, the general surroundings being very unfavourable for a good recovery. I think the remedy undoubtedly had a curative effect in this case.

I have been trying thyroid extract lately as a local application, and have found the remedy useful in the following cases: (1) Unhealthy serpiginous ulcers; (2) open buboes of specific gonorrhœal origin; (3) Hunterian chancres, and especially chancroids; (4) for the cure of deep sinuses. The medicine proved serviceable combined with calomel and another sheep product—lanolin. Buboes and sores quickly took on a healthy action, and in some patients desquamation was noticed. The tendency to too rapid healing had to be obviated, for example, in discharging buboes. An elegant preparation has been made for me by Messrs. Burroughs, Wellcome, and Co., in the form of thyroid cream. This seems to be a very cleanly and emollient dressing, the lanolin acting as a preservative. I have already noted the benign influence of the tabloids in certain syphilitic skin eruptions.

Chatham Hospital. J. D. Menzies, Surgeon R.N.

COMPLETE INVERSION OF UTERUS IN A PRIMIPARA.

About 2 o'clock on the morning of October 13th, 1893, I was hastily sent for by Dr. Parmer, of Notting Hill, to see a case in consultation. I found a primipara, about 25, lying in a state of severe collapse on the third day after delivery. The child had been born naturally without forceps. Crede's method had been used somewhat vigorously in expressing the placenta, though I have no reason for believing it was excessive, or that there was any unusual traction on the cord. After the placenta had been expelled another small mass was taken away, representing probably a placenta succenturiata. There was no excessive hæmorrhage. The patient went on perfectly well till about 5 p.m. on the afternoon of October 12th. She suckled the child. At that hour, while her bowels were being relieved in a chamber utensil,

placed on a low chair (not a bed pan), she suddenly felt a great pain, and something came "between her thighs." She felt very ill and looked so badly, the nurse said, that the doctor was sent for. He found a large soft and sanguineous mass protruding from the vulva. The woman was too much collapsed and distressed to permit of a full examination. On my arrival, I gave her some brandy and then put her under chloroform and on examination I found that the sanguineous tumour was undoubtedly the fully inverted and prolapsed uterus.

I then tried digitally to reduce the prolapse first, and after some time succeeded in getting the body of the uterus, which formed a mass about 8 inches by 4 inches, into the vagina, but could do nothing more digitally, the inversion remaining the same. I then clenched my fist, and placed the flat of the first phalanges against the inverted fundus, keeping up steady strong upward pressure. It gradually yielded, and became invaginated. I followed it steadily, and in about five minutes had the satisfaction of completely reinverting the uterus and restoring it to its original position. There was no hæmorrhage to speak of. The uterus and vagina were then washed out with corrosive sublimate $\frac{1}{20}\frac{1}{00}$, and the vagina plugged with gauze. The woman was kept up with meat, jelly, etc. The plugging was removed next morning, and I understand her recovery has been complete, with no further symptom of interest or any rise of temperature.

I think the occurrence of the complete inversion and reposition of the uterus of a primipara on the third day after an uncomplicated labour is sufficiently rare to make the incident worth recording.

Westbourne Terrace. ALFRED T. SCHOFIELD, M.D.

REPORTS
ON
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

QUEEN'S HOSPITAL, BIRMINGHAM.

RUPTURE OF MUCOUS MEMBRANE OF THE STOMACH.

(By J. HAZELWOOD CLAYTON, M.B.Lond., Casualty Surgeon to the Hospital.)

History.—H. L., a youth aged 16, was admitted at 11.30 A.M. on January 4th. He had been caught between the buffers of two railway trucks whilst helping to shunt them. At the time of admission he was found to be suffering from shock, and complained of pain in the abdomen; but the only evidence of any injury was a slight abrasion of the skin in the left hypochondriac region. His condition appeared to improve after he had been in bed about an hour, but at 1.30 P.M. he vomited nearly a pint of a reddish-brown fluid containing fragments of solid food and this liquid was found to be composed chiefly of altered blood. At 4.30 P.M. he again vomited half a pint of partially digested blood. He now complained of great pain in the abdomen, and there was marked tenderness on palpation, especially over the region of the stomach. The temperature was 99.6°; pulse 84; respirations 40, and chiefly thoracic, the abdomen scarcely moving. At 11.30 P.M. the boy's condition was decidedly worse, the pain had increased in severity, and the abdomen showed signs of distension. I therefore decided to explore.

Operation.—I opened the abdomen by a median incision above the umbilicus, and as soon as the peritoneum was opened a quantity of blood gushed forth. The stomach and intestines were carefully examined, but no evidence of any injury could be found. The hæmorrhage into the abdominal cavity appeared to be proceeding from the region of the spleen, and on passing the finger carefully over the surface of the spleen a laceration was felt; but, as it was impossible to explore that region from the median incision satisfactorily, I made a second incision in the left flank, and then found that the bleeding was from a superficial laceration of the anterior surface of the spleen; this was touched with a mixture of iodoform and friar's balsam, which completely controlled the hæmorrhage. The abdomen was then well irrigated with hot water, the median incision was completely closed by sutures, whilst through the lateral one a glass drainage tube was inserted.

After-History.—During the night the patient vomited small quantities of partly-digested blood, and about 2 drachms of blood-stained fluid were drawn off through the drainage tube. On January 5th, at 10 A.M., the condition of the patient showed improvement; the pain and tenderness were less, the face had lost its anxious expression, the temperature was 99.6° F., the pulse 100, and respirations 32. The fæces and urine passed by the patient were normal. The patient had nutrient enemata, but nothing was administered by the mouth. During the afternoon there was an increase in the pain but no distension of the abdomen; in the evening the temperature rose rapidly to 104.6°, the pulse being 204 and the respirations 34. At 8.30 P.M. the temperature suddenly fell to 97°, and death took place in about an hour.

Post-mortem Examination.—There was *post-mortem* discoloration of the body, but no sign of injury. The peritoneal cavity contained a small quantity of blood-stained non-inflammatory fluid. The intestines were slightly reddened. The stomach was moderately full of fluid, but there was no evidence of injury to the serous coat. On opening the stomach it was found to contain partially digested blood, whilst its mucous membrane was seen to be ruptured in two places, the one being on the anterior surface midway between the cardiac and pyloric extremities, of a somewhat irregular star-shaped area 1 inch in diameter, the mucous membrane alone being stripped from the underlying muscular coat; the other was situated on the posterior wall immediately opposite to the one on the anterior wall, and resembling it in size and in its limitation to the mucous coat. The œsophagus was free from rupture. The duodenum contained bile, but no blood. The diaphragm was infiltrated with blood in its left muscular half. The spleen showed a superficial linear laceration running across the lower half of its anterior surface, and on the posterior surface at its upper part a similar slight rupture existed. The left kidney was very small, and scarred irregularly as though from an old injury. The left perirenal tissue was infiltrated with blood. The right kidney was normal, as was the liver. There were old adhesions between the gall bladder and transverse colon. There was no fracture of ribs. Both pleuræ contained a little blood-stained fluid. Both lungs were healthy. The heart was healthy; both auricles were flaccid and contained a little liquid blood; both ventricles were empty.

REMARKS.—The appearance of blood in the vomit so soon after the injury indicated a lesion of the alimentary canal in the neighbourhood of the stomach. The increasing distension of the abdomen due to the hæmorrhage from the lacerated spleen led to the diagnosis of a complete rupture of some portion of the alimentary canal. The blood effused appeared to have been either vomited or retained in the stomach, and not to have passed into the duodenum.

The stomach showed no sign of previous disease, and the ruptures were apparently through healthy tissue, and entirely limited to the mucosa; the corresponding position of the two areas suggests the possibility of some solid portion of food having intervened between the two walls of the stomach as they were pressed together. The ruptured surfaces of the spleen would most probably have healed, as very little hæmorrhage took place subsequent to the operation. The scarring of the left kidney and the old adhesions between the gall bladder and transverse colon indicated some former abdominal injury, but of such no history could be obtained.

For this case I am indebted to Mr. Marsh, under whom the patient had been admitted, and my thanks are due to Mr. R. B. James, house-surgeon, for careful notes of the case.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

F. W. PAVY, M.D., F.R.S., President, in the Chair.

Tuesday, March 20th, 1894.

DEFORMITY OF THE SHOULDER GIRDLE.

MR. J. HUTCHINSON, jun., exhibited a specimen, the third of the kind reported, of a deformity previously described by Mr.

Willett and Mr. Walsham. It was obtained from a child, in whom the left shoulder was fixed high up in the neck under the occiput. The laminæ of the third, fourth, fifth, and sixth cervical vertebræ did not meet in the middle line, and were fused on the left side; from the fused mass there proceeded outwards a plate of bone terminating in a process of cartilage, with which the scapula articulated by its upper and inner angle. This disposition disproved the possible view that the osseous process was an abnormal development of a suprascapular element; and in this Professor Cleland agreed. Although in certain fishes a suprascapular element articulated with one or two of the upper dorsal vertebræ, Mr. Hutchinson was not inclined to regard the specimen as one of reversion to a previous type; the likeness of the three specimens now recorded, however, was noteworthy. The high position of the scapula corresponded with the normal primitive condition in the human subject.

Mr. Bowlby observed that in the other specimens referred to by Mr. Hutchinson the vertebræ were also abnormal, though not so much in regard to their laminæ as their bodies: in one there was a deficiency of three and a half, in the other of a lesser number. The formation of the osseous process was to be looked upon as part of a deeper failure in the development of the spine. He asked whether Mr. Hutchinson had noticed any alteration in the rhomboid muscles or levator anguli scapulæ.

Mr. Hutchinson stated in answer that the rhomboid muscles were normal; as to the other muscle, he had not examined it.

Histological Changes of the Breast associated with Carcinoma.

Mr. Cecil F. Beadles brought forward a continuation of the work he had before reported on this subject. Mr. Stiles had since asserted that the secondary formations in a breast the seat of a carcinoma were in all cases located in lymphatics. The author, however, still held that this was not always the case, and that secondary foci might arise in the acini of the gland at a distance from the primary growth. In Mr. Stiles's view recurrence did not take place in the acini after removal of a carcinoma, when the apparently normal portion of the breast was left; the author, however, held that this was not always true. He maintained that the acinous changes due to inflammation, and which might be called precancerous, could be distinguished from those due to carcinoma; as a test of carcinoma, he relied upon the want of uniformity in size of the epithelial cells and their large size. In support of his views, the author cited certain typical instances. In one, from a woman, aged 35, in whose breast there was a typical carcinoma 2 inches in diameter, sections made from another part of the organ showed enlargement of certain lobuli, of which the ducts were occluded by epithelial proliferation, and the surrounding stroma was the seat of small-celled infiltration; the cells filling the acini were of large size, and wanting in uniformity; the general disposition made it certain that acini were involved and not lymphatics, and he thought that the change must be considered as carcinomatous. Though Mr. Watson Cheyne held with Mr. Stiles that mammary carcinoma arose as a single growth, which extended only by lymph spaces, the author did not see why carcinomatous changes should be so limited in their origin to a single acinus. A second case to which he attached importance was that of a woman with carcinoma of the uterus. The breast in this patient presented no microscopic new formation, but microscopic sections showed in it areas which he regarded as carcinomatous, as judged by the criteria he had offered; the disease was not metastatic, but of independent origin.

Mr. Jackson Clarke agreed with the author's views in so far as the first stage of carcinoma was one that might be regarded as an inflammatory lesion.

Mr. Raymond Johnson had observed so highly-marked irregularities of epithelium in so many other lesions that he could not allow that proof had been given that those found in the acini of parts of a cancerous breast away from the tumour were really carcinomatous.

Mr. Anthony Bowlby had on a previous occasion pointed out, like the preceding speaker, that such varied changes were to be encountered in non-cancerous breasts, even in the involution following lactation, that he did not see what proof Mr. Beadles had furnished that the lesions he had described were truly cancerous: they might be precancerous, in the sense in which the word was used in other situations. And as to local recurrence, though this might take place in the remains of the breast after partial excision for cancer, it was, he thought, because the breast was predisposed by the inflammatory changes noticed, that was, if the recurrence really occurred in the secreting tissue; and in support of this view, it was not very rarely observed clinically that the opposite breast became the seat of carcinoma after the excision of one, for the reason that in most cases the predisposing conditions would affect them equally. He was of opinion that carcinoma started at a particular spot, whence it extended, and that it did not arise independently at many.

The Left Hemisphere from a Case of Aphasia.

Dr. W. N. Ord and Mr. S. G. Shattock recounted the case of a man, aged 61, admitted four days after the sudden onset of aphasia. He was, when admitted, able to speak, and was able to show that he recognised objects presented to him, though incapable of hearing them. He spoke with hesitation, and with exaggerated facial movements. The nasolabial fold was less marked on the right than on the left side, but very slightly so. The patient could frown, smile, shut his eyes, show his teeth as well on the right side as on the left. The masseter and temporal muscles contracted with equal force on both sides; the tongue was projected straight in the middle line. Death occurred forty days after admission. Examination of the left hemisphere showed a depressed yellow area of softening in the lower frontal convolution, corresponding with the proper aphasic area of Broca; but behind this was a second similar area occupying the lowest part of the ascending frontal convolution; this area extended in the upward direction from the posterior limb of the Sylvian fissure for the distance of 1 inch, and involved the larger anterior part of the convolution in question, there being, however, a hinder uninvolved strip. The interest attaching to the specimen arose from the fact that the only facial affection was some paralysis of the opposite levator labii superioris alæque nasi. In the monkey the centre for this muscle lay in the ascending frontal convolution, opposite the highest part of the third frontal. It would seem that although the face and tongue centre in man lay in the lowest third of the ascending frontal convolution, there was a special area in the anterior portion of the lowest third of this convolution which was not part of this centre; and as the area corresponded with what had been shown by Dr. Felix Semon and Professor Horsley to be the phonatory centre in the monkey, the authors thought that it might provisionally be held to have the same function in the human subject. In the monkey, stimulation of the centre in question produced a bilateral result, namely, adduction of the vocal cords. Seeing that the corresponding area on the right hemisphere was uninvolved, the absence of any affection of phonation in the case recorded was intelligible.

Dr. Rose Bradford pointed out as worthy of notice that no lesion appeared to be present in the angular gyrus or the temporo-sphenoidal, since lesions in such situations had been noticed in cases where the power of naming objects was lost, whilst that of repeating the names of such remained.

MEDICAL SOCIETY OF LONDON.

Sir William Dalby, M.B., F.R.C.S., President, in the Chair.

Monday, March 19th, 1894.

The Diagnosis of Diphtheria by Bacteriological Cultures.

Dr. Wethered read a paper on this subject. He said there were a fair number of cases of diphtheria in which it was not an easy matter to decide whether the disease was one of follicular tonsillitis or diphtheria. The discovery of the bacillus of diphtheria suggested that a very considerable aid to diagnosis might be found in bacteriological cultures obtained from deposits found in the patient's throat. The procedure, however, could only be carried out in hospitals or labora-

tories provided with apparatus for bacteriological research. In other cases which he had brought to the notice of the Society he had relied entirely on the morphological characters of the Klebs-Loeffler bacillus, and quoted such observers as Councilman and Williams as having done the same. He (Dr. Wethered) had examined twenty-six cases of diphtheria and sixteen of follicular tonsillitis. His method was to obtain particles of the deposit from the throat by means of a strong piece of platinum wire fixed in a glass handle, and bent into a loop at the end. The portion thus obtained was drawn over the surface of glycerine agar-agar contained in large test tubes, which were then placed in an incubator at a temperature of of 37° C. for twenty-four hours, and the cultures examined microscopically. In sixteen cases of follicular tonsillitis he found staphylococci only, and in one case bacterium termo also, but no organisms which could in any way be mistaken for the bacilli of diphtheria. In twenty-six cases of diphtheria he found the Klebs-Loeffler bacillus fifteen times, streptococci three times, and staphylococci eight times. Baginski had stated that streptococci might cause mild forms of diphtheria, but of Dr. Wethered's cases two recovered and one died. He gave briefly the reasons why he failed to find bacilli in the remaining eight cases, and after giving details of two cases of which the diagnosis was uncertain, but which were proved to be diphtheria by means of cultures, he offered the following suggestions: (1) That bacteriological examination of material obtained from the throat in doubtful cases of diphtheria might prove of great service in diagnosis. (2) That on microscopical examination there was no great danger of mistaking organisms found in cases of follicular tonsillitis for the pathogenic organism of diphtheria, although the naked-eye appearance of the cultures were not characteristic. (3) That as some observers had described non-malignant organisms similar to the diphtheria bacillus, in case of doubt plate cultures on gelatine should be made as control experiments.

Milk Diet in Bright's Disease.

Dr. Ralfe remarked that the exclusive use of milk as a diet in Bright's disease in all its stages had found considerable acceptance, though recently its utility had been questioned with regard to the more chronic stages. The fact that milk, either exclusively, or at least in considerable quantities, had proved beneficial in a large number of cases was incontestable. He gave the result of observations as to the effect of a milk diet on the secretion of urine, as regards its quantity, amount of solids, and excretion of urea and albumen, in patients suffering from nephritis in its different stages, such as ordinary acute nephritis, chronic nephritis with active hypertrophy of the left ventricle, with strong pulse tension; chronic nephritis with failing cardiac action and degenerated vessels; chronic renal cirrhosis from venous congestions, the result of valvular disease of the heart, and nephritis complicated with lardaceous disease. The patients at first for one week were placed on an ordinary diet (containing 4 ounces of meat), and afterwards for two or three weeks kept on milk, and then again for a week resumed the ordinary diet. The results were given on charts showing the weekly averages of the quantity of urine passed, the solids, the urea, and albumen. With regard to acute nephritis, it was found that the effect of a milk diet was to increase the quantity of urine, the amount of solids, and the urea, and to diminish the albumen, all which was reversed when a more stimulating diet was resumed. In the chronic cases the milk diet had not such a marked diuretic effect on the amount of urine secreted, but caused a decided fall in the quantity of solids and of urea. The effect on the amount of albumen was varied—in nephritis, associated with high pulse tension, it was certainly lessened; but in nephritis with failing cardiac action and degenerated vessels very little change occurred. As a rule, the milk diet was well borne by the acute cases, and they certainly improved under its use. On the other hand, the chronic cases generally disliked milk from the first; they did not improve under it, and it certainly increased the uræmic symptoms. It had, however, considerable influence on reducing the tension of the pulse, which rose again on the resumption of a diet containing meat. This raising of the pulse tension was an important objection to the use of a too stimulating diet in cases in which there was a strongly acting vascular system, for fear of its inducing cerebral hæmorrhage, a risk as great, in Dr. Ralfe's opinion, as of inducing uræmia by too low a diet. The exclusive use of milk should be confined to acute cases alone, and for a time perhaps to chronic cases, when it might be necessary to reduce the action of the vascular system. In cases with a failing heart and degenerated vessels a more stimulating diet was called for; its effect should, however, be carefully watched, and it should only be given in small quantities at a time.

Dr. Hale White referred to a series of observations made by him on the effects of a milk diet in patients suffering from chronic nephritis. His conclusions, on the whole, agreed with those put forward by Dr. Ralfe. The milk diet increased slightly the amount of urine excreted and lessened its specific gravity, but the amount of albumen increased. He insisted on the fact that the loss of albumen in chronic nephritis was trifling *per se*, and he added that too much importance was attributed to the amount of albumen present in the urine. He agreed that the milk diet tended to increase the risk of uræmia when this was threatening. No hard and fast rule could be laid down as to the milk diet in chronic cases of nephritis, and rather than give it in all cases he would prefer not to give it all.

Dr. Solomon Smith suggested that the failure sometimes observed with milk might be due to its not being digested, which would make a milk diet a form of slow starvation.

Dr. Shuttleworth had found that boiled milk was seldom tolerated for long, and he asked whether the effects of the milk of other animals was the same as that of cow's milk.

Dr. Kelson mentioned that the addition of eggs to the milk diet in one series had determined disastrous symptoms, and two of the patients had died, apparently in consequence of the change of diet.

Dr. Wethered pointed out that the effect of a milk diet must vary according to the previous habits of the patients, and he asked whether any difference in this respect had been noted between hospital and private patients.

Dr. Ralfe pointed out that what these patients required was a more solid but not a stimulating diet. He regretted that Dr. Hale White should have made use of the term "full diet," which was apt to mislead. The average quantity of milk was four pints daily, but more was given if asked for. It was taken plain or boiled or with effervescing water as elected by the patient. He explained the mode in which his analyses were made in order to avoid various sources of error and to ensure an accurate estimate of the quantity of albumen.

Dr. Hale White asked permission to explain that by "full diet" he meant what was known as a full diet in hospitals—a technical expression with a definite meaning.

Manchester Medical—*March 7th*—Professor Dixon Mann, President, in the chair.—Mr. Jones showed two cases of united fracture of the olecranon treated by wiring. In both instances the injury had been caused by a severe fall on the point of the elbow, in one case sixteen months and in the other six weeks before the operation. The olecranon was exposed by a single posterior median incision; the fractured surfaces were freshened and brought together with two silver sutures in each case. The wires were left *in situ*, causing no inconvenience. In one case the joint was drained with catgut. Primary union and perfect function resulted in both cases.—Mr. Hardie showed a boy, aged 12, with persistent thyro-glossal duct or canal of His. He proposed to treat the condition by slitting up the canal and then excising the fibrous structure surrounding the duct. Mr. Hardie also showed a boy, aged 16, with tumours of the cervical vertebræ associated with enchondromata of the fingers. He mentioned another case of osseous tumours of the cervical vertebræ simply—in a man, aged 35, which was then under his observation.—Dr. Donald made some remarks on vaginal hysterectomy, and gave short notes in a tabular form of 17 cases. In the series there were 3 deaths as the result of operation, 2 from septic peritonitis and 1 from asthenia. In the last 12 cases, in which the wound in the peritoneum was partially closed, only 1 death had occurred. Fourteen of the cases suffered from cancer of the cervix or of the body of the uterus. In 3 of these the operation was fatal; in other 4 of doubtful benefit; in 4 there was recurrence within six months, but the operation brought about great relief of symptoms; in 3 there was no recurrence (1 after three and a-half years, 1 after two years and four months, and 1 after nine months). In the remaining 3 cases the operation was undertaken for uterine fibroid; all of them recovered. In two of these the tumour was as large as a fœtal head.

Nottingham Medico-Chirurgical—*March 7th*—Dr. Hunter, President, in the chair.—Mr. Anderson showed (1) a man, aged 44, who had suffered from epileptiform attacks for nine years, dating from a fall on the head. The symptoms pointed to lesion of the motor centres of the left side of the brain. There was a scar on the scalp 5 inches above

the left auditory meatus, and beneath the scar the bone was grooved. A trephine was applied over the depressed bone, and when the disc of bone and the dura mater had been removed, a cystic accumulation of fluid was found pressing on the brain. This was evacuated and the wound dressed. The patient made a good recovery, with relief to all his symptoms. (2) A man, aged 23, who had suffered from fits of nine years' standing. The localising symptoms pointed to a lesion in the centre for the movements of the left thumb. Two previous operations had been done with only temporary benefit. The skull was trephined a third time on February 20th. Recovery from the operation was complete, and he had since had only three slight fits. (3) A man, aged 26, who had had twelve attacks of appendicitis during the last five years. The enlarged and adherent appendix was excised, and the cut surface covered by an omental graft. A complete recovery resulted. Mr. Anderson related the case of a man whose head had been injured a year previously by the fall of a stone upon it. He had since suffered from headache, vertigo, and mental failure. A disc of bone was removed from the right parietal region, corresponding with a tender spot on the scalp. Since the operation the symptoms had been much relieved.—Dr. Elder gave some "Reasons for Early Ovariotomy." These were the danger of benign tumours becoming malignant, the prevention of various pressure symptoms, the danger of adhesions forming, and of accidents such as twisting of pedicle, hæmorrhage into or suppuration of the cyst.—Remarks were made by Messrs. Steavenson, Cattle, and Watson.—Specimens were exhibited by Dr. Elder, the President, and Mr. Kingdon.

Laryngological—*March 14th*—Dr. Felix Semon, President, in the chair.—Dr J. B. Ball brought forward a case of fixation of one vocal cord of uncertain origin. The voice had been affected ever since an attack of influenza, but there was no other disease which could explain the paralysis. Dr. Ball also showed a case of tumour of the thyroid associated with a swelling within the larynx limited to the right side. The thyroid swelling was probably malignant, but opinions differed as to the cause of the intralaryngeal tumour.—Dr. F. W. Bennett exhibited a patient with marked laryngeal symptoms of spasm in association with early insular sclerosis.—Remarks were made by Dr. Spicer, the President, and Dr. McBride.—Dr. de Havilland Hall showed a patient in whom a tracheal fistula had been successfully closed after twenty-one years' duration. Dr. Hall also exhibited the larynx of a patient, previously shown to the Society with laryngeal stenosis, who in a street brawl had suddenly lost his tracheotomy tube, and died very rapidly.—Mr. Spencer thought that the death might in some measure be due to a neuritis of the superior laryngeal nerve, as the patient during life had given evidence of cardiac failure from this cause.—Dr. Percy Kidd showed cases of laryngeal stenosis (probably tuberculous); subglottic tumour in a tuberculous subject; and a case of tracheal stenosis.—The President exhibited two cases of malignant disease of the larynx cured by thyrotomy and excision of the new growth. In both instances the voice had been recovered very fairly, and on examination it was seen that a prominent ridge had formed in the cicatrix in the situation of the cord that had been removed, and that the healthy cord moved up to it in phonation. The fact that cicatricial ridges would thus take upon themselves the function of a cord had been seen in other cases.—Dr. Scanes Spicer exhibited a case of pachydermia laryngis, the symptoms of which had been very sudden in their onset.—A second case of pachydermia was also shown by Mr. C. J. Symonds.—Dr. Herbert Tilley showed a case of adductor paralysis of the left vocal cord and a case of advanced tuberculous disease of the larynx in which an almost complete destruction of the epiglottis gave rise to no pain and no dysphagia.

Liverpool Medical Institution—*March 15th*—Mr. Puzey in the Chair.—Mr. Damer Harrisson opened a debate on the value of abdominal operations in the treatment of malignant disease of the alimentary tract, in which was included the adjourned discussion on Mr. Banks's two fatal cases of gastro-enterostomy for pyloric cancer. Mr. Harrisson said gastrostomy should be performed when semi-solid food could no longer be introduced through the œsophagus into the stomach. He did not believe that gastro-enterostomy prolonged life much, but that in the future great good would result, if in suitable cases it was combined with pylorectomy. The latter operation should only be done where a small, freely movable tumour could be felt, and before there was great distension of the stomach. Colotomy should be performed immediately it was decided that excision of the rectum was not applicable.—Dr. Alexander said that malignant disease being local in its earliest stage the problem was simple if early diagnosis could be made—namely, to cut out the diseased part of the tube, and unite the cut ends of the healthy intestine. Unfortunately, neither the diagnosis nor the operative procedures were satisfactory at present. He had not much sympathy with palliative operations.—After some remarks from Dr. Barr, Dr. Carter said that at present the diagnosis could only be made by the appearance of a tumour, and then in nearly every case it was too late for operation. As soon as the tumour could be felt he saw no objection to an exploratory operation, the wound being closed up again, unless there was a good prospect of being able to eradicate the disease.—Mr. Robert Jones had very little faith in the utility of gastrostomy and gastro-enterostomy, but he believed pylorectomy had a future.—Mr. Paul said that when a physician suspected cancer of the stomach he should allow the surgeon to make an exploration; in this way he believed that pylorectomy, in early cases, would become an established success. Gastro-enterostomy he considered still *sub judice* owing to the operative difficulties. In cancer above the rectum he could speak with more confidence, as he had performed colectomy six times; the first three patients died, but owing to improved methods in operating the last three recovered. He much preferred, however, to excise the rectum or part of the colon than to adopt the palliative treatment of colotomy.—Mr. Banks gave details of four cases of gastrostomy, two of gastro-enterostomy, and seventeen of colotomy. Not having any personal experience of pylorectomy, he could only say that suitable cases seemed so rare that at present gastro-enterostomy would be the most useful procedure in well-selected cases. He put in a plea for more judgment and care in the selection of appropriate cases for the operations under discussion.

REVIEWS.

A Treatise, Practical and Theoretic, on Cancers and the Cancer Process. By Herbert Snow, M.D.Lond., etc. London: J. and A. Churchill. 1893. (Demy 8vo, pp. 400. 15s.)

In the work before us we have ample evidence that Dr. Snow has not entered on the treatment of the many difficult questions involved in this subject without careful study of what has already been written, and of the ample material that must have passed through his hands in recent years; and although many observers will be diametrically opposed to a number of the views set forth in this work, all must feel that the methods of obtaining the desired results which he advocates—that is, the prolongation of the life of the patient and the alleviation of suffering—are in most cases eminently rational, especially as regards the complete removal of the growth in the early stages of its development, though few will be inclined to take such an optimistic view of the results of after-treatment as Dr. Snow himself does.

The author is probably somewhat rash and certainly too comprehensive in including so many forms of tumour as he does under cancerous disease, the clinical history, the age of the patient affected, and the termination of the process, differing so materially in the different cases he describes; whilst the developmental and pathological evidence all point to essential and marked differences which under Dr. Snow's comprehensive classification are only too likely to be ignored.

At present the terms "sarcoma" and "carcinoma" or "cancer" have well defined, if perhaps somewhat too comprehensive, meanings, but if the author's classification is to be accepted these will have to be entirely altered, and the confusion arising from such reclassification, especially if the somewhat mixed and irregular form proposed were accepted, would be enormous. As an example of the unnecessary subdivision which accompanies a somewhat miscellaneous grouping, it may be pointed out that the melanotic sarcomata are (page 175) divided into two groups—those derived from the skin, and those derived from the eyeball; one is described as an epithelial melanotic cancer, the other as a melanotic sarcoma. Those who have studied the tumours in these two positions will feel considerable difficulty in recognising and accepting the sharp lines of demarcation and differentiation which are here insisted upon. As another example of the way in which tumours that are looked upon by pathologists as essentially different growths are mixed up, it may be mentioned that colloid cancers and myxomatous growths are held by Dr. Snow to be the same, as he maintains that colloid cancer is "the result of a mucoid degeneration process precisely analogous to the transformation of connective tissue elements in myxoma." Although these two processes may undoubtedly go together, the processes of degeneration in epithelial and connective tissue structures have been recognised as being so different from one another, both histologically and chemically, that they ought not to be brought together under any system of classification.

As regards treatment, Dr. Snow lays great stress on the early removal of localised cancerous growths either by the surgeon's knife or by escharotics, but he appears to prefer the former method in so far as it "permits more free selection and judgment in the adaptation of means to ends." He also on good clinical grounds, for which he has the additional authority of the pathological histologist, recommends "the extirpation of the adjoining lymph glands, if possible, before they have undergone any increase in bulk, by which time the particles will have been still further diffused by the lymph or blood currents; and in the carcinomata general blood infection will have commonly taken place." He also holds that operation such as removal of the tongue in cases of epithelioma, and removal of the adjoining glands in cases of breast cancer, are essential. It is, however, open to some question whether the removal of the local disease as a palliative method, except in the case of the tongue and the axillary glands in mammary cancer, and the application of chemical escharotics, do not so much hasten the course of the disease that in the majority of cases their use is inadvisable.

The chapter on blastomata is practically devoted to a consideration of Cohnheim's belated rudiment theory, and Dr. Snow appears to include in his class of blastomata all tumours, whatever their origin, course, and termination, which can in any way be traced to the irregular development of an embryonic rudiment. Here, again, his class comprehends so many and such different tumours that his classification loses its value. Indeed, it seems possible that all the tumours which are there included may find their analogue or homologue in similar tumours not derived from belated rudiments. The chapter is interesting, however, in so far as the author has collected a large number of tumours which have occurred in positions where they may readily have had their origin in the so-called belated rudiments.

The original distribution of cancer and cancerous tumours is gone into fairly fully, and a considerable number of cases have been collected and described in order to illustrate the salient features of the tumours occurring in the various positions.

The most disappointing feature in the book is the illustrations, which, though in many instances very pretty to look at, are all of them far too diagrammatic to convey any real idea of the appearance of the structures. In some cases there is no outline of the cell given at all, and we have merely an indication of the shape and position of the cell in so far as these may be gathered from the arrangement and position of the nuclei as here represented. Where so much depends on an accurate comprehension of the appearances presented by cells and the relation of the different parts to one another, such diagrammatic representation makes it impossible to give an opinion as to the accuracy or inaccuracy of the author's observations. The book, however, as a whole, contains many original ideas, some of which, however, we believe to be absolutely incorrect, though others are worthy of very careful consideration. As a textbook for the ordinary student it cannot be strongly recommended.

LES MALADIES DU SOLDAT [Diseases of the Soldier]. Par Dr. A. MARVAUD, Professeur Agrégé libre de l'École du Val-de-Grâce. Paris: Félix Alcan. 1894. (Royal 8vo, pp. 839, 20 fr.) Published in two parts.

II.

THE last four books into which this work is divided are etiological, clinical, and prophylactic studies of the various diseases met with among soldiers. As might be expected, one is devoted entirely to the infectious diseases. In it is a fairly good chapter upon infection and disinfection, which, if perhaps not materially adding to our knowledge, is still quite up to date. It is curious to find that as in the British army so in the French, the medical officers complain of the inadequacy of arrangements in many garrisons for proper isolation of the infectious sick and efficient means for disinfecting clothing and bedding.

The chapter dealing with enteric fever is good. From figures given, it appears that this disease is twice as prevalent among the French soldiery as in the civil population of like age. Their experience agrees with our own in regard to the special incidence of this disease among the young soldiers. Dr. MARVAUD considers enteric fever to be endemic in the majority of French garrison towns, the defective water supply and sanitary arrangements being mainly responsible for this circumstance. An effort is made to discuss the real etiological significance of the Eberth-Gaffky bacillus in this affection and its precise relation to the bacillus coli communis. Dr. Marvaud appears to regard the one as being nothing more than a transformation, under suitable conditions, of the other; at the same time he is inclined to think that conditions of fatigue, exhaustion, overcrowding, and auto-infection may account for many cases of this disease which are inexplicable by the existence of an antecedent case. These views are not new, but, in the absence of stronger and more definite facts and arguments than are here offered, will fail to carry conviction to the English reader.

The chapter dealing with tuberculosis is notable for the tribute paid to the work of the late Dr. Parkes in demonstrating the great influence of ventilation of barrack rooms in lessening the mortality from phthisis among soldiers, and to the importance of regarding tuberculosis as essentially a communicable disease.

Small-pox and vaccination are fully discussed. The latter procedure is compulsory in the French army, and upon its value the author writes in no uncertain language. Animal vaccine is more generally used than human. Great care is enjoined by the military regulations to be taken to secure absolute cleanliness in the operation, with the result that post-vaccinal complications are extremely rare among the French soldiers.

Measles, scarlet fever, erysipelas, and diphtheria are all considered at some length. The latter disease appears of late years to have increased among the French soldiery, the large urban garrisons, particularly Paris, having suffered most. Considerable space is given to accounts of jaundice, glanders, farcy, and hydrophobia, as well as to malarial fevers. As might be expected, these latter are rare in France itself, but contribute largely to inefficiency in both Algeria and Tunis. Like ourselves, French military surgeons find that arsenic is of little avail either in the cure or the prevention of malaria and that of quinine preparations, the sulphate is the best.

Dr. Marvaud urges that diarrhœa and dysentery should be regarded as infectious maladies, and as such needing prompt measures in regard to segregation of the sick and disinfection of all excretal discharges. French military experience shows the aggravation and extension of these diseases which follow the aggregation of those suffering from them. No new ideas as to the treatment of these cases are offered, except it be an insistence upon the value of maintaining body warmth in all cases. Dysentery, according to the author, should be regarded as the specific cause of liver abscesses.

The chapters devoted to influenza, typhus fever, and cholera are on the whole disappointing, but that upon affections of the heart is distinctly good. The author attaches less importance to the abuse of tea, coffee, and tobacco in the production of certain functional cardiac derangements so common among soldiers, than he does to fatigue, overstrain, pressure of accoutrements, etc. Parkes and other English military surgeons long ago recognised the existence of the "irritable heart" among soldiers, and it is satisfactory to find their work, observations, and recommendations confirmed and advocated by French military surgeons of the present day.

The various affections of the digestive organs, nervous system, and skin, as met with among soldiers are all discussed at some length, though the author's account of the Biskra or Aleppo sore, an affection analogous to the Scinde or Delhi boil, is less full than we expected to find.

The relative prevalence of diseases of the eye among French soldiers is difficult to estimate, as in the official returns these diseases are bracketed with those of the ear. Ophthalmia appears to be as little prevalent in the French army as in our own, while like ourselves the French have many non-effectives as the result of chronic middle ear disease, in great measure sequelæ of causes antecedent to enlistment. To correct this, Dr. Marvaud advocates greater stringency in the medical examination of conscripts and the adoption of more careful supervision of bathing parades, especially the forbidding of bathing immediately after any fatiguing exercise and the insertion of cotton wool plugs in the ears during actual bathing.

The amount of venereal disease seems to have been steadily falling of late years in the French army. This is particularly so with regard to gonorrhœa. The author makes no attempt to analyse the comparative frequency of venereal affections among the military and civil populations, as practically no reliable data are available.

In the chapter devoted to a consideration of the chief diseases dependent upon dietetic errors, it is satisfactory to learn that scurvy is a thing of the past, and that alcoholism and diseases the direct result of intemperance are each year diminishing in the French army; it is less pleasing to find (page 814) figures giving the ravages of drink in the British army. It is a pity the author has not looked up English army statistics on this point of more recent date than 1859-66.

In closing the notice of this book, we can most heartily congratulate the author upon his work and the care with

which he has completed his task of preparing what is practically a complete manual of military medicine in its broadest sense. Its value would have been enhanced had the author, in attempting to discuss comparative statistics, obtained access to and quoted more recent figures, especially with reference to the incidence of disease in foreign armies. Possibly this defect may be remedied in a later edition. The work as it stands is certainly unique, and not only of interest to the demographist, but well worthy of perusal by every army medical officer, no matter what his nationality.

NOTES ON BOOKS.

Stammering: its Nature and Treatment, with Appendix on Voice Production in Speaking. By Emil Behnke. Fourth and enlarged edition. (London: T. Fisher Unwin. 1893. Foolscap 8vo; pages 31. 1s.) — In this pamphlet the late Mr. Behnke, after defining what stammering is, and warning parents that children do not "grow out" of it, inquires into its causation from a pathological, mental, and elocutionary point of view. He recommended that treatment should be based on diaphragmatic and phonation drill, and declined to train stammerers unless they were placed under his care for at least three months. An extract from a special discussion on the necessity for systematic voice training in public speakers, held at a meeting of the British Laryngological Association, is appended. The pamphlet is clearly written, and may be strongly recommended to those who are interested in the treatment of this malady.

A Manual of Practical Hygiene. By W. M. L. Coplin, M.D., and D. Bevan, M.D. (Philadelphia: P. Blakiston, Son, and Co. London: Kegan Paul, Trench, Trübner, and Co. Demy 8vo, 456 pages, with 140 illustrations, 25s.)—This book deals at some length with such subjects as personal hygiene, clothing, habitations, and meat inspection. Details are given concerning the climate of most of the States of the Union. The subject of bacteriological *technique* is also discussed. Many questions, however, which it might have been anticipated would receive attention in a work of this kind are either dealt with superficially or escape consideration entirely. Sewage disposal, for example, is very inefficiently treated; vaccination receives the briefest possible mention; no allusion is made to vital statistics; and but little information is given concerning the ordinary forms of infectious disease. It is, of course, impossible to discuss within the compass of a work of this kind all the questions of interest to students of hygiene, and no doubt individual opinions differ widely as to the relative importance of various branches of the subject. This book does not appear, however, to be a conspicuous instance of judicious selection. In the sections dealing with bacteriology there are a few orthographical errors which have escaped correction.

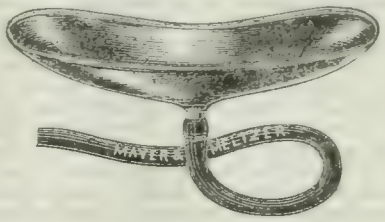
Ein dermatologisches System auf pathologisch-anatomischer (Hebra'scher) Basis [A Dermatological System (of classification) on the Basis of Pathological Anatomy—following Hebra]. Von Dr. S. Jessner. (Hamburg and Leipzig: Leopold Voss. 1893. Paper covers, Royal 8vo, pp. 66, M. 1.80.) —Dr. Jessner considers (and with reason) that any classification of skin diseases that has a chance of being accepted as a permanency must be founded, not on the changing phases of external manifestations, but on the structural changes which underlie them. He suggests a classification on this basis, grouping these affections under six classes. The tract possesses interest for writers on dermatological subjects.

REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

A "UNIVERSAL TRAY."

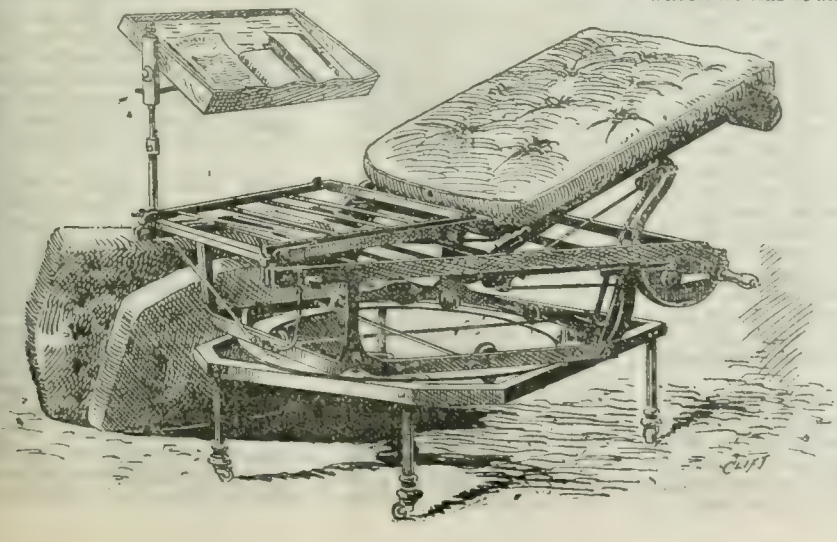
The old-fashioned pus-basin was a clumsy appliance. In washing out a sinus or emptying a cavity there was always a a great risk that in removing the basin from the body of the patient some part of the fluid would be spilt into the bed or on to the floor. The basin shown in the accompanying diagram should render it easy to douche a wound for as



long as may be necessary, and with as large a quantity of fluid as may be desired. The india-rubber tube attached to the central aperture is carried into a basin placed on the floor, and the fluid runs away at once into this, and does not accumulate in the pus basin held in contact with the patient, and liable, therefore, to be tilted by any sudden movement. It can be held in place by the patient himself. The appliance has been made at the suggestion of Mr. W. T. Whitmore, of Arlington Street, by Messrs. Meyer and Meltzer, 7, Great Portland Street, London.

INVALID CHAIR BEDSTEAD.

Mr. W. Dowley Eddowes, L.R.C.P., of Stamford, forwards us a description and drawing of an invalid chair bedstead which he has found useful and practicable, and recommends for use, especially in convalescent wards of hospitals and infirmaries. The bedstead has been invented and patented by Mr. Thomas Turner, of Ketton, Stamford, Lincolnshire. The head portion can be raised by a winding arrangement to any position; the foot part also can be lowered in a similar manner. A patient can thus be raised into a sitting posture without fatigue or handling. The bedstead turns on a circular frame, so that the patient can be brought to face in any desired direction. There is an arrangement for keeping the mattress of the head portion fixed in a proper position, so that the tendency to force the patient down in bed observed in most bed rests is avoided.



A hospital for lepers, with a laboratory for the study of leprosy, has been established at Rio de Janeiro. Dr. Wolf Havelburg, a German physician, who for the last twelve years has practised in Brazil, has been appointed director.

TEA, COFFEE, AND COCOA.

On Wednesday Mr. Ernest Hart, Chairman of the Council of the National Health Society, delivered an address on this subject at the rooms of the Society, 53, Berners Street, in which he aimed at dispelling many common errors, and discussing the matter in hand practically as well as from the scientific point of view. The lecturer began by referring to the overwhelming argument in favour of these beverages deducible from the principle *quod ubique, quod ab omnibus*. A universal, discriminating, and all-powerful instinct had led first all the nations of the East and the South to use as their beverage, and subsequently all the Western nations, to adopt from them beverages derived from tea, coffee, Paraguay tea, cocoa, Guarana chocolate, or the kola nut. These were all extremely different in their flavour, and altogether different in their sources of origin. The tea was the dried leaf of a camellia; coffee the dried seed of a species of cinchona; the Paraguay tea, drunk by millions of people in Southern America, was derived from the leaves of a holly; guarana from the seed of paullinia; kola from the nut of sterculia. Modern chemical processes had succeeded in discovering that the whole of these beverages were characterised, however different in flavour or source, by the presence of a single and practically identical alkaloid or active principle known as theine or caffeine. Taking tea and coffee as the two typical beverages of the kind prevalent throughout the East and in Western Europe, Mr. Ernest Hart proceeded to discuss what were the important matters known or unknown about them, and to compare the methods of preparation and of infusion which prevailed in the West and in the East. Describing in comparative detail the processes of plucking and preparing China tea and the teas of India and Ceylon, he pointed out that however different in detail, they were essentially alike in principle. After plucking from the shrub the leaf was subjected to the softening and wrinkling process known as withering; the leaves were then, in India, China, and Ceylon, fermented in a wet mass, rolled and crushed under heavy pressure, re-roasted and packed for the market. In Japan the practice differed especially for teas intended for home consumption. The leaf was moistened by steam, roasted at a very mild heat or basket fired, rolled, and for the purposes of the finest tea reduced to powder, which was the most highly esteemed and the only kind of tea used in the tea ceremonies of Japan. It will be observed that the essential point in all these modes of preparation is the *softening* of the tealeaf and the *crushing* it so as to set free within the substance of the leaf the theine and essential oils which it contains, so as to render them more easily diffused when infused in hot water as a beverage. In all cases the leaf most highly valued was the small top leaf of the twig and the bud. There was no reason whatever, however, to believe that this was either finer in quality, richer in content, or intrinsically better in flavour than the leaves next in succession, but being more tender and softer in structure, it yielded more completely to the crushing process and gave better and more flavoured liquor.

Setting aside for the moment the various obscure and untrustworthy varieties of preparation and selection of China tea, as to which there was much mystery and some misrepresentation, and dealing only with Indian, Ceylon, and Japan teas, where everything was open and above board, Mr. Hart pointed out that the common and prevalent impression that the trade names Orange Pekoe, Pekoe, Suchong, Congou, represented different products having some generic distinction, was altogether unfounded and contrary to the fact. They were all the same in respect of origin; they were picked at the same time from the same plant and from the same bush. The bud and the top leaf constituted Orange Pekoe, the two or three larger leaves growing on the same twig a little lower down were Suchong, and below that the leaves became Congou, a name, however, not much recognised either in Indian or Ceylon teas.

After describing the mode of growth and of selection of the leaf, the lecturer paid a warm compliment to the Ceylon teas and the Indian teas, pointing out, however, that the great favour with which Ceylon teas were now regarded was no doubt due to the fact that, while equally rich in theine, they had a less proportion of tannin than the Indian teas. In 1880 the total export of tea from Ceylon was under 120,000 lbs.; this year it had reached 80,000,000 lbs. The housewife, in selecting a fine tea, should not be guided by any trade name, but should obtain Orange Pekoe of whatever growth, whether from Ceylon, Assam, or Darjeeling, and should then determine by pouring a little boiling water over the leaves, and examining them that the leaf was a whole leaf, and not cut into small pieces from the larger leaf, as was commonly the practice. The larger the leaf the weaker the infusion and the less the value. Green tea from China was for the most part tea fermented and made bitter like black tea, and then faced with Prussian blue or indigo to simulate green tea. Nearly all the Indian and Ceylon teas were also fermented and were all black teas.

The only true natural green tea produced in quantity by any country now was the green tea of Japan as drunk by the natives and largely consumed in America. This tea was neither so bitter nor so strong as to require to be doctored with an albuminoid fluid such as milk to make it drinkable, or with sugar to further hide its bitterness. It needed to be infused only for a short time, never more than five minutes, and the water used should be just off the boiling point, so as not to dissipate the delicate aroma of the tea. Japanese "green," or unfermented and unfaced tea, so drunk was, in the lecturer's opinion, the very perfection of the beverage. Our European tastes, however, had so long been vitiated by the habit of drinking the strong, bitter, fermented tea, that he had no great anticipation that any but the more delicate and cultivated palate would appreciate and habitually prefer this exquisitely aromatic and harmless beverage, which was the staple drink of the far East. He showed the mode of preparing tea after the fashion of the Japanese from a series of specimens, some of his own importation, and some procured from a Japanese resident in London.

Referring then to the question of tannin in tea, Mr. Hart gave the result of a series of experiment, which threw much doubt upon the current views on the subject. It was supposed generally that letting the hot water stand upon the leaves more than fifteen minutes extracted a considerable additional amount of tannin from the tea, and was very deleterious. This was hardly the fact. After fifteen minutes very little more tannin could be extracted from the tea by the ordinary methods of infusion. What came over was an unpleasant disagreeably flavoured bitter extractive, which had lost all delicacy of flavour, and was unpleasant to the palate, but it did not contain the excess of tannin popularly attributed to it. Tannin was so highly soluble that it was dissolved in the water from the very first instant of contact, and the three minutes' infusion of pale tea contained a very large proportion of tannin. He agreed with Sir William Roberts in believing that the alleged ill-effects of the tannin in the tea were probably very much exaggerated, and that the ill-effect of drinking too much tea and too strong tea were due to the theine and volatile extractives of the tea, and not to the tannin. It was quite a fallacy to suppose, although he often saw it stated, that common teas contained more tannin than the choicer varieties. In many cases the opposite was the fact. Varieties of tea, however, such as the "digestive" tea, might be had in which the tannin of the tea was so altered by electrical treatment that it did not precipitate gelatine, and interfered but little with the digestion of starch; of these Mr. Hart showed specimens which he considered deserving of notice.

The most essential point of all for making good tea of the finest quality, and with the least waste, was the thorough crushing of the leaf, and its subdivision in such a manner that the largest possible surface was rapidly exposed to the boiling water in infusing it. Hence the traditional preference by the Japanese, who in this matter had shown their customary intelligence and refinement of taste, for their carefully prepared and selected "tea powder," which produced the finest tea in the world. Hence, too, probably, the superiority of the thoroughly crushed tea bricks of the best quality formerly sent from China to Russia. This matter had been greatly overlooked in the West, but undoubtedly it was the key to any further progress in the art and economics of tea drinking. The difficulties and disadvantages of tea powder obtainable in Europe at present were its liability to adulteration, its uncertain mixture, and the discomforts attending

its use. Some months ago he had sent to him a series of Tea Tabloids made by the compression into the tabloid form of carefully selected and finely ground teas of Japan, India, and Ceylon, some of them already sweetened. During his recent travels he had used these largely and with excellent results. Investigating the matter accurately he found that weight for weight the finest teas in small compressed tabloids gave results at least three times better than the same tea in leaf. These tabloids were a scientific application of the experience of the great tea-using nations of the East. Their extreme portability, the automatic and accurate measurement of quantity which they facilitated, and the saving of fully 50 per cent. in cost, together with the readiness with which a cup of tea might be prepared from them in a few seconds, were advantages which he thought were likely to be highly appreciated by others as they had been by himself.

Specimens were shown of these and of the beverage prepared from them. Passing to coffee, for which he had left himself little time, Mr. Hart said that coffee as in France had justly lost its reputation, and was commonly hardly drinkable by reason of its large admixture with chicory, which cheated the eye but defrauded the system of the needful and necessary alkaloid. Chicory was worth 2d. a pound, and good coffee 1s. 6d. or 1s. 8d. There was only one secret in making coffee, and that was the berry should be good in quality, freshly roasted, freshly ground, and that not less than an ounce should be used for every pint of coffee, better two ounces. Weak coffee was an abomination, but it was what was almost universally drunk in this country. Strong coffee would cost not less than 1d. a cup without sugar or milk, and the only permissible dilution was with milk, not water; a pint of watery coffee, thickened and darkened with chicory and burnt sugar, and coloured with milk, could be produced at 2d. a pint, and this was what was ordinarily drunk by the working classes. It was not a very agreeable and not a really restorative fluid. No wonder the use of coffee among the working classes was declining rather than advancing. Good tea could be sold for a fourth of the price of good coffee, hence the universal preference for it among the working classes and in the ordinary British household, a preference which was quite natural and justifiable. After discussing cocoa and chocolate, the lecturer concluded that only cocoa essences which were free from heavy admixtures of starch and sugar should be drunk; and he showed specimens of chocolate which were notable and much to be commended, in that they were also wholly free from added sugar or starch, and which he hoped would be largely introduced into commerce for the sake of the gouty and rheumatic, the diabetic and the obese, to whom a superfluity of starch and sugar was highly objectionable.

IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.

The annual general meeting of this Association took place at 11, Chandos Street, on St. Patrick's Day, March 17th. The President, Dr. Richard Heath, of St. Leonard's, was in the chair, and there was a large attendance.

The annual report was read by Dr. Cagney, and adopted on the motion of Dr. Mapother. It was announced that the Association increased rapidly in numbers, the total now reaching 720. The balance sheet was read and adopted.

The following officers were elected for the ensuing year:—*President:* Richard Heath, M.D. *President-Elect:* Henry Heygate Evatt Phillips, M.D. *Vice-Presidents:* Alexander Macalister, M.D., F.R.S.; Richard Fegan, M.D.; George Hugh Kidd, M.D.; Thomas Gilbart-Smith, M.D. *Honorary Treasurer:* Charles Wells, M.D. *Council:* Phineas S. Abraham, M.D.; William Barter, M.D.; Campbell Boyd; Richard J. Maitland Coffin; James Davison, M.D.; Thomas Michael Dolan, J.P., M.D.; Henry Grier, Surg.-Maj. A.M.S.; John Hadden, M.D.; Charles Henry Hartt; Archibald Hamilton Jacob, M.D.; John Joseph Lough, M.D.; George Stocker; Richard Jocelyn Swan; Francis John Waring, M.D.; William Dakin Waterhouse, LL.D. *Honorary Auditors:* William Henry Bourke, M.D.; John Joseph Redfern, M.D.

After the usual votes of thanks the meeting terminated.

The annual dinner took place the same evening at the Café Monico, Dr. Richard Heath in the chair. In point of numbers, as in other respects, the gathering was the most successful which has yet taken place under the auspices of the Association. More than 100 members and guests were present. An excellent programme of music was supplied by M. Tivadar Nachèz, Mr. Bernard Lane, Mr. Liddle, Surgeon-Major Carte (Grenadier Guards), and others. The speakers included Sir Raymond West, K.C.I.E., and Mr. R. O. B. Lane (Association guests), Inspector-General Lloyd, R.N., Surgeon-Major Grier, Dr. Cagney, Dr. Widenham Maunsell, Dr. Mapother, and the President. In the course of the evening, sympathetic reference was made to the late Surgeon Parke, a valued member of the Association.

MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

Large Increment of New Members.—Continuous Payments for Chronic and Life-long Disablement.—The Quinquennial Valuation.

The usual monthly meeting of the Executive Committee of this Society was held on March 15th. The chair was taken by Mr. Ernest Hart, the chairman of the Society, and there were also present the deputy chairman, Dr. de Haviland Hall, Dr. W. Knowsley Sibley, Mr. J. Brindley James, Dr. Major Greenwood, Mr. Frederick Wallace, Dr. G. E. Herman, Mr. F. Swinford Edwards, and Mr. Edward Bartlett.

Upwards of forty proposals for new membership had been received during the months of January and February, the largest number on record.

The Committee devoted the greater part of the meeting to the examination of the sick benefit claims, which were very numerous, but still in the aggregate below the amount provided for. As the number of members is always growing, and the average age of the old members also rises, the claims become necessarily more numerous and more varied. Attention was also given to the list of chronic cases in receipt of permanent payment. This list also of necessity grows with the age of the Society, but in no undue proportion or beyond the original calculations. The enormous benefit which the Society confers in such cases is very perceptible in these sad cases.

The Secretary reported that the valuation of the business was proceeding satisfactorily.

Prospectuses and all particulars may be obtained on application to the Secretary, Mr. F. Addiscott, F.S.A., at the office of the Society, 33, Chancery Lane, London, W.C.

LITERARY NOTES.

We have received the first number of the *Giornale Ufficiale dell'XI. Congresso Medico Internazionale*, published on March 12th at the office of *Il Policlinico*, a journal founded towards the end of last year by Professors Guido Baccelli and Francesco Durante. The second number of the *Giornale Ufficiale* will be published on March 29th, and will appear thereafter daily during the session of the Congress. With a generous intention of facilitating the labours of their fellow journalists, the offices of *Il Policlinico* will be open to the representatives of foreign journals until midnight on each day of the Congress.

A new edition of the works of Sir Thomas Browne, comprising the *Religio Medici*, *Urn Burial*, and *Christian Morals*, will shortly be issued by subscription by Mr. Moreton, 42, Burgate Street, Canterbury.

Under the title of *El Gran Pueblo* (The Great People), Dr. Angel Pulido, the well-known Spanish medical writer, has published an account of a visit paid by him to this country. He gives a graphic picture of London life and London streets as they strike the foreigner, and, as might be expected, he describes with special interest the hospitals and asylums of the metropolis. He is enthusiastic in praise of the attention bestowed on all matters relating to public health in this country, but he bewails in a philanthropic spirit the intemperance which is such a blot on the escutcheon of our civilisation. The book is illustrated with numerous engravings from the pencil of a rising Spanish artist, Ramon Pulido.

According to M. Durand-Fardel, the name of Dante must be added to the list of men of genius who have been the subjects of epilepsy. In an article published in the *Nouvelle Revue* in 1893 the French physician expressed the opinion that the author of the *Divine Comedy* probably died of exhaustion and nervous disease. Certainly, says M. Durand-Fardel, Dante "must have suffered from epileptic fits followed by unconsciousness, as is proved by the frequent descriptions of falls accompanied by psychical disturbance and loss of consciousness which are found in his poems." Professor Lombroso has lately, in the *Archivio di Psichiatria*, fasc. i, ii, 1894, made a *catena* of passages from Dante's poems illustrating this thesis of M. Durand-Fardel's. In the *Purgatorio* the condition described seems to be of the nature of dreams or somnambulism, in the *Paradiso* of religious ecstasies. Lombroso is unable to decide from these passages whether the attacks were epileptic or hysterical; he is, however, inclined to look upon them as epileptic on the ground of the pride and irascibility which were such prominent features in Dante's character, and of the "erotism" of which the poet accuses himself.

The late Professor Billroth left an interesting fragment of autobiography which he had deposited in the archives of the Vienna Medical Society and which has now been published with the authority of that Society. The fragment bears date June, 1880. Billroth, whose maternal great grandmother was a French woman, was the eldest of five children. His father died soon after the birth of the youngest (twins), and the care of the young family devolved entirely on the widow, who went to live at Greifswald. Billroth's four brothers died in early life, three of pulmonary phthisis (of which disease the mother also died in 1851) and one of tabes. Billroth received his first scientific education in the Greifswald Gymnasium and matriculated as a student in the medical faculty of the University of that town in 1848. At the Gymnasium he had for schoolfellows Max Schultze, afterwards Professor of Anatomy at Bonn, Bernhard Schultze, afterwards Professor of Midwifery at Jena, and Hugo Ziemssen, afterwards Professor of Clinical Medicine at Erlangen and Munich. At the Gymnasium Billroth says he showed little taste for the studies of the school course, little talent for languages, and none for mathematics. He was a desultory reader, giving his attention to history, especially literary history, and to the old poets. As a Gymnasium student he was, he tells us, beneath mediocrity. The chief talent which he displayed was in the direction of music, for which he had inherited a strong taste from his parents and grandparents. It was only by the energetic remonstrances of his mother that he was dissuaded from taking up music as a profession; for this he was afterwards particularly grateful to her. His first semester he gave entirely to music, but at Easter he migrated to Göttingen, and there he began his medical studies in earnest. The two teachers who chiefly influenced him at Göttingen were Rudolph Wagner, Professor of Physiology, and Wilhelm Baum, Professor of Clinical Surgery, a great friend of his family, whom he had followed from Greifswald. In 1851 he went to Berlin, and the death of his mother at one time threatened to interrupt his studies, but his grandmother came to the rescue and furnished him the means not only of taking his degree, but of making a scientific *grand tour* afterwards. The teachers at Berlin who chiefly influenced him were Langenbeck, Schönlein, Romberg, and Traube, the last of whom suggested that he should turn his attention to experimental pathology. Billroth's autobiography may, in this age of "reminiscences" and histories of "soul-wobblings," be commended for imitation by all who feel tempted to follow Carlyle's advice and tell the story of their own lives for the edification of the "many-headed beast." He unfolds his tale simply, clearly, and modestly, without a trace of self-consciousness.

Sir Dyce Duckworth has republished a somewhat discursive address on "Women: their probable Place and Prospects in the Twentieth Century," recently delivered in Glasgow before the Scottish Society of Literature and Art, in which he predicts that the approaching century will be signalised by "a large emancipation of women in Northern Europe which may even include the German Empire." After paying a graceful tribute to the achievements of women in literature, in poetry, in music, and in the fine arts, he says that the field of medicine now open to them has not so far proved one in which they have gained any noteworthy distinction, with the exception of "Professoressa" Cattani, of Bologna, nor does he think the pursuit of its art in practice a fitting occupation for the sex. He thinks, however, they may be safely turned loose in the "open fields" of public health or hygiene—a concession for which no doubt the ladies will be duly grateful. Further on we find that he makes a further concession in favour of women who become medically qualified for Zenana mission work in India, as he sees there "one field for fruitful labour in spreading the best forms of Christian civilisation and sanitation in our Eastern Empire." With this exception the medical woman, and in fact the female member of any of the "recognised professions," finds no favour in his eyes. He somewhat mysteriously says: "My knowledge of American life has taught me how very undesirable, and I will add unpleasant, it is to meet with professional women." Sir Dyce leaves us in no doubt as to what he considers to be the true field for woman's best energies—namely, the home. He would have women take no public part in "politics so called," but he would allow them to sit at school boards, and even sometimes to act as guardians; he draws the line, however, at county councils without assigning any reason for their exclusion from these administrative Paradises. On the whole, Sir Dyce Duckworth's chief message to woman is that after 22 years of age matrimony is her first natural duty. Next to matrimony—or during the period of animated expectancy of that condition which must fall to the lot of many spinsters considerably beyond the age somewhat arbitrarily selected by the lecturer—he places "that specially womanly occupation of sick nursing, which is now so much and so beneficially cultivated," and which according to him "constitutes one of the highest qualifications for subsequent marriage and maternity." Sir Dyce Duckworth believes that we shall continue to find women grouped in one or other of the following categories: (1) The domesticated class; (2) the more highly educated, so-called "cultured" or "blue stocking" class; and (3) the frivolous silly, or "smart" class. He is hopeful that the domesticated class will not grow smaller; and he predicts that a greater infusion of the cultured class will gradually blend with this, and afford the highest type of womanhood the world has yet seen.

Dangerous Trades for Women is the title of a booklet by Mrs. C. Mallet, published under the auspices of the Humanitarian League. It is an appeal to the Women's Liberal Association to interest itself in the subject of unhealthy trades for females. The writer mainly deals with the potteries and with white lead and phosphorus poisoning. In addition there is mention of the injurious effects of fur cape making upon women. Most of this work is carried on in private, and the deleterious effects are attributed to the offensive smell of the skins and the presence of fluff in the atmosphere, which irritates the respiratory passages. Artificial flower making is not a healthy occupation. The work is dusty, and as most of it is carried on in artificial light there frequently follows inflammation of the eyelids. Mrs. Mallet has written a very readable and interesting pamphlet, which will help to influence public opinion in favour of improving the sanitary condition of our industries.

An experiment is to be tried in the mode of issuing the new edition of Quain's *Dictionary of Medicine*. It will be published not only in four volumes bound in cloth, but also in eight divisions in paper wrappers. This mode of publication, which is very popular both in France and Germany, presents certain advantages, among which one is that the purchaser can eventually have the book bound in the style and form most adapted to his own particular tastes and needs. The price of each division will be 5s. net, of the four volumes bound 12s. 6d. each net. The additional contributors to the new edition number forty-two.

The second fasciculus of the ninth volume of the scientific reports of the German Board of Health (*Arbeiten aus dem Kaiserlichen Gesundheitsamte*. Berlin, Julius Springer, 1894, 16s.) is devoted in the main to an elaborate report on the influenza epidemic of the winter of 1889-90 in the German empire, prepared by Dr. Paul Friedrich. There are also papers on the recognition of the cholera vibrio, by Professor Dunbar, of Hamburg, and Dr. Albert Maassen.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1894.

SUBSCRIPTIONS to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, MARCH 24TH, 1894.

THE REGULATION OF LONDON BUILDINGS.

THAT the health of a great city largely depends on the plan upon which it is laid out and on the construction of the houses in which its inhabitants dwell is thoroughly well known, and the general recognition of the dictum in regard to our metropolis is witnessed to by the numerous Acts of Parliament which have at various times been brought forward to regulate the formation of streets and the building of houses within the area now included in the County of London. A dozen or so of these have been passed within the last fifty years, and yet no one can honestly say that their effect has been such as to ensure that the requirements of a healthy city should be provided for either in the alterations which are taking place every day in the older portions of the town or in the creation of that great maze of new streets which is every year carrying the metropolis further over the surrounding country.

Putting entirely on one side for the present all questions of architectural beauty or structural fitness and all those matters of material and workmanship which have already, with more or less success, been taken cognisance of by law, it still remains patent to everyone that, as regards two main essentials to health, namely, air and light, London is getting worse every day. In the central parts every available bit of land is being covered over by buildings; frontages have encroached on gardens and have crept close up to the roads; back gardens have been covered with out-buildings; houses, hotels, and flats emulate with each other which shall go the highest; and in some cases, whole blocks of property have been built up, practically solid from street to street, with mansions or workmen's dwellings, the only access of light and air to the inner rooms being by means of gloomy shafts, down which, it is hoped, some rays of light will flicker, while up them rise the exhalations of innumerable kitchens, waterclosets, and bathrooms. This is a state of affairs which is obviously inimical to health, and yet there seem at present no laws to prevent the continuance of the process.

In the outer and suburban districts the interference with light and air, while perhaps less flagrant, is even more inexcusable. Each owner has laid out his plot of land with but small reference to his neighbour's plans, and houses have been huddled together, separated only by the narrowest streets allowable, and the smallest possible backyards. In these shabby and poverty-stricken regions the lowness of the houses prevents any great immediate interference with light; such districts, however, are but the ground plans of what will, if not altered, become the slums and unhealthy areas of the future. As London reaches them, these ill-planned suburbs, with their squalid courts, and narrow, dead-ended streets, will do as London does; the houses, if unrestrained by law, will grow higher as land becomes more valuable; and on every side we shall have to deal, at great expense, with slums and unhealthy areas, which have grown into existence before our very eyes.

We cannot then wonder at, and in fact can only praise, the County Council for its action in bringing in a Bill to regulate the future planning and construction of the city over which it rules, and if the Bill should seem to some to err on the side of stringency, it must be remembered that the evils it seeks to prevent are very great even at the present, and threaten in the future to become absolutely overwhelming.

The Bill brought in by the County Council covers a large amount of ground, and includes many details into which we cannot here enter; but running through it is the main idea, that light and air shall have access to every window. It is to the provisions having this object in view that we would direct especial attention, because not only are they the very essence of the Bill, but they entail the greatest interference with the rights of property, and have elicited the most active opposition on the part of both architects and landlords.

According to the Bill, all new streets for carriage traffic are to be at least 40 feet wide. No new house is to be of greater height than its distance from the opposite side of the street, or way, on which it may abut; and no building is to be of greater height than 75 feet (exclusive of two storeys in the roof, and ornamental turrets, etc.) without the consent of the Council. Every domestic building that does not abut upon two streets must be provided with an open space in the rear, of an aggregate of not less than 150 square feet, and the distance across such open space must not be less than 10 feet. The provision of air space at the rear of buildings is, however, much greater than would appear from this rule, and is regulated by a clause according to which no part of the building (except chimneys, turrets, etc.) shall extend above a diagonal line passing upwards towards it, at an angle of 45° with the horizon, from the further boundary of the open space in its rear, or, in case that space slopes away from the building, from the point at which a horizontal line drawn from the road would intersect a perpendicular extension of the boundary. It will be seen, then, that the absolutely open space required in the rear is a small one, and that outbuildings can be carried back for a considerable distance so long as they keep below the diagonal line, but that by no device can they be made to interfere with a clean sweep of air between the rows of houses.

Another most important provision is that compelling the construction of a free ventilating inlet at the lower part of any such shafts or courts as it may be found necessary to enclose within any buildings. But the erection of blocks of buildings, with no outlook except these shafts for many of their rooms, will be entirely stopped by Section 55, which enacts that every inhabitable room, the windows of which do not look into a street, shall be lighted by windows or sky-

lights, a certain proportion of the area of which shall be be above an imaginary line, drawn down at an angle of 45° with the horizon, from the top of the parapet or eaves of any building directly opposite.

It is clear that these provisions are most far-reaching, and will in many cases interfere greatly with the development of property which has already been laid out into streets, the width between which will fix unalterably the class of house which can be erected upon it. Moreover, in the central parts of London, it will be exceedingly difficult, in the erection of large buildings—such, for example, as hotels—to comply with the provisions of the Bill without such a sacrifice of land as to be absolutely ruinous. Yet, from a health point of view, there cannot be the slightest doubt of the enormous importance of opening out the city, and, especially in the new and growing portions, preventing that close crowding together of dwelling-houses, which has of late years been the great characteristic of all large centres of population.

THE "THIRD ESTATE."

WE are glad to see that the Royal University Commission has not ignored the fact that one of the main requirements of university life in London is—more money. To whatever cause we may attribute it—the commercial atmosphere of the world's mart, the obscure situations which have been selected for London university institutions, or the proximity of Oxford and Cambridge—the fact remains that the metropolis has never shown itself enthusiastic in the support of higher education or research. Page after page of the Commissioners' report reiterates the same story—want of adequate endowment for either purpose. This, however, the Commissioners anticipate, is now to be amended. The new University is to be the means of attracting a golden stream from Her Majesty's Treasury, from private benefactors, and from certain corporations which have been complimented with the disposal of a seat on the Senate; and seven pages of the report are occupied with recommendations as to how, in the Commissioners' opinion, the money ought to be spent.

It should be devoted, they recommend, partly to the construction and maintenance of new laboratories and the foundation of new chairs, and partly in the way of subsidies to those that already exist in some of the admitted schools of the University, chiefly in University and King's Colleges. In the faculty of arts it is recommended that some nineteen or twenty chairs should be endowed in whole or part. In science liberal assistance is to be given to various important branches of physics and chemistry, zoology and botany being also considered to have strong claims. Not a doit, however, do the Commissioners suggest should be devoted to any branch of medicine or surgery, or to any science more closely connected with it than those we have named.

Of physiology we read that "Although the importance of the subject makes it desirable that it should be better provided for than it is at present, the facts that a research endowment for physiology exists at University College, and that at several of the other large schools there are laboratories which require only additional funds to render them efficient for the higher teaching, seem to us to afford reason for postponing its claims to those of other subjects," a statement the logic of which is not very apparent. As regards pathology, all we are told is "that the two Royal Colleges have provided an excellent laboratory for pathological investigations on the Victoria Embankment." Hygiene is dismissed in equally cavalier phrase. Of bacteriology, experimental pharmacology, epidemiology, and toxicology there is no mention.

These recommendations, of course, are not binding on the University. The Senate is to have full control over its funds. Lest, however, it should be too readily persuaded to lend an ear to the claims of medical subjects, it is expressly provided that the Senate shall make no grant for teaching or research without first consulting the Academic Council, on which Arts and Science are to have a permanent majority.

We have called attention to this point, not because we attach much intrinsic importance to recommendations for the distribution of hypothetical funds, but because we take it to be an index of the Commission's whole attitude towards medicine. Medicine, in fact, is to occupy in this University very much the position of the "Third Estate," or Commons, under the old French *régime*. It is the faculty of greatest importance to the public; it is by many times the largest, and hitherto the most successful, and its students will supply the bulk of the fees that will reach the University exchequer. It is to be permitted to talk as much as it pleases, and may express its opinions freely; but, when it comes to voting, its suffrages are liable at any time to be overborne by those of the two privileged orders of Arts and Science, or, indeed, by either of them alone.

STUDIES IN THERAPEUTICS.

II.—THE NEWER ANTIPYRETICS: ANTIPYRIN.

THERE are few remedies in greater employment than those grouped as antipyretics, and it is but a truism to say that the judicious exhibition of them is a matter requiring much discrimination, and perhaps in none is the value of large experience more apparent. The significance of a rise in the bodily temperature varies within such wide limits, that it may mean only a slight temporary disturbance of the heat-regulating mechanism, or it may be a state which in itself threatens the life of the organism, and, therefore, demands urgent treatment. But where pyrexia is merely symptomatic, and the other organic functions more or less gravely involved, the question of interference may likewise become pressing, as the persistence of an elevated temperature may add an element of danger. It is in such circumstances that we meet with the requirements of an ideal antipyretic, one that will act upon the heat centres and control fever, whilst at the same time it spares the other systems.

The older antipyretics—quinine and salicylic acid—may cause a reduction of several degrees in a short time, but this action is too frequently accompanied by symptoms of depression and collapse to make their administration admissible in all cases, or even generally; hence the attempts made to replace them by synthetically prepared bodies of the aromatic series, of which the best known are antipyrin, acetanilide, and phenacetin; and as these substances have been in the hands of the profession for some years, the Therapeutic Committee of the British Medical Association have done good service in instituting an inquiry into how far they have fulfilled expectation. Having directed their attention to the alleged ill-effects of

these remedies as antipyretics and analgesics, the Committee, in their report, express the opinion that with due care these are extremely infrequent, and not such as to limit the usefulness of the drugs. Yet we cannot shut our eyes to the occasional occurrence of untoward results; careful dosage will do much to prevent them, but cases arise from time to time which make it desirable to keep clearly in view the limits of safe administration, and the ill-effects met with when these are overstepped.

All the aromatic compounds have a definite action upon protoplasm, and to this, as Schmiedeberg points out, the influence upon the temperature and metabolism in febrile states is probably related. Antipyrin acts on the cerebro-spinal nervous system, in moderate doses effecting a fall of temperature and slightly raising the blood pressure. This action on the heat mechanism has received widely different interpretations, and experiments have only yielded contradictory results. Wood and others hold it is due to decreased heat production, while Gottlieb, from calorimetric observations, affirms that antipyrin quickens the heat-dissipating mechanism. However that may be, large doses depress the nervous system and lower the blood pressure, and symptoms, varying from an unpleasant diaphoresis to severe collapse, have been met with after administration. Instances may be cited where a dose of 20 grains in an adult male led to great collapse and fall of temperature, which required free stimulation to tide the patient over the difficulty; half that amount produced an alarming condition in a woman, and even smaller quantities have been followed by untoward manifestations. As accompaniments of the fall of temperature, profuse sweating, marked palpitation, and disturbance of the heart's rhythm are not uncommon; and while these symptoms are referred, with some probability, to changes in the vasomotor system, we cannot altogether exclude a toxic effect upon the cardiac muscle. This should be borne in mind in acute pneumonia where cases of death after antipyrin have been recorded. Experienced practitioners now limit its administration to the early stage of the sthenic form, and exercise much care in typhoid fever and diphtheria, in which the nutrition of the heart so frequently suffers. Again, the respiratory and cardiac systems may be influenced directly through the medullary centres; or, on the other hand, secondarily from changes in the hæmoglobin of the red blood corpuscles resulting in methæmoglobinæmia. This is seen in various degrees of cyanosis, which is so common. Minor forms of depression are represented by profuse diaphoresis, which may go on quickly in phthisical and weakly persons to severe prostration. The intensity of the depression that is possible after even moderate doses is shown by a case recorded by Paul Guttmann. The patient was sent into hospital during the cholera epidemic in the autumn of 1892, with all the symptoms and appearances of the asphyxial stage of cholera, save that the bowels were confined. Subsequent inquiry elicited that for five days previous to admission he had taken for headache a 15-grain dose of antipyrin twice a day. After the first few doses the vision became so markedly affected that he was treated for amaurosis at an ophthalmic hospital. He had consumed in all 150 grains (extended over five days), when he fell into this notable state of collapse.

In small doses antipyrin acts as a stimulant to the nervous system, and like quinine and salicylic acid may induce a slight rise in the body temperature. This action is sometimes present after moderately large doses, and instead of the anticipated fall there is a rise in the temperature curve, with an exaggeration of symptoms already existing. This has been explained by vasomotor changes leading to dilatation of capillaries in the thermogenic centres. Gottlieb's experiments show that while loss of heat is much increased after antipyrin, heat production is likewise stimulated, and it is possible therefore to account for those anomalous results by assuming the failure of the former action. Headache and giddiness, depression of spirits and lassitude are minor results of the action on the nervous system. Unlike some of the older antipyretics, antipyrin rarely affects the hearing. Scattered references may be found to other symptoms, but they are to be explained for the most part by some peculiarity in the individual, and are not of general interest.

The skin suffers frequently from the action of the drug as shown by the appearance of eruptions and an allied condition, catarrh of the mucous membranes, is not unknown. These are referred to vasomotor paralysis of the peripheral blood vessels. The skin rash is usually of the erythematous type; it may closely resemble measles and be diffuse, or have a tendency to run into patches, with its chief distribution over the arms and trunk. Urticaria has been noted not a few times, and may be very troublesome, whilst œdema of the face and other parts and bullous eruptions are also recorded. They have been observed rather more often in typhoid fever, where they may develop a hæmorrhagic character. A note of warning should be uttered regarding the use of antipyrin in phthisis and typhoid fever, as instances are not lacking where the liability to hæmorrhages has been increased by a course of the remedy in large doses.

The frequency with which these untoward effects are met with is, on the whole, very slight; many of them have doubtless arisen from the initial dose being too large; others we can only ascribe to idiosynerasy on the part of the patient. But this does not cover the whole ground, and would not explain the fact that these symptoms do not always show themselves when the largest amount of the drug is being taken. Some, such as the skin eruptions and a rise of temperature instead of the expected fall, may appear several days after the commencement of administration, and not necessarily in the period when the greatest quantity is taken, and, it may be, even after the dose has been considerably reduced. It is probable that the mode of dispensing is sometimes at fault, for antipyrin reacts with facility, forming compounds with many substances, and it has already a long list of "incompatibles." Sickness and nausea are sometimes intractable, refusing to yield to a change in the form of administration, and even persisting when the drug is given *per rectum*. The presence of kidney disease, with the consequent impaired excretion, is another factor which makes for uncertainty, and should not be overlooked. The experience of many practitioners indicates that the combination of the drug with a general or cardiac stimulant, such as brandy, sal volatile, or caffeine, tends to prevent symptoms of depression, without unduly interfering with its value as an antipyretic, and in this way doses of twenty grains have been administered at short intervals, without untoward results. Demme, who has given much thought to the use of antipyretics in children, advocates the

addition of a few drops of brandy to each dose of antipyrin. But it is an old and good rule to begin with small doses, for experience alone will reveal sensitive individuals, and prevent the unforeseen and undesirable.

THE very able report on the white lead industry and its sanitary aspects issued recently by the Home Office, on which it is expected that legislation will this year be based, was drawn up by Mr. Harrold Tennant, one of Mr. Asquith's private secretaries, and now Liberal candidate for Berwickshire.

THE JENNER RELICS.

MR. MOCKLER has decided to bring his collection of Jenner relics to London, and to have it on exhibition at the First Avenue Hotel in Holborn. The exhibition will open on March 26th, and admission will be free to all members of the medical profession. It is proposed to have the collection on view from 10 to 6, and in all probability the exhibition will continue open for some weeks.

A NEW HOSPITAL IN DUBLIN.

ON Saturday, March 17th, a new lying-in hospital was opened in Holles Street, Dublin, under the title of the "National." The house was originally opened by the late Dr. Roe, on non-sectarian lines, but it was never very prosperous, and it had to close its doors. Now it is reopened under strictly Roman Catholic management, and Archbishop Walsh has intimated his intention to contribute £100 a year for ten years. The masters are Dr. Andrew Horne and Dr. Barry.

A LADIES' HOSPITAL FUND.

A LADIES' hospital fund has been organised in Leeds, at a well-attended meeting, over which the Mayoress presided. A committee for each ward was arranged to carry on work similar to the Workpeople s Hospital Fund. They also propose to establish committees in neighbouring towns and villages, from which many patients are sent, but few subscriptions received. This arrangement is being carried out in consequence of a serious deficit of about £4,000, announced at the last annual meeting at the infirmary.

RABIES AND THE DUTIES OF DOG OWNERS.

IN view of the recent outbreak of rabies in Scotland and the probable transmission of the disease to other parts of the United Kingdom, it is desirable to call attention to the duties of dog owners in regard to notification. By the Rabies Order of 1892 rabies is constituted a disease within the meaning of the Contagious Diseases (Animals) Acts, the provisions of which are extended to dogs. By Section 7 of the Order it becomes obligatory upon every person having charge of a dog affected with rabies immediately to give notice of the fact to a police constable, who is thereupon required to transmit the information, by telegraph or other rapid means, to the Director, Veterinary Department, Board of Agriculture. In addition to this the usual notice is to be given by the constable to the local sanitary inspector, who is empowered to put in force the provisions of the Order.

CORONERS' COURTS AND MORTUARIES IN LONDON.

CONSIDERABLE progress has been made by the London Council to meet the statutory requirements of the Public Health (London) Act, 1891, in regard to the provision of proper mortuaries, *post-mortem* rooms, and accommodation for the holding of inquests. Excluding the city, London now consists of forty sanitary districts, of which twelve possess good mortuaries, *post-mortem* rooms, and coroners' courts; seven are provided with mortuaries and *post-mortem* rooms, whilst arrangements are being made for the provision of proper coroners' courts; eleven are provided with mortuary and *post-mortem* rooms, and with satisfactory accommodation for holding inquests otherwise than in specially constructed courts: ten possess only provisional accommodation as to mortuaries, *post-mortem* rooms and coroners' courts. In a few instances it has been impracticable, so far, to discontinue the use of public-houses for holding inquests, but everything is being done to put an end to the practice as soon as possible. There is still great need for improvement in regard to the provision of suitable places for receiving bodies awaiting burial, for it is of the greatest importance in the interests of public health not to keep dead bodies in living rooms or in crowded tenements. Marylebone has provided a mortuary which is admirably designed for this purpose, and it has been largely used by the parishioners. In other districts, where less suitable mortuaries have been provided, they have only been used to a very limited extent. There were 7,166 inquests held in the county of London in the year ending September 30th, 1893.

FATAL FOOTBALL ACCIDENT.

A REFERENCE to this distressing case has already appeared in the JOURNAL of February 24th, and the facts now elicited by the *post-mortem* examination clearly prove the justice of our remarks on the necessity in all similar cases of immediate surgical assistance. On opening the abdominal cavity, a superficial portion of the small intestine was found longitudinally ruptured to the extent of 3 inches. Surely the absence of any professional help on the spot and the long journey by both land and water must have very seriously increased the risk caused by the escape of the intestinal contents and the development of fatal collapse.

THE OUT-PATIENT DEPARTMENT OF THE LIVERPOOL ROYAL INFIRMARY.

THE great development in the out-patients' department that has followed the opening of the new Liverpool Royal Infirmary, and the appointment of several assistant medical officers and officers to special departments, has necessitated the entire rearrangement of the out-patient rooms, which have been furnished and placed in a high state of efficiency both for the treatment of minor complaints and for clinical instruction. The special departments have been fitted up with every requisite, a splint fund has been formed, and more than £50 spent upon instruments. These improvements have been effected through the generosity of Mr. E. P. Thompson, who, in memory of his father, the late Mr. Samuel Thompson, J.P., of Thingwall Hall, presented the sum of £500 to Mr. G. G. Hamilton, one of the Assistant Surgeons, to be spent for the benefit of the Infirmary, in such a way as he and his colleagues thought most desirable.

THE SPREAD OF SMALL-POX: PLAIN SPEAKING.

To the Essex Infectious Diseases Committee Dr. Thresh has been reporting that 30 cases of small-pox were intimated in December, 45 in January, and 90 in February, and that the disease might be looked on as epidemic in several districts. With reference to an outbreak at the County Lunatic Asylum, he is reported to have said that "if an outbreak of anthrax occurred in the same district and caused eight deaths in a few days, the Committee would have been greatly alarmed, and would have required a special inquiry to be made, and would have seen that every possible effort was made to stamp out the disease. Unfortunately small-pox, diphtheria, typhoid fever, scarlet fever, and other such preventable diseases caused no mortality among cattle; they only destroyed our working people, our children, relatives, and friends, and therefore the County Council had not thought it worth the expenditure of a few hundred pounds per annum to assist in their extinction. They did not even

regard such epidemics as worthy of special investigation by an expert, and they had made no special inquiry as to the preparedness or otherwise of the county to combat any serious outbreak of any of these diseases." The County Council should certainly be obliged to Dr. Thresh for his perfectly frank statement of his opinion as to their position in the matter, and it is to be hoped that they will now take such steps as will make similar animadversion on their inaction impossible in the future.

"VIEWING THE BODY."

Old customs, especially if supported by legislative sanction, are hard to kill, but it is likely that some remarks by Mr. Oliver Pemberton, F.R.C.S., the coroner at Birmingham, will have helped to drive a nail into the coffin of that particular meaningless and sometimes dangerous rule of "viewing the body" at public inquests. The case was a very unfortunate one; a poor girl who, in a state of delirium, had escaped from the local small-pox hospital, and had been drowned in a canal. Mr. Pemberton favoured the carrying out of the law, but urged the necessity for its amendment. To prevent evil consequences in the case in question he had the corpse enclosed in a coffin covered with a glass lid, and laid in the open air. He stated, in addition, that the member of Parliament representing Aston Manor had already given notice of his intention to raise the question in the House of Commons. As soon as Parliament finds time to attend to the matter we fancy it will have no difficulty in coming to a decision in accordance with the view so often expressed in the British Medical Journal, and now endorsed by Mr. Pemberton.

THE LONDON "FACULTY OF ARTS."

A correspondent writes: As the Royal Commissioners appear to think that the interests of arts should outweigh those of medicine in the new University of London, your readers may be curious to know what the London "Faculty of Arts" really amounts to. The existing institutions which the Commissioners propose to include in it, and to endow if the means are forthcoming, are the arts departments of University and King's Colleges and the Bedford College for Women. If any of your readers care to consult the B.A. list of the present University of London for 1893, they will find that the sum of successful candidates which these three Colleges produced between them last year is exactly ten. Of these ten, University College, in association with private agencies, is credited with seven, Bedford College with three, and King's with none. It is to the interests of this remarkable teaching faculty that the Commissioners propose to subordinate those of the twelve metropolitan schools of medicine, which pass nearly 500 men a year through the searching examinations of various universities and licensing bodies. It would seem that, in the Commissioners' eyes, to be successful and self-supporting is to deserve subjection and possible suppression; to fail is to merit liberal endowment and ample power.

THE PROPOSED SOCIETY OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

In another column we publish a letter from Mr. Percy Dunn, Honorary Secretary of the Association of Fellows of the Royal College of Surgeons of England, calling attention to the proposal on the part of some of the non-reforming Fellows, who have persistently held aloof from the Association, to found a "reforming" association on their own account. The scheme is regarded as being designed to undermine the influence of the Fellows' Association, which is only now beginning to be felt in the Council. For the last ten years the Association has continued to press forward its programme of reform. It has wrung from the Council concessions of which the whole body of Fellows is now reaping the benefit. To mention only recent advantages which have been gained through its agency: there is the common room for the use of the Fellows and Members, the suggestion for which was entirely that of the Association; then there are the separate meetings of the Fellows, the granting of which was for long opposed by the Council, and it was only after the Association had persistently demanded that the Council should submit the matter to their legal authorities that it was plainly shown that there was nothing in the charter forbidding such separate meetings. Again, after much fighting, the Council has just agreed to those reforms in the issue and return of the voting papers for the annual elections, a matter which the Association has pressed forward ever since the "proxy" voting was introduced. These are only some of the advantages for which the non-reforming Fellows have had to thank the Association. But all this consistent and strenuous effort to obtain reforms has not been lost upon the bulk of the Fellows. Signs are now apparent that, after ten years' fighting, the Fellows are beginning to appreciate the work of the Association. An integral part of the Association's programme has always been to promote the candidature at the College elections of Fellows whose views are favourable to the reform movement. By this means men of such standing in the profession as Mr. Macnamara, Mr. Walter Rivington, Mr. Tweedy, Mr. Willett, and Mr. Mayo Robson have been returned to the Council. Before the Association of Fellows came into existence and long afterwards the influence of the Council was all-powerful in securing the return of their own candidates. A representative of a particular school had simply to be nominated by the Council, of course, unofficially, and he was certain to be elected. This was not a healthy condition of affairs; but while the College occupied a minor position among the examining corporations, the need for interference was less pressing, and the routine duties of the Council were easily discharged by those who had attained their seats thereon, without questioning on the part of their supporters. In the present day, however, things have vastly changed. The responsibilities of the Council have become very great, for not only has the Royal College of Surgeons of England become one of the most representative examining corporations, but, owing to the munificence of the late Sir Erasmus Wilson, it has acquired much vested property. It was mainly with the view of prevailing upon the Council to share some of their responsibilities with the Fellows that the Association of Fellows was founded; and herein comes the necessity, in the interests of the Fellows, that the reforms advocated by the Association should, as far as possible, be promoted by the Council. This proposed new society, so far as can be judged by reading between the lines of their circular letter addressed to the Fellows, appears to be nothing more than an attempt to form a combination by which to upset the growing influence of the Association of Fellows, upon whose shoulders has hitherto fallen the burden of opposing the obstructive policy of the Council. The Fellows, not members of the Association, will probably hesitate before agreeing to join a society such as this without further explanations; for were this society to be formed it is feared by some that its policy would ultimately tend to the establishment of the old *régime* on the Council, with the extinction of the power which the Fellows are just beginning to acquire. The confidence reposed in the Association by the Fellows who are not actual subscribers to that body was amply displayed by the support accorded to the Association's candidate at the College election last year. This is in a sense an answer to those who are agitating for the "Society of the Royal College of Surgeons."

PLURAL NOTIFICATIONS.

The Notification Act, unlike some of the local Acts under which the experience which led to the framing of the 1889 measure was obtained, requires that when two or more notifiable cases occur at the same time in the same house-

hold each shall be reported. On the whole it seems that this arrangement is the better one, and it is with some surprise that we learn that Mr. Dansey, one of the non-medical inspectors of the Local Government Board, has thought fit to advise the Congleton rural sanitary authority to make representations to the Board with a view to an alteration of the Act in this respect. It may be that the opinion thus volunteered is shared by the medical advisers of the Board, and is, indeed, the outcome of consultation with them, but in a matter of this kind sanitary authorities will look rather to the wide experience of the medical department at Whitehall and to the local knowledge of their own health officers for guidance than to the general inspectors of the Board, who can scarcely be in a position to judge of the medical questions involved. Up to the present time we are not aware that the medical department of the Local Government Board has taken any action with a view to amendment of the Act, although there are points in which amendment seems to be needed.

THE VACANT CORONERSHIP IN LONDON.

In addition to the names mentioned last week, we hear of three medical men who are candidates for the office of coroner in the North-Eastern District of the county of London, rendered vacant by the death of Dr. Roderick Macdonald. Dr. W. Wynn Westcott has had a large experience in the duties of coroner, as he has served for eleven years as deputy coroner for the Central and Western Divisions of the county of London. Dr. Frederick H. Daly has had judicial experience as J.P. for the counties of London and Middlesex, while, as will be seen by a letter in another column, the candidature of Dr. Yarrow is strongly supported by his colleagues of the Metropolitan Police Surgeons' Association.

A STUDENTS' REVOLT.

The Dublin medical students, to whose alleged grievances we referred last week, have had an interview, through their representatives, with a Committee appointed by the Council of the College of Surgeons. Some requests were at once acceded to, but the Committee pointed out that the fee charged for the diploma was the result of an arrangement existing with the College of Physicians, and that that point could only be settled after conference with that body. The students claimed that a decision should be given before April 1st, and it was stated that this could not be done in the time. Forthwith the deputation reported the interview to the general body of the students, and a resolution was passed pledging all College of Surgeons students to take out their lectures at the Trinity and Catholic Medical Schools. The course which has been adopted is deeply to be regretted. It is undignified and silly. It is impossible to undo at lightning speed complicated arrangements affecting many interests. The College Council will, we have no doubt, do all that is fair, and we should strongly advise our young friends, the revolters, to leave the redress of their troubles in the hands of men who are their friends, and who are just.

ACTIONS IN LUNACY.

The important point in the case of Stevenson *v.* Potter, reported in another column, was the efficacy or failure, as a protection, of the clause of the Lunacy Act, 1890, which deals with the protection from liability to civil or criminal proceedings of those who, under the Act, in good faith and with reasonable care, do anything in pursuance of the Act, concerning the making or carrying out of certificates, orders, and reports, and other matters dealing with persons alleged to be of unsound mind. Now in some cases this clause has operated effectually, in others it has failed. It failed notably in the action brought against Drs. Carpenter and Dukes in 1891, in which, although application was made to stay proceedings under the clause, they were not stayed; the case went on to long and costly trial, and although the medical defendants gained the verdict, with costs, they were unable to collect their costs from the plaintiff, whose means were slender, and therefore had to pay them themselves, members of the medical profession, however, eventually raising a fund to recoup them. In one or two other cases proceedings have been stayed under the clause after prolonged evidence and argument before the court, practically as bad as a tedious and costly trial. It seems to be fortuitous and dependent on the individual views of the judge or judges before whom the motion to stay proceedings comes, whether the clause becomes protective or not. In the case now under comment the clause proved to be protective, but only after repeated proceedings; for, in the first place, the defendant's application to stay the action was refused by a Master; secondly, a judge made an order to set the Master's order aside; and, in the third place, the present occasion was an appeal by the plaintiff against that order of the judge. The judges have now dismissed that appeal with costs, thus confirming the staying of the action against the defendant, and stated that there was no evidence to show that he had acted without reasonable care, which was the only question in the case, as it had not been suggested that he had not acted in good faith; and that, therefore, the action must be stayed, as the defendant had acted in good faith and with reasonable care, having regard to the duties imposed on him by the Act.

POSTPONTMENT OF VACCINATION LEGISLATION.

It would appear that we are not this year to be threatened with any serious attempt to tamper with the Vaccination Acts. The Home Secretary informed Mr. Hopwood on March 20th that the experience of last session showed that a Bill to carry out the recommendations of the fifth report of the Vaccination Commissioners could not be treated as a non-contentious measure. Under these circumstances, he added, there could be no hope of passing it into law, and it would be waste of time to introduce it.

THE CHELSEA HOSPITAL FOR WOMEN.

A special meeting of the board of governors of the Chelsea Hospital for Women was held on March 19th, under the presidency of Lord Cadogan, to promote an inquiry with regard to the serious charges against the condition of the hospital recently made by the Medical Officer of Health for Chelsea. It was stated that both the Chelsea Vestry and the hospital authorities had applied to the Home Office and the Local Government Board to hold an official inquiry, but that these departments had replied that they had no power to do so. Lord Cadogan stated that he had every confidence that the charges would be fully met and satisfactorily refuted. As they could not obtain a Government inquiry, he would suggest the appointment of a committee of inquiry composed of eight members, one nominated by the College of Physicians, one nominated by the College of Surgeons, three members of the consulting staff of the hospital (Dr. Barnes, Sir T. Spencer Wells, and Mr. Jonathan Hutchinson), one nominated by the Chelsea Vestry, and also Lord Sandhurst and Sir C. Dilke, M.P. Sir A. Borthwick, M.P., moved the adoption of the chairman's suggestion. After some discussion the name of Lord Balfour of Burleigh was added to the proposed committee, which was then appointed, and a vote of thanks to the chairman concluded the proceedings.

LONDON WATER SUPPLY.

The London County Council has commenced to take action respecting its resolution last month to enter into negotiations with the London water companies for the purchase of their undertaking, but so far with but little success. The Lambeth and New River Water Companies merely acknowledge the receipt of the Council's letter, whilst the Grand Junction, the Southwark and Vauxhall, and the East London, have returned specific answers. The Grand Junction state that

they are not willing to enter into negotiations at the present moment for the sale of their undertaking to the Council. The Southwark and Vauxhall have no intention or desire whatever to sell their undertaking, and the East London Company do not see their way to enter into negotiations for sale on the basis indicated in the resolution, but add that if any definite and practicable proposals are made for the purchase of their undertaking, they will be prepared to give them careful consideration. In consequence of these replies, the Council will take strong action to prevent the passing of any of the Bills which are being promoted by some of the companies this session, since the inevitable result of these Bills becoming law will be to add to the difficulties of the attainment of the Council's objects.

THE DEPOPULATION OF FRANCE.

The diminution of the population of France continues to be the subject of comment. Several remedies have been suggested, including that of freedom from taxation for prolific families, with money recompenses to the parents. M. Naquet has now taken up the matter with the vigour which characterised his successful propaganda for the French divorce law. The system adopted by M. Naquet is simple enough, and doubtless would be effective. It consists (1) of rigid sanitary measures in poor districts, and even in country villages, where epidemics are frequent: (2) increased surveillance of children sent out to nurse; and (3) greater facilities for naturalisation. The French social economist makes the startling declaration that the mortality amongst children confided to nurses in the country is over 30 per cent. Prefects of departments who have shown vigilance against abuses have been able to reduce this to less than 10 per cent. M. Naquet believes that Italian, Belgian, and Swiss aliens might be easily assimilated in the second generation if they were helped to forget that they were foreigners. Amongst the working classes especially conflicts like those at Aigues Mortes and near the Belgian frontier might be avoided. At present the baneful methods of protection are extended to men as well as to commercial produce. The former can only lead to depopulation and eventual subjugation.

DEATHS UNDER CHLOROFORM.

Dr. T. Jason Wood, house surgeon to the Bradford Infirmary, has favoured us with the following report of a case of death under chloroform which occurred recently in that institution. The patient, a healthy child 3½ months old, was the subject of hare lip and cleft palate. An operation was undertaken on March 7th for relief of the former condition. The child had been a week in the hospital, and was prepared in the usual way. Chloroform was administered on a single fold of a towel, about a drachm being used. The child took the anæsthethic quietly, without crying or struggling, and the operation was commenced by the removal of the projecting premaxillary bone. This caused a slight amount of hæmorrhage, some of the blood trickling down into the pharynx. The blood was sponged away assiduously, but it was then noticed that the respirations were becoming less frequent than natural, and they shortly ceased. The patient had been cyanosed. The heart was beating strongly. Inversion, together with artificial respiration, was resorted to, but as the air did not enter freely tracheotomy was performed, and a catheter passed into the trachea. Aspiration through the catheter was first practised, but nothing came away, and the lungs were then inflated. Cutaneous stimulation by means of hot and cold cloths was also employed, together with subcutaneous injections of ether, but the respirations never recommenced. About ten minutes elapsed between the commencement of the administration of chloroform and death. The necropsy showed the organs to be healthy. There was no blood in the trachea, but on slitting up the bronchial tubes it was found that they contained blood partly clotted and partly liquid. The death appeared to be due to asphyxia from the entry of blood into the air passages. The patient was at no time deeply under the anæsthetic, and the administration had been suspended for some little time before the failure of respiration. The air never entered the chest satisfactorily during the artificial respiration. Possibly the presence of the cleft palate may have embarrassed the reflex of swallowing, the activity of which was lowered by the chloroform.—Mr. R. W. Gowring, senior resident medical officer to the Radcliffe Infirmary, Oxford, has favoured us with the following report of the death of Violet Edmonds while under chloroform in that institution. The patient, a child of 7, was admitted for removal of adenoid growths in the pharynx. Chloroform was administered by being dropped on a towel. With the patient lying on her back the adenoids were removed with Löwenberg's forceps, the operation being completed by clearing the nasal passages with forceps passed down the nose. The whole operation occupied about a minute and a-half. The anæsthetic was discontinued from the commencement of the operation. There was no excessive hæmorrhage. Immediately after the operation it was noticed that the patient became cyanosed, but not markedly so; there was no struggling, coughing, or sign of dyspnœa. She was at once inverted, and artificial respiration resorted to. Brandy was given by the rectum, and strychnine injected hypodermically; hot cloths were applied to the cardiac region, and the surface of the body stimulated with a strong electro-magnetic current. About twenty minutes after the commencement of the bad symptoms tracheotomy was performed, and the lungs inflated by a catheter passed through the wound. Despite every effort, continued upwards of an hour, to restore animation, the patient never showed the least improvement. The pulse was not observed at the very beginning, but shortly afterwards it was imperceptible at the wrist. Death occurred without a struggle. The *post-mortem* examination showed that the trachea and two bronchi contained about two drachms of uncoagulated blood. The blood did not extend beyond the two main bronchi, and the lungs contained air. The right side of the heart was not in any way distended with blood.

A SUGGESTED ANTIDOTE FOR MORPHINE.

The New York *Medical Record* of February 17th contains an article by Dr. William Moor, in which he describes some experiments he has made with potassium permanganate as an antidote in cases of poisoning with morphine, and in the same journal there is a report of the recovery of a man treated in this way after having attempted suicide by taking 3 grains of morphine. Dr. Moor states that, having given much attention to the therapeutic use of permanganate, he was led to examine its action upon morphine by observing that it is a powerful destroyer of organic material and by the successful results he has obtained by administering it in the form of pills in the treatment of gastric disorders associated with putrid fermentation of the ingesta and in cases of cancer of the stomach. On adding a solution of 1 grain of morphine sulphate to a solution of 1 grain of permanganate, he found that the mixture at once became green, and after a few moments a dark precipitate separated, leaving an almost colourless liquid without taste, in which the presence of morphine could not be detected. This result is quite in accordance with the known susceptibility of morphine to change by oxidation. This reaction has been partially investigated, and has been found to give rise to the formation of an acid, apparently pyridine tricarboxylic acid $C_5H_2N(CO_2H)_3$. What other products may be formed is not known; but it is certain that morphine is completely destroyed under these conditions. Dr. Moor then proceeded to test the efficacy of permanganate as an antidote on himself, and being peculiarly sensitive to very small doses of morphine, he began by taking one-sixth of a grain, which would under ordinary circumstances have a profound narcotic

effect upon him lasting for several hours. But when he had also taken one ounce of permanganate solution (1 in 2,000) he found that the morphine did not produce any effect whatever. Gradually increasing the dose of morphine and the corresponding quantity of permanganate with similar results, he eventually took two grains of morphine sulphate without producing narcosis. These results are again explicable by the ready alteration of morphine by oxidising agents, which would, under the conditions described, be likely to take place in the stomach as well as in the test above mentioned, the quantity of permanganate taken being more than equal to that of morphine sulphate. To ascertain the influence of albuminous materials, such as the organic matter of the buccal cavity, œsophagus, and stomach or its contents upon permanganate, Dr. Moor dissolved one drachm of white of egg in an ounce of water, and added one drachm of a solution of permanganate (1 in 250), and found that the reduction of the salt was only partial, and after five minutes sufficient permanganate remained to destroy some morphine added to the mixture. The same effect was produced after thirty minutes, so that it took more than thirty minutes for one drachm of white of egg to deoxidise a quarter of a grain of permanganate, while a quarter of a grain is deoxidised in one second by the same quantity of morphine sulphate. Hence it was inferred that the contents of the stomach would not interfere with the reaction between morphine and permanganate, as the latter takes place so much more rapidly, and that the selective faculty of permanganate for morphine may be relied upon to ensure its efficacy as an antidote. Further experiments with peptone gave similar results. For the practical application of permanganate as an antidote in cases of poisoning with morphine, Dr. Moor recommends that ten or fifteen grains of the salt should be administered at once, and repeated at intervals of thirty minutes three or four times or even more. In cases of poisoning it is also advisable to acidulate the permanganate solution with dilute sulphuric acid or white vinegar. Dr. Moor believes that the administration of permanganate will be of beneficial effect even after absorption of the morphine into the system has taken place, and this is the most important point in regard to the matter. Dr. Moor bases his opinion upon some experiments by Hitzig, which showed that when morphine is injected subcutaneously it is secreted by the glandular lining of the stomach.[1] It appears, however, most probable that the action of permanganate as an antidote to morphine would only take place in the stomach, and that when the poison is administered internally and has been absorbed into the system, producing symptoms of intoxication, the portion absorbed would be beyond the reach of the counteracting influence of permanganate. In view of that probability, it may be inferred that the efficacy of permanganate as an antidote would be correspondingly limited. As a means of destroying any morphine still remaining in the stomach it would undoubtedly be useful when administered promptly, but only to that extent does there appear to be any prospect of benefit attending its use in cases of poisoning. Actual contact of the permanganate with morphine being essential for the action, while permanganate is unlikely to be absorbed unaltered, it seems highly improbable that, either in the blood or in the organs, toxic effects would be influenced by the action of permanganate on absorbed morphine.

CHOLERA IN CONSTANTINOPLE.

TELEGRAMS have been published from time to time within the last two months in various London newspapers, as to the existence of an epidemic of cholera in Constantinople. From communications which we have recently received from Constantinople we learn that cholera has been smouldering there all through the winter. The official returns do not admit more than a few cases, an average, perhaps, of three or four a week, and our information, drawn from unofficial but well-informed sources, is to the effect that there has been no serious amount of cholera. There are medical practitioners who have not seen a single case of genuine cholera, and it would appear that the cases both in Constantinople, where some of the Imperial Guard have suffered, and in the provinces of Broussa and Erzeroum have been sporadic. At the same time it must be confessed that this persistence of cholera in the Levant, even on a limited scale throughout the winter, cannot be viewed without uneasiness.

[1] *Berlin. klin. Woch.*, 1892, No. 49.

STERILISATION OF TUBERCULOUS MEAT.

A CURIOUS "function" took place on March 15th in a room belonging to the Berlin central slaughterhouse. The committee of superintendence of the slaughterhouse, several magistrates, and other municipal authorities sat down to a meal the *menu* of which ran: "Bouillon of and boiled tuberculous beef." The meat had been sterilised by an ingenious process, too long to give in full detail, but which in the main is as follows: A double-walled cylindrical boiler is fitted with iron grills, on which the meat is laid in pieces of a certain size; vessels below the grills serve for the reception of the juice dropping from the meat. The boiler is opened by means of iron doors, which can be closed air-tight. It is connected with the steam conduit of the slaughterhouse, and can bear an overpressure of one atmosphere, though as a rule half an atmosphere suffices for the purposes of sterilisation. Contact thermometers connected with bell apparatus are passed into the thickest part of the meat, the bell ringing at 100° C. This temperature was reached, even in large joints, in about two to two and a-half hours, the temperature in the apparatus itself being then about 120° C. The boiled meat thus obtained looks and tastes like ordinary boiled beef, and the droppings form a concentrated bouillon. Experiments made upon guinea-pigs before and after the steam-boiling prove that the meat is completely sterilised in the process. The apparatus is constructed by Dr. Rohrbeck.

REARRANGEMENT OF CORONERS' DISTRICTS IN LONDON.

WE understand that the County Council proposes to make some rearrangement of the coroners' districts in the east of London. Owing to the curious arrangement, according to which the sanitary authorities provide mortuaries and *post-mortem* rooms, while the County Council provides accommodation for holding inquests, it becomes very desirable to make the boundaries of the coroners' districts coincide as far as possible with those of the sanitary authorities. At present both the Poplar and the Whitechapel districts are situated partly in the Eastern and partly in the North-Eastern coroner's district, and as a coroner must hold his inquest within his own district the mortuaries are not always available, even where they exist. We understand that the Council now proposes to get rid of these anomalies by putting the whole of Poplar and Whitechapel into the Eastern District, and by transferring the minute portion of the Holborn District called the Liberty of Glasshouse Yard into the Central Coroner's District. It is expected that this will reduce the value of the vacant coronership from about £1,400 to something like £1,200 a year. The change, however, cannot take place for some months probably, as it must be made by Order of the Queen in Council. During the interregnum the acting coroner will carry on the duties.

BERI-BERI IN THE SPANISH COLONIES.

IN connection with the reviving interest in that important disease, beri-beri, we are pleased to note in a recent issue of our Spanish contemporary, the *Revista de Ciencias Medicas*, two lectures, one by Dr. José Léon de Mendoza on certain cases of this disease occurring in hospital and in the city of

Havana, Cuba, the other on the pathological anatomy of beri beri delivered at the school of medicine, Manila, by Dr. A. A. Maseras. These lectures, apart from the intrinsic merit they possess, are of importance as establishing the fact that beri-beri is now endemic in the islands of Cuba and Manila. Apparently the disease had not been recognised in Cuba until Dr. de Mendoza called attention to the matter. His clinical descriptions apply unmistakeably to beri-beri. Although his cases—and he says they are numerous—occurred among Chinese and Asiatic immigrants, there can be little doubt, considering the insanitary condition of Havana and other Cuban towns, that sooner or later this serious pest will extend to the negro and other races there. Dr. Maseras's lecture, which is reprinted from *La Revista Medico-Quirurgica*, deals almost exclusively with the pathological anatomy of the disease. Contrary to the generally accepted view of the neurotic character of the primary lesions of beri-beri, Dr. Maseras regards myositis as the first and most important element in the process of evolution of the morbid phenomena. He also regards anæmia as an important, if not an essential, feature of the disease. It is difficult, however, if Dr. Maseras is correct in his views, to account by them for the early implication of the sensory nerves, for the vasomotor troubles, and for the entire absence of anæmia in a large proportion even of the worst cases—a fact thoroughly established by numerous and carefully made hæmacytometric observations. Dr. Maseras calls attention to the frequency of degrees of œdema of the vocal cords in beri-beri cadavers, and to this œdema he attributes the aphonia so frequently encountered. He appears, however, to overlook the circumstance that aphonia is a frequent and often persistent symptom in the atrophic forms of beri-beri, and occurring in cases in which all œdema of the subcutaneous areolar tissue and other parts has completely disappeared, in which there is no evidence of effusion into the serous cavities, and in which extreme degrees of muscular atrophy are associated with what may be described as a desiccated rather than an œdematous state of the tissues. Such conditions of aphonia are frequently, if not invariably, associated with evidences of paralysis of the muscles of the larynx, such as inability to produce an explosive cough, and also of paralysis of the diaphragm, and of the intercostal and abdominal muscles.

THE CIVIL MEDICAL SERVICE OF INDIA.

We have received a very long memorandum on the reconstruction of the civil service of India by Dr. Bahadurji. The questions raised in this long and diffuse memorandum are of great importance and many-sided, and it impossible to discuss them profitably in a short space. They involve historical, economical, and administrative considerations which the writer simply ignores. His main object is to disparage the Indian Medical Service and exalt the native-born medical graduate, whether educated in India or in England, and to procure the supplanting of the former by the latter as a cheaper and better agency. He would restrict the Indian Medical Service to military employ and create a new service, recruited mainly from the ranks of Indian graduates for civil and educational appointments. The arrangement would result in the deterioration of the Indian Medical Service, and it is doubtful whether much, if any, saving of money would result, because the reserve of medical officers which is now lent for civil work would have to be greatly increased, and it is very doubtful, indeed, whether the new service could be got at a cheaper rate than the old, unless the work were given to an inferior class of men. Some reforms in educational matters are probably wanted and will come in time. The statement that men are appointed to professorships without consideration of special ability and merely because they hold a certain rank and belong to the Indian Medical Service is incorrect, but the field of recruitment might be enlarged by extending the area of selection for any professorship to the whole of the Indian Medical Service in all presidencies, and for special appointments, such as chemistry, physiology, and pathology, the field of selection might advantageously be spread beyond the service if suitable men could not be found in it. At present these college appointments constitute an attraction to the service, and good and eligible men enter the service with a view to holding them, and work for and up to them from the first. The strongest point in favour of the present status is that these educational establishments are supported and controlled by the State, and the State naturally employs its own officers to work them, and there is no question or doubt that the work has been well done hitherto. The sort of men to whom Dr. Bahadurji would for the future entrust medical education are certainly, according to our experience, not equal in capacity to present and past incumbents of the Indian Medical Service. The real solution of the difficulty is for Indians to start medical colleges of their own, officered by their own graduates, if they are dissatisfied with the medical education and training imparted in the State colleges. The alleged practice of changing about officers from one chair to another is, of course wrong, but it very rarely happens.

THE OLD AND NEW UNIVERSITY OF LONDON.

The approval passed upon the scheme by the Fellows and the few Members of the Royal College of Surgeons who attended the Members' meeting, as is recorded elsewhere in our pages to-day, may be reassuring to those who favour the proposals for the new University. But the scheme is likely to meet with much opposition when it comes up for discussion at the meeting of Convocation of the existing University of London, to be held on April 10th. The Annual Committee have agreed to propose the following resolutions: 1. That Convocation protests against the withdrawal without its consent of the Charter of the University of London as proposed by the Gresham Commission, and notes with satisfaction that the Commission quotes, and does not dissent from, the praise which the Commission of 1888 accorded to the University in respect of the manner in which it has fulfilled all the functions hitherto entrusted to it. 2. That Convocation reaffirms its desire that power should be conferred on the University of London to make extended provision for teaching and for original research in London, according to the schemes of 1886 and 1893 adopted by Convocation, or with modifications thereof. 3. That Convocation is of opinion that the scheme recommended by the Gresham Commission does not contain sufficiently definite proposals for increasing efficient teaching in the metropolis, would tend to destroy the present work of the University, and would operate injuriously on higher education throughout the Empire. 4. Convocation, therefore, although it would regret the establishment of a second University in London, is of opinion that it would be less disastrous to establish such a University with a distinctive title than to carry into effect the scheme of the Gresham Commission. 5. That Convocation instructs the Annual Committee to prepare and to request the member for the University to present to Parliament a petition against the establishment of the proposed University, and empowers the Annual Committee to send copies of the petition to members of the Government and other persons as may seem desirable, and also to take all such steps in order to give effect to the foregoing resolutions of Convocation as to the Committee may seem necessary or advisable.

Successful Vaccination.—Dr. E. F. Bindloss, public vaccinator for the fourth and sixth districts of the Royston Union, has received the vaccination grant of the Local Government Board.

Donations.—Baron de Hirsch has sent £300 to the North-Eastern Hospital for Children, Hackney Road; £300 to the East London Hospital for Children, Shadwell; and £500 to the British Home for Incurables.

ROMAN FEVER.

II.—Its Avoidance.

The important point for visitors in Rome to bear in mind is this: that the risk to life is much more serious from typhoid fever than from malarial poisoning. To avoid this all the usual precautions must be carried out, both in regard to avoiding the virus and to keeping the system in a condition to resist its attack. Visitors are only too ready to be carried away by the attractions of sight-seeing, or haunted with the dread that they will never be able to see everything in the limited time at their disposal. They spend long hours in cold galleries; pass recklessly from chilly streets into the blazing sun; loiter on the Campagna or in the Forum at sunset; and postpone their meals in an erratic way, or dispense with some of them altogether. Their evening hours are given up to a strained attempt to read up all the various subjects they have seen during the day, or passed in the ill-ventilated and overheated rooms of public or social entertainments. Rest is curtailed, and it is small wonder if the tourist becomes completely overdone and a ready prey to fever.

Visitors must endeavour to lead a rational life, securing for themselves regular meals and rest, with avoidance of strain, hurry, and fatigue. In addition to the usual precautions against typhoid fever, a few of special importance in Rome may be mentioned. However pure and good the water supply may be—and some of the sources are world-famous for their excellence—in some houses it is stored in cisterns of which it is difficult to say that they are not exposed to any contamination. Those who are in any way likely to be susceptible to enteric fever will be on the safe side if they limit themselves to the consumption of mineral waters. Apollinaris, Giesshübler, etc., are now found in many of the hotels of Italy. Of the native waters, two are found everywhere: Nocera is a pure water, artificially aërated; Chianciano is a still water. Both are very cheap, and nowhere should more than half a franc a bottle be charged. This consideration of the water will also prevent the traveller from indulging in salad, ices, and the aërated water of siphons; while some, who cannot secure boiled water, will carry precaution so far as to use mineral water with their tooth brush. A possible source of typhoid, or at any rate of gastro-intestinal disorders, is oysters. Those from the gulf of Naples have long enjoyed an unenviable notoriety from the suspicion that they are reared near the openings of sewers into that tideless bay.

With regard to "Roman fever" the spring is not the fever season. The elderly are but little susceptible. Still, the tourist must bear in mind that here he cannot disregard the laws of health with as much impunity as he may do at home. Many of the precautions against typhoid fever are equally necessary in the avoidance of malaria. In all countries where this disease occurs we find that certain precautions have become traditional amongst the inhabitants. One of the first things recommended in Rome is to avoid being out of doors at sunrise and sunset, the atmosphere being more laden with poison at those hours than through the day. This precaution dates back to the time of the Sybarites, who had a proverb "If you wish to live well and long, never see the rising or the setting of the sun." This is often quoted as a proof of their effeminacy, but that trait developed much later in their history, and the saying doubtless is the result of experience in their struggle against the malaria of Sybaris. Tourists are not likely to be exposed to the sunrise. With regard to the sunset, it may be as well for those who have had a long day or a hurried lunch to be indoors and at rest at that time. Certainly no one should be caught at sunset sketching or sitting out in such places as the Colosseum or the Palace of the Cæsars; they should be very careful to avoid watching excavations at that hour, or standing about until they are tired and chilled. Others who are in good general health and leading a physiological life may generally disregard the injunction; most of the British residents in Rome completely ignore it.

The next advice given to new arrivals in "The City of the Soul" is never to sleep with their windows open. This arises from the practical observation already noted that the virus is more active at night than during the hours of sunshine, and from the experience that the malarial poison can be carried by currents of air to a considerable distance from its source of origin. Popular observation is to the effect that the malarial poison is heavy, and only rises into the atmosphere to a certain level along the surface of the earth. This explains the platforms raised some twelve or fifteen feet above the soil, which may be seen in the Pontine marshes. Those whose occupation compels them to sleep out in this pestilential district during the summer, find that at this elevation they have more chance of escaping the malaria. On the contrary, the miserable labourers of the Campagna, who are compelled to sleep in huts, are ravaged with ague. In the jungles of India a similar system is adopted by those who have to sleep in the open, or who remain out at night to watch game. The natives of malarious districts in South America sling their hammocks in the loftiest trees. Visitors to the Congress will be interested in remarking the remains of diminutive dwellings on the tops of the tombs which line the Via Appia. It has been suggested that this position was selected to escape the malaria of the surrounding Campagna.

Some ancient farmhouses have been discovered in the Campagna, constructed in a peculiar way. They are built like a College quad, around a central courtyard. The only opening in the outer wall is the door, and perhaps some small windows under the eaves. As a result, when the door was closed at night, the house was entirely ventilated from the windows opening on the courtyard, the air of which could only be renewed from strata of air above the roof of the house, and therefore above the malarial area. It may, of course, be argued that this plan of construction was chiefly designed for protection from violence; but being found in malarious districts, and answering the same purpose as the Pontine scaffolds, it is possible that it may have served a double purpose. This theory is supported by the observation that towns connected with marshes by inclined slopes, along which the malaria-laden atmosphere can roll, are ravaged with fever; while others, situated on plateaux rising vertically from the plains, remain free.

The practical outcome of this is that ground-floor rooms should be avoided, and that the higher floors of a hotel are to be preferred. As with the question of being out of doors at sunset, visitors must be guided by their condition of health as to whether they will leave their bedroom windows open at night. Many of the resident foreign colony do so with perfect impunity. A harmless precaution is to close the windows at sunset, and ventilate the room a few hours afterwards. A fire, especially on a chilly evening, will prove a safe and acceptable method of renewing the atmosphere.

Amongst other customs which have become traditional with the inhabitants of malarious centres is that of being warmly clothed, and avoiding chills and sudden changes of temperature. It is the disregard of our countrymen for the latter point which has given rise to the saying, "Only Englishmen and dogs go in the sun." However, it is not simple exposure to the sun's rays which is injurious, but the sudden chills produced by passing afterwards through damp narrow streets and cold sunless galleries. A chill is in most cases the starting point of an attack of fever, and an Italian has a profound dread of a chill. It is striking to notice how, on raw evenings, the natives of the south cover their mouths and muffle themselves to their eyes in their swinging cloaks. Tourists must not discard winter clothing because in April they encounter days as balmy as the best we have at home in summer. Such days may be followed by bitter evenings, hence the Italian proverb:

> Prima che Maggio sia finito
> Non si cambia un vestito,

which is exactly translated by the Scotch saying: "Ne'er cast a clout till May be out."

A piece of useful advice found in all guide books is to drive to churches and galleries, so as not to arrive heated and tired; to put on a wrap on entering to counteract their stony chilliness; and to walk home to revive the circulation.

Reference has been made to the risk of exposure to the emanations from freshly dug earth. A similar possibility of contagion attends the presence of potted flowers and plants in dwelling rooms. Cut flowers in water are, of course, free from this possibility of danger. As the malarial virus is almost constantly received through the air passages, visitors

to Rome should be careful to make use of Nature's respirator, and by filtering the air through the nose arrest the entrance of the germs at the threshold. With this object they will particularly avoid mouth breathing in the open air after sunset, and will talk little to their companions on their way to and from evening receptions. As nasal respiration warms the air to the temperature of the body, and saturates it with moisture, the process is also a protection against chills.

Tourists who may have friends in Rome must not be beguiled into thinking that they can lead the same life as the residents. The susceptibility of those who are not acclimatised to the country is as marked in the case of malaria as it in that of typhoid. It even extends to animals, and English horses or Swiss cattle introduced to the Campagna have sometimes been destroyed by ague. It must at the same time be remembered that visitors who may have had ague in India or elsewhere are not less but more susceptible to the Roman form.

Coming now to the question of medicinal antidotes, many visitors make the great mistake of relying on alcohol. They think it necessary to fortify themselves with wine before starting out, and when they return exhausted they revive themselves with the same treacherous protector. Nothing could be more unwise; a temporary stimulation being secured at the cost of lowered temperature, impaired appetite, and deferred but greater depression. Eucalyptus has not proved of any value. Quinine as a protective cannot be recommended. Its action is rapid and transitory; it tends to disturb the digestive and nervous systems; and if the visitor should get a touch of fever while taking quinine the curative action of the drug is greatly lessened. Many a traveller makes himself positively ill with it, and thinks that he has a bad attack of "Roman fever" until a physician is called in and diagnoses his malady as a mixture of quinine and fear.

Since the year 1880 Professor Tommasi-Crudeli has employed arsenic as a reliable, and at least partial, antidote to malarial poisoning. He tried it on a large scale amongst railway and custom house employees, and found that when given for some weeks before the fever season commenced it has secured a total or partial immunity in those exposed to the virus. He commenced with a daily dose of 2 milligrammes (gr. $\frac{1}{30}$) and gradually increased it. The late Dr. Rolph Leslie, well known to so many travellers, made use of the same drug in the Congo Free State during the years 1885-87. There the malarious season lasts throughout the greater part of the year, and the disease is of a severe type. He found that all who underwent the treatment escaped severe attacks of fever, and that those who did suffer had it in a mild form readily amenable to quinine.

As a tonic and possible preventive of malaria, those whose state of general health makes them at all susceptible might take gr. $\frac{1}{100}$ of arsenious acid three times a day. The most convenient form is in tabloids, which can be dissolved in soup or coffee, and taken with meals.

A popular preventive and remedy is lemon juice. This use of the fruit is not limited to Italy, but is found in existence in the malarious parts of Greece, Spain, and Arabia.

The precautions above indicated should not be abandoned suddenly on leaving Rome. Although the malaria of the Campagna has as a rule a short period of incubation, it is well known that ague may be dormant in the system for some time.

The most important precaution of all is to attend to the general health. For, even as regards the severity of the attack, it has been shown that it depends more on the previous state of health than on the amount of exposure, or such facts as the fever being caught without or within the city walls.

ROYAL COLLEGE OF PHYSICIANS.

A Comitia of the Fellows of the College was held on Monday, March 19th, in accordance with the statutes for the election of a President for the ensuing year, Dr. Russell Reynolds, President, in the chair.

A communication from the Earl of Meath with respect to the proposed laying out of Trafalgar Square as a public garden was referred to the Finance Committee.

Communications were received from the College of Surgeons on matters of interest to the two Colleges jointly.

A communication was received from the President of the International Congress of Hygiene and Demography, inviting the College to send delegates, and the President nominated Dr. Poore and Dr. Seaton to represent the College.

The resignation of his diploma by a Member was accepted.

A report was received from a joint Committee of the two Colleges on the report of the Royal Commission respecting the new University, and its consideration was deferred to a special meeting.

A report from the Censors' Board in regard to certain proposed alterations in the conduct of the examination for the Membership was adopted.

A report from the Sir Andrew Clark Memorial Committee, recommending that a portrait be painted and presented to the College, for which subscriptions not exceeding 2 guineas were to be invited, was adopted, subscribers of the sum named to receive a reproduction of the portrait in photogravure.

On the recommendation of a committee appointed to consider the subject, it was resolved to raise the fees for admission to the Fellowship to 60 guineas, and for the Membership to 40 guineas, to come into effect at once.

A report from the joint Finance Committee of the two Colleges was received and adopted.

The President then delivered the customary annual address. After referring to the numbers on the College roll, he passed in review the chief events of the preceding twelve months, referring to the correspondence that had taken place with the Secretary of State for War respecting the examinations for admission into the medical services, with the result that the two Colleges had been requested to take part in the conduct of those examinations. Reference was next made to the Trinidad Board examination question, and to the abolition of the permission to a candidate recommended by that Board to be examined by correspondence. The relations of the College to the General Medical Council were next passed in review, especial reference being made to the question of allowing candidates to take up the preliminary subjects before registration, and to the postponement of pharmacology to the third part of the examination. Reference was next made to the financial state of the College, to the foundation of the Jenks Memorial Scholarships by Miss Johnson, to be annually awarded and tenable for five years, the first award having just been made on the recommendation of the head master to Epsom College; and to the titular honours conferred upon Sir William Broadbent, Bart., Sir W. Priestley, and Sir B. W. Richardson. The President then proceeded to refer briefly to the Fellows who had died during the preceding twelve months, the list consisting of Drs. Wegg, Prance, A. T. Myers, Hitchman, Graily Hewitt, Hadden, and Edis, and Sir Andrew Clark, Bart., to whose services to the College most feeling reference was made.

The ballot was then taken for the President, when Dr. Reynolds was elected by an almost unanimous vote, only two papers being given for other Fellows.

THE NEW UNIVERSITY FOR LONDON AND THE ROYAL COLLEGE OF SURGEONS.

A meeting of the Fellows of the Royal College of Surgeons of England was held at the College on Monday last. The meeting was summoned in pursuance of a resolution adopted by the Council on January 12th, 1893, namely:

That, in order to ascertain the views of the Fellows and Members of the College on the position which, in their opinion, this College should hold in the proposed Teaching University for London, separate meetings of Fellows and Members be convened at an early date after the report of the Gresham Royal Commission has been made public.

The President (Mr. Hulke) occupied the chair, and about 70 Fellows were present, amongst whom were Mr. Macnamara (Vice-President), Mr. Birkett, Sir G. M. Humphry, Mr. Bryant, Mr. Christopher Heath, Mr. Durham, Mr. Howard Marsh, and Mr. Tweedy.

The President made a statement explanatory of the proceedings of the College during the last eight or ten years in reference to the establishment of a Teaching University for

London; and read the following resolution adopted by the delegates of the Royal Colleges of Physicians and Surgeons which had been referred to the consideration of that meeting by the Council of the College of Surgeons, namely:

That the delegates of the two Royal Colleges do cordially approve of the general provisions in the report of the Gresham University Commission, particularly in so far as they relate to the said Colleges, regarding them as being in accordance with the principles which the Colleges have hitherto affirmed and accepted, and as constituting the most comprehensive and academic scheme hitherto proposed.

He expressed his own personal opinion as being in entire agreement with that resolution.

Mr. H. W. PAGE proposed:

That the Report of the Commissioners appointed to consider the Draft Charter for the proposed Gresham University in London does in principle commend itself to this meeting of Fellows of the Royal College of Surgeons of England.

He thanked the Council for summoning that meeting, and especially for the promptitude with which the Fellows had been called together. The Royal Colleges had for long been in the front of the movement, and it would have been most prejudicial to their interests had their Colleges postponed the consideration of the subject for any length of time. The matter had already engaged the attention of the delegates of the medical schools, and the Fellows of the College of Surgeons were not less capable than they of coming to some opinion on the subject. One reason for promptitude in action was to be found in the report itself, where it was said that the present position of King's and University Colleges and of other institutions in London made it both possible and advisable to set to work at once and bring the Teaching University into existence. The Colleges had, he said, been in the van of the movement by making a joint request some years ago to be accorded university rank; but he wished to express his own opinion that it was a good thing both for the Colleges themselves and for the profession of medicine that the request had not been granted. Medicine was one branch of learning, and could not stand alone without the support of those other branches which it was proposed to combine with it in the new University. Turning to the principle of the new University, he referred to several passages in the report of the Commissioners, which showed that the essential element of the scheme was to give the teachers as a body such an influence upon the examinations and studies of the University as to remove the objections that had been advanced against the examinations of the existing University of London. Their influence would be brought to bear upon it by means of faculties in the various branches of study. It was not quite clear in the report as to whether all or only some of the teachers in the various branches of learning were to be included in the faculties. But clearly this was a detail to be considered at some future time; and he deprecated very strongly any such narrow-minded view of the scheme as would hesitate to adopt it because of some trivial detail of the kind. But whatever the constitution of the faculties, it was obvious that they must be too large to deal with the administrative work of the new University, and, therefore, by an entirely new proposal in University organisation, the Commissioners had recommended the formation of an Academic Council, on which the various faculties should be represented. With reference to this body he quoted the excellent note of Lord Reay, appended to the report, in which it was pointed out that high intellectual powers and devotion to the service of the University will have to be tests qualifying for membership of a faculty, which would thus be composed of the leading teachers capable in every respect of electing the best men to the very responsible position of members of the Academic Council. The Academic Council, indeed, should be representative of the highest development of English learning and science. Mr. Page had no fear that the Faculty of Medicine would have any difficulty in finding men of high intellectual power and capacity to represent it on the Academic Council. He had heard it said that the representatives of other faculties would combine on the Academic Council to oust medicine. But he took no such deplorably narrow view of that body, and believed that the representatives of each and all of the faculties would hold an equal position at its table. He next passed to the position which it was proposed that the Royal Colleges should hold in the new University, and in which by a scheme of which all knew they would have a voice in the conduct of the examinations. He did not believe that the independence of the College of Surgeons would be thereby sacrificed; that the Membership of the College would be no longer sought as a qualification, or that the Fellowship of the College would not be as coveted a distinction as it was at the present time. For these reasons he hoped the Fellows would express such an opinion either for or against the scheme as would help the Council of their College in the deliberations in which they must presently engage upon the subject. For his own part, he thought it would be a good thing for the College itself and for medicine as one branch of learning to be united in the proposed University. It must of necessity be a long time before the new University could rival the old universities of the country, because it would lack the prestige of past history, but that which it lacked the two Royal Colleges would bring to it—the record of the life and work of distinguished men. No university could rob them of that which was peculiarly their own—the right to live and work in the spirit and under the abiding influence of William Harvey and John Hunter, whose memory and whose example would be a priceless possession to the end of time.

Mr. RICKMAN GODLEE seconded the resolution, and stated that he was in complete agreement with its proposer in the several points which he had mentioned.

Mr. R. M. CRAVEN (Hull) thought that the Gresham University Commission was to be commended for admitting the Society of Apothecaries to representation on the governing body of the University.

Dr. W. J. COLLINS, who had worked at the subject for years, considered that the resolution of the delegates of the two Royal Colleges was not quite accurate in so far as it stated that the general provisions in the report of the Commission which related to the Colleges were in accordance with the principles which the Colleges had hitherto affirmed and accepted, since it was notorious (as mentioned by Mr. Page) that the Colleges had at one time sought for their own recognition as constituent colleges of a one-faculty University. He was glad that the meeting was approaching the question in a large-minded spirit. He feared, however, that the new University would not satisfy the craving for a university degree of the great bulk of London medical students unless it did so by lowering the standard of the examinations below the point enforced by the present university, especially in regard to the Matriculation and Preliminary Scientific examinations, which were at present the chief hindrances to graduation experienced by London students. But any lowering of the standard of examination would be fatal to the repute of the London degrees. He thought also that any attempt to rush the report of the Commission would be disastrous to its proposals. There was no necessity for hurry, and he hoped that further time would be allowed for the full digestion of the scheme. Many of the Fellows there present had not, he believed, even read the report of the Commission. As to the Senate of the University of London, it certainly was not at present committed to the project. He opined that the immediate admission of University and King's Colleges to the new University would be likely to attract medical students to the schools attached to those Colleges in undue proportion, and hence would be detrimental to the other London medical schools. The requirement of the day was, as had already been well said, a "Teaching University," not a "Teachers' University," which latter seemed rather to be the *rôle* to be played by the proposed University.

Mr. KEETLEY feared the scheme might affect injuriously many of the constituent bodies, that College and the present University of London, for instance.

The resolution was then put to the meeting, and carried without a dissentient.

Mr. R. M. CRAVEN moved:

That, in the opinion of this meeting of the Fellows of the Royal College of Surgeons of England, in case the scheme for a Teaching University in London becomes law, there should be granted during the first year of its existence a year of grace, and *honoris causâ* any gentleman having arrived at the age of 65, and who possesses the diploma of F.R.C.S.Eng., M.R.C.S.Eng., L.R.C.P.Lond., or L.S.A.Lond., of good repute among his Fellows, shall be entitled, on application to the University, and on having his application signed by six gentlemen of good repute with London diplomas, to receive the degree of M.D. (Doctor of Medicine) on payment of a fee of £52 10s.

He thought his proposal, if carried out, would be likely to aid the coffers of the new University at its commencement, as he considered that there were many aged members of the medical profession who would not be sorry to die as members of a University. The resolution, however, was not seconded.

The meeting then terminated.

Meeting of Members.

A meeting of members of the College was held at the College on Tuesday last. Mr. Hulke, the President, occupied the chair, and was supported by Messrs. Bryant, Rivington, Pick, and Howse; Dr. E. Liveing, Registrar of the Royal College of Physicians, Dr. W. H. Allchin, and about eight other gentlemen, comprised the whole attendance at the meeting.

The President made a historical statement similar to that given by him to the Fellows at their meeting on the previous day; and, in reply to Mr. Atkinson, stated that the views of the Council and his own opinion were in favour of the new scheme, and that it was a matter of public notoriety that the Fellows of the College had on the previous day also voted in approval of the project.

Surgeon-Major Ince proposed the following resolution:

That this meeting of the Members of the Royal College of Surgeons of England approve generally the principles contained in the report of the Commission appointed to examine the draft charter of the proposed Gresham University in London, and therefore commend the scheme therein set forth to the earnest support of the Council of this College.

He said there was a general desire for a University degree on the part of young practitioners, and a want amongst them of general culture, particularly in subjects comprised in the earlier examinations for a degree, and in logic, which would be remedied by the work that must be done in order to attain graduation.

Mr. Arthur G. Haydon seconded the proposition. It was a bad thing that men were compelled to go abroad or to Scotland or Ireland for a degree; and if the Council by taking part in the scheme could prevent this exodus, it would be a distinct gain.

Mr. Atkinson thought it somewhat presumptuous for such a small meeting to take upon themselves to pass such a resolution in the name of the Members of the Royal College of Surgeons. He himself could not under these circumstances vote for it.

The proposition was then put by the President, and carried without a dissentient.

A vote of thanks to the President for taking the chair brought the meeting to a close.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A meeting of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 11th day of April next, at 2 o'clock in the afternoon.

Francis Fowke, *General Secretary.*

March 8th, 1894.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

Members are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the Office.

BRANCH MEETINGS TO BE HELD.

West Somerset Branch.—The spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Friday, March 30th, at 5 o'clock; dinner at 5.30. The subject for discussion is Common Diseases of the Eye as met with in General Practice. Mr. Cosens will open the discussion. Any member having any communication to bring forward should send me notice of its title, and also kindly inform me if it is his intention to be at the dinner.—W. M. Kelly, M.D., Honorary Secretary, Taunton.

North Wales Branch.—The intermediate meeting will be held at the Wynnstay Arms Hotel Wrexham, on Tuesday, April 3rd. Members having papers to read, etc., or new members to propose, are requested to intimate the same, not later than March 26th, to W. Jones Morris, Honorary Secretary, Is-y-Coed, Portmadoc.

STAFFORDSHIRE BRANCH.

The second general meeting of the present session was held at Stafford, on February 22nd, twenty-eight members being present.

New Member.—Dr. Reginald Alcock was elected a member of the Branch.

Cases and Specimens.—Dr. Hind showed: (1) Ten Calculi which he had removed from a patient, aged 56, who was suffering from total suppression of urine owing to the impaction of one of them in the top of the ureter, which weighed 6 grains. Eight of the others were found loose in the pelvis of the kidney. The patient sank fifty-seven hours after the operation from cardiac failure, there having been cardiac trouble for many years previously, due to chronic gout. The patient felt unwell on January 2nd, and passed a small facetted uric acid calculus that night with much urine, and this was the only thing that pointed to the true nature of the case. The left kidney was found to be completely absorbed, being represented by a thin sac enclosing a mass of calculi weighing 370 grains. (2) An oxalic acid calculus weighing 3 grains passed from the kidneys after an attack of hæmaturia. (3) A man, a gardener, who fell fourteen weeks previously with arm bent under him. This caused paralysis of the deltoid, triceps, and pectorals. The case was shown as one of laceration of the brachial plexus, but it was felt that the probable seat of injury was the nerve roots. Sensation of hand was also affected.—Dr. Deanesly exhibited a Cyst the size of a small hen's egg which he had removed from the right lobe of the thyroid body. The case had done well.—Dr. Edge exhibited a Uterus with Appendages removed for rupture by Taylor's method. The operation was successful.—Dr. Blumer showed: (1) Harvard Surgical Chair. (2) Regulating Inhaler, with Respiration Indicator, for administration of chloroform and ether, separately or in combination (Krohne and Sesemann).

Papers.—(1) Dr. Blumer read a paper on the Registration of Midwives, in which he argued that the existence of midwives was necessary. The period of training should be at least one year, and facilities might be found in workhouse infirmaries and Poor law practice. The expenses might be borne, in part at any rate, by the State. All regulations as to examination should be in the hands of a central medical council. The question of registration should not be regarded as bringing midwives into rivalry with medical men, but as bringing trained midwives into competition with the untrained and ignorant women. In the discussion which followed many members took part, and the opinions expressed were almost unanimous in favour of registration.—(2) Mr. Vincent Jackson read a paper on The Essential *versus* the Superfluous in the Surgical Operation of the Radical Treatment of Hernia in Boys and Men. After a review of the various procedures, an opinion was given that the least complex operation was the best, bearing in mind the importance of closing, but not removing, the sac, and of accurately apposing the sides of the external ring if possible. The patient should not be allowed to leave his bed for a month after the operation, and it was advisable, among the artisan class, that for a few months at least after he did so a light fitting truss should be worn. It had been computed that from 40 to 50 per cent. of cases operated upon for radical cure suffered from relapses.

HALIFAX (NOVA SCOTIA) BRANCH.

A largely-attended meeting of this Branch was held at Halifax on March 1st, the Vice-President, Dr. Milson, in the chair.

Report of Council.—The report of the meeting of the Council, held in February, was received.

New Member.—Surgeon-Captain Moir, A.M.S., was elected a member of the Branch.

Communications.—Dr. Murdoch Chisholm read a paper on "The Therapeutics of Heart Affections." A prolonged discussion followed, in which the following took part: Surgeon-Colonel Archer, Drs. Farrell, M. A. B. Smith, Surgeon-Captain Moir, Drs. Murray and Carleton Jones.

FORMATION OF A NEW BRANCH OF THE BRITISH MEDICAL ASSOCIATION IN GIBRALTAR.

Banquet to Mr. Ernest Hart.—Speeches of Governor-General Sir Robert Biddulph and Surgeon-Major-General Lewer.—Proposal for the Formation of a Branch.—Resolution.

Tangier is only three hours across the Straits from Gibraltar, which is the necessary port of call. On returning home from a fortnight's holiday in Tangier Mr. Ernest Hart passed through Gibraltar. The medical officers of the army and navy stationed there and the civil practitioners, on hearing of Mr. Ernest Hart's presence in Tangier, formed a committee and invited him to a professional banquet at the Grand Hotel, in passing through on his way home. This kindly act of hospitable courtesy has led to the formation of a new Branch of the British Medical Association.

The occasion was a very brilliant one, and we subjoin a note which has been forwarded to us of the proceedings: The dinner was honoured by the presence among others of His Excellency the Governor-General, Sir Robert Biddulph, G.C.B.; Major-General Hopton; Surgeon-Major-General Lewer, principal medical officer, who occupied the chair; Fleet-Surgeon W. H. Stewart, R.N.; Staff-Surgeon C. A. Macaulay, R.N.; Dr. William Turner, surgeon to the Colonial Hospital; Surgeon-Major D. L. Irvine; Surgeon-Captain W. G. Macpherson, medical officer of health; Surgeon-Captain Irwin; Surgeon-Major Tuthill; Captain Hope Biddulph, A.D.C.; Dr. John Wheeler; Surgeon-Major Sawyer; Surgeon Price, R.N.; Surgeon J. J. Walsh, R.N.; Dr. N. O'Brien; Surgeon-Captain Perry Marsh; Surgeon-Captain Maturin; Surgeon C. S. Bennett, R.N.; Dr. Tuay; Surgeon-Captain Harley Thomas; and others. Captain Lake, R.N., and others sent letters expressive of their regret that a festivity which was occurring in the Fleet that night prevented their attendance.

After the usual loyal toasts, Surgeon-Major-General Lewer proposed the health of the Governor, expressing the great gratification of the profession that his Excellency had taken part in doing honour to their guest, and was present at this first meeting of members of the British Medical Association ever held in Gibraltar.

General Sir Robert Biddulph, in reply, expressed his high sense of the value of the services of the medical profession in their various capacities in the island and elsewhere. On a former occasion he had the honour of addressing the medical students at Netley, and had felt it to be a great compliment that he had been afterwards told that his address was so thoroughly in sympathy with medical sentiment that it might have been delivered by a doctor.

The Chairman then rose to give the toast of the evening, and said he had the privilege and honour of proposing the health of their most distinguished guest, Mr. Ernest Hart, whose name was a household word in the medical profession, and one famous wherever the English language was spoken. To enumerate the services of their guest would be to give a retrospect of a large part of the progress made in the course of the last thirty years in the organisation and elevation of the medical profession, and in the promotion and the welfare of its various departments, as well as the social and sanitary amelioration of the people. His long life had been one of great usefulness, and whether they regarded him as an ophthalmologist, an author, a leader in medical progress and social reformer of high achievement, he had left an indelible mark on the public and professional progress. Among the many labours had been his recent addresses in America at the congresses at Milwaukee and Washington, while his Edinburgh and Newcastle addresses on Waterborne Cholera and on the Nurseries of Cholera and the Methods of its Extinction had borne fruit, not only in the enlightenment of the profession and of the nations as to the origin, march, and extinction of cholera, but was at that moment the subject of an International Sanitary Conference aiming at the destruction of the cholera poison in its home and at its portals of eruption, from which might be expected results of world-wide importance. Even the Shah of Persia and the Sultan of Turkey were moved to send delegates to that conference, and they all hoped much from the assistance of those potentates in solving what was a second and a very pressing Eastern question. Amid all his various pursuits Mr. Hart had found time to cultivate successfully difficult branches of artistic and literary research, and was known as the leading European authority and the noted collector of Japanese art, in respect to which he had established a reputation which had preceded him so far East, and which was rare even among those solely devoted to such pursuits. In his intervals of holiday he had visited nearly all the leading seats of the extended organisation of the British Medical Association, and they could not allow this opportunity of his temporary passage through Gibraltar to pass without marking their sense of the great services which he had rendered to his profession and humanity, and they were proud in welcoming him as a honoured guest and eminent colleague.

Mr. Ernest Hart said: Your Excellency, Surgeon-Major-General Lewers, and Gentlemen,—The signal, most unexpected, and most gracious welcome with which you have honoured me is one which ordinary words are poor to acknowledge. The occasion gains a double distinction from the presence of his Excellency the Governor; and I appreciate and thank him for this public mark of his sympathy with our profession, while I deeply appreciate the personal courtesy involved. To me, as a member of the medical profession and of the British Medical Association, the most signal significance of this splendid banquet is that it is offered by members of my own profession, and that it testifies to their good feeling and affection for the British Medical Association and their ready recognition of what I have been able to do as the Editor of its Journal and the Chairman of its Parliamentary Bills Committee. It is the donor who makes the gift precious, and to be honoured by men themselves so worthy and so full of honour is the crown of a career spent in the service of the profession to which nearly all of us here belong. Gentlemen, the British Medical Association is strong in its unity and it grows by concord. There are many forces in society at the present moment which tend towards the disintegration, if not the dissolution, of society; all the more necessary that men of our profession and indeed that all men with the sense of the value of civic virtue should endeavour to help forward those social ameliorations which can be effected by co-operation and which tend to consolidate the bases of society and the fabric of the British empire. I am happy to feel that here in this British fortress—standing as an outpost of inestimable value to the Empire—British interests are the interests of peace and equity, of freedom, and of the common welfare of the subject and protected races who live under the British flag. What a contrast between the order, the health, and the prosperity which reign here and the misgovernment, the misery and the poverty of the crumbling empire across the Straits which I left only a few hours ago! It is not for me—a stranger within your gates, a visitor, and a learner—to say anything by way of comment or criticism of the minor details either of the services or of this place; but since allusion has been made to the sanitary question, I will only say that one of the principal lessons which I have derived from long years of study, and of observations at home and abroad, is that of all the kinds of economy that which displays itself in stinting sanitary work is the most wasteful, and that of all forms of expenditure there is none so truly economical as a liberal and well-directed expenditure in the prevention of disease. There are few things so costly as epidemics, few things so spendthrift as a scare about the invasion of cholera or other imported zymotics. It is very economical to make all the expenditure necessary in providing purity of air, of soil, and of water. Not only is prevention better than cure, but it is far cheaper. Quarantine, isolation houses, the stoppage of commerce, and the check to international communications are costly curses to any community. That lesson which we have learnt so thoroughly in Great Britain is now being learnt by all the Continental nations, and I trust that the International Cholera Conference now

sitting in Paris may result in regulations which will at once arrest epidemic disease, and remove some of the antiquated barriers to commercial intercourse which prevalent dirt and the blind fear of diseases, fostered by filth, have imposed upon the ignorance, the inaction, and the terror of nations who had sinned against the laws of health, and had idly thought to erect artificial barriers which have no real efficacy. Standing here on one of the pillars of Hercules, let us remember that one of the greatest and most useful of his fabled labours was the cleansing of the Augean stable. For the old motto inscribed upon these pillars by the ancient geographers, "*Ne plus ultra*," it is our boast to substitute "*Plus ultra*."

Other toasts followed.

Towards the close of the banquet Surgeon-Captain Perry Marsh said he believed there was a general sentiment among those present that the memory of this most interesting occasion should not be lost, but that it should take a practical and permanent form by the establishment of a Gibraltar Branch of the British Medical Association. They were all attached to that Association from the value of its professional work, whilst, as members of the public services, they warmly recognised the value of the important assistance which on many occasions it had rendered to the medical officers of the army and navy.

Surgeon-Major-General Lewer expressed his warm concurrence with this excellent suggestion, and he proposed that the necessary steps should be taken at once while they had the advantage of the presence among them of Mr. Ernest Hart, of whose visit this Branch might furnish a permanent memorial. He desired those present to signify their wish in the matter.

Every hand was held up in favour of the proposal, which was accepted with general enthusiasm, and it was resolved that a meeting should be called without delay to take the preliminary steps for requesting the assent of the Council of the British Medical Association to the formation of the proposed Branch. The necessary formalities were entrusted to the hands of Surgeon-Major-General Lewer and Dr. Turner, who were requested to convene a meeting for the purpose.

The guests did not separate till after midnight.

BRITISH MEDICAL ASSOCIATION.

SIXTY-SECOND ANNUAL MEETING.

The sixty-second Annual Meeting of the British Medical Association will be held at Bristol on Tuesday, Wednesday, Thursday, and Friday, July 31st, August 1st, 2nd, and 3rd, 1894.

President: George Hare Philipson, M.D.Cantab., D.C.L., F.R.C.P., Professor of Medicine in the University of Durham.

President-Elect: E. Long Fox, M.D.Oxon., Consulting Physician to the Bristol Royal Infirmary.

President of the Council: J. Ward Cousins, M.D.Lond., F.R.C.S., Senior Surgeon to the Royal Portsmouth Hospital.

Treasurer: Henry Trentham Butlin, F.R.C.S., D.C.L., Surgeon to St. Bartholomew's Hospital, E.C.

An Address in Medicine will be delivered by Thomas Grainger Stewart, M.D.Edin., Professor of the Practice of Physic and Clinical Medicine in the University of Edinburgh.

An Address in Surgery will be delivered by James Greig Smith, M.B., F.R.S.E., Surgeon to the Bristol Royal Infirmary.

An Address in Public Medicine will be delivered by Sir Charles Cameron, Medical Officer of Health, Dublin.

A. Medicine.—*President:* Frederick T. Roberts, M.D. *Vice-Presidents:* E. Markham Skerritt, M.D.; R. Shingleton Smith, M.D. *Honorary Secretaries:* W. T. Brooks, M.D., 32, Holywell, Oxford; J. Michell Clarke, M.D., 28, Pembroke Road, Clifton, Bristol.

B. Surgery.—*President:* W. Mitchell Banks, M.D. *Vice-Presidents:* Nelson C. Dobson, F.R.C.S.; Professor Victor Horsley, F.R.S. *Honorary Secretaries:* G. A. Wright, M.B., 8A, St. John Street, Manchester; James Swain, M.D., 14, Buckingham Place, Clifton, Bristol.

C. Obstetric Medicine and Gynæcology.—*President:* Professor J. G. Swayne. *Vice-Presidents:* E. Malins, M.D.; A. E. Aust-Lawrence, M.D. *Honorary Secretaries:* R. Boxall, M.D., 29, Weymouth Street, London, W.; Walter C. Swayne, M.D., 3, Leicester Villas, St. Paul's Road, Clifton, Bristol.

D. Public Medicine.—*President:* Professor W. H. Corfield, M.D. *Vice-Presidents:* J. Lane Notter, M.D.; S. Davies, M.D. *Honorary Secretaries:* B. H. Mumby, M.D., Town Hall, Portsmouth; J. C. Heaven, M.R.C.S., 2, Queen Square, Bristol.

E. Psychology.—*President:* G. F. Blandford, M.D. *Vice-Presidents:* S. R. Philipps, M.D.; Fletcher Beach, M.D. *Honorary Secretaries:* C. S. W. Cobbold, M.D., Bailbrook House Asylum, Bath; R. S. Stewart, M.D., Glamorgan County Asylum, Bridgend.

F. Pathology.—*President:* G. Sims Woodhead, M.D. *Vice-Presidents:* Joseph Frank Payne, M.D.; M. A. Ruffer, M.D. *Honorary Secretaries:* Norman Dalton, M.D., 4, Mansfield Street, London, W.; C. A. Morton, F.R.C.S., 24, St. Paul's Road, Clifton, Bristol.

G. Ophthalmology.—*President:* F. R. Cross, M.B. *Vice-Presidents:* H. E. Juler, F.R.C.S.; Simeon Snell, F.R.C.S. *Honorary Secretaries:* C. H. Walker, M.B., 3, Leicester Villas, St. Paul's Road, Clifton, Bristol; J. Tatham Thompson, M.B., 24, Windsor Place, Cardiff.

H. Laryngology and Otology.—*President:* P. McBride, M.D. *Vice-Presidents:* W. H. Harsant, F.R.C.S.; Barclay J. Baron, M.B. *Honorary Secretaries:* P. Watson Williams, M.D., 2, Lansdown Place, Victoria Square, Clifton, Bristol; W. Milligan, M.D., 28, St. John Street, Deansgate, Manchester.

I. Dermatology.—*President:* A. J. Harrison, M.B. *Vice-Presidents:* Stephen Mackenzie, M.D.; H. Waldo, M.D. *Honorary Secretaries:* J. Hancocke Wathen, M.R.C.S., 16, York Place, Clifton, Bristol; H. Leslie Roberts, M.B., 46, Rodney Street, Liverpool.

J. Diseases of Children.—*President:* W. Howship Dickinson, M.D. *Vice-Presidents:* John Edward Shaw, M.B.; Frederic S. Eve, F.R.C.S. *Honorary Secretaries:* R. W. Murray, F.R.C.S., 15, Rodney Street, Liverpool; Bertram M. H. Rogers, M.D., 11, York Place, Clifton, Bristol.

Programme of Proceedings.

Tuesday, July 31st.

9.30 A.M.—Meeting of 1893-94 Council.
11 A.M.—First General Meeting. Report of Council. Reports of Committees and other business.
3 P.M.—Sermon.
8.30 P.M.—Adjourned General Meeting from 11 A.M. President's Address.

Wednesday, August 1st.

9.30 A.M.—Meeting of 1894-95 Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting. Address in Medicine.

Thursday, August 2nd.

9.30 A.M.—Meeting of Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting. Address in Surgery.
7 P.M.—Public Dinner of the Association.

Friday, August 3rd.

9.30 to 11 A.M.—Sectional Meetings.
11 A.M.—Concluding General Meeting. Address in Public Medicine.

Saturday, August 4th.

Excursions.

International Medical Congress.—Professors Quinlan and Roche and Dr. T. More Madden have been appointed as delegates of the Catholic University Medical School, Dublin, to the International Medical Congress at Rome.

The New Medical Officer of Health for Paddington.—The vacancy caused by the resignation through ill-health of Dr. Stevenson, Medical Officer of Health for Paddington during the last eighteen years, has been filled by the appointment of Dr. Reginald Dudfield, M.A. and M.B. Trinity College, Cambridge, D.P.H., L.R.C.P.Lond., and M.R.C.S.Eng. Dr. Dudfield has held the post of medical officer of health for the borough of Eastbourne, medical superintendent of the sanatorium, and surgeon to the police since 1891. He was chosen by the vestry from about forty candidates.

CORRESPONDENCE.

THE PROPOSED "SOCIETY OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND."

SIR,—No Fellow of the College who has paid close attention during the past few years to college politics at the Royal College of Surgeons of England could fail to have been intensely amused on receiving last week a circular suggesting the formation of a "Society of the Royal College of Surgeons of England." The objects of the Society are stated to be (1) the desirability of holding meetings for the discussion of matters concerning College management, and for eliciting opinions which may be regarded as representative of at least the majority of the constituency; (2) to give the Council the support of its constituency in any steps thought necessary to be taken for obtaining such alterations in the charter as shall enable it better to deal with any Fellows or Members who have been guilty of professional misconduct; (3) by well digested argument, and in such a manner as to represent the opinions of the majority of the Fellows, to urge upon the Council such reforms as may be considered necessary. But on casting one's eye over the list of those attending the preliminary meeting at which this new society was proposed, the curious fact becomes at once apparent that no fewer than five of those present had been unsuccessful candidates for seats on the Council at the election last July, and that one of these has been appointed chairman of the "Provincial" *(sic)* Executive Committee.

Ostensibly this society has been proposed for the purpose of promoting the interests of the Fellows, but, practically speaking, it is nothing less than an imitation of the organisation known as the "Association of Fellows," founded in 1884, to the policy of which the concessions granted by the Council during recent years have been almost entirely due.

It may here be observed that the work of the Association has met with so much approval among the bulk of the Fellows that the last two or three elections for vacancies on the Council have emphatically shown that only those candidates who avowed themselves prepared to promote the views of the Association on the Council were likely to be successful. The circular comments upon this fact in the following manner: "By the formation of a Central London Executive and of Branch Executive Committees.....it was hoped and expected that the general body of Fellows would be enabled to form an opinion as to the suitability of candidates to represent them upon the Council, and so the risk would be avoided of candidates becoming the mere nominees of small committees which, without having any true representative character, might tend to influence, and in the end control, elections to the Council by methods akin to those of the political caucus of the day." This is scarcely complimentary to Mr. Rivington, Mr. Tweedy, Mr. Macnamara, Mr. Mayo Robson, and others who have attained to their seats on the Council largely through the agency of the Association. Nor is it by any means true that the Association does not represent the views of the bulk of the Fellows. On the contrary, there is ample reason for believing that the large majorities that the Association candidates have recently secured over the non-reforming Fellows at the College elections have come from the Fellows who do not belong to the Association. Clearly this fact must have at last become apparent to those Fellows in London desirous of seats on the College Council who, for reasons best known to themselves, have hitherto held aloof from the reforming body of Fellows. Now, however, it is evident, that these certain London Fellows have thought it best to establish a "reforming" society on their own account, and thus follow in the lines of the Association Fellows, for which they have been accustomed to profess so much contempt. It is certain, at all events, that those Fellows who go to the poll at the College with views in favour of reform will have the best chance of success, for the working of the Association of Fellows has undeniably taught during the past few years how widely diffused and determined is the feeling among the Fellows to obtain some share in the government of their College.—I am, etc.,

H. PERCY DUNN,
London, March 17th. Honorary Secretary, Association of Fellows.

OUT-PATIENT HOSPITAL ABUSE.

SIR,—In Dr. Hughes Bennett's letter there are many points in which most general practitioners would agree, and there are many other points which show all the more offensive traits which the fortunate men who call themselves physicians show to what they opprobiously term G.P.'s.

The letter is evidently written not to elucidate the question of hospital abuse, but to magnify the position of the physicians; and the keynote is struck in the paragraph "none of whom could afford to pay adequate fees to a private doctor."

According to the scale of medical tariffs published under the patronage of the British Medical Association most of these people would only have to pay from 1s. 6d. to 2s. 6d. for each consultation, and most of them are well able to pay that; yet, in preference to referring these people to a general practitioner in their neighbourhood, they are to be retained at the hospital, although "owing to the crowds which demand attention, the deserving patient runs the risk of failing to receive the time and consideration his case merits, the physician being overwhelmed with an incongruous mass of material which requires no skilled attention."

From experience I quite agree that provident dispensaries where the pay is from ½d. to 1d. per week, and where the medical men attached are only a small proportion of the medical men of a district, are as great an evil as the out-patient department. But I cannot agree that "the total abolition of the out-patient system would only transfer the public from one institution to another." Were there no out-patient department all the general practitioners in the neighbourhood would get a fair proportion of the cases that now crowd the hospitals, the same as they do in the moderate-sized towns where there are no hospitals.

With regard to special hospitals (which are the worst offenders) such as the eye, ear, throat, skin, and women, is it not a very grave aspersion on the examining body of the different universities and licensing bodies if the men who are passed have not knowledge enough to treat the special cases of these classes? If the men licensed to practise are not as capable of treating a case of ophthalmia or iritis as they are supposed to be that of pneumonia or bronchitis, there must surely be something wrong in the examination; and as I believe Dr. Hughes Bennett has had something to do with the examinations of one of the best of the universities, he should surely exert his influence in seeing that everyone before he qualifies is capable of treating every disease which does not require a delicate operation. Operations of course require dexterity and practice, and every man has not the mechanical skill to perform them; and unless a man has considerable practice his results will not be so good as the man who has large practice; but even the most famous operators would not care to be judged by their earliest results, which means, if stated plainly, that some of the first cases operated on must suffer disadvantageously.

A few men there are—really very few—who have studied one or more diseases specially, and are capable of giving useful advice, but the majority of so-called physicians have not had any special experience, and are not as capable of treating disease in its various phases as are the despised general practitioners whose brains the consultant always picks when called into consultation.

If hospital abuse is to be abolished, there must be only enough patients retained to instruct the students properly, and then they will learn more from half-a-dozen cases than they now do from hundreds that are never properly examined: and in special hospitals patients must be taught that because they have paid 6d. or 1s. they have not paid for medical attendance as a right, but have only defrayed in part the expense of what drugs they are supplied with.—I am etc.,

Chelsea, March 19th. J. HAMILTON.

SIR,—Dr. A. Hughes Bennett's excellent letter appears to me to contain a few weak points.

1. He says: "The large mass of the patients consist of the working classes, or the lower ranks of clerks, shop assistants, and the like, none of whom could afford to pay adequate fees to a private doctor." Everything here hangs upon the word "adequate." I maintain that the general practitioner is conferring an infinitely greater benefit upon these people by

attending them and dispensing for them at an extremely small charge than the physician who, to save his own dignity, pauperises them by treating them gratuitously.

2. He says: "Reduction (of the number of out-patients) by means of selection of cases is eminently unsatisfactory, as such a procedure, which demands the highest skill and experience, would have to be relegated to junior officers." I see no difficulty in the out-patient physician seeing all new cases himself, provided that he retains only those which are clinically useful, and relieves himself from the intolerable burden of seeing week after week the hosts of trivial cases that beset every hospital.

3. He says: "The establishment of affiliated provident dispensaries would in no way serve to put money into the pockets of the general practitioner, but only of the limited few associated with them." Considering that at least one stipendiary would be needed for every 5,000 persons, so that at least 1,000 stipendiaries would be needed for London alone, the number of practitioners affected is not inconsiderable.

4. He says: "Even the entire abolition of the hospital out-patient system would only transfer the public from one institution and staff to another." Surely the position would be greatly improved if the new staff were adequately paid for their services, and the public were no longer pauperised. I see no great difficulty in having "special" as well as "general" dispensaries, nor in remunerating the staff, nor in having separate dispensaries, or separate days, or separate hours, for the really destitute, who cannot be expected to contribute anything.—I am, etc.,

Kendal, March 18th. WM. RUSHTON PARKER, M.A., M.D.

ASSISTANT MEDICAL OFFICERS IN ASYLUMS.

SIR,—I should like to second Dr. Rees Philipps's suggestion made in the BRITISH MEDICAL JOURNAL of March 17th, that the question of status, etc., of assistant medical officers should be discussed at the annual meeting of the British Medical Association. To such a discussion, however, much tact, moderation, and self-control must be brought; the matter must be shorn of narrow private prejudices, of local and personal considerations; freed from the coloured sidelights of emotion, and subjected to the "*critique* of pure reason." Definite and rational propositions, an amicable and sober discussion—these, to my mind, constitute the *sine quâ non* of such a proposal as that of Dr. Philipps. The subterranean rumblings of discontent which we have of late experienced are, in my opinion, without avail. I trust those gentlemen whose sable-hued pictures of asylum life have recently been on view to the medical public may be afforded an opportunity of discussing their grievances in the broad light of day.—I am, etc.,

Wakefield, March 18th. EDWIN GOODALL, M.D.

SIR,—You have opened your columns to the grievances of assistant medical officers in asylums. While I am strongly impressed by the fact that there exists in the majority of asylums and hospitals for the insane an urgent necessity for reform with regard to the position of assistants, I feel assured that the unfortunate experiences so graphically described by some of your correspondents on the subject are happily exceptions. The relations between superintendents and assistants are as a rule, I believe, of a cordial and friendly nature; and if they are not so, who shall decide where the fault lies?

But we have other than sentimental grievances. I would most strongly maintain that under the present system of asylum administration the disabilities of assistant medical officers are a deterrent to the present, and a menace to the future, progress of psychological science. I am firmly convinced that despite the halo of scientific sanctity which surrounds medical superintendents, that much of our future knowledge, and future success in the treatment of the insane must largely depend on the honest endeavours of assistant medical officers.

Medical superintendents can rarely have the time, even if they have the inclination, for more than the administrative work of an institution; and their devotion to that duty often leads to a paralysis of scientific interest. Under the present unsatisfactory system asylum assistants rarely remain more than a year or two, and then drift away into general practice, thus rendering it evident that their interests are not those of the institution they serve.

Now it will be sufficiently obvious to everyone that the longer an assistant remains the greater, *cæteris paribus*, must his value become; he acquires knowledge and experience denied to a succession of younger men. I submit, therefore, that both the institution and the public must suffer from this state of things. Can we make any material progress in the treatment of insanity while we have medical superintendents whose multifarious duties debar them from what is, after all, the essential work and object of institutions for the insane, and while the junior posts are filled by men who give up the work before they have metaphorically cut their teeth? If, however, the position of assistant medical officers be so improved and their remuneration adequate, there is no reason why they should not be content to remain as assistants, no matter how remote the hope of a higher post. Many men, under altered conditions, would, I have no doubt, choose to remain in this position, preferring the purely medical to the administrative work. Surely the object to be attained justifies such conditions being offered to them as will retain their services; surely the advancement of the science would progress more rapidly in the hands of assistants of age and experience than in those of raw unfledged youths fresh from college, who have no serious intention of taking up the study of the speciality, and no inducements to urge them to do so.

Dr. Rees Philipps has, I am glad to see, suggested that the question should be discussed at the annual meeting of the British Medical Association, but I fear that many an assistant medical officer will shrink from thus publicly advertising his troubles, owing to the fear of possible difficulties with his superintendent. We owe a large measure of thanks to Dr. Philipps for his suggestion, but if only he and others would take the initiative, and put their theories into practice, the result would be a speedy amelioration of the condition of assistant medical officers throughout the country.—I am, etc.,

March 17th. AN ASSISTANT MEDICAL OFFICER.

SIR,—A few simple and radical changes are required before the study of lunacy will attract men of real ability, promote the study of psychology, or advance the position of asylum medical officers.

1. Superintendents should be chosen, not because they are good farm stewards and general administrators, but on account of their abilities as scientific men, who are content to spend their lives in the interest of medical science.

2. Assistant medical officers should be selected, not because they have high cricket averages, play a good game of whist, or have a baritone or tenor voice; they should be chosen on the strength of their medical qualification.

I have had a fair amount of experience in asylums, and when I was selected for the posts which I have filled the questions invariably asked were: "Do you play cricket?" "Can you play an instrument?" or "Do you take part in theatricals?" or others of a like tenour. I was not asked if I took an interest in pathology or surgical science. The superintendent, I soon found, cared little about medical work, rarely visited the wards in my company, and spent the greater part of the time in signing numerous awe-inspiring but very useless account books, superintending drains, or the planting of trees on the farm.

The above experience speaks for itself to any intelligent mind, and I am sure several of my colleagues throughout the kingdom have seen the same sort of things in their institutions.—I am, etc.,

March 17th. DISGUSTED.

SIR,—I can assure Dr. Rees Philipps that so far from "Experientia Docet" being "unfortunate in his asylum," he has only had the bitter experience of nineteen out of twenty assistant medical officers. My own service was one of seven years at a county asylum, and in my own opinion "Experientia Docet's" life is the common lot of the unfortunate assistant medical officers; the latter has no status whatever,

and at the same time is liable to be held responsible for any treatment of patients or mismanagement of h vards, even when acting solely under his chief's orders; the atter has the ear of the Committee, to whom he can make all kinds of statements, excusing his own conduct and blaming his assistants; and if at any time the Committee call upon the latter for an explanation, he is suddenly informed that he is "wanted in the Committee Room," and is then surprised by a number of accusations which probably the medical superintendent has been collecting in diary form for some years. This, astounding as it may seem, was my own experience; and if, in addition to these mental obliquities, the medical superintendent is so old that he has forgotten the symptoms of simple diseases and the doses of the most commonly used drugs, the situation may be better imagined than described.

In conclusion, I would solemnly warn any young medical man, unless physically incapacitated from practising his profession in any other way, against entering upon asylum life.—I am, etc.,

March 20th. Late A.M.O.

Sir,—Nothing would be more welcome to the mass of junior asylum officers than the proposition of Dr. Rees Philipps to bring the question of assistant medical officers before the annual meeting of the British Medical Association. I am sure every assistant medical officer would co-operate with Dr. Philipps in his effort to deal with the question.

I am also of opinion it would be the means of clearly bringing into relief the weak points of a system which burdens the medical superintendents with vast economic responsibilities and stultifies the advancement of scientific research.

The public and the profession have a right to see that our asylums are made and kept up in the highest and best sense as curative institutions.—I am, etc.,

March 19th. Probatum est.

MEDICAL CORONERS.

Sir,—At a council meeting of the Metropolitan Police Surgeons' Association, held at New Scotland Yard, on March 15th, the following resolution, moved by Mr. G. B. Phillips, and seconded by Mr. Alex. O. Mackellar, was passed unanimously: "That Dr. Yarrow, one of our vice-presidents, being qualified both medically and legally, be requested to represent the interests of the divisional surgeons by becoming a candidate for the coronership of North-East London, vacant through the death of the late Dr. R. Macdonald, M.P., and that a copy of this resolution be sent to the Editors of the British Medical Journal and the *Lancet*."

I should feel obliged by your kindly inserting this in your next issue.—I am, etc. A. Dorin,

Clapham Road, S.W., March 20th. Hon. Sec.

EPIDEMIC JAUNDICE.

Sir,—Judging from the letters which have appeared in the British Medical Journal on the above subject, there can be no doubt as to the existence of this complaint. Observers differ in opinion, however, as to its causation. Two theories seem to find most favour—namely, as a sequela to influenza and errors in diet. With regard to the first, no doubt jaundice may be a sequela to influenza, but that it was in my cases I cannot believe. The epidemic of jaundice appeared at first in one village only, in the month of September, and was over by the end of October. In that same village influenza appeared about the middle of January. I attended many children with the complaint, but not a single case of jaundice came under my notice in the village, either during or after the epidemic of influenza. If the jaundice was a sequela of influenza, why did it not follow, instead of precede, the latter? Again, why were some villages affected and not others, as influenza was prevalent in all around? Why did it spread from village to village in a somewhat similar manner to measles? Difficult points to reconcile with the view that it was simply a sequela of influenza.

I at first attributed the epidemic to the second cause—namely, error in diet—as at the time of its appearance edible chestnuts were very plentiful in the woods, and the children had been eating freely of them. I had, however, to give up this theory later on, when the complaint appeared in a village long after chestnuts were over, and in patients who had not eaten any.

From what I observed of this complaint I am inclined to regard it as a distinct specific disease, and as such I believe it will one day find a place in our textbooks.—I am, etc.,

Bourton, March 17th. B. Pope Bartlett.

NAVAL AND MILITARY MEDICAL SERVICES.

VENEREAL DISEASES IN THE ARMY.

On December 21st, 1893, a return was ordered in the House of Commons, on the motion of Mr. Jeffreys, showing the statistics of venereal disease in the Army in the United Kingdom from 1870 to 1892; and in foreign stations, separately, from 1879 to 1892. The return has recently been issued. Its object, doubtless, was to illustrate the effect of the Contagious Diseases Acts, in garrisons and stations, during their operation and since their repeal; the return does this with such substantial accuracy as is possible in the circumstances of the case.

As invariably happens in all returns of the kind extending over a considerable period, disturbing elements of error, affecting ratios, have to be eliminated, or explained, for purposes of comparison; and among these in this instance we note the following: The period embraced is twenty-three years, of which, speaking roundly, thirteen were under the Acts, and ten have elapsed since their abrogation. But of the former period it may be taken that in our home garrisons, of which we now exclusively write, only the first four, from 1870 to 1873, show the Acts in unfettered operation. For, in the latter year, during the somewhat drastic *régime* of Mr. Cardwell, the opponents of the Acts, failing in their repeal, succeeded in "penalising" venereal diseases, by obtaining an order which mulcted the soldier of his entire pay while under treatment for them in hospital. As any unbiassed student of human nature could have foretold, the result of this unwise regulation was no actual diminution, but only concealment of venereal diseases in the Army; while the effect on the popularity of the Army as well as the discipline, spirit, and, above all, the health of the men was so disastrous as to lead to its being cancelled in 1879. Since then, we do not remember anyone reckless enough to propose the re-enactment of such an inequitable regulation.

Again, in 1879, under revised nomenclature in army returns, venereal diseases were subdivided in the statistical abstracts, but all forms were included in the subdivisions. In 1886, however, "simple venereal ulcers" were removed from the venereal group, although they have again been added to this return for obvious purposes of fair comparison with previous returns in which they were incorporated. In May, 1883, the compulsory examination of women was abolished; in March, 1886, the Contagious Diseases Acts were abrogated.

Under the above explanation the period of the return naturally divides itself into four parts for any purpose of practical comparison: four years of normal working of the Acts; six years of "penalised" working; six years of agitation preceding abolition; seven years since repeal.

The combined ratios during the above periods per 1,000 of average strength of troops serving in the United Kingdom constantly sick through venereal diseases are shown as follows: 1870-73, 12.33; 1874-79, 9.53; 1880-85, 17.96; 1886-92, 17.48.

From a merely superficial view of the above figures it is possible to show the Contagious Diseases Acts were or were not of value, but the mere abstract reasoning without a key is calculated to mislead; the key is to be found in the reasons for dividing the years into four groups. It may broadly be asserted the Acts must have been of value, for during their free operation the numbers constantly sick from venereal diseases were 40 to 50 per cent. fewer than they are now. But, as we said before, only the years of the first group show the Acts normally administered, with the figures 12.33; the figures 9.53 of the second group only show the evil effects of "penalising" and consequent concealment. But if the figures of the '70 decade must therefore be read

with qualification, what of those following? We know the opponents of the Acts triumphantly say: "See, not only has there been no increase in the ratios since 1880, but actually a slight diminution since the total repeal in 1886!" But this hasty conclusion acquires a somewhat different complexion if analysed and examined in the light of well-known facts. And the first question is, Why was there a big rise in 1880 at all? Simply because in that year, with the advent of new political officials, the agitation against the Acts became so clamorous, persistent, and even aggressive as to render their due application actually full of difficulty and danger to the police charged with their administration. The true abrogation of the Acts dates from 1880, and their practical repeal since 1883, when the women ceased to be controlled. It is no use, therefore, contrasting 1880-86 with the years since, because they have been virtually in the same boat as far as the operation of these Acts was concerned. We fear there has been much misconception and even mystification over statistics of these Acts, and we hope the present return, read aright, will clear the befogged public mind.

The following, we think, are absolutely correct conclusions, of which let unbiassed persons judge. The Contagious Diseases Acts, honestly and unrestrainedly applied to our garrison towns and camps, decreased the number of men constantly sick from venereal disease by from 20 to 25 per cent. At present we constantly have the strength of two strong infantry battalions always non-effective through venereal disease; and at least one-half, if not two-thirds, of this waste might be prevented by the re-enactment and careful administration of a Contagious Disease Act; the money loss to the taxpayer is very great.

Of foreign stations we would broadly remark that, with one or two exceptions, all exceed the home rate of men constantly sick.

Venereal disease is known to the medical profession as one of the most fruitful sources of physical degeneration both to the individual and the race; one would think, therefore, there ought to be no doubt about the obligation of attacking and limiting it at its very source; all the more in the Army when in these days of short service men return in great numbers to mix in the civil population. But we fear the perverted moral sentiments rampant on this subject, and the euphemistic cry of "legalised vice," as if all the vice or crime which the law recognises and deals with thereby becomes "legalised," will prevent legislative handling.

THE NAVY.

The following appointments have been made at the Admiralty: Frederick A. Trevan, Staff-Surgeon, to the *President*, temporarily, March 14th; Sidney H. Youel, Surgeon, to Devonport Dockyard, March 14th: Ernest E. P. Tindall, Surgeon, to the *Mistletoe*, March 14th.

ARMY MEDICAL STAFF.

Brigade-Surgeon-Lieutenant-Colonel W. S. M. Price, who is serving in the Bengal Command, is appointed to officiate as Principal Medical Officer of the Allahabad District, *vice* Surgeon-Colonel W. T. Martin, M.D., who is transferred to the Oude and Rohilcund Districts.

The undermentioned Surgeon-Captains, having completed twelve years' full-pay services, are promoted to be Surgeon-Majors from February 4th: William Dick, M.B., F.R.C.S.Edin., Francis J. Jencken, M.B., Henry O. Smart, F.R.C.S.Edin., Francis H. Treherne, F.R.C.S.Edin., Samuel F. Lougheed, M.D., John C. Haslett, M.D., Herbert J. Barratt, Herbert E. R. James, F.R.C.S.Eng., Henry O. Trevor, Alexander F. Russell, M.B., Robert J. L. Fayle, John W. Jerome, William W. Pike, F.R.C.S.I., Lewis Haywood, M.B., James M. Irwin, M.B., Patrick J. Nealon, M.D., Ernest O. Wright, Francis H. M. Burton, M.D., Charles E. Nichol, M.B. Their war services are as follow: Surgeon-Captain Dick: Nile expedition in 1884-85, action at Abu Klea (medal with two clasps, and Khedive's star). Surgeon-Captain Jencken: expedition to the Soudan under Sir Gerald Graham in 1884; engagements at El Teb and Temai (medal with clasp, and Khedive's star), also with the Nile expedition in 1884-85 (clasp). Surgeon-Captain Stuart: Afghan war in 1880 in Southern Afghanistan (medal); expedition to the Soudan under Sir Gerald Graham in 1884 in command of detachments of the Army Hospital Corps, and present in the engagements at El Teb and Temai (medal with clasp, and Khedive's star); Nile expedition in 1884-85, and present at the action of Kirbekan (two clasps). Surgeon-Captain Treherne: Soudan expedition under Sir Gerald Graham in 1884 in medical charge of the 1st Battalion Black Watch, and present in the engagements at El Teb and Tamai (mentioned in despatches, medal with clasp, and Khedive's star); Nile expedition in 1884-85, and present at the action of Kirbekan (two clasps). Surgeon-Captain Trevor: Burmese expedition in 1885-86 in medical charge of a battery of Royal Artillery (medal with clasp). Surgeon-Captain Nealon: expedition to the Tambaka country, West Africa, in 1892, including the capture of Tambi (medal with clasp). Surgeon-Captain Burton: Burmese expedition in 1885-87, in charge of a section of a field hospital at Bhamo from January, 1886, to March, 1887, including the expeditions to Bhamo, Mogaung, and against the Kachins on the frontier of China (medal with clasp). Surgeon-Captain Nichol: Burmese expedition in 1885-86 (medal with clasp).

INDIAN MEDICAL SERVICE.

Brigade-Surgeon-Lieutenant-Colonel J. C. G. Carmichael, M.D., Bengal Establishment, Medical Officer 1st Battalion 3rd Goorkha Regiment, is appointed to officiate as Principal Medical Officer in the Presidency District during the absence in civil employment of Surgeon-Colonel R. Harvey, D.S.O.

THE YEOMANRY AND RIFLE VOLUNTEERS.

Mr. Ernest Kingscote, M.B., is appointed extra Surgeon-Lieutenant to the Royal Wiltshire Yeomanry (Prince of Wales's Own Royal Regiment), March 17th.

Surgeon-Lieutenant G. T Cattell, M.D., 2nd Volunteer Battalion the Royal Fusiliers (City of London Regiment), has resigned his commission, March 17th.

Surgeon-Captain G. W. Murphy, M.B., 3rd Volunteer Battalion the Bedfordshire Regiment (late the 1st Bedfordshire), has resigned his commission, with permission to retain his rank and uniform.

Mr. John Barr Stevens, M.B., is appointed Surgeon-Lieutenant to the 2nd Volunteer Battalion the Princess Louise's Argyll and Sutherland Highlanders (late the 2nd Renfrewshire), March 17th.

Surgeon-Lieutenant-Colonel H. F. Holland, M.D., 3rd Volunteer Battalion the Bedfordshire Regiment, is appointed Brigade-Surgeon-Lieutenant-Colonel to the Home Counties Brigade, Volunteer Infantry Brigades, March 17th.

MEDICAL RANK AND TITLES.

Referring to our leaflet briefly explaining for the civilian mind the rank and present titles of medical officers, Surgeon-Lieutenant-Colonel remarks: No circulation of statements will avail until the rank itself be comprehensible; the civilian does not understand the difference between Lieutenant-Colonel and Colonel, or Major-General and Lieutenant-General; to him they are simply Colonels and Generals, and addressed as such. To introduce an officer as Brigade-Surgeon-Lieutenant-Colonel is a painful social operation; the only cure is army rank and titles pure and simple. Surgeon-Lieutenants, who call themselves such, are open to the charge of ultra-militarism, because a subaltern is never socially addressed by his title; they should simply drop their military title until they attain the rank of Captain.

Surgeon-Major A. M. S. writes much in the same strain: Surgeon-Lieutenant-Colonels and Surgeon-Major-Generals should respectively be called, according to military usage, simply Surgeon-Colonels and Surgeon-Generals. The prefix surgeon is now dropped by many civilians in addressing medical officers—a matter of taste, courtesy, or convenience.

Surgeon-General similarly writes: The invincible ignorance on military medical titles can only be dispelled by the concession of army rank and titles in a medical corps; levelling up is the order of the day in all classes, whether civil or military; the arrogant claims of combatants to consider their medical comrades their natural inferiors cannot long survive in these days. Many hold that medical officers are not sufficiently self-assertive, which enables the "military hierarchy" to depress them directly and indirectly. Of the latter kind must have been the partial information supplied to the writer of the *True Tale of Rorke's Drift*, in which the name of Reynolds—one of the most heroic figures in the defence—is suppressed without a blush.

*** Concerning Rorke's Drift, our strictures do not seem to have elicited any explanation from the writers of the *True Tale*. A plain answer is undoubtedly awkward: to plead partial information would discount the historical accuracy or value of the so-called "true" tales: to admit the deliberate omission of Reynolds's name (of which we cannot imagine the writers guilty) would be a descent indeed.

SICKNESS IN THE MEDITERRANEAN SQUADRON.

A Member M.B. Association writes: Regarding sickness in the Mediterranean Squadron, you mention in the British Medical Journal of February 24th, page 427, that from inquiries you have made "there is no extraordinary prevalence of fever at present." True. This is not the time of year of its greatest prevalence. Mediterranean fever is most rife during the months of July, August, and September. Few cases appear during the winter months. These fevers are no doubt due to insanitary surroundings favouring the growth of the specific germs, but much of it is due to preventable causes. During the warmer months of the year a large number of sailors on board our war ships (soldiers also)[1] when in harbour bathe daily (twice) in these very harbours which you describe as "in a very foul condition from accumulations of old sewage." Moreover, the upper decks in all, and the between decks probably in many, ships, are daily deluged with this filth. You speak to the point when you say "at every port of call the opportunities of contracting fever are considerable." In the first place, this filth drying on the decks probably gives off the miasmata it contains, and is breathed by the men. In the second place, a large proportion of the crew must swallow, when bathing, of these polluted waters, and at a time (during the hot months of the year) when the poison is most active. What wonder, then, at so much sickness? Stop the men bathing in these foul harbours, and prevent the water being used for deck purposes; then, and not until then, my experience of the disease tells me, the prevalence of the disease would be small as compared with what exists now during the summer months. You will doubtless admit that washing decks and allowing men to bathe in this foully-polluted water is not much less revolting than the Hagar Well ablutions, so graphically described in the same number. Should these habits continue? They can be controlled, and we have the power to do it, although we may not be able to dredge the accummulations of sewage from the beds of other harbours than those of Malta.

[1] *Vide* British Medical Journal, July 8th, 1893, p. 61.

VOLUNTEER MEDICAL OFFICERS IN REGIMENTAL DISTRICTS.

Why Not suggests that volunteer medical officers in each regimental district should consider the regular medical officer of the regimental district as their head in all medico-military matters. Such a relation would be similar to that existing between colonels commanding regimental districts and volunteer battalions in it. The principal medical officer of divisions is too far removed for effective control or knowledge of local corps at a distance from headquarters. He would communicate with the officer of the district, who would inspect ambulance companies and classes, and do away with very junior medical officers being sometimes called upon to do so.

A CONTRAST.

Observer contrasts the pay and allowances of the Royal Engineer Corps with the Departmental Medical Staff. First and foremost the Royal Engineer brings no ready-made profession with him into the service, being taught and trained as a youth mainly at the expense of the State; the medical officer, at a relatively advanced age, brings an expensive ready-made profession privately paid for. A medical officer entitled to draw forage for a horse gets no allowance for a groom; an engineer, under similar circumstances, draws a shilling a-day (Allowance Regulations, Par. 495), and in this way draws money allowance for two servants. An engineer mess is provided with a public building—not so the medical staff; the sum of 1s. 6d. is allowed daily for a mess-servant for an engineer mess, nothing for the medical (Pars. 499 and 273). Each Royal Engineer officer has a yearly mess allowance of £6; nothing for the medical (Par. 512). The official answer to these striking differences and anomalies probably is, the Engineers are a corps, the "doctors" a department. The War Office will never of its own initiative do anything for the officers of the medical staff, because it is controlled by "my military advisers," who hate them. Let the Parliamentary Bills Committee go into this question of allowances.

ADMINISTRATIVE DISTRICTS.

A.M.S. writes: The only practical plan to prevent the present loud outcry as to the medical administration of districts and the frequent changes of principal medical officers seems to be the following:

1. Make the tenure of an appointment of a surgeon-colonel five years, without reference to the length of service abroad.

2. Promote no officer to the rank of surgeon-major-general who is debarred by the age clause from putting in at least three years in the rank. Thus a surgeon-colonel on completing his five years' charge of the district to which he was appointed on promotion would be compulsorily retired. I think such an officer would have little ground of complaint, as he would have drawn the high pay and allowances of his rank for the same period as general officers in other branches of the army, and would have a substantial pension of £1 15s. per diem to retire on. Thus the present difficulty of filling the higher administrative grades would be got over, and the interests of the public and the individual would be equally advanced. The existing system can no longer be maintained without great danger of the mobilisation scheme as regards the medical services completely breaking down. More especially is this the case with India, where the utmost readiness for war is absolutely necessary, having in view the present political outlook.

MEDICO-LEGAL AND MEDICO-ETHICAL.

DETENTION IN AN ASYLUM: THE QUESTION OF BONA FIDES: ACTION STAYED.

The case of Stevenson *v.* Potter (heard in the Queen's Bench Division before Justices Cave and Wright) was an appeal by the plaintiff (Mrs. Caroline Stevenson) from an order made by Mr. Justice Grantham at Chambers, setting aside the order of a Master who had refused the defendant's application to stay the action. Mr. Bartley Dennis and Mr. Henriques appeared for the plaintiff in support of the motion, while Mr. T. Beven opposed it on behalf of the defendant. Mr. Dennis, in support of the appeal, said the plaintiff had brought an action against the defendant (the general relieving officer of the Bethnal Green Union), alleging that the defendant, without reasonable and proper care, had maliciously caused her to be assaulted and imprisoned in a lunatic asylum. The facts were these: The defendant, who was the general relieving officer of the union and the special relieving officer of the district in which the plaintiff resided, sent a notice to a justice of the peace that the plaintiff was a lunatic and a pauper, and thus set the justice of the peace in motion, who, after an inquiry with a single medical practitioner, made an order for the plaintiff's detention in Fisherton Private Lunatic Asylum. When that order was made by the justice of the peace the defendant filled in the particulars that the defendant was a married woman living with her husband, and that she was chargeable to the parish of St. Mathew, Bethnal Green. He then took her to the workhouse infirmary, where she was stripped of her own clothes and put into a pauper garb, and afterwards she was taken to Fisherton Private Lunatic Asylum, where she was detained from September 3rd until the 19th, when, by order of the board of guardians, she was released and sent back to the care of her husband. He had to show, under Section 330 of the Lunacy Act, 1890, that plaintiff had reasonable ground for alleging want of good faith or reasonable care against the defendant.—Mr. Justice Wright: You must show a clearly strong *primâ facie* case of want of good faith or want of reasonable care against the defendant, that is to say, you must show that it is a case fit to be tried.—Mr. Dennis admitted that he must show some fair ground for a statement of claim. He submitted that the plaintiff was neither a pauper nor a lunatic. She resided with her husband and son, who earned together 35s. per week, and she was only left alone between 7 and 10 in the morning and 7 and 9 in the evening.—Mr. Justice Wright: There is no suggestion of malice of any kind, is there?—Mr. Dennis: Plaintiff says there was gross negligence.—Mr. Justice Cave said to satisfy the Court that the defendant was guilty of want of reasonable care in treating plaintiff as a pauper counsel must show that she was in such a position in life that her friends could afford to keep her in an asylum. If she was not, then it would be a case requiring relief.—Mr. Dennis said the husband and son together earned 35s. per week. He contended that if the defendant did not absolutely know the plaintiff was a pauper it was his duty to make an inquiry.—Without calling on counsel for the defendant, Mr. Justice Cave said he was of opinion there was no evidence to show that the defendant acted without reasonable care, and that was the only question in the case, as the counsel had not suggested that he had not acted in good faith. Therefore the action must be stayed, as defendant had acted in good faith and with reasonable care, having to the duties which were imposed upon him by the statute.—Mr. Justice Wright concurred; and the appeal was dismissed with costs.

MAINTENANCE OF PAUPER FEVER PATIENTS.

On March 13th, Sheriff Mair gave judgment in an action in which the Commissioners of the burgh of Motherwell sued the parochial board of Shotts for £5 16s., being the cost of removal and maintenance of a pauper fever patient, removed by the pursuers, as local authority from the Motherwell Combination Poorhouse to the Hamilton Combination Fever Hospital. The sheriff said he was clearly of opinion that the pursuers correctly interpreted their duty, as local authority under the Public Health Acts, but he had not been referred to, nor did he know of any section in these Acts making a parochial or any other board or person liable for the expenses of treating a fever patient in a hospital. The implication is altogether against an assumption. After quoting various authorities, the sheriff said there had been some conflicting decisions as to whether one parochial board can recover from another the expenses incurred in the treatment of patients suffering from infectious diseases, but in every one the pauper was either maintained in a poorhouse or on the outdoor roll. The decisions amount to this: that while the Public Health Acts do not relieve parochial boards from the duty of granting maintenance to persons disabled by infectious diseases, if the local authority in the public interests remove the case to a fever hospital, the expense must be borne by the public health assessments. In this case he therefore granted absolvitor in favour of the parochial board.

CONSULTANTS AND PRACTITIONERS.

Dr. A. is called in by Mr. B. to see Mrs. C. Some time afterwards Mrs. C. calls to see Dr. A. at his own house. Is Dr. A. justified in giving advice without referring to Mr. B.?

*** Inasmuch as our correspondent has omitted to refer to an important factor in the case—namely, the interval that elapsed between the date on which Dr. A. was called in consultation by Mr. B. to the patient, and the subsequent private visit of the latter to Dr. A., the consultant in question—we are not in a position to express a definite opinion on the point at issue. The principle, however, laid down in the following rules have a more or less direct bearing on such cases: "When a practitioner is called in to, or consulted by, a patient who has recently been, or still may be, under the care of another for the same illness, he should on no account interfere in the case, except in an emergency, having provided for which, he should request a consultation with the gentleman in previous attendance, and decline further direction of the case except in consultation with him."—*Code*, Chap. ii, Section 5, Rule 9, to which may be added: "Should the practitioner who has been called in consultation be subsequently requested to take sole charge of the patient, he should courteously but firmly decline."—Chap. ii, Section 4, Rule 12.

A PARTNERSHIP QUESTION.

On perusing the particulars in the memorandum furnished, it would appear that a legal partnership exists, although the articles of partnership have not been executed. This is not absolutely necessary where the parties have been working together and actually in partnership. It would be indiscreet to express any definite opinion on the particulars, not knowing the reasons or motives which govern the other side. We should advise that a solicitor acquainted with medical jurisprudence should prepare a case for counsel, as there is evidently a claim for considerable damages if the case can be completely established, and one which appears to us should be settled by a jury.

STARTING IN PRACTICE.

One Who Does not Know.—As our correspondent intends to commence as a general practitioner, and in view of the fact that the M.B. does not legally entitle him to the prefix of "Dr.," the adoption of which, moreover, though otherwise desirable, is apt to mislead some people as to the real nature of the practice and associated fees, we would recommend him to refer to *The Young Practitioner: his Code and Tariff*, published by Mr. H. K. Lewis, 136, Gower Street, W.C., on page 7 of which he will find useful hints as to his doorplate, and, in the body of the work, various practical and suggestive instructions for his guidance on entering into private practice.

DEATH CERTIFICATES IN CASES OF INJURY.

A Member writes: Mrs. H., aged 78, fell down some steps and fractured the neck of her left femur. She lived nineteen days. Can I, as medical attendant, give a certificate of death? Is it not necessary that an inquest should be held?

*** If a deceased person died, either directly or indirectly, from the effects of injury, the medical practitioner attending the case should communicate the facts to the coroner, and he will decide whether an inquest is held or not. If a certificate of the cause of death is given as arising from injury, it is usually sent by the registrar to the coroner

and sometimes causes a delay in the inquest. It is not illegal to give a certificate if the true facts are stated, but it is wiser to communicate the facts to the coroner first.

A CARD.

PROFESSIONALLY indefensible as is the alleged mode of seeking practice by the distribution of printed cards from house to house through the medium of the letter boxes, we trust that the publication in the BRITISH MEDICAL JOURNAL of Dr. R. Whitelam's and his reputed assistant's card will act as a deterrent in their case and that of others who may feel disposed to have recourse to such a course of action.

Change of Hours.
DR. R. WHITELAM,
648, Fulham Road,
Corner of Radipole Road, near Munster Park Chapel.
Hours of Consultation—10 to 12 A.M. and 8.30 to 9.30 P.M.
Saturday evenings and Sundays excepted.

DR. COHEN,
1, Fernhurst Road, corner of Filmer Road.
Hours of Consultation.

At 1, Fernhurst Road.	At Surgery—67, Rosaville Road.
9 to 10 A.M. — 6 to 7 P.M.	10 to 12 A.M. — 7 to 9 P.M.
Sundays, 10 to 11 A.M.	No Sunday attendance.

N.B.—Patients requiring visiting are requested to send by 10 A.M. to either of the above addresses.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

NEW USE FOR A SIPHON TRAP.

THE framers of sanitary by-laws no doubt consider that the object of inserting a siphon trap in a house drain is to prevent the uprising of sewer gases. Certain contractors, however, appear to look upon them merely as a means of passing the inspection of the sanitary authority, so when the inspection is over they take them out again. On March 17th a firm of contractors were summoned before the Marylebone Police Court for having committed a breach in the parish by-laws requiring a siphon to be placed in the drains of each of six houses. The case was that the defendants, having erected six houses in Kilburn, put siphons into the drains, and, after the local board inspector had passed the work, the defendants' workmen took the siphons out and in their place put straight pipes, thus removing the intercepting arrangement. The defence was that the alteration was made without the knowledge of the firm. Mr. Cooke, however, inflicted a penalty of £5 in regard to each of the six summonses, with 54s. costs. Notice of appeal was given. The interest of the case to us, however, is not so much who gave the order as that drains are subject to such tricks at the hands of those whose duty is to make them as perfect as possible. Medical men especially should be aware that drains are not always what they seem, and should keep themselves informed of all the tricks of trade, for, unfortunately, it seems the fact that every by-law framed for the protection of the public leads straightway to the invention of some new dodge by which its provision can be circumvented.

ISOLATION HOSPITALS.

J. F. H.—The Act referred to on page 593 in our article on Infectious Diseases Hospitals is the Isolation Hospital Act, 1893, commonly known as Lord Thring's. This Act does not extend to Scotland or Ireland, or to any county borough, or, without the consent of the council of the borough, to any borough containing a population of 10,000 persons or upwards; or to any borough containing a less population without the like consent, unless the Local Government Board by order direct that the Act shall apply to such borough. The county council may, under this Act, provide, or cause to be provided in any district within their county, a hospital for the reception of patients suffering from infectious diseases. The county council may be moved to do this by application in the form of petition, by any one or more of the local authorities having jurisdiction in any part of the county; but the county council may (by Clause 6) direct an inquiry to be made by the medical officer of health of the county as to the necessity of an isolation hospital being established for the use of the inhabitants of any particular district in the county, and in the event of his reporting that such a hospital ought to be established may take the same proceedings as if a petition had been presented by a local authority. Every hospital district constituted under this Act shall consist of a single local area, or two or more local areas, the term "local area" meaning any one of the following localities: an urban sanitary district, a rural sanitary district, or any contributory place, or, where a local area is included in more than one county, the part of the area included in each county. Under this Act hospitals may be established, ambulances provided, and nurses trained. Expenses may also be recovered, in the case of paupers, from the guardians; of non-paupers from the sanitary authority, and of "special patients" from the patients themselves or their estates. The Act may be obtained from Eyre and Spottiswoode, direct or through a bookseller, for a few pence.

SUPPLY OF RATIONS FOR DISTRICT PAUPER PATIENTS.

A DISTRICT MEDICAL OFFICER writes: I received from the relieving officer a medical order to attend a case. I find a labourer suffering from rheumatism, which I consider arose from privation. I supply medicine, and also give an order on the usual printed form for mutton. The relieving officer refuses to supply this, on the ground that the patient is able to buy it himself. Has the relieving officer power to refuse extras ordered by the medical officer, without consulting the guardians, and is this refusal common?

*** It is distinctly ruled that a district medical officer can only *recommend* extras, such as meat and wine; consequently a relieving officer has the power to refuse these if he thinks proper, but of course he takes upon himself a somewhat serious responsibility whenever he does so; and in the event of the patient dying, and a coroner's inquest being held, a jury would in all probability take a very grave view of the case. It follows, as a necessary consequence, that as medical officers have only the power to *recommend* rations, their responsibility in many difficult cases is less than it would be if they had the absolute power to order them.

FEE FOR FRACTURE WHEN PATIENT IS SUBSEQUENTLY REMOVED TO HOSPITAL.

THE SAME CORRESPONDENT also writes: I received a medical order to attend a boy. I found on visiting the case that it is one of fractured femur. This I put up on a Liston's splint, and some hours later the parents asked me to sanction the patient's removal to a hospital (?) miles off. I gave consent, and superintended the removal. Can I claim from the guardians the usual fee of three guineas?

*** We think this a somewhat doubtful point, as the fee is payable not simply for putting up the fracture but for subsequent attendance. We consider, however, that our correspondent has a strong claim for the fee, as he did all that was required, and the subsequent removal of the patient was not at his instigation. We recommend him to apply for it.

MORE PAY FOR MORE WORK.

A MEDICAL OFFICER OF HEALTH of a district with 15,000 inhabitants receives a salary of £40 per annum. He has recently undertaken charge of a newly-erected isolation hospital, and now writes saying that he thinks the time has arrived for reconsideration of the sum awarded for his services. This appears sufficiently obvious. He considers that £70 a year should be paid for his services as medical officer of health and an additional £50 a year for the hospital attendance. The demand is modest enough, and it is to be hoped he will be satisfied with nothing short of it.

MEDICAL OFFICER'S SALARY.

AT a recent meeting of the West Riding County Council, Alderman Rendall moved: "That this County Council do sanction the acceptance by Dr. Whitelegge, the county medical officer, of the office of chief sanitary officer under the Joint Committee of the rivers of the West Riding, subject, however, to the Sanitary Committee making such arrangements with Dr. Whitelegge as that the total remuneration for both offices should not exceed £1,000 per year." It was explained that this resolution was the result of a compromise, and after some discussion the motion was passed.

THE MEDICAL OFFICER OF HEALTH AND CASES OF INFECTIOUS DISEASES.

MEMBER B.M.A. writes: A. is called to a patient suffering from an infectious disease, and notifies the fact to B., the medical officer of health for the district. B. sees the case with A., and two days later pays another visit to the patient. Does not B. exceed his duties, as medical officer of health, in so doing?

*** B. would appear to have acted injudiciously in paying a second visit without obtaining A.'s consent, if we are to understand that the purpose was an examination of the patient, and not merely further investigation of his surroundings and history.

B. W.—There is no redress, beyond the doubtful satisfaction of appealing to the Local Government Board.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.

The Army Hospital Corps.—Mr. CAMPBELL-BANNERMAN, in reply to Mr. ARNOLD-FORSTER, said that the transport needed for medical services in time of war would be supplied from the mounted companies of the Army Service Corps. Men so employed, when wearing the brassard, would be under the protection of the Geneva Convention. He was informed that in Austria, France, Germany, and Russia, ambulance transport was provided from combatant corps.

Inebriates.—In reply to Mr. KNOWLES, Mr. ASQUITH said that instructions had been given to the Parliamentary draftsman to prepare a Bill for introduction to Parliament to carry out the recommendations of the report of the Departmental Committee, and his hon. friend the Under-Secretary hoped to introduce the Bill at an early date.

Lunatics in Unlicensed Houses.—Mr. LABOUCHERE asked the Secretary of State for the Home Department whether he was aware that in a case of "The Commissioners in Lunacy *v.* Sherrard," recently tried at the Central Criminal Court, Mr. Justice Grantham stated that, in order to get a conviction for keeping two lunatics in an unlicensed house, it must be proved that the two persons detained were not only of unsound mind, but that they were treated by the defendant as persons of unsound mind: and whether any change of the law was proposed in order to guard against the danger of the confinement of persons of unsound mind in unlicensed houses.—Mr. ASQUITH said he was informed that Mr. Justice Grantham did direct the jury in the terms stated in the question. In so doing he followed the ruling of the late Mr. Justice Stephen in "The

Queen *v.* Bishop," which was upheld in the Court of Crown Cases Reserved. He was not aware that in practice the law had been found defective, but if any case of abuse was brought before him, he would consider whether amendments were desirable and practicable.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

EXAMINATION FOR MEDICAL AND SURGICAL DEGREES.—The names of candidates for the third examination for the degrees of M.B. and B.C. and for the examination for the degree of Master of Surgery must be sent to the Registrary (through the Prælectors of their respective Colleges) on or before Saturday, April 7th. Forms on which it is requested that the names may be written will be sent to the Prælectors. The certificates of candidates, accompanied by their postal addresses, must be sent to the Registrary on or before the fifth day before the beginning of the examination for which they are entered. The fees for each examination must be paid to the Registrary when the certificates are sent in. The fee is £2 2s. for each part of the third examination, and £3 3s. for the examination for the degree of M.C. Any candidate whose name and certificates have not been sent in and fee paid at the proper time is liable to pay an additional fee of £1 if he be nevertheless admitted to the examination.

DIPLOMA IN PUBLIC HEALTH.—The next examination for this diploma begins on Tuesday, April 17th. The names of candidates are to be sent to the Registrary at least a week before.

DEGREES.—At a congregation on March 15th, the following medical and surgical degrees were conferred: *M.D.*—W. H. L. Copeland, M.A., King's; W. S. Lazarus-Barlow, M.A., Downing. *M.B. and B.C.*—T. R. H. Smith, B.A., Trinity; C. D. Henry, M.A., St. John's; A. B. Hofmeyr, B.A., Trinity Hall; A. Shillitoe, B.A., Trinity Hall; C. H. Evans, B.A., Emmanuel.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

WALKER PRIZE FOR INVESTIGATION OF CANCER.—We announced a short time ago that Mr. Charles Clement Walker had founded a prize at the Royal College of Surgeons of England, with a view to the encouragement of the investigation of the disease of cancer. A Committee was appointed by the Council to confer with Mr. Walker on the subject, and the following regulations recommended by them have been adopted:

1. The Walker Prize shall be awarded for the best work in advancing the knowledge of the pathology and therapeutics of cancer done, either partially or wholly, within the five years preceding the year in which the prize shall be awarded.

2. The first award of the prize shall be for the period ending December 31st, 1895, after which the prize shall be awarded quinquennially.

3. The prize shall consist of a gift of £100, except on the first occasion, when the amount of the prize shall be £60. A document declaratory of the award, sealed with the College seal, and signed by the President, shall be presented with the prize.

4. The prize shall be awarded by the Council on the recommendation of a Committee at the quarterly meeting of the Council in the April following the expiration of the quinquennial period. The Council shall not, however, award the prize should they not consider any work deserving of it.

5. The Committee shall consist of five members, and shall be appointed by the Council not less than one year prior to the date of the award of the prize. The Committee shall not of necessity be confined to members of the Council.

6. The grounds upon which the prize is awarded shall be made public at the time of the award.

7. The prize shall be open to foreigners as well as to British subjects, and the Committee shall not be restricted in any way as to the selection of persons qualified to receive the prize, with the exception that members of the Council shall not be eligible.

8. The fund shall be invested in the name of the Royal College of Surgeons of England as trustee thereof.

9. The interest on the fund shall be invested, as it is received, to augment the capital of the fund.

HOSPITAL AND DISPENSARY MANAGEMENT.

ROYAL FREE HOSPITAL.

AT the annual Court of Governors the Chairman announced that the rebuilding of the front and the erection of a new laundry were so far advanced that it was hoped that the opening ceremony might take place in the autumn.

CORK EYE, EAR, AND THROAT HOSPITAL.

THE report of this institution for the past year is satisfactory when we regard the number of patients treated in the wards, and the work accomplished by the hospital. There was a balance to the credit of the hospital at the termination of the year amounting to £181. There is an urgent necessity for securing more extensive premises.

HOSPITALS AND THE COAL STRIKE.

THE effects of the late coal strike have shown themselves in the finances of the Chesterfield Hospital, situated as it is in the centre of an extensive coalfield. The annual subscriptions decreased from £576 in 1892 to £460 in 1893; workmen's contributions had also fallen from £871 to £770, and the amount received from trades' demonstrations also showed a reduction from £259 to £116. The total reduction of income for the year was £400, but the foregoing items illustrate the effect of the stoppage of the coal trade and the throwing out of employment of the men.

OBITUARY.

DR. RODERICK MACDONALD, coroner for North-East London, and late M.P. for Ross-shire, who died recently at his residence in Camden Road, was the son of a crofter, of Skye, where he was born. He became a tutor, and subsequently studied for the medical profession at Edinburgh, where he took the M.D. degree in 1883. He came to London and practised in the East End, and was divisional surgeon of the police in the Isle of Dogs. When the East Middlesex district was divided, about seven years ago, he was elected to the coronership for the north-east portion.

WE regret to have to report the death of Mr. WILLIAM RICHARDS, of Birmingham, which took place on March 15th, at the age of 31 years. The deceased became L.S.A. in 1883, and in 1884 M.B., C.M.Edin., and M.D.Edin. in 1893. After qualifying he joined the staff of the Birmingham Dispensary, and afterwards became chief medical officer at the Highgate Dispensary. Some eighteen months ago he embarked in private practice, in which he was very successful. The deceased was only ill a few days. He was a brother of Dr. Thomas Richards, honorary physician to the Birmingham Children's Hospital.

DEATHS IN THE PROFESSION ABROAD.—Among the members of the medical profession in foreign countries who have recently passed away are Dr. A. Niepce, for many years *inspecteur des eaux* at Allevard, and well known as the author of valuable researches on goitre and cretinism, for which prizes were awarded him by the Academy of Sciences and the Academy of Medicine; Dr. Egas Carlos Muniz Sodré de Aragao, since 1874 Professor of General Pathology in the Medical Faculty of Bahia, and author of various works on the subject which he taught; Dr. Ramon Blaitt, Surgeon in Chief of the Chilian Navy; Dr. Pedro Bassagaña y Bonhome, Professor of Pharmacy at Barcelona; and Dr. Laureano Calderón y Arana, Professor of Biological Chemistry at Madrid.

INDIA AND THE COLONIES.

NEW SOUTH WALES.

DISEASED ANIMALS.—The report on the administration of the Diseased Animals and Meat Act in New South Wales shows considerable activity on the part of the officers appointed to carry out its provisions, 1,930 cattle, 507 pigs, and 675 rabbits having been seized and dealt with during the year, in addition to various carcasses. Out of 155 specimens taken from condemned animals, 116 were found on microscopical examination to be affected with tubercle and 18 with actinomycosis, a result speaking well for the inspectors but not betokening a very satisfactory state of affairs among colonial cattle. It is not unnatural that European Governments who receive so much food from over the water should make inquiries, as they are stated to have done, regarding the condition of the meat exported from the colony, and it is no doubt a satisfaction to the people of New South Wales to find that the Governments concerned appeared satisfied on receiving information concerning the nature of the Act now in operation for preventing the slaughtering of diseased animals for food, and on assurances being given that the Act was stringently administered. We find it difficult, however, to reconcile these assurances with the statement made in another part of the report that the expense of administering the Act has not exceeded £1,000 per annum. In an international sense it is extremely desirable that efforts to prevent the importation of diseased meat should not be relaxed on the faith of assurances from exporting countries, unless there is good evidence that the steps in which they put confidence are such as to prove really effectual in preventing the exportation of the flesh of diseased animals—a matter which, for a large colony like New South Wales, we should be inclined to think would cost a great deal more than £1,000 per annum.

DR. F. RAYMOND has been recommended by the Paris Faculty of Medicine for appointment to the Chair of Clinical Neurology, vacant by the death of Professor Charcot.

THE death is reported of an inmate at Wadsley Asylum, in which the fatal result was traced to swallowing a darning needle.

BEQUEST.—The late Mr. Henry Boys, of Walsall, who died on March 16th, has left by his will £2,000 to the Walsall Cottage Hospital and £1,000 for a free surgical appliances fund.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M., 1.30; Dental, M. W. F., 9; Throat and Ear, F., 9.30 *Operation Days.*—W. Th. F., 3.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30 *Operation Days.*—M. Th., 2.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. W. Th. F., 2.30; Obstetric, W., 2.30; Eye, M. Th., 2.30; Ear, Tu. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.* W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 9; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Soho. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., Tu. W. F. S., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.* M. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9; Dental, Tu., 9. *Operation Days* M. Tu. W. Th. S., 2.

LONDON TEMPERANCE HOSPITAL. *Hours of Attendance.*—Medical, M. Tu. F. 2; Surgical, M. Th., 2. *Operation Days.*—M. Th., 4.30.

METROPOLITAN. *Hours of Attendance.* Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W., 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th., 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1.30, S., 2; (Obstetrical), Th., 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, F., 2; Dental, F., 9. *Operation Day.*—Th., 2.30.

ROYAL EYE HOSPITAL, Southwark. *Hours of Attendance.*—Daily, 2. *Operation Days.*—Daily.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th., 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M., 2.

ROYAL WESTMINSTER OPHTHALMIC. *Hours of Attendance.*—Daily, 1. *Operation Days.*—Daily.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2, Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th., 2; o.p., Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu. S., 9. *Operation Days.*—Th., 1

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of the Rectum, males, S., 3; females, W., 9.45. *Operation Days.*—M., 2., Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45; o.p., 1.30; Obstetric, Tu. F., 1.15; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electro-therapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 5, Th., 2, F. (Women and Children), 2, S., 4. *Operation Days.*—W. and F., 2.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, exc. W. and S., 2; Obstetric, Tu. F., 2; o.p., W. S., 1.30; Eye, Tu., 2; o.p., daily, exc. S., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10 *Operation Days.*—W. S., 1.30; (Ophthalmic), M., 2.30, F., 2; (Gynæcological), Th., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30; *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30. *Operation Days.*—W. Th. 1.30; S., 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu. F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic; W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10, F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, Tu. F., 9.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

MEDICAL NEWS.

PROFESSOR RUBNER has been chosen to succeed the late Professor August Hirsch in the Chair of the History of Medicine in the University of Berlin.

DR. RICHARD FÖRSTER, Professor of Ophthalmology in the University of Breslau, has been named a life member of the Prussian House of Lords.

A REUTER'S telegram from Rio de Janeiro, dated March 15th, states that the deaths from yellow fever average about 60 a day.

THE QUEEN has approved of the appointment of William Carnegie Brown, M.D., to be an unofficial member of the Legislative Council of the Straits Settlements.

SIR HENRY THOMPSON has, the *Observatory Magazine* states, offered the sum of £5,000 sterling to the nation, through the Astronomer Royal, for the purpose of buying a telescope for Greenwich Observatory.

PASTEURISM IN TURKEY.—It is announced that antirabic stations will shortly be established in various towns in Turkey, among which Yemen, Bagdad, Damascus, Erzeroum, and Monastir are specifically mentioned. There is already an antirabic station at Constantinople.

MEDICAL PRACTITIONERS IN PARIS.—A recent enumeration made on behalf of the Paris Prefecture of Police shows that the total number of medical practitioners in the French capital at present is 2,208. This gives a proportion of about one practitioner to every 1,000 inhabitants.

M. HENRI HÉRISSON, nephew of a well-known French politician recently deceased, died on March 13th of diphtheria. M. Hérisson, who was only 23 years of age, was an *externe* of the Paris hospitals, and contracted the disease in the course of his duties.

THE sanitary committee of the Newport County Council at its last meeting included in its report a reference to the proposal of the Cardiff Corporation to erect a crematorium, and passed a resolution approving the application and hoping that Parliament would grant permission.

AN International Congress of "Marine Hydrotherapeutics" is to be held at Boulogne-sur-Mer in July next (25th to 29th), under the presidency of MM. Verneuil and Bergeron. An exhibition of objects useful in sea bathing, etc., will be held in Boulogne in connection with the Congress.

THE QUEEN has granted unto Dr. Pestonji Nariman Her Majesty's royal licence and authority that he may accept and wear the Insignia of the Third Grade of the Second Class of the Order of the Brilliant Star of Zanzibar, which His Highness the Sultan of Zanzibar has been pleased to confer upon him as a promotion in that Order.

PARIS CREMATION SOCIETY.—The Paris Cremation Society will hold its annual general meeting on March 31st, under the presidency of Dr. Bourneville. A report on the position of cremation in foreign countries will be read by M. Salomon, the General Secretary, and the President will deliver an address on "Cremation in Paris."

AN ordinary meeting of the Hunterian Society was held at the London Institution on February 28th. Mr. F. Charters Symonds, before calling on Dr. Pye-Smith to deliver the second Hunterian Society lecture, gave a short address, it being the first occasion of his occupancy of the chair as President. Dr. Pye-Smith, F.R.S., then delivered an instructive address entitled "Rational Therapeutics," which will appear in the *Practitioner* for April. The usual vote of thanks was unanimously accorded to the lecturer, who briefly replied.

MR. VICTOR HORSLEY, who was visiting Sheffield on March 7th for the nurpose of lecturing for the Literary and Philosophical Society, was afterwards entertained at supper by members of the profession. About forty were present, with Mr. W. F. Favell in the chair. Opportunity was taken to urge the advantages of the Medical Defence Union, and there is reason to believe that a considerable accession of members will result.

HOUSE SANITATION.—The report presented to the thirteenth annual meeting of the London Sanitary Protection Association stated that during the past year 488 houses had been inspected for the first time. Nearly 69 per cent. of the houses were in a more or less bad condition. The engineers have been experimenting with a smoke machine, which it was hoped would render the smoke tests for such parts of the drainage system as were not amenable to the water test more thorough and reliable.

THE DENTAL HOSPITAL OF LONDON.—The annual meeting of this institution was held at the hospital in Leicester Square on March 15th. The report showed that much good work was being done. Upwards of 15,000 stoppings and a still larger number of extractions had been performed, besides a large amount of miscellaneous operative work. The great difficulty was want of room. It would seem, however, that a new site in Leicester Square has been purchased, and an appeal is being made for funds for the erection of a more suitable building than the present one.

LEPROSY AND TUBERCULOSIS.—In the *Medical Record* of New York Dr. Beaven Rake summarised recently the evidence for and against the communicability of leprosy which has appeared during recent years, and of which most has been already noticed in the BRITISH MEDICAL JOURNAL. His final conclusion is that for practical purposes leprosy may be regarded as less dangerous to the community than tuberculosis, and as requiring no greater precautions than those taken against the spread of that disease. Inoculations in guinea-pigs of morbid deposits from the lungs have led him to agree with Hansen in considering that the "visceral tuberculosis" so common in lepers is tuberculous—that is, connected with the bacillus tuberculosis.

AT the annual meeting of the Royal National Pension Fund for Nurses, Mr. Walter H. Burns, who presided, observed that, starting with a donation of £20,000, made by four public-spirited merchants of the city of London, they had already accumulated nearly £170,000, and had an annual budget from nurses' payments and invested moneys of over £30,000. During the year £576 had been distributed in sick pay. The quinquennial valuation showed that the annuities for which nurses were paying would be very materially increased by bonus additions when the pensions came due. The sum of £5,800 had been set aside to increase the annuities of "the first thousand nurses" as they became due. A report, signed by Lady Rothschild, dealt with the Junius S. Morgan Benevolent Fund, and Mr. H. C. Burdett showed the benefits which this fund confers upon nurses.

MEDICAL VACANCIES.

The following vacancies are announced:

BEDFORD GENERAL INFIRMARY AND FEVER HOSPITAL.—House-Surgeon, doubly qualified. Salary, £100 per annum, with apartments, board, lodging, and washing. Applications to the Secretary by April 10th.

BETHLEM HOSPITAL, Lambeth Road, S.E.—Two Resident Clinical Assistants. Applications and testimonials, endorsed "Clinical Assistantship," to the Treasurer, Bethlem Hospital, Lambeth Road, S.E., by March 31st.

BIRMINGHAM GENERAL DISPENSARY, Birmingham.—Resident Surgeon. Salary, £150 per annum, with an allowance for cab hire, and furnished rooms, fire, lights, and attendance. Applications and testimonials to Alex. Forrest, Secretary, by April 11th.

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN.—A Resident Medical Officer and a Resident Surgical Officer. Salaries £70 and £50 respectively, with board, washing, and attendance. Applications to the Secretary, Children's Hospital, Steelhouse Lane, Birmingham, by April 4th.

CARLOW DISTRICT LUNATIC ASYLUM.—Assistant Medical Officer, unmarried, and not more than 30 years of age, and doubly qualified. Salary, £100 per annum, and emoluments valued at £100 per annum. Applications to the Medical Superintendent. Election on April 13th.

CARNARVONSHIRE AND ANGLESEY INFIRMARY, Bangor.—House-Surgeon. A knowledge of the Welsh language is desirable. Salary, £70 per annum, with board and lodging in the house. Applications and testimonials to the Secretary by April 7th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Pathologist. Salary, 100 guineas per annum. Applications to the Secretary at the Office, 24, Finsbury Circus, E.C., by April 12th.

COUNTY OF NORTHUMBERLAND.—Medical Officer of Health. Salary, £700 per annum, with travelling expenses. Appointment for three years. Applications and testimonials, endorsed "Medical Officer, to C. D. Forster, Clerk to the Council, by March 24th.

EAST LONDON HOSPITAL FOR CHILDREN, Glamis Road, Shadwell, E.—House-Physician. No salary, but board, lodging, and washing are provided. Applications and testimonials to Thomas Hayes, Secretary, by April 4th.

GENERAL HOSPITAL, Birmingham.—Two Assistant House-Surgeons. Appointments for six months, and may be held by re-election for a further period of three or six months, but no longer. No salary attached to the posts, but residence, board, and washing will be provided. Applications and testimonials to Howard J. Collins, House-Governor.

GUEST HOSPITAL, Dudley.—Assistant House-Surgeon. Appointment for six months. No salary, but board, lodging, and washing in the hospital. Applications and testimonials to E. Poole, Secretary, by March 28th.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST AND THROAT, 26, Margaret Street, Cavendish Square, W.—Honorary Visiting Physician; must reside within one mile of the Institution. Particulars of qualifications to be obtained at the Infirmary.

JOINT COUNTIES LUNATIC ASYLUM, Carmarthen.—Medical Superintendent. Salary, £500 per annum, with unfurnished house, garden produce, fire, light, and washing. Applications and testimonials to be forwarded to W. Morgan Griffiths, Solicitor, Carmarthen, by March 24th.

LEITH HOSPITAL.—House-Physician, House-Surgeon, and Surgeon for the Outdoor Department. Appointments for six months. Salary to each office £50 a year, with board in the hospital. Applications to George Mann, Secretary, 33, Bernard Street, Leith, by April 4th.

LIVERPOOL EYE AND EAR INFIRMARY.—House-Surgeon, doubly qualified. Salary, £80 per annum, with residence and maintenance. Applications to Reginald Haigh, Honorary Secretary, 13, Bevey's Buildings, George Street, Liverpool, by April 7th.

METROPOLITAN HOSPITAL, Kingsland Road, N.E.—House-Physician, House-Surgeon, and Assistant House-Surgeon. Appointments tenable for six months. The House-Physician and House-Surgeon will receive a salary of £60 per annum. Applications and testimonials to Charles H. Byers, Secretary, by March 26th.

MORPETH DISPENSARY.—House-Surgeon, doubly qualified, unmarried. Salary, £120 per annum, with furnished house, coals, and gas. Applications to the Honorary Secretary, N. J. Wright, Morpeth, Northumberland, by April 4th.

NATIONAL HOSPITAL FOR DISEASES OF THE HEART AND PARALYSIS, 33, Soho Square, W.—Resident medical officer, doubly qualified. Appointment for six months. Honorarium, 10 guineas. Applications to the Secretary.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Albany Memorial), Queen Square, Bloomsbury.—House-Physician. The present Junior House-Physician is a candidate, and applicants should state whether they are prepared to accept either appointment. The salary of the Senior House-Physician is £100 and of the Junior £50 per annum, with board and apartments. Applications and testimonials to B. Burford Rawlings, Secretary, by March 31st.

NEW HOSPITAL FOR WOMEN, Euston Road, N.W.—Female Assistant Anæsthetist. Applications and testimonials to Margaret M. Bagster, Secretary, by March 28th.

OWENS COLLEGE, Manchester.—Professor of Zoology. Applications to the Council of the College, under cover to the Registrar, by April 3rd.

PARISH OF WEST CALDER, Midlothian.—Medical Officer. Salary, £30. Applications to William Millar, Inspector of the Poor.

ROYAL COLLEGE OF PHYSICIANS.—Milroy Lecturer. Applications to Edward Liveing, M.D., Registrar, by April 9th.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—Secretary of Council, must be Fellow of the College. Particulars as to salary and duties from Mr. G. F. Blake, Registrar, at the College.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to the Secretary by April 11th.

SHEFFIELD SCHOOL OF MEDICINE, Leopold Street, Sheffield.—Tutor to take charge of Dissecting Room, and hold classes in Anatomy and Physiology. Salary, £125 per annum. Applications to the Secretary by April 2nd.

SOUTH-EASTERN FEVER HOSPITAL, Hatfield Street, New Cross Road, S.E.—Dispenser, qualified under the Pharmacy Act. Salary, 35s. per week and dinner daily. Applications to the Medical Superintendent.

SUFFOLK GENERAL HOSPITAL, Bury St. Edmund's.—House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications to Henry Bonner, Secretary, by March 26th.

TAUNTON AND SOMERSET HOSPITAL.—Assistant House-Surgeon. Appointment for six months. No salary, but board, washing, and lodging in the Institution. Applications and testimonials to the House-Surgeon by March 24th.

THETFORD UNION.—Medical Officer and Public Vaccinator for the Northwold District. Salary, £49 6s. 8d. per annum, exclusive of extra medical fees allowed and vaccination fees. Applications to E. N. Cole, Clerk to the Guardians, Guardians' Office, Thetford, by March 26th.

UNIVERSITY COLLEGE, Bristol.—Medical Tutor. Salary, £125 per annum. Applications and testimonials to E. Markham Skerritt, Dean, by April 4th.

WEST LONDON HOSPITAL, Hammersmith Road, W.—House-Physician and House-Surgeon. Appointments tenable for six months. Board and lodging provided. Applications and testimonials to R. J. Gilbert, Secretary-Superintendent, by March 30th.

YORKSHIRE COLLEGE, Leeds.—Professor of Pathology. Particulars from the Secretary of the College.

YORK UNION.—Medical Officer for the Workhouse, doubly qualified. Salary, £120 per annum and extra fees. Applications (on forms to be obtained at the Clerk's Office) to James Leeming, Clerk, Museum Street, York, by March 28th.

MEDICAL APPOINTMENTS.

BRERETON, Joshua Geo., L.R.C.P., L.R.C.S.I., appointed Medical Officer for the Ryde District of the Isle of Wight Union.

ECCLES, W. McAdam, M.B., B.S.Lond., F.R.C.S.Eng., appointed Assistant Surgeon to the City of London Truss Society.

FRANCE, Eric, M.B., B.S.Dunelm., appointed House-Surgeon to the Belgrave Hospital for Children, S.W.

GAYLOR, Edward, L.R.C.P.Edin., L.M., L.F.P.S.Glasg., reappointed Medical Officer of Health to the Alfreton Local Board.

HOUCHIN, E. K., L.R.C.P. & S.Edin., appointed Deputy Coroner for the Eastern Division of London, *vice* George Collier, deceased.

KENDRICK, J., M.B., C.M., appointed Medical Officer for the Greystoke District of the Penrith Union.

LIVINGSTONE, T., M.D.Glasg., M.B., C.M., appointed Medical Officer to the Stanhope District of the Wearsdale Union, *vice* W. Robinson, resigned.

MORGAN, John H., M.A.,F.R.C.S., appointed Special Lecturer on Clinical Surgery to Charing Cross Hospital Medical School.

NEECH, Jas. Thos., D.S Sc.Vict., reappointed Medical Officer of Health for Atherton.

PATERSON, D. R., M.D.Edin., M.R.C.P.Lond., appointed Lecturer on Materia Medica and Pharmacy in the University College of South Wales, Monmouthshire.

PRESTON, J. M. S., M.B., C.M.Edin., appointed Medical Officer for the Third District of the Township of Manchester.

PURVIS, Wm. Prior, M.R.C.S.Eng., appointed House-Surgeon to the Royal South Hants Infirmary, *vice* H. P. Ward, M.R.C.S.Eng., resigned.

REES, Hugh, M.R.C.S.Eng., reappointed Medical Officer of Health for the Colwyn Bay Local Board.

THOMSON, St. Clair, M.D., M.R.C.P.Lond., F.R.C.S.Eng., appointed Senior Clinical Assistant to the Throat Hospital, Golden Square, *vice* Arthur H. Cheatle, F.R.C.S.Eng., resigned.

TWEEDY, Mr. R. C., appointed Medical Officer for the Kenilworth District of the Warwick Union.

WADDY, F. H., M.B., C.M.Glasg., appointed Non-resident House-Surgeon to the Brighton, Hove, and Sussex Throat and Ear Hospital, *vice* R. S. Wright, M.R.C.S., resigned.

WARE, Henry S., B.A., M.B., B.S.Camb., appointed Resident Medical Officer to the City of London Hospital for Diseases of the Chest, Victoria Park.

WATERS, Alfred J. G., L.R.C.P.Edin., M.R.C.S.Lond., appointed Medical Officer for the Third District of the North Witchford Union, *vice* C. P. O'Connor, M.D., resigned.

WOAKES, C. E., M.R.C.S., L.R.C.P.Lond., appointed House-Surgeon to the London Throat Hospital, Great Portland Street, W.

DIARY FOR NEXT WEEK.

WEDNESDAY.

POST-GRADUATE COURSE, West London Hospital, Hammersmith, W., 5 P.M.—Mr. Cheatle: Bacteriology of Wounds and Antiseptics.

FRIDAY.

CLINICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. Christopher Heath: Two Cases of Rectangular Ankylosis of the Hip-joint treated by Operation. Mr. G. R. Turner: A Case of Aneurysm by Anastomosis. Mr. Hurry Fenwick: Resection of Part of the Left Lower Lateral Wall of the Bladder for Recurrent Epithelioma. Mr. Battle: A Case of Traumatic Rupture of the Bile Duct. Mr. Arbuthnot Lane: Large Stones in the Common Bile Duct producing Complete Obstruction: Fæcal Material in the Duct: Operation: Recovery.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 8s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTHS.

CADELL.—On March 18th, at Clare House, Tiverton, North Devon, the wife of Nevil P. Cadell, L.R.C.P., of a son.

FERGUSON.—At 25, Rutland Street, Edinburgh, on March 17th, the wife of James Haig Ferguson, M.D., F.R.C.P.E., M.R.C.S.Eng., of a daughter.

HOPKINS.—March 19th, at 5, Picton Place, Swansea, the wife of G. Herbert Hopkins, F.R.C.S.Eng., etc., of a son.

HUSKIE.—At Hamilton House, Moffat, N.B., on March 4th, the wife of David Huskie, M.A., M.B., C.M.Edin., of a daughter.

DEATHS.

RENNIE.—On January 30th, at 16, College Street, Sydney, N.S.W., Grace Elizabeth, the wife of George E. Rennie, M.D., in her 36th year.

RICHARDS.—On March 15th, at 381, Moseley Road, Birmingham, after a short illness from acute pneumonia, William Richards, M.D.Edin., aged 33 years.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies.*

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

ANSWERS.

ANGINA.—Cactina is the active principle of cactus Mexicana. It is stated to be useful in some asthenic conditions of heart and dropsy, and also a cardiac tonic free from cumulative or narcotic action. We have known it given in two cases with negative results—one of mitral regurgitation, the other of weak heart after influenza.

SANATORIA IN THE BLACK FOREST.

W. R. T. had better apply to Dr. Otto Walter, the resident physician at the sanatorium at Nordrach, who will send him a prospectus of the institution, which is conducted on the same principle as Dr. Dettweiler's sanatorium for chest affections at Falkenstein, near Frankfort. *Rambles in the Black Forest*, by H. W. Wolff, is an instructive and interesting work, but it is written by a layman.

ANTICHOLERA INOCULATION.

G.N.S.—1. M. Haffkine described his method of cholera inoculation in the BRITISH MEDICAL JOURNAL of February 11th, 1893, p. 378. The theory upon which it is founded rests upon the results of experiments on animals, as is explained in the article cited. A large number of persons have been inoculated in India, but it has not yet been found possible to draw any decided conclusions. The method is still in the experimental stage 2. The result of the prize competition has not, we believe, been announced.

NOTES, LETTERS, Etc.

RELAPSE OF SCARLET FEVER.

DR. ALEX. HOPE WALKER (Cranleigh) writes: I am at the present time attending a patient, aged 10, with a relapse of scarlet fever. His illness commenced in the usual manner; the rash developed on February 20th, lasting three days. Desquamation was at first slow, but in the second week became profuse, and the boy was rapidly convalescing until March 11th, when he again became feverish, throat rather sore, submaxillary glands considerably enlarged. On March 13th the rash came out (quite as marked as the first one), lasting three days. The interval between the appearance of the two rashes was exactly three weeks.

THE DRINK QUESTION IN AMERICA.

A COMMITTEE of the "Sociological Group" has been formed in America for the purpose of investigating the "liquor problem" in its physiological, ethical, and legislative aspects. The Committee includes such representative divines as Cardinal Gibbons, Archbishop Ireland, Rabbi Gottheil, Bishop E. G. Andrews, besides physicians and men of science like Dr. J. S. Billings, Professor Bowditch, of Harvard; Professors Furnam and Chittenden, of Yale; Dr. Weir-Mitchell; and public men like President Eliot, President D. C. Gilman, Mr. Cornelius Vanderbilt, and others. Physiological experiments on a large scale are proposed, and the investigation is to be made as complete as possible.

PLACENTA PRÆVIA CENTRALIS.

DR. J. H. CROUDACE (Stafford) writes: Mrs. B., aged 40, mother of eight children all born naturally, pregnant for the ninth time, was taken very suddenly with profuse hæmorrhage from the uterus on the morning of February 23rd, and, although she had with her her mother, who pretended to knew something of childbirth, and the bleeding had continued all day, did not send for me until 11.45 P.M.

It appears that the bleeding had been going on from about the eighth month, during which time she had no pains, nor had she when I was sent for. I found her in bed looking very pale and feeling cold and sick. The pulse was quick, very feeble, and thready; the os was dilated to the size of a crown-piece, soft and dilatable. On pushing my finger in, I felt a quaggy mass, and sweeping it round for about 2 inches I found the same condition of things. I came to the conclusion that I

had to deal with central placenta prævia, and therefore determined to deliver at once. I sent her husband for a fellow practitioner, who came and gave chloroform, and as soon as the patient was fully under I introduced my left hand into the vagina and pushed it on by the side of the placenta to its margin, ruptured the membrane, caught hold of the right foot of the child, and delivered at once. I then took away the placenta, and, after injecting ergotin and finding the uterus was firmly contracted and the patient quite recovered from chloroform, I left. On visiting her next morning she had rallied somewhat, but complained of intense headache, and did so for four or five days; this I attributed to loss of blood. It was relieved by 1 gr. of opium every two hours. It is now eleven days since delivery, and she is still going on satisfactorily. The temperature has remained normal throughout. The child, a female, was full time and dead.

VENTILATION.

DR WALTER LATTEY (Southam, Warwickshire) writes: Although a knowledge of the theory of ventilation is now pretty general, one still finds considerable failures in its practice. It does not appear to be sufficiently considered in erecting dwellings for the poorer classes; many of the old thatched converted barns in rural districts, with cobwebs and dust clinging to the inside of the roof, but with their many chinks and crevices, were healthier to live in than the modern constructions with small unventilated rooms. The ventilation of public buildings and assembly rooms is often unsatisfactory. I once attended a most interesting lecture given by a distinguished hygienist on the "Air We Breathe;" the room was crowded and the weather warm, but every ventilator was closed.

In the splendid workhouse infirmary at Birmingham the ventilation is allowed to take care of itself; the upper parts of the walls have an open arrangement, so that cold winds can at any time drive out all warmth from the wards, so that the inmates might as well be in the open air. I submit that the admission of air into assembly rooms and the like should be regulated according to the force and direction of the wind, and that on all occasions of public meetings it should be the duty of a competent person to regulate both the ventilation and the warming of such rooms; this, I believe, is a matter which is very much neglected.

A CHINESE MEDICAL DIPLOMA.

"DR." CHAN QUAN HING not long ago registered at Detroit, U.S., under a diploma from the Kwang Joie College, Canton. The following is a translation of the document: "Dr. Lee, Chief Examiner for the Government, second degree of the rank of wearing peacock's feathers for special attendance at the Gong Wo College of Physicians and Surgeons. This certificate is for the examination in the practice of medicine as physician, that the practice of medicine may be promoted in order to guard and protect both the exalted and the lowly. Now the bearer, Chan Quan Hing, although young, has sufficient character and knowledge. He was examined at Kwang Joie College of Physicians, by Dr. Fond. His learning entitles him to be a doctor, having passed the examination of the second grade of first degree of this College. I therefore encourage him and give him this certificate. He must be kind to the people, and use his knowledge to the best of his ability, doing nothing rash in his practice to render futile this examination of our College. This certifies that he may practise where he pleases in the gateways and throughout the cities and the country. No. S.O.E., 362. First month and fifteenth day, seventh year of Kwang Shui, Emperor (1881)."

FORCIBLE FEEDING OF THE INSANE.

DR. GEORGE R. LAWLESS, (Assistant Medical Officer, District Asylum, Sligo, writes: The subject of forcible feeding of the insane has been brought into prominence recently in the BRITISH MEDICAL JOURNAL by Dr. Neil, in the issue of January 27th, and Dr. Herbert in that of March 3rd. It would appear that the desideratum is to introduce a quantity of food into a patient, who refuses his meals, in the most comfortable and most expeditious manner. Though this is undoubtedly desirable in some cases, yet there are patients who will submit quietly and passively to this treatment for weeks together, and make no effort to feed themselves: I venture to suggest in these cases it is better to work on what may be left of their moral susceptibility, and make the operation so disagreeable to them that, rather than undergo it, they will take their food voluntarily. It is certainly well to begin with the easiest plan, both for patient and operator, and the choice will lie between the nasal and stomach tubes worked by pump. Higginson's enema apparatus, or by means of a funnel and jug: but if the patient continues obstinate after feeding in this manner for a day or two, I resort to the following plan: The patient is placed as described in the papers alluded to above; the screw gag is introduced, and the mouth opened sufficiently wide to prevent the lips closing, this prevents the patient spitting out the food; the nose is then held, and about an ounce of the food is poured into the mouth during, or towards the close of, expiration; this at once stops the breathing, and, before the next breath can be taken, what is in the mouth must be swallowed. In this manner as much as is thought desirable can be introduced. That this method is somewhat rough I freely admit, but it is not without its advantages. In the first place it has a greater moral effect on the patient, and makes him an active participator in the operation, instead of remaining passive, as in the tube methods, he having to perform the act of swallowing, an important point in patients who imagine that they cannot do so. The saliva which is necessarily secreted during operation is also swallowed with the food, an important factor in the digestive process: and, further, it has the great advantage of preventing to a great extent the abominable fetor of breath incidental to tube-fed patients, due to the decomposing epithelium of the mouth and pharynx, which, when swallowed by the patient, cannot but have a deleterious effect. One other small point I would like to notice. In the illustration accompanying Dr. Herbert's paper I see that the attendant at the patient's head holds it with his hands: I have found it more convenient to get the attendant to kneel on the pillow, holding the patient's head between his knees: he thus has far greater power, and moreover has his hands free to hold the gag steady with one, and the patient's nose with the other.

THYMOL IN TYPHOID.

J. H. W. writes: I do not know whether thymol has yet been tried as an agent for producing intestinal asepsis in typhoid fever, but it seems to me that it ought to prove more useful than any other antiseptic on account of the apparently large efficient doses that can be given of it without producing symptoms of poisoning. Members who have exhibited the drug internally in the treatment of dochmii duodenales, etc., would be conferring a benefit on the profession. I think, by recording these experiences with the drug. If abdominal asepsis drug treatment be tried in typhoid, it ought to be efficiently carried out in detail. Milk, water, etc., that have not been boiled to kill the microbes ought not to be given, and the mouth ought to be frequently brushed out, and the throat gargled with a fragrant antiseptic wash. The flow of bland mildly antiseptic material from the mouth onwards would then soon purge the *primæ viæ* of most microbes, and render the intestinal walls not a happy sphere of action for those micro-organisms that did stay.

LETTERS, COMMUNICATIONS, ETC., have been received from: (**A**) Assistant Medical Officer; H. B. Angus, M.B., Southport; Alpha; Mr. T. R. Atkinson, Sherborne. (**B**) A. B. Boyd, M.B., Oxford; Mr. W. F. Brook, Swansea; J. F. Bullar, M.B., Southampton; Mr. J. Bark, Liverpool; Professor B. Bizzozero, Turin; Mr. B. P. Bartlett, Bath; Mr. H. Beer, London; Mr. W. G. Bower, Sheffield; Messrs. Bailey and Fairchild, New York; Messrs. O. Berend and Co., London; Mr. E. C. Barnes, London. (**C**) The Cortland Wagon Company, London; J. Cowan, M.B., New Galloway; Dr. A. Carmichael, Barrow-in-Furness; Mr. J. F. Colyer, London. (**D**) Dr. L. Dobson, Hanwell; Dr. Davies, London; Disgusted; Mr. A. Doran, London. (**E**) W. M. Eccles, M.B., London; Enquirer; H. L. Evans, M.B., Reading; Mr. A. M. Eason, Lytham. (**F**) Mr. E. C. Fawley, London; Mr. R. H. Forrest, Winchester; Mr. R. Fletcher, Burslem; Mr. C. Forbes, London. (**G**) Dr. J. Galloway, London; G. B.; Mr. B. W. Gowring, Oxford; Mr. R. Gibbs, Nottingham; Dr. J. Graham, Sydney; W. Gordon, M.B., Exeter. (**H**) Mr. W. F. Haslam, Birmingham; F. G. Haworth, M.B., Darwen; Mr. J. Harrold, London; Professor Hamilton, Aberdeen; Mr. E. K. Houchin, London; Mr. J. T. Hartill, Willenhall; Dr. L. Henry, Melbourne; Messrs. Holt, Webb and Co., London; Hygiene; Dr. W. P. Herringham, London. (**I**) I.M.S.; Dr. C. R. Illingworth, London; Ignoramus. (**J**) Mr. W. G. Jacob, Maryborough; Dr. A. H. Jacob, Dublin; Justitia; R. Johnson, M.B., London; Mr. H. Jackson, Manchester; J. H. W. (**K**) H. R. Kenwood, M.B., London. (**L**) Lingua; Mr. T. D. Luke, Belfast; Mr. J. Lawrence-Hamilton, Brighton; Late A.M.O.; Dr. T. G. Lyon, London. (**M**) Member of the B. M. A.; Mr. J. H. Morgan, London; W. L. Mackenzie, M.B., Newton Stewart; Dr. R. I. Metcalfe, Beccles; Dr. R. Maclaren, Carlisle; M.D. (**N**) Mr. J. T. Neech, Tyldesley. (**O**) T. P. O'Meara, M.B., Carlow; Mr. O. W. Owen, Chicago. (**P**) Dr. D. R. Paterson, Cardiff; Mr. E. L. Pritchard, Norwich; Puzzled; Practitioner; Probatum est; Dr. W. R. Parker, Kendal. (**R**) B. Rogers, M.B., Clifton; Mr. A. C. Roper, Exeter; Miss A. M. Rowley, Birmingham; Professor A. Roche, Dublin. (**S**) Messrs. J. Smith and Co., London; Mr. H. Spratt, London; Dr. J. F. W. Silk, London; Mr. P. W. Squire, London; Surgeon-Major A.M.S.; Mr. J. Shimeld, Ilford; Mr. C. H. B. Shears, Liverpool. (**T**) T. A. B.; J. D. Thomas, M.B., London; Dr. W. S. Thomson, London. (**U**) Union Medical Officer. (**V**) Mr. W. T. Vincent, London; G. Valentine, M.B., Perth. (**W**) Mr. A. J. G. Waters, March; Mr. P. C Webb, London; Messrs. W. Wallace and Co., London; W. W. Westcott, M.B., London; Dr. T. J. Wood, Bradford; Mr. H. S. Ware, London; Messrs. W. Wood and Co., New York; E. E. Waters, M.B., Sheffield; Mr. A. H. Walker, Cranleigh; Mr. G. C. Wilkin, London; Mr. J. R. Whitaker, Edinburgh; Mr. T. H. Williams, Gainsborough; F. C. Wallis, M.B., London; etc.

BOOKS, ETC., RECEIVED.

An American Textbook of Gynecology. Edited by J. M. Baldy, M.D. London: F. J. Rebman. 1894. 34s.

An American Textbook of the Diseases of Children. By L. Starr, M.D. London: F. J. Rebman. 1894. 40s.

A Textbook of the Theory and Practice of Medicine. By American teachers. Edited by W. Pepper, M.D. Vol. II. London: F. J. Rebman. 1894. 30s.

Atlas der topographischen Anatomie des Menschen. Von Dr. Karl von Bardeleben und Dr. H. Haeckel. Jena: Gustav Fischer. 1894. M. 15.

The Medical Annual and Practitioner's Index. Bristol: John Wright and Co. 1894. 7s. 6d.

Syphilis in the Innocent (Syphilis Insontium). By L. D. Bulkley, M.D. New York: Bailey and Fairchild. 1894. $3.50.

Companion to the Latest Edition of the *British Pharmacopœia*. By Peter Squire. Sixteenth Edition, revised by P. W. Squire and A. H. Squire. London: J. and A. Churchill. 1894.

Traité Pratique de Gynécologie. Par Dr. A. Auvard. Deuxième Edition revue et augmentée. Paris: O. Doin. 1894. Fr. 18.

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***** In forwarding books the publishers are requested to state the selling prices.**

LECTURES
ON
INJURIES TO THE EPIPHYSES AND THEIR RESULTS.

Delivered at the Royal College of Surgeons.

By JONATHAN HUTCHINSON, Junr., F.R.C.S.,
Professor at the College,
Assistant Surgeon and Demonstrator of Practical Surgery at the London Hospital.

Lecture III.

The Epiphyses of the Ulna.

Most of the olecranon process is developed from the shaft the true upper epiphysis including only about one-third of this process, ossifying from the tenth year, and uniting at 17. There is frequently more than one nucleus for this small epiphysis. It is only during the first few years that much of the triceps muscle is attached to the cartilaginous upper end of the ulna, and hence probably the rarity of its detachment. The experiments of Schüller and my own proved that it was quite possible to separate this part on the cadaver in young children, and there is reason to think that this occurs occasionally in the living subject. Eames[1] records one case at the age of 4, occurring from direct violence. Hamilton had the misfortune to produce this separation in attempting to reduce an old dislocation of the elbow in a child aged 7. In Eames's case there was no marked displacement: in Hamilton's the olecranon was drawn up for at least half an inch. There are a few other more doubtful cases on record, and with the note that "fractures of the olecranon" were observed fourteen times at the Middlesex Hospital in patients under 15 during a term of twenty years, we will pass to the lower epiphysis of the ulna. The latter includes the styloid process, the whole of the head and articular surface for the radius: the epiphysial line is decidedly convex downwards, and is situated on a higher plane than that of the radius. The shaft of the ulna narrows so rapidly above the epiphysis that we may say the weakest part of the bone here is not the epiphysial junction but the shaft at a point within 1½ inch of the lower end. In a fall upon the hand so much of the force is transmitted through the radius that in a young subject complete displacement of the lower radial epiphysis may be unaccompanied by any lesion whatever of the ulna. However, occasionally we find the styloid process of the ulna dragged off, more frequently a fracture of the shaft at the point just mentioned, and very rarely the epiphyses of both bones simultaneously detached. I have observed one case of the latter condition, and M. Ozenne obtained a specimen of it.

A third example of this accident I placed in the College of Surgeons' Museum; it was obtained from a boy, aged 14, who sustained a compound fracture of the forearm high up, which necessitated amputation. The lower ulnar epiphysis was found, on dissection, to be cleanly detached, and to be wedged in between the shaft and the lower end of the radius, so that it was hardly possible to disengage it—a most remarkable displacement. The wrist-joint and the membrana sacciformis were intact. We have said that the lower ulnar epiphysis is detached very rarely compared with that of the radius, and, corresponding with this, we should expect cases of arrest of growth in the ulna from traumatism to be very infrequent. I know of three cases—the first reported and figured by my father,[2] in which, after a severe blow on the wrist at the age of 5, the ulna did not grow like the radius, being ultimately nearly 2 inches shorter than the bone of the opposite side. The radius became markedly curved, and the hand was pushed over to the ulnar side.

The second case was reported by Mr. Edmund Owen.[3] In this the lower ulnar epiphysis was cut off in a machinery accident at the age of 2 years. The ultimate result was exactly similar to the preceding case. At 18 years Mr. Owen excised 1 inch of the radial shaft with the result that the hand and forearm became much straighter, and their usefulness increased.

The third case was a student, aged 24, who came under my own observation. When 5 years old he had been kicked by a horse on the right wrist. There was no wound and no subsequent suppuration. The radius gradually became curved, and the ulna was ultimately nearly 2 inches shorter than on the other side. The forearm muscles were not so well developed as on the left side, but he had very good use of the hand.

The Epiphyses of the Radius.

The upper epiphysis may be described as a biconcave meniscus, having at most a depth of 1 cm. in its centre. It ossifies first about the fifth year, and unites from the sixteenth to the nineteenth year. It is remarkable amongst the epiphyses from being always entirely within the joint and from having no muscular or ligamentous attachments. Hence it is practically never separated except from direct violence. I know of only two undoubted cases of its detachment, one (the specimen is in the London Hospital Museum) having occurred at the age of 16, in a lad under the care of Mr. Mansell Moullin, the other (also from severe crushing force) was under my father at the same hospital. In both the epiphyses lay loose in the elbow-joint. Hamilton has recorded three cases, all seen at a considerable interval from the accident, about which we can only say that they may possibly have been examples of epiphysial detachment, and many other supposed cases have been recorded, especially in children under the age of 5. In August, 1885, I published a short paper pointing out that these were in all probability examples of subluxation of the radial head (that is, its slipping from out of the grasp of the orbicular ligament). The mistake in diagnosis is readily explained, for when by appropriate manipulation (flexion and full pronation of the forearm) the subluxation is reduced, a sound is heard which might easily be mistaken for the cartilaginous crepitus of the epiphyses upon the shaft. I have since seen no reason to alter this opinion or to believe that true separation of this epiphysis is other than an extraordinarily rare accident and probably always due to direct violence.

We will now consider the very important epiphysis of the lower end of the radius, which includes the articular surfaces both for the carpus and the head of the ulna. The epiphysial disc, which is comparatively straight, corresponds to the insertion of the supinator longus, the lower edge of the pronator quadratus, and the so-called extensor protuberance (the small, but easily felt ridge on the back of the bone forming part of the groove for the extensor secundi internodii). The latter point has been described as the best landmark to the epiphysial line, but since in cases of displacement the epiphysis is nearly always driven backwards, it would be difficult to detect, and, further, the line of separation often encroaches on the diaphysis posteriorly. The greatest size the epiphysis attains is about 3 cm. across, 2 cm. from before backwards, the same in vertical depth on the outer side, but only 7 mm. on the inner side. Among the 54 cases of separation of this epiphysis I have collected, 17 of which were under my own observation, the age of the patient ranged from 3 years to 20, the majority being over 10 years, and quite a number of them 17 or 18 years. As in the case of other epiphyses, the central part of the epiphysial disc is the first to disappear, complete fusion occurring from the 20th to the 22nd year.

Looking at the great strength of the ligaments connecting the epiphyses with the carpus, we should expect to find that separation of the former takes the place under 20 years of true dislocation of the wrist. But this is not altogether accurate. Thus Haydon[4] recorded a case of double dislocation at the age of 13, and we could quote others. Nor can we exclude a true Colles's fracture in early life, as convincingly shown by an impacted specimen in the museum of St. Bartholomew's Hospital. Still we can safely assert that three out of four of the cases diagnosed as either dislocation of the wrist-joint or as Colles's fracture, in patients under the age of 20 years, are really examples of epiphysial separation. In a considerable proportion of 21 cases in which the specimen was subsequently obtained, one or other mistake in diagnosis had been made by the surgeon. Theoretically we should not expect much difficulty in diagnosis, the following rules being almost without exception:

1. In complete separation and displacement of the lower

radial epiphysis the styloid process can be felt to have its normal relation to the hand, unlike a dislocation.

2. In such a case the abrupt end of the diaphysis projects in front, forming an angle of usually 90° to 100°, and contrasting well with the gentler slope of a Colles's fracture, which is, as a rule, at least 140°.

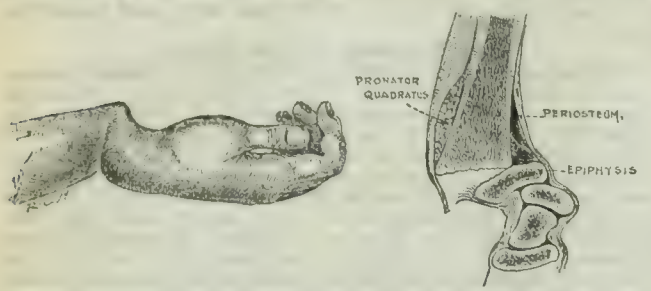


Fig. 7.—The deformity present in a recent case of backward displacement of the lower radial epiphysis. The other figure is from a specimen in the Royal College of Surgeons Museum (case under Mr. Bryant).

Sometimes the protruding diaphysial end has been mistaken in compound cases for the articular surface of the bone. It need only be pointed out that the latter is concave in both dimensions, the end of the diaphysis slightly convex.

The causation of this lesion, like the backward displacement, is remarkably constant. A fall on to the hyper-extended hand, with more or less adduction combined, is the usual mechanism of such cases. In only one case was the epiphysis displaced forwards; in this the diaphysis protruded through a wound on the back of the wrist, and was resected.[5] In one curious case a lad was incautiously lying on the ground, resting his head upon his hand, underneath a lift. He happened to raise his head, and at that minute the lift descended, striking the front of his hand and forcing backwards his radial epiphysis. The chief complications we have to note are (1) dragging off the ulnar styloid process, as so commonly occurs in Colles's fracture; (2) detachment of the lower epiphysis of the ulna; or more often (3) a fracture of the ulnar shaft 1″ up; (4) a vertical split in the radial epiphysis (rare); (5) extensive detachment and tearing of periosteum in front of the radial shaft, that on the back being rarely torn: (6) obstruction of radial and ulnar arteries by the pressure of the diaphysial end; (7) interposition of tendons or periosteum, etc., between the latter and the epiphysis; (8) extensive extravasations of blood in front of the wrist, especially in and about the pronator quadratus.

Provided the accident is diagnosed and treated early, and muscular spasm overcome by an anæsthetic, there is often but little difficulty in reduction. Thus, out of 14 cases[6] of simple detachment of the epiphysis, most of them with very marked displacement, reduction was effected, and a very good result obtained by treatment in every case. Of course splints are required for a time to prevent recurrence of the deformity, but I feel convinced that in most cases where the tendency to this recurrence is marked a complete replacement has not been effected, and that some periosteal band is probably intervening. The danger of tight apparatus in this situation is unfortunately only too well established.

In estimating the prognosis in compound cases of detachment, we will exclude every one in which another injury has been present to complicate the case. We have, then, 10 cases to consider; in 4 it was found necessary to resect the end of the protruding diaphysis before it could be reduced. In all these good recovery ensued; in the other 6 this course was not followed, but more or less imperfect reduction obtained. Two died, both with suppuration, tetanus being responsible in 1 case, pyæmia in the other; 1 case recovered with a crippled wrist-joint after tedious suppuration, 3 underwent amputation on account of gangrene. It must not be thought that this list of "surgical calamities"—2 deaths and 3 cases of loss of the limb out of 6—all occurred long ago; they are nearly all comparatively recent ones.

We have already discussed the cases of arrest of growth from old injury to this epiphysial disc, and the remarkable deformity of the hand to which it may give rise, we have seen that probably the best operation in such cases, if any be called for, is to excise the lower epiphysial disc of the ulna with a certain amount of the shaft. There is very good reason for believing that these cases form only a small minority of the total number. As already mentioned, out of 6 cases of detachment of the lower radial epiphysis followed up by myself and 3 by M. Goyrand, shortening from arrest of growth followed in only 1.

Before leaving the upper limb, we must recall the fact that each of the phalanges and the four inner metacarpals have one epiphysis, the thumb metacarpal frequently two; and that during early life separation exactly at the epiphysial disc may occur. I have collected notes of about ten cases in all; but they are not of sufficient interest to warrant analysis. In one case the proximal epiphysis of the first metacarpal was separated during an attempt (fortunately successful) to reduce a dislocation of that bone. In another I removed by incision the dead epiphysis of the middle phalanx of a finger after acute inflammation of the disc, etc., following injury.

The Epiphysis of the Head of the Femur.

Up to the age of 12 or eighteen months it is possible that the mainly cartilaginous upper end of the femur, including the head and great trochanter, might be separated from the rest of the bone: but it has never been proved by dissection to have occurred from traumatism during life, and experimental attempts on the cadaver have generally failed. In children and young adults, however, the clinical evidence (which has been lately dwelt on by my father in the *Archives of Surgery*) points very strongly to the possibility of detachment occurring exactly at the epiphysial line between the head and neck of the bone. The accompanying woodcut illustrates roughly such a case, which was under the care of M

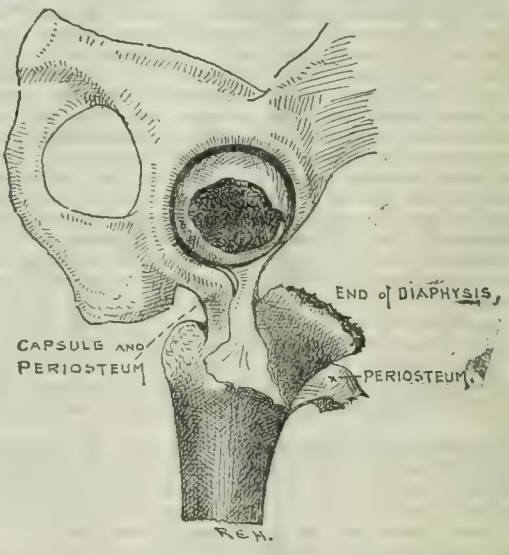


Fig. 8.—Specimens from M. Bousseau's case.

Bousseau in Paris.[7] The patient, aged 15, had been run over by a cart, and after his death from shock it was found that the capsule of the left hip-joint was torn, and that the epiphysis for the head was detached exactly at the epiphysial line. To this solitary case we may add several others derived from the lower animals. In the museum of the Veterinary College there are two examples obtained from horses, in the London Hospital Museum one from a rabbit, in my father's possession one from a sow, etc. All these were cases of traumatic detachment of the epiphysis.

That intracapsular fracture of the femoral neck occurs in young subjects has been proved by specimens described by Coulon, Stanley, and others, and by two in the museums of the Middlesex and Guy's Hospitals. The woodcut represents the latter specimen.

I have collected records of upwards of 20 cases in which the symptoms (shortening from ½ to 1½ inch, eversion of the limb, more or less crepitus, alteration of Bryant's

measurement, etc.) indicated either a fracture of the neck or separation of the epiphysis, in patients under 20 years of age. Dr. Whitman has lately recorded six other examples, and he holds the view that in the majority the lesion is a fracture. Fig. 10 shows a vertical section of the femur, the dotted line indicating the narrowest and probably the weakest part of the neck.

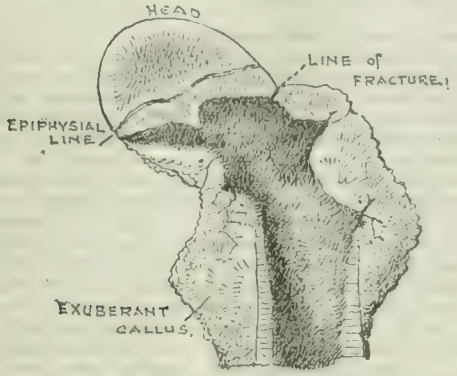


Fig. 9.—Example of fracture of neck of femur in a child (Guy's Hospital Museum).

It is only necessary here to allude to the numerous cases in which, after a wrench of the hip, acute epiphysitis has occurred, and the head become thus detached from the neck. Such separation of the epiphysis is, of course, secondary to the inflammatory process. In case of detachment or of fracture of the neck in young subjects which are primarily due to the accident, bony union appears to follow treatment in nearly all cases. In one, however (recorded by Mayo Robson), a false joint seems to have been formed.

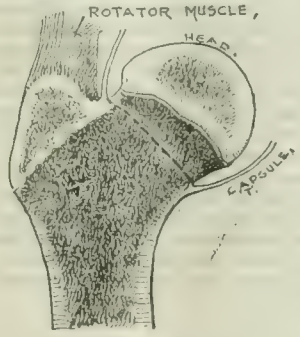


Fig. 10.

Separation of the Great Trochanter Epiphysis.

Looking at the enormous strength of the muscles attached to this process, one would be prepared to find that muscular action alone might produce its separation, and there are one or two cases confirming this view; however, severe direct violence is the usual cause. Out of eleven cases, no fewer than six were followed by suppuration (five of these ending fatally). When the trochanter is detached, but still held in place by the periosteum, etc., the diagnosis must be difficult, the only positive sign being the hinge movement obtained on direct pressure.

The Lesser Trochanter.

I believe only one undoubted example of separation of this process has been recorded, by Dr. Fenwick, of Montreal. His own son, aged 17, in leaping on to a fence, fell backwards on to his feet. The violent strain of the psoas and iliacus tore away the lesser trochanter. This was verified by incision. The boy died of septicæmia on the seventeenth day after the accident. The specimen is in the McGill College Museum at Montreal.

The Lower Epiphysis of the Femur.

There is no epiphysis of so much importance in practical surgery as the lower epiphysis of the femur. The grave results that have often followed its detachment, including injury to the popliteal vessels, suppuration involving the knee-joint, and arrest of growth have led surgeons from the time of Sir Charles Bell to devote special attention to it: and I have collected records of no fewer than 75 cases, of which 10 have not previously been published. The anatomy of the epiphysis is so well known that it need hardly detain us. We may only recall the facts that the epiphysis includes the whole articular surface, and that its separation must inevitably imply injury to the synovial membrane, that the adductor tubercle is placed exactly at the upper limit of the epiphysis, and that both heads of the strongest muscle in the leg—the gastrocnemius—are attached to the latter in great part. Hence the marked tendency to backward rotation of the epiphysis in cases of complete separation, and the necessity for the use of an anæsthetic before attempting reduction. Theoretically we might expect separation to occur even beyond the 20th year; out of 50 cases three of the patients had attained that age, the average being 10 years. The remarkable breadth of the femur at the epiphysial level and the great strength of the periosteum are circumstances which lessen the frequency of this accident. On the other hand, the attachment of the gastrocnemius, the popliteus, and the exceedingly strong ligaments of the knee almost entirely to the epiphysis favour its occurrence when a sudden wrenching force is brought to bear upon the leg. And it is nearly always a complicated and very violent force that has caused the separation of this epiphysis, such as hyperextension with twisting or traction. Direct violence may suffice when the knee is run over, and it is remarkable how many cases have been due to the leg getting caught in the spokes of a wheel.

When experimenting on the bodies of young children (chiefly by abduction or adduction of the extended knee), I found—

1. That if the thigh were held high up, the femur usually broke at its narrow central part.
2. That if the lower third were firmly grasped the epiphysis was usually separated.
3. When separation occurred the epiphysial disc almost always remained with the epiphysis, both heads of the gastrocnemius also remaining attached to it, and that the periosteum was extensively stripped from the lower third of the femur.
4. It was far easier to separate this epiphysis than to rupture the ligaments of the knee, or to break the shaft in its lower third.

The latter deduction has an important bearing upon the expediency of performing osteoclasia for genu valgum—an operation largely advocated in France, and advised in certain cases by such authorities as Macewen and Ogston (who has performed it over thirty times).

Now no surgeon would endorse this proposal if there were decided risk of detaching the epiphysis with possible or probable arrest of growth. The dangers attending an aseptic division of the femoral shaft are as nothing compared with ultimate shortening of the limb to the extent of four, three, or even two inches. Putting aside the experiments on the dead subject, the following case sufficiently proves the truth of my contention: A distinguished French surgeon, M. Delore, a great advocate of osteoclasia, and who denied the risk of separation of the epiphysis in this operation, performed it on both sides on a child, aged 7. The patient died of measles three weeks later, and M. Barbarin had the curiosity to dissect the limbs. On both sides the femur had given exactly at the epiphysial disc. Chauvel records an example of separation of the epiphysis in the attempt to straighten an ankylosed knee: Callender in flexing a stiff knee; Volkmann knew it occur three times during the surgeon's manipulation of children affected with old hip-disease. As is the case with the lower epiphysis of the radius and the upper one of the humerus, separation is remarkably clean, occurring exactly at the epiphysial disc, and a division of the condyles by a vertical split is a rare complication. The epiphysis may be completely separated, and yet retained in place by the periosteum, as shown in one of my own specimens; how often this happens without being diagnosed we can only surmise.

When the diaphysis is forced through its sheath the

varieties of displacement are many, though in the great majority of cases the epiphysis is carried forwards, and the danger of stretching the popliteal vessels over the broad diaphysial end is only too obvious. It is probable that in many of these cases the periosteum in front is not torn. Next in frequency to the displacement forwards of the epiphysis comes a lateral one, especially in the outward direction, sometimes so extreme that the leg and thigh form a right angle when seen from in front, or the deformity may resemble that of severe genu valgum. The epiphysis may be rotated on itself as well as laterally displaced, and in one remarkable case operated on by Mr. Atkinson, of Leeds, it was displaced right in front of the diaphysis, and so twisted that one condyle lay vertically above the other. In one reported by M. Trélat union occurred with the epiphysis rotated through 90° on a vertical axis.

In order to explain the frequency with which displacement has been allowed to remain, or with which a wholly wrong diagnosis has been made, we must remember that the knee-joint may be distended with blood and synovial fluid, and there may be much swelling of the soft parts at the time the patient is seen by the surgeon. Not infrequently the diaphysial end has been mistaken for the condyles and a dislocation diagnosed, even in compound cases. One thing is, however, certain, that a correct knowledge of the pathology of separation of this epiphysis would have saved the patient and surgeon from many a disastrous mistake. The gravity of the lesion is best shown in an analysis of recorded cases. Taking first those uncomplicated by wound, out of 28 cases, 16 were got into good position and recovered with very useful or perfect limbs (the possibility of ultimate shortening is not now considered), whilst of the remaining 12 in which perfect replacement was not obtained, 6 were followed by sloughing or suppuration. In 4 of these amputation had to be performed, 1 recovered after excision of the knee, and 1 after resection of the diaphysial end. In one case a popliteal aneurysm formed twenty years after, and led to amputation.[9] The remaining cases recovered with more or less useful limbs, the displacement persisting. The cases complicated from the first with wound and more or less protrusion of the diaphysis gave still less favourable results. Out of 30 cases, 4 died from shock, etc., in 8 reduction was more or less effected, with 4 subsequent amputations and 3 deaths from pyæmia. The remaining case recovered after suppuration and some necrosis—a truly dismal record. In 13 cases amputation was performed soon after the injury, with at least 3 deaths (in one the limb was removed at the hip-joint).

In favourable contrast to this list, which is anything but creditable to surgery, are the cases in which the protruding end of the diaphysis was cut off and replacement effected, five in number, all of which recovered with useful limbs. It may be said that after resection of the protruding diaphysis all growth at the affected part will cease. This is by no means certain, and the following case, proving the contrary, is of such interest that a brief quotation will be excused.

1. A boy, aged 8, in climbing behind a carriage, had his right leg caught in the wheel. When examined by M. Delens[10] the diaphysis protruded through a wound on the outside of the popliteal space. Prolonged efforts at reduction under chloroform failed on two occasions, but after the end of the bone had been sawn off replacement was easily effected. At the end of a fortnight the splint had to be removed on account of an abscess forming; this was drained and slowly healed. At the end of fourteen weeks good union had occurred, but with some stiffness of the knee and 4 centimetres shortening. He was repeatedly examined during the next ten years, and at the age of 19 the joint was freely movable, and the shortening amounted only to 9 centimetres. This proves that a considerable amount of growth had occurred at the lower epiphysial disc, since the failure amounted only to 5 centimetres in the ten years.

Unfortunately, we have but few records of cases, whether single or compound, which were followed up a sufficient number of years after the accident to enable us to estimate the risk as to arrest of growth. I can only adduce five:

1. A girl, aged 14. Severe injury to knee, treated for twelve months in the Sainte Eugénie Hospital by Marjolin.[11] Nature of the accident apparently never diagnosed. Recovered with stiff knee, displacement of epiphysis inwards and forwards, and shortening at the age of 18 of 4½ centimetres.

2. A case of Mr. Chauncey Puzey's.[12] Injury at 16; outward displacement of the epiphysis—reduced. Perfect recovery. At age of 19 there was 1 inch shortening.

3. A lad, aged 12, under my own care, with very marked forward and lateral displacement of the epiphysis, the diaphysis pressing on the popliteal artery so as to almost stop the pulse. Reduction under anæsthetic. M'Intyre's splint. Perfect recovery. When seen last, one year after the accident, there was no shortening whatever.

4. A medical student whose knee was severely injured at football when aged 15. When I examined him at the age of 23 there was fibrous ankylosis of the knee with 1½ inch shortening.

5. Delens's case, already quoted.

My impression is—but, unfortunately, it is only an impression—that most cases of separation of this epiphysis, if properly reduced with as gentle manipulation as possible, recover without any ultimate arrest of growth. Before attempting to reduce the displacement it is absolutely essential that muscular spasm should be prevented by thorough anæsthesia, the knee should be flexed and then traction and direct pressure brought to bear on the epiphysis. If the case be compound the wound should be enlarged if necessary and the surgeon's finger should ascertain what is the exact cause of the difficulty. If, as is most probable, this lies in interposed muscles or in the periosteal sheath it may be necessary to hook the former aside or to enlarge the aperture in the latter vertically. The end of the diaphysis should be carefully cleaned, but no strong and irritating antiseptic solution used, for in at least one case they seem to have been responsible for subsequent sloughing. Tenotomy of the tendo Achillis should be performed if the main obstacle is the backward tilting of the epiphyses, and certainly when reduction has been effected the best splint to use is a carefully padded M'Intyre's one, flexed to an angle of 135°. Inflammatory reaction should be combated by iced compresses to the knee. Good union is to be expected in from four to six weeks. Finally if displacement recurs directly the surgeon relaxes his pressure I believe that it is quite justifiable to fix the ends with a steel peg traversing the diaphysis from one side, being careful not to pass it through the epiphysis into the knee-joint. Rather than employ violent efforts at reduction protracted through one, two, or more hours (as has been done with bad results) it is better surgery to resect the expanded diaphysial end. Is it ever justifiable to excise the knee-joint? The results in the cases thus treated are a sufficient answer to this question. Out of 4 cases only 1 recovered with a firm and useful limb, all growth, however, being completely arrested at the knee.

As regards injury to the popliteal vessels the circulation may be arrested and the leg cold from pressure on the artery and yet recovery take place when the diaphysis is got into place, as happened in a case under my own care. But if the artery or vein be torn or completely thrombosed, gangrene is almost certain to follow, and primary amputation is probably the wisest course.

The Upper Epiphysis of the Tibia.

Although in its large size and the long period of years which elapses before this epiphysis fuses with the shaft, a strong resemblance exists between it and the lower epiphysis of the femur, yet as regards injury the former is comparatively rarely detached. This is probably due to the fact that the ligamentum patellæ, the internal lateral ligament, and the semimembranosus tendon are inserted partly into the epiphysis and partly into the diaphysis, thus strengthening the connection between the two. It will be remembered that the upper epiphysis includes in front a downward projecting portion of bone, the tubercle of the tibia, which is not infrequently developed from a separate centre. This portion of bone may be torn off by a violent pull of the quadriceps extensor.

Dr. Müller[13] has collected five cases of this detachment of the tubercle, and Dr. Ogilvie Will[14] has added a sixth, in which the nature of the lesion was made out by operation. All the cases were young male adults between the age of 16 and 20, and in every one the accident occurring in vaulting over "the horse" or in springing from the ground. In Dr. Will's case the surgeon cut down, believing he had to deal with a fractured patella; finding the supposed lower fragment was the tubercle of the tibia he fixed it with a steel needle in place. A quantity of blood clot was evacuated

from the knee-joint. Ultimately good union and power of motion were obtained.

Returning to the subject of the complete upper epiphysis of the tibia, we have records of ten cases of its detachment (including three unpublished ones), mostly happening from violent wrenches of the leg. The youngest patient was 12 months, the oldest 16 years. The great strength of the periosteum, reinforced by the semimembranosus tendon, the internal lateral ligament, and other structures which help to bind the epiphysis and diaphysis together, as a rule prevent much displacement occurring. If any exists, it is usually a forward over-riding of the epiphysis. This is best overcome when the knee is flexed, and probably the best form of splint to use in these cases is a M'Intyre's one. It must be remembered that effusion is almost certain to occur in the knee-joint after this accident.

The displacement just mentioned is well illustrated in a case recorded by Fischer and Hirschfeld,[14] which is of sufficient interest to be quoted here.

A weakly lad sustained a severe machinery accident, and in the left lower limb, this caused separation of the upper tibial epiphysis with forward displacement, and detachment of both fibular epiphyses (not compound). On the right leg the lower femoral epiphysis was detached and twisted round. Both displacements were corrected, but six weeks after the injury suppuration developed in connection with the left fibula at either end (traumatic epiphysitis). This led to amputation, and the specimen showed that union had occurred with the tibial epiphysis tilted forwards, or over-riding. The patient recovered after the amputation, with a very useful right lower limb; although here, also, the displacement had not been fully corrected. Parallel cases of multiple detachment of epiphyses on the same subject are illustrated in the St. George's and London Hospital museums. There is a beautiful specimen of simple detachment of this epiphysis placed by my father in the London Hospital museum: in this case the foot had been run over, and the leg forcibly bent inwards.

I do not think there is anything special to be said about the prognosis and treatment. In the 3 cases of my own, and in one published by Dr. Heuston[16], good union without any noteworthy displacement followed. Should suppuration occur at this epiphysial disc the knee-joint is, of course, in grave danger, as instanced by a case quoted by Gurlt, in which, on the sixth day after the accident, the presence of emphysema and pus in the joint was the precursor of rapid death.

I know of only one example of premature arrest of growth at this epiphysis from traumatism; this was recorded by Volkmann. A boy aged 3 had been severely knocked about by his drunken father. At the age of 4 he began to limp, and after this the tibia grew no more at the upper end, so that the ultimate shortening in this bone amounted to 3". A ridge could be felt as though the diaphysis had been displaced somewhat inwards and forwards. But curiously the femur of that side, the foot, and indeed the whole lower limb partook to a less extent in the want of development.

The Lower Epiphysis of the Tibia.

Many points of resemblance exist between this and the corresponding epiphysis of the radius: the epiphysial line is almost straight, situated above the synovial cavity of the neighbouring joint, and separation of this epiphysis (wide as it is) seems to be much more common than that of the lower epiphysis of the fibula. It is, however, often complicated with a fracture of the latter bone, as in the case of the radius and ulna. It may be said practically to take the place of Pott's fracture in young subjects, and may occur either from extreme inversion or eversion. The midwife's efforts may be successful in detaching the lower epiphysis; and in one example of this accident the foot had come to form a straight line with the leg, and the presentation was mistaken for that of a hand. Carus gives a case in which compound separation of this epiphysis occured *in utero* from a fall, the child being born with a wound through which the diaphysis protruded. Reduction was not effected, and the child died.

Turning to the examples of detachment of this epiphysis in older subjects, we have records of seventeen recent cases, two others of suppurative epiphysitis following a wrench or sprain, and eight cases of arrest of growth at this part after injury, with overgrowth of fibula and inversion of the foot, making a total of twenty-seven in all. It would have been easy to increase this list by including those cases of severe crush of the leg in which detachment of the lower tibial epiphysis is an unimportant item. The displacement met with has usually been that of the foot and epiphysis backwards or backwards and outwards, so that the sharp ridge of the diaphysial end has projected under the skin. Reduction even in compound cases has been effected without much difficulty as a rule, though Mr. Jacobson once found it necessary to remove the end of the diaphysis, and in two or three cases some necrosis has followed its reduction without resection. So favourable are the chances of conservative surgery in dealing with this injury, that some of the recorded cases would seem to have undergone a needless primary amputation, which in one was certainly owing to an erroneous diagnosis having been made.

Amongst the twenty-seven cases mentioned above are included two reported by Mr. Bryant, three by my father (in one of which the accident occurred in both legs), and three under my own observation.

The only complications we have to note are some splintering of the diaphysis (probably common), fracture of the fibula, and more occasionally separation of its lower epiphysis. There is no doubt that a certain proportion of the cases of so-called sprained ankle involve loosening without displacement of this epiphysis. The epiphyses of the fibula are so unimportant from the surgical point of view, that a few words must suffice to deal with both. The lower one is probably the most important with regard to growth in the bone: the occurrence of its separation is proved by two specimens obtained by Mr. Bland Sutton[17] and M. Anger[18].

Examples of detachment of the epiphysis for the fibular head have been obtained by Stimson, Targett, Delore, and myself.

The only point of interest lies in the possibility of curvature of the tibia following arrest of growth at either end of the fibula.

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ABSTRACTS FROM

THE INGLEBY LECTURES ON THE COMMON FORMS OF DYSPEPSIA IN WOMEN.

Delivered at Mason College, 1894.

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Lecture II.—Rest.

Exhaustion from over-taxing the physical and mental powers, or from other causes, being the basis of these troubles, we have no difficulty in naming the essential remedy, which is rest—rest in bed.

The duration of the period of rest must necessarily depend upon the intensity and duration of the symptoms. Such virtue is there in prolonged sleep and rest that even thirty-six hours in bed will do much in the early stage of this neurosis; but when our advice is sought it is usually for a condition of things which demands at least a week, and commonly two or three weeks' rest. The rule is to keep the patient in bed until she has eaten ordinary diet without any discomfort for at least three or four days.

When the patient is first put to bed only milk and bread should be allowed. If there is vomiting, only milk, 1 ounce every hour. Then, as this simple food is tolerated, additions are made to the diet, such as minced chicken, cold baked

custard pudding, dry toast, and weak tea. I am assuming now that there are no inflammatory complications. Afterwards minced mutton and mashed potatoes, and finally ordinary diet.

MASSAGE.

Should there be great loss of flesh, as is the case where the symptoms have existed some time and the amount of food taken has been inadequate to the demands of the body, seven or eight weeks may be usefully spent in bed after full diet can be taken; but under these circumstances massage and faradism should be employed daily to aid the nutrition of the tissues and restore tone to the muscles.

ISOLATION.

In some patients the treatment of the case is complicated by the presence of hysteria. When this exists it is absolutely necessary to isolate the patient if the treatment is to succeed. Isolation, to be effective, means separating the patient from all communication, direct or indirect, personal or by letters, messages, flowers, or parcels, with her relations and friends, or any but those who have to do with her medical care and treatment. It is impossible to do this properly in the patient's home, so that removal to a private hospital is imperative. The remedy is not very acceptable, but the success which follows it justifies our insisting upon it; and in view of the unsatisfactory and even fatal results which may follow less efficient treatment it is preferable to decline the case than to undertake it where failure is almost inevitable.

In dealing with hysteria, it is necessary not only to remove the baneful sympathy, but to supply or strengthen motives which should make the patient desire to get well. The removal from her friends does this in part; but it is important to aid this where desirable by forbidding all amusements, such as reading or fancy work, which beguile the tedium of lying in bed, and by the use of the faradic brush or the cold douche, which stimulate a healthy longing to abridge the course of treatment, while the patient should be reminded daily that her stay depends entirely on the rate at which she improves, and her hopes encouraged by promises of speedy recovery.

CLIMATE.

When the patient is well enough to go out, it is very desirable to complete the cure by change of air and scene, by which she will avoid returning to her ordinary duties, with their often unavoidable worries, and still further strengthen her mind and body. In the winter our choice of place is limited, and circumstances may impose upon us further restrictions, but the south coast watering places are generally suitable; if the weather is mild, those at the eastern end; if the weather is cold, the Isle of Wight, or the more westerly resorts in Dorsetshire, Devonshire, or Cornwall. More wealthy patients may be sent to the Riviera, Cannes being especially suitable. I have found Weston-super-Mare suit these cases exceedingly well in the spring. In the summer the seaside is generally too enervating for them, though the bracing air of Rhyl benefits many poor women in the excellent convalescent institutions which exist there for their great advantage. But higher altitudes are better adapted to restore lost vigour, and of such stations there is none better than Braemar (1,200 feet), in Scotland, and none more accessible than Buxton (1,100 feet). There are many stations abroad which have a reputation in the treatment of these neuroses, and at some there is the advantage of waters which correct constipation and anæmia. For a simple air station there are Wildbad (1,300 feet), near Baden-Baden, and St. Sauveur (2,500 feet), in the Hautes Pyrenées. Pyrmont, St. Moritz (5,859 feet) and Schwalbach (1,000 feet) are useful where there is anæmia. Homburg (600 feet), Kissingen (600 feet), in Germany, or Marienbad (1,900 feet), or Carlsbad (1,120 feet), in Austria, and Châtel-Guyon (1,300 feet), in France, when gastritis is more pronounced.

DIET.

Tea, coffee, and cocoa have very largely replaced the use of weak alcoholised beverages, such as beer, among women of all classes, and especially concern us. Tea is an infusion which contains a good deal of tannic acid, the alkaloid theine, a little gum, extractives, and colouring matter. The only active agents are the tannic acid and theine. Tannic acid unquestionably irritates the stomach when the organ is empty, and in that way it may set up gastritis. When gastritis is present, the use of ordinary tea should be avoided; but if it is made with boiling milk instead of boiling water, as recommended by the late Sir Andrew Clark, these irritating effects are so much diminished, that it can be taken without harm by many people suffering from chronic gastritis.

Theine is certainly not an irritant to the stomach, and there is no satisfactory evidence that its habitual use produces nervous or physical depression; but when, as is the case with some poor women, the teapot is made to do duty for a meal, after overwork has destroyed appetite and the energy to seek food, then it is blamed as the cause of troubles for which it affords some temporary relief.

Coffee, which contains less tannic acid, and cocoa are much less commonly employed in this country, so that they concern us less closely. Coffee, unless taken after meals, is usually mixed with so much milk that the tannic acid is precipitated, and the resulting beverage is one of the best that man has devised.

Cocoa, in spite of its popularity, is an uninteresting, harmless kind of drink, unless adulterated with starch, a fraud which is much less commonly seen than was formerly the case.

Diet in Gastralgia.—Subject to these considerations and limitations of what we may fairly call ordinary healthy diet, after suitable repose has restored a healthy tone to the stomach, these cases, when uncomplicated by organic disease, may eat, and should be encouraged to eat, anything. Positive harm is done by dieting them; it tends to make them hypochondriacal and fanciful about this or that article of food not suiting them; moreover, they are often disposed to eat too little, and the necessity for at least three good meals a-day should be impressed on them. If a little weak alcohol helps appetite they should take it, but on general principles spirits should not be recommended. Light wine or light beer, or even stout, may be really beneficial, the last especially, from the large amount of dextrines and sugar it contains.

In Atony and Dilatation.—When there is a distinct motor defect, fats should be taken very sparingly or not at all, and some care must be exercised to avoid the use of indigestible food, such as uncooked fruit and vegetables, pork and veal, cheese, pickles, and pastry. The object in view is to secure a chyme which shall be formed as quickly as possible, and pass the pylorus easily, and the extent to which diet must be modified to effect this must depend upon the degree of dilatation present. But marked dilatation is always associated with more or less gastritis, which leads us to those cases in which inflammatory complications have to be considered.

In subacute and chronic gastritis we are guided by the same principles, with this additional rule for the more acute cases, that abstinence from food or from all but the simplest nourishment for a limited period is strongly indicated.

When the stomach is irritated or inflamed, we must carefully exclude all food which comes under the following headings: (1) Pungent and acrid substances; (2) chemical irritants; (3) mechanical irritants; (4) fermentable substances.

Under the first heading are included condiments, such as pepper of all kinds, mustard, spices, and alcohol, especially ardent spirits. It is to be regretted that patients so often tell us that they have been recommended to drink spirits because they are suffering from dyspepsia. It should be better understood than it is that gastritis in any degree contraindicates the use of spirits.

Under the second heading are all strong acids, such as tannic acid in tea, acetic acid in beer.

Under the third heading of mechanical irritants are the insoluble, indigestible foods, fat meats, pork, oily fish, salmon, mackerel, and eels, veal, mushrooms, cheese, pastry, fried articles, uncooked fruit and vegetables, seeds, husks, and skins. This rule excludes all bread but the finest white bread, and this should be well toasted so as insure complete rupture of its starch capsules. No brown bread or wholemeal bread should be allowed.

Lastly, we have such fermentable substances as sugar, farinaceous food, and fat. We should forbid all sweets, all

fats but a very small allowance of butter, and all farinaceous food except toast and light vegetables.

This dietary is not so restricted as it may appear to be; for example, it permits for

Breakfast.—Milk tea, *café au lait*, cocoa, toast, a little butter, white fish, fowl, game, beef and mutton boiled, roast, or broiled, hot or cold; eggs lightly cooked, potted meats unspiced.

Luncheon.—White fish, fowl, game, beef and mutton, boiled, roast, or broiled; mashed potato, cauliflower, broccoli, vegetable marrow, early peas; custard pudding, jelly, isinglass blancmange unsweetened or with little sugar; claret or hock with aërated mineral water.

Tea.—Milk tea, toast, German rusks.

Dinner.—No soup; any fish but salmon, mackerel, and eels; beef or mutton; sweetbreads, calves' head or feet, cowheel, tripe; all light vegetables; fowl or game; well-stewed fruit free from stones, skins, or fibres; custard, jelly; toast or rusk; cream cheese; claret or hock with aërated mineral water.

All uncooked food and all that is acrid, pungent, sour, sweet, and greasy, should be carefully avoided.

In the treatment of a case of subacute gastritis which will only require care for two or three days, it is better to tell your patient exactly what to eat; but where the disease is more chronic it is better to tell her what things to avoid.

Exercise.

The muscular system depends for its health on regular exercise, and this process not only keeps the muscles in tone, but promotes the circulation and respiration and the glandular functions of the body. It is probable that large muscles demand more active exertion than small ones, and that spare bodies are benefited as much by rest as fat ones are by exercise. The importance of rest in these cases has already been explained, and where exercise is productive of fatigue it must be discouraged, or at least restricted to limits within which the patient will not feel tired. Exercise should be taken early in the day, and may with advantage be avoided later. Patients are not all alike; some require urging to take the necessary exercise, others—and those not a few—are seriously disposed to overdo it.

Electricity.

It would be strange if, in an age in which electricity has become the substitute for more simple means of stimulating the popular imagination, there should be nothing to say as to its virtues, real or alleged, in the treatment of these neuroses. Apart from its influence upon the imagination, with which I do not concern myself, electricity plays a useful part, as has been already stated, in preserving and improving the nutrition of the muscles, and as a stimulant to the circulation in the skin. But in atony and dilatation of the stomach we may apply either current to stimulate the action of the muscular wall and to restore its tone. This may be done through the abdominal wall by applying large well-wetted flat electrodes over the region of the stomach, but much more certainly by means of Max Einhorn's stomach electrode. The stomach is filled moderately with water, and the electrode introduced in the same fashion as a stomach tube, while a large flat electrode is applied to the epigastrium. We can then connect them with either current; but our plan has been to use four or five cells of constant current, which is interrupted every five or ten seconds. In the early stages this treatment obviously has a much better chance of success than in the more advanced cases in which we have generally used it. It is not difficult of application, but its value is still in doubt.

Stomach Tube.

The modern soft stomach tube is an instrument which serves the double purpose of filling and emptying the stomach. In some cases of anorexia, complicated by hysteria, it is often necessary to threaten to feed by the tube, but very rarely have we had to carry out the threat. It may be used to wash out the stomach where there is reason to believe that there is retention of stomach contents, and its use becomes imperative when there is decided dilatation. To a considerable extent we may get the same results from emetics as from the tube, and with less alarm to the patient, for although they soon get used to the instrument and pass it readily for themselves, it is always distressing at first. Therefore in cases of recent trouble, where the stomach would probably need to be washed out once only, I prefer to the tube an emetic of zinc sulphate, given together with plenty of warm water. There is a reason to believe that the tube is used too little in this country and too much in Germany. The best antiseptic for washing out the stomach is a 1 per cent. solution of salicylate of soda.

Drugs.

Iron.—On account of the prevalence of anæmia in these cases iron takes a very prominent place in their treatment. Where this symptom is marked we may give pil. ferri (Blaud's pill), sulphate of iron in mixture, so often usefully combined with sulphate of magnesium, or the tincture of the perchloride of iron.

Strychnine.—This drug is extremely useful in combating the motor weakness of the stomach and intestine, and may be suitably combined with iron, or, in those cases where iron is not indicated, with a mineral acid, of which hydrochloric acid seems the most appropriate. A mixture in which these two drugs form the essential elements is very beneficial to the ordinary type of atonic gastralgia, and is thus formulated in the General Hospital *Pharmacopœia:* ℞ Ac. hydrochlorici dil., ♏x; ac. hydrocyanici dil., ♏v; liq. strychninæ, ♏ijss; sodii chloridi, gr. xx; glycerini, ♏xxx; aquam ad ℥j. Ft. ht. Sig. To be taken thrice daily, an hour after meals.

Magnesium and Sodium Sulphates.—These admirable aperients deserve early mention among the drugs which stand first in usefulness and in the frequency with which they are required. Constipation is the absolute rule in these cases, and of all aperients the salines are the best. When the patient is in bed the dose may be divided and given three times a day, but when she can get about it is better to give it the first thing in the morning, on rising from bed. I think there is little to choose between the magnesium and sodium salt, except in their taste, of which, probably to most people, the former is more disagreeable. Either may be given in the shape of mineral water, of which Franz-Josef, Æsculap, Friedrichshall, and Hunyadi are among the best known magnesium waters, and Carlsbad, Kissingen, and Rubinat the sodium waters. The last is, in my experience, one of the least disagreeable and most efficient: I recommend it constantly with excellent results, but among so many in the market I have no doubt there are others equally satisfactory. Aperient waters may be taken hot or cold, and probably act better as a rule when hot. I say "as a rule" because I have known exceptions. If really hot they are less disagreeable, but if only warm their nauseous taste is increased and may cause vomiting. Where there is gastritis these salts or waters should always be taken in half a pint of water as hot as it can be sipped.

Mercury.—Abernethy said he would define biliousness as a condition curable by blue pill, and there should be no doubt of the value of this remedy in all cases of subacute gastritis. The drug may be given in the form of calomel or blue pill. I prefer the latter, and I generally give two five-grain pills, one to be taken at bedtime on successive or alternate nights according to the extent of its action. It unquestionably has the power of allaying gastritis, and in small continued doses is useful in the chronic form as well. How it acts—whether as an antiseptic, or by unloading the vessels, or by both means combined—we cannot be sure, but its power in both these directions is indisputable, and no one will question the good results which follow its administration. That mercury was abused in the treatment of the early part of this century there can be no doubt. Sir Robert Christison used to illustrate this abuse by relating that when he was a young man attending St. Bartholomew's Hospital a discussion upon this subject arose among a company, of which the house-surgeon formed one. In order to maintain his opinion, Christison offered to bet him that there were not ten patients in the hospital who were not at the time under mercurial treatment in some shape or form, but the house-surgeon would not accept the challenge, so little certain did he feel of winning it. Nevertheless, the reaction that set in led to the un-

deserved disrepute and consequent neglect of one of the most generally useful drugs in the *Pharmacopœia*.

Bismuth.—In the treatment of gastritis, whenever there is evidence of much irritation by pain, furred tongue, icterus, or mucous vomiting, etc., bismuth is indicated. It may be given in various combinations and forms; for example, in subacute gastritis I give with blue pill and a saline aperient the following powder, to be taken thrice daily before food: ℞ Bismuth. salicyl., gr. x; sodii bicarb., gr. x; pulv. rhei, gr. iij; pulv. cinnamomi co., gr. v. Ft. pulv. Mitte xij. It should be taken in milk, and is an excellent remedy for ordinary use. Where the bowels are irritable I omit the rhubarb. In chronic gastritis, with mucous vomiting, I give the following: ℞ Bismuthi carb., gr. xv; sodii bicarb., gr. x; muc. tragacanthi, ℥ss.; aq. ad ℥j; M. ft. ht. Sig. To be taken thrice daily before meals. In cases of atony, with slight gastritis, I order: ℞ Liq. bismuthi et ammon. cit., ℥j; sodii bicarb., gr. x; tr. nucis vom., ♏x; inf. gentianæ ad ℥j. M. ft. ht. Sig. To be taken thrice daily before meals.

Hydrochloric Acid and Pepsin.—We have seen that not very uncommonly there is distinct deficiency in the hydrochloric acid of the gastric juice; it is difficult to give as much as is needed to compensate for defective secretion, but fifteen drops in a wineglassful of water may be taken through a tube every hour for four hours after each meal. Pepsin is much more rarely absent, as so little of the ferment is actually necessary, but when artificial digestion has determined the want of it, it may be very easily supplied by any of the good preparations now in the market. In connection with the use of these remedies, it may be said that they do not do so much good as might be expected, nor does their absence produce the ill-effects we should anticipate. In fact, so long as the food is not retained too long in the stomach its chemical condition is of comparatively little importance, the deficient digestion in the stomach being made up by the activity of the pancreatic and intestinal juices. It is therefore to the various means for promoting motor activity that we should chiefly look in the treatment of these cases.

REMARKS ON AMŒBIC ABSCESS OF THE LIVER.

BY PATRICK MANSON, M.D., LL.D.,
Physician to the Seamen's Hospital.

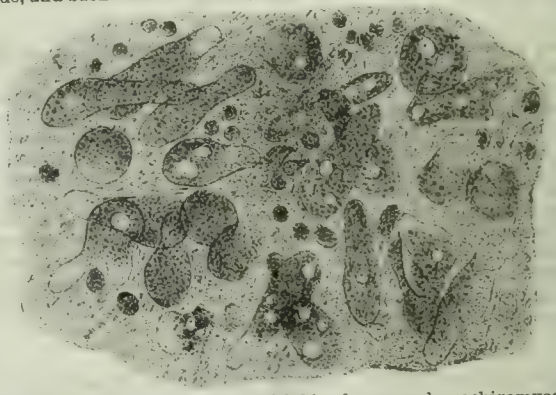
WITH A REPORT ON THE PATHOLOGY
BY JAMES GALLOWAY, M.D., F.R.C.S., M.R.C.P.,
Pathologist to the Great Northern Central Hospital.

IN common with many other observers I have frequently, since Kartulis brought the subject prominently before the profession, found amœbæ in dysenteric stools. But, although I had searched more than once for similar parasites in the discharge of liver abscess, I had hitherto failed to discover their presence in this medium until I came across the following case. So far as I am aware, this is the first time the amœba has been found in liver pus in England; at all events, no similar case has been published in any English journal, although a good many are now on record in American and German, and a few in French and Indian publications. The value of the case is very much enhanced by Dr. Galloway's report on the microscopical examination of the liver tissue; to a certain extent this is confirmatory of Councilman and Lafleur's important researches.

HISTORY OF THE CASE.

M. T., aged 30, fireman ss. *Carthage*, was admitted to the Albert Dock branch of the Seamen's Hospital, Greenwich, on September 4th, 1893. He stated that he was a native of Zanzibar, that for many years he had resided in Jeddah, Arabia, and that latterly he had been employed as a fireman on steamers running between Bombay and London. He further stated that he had been healthy, and had not suffered from diarrhœa or dysentery. He had been ill since the arrival of his ship in the London Docks—a fortnight before his admission—and for two or three days previously, while at sea, with pain in the belly, a feeling of fulness after eating, occasional vomiting and feverishness, his symptoms being aggravated by any attempt to work. I did not see him till September 18th. I then found him complaining of the symptoms mentioned, and, in addition, I could make out by palpation an ill-defined swelling in the epigastrium. The swelling was smooth, rounded, slightly tender, about the size of two fists, and apparently connected with the liver. This organ was slightly sensitive on percussion in front, and it measured rather over 4 inches in the nipple line. A spot below and to the left of the xiphoid cartilage was distinctly tender. At this point particularly, but also all over the epigastrium in a less degree, the superficial cutaneous veins were dilated, and there was in addition to this a suspicion of œdema. The urine contained a trace of albumen, but was of fair specific gravity. Temperature ranged from 99° in the morning to 102° in the evening. Sweating had occurred only once or twice, and was not a marked symptom.

Suspecting abscess of the liver, and with a view to clearing up the diagnosis, and, if pus were discovered, to operating, on September 20th the patient was put under chloroform. When he was deeply anæsthetised the swelling in the epigastrium could be readily made out; but it was now discovered for the first time that on light percussion over the tumour a distinct tympanitic note could be elicited. In the absence of any history of expectoration, vomiting, or passing of pus by stool, it was concluded that this tympanitic resonance was owing to gut or stomach intervening between liver and the abdominal wall; and it was deemed prudent to defer exploration for a day or two, to give time for fresh developments to occur and for preparation for what might prove to be an extensive laparotomy. A week later, no improvement having taken place, a hypodermic needle was thrust into the swelling at a point to the right of the middle line, and pus withdrawn. Next day this proceeding was repeated, and on subjecting the chocolate-coloured pus to microscopical examination it was found to contain many actively moving amœbæ. On October 4th, the tympanitic resonance in front of the tumour still persisting, an incision about 3 inches in length was made in the epigastrium to the right of the middle line, and the dissection carefully carried into the peritoneal cavity. No adhesions were apparent, but a knuckle of small intestine showed itself at the wound, suggesting an explanation for the tympanitic resonance referred to. The gut was easily pushed aside. A hypodermic needle passed into the liver in an upwards, inwards, and backwards direction, entered an abscess cavity. On passing a finger into the wound, extensive and firm adhesions were discovered to the left of the middle line. The original wound was therefore stitched up and a fresh incision made through the abdominal wall in the situation of the adhesions. This opened an abscess about the size of a small orange at a short distance from the surface. The abscess wall was felt to be rough, irregular, and moderately resistant. The contents had the usual characters of liver pus, namely, in the main chocolate coloured, with here and there streaks of almost pure blood and yellow mucoid pus, the whole assuming an almost jelly-like consistence on cooling. Four hours later, on placing some of this pus under the microscope, living amœbæ were found in it in abundance—sometimes as many as six or seven in one field of a one-inch objective. The patient did not rally from the operation—which was a simple enough affair and skilfully performed by Mr. Johnson Smith—but died about 48 hours afterwards. No *post-mortem* examination could be obtained; such examination as could be made through the wounds in the abdomen failed to detect any sign of hæmorrhage or leakage of pus into the peritoneal cavity. A small portion of the liver was removed through the wounds, placed in spirit and handed to Dr. James Galloway for microscopical examination. To him I am indebted for the following report.



Amœba coli in intestinal mucus, with blood corpuscles, schizomycetes, and similar bodies (after Lösch).

DR. GALLOWAY'S REPORT.

[From the Laboratories of the Royal Colleges of Physicians and Surgeons.]

The tissues handed to me for examination consisted of portions of liver, including part of the anterior edge. To the naked eye some of the pieces resembled liver substance apparently little changed, others consisted of very dense fibrous tissue, while other portions showed great change in the liver structure. The last were of a dark brown colour, of exceedingly fragile consistence, and they gradually passed into normal liver substance at the margins of what were evidently cavities produced by necrosis. Pieces from each of these types of material were placed in absolute alcohol, then, after being embedded in paraffin, were cut in sections and submitted to microscopic examination. The stains made use of to bring out the characteristics of the tissue were hæmatoxylin (Ehrlich), hæmatoxylin and eosin, and methylene blue.

1. The liver tissue, through considerable areas, shows the hepatic cells unaltered. The most striking change is a considerable increase of connective tissue along the course of the main branches of the portal circulation. Thus the liver has some resemblance to the condition known

as "coarse cirrhosis," but it differs from this on account of the exceedingly active appearance of the fibrous tissue, and also because the fibrous tissue is less diffusely distributed than in the lesion mentioned. In the bands of newly-formed connective tissue were observed very numerous bile ducts, especially near the margins of lobules, encroached on by the developing connective tissue cells. The number of these bile ducts, probably of new formation, is much greater than is seen in cases of coarse cirrhosis, and greater even than is observed in cases of the hypertrophic or biliary cirrhosis.

2. The fibrous tissue, found in areas apart from necrosing liver tissue, is well developed, very dense, and suggests the fact that it may have been formed on the site of older lesions than those which immediately preceded death, and it is probably in relation to these masses of scar tissue that the processes resembling cirrhosis originated. Scattered throughout the fibrous tissue are numerous cells of irregular, but usually somewhat elongated, shape, occasionally arranged in rows or groups, and almost invariably containing quantities of brownish pigment particles. These are, no doubt, relics of the secreting cells of the liver which have undergone degeneration.

3. The areas of recent lesion, however, show the most interesting changes. As already remarked, these are of a dark brown colour, exceedingly brittle, almost melting away in water, and require careful embedding to secure proper sections.

The surrounding comparatively normal liver tissue passes almost insensibly into the brown mass mentioned. There is no boundary of fibrous tissue, and it is very striking to observe the remarkable absence of leucocytic infiltration round the margins of such areas. The hepatic cells lose their outline and melt imperceptibly into the surrounding brown matrix. In the latter no formed elements are to be seen, with the exception to be noted, but it consists of granular material, in which may be observed, especially towards the normal liver substance, small particles of chromatin persisting from the nuclei of cells which have undergone degeneration. There may be observed, however, in certain spots numerous cells, usually rounded in outline, from 0.016 to 0.024 millimetre in diameter, and presenting a healthy well-developed appearance. The nucleus is not very distinct, but is invariably present, and there are usually to be seen one or two pigment particles in the surrounding protoplasm. The presence of vacuoles cannot be well ascertained. To all appearance these structures resemble the bodies described by Drs. Councilman and Lafleur in their description of "Amœbic Dysentery,"[1] and which are affirmed to be amœbæ from the colon which have been carried into the liver. They are certainly somewhat anomalous in character, and differ from the ordinary form of degeneration of liver cells. The latter are met with in large numbers, and are shrunken, usually elongated, bodies containing a large quantity of pigment. On the other hand, the structures under discussion are rounded well-defined cells in which there is little appearance of degeneration, and it is a striking fact that they remain apparently healthy in the midst of obviously necrosed tissue.

The amœbæ of dysentery have so rarely been searched for in this country that I have some difficulty in deciding whether these bodies are really the micro-parasites as described by Councilman and Lafleur, or whether they may not be the result of some form of degeneration of liver cells, which causes the nuclein and cell protoplasm to become œdematous before disappearing, differing greatly from the usual method, which is readily recognisable.

It is very noteworthy in this respect that in the series of cases examined by Dr. Albert Calmette,[2] in Cochin China, he has not been able to identify the amœba of Kartulis in a single case of liver abscess. This observation is worthy to be borne in mind in considering the subject, for it is not likely that the bodies seen so readily in these preparations, and said to be discovered with ease by Councilman and Lafleur, can have been overlooked by so careful an observer as Calmette.

On the other hand, the fact may emphasise the conclusion that there is more than one class of liver abscess in dysentery, one being possibly the result of absorption from the colon of toxins which have a selective action on the liver tissue (Calmette—bacillus pyocyaneus), another being possibly associated with the amœba coli as a cause (Kartulis, Councilman, Lafleur, etc.).

The occurrence in this case of tympanitic resonance on light percussion over a liver abscess which did not communicate with either lung or alimentary canal, and the probable explanation of this unusual circumstance discovered at the time of operation, is of considerable clinical interest. My object, however, in recording this case is to call attention to the association of amœba coli with liver abscess, an association which, although it seems to carry with it distinct prospects of a great advance in the pathology of an important section of tropical disease, and which, therefore, should be of special interest to Englishmen, yet nevertheless has hitherto been better appreciated in America and on the Continent than either in England or in India. In this neglect by our countrymen we have but a repetition of the history of a similar and even more important discovery—that of Laveran's plasmodia—in another department of tropical pathology.

In view of recent discovery it is manifest that the old views of the etiology of liver abscess must be abandoned. So long as the amœba coli seemed to be confined to the intestinal discharges, more particularly as it, or a species resembling it, was frequently found in simple diarrhœa, and even in healthy stools both in men and animals, and that often apart from any recognisable morbid condition whatever, so long it seemed to have little claim to be regarded as an important pathological factor. But since Kartulis in Egypt, Osler, Councilman and Lafleur and others in America, Hehir in India, and others have shown that it may be present in the contents and even the wall of liver abscess, it has acquired an additional and weighty claim to be regarded as probably something more than a fortuitous epiphenomenon in certain diseases. That we have in amœba coli the explanation of all or of any of the forms of liver abscess I do not go the length of asserting; but its frequent presence in liver abscess, taken in conjunction with certain other circumstances, must, I think, to say the least, be looked on as extremely significant and calling for extended investigation.

Calmette's suggestion, that the necrosis of the liver tissue resulting in tropical and dysenteric liver abscess is produced by the disintegrating action of toxins absorbed from the surface of dysenteric ulcers, is ingenious; but this view takes no account of the many cases of abscess the formation of which precedes the dysenteric ulceration it may subsequently become associated with, nor of those cases in which dysentery is at no time a feature. It seems to me probable that the immediate cause is the same in every instance. It would be strange if this form of disease, with a geographical distribution so peculiarly limited, should be brought about by a variety of causes, each of which must concur in possessing a similarly limited geographical distribution. It might be asked of a supporter of the amœbic doctrine of liver abscess: Why—assuming that the amœba is the cause—is this parasite not found in every instance? A possible answer to this would be, that the amœba may really be present in every instance at one time or another, but that, like the micro-organism of malaria, it may be polymorphic in character, and that we do not as yet know or recognise all its phases.

Regarded as an abscess, liver abscess is peculiar in many ways. First, in a large proportion of cases, the contents are not pus in the proper sense of that word; they consist principally of blood, detritus of liver tissue, a mucoid material, and usually only a very small proportion of pus proper. Secondly, in liver abscess there is no well-defined abscess wall or extensive infiltration of leucocytes into the surrounding and still living tissues in the earlier stages, nor, in many cases, at any stage; a circumstance which suggests that whatever may have been the cause of the breakdown of the tissues, this cause differed in its mode of action from ordinary pyogenic bacteria, inasmuch that it gave rise to very little, if any, tissue reaction. In fact, liver abscess seems to be more a necrosis than a suppuration.

Thirdly, in a large proportion of cases, the usual pus bacteria are entirely absent. In many instances in which cultivations of liver abscess pus have been attempted the tubes have remained sterile. This fact has been thoroughly made out by several reliable bacteriologists. The latest observations and experiments of this description with which I am acquainted are those alluded to by Dr. Galloway, namely, Calmette's. He found the pus of seven liver abscesses absolutely sterile and free from bacteria. There are now a good many similar observations on record, so that it may be considered as established that usually tropical and dysenteric liver abscesses are sterile as regards the ordinary pyogenic bacteria.

Are we not justified in regarding the peculiar structure and contents, the absence of pyogenic bacteria, and, in many instances, the presence of amœbæ, not only in the contents but in the walls of liver abscess, as being in all probability correlated circumstances? Do not these circumstances suggest that the amœbæ are the cause of those abscesses in which they occur, and of their distinctive peculiarities; that, preying on the liver tissues, they break these down piecemeal and so create the peculiar and characteristic purilage? The frequent and well-known association of liver abscess with dysentery, and of dysentery with amœbæ gives further support to this view.

Up to the present, the data in our possession are insufficient to warrant definite conclusions, but the facts I have mentioned point distinctly to the probability that the amœba is at the bottom of the pathology of many cases of liver abscess. At all events, they are sufficiently striking to make it the duty of pathologists to follow the matter up, and of the practitioner to provide the pathologist with material and carefully observed clinical facts. Whenever a liver abscess is opened

[1] Councilman and Lafleur, *Johns Hopkins Hospital Reports*, 1891.
[2] Calmette, *Archives de Médecine Navale et Coloniale*, 1893.

or explored the contents ought to be examined for amœbæ, and also submitted to cultivation experiment for the detection of other micro-organisms.

This latter may not be always possible for the practitioner to carry through, but it is always an easy matter for him to ascertain the presence or absence of amœbæ. Such an examination is a very simple matter, and requires little skill or special apparatus. A little of the abscess contents is placed on a slide and spread out in a thin layer by pressing on the cover glass. It is then examined with a magnifying power of from 80 to 100 diameters. If amœbæ are present, they are readily recognised as clear, spherical globules, about three or four times the diameter of blood corpuscles, and lying isolated among the blood, pus, and liver detritus. Several fields may have to be scrutinised before they can be found or their absence pronounced on. Under a power of 250 to 300 diameters, on placing the slide on a warm stage, the amœboid nature of these bodies is readily detected. It is well to select for special examination an amœba lying in any islet of clear serum which may be present in the preparation; here the movements are easily made out. In this climate, to elicit the amœboid movement a warm stage is necessary; this fact may be an obstacle to some who would otherwise be willing to make the necessary examination; but a very simple apparatus is all that is necessary. For my examinations I have used a long piece of tin with a hole cut in one end for the transmission of light, a spirit lamp being applied to the other end. No delicate regulation of temperature is necessary. In hot climates a warm stage is not required. As the temperature of the slide approaches 100° F., the amœbæ become very active—not all of them, but most of them. When the temperature falls below 80° F., they become globular and passive, or exhibit only very languid movements. If it be inconvenient to examine the abscess contents in the patient's house, it will suffer nothing by a five or six hours' delay, and may therefore be taken home by the observer and examined at leisure.

The illustration on page 676 conveys a very good idea of the amœba and of its size relative to that of the blood corpuscles usually present in slides of liver pus and dysenteric dejecta, and which, therefore, form a convenient standard of measurmeent. The clear rim of ectosarc which tips the advancing pseudopodium in several of the amœbæ is very characteristic and is well represented. The only points in the figure I would take exception to are the vacuoles which in Lösch's drawing are too pronounced, and the very large number of amœbæ in the limited field—I have never seen them thus crowded together. Perhaps, too, the endosarc is somewhat too deeply shaded. Otherwise the figures conveys a graphic conception of the various shapes the amœba assumes in its movements.

IS DYSENTERY THE INVARIABLE PRECURSOR OF "TROPICAL" LIVER ABSCESS?

BY NEIL MACLEOD, M.D.EDIN.,
Shanghai.

DURING the first years of my acquaintance with liver abscess, its relationship with dysentery seemed to me only occasional. This conclusion was based partly on the literature of the subject and partly on clinical observation, from which alone the answer to the above query would certainly not be in the affirmative. For some years past I have been convinced that the answer to the question should be practically in the affirmative, and that the facts urged against this view—namely, the absence, in certain cases, of a history of bowel disturbance or of ulceration of the large intestine on *post-mortem* examination—have another interpretation. Two recent fatal cases in my practice furnish striking illustration of some of the points connected with this question. It is very generally accepted that multiple liver abscess—portal pyæmia as it is sometimes designated—is secondary to dysentery, but if single hepatic abscess is not to be attributed to the same cause, owing to the absence of antecedent dysenteric history, such causation ought likewise to be denied to multiple abscess, as may be seen from the following case:

A robust well-preserved man of 52 felt slightly ill on October 22nd, and took to bed on the following day. Liver dulness was not appreciably increased on the 24th, slightly increased on the 26th, distinctly so on the 28th, with slight jaundice. Uneasiness in the right side and epigastric tenderness were felt, and the hepatic dulness increased thereafter till it extended from the nipple to the umbilicus. On November 2nd friction could be felt and heard over the lower ribs laterally, and on the following day in the epigastrium. The jaundice deepened daily, and on November 5th a tumblerful of pus was evacuated from an opening made in the right epigastrium. The shock was out of all proportion to the severity or duration of the operation, and death took place in forty-eight hours. There was no history of bowel disturbance before the illness set in as described, but in its course the stools were soft, and, after a purgative, a small quantity of mucus, on one occasion reddish, was observed. *Post-mortem* examination revealed ten abscesses of right and left liver lobes, all larger than a small orange. Between twenty and thirty ulcers, from a-quarter to a whole inch in diameter, were present in the cæcum.

This patient, a man occupying a prominent position, one of the busiest men in the East, was going about neither feeling ill nor suspecting that there was anything wrong with the bowel, hard at work up to the first day of his illness. That dysenteric ulceration occurs without attracting the patient's attention is evidenced by the occurrence of hæmorrhage from the bowel, where no piles, typhoid, or tuberculous ulceration are present, the hæmorrhage being the first thing that attracts notice, and subsequently proofs of dysenteric disturbance are obtained. In a case of the kind noteworthy for its termination—to which Dr. Milles, of Shanghai, allows me to refer—he opened a single hepatic abscess, and death followed in forty-eight hours from bowel hæmorrhage. *Post-mortem* examination revealed ulceration of the large gut and the ruptured vessel. This case had no history of bowel disturbance, and, but for the hæmorrhage and *post-mortem* examination, would have gone to swell the number of single hepatic abscesses not preceded by dysentery. That degrees of dysentery may exist, from the most severe and fatal process to one not apparently interfering with health, is only in keeping with what is known of nearly every other disease that comes under observation.

Yet another class of cases is met with. Ten years ago a man from Pekin came under observation from fever, which was suspected and demonstrated after the lapse of a few weeks to be symptomatic of suppurative hepatitis, and that multiple. There was no history of diarrhœa or dysentery, and *post-mortem* examination of the large gut furnished traces of ulcers in the shape of unpuckered cicatrices. The following case affords absolute proof that the dysenteric process with ulcers may exist prior to the occurrence of hepatic abscess, and that the ulcers may heal before death.

On August 24th commenced a typical attack of dysentery in a man of 26. The stools having lost their dysenteric character, but occasionally containing blood, and there being no piles, on September 19th he was sent north to Chefoo, to escape the Shanghai heat, with a note to a physician there stating that the thermometer gave no evidence of fever, and that there was no sign or symptom of liver disturbance at the latter date. At Chefoo fresh dysenteric trouble manifested itself, and was followed by hepatitis and a hectic type of fever, the latter setting in on September 28th. Aspiration of the liver ailed to reach pus on October 2nd, and at sea on the 13th symptoms of rupture into the peritoneum either of an abscess or of an ulcer of the descending colon were followed by peritonitis. Evacuation of 12 ounces of pus from the liver gave no relief, and death occurred on the 24th, two days after the operation. Examination after death showed a single abscess of the back part of the right lobe of the liver. This abscess had ruptured below, and communicated with an encysted collection of about 6 ounces of pus lying below the left lobe. From this on the extreme left leakage had taken place, causing almost general peritonitis. The colon presented no ulcers, but there were fresh cicatrices.

The ulcers in the colon in this case must have healed subsequent to September 19th, and probably while the hepatitis was going on, since (1) the absence of a history of diarrhœa or dysentery in a case of liver abscess does not negative ulceration of the large gut; (2) in every fatal instance of liver abscess that I have examined after death, some 20 or 30 ulcers or their cicatrices have been found; (3) in the majority of those cases of hepatic abscess that I have seen recover, symptoms of dysentery have preceded the inflammation; (4) "tropical" liver abscess seldom or never occurs except in those who are or have been resident in countries where dysentery prevails; and since (5) an ulcer of the large bowel overlying a vein with an opening in the latter (and this occurs in dysentery occasionally) furnishes conditions which can set up suppurative hepatitis, single or multiple.

I hold that the answer to the heading of this paper should be tropical liver abscess (and by this is meant cases in which the suppurative process is not a part of a general pyæmia,

or connected with gall stones, hydatids, or operative procedure on the large bowel) is the result of dysenteric ulceration.

THE ACTION OF SENECIO JACOBŒA IN THE TREATMENT OF FUNCTIONAL AMENORRHŒA.

By WILLIAM MURRELL, M.D., F.R.C.P.,
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Some years ago I learnt that the common ragwort (senecio Jacobœa) made into tea was extensively employed in many parts of England in the treatment of various menstrual disorders. I looked up the literature of the subject, but could find nothing definite. I found, however, that a closely allied species, the senecio aureus, was employed by the eclectics under the name of "life root" as an emmenagogue. In an old herbal I came across the statement that it acted with such certainty that it was commonly known as the "female regulator."

I had several pounds of ragwort collected and made into a 1 in 10 tincture, and my first endeavour was to ascertain the dose and the quantity which could be taken with safety. I began with half-drachm doses of the tincture in water three times a day, and gradually increased the quantity until I took half an ounce four times a day for a month without producing any effect.

I then began giving it to women suffering from menstrual derangements, and found that it answered well in cases of amenorrhœa. My observations have not been confined to the tincture, for in many cases I have employed a 1 in 1 liquid extract. I have reason to think that this liquid extract was sometimes prepared from the senecio aureus, but I do not think that the substitution of one species for the other is a matter of any importance, as apparently they have the same action. I have also used with good results the active principle known as senecin, a dark resinous-looking substance, the minimum dose of which is 2 grains three times a day.

I find senecio useful in those cases in which the menstrual function, having been performed regularly for some years, has been suddenly suspended as the result of exposure to cold.

L. G., aged 18, commenced menstruating at the age of 14, and had always been perfectly regular. The period usually lasted four days, was fairly profuse, and unattended with pain or discomfort. Six months before coming under observation she took a situation as chambermaid in a country hotel, where she slept in a cold damp room. The menses ceased, and she saw nothing for five months. She was examined, and there were no indications of pregnancy. On May 26th, 1893, she was ordered one drachm of tincture of senecio in water four times a day. On May 29th the dose was increased to two drachms four times a day, and on June 5th to three drachms four times a day. On June 8th the catamenia appeared, and lasted three days. She was given a tonic, and was not seen again.

In the majority of cases the period is not re-established until the drug has been taken for ten days or a fortnight, but in one case the patient, after having missed for two months, came on unwell after six 2-drachm doses. As a rule the patients were given only one drachm three times a day to begin with, the dose being gradually increased. This precaution, however, is unnecessary, and it is perfectly safe to begin with a couple of drachms of the tincture, or 20 minims of the liquid extract four times a day. Either preparation is taken without difficulty, and induces neither purging nor vomiting.

In some cases which were under observation the amenorrhœa was associated with marked anæmia, and then senecio failed. On giving iron the catamenial function was sometimes restored without further treatment, but when the periods failed to make their appearance senecio answered well. In cases of amenorrhœa following parturition senecio answers admirably, provided always that anæmia is not a prominent symptom.

Mrs. B., a stout well-nourished woman, aged 24, had been married three years, and had had three children. She had always been perfectly regular, except when pregnant. The menses ceased in March, and in the following December she was delivered of twins. The labour was not prolonged or difficult, and there were no complications. She suckled the children for a fortnight, and then weaned them. She came under treatment on March 18th, and complained that she had seen nothing since her confinement. She was not anæmic, and there was no history of syphilis. On vaginal examination nothing abnormal was detected, except that both ovaries were tender. She was ordered 20 drops of the fluid extract of senecio three times a day, and came on unwell on March 22nd, the period being profuse and lasting three days.

In another case the patient had seen nothing since the birth of her first child, five months previously. She was suckling the child, and was slightly anæmic. She had no leucorrhœa, and the condition of the uterus was normal. She was given a drachm of the tincture four times a day for four days, and the dose was then increased to 2 drachms twice a day. After taking four doses of the stronger mixture the catamenia appeared and lasted four days.

In cases in which the menstrual period has never been established senecio is sometimes useful.

C. G., an ironer, came to the hospital on February 25th, 1893. She stated that she had never seen anything, but every month had a severe pain in the back and stomach, which lasted two or three days. The pain was always followed by bleeding from the mouth and gums. The hæmorrhage lasted only for a few minutes, but it occurred several times a day for three or four days, and always came on immediately after the pain and at the same time every month, the last time being on February 14th. The breasts were well developed and there was hair on the pubes. On February 25th, 1893, the patient was ordered a drachm of the tincture in water three times a day. On March 1st, this was increased to 2 drachms three times a day, and on March 11th to 2 drachm four times a day, which was continued until April 3rd, when, after three days of acute abdominal pain she came on unwell, the period lasting one day. The pain on this occasion was not accompanied by the usual bleeding from the mouth. The medicine was discontinued immediately on the appearance of the period, but was resumed in 2-drachm doses four times a day on April 8th. On April 19th she came on unwell quite unexpectedly, the period lasting two days, being much more profuse and again being unattended with bleeding from the mouth. This case is satisfactory, but the drug should not have been discontinued quite at the commencement of the menstrual flow, and it should not have been resumed until a week or so before the expiration of the month.

In another somewhat similar case the patient, a girl of 17, was regular, but the menses were scanty and at each period she spat blood three or four times a day. She said it was bright red blood and that there were several mouthfuls each time. Her chest was examined but nothing abnormal was detected. Her next period was due in a fortnight. On June 19th she was ordered 2 drachms of the tincture three times a day, and this she took without intermission until July 2nd, when she came on unwell. The flow was much more profuse than it had ever been before and there was no spitting of blood.

I am satisfied that senecio not only anticipates the period but that it also increases the quantity. In many cases it relieves the accompanying pain and not infrequently the headache from which some women suffer at those times. In one instance the administration of the drug was coincident with the disappearance of a profuse leucorrhœa from which the patient had suffered for many months.

I have not attempted to give any numerical results of my observations, for figures, especially when accumulated slowly and at long intervals, are apt to prove misleading. There is, I think, very little doubt that we have in senecio and its preparations a drug which deserves to rank with permanganate of potassium and binoxide of manganese in its power of stimulating the menstrual flow.

A CASE OF PERIPHERAL PARALYSIS FOLLOWING VARICELLA.

By WILLIAM GAY, M.D., M.R.C.P.,
Late Clinical Assistant Great Ormond Street Hospital for Sick Children, and the National Hospital for the Paralysed and Epileptic, Queen Square.

The late discussion at the Medico-Chirurgical Society upon paralysis following measles and other exanthemata induces me to put on record the following case of paraplegia immediately succeeding an attack of varicella. It does not conform to the type of nerve lesion, which was then chiefly considered, since the area of nerve disturbance was definitely localised, and the affection, after a sudden onset, ended in a comparatively brief space of time in complete recovery. It is, nevertheless, of some little interest, for with the exception of the so-called varicella gangrenosa that affection is usually considered of the slightest importance, and free from any complications or sequelæ. I have myself been unsuccessful in finding recorded any undoubted case of nerve affection following chicken-pox, and the fact that both Ross and Gowers in their handbooks omit all reference to such an association proves it to be of extreme rarity.

S. B., aged 2 years 5 months, was brought to Great Ormond Street Hospital for Sick Children on account of a difficulty in walking. The family history was quite unimportant. The patient was one of three children, of whom the eldest was 4 years and the youngest 10 months. All were robust, and none had suffered from any of the neuroses of

infancy. They had all been successfully vaccinated, the patient in three places. Six and a-half weeks before the patient was first seen, the three children developed chicken-pox at about the same time. The attack was of moderate severity in each case, and the eldest and youngest children completely recovered. The patient, however, who lived under exactly the same conditions as the others, and had been exposed to no other influences, so far at any rate as I was able to discover, was found one morning, a fortnight after the onset of the varicella, to be completely paralysed in his lower extremities. The evening before he seemed in his usual condition of health, and his mother feels certain that no attack of convulsions occurred during the night, or indeed at any other time. A few crusts of the original disease still remained when the paralysis occurred. A doctor was sent for, and found that he could stick a pin into the soles of his feet without producing any pain. Beyond this, however, he did not seem to have made any very thorough examination, so that it was impossible to obtain any important particulars concerning the acute stage of the affection. The arms could be moved about as freely as before, and at no time is it likely that either the face or they were ever affected. There was no history of regurgitation of fluids through the nose, or dilatation of the pupils, and the speech remained unaffected from the first. There was, in addition, no reason to suppose that the patient had suffered from any sore throat at the time, so that the possibility of diphtherial paralysis may be placed on one side. For three weeks the paralysis remained complete, and the child apparently made no effort to move his lower extremities, which remained extended on the bed flaccid and motionless. Nine days afterwards he made his first attempt at walking, and two days after this he was brought to hospital, when he was encouraged to walk a few yards. His steps were short, and made with the greatest circumspection, with widely separated legs. In fact, the general character of the gait was decidedly ataxic, although there was a considerable amount of shuffling of the toes, on account of a preponderating paralysis of the extensor muscles. It is practically impossible to obtain any very accurate observations in children in regard to disturbances of sensation, but in the present case a large amount of sensory disorder was undoubtedly present, for very severe pinches of the legs evoked no muscular response, and the child was perfectly indifferent about them, however energetically they were made. Over the abdomen, however, a pinch caused immediate wincing, but over the upper part of the thighs it produced only a slight reaction. According to this rough test, therefore, it is evident that painful impressions failed to be conducted from the feet, legs, and lower third or thereabouts of the thighs. There was a general weakness of all the muscles of the lower limbs, but the extensors generally were clearly the more profoundly affected. There was no apparent wasting of the limbs, and the muscles were not more flabby than would have been accounted for by the length of the illness, but no electrical examination was made. The knee-jerks and plantar reflexes were absent. The cremasteric were certainly affected, for they were obtained with the greatest difficulty; whereas, in children, they are as a rule exceedingly brisk, and may actually be sometimes obtained by tickling the calf of the leg. The abdominal reflexes were very brisk, and this fact, considered with the quick response to pinching over the skin of the abdomen, renders it probable that the lesion was entirely restricted to the lower extremities. There was no history of retention of retention of urine or of incontinence of the bladder or rectum. The pupils were equal, moderately contracted, and reacted normally; there was no history of strabismus, and the fundi were normal. The boy was plump and well nourished, but there was a considerable excess of fatty tissue all over the body and the face had that "pasty," unhealthy appearance which so often accompanies abnormal adiposity. Only sixteen teeth had been cut, and there were in addition other signs of a slight degree of rickets. There was nothing of any sort to excite a suspicion of congenital syphilis. The spine was quite normal, except for a slight bulging of rachitic origin. The child's progress to complete recovery was rather slow, and his knee-jerks remained absent as long as he remained under observation—two or three months—at the end of which time he could walk fairly well.

Remembering the rarity of nerve affections after varicella, and their comparative frequency after variola, one might be tempted to question the diagnosis of the exanthem. All the children, however, had been vaccinated, and none of the adult members of the house had taken the affection. The general character of the rash (vesicular), the slight amount of constitutional disturbance, which was almost *nil*, and the pigmented areas of the healed vesicles, all point conclusively to varicella as the original affection. The sudden onset of the nervous symptoms, before the crusts had completely disappeared, strongly suggests that the varicella and nerve disorder were related as cause and effect; but to what extent other conditions, if any, were also responsible, it is impossible to decide. The child's bill of health previously had been a clean one, with the exception of the rachitic tendency, which, although predisposing to functional nerve disorders, has not yet been shown to have any part in the production of organic nerve lesions. Why this particular child, therefore, of all those who have had varicella, many of whom must have existed under almost identical conditions of existence, should alone, or as one of very few, have developed an affection of the nervous system must remain a mystery.

It is especially difficult in a child to arrive at an exact diagnosis in some cases of nerve disease, as it is impossible to make use of many data, which are almost indispensable, in making an attempt to arrive at a correct solution. One of these observations—the electrical reactions of the muscles—would have proved of infinite value in making a diagnosis in the present case, but in young children it can only be thoroughly carried out under chloroform, the administration of which, it seems to me, is only justifiable when some conclusion of importance to the individual depends upon the result obtained; it was therefore omitted in the present case. The other symptoms, however, are sufficient to enable one to arrive at a diagnosis of peripheral paralysis, though perhaps they cannot be said to establish it beyond the possibility of doubt. The sudden onset of the symptoms is rare in peripheral paralysis, but not unknown, whilst the loss of knee-jerks, absence of superficial reflexes, the motor and sensory symptoms, the absence of incontinence of urine and fæces, all tend to support this diagnosis. The presence of slighter degrees of muscular wasting is not so appreciable in the young child on account of the comparatively large amount of fat present, and our patient was clearly of the fat rachitic type.

The alternative diagnoses are infantile paralysis, which, however, is inconsistent with the sensory disturbances, and myelitis. If the latter condition had existed, there must at one time have been a very considerable affection of the whole lumbar enlargement, and it is difficult to understand how the organic reflexes could have entirely escaped in such a case. The knee-jerks, too, would probably have been exaggerated, and ankle clonus readily obtained. Reflex paralysis need only be mentioned to be dismissed, if only on account of the undoubted presence of organic symptoms, whilst pressure paralysis, as from caries of the spine, is out of the question for the same reasons, which render the diagnosis of myelitis almost impossible. By the process of exclusion, therefore, as well as by direct evidence, the diagnosis of peripheral paralysis appears to be by far the most probable, although the symptoms form a by no means perfect clinical picture of the disease. For example, it is extremely rare to find any interference with the transmission of painful impulses in the course of peripheral neuritis, but, although pinching is a very rough-and-ready manner of testing that sense, the complete absence of any result in the case of the legs, and the diminished reaction in the thighs, as compared with the rest of the body, show that really there must have been a very considerable interruption in the conduction of painful impressions. The diagnosis, therefore, must be left open to a certain amount of doubt, and Gowers,[1] indeed, in speaking of this subject, says that "the distinction of the central or peripheral nature of many cases is very difficult."

The entire limitation of the symptoms to the lower extremities is another rare feature of the disease, but Dr. Buzzard[2] records some very interesting cases of paraplegic multiple neuritis in the course of his Harveian lectures for 1885. Peripheral neuritis, as a rule, is much less seldom met with after or during the course of the exanthemata than are the various forms of cord affection; and indeed, when it does happen to be so related, it is often unsymmetrical, and picks out by preference some particular nerve in the arms or legs. Two cases, however, are recorded by Surmay,[3] in which both peroneals were symmetrically affected after typhoid fever, and I have myself seen a case of partial paraplegia, of apparent peripheral origin, arising during convalescence from the same disease.

My thanks are due to Dr. Abercrombie for allowing me to publish this case, which came under my care during the time I was his clinical assistant at Great Ormond Street Hospital for Sick Children.

[1] Gowers, *Diseases of the Nervous System*, vol. ii, p. 825, first edition.
[2] Buzzard, *Paralysis from Peripheral Neuritis*, p. 95.
[3] Surmay, *Archiv. Génér. de Méd.*, t. i, 1865, p. 678.

Drunkards' Exhibition.—The promoters of the Drunkards' Exhibition, says the *Edinburgh Evening Dispatch*, are making frantic efforts to gather together a few people to form a committee to enable the Yankee "Dr." and his London agents to boom his so-called "cure." The reply of "B. W. Hair and Son" to our articles has been printed and circulated at the expense of the Edinburgh Total Abstinence Society, the Secretary's name being appended to an official appeal on behalf of the exhibition. Have the members of the Society given their sanction to their funds being used in this extraordinary fashion?

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

LARGE DOSES OF ANTIFEBRIN.

The inquiry regarding the ill-effects following the use of antipyrin, etc., in the British Medical Journal of January 13th, reminds me that a few years past, when I tried antifebrin in a case of sciatica, I myself was the sufferer, and, having tried nearly all the modes of treatment in vogue with only temporary benefit, I read of a case of sciatica in the Journal which somewhat resembled my own, inasmuch as the ordinary methods of treatment employed proved of little use. This patient was under the charge of Dr. Austin Flint, of New York, and, as I well remember, it was stated he left hospital cured after two doses of antifebrin of 20 grains each. Though very willing to try any drug which might effect a cure, I must say when I read of the alarming symptoms produced by those two large doses—namely, cyanosis and asphyxia, necessitating the employment of artificial respiration, and other means to restore the patient—it seemed to me a case of kill or cure, and I was not quite prepared to make a selection, troublesome though the sciatica was at the time.

Thinking, however, that the drug might give some benefit without pushing the dose to dangerous limits, I began to take it in 5-grain doses, but it produced no effect, either physiological or therapeutical. On repeating the same dose at intervals of three hours no effect was still noticeable. Not wishing to abandon the drug as useless, I increased the dose gradually till it reached 20 grains, but, to my astonishment, it still had no effect. I may add that 5 grains out of the same bottle of antifebrin produced copious diaphoresis in a patient suffering from fever, so that there could be no possibility that the medicine I took was antipyrin, or other drug instead. Besides, I saw the bottle and had the medicine weighed before me. After this I took to repeating the dose cautiously, and only noticed the physiological effects of the drug, namely, slight difficulty of breathing, fulness and throbbing in the head, but no diaphoresis after two doses of 20 grains each, separated by an interval of not more than three hours. The symptoms were anything but alarming, and did not prevent me moving about; but though I met several people when in this condition only one person remarked any flushing of the face or unnatural colour.

Those who are 'engaged in investigating the ill-effects of antifebrin may, perhaps, be interested to learn what large doses of this drug can occasionally be taken with impunity; and as it is not recorded, as far as I am aware—except in the case of Dr. Austin Flint's patient—that anybody has taken as much as 40 grains in two doses at an interval of three hours, my experience may be of interest.

R. J. Macnamara, M.D.,
Surgeon-Captain I.M.S.

Multan, Punjab.

ACUTE INFLAMMATION OF THE ANTRUM OF HIGHMORE AFTER INFLUENZA.

Some weeks ago a case was sent to me to treat at the Central London Throat, Nose, and Ear Hospital, by Dr. Ezard, of St. John's.

The patient, a young woman, aged 20, had been attacked with influenza about six weeks previously to presenting herself at the hospital. On the subsidence of the acute stage she suffered severely from toothache, which involved the first and second bicuspid teeth in the right upper jaw; subsequently she experienced severe pain, with swelling of the right cheek, which somewhat subsided on occurrence of a yellow and rather thin discharge from the right nostril.

After removal of the first bicuspid the antrum was opened through the socket, the cavity was curetted and syringed out with a weak antiseptic solution, and the hole kept open by a hickory-wood plug.

The cure was complete in a few days, thus distinguishing it from cases of a chronic nature, the characteristic of which is their strong resistance to treatment. This was not the first example of acute inflammation of the antrum which I have seen, and now that attention has been drawn to the subject, the malady will in all probabily be found to be less rare than has been hitherto considered.

Lennox Browne.

Mansfield Street, W.

A CASE OF CONGENITAL ANOPHTHALMOS.

B. C., aged 6 months. The left eye was perfectly normal, but the right was represented by a small stump of what appeared to be fibrous tissue, which moved in harmony with the left. There was a good conjunctival sac, and the eyelids, eyelashes, canaliculi, tear passages, and glands were normal. The peculiar appearance was noted immediately after birth. Inquiry into the family history showed that the father was healthy and presented no abnormality, though the mother had marked convergent strabismus, the right eye being convergent. There was one other child with normal eyes.

C. Ramage, M.D.,
Late House-Surgeon Manchester Royal Eye Hospital.

Great Russell Street, W.C.

EPIDEMIC JAUNDICE.

Seeing the interesting communications in the British Medical Journal of March 10th on the above subject leads me to record some cases which may perhaps be similarly classed.

During the month of July last I attended some twelve or fourteen cases of simple catarrhal jaundice, all occurring in one small village, and all in children ranging from 4 to 12 years of age. Four of these cases passed round worms, and all yielded to simple treatment. The water in this particular village was at the time scanty, and quite unfit for drinking purposes. Upon my recommendation, most of the villagers either boiled or filtered their drinking water, after which no fresh cases occurred.

Alfred H. Holmes, M.B., B.Ch., B.A.O.

Steeple Aston, Oxon.

COMPOUND FRACTURE OF THE TIBIA AND FIBULA BY MUSCULAR ACTION.

There are a few cases recorded, and they are somewhat indefinite, of fracture of the tibia and fibula by muscular action, but this is one caused by a twist.

J. H., aged 47, height 6 ft. 1½ in., was playing cricket, and in order to get out of the way of the ball, which was coming at his leg, gave a twist round and heard a snap. He did not fall down, but leant on his bat, and called out that his leg was broken. It began to bleed, and he was laid down carefully on the grass, and the bat was secured to the injured limb. On admission to the infirmary, it was found that he had sustained a compound fracture of the tibia and fibula, which was put up in the usual way. In three months' time he was able to do without any bandage, and is now walking about as usual. J. H. is a very healthy man, and there is no ground for suspecting any constitutional disease.

William Fairbank,
Hon. Surgeon to the Windsor Royal Infirmary.

Windsor.

CEREBELLAR TUMOUR: FAILURE OF RESPIRATION.

I have read with much interest the case of cyst of the cerebellum and death from failure of respiration, reported by Drs. J. Hughlings Jackson and J. S. Risien Russell in the British Medical Journal of February 24th. It has recalled to my memory a case of cerebellar tumour and failure of respiration which occurred in this Infirmary fifteen months ago.

J. B., aged 42 years, admitted under Dr. Carter, suffering from cerebellar tumour. One evening I was called to see him in the ward and found him in a state of profound coma; a few minutes later he stopped breathing: but his heart was still acting (140 per minute); artificial respiration was at once commenced and continued for three hours and a-quarter; at the expiration of this time he commenced breathing naturally, and it was no longer necessary to perform the artificial respiration; a few days later he was as well as before the onset of the coma, and was able to walk with assistance; he died eight weeks afterwards from asthenia, and the cerebellar tumour was verified at the *post-mortem* examination, occupying the left lateral lobe.

J. F. Atkins, M.R.C.S., L.R.C.P.,
Resident Medical Officer, New Infirmary, Birmingham.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

FRENCH HOSPITAL AND DISPENSARY, LONDON.

A CASE OF ABSCESS OF THE LIVER.

(Reported by LOUIS VINTRAS, M.B., B.Sc., L.R.C.P., M.R.C.S., Resident Medical Officer.)

J. G., an Alsatian governess, aged 25, was admitted, under the care of Dr. Vintras, on June 23rd, 1893, with great pain in the right side over the region of the liver. She had been ill for a fortnight previously, and had kept her bed for ten days. On admission she had a temperature of 102.1°; her respiration was somewhat shallow, on account of the pain; the face was flushed, the tongue coated, the pulse 120; there was a marked fulness over the right hypochondriac region, extending across the middle line, and great tenderness.

The next morning the temperature was 101.1°, the pain was somewhat less, but the patient was slightly jaundiced. She had continuous vomiting, being unable to retain any nourishment; this symptom had been present for three days before admission. The tongue was very bad, and the breath offensive. During the afternoon the bowels acted, the motion being loose, dark, and smelling very bad; in the evening the temperature was 102.1°. From the first an abscess of the liver was suspected, but there were as yet no definite signs. On the third day after admission the temperature was 100.1° in the morning, and 101.1° in the evening. The vomiting had now ceased, and the patient was able to take and retain light nourishment. There was a fulness of the abdomen generally; the redness and tenderness over the right hypochondriac region had increased; at night the patient, however, slept at frequent intervals. On the fourth day the morning temperature was 99.4°, evening 101.2°; pulse 120; the bowels acted in the morning. For the next four days the temperature varied from 99° to 101°, the pulse from 116 to 124; the bowels acted regularly, and twice the patient vomited a small quantity of bile. On July 1st the temperature suddenly fell to normal. There was now a distinct elastic sensation on palpation over the liver region. Sir William Mac Cormac was asked to see the patient, and made a preparatory incision over the anterior border of the liver, at the outer edge of the rectus abdominis, dividing the peritoneum, and exposing the surface of the organ. The peritoneum was then notched all round the wound, and the latter plugged with iodoform gauze; the point in view being to get adhesions of the peritoneum around the opening before proceeding. The same day the patient lost a large quantity of peritoneal fluid through the wound, the dressings having to be changed continually. This went on for six days, the escape of the fluid preventing the adhesions forming. During this time the patient took her nourishment well, was comparatively free from pain, the bowels acted regularly twice a day, and the temperature remained about normal. The pulse was good.

On July 7th Sir William Mac Cormac punctured the liver with a trocar through the wound, when pus escaped. He enlarged the opening with a probe-pointed bistoury, and evacuated a large cavity situated an inch below the anterior border, removing over 30 ounces of pus. The pus was thick, yellow, mixed with dark blood and broken-down tissue. The cavity was well syringed out with a solution of carbolic acid, and two large drainage tubes inserted. The wound discharged a great deal on the subsequent days. For two days the general condition of the patient improved, but on the third day the jaundice increased, the cheeks became flushed, the tongue dry. The temperature, however, remained normal.

On July 11th the vomiting began again, and continued very troublesome for three days. The pain also reappeared, the patient was very restless, there was great thirst, and the discharge from the wound increased.

On July 13th the vomiting ceased, but the weakness was now extreme, the pulse slow and feeble. The next day she became delirious, the expression of the face was pinched and anguished, the tongue hard and brownish on the surface, the lips and gums covered with sordes. The patient died from exhaustion on July 16th.

At the *post-mortem* examination the next day the liver was found adherent to the abdominal walls and to the diaphragm. The organ was not much enlarged. There was an abscess cavity at the site of puncture, which led by various sinuses into a huge irregular abscess cavity occupying all the remainder of the right lobe, and still containing over a pint of pus. There was hardly any liver substance left in the right lobe. The left lobe was much jaundiced, but not otherwise affected. The gall bladder was adherent, but healthy. There was no peritonitis.

SHEFFIELD UNION INFIRMARY.

A CASE OF PUERPERAL ECLAMPSIA FOLLOWING LEAD POISONING.

(By ERNEST E. WATERS, M.B.Edin., House-Surgeon.)

THE patient, a single woman, aged 19, came to me on November 15th, 1893, complaining of feeling drowsy and of having had a fit. Seeing her condition (she was expecting her confinement at the end of November) she was at once admitted into hospital.

Previous History.—When about 5 years of age she had an attack of scarlatina; no history of nephritis at that time can be obtained. At the age of 15 she began to work in the lead mills and in three months contracted lead poisoning. During the last four years she has suffered several times from the same complaint, the last attack, twelve months before admission, being a particularly severe one. The patient stated that she had had fits for two days, was unconscious for five days and was blind for three weeks. From this she gradually recovered, her convalescence lasting about eight weeks.

State on Admission.—The temperature was 98°. She was a well-nourished girl of a sômewhat phlegmatic constitution. The urine showed copious albumen. She was ordered 15 grains of bromide of potassium every four hours, milk diet, aperients, and diaphoretics. She was extremely drowsy, but could be roused when spoken to.

On the morning after admission the temperature rose to 100°, fell in the evening to 98°, and rose a little the following morning. Coma was deeper and the conjunctiva was insensible. At 2.30 P.M. on November 17th, 1893, as preparations were being made to examine her, an epileptiform seizure came on. The eyelids blinked violently, the limbs became rigid, and the face cyanosed. The jaws were firmly clenched. Whilst being removed to the maternity ward (2.50 P.M.) she had another similar attack.

Chloroform was administered, and the os felt to be very slightly dilated and fairly soft. At this stage ℥j of glycerine (as recommended by Professor Simpson, of Edinburgh) was injected into the cervical canal, with the object of bringing on labour and softening the parts. The chloroform was stopped about 3.30 P.M. At 4 P.M. there was a third fit, and morphine gr. ⅓ was injected. The fourth fit was at 4.30 P.M., the fifth at 5 P.M., the sixth at 5.20 P.M. At this time the pulse was 72, and the respiration 24. The seventh and most severe fit was at 5.50 P.M., the pulse being 136. Chloroform was again administered, and at 6.20 P.M. a sponge tent was introduced. Dr. Hunt, arriving at that time, dilated forcibly with the fingers, and removed the child by forceps at 6.45. (Urine to the amount of ℥x was withdrawn. The temperature was 97.4°.) The child was apnœic, but recovered. The mother had some *post-partum* hæmorrhage, and there was difficulty in securing firm contraction of the uterus.

The patient did not regain consciousness till November 20th, and stated that the five days from her admission were a complete blank to her.

On November 20th the temperature rose to 101°, pulse 112.

November 22nd. Temperature 102.6°, pulse 140.

November 24th. Temperature 99°, pulse 88.

The urine had to be drawn off with a catheter; and from November 18th to 23rd contained no albumen. On November 23rd a trace of albumen was present.

The patient on November 24th was very lively, said she felt quite well, and asked to get up. She was discharged from hospital on December 13th quite well and with no albuminuria.

The chief interest of the case seems to lie in the previous history of lead poisoning and in the use of glycerine. Under its influence the os dilated readily under the fingers within three hours and a-half of the injection.

REPORTS OF SOCIETIES.

British Gynæcological—*March 8th*—Dr. SAVAGE, President, in the chair.—Mr. BOWREMAN JESSETT read notes of three cases of vaginal hysterectomy, and showed the specimens: (1) adenoid carcinoma, (2) a uterus studded with fibromyomata—it was considered that treatment by removal of the appendages would not relieve the pain; (3) a large cauliflower epithelioma of the cervix; all three patients recovered.—Dr. PURCELL read notes of three cases of vaginal hysterectomy, and of a case of supravaginal amputation of the cervix, and showed the specimens; all four operations were undertaken for cancer; three of the patients recovered.—Drs. PARSONS, LEITH NAPIER, R. T. SMITH, LYCETT, HEYWOOD SMITH, and O'CALLAGHAN took part in the discussion; Mr. JESSETT and Dr. PURCELL replied.—Mr. CHRISTOPHER MARTIN (Birmingham) showed a testicle removed from a hermaphrodite. The patient, apparently a woman, came to the hospital complaining of amenorrhœa. Externally she had female characteristics; the "vagina" was ¾ inch, and no uterus was felt. In the left groin was a solid body, regarded as an ovarian hernia, and which caused much pain. Operation was advised, and the body removed proved to be a testicle. The patient had a sister presenting much the same features. During the conception of these two children the father was insane; the children born before and after these two were healthy.—Drs. LYCETT and LEITH NAPIER made remarks.—Dr. MACNAUGHTON JONES read a paper entitled "A Gynæcological Question of Importance in Forensic Medicine relating to the Hymen." The special subject considered was the "folding hymen." By this term the writer described the condition in which the hymen was of the normal appearance seen in virgins, but capable of a considerable dilatation when a finger was introduced into the vagina, and becoming folded back in tubular form, resuming its ordinary position and appearance when the finger was withdrawn. Examples were given to illustrate the medico-legal questions to which such a condition might give rise. Other causes that sometimes led to an erroneous judgment were the occurrence of "vulval intercourse," intercourse *per urethram*, and the condition described by Skene of New York as "hymen fimbriatus."—In the discussion which followed the PRESIDENT, and Drs. PARSONS, HEYWOOD SMITH, A. E. BARRETT, PURCELL, LYCETT, ELDER, and RASCH took part, and Dr. MACNAUGHTON JONES briefly replied.

North London Medical and Chirurgical—*March 8th*—Dr. HENTY in the chair.—Dr. PATRICK MANSON read a paper on some points in the diagnosis of tropical diseases seen in London. He first considered the subject of malaria. The appearance and course of development of the blood parasite of malaria was described and demonstrated. The occurrence of the crescentic and flagellated forms of the organism was mentioned, as seen in certain varieties of malaria. The ease with which the now well ascertained forms of the organism could be demonstrated was considered to be an important advance in diagnostic methods at our disposal. Dr. Manson proceeded to mention the species of larvial filariæ found in the blood, and spoke of their discovery in the blood as of great importance as an element in the differential diagnosis of certain diseases of the lymphatic circulation which had been mistaken from time to time for herniæ, abscesses, etc. The occurrence of the distoma pulmonale was next alluded to. The recognition of the ova in hæmorrhagic expectoration was a matter of great importance as a differential element in diagnosis. The frequency of aneurysm of the thoracic aorta in regions where syphilis was rife, and opportunities for treatment and care few, rendered it specially important to recognise the hæmoptysis of pulmonary distomiasis from the expectoration caused by a perforating thoracic aneurysm or other condition. The appearance of the bilharzia hæmatobia was drawn attention to, its significance in cases of tropical hæmaturia and its diagnostic and prognostic value. The escape of the ciliated embryo from the ovum was described, and the method most suitable for its demonstration. This paper was illustrated throughout by microscopic preparations and lantern slides.—Mr. EVAN JONES described a case of extrauterine gestation, in which rupture occurred at the end of the ninth week. On being called to the patient she showed symptoms of severe hæmorrhage and great collapse. The diagnosis having been promptly made, and Dr. William Duncan's advice having been obtained, abdominal section was performed. A large quantity of blood in the abdominal cavity being removed, a tubal pregnancy was found to have existed; means were taken for the removal of the fœtation with the corresponding ovary, hæmorrhage was then thoroughly controlled. The patient was now perfectly well.

On Easter Eve, in St. Thomas's Hospital Chapel, an altar and cross were dedicated to the glory of God, and in memory of Agnes Murray, a regular worshipper in St. Thomas's Hospital Chapel from 1880 to 1887.

MR. T. REUEL ATKINSON, of Sherborne, has been presented by the members of his male ambulance classes held in that town with Cassell's *World of Wonders*, in two volumes, and a large framed photographic view of Sherborne.

MEDICAL MAGISTRATE.—William J. Weldon, M.D., of Gorey, has been appointed a Justice of the Peace for the County Wexford.

REVIEWS.

THE DWELLINGS OF THE PEOPLE. By T. LOCKE WORTHINGTON, A.R.I.B.A.; with an introduction by G. V. POORE, M.D., F.R.C.P. London: Swan Sonnenschein and Co. (Cr. 8vo, pp. 180. 2s. 6d.)

THIS book touches on a wide range of subjects more or less connected with the dwellings of the people. Perhaps the portion which deals with the possibility of distributing the population over larger areas, and providing detached and semi-detached cottages with allotments, situated not far from suburban railway stations, for the 300,000 artisan citizens of London, may savour more of the enthusiast than of the practical man of business; but all the rest of the book, dealing as it does with facts and embodying a wide and carefully-collated experience, is worthy of the most thoughtful perusal and consideration.

Mr. WORTHINGTON has put together in a readable form and within a small compass a description of the different kinds of dwellings occupied by the industrial classes in Great Britain, indicating the points in which they are deficient and suggesting those in regard to which care should be taken in future buildings. He has also introduced some very interesting information concerning recent developments of similar classes of building in France.

Great emphasis is laid on overcrowding as a constant cause of increased mortality and impaired health, especially when, as is now the case in our large towns, overcrowding means not only getting more people into the houses, but putting more houses on the site. The height to which such buildings can be carried is a serious matter. "The extreme limit of height of any new London buildings, which necessarily applies to streets laid out before August, 1862, is ninety feet," which legal limit "is from the footway to the top of the external wall, and does not include two storeys permitted in the roof; so that as regards circulation of air the limit is over a hundred feet. Fortunately the height of dwellings is otherwise controlled by the rights of adjoining owners." The recommendation of the committee of the London County Council—namely, that any building rebuilt so as to be higher in any part, or to extend further in any direction than before, should be subject to the Building Acts and Local Management Acts; and that no building should be made higher, measured up to the parapet and eaves, than the width of the street would, if adopted, usefully regulate the height of the buildings according to the open space in front. But a similar rule should certainly apply behind, and Mr. Worthington shows by a diagram how, in regard to block dwellings, a general rule that all buildings should stand below a line drawn at 45° from the sill of the windows on the ground floor of the buildings on the opposite side of the adjoining street or area, would act in regulating the number of people who could be crowded on to any given area. The higher the buildings the wider the surrounding air space. That some such regulation is necessary is evident from the statement that there now are in London block dwellings five storeys high and fronting on streets only 19 feet wide, the courtyard between the backs of the blocks being only 12 feet wide, rendering the rooms on the two lower floors almost dark at midday.

Among the difficulties in planning block dwellings is that of getting through ventilation, without which they participate in all the evils incident to back-to-back houses. If an outside gallery is allowed as in some buildings the problem is simplified, but otherwise the desire to make one staircase serve for more than two dwellings on each floor seems to drive architects to sanction arrangements in block dwellings which have long stood condemned in all classes of buildings.

One of the great evils of the tenement houses, as they at present exist in London, is that the great mass of them were originally built for single families and have since been broken up into tenements, with a family in each room, or, at at any rate, several in each house. The result of this is that the water supply and closet arrangements are entirely inadequate for their new purpose, and that, as regards cooking appliances and every convenience for decent living, these converted houses are lamentably deficient.

There can be no doubt that the author is right in saying that houses built originally for another purpose should either be carefully altered or pulled down.

The most reassuring part of the book is that which sketches out the laws which already exist for the regulation of the dwellings of the working classes. These are chapters which should be read carefully and taken to heart by all members of vestries and public bodies acting as sanitary authorities. It is clear enough that, at any rate in the metropolis, there is plenty of power to abolish all unhealthy dwellings if the law were but firmly and energetically administered.

The landlords are responsible for the condition of the houses which they let, and a closing order can at any time be issued in regard to any house which is unhealthy. Unfortunately, unless the tenant himself takes action, which, in nine cases out of ten, he will not do, the vestry has to be the moving power. Even for such progress as has been made Londoners little think how much they owe to the energy and vigilance of their medical officers of health—the one single influence for good, it is to be feared, in many vestries.

Traité Clinique de Dermatologie. Par le Dr. H. Tenneson, Médecin de l'Hôpital Saint Louis. Paris: Octave Doin. 1893. (Med. 8vo. pp. 496, 10 fr.)

Specialism in medicine has been shown by statistics to be extraordinarily prolific in books, and the great weakness of most of these books on special subjects is that they are nearly all more or less compilations. No such criticism could be applied to Dr. Tenneson's work. Straight from the mind of the author, it describes what he has himself seen, and in almost every page his pungent criticism shows how much this branch of medicine has become overlaid by prejudice and tradition. Dermatologists as a class, and members of the profession in general, will equally benefit by perusing this book. The former will see how little scientific basis there is for a large part of their routine practice, whilst the latter, instead of being worried and bewildered by a mass of formulæ and alternative methods, receive plain simple directions for treatment, given with the confidence and authority which are based on the rich experience of the author.

Eczema is by far the most important skin disease from the practical point of view, and the author, who puts it in the front of the volume, begins by stating that "its cause is unknown, and its histological lesions are common to other affections of the skin." Although a disease attended by great itching, *the lesions of scratching are not found*, and when these are present we must examine for itch, lice, prurigo, or dermatitis herpetiformis. He regards dry seborrhœa of the scalp as an eczema, and as the cause of most cases of premature baldness. He also includes the *pityriasis rosé* of Gibert amongst the forms of eczema, regarding it as a remarkable form of desquamating eczema in disseminated patches. Eczema is usually described as vesicular in one of its forms. Dr. Tenneson truly remarks that the vesicle is very seldom seen, and that when vesicles are observed we must consider whether it is a case of scabies or artificial dermatitis due to stimulating baths or unsuitable local applications. Dr. Tenneson has strong ideas regarding the influence of diet, not only as a provoking cause of eczema, but of every disease of the skin: although with him it is not a question of the injurious effect of special articles of food, but of the quantity eaten. "Many people," he tersely observes, "because they have a good appetite, think they have a good stomach; and manufacture daily in their overloaded digestive tracts toxic substances which, after they are absorbed, excite abnormal effects, both in the skin and all the other organs of the body." His dietetic rules for eczema, therefore, consist simply in restricting the quantity of food taken, particularly the midday meal. His rules of treatment for eczema are eminently practical. Baths should be forbidden, or diminished as much as possible. As regards drugs taken internally, several are injurious—none are useful. The eczema which is frequent in diabetic people leads him to remark, regarding the diet for diabetics and the necessity for relaxing strict rules as soon as the general health suffers, that men cannot live indefinitely on albuminoid and fatty substances, and that this exclusive *régime* is one of the most active causes of diabetic coma.

His local treatment consists in allowing or provoking the eczema to ooze as long as possible. Topical remedies which transform an oozing into a squamous eczema prolong the duration of the disease. In order to provoke a continued oozing without causing irritation, he envelops the affected parts in an impermeable tissue, particularly by india-rubber. The india-rubber cloth must be frequently changed and cleaned in order that the exuded fluid may not become a source of irritation. Under the india-rubber this fluid is never purulent. In irritable eczema, particularly in young children, it ought to be at first changed every two hours, then gradually less and less frequently, until it is changed only three or four times a day. As soon as itching commences the covering should be changed or cleaned. The tissue ought to be delicate, and applied so smoothly as to cause no folds. This treatment is continued as long as there is any exudation. In very irritable varieties of eczema, especially in children, it is sometimes advisable to apply cold poultices of potato flour for two or three days before the india-rubber is applied, or, instead of these, compresses wrung out of cold water, covered with gum taffeta, and renewed as soon as they are dry. When oozing has ceased to take place under the india-rubber, the affected parts should be anointed three times a day with perfectly fresh lard, and covered with fine linen. Preparations with vaseline and glycerine are bad. All the various soothing ointments which are used (zinc, bismuth, etc.) owe their virtue to the lard with which they are made.

If the eczema does not cure under one ointment, it will not cure under another. Our steps must be retraced, and the application of india-rubber resumed. If oozing again occurs under the india-rubber, the want of success of ointments is explained. If it does not ooze, then the indication is for topical irritants, and, of all the irritants used, Dr. Tenneson prefers solution of nitrate of silver, 1 in 20 to 1 in 50, and sapo mollis. These are used to make the eczema acute, after which the treatment is again resumed.

In discussing the treatment of purpura, the author points out that there are rare cases in which excessive loss of blood is arrested by general bleeding, and recommends that in cases where the patient is dying slowly of continued hæmorrhage, venesection should be tried as a revulsive before having recourse to transfusion as an alternative. The physician should not wait until the patient is quite exsanguine. The opening in the vein should be large, and the blood withdrawn in full stream. No more than 100 to 150 grammes of blood should be taken.

In psoriasis, Dr. Tenneson first gets rid of the scales by the alternate use of vaseline and baths with soap; and of the three local applications which are then generally used—oleum cadini, pyrogallic acid, and chrysophanic acid—he appears to prefer the tar, which he does not use pure. His formula is: Oleum cadini 400; glycerole of starch 600; watery extract of "bois de Panama" q.s. For localised patches of psoriasis on the trunk, he considers plasters very suitable.

The opportunities for watching cases of ringworm of the scalp at the St. Louis Hospital are great. It is interesting, therefore, to notice that Dr. Tenneson is highly sceptical regarding the advantages of all the methods of treatment which are used there or elsewhere. The only substances really useful in the treatment of ringworm of the scalp are vaseline and soap—vaseline to soften the scalp infiltrated with spores, and soap to remove them. The hair should be kept closely cut, and the scalp washed with soap daily; at all other times the head should be kept well covered with vaseline.

The chapter on alopecia areata is extremely interesting. Dr. Tenneson tells us that, as compared with twenty-five years ago, the disease has enormously increased in Paris, and for one case which was seen at the Hôpital St. Louis then, twenty to thirty are seen now; and that in regiments and schools it occasionally appears in an epidemic form. He writes of the contagiousness of the disease as being beyond doubt, and considers the tools of the barber the most frequent means of contagion. He has several times observed the disease spread from a slight wound, which he considers has given admission to the unknown parasite. In the majority of cases he finds a spontaneous cure takes place irrespective of the remedies used. Under the name of "*pseudo-pelades*" he refers to the series of cases which simulate alopecia areata, and which in countries where the disease is not common have led dermatologists to doubt its contagiousness and

parasitic origin, and to look upon it as a cutaneous trophoneurosis.

We have selected for notice the chapters on eczema, psoriasis, ringworm, and alopecia areata in order that our readers may have the benefit of knowing what the author's valuable experience has led him to teach, and also as an example of the eminently practical character of the book and of the useful therapeutic indications which it contains.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

OUT-PATIENTS AT BRIGHTON.

AN extract from the *Brighton Gazette* for March 15th shows that in this, as in nearly all other large towns, the abuses of the out-patient system are becoming intolerable, and the usual conclusion is drawn that "something should be done to modify the prevalent system of out-patient treatment;" but, as usual, when we come to practical suggestions we get lost in a fog. The abuse which chiefly strikes our contemporary is the pecuniary one—that people able to pay are said to avail themselves of gratuitous treatment. As the eminent authority of Dr. Withers Moore is cited for the statement, we are bound to believe that it is a matter of importance at at Brighton. In London, though doubtless the abuse prevails, especially at the special hospitals, it is not, we think, the chief defect of the system; but the remedy which seems to be here suggested would, it appears to us, be worse than the disease—namely, to make the out-patients "compensate the charity" by paying for their treatment, as is done "in some of the London hospitals." If this means, as we suppose, the Guy's system of paying threepence for medicine, we have often pointed out its intrinsic unfairness. It does "compensate the charity"—that is, may be more than the cost of the physic supplied—but it gives nothing for the medical advice, which is the essential part of the treatment; it tends to bring down the rate of fees in the neighbourhood, and so does an injustice to the profession, and is in fact, as we have said before, merely an extension of the "sweating system" into medical practice. The out-patient system, to be adequately reformed, must be studied as a whole, and public opinion be founded on thorough investigation by persons of practical experience in its working.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns, including London, 6,109 births and 3,855 deaths were registered during the week ending Saturday, March 17th. The annual rate of mortality in these towns, which had been 20.5 and 19.9 per 1,000 in the preceding two weeks, further declined to 19.2 last week. The rates in the several towns ranged from 12.1 in Croydon and in Newcastle-upon-Tyne to 24.3 in Burnley, 24.6 in Salford, and 25.6 in Liverpool. In the thirty-two provincial towns the death-rate averaged 19.2 per 1,000, and was slightly below the rate recorded in London, which was 19.3 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.2 per 1,000; in London the rate was equal to 2.7 per 1,000, while it averaged 1.9 in the thirty-two provincial towns, and was highest in Birkenhead, West Ham, and Liverpool. Measles caused a death-rate of 1.8 in Wolverhampton and 2.0 in Birkenhead; scarlet fever of 1.6 in Burnley; whooping-cough of 1.2 in Plymouth; and "fever" of 1.1 in Liverpool. The 71 deaths from diphtheria included 52 in London, 3 in Manchester, and 2 each in West Ham, Birmingham, and Sheffield. Eight fatal cases of small-pox were registered in Birmingham, 3 in London, 2 in West Ham, 1 in Cardiff, and 1 in Oldham, but not one in any other of the thirty-three large towns. There were 89 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, March 17th, against 81, 84, and 87 at the end of the preceding three weeks; 20 new cases were admitted during the week, against 17 and 24 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,107, against 2,181, 2,188, and 2,153 at the end of the preceding three weeks; 222 new cases were admitted during the week, against 239 and 212 in the preceding two weeks.

In thirty-three of the largest English towns, including London, 6,076 births and 3,979 deaths were registered during the week ending Saturday, March 24th. The annual rate of mortality in these towns, which had declined from 20.5 to 19.2 per 1,000 in the preceding three weeks, rose again to 19.8 last week. The rates in the several towns ranged from 10.6 in Derby and 13.1 in Portsmouth, to 23.8 in Manchester and in Sunderland, and 25.1 in Salford. In the thirty-two provincial towns the death-rate averaged 19.5 per 1,000, and was 0.8 below the rate recorded in London, which was 20.3 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.1 per 1,000; in London the rate was equal to 2.8 per 1,000, while it averaged 2.1 in the thirty-two provincial towns, and was highest in West Ham, Salford, and Birkenhead. Measles caused a death rate of 1.9 in Leicester and 1.9 in Birkenhead; scarlet fever of 1.1 in Burnley and 1.2 in Wolverhampton; whooping-cough of 1.5 in Hull and in Newcastle-upon-Tyne, and 2.0 in Birkenhead; and "fever" of 1.1 in Gateshead. The 84 deaths from diphtheria included 56 in London, 8 in Manchester, 3 in Bristol, and 3 in Salford. Five fatal cases of small-pox were registered in Birmingham, 3 in Oldham, and 1 in London, but not one in any other of the thirty-three large towns. There were 85 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, March 24th, against 84, 87, and 87 at the end of the preceding three weeks; 17 new cases were admitted during the week, against 21 and 20 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,103, against 2,188, 2,153, and 2,107 at the end of the preceding three weeks: 233 new cases were admitted during the week, against 212 and 222 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday, March 17th, 930 births and 600 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had been 19.6 and 21.1 per 1,000 in the preceding two weeks, declined again to 21.0 last week, but was 1.8 per 1,000 above the mean rate during the same period in the thirty-three large English towns. Among these Scotch towns the death-rates ranged from 13.3 in Paisley to 22.9 in Glasgow. The zymotic death-rate in these eight towns averaged 2.3 per 1,000, the highest rates being recorded in Dundee and Glasgow. The 303 deaths registered in Glasgow included 18 from whooping-cough, 7 from "fever," 6 from diphtheria, 4 from scarlet fever, and 1 from small-pox. Two fatal cases of small-pox and 2 of diphtheria were recorded in Edinburgh.

During the week ending Saturday, March 24th, 834 births and 533 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality, which had been 21.1 and 21.0 per 1,000 in the preceding two weeks, further declined to 18.7 during the week under notice, but was 1.1 per 1,000 below the mean rate during the same period in the large English towns. Among these Scotch towns the death-rates ranged from 13.3 in Greenock to 22.2 in Paisley. The zymotic death-rates in these eight towns averaged 2.0 per 1,000, the highest rates being recorded in Aberdeen and Dundee. The 265 deaths in Glasgow included 15 from whooping-cough, 3 from scarlet fever, and 2 from diphtheria. Two fatal cases of diphtheria were recorded in Edinburgh and 2 in Leith.

SMALL-POX AND VACCINATION.

THE number of patients in the Birmingham City Hospital, on Saturday morning, March 17th, was 207. During the day 7 were admitted and 20 were discharged, and 1 died, making the number in hospital at the close of the week 193. On March 18th 7 new cases were admitted, making 200 in hospital, as against 212 on the previous Monday morning. It will be remembered that some time ago the Birmingham guardians thought it prudent to have the whole of their workhouse staff revaccinated. Two of the nurses—one in the workhouse and the other in the Workhouse Infirmary—objected to the operation, and, as is well known, one of them (the workhouse nurse) died about two months ago. On Saturday morning the other nurse died from the disease. None of the other nurses have been affected by small-pox.

THE DIAGNOSIS OF SMALL-POX.

THE case of Gray *v.* Mackenzie, which was recently tried at the Liverpool assizes, presents points of considerable interest in connection with the diagnosis of infectious disease. Dr. Mackenzie attended the servant of a dressmaker employing fourteen assistants, and treated her for what he considered to be influenza. Miss Gray herself and several of her assistants subsequently developed small-pox, and, on inquiry, it appeared that the servant whom Dr. Mackenzie had attended presented evidence of having suffered from that disease. The contention of the plaintiff, who claimed damages for negligence and injury to her business, was that the defendant had seen the servant on several days from about March 24th to about April 6th of 1893—and he had failed to recognise the true nature of the malady from which she was suffering. On the other hand, it was alleged, in defence, that Dr. Mackenzie had not seen the servant between March 27th and April 12th, on which latter day he was called in to attend Miss Gray, and came to the conclusion that hers was a case of small-pox. There was a good deal of contradictory evidence as to the dates of Dr. Mackenzie's attendance and as to the precise time at which the fact that the servant was suffering from small-pox must have become evident. The jury found in favour of the defendant, evidently feeling that it had not been clearly demonstrated that the doctor had seen his patient on a day when failure to recognise the disease from which she was suffering would have been culpable negligence. The doctor seems to have had a narrow escape, and the case should impress on the minds of those whose opportunities of studying small-pox have not been extensive the importance of their being able to recognise the disease, even, it may be, in its more obscure forms.

VAN DWELLERS.

THE various classes of van dwellers and itinerant showmen are said to be a healthy race, and probably the saying is quite true if by it is only meant that their death-rate is not high, for when they cease to be healthy they probably cease also to dwell in tents, and go to swell the ranks of those who live in permanent habitations. But that they and their abodes are in any way exempt from disease, and especially disease of an infectious type, is certainly untrue, and the presence in our midst of such a nomadic race, wandering from town to town, and, although dropping here and there *en route* such of its members as are too ill to travel further, still carrying with it its infected vans and its so-called mild cases of disease, is a distinct danger to the community. It was lately stated at a meeting of the Van Dwellers' Protection Association that the "show business" in this country gives employment to over 20,000 unskilled

labourers, and that many thousands of pounds are now invested in rolling stock, horses, shows, roundabouts, machinery, electric light plant, etc.; and a protest was made against the action of the Essex County Council, which had drafted a series of by-laws regulating shows and vans, which, in their view, virtually aimed at the suppression of the showman's trade in that county. The secretary of the Association, however, announced, that, in answer to representations made to the Home Secretary, he had received a letter to the effect that "by-laws aimed at the general suppression of showmen and other van dwellers could not be made by a county council, and would not be allowed by the Home Office," and that the by-laws made by the Essex County Council, as amended and restricted by the Secretary of State, "will apply only to a limited area, and only when the presence of vans, etc., in the neighbourhood of houses or highways, is a definite source of annoyance or danger. They will not apply to vans passing merely through the area, nor to vans properly managed and not causing any nuisance or annoyance." The showmen assembled are said to have expressed themselves as very much obliged to Mr. Asquith. No doubt they were. Whether residents are equally pleased may be questioned. A migratory population, drifting from town to town under no certain sanitary supervision, carrying with them their homes, their bedding, their infections, and, except in cases of extreme illness, their sick also, is a continual source of danger to the home-staying and ratepaying community, and requires regulating with a firm hand.

PUZZLED writes stating that several members of the family of a board school teacher are affected with typhoid fever, and asks whether the school should be closed.

There appears to be no reason for adopting so stringent a remedy if the patients are properly isolated, and the teacher takes due precautions against conveying infection.

Our correspondent also wants to know if a person is justified in going about amongst his fellows as soon as he is physically able, and his temperature is normal.

It would, of course, be an injudicious thing for a patient recovering from typhoid fever to walk about immediately his temperature becomes normal; his own safety demands that some time shall elapse for convalescence to be thoroughly established. It is a generally-received doctrine that typhoid can be conveyed by inhaling odours from infected material. No hard and fast line can be drawn as to when typhoid stools cease to be dangerous. Several milk outbreaks of typhoid have been recorded. We do not know of any instance in which the disease was definitely traceable to butter or cheese.

MEDICAL OFFICERS OF WORKHOUSES AND LUNACY CERTIFICATES.

JUNIUS.—There is not any provision, we believe, in the Act for the payment of the medical officer of the workhouse for his certificate under the circumstances mentioned, although there is a provision for remuneration of the medical practitioner who, not being an officer of the workhouse, signs a certificate in support of that of the medical officer of the workhouse. The last named, apparently, has to perform that certification as a duty of his office, and in that case, like other duties, it is supposed to be duly considered in fixing the salary of his appointment.

QUALIFICATIONS OF A MEDICAL OFFICER OF HEALTH.

JUNIUS writes asking whether he must possess the diploma of Public Health in order to be eligible for a particular post.

*** Section xviii Local Government Act, 1888, prescribes that (except when the Local Government Board may otherwise determine) every newly-appointed medical officer of health to a district having at the last census 50,000 inhabitants or more shall be the holder of a diploma in sanitary science, public health, or State medicine, unless he have been for three years prior to 1892 a medical officer of a district with a population according to the last census of no fewer than 20,000, or a medical officer or inspector of the Local Government Board.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF OXFORD.

THE Regius Professor of Medicine gives notice that the following examinations will take place in Trinity term: Final examination for the degree of Bachelor of Medicine, to commence on Monday, June 4th, in the Examination Schools; examination for the degree of Master in Surgery, to commence on Wednesday, June 13th; first examination for the degree of Bachelor of Medicine, to commence on Friday, June 22nd. On each day at 10 A.M.

UNIVERSITY OF EDINBURGH.

THE classes in the Faculty of Medicine closed for the winter session on March 22nd. The First Professional Examinations for Medical and Science Degrees began on Monday last, and will be continued *de die in diem*.

The Murchison Memorial Scholarship (the annual proceeds of about £21,000) in Clinical Medicine falls to be competed for in London this year, and the examination will take place in the Royal College of Physicians on April 9th and following days. No award was made in either 1891 or 1892.

The Triennial Prize of the Edinburgh University London Club, of the value of 20 guineas, is also open for competition this year. Candidates must be graduates of not more than two years' standing, and the prize will be awarded for the best essay embodying original observation in any subject in Medicine or Surgery, or in the sciences directly bearing upon them. Competing essays are to be sent to the Dean of the Faculty of Medicine before April 30th, 1895.

The summer session in Medicine begins on Tuesday, May 1st.

UNIVERSITY COLLEGE, DUNDEE.

IN distributing the medals and certificates at the close of the winter session in the Anatomy class on March 21st, Professor Paterson referred to the arrangements for the ensuing summer session. He pointed out that, now that adequate provision had been made in the new buildings for the departments of Botany and Zoology, students commencing the study of Medicine in the summer would have much greater facilities than before for the prosecution of the work of the first professional examination. Senior students were also advised that the work of the second summer was amply provided for at the College and Royal Infirmary. It was intended to offer courses of Practical Physiology and Practical Anatomy, along with demonstrations and tutorial classes at the College, while at the infirmary courses would be given, as in previous years, in Practical Pharmacy, Clinical Surgery, etc. In addition, classes in Embryology, Operative Surgery, Clinical Medicine, and Mental Diseases would be offered for more advanced students or qualified practitioners. Professor Paterson expressed his conviction that the only course which they could follow in Dundee at present was one of steady persistent progress. If it was in the meantime impossible to complete the school by the aid of St. Andrews, every effort should be made to extend it independently. To complete the third winter of the medical curriculum only one chair of lectureship was required for Materia Medica and Therapeutics. He expressed the hope that by some means this appointment should be made before the commencement of next winter session.

THE VICTORIA UNIVERSITY.

FACULTY OF MEDICINE: SECOND M.B. AND CH.B. EXAMINATION PASS LIST.

Anatomy and Physiology.—G. Ashton, Owens; F. J. Batten, Owens; R. Bleasdale, Owens; H. M. Brown, Owens; *A. H. Burgess, Owens; H. M. Crake, University; H. R. Cross, Yorkshire; H. Hamer, Owens; E. Hutton, Owens; W. F. Jackson, Owens; K. H. Jones, Owens; E. E. Laslett, University; F. E. Marshall, University; J. G. Martin, University; W. H. S. Nickerson, Owens; A. E. Normington, Owens; G. C. Phipps, Owens; F. S. Pitt-Taylor, University; J. Prentice, University; F. Pritchard, Owens; A. L. Rhind, Owens; J. S. Ross, Owens; S. T. Rowling, Yorkshire; C. R. Schofield, Owens; A. B. Smallman, Owens; J. E. Smith, University; H. Stansfield, Yorkshire; F. E. Taylor, Yorkshire; L. Tong, Owens; W. C. Varley, Owens; H. de P. B. Veale, Yorkshire; J. V. Watson, Owens; A. Wightwick, Owens; A. A. Wood, University; J. Wood, Owens; H. B. Woodcock, Owens; and W. Wright, Owens.

Materia Medica and Pharmacy.—E. L. Anderson, University; G. Ashton, Owens; E. Baldwin, Owens; F. J. Batten, Owens; H. M. Brown, Owens; W. J. F. Burges, University; *A. H. Burgess, Owens; R. W. Carmichael, Owens; J. B. Clarke, Owens; W. Cunliffe, Owens; W. A. Helm, Owens; V. R. Hendry, University; W. F. Jackson, Owens; J. R. Lambert, Yorkshire; N. Neild, Owens; W. H. S. Nickerson, Owens; J. Prentice, University; F. Pritchard, Owens; A. L. Rhind, Owens; A. T. Sissons, Owens; O. Smithson, Yorkshire; H. Stansfield, Yorkshire; F. E. Taylor, Yorkshire; H. Thorp, Owens; L. Tong, Owens; W. C. Varley, Owens; J. Wood, Owens; and H. B. Woodcock, Owens.

* Awarded Scholarship in Medicine.

FINAL M.B. AND CH.B. EXAMINATION PASS LIST.

Part I.—H. Armstrong, University; R. E. Bickerton, University; W. M. Brown, University; J. S. Dockray, Owens; J. W. Hainsworth, Yorkshire; H. F. Jeffery, Owens; A. W. Lilley, Owens; P. McDougall, Owens; T. U. Mercer, University; S. Pickering, Owens; J. H. Ray, Owens; J. F. Rimmer, Owens; S. J. Ross, University; H. A. Scott, Owens; B. Stahlknecht, University; and O. B. Trumper, Yorks.

Part II.—W. J. Bowden, Owens; H. S. Brightmore, Owens; W. M. Brown, University; E. Harrison, Owens; J. Jones, Owens; *D. Seaton, Yorkshire; H. S. Smith, Owens; and *P. Thompson, Owens.

* Second Class in Honours.

OBITUARY.

J. G. UVEDALE WEST, M.R.C.S., L.R.C.P.

WE regret to have to report the death of Mr. Uvedale West (of Stoke-on-Trent), at Madeira, where he had gone for the benefit of his health. The deceased was the son of Dr. Uvedale West, of Alford, Lincolnshire, a well-known obstetrician, and was descended from a distinguished ancestry which may be traced to the Uvedale of Wykeham, who was the patron of William of Wykeham. Mr. West was educated at Alford Grammar School and at University College Hospital, where he held the office of ophthalmic assistant. Soon after taking his diplomas Mr. West was appointed house-physician to the North Staffordshire Infirmary, a position he occupied for three years, when he settled in practice at Stoke. He was elected an honorary medical officer of the infirmary, and, on the addition of an eye department to that institution a few years ago, he was appointed ophthalmic surgeon, the

duties of which office he discharged up to his death. Mr. West was also medical officer to the Stoke Workhouse and medical attendant to the North Staffordshire Nursing Institute, Hartshill. For many years he acted as financial secretary to the Staffordshire Branch of the British Medical Association.

The deceased gentleman, who was only 45 years of age, leaves a widow, one son, and three daughters, for whom the greatest sympathy is felt. In all matters of charity Mr. West was amongst the foremost. A special meeting of the Medical Board of the North Staffordshire Infirmary was held on Tuesday, March 20th, and the following resolution was passed: "The members of the Medical Board desire to record their deep regret at the sad loss they have sustained by the untimely death of their late colleague, Mr. West. In him they feel they lost a true friend, a man of the highest honour and integrity, and one who was so universally esteemed. At the same time they wish to express their sincere sympathy with Mrs. West and the other members of the family in their painful bereavement."

Dr. William Barnard Clarke, senior M.D., of Edinburgh University, died on March 20th at Nostell, Yorkshire, at the age of 87. After graduating at Edinburgh, he practised for a short time in Ipswich, then at North Shields, and afterwards went to reside at Walton-on-the-Naze. During these years, as throughout life, he devoted more time to the study of natural history than to the profession of medicine. He acquired a splendid collection of natural history objects, and when the Ipswich Museum was formed he gave this collection to his native town, and filled the post of first Curator of the new institution.

THE LONDON CLERKS' ASSOCIATION.

A medical man practising in a London suburb has sent us correspondence which he has had with the secretary of the London Clerks' Association. This body, which is registered under the Friendly Societies Act, with offices at 15, Fenchurch Street, has for its objects: 1. Assistance in obtaining employment. 2. Weekly allowance when out of employment or sick. 3. Medical attendance and medicine. 4. Annuities to aged and disabled members, their widows and children. 5. Assistance in special cases of distress. 6. Insurance at death. Any clerk above 18 and under 45 years of age who is employed in any establishment within a radius of twelve miles from the city of London and has held his present situation for twelve months is eligible for membership. Any clerk who has held his present situation less than this time but who has held any previous situation twelve months or longer, may be eligible to join at the discretion of the directors. The association has among its list of patrons seven members of Parliament and some other eminent persons. It has a long list of medical officers in various parts of the outskirts of London and a board of directors.

From the correspondence before us it appears that the remuneration offered to the medical officers is 1s. each for examining candidates for admission, and a similar sum per quarter for each member placed under the care of the medical officer, in return for which the members are entitled to be treated professionally and supplied with medicine as occasion may arise. The rules contain the following extraordinary provision: "The medical men shall aid each other in consultation in any particular case without fee or reward." It is also provided that "the members shall have access to the medical man on whose list they have been placed without an order from any officer of the association." Our correspondent declined to accept the invitation to become one of the medical officers, and asks: "How is it, in view of the fact that wages of all classes are higher, and also the price of most articles, as well as the increased cost of a medical education, that we as a body are worse paid than formerly? Is there no means of forming a medical union to keep up and raise medical charges?"

We are quite disposed to agree with our correspondent that medical men should be advised not to connect themselves with this Association. The following points in the rules and arrangements seem particularly worthy of serious consideration by the medical men who have become or may be invited to become medical officers of the London Clerks' Association:

1. The sum of 4s. per annum paid for each member, is the lowest amount offered by artisans' clubs; it is the amount fixed many years ago, and when the rise in wages and the greatly increased cost of medical education are considered it is quite inadequate even for labourers' clubs. It would require but an infinitesimal amount of self denial on the part of the members to double the sum payable for sick attendance.

2. An examination for which the sum of 1s. is payable must of necessity be a perfunctory one.

3. The proposition that the medical men connected with the Association shall aid each other in consultation in any particular case, without fee or reward, involves an unwarrantable claim.

4. In every association or club in which a contract for medical attendance is made there should be a distinct wage limit for a member when he enters, and also for the time when he obtains higher wages. Above this limit the member should either pay a larger contribution, or he should cease to be entitled to free medical attendance.

THE ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS, ENGLAND.

A meeting of the Committee of the Association of Fellows of the Royal College of Surgeons, England, was held at 18, Great Cumberland Place, W., on March 21st, 1894, at 5.30 p.m. Mr. Timothy Holmes, Vice-President, in the unavoidable absence of Mr. George Pollock, President, was in the chair. There was a large attendance.

The minutes of the last meeting having been read and confirmed, the Honorary Secretary (Mr. Percy Dunn) read letters of regret at inability to be present from certain of the members.

Mr. Holmes then pointed out the reasons which had led to the summoning of the meeting. Within the past week all the Fellows of the College had received a circular inviting them to join a society which had been called "A Society of Fellows of the Royal College of Surgeons of England." With the view of placing all the facts of the case before the Committee, Mr. Holmes read the circular letter issued by the promoters of this new Society. Mr. Holmes further stated that he had written to a member of the Provisional Committee asking for information with respect to the scheme, and in reply he had received a communication which was as follows:

"The circular you have had endeavours to tell without reservation the reasons for forming a Society of Fellows. Of course it was impossible to hold any of the preliminary meetings without some mention being made of the Association of Fellows, but there was no reference to it at the meeting held in Chandos Street on March 8th. It cannot, therefore, be said that the proposed Society takes any attitude towards the Association other than that which is implied in the hope that members of the Association will accept the invitation to join it, which has been issued without distinction to all the Fellows of the College. If one may judge from the hearty and widespread support with which the proposal has been received, it would appear evident that the Fellows feel the need of the formation of such a society as is suggested in the circular letter, and I hope that before very long you yourself will consent to join it."

A long discussion then ensued as to the precise action which the Committee, on behalf of the Association, should take under the circumstances. In the end, however, it was unanimously decided to issue a circular letter forthwith to all the Fellows of the College stating the case for the Association. The chief points to which attention would be drawn in the letter having been drafted and agreed to, a subcommittee was appointed to arrange the final wording of the letter and for the printing and distribution of the latter among the Fellows at as early a date as possible. This concluded the business of the meeting, and the Committee adjourned.



A Well outside Tangier.

THE NEAREST AFRICAN HEALTH RESORT.

II.

An Evening on the Housetop.—Street Sights and Sounds.—The Fascination of the East.—Cannes without its Banalities.—Nice made Picturesque.—Meteorological Tables and Climatic Details.—Medicine among the Moors.—The Doctor's Tongue.—The Talking Stone.—Bezoars.—Shot.—Rhinoceros Horn.—Ants.

The day passes on—a cloudless enchantment—and as the evening comes, the setting sun fills the air with orange and copper tints; the exquisitely transparent purple and primrose deepen into rich crimson, and the mountains, Gebel-el-Tarik and Si Mouca, become transparent and take the colour of alabaster and rose.

On the white terraced houses below me the women, who, like dogs, are excluded from the mosques, gather at the hour of evening prayer on the flat white housetops in their violet, orange, and pale blue robes, radiant in rainbow colours. It is probably this many-hued beauty of sky and sea, of fields enamelled with flowers, and groves aflame with orange, pomegranate and lemon, or grey with olives, that has given to the Moors, as to the Orientals generally, their love of colour and their unerring sense of harmony and contrast. This is shown in the parti-coloured mosaics of their tiled walls and pavements, in the painted and gilded wood work of their ceilings and doors, in their embroidered robes, the strange and violent, but yet not shocking contrasts of the children's and women's dresses, and the delicate beauty of the tints of the Eastern kaftan. Nothing impresses one more strikingly and more agreeably than those brilliant combinations—green, violet, blue, and red—which occur at every step in the dresses of the better classes and the interiors of the good old Moorish houses such as those seen in Tetuan and in the interior, and, more rarely now, in Tangier. The black European figures which mingle with the crowd look mean and ugly; indeed, it is notable that with the Moors black is an accursed colour, and only the Hebrews of the Ghetto are ever seen clothed in black. With them at one time it was, and in some parts of Morocco is still, compulsory. I speak, of course, of the true native population, and not of the mixed cosmopolitan classes, who in the outports adopt European dress, and disfigure their newly-built houses with all the horrors of stucco, of veneer, and of graining on the walls, and pride themselves on furniture of the Tottenham Court Road type. Even they are, I was glad to learn, beginning to see the folly of their fashion, and are disposed to return to the ogival arch, the pannelled, carved, and painted ceilings and doors, the arabesque tracery of the walls, the mosaic tiling and the generally beautiful Oriental type of dwellings and of dress.

I make no apology for dwelling on these details, for as we live not by bread alone, so we do not breathe air alone; and to the invalid, the health seeker, or the holiday maker who comes to Morocco, the atmosphere filled with all-pervading light, the environment of brilliant colour and variegated dress, the whiff of Oriental life which he inhales through every avenue of the senses, mental as well as corporeal, are not less stimulating and revivifying than the purely physical surroundings amid which he lives.

I awake glad to hear the children, squatting on a crowded floor, in the school below chanting continuously, in a monotonous childish treble, verses of the Koran; to hear the rhythmical shouts of the shoremen loading the boats on the beach, to see the blue mountains and the pillars of Hercules before me. All the sounds and odours of the streets and of the shore are thrilling in their combination and in analysis. To those who have once felt the fascination of the East, the sound of the thin, frail notes of the two-stringed gimbri, the low tapping of the tom-tom, or the echoing, long-drawn melancholy of the Arab song: the sight of the half-effaced tracery, and the ruined ogive of the yellow lime-



Whited Sepulchres.

washed wall; of the sandy waste sprinkled with asphodel, the spikes of the blue-green aloe, the hairy and deformed roundlets of the cactus and the fans of the palmetto scrub; the perfume of the orange blossom, or the scent of burning aloes, awake emotions and recollections which quiver through the innermost being. The enchantment of the Orient does not penetrate all alike, but few are insensible to it, and it is an antique and varying emotion worth trying, a romantic reminiscence worth storing, in this day of novelty and effort, of bustle and convention. The solemn quiet of the desert beyond the walls of Tangier, the wild grandeur of the snow-capped mountains seen from the housetops and the walls; the biblical traditions clustering around the cadi "sitting in the gate" of the citadel (Kasbah); the water seller, with his bursting goat-skin bottle; the call of the muezzin, the tinkling of bells, the murmur of prayers, the clinking of the iron castanets, the sharp discord of the flageolet, the white-robed men, the shrouded women gliding near the wall—all present pictures or suggest associations which please the imagination and stimulate the senses of the invalid as of the holiday maker. Other things being equal in climatological conditions and matters of meteorology, they justify, according to my predilections, a preference for holidays and repose, whether in the near or in the far East.

Happily Tangier, although within three days of London, and as accessible as the Riviera, is redolent of Africa of the twelfth century as it is radiant with unquenchable sunshine and refreshed with Atlantic and Mediterranean air. It is Cannes without its banalities; Nice made picturesque, and freed from the battle of the winds; above all, it is Africa, full of strange and solemn problems which we, in our generation at least, cannot hope to see solved or even attacked; the seat of a strange race, heirs of the ages, and holding to their unimproved heritage; unlike us in dress, custom, aspect, costume, sentiment, or religion; the outpost of a crumbling empire and fierce fanaticism, of which twelve centuries have not extinguished the fire; altogether a subject worth studying, a sight worth seeing beneath a sun which adds a few days or weeks of summer to one's life, in however short a winter holiday.

And so let us stroll up the one thoroughfare and get outside the town. We pass the whitewashed courts of the mosque, and note the fountain, the waiting donkeys, the crouching beggars, and its towering green-tiled minaret; no Nazarene may set foot in it, not even a tabil (a learned doctor as I am accredited to be) or a bashador: but there is nothing within to tempt one to rival the daring of an English sporting duchess who is reported to have made a rush across it, and to have escaped unhurt by the petrified worshippers. Past the cupboard shops and the booths of the traders, up through the tortuous Moorish quarter, the high white walls shrouded in the winding sheet of Islam, under a high rounded arch, and into the courtyards of the crenelated Kasbah—fortress, prison, treasury, court of justice, palace, and residence.

As we emerge from the citadel and cross the plain of the Marchan, the glory and glamour of the landscape grows upon us. It is not easy to analyse the complexity of the impression made up by the glittering of the green grass, the limpid blue of the sky, the splendour and excess of the sun, the suave and exotic odours exhaled by the surrounding gardens: the sharpness of outlines of the mountain ridges of the Atlas and the distinctive folds of the valleys: the cadenced cry of the camel drivers; the filing past of the caravans of camels, heavily laden, with slow, serious, and rolling gait, returning homeward to the hills from the market in the Soko and traversing a solitude peopled with flowers, a desert plain of iris and asphodel: the grace of the waterdrawers by the well—often half naked and tattered, but poising their jars, as Rebekah may have done, with easy agility and not always without their expectant Jacob, lingering in flowing white robes; the tranquil shepherd,



A Group of Palms; Marakseh.

tending with patient melancholy his flock of many-coloured sheep—brown, black, russet, ochre, and white; the ragged herd separating his goats; in the distance the brown camel-hair tents of a nomad camp from the hills, and in the hollow below the beehive or boat-like huts of a village of potters overgrown with flowering shrubs, patched with rough-netted mats, hedged by the lance and dagger, tipped by clumps of aloes, and fenced by the prickly pear.

Rainfall.

Months.	1879.			1880.			1881.		
	Most in 24 hours.	Days.	Total.	Greatest in 24 hours.	Days.	Total.	Greatest in 24 hours.	Days.	Total.
January	—	—	—	1.45	6	3.76	2.16	22	11.44
February	—	—	—	0.66	10	2.80	1.42	19	7.01
March	—	—	—	0.95	12	2.75	0.83	12	4.38
April	—	—	—	1.16	9	2.36	1.78	15	7.98
May	—	—	—	0.86	13	4.81	0.89	7	1.37
June	—	—	—	0.23	1	0.23	0.07	2	0.08
July	—	—	—	0.01	1	0.01	0.19	8	0.71
August	—	—	—	0.04	2	0.05	—	—	—
September	0.42	9	1.53	—	—	—	0.31	3	0.34
October	2.50	6	7.97	2.34	7	3.15	0.72	14	3.17
November	1.18	12	5.11	0.40	18	3.64	0.67	2	0.68
December	3.10	9	5.46	1.00	6	2.21	0.61	10	2.31
Total	—	—	—	—	85	25.97	—	114	39.47
In Seasons...	...	...	...	1879 / 1880	90	37.04	1880 / 1881	116	41.97

Months.	1882.			1883.			1884.		
	Greatest in 24 hours.	Days.	Total.	Greatest in 24 hours.	Days.	Total.	Greatest in 24 hours.	Days.	Total.
January	0.21	5	0.47	2.22	11	6.03	0.53	7	1.65
February	0.47	6	1.42	0.52	5	1.48	0.98	18	3.54
March	0.58	7	1.32	1.67	19	8.86	1.07	18	6.08
April	0.32	6	1.03	1.49	6	3.51	—	—	—
May	0.52	12	2.30	1.63	7	4.17	—	—	—
June	0.06	1	0.06	0.52	2	0.60	—	—	—
July	0.03	1	0.03	—	—	—	—	—	—
August	—	—	—	0.05	1	0.05	—	—	—
September	0.60	4	1.04	0.03	1	0.03	—	—	—
October	0.64	8	1.34	0.68	7	1.51	—	—	—
November	—	—	—	0.14	1	0.14	—	—	—
December	1.74	16	9.38	1.41	8	2.16	—	—	—
Total	—	66	18.39	—	88	28.54	—	—	—
In Seasons...	1881 / 1882	67	13.13	1882 / 1883	79	36.46	—	—	—

My personal notes of climatic experience are here supplemented by the exact meteorological data furnished to me by Mr. H. E. White, the British Consul at Tangier. Mr. White has carried on these observations with great care and accuracy for a series of years, employing the standard instruments of the Royal Meteorological Society, placed, observed, and registered with strict adherence to the necessary conditions for accuracy. I am greatly indebted to him for the prompt liberality with which he placed at my disposal the whole series of his careful and valuable



A Fruiterer's Shop.

observations, of which the subjoined is only a short abstract and summary.

Averages.

Month.	Dry Bulb, 9 A.M.	Wet Bulb, 9 A.M.	Dew Point, 9 A.M.	Relative Humidity, 9 A.M.	Maximum in Sun.	Mean of Maximum in Sun.	Maximum in Shade.	Mean of Maximum in Shade.	Minimum	Mean of Minimum.	Rainfall.
Jan.	51.7	48.5	45.6	82	126.5	114.9	63.0	56.8	39.8	47.3	4.77
Feb.	54.2	51.9	48.8	80	131.2	121.0	63.7	59.0	43.7	49.3	3.34
March	57.1	53.8	49.9	76	136.0	126.1	69.7	61.0	45.2	52.7	5.51
April	60.7	58.0	54.8	78	138.6	130.5	72.3	65.0	50.3	54.7	4.13
May	64.9	61.2	57.3	74	144.5	133.7	75.4	68.9	51.9	57.6	2.41
June	70.3	65.6	61.6	71	146.6	138.1	83.5	75.2	56.2	62.7	0.36
July	73.7	65.7	62.2	65	146.0	139.2	84.5	77.5	60.8	65.7	0.08
Aug.	73.6	68.4	64.0	69	148.0	140.5	83.5	77.7	63.2	66.8	0.03
Sept.	71.2	66.7	62.7	72	144.0	137.2	82.0	75.9	59.2	64.4	1.00
Oct.	65.2	62.8	58.1	77	142.0	130.9	76.5	69.3	51.3	59.7	4.00
Nov.	59.2	56.5	53.7	82	134.5	120.3	68.4	62.1	43.0	55.2	2.75
Dec.	53.9	51.9	49.4	83	126.9	113.4	64.3	58.4	41.8	49.2	3.94

Average yearly rainfall about 32½ inches. Rainfall calculated on ten years; sun maximum on three years generally, but some of the summer months only one year's record is kept. Most of the other averages are calculated on five years.

To these observations may properly be added those furnished to Dr. Hooker by Dr. Beaumier on the cognate climate of the neighbouring Mogador, which rivals Tangier in respect to its claims as a sanatorium for consumptive and other patients, together with Dr. Hooker's judicious comments thereon.

Phthisis is all but completely unknown among the inhabitants of this part of Africa, while in Algeria cases are not rare among the natives, and in Egypt they are rather frequent. In the course of ten years Dr. Beaumier met but five cases among his very numerous native patients, and in three of these the disease had been contracted at a distance. He further mentioned several cases among Europeans who had arrived in an advanced stage of the disease on whom the influence of the climate had exercised a remarkable curative effect.

An examination of the tables showing the results of M. Beaumier's observations, and especially those for temperature, may help to explain these facts, as they certainly show that Mogador, like Tangier, enjoys a more equable climate than any place within the temperate zone as to which we possess accurate information. It should be mentioned that these observations were made with good instruments, sufficiently well situated on the shady side of the open courtyard of the French consulate, about 30 feet above the sea level. The hours of observation were 8 A.M., 2 P.M., and 10 P.M., not perhaps the best that could be selected, but sufficient in a climate where rapid transitions are unknown.

A few of the results here stated in Fahrenheit's scale are derived from M. Beaumier's tables as continued to the end of 1874:

Mean temperature during eight years	66.9°
Mean for the hottest summer (1867)	68.65°
Mean for the coldest year (1872)	65.75°
Mean of the annual maxima	82.5°
Mean of the annual minima	53.0°
Highest temperature observed	87.8°
Lowest temperature observed	50.7°

More striking still the comparison between the temperature of summer and winter. The following results show the monthly mean temperature, derived from eight years' observations:

Summer	June	70.8°
	July	71.1°
	August	71.2°
Winter	December ...	61.4°
	January	61.2°
	February ...	61.8°

showing a difference of only 10° of Fahrenheit's scale between

the hottest and the coldest months. It has not been possible to ascertain accurately the daily range of the thermometer, as there were no self-recording instruments employed, but there is reason to believe that this would exhibit a still more remarkable proof of the equability of the climate. So far as the observations go they show an ordinary daily range of about 5° F., and rarely exceeding 8° F. It may be added that in the course of six weeks from my arrival on April 26th to my departure on June 7th the lowest night temperature observed at Mogador was 61° F., and the highest by day was 77° F.

If the climate of Tangier and Mogador be compared with that of such places as Algiers, Madeira (Funchal), and Cairo, which have nearly the same mean winter temperature, it will be found that in each of those places the mercury is occasionally liable to fall considerably below 50°, and that the summer heat is greatly in excess of the limits that suit delicate constitutions, the mean of the three hottest months being about 80° at Algiers, about 82° at Funchal, and 85° at Cairo. It will help to complete the impression as to the Tangier climate to say, that rain falls on an average of forty-five days in the year; and that, per 1,000 observations on the state of the sky, the proportions are: Clear, 785; clouded, 175; foggy, 45. The latter entry refers to days when a fog or thick haze prevails in the morning, but disappears before midday. The desert wind is scarcely felt either at Tangier or at Mogador. On an average it blows on about two days in each year, and on these rare occasions it has much less effect on the thermometer than it has in Madeira, doubtless owing to the protective effect of the chain of the great Atlas.

These remarkable climatic conditions have been mainly attributed to the influence of the north-east trade wind, which sets along the coast, and prevails especially in summer, throughout a great part of the year, the average of north and north-east winds being 275 days out of 365. West and south-west winds blow chiefly in winter on about 57 days in each year, and variable winds from the remaining four points prevail on an average of 37 days. The north-east breeze increasing in force as the sun approaches the meridian maintains the exceptionally cool summer temperature already indicated as characteristic of the Tangier climate, a privilege which is not shared by Saffi or Mazagan, where the summer heat is sometimes excessive. It must be noted that although the summer temperature of the interior of Morocco is much higher than that of Tangier, it yet falls far short of what is found in places lying in the same latitudes of North Africa or Asia. This is evidently owing to the influence of the Great Atlas chain, with its branches that diverge northwards towards the Mediterranean, which screen the entire region from the burning winds of the desert, and send down streams that cover the land with vegetation.

Dr. Leared, who repeatedly visited Morocco, and spent a considerable time there, gives some very curious details as to the state of medicine among the Moors.[1] The mantle of Avicenna, or of Rhazes, he says, has not fallen on their modern representatives. Certain nondescript practitioners may be seen squatting in the streets. They dispense drugs and practise astrology, for the last is regarded as a most useful adjunct to the medical art. Most of the drugs in use are herbs, which are brought to market by women. Of these the greater number are well known and in common use in Europe. But in Morocco greater faith is probably placed in written charms than in the most active drugs. The former are given in various diseases and under various circumstances, as, for instance, when a person is about to undertake a journey or to transact business.

Certain surgical operations are practised, and the Moorish doctors even perform the operation of couching for cataract. There is a kali-lah beyond Tafilet which is noted for its oculists. One of the applications to the eye is that of the doctor's tongue, which is drawn across the organ while it is held open. No doubt sand and other foreign bodies are thus effectively licked out. The application of a red hot iron—the actual cautery—is held in high esteem. Cupping is managed by means of cuts made with a razor; the wide end of a cow's horn is then placed over them, and through the hole at the tip the operator draws blood by suction. Bleeding from the arm is also practised, and among the Jews women are always bled in the last month of pregnancy. The grossest superstitions are mixed up with the Moor's conception of the healing art. But of this parallel instances might be cited nearer home. A few years ago a Moorish woman, who was called 'Lallah Tasrout,' or 'Lady of the Stone,' made a great sensation at Mogador. She was the fortunate possessor of a talking stone, from which she extracted what was better than sermons—namely, very valuable secrets and particularly infallible methods for curing diseases, which she, of course, turned to her own good account.

The Jewesses of Mogador, by the advice of old women, practise the following method for the cure of certain diseases. They select the outlet of a sewer, and throw into the filthy liquid which flows from it seven eggs, broken up one by one. These are well mixed with the sewage. 'Prayers are then offered to demons, and the horrible mixture is swallowed seven times. It is difficult to understand how the patient survives the remedy. If ever there was a case in which a cure is worse than the disease, it is surely to be found in this treatment by liquid manure.

Cholera is attributed to evil spirits who gain possession of people. To avoid meeting them it is the custom, when the disease is prevalent, to keep as close as possible to walls when out of doors. For the same reason sandhills are avoided, as they are considered to be a great resort of evil spirits.

Bezoars, from the *horrep*, or Sahara antelope, are held in great esteem. Signor Korkos, of the city of Morocco, showed Dr. Leared one the size of a small walnut, for which he paid 12 dollars. It was a very smooth, cream-coloured concretion, the interior of which showed the mode of formation in concentric circles. When used the bezoar is rubbed on a stone, and the powder thus obtained is swallowed. It was stated that it was necessary that the patient who took it should observe strict regimen, and remain in the house for seven days. Bezoars are esteemed as sovereign remedies for diseases of the heart, liver, and other internal organs, as also for sore eyes, for rheumatism, and other ailments.

Gold dust is taken internally when it is desired to prevent offspring. Shot is swallowed with the same intention, and also scrapings from a rhinoceros's horn.

Ants are given to lethargic people as a remedy, on the principle, we may presume, of antithesis and pure allopathy; but as it is held that eating lion's flesh makes a cowardly man's heart brave, it would also seem that homœopathy is not despised. A chameleon split open alive is a common application to wounds and sores. The dried body of the animal is also employed. This is burned, and the noisome fumes arising therefrom are inhaled by the patient as a sovereign remedy for debility. Leprosy is sometimes one of the scourges of the country; but in some places, as at Mogador, it seems to be unknown, although it prevails in the province of Haha, in which the town is situated.

The fearful epidemic of plague, which cut off so many of the people in the last and beginning of the present century, has been entirely unknown for more than fifty years. It has certainly not been "stamped out" by precautions or improved sanitation. It is probably only in abeyance, in obedience to some unknown law.

[1] Leared's *Morocco and its Moors*, p. 274.

THE OLD AND NEW UNIVERSITY OF LONDON.

The report of the annual Committee of Convocation of the University of London on the report of the Gresham University Commission, which is to be presented at the extraordinary meeting of Convocation to be held on April 10th, is an interesting document, and subjects the scheme of the Commissioners to a searching criticism throughout. In a historical sketch of the movement for a teaching university for London, it traces the part followed by Convocation in the question during the last nine or ten years, and shows that Convocation has consistently advocated the policy of enlarging the scope of the University of London by engrafting teaching upon its present examining functions. Negotiations to this end were proceeding between the Senate and Convocation when the appointment of the Royal Commission of 1888 interrupted the course of events, as was acknowledged by that Commission. That Commission finally reported in 1889, and

though its members were equally divided between the wisdom of remodelling the old or of creating a new University, it unanimously advised that time should be allowed the Senate and Convocation to consider whether they would apply for a new charter. The Senate thereupon prepared a draft charter, which in May, 1891, was rejected by a large majority by Convocation. The Gresham University charter also subsequently failed, in consequence of an address of the House of Commons praying Her Majesty to withhold her assent.

The Commission to consider the Gresham Charter was thereupon formed, and the annual Committee of Convocation endeavoured, but unsuccessfully, to secure a representation of Convocation upon the Commission. The annual Committee then drafted a scheme for the reconstitution of the University on lines already approved by Convocation, and Convocation adopted it as a basis of conference with the Senate and various institutions affected thereby, and resolved that it should be laid before the Royal Commission by the Chairman as the outline of a scheme for the reconstitution of the University approved by Convocation. The report then proceeds to contrast the Commissioners' report with the above scheme of Convocation, and to show where the new scheme differs from or agrees with the 1888 Commissioners' report and the rejected draft charter of 1891.

The reference to the Commissioners was to form "a scheme for the establishment under charter of an efficient Teaching University for London: but the Commissioners propose a reconstitution of the University of London, not under charter, which would have preserved to Convocation its existing right of veto, but by statutory commission," which deprives Convocation of that right, although Convocation has repeatedly affirmed its approval of the principle of a teaching university, and has several practical schemes for carrying it out.

The findings of the Commissioners upon the two fundamental points of their inquiry are that there shall be one university only in London, the establishment of which as an efficient teaching university will be best effected by the reconstruction of the existing university on such a basis as will enable it, while retaining its existing powers, privileges, and duties towards students from all parts of the empire, to carry out efficiently the work of a teaching university; and, secondly, that these changes should be effected by a Commission with statutory powers. Bishop Barry and Professor Sidgwick dissented *in toto* from this part of the report, whilst Mr. Anstie's objections were less pronounced. Three of the Commissioners of 1888 (Sir W. Thomson, Sir. G. Stokes, and Dr. Welldon) also, it may be remembered, "doubted the possibility of effectually combining the functions of an examining and of a teaching as well as an examining university in the University of London."

The divergent views upon the important question as to whether candidates for graduation should or should not be examined by their own teachers were considered by the Commissioners, who found its solution in "different considerations applying to different branches and purposes of study," and who insisted upon "the paramount necessity of securing manifest impartiality" in the medical examinations. But the recorded opinions of the Senate and of Convocation have always been in favour of excluding the participation of the teacher in the examination of his students in all the faculties, whilst the teachers should have means of regularly communicating to the Senate their complaints, their wishes, and their views.

Exception is taken to the fact that, though music is to have a separate faculty, fine art is not accorded a similar dignity; and that in the reformed Senate forty-eight out of sixty-six of its proposed members will represent interests not at present represented upon the Senate of the University. As to the additional facilities for research favoured by the scheme of the Commissioners, it is shown that Convocation has consistently ever since 1878 urged upon the Senate, but in vain, the desirability of promoting "the cultivation of such higher or unusual branches of study as can be more conveniently and more efficiently taught by a central body." The exclusion, as schools of the University, of provincial colleges, which furnish a large proportion of the students graduating in the existing University is noticed; and the fact is emphasised that whilst they have no representation on the Senate, to the colonies and India are allotted a senator apiece, to be nominated by the respective Secretaries of State.

In regard to the constitution of the projected University, it is pointed out that the Academic Council is "entrusted with enormous executive power, which power is likely to dominate the reconstituted University." And, again, the Academic Council "will be readily seen to be the pivot upon which the whole work of the University would turn." It is to be composed of fifteen members, elected for four years by the faculties or assemblies of teachers of the University; and the Vice-Chancellor will preside over it. Three of the fifteen members are assigned to the Faculty of Medicine. Among the multifarious duties and powers of the Council will be the following: The recognition, or withdrawal of recognition, of teachers in the schools of the University; to assign the teachers to their faculties; to assign, or not, a place upon the faculties to demonstrators and assistants appointed by the University; the partial control of boards of studies in each faculty; to determine curricula of study and examination; to settle University courses of study to be pursued at any school of the University after consultation with the authorities of the institution concerned. The absence of provision for the organisation of secondary education; and the slight encouragement afforded to training colleges for teachers meet with criticism; and the feeble check upon the Academic Council that can be exercised by the Senate is pointed out. The Statutory Commission will "receive the assents of various persons and bodies, other than the Crown and Convocation." But Convocation is the only body which at present has the chartered right to approve the surrender or alteration of the charter of the University of London; and that is now to be unjustly denied such opportunity.

The Senate of the existing University is to disappear and Convocation is to appoint one-seventh only of the new Senate (each faculty electing only its own representatives), whereas the representatives of Convocation form one-fourth of the existing Senate. There are also important "limitations and conditions" upon the authority of the Senate to which the Annual Committee take exception. Thus "in the assignment of funds for the erection or extension of buildings, and for the provision of teaching and equipment, and in the allocation of funds for the endowment or remuneration of university professors, readers, lecturers, demonstrators, or assistants, whether in connection with admitted institutions or otherwise, the Senate should not act without giving the Academic Council an opportunity of expressing their opinion upon the matter."

The annual Committee in dealing with the examinations notices a proviso, the exact meaning of which it is a little difficult to grasp, namely, that the examinations for internal and external students "shall, if not the same, represent the same standard of knowledge, and shall be identical so far as identity is consistent with the educational interests of both classes of students."

The fact that matriculation is left an open question, that in no case is a degree to be conferred until three years from entrance into the University, that there should be two, and only two orders of degrees, and the power to grant *ad eundem* and honorary degrees—against all these provisions does Convocation set its face.

The regulations for admission to Convocation are to be ordained by the Senate, not as heretofore by Convocation; whilst the number of members present at the decision of any question in Convocation is to be not less than fifty. The restrictions of the powers and privileges of Convocation in these and other directions do not tend to commend the scheme to the Annual Committee.

In relation to degrees in medicine, the Commissioners suggest "that the University should have power to enter into arrangements with the Royal Colleges of Physicians and Surgeons for conducting in common examinations in such portions of the subjects included in the course of the degree as may be determined by common consent between the University and the Colleges." An arrangement of this kind—found in the Senate's scheme of 1891—was one of the main objections urged in Convocation against that scheme. Convocation's own scheme of 1893, on the other hand, suggested

increased facilities for taking medical degrees, and especially the removal of "restrictive regulations as to compulsory intervals of time between Matriculation and the Preliminary Scientific Examination and the Intermediate Examination in Medicine and M.B. Examination." The obvious advantages of the medical schools of University and King's Colleges over the other medical schools receive much notice; and it is suggested that those medical schools found to be in every way sufficiently equipped for the teaching of biology and chemistry should be recognised as science schools on a par with University and King's Colleges.

Lastly, it is maintained that "if the scheme of the Gresham Commission be carried into effect, the present University of London will cease to exist, and its name will be transferred to a new and wholly different University, which will thus acquire for its degree the world-wide reputation which attaches to the degrees of the existing University." "All schemes hitherto proposed have been based on the continuation of the present University, while enabling it to become a teaching University by taking powers to establish professorships or lectureships for the furtherance of regular and liberal education, and of original research." The restriction of the powers of the future Senate, as compared with those of the Senate of the existing University, and the restricted privileges of Convocation meet naturally with the disapproval of the Annual Committee, which considers that there is no sufficient reason for thus entirely altering the constitution of the present University, seeing that for the last fifty-seven years it has, as the Commissioners fully acknowledge, performed satisfactorily the work with which it was entrusted. Moreover, if it be urged that there is a strong and widely-spread demand that something should be done, and that the scheme of the last Commission should be tried as an experiment, and afterwards modified as may turn out advisable; the answer is that, even though there may be a demand for something to be done, yet it does not follow that there is a demand for a university after the pattern suggested by the Commission, and that an experiment which involves the destruction of a great institution which has done important work for fifty-seven years is far too costly and hazardous. The Annual Committee consequently recommends Convocation to adopt the five resolutions which were published in the British Medical Journal of March 24th, at page 651.

PROPOSED SOCIETY OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A meeting of Fellows was held at the Liverpool Medical Institution on March 20th, under the presidency of Mr. Rushton Parker, Mr. R. W. Murray being voted Secretary.

Of twenty-three Fellows in the immediate neighbourhood (including eighteen in Liverpool itself), ten were present at the meeting.

The following resolutions were carried unanimously:—

"1. This meeting approves of the objects of the proposed Society of Fellows of the Royal College of Surgeons of England, as referred to in the circular dated March 14th, signed by Mr. Herbert W. Page and Mr. Fred. C. Wallis, and desires to constitute itself the nucleus of a branch of the Society, including Fellows living in Liverpool and district.

"2. That the above resolution be communicated by Mr. Rushton Parker to Mr. Herbert W. Page before the meeting in London on April 4th.

"3. That Mr. Rushton Parker, Mr. R. W. Murray, and Dr. W. Permewan be a provisional committee to promote the Society in Liverpool and district."

Edinburgh Harveian Society.—The 112th Harveian Festival will be held in the Hall of the Royal College of Physicians, Queen Street, on Friday, April 13th. The Society will meet at 6 P.M. on that day, when the President, Dr. John Struthers, will deliver the Harveian Oration, on "Harvey and his Work," after which the members will dine together.

THE INTERNATIONAL PREVENTION OF CHOLERA.

The Proposals of Mr. Ernest Hart and of the French Delegates.—The Brilliant Success of Sanitation at the Recent Pilgrim Fair of Allahabad.—Letter from Dr. Simpson of Calcutta.—Three Millions of Pilgrims successfully dealt with.—Summary of the Draft Convention of the Paris Conference.

In connection with the sitting and results of the International Sanitary Commission on Cholera in Paris, which has, we understand, recommended as nearly as possible *in toto* the propositions laid down in Mr. Ernest Hart's address on "Cholera Nurseries in the East, and the Extinction of Cholera," which were laid before it, the following letter which we have just received from a highly competent Indian authority, is exceedingly opportune. It is of great international importance, as proving that the complete methods of sanitation carried out at the great Hardwàr Fair of 1891, described by Mr. Ernest Hart, and since by Dr. Klein, and figured from the photographs taken by Dr. Simpson, of Calcutta, have again been repeated with perfect success at the great Allahabad pilgrim fair, attended by nearly 3,000,000 of pilgrims. The remarkable success thus described justifies the hope and strengthens the assertion of Mr. Hart that, by the adoption of adequate measures in India, Persia, and Egypt, Europe may become wholly free from that scourge of nations, and the word "cholera" may have as little terror for European nations in the future as typhus and plague and other extinct pests, which have been destroyed by adequate sanitary precautions.

Our correspondent, Dr. Simpson, of Calcutta, writes: "I have just returned from the Allahabad Magd Mela. It was a Khumb, or twelfth year gathering, and surpassed in size the Hardwàr Khumb of 1891. It lasted from January 10th to February 20th, but the great day was February 6th, when 25,000 Fakeers went in procession to the sacred bathing ghat. The crowd was enormous, being estimated at nearly 3,000,000. Dr. Hutcheson, the Sanitary Commissioner for the North-West Provinces, who have so successfully carried out the arrangements for the Hardwàr Khumb of 1891, had the management of this great gathering. He was ably assisted by Dr. Giles, the Deputy Sanitary Commissioner. Allahabad is fortunate in possessing plenty of open common near the river; advantage was taken of this, and a new town was constructed, the houses being made of matting. Streets were laid out in the American style, the land divided into plots, and let out for building purposes under certain regulations. Filtered water was brought from the town in pipes, which were laid down in every street of the temporary town, and stand forts were erected at suitable intervals. This secured a plentiful supply of filtered water, and it is pleasing to be able to state that the pilgrims thoroughly appreciate the pure water. The latrine arrangements also were on a very extensive scale, being on the dry-earth system. A tramway was constructed on one side of the town at the back of the latrines, and on this tramway small wagons carried away the excreta from the latrines to the trenching ground, at a considerable distance from the encampment. Two great lessons were learnt at this vast gathering: (1) That with regulations, supervision, a big staff of workers, and good organisation, the Hindu people at the pilgrimages are as cleanly inclined as any other people in the world. If the arrangements are provided, and strict insistance on their use is enforced, no difficulty whatever arises, and an encampment of two or three millions can be as sweet and wholesome, as far as the disposal of excreta is concerned, as a small gathering in Europe; (2) that pilgrims will use for drinking purposes filtered water if it is as easy of access as other water. Another point is that there is no use providing any of these sanitary arrangements unless there is also a large inspectorial and supervising agency. What also struck me as very important is that although the place of gathering may be in a good sanitary condition and perfectly healthy,

attention should also be directed to the roads by which the pilgrims come and go. I feel certain that much of the cholera is contracted either on the road to or road from the pilgrimage. For miles and miles I observed groups of pilprims encamping wherever there was water. It might be on the edge of a pond, or near a well, or at the sides of a ditch, and it was very evident that should any of these be polluted with cholera dejecta, the several parties that came after and encamped there, either going or coming from the Mela, would contract cholera."

The International Sanitary Conference has now almost completed its task, and the Convention will probably be signed on April 2nd. If the decisions of the Conference are properly carried out, they will doubtless prove an effectual check to the importation of cholera into Europe. The Conference has drawn much of its inspiration from the conclusions arrived at by the Venice and Dresden Conference in matters of quarantine, so that not only will the public health be benefited by the measures to be adopted, but commercial transactions will be facilitated by a diminution of quarantine in the Red Sea and Persian Gulf. Great Britain figures for 50 per cent. in the commerce of the Red Sea, and for 90 per cent. in that of the Persian Gulf.

Three series of precautionary measures have been adopted by the Conference. The first concern the measures to be taken at the ports in India and Dutch India from which the pilgrims embark for Mecca. A very effectual system of disinfection and medical inspection of the pilgrims before embarking has been agreed to, as well as the space to be allotted to each of them on board ship. Pilgrim ships are always to have a duly qualified doctor on board, and to be constantly provided with a sufficient supply of potable water, etc.

The second series of measures concerns the reorganisation of the Turkish lazzarettos in the Red Sea. Those lazzarettos are to be thoroughly reorganised in accord with the principles laid down at the Venice and Dresden Conferences with regard to doctors' space, medical officers, disinfecting stoves, etc.

The quarantine of pilgrim ships from India, whether provided with a clean bill of health or not, formerly varied from fifteen to fifty days. It is now never to exceed five days for contaminated or suspected vessels, while ships with clean bills of health will only be delayed for the medical inspection. A vessel is regarded as contaminated if cholera cases have occurred on board within five days.

The third series of measures concerns the return of the pilgrims from Mecca by the lazzaretto of Tor, a dependency of Egypt. The pilgrims formerly returned in a most filthy condition, which made it requisite to take the strictest precautions to prevent the importation of cholera into Egypt, Tunisia, Algeria, and Bosnia, whence pilgrims go to Mecca. About 10,000 French subjects annually go to Mecca. The Conference has organised a very complete lazzaretto at Tor.

The Turkish Government has been strongly urged thoroughly to organise its sanitary administration with the object of preventing the importation of cholera into Europe by land. It is hoped the Sultan will carry out the recommendations made by the Conference with that object in view, for they are not only in the interest of the public health of Western Europe, but also in that of his own empire, and none of them infringes on his territorial rights.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.

Medical Attendance in the Post Office.—Mr. A. Morley, in reply to Mr. Luttrell, said that the department was constantly extending its medical system as opportunity offered, but, paid as its medical officers were by means of a capitation allowance in respect to each man placed under their charge, it would be obvious that the system could not be established, except where post-office servants were employed in sufficient numbers. Where this was the case, for attendance for one post-office servant who was ill, even if the illness be of some duration, the medical officer finds compensation in not having to attend others whose health remained good; but of course such a system as this, depending as it does on averages, was not adapted to places where post-office servants were employed singly or in twos or threes. Under these circumstances he feared he could hold out no hope that any system would be adopted which would supply every post-office servant in the kingdom whose pay did not exceed £150 with medicine and medical attendance gratuitously.

THE CONGRESS: SOME OFFICERS AND READERS OF ADDRESSES.

[*Portraits are given on a Special Sheet.*]

PROFESSOR GUIDO BACCELLI.

Professor Guido Baccelli, the President of the Congress, was born on November 25th, 1832, and is now therefore in his sixty-second year. He is descended from an ancient and noble family family of Florence, which has been settled in Rome for about two centuries. The family is remarkable for the number of distinguished members it has given to the medical profession. Dr. Baccelli began his brilliant career as a teacher some thirty-eight years ago. In 1863 he became Professor of Morbid Anatomy in the University of Rome in succession to Viale, whose pupil he had been; and in 1870 he was appointed to the Chair of Clinical Medicine, which he has occupied ever since. He may justly claim to be the reformer of clinical teaching in Rome, and it is to him chiefly that it owes the scientific and experimental character which is now its special feature.

Professor Baccelli has made several important contributions to medical literature. His first work, which dealt with the pathology of the heart and aorta (*Trattato di Patologia del Cuore et dell'Aorta*), appeared as far back as in 1859. In this work he maintained, at that time and for many years afterwards generally received both among clinicians and experimental physiologists, that the impulse of the heart's apex takes place when the organ is full of blood. He showed that it was an error to separate the systole sharply from the diastole, inasmuch as these two phases of the heart's action are always in close relation to each other. Thirty-two years later the truth of Professor Baccelli's view was confirmed, graphically and experimentally, by Gerhardt. In 1866 Professor Baccelli published a work on subcontinuous fevers which contained an account of his earliest researches on malaria—a subject to which he has ever since continued to devote special attention, and on which he has added considerably to our sum of knowledge, both on the etiological and on the therapeutic side. Among his other publications may be mentioned his papers on the transmission of sound vibrations through endopleuritic effusions; on acute yellow atrophy of the liver; on a new method of treating certain aortic aneurysms; on Koch's tuberculin; and one on the paradoxal compensation of cardiac lesions, published since the beginning of the present year.

It is not in medicine alone that Professor Baccelli has honourably distinguished himself. Elected a member of the Italian Parliament in 1875 he speedily made his influence felt, especially on all matters relating to educational reform. From 1881 to 1884 he held the portfolio of Minister of Public Instruction, a post which he was not long ago called upon to hold for the second time. To him are mainly due the comprehensive measures of reform both in primary instruction and in university education which are bringing about a second and greater Renascence in Italy. It is to Professor Baccelli that Rome in particular owes its magnificent Policlinico, an institute for the clinical study of disease fully equipped for the purpose in accordance with the most advanced scientific ideas. He was at one time President of the Board of Health of the Kingdom of Italy.

Professor Baccelli has had a large experience of congresses, having been present at every meeting since the first one held in Paris in 1867. He is an excellent speaker both in Italian and in Latin, in which he can deliver *ore rotundo* stately periods which would not have disgraced the lips of an orator of the older Rome. It was through him that the invitation to hold the present Congress in Rome was conveyed to the congress sitting in Berlin in 1890. His parting words on that occasion were: "Scientiæ atque artis humanissimæ vexillum cum libertatis vexillo consertum in Capitolio, viribus omnigenis fraterno more conjunctis sæculis nationibus immortale fulgebit." There appears to be every prospect that the success of the present Congress will bring fulfilment of these proud words.

PROFESSOR EDOARDO MARAGLIANO.

Professor Edoardo Maragliano, the General Secretary of the Congress, is 44 years of age. For the last 15 years he has been Professor of Clinical Medicine in the University of

Genoa. The Clinical Institute, of which he is the head, is one of the best equipped in Italy. It was built two years ago, and may be regarded as Professor Maragliano's own creation. When he was appointed to the chair which he holds, clinical teaching was at a very low ebb in Genoa. Being elected Dean of the Medical Faculty, he set about the work of putting life into the dead bones of the school with such vigour that he transformed it in less than ten years into a flourishing centre of scientific activity. He is an indefatigable worker, both as a clinician and as an organiser, and he has the gift of breathing something of his own spirit of restless intellectual activity into his pupils. He has found time to make valuable additions to knowledge, particularly as regards the blood and the nervous system.

PROFESSOR MICHAEL FOSTER.

PROFESSOR MICHAEL FOSTER was born at Huntingdon on March 8th, 1836. He was the son of the late Mr. Michael Foster, a well-known general practitioner of that place. Michael Foster the younger received his early education at the Huntingdon Grammar School, and at University College School, London. He afterwards studied science and medicine in University College. He took the B.A. degree in the University of London in 1854, gaining a scholarship in classics. In 1858 he graduated as Bachelor of Medicine in the same University, and as Doctor in 1859. After spending some years in general practice at Huntingdon, in partnership with his father, he was in 1866 appointed Teacher of Physiology in University College, London. In 1869 he became Professor of Practical Physiology in University College, sharing the labours of the department of physiology with the late Professor Sharpey. He was at the same time Fullerian Professor of Physiology in the Royal Institution of Great Britain. Among Professor Foster's pupils at University College were Professor Schäfer, Dr. Barlow, and Professor Greenfield. In 1870 he was called to Cambridge under the auspices of Trinity College to reorganise the teaching of physiology in that University. He was appointed Prælector in Physiology at Trinity College, and in 1883, when the Chair of Physiology was founded in the University of Cambridge, he was formally appointed to it. Under Professor Foster's influence the department of physiology at Cambridge has grown into the largest in England, but his work has not been confined to this branch of medical education. It is largely in response to the impulse given by him that the modern School of Biology, which has become so justly celebrated, came into being. Among Professor Foster's earlier pupils at Cambridge were the late Professor F. M. Balfour, Professor Newell Martin, the late Professor Milnes Marshall, Dr. Carpenter, Dr. Vines, Mr. Adam Sedgwick, Professor Marshall Ward, and Dr. Gaskell, Mr. Langley, and Dr. Sheridan Lea, who are now his colleagues in the Department of Physiology.

In 1872 Professor Foster was elected a Fellow of the Royal Society, and since 1881 he has held the office of Secretary of that distinguished body. Honorary degrees have been conferred on him by the Universities of Cambridge, Glasgow, Dublin, and St. Andrews, and among the foreign societies which have elected him to their honorary membership are the Lincei of Rome and the Accademia delle Scienze of Turin.

His chief contribution to scientific literature is his well-known *Textbook of Physiology*, of which the fifth edition (in five volumes) has now appeared. In 1878 Professor Foster founded the *Journal of Physiology*, and up to the present time he has been its chief editor.

PROFESSOR NOTHNAGEL.

PROFESSOR NOTHNAGEL was born at Brandenburg in 1841, and was appointed Professor of Medicine in the University of Freiburg in 1872. On the death of Professor Bamberger he was invited to Vienna to succeed him in the Chair of Clinical Medicine. To Professor Nothnagel unquestionably belongs the distinction of having revived the ancient glory of the Vienna Medical Clinic, which had become somewhat dim since the days of Skoda and Oppolzer. He is extremely popular as a teacher, and as a clinician is particularly celebrated for his power of accurate diagnosis. He has published valuable treatises on therapeutics and diagnosis, and in the earlier part of his career he did much good work in the province of physiology.

DR. ABRAHAM JACOBI.

ABRAHAM JACOBI was born at Hartum, near Minden, in Westphalia, on May 6th, 1830. He received his early education at the Gymnasium of Minden, and entered the University of Greifswald in 1847; subsequently he spent some time at the University of Göttingen, and finally graduated at Bonn in 1851. Shortly afterwards he went out to America, and in 1853 settled as a general practitioner in New York. He began early to give special attention to the study of diseases of children, and in 1861 he was appointed Professor of Pediatrics in the New York Medical College, in which capacity he delivered the first systematic course of lectures on that department of medicine given in the United States. In 1865 he became Clinical Professor of Pediatrics in New York University Medical College, an office which he resigned, in 1870, to accept a similar chair in the College of Physicians and Surgeons in New York, which he now holds. By his writings, and by the leading part which he took in the foundation of the Sections on Pediatrics of the American Medical Association (1880), and of the New York Academy of Medicine (1886), and of the American Pediatric Society in 1889, he has done much to stimulate the clinical study of the special phenomena of disease in children, and has earned for himself a leading place among the authorities on this subject.

PROFESSOR STOKVIS.

PROFESSOR STOKVIS was born in August, 1834, and took his doctor's degree in June, 1856, the subject of his thesis being "The Formation of Sugar in the Liver in Connection with Diabetes." After a few years spent in general practice, during which he found time to make some researches on various subjects in the domain of physiological chemistry, he was appointed Professor in the Athenæum of Amsterdam, becoming Professor in the University of that city in 1874. Professor Stokvis is a Member of the Dutch Royal Academy of Sciences, an Honorary Member of the Belgian Academy of Medicine, a Corresponding Member of the Royal Academy of Medicine of Rome, and of the Medico-Chirurgical Academy of Perugia. In 1884 the University of Edinburgh conferred on him the degree of LL.D.

DR. V. BABES.

DR. BABES, who is of Roumanian origin, was born at Vienna in 1854, and studied medicine in the University of that city and at Buda-Pesth. After having been assistant and *Privatdocent* for ten years at Buda-Pesth, he went to Berlin, where he worked for two years under Virchow and Koch. Subsequently he worked in Paris under Cornil, Vulpian, and Pasteur. In 1885 he was appointed Professor of Pathological Histology and Bacteriology in the University of Buda-Pesth, and in 1887 he was invited by the Roumanian Government to organise a pathological and bacteriological institute at Bucharest. Among the numerous works published by Professor Babes, the most important is the treatise on Bacteriology, written in collaboration with Professor Cornil. Among other subjects on which he has added to our knowledge have been the bacteriological details of glanders, of leprosy, and of tuberculosis.

DR. S. LAACHE.

DR. S. LAACHE is now 40 years of age. He graduated in the University of Norway, and from 1881 to 1883 he was assistant in the Pathological Institute of Christiania. From 1883 to 1886 he was assistant in the Medical Clinic at Christiania, first under Professor H. Heiberg and subsequently under Professor Winge. Since 1887 Dr. Laache has been lecturer on pathology and propedeutic medicine in the University of Norway, and he is physician to the "Rigshospitalet" at Christiania. He has published several papers on clinical subjects, among which may be mentioned one on Anæmia, one on Analysis of the Urine—which has been translated into German, French, Italian, and Greek—and one on Empyema.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1894.

Subscriptions to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, MARCH 31st, 1894.

ANTHROPOMETRICAL IDENTIFICATION.

The report of the Committee appointed by the Home Secretary to inquire into the method of registering and identifying criminals has now been published, and is well worthy of perusal. The first question which is considered is the method of identifying habitual criminals now in use in England. In general terms it may be said to be personal recognition of the criminal by the police or prison officers, and by this means also identity is proved in criminal courts. Personal knowledge is, in the first instance, obtained in connection with the arrest and trial of prisoners for their earlier offences, and afterwards by the conditions which require licensed convicts and persons under sentence of police supervision to report themselves to the police every month, and on every change of residence. As a rule, criminals residing in a particular district are well known to the local police, and when arrested on criminal charges are at once recognised. The greater part of the crime in this country is committed by men who are well known to the police of their district, and who have little chance of concealing their identity. On the other hand, offences committed by men travelling from place to place, or conducting operations in one police district and living in another, are often of a very serious and dangerous character, and the history of the perpetrators of them difficult to trace, especially in large centres of of population, and, above all, in the metropolis. To assist in the identification of these travelling criminals a *Habitual Criminals' Register* and a *Register of Distinctive Marks* are kept, but these do not seem to have been very effective. More useful, however, in tracing identity are the route forms and photographs sent out to different places where the prisoner is likely to be known, but these are open to the objection that they involve a great deal of waste of time and trouble. Although several cases of mistaken identity have occurred, and are always liable to occur, from faulty memory or want of care on the part of some constable or warder, the Committee believe that no serious injustice has been done, as mistakes have usually been found out in time, and rectified. On the other hand, a considerable number of old offenders escape identification under the present system; and, moreover, no one would say that the recognitions are easily obtained, and without the expenditure of much labour. They consider, therefore, that the present system is decidedly defective and that what is specially wanted is a means of classifying the records of habitual criminals, such that as soon as the particulars of the personality of any prisoner are received it may be possible to ascertain readily and with certainty whether his case is already in the register, and if so, who he is.

In order to ascertain whether greater perfection is attainable by Bertillon's system—which has been in use in France for the last eleven years—the Committee visited Paris and saw the process in operation at the Prefecture of Police under M. Bertillon, who explained in detail the practical working of his system. They also examined very carefully into the system, with which the name of Mr. Francis Galton is so intimately associated, of identification from impressions of the papillary ridges on the palmar surface of the tips of the fingers, and in doing so they had the advantage of Mr. Galton's assistance and the use of his laboratory at South Kensington. The conclusion they arrived at regarding this latter method is very decided. "We are clearly of opinion that for purposes of proving identity the finger prints, examined and compared by an expert, furnish a method far more certain than any other. They are incomparably more certain than personal recognition or identification by photographs . . . . It is wholly inconceivable that two persons should show an exact coincidence in the prints of two or three, not to speak of ten fingers;" and again, "It seems impossible to insist too strongly on the absolute certainty of the criterion of identity afforded by finger prints." Considered merely as a test of identity, and not as a detective agency, their use becomes at once extremely simple, and in the hands of an expert, free from any danger of error. As regards tracing identity, that is, whether a case is already in the register, the result is not so satisfactory when large numbers have to be dealt with, though for small numbers the system is admirable. Where the system of finger prints is weak the system of M. Bertillon is particularly strong, while at the same time, under the latter, "a misidentification is practically impossible." Under no circumstances, however, could the system of M. Bertillon be adopted in its entirety in this country, on account of the fundamental differences between French and English judicial procedure.

In deciding what system should be adopted, three main conditions are laid down: (1) The descriptions, measurements, or marks which are the basis of the system must be such as can be taken readily, and with sufficient accuracy, by prison warders or police officers of ordinary intelligence; (2) the classification must be such that on the arrest of an old offender, who gives a false name, his record may be found readily, and with certainty; (3) when the case has been found among the classified descriptions, it is desirable that convincing evidence of identity should be afforded. "The first and third of these conditions are met completely by Mr. Galton's finger-print method;" while, with respect to the second, the Committee states, "the strongest point in favour of M. Bertillon's system is the method of classification." "Absolute perfection is of course not obtainable, all measurements being subject to error arising from actual variations in the body, and from want of skill in the operator; but these causes affect some measurements in a much slighter degree than others, and by selecting five measure-

ments which are least subject to variation in adults, and which can be taken with the greatest accuracy by ordinary operators, M. Bertillon has obtained a primary basis of classification as nearly perfect as possible." The recommendation of the Committee, therefore, is that the prisoners who are to be included in the register should be measured as regards length and breadth of head, the length of the left middle finger, the length of the left forearm, and the length of the left foot; that these should form the primary classification, giving, when arranged on the system of Bertillon, 243 nearly equal classes, being the same measurements as are used for classification in France; that the finger prints of each prisoner should be taken, and that the subdivisions should be by means of Mr. Galton's method of classifying the finger prints. The measurements and finger prints should be taken in prison by prison warders, and should afterwards be classified and used for identification in a central registry for the whole of England. This system they think should in the first instance be applied only to all convicts and to habitual criminals; and that the registrar might have a discretion, on application to the police, to add to the register a limited number of other prisoners, who, though only once convicted, are reasonably believed to belong to the class of travelling thieves. They further recommend that in all cases photographs should be taken. The proposed new method they consider should, in the first instance, be supplementary to the existing methods of identification as it must take several years before the new system is in full operation, and until then it will be necessary to continue all the existing devices for identifying old offenders.

The Committee indicate the means which should be adopted for putting into practice the method of identification recommended, and the most convenient forms of card on which the description of a convict may be given; the cost of the introduction of the system is gone into and the probable number of entries which will be required each year. They are strongly of opinion that it is essential to the complete success of the registry to secure the services of an expert practised in the methods of scientific anthropometry, and if possible one who has had practice in training other persons in making scientific measurements, who would from the outset be able to settle such questions as the limits of the different measurements to be adopted in England and would be able to superintend the training of warders in taking measurements and instruct the officer in charge of the register in the decipherment and classification of finger prints. On every ground they think it desirable that the English anthropometric officer should from the first have the advantage of scientific guidance not inferior to that which the French *service d'identification* enjoys in having M. Bertillon at its head.

In conclusion we may say that we consider the report to be most satisfactory in every respect. The Committee have dealt with the subject very thoroughly and made themselves masters of the scientific details involved in it. If the recommendations made in the report are adopted in their entirety by the Home Secretary we have little doubt that the English anthropometric office will be established on a thoroughly sound scientific basis, and though in some respects different in detail, the English system will be in essential points international as regards identification of criminals in countries adopting Bertillon's system.

REGINA V. SHERRARD.

THIS is a lunacy case of very great importance, on which some comment is necessary now, though the results may require further and more detailed consideration. In this instance the Commissioners in Lunacy took action against Dr. C. D. Sherrard, of Eastbourne, for having more than one person of unsound mind in his house for profit at the same time. The real cause of the action was that a lady patient threw herself out of a window, and, as a result, died. At the inquest the coroner and jury intimated their opinion that notice should be taken of the case by the Commissioners in Lunacy. From the assizes at Lewes, by application, the trial was removed to London for various reasons. For several days at the Central Criminal Court, before Mr. Justice Grantham, this case was tried, and resulted in the acquittal of Dr. Sherrard. The chief points of interest in the case are the following: Dr. Sherrard was accused of having received and detained two persons of unsound mind in his house, where he already had one certified patient. One patient was a lady passing through the climacteric period, who had on several occasions done strange things; the other was a young man who had been morbidly self-conscious, and who was not fit for the work of a lawyer's office. This latter case may be dismissed from our attention at once, for the patient was never in any way restrained in his actions. He left Dr. Sherrard to return to work in his father's office, and only some months later had to be certified and sent to an asylum.

In the case of the lady it seems that there were domestic troubles, which at the menopause became morbidly exaggerated, and that periodically, coincident with menstrual times, she was strange in her words and actions. She had accused herself of crimes; she had wandered away from home at night; she had escaped from a window, and had passed part of a night on the roof, she had gone into the sea, and had in fact done many things which pointed to mental unsoundness; but, at the same time, save for periods of a few days in each month, she was reported as being absolutely sane, and there was evidence that most of her acts were such as might have been done by a hysterical person who wished to attract attention. She was sent to Eastbourne, and there she stayed willingly, and was reported as being reasonable, though reserved and depressed. While there she left the house one night, and wandered about getting wet and dirty, but she returned of her own will, and said that she felt that the walk and the freedom had done her a great deal of good; she was, in fact, much better after this. Later she made a very feeble attempt at cutting her throat, this again having the aspect of a hysterical attempt. After this, however, Dr. Sherrard was anxious that the husband should remove the patient, and it was pending his coming that the fatal accident occurred. The patient pushed a nurse out of the room, then ran to the window and threw herself out, striking her head and neck, and thus causing fatal injuries. There can be no reasonable doubt that at certain times this lady might have been certified, but it is equally certain that during the greater part of the time she could not have been. This latter fact does not, of course, interfere with certification in many cases, but the contention of Dr. Sherrard, and of those who supported him, was that in such cases of transient insanity all that is necessary is to protect

the patient during the paroxysms, and quietly wait till the unstable period is passed.

The whole question involved is whether every patient who is certifiable should therefore be certified. We can hardly think that the law contemplates this. We think the law insists, as far as possible, on the safeguarding of society, and though the result in the case of the lady patient in question was unfortunate, it does not follow that it is to establish a rule, for, as the counsel for the defence pointed out, suicides and accidents occur even in asylums.

Mr. Carson, counsel for the defence, very ably pointed out the importance of the present case, and maintained that the function of the Commissioners in Lunacy was to take care of those under certificates, and not to drive all those who were slightly aberrant into asylums. Mr. Justice Grantham and the jury were of the opinion that the Commissioners were justified in what they had done, but at the same time the judge spoke in the highest terms of the conduct of Dr. Sherrard in relation to his patients.

There are many points in the case deserving consideration. In medicine we seem to have our Ireland ever with us in the shape of lunacy questions. The present lunacy law is unsatisfactory from several points of view: first, it is too rigid; and, next, it is too much a matter of chance what forms of insanity will fall within its observation. As to its rigidity, we all know that there are innumerable cases of mental disorder which, being curable and being slight, should not be sent to asylums if any other plan can be followed.

Even the alienist physician sends only a small percentage of his cases into asylums, and he needs homes of some kind into which such dwellers on the border land of insanity can be placed. If the Commissioners are too careful in their pursuit of such cases the result will be a return to the old plan of hiding away and neglect. The increase of duty means increase of smuggling, and we are sure that the Commissioners, who fulfil their duty in a most satisfactory way, are not anxious to interfere with what is the legitimate treatment of mental disorder out of asylums or apart from certificates.

On the other hand those interested in asylums are inclined to think that grave injustice is done to them if others are allowed, unvisited and uncontrolled, to keep nervous patients, while they have to be watched as if they were not to be trusted. This is true; and perhaps the best plan would be for every doctor or layman who wishes to keep private patients of any kind to be obliged to apply for a permit or licence; and we are inclined to think that it would be a very good thing if such licences were granted only with the knowledge of the health officer or some other public medical officer. We have to accept the fact that there are many patients who are not of sound mind, yet who should not be treated as lunatics; and such patients, as a rule, are worse off at home than anywhere else, for the family neurosis comes out in many irritating ways. Such persons must be sent to medical or lay homes; and we believe that they are best off with medical men who have had special asylum experience. In Scotland the Lunacy Acts provide for the treatment of recent and acute cases in private houses under a six months' certificate granted by a registered practitioner. Cases so provided for have not to be reported to the Board of Lunacy until the expiry of the certificate.

We would make the suggestion that every nervous patient, before being received into a private home, should have to be seen by his own medical man and a specialist, who together should certify that the patient is not one who ought to be certified. This certificate of fitness for private care should be renewed from time to time.

There is no doubt that the effect of the recent legislation is to cause more and more patients to be treated away from asylums, and the number of persons who seek for the care of such patients is quite out of proportion to the number of those who by training are fit for such work. The result of all this will be disastrous, and we are sure that the Commissioners see that in too inquisitorial inspection of persons of unsound mind there is danger of abuse, and they are only desirous of preventing abuses by taking such actions as this against Dr. Sherrard.

The Council of the Sanitary Institute have accepted an invitation received from the Lord Mayor and citizens of Liverpool to hold their next congress and exhibition in that city in the autumn of the year.

The Duke of Bedford unveiled at Bedford a statue of John Howard, the philanthropist. Magnificent weather prevailed, and there was a large concourse of spectators. The statue is of bronze, and is fixed on a high and elaborate pedestal in the centre of the Market Place.

Dr. W. J. Russell, F.R.S., the new President of the Institute of Chemistry, is one of the most noteworthy chemical authorities in England. That is sufficiently evidenced by the fact that he has been already four years President of the Chemical Society. The earlier studies of his youth were passed in eminent company. For some years he was a student in Bunsen's laboratory in Heidelberg, and then for a brief while he was a student with Professor Williams. When Dr. Russell was appointed a lecturer in chemistry at St. Bartholomew's, he devoted a close attention to personal researches into chemistry of the gases, and has given much study to smoke abatement.

THE CORONERSHIP OF THE NORTH-EASTERN DISTRICT.

We are informed that in addition to the gentlemen whose names have already been mentioned in the British Medical Journal, Dr. R. A. Douglas Lithgow, M.D.St.Andrews, LL.D., M.R.C.P.Edin., is also a candidate for the vacant office of coroner for the North-Eastern District. Dr. S. A. K. Strahan, barrister-at-law, and author of *Suicide and Insanity*, is also a candidate.

CHRIST'S HOSPITAL.

The early part of June will see Christ's Hospital once more inhabited, for the scheme of sanitary reorganisation will be completed, it is expected, at the end of May. Not more than about 400 boys will be received back at the Newgate Street Foundation, and of the 750 children 220 boys and 112 girls are at present at the school at Hertford. The drainage works have been commenced, and are on a modified scale compared with the scheme which was proposed shortly after the closing of the school several months ago. An official memorandum has been issued to the parents and friends of the scholars, intimating the fact that the school will be reopened in June, and this will be followed by another, giving the actual date of the reopening, and further particulars for the information of parents and guardians.

OUTBREAK OF SCARLET FEVER AT LEWISHAM.

WE regret to hear of a very extensive, sudden, and threatening outbreak of scarlet fever in Lewisham, Blackheath, and the surrounding neighbourhood, which has, it is alleged, been traced to the distribution of milk from a dairy farm on which several cases of scarlet fever have for some time existed, and have been notified, without, however, means having been taken to stop the milk supply. The matter is one which deserves, and will, we believe, receive the investigation of the Metropolitan Asylums Board, and seems to call for a special inquiry from the Local Government Board.

GUY'S HOSPITAL.

WE learn that Mr. Arthur E. Durham, who since Mr. Thomas Bryant was placed upon the consulting staff has been senior surgeon to Guy's Hospital, retires this week by lapse of time from the acting staff. Mr. Durham delivered his last clinical lecture on Wednesday, and, as might be expected with so popular a teacher, the theatre was crowded by an enthusiastic audience of past and present students. We understand that his old dressers have organised a students' dinner in his honour, which is to take place on March 31st at the St. James's Restaurant; and that further steps are being taken to give substantial expression to the widely-felt appreciation of his long and distinguished services to the hospital and medical school. Mr. Durham has been placed by the governors upon the consulting staff, his post on the acting staff of surgeons being taken by Mr. Golding Bird, the present senior assistant surgeon, whilst Mr. L. A. Dunn has been appointed assistant surgeon.

THE LONDON HOSPITAL.

ON February 26th, at a special court of the governors of the London Hospital, the resignation of Dr. Hughlings Jackson, on the completion of 20 years' service as physician, was received. The Chairman of the House Committee expressed the sense of the Governors of the great services which Dr. Hughlings Jackson had rendered to the hospital during the thirty-one years he had served as assistant physician and physician, and he was unanimously elected a consulting physician to the hospital. In consequence of Dr. Hughlings Jackson's retirement a vacancy was created in the senior staff, and at a special court of governors held on March 7th Dr. Gilbart Smith was appointed to succeed Dr. Jackson. The promotion of Dr. Gilbart Smith occasioned a vacancy of an assistant physician, which, on March 19th, at a special court of governors, was filled up by Dr. Gustave Schorstein being elected to the post. The appointment of Dr. Schorstein will lead to a vacancy of the post of medical registrar, which office he was holding at the time of his election. It has been decided by the staff of the hospital to present Dr. Hughlings Jackson with a testimonial to commemorate his valuable services to the hospital, the esteem of his colleagues, and the distinguished services he has rendered to medical science, concerning which a notice will later appear.

SEWAGE ON A GREAT SCALE.

SOME statistics of interest are forthcoming respecting the treatment of London's sewage at Barking and Crossness during the year 1893. During the past year 67,583¾ million gallons of crude sewage were received and treated, and 2,021,000 tons of sludge of a moisture varying from 90.98 to 91.68 per cent. were sent to sea; in other words, one ton of sludge was extracted from each 32,000 gallons of crude sewage at Barking, and from each 35,500 gallons at Crossness. 177,345 tons of absolutely dry solid matter, it is estimated, were removed from the river, but as it is not possible to see or examine absolutely dry solid matter, except in very small fragments, this figure vastly underestimates the real nature of the case. It is noteworthy that the sewage treated at Barking is of a much heavier description than that treated at Crossness, and consequently more solid matter is sent from Barking to sea than from Crossness. The effluent produced at the two outfalls is said to contain solid matter in suspension of an average of 6.915 at Barking, and 5.834 at Crossness. Each sludge ship carries on an average 1,000 tons, and 2,021 double voyages of about 100 miles each have been performed by the fleet of five sludge vessels. The cost of carrying out this work, taking into account working expenses and capital expenditure, has been £159,784 7s. 7½d., or at a total average cost for precipitation, deodorising, and conveyance to sea at the rate of £2 7s. 3.42d. per million gallons on the gross quantity of 67,583¾ million gallons of sewage received and treated at the two outfalls, or at the rate of 18s. per ton for the 177,345.2 tons of solid matter removed from the sewage.

DIPHTHERIA AT THE MALVERN COLLEGE.

THE Malvern College was founded in 1832 by a company of shareholders with a capital of £24,000. There are seven boarding houses, each capable of accommodating from 40 to 60 boys, besides the schoolhouse for the head master, which has been enlarged so as to receive 70 boarders. The total number of boys is now 409, including 26 day boys. The College is beautifully situated under the Malvern Hills, and its inmates have hitherto enjoyed the most perfect health. Ten cases of sore throat and three of diphtheria have occurred since March 13th amongst the boys, and of these two have unfortunately ended fatally. A fourth case of diphtheria also occurred in the person of the cricket professional. The outbreak is attributed to certain excavations in connection with drainage made during the enlargement of the cricket pavilion, a portion of which is used as the school "tuckshop." The Council of the College, acting in conjunction with the masters, have taken the most prompt and energetic measures to meet the outbreak. The school is closed, and they have summoned to their assistance Mr. Fosbroke, the Medical Officer of Health for the County of Worcester, and Dr. George Reid, who holds a similar position under the County Council of Staffordshire. *Carte blanche* has been given to these gentlemen to put the College into a state of thorough sanitary repair, and the work has already been commenced by Messrs. Willcox and Allen, civil engineers of Birmingham. It is to be hoped that when the school again meets it will be free for many years to come from this scourge of schoolmasters. The very prompt action taken by the Council of the College, acting under the guidance of their medical officers, Dr. Pike and Dr. Brockatt, in isolating the cases as they occurred appears to have reduced the outbreak to the smallest possible proportions.

FOOTBALL DEATHS.

A PAINSTAKING statistician has collected as many as he could of the newspaper records of accident in the football field during the past season, and certainly the list of casualties is a long one. Naturally, Saturdays give the largest numbers. On October 28th, 1893, there were four broken legs, two concussions of the brain, one broken arm, one collar bone, one serious internal injury, and others. On November 4th there were two fatal accidents and many slighter ones. On November 11th there were two abdominal injuries causing death, seven broken clavicles, five broken legs, etc. On March 3rd, 1894, there were two fatal injuries, five broken legs, two ribs, two clavicles, one patella, and various other accidents. The whole list, from the end of August to the middle of March, occupies about two columns. Eighteen deaths among players are recorded, besides several which took place among spectators, apparently from excitement. It is curious that out of the eighteen deaths four are stated to have taken place from tetanus. This is an extraordinary proportion considering that of the rest twelve clearly died from internal injuries in the head, neck, and abdomen. Thus it would appear that out

of six fatal injuries to limbs four died from tetanus, one from pyæmia, and one from "inflammation." We would be the last to dissuade young men from indulging in games and athletic exercises, but surely some sort of moderation might be displayed. It certainly is the fact that in some instances the game was played, or rather fought, with great brutality, and no one can fail to see that in this respect the presence of an immense crowd of hooting and cheering spectators, whose only aim is gambling and excitement, is a deteriorating influence, leading to undue violence and roughness. The game is right enough: the mischief is playing to the gallery—and such a gallery!

THE ANNUAL MEETING AT NEWCASTLE-ON-TYNE.

THE "general summary of accounts" in connection with the annual meeting of the British Medical Association, held at Newcastle-on-Tyne in August last, which the Honorary Treasurer, Dr. W. Crump Beatley, has drawn up, shows that the total receipts amounted to £1,916 4s., of which £52 10s. was voted by the North of England Branch, and £813 2s. was contributed by 194 subscribers. The sale of tickets for excursions produced £319 8s. 6d. The expenditure included £356 4s. 9d. for general and reception expenses, £189 2s. 7d. for the museum, £335 1s. 7d. for the annual dinner, £16 for local entertainments, £269 10s. 5d. for excursions, and £262 19s. 6d. for the *conversazione*. A donation of £12 19s. was made to the Royal Medical Benevolent College, Epsom, and £474 6s. 2d. (being 11s. 8d. in the £) was returned to the subscribers.

THE LEWISHAM LUNACY CASE.

A LETTER from the Local Government Board has been received by the Lewisham Board of Guardians embodying the conclusions of the Board on the inquiry recently held as to the allegations of a man named Williams, that he had been sent to a lunatic asylum while perfectly sane, and had been otherwise subjected to improper treatment. The Board are of opinion that the medical officers of the workhouse acted in good faith in respect to the removal of Williams to the asylum, and that many of Williams's statements are marked by much exaggeration, but they specify certain matters in regard to which they think the conduct of certain of the workhouse officials was indiscreet and improper.

PHRENOLOGICAL FRENZIES.

THE first sight of *The Phrenological Annual and Register for 1894*, with a copy of which we have been favoured, recalled the innocent inquiry of the traveller who, having just returned from foreign parts and hearing Parliament mentioned, asked if "that kind of thing went on still." Even in this age of "spooks" and spirit writing, we confess it comes upon us with a slight shock of surprise to find phrenology, not only alive, but figuratively "kicking." Your latter-day phrenologist seems to take himself very seriously. Thus, as we gather from a prophet of the cult, the "ideal phrenologist" is "priest and physician combined; for he must minister to minds and bodies diseased." We respectfully warn the ideal phrenologist, however, to be careful how he carries out the mission here claimed for him in practice, or he may find the Medical Defence Union taking an inconvenient interest in his "ministrations" as far as they concern the bodies of his clients. We are further told that "the sanctum"—elsewhere it is called the "consulting room"—"of the phrenologist is a confessional where many sacred secrets are brought to light. Hearts are unburdened, secret vices indulged, fatal mistakes in life, loves and hates, joys and sorrows, hopes and fears, all are brought to the surface, and the ideal phrenologist deals with them with a master hand." We are not told what it is that all these things are brought to the surface of; but it is to be inferred that it is the skull. Is it on that irresponsive instrument that the "master hand" of the phrenologist is to play? Further on we learn that the ideal phrenologist is not only a priest and a physician, but a philosopher, and something more than a philosopher, "a true magician"; and indeed we are willing to believe that "magic" is much more in his line than medicine or philosophy. Another hierophant deals with "phrenological difficulties," but does nothing to remove them. One "difficulty" is that phrenology is sometimes professed by "incompetent practitioners"; as to this we agree with the learned apologist more probably than he would agree with us. Another "difficulty" is that the skull varies in thickness; this, however, is one of the strongest proofs of phrenology, *because*, as we are told, "any part of the skull thinner than the other proves that some organs are very active"—the intellectual sword wearing out its sheath, we suppose. Another "difficulty" which we are told "weighs with anatomists" is that "there are no bumps on the brain." The answer to this, as far as we can make out, is that "it would be absurd to object to a thing because we cannot see it." In fact, the oracle's style of ratiocination rouses in us such a desire to feel his bumps as Charles Lamb once expressed to handle those of the man who asked Wordsworth if he thought Milton a great poet. The trifling difficulty that what our author calls the "high collosal (*sic*) forehead" and the protuberances of the skull in general do not necessarily indicate corresponding masses of brain substance underneath is not alluded to. On the whole, one cannot help regretting that the genuine, if misguided, enthusiasm which finds expression in more than one paper in the *Phrenological Annual* should be wasted on so hopelessly improfitable a subject.

HOSPITAL ABUSE IN CORK.

A LARGELY attended meeting of the Cork Poor Law Medical Officers' Association was held on March 17th, Dr. J. J. Curran, Killeagh, in the chair. The meeting was summoned to consider the present abuse of medical relief in the Cork city hospitals, it being stated that many well-to-do persons are admitted to them apparently without any inquiry as to their means. It was decided to communicate with the medical staff of the various hospitals with a view to checking this abuse.

DANGEROUS OCCUPATIONS.

THE Press Association announces that Mr. Asquith, following up the policy he has pursued since he came into office, may be expected shortly to introduce a fresh series of administrative reforms in various departments under the control of the Home Office. The recent addition to the staff of factory inspectors is likely to be supplemented by the appointment of further inspectors, male and female, and also of more inspectors' assistants. These assistants, who will number fifteen, are intended to be active men of practical knowledge and experience. One of their special functions will be to follow up the lists of out-workers which are now required to be kept by the manufacturers of all kinds of wearing apparel, cabinet and furniture making, upholstery work, file cutting, and electro-plating. It is hoped in this way to check and prevent some of the worst evils of the sweating system. The bulk of the present assistants are now engaged in London, where they have been placed under the charge of Mr. Lakeman, one of the most experienced of Her Majesty's inspectors. In addition to the central offices in London, Glasgow, Birmingham, and Leeds, which are intended to be recognised centres of factory inspection in their respective districts, where all concerned, whether employers or employed, can call to give or ask for information, it is said to be proposed during the present year to provide additional offices for the like purpose at Manchester, Liverpool, Blackburn, Sheffield, Newcastle, Nottingham, Norwich, Bristol, Southampton, Plymouth, Swansea, Edinburgh, Dundee, Dublin, and Belfast. In addition to the special rules already issued for the various industries which are more or less dan-

gerous to health, based upon the reports of special committees, consisting of inspectors, medical men, chemical and other experts, it is found that further legislation is necessary to give full effect to some of the recommendations contained in certain of these reports. In this connection, the Home Secretary will probably seek to amend the Factory Acts, and to deal with unreasonably long hours of labour in unhealthy industries; also to place open quarries as well as underground quarries under the supervision of inspectors of mines. Two or three additional inspectors will be appointed in that department. The most recent steps taken by the right hon. gentleman on the lines indicated are: (1) The institution of exhaustive inquiries in respect of laundries, the linen industries of Belfast, the Merionethshire salt mines, and the Sheffield grinders; (2) the scheduling as occupations dangerous to health of the red, orange, or yellow lead, lead smelting, the turning and enamelling of iron hollow ware, electric accumulator works, flax mills, and linen factories; and (3) the appointment of a committee to consider the subject of statistics relating to factories and workshops, and mines and minerals.

A SUCCESSFUL PROVIDENT MEDICAL INSTITUTION.

We are glad to receive from the *Cambridgeshire Weekly News*, March 16th, a very encouraging report of the Cambridge Provident Medical Institution. It was founded in 1883, and has therefore had ten years' experience, and the Chairman stated to the annual meeting that, whereas in 1883 the amount paid in outdoor relief in Cambridge exceeded £8,000, that amount for the year ending June, 1893, was less than £3,000, or about 3½d. in the pound as compared with 1s. This looks as if the institution rightly claims success in its main object—that of preventing the sick poor from having to apply to the parish doctor and so keeping them off the rates. The society is self-supporting, except that the contributions of a few honorary subscribers are used to supplement the management fund, which consists of one-fourth of the members' payments, the other three-fourths being handed over to the medical officers. No provident member is admitted whose earnings and those of his family exceed 25s. a week. The committee believe that, "bearing in mind the limitations imposed as to membership, the institution may fairly be said to cover the ground available in a town the size of Cambridge." It is clear to our minds that in country districts the system can easily be worked to the satisfaction and benefit of all parties, and if so, there is the more encouragement for efforts to obviate the objections and meet the difficulties which are no doubt met with in large cities, as our recent article on the provident system in the neighbourhood of Manchester will show.

THE TERRORS OF PAUPERISM.

The time surely is approaching when the people of England will be driven, if only for very shame, into making a general provision ensuring in all rate-supported asylums something like decent treatment for the sick and the feeble whose miserable lot it is to end their days in country workhouses. We are far from approving of exaggeration, but no one who knows the facts can fail to understand, and to sympathise with, the feeling of terror with which the aged poor so often regard the inevitable day when they will be driven to enter the "house." No one likes to believe in human depravity, nor do we willingly accept the statement that dastardly cruelty is anywhere daily perpetrated on the aged and helpless in our very midst, nay, under the supervision of our own servants. We know that we pay substantial poor rates; that we elect men of good repute, householders, fathers of families, men of position in society, and of good standing in religious communities, as guardians of the poor; we see advertisements for tenders for best meat, best flour, best coals, etc., for use in the workhouses, and we go to our warm fires and think that all is well, and that, although the rate is heavy, there is at any rate the comfort of knowing that the old people are taken care of. This is so in many places, and to a larger extent than heretofore. But all is not well, and the old people are not everywhere taken care of. When they are ill they are not even nursed, and when they are helpless and dependent from mere age they are subjected to gross cruelty. These are hard words, but they are true. People read reports of the neat and trim infirmaries connected with some of our metropolitan workhouses, or of those at Birmingham, or Liverpool, or Manchester, or Halifax, and of the nurses and probationers who are there engaged; and, reading of these things, and quite ignoring the fact that these are altogether exceptional institutions, they go their way thinking that after all the lot of the poor is not so very bad. Let us see what the lot of the sick poor really is in many places; not in one of the few exceptionally good workhouses in which reforms have taken place, nor in one of the utterly bad ones, in which no nursing has even been attempted and of the internal management of which no outsider can know much, but in one the managers of which, although still under the thraldom of tradition, have been sufficiently enlightened, at any rate, to appoint a trained nurse. Newton Abbott is a union in the beautiful county of Devon, and contains within it the districts of Dawlish, Torquay, and Teignmouth, places resorted to by the wealthiest in the land for the treatment of their sick. Let us then see how the sick poor are treated there. At a meeting of the Newton Abbott guardians recently, Dr. Ley read a statement, made on oath before a magistrate by Nurse Hinton, a nurse who had been appointed some little time ago in consequence of various complaints being made as to the management of the imbeciles and epileptics. We cannot quote it *in extenso*, but the following are some of the facts sworn to: The women could not have their own clothes washed (although allowed to wear them) without paying, either by food or money, the laundry women. This the laundry women demanded, and the consequence was that many of the female inmates had to go without their food, or a part of it, to pay for their washing." "The result of the inmates being brought in unbathed and with their own dirty clothes on, was that the house was infested with lice. She continually found them on her sheets and her clothes when they came from the laundry. She had had to burn most of her woollen underclothing on that account. A large number of the inmates were covered with lice. Ann Hill and Clara Dart had both picked lice off their bread in the dining hall. Her (the nurse's) rooms were full of bugs, which even got into her cooking utensils." "The idiots were almost always fighting with each other, and many of them were covered with bruises. They were under no one's care or control." Many of the old infirm people at night were stripped naked and put into a kind of sack called a "jumper." These "jumpers" had six or more strings by which the woman was tied down to the bed all night so that she could not move. She had seen black marks round the throats of old women caused by their struggles. A woman called Bovey died after Christmas. Three inmates (whose names are given) complained that a ward woman (whose name also is given) beat Sarah Bovey, who was paralysed, stripped her naked, and put her into a "jumper" every night for a week. One morning, because the old woman had made a mess whilst in a dying condition, the ward woman took a handful of fæces and put it into her mouth. The poor creature died the same night. The old women were most imperfectly clad. No inmate under 60 had a nightdress. Then came various details about immorality into which we will not enter; but we should add that, according to the report in the *Western Morning News*, a Mr. Burridge is stated to have said in the discussion that in the sick wards there was only one towel for fourteen persons for a week; that if the towel stank the paupers had to pay to have it washed; that there were no basins for the inmates to wash in, and that they had to use

the chamber utensils for that purpose. And this is in civilised, Christian England! and this is what is being done in a public institution, managed by guardians publicly elected and responsible to the ratepayers! and this is the sort of treatment accorded to old age by a Poor Law which in the view of some is all-sufficient to meet the legitimate wants of the poor! How all this reminds one of times thirty years ago, when Miss Louisa Twining began to draw attention to the state of workhouses, and when Mr. Ernest Hart and Dr. Anstie made those startling revelations which led to reformation in the workhouses of London —the creation of the Metropolitan Asylums Board. Nothing, however, could show more markedly the stolid impassiveness of public opinion in country places than to find ourselves now, after thirty eventful years have rolled by, confronted with a statement of abuses in a country workhouse which, almost word for word and certainly fact for fact, are practically identical with those which so many years ago produced such indignation. The dirt, the vermin, the cruelty, the extortion, even the washing in the chamber utensils, seem to be going on now in the country just as they were thirty years ago in London. It is a depressing thought for those who boast of progress that, for all our education, our railways, telegraphs, and newspapers, it takes more than thirty years for an idea, a mere spark of human sympathy, to travel from London to Devonshire.

NOMENCLATURE OF LUNATIC ASYLUMS.

Dr. William Reid, Physician-Superintendent of the Aberdeen Lunatic Asylum, in his yearly report, urges the attention of his directors to the advisability of a change of name in the institution, to obviate the offensive term of lunatic asylum. In pointing out the increase of cases of suicide reported in the north of Scotland during recent years, he observes that a large number of such persons might be tided over their troubles if the condition was observed and realised by immediate friends. At the same time he states that if any anxiety arises on the part of friends the person should be placed forthwith in a hospital for the treatment of mental diseases. He points out that it is a pity that we have to use the term "lunatic asylum" as indicating an institution for the treatment of persons affected with disorders of the mind. "Royal Hospital for Diseases of the Nervous System," or some such name—say one founded upon the name of a particular benefactor to the institution, or one dependent upon local geographical nomenclature—would be more pleasing to the minds of those who have relatives in the institution. The feeling of having to place a person in an asylum should in no way, Dr. Reid states, be different from that of having to place an individual in an establishment for the treatment of any physical complaint. We commend the ideas of Dr. Reid to the directors of lunatic asylums, and to all interested in relieving the sufferings of those who have relatives afflicted with nervous disease.

OUR PRISON SYSTEM.

The reports which have lately appeared in the *Daily Chronicle* regarding the management of our prisons have drawn from the Howard Association a statement which is intended to dissipate some common misconceptions concerning the "separate" system adopted in the prisons of England. The prisoners subjected to this *régime* are those undergoing short sentences, ranging from a few weeks to a maximum of two years, and the discipline is entirely different from the form of "solitary confinement," which earned for itself so bad a name in consequence of its tendency to produce insanity and suicide. Sixty years ago the evils of associate imprisonment became so apparent, and the promiscuous intermingling of young and old, together with the exposure of first offenders to all manner of evil communications among the depraved wretches so commonly found in gaols, became so obviously a mode of manufacturing criminals rather than preventing crime, that several countries, more particularly the United States, sought a remedy for these evils by introducing the rigid solitary system; they constructed underground cells, and shut up the unfortunate offenders in them without light, without work, without books, and without instruction. No wonder that they died or went mad. There is, however, no such system as this in England. The "separate" system is a separation from evil companionship, not an exclusion from intercourse with man—"chaplains, schoolmasters, warders, magistrates, and others often visit the prisoner. His hands are occupied with industry; he has exercise, instruction, books, and can earn various privileges by good behaviour." The Howard Association is strongly opposed to the recommendation made by the *Chronicle* that prisoners should be allowed to associate with each other by day. This plan, they say, has been proved by abundant experience to be most mischievous, and it has been conclusively established that the entire separation of offenders from each other, both by day and night, should be strictly enforced, at any rate for short sentences. Intercourse between prisoners corrupts the less hardened, increases crime, and makes reformation impossible, besides being unjust, in that it makes the sentence worse a hundredfold for the less vicious than for the habitual criminal. The important matter of the production of insanity is one which receives considerable illumination from recent researches as to the condition of the organ of mind among the criminal population. On the one hand, it certainly is not fair to attribute to the gaol outbreaks of insanity due only to the abnormal brain of the gaol bird; on the other hand, it may rightly enough be urged that, with minds so unstable, even greater care than usual is requisite to prevent an upset. To this latter argument the Howard Association answer that insanity among criminals is mostly the result of their habits of drunkenness and prostitutisn, and of the unbridled passions that have been previously indulged in, and that when it occurs among prisoners it is seldom, if ever, caused by separation under circumstances which allow of exercise, active cell industry, with due instruction and the use of books, together with suitable visitation by judicious persons; but it may result from the neglect of these conditions, which the Howard Association has habitually recommended.

COLD SUMMERS AND WARM WINTERS.

Mr. W. H. Dines read a paper at the last meeting of the Meteorological Society on the Relation between the Mean Quarterly Temperature and the Death-Rate. The Registrar-General's quarterly returns for the whole of England since 1862 were taken by the author, and the number of deaths in each quarter expressed as a departure per 1,000 from that particular quarter's average, the value so obtained being placed side by side with the corresponding departure of the temperature at Greenwich from its mean value. The rule seems to be that a cold winter is unhealthy and a mild winter healthy, and that a hot summer is always unhealthy and a cold summer healthy.

CATCHING THE TRAIN.

An inquest was held at Guy's Hospital on March 22nd respecting the death of a lady, aged 53, who died suddenly at London Bridge station after hurrying to catch the train. It cannot be too widely known that among people over 50 danger of sudden death from heart failure, under like circumstances, is by no means confined to such as have obvious heart disease. The number of weak hearts which, while doing quite easily their daily dole of work, and thus showing no symptoms of disease, are totally unfit to stand a sudden strain, is very considerable. and for such a run to catch a train, and especially a run uphill, is sufficient to produce a dilatation which may be the apparent starting point of a long or even fatal illness, or may actually cause immediate death. It is interesting to observe how frequently the catastrophe occurs after

the effort is over. While the race is in full swing there is plenty of room in the systemic circulation, the arterioles are dilated, the tissues are hungry for blood, the muscular action clears the course by helping the venous flow, and thus, although the left ventricle works hard, it does not work against a great resistance. When, however, the exertion is over, things are very different. The blood hunger of the tissues ceases, the outflow from them is no longer helped by the contraction of the muscles, and thus the resistance against which the left ventricle acts is increased. Meanwhile, the cavity of the chest, enlarged, as it has been, by the action of the respiratory muscles and proportionately filled with blood, contracts under lessened respiratory demands, and the blood within it has to pass through the left ventricle to be discharged into the tissues. Suddenly, then, when exertion ceases and the object of ambition is secured, not only does the contracting lung pour into the left side of the heart the excess of blood which it had contained but the arterial tension increases in consequence of the lessened demand for blood by the tissues. The left ventricle, then, under these conditions, with more blood to propel and a greater resistance to overcome is strained to the utmost, and if its tissues are weak, what with pressure behind and tension in front, it either fails to contract completely, thus landing the patient in the miseries of asystole, or it fails to contract at all, and the patient dies with an overstretched ventricle. Runners who have been on the verge of this condition will agree with us in saying that the sense of palpitation and suffocation comes on after violent exertion ceases, that it is aggravated by sitting still, and that it is best relieved by movement and continued deep respiration.

THE PREVENTION OF MEASLES.

It appears that the Vestry of Westminster has for some time past paid a notification fee for reporting cases of measles; but, in the opinion of at least some of the members, this is a waste of public money, and from a report of a recent discussion it is clear that an attempt will be made to recede from the position Westminster at present occupies, that of one of the few sanitary authorities in the kingdom which recognises the importance of measles as a cause of infant mortality, and of the necessity of taking some means of prevention. An argument that may be used justly against the notification of measles is that there is no hospital accommodation for this disease, and hence the knowledge acquired, although of some use from a medical and statistical point of view, cannot be utilised practically in effectually isolating the patients; this is the only strong argument, we believe, against the notification of measles. On the other hand, it is obvious that a medical officer of health receiving information that measles existed in a particular house would immediately, as a matter of routine duty, communicate the fact to any school or schools attended by children from the same household; this would in itself go some way to prevent spread, for the school authorities would not receive pupils from an infected household; secondly, where families have sufficient accommodation, isolation measures, of a more or less perfect character can be carried out. Lastly, in districts in which cases of measles are notified disinfection will be enforced. It is a nice legal question, considering that the Public Health (London) Act only mentions certain diseases as "dangerous infectious diseases," whether in districts which have not adopted by resolution (confirmed by the Local Government Board) the addition of measles to the notifiable list, it is an offence under the Act to take children actually suffering from measles by rail, or cab, or public car, and whether measures of disinfection can be enforced. Should the view of the exemption of measles from the operation of the general powers of the statute be correct, there is at once an urgent additional reason for all London authorities to add measles to the notifiable list. It is a matter of great regret that the metropolis is not provided with hospital accommodation for measles. According to the last census, no fewer than one million persons live in one or at the most two rooms, and cases of this kind of infectious sickness cannot be treated properly, or even humanely, under these conditions. In some districts of London, the one- and two-roomed tenements house nearly half the population; for instance, in the parishes of St. James, St. Margaret, and St. John, Westminster, out of a total population of 80,000, 30,000 are housed in one- and two-roomed tenements. Whether, considering the intense infection of measles and the frequent obscurity of the early symptoms, isolation in hospital would do much to prevent spread is a question quite distinct from the obvious benefit that would accrue to the sufferer by his removal from a crowded unhealthy tenement to the bright airy wards of a well-managed hospital.

WOMEN AS OFFICIAL INSPECTORS.

In the *Nineteenth Century* there is an article by Miss Louisa Twining, than whom no one is more entitled to speak on the subject, urging the desirability of greatly extending the appointment of women as official inspectors. Miss Twining speaks with special force, as she does with special experience, in regard to their fitness for the duty of inspecting workhouses and workhouse infirmaries. The gradual extension of the system of employing trained nurses in these institutions makes it increasingly necessary that their work should be inspected by women who understand nursing and have been trained themselves. The position of a nurse in a workhouse infirmary is anomalous in the extreme, and her surroundings tend much to her deterioration, and to the lessening of her efficiency. "In the country unions," says Miss Twining, "there are to be found no matrons who have any knowledge of trained nursing, or who have the capacity for even judging of, or appreciating, a nurse's work. Too often, therefore, she is met with jealousy, and her efforts thwarted and misunderstood; orders are given which cannot be carried out, and the interference becomes intolerable; at the best, intelligent supervision is lacking, and how can a nurse's work fail to degenerate, and herself to become demoralised, under such a system and such circumstances as these? So serious in its influence has this want of supervision and encouragement been felt to be that, in the case of one association for providing trained nurses, a trained nurse has been appointed as visitor of the nurses in the different unions to which they are sent, and this with the happiest results. It must be remembered that the inspectors of workhouses are not medical men, there being only one medical inspector for the whole of England outside London. "A high standard of nursing and efficiency can only be maintained by the inspection of qualified and competent persons, an inspection that is at present not given." Miss Twining would not, however, limit women to merely inspecting workhouses and infirmaries. She thinks they are quite in their place when inspecting factories and workshops in which their own sex is employed, and she is especially anxious to see them appointed to watch after the arrangements for women in prisons and lunatic asylums. If it is right that factories in which women are employed should be inspected by women, as has already been admitted, it may fairly be argued that it is doubly right that all places where women are kept under restraint should be under the watchful eyes of persons of their own sex.

TYPHUS FEVER IN LIVERPOOL.

At the weekly meeting of the Health Committee of the Liverpool Corporation on March 15th the subject of typhus fever prevalence in the city was under discussion. The number of cases of typhus under treatment in hospital was 56, as compared with 52 in the preceding week. Thirty-one cases of fever were notified during the week, and 7 cases of fever had been brought to the notice of the medical officer of health, in addition to those notified. There had been in all 7 fever deaths. The authorities are actively engaged in dealing with the outbreak by isolation of patients, disinfection, etc. The increase on the record of the previous week is small, and affords ground for hope that the outbreak has attained its maximum prevalence and will now decline.

THE ELEVENTH

INTERNATIONAL MEDICAL CONGRESS.

Held in ROME, March 29th to April 5th.

[FROM OUR SPECIAL CORRESPONDENTS.]

RETROSPECTIVE AND PROSPECTIVE.

The Influence of International Congresses.

The International Medical Congress which assembles in Rome this week is recognised officially as the eleventh in chronological order of these assemblages which, from quite small beginnings, have grown to be events of no little importance in the contemporary history of medicine. These congresses afford opportunities for the exchange of international courtesies between representatives of a department of intellectual activity which may truly be said to know no frontiers, but in which, nevertheless, certain little national asperities and jealousies are liable to arise, which may be smoothed away or converted into a generous rivalry by opportunities of personal intercommunication and conference.

These Congresses have, also, from time to time, had the happy, if undesigned, effect of stamping, as with the seal of international recognition and approval, the pathological or clinical work of some original investigator, as witness the magnificent receptions given to Lister in Amsterdam (1879), and to Pasteur in London (1881), and Copenhagen (1884).

Their Beginnings.

The origin of these international gatherings may be said to have been almost accidental. The plan was not born complete, with precise rules and a defined organisation, like a constitution of the Abbé Sièyes. It began in a tentative manner and was gradually moulded to meet the special needs of the very special circumstances under which it has to be worked. To the present day, indeed, the greatest elasticity has been retained, and the freest scope is left to the national Committee of the country in which the Congress is to be held to organise the meeting along the lines which in the special circumstances of place and epoch may seem to offer the best prospects of success.

Paris, 1867.

In 1867, the year of the great exhibition in Paris, it had been decided to hold the customary annual assembly of French medical men in that city, and the happy thought occurred to the Committee to address special invitations to foreign members of the medical profession, who might be attracted to Paris to see the exhibition, to take part in the proceedings of the medical meeting. Considering the novelty of the suggestion the invitation was well responded to. Some five hundred foreigners attended and a number of foreign vice-presidents were appointed. Though the proceedings were all conducted in French some interesting discussions took place, and the meeting, on the whole, was so much of a success that the suggestion of one of the Italian delegates, Dr. Pantaleoni, that an International Medical Congress should be made a regular institution was well received. The meeting in Paris was recognised as the first International Medical Congress. Its President had been Professor Bouillaud, and Ricord presided over a surgical meeting—there were no sections—at which was stirred up a vehement controversy, in which he himself took a prominent part.

Florence, 1869.

The suggestion for the permanent institution of these congresses having come from Italy it was at first proposed to hold the second Congress in Rome, but as some fears existed as to the character of welcome which might be met with in a city still under the temporal sovereignty of the Pope, the place of meeting was changed to Florence, where, accordingly, the second Congress assembled in 1869. Its President was Dr. Salvatore de Renzi, of Naples, who welcomed the members in a speech in Latin, the old "universal language" of science. The attendance at this Congress was not very large, in fact the number of foreign members was under a hundred. The Franco-Prussian war following soon after raised feelings very inimical to the international goodfellowship upon which such assemblages must be based and thus the prospect for the future of these congresses appeared to be bad.

Vienna, 1873.

Vienna, however, had the courage to announce its intention to hold an International Exhibition in 1873, and the occasion was taken to revive the project for international medical congresses. Rokitansky, the venerable and venerated professor of pathology, accepted the office of President, and the meeting, though small when compared with others which followed, was most successful, great interest being shown in the discussion of many hygienic questions, especially the prophylaxis of cholera and the efficacy of vaccination. At this Congress it was resolved for the first time to recognise three "official languages"—English, French, and German.

Brussels, 1875.

The fourth Congress was held in Brussels in 1875, under the presidency of M. Vleminckx, and Honorary Presidents were elected to represent the various countries sending delegates—for France, MM. Bouillaud, Jaccoud, Larrey, and Verneuil; for England, Mr. (afterwards Sir William) Bowman; for Italy, Professors Semmola and Palasciano; for Germany, Professors v. Langenbeck and v. Graefe; for Austria, Professors Sigmund and Hebra. The Congress was opened by the King of the Belgians, and enjoyed all the social and official advantages which the warm sympathies of this enlightened monarch could afford. Among the subjects which gave rise to most interesting discussions were epidemic cholera, antiseptic surgery, and the management of lying-in hospitals. It is an interesting piece of history that M. Lefort, who introduced the last-named subject, urged strongly that the continued existence of large lying-in hospitals was unjustifiable, owing to the large mortality among the women admitted into them, and that a series of resolutions were adopted recommending the complete suppression of such hospitals and the substitution of collections of small buildings to hold a few cases only.

Geneva, 1877.

The fifth Congress was held at Geneva, under the presidency of Professor Karl Vogt in 1877. The countries recognised by the election of representative delegates as Vice-Presidents were Great Britain, Germany, Austria, France, Belgium, Italy, the United States of America, Switzerland, Holland, Sweden, and Egypt. On this occasion there were six sections: Medicine, Surgery, Gynæcology and Midwifery, Public Medicine, Biology, and Ophthalmology and Otology. The time of the Section of Biology was occupied mainly with physiological subjects. There was organised also an exhibition of new apparatus and inventions.

Amsterdam, 1879.

Professor Donders, an ophthalmologist and physiologist of world-wide reputation, was the President of the sixth Congress, which was held in Amsterdam in 1879. In a brilliant address he traced the influence on the progress of medicine of the three great nations whose languages were the official tongues of the Congress—the philosophical speculation of Germany, the positive and practical mind of Great Britain, and the anatomico-physiological researches of France. It was at this meeting that Sir Joseph Lister received the remarkable reception to which we have already referred. Among other notable addresses were those of Verneuil, Becker, and Virchow. On this occasion there were nine sections, Psychiatry and Pharmacology being added, and Ophthalmogy and Otology divided. The museum was an important feature of this Congress.

London, 1881.

The great success of the seventh International Medical Congress held in London in 1881 will not have been for-

gotten. The magic attraction of the great metropolis brought the most immense assemblage of medical men ever at that time gathered together. Over 3,000 members, including 1,000 foreigners, registered their names as in actual attendance, and everything that good organisation and Royal and official recognition could do to further the distinction and success of the occasion was done. The general meetings found an eloquent and tactful president in Sir James Paget; and the addresses of Professor Huxley, Professor Virchow, and M. Pasteur, who took occasion to pay a striking tribute to the memory of Edward Jenner, were of exceptional brilliancy. There were sixteen sections, which held, it was said, at the time, 190 meetings, lasting 293 hours, and at which 325 papers were read. A very interesting feature of this Congress was the daily demonstration before the business of the sections began of interesting clinical cases.

Copenhagen, 1884.

The Congress of 1884, under the presidency of Professor Panum, was an interesting and highly successful assembly. It was attended by some 1,700 members, including some 500 representatives of the Scandinavian countries. Virchow and Pasteur again gave valuable addresses, and Verneuil and Tommasi-Crudeli spoke for France and Italy.

Washington, 1887.

The ninth Congress, held at Washington in 1887, was, for various reasons, some of them unavoidable, less brilliantly successful and less truly international in character than some of its immediate predecessors, but those who attended will recall with pleasant feelings the warm welcome and friendly hospitality extended to European members.

Berlin, 1890.

Of the tenth International Medical Congress in Berlin in 1890 who shall speak with moderation? How there were 6,000 members, how Professor Virchow delivered his presidential address to an audience of some 7,000 persons, how many sections there were, and how many and important the papers they read, how friendly the welcome, how lavish the hospitality—is not all this described in the columns of the British Medical Journal of that September for the astonishment of stay-at-home folk?

Eleventh Congress, Rome, 1894.

Of the eleventh International Medical Congress we must still speak in the future tense, for it will only be inaugurated on the morning of the day—Thursday, March 29th—on which the British Medical Journal goes to press, and no more than a brief telegram can reach London in time for publication.

That no effort has been spared to ensure the success of the Congress, and to render their visit to Rome agreeable and advantageous to the members need hardly be said. The postponement from last September, the date originally fixed, but altered owing to the prevalence of cholera on the Continent, is not likely to have in any way diminished the number of those who will attend. There is, indeed, a kind of tradition that at no time in the year can Rome be seen at greater advantage than in Easter week, and though much which at one time rendered this true is now a thing of the past, still the early spring is undoubtedly one of the pleasantest and healthiest times of the year in Rome and Southern Italy. The glamour which surrounds the very name of Rome remains. We may appropriately recall the words used in a leading article in our columns in 1890, when announcing that the next Congress will be held in Rome:

"To mention the name of Rome is to evoke in the minds of those who are familiar with the historic glories, the artistic treasures, and the monumental grandeur of the city, memories of an ineffaceable delight, to renew which must in itself be an invincible attraction; while to those who are acquainted with the storied beauties and undying loveliness of the palaces, the galleries, and the classic remains of the Eternal City, such a visit must be looked forward to with eager anticipation. Rome, too, is now a centre of great scientific and literary activities, the capital of an illustrious nation, and one whose aspirations and repute, not less than its enthusiasm and its sympathies, will not allow it to dream of being backward in the organisation for the great reception, such as that of which London, Copenhagen, Washington, and Berlin have in turn afforded models. The invitation was all the more acceptable, from being given by Baccelli, a former Minister of State, a President of the Italian Society of Medicine and of the Medical Academy of Rome, an orator, a statesman, and a *savant*—one of the most brilliant of speakers, one of the most lovable of men, and one of the most distinguished of modern investigators. Under his presidency, and with the support which he is sure to find from the Government, from the municipality, and from his countrymen, we may be sure that the future Congress of Rome will have active features of its own, before which it is not improbable that all Congresses up to this date will pale their ineffectual fires."

General Programme.

The inaugural ceremony will be honoured by the presence of the King and Queen of Italy, who will thus, and by certain hospitalities which they purpose to extend, testify their interest in the Congress. After the inauguration the formal business of the election of officers will be gone through, and in the afternoon the Sections will meet for the final arrangement of their business, which will begin on the morrow at 8 A.M., and continue at the same hour day by day, except Sunday, until the following Wednesday. That the Italian executive intend that the Sectional work shall be no holiday task is proved clearly enough by the fact that each Section is to sit from 8 to 15 o'clock (8 A.M. to 3 P.M.)—seven mortal hours—on each day, and by the formidable list they have issued of papers to be read, the mere titles of which occupy 69 octavo pages of by no means large type. Whether their numerous guests who are now hurrying to Rome from all parts of the world will be in the same stern mood remains to be seen. There are 19 Sections, and if each sits for the full seven hours on five days, a little simple arithmetic shows that the total number of hours of Sectional work will be 665!

General meetings of the Congress will be held on Friday, Saturday, Monday, Tuesday, and Wednesday (March 30th and 31st, April 2nd, 3rd, and 4th) at 4 P.M., when addresses will be delivered by Professor V. Babes on The Position of the State in Respect to Modern Bacteriological Research; by Professor Bizzozero, of Turin, on Growth and Regeneration; by M. Brouardel, of Paris, on The War against Epidemics (M. Brouardel being detained at the Paris Cholera Conference, his place is taken by M. Bouchard); by Dr. Danilewski, of St. Petersburg, on The Biological *Rôle* of Phosphorus in Organic Compounds; by Professor Michael Foster, of Cambridge, on The Organisation of Science; by Dr. A. Jacobi, of New York, who has taken for the title of his address *Non Nocere;* by Dr. Laache, of Christiania, on "Idiopathic Hypertrophy of the Heart and on Degeneration of the Heart Muscle;" by Professor Nothnagel, of Vienna, on The Reaction of the Organism to Pathological Changes; by Dr. Stokvis, of Amsterdam, on The Relation of Chemistry to Pharmacotherapy and Materia Medica; and by Professor Virchow, of Berlin, on Morgagni and his Influence on Anatomical Thought. Some of these will be published in full or in abstract in the British Medical Journal, and coming as they will from acknowledged leaders of medical and scientific thought, each in his own country, will doubtless be read with interest.

Programme of Amusements.

The "Congressisti," however, are not to be condemned to an unceasing round of toil. In addition to the unequalled attractions of the churches, picture galleries, villas, and ancient ruins of Rome, special evening entertainments have been arranged. On March 28th there will be a reception by the Italian Committee at the Palazzo delle Belle Arti. On March 29th a committee of the citizens of Rome will illuminate the Passegiata Archæologica, which includes the most interesting part of ancient Rome, including the part laid bare recently by the works carried on under the authority of S. E. il Ministro Baccelli, President of the Congress. On March 30th there will be a gala performance at the Costanzi Theatre. On April 1st the Municipality of Rome will give a grand concert at the Constanzi Theatre, and on April 2nd a reception of the 5,000 members of the Congress and their 800 ladies at the Capitol. On April 4th the banquet of the Sections will be held.

On Thursday the final sitting of the Congress will be held in the morning; after that a lunch will be given at the Baths of Caracalla; and, finally, the same afternoon there will be the characteristic Roman festivities—*Corso dei fiori, Ritirata coi Moccoletti.*

THE HOSPITALS AND CLINICS OF ROME.

All the chief hospitals in Rome, some of them dating back, indeed, well into the early middle ages, are monuments of that newly-awakened desire to bear the burdens of the poor. Some of them, as the great Hospital of S. Spirito, owe their foundation to the direct action of the head of the Catholic Church; others, as S. Giacomo, have been enlarged or rebuilt by successive Popes; others again have been founded or extended by private munificence. It has been claimed that hospitals are institutions which did not exist before the general acceptance of Christianity in Europe. However this may be—and it would carry us too far to discuss this point, which has before now exercised the ingenuity of historians—there can be no doubt that nearly all the hospitals in Rome can be traced back as in existence for hundreds, in some instances for many hundreds, of years. Legacies of the piety of a past age, they perpetuate not only its aspirations, but also in their general plan and mode of construction the methods and ideas—fatally from the hygienic point of view—of mediæval architects.

How to convert these noble but obsolete buildings into hospitals in the modern sense of the term was a problem which presented enormous difficulties. It has been met with great courage and intelligence, and the compromise which has been made is one well deserving of study. On the surgical side the difficulty has been overcome by reorganising and in great part reconstructing the places in which operations and dressings are performed. The most absolute purity of appliances of all kinds and of the operating rooms and theatres has thus been ensured, and minute attention to antiseptic details has been trusted to accomplish the rest.

The hospitals in Rome are:

S. Spirito—for male medical cases.

S. Giovanni Laterano—for female medical cases.

S. Giacomo—for surgical cases of both sexes.

Della Consolazione—devoted chiefly to the reception of accidents.

S. Gallicano—for diseases of the skin, syphilis, and venereal diseases generally.

Del Bambino Gesù—for children from the age of weaning up to 12 years.

Dei Fate Bene Fratelli—for men.

In addition there are asylums for the aged, for lunatics, and for foundlings.

The hospital system of Rome has this peculiarity, that the Ospedale della Consolazione is specially assigned for the reception of accidents. All the hospitals, including the medical hospitals, will receive accident cases, and in all cases first dressings are applied in special reception rooms attached to each hospital. In every case, however, in which it is possible to move the patient he is transported immediately after receiving the first surgical treatment to the Ospedale della Consolazione. A very severe case will be admitted into the hospital to which it is brought, but even so it is subsequently drafted to the Consolazione.

Under the experienced and most obliging guidance of Dr. Luigi Concetti, physician to the Hospital del Bambino Gesù, and secretary of the Pediatric Section, we have had the opportunity of visiting the hospitals, of studying their arrangements, and of observing the methods employed in the ordinary course of practice.

Perhaps the characteristic which strikes the English visitor most—after the striking combination of ancient buildings and modern appliances, and therapeutic appliances—is the system by which every surgical ward is provided with a dressing room. This is entirely distinct from the operating theatres, and in every case opens directly off the ward. The patients walk or are carried into the ward in which is a high table, like an operating table, and the room is fitted with all the necessary appliances, douches, instruments, dressings, etc., which are under the charge of a male or female nurse. In this way is avoided the dragging about of screens and all the other preparations for a dressing which we are accustomed to see in an English hospital, and which doubtless have a depressing effect upon the patients. Moreover, having ample room and all appliances to hand, the surgeon or house-surgeon can get through his work more rapidly and efficiently, and an anæsthetic can be administered, if necessary, for purposes of examination or for minor secondary observations without the derangement of the usual ward routine.

We will describe, first of all, the chief surgical hospital of Rome.

Ospedale S. Giacomo.

This hospital, situated in the street of the same name at a few paces from the Corso and in the very centre of Rome, is entirely given up, as has been already stated, to surgical cases. It contains altogether in round numbers 270 beds, and has a staff of four surgeons, four assistant surgeons, and eight internes or house-surgeons. It is in its origin a religious foundation, and stands immediately behind the church of S. Giacomo, the courtyard running up to the walls of the church, and the accident room standing under the shadow of the apse. This accident room is a detached building, well lighted, with cemented floor, and dado, the floor falling from every part towards a central drain. The angle between the cemented floor and cemented dado is rounded off, so that the whole can be easily, quickly, and thoroughly washed down. On the basement also is a small department for out-patient practice. It contains two consulting rooms fitted with tables for operations and examinations, and is fitted with all necessary appliances, including instrument cabinets and douches. Here, as elsewhere throughout the hospital, and in fact in all the surgical dressing and operating rooms in the hospitals of Rome, corrosive sublimate solution (2 in 1,000) is kept constantly warm by bunsen burners under the reservoirs. Here one of the staff surgeons attends every morning and sees the cases which may apply, the ultimate destination of these cases being entirely at his discretion. Cases requiring serious operations will be admitted, cases presenting special features of value for teaching purposes are referred to the Clinica Chirurgica, minor cases are dressed and sent home.

Still on the ground floor we find met a want which is still a crying defect in many London and other large English hospitals. There is an accident ward to which traumatic cases received during the night, or in a condition of intoxication, can be admitted after being dressed, put up in splints, or received other necessary treatment in the accident room. This emergency ward contains thirty-seven beds. It is floored with cement with cement dado, and rounded corners like the accident room. All the tables have tops either of marble or glass and iron supports. Clearly the governing idea has been to introduce nothing into the ward which cannot be quickly and thoroughly cleansed by that most efficient of all cleansers—the combined operation of soap and water and the scrubbing brush. A similar ward for women, but containing fewer beds, is also provided.

The hospital proper consists of a series of wards, old-fashioned in general construction and somewhat ill-ventilated, but scrupulously clean, with distempered walls and cemented floors. The Italian's love of colour and the Italian workmen's instinctive artistic aptitude comes out in the truly elegant effect produced with this cement, which at a casual glance has the general effect of a fine mosaic of a warm light-brown tint. As a whole, the effect conveyed to the eye of the visitor is cheerful. The severe simplicity of all the appointments—the nurses in their white blouses, the bed furniture reduced to its simplest expression, all in the most spotless of white though coarse linen, and the patients themselves—those who are well enough to get about—in the hospital garb of white jacket, white breeches and stockings, and white sandals—produce an effect which is pleasing not only to the inward scientific intelligence, but also to the æsthetic sense, which has perhaps a somewhat lower place in the hierarchy of cerebral centres.

The wards are for men and women, and each surgeon has a ward or a certain number of beds for both sexes. Each ward, as has been said, is supplied with its own room for dressings, and each with a bath room, which is entirely admirable.

Here again we find this admirable Roman cement, which gratifies the eye by its warm tone and meets every hygienic requirement; no furniture, no fittings beyond the marble baths. Here the ordinary patient (that is, the patient not suffering from severe injuries, all the joint cases, the ulcers, *et hoc genus omne*) make their first entry into the hospitals, here they leave their soiled clothes to be taken away to the disinfecting stove, and afterwards wrapped up in neat linen covers to await their departure into the outer septic world, and here in the cleansing waters of the bath they leave, with many grunts and objurgations unintelligible to the northern ear, their more intimate and personal impurities, the accumulation, perhaps, of years.

Outside each ward, in the corridor leading to the baths, is a circular-covered vessel, in which all soiled linen from the ward is placed immediately, to be taken away at frequent intervals to be cleansed.

The bath establishment attached to the male ward is on a large scale. There is a beautiful room—the use of the adjective becomes almost wearisome, but there is no other to express the strange charm and elegance with which the Roman workman manages to invest the most prosaic details—a beautiful room, fitted with douche, needle bath, shower bath, and so on. Further, there is a hot-air bath for fumigations, with a small ward beyond with a bed in which the patient can be placed immediately to cool down.

The wards, as has been said, are remarkable for the extreme simplicity of their furniture; the ward tables are all of marble, or have glass tops, and the patients' "lockers" are best described as small dumb waiters with glass tops and shelves. At the head of each bed is a small portfolio to contain the clinical notes, and on the wall are slates, the one containing the diagnosis, the other recent details as to the temperature, pulse, etc.

In addition to the main long wards there are small wards in which patients are placed immediately after operation, where they can recover from the anæsthetic without disturbing those in the main ward, and to which friends can be admitted if thought necessary. Each surgeon has his own room for dressing his patients, and each ward is provided with a retiring room for the surgeon, where he can see patients in private, make notes, or confer with his assistants.

The largest male ward is an immense corridor containing 108 beds. In the centre of this, as of many other wards, is an altar with the somewhat tawdry decorations usually found in Catholic churches abroad. The waterclosets have been placed as far as possible from the wards proper, but, owing probably to the inherent defects of the old building, much remains to desire in this respect. The ventilation also appears to be distinctly defective, and might probably without much difficulty be materially improved.

The operating theatres have been most carefully fitted. Again, we find the cemented dado, 5 feet high, rounded cemented angles, and cemented floor, no chairs or stools, all tables, and other fittings of brass or glass—nothing which cannot be washed, in fact deluged, with water. There is a steriliser for dressings, and also for instruments, and the room is warmed by hot air admitted through cotton filters somewhat in the same manner as that used for purifying the air for the House of Commons. The theatre has two galleries for spectators, with detached staircases; these galleries are entirely cut off from the air of the operating theatre by large sheets of plate glass. The view from these galleries is excellent, and the only objection which can be raised is that the galleries will admit only a few spectators. The surgeon and his assistants, whether at operations or dressings, wear long white linen blouses reaching from the neck below the knees.

In connection with this hospital is a laboratory for microscopy and bacteriology, fitted with the necessary appliances—incubators, sterilisers, etc., photographic appliances. Opening off this is the clinical theatre, an ancient room with heavy carved-wood fittings, in which lectures and demonstrations are given, and in which meets the Lancisian Society, one of the oldest, and formerly the most important, medical societies in Rome.

Not far from this we find the room for the sterilisation of dressings. It is in the charge of a special nurse, who attends to it alone. It is provided with a steriliser (made in Germany) for dressings and bandages. The bandages are rolled in the full width of the stuff, sterilised, and subsequently cut to the size required by a powerful knife set as a lever, in the way in which bread is cut into slices in some institutions.

The nurses employed in this hospital are both male and female.

OSPEDALE S. SPIRITO.

This immense institution occupies a site on the right bank of the Tiber, just below the Castle of S. Angelo, and many of its wards command charming views across the historic stream. It is of extremely ancient foundation and contains altogether some 3,000 beds. A large proportion of these are set apart for the reception of lunatics, and to a large foundling asylum. The number of medical beds is about 1,000, the number actually occupied at the time of our visit was 646. During our visit to this hospital and to the Clinica Medica at present attached to it, we had the advantage of the guidance of Dr. Minossi, one of the assistants to the Professor of Medicine. The hospital is divided into two main parts by a street, and in each there is one enormous long ward reaching the whole length of the building. That on the side towards the Tiber is divided into two by a beautiful rotunda with a high pitched circular roof, under which is an altar of elegant construction and tawdry ornamentation. The lecture theatre is an ornate apartment which contains two extraordinary preparations of the blood vessels of the whole body mounted in big glass catinets suspended to the walls. They are dated 1774 and are the products of the industry of Joseph Flaini, who has the credit here of being the first to describe exophthalmic goitre, a credit generally given to Graves or Basedow. Opening off this is the anatomical and pathological museum, remarkable rather for its rococco ornamentations than for the preparations it contains, though among them are some admirable wax models, and a considerable collection of specimens of diseases of bones.

Though mainly devoted to medical cases, the hospital contains also two surgical wards and two operating theatres, the one for aseptic the other for septic cases—that is, all cases in which pus has already formed, including such diseases as empyema. The room for necropsies is well arranged, with good light and cemented floor and dado. Attached to it is a preparation room fitted with microscopes and bacteriological appliances. Cases of exanthematous disease and tuberculosis are treated in special detached wards, which will soon be replaced by new buildings.

THE MEDICAL CLINIC.

The number of medical students in each year at the University is about 100, so that, as clinical attendances must be kept for two years, there are generally about 200 students attending the clinical departments.

The Clinica Medica set apart for educational purposes, and almost identical in its object and general plan with the clinical ward at Guy's, is at present attached to the S. Spirito, but will shortly be removed to the fine new *Policlinico*; it contains male and female wards. The staff consists of the Professor of Medicine in the University, three assistants to the professor, and four assistant physicians; the jurisdiction of this staff extends also over the hospital, but the teaching is confined to the clinical department. The main ward is an immense hall, half of which—separated from the rest by a wooden screen—belongs to the clinical department. The beds for women are contained in two small wards. Here we were shown two interesting cases, a very marked example of Addison's disease in a young woman and a case of anæmia splenica with an enormous spleen which had fallen downwards and forwards, and appeared to occupy the greater part of the lower half of the abdomen. The present time, however, is not a good one for seeing the clinical departments, as the University is in vacation and the classes are suspended.

Opening off the clinical wards are rooms for the examination of patients, where also "histories" and "present states" are taken; one of the rooms is fitted with a very complete set of electrical and other appliances for clinical examinations. In the clinic also is a small bacteriological laboratory, with its windows looking down on to the Tiber. The whole arrangement of this department, however, is temporary and provisional, awaiting the completion of the Policlinico, and the building in which the Medical Clinic now is will shortly

come down to make room for the new Victor Emmanuel bridge which is to span the Tiber at this point.

The Surgical Clinic.

The surgical clinic is at present established in an old disused manufactory in the Trastevere district at the foot of Janiculum, and the poorest quarter of Rome. As Dr. Rossi, who with the greatest readiness and courtesy showed us all that was to be seen here, observed, the building was very ill adapted for its purpose, but by dint of much ingenuity has been made to serve far better than from its exterior and general plan might have been anticipated. A corridor runs round a square, tastefully planted with shrubs, and opening off the corridor are a series of small wards holding, as a rule, four beds each. A special ward is set aside for laboratories, and here, as indeed in all the wards, the severe simplicity of all the furniture, the entire absence of carpets, cupboards, pictures, and other traps for dirt strikes the eye, and everywhere the floors are of cement or tiles. The building is fitted throughout with the electric light and with electric bells, and every serious case is provided with an electric bell brought to the side of the bed. The operating room is a model of cleanliness and simplicity. There is a steriliser, of German manufacture, for bandages, and a Schimmelbusch steriliser for instruments. The antiseptic used is, in the main, corrosive sublimate, but also carbolic acid and iodoform: and glycerine emulsion has also been used for articular tuberculosis, but has not given good results, and is now being abandoned. In this room is a converter connected with the electric light mains, for heating the electric cautery, but we were informed that it was seldom used except for rare cases of secondary hæmorrhage. Dressings after the first are done in a special room fitted with its own complete set of appliances. In the clinic are a few private wards to which patients are admitted for operation at a charge of 10 francs a day.

The Skin and Venereal Clinic.

The clinic for diseases of the skin, syphilis, and venereal diseases is at present established in the hospital of S. Gallicano, a strange, low, ramshackle building near the Tiber. The visitor enters an irregular courtyard, where small boys in blue cotton suits and white nightcaps swarm and disport themselves apparently in the enjoyment of the most robust health. But the diagnosis is easily made even without seeing the local lesion; they are "the ringworms;" and opening off the courtyard in which they are now playing and shouting so vociferously is a school where their education is continued during the months of treatment. There are here clinical wards for skin cases, male and female; and in the male ward Dr. de Sanctis showed us a remarkably typical case of leprosy. The case has excited much interest in Rome, as the disease is rare in Italy, and so typical an example is rarely seen. We saw also a case of pellagra in an old peasant, which, however, did not present any very characteristic symptoms, as the old man had almost recovered under the influence of rest and good food. The clinic contains a small operating and dressing room, where out-patients are seen in the morning. There is also a large lock ward for women.

Ospedale del Bambino Gesù.

The Children's Hospital is established in an old convent, which stands in a magnificent situation, near the top of the Janiculum, and commands a panoramic view of Rome. The eye takes in all its domes and campaniles and historic sites, and wanders over the levels of the Campagna to the Alban Hills and the snow-capped Apennines. The hospital was founded by the Duchess Salviati in 1869. The first hospital stood on low ground, and contained only 12 beds. It was soon seen that it met a real want, and the municipality granted the present building and a considerable amount of vacant ground around. There are now 200 beds, and we were interested to learn from Dr. Concetti by what funds the institution is maintained. We were informed that there were four classes of patients: (1) Those who occupy beds on the original foundation of the Duchess Salviati; (2) those who occupy beds at the cost of benevolent persons who pay 50 francs a month, and are entitled to keep a bed full; (3) paying patients, whose relatives contribute 60 francs a month; and (4) those who occupy the 100 beds supported by the Congregazione di Carità, a charitable institution which works upon much the same lines as the Charity Organisation Society.

The wards, which are bright, clean, and comfortable, with tiled walls and iron cots, contain rather too many patients. There are special wards for tuberculosis, and for noisy or troublesome children. The medical wards occupy the ground floor, the surgical the upper floor, and each surgical ward has its dressing room. There is also a special ward for the use of patients immediately after operation. In the corridor outside the wards on each storey is a shoot for soiled linen, and a room in which the patient's own clothes are stored after disinfection. The operating room, which has the aseptic arrangements already noted in other hospitals, has attached to it a dressing room ornamented with portraits of distinguished physicians and surgeons, among which we noticed a portrait of Dr. C. West, and a recent photograph of Sir Joseph Lister. The special department for infectious diseases is under the direction of Dr. Concetti; it consists of a number of small wards, but will shortly be replaced by a new pavilion for infectious diseases, which will be erected on the vacant site already mentioned. The old wards will then be given up entirely to whooping-cough.

Institute of Hygiene.

The Istituto di Igiene Sperimentale is an institution of which the Roman School may well be proud. It stands on an elevated site not far from the Institutes of Anatomy and Physiology of Chemistry and Physics, and is in the main a new building, some four or five years old, but the lecture theatre is an extremely handsome apartment, which was formerly a church. This Institute is presided over by Professor Celli, who was kind enough himself to conduct us over his domain, and to explain to us all its admirable arrangements. He has three assistants, Professors Scala, Fermi, and Fioccha. Near the entrance we are shown first a small but well arranged and thoroughly practical museum, containing plans, maps, diagrams, and specimens of sanitary appliances. Near this are the practical class rooms for the students' classes, excellently fitted and lighted. On the ground floor is the Pasteur section, where preventive inoculations against hydrophobia are made. Here are preserved the spinal cords of various degrees of virulence with which the inoculations are made, and in the garden at the rear well made and beautifully clean cages for the animals which furnish the material for inoculation. As we were saying farewell to Professor Celli we met at the door a small patient, brought by his parents, who had already undergone some of the earlier inoculations.

There is a preparation room for making culture fluids, and near this a large room fitted with tables and the necessary apparatus which are allotted, as space permits, to medical men who are willing and competent to undertake original work. Here our devoted guide, Dr. Concetti, was able to point out the table at which he had been able to conduct a long series of investigations at once scientific and practical as to the influence of various drugs and antiseptics on the bacillus Loeffleri, the original materials being drawn from the cases of diphtheria in the children's hospital, and the laboratory results applied at once to the treatment of subsequent cases in the hospital. His results have been published in a recent work, *Studi Clinici e Richerche Sperimentali sulla Difterite*. On an upper floor are Professor Celli's private laboratories. He has a remarkable collection of typical cultures of bacteria of very many species, which are used for purposes of comparison and for teaching. Here also he showed us various species of amœbæ, pathogenic and non-pathogenic. He has given recently much attention to this subject, and has succeeded in isolating and cultivating eight species or varieties on a special culture medium. An amœba thus cultivated has been derived from water and the soil, and also from various parts of the human body—the mouth, the intestine and the vagina. The majority of these are thought to be non-pathogenic, but two varieties are associated respectively with dysentery and with certain forms of diarrhœa. These researches are not yet complete, but Professor Celli contemplates the publication at an early date of a preliminary communication.

In an adjoining room we were shown an extremely in-

genious centrifugal machine, with which two fluids can be centrifugalised at the same time. The motion is imparted by a small electro-motor, and the number of revolutions in the minute is 25,000; yet the whole apparatus would pack easily inside an ordinary "top hat." This beautiful little instrument is of Italian manufacture, as is also an oleo-refractometer for studying the constitution of oil, butter, and other oleaginous materials, also the work of an Italian instrument maker.

Near at hand is an "incubation room," fitted with incubators of the most approved kind. On an upper floor is another series of rooms devoted to bacteriology; it contains class rooms and also a series of smaller laboratories for the assistants and for independent workers. All are airy, well lighted, and fitted with the necessary appliances for bacteriological investigations.

Descending again to the second floor we find a library well supplied with periodical literature. It is divided into two sections; in the one are works chiefly concerned with bacteriology and experimental pathology, in the other those which deal with engineering, drainage, and other details of practical hygiene.

We visit next the food department, where are class rooms for instruction in the analysis of foods and drinks, small rooms for original workers, and an extremely interesting collection of specimens of macaroni, illustrating all the stages of manufacture from the grain to the finished commercial article. This section is given up entirely to teaching and research, the work of the public analytical department being done in a special laboratory attached to the Home Department. Here also we were shown specimens of sterilised milk made by an Italian firm, which had been found to stand the test of long keeping very well, better indeed than any brand with which it had been compared.

At the top of the house is the photographic department, containing microphotographic apparatus. As a rule the electric light is employed, but there is an an arrangement by which sunlight also may be used.

Institute of Anatomy.

The Institute of Anatomy is located in a large building, in another part of which are the Institutes of Physiology and Histology and of Pathology.

In the anatomical department there is a theatre, exceedingly well lighted from both the top and the sides, and provided with all the necessary requirements in the way of boards and wall space for diagrams for lecturing to large classes. The seats are arranged in the way which is now universally acknowledged to be the best, namely, rising not too steeply from the lecturer's table and slightly curving outwards. Close to the lecture theatre is a demonstrating theatre, which is supplied with a rotating table for a subject. The windows are so arranged as to give a good light to the table whilst the rest of the room is in shadow. Leading out of the demonstration theatre is the dissecting room, which, although not a very large room, is exceedingly well appointed. The tables are models of what dissecting-room tables should be; each table is entirely of metal, painted so as to be easily washed, and mounted upon a central pillar upon which it rotates. The body lies upon a perforated plate which not only serves to drain off any fluids, but is also connected through the pillars with an aspirator, which maintains a constant down draught, so that all the gases which emanate from the subject are sucked down, and the air in the dissecting room is consequently kept perfectly sweet. The lecture theatre, demonstrating theatre, and dissecting room are on the ground floor, whilst the rooms above are devoted to the research and preparation laboratories.

Professor Todaro, who for the last twenty years has devoted especial attention to the study of tunicates, is the director of the anatomical department and lecturer upon general anatomy; whilst Professor Giuliani takes the lectures upon topographical anatomy, and Dr. Mingazini gives a course upon histology.

Professor Todaro very kindly showed us over his own research laboratories, and allowed us to see some of his unique preparations of tunicates.

Professor Giuliani's rooms contain all the apparatus necessary for research work, and attached to the institute is a very complete anatomical laboratory, well supplied with English, German, and French journals and works. The anatomical department issues, under the direction of Professor Todaro, with the help of Dr. Mingazini, very elaborate reports of the work done in the institute.

Physiological Institute.

This is under the same roof as the anatomical department, and is at present undergoing extensive alterations, for when Professor Luciani succeeded Professor Moleschott, some months ago, he found that considerable changes would be necessary to bring the department up to the level of the anatomical and pathological schools.

The research rooms are moderately well fitted, but the rooms for practical teaching are now under process of reconstruction. Professor Luciani and his assistants kindly showed us several animals upon which they had recently operated, illustrating the results of removal of different parts of the brain, one dog from which half of the cerebellum had been removed being especially noteworthy from the very clear and definite results obtained. Professor Luciani is still continuing his most important work upon the functions of the brain, and proposes reading a paper at the Congress upon the functions of the Cerebellum.

In one of the rooms of the Physiological department are placed the wonderful collection of preparations made by the late Professor Moleschott, illustrative of vertebrate embryology.

Institute of Pathology.

The department of pathology occupies a considerable number of rooms in the same building as that of anatomy and physiology. In the basement are a series of small rooms about 20 feet square, one of which is devoted to spirit specimens of tumours, and another to pulmonary and intestinal diseases.

This department is under the direction of Professor Marchiafava, and contains on the ground floor a small but very convenient laboratory for a junior course of pathology. The students' laboratory is fitted with all the apparatus necessary for the cultivation of bacteria, in addition to the usual appliances, and is very well lighted and appointed.

Close to this room, but entirely detached from the main building, is an animal house, the cages for the animals being hung from the walls, and being fitted with perforated bottoms, beneath which trays can be arranged for the collection of urine.

On the second floor is the lecture theatre, which is used both for lectures upon pathology and physiology. It is an exceedingly well-lighted and convenient room, with benches rising upwards from the lecturer's table to seat about 230 students. The lecture's table is a long one, and has numerous appliances for demonstration purposes.

On the same floor are several research laboratories for the assistants and for senior students, in one of which there is a cabinet containing, amongst a large number of most interesting specimens, those of Professor Marchiafava, of the Plasmodium Malariæ.

Ospedale di S. Maria della Consolazione.

This hospital, which is specially devoted to the reception of accidents, stands close by and above the Forum Romanum. It contains 100 beds for both sexes, and is an old building adapted, by recent alterations, to its present purpose. The staff consists of two chief surgeons, two assistant surgeons, and four house-surgeons. The wards, which are broad and lofty, contain, judging by the eye, a comparatively small number of patients in proportion to their cubic space. In the largest were 32 beds, in another 24, in another 16, and nearly all were occupied. The patient, on admission, is taken first of all to a casualty room, furnished with an operating table, and here dressings, splints, etc., are applied, and the patient is washed, his clothes changed, and he is prepared generally for admission into the general wards. If a serious operation is necessary, he is removed to the operating theatre a large, well-lighted room with glass floor and dado, provided with the receptacles for antiseptic solutions, and with the sterilisers for instruments and bandages, which have already been mentioned in describing other hos-

pitals. Near the operating theatre is a dressing room where the second and subsequent dressings are applied, the patient being removed to it from his ward. The waterclosets are here, as in most of the Roman hospitals, too near, and in too intimate aërial connection with the wards, but an effort has been made to detach them as much as possible, and in the case of one ward the watercloset has been built out, and is entirely cut off from the ward by another passage.

Each surgeon has, besides the dressing rooms of the wards, a special room of his own in which he can interview patients, take notes, and in other ways feel that he has a corner in the hospital which he can call his own. There is in this hospital also a room called the armamentarium, in which all instruments are kept in the charge of a special attendant.

In the hospital garden, which is prettily laid out, with a fountain in the centre, are a number of small cottages containing one or two beds; in these cases which for various reasons it may be desirable to isolate are placed. As a rule they are used for infectious cases, but also sometimes for cases of special severity, which it may be desirable to keep quiet. There, on the occasion of our visit, one cottage in a quiet corner, with darkened windows, contained a patient suffering from tetanus, and another man who had sustained a fracture of the tenth dorsal vertebra, for which laminectomy had been performed.

The hospital possesses a clinical theatre, and in connection with it a small library. In it we noticed a handsome volume containing the history of the hospital, written by the Deputy, Pietro Pericoli, and published in 1879.

The main women's ward is in a detached building at the opposite side of the street; it contains 24 beds, and attached to it are isolation wards and the usual dressing room.

The Military Hospital.

The large military hospital, of which Italian surgeons are justly proud, occupies an elevated situation, at no great distance from the Consolazione. It covers a very large site, roughly triangular in form. In viewing it we had the advantage of the guidance of Dr. Grosse, *aide-major*, who has prepared a detailed description of the hospital and its administration for presentation to the Section of Military Surgery and Medicine of the Congress. He informed us that there were twenty-eight separate detached buildings forming the hospital. Of these the most important are the four blocks for the administrative offices, pharmacy, and so on; eight pavilions, each containing two large wards; and the surgical pavilion, which contains the operating theatre and its dependent rooms. In addition there is a pavilion for officers on the sick list, a series of small pavilions for infectious diseases, each labelled with the name of the disease, measles, scarlet fever, etc., to which it is devoted, a large laundry, a disinfecting house, mortuary, a house for the sisters of charity, and other smaller buildings.

The administrative block contains special rooms for bacteriology, for urine testing, and for other special purposes, including an ophthalmological room, used especially, as Dr. Grosse put it, for "les maladies simulées et dissimulées." The pavilions are connected with each other and with the administrative block by light cross galleries and bridges, which are entirely uncovered, and each ward is in telephonic communication with the rooms in which the surgeon on duty sleeps and lives in the administrative block. Under the galleries is a tramway on which run small trucks to and from the laundry, kitchen, and other central sources of supply. Altogether the hospital provides about 500 beds for surgical and medical patients. Each ward has a small isolation room, and the waterclosets are separated from the ward by a large cross-ventilated corridor.

On reaching the surgical pavilion the visitor first enters a preparation room in which dressings are disinfected and solutions made. The water used for making the solutions is first passed through a Chamberland filter. The solutions are stored in large reservoirs, from which tubes pass through the wall into the operating theatre, where they are brought, at the height of about 8 feet, over the operating table. The theatre itself is a large room, shaped like a bay window, and full of light. It has a glass floor and dado, and the operating table is of iron with perforated enamelled iron top, with drainage beneath for carrying away solutions or discharges.

Hospital of San Giovanni.

This is a large hospital, which has been quite recently renovated. It is devoted entirely to women, and is divided into two sections, one being restricted to obstetrical and gynæcological cases and the other to medical patients. The director of the hospital is Professor Pasquale, who is also chief surgeon to the Obstetrical Section, whilst Professor Mazzoni is senior surgeon for medical cases requiring operation. On the medical side there are five visiting physicians, each of whom has attached to him two assistants to look after the four to five hundred patients in the hospital. As usual in the Roman hospitals, the greatest care has been exercised in rendering the wards, operating rooms, corridors as aseptic as possible: the floors are all tiled or cemented, and the walls either tiled or painted. The ventilation is very good, and the wards, although in some cases overcrowded with two rows of beds down each side, are sweet and clean. The main wards are very large, but there are also a considerable number of small wards for special cases.

Close to the entrance is the reception room, and attached to it is an observation ward, where doubtful cases may be watched before admission to the general wards. *En suite* with the reception room are bath rooms and lavatories. Small wards are set apart close to the main wards for the reception of medical cases requiring minor operations, and in addition there is a suite of rooms for major operation cases. This suite consists of a small room where the surgeon and his assistants can render themselves as nearly as possible aseptic, leading from this is a second room where a final examination of the patient may be made and the anæsthetic administered; opening out of this is the operating room fitted with all modern appliances, and next to it is another small room in which the irrigating and other solutions are prepared, and opening out from this again is a room in which the surgical instruments are kept; whilst finally a small ward is attached containing two beds into which the patients are taken after operation. Close to these rooms is the professors' private room with a small laboratory opening out of it.

In the Obstetric Section there is a suite of rooms providing almost ideal arrangements for avoiding sepsis. The patient is received in a small room where she can be thoroughly cleansed, and is then carried into a second room in which each bed is divided into two parts, the foot end being removable; this manifestly is of great convenience for delivery in the dorsal position. The patient is then carried into a special lying-in ward.

INAUGURATION OF THE CONGRESS.

The Eleventh International Congress was formally inaugurated on Thursday, March 29th, at 10 A.M., in the Theatre Costanzi. His Majesty the King of Italy, who was accompanied by the Queen, by the officers of the military household, and by the principal Court officials, was received at the entrance to the theatre by the President of the Congress and by the Presidents of the various International Committees. Entering the theatre by the *parterre*, he took a seat reserved for him on the stage, where also were the Ministers and Under-Secretaries of State, and the Presidents of the International Committees and of the Sections. In the boxes of the first tier were members of the diplomatic body and the chief State dignitaries. The second tier of boxes were occupied by the ladies accompanying members of the Congress, and by the ladies of the Roman Committee. The floor of the house was reserved for the members of the Congress. Immediately after the King had taken his seat, M. Crispi, the Prime Minister, speaking in Italian, expressed the good wishes of the Government for the success of the Congress, and referred to the great importance of the subjects which would be discussed.

Professor Baccelli delivered the inaugural address in Latin, and dwelt on the importance of the "great and solemn festivals of science." At the conclusion of his discourse he, in his double capacity as President of the Congress and Minister of Public Instruction, in the name of the King formally declared the Congress open.

Prince Ruspoli, the Syndic of Rome, then extended to the members the welcome of the Municipality and of the citizens of Rome, "S.P.Q.R."

Professor Virchow, speaking as the President of the tenth International Congress at Berlin, expressed the thanks of the members of the Eleventh Congress to the city of Rome and to Italy for the warmth of the welcome extended to them. Thereafter Professor Maragliano, the Secretary-General of the Congress, called upon the presidents of the International Committees, who, speaking briefly in the name each of his own country, acknowledged the compliments which had been paid to the foreign members.

The rest of the sitting was occupied by formal business. Six thousand persons were present. The scene was very brilliant and the enthusiasm enormous.

At 3 P.M. the sections assembled in the rooms allotted to them in the Policlinico, and formally elected their presidents and other officers.

It is early times yet, when the eleventh International Congress has not actually begun, to speak of arrangements for the future, but there is already no doubt that the future is assured. It was understood at Berlin that the invitation from Russia would probably be accepted, and that the twelfth Congress will be held in Moscow. A strong rival, however, will be Madrid, and the Spanish delegates will make a determined effort to obtain a recognition of the claim of their country to the honour of entertaining the Congress. They urge various considerations in favour of their proposition, among others that Madrid is far more accessible, and that its climate in September is extremely agreeable, neither too hot as in August nor too cold as in October. Should the invitation to Madrid be accepted, it is probable that the president chosen by the Spaniards would be the Marquis del Busto, Dr. Letamendi, or Dr. Calleja.

Professor Marchiafava has arranged to give a demonstration of living specimens of the plasmodium malariæ.

Professor Péan, of Paris, intends to read two papers of some importance, the one on the surgery of the joints and the other in the gynæcological section. Dr. Backer, of Paris, will give a demonstration of the behaviour of the yeast organism in the blood, and its power of including and destroying bacteria. He is confident that this observation may eventually have important therapeutic applications.

The President of the Congress, Professor Baccelli, as Minister of Public Instruction, has caused all the ancient *Codici di Medicina* in the various libraries of Italy to be sent to Rome and placed in the historical museum. Many of them, it is said, are beautiful manuscripts, containing fine specimens of the illuminator's art.

The combination of exceptional attractions which Rome presents as the place of meeting has drawn a very large number of visitors to the eleventh International Medical Congress, which promises to be, if possible, more successful than any that have been held previously.

As soon as Rome is reached, the care of the member by the Italian Committee commences, for at the railway station a man awaits the arrival of the train, and as soon as the passengers have alighted the *congressisti* are directed to an office in the station, where all information with regard to lodgings can be obtained.

The work of the officials at the railway station office is by no means a light one, for rooms are only to be obtained with considerable difficulty by those who have not secured them in advance.

The central office of the Congress is the Via Genova, and the position is indicated in the Via Nazionale, out of which the Via Genova leads, by a white flag directing attention to the fact that the reception room is in the adjoining street.

The Congress Hall is in a large building usually devoted to art, and is subdivided into a central hall with galleries and a series of side rooms devoted to offices at the end, to a mineral water exhibition on the one side, and to the reception room on the other.

All the notices are posted in four languages—Italian, German, French, and English; and these are in almost every case models of clearness.

On entering the reception room the member is directed to a long table, divided into four sections, each section being indicated by a notice that the official behind it speaks one of the four official languages, so that the inconveniences of not knowing Italian are for the time spent in the Congress Hall almost absent. At this table the form is supplied, white for members and pink for guests, which has to be filled up before the invitation card is exchanged for a card of membership. The information requested includes numerous details, such as residence in England and Rome, the section to which special attention is going to be devoted, and a statement of titles, etc. Nothing unnecessary is asked for, but, on the other hand, everything which is likely to lessen the probability of mistakes being afterwards made is required. In return for the filled-up form, the invitation card, and a visiting card the member receives his card of membership, which will admit him without payment into picture galleries and museums, hospitals, and various other places of interest or amusement, cards of invitation to the inaugural ceremonies, a medal, and a rosette.

The medal is a copy of a medallion of the time of the Emperor Antoninus, which represents the god Tiber as he is rising out of the water, extending his hand to the serpent borne upon the trireme which appears to be under the Pons Fabricius (Ponte Quatro-capi).

Close to the reception tables there is a well-arranged *poste restante*, and in the outer hall there is an office for the exchange of money and another for the purchase of tickets for the dinner of the sections.

If the sectional dinner repeats the similar function at the Berlin Congress in 1890 it will not be one of the least successful of the various entertainments proposed. It is expected that a very large number of guests will be present at this dinner as already the inquiries about it are both numerous and constant.

The preparations at the Policlinico, where the meetings of the Sections will take place, are proceeding with great rapidity; the buildings are being gaily decorated, and everything is being done that is possible for the convenience of members.

A new way is being constructed from close to the Policlinico direct into the Castro Pretorio, by means of which the centre of the city can be reached, and this affords a good example of the enormous amount of trouble which is being taken to render the arrangements as perfect as possible.

The exhibits promise to be both varied and numerous, and the number of exhibitors is greater than at the Berlin Congress; more than 600 having responded to the invitations issued, including many well-known Italian and foreign

firms. The exhibits have already exceeded the space allotted to them in the Palace, and have overflowed into an adjoining building.

The list of papers to be read at the different sections, provisionally published, is an exceedingly long one, but as it is only a provisional one, it is impossible to tell exactly what papers will actually be read. A revised list is in preparation, and will be published on the first day of the sectional meetings.

At the time of writing nearly two thousand members have already inscribed their names, although the official opening of the Congress does not take place for three days, and it is reported that nearly three thousand guests have arrived. It is confidently expected that four thousand members and at least an equal number of guests will be present before the end of the week.

Among those who arrived in Rome early in the week to attend the Congress were Sir Dyce Duckworth, Sir W. O. Priestley, Dr. Duffey, Sir W. McCormac, Dr. Hare, Dr. Ferrier, Inspector General Eames, Mr. Malcolm Morris, Prof. W. R. Smith, Dr. J. W. Moore, Dr. Magee Finney of Dublin, Dr. Charles Ball, Dr. C. J. Nixon, Dr. C. Nugent, Prof. Virchow, Sir Spencer Wells, Dr. Bouchard, Dr. Backer, Dr. Péan, Sir William Stokes, Prof. Simpson of Edinburgh, Prof. Michael Foster, Prof. Nothnagel, Prof. Benedikt, Prof. Kaposi, Dr. Treille of Algiers, Prof. Charrin, Prof. Lucas-Championnière, Dr. Peyrat, Dr. Apostoli, Dr. Bérillon, Dr. Marcel Bourdoin, Prof. Baginsky, Dr. Ruffer, Dr. Bantock, Mr. H. Power.

The new Policlinico, in which the meetings of the sections will be held, is situated on a commanding site outside the walls, not far from the Porta Pia. It is an immense erection, and some of the pavilions are not yet out of the builder's hands. It consists of a central block and two long wings, each composed of a series of pavilions. The central block bears on its *façade* the inscription *Policlinico Umberto I, Anno MDCCCXCIII.* Entering the main hall the visitor finds in front of him a splendid staircase in white marble, which leads up to a gallery four square. Here are found the offices of the President, of the Secretary-General, and of the national committees, post and telegraph office, telephone, and an office for registration. Following the front of the building we come first to a pavilion inscribed *Clinica Propedeutica Medica*, then to a pavilion for women, and next to a pavilion of very handsome elevation, the upper part of which contains the immense bas-relief of Morgagni surrounded by his pupils.[1] This building is inscribed *Regio Istituto di Clinica Medica.* Beyond this are two more pavilions for men and women respectively. Walking in the inverse sense from the central administrative building we find first a pavilion inscribed *Clinica Propedeutica Chirurgica*, next to a pavilion for men, and then to that inscribed *Regio Istituto di Clinica Chirurgica*, which has a special interest for the representatives of Great Britain. It corresponds generally with the medical clinic, but the façade contains a bas relief of Sir Joseph Lister in the operating theatre.[1] Beyond this are three pavilions, two for women and one for men. To this building the several scattered clinics of Rome—medical, surgical, obstetrical and gynæcological, dermatological, ophthalmological—will shortly be transferred.

The following are the dates at present settled for the delivery of the general addresses to full sessions of the Congress:—Friday, March 30th: Professor Virchow, Professor Brouardel, Professor Babes. Saturday, March 31st: Professor Michael Foster, Professor Nothnagel, Professor Laache. Monday, April 2nd: Professor Danilewski and Professor Bizzozero. Tuesday, April 3rd: Professor Ramon y Cajal and Professor Kocher. Wednesday, April 4th: Dr. Jacobi and Professor Stokvis. It is possible that these arrangements may be altered, the more especially as there is reason to believe that both Professor Ramon y Cajal and Professor Kocher may be unable to attend.

To celebrate the fact that the first use to which the buildings of the new Policlinico have been put has been to afford hospitality to the Eleventh International Medical Congress, the architect, Giulio Podesti, has published, through the firm of C. Virano e C^{a}, of Rome, a beautiful volume descriptive of the building, illustrated by plans and drawings by his assistants, E. Negri, L. Rolland, and V. Manni.

The occasion of the Congress has called forth many evidences of the widespread interest which has been aroused amongst the Italian universities by its being held in Rome, but amongst all those received by the President perhaps one of the most unexpected has come from an Englishman, Dr. Steele, who has composed a Latin poem in honour of Dr. Baccelli.

The King and Queen of Italy will give a garden party in the gardens of the Quirinal Palace on April 2nd. It is understood that some 6,000 invitations will be issued, and extensive preparations are already in progress under the direction of the Master of the Ceremonies. Unwilling to trust to a continuance of the magnificent weather, it is intended to roof in a large space where the guests can be received in any event.

Professor Baccelli will give a dinner to the official national delegates in the Salle Umberto.

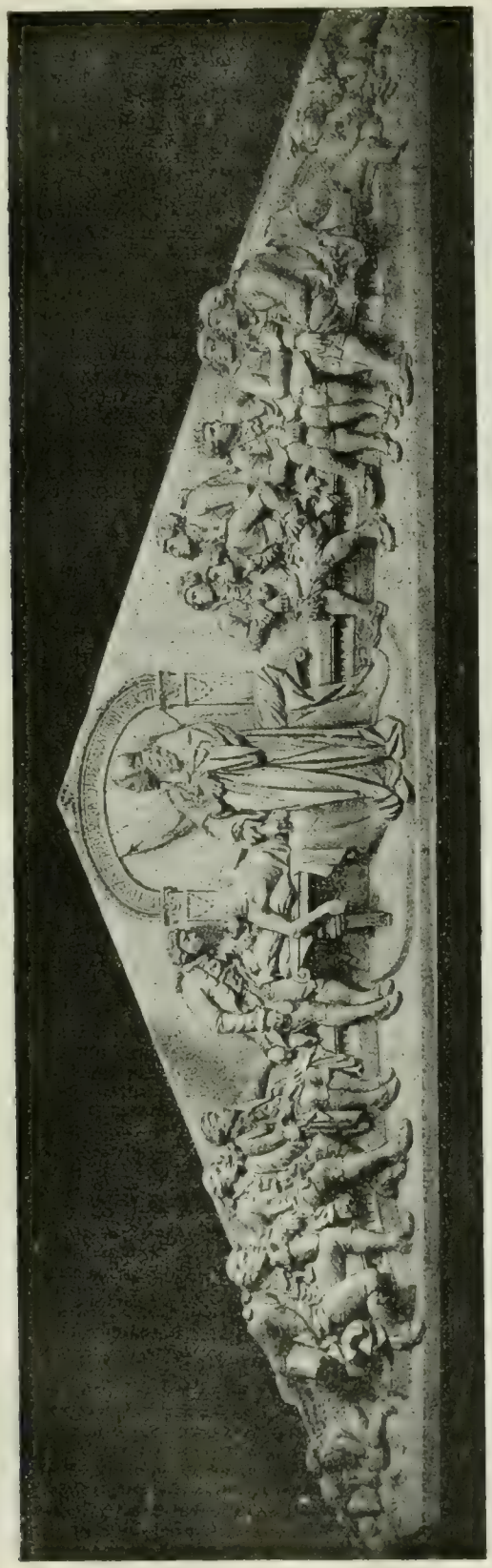
The British Ambassador, Sir Clare Ford, has issued invitations to a large dinner party to official national delegates on Friday, March 30th.

Up to the time of writing the rooms in the Palace of Fine Arts, in which the Hygienic and Medical Exhibition is located, only present a scene of confusion; but the exhibitors are working night and day to get ready for the opening on Wednesday, and the exhibition promises to be a most successful one. The number of exhibitors up to the present is stated to be 650. Of these Italy and Germany provide the greatest number. The latter country alone occupies two entire rooms with its exhibits, amongst which the Army Medical Service contributions hold an important place. The French Government have sent models of stretchers and barracks, and the Austrian war department supplies numerous models of appliances for succouring the wounded. The historical exhibition also promises to be of the greatest interest; it includes surgical instruments and appliances of the greatest antiquity, together with a large number of books, prints, medals, and other objects bearing upon the history of medicine. A large allegorical painting by Ballestra is to be hung in the central arch of the façade of the building. The exhibits will be divided into nine classes, and these will be further subdivided into a large number of sections, each section illustrating some special application of science to therapeutical or sanitary medicine.

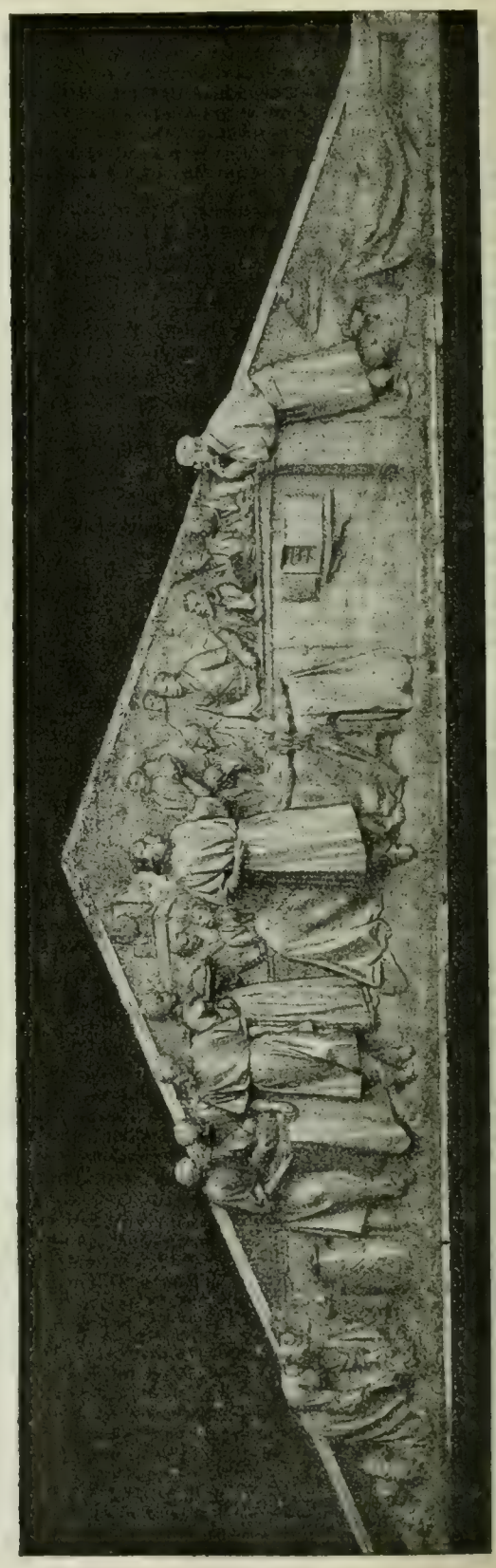
Our correspondent writes that on Wednesday, March 28th, in the presence of Signor Crispi, Professor Baccelli, the Syndic of Rome, and the foreign representatives, the International Exhibition of Medicine and Hygiene was formally opened. The Germany Imperial Sanitary Office exhibit is one of the most interesting. From models of the famous Berlin dairy to cabinets for the cultivation of bacteria, there is everything relating to health and the prevention of disease. Italy exhibits numerous plans of city sanitation, plans of its many spas, specimens of butter, and quantities of in-

[1] Photographs of these two bas-reliefs are reproduced in our present issue.

ITALY AND BRITAIN.



Frieze in Façade of Medico-Pathological Section of the Policlinic in Rome: MORGAGNI. (From a photograph.)



Frieze in Façade of Pathologico-Surgical Section of the Policlinic in Rome: LISTER. (From a photograph.

dustrial products conducive to health. Very complete is the Harrogate exhibit, which includes coloured pictures, photographs, and plans of the old and new bathing establishments, and a battery of bottles containing samples of its waters, giving an imposing idea of the famous English Spa. Some disappointment is felt that English exhibitors number only 5 out of the 650. From Naples there is an excellent exhibit of apparatus for surgical operations, mostly of German invention.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A meeting of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 11th day of April next, at 2 o'clock in the afternoon.

Francis Fowke, *General Secretary.*

March 8th, 1894.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

Members are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the Office.

BRANCH MEETINGS TO BE HELD.

South-Eastern Branch.—A conjoint meeting of East and West Sussex Districts will be held at Worthing Infirmary on Thursday, April 12th, at 3.30 P.M. Dr. Ewart, Mayor of Brighton, will preside. Dr. Kelly (M.O.H.) will read a paper on "The Epidemic of Typhoid Fever at Worthing in 1893. Dinner at the Royal Hotel at 5.30; Mr. Augustus H. Collett in the chair; charge 6s., exclusive of wine. It is requested that members who can do so will show cases of interest.—J. W. Batterham, Frank Hinds, Honorary Secretaries.

North Wales Branch.—The intermediate meeting will be held at the Wynnstay Arms Hotel, Wrexham, on Tuesday, April 3rd, at 2.15 P.M. The Wrexham and District Medical Society will entertain the members of the Branch present to lunch at 1.30 P.M. After formal business the following papers will be read:—Dr. Eyton Lloyd: An Interesting Case of Gunshot Wound. Mr. Hugh E. Jones (Liverpool): The Radical Cure of Otorrhœa. Mr. Lawson Tait, F.R.C.S.: Overdistension of the Female Bladder. Mr. Damer Harrisson, F.R.C.S.Edin.: On the Treatment of Acute Delirium Tremens. Communications will also be made by Mr. A. Emrys Jones, F.R.C.S., and Mr. W. R. Parry-Jones.—W. Jones-Morris, Honorary Secretary.

South Wales and Monmouthshire Branch.—The next ordinary meeting will be held at Neath on April 26th. Members wishing to read papers, etc., should send titles to Dr. Sheen, Cardiff, before April 10th.—A. Sheen, D. A. Davies, Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH: HERTS DISTRICT.

A meeting of this District was held at Hatfield on March 14th, Mr. Henry Power, President, in the chair.

Confirmation of Minutes.—The minutes of the last meeting were read and confirmed.

Communications.—Mr. Fisher showed a case of Stricture operated on by the combined method of internal and external urethrotomy nine years ago. The point of interest was absence of contraction of stricture, as shown by the easy passage of No. 26 French sound; no catheter had been passed for four years.—Mr. Cotton showed four Vesical Calculi which he had removed during 1893; one weighed 8 ozs. and another 5 ozs.—Mr. Clutton then opened a discussion on the normal size of the Urethra, and demonstrated various methods of overcoming a difficult stricture with special reference to lithotrity and the treatment of gleet.—A very interesting discussion followed, in which nearly every member joined, and Mr. Clutton replied.

New Members.—Two new members—Dr. Thomson of Luton and Dr. King of Watford—were elected.

Vote of Thanks.—A vote of thanks was passed to the President.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

The sixth meeting of this Branch for the session 1893-4 was held on Thursday, March 8th, Dr. Rickards, President, in the chair.

New Members.—The following were elected members of the Branch: W. H. Packer, L.R.C.P., Cressage; J. A. Codd, M.B., Wolverhampton: F. J. Dixon, M.B., Birmingham; R. C. Tweedy, M.R.C.S., Kenilworth.

Report on Specimen.—Dr. Kauffmann reported as follows on a specimen shown by Mr. Lawson Tait at the last meeting: The stone is a fæcal concretion round a thick brass pin. One mass of tissue consists of vermiform appendix and Fallopian tube intimately adherent from chronic inflammation. Another mass of tissue is a portion of Fallopian tube. A third mass is structurally cicatricial, and no further detail can be ascertained about it.

Communications.—Mr. F. Marsh showed a young man, nearly the whole of whose soft palate had been destroyed by Syphilitic Ulceration. The parts had been firmly cicatrised for some months, but the man was unable to obtain any employment on account of the extreme nasal character of his voice. This defect had been entirely remedied by an "obturator," which had been made for him at the Dental Hospital by Mr. A. E. Donagan.—Dr. Foxwell read a paper on the Antiseptic Treatment of Tuberculous Phthisis. For the disinfection of the lung parenchyma he believed inhalation to be of little, if any, avail. For this purpose prolonged saturation of the pulmonary lymph was necessary. Taking all things into consideration, he thought iodoform the most suitable drug for effecting this. He had tried it persistently for six years, and had obtained better results from it than from any other means apart from treatment by climate, and climatic treatment was obviously only possible to the few. He administered the drug in pill form, the daily dose beginning at 6 grains and, if tolerated, rising to 30, at which maximum point he kept it for two or three months (in one case for two years and a-half). His experience bore out the experiments of Gosselin, which showed that iodoform could prevent bacilli from producing tubercles during its administration, but that it failed to destroy their vitality was evident from the fact that so soon as the drug was withdrawn tuberculous lesions began to appear.—Mr. Barling read a paper on Operations for Stone in Young Male Subjects, which will be published.

STIRLING, KINROSS, AND CLACKMANNAN BRANCH.

A general meeting of this Branch was held at Falkirk on March 16th, Dr. Currie, President of the Branch, in the chair. There were present: Professor Gairdner, of Glasgow, and Drs. McVail, Strachan, Macpherson, Griffiths, Joss, Linton, Baird, Skeen, Bell, Calderwood, Alexander, Moorhouse, Clarkson, Paterson, and Lewis.

Minutes.—The minutes of the last meeting were read and signed.

By-laws of the Branch.—A letter was read from the General Secretary of the Association conveying the approval of the Council regarding the alteration of by-laws of the Branch at the last annual meeting.

New Members.—Dr. R. D. Clarkson, of Falkirk, was elected a member of the Association and Branch. Dr. Moorhouse, of Stirling, and Dr. Skae, of Larbert, were elected members of the Branch.

Reminiscences of Medical Practice.—Professor Gairdner delivered an address on this subject. He began by relating his recollection of some leading Edinburgh physicians. Among these he mentioned specially Gregory, Abercromby, Davidson, and John Thomson. Gregory was described as full of vivacity and energy, and apt to pursue methods of treatment to extremes; Abercromby as of high merit, a thorough collector of facts and observations from a wide experience; Davidson as a scholarly man, conversant with German language and literature; Thomson as at first a

military surgeon and author of a book on *Inflammation*, afterwards Professor of Pathology and a strong opponent of the use of mercury. Reference was also made to some of his teachers—for example, Christison, whose simplicity of practice and abhorrence of polypharmacy were noted; also Alison, Graham, Henderson, Begbie, Craigie, and Syme, who at first opposed the use of such anæsthetics as ether, and subsequently, on the introduction of chloroform, recognised their value. In some remarks on prognosis, Professor Gairdner thought there was a tendency for prognosis to be rendered too bad owing to the estimate of a disease being formed from the pathological appearances in previous severe cases. The address concluded with some interesting medico-legal experiences.

Vote of Thanks.—A vote of thanks to Professor Gairdner for his address was moved by Dr. McVail and seconded by Dr. Strachan.

Dinner.—The members present dined together in the hotel after the meeting. Dr. Currie was chairman and Dr. McVail croupier. The Chairman proposed the loyal toasts and afterwards the health of Professor Gairdner, who replied and proposed "Prosperity to the Branch."

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

A meeting of the Aberdeen, Banff, and Kincardine Branch was held at Aberdeen on February 21st; Professor Ogston, and afterwards Dr. Blaikie Smith, in the chair.

Confirmation of Minutes.—The minutes of the last meeting were read and approved.

New Members.—Dr. Thomas McHardy (Cullen) and Dr. Alexander Mitchell (Old Aberdeen) were admitted members of the Branch.

Conjoint Meetings.—A communication was read from the Secretary of the Aberdeen Medico-Chirurgical Society, intimating that the motion for conjoint meetings had been negatived by that Society.

Communications.—Dr. McKenzie Davidson described an Ophthalmic case, and exhibited the patient; he also showed a case of Contracted Socket, on which he had operated, and in which by the use of an artificial vitreous he had to a great extent obviated the disfigurement.—Dr. J. Scott Riddell described a New Method of Tongue Excision by means of a Tongue Clamp, which had been made for him by Messrs. Young and Son, Edinburgh. The operation consisted in splitting the tongue according to Morrant Baker's plan, in clamping each half separately and in removing by a scalpel. The operation was illustrated by photographs made by Dr. William Findlay.—Dr. Mackenzie Booth described a case of Complete Dislocation of the Left Knee-joint, in a lad, aged 17, who fell 20 feet whilst working on the roof of a house; he also read notes of a case of Fibrous Tumour of the Naso-pharynx, which he had removed from a boy aged 14. The tumour, which weighed over an ounce, was removed through the mouth, after having its base cut through by means of a *serre-nœud* introduced by the nostril. The patient made a good recovery and the symptoms were much relieved.

SPECIAL CORRESPONDENCE.

PARIS.

Typhoid Fever in Paris. — A Microbe Scare. — A Hospital "Scandal."—The Paris Ambulance Service.—A Royal Patient.

It is now clearly established that typhoid fever broke out at Sens, a village supplied with Vanne water, about the same time that the Paris epidemic declared itself. Thirty years ago the ponds of the Château of Theil-sur-Vanne were cleaned out, and a severe outbreak of typhoid occurred among the inhabitants of the Château. The city of Paris has utilised some of the springs which flowed into these ponds for the Paris water supply. During the summer drought the earth beds were dug up, and it is considered probable that the germs were thus infiltrated from the surface into the springs and carried along by the water.

In Paris the microbe scare is at its zenith. The public ask if the use of mineral waters insures immunity from contagion, and fears that they may not always be genuine. M. Frederic Maurice, in the *Temps*, assures his readers that mineral waters from the springs belonging to Government are genuine. Moreover, the bottles are washed out with sterilised water. MM. Henry Moissan and Léon Grimbert have made some interesting bacteriological analyses of seltzer siphons and mineral waters. In the seltzer water siphon a small quantity of lead was detected, but generally the water was pure; apparently the carbonic acid destroys the bacilli. In mineral waters the results were not the same; some of these contain from 50,000 to 100,000 and sometimes 180,000 per centimetre cube; the bacillus coli communis has been found in some samples of mineral water.

An unfortunate surgical "scandal" has again occurred, this time without any solid ground. A month ago Professor Poucet, of Lyons, read a paper before the Paris Academy of Medicine on a method of operation for different kinds of goître. Fourteen operations had resulted in fourteen cures; two of these were cases of exophthalmic goître. M. Brissaud having in his wards two of these cases, asked M. Poucet, then in Paris, to examine the patients. M. Chapert, also of the Salpêtrière, was present at the consultation, and an operation was decided on in the two cases. One of the patients being under age, her parents were consulted, and consented; the adult patient asked for the operation to be performed immediately; her wishes were acceded to, and the results were most satisfactory; the younger patient unfortunately died nine hours after the operation. The daily papers have published exaggerated accounts of the circumstance, and the impression left on the general public is that these operations are another instance of the "operating mania." M. Brissaud has made a straightforward statement as to the occurrence; and the inquiry which the Dean of the Faculty, on M. Brissaud's demand, is making concerning it will doubtless remove the painful impression. At a recent meeting of the Municipal Council, Dr. Dubois expressed his astonishment that the Salpêtrière *chefs* had not consulted the director of the Assistance Publique before inviting a surgeon not attached to that hospital to operate on one of its patients. Dr. Dubois urged the Council to demand that the administration exercises its legitimate authority over hospitals.

According to the *Bulletin de Statistique* the Ambulance Urbaine Organisation has answered 2,129 summonses, 97 of these were alien. This organisation is localised at the Saint Louis Hospital, and is in telephonic communication with only five districts. If all the Paris districts could appeal to that or other similar organisations the summonses would be still more numerous.

Dr. Galezowski has been summoned from Paris to treat Prince Massoud Merza, the second son of the Shah of Persia, suffering from glaucoma. The distinguished patient is 44 years of age. Dr. Galezowski, who has on a previous occasion treated the Prince during his stay in Paris, will meet his Royal Highness at Reschd, a Caspian seaport, a twelve days' caravan journey from Ispahan.

CORRESPONDENCE.

OUT-PATIENT HOSPITAL ABUSE.

Sir,—Of the cases of abuse of the out-patient department that have come under my own notice certainly in one half the patients have been sent by a medical practitioner with a note from him. It is easy to perceive the process. A patient who is not a fit subject for gratuitous treatment has heard of the doctors at a certain hospital and expresses a wish to go there to obtain an opinion on his case. His doctor, when asked for a note that will secure an interview must accede to the request or, in most instances risk the loss of his patient. The members of our profession have much in common with the rest of the human race. Of two evils that is chosen which is least personal. The desired letter of introduction is given, and this from a practitioner carries the patient past the eyes, however watchful, of those who strive to detect unsuitable

cases, and is equally effective with the physician to whom it is presented.

I think the abuse of the out-patient system is as frequent at general, as it is at special, hospitals. Probably doctors are made the unwilling instruments more often in the case of special hospitals. But the most striking instance I remember occurred at University College Hospital, where always great pains were taken to prevent abuse.

A middle-aged man in a somewhat shabby dress brought a note to the "Physician for the day," from a medical practitioner living near. The name on his out-patient paper—the Baron von S.—made me look at him a second time, but the reinspection only reminded me of the fact that the barons of Teutonic race are many and various. So I proceeded to examine and prescribe for him. He then asked if a sea voyage would be good for him. I hesitated, thinking he proposed to go out as a steward or possibly before the mast, and inquired if he would be able to go comfortably? "Oh," he said, "I should go in one of my own ships."—I am, etc.,

Queen Anne Street, March 24th. W. R. Gowers.

Sir,—The letter of Dr. Hughes Bennett appears to have been written in happy ignorance of much that has been said and done on both sides of the question of which it treats during the last twenty-five years, else it would be difficult to understand how some of the statements in it could have been made. Anyone in the habit of reading the British Medical Journal even cursorily during those years might have imagined that, if there was any subject which might have been said to be thoroughly threshed out, both in your columns and elsewhere, it was the one to which Dr. Bennett has devoted two columns without, as far as I can see, bringing forward a single new fact or adducing anything in the way of argument or objection to reform which had not previously been advanced and refuted a dozen times.

Dr. Bennett appears to think that hospital physicians have hitherto refrained from taking an active part in the public discussion of this question; but a reference to the literature of the subject will show that this is a mistake. The influential Medical Committee, which in 1870-71, under the presidency of Sir William Fergusson, made an elaborate report on the subject, embracing all the points which have been alluded to by Dr. Bennett, was largely composed of hospital physicians and surgeons; the Out-patient Reform Association, which in 1872-74 formulated proposals to remedy acknowledged abuses, had among its leaders Drs. Anstie and Meadows and other hospital physicians; the largely-signed and strongly-worded memorial to the Committee of Council of our Association in 1875 included among its signatories Sir William Gull, Sir William Jenner, Dr. (now Sir) George Johnson, Dr. A. P. Stewart, and others. In more recent times, among the hospital physicians who have taken part in the discussion—some for and some against reform—have been Sir Edward Sieveking, Sir Andrew Clark, Dr. Ord, Dr. Gilbart Smith, Dr. Robert J. Lee, Dr. Frederick Smith, and many members of the Hospitals Association; while amongst those who have given evidence before the House of Lords Committee have been Sir A. Clark, Sir Morell Mackenzie, Drs. Allchin, Barlow, Stephen Mackenzie, Dowse, etc.: and if to these we add hospital surgeons such as Mr. Holmes, Mr. Brodhurst, etc., we shall find that most of the large London hospitals have contributed their quota to the discussion.

Dr. Bennett's assertion that the gross abuses which from a financial standpoint have been over and over again proved to exist at the large general hospitals are much exaggerated and for practical purposes do not exist is opposed to all the facts which have been brought forward as the result of skilled investigation by the Charity Organisation Society, and to the sworn testimony of numerous witnesses before the House of Lords Committee, and is hardly of much value as opposed to the general consensus of opinion among general practitioners, who may be supposed to know what does or does not affect their practices, financially, at least, as well as any hospital physician can.

Dr. Bennett is quite satisfied that we are not injured in pocket by the out-patient system, but that only shows how complacently one can regard the misfortunes of one's friends. We whom the shoe pinches feel it but a mockery to tell us what an admirable fit it is.

Dr. Bennett, while professing a desire for reform, does his best to hinder it by hashing up all the old objections which, as I have said, have been made and refuted over and over again. He has not, however, yet attempted to show that there is anything impracticable in the proposed threefold reform, which, as I pointed out in your columns in the beginning of August last, has now been before the profession for twenty years, namely (1) inquiry into the circumstances of all patients by a properly qualified officer; (2) stopping the indiscriminate supply of medicines; (3) discontinuance of prescribing by unqualified students.—I am, etc.,

Dulwich, March 20th. H. Nelson Hardy.

THE TREATMENT OF PERICARDITIS.

Sir,—My friend and colleague Dr. Sturges has done good service by drawing attention, in his interesting Lumleian Lectures, recently reported in your columns, to the severity and danger of pericarditis in childhood and early life, a fact which is as yet very inadequately realised by the profession. Dr. Sturges prefers to speak of it as an "acute carditis," and this name would often be very appropriate. But without discussing the question how far the myocardium and the endocardium are implicated in such cases, there can be no doubt that the signal of danger is usually the appearance of a pericardial rub, along with rapid increase of the præcordial dulness, indicating acute dilatation of one or both sides of the heart. That this is a condition of extreme peril is proved by the fact that of sixteen cases which Dr. Sturges can remember, no fewer than twelve were fatal. And it may be added that children who survive this immediate danger have almost always permanently dilated and crippled hearts. Clearly, therefore, the proper treatment of these cases is of the most urgent importance.

In his comments on my advocacy of the employment of the icebag in this condition, Dr. Sturges says: "If by the application of ice to the heart in cases like these the children habitually recover, Dr. Lees's contention is made out, but only so." But is not this asking a little too much? Is it fair to demand of any form of treatment proof of its ability to bring about "habitual" recovery in cases which Dr. Sturges has found to be so very fatal? In some instances, doubtless, the tendency to death is too strong to be overcome by any therapeutic method, as in a case recently under my own care, an anæmic child of three years, ill only one week with its first attack of rheumatism, who died from pericarditis within two days after admission into hospital. Yet I claim that there is evidence that careful treatment of such cases by the icebag and salicylates (with or without leeches), is successful in saving many lives and also in diminishing the damage done to the hearts that recover. Of the last twelve cases of pericarditis under my care at the Hospital for Sick Children, only five died. One of these died from broncho-pneumonia, with caseous bronchial glands, and her only evidence of pericarditis was congestion and some adhesion over the posterior surface of the left auricle, which would certainly not have killed her. This reduces the number of deaths from pericarditis to four. Two of these were due, I believe, to the too early discontinuance of salicylates. Both had improved remarkably under ice and salicylates, so much so that the treatment was discontinued. In both instances fresh rheumatic symptoms appeared a few days later, and proved fatal. I think that these two cases might have been saved, thus reducing the mortality rate to one in six. But however this may be, I feel sure that any of your readers who give a careful trial to the treatment by salicylates and ice, with the precautions to prevent undue chilling which are especially necessary in young children (the application of hot bottles to the lower extremities, and an hourly or half-hourly determination of the temperature), will be well satisfied with the result, even if they are not quite able to say that their patients "habitually" recover.

May I also take this opportunity of pointing out that the title of my paper referred to by Dr. Sturges in the first Lumleian lecture was not, "Is there a dextrocardiac-respiratory centre?" but "Is there a dextrocardiac-respiratory reflex?" I have no wish to add to the number of hypothetical "centres," but it does appear to me that there is good ground for believing that a normal reflex exists from the right ventricle of the heart to the respiratory centre similar to that which is well known to exist from the left ventricle to the vasomotor centre along the depressor nerves, and with a similar function—the automatic relief of an overdistended ventricle. This suggestion has been approved by some of our leading authorities on cardiac disease as probably the secret of the various forms of cardiac dyspnœa, and I hope that before long confirmatory evidence may be forthcoming from the physiologists, who alone can furnish the decisive proof.—I am, etc.,

Weymouth Street, W., March 24th. DAVID B. LEES.

THE OPIUM QUESTION.

SIR,—I was much surprised at the undernoted question being put to me by Mr. H. J. Wilson, M.P., in cross-examination on the evidence I had given before the Royal Commission on Opium in Bombay. I therefore consider it incumbent on me to bring the matter before the medical officers in England through the medium of your able and influential journal.

Question.	*Answer.*
Is it the custom in India (you know very well it is not in England) for the real cause of death to be always stated with absolute frankness?	Unquestionably so. I never had a doubt before coming out to India that the real cause of death was not stated. It is the first time I have heard such a reflection on the medical practitioners of England.

The question was obviously put to me by Mr. Wilson to throw doubt on my evidence in regard to the medical certificate of death in India, as I was unable to produce a single death in the "Oriental" through the use or abuse of opium.

This clearly shows to what extent the opium faddists, with no monetary interest at stake in the country, will go to prove their case; and I think it my duty to bring to your notice this not very creditable attempt to serve a weak cause by an unworthy insinuation against the probity of the medical profession.—I am, etc.,

D. McLAUGHLAN SLATER, F.I.A.,
Bombay, March 7th. Manager and Actuary Oriental Life Office.

ASSISTANT MEDICAL OFFICERS IN ASYLUMS.

SIR,—We are indebted to your courtesy for the expression of the opinions of many who are interested in this subject; but, looking through the correspondence, one cannot help feeling that the whole difficulty rests in the fact that assistant medical officers as a body are as incapable of concerted action as are the patients under their charge; and in this lies at once the helplessness of both. There are of course many good reasons for this. In the first place our interests could with difficulty be placed upon a common basis; and, passing over this difficulty, there are many others. Some men feel the utter hopelessness of airing their grievances; others shrink from doing so, as well they may, when they are truly—if with unpleasant frankness—stated by your correspondent "Experientia Docet." Some do not appear to have the necessary *esprit de corps*, as exemplified in the letter of "A.M.O."; others are indifferent, or satisfied with their own individual prospects. It seems to me, however, that something ought to, and might be done, if a reasonable and practicable suggestion for readjustment could be advanced and supported. One must at the outset exclude the smaller asylums; and dealing with the larger ones, with an admission rate of 150 per annum and upwards, it is patent to every man facing the position honestly that they owe their success to the permanency and efficiency of the senior assistant medical officer or officers as completely as they do to the superintendents; and all these men ask is that this fact be recognised, and the only practical way of recognising it is to give them such a position as shall enable them to regard their lives as comparatively successful, although they fail to become superintendents. In short, in every large asylum, one or two (according to the size) of the senior assistant medical officers should be provided with a house, an adequate salary, and ability to marry. The junior medical officers need only be considered as house physicians, and it would be well to limit their engagements. This would cause them to review their position from time to time, and decide whether they would devote themselves to the speciality; or they could be compelled to relinquish it, without any hardship to themselves, bearing in mind the terms of their engagement. Such a system would in time do away with the "chronic" assistant medical officer.

I must confess that I despair of a reasonable possibility of hearing the opinion of a number of superintendents on this subject. Their silence might well be taken as an admission of its fairness; a large number of them have expressed the opinion that 600 patients are as many as one man can manage, whilst others have said that the number depends on the medical staff, at once admitting the necessity of considering the latter.

From the Commissioners I think we might hope for much if their interest in the matter could be aroused, for an august and supremely disinterested body, such as they are, can only require to be assured of the present state of matters to insure their sympathetic interest in any movement which seeks to remedy it; and, lastly, it is through them that we must hope to reach the ears of the committees, whose superintendents remain silent.—I am, etc.,

March 20th. AN ASYLUM MEDICAL OFFICER.

MEDICO-LEGAL AND MEDICO-ETHICAL.

WHO IS TO PAY THE DOCTOR?

A CASE which has lately been before the Sheffield County Court shows how necessary it is that a medical man should have a clear understanding with his patient as to who is to be responsible for his fees. It would appear that Mr. Wm. Skinner, a practitioner living at Brookhill, is one of the medical officers appointed by the Wesleyan and General Assurance Society to make examinations of applicants but not to attend sick patients. James Marson is a member of the Society and he seems to have considered himself entitled to medical attendance at their hands, and therefore sent his card to the office to ask who was to attend him. Some one, whom the Society contends was never authorised to do so, wrote Mr. Skinner's name on the back of it, and Mr. Skinner was called in. After the illness came the bill, which the patient straightway repudiated, saying that the doctor must look to the Assurance Society for payment. It was maintained on the part of the Society that the patient had no right to call in Mr. Skinner except as a private practitioner without special permission, and that although his certificate was accepted he was not appointed to attend patients on their behalf. The general manager admitted, however, that Mr. Skinner was an appointed medical officer of the Society and that there was nothing in the rules to show that his authority was limited. The matter was complicated also by the fact that the doctor each week signed a certificate, by means of which the patient received his sick pay from the office.

According to the *Sheffield Independent*, "His Honour gave judgment against the Society, remarking that he thought Mr. Skinner accepted the appointment subject to the Society's rules, under which he was required to attend sick members." It was intimated that the Society were willing to pay Mr. Skinner half the amount claimed, and this was accepted. It is very often a matter of no small difficulty for a doctor to find out who has called him in to attend on a patient, and who is to be responsible for payment. Dick tells Tom, and Tom tells Harry, and Harry tells the housemaid, but who told Dick is always a mystery. These are troubles we all have to put up with. This matter of one's relationship to an insurance society is, however, a thing in which a little definiteness of arrangement at the beginning may save a world of trouble later on. Assurance societies which, as part of their ordinary business, provide medical attendance, often have members in places where they have no medical officer, and they sometimes arrange for a practitioner in the district to examine their applicants and sign their certificates. Under such circumstances, it obviously becomes extremely important that the gentleman so appointed should not only make his position clearly understood by his patients, but should ascertain whether such a limited appointment is provided for by the rules of the society; otherwise, if he accepts the position of medical officer to the society thinking his sole duty is examining candidates and giving certificates, he may find himself involved in difficulties when attending any of its members.

ALLEGED SUICIDE.

"As a rule it may be said that all inquests in which there has been no medical inspection of the body are a vain mockery." So Taylor wrote years ago, and the case at Wenlock to which our attention has been drawn is no exception to the rule. An elderly man was found dead in his room; he was seated on the table with his feet resting on the floor, and round his neck was a rope fastened to a hook in the ceiling. The coroner said that in this case there was not the slightest doubt, and refused to order a *post-mortem* examination or call the doctor, who had arrived on the scene shortly after the body was found. Of course, it is possible that this was a case of suicide, as the finding of the jury decreed, but it must be confessed that the position of the body does not of necessity suggest such a conclusion, for the idea that a person can hang himself whilst sitting down is not in accordance with experience, while suicidal strangulation is admittedly of most exceptional rarity. In spite of the coroner, we are of opinion that it was most essential to ascertain the exact cause of death in this case.

"AN INQUEST UNNECESSARY."

The medical officer of a union calls our attention to the following case: He was summoned by the midwife to a young woman, aged 20, in labour for forty-four hours. No doctor had been sent for, and the midwife, who had been previously engaged, was not summoned until thirty-four hours after the escape of the liquor amnii, and she at once called the doctor in. He found a shoulder presentation and the woman much exhausted. Delivery was accomplished some six hours later, version having been effected with much difficulty when the patient was under chloroform. The patient never rallied, and died forty-three hours after delivery. The husband—a mere youth—was asleep in another bed at the time his wife died, and his mother, who was to nurse the patient, betrayed great indifference to her state. The parties had been married seven months, and the child was full term. The patient was insured. The doctor refused to give a certificate, but the coroner—not a medical man—"did not think an inquest necessary." If the most gross neglect of a woman in labour on the part of those whose duty it is to attend to her needs is not sufficient to justify the holding an inquest, all we can say is that it ought to be; and, if the law cannot deal with such cases, the sooner the law is altered the better.

UNQUALIFIED ASSISTANTS AND FEES.

Practitioner.—In view of the decision given in the case of the Apothecaries' Company *v.* Greenwood, to the effect that the practice of an apprentice or unqualified assistant (which position we take to be that of our correspondent's son) must be limited to his master's house, we apprehend that our correspondent, in seeking to enforce payment of a disputed account through the medium of the county court, will incur great risk of being non-suited so far as relates to the charges for his son's attendance. It is possible, however, that inasmuch as the attendance was under the strict supervision of the father—a duly registered practitioner—the county court judge may take a favourable view of the fact, and especially if no objection was taken at the time by the parents of the children.

AN UNQUALIFIED *LOCUM TENENS*.

Curriculum.—Not for a moment would we counsel our correspondent to leave his brother—at present an unqualified assistant—in charge of the practice during his proposed holiday. Not only would it, in our opinion, be acting unfairly to his patients and professional brethren, but in the event of any untoward casualty occurring during his absence, he would very justly be held morally or otherwise responsible.

LONDON GRADUATES AND GENERAL PRACTICE.

Ignoramus.—In response to our correspondent's query, we are ignorant of any rule of the University of London which prohibits its graduates from entering into general practice, as does the Fellowship of the Royal College of Physicians; and so long as the graduate referred to maintains his personal dignity as such, we fail to see any moral dereliction of duty to self in seeking to obtain a livelihood as a general practitioner.

NAVAL AND MILITARY MEDICAL SERVICES.

THE ARMY ESTIMATES.

Little has as yet transpired in the introduction of the Army Estimates for 1894-5 of direct interest to the medical service or profession, but there is not a little interesting to all of us as citizens. The estimate for the medical establishments is £290,000, being an increase of £1,800, such modest increase being readily accounted for by even minute charges spread over very considerable and varied establishments at home and abroad. Some provision, we are glad to note, has been made for the training of the Medical Staff and Medical Staff Corps in war duties at Aldershot and the Curragh. Some such training has been repeatedly urged and ventilated in these columns and we are happy to think the note of warning as to the unpreparedness and unreadiness of the medical department for field duties has been heard and listened to by the War Minister.

He declares the mobilisation of our own army corps is no longer a mere paper scheme, but is being carried into practical effect, in which we hope mere military supineness will not be permitted to give the medical department the go-by. The Secretary also declared the health of the army continued satisfactory, for which he, no doubt justly, attributed some credit to better barrack accommodation, and to improvement in general sanitation and hygiene, especially the clothing, cooking, and dietary of the troops. The remarkable spread of the temperance movement among soldiers is a matter for sincere congratulation, and a small vote of £500 is contributed towards the organisation of the Army Temperance Society. Coir fibre, which has long been advocated, is now substituted for straw in army bedding.

Mr. Campbell-Bannerman says it is a matter for sincere congratulation that the period of change in the strength and organisation of the army is now ended, and something like fixity reached. We are glad to hear it, but would remind him that fixity and finality have certainly not been reached in the medical department, and will not be attained until the Medical Staff and Medical Staff Corps have been consolidated into a unified corps. Let him not be dissuaded from this by "military advisers," who, on matters medical, seem solely swayed by mere hidebound traditional prejudice. The War Secretary's statement on the estimates was broad and statesmanlike; he showed that the naval and military establishments could not be played off against each other, a strong navy really meaning a strong army to protect coaling stations and the bases of naval operations. Continuity in our defensive establishments is true economy, for the old happy-go-lucky system of cutting down establishment to square estimates was always followed by the nemesis of a vote of credit. Mr. Campbell-Bannerman pays a generous and graceful tribute to the memory of his predecessor in office, the late Mr. Stanhope, which we cordially endorse. In the army medical controversy during Mr. Stanhope's tenure of office, he was always straightforward and sympathetic towards medical officers, and we do not doubt, had he been left to his own judgment and initiation, would have done more for them than he did.

ARMY MEDICAL STAFF EXCHANGE.

The charge for inserting notices respecting Exchanges in the Army Medical Department is 3s. 6d., which should be forwarded in stamps or post office order with the notice. The first post on Thursday mornings is the latest by which these announcements can be received.

A Surgeon-Captain likely to go abroad next trooping season wishes to exchange with an officer who has just returned home. Reply to "Surgeon-Captain," care of Messrs. Holt and Co.

THE NAVY.

Staff-Surgeon John James Douglas Burns, M.D., M.R.C.P., medical officer of H.M.'s prison at Borstal, died at Rochester on the 10th instant, aged 78. He was appointed Surgeon, September 23rd, 1835, and Staff-Surgeon, March 8th, 1842.

Surgeon Frederick A. Capps has been appointed to the *Triton*, lent, April 2nd; and Surgeon Percy Lord to the *Research*, also lent, April 2nd.

ARMY MEDICAL STAFF.

Surgeon-General Alexander Smith, M.D., C.B., retired pay, is appointed Honorary Physician to the Queen, *vice* Inspector-General of Hospitals R. Lawson, deceased. Surgeon-General Smith was appointed Assistant-Surgeon, August 7th, 1846; became Surgeon, January 12th, 1855; Surgeon-Major, August 7th, 1866; Deputy Surgeon-General, April 28th, 1876; and Surgeon-General, July 5th, 1881; retiring from the service October 14th, 1884. His war services are as follow: Crimean campaign, 1855.—Siege of Sevastopol, attack on Redan of June 18th (medal with clasp, and Turkish medal). Jowaki expedition, 1877-78.—(medal). Afghan war, 1878-80.—As principal medical officer, including the actions of Ahmed Khel and Urzoo. (Mentioned in despatches, medal with clasp, C.B.)

Surgeon-Majors L. B. Ward, W. B. Miller, M.D., J. Martin, J. J. Greene, M.B., N. McCreery, and J. A. Gormley, M.D., complete today twenty years' full pay service, and therefore become entitled to promotion as Surgeon-Lieutenant-Colonels.

ARMY MEDICAL RESERVE.

Surgeon-Major G. H. Turnbull, M.D., is promoted to be Surgeon-Lieutenant-Colonel.

EFFECT OF REORGANISATION IN INDIA.

The reorganisation of the army in India now proceeding will effect some changes among the officers both of the Army Medical Staff and the Indian Medical Service. The Hindustan and Bombay Army Corps will each have an officer of the Imperial Service as Principal Administrative Medical Officer, while the Punjab and Madras armies will pass to Administrative Medical Officers of the Indian branch. The Bangalore District, which has had an officer of the Army Medical Staff at its head, will be presided over by an Indian officer; while the Madras District will be administered by a brigade-surgeon-lieutenant-colonel of the Army Medical Staff. The salaries of the four Surgeon-Major-Generals is to be 2,200 rupees a month instead of 2,500 rupees as at present. The total saving effected by the Government by the various changes now contemplated is stated to be nearly 10,000 rupees a year, and of course the members of the two medical services, Imperial and Indian, will be so much the poorer.

SURGEON-CAPTAIN PEARSE.

The trial of this officer for the manslaughter of a native while out shooting has ended in his complete and summary acquittal by the High Court of Calcutta. We congratulate Surgeon-Captain Pearse, and sympathise with him in the long and painful suspense which the various delays in the trial must have caused him. The circumstances of the case have been paralleled not infrequently in India. An officer out shooting is sometimes mistaken for a private soldier, who, the natives seem to think, should have no sporting instincts, and, if alone, is set upon and beaten until he is obliged to fire upon his assailants in self-defence. Some unfortunate native gets killed or wounded in the *mêlée*, and immediately a whole host of false witnesses come forward totally to misrepresent the circumstances and accuse the white man of deliberate and unprovoked murder. We are told the native press in this instance trum-

peted forth before the trial the "brutal murder" of a native by a British soldier bent upon forcing a way into his house; whereas the man was shot in a paddy field through which the officer was endeavouring to run in order to rejoin his companions, from whom he had separated, and the deed was done in self-defence while pursued by a mob beating him with ropes, sticks, and even sickles, by which another of the shooting party was afterwards wounded in the arm. Such cases are very much to be regretted, but, we fear, will almost inevitably occur from time to time in places where the antagonism of race is liable to produce them.

MEDICAL OFFICERS IN THE ITALIAN ARMY.

MEDICAL officers in the Italian army first serve one year in the ranks, and after qualifying (which is done chiefly at the expense of the State) they are commissioned as Sotto-Tenente Medico for two years. They then obtain the rank of Tenente Medico, in which grade they remain four years. At this period most of the officers return to civil life, being retained on the roll of the army, and liable to be recalled in case of national emergency. A few remain in the service for the higher grades, but promotion seems slow, and they are not very well paid. The military rank and position of the medical officers in the Italian army is now thoroughly recognised, and they conduct the duties connected with their hospitals without any military interference. They have full disciplinary powers over the men of the Sanitary Corps. The military portion of the title coming first is a distinct advantage, and is far preferable to the cumbrous and confusing compound titles by which medical officers in the British army are designated. All duties are performed in uniform, but, unlike other officers in the Italian army, medical officers have the privilege of wearing plain clothes when off duty. We understand that the warrant for the Medical Department of the Italian army was chiefly based on the ideas and recommendations of Sir Harrie Ker Innes, K.C.B., Surgeon-General A.M.S., r.p., who resides at Florence, and who was consulted on the subject by the Italian Minister for War. Sir Harrie Ker Innes's great experience in our service eminently qualified him to give advice on the subject, and there can be no doubt that as regards military rank and in other ways the Italian Medical Service is in a much better position than our own.

THE RANK QUESTION IN THE RUSSIAN ARMY.

AN illustration of the very real disadvantage attending the want of definite rank on the part of medical officers in the public services is reported in connection with the name of Dr. Botkin, son of the late Physician in Ordinary to the Czar, who is a surgeon in the Russian Navy. In addition to his commission as a medical officer, Dr. Botkin is an officer of the line of the rank of ensign, and it is said that his reason for assuming the double character was to enable him to add the influence of definite military rank to that attaching to him as a medical officer. Having in view the undertaking of certain explorations in Central Asia, he thought that he could better enforce discipline if he were invested with military authority, even of the subordinate kind attaching to the rank of ensign. There could hardly be a more striking illustration of the truth of the contention on which we have so often had occasion to insist, that a medical officer without military rank is not only in an anomalous position intolerable to a man of any self-respect, but is at a serious disadvantage in respect of the effective discharge of his duties.

INSANITY IN THE FRENCH ARMY.

INSANITY appears to be steadily increasing in the French army. The following official statistics show the number of cases of invaliding out of the service owing to this cause from 1877 to 1890: 1877, 62; 1878, 94; 1879, 77; 1880, 63; 1881, 82; 1882, 81; 1883, 64; 1884, 73; 1885, 120; 1886, 112; 1887, 130; 1888, 150; 1889, 158; 1890, 192. General paralysis remains stationary, the number of cases of invaliding from this cause being on the average 20 a year.

CHARGE OF NATIVE TROOPS.

A. M. S. writes: I was unaware until lately than an officer of the Medical Staff could be compelled to take medical charge of native troops in addition to his own duties without payment. Yet such has been my experience. The officer in charge of these troops was detached on a duty which was held should not cause loss of pay to him, and of course left nothing for his substitute.

*** The present Secretary of State for War declared in No. VII of his Reply, dated August 26th, 1893, that "no information had reached him of any proposal for placing officers of the British medical service in charge of native troops in India," and "feels, therefore, that no remarks are called for from him upon this subject." Perhaps if he chose to inquire he would find, whatever the "proposals" might be, it is by no means an infrequent practice, as in this instance, to place these officers temporarily in charge of native troops. The Indian Government have a perfect right to do so, and it would be altogether unreasonable and improper to object to their so doing; but what we did and do object to is the "non-payment." Such charge does not properly belong to the Medical Staff, and is clearly an extra duty which should carry a special allowance, as in the old days of "head money." To foist it on the Medical Staff with the object of saving money is a gross injustice, and contrary to the spirit of Indian administration hitherto.

VENEREAL DISEASE IN INDIA.

SURG.-GENERAL SIR W. J. MOORE writes: In your remarks on venereal disease in the army in the BRITISH MEDICAL JOURNAL of March 24th, it is shown how the disease has increased since the abolition of the Contagious Diseases Act. As in England, so in the Anglo-Indian army. The first result of the abolition of the Contagious Diseases Act in this country was a large increase of the number of men landing in India from the troopships with syphilis. And the result of the cessation of the working of the Act in India was a large increase of venereal contracted in that country. To such an extent, that with the decrease of other maladies under improved sanitation, venereal has in more than one instance headed the list of admissions. But for the increase of venereal, the health of the Anglo-Indian army would have shown a marked improvement. As it is, since the abolition of the Contagious Diseases Act venereal has increased to such an extent that in 1891 there were 26,862 admissions; the ratio being 400.7 per 1,000 of strength. And in 1892, official returns for which year are now published, there were 27,927 admissions, giving a ratio of 409.9 per 1,000, and contributing 13 per cent. of the invaliding. Having had, when Surgeon-General, the control of the working of the Contagious Diseases Act in Bombay, I know that if fairly worked venereal may be almost altogether prevented. "But perverted moral sentiments, rampant on the subject," prevent those measure being applied which would prevent an evil crowding the Indian hospitals with sick, and the troopships with invalids.

"ADMINISTRATIVE CHANGES IN INDIA."

I.M.S. takes exception to several of the statements in the BRITISH MEDICAL JOURNAL of February 10th, under the above head. He states that although the Surgeon-Major-General of the Indian Medical Service selected for the Punjab under the new army corps system has five years' less total service than the senior Surgeon-Colonel of the Medical Staff at Rawal Pindi, yet in the rank of Surgeon-Colonel the former is of two and a-half years' standing, compared with two years for the latter; seniority in a rank of course gives precedence, irrespective of total length of service. Again, it cannot fairly be stated that the Indian Medical officer in question "has had no experience in European military hospitals," for he has been principal medical officer of two of the most important military commands in India, and three times twice as principal medical officer on active service with British troops in the field! His administration on these occasions was most successful, as I can personally testify. Again, as regards pay, the Medical Staff have secured an additional administrative appointment, with full emoluments, in Upper Burmah. For years the Indian medical officers who stick to military employ have been practically debarred from promotion to the highest rank. The composition of the army corps in question, 70,000 men, will be largely native: it is but just and expedient that an officer of long Indian experience, and fully acquainted with natives, should be its principal medical officer.

*** Of course seniority in a rank must carry precedence; but if promotion in the Indian continues more rapid than in the Home Medical Service, the feeling and friction of virtual supersession, when the two are brought together, are inevitable.

INDIA AND THE COLONIES.

NEW SOUTH WALES.

SEWERAGE AND SEWAGE DISPOSAL OF SYDNEY.—The fifth annual report of the Metropolitan Board of Water Supply and Sewerage for 1892, presented to the Parliament of New South Wales, amid much that is interesting and instructive reading, contains also much that is encouraging in relation to matters of sewerage and sewage disposal at Sydney. A population, estimated at 150,000 out of 400,000 persons, reside in houses draining to the improved sewerage system of 177 miles of sewers, whilst 1,838,000 gallons of sewage are daily discharged from a drainage area of 1,079 acres to Botany sewage farm, which comprises 34 acres of raw drift sand. Storm water, except the first shedding, is turned into the river by special outlets. Crops were not very successful in 1892, gales and the conditions of soil not being conducive to fruition, but £220 was contributed by the produce of the farm towards its total cost of £890. Cattle and pigs kept on the farm will, it is hoped, soon prove a large source of revenue; and horses also are taken for agistment. An experiment has been made whereby gases evolved by the sewers shall be cremated, the system aiming at extraction of gases by artificial draught; and their cremation prior to their exit into the general atmosphere. A special report on the subject is to be presented, and should prove interesting and instructive. Especially noteworthy are the facts stated by the Medical Adviser of the Board as to the increased healthiness of Sydney under the operations of the Board. The general death-rate, and as well that from infantile mortality and that from zymotic disease, have decreased, typhoid fever in 1892 claiming only 19 victims, against an annual average of 66, the rate having almost continuously fallen since 1884, when it was 8.43 per 1,000 population, against 1.76 in 1892. The rate from phthisis shows constant fall to 12.0, from 16.8 in 1888, the beneficent effects on the low-lying districts of a proper system of sewerage being credited with this decrease.

HOSPITAL AND DISPENSARY MANAGEMENT.

WATERFORD DISTRICT LUNATIC ASYLUM.

DURING the past year 479 patients were under treatment in this asylum. Calculating the recoveries in proportion of the admissions, there was a percentage of 59.25 for the males and 69.04 for females, giving a total for both sexes of 63.51, the highest recovery rate (with a single exception in 1879) ever recorded in the history of the institution.

FEVER HOSPITAL, CORK.

THE report of this hospital for the past year is in many respects satisfactory, particularly as showing the considerable decrease in infectious diseases during the past decade, partly to be attributed to the energy of the Public Health Committee and to the Notification of Infectious Diseases Act, which has been in force for the last two years. The unsatisfactory part of the report is the debt incurred by the hospital, which at the close of the year amounted to upwards of £700.

MEDICAL NEWS.

Edinburgh Royal Infirmary.—The following gentlemen have been appointed Resident House-Physicians for six months: George H. Dupont, M.B., C.M., James V. Paterson, M.A., M.B., C.M., T. Goldie Scott, M.B., C.M., John Stead, M.B., C.M., and Beckett McCarthy, L.R.C.P. and S.E. The following gentlemen were at the same time appointed Resident House-Surgeons: W. B. Bell, M.B., C.M., G. P. Coldstream, M.B., C.M., and G. L. K. Pringle, M.B., C.M. Some fourteen gentlemen were elected non-resident Clinical Clerks for the ensuing six months.

Cæsarean Section in Spain.—A successful Cæsarean section was recently performed by the Marquis del Busto, Professor of Obstetrics and Gynæcology at Madrid, in the Clinical Hospital of San Carlos in that city. The patient had a severe fall two years ago, resulting in fracture of the pelvis. The child, a girl, was extracted alive, and weighed nearly 9 lbs., and both it and the mother were doing well at the date of report. The operation was performed in the *Quirofano*, the model aseptic operating room which was described some time ago in the British Medical Journal.

Sir George Birdwood, whose bust was unveiled at Bombay University on Tuesday, March 27th, is the highest living authority on Indian art. Born in India sixty-two years ago, he was trained for the medical profession. He served in the Indian Army Medical Department for several years, but left it to take a chair in the Grant Medical College at Bombay. With the assistance of some rich and influential gentlemen, he founded the Victoria and Albert Museum, and, when forced to return to England in broken health in 1869, he was publicly declared to have done more than any other man in the presidency to have brought together the various races in friendly connection.

A Dublin Lawsuit.—We mentioned a few weeks ago that the late Sir Gervas Taylor had left large sums to several Dublin hospitals. We understand that the matter will come before the Irish law courts next term. It appears that a codicil, which varied in a remarkable way the terms of the will as to the amounts bequeathed and the executors, is challenged, one allegation being want of testamentary capacity. The trustees of the Adelaide Hospital suffer under the modifying codicil, and they will seek a decision at law upon the objections which they raise. The trial is looked forward to with much interest, as one of the beneficiaries is a medical gentleman to whom a considerable sum was bequeathed.

Society of Anæsthetists.—The fifth ordinary meeting of this Society was held on March 15th, Mr. T. Woodhouse Braine, President, in the chair. Casual communications were made by Mr. John Adams, Mr. Henry de Vis, and Mr. W. Fingland, of Liverpool; and Mr. Richard Gill read a paper on the Relation of the Pupil to Anæsthesia. After discussing the significance of the small and the dilated pupil respectively, he proceeded to advocate the maintenance of the small pupil throughout anæsthesia, the amount of the anæsthetic given being reduced at stated intervals. Dr. Hewitt said he could not agree that it was possible or advisable to work with a contracted pupil under ether: if this were done many patients would be found to be insufficiently anæsthetised.

Suicide in France.—According to statistics lately published in the *Journal Officiel*, the number of suicides during 1890 was 8,410—6,576 males and 1,834 females. This shows a considerable increase as compared with previous years: indeed, statistics show that the suicide-rate has been steadily rising during the last thirty years. Thus, while in 1861-65 it was 4.661 per 100,000 of population; in 1866-70 it was 4.990; in 1871-75, 5.276; in 1876-80, 6.259; in 1881-85, 7.339; in 1886-90, 8.226. A specially melancholy feature in these statistics is the increasing rate of suicide among children under 16 which they show. In 1886 the number of such suicides was 62; in 1887, 67; in 1889, 77; and in 1890, 80. The annual average of such juvenile suicides was 61 in 1881-85, 51 in 1876-80, and 31 in 1871-75.

Institute of Certificated Sanitary Inspectors.—The second annual meeting of the Institute of Certificated Sanitary Inspectors was held at the Parkes Museum on March 22nd. The Chairman of the Council, Mr. W. H. May, in his opening remarks, gave an account of the work and progress of the Institute during the past year. He said the Institute was financially in a better position than at their last meeting. The number of honorary Fellows had been increased by the addition of several leading representatives of sanitary science. Mr. May suggested that much good might be effected by ladies aiding in the diffusion of a knowledge of hygiene by the formation of a "Sanitary Primrose League." An interesting paper on the Education of the Sanitary Inspector, Past, Present, and Future, was read by Mr. Wynter Blyth, President of the Institute.

MEDICAL VACANCIES.

The following vacancies are announced:

BEDFORD GENERAL INFIRMARY AND FEVER HOSPITAL.—House-Surgeon, doubly qualified. Salary, £100 per annum, with apartments, board, lodging, and washing. Applications to the Secretary by April 10th.

BETHLEM HOSPITAL, Lambeth Road, S.E.—Two Resident Clinical Assistants. Applications and testimonials, endorsed "Clinical Assistantship," to the Treasurer, Bethlem Hospital, Lambeth Road, S.E., by March 31st.

BIRMINGHAM GENERAL DISPENSARY, Birmingham.—Resident Surgeon. Salary, £150 per annum, with an allowance for cab hire, and furnished rooms, fire, lights, and attendance. Applications and testimonials to Alex. Forrest, Secretary, by April 11th.

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN.—A Resident Medical Officer and a Resident Surgical Officer. Salaries £70 and £50 respectively, with board, washing, and attendance. Applications to the Secretary, Children's Hospital, Steelhouse Lane, Birmingham, by April 4th.

CANCER HOSPITAL (Free), Fulham Road, S.W.—House-Surgeon. Appointment for six months. Salary at the rate of £50 per annum, with board and residence. Applications to the Secretary by April 9th.

CARLOW DISTRICT LUNATIC ASYLUM.—Assistant Medical Officer, unmarried, and not more than 30 years of age, and doubly qualified. Salary, £100 per annum, and emoluments valued at £100 per annum. Applications to the Medical Superintendent. Election on April 13th.

CARNARVONSHIRE AND ANGLESEY INFIRMARY, Bangor.—House-Surgeon. A knowledge of the Welsh language is desirable. Salary, £70 per annum, with board and lodging in the house. Applications and testimonials to the Secretary by April 7th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Pathologist. Salary, 100 guineas per annum. Applications to the Secretary at the Office, 24, Finsbury Circus, E.C., by April 12th.

DENTAL HOSPITAL OF LONDON AND LONDON SCHOOL OF DENTAL SURGERY, Leicester Square. Demonstrator. Honorarium, £50 per annum. Applications to Morton Smale, Dean, by May 14th.

EAST LONDON HOSPITAL FOR CHILDREN, Glamis Road, Shadwell, E.—House-Physician. No salary, but board, lodging, and washing are provided. Applications and testimonials to Thomas Hayes, Secretary, by April 4th.

GENERAL INFIRMARY, Leeds.—Honorary Assistant Physician. Applications marked "Private" to the Treasurer by April 6th.

LEITH HOSPITAL.—House-Physician, House-Surgeon, and Surgeon for the Outdoor Department. Appointments for six months. Salary to each office £50 a year, with board in the hospital. Applications to George Mann, Secretary, 33, Bernard Street, Leith, by April 4th.

LIVERPOOL EYE AND EAR INFIRMARY.—House-Surgeon, doubly qualified. Salary, £80 per annum, with residence and maintenance. Applications to Reginald Haigh, Honorary Secretary, 13, Bevey's Buildings, George Street, Liverpool, by April 7th.

LIVERPOOL NORTHERN HOSPITAL.—House-Surgeon's Assistant Board and lodging provided. Applications to the Chairman by April 2nd.

MORPETH DISPENSARY.—House-Surgeon, doubly qualified, unmarried. Salary, £120 per annum, with furnished house, coals, and gas. Applications to the Honorary Secretary, N. J. Wright, Morpeth, Northumberland, by April 4th.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Albany Memorial), Queen Square, Bloomsbury.—House-Physician. The present Junior House-Physician is a candidate, and applicants should state whether they are prepared to accept either appointment. The salary of the Senior House-Physician is £100 and of the Junior £50 per annum, with board and apartments. Applications and testimonials to B. Burford Rawlings, Secretary, by March 31st.

OLDHAM INFIRMARY.—Senior House-Surgeon. Salary, £80 per annum, with board and residence. The Junior House-Surgeon is a candidate, and if elected there will be a vacancy for Junior House-Surgeon. Salary, £50 per annum, with board and residence. Doubly qualified. Applications to Harold Lees, Secretary, by April 10th.

OWENS COLLEGE, Manchester.—Professor of Zoology. Applications to the Council of the College, under cover to the Registrar, by April 3rd.

ROYAL COLLEGE OF PHYSICIANS.—Milroy Lecturer. Applications to Edward Liveing, M.D., Registrar, by April 9th.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to the Secretary by April 11th.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road, E.C.—Resident Medical Officer. Appointment for six months, when re-election is required. Salary at the rate of £100 per annum, with furnished apartments and board. Applications to the Secretary by April 11th.

SHEFFIELD SCHOOL OF MEDICINE, Leopold Street, Sheffield.—Tutor to take charge of Dissecting Room, and hold classes in Anatomy and Physiology. Salary, £125 per annum. Applications to the Secretary by April 2nd.

THE COPPICE, Nottingham.—Assistant Medical Officer: unmarried and not more than 28 years of age. Salary, £120 per annum, with furnished apartments, board, washing, and attendance. Applications to Dr. Tate at the Asylum by April 11th.

UNIVERSITY COLLEGE, Bristol.—Medical Tutor. Salary, £125 per annum. Applications and testimonials to E. Markham Skerritt, Dean, by April 4th.

MEDICAL APPOINTMENTS.

ADAM, Walter, M.B.Edin., of Rainhill Asylum, appointed Assistant Medical Officer to the Grahamstown Asylum, South Africa.

AINSWORTH, Hugh, M.R.C.S., L.R.C.P., appointed House-Physician to the Manchester Royal Infirmary.

ATWOOD, W. T., M.R.C.S.Eng., appointed Ophthalmic Surgeon to the Torbay Hospital, Torquay.

BAINF, Laurence A., M.D.Durh., appointed Assistant Medical Officer to the Monsall Fever Hospital of the Manchester Royal Infirmary.

BLACKHAM, R. J., L.R.C.P., L.R.C.S.E., L.F.P.S.Glasg., L.M. (R.C.P.E. and Rotunda Hospital), appointed an additional Surgeon to the Independent Order of Oddfellows (Sidcup District).

BYERS, Alfred, M.B., Ch.B.Vict., B.Sc.Lond., appointed House-Physician to the Manchester Royal Infirmary.

CALEY, H. A., M.D.Lond., M.R.C.P., appointed Joint Medical Tutor to St. Mary's Hospital, Paddington, *vice* A. P. Luff, M.D.Lond., resigned.

CHADWICK, Chas. M., M.A., M.D., M.R.C.P., appointed Honorary Physician to the Leeds General Infirmary.

CLAYTON, W. Kitson, M.D.Brux., L.R.C.P., L.R.C.S.Edin., L.M., appointed Medical Officer of the Wakefield District of the Wakefield Union and Public Vaccinator of the No. 1 District.

DALBY, John Lyttleton, M.R.C.S., L.R.C.P., appointed Senior House-Surgeon to the East Suffolk and Ipswich Hospital.

DAVIS, A. P., M.R.C.S.Eng., appointed Medical Officer for the Fowey District of the St. Austell Union.

DUDFIELD, Reginald, M.A.Camb., M.B., D.P.H., L.R.C.P.Lond., M.R.C.S. Eng., appointed Medical Officer of Health for the Borough of Paddington, *vice* James Stevenson, M.D., resigned.

EDGERLEY, Samuel, M.A., M.B.,C.M.Edin., appointed Assistant Medical Officer to the Roxburgh District Asylum, Melrose, N.B.

EDWARDS, E. C., M.B., C.M.Edin., appointed Junior House-Surgeon to the East Suffolk and Ipswich Hospital.

FINDLAY, George, M.A., M.B.Aberd., reappointed Deputy Medical Officer of Health to the Shipston-on-Stour Rural Sanitary Authority.

FLETCHER, John H., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Manchester Royal Infirmary.

FYFFE, W. Kington, M.B., M.R.C.P., appointed Medical Registrar to St. George's Hospital.

HAMMOND, W., L.R.C.P.Edin., M.R.C.S., appointed Medical Officer for the No. 6 District of the Liskeard Union, *vice* J. T. Cheves, M.R.C.S., resigned.

HITCHINS, Thos. Hy., M.R.C.S.Eng., reappointed Medical Officer of Health to the Shipston on-Stour Rural Sanitary Authority.

JOHNSTONE, G. W., L.R.C.P.Edin., L.F.P.S.Glasg., reappointed Medical Officer of Health to the Upholland Local Board.

LEA, Arnold W. W., M.D., B.S.Lond., F.R.C.S.Eng., appointed Resident Medical Officer to Queen Charlotte's Lying-in Hospital, Marylebone Road.

MACALISTER, Charles J., M.B.Edin., M.R.C.P., appointed Consulting Physician to the Liverpool Schools for the Deaf and Dumb.

MARSH, J. H., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Manchester Royal Infirmary.

MCDOUGALL, Alan, M.R.C.S., L.R.C.P., appointed House-Surgeon to the Manchester Royal Infirmary.

O'CONNOR, Mr. J. E., appointed Medical Officer for the Glenfield District of the Blaby Union.

PAGE, Herbert W., F.R.C.S.Eng., appointed Consulting Surgeon to the Railway Passengers' Assurance Company, *vice* Barnard Holt, F.R.C.S.Eng., deceased.

PARKER, Joseph Edmund, M.R.C.S.Eng., appointed Medical Officer of Health to the Ince Local Board, *vice* Dr. William Hall, resigned.

POMFRETT, W. H., F.R.C.S., reappointed Surgical Registrar to the Manchester Royal Infirmary.

ROBINSON, G. B., M.R.C.S., L.R.C.P., appointed Assistant Medical Officer at the Dorset County Asylum, Forston, *vice* J. A. Offord, M.R.C.S., resigned.

SCHORSTEIN, Gustavo, M.A., M.B., B.Ch.Oxon., M.R.C.P., D.P.H., appointed Assistant Physician to the London Hospital.

SHUTTLEWORTH, G. E., B.A., M.D., late Medical Superintendent of the Royal Albert Asylum, appointed Lecturer on Physiology and Hygiene at the Battersea Polytechnic Institute.

SMITH, Fred. P., L.R.C.S., L.R.C.P.I., appointed House-Surgeon to the National Eye and Ear Infirmary, Dublin.

TOLLER, Seymour Graves, M.B.Lond., appointed Resident Assistant Physician to St. Thomas's Hospital.

TREVELYAN, E. F., M.D.Lond., B.Sc., M.R.C.P., appointed Professor of Pathology in the Yorkshire College, Leeds, *vice* the late Dr. Ernest H. Jacob.

VICKERS, C. W., L.R.C.P.Edin., M.R.C.S.Eng., reappointed Medical Officer of Health to the Paighton Local Board.

WARE, Henry S., M.B., B.C.Camb., appointed Resident Medical Officer to the City of London Hospital for Diseases of the Chest, Victoria Park.

WATSON, J. K., M.B., C.M.Edin., late House-Surgeon to the Morpeth Dispensary, appointed Junior Assistant House-Surgeon to the Public Hospital and Dispensary, Sheffield.

WESTMACOTT, M.R.C.S., L.R.C.P., appointed Resident Medical Officer to the Barnes Convalescent Home of the Manchester Royal Infirmary.

WESTLAKE, A., M.B., C.M.Edin., appointed Medical Officer to the New Workhouse of the Grimsby Union.

WILKINSON, William Arthur, M.B., Ch.B.Vict., appointed House-Surgeon to the Manchester Royal Infirmary.

WILLIAMS, G. Chisholm W., M.R.C.S., L.R.C.P., L.S.A., appointed Assistant Surgeon to the City Orthopædic Hospital, Hatton Garden, E.C.

DIARY FOR NEXT WEEK.

MONDAY.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN, 8 P.M.—Discussion on Root Filling.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. H. Percy Dean and Mr Jonathan Hutchinson, jun.: Abdominal Section for Acute Intestinal Obstruction by Bands, with record of a case in which it was successfully performed twice on the same subject. Dr. Pasteur and Mr. Bland Sutton: Abdominal Section for Acute Intestinal Obstruction by a Band; Recovery.

WEDNESDAY.

OBSTETRICAL SOCIETY OF LONDON, 8 P.M.—Dr. Amand Routh: Cases of Associated Parovarian and Vaginal Cysts formed from a Distended Gartner's Duct. Dr. J. Braxton Hicks: On Intermittent Contractions of Uterine Fibromata and in Pregnancy in relation to Diagnosis.

ROYAL MICROSCOPICAL SOCIETY, St. Martin's Town Hall, Charing Cross, W.C., 8 P.M.—*Conversazione.*

POST-GRADUATE COURSE, West London Hospital, Hammersmith, W., 5 P.M.—Dr. Seymour Taylor: The Therapeutics of Heart Disease.

THURSDAY.

HARVEIAN SOCIETY OF LONDON, 8.30 P.M.—Clinical Evening. Dr. James Taylor: Two cases of Friedreich's Ataxy. Dr. G. A. Sutherland: Gummata of the Liver in a Child. Cases shown also by Dr. Sidney Phillips, Dr. Boxall, and others.

FRIDAY.

WEST KENT MEDICO-CHIRURGICAL SOCIETY, the Miller Hospital, S.E., 8 P.M.—Discussion on Headache by Drs. Harry Campbell, Newton Pitt, Francis Tayler, George Herschell, Ernest Clarke, and others.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY, West London Hospital, 8 P.M.—Mr. F. Bowreman Jessett: The Treatment of Advanced cases of Carcinoma of Uterus. Mr. L. A. Bidwell: Remarks on Amputation of the Breast for Cancer. Mr. W. H. Battle: Two cases of Malignant Disease of Penis

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTHS.

BENSON.—On March 18th, at Grosmont, Pontrilas, R.S.O., wife of H. P. D'Arcy Benson, M.B., Ch.M.Edin., of a son.

BULLOCK.—On March 16th, at Eastgate House, Warwick, the wife of Roger Bullock, M.R.C.S., L.S.A., of a daughter.

HARFORD-BATTERSBY.—On March 27th, at 33, Mornington Road, Bow, E., the wife of Charles F. Harford-Battersby, M.D.Cantab., M.R.C.S.Eng., of a son. Died at birth.

SKRIMSHIRE.—Chantry House, Morpeth, Northumberland, on March 19th, the wife of Fred. W. Skrimshire, M.R.C.S.Eng., of a daughter.

MARRIAGE.

MURRAY—BECHER.—On March 27th, at Ballygiblin, county Cork, Percy Hope Murray, M.B., to Miss Cecil Eleanor, daughter of Sir John Wrixon Becher, Bart., of Ballygiblin and Creagh, County Cork, and the Lady Emily Becher.

DEATHS.

GUEST.—On March 21st, at his residence, Arlington Place, 263, Oxford Road, Manchester, Ellis Southern Guest, surgeon, aged 70. No cards.

NORMAN.—March 26th, at Sutton-in-Ashfield, Notts, Reginald Norman, M.R.C.S Eng., L.R.C.P.Edin., youngest son of the late G. B. Norman, of Ilkeston, aged 39.

SMITH.—On March 25th, at Summerhill, Horsell Henry Smith, F.R.C.S. Eng., aged 70, of the above address and 7, Wimpole Street, W.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

IN order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

A. W. asks if there is any book on the management of workhouses, etc., from the medical superintendent's point of view.

A MEMBER asks at what London houses Unna's plaster muslins can be obtained.

M.B., M.A. asks which is a good book on the subject of urine analysis—one that goes fully into the quantitative estimations, and gives some hints on the significance of the presence of abnormal constituents.

MEMBER B.M.A. writes: Will any of your readers kindly assist me in the following case: A perfectly healthy lad, aged 17, suffers almost nightly from incontinence of urine. He has been circumcised. There are no symptoms of worms, and the usual drugs appear to have no effect. I should be glad of suggestions.

DIET IN OBESITY.

R. M. M. writes: Will any of your correspondents kindly furnish me with a diet chart for obesity?

ANTHRAX.

J. H. BELL, M.D. (Bradford), writes: If any of your readers who have seen cases of malignant pustule (anthrax) and internal anthrax (without pustule) in Russia, Turkey, Persia, South Africa, South America, Australia, and other countries that export hides, hairs, wools, etc., would kindly favour me with any particulars as regards infective material, prevalence of this disease, and protective precautions against it in these countries, I should be much obliged.

HYPERTROPHIED HEART IN HODGKIN'S DISEASE.

ENQUIRER asks whether any one has met with an instance of largely hypertrophied heart in a case of Hodgkin's disease. The following are the chief points: Female, aged 44, died; there was well-marked enlargement of the glands on both sides of the neck and in both axillæ; pneumonia of right side (which was the cause of death); great hypertrophy of the heart (18½ ounces); liver and kidneys healthy; spleen large (8 ounces), bright scarlet colour, no evident disease; lymphatic glands in thorax and around bronchi enlarged; mesenteric and inguinal glands not enlarged.

There was nothing to account for the large heart: all the valves were competent and healthy; there was no nephritis, no circulatory obstruction; nothing in fact which could be set down as the cause except the enlarged lymph glands and spleen, which, being defective in function, may, by altering the quality of the blood, have led to the cardiac hypertrophy.

THE RADICAL CURE OF HYDROCELE AND STERILITY.

DR. J. V. ABRINES (Fortess Road) writes: Not having been successful in getting any definite information from the several authorities I have questioned, nor in any of the standard works on the subject, I venture to ask your efficient aid in inquiring whether there are any statistics for or against the radical cure for hydrocele having any bearing at all on the subsequent reproductive powers of the patients? I bring this interesting subject to your notice to invite reference to further cases, for I can furnish you with details of eight cases where the operation has resulted apparently in subsequent sterility. I may mention that all the patients have been under 30 years of age at the time of the operation, perfectly healthy, and capable of copulation. In six of these cases the operation has been performed before marriage, whilst in two of them it has been subsequent to it. In the first of these two cases the patient had a child eighteen months after marriage, and shortly after the birth of the child, ten years ago, the operation was performed, whilst in the second case the operation was performed after the birth of the second child, eight years ago. The injection used has invariably been iodine. Is this a coincidence? *Quien sabe?*

ANSWERS.

INQUIRER.—We are advised that £5 5s. would be a proper charge.

LINGUA.—A skilled teacher for the boy with defective speech, described by our correspondent, might be obtained from the College for Training Teachers of the Deaf, Castle Bar, Ealing.

NURSING.

MISS LÜCKES'S *Lectures on Nursing*, or Dr. Laurence Humphry's book on the same subject, would probably answer our correspondent's purpose.

THYMOL IN TYPHOID.

IF J. H. W. will refer to Dr. Burney Yeo's *Manual of Medical Treatment*, or to Hare's *System of Practical Therapeutics*, he will find in the chapters on typhoid fever that thymol has been largely used as an intestinal antiseptic, especially by Professor F. P. Henry, of Philadelphia.

TEA TABLOIDS.

PENFOLD; W. C.; C. H.; T. U.—The tea tabloids referred to in the lecture at the National Health Society, are manufactured by Messrs. Burroughs, Wellcome and Co., Snow Hill Buildings, Holborn Viaduct, E.C., and may, we suppose, be obtained through any grocer.

MEDICAL SICKNESS ASSURANCE.

M.D. writes: For some time I have been looking out for an assurance association, which provides against sickness, suitable for medical men, paying, say, from £2 to £6 per week, but have not been able to find one. Is there such an association?

*** Where can our correspondent have been looking? Evidently not in the columns of the BRITISH MEDICAL JOURNAL, which have contained reiterated reports of the Medical Sickness Assurance Society, 33, Chancery Lane, which makes precisely the provision which he seeks. *Vide* BRITISH MEDICAL JOURNAL, March 24th, page 641, *et passim*.

NOTES, LETTERS, Etc.

ERRATUM.—In the description of Fig. 6 in Dr. Octavius Sturges's second Lumleian lecture in the BRITISH MEDICAL JOURNAL of March 17th, p. 562, the word "no" was accidentally omitted before "cardiac lesion."

A MYSTERIOUS OFFER.

CORRESPONDENTS in various parts of the country keep sending us letters received by the porters at the local hospitals, all apparently written by the same person, giving the same address, and having the same object. Query—What is the object? Do these letters emanate from an enterprising instrument maker, or what? The following is a copy of one of them: "Sir,—I propose sending you a 2s. postal order for every address, occupation, etc., of anybody over 15 and under 55 who from this date leaves in reasonable health the place where you are employed after the amputation of a limb. The information being wanted for a good purpose I trust there will be no objection. Kindly let me know, signing your full name, and oblige yours very truly."

PASSAGE OF THE CATHETER IN PROSTATIC DISEASE.

DR. J. M. MILES (Dingle) writes: If Dr. W. Donovan will look at Vol. 2, page 91, of the 4th edition of *Bryant's Surgery*, he will read the following:

"To arrive in the introduction of any instrument into the bladder, the passage of the index finger of the surgeon's left hand fully into the rectum is an excellent aid, and under all circumstances the pelvis of the patient should be well raised on a pillow."

It is evident Mr. Bryant's meaning is for the surgeon to tilt the point of the catheter with his finger over the so-called middle lobe of the prostate. I do not in the least mean to detract from Dr. Donovan's kindness in reminding the busy practitioner of the very useful suggestion, but he will now see that the profession were not deprived of the treatment, as it is so fully described by Mr. Bryant.

MEDICAL EXAMINATION FOR LIFE ASSURANCE.

M.D. writes: I was recently asked to examine for insurance a healthy well-developed mechanic by a company which pays a half-guinea fee when the amount insured for is under £500, and one guinea if the amount is above that sum. The examination form, which was of a most searching and precise nature, requested the examiner to test the insurer's urine, and give the result of a detailed analysis thereon. Seeing no reason for giving the analysis in question I omitted it, but a request came from the office requesting me to furnish it. This I refused to do unless I had at least a guinea fee. Why should a medical man, for a sum like half a guinea, spend an hour over the examination of a case, and in addition be called upon to analyse the urine, when chemists will not conduct such analysis under less than a guinea? Surely it is time that the question of insurance fees should be placed upon some more remunerative basis than that on which it now stands.

*** The question of the rate of remuneration for the examination of applicants for life assurance is constantly cropping up, and we think that the recently formed "Association of Medical Officers to Life Assurance Companies" would be doing a public service in eliciting a discussion on the subject, and formulating suggestions for the guidance of the various offices. "M.D." will, of course, bear in mind that an examination of a specimen of urine to detect the presence or absence of albumen and sugar takes less than five minutes, and that no report on an applicant for life assurance is complete without this information.

MEDICAL WOMEN AS WORKHOUSE DOCTORS.

M.D. writes: With regard to Miss Dickson's three questions, may I be allowed to urge the following for her consideration and as a reply? To the Question 1 the answer is of course there is no difference in the abstract, but this question and the next one calmly assume that women prefer the attendance of a woman doctor, whereas it is a well-known fact that by far the greater proportion of women, even though suffering from a gynæcological complaint, would consult a male

practitioner; therefore, if in a Poor-law infirmary there is to be only one assistant medical officer, that one should be a man. With regard to her last question, it is all very well to say sentiment should not come in. Sentiment does come in, even amongst the profession. In spite of the suggestion to the contrary, I am very loth to believe that even medical women have already overcome natural repugnances. I also believe that if they have, at any rate the public of both sexes have not. My contention is that women doctors ought not to do in a Poor-law infirmary what public opinion would never permit them to do in private practice. Does Miss Dickson imply that women doctors attend or propose to attend male venereal cases, etc., in private practice? For my part, I cannot believe this. If the women doctors were ready to do it, the patient and the patient's friends would not submit to it. The same does not hold for male doctors attending females for gynæcological troubles. That has been the custom of centuries, and as above stated the average female patient consults, and will continue to consult, a male practitioner. And as I stated in my previous letter, I firmly believe that women doctors will alienate what little public sympathy they possess if they let it be known that consideration of sex will in no way affect their practice.

THE ANCIENT USE OF STERILISED WATER.

MR. MORRIS F. DAVEY (Abergavenny) writes: The following from Ragozin's *Media, Babylon, and Persia* is interesting: "As soon as Susa became the principal capital of the Persian Empire, its river, the Choaspes, had the honour of supplying the kings with the only drinking water they would use. Kyros first instituted this custom, which was religiously kept up by his successors. 'Whenever the great king travels,' Herodotus reports, 'he is attended by a number of four-wheeled cars drawn by mules, in which the Choaspes water, *ready boiled for use*, and stored in flagons of silver, is moved with him from place to place.'" The author says in a footnote, page 319, "It is amusing to find so early an instance of this hygienic precaution—the boiling of water—which we are wont to consider so very modern."

"MATTHEW BAILLIE'S PILL."

MR. L. J. GERARD CARRÉ (Senior House-Physician, St. George's Hospital) writes: I desire to correct an error in a letter on the above subject in the BRITISH MEDICAL JOURNAL of March 10th. "Matthew Baillie's Pill" is most certainly known at St. George's Hospital, and its prescription and synonym—pil. digitalis co.—were correctly stated in that number. Dr. Matthew Baillie was Physician to St. George's Hospital from February 23rd, 1787, until 1800, during which time this pill was so extensively used by him as to merit the name of "Matthew Baillie's Pill." The fact that this pill—pil. digitalis co.—is now of world-wide reputation and has found a place in the pharmacopœias of several London hospitals is sufficient to testify to its worth, and is also my excuse for occupying your space to give Dr. Baillie the credit for it.

FORCIBLE FEEDING OF THE INSANE.

DR. W. H. CARRUTHERS (Halton) writes: Dr. Herbert's admirable paper appeals beyond the asylum physician to the general practitioner, and is of peculiar interest and instruction to him in that he, too, is occasionally called upon under emergency and difficulty to pass the stomach tube down the œsophagus and into the stomach. In ordinary washings out of the stomach it may in certain cases be found convenient to pass the tube by way of the nostril, and so obviate the tendency to retching, as when the tube is passed through the mouth. But particularly in cases of poisoning, whether to overcome the resistance and inclination of a would-be suicide, or to overcome the effect of convulsive struggles or tetanus, without violence to the subject, the method so graphically described by Dr. Herbert can be readily adapted, and commends itself both to empty the stomach of the poison swallowed, and to wash out that organ afterwards. A Tosswill tube has many obvious advantages over an ordinary siphon tube, and either in its simplicity is infinitely superior to the complicated and expensive brass apparatus called a stomach pump.

DANGEROUS FUNERAL OBSERVANCES.

DR. ANDREW M. T. RATTRAY (Portobello) writes: With reference to the remarks of Professor Hay, of Aberdeen, on this subject, alluded to in a recent number of the BRITISH MEDICAL JOURNAL, I could easily enumerate cases where illness was brought on by mourners hanging about the doors in thin black clothing, often in chilly and damp weather, while the services, often too lengthy, were being conducted in the house of mourning. At present I have under my care a patient, aged 66 years, who three months ago attended a funeral in his Sunday suit. He then caught a cold which developed into influenza, and he has never been himself since. The danger does not end here, for frequently the officiating clergyman offers up prayer at the grave; there again the risk is increased as the company uncover their heads, which is a fresh and frequent cause of chills and catarrhs. To avoid this services should be brief and punctual.

THYROIDIN IN TEETHING ECZEMA.

DR. R. T. H. BODILLY (S. Woodford) writes: For some reason my eldest child developed eczema of a stubborn and severe type, upon the head and face when teething; there is no previous history that could account for it. I tried every remedy that could be suggested by many of my fellow practitioners: iron and arsenic; cod-liver oil given internally and applied externally; then on the advice of one of our leading specialists who kindly saw her for me, she was kept entirely from milk and on a more or less vegetable diet, but all to no purpose. I at last in despair gave up treatment, and the eczema disappeared when all her teeth had come through, although it still reappears in a very modified form if the skin is exposed to wind, cold, or excessively hot air. My second child also developed this eczema in a more severe form still upon his face, head, back of knees, and ankles, and in his case also no treatment seemed of any avail, until six weeks ago I commenced giving him extract of the thyroid gland, first 2, then 3, and now 4 minim doses three times daily; the effect has been marvellous, the eczema having disappeared entirely from the scalp and from the face, and is fast disappearing from the other portions of his body; the child is much better in health and is rapidly gaining flesh and strength, and although he has recently cut two teeth there has been little increase of the eczema.

LETTERS, COMMUNICATIONS, ETC., have been received from:

(**A**) Dr. J. Abrines, London; A. G.; Assistant Medical Officer; Mr. C. Aggio, Shifnal; A. W.; W. L. Andriezen, M.B., Wakefield; Mr. R. R. Anderson, Edinburgh; A. M. S.; Mr. J. P. Aston, Eccleshill; Mr. T. R. Atkinson, Sherborne; Messrs. Arnold and Sons, London; Another Late A.M.O. (**B**) Mr. W. E. Black, Glasgow; Birmingham and Midland Counties Branch of the British Medical Association, Secretary; Mr. L. A. Bidwell, London; Mr. E. F. Bindloss, Royston; Mr. R. J. Blackham, Sidcup; Mr. T. Blair, Leeds; Professor G. Bizzozero, Turin; Dr. J. H. Bell, Bradford; Mr. F. C. Bryan, Littlehampton; J. W. Batterham, M.B., St. Leonard's; Mr. Lennox Browne, London; Dr. B. Bramwell, Edinburgh; Dr. W. C. Beatley, Newcastle-upon-Tyne; Mr. W. E. Bott, London; Mr. S. Bennett, London; Dr. Blanc, Cannes; Mr. T. H. Bodilly, Kingston-on-Thames. (**C**) Mr. G. Carré, London; Cork Poor Law Medical Officers' Association, Secretary; Dr. W. H. Carruthers, Runcorn; Dr. W. T. Cocking, Sheffield; J. M. Cotterill, M.B., Edinburgh; Mr. G. M. K. Clarke, London; Dr. W. H. Calvert, Melrose; Dr. A. H. W. Clemow, London. (**D**) Dr. F. H. Daly, London; Dr. T. O. Dudfield, London; Messrs. Duncan, Flockhart, and Co., Edinburgh; Dr. C. H. Dulles, Philadelphia; Dr. J. Davy, Halifax. (**E**) E. C. Edwards, M.B., Ipswich; Mr. S. Edgerley, Belford; Exile. (**F**) Mr. T. Fletcher, Warrington; Messrs. Forthe and Co., Cambridge; Messrs. Funk and Wagnalls, London; Dr. F. Fergus, Glasgow; W. K. Fyffe, M.B., London; Mr. H. J. Fletcher, Burnley; Mr. R. W. Frankham, London. (**G**) G. P.; D. J. Grant, M.B., Grantown-on-Spey; Glasgow Member; Mr. J. George, London; G. S. T.; Dr. W. R. Gowers, London; Dr. W. Gordon, Exeter; Mr. T. Gurney, Dovercourt; Dr. T. D. Greenlees, Grahamstown. (**H**) Mr. H. N. Hardy, London; Mr. G. H. Higgins, Heckmondwike; J. M. Hermon, M.B., Wakefield; Mr. P. J. Herbert, London; Mr. C. Heaton, Bromley. (**I**) I. M. S.; Infans: Inquirer. (**J**) Messrs. H. F. Joel and Co., London; Junius; J. Jones, M.B., Llanfair; Sir George Johnson, London; Mr. T. R. Jessop, Leeds; Mr. F. B. Jessett, London. (**L**) Dr. C. J. Lewis, Birmingham; Dr. W. W. Lea, London; Liverpool Northern Hospital, Secretary, Liverpool; Mr. R. H. Luce, London; Dr. C. J. Lewis, Stirling; Dr. D. B. Lees, London; r. R. A. D. Lithgow, London. (**M**) Mr. H. McCormack, London; M.D.: Mr. T. F. Manning, London; Mr. W. Marriott, London; Member, B. M. A.; Mr. J. F. M. Miles, Dingle; Dr. M. Mendelssohn, Berlin; Mr. W. H. May, London; Mr. J. S. Mills, London; Dr. J. Murphy underland; Dr. A. M. McAldowie, Stoke-on-Trent; Dr. R. Maclaran Carlisle; Mr. R. J. Mackay, Bradford; Mr. J. Mockler, London; M.B., .A. (**N**) Mr. H. F. Norbury, London. (**O**) Mr. C. L. Oliver, Bromley; Omega; One Who Knew. (**P**) H. W. Page, M.B., London; Dr. James Priestley, London; Dr. T. Partridge, Stroud; Mr. W. R. Parke, London; Dr. F. C. H. Piggott, Teignmouth; Mr. R. J. Pye-Smith, Sheffield. (**Q**) Quekett Microscopical Club, Secretary, London. (**R**) Mr. G. Q. Roberts, London; Dr. A. M. T. Rattray, Portobello; Mr. G. B. Robinson, Dorchester; Mr. R. P. Ryan, Thorpe; R. M. M.; E. D. Rowland, M.B., Georgetown; Mr. R. P. Ryan, Dublin; Mr. A. A. Rae, Edinburgh; Mr. A. Roberts, London. (**S**) Dr. G. E. Shuttleworth, London; Dr. S. A. K. Strahan, London; Dr. E. Stevenson, London; F. Skae, M.B., Larbert; Mr. H. Spratt, Bournemouth; F. Shearar, M.B., Paisley; Mr. D. McL. Slater, Bombay; Dr. J. F. W. Silk, London; Mr. A. L. Sharpin, Bedford. (**T**) A. Todd, M.B., Market Drayton. (**V**) Dr. C. B. Voisey, Liverpool. (**W**) H. S. Ware, M.B., London; Mr. G. C. Wilkin, London; Messrs. W. Woollams and Co., London; Dr. C. T. Williams, London; Mr. G. C. W. Williams, London; Mr. A. Wigglesworth, Liverpool; etc.

BOOKS, ETC., RECEIVED.

Du Traitement mécanique de la Constipation Chronique. Par Dr. F. Le Marinel. Bruxelles: Henri Lambertin. 1894.

A Manual of Therapeutics. By Dr. A. A. Stevens. Philadelphia: W. B. Saunders. 1894. 2 dollars 25 cents.

A Textbook of the Diseases of Women. By Dr. H. J. Garrigues. Philadelphia: W. B. Saunders. 1894. 4 dollars.

Formulaire des Médicaments Nouveaux et des Médications Nouvelles pour 1894. Par H. Bocquillon-Limousin. Paris: J. B. Baillière et Fils. 3 francs.

Willing's British and Irish Press Guide, 1894. London: James Willing. 1s.

A Standard Dictionary of the English Language. Vol. I. London and New York: Funk and Wagnalls Company. 1893.

*** **In forwarding books the publishers are requested to state the selling prices.**

THE ELEVENTH

INTERNATIONAL MEDICAL CONGRESS.

Held in ROME, March 29th to April 5th.

[FROM OUR SPECIAL CORRESPONDENTS.]

AN ADDRESS

ON

MORGAGNI AND "ANATOMICAL THOUGHT."

Delivered before a General Meeting of the XIth International Medical Congress, held in Rome, 1894.

By Professor Dr. RUDOLF VIRCHOW,
Berlin.

The history of medicine, although to some extent bound up with that of general civilisation, still offers us a few noteworthy differences. Whilst religion and systems of legislation changed, medical tradition was preserved. As in the time of Hippocrates, so to-day, our nomenclature is still Greek, and pains are taken that even modern barbarisms should have, at all events, the appearance of a Greek origin. No other science was so firmly founded, even at its commencement. No other science is in reality so old as medicine. Its long continuation is due to the subject with which it is concerned—a problem which survives all change of time and place—disease. Disease may differ with time and place, but the question as to its nature remains always the same, and the doctor's duty is ever to heal, whether he be in Italy or Russia, Europe or America.

In regard to this nothing is so significant as the change in the medical schools with time and place, at first sight so confusing. Till the end of the Middle Ages the schools were all in connection with one of the countries about the Mediterranean Sea. The Asclepiadæ and their fortunate heir, Hippocrates, derived their material from the "poliklinik" of the Temple of Cos and other places. Thence the new teaching spread throughout the whole Hellenic world, especially after the conquests of Alexander the Great; yet Asia Minor for a long time remained its centre. In Cicero's time Greek doctors first appeared in Rome, and later, under the Emperors, Galen carried westward the formulated teaching of Hippocratic pathology. Galen's humoral pathology was the true exposition of the teaching of Hippocrates, and although more than five centuries separated the two men, their successors were accustomed to regard them as contemporaries.

Rome under its emperors could produce no rival to Hippocrates and Galen, for Celsus was so little original and so little general in his views that he has only gained any distinction at all by single points of explanation. In the Eastern Empire the school maintained a certain amount of activity, and in Asia Minor and Byzantium for some time longer there were authors who attained to some importance, thanks chiefly to their specialistic tendencies. The humoral pathology in the peculiar form given to the doctrine by Galen remained the doctrine of the whole civilised world, both in Eastern and Western countries. The four cardinal juices, the Greek χυμοί, the Latin *humores*, served as the foundation for all physiological and pathological views of the constitution of the human body, and every illness was made out to be a "dyscrasia" or faulty mixture of the humours affecting a part or the whole of the body.

It is still an unanswered question where this humoral theory started. The medical literature of Egypt, so far as it is known at present, affords us no sufficient explanation, nor does that of India, though the latter may perhaps give us hints. At any rate neither of these countries had any great influence on the progress of medicine.

When out of the ruins of Alexander's empire several independent kingdoms arose in the East small local centres of medicine began to grow up in Syria and Persia, with doctors in ever-increasing numbers, who not only obtained local reputation but by their teaching acquired also a wide sphere of usefulness. Then it was that Jews and Arabs began to figure prominently as teachers of medicine. It is only in our own time that a study of Hebrew manuscripts has shown with what zeal and learning Jewish doctors of the early Middle Ages busied themselves for the maintenance and furtherance of medicine. The often hereditary capability of the Jews, which since then has achieved so much for science, may be traced back to this time.

The Arabs were still more distinguished, they carried on the medical teaching of the Greeks, which, but for them, might have been given over to oblivion. They founded schools at first in Mesopotamia and the neighbouring countries, then in North Africa and Spain. The works of Greek authors were translated into Arabic, and explained by further experience, and the Arabian schools in North Africa and Spain became colonies of learning for the West. One of the new elements which the Arabs introduced into medicine was their spiritualistic view of things, the influence of which can still be felt to-day. With the exception of some customs in the old temple ceremonies, this spiritualistic tendency was almost foreign to the Greeks, and there is hardly a trace of it to be found in the writings of Hippocrates. Amongst the wandering races of the East, however, the belief in supernatural agency dates no doubt from prehistoric times. As prototype of such supernatural forces we may mention the "living breath," in Greek πνεῦμα, and in Latin *halitus* or *spiritus*. Remnants of this idea may still be found nowadays in animal magnetism, spiritualism, and to some extent in hypnotism.

It is, however, through chemistry that the Arabs have won their distinguished place in the history of the natural sciences. Though the Arabs themselves never advanced beyond alchemy, they may be considered the founders of chemistry—a science which first at the end of the last century acquired its great importance amongst other sciences. With the first steps in the direction of analysis and synthesis of substances, with the processes of extraction, distillation, sublimation, and precipitation, the notion gained ground that in the raw materials finer substances were concealed, to which the virtue of the raw material was due. Hence a mere spiritualistic idea became associated with an actual reality, and in this dual form reached the Western world.

The Crusades helped much towards the introduction of Eastern ideas into the Western countries of Europe, which had at that time no science of its own, least of all medical science, but the medical learning of the Arabian schools was introduced amongst Western nations in part from Spain through the South of France, in part from North Africa through Southern Italy. The school of Montpellier was comparatively slow in its development, whereas that of Salerno is universally regarded as the spot where Eastern ideas and knowledge, first introduced towards the end of the eleventh century by Constantinus Africanus, took firm root. Then came the cloister of Monte Cassino, and the transference of learning to the Benedictine monks, and afterwards the teaching of medicine in the monastic schools. The Arabian translations of the Greek works were now in their turn translated into Latin, which since the time of Charles the Great had become the language of Western learning (it was only much later that these Latin versions were revised from the Greek originals). No wonder, therefore, that the monks still taught the old humoral pathology of the Greeks. Hippocrates and Galen were recognised by the Church, and by degrees, though without its expressed sanction, acquired the position of actual fathers of the Church, and to doubt their authority was regarded as sacrilege; hence the teaching of Galen became transformed into a series of actual dogmata.

This might all have been otherwise had real hospitals, with the opportunities they afford of observing disease, existed at that time; for it is to the hospitals that modern medicine owes its knowledge. The so-called hospitals of that time

were, however, as their name implies, only resting places where travellers, chiefly pilgrims, were received: the priests who looked after them had only occasionally the opportunity of giving assistance to sick persons. Some of these institutions were really in later times transformed into true hospitals. The hospital of St. Spiritus in Sassia was founded at Rome in the seventh century; Pope Innocent III made use of it for the extensive hospital organisation of the Holy Ghost, and, transformed into a large lay hospital, it still exists in the old place. The hospitals of the Holy Ghost organisation have seldom done much service for medical science; those which have, owe their reputation almost exclusively to lay management. This was especially the case where they fell under the control of the town authorities; the latter began to occupy themselves with such matters at the beginning of the last century, when, moreover, the universities demanded the use of hospitals for purposes of medical instruction.

It was a long war before medicine could cast off the chains of dogmatism and free herself again; a war chiefly fought out on Italian ground, though other nations also had a share in its victorious ending; in this war the prizes belong to anatomy. Excepting under the rule of the Ptolemies in Egypt, dissection of the human body was forbidden throughout ancient times. Even Galen had to confine his examination to pigs and monkeys, the animals most resembling man, and hence, though already Hippocrates had knowledge of many facts acquired from observations on animals, the knowledge of human pathology as well as anatomy had to remain uncertain.

The Church stood in the way. By its prohibition the natural dislike felt by the people to the dissection of human bodies was strengthened. Moreover, those who were convinced of Galen's infallibility could see no use in dissection, thinking as they did that they already knew the structure of the body. Science demanded dissection to find out if Galen had made mistakes or not, but the Church refused it, and declared that Galen had made no mistakes. This dilemma held back anatomy for at least two centuries, but at last the highest authority of the Church showed himself favourable to the claims of science.

In Rome itself doctors were never wanting to help in the search for truth in science, and even the physicians to the Pope himself have, quite down to present times, distinguished themselves in this direction. In the beginning of the fourteenth century Mondino in Bologna received permission to dissect and demonstrate a few human bodies to the students. The road was thus opened; Italian universities gained this great addition for the study of medicine, with the result that anatomists existed already in Italy when this special study was unknown elsewhere. No wonder that medical students from northern countries flocked to the Italian universities, especially to Bologna and Padua.

Amongst those attracted to Italy was Andreas Vesalius, of Low-German family, born in Belgium, educated in France, and destined as professor in Padua (1537-1544) to reform medical instruction from its foundations, and for ever to destroy the belief in Galen's infallibility. This great man, whom Italy, France, Germany, the Netherlands, and even Spain can lay claim to, obtained for anatomy its scientific position, and the importance of his anatomical discoveries was recognised in all other branches of medicine.

It is not, however, quite correct to call Vesalius the reformer of medicine; his anatomical researches could not destroy the old notions of humoral pathology, they could not prove that the organs he examined were not made from particular mixtures of the four cardinal humours. It was reserved for Theophrastus Paracelsus, a German contemporary of Vesalius, to effect this; he it was who, with the direct attack and vigour of a conqueror, destroyed the doctrine of humoral mixture. Anatomy he in reality despised, and he made use of Arabian traditional teaching, though certainly much modified, to effect his purpose; with its help he set up a sort of counter doctrine in opposition to that of the four primary humours. This doctrine, half naturalistic, half spiritualistic in nature, unfortunately, in the hands of his successors, assumed an extremely mystic as well as dogmatic aspect.

What would have resulted from it is hard to say, but preservation was close at hand, and in the early part of the seventeenth century William Harvey established as a fact the doctrine of the circulation of the blood. This was the foundation of physiology, which soon took its place gloriously by the side of anatomy. Harvey, like others, had visited Italy, and under the guidance of Fabricius ab Aquapendente, at Padua, had studied the arrangement of the blood vessels and heart. To Italy, moreover, belongs the credit of filling up the one gap left by Harvey in his doctrine of the circulation, namely, how the blood passed out of the arteries into the veins; it was Marcello Malpighi, the famous professor of Bologna, who by the help of the microscope discovered the capillary circulation, and thus to some extent crowned the building, to the erection of which Vesalius, Harvey, and numberless other teachers had devoted their strength. The pathology of the humours now became a pathology of the blood, and a new direction was given to research, a direction which afforded work for the two following centuries, and whose limit has not yet been reached.

It is remarked that though their anatomical studies led to experimental physiology, none of these investigators attempted by the same methods to make similar advances in pathology. Eustachius and Vesalius indeed directed the attention of anatomists to certain pathological abnormalities, but neither they nor their immediate successors studied these abnormalities with sufficient care to found a doctrine of pathology on their facts. On the contrary, the old idea that disease was something general gained credit when the blood, circulating through all parts of the body, came to be regarded as the carrier and centre of all disease. Even the great professor of Leyden, Hermann Boerhaave, whose pupils soon came to occupy all the chairs of medicine in Middle Europe, put no stop to this idea. He certainly drew attention to local processes in disease, but attributed them to local disturbance in the circulation. The circulation occupied the chief place in ideas of pathology, and the *vita propria* of the organs, which Paracelsus talked of, was considered a spiritualistic error.

This was the time of Morgagni's youth, and his good fortune placed him at first in a position which favoured rather anatomical than pathological study. Giambattista Morgagni was scarcely 16 years old in 1698 when he left the school of his native town, Forli, for the University of Bologna. There he must have been in an "atmosphere of anatomy;" everyone must still have known of the discoveries which Malpighi, Aranzi, and Varoli had made; there Valsalva helped him in anatomical work, and introduced him also to pathology and medical practice. Already in 1701 Morgagni graduated in medicine and philosophy, and a few years later he obtained the chair in the Academia Inquietorum (afterwards the Istituto delle Scienze). In 1706 his first publication appeared, the first of the six parts of his *Adversaria Anatomica*: his fame rose so quickly that in 1711 Venice called him to the chair in Padua formerly occupied by Vesalius. Here he became so popular as a teacher that there was not room enough for the students in the narrow lecture rooms. German students were especially attracted by Morgagni; in 1715 his German pupils made him Patronus Germanorum, and with his help obtained a special house with a library, where the following inscription was placed: "Inclyta natio Germanica adjuvante liberalissimo protectore cel. viro Jo. Bapt. Morgagni, M.P.L.P., has sibi emit ædes." In 1708 he had already been elected a member of the German Academia Curiosorum Naturæ (afterwards Acad. Cæsarea Car. Leopold. Curiosorum Naturæ), and in 1732 he was made "adjunctus." These honours were pleasing to Morgagni, and so the first book of his great work, *De Sedibus et Causis Morborum*, when it appeared in 1761—Morgagni being already nearly 80 years of age—was dedicated to Trew, the well-known member of the above-mentioned society, and the fifth book was similarly dedicated to Johann Friedrich Meckel.

Italians will not object to such incidents being referred to, which recall the ancient fellowship between Italy and Germany on the battlefield of science; neither can other nations take it amiss, for Morgagni, though not like Vesalius a citizen of many States, is just as much as Vesalius a representative of science which is common to all countries. It is, indeed, the duty of this whole assembly to pay that tribute to his genius which his great services to science render just.

Now let us shortly estimate what Morgagni did for science. When he died on December 6th, 1771, in the 89th

year of his age, Morgagni bequeathed to the world, as the labour of his life, the five books *De Sedibus et Causis Morborum*. The subject of these books was not yet called "pathological anatomy," but everyone knew that these books contained all that was known up to the time concerning changes produced by disease in the structure of the human body. In these books he had included the new observations of Valsalva, and his own much more numerous ones, and, in fact, the innumerable records scattered through the academical and periodical literature of all Western countries. His work was no simple compilation like those of his predecessors, Schenck von Grafenberg and Bonet; it was rather a methodical handbook, with each case separately examined, and included only after submission to the most careful criticism; a book written for the purpose of making anatomical observations in disease serve as the foundation of practical medicine. His observations contained not merely the anatomical facts found at the dissection, but their relation to previous clinical signs and symptoms, with the conclusions as to diagnosis and prognosis to be drawn from them. It was naturally first after Morgagni's time that clinical medicine acquired its real importance. The full results of Morgagni's work were felt in London and Paris, in Vienna and Berlin, and therefore we may say that it was first through Morgagni that the dogmatism of the old schools was absolutely destroyed, and that with him commences the New Medicine.

Morgagni handled his subject in a manner different from that of his predecessors, and perhaps writers on the history of medicine have not given him sufficient credit in this respect. Till Morgagni's time the nature of the disease was the first question. They examined into the antecedents, they established a clinical picture of the disease, they determined the structural alterations in the body, and gave the whole a name. In spite of all this the nature of the disease was usually by no means clear; the most arbitrary hypotheses were relied on, and even regarded as scientific. What theories have not been maintained as to the nature of fever and of inflammation?

Morgagni did not make the nature of diseases the first object of his inquiry; the very title of his book, *De Sedibus Morborum*, shows that his first inquiry was: "Where is the disease?" This is his method of scientific investigation, and the importance of locality in disease is well expressed by the question, for naturally such a question would be absurd if general diseases really existed. Pathological anatomy teaches us that there is no diseased body which has undergone change in all its parts; this *sedes morbi* is the quintessence of Morgagni's experience, and he has placed it at the head of his book.

Pathological anatomy cannot find out the site of every disease. In the large class of nervous diseases and in the class of poisonings there are many cases where anatomical inquiry fails to find out the site of the disease, not because there is not one, but because the disease has not produced visible structural changes in the affected part; even in such cases our physiological and chemical knowledge justifies us in speaking of the site of the disease, though we find no structural change there. This is what I call "anatomical thought in medicine." *Ubi est morbus?* is the question to begin with both in examining a living patient and a dead body; but if the examination fail to supply an answer to this question, the examination is not at an end, for previous history and etiological data must be taken into consideration to decide the question what the site of the disease is. "Anatomical thought" reaches much further than the dominion of pathological anatomy; it is no longer confined to the visible changes exposed by the anatomist's knife, but is concerned also with the vital function of organs, and so includes a great part of what modern division of labour has given to the clinician.

This division of labour was not so sharply marked out in Morgagni's days; and although he was more anatomist than clinician, many parts of his great work are rather clinical than anatomical. His principles had great importance with reference to the method of examining patients, and it is characteristic that the Paris school of Bayle and Bichat, of Laennec and Dupuytren has been called the school of *organicisme*.

We have since then far overstepped the limits of this school. The search after the *sedes morbi* has advanced from the organs to the tissues, and from the tissues to the cells. In practical medicine the principle of local treatment has continually progressed; each year treatment by drugs and surgery has become more local, so much so that probably Morgagni himself, if he were here with us, would be amazed to find how much modern medicine differs from the old tradition, and how little resemblance it has to that of Galen. Nevertheless, this is all a development of his own thought concerning the "*sedes morborum*," or, as I have termed it, the "anatomical" thought. This thought rules modern physiology and pathology; it will certainly remain the thought of the future, and this future will date the commencement of its history from the days of Morgagni. To him be the honour!

AN ADDRESS
ON
THE ORGANISATION OF SCIENCE.

Delivered before a General Meeting of the XIth International Medical Congress, held in Rome. 1894.

By Professor MICHAEL FOSTER, F.R.S.,
University of Cambridge.

[Abstract.]

[Despite the comparatively small number of English-speaking members of the Congress, a large number attended to hear Professor Foster's address. Professor Foster was very warmly received, and as soon as the applause had ceased he said:]

Ladies and Gentlemen,—One of the most salient features of animals is a division of parts whereby each part does its best to fulfil the work required of it. On the other hand, all the parts of the body are so united that every part works for the common good. Just as in the body politic there are laws and unwritten customs which regulate the actions of the members, so also with the workers in science. Differentiation has proceeded to a great degree amongst scientific workers; each inquirer has now to limit his inquiries not only to one science, but to one part of that science, and there is no doubt that in the future division of labour will have to proceed still further.

So much for division; but what about integration? Is it possible for anything to be done to unite the different scientific workers together? I think that there is, and it seems to me that this International Congress of Medicine—of medicine which is the mother of all sciences—is a suitable opportunity, and Rome is a fitting place to propose the doctrine that human wit may well devise some tie that will bind all the workers of the world together by one indissoluble knot. What is wanted in science is organisation; by this the labours of the individual will be lightened and the progress of science will be furthered. Let me now ask whether organisation can be applied and inquiries carried out by single investigators?

There is, however, a danger which I do not want to underrate, for we must bear in mind that an investigator is like a poet, *nascitur non fit*, and there is a danger that by organisation we may tend to nurse the unfit and hamper the fit. There are two main incitements to investigation—one is love of fame and the other love of truth, that curiosity to know the truth which drove Adam and Eve from the garden, and which has ever since stimulated mankind. Ambition will be hampered by organisation, the lover of truth for its own sake will be aided, and the latter is undoubtedly the more important of the two. As I look around me, I see everywhere waste of effort. Every inquirer knows that when he commences an inquiry he is sure to come upon side issues which have to be investigated, and he is obliged either to devote much time to them and partly to solve them, or he has to leave them alone. Every inquirer goes to his rest leaving many of his problems unsolved. There are plenty of young men capable and anxious to solve them, but, owing to the want of organisation, they do not know what to undertake, or they dig wells where there is no water. In all this energy

is wasted, and in addition a great deal of work is thrust upon the world which the world were much better without—work which is crude, unfinished, unmatured, a veritable sewage thrown into the pure stream of science, which has to be got rid of before the stream can again become free from impurity. Is there any way by which this waste of energy may be diminished and this increasing flow of useless matter lessened? It is on this point that I wish to make a suggestion to the Congress. In the old times there were guilds by which the workers in any one branch were united together. Now in science many men have laboratories and no men to work in them, or no men that are fitted to work in them; others, again, have men and no laboratories. Would it not be possible to form a guild, and so unite these workers, so that by the guild the work done might be polished and completed before it is given to the world?

There are many kinds of inquiry which would be much benefited by concerted action. Two of these which merge into each other are statistical inquiry and what we may call skilled inquiry. The chief feature of the former is that the data which are gathered should be homogeneous. There should be no exercise of individual judgment by the inquirer. It is evident that the value of statistics largely depends upon the width of the field covered, and the collection of statistics by many nations at the same time would be of the greatest value. I can especially aver that this is the case in the biological sciences. By this means we might avoid the collection of statistics based on insufficient cases or over so limited an area as to be worthless, couched in percentages, so that they have an apparent value which is most misleading and dangerous. The second kind of inquiry is the skilled inquiry, that kind of inquiry which should only be undertaken by skilled men. As an example, I may mention a solar eclipse. How valuable the knowledge that has resulted from several skilled men observing and discovering the same thing at the same time! The favourable opportunity for an investigation may be a short one, and the advantage gained by concerted action would be in such a case very great. Again, the number of skilled observers living at any one time is not great, and they are spread over many lands. The problems of the future must be faced by the best men, and why should not these men work together? Why should not the best men be selected—now an Italian, now a German, now a Frenchman—because they are best to do the work for which they are best fitted? It is only in this way that we can get the best work done in the future.

Expense is another reason why scientific work should be taken up by nations in common, for every day the pursuit of scientific investigations becomes more costly, and may in any given case be too expensive even for the richest nation.

If such a proposal be a good one, then there must be some international organisation if it is to be possible. No nation waits to prepare for war until the drum beats to arms, so in science we should be ready with our organisation for whatever work may present itself. The chief difficulty of starting such an organisation is the expense at the commencement; when that is once got over, the cost of fuel to keep it going is not great. If once in working order, a permanent organisation could at any time start the machinery which was necessary for any special work. Scientific work is the property of the whole world, and as such the whole world should combine to fight the powers of darkness and ignorance.

The dangers which apply to the individual in such an organisation also apply to the nation. Ambition when applied to a nation is called patriotism; but surely the love of truth is higher even than patriotism. Leaving generalities, every worker knows how much difficulty small things create in his work. For instance, nomenclature. How great a help it would be if there were only an international tribunal before whom every new name had to go, and who would, as it were, stamp the coin of science before it was allowed to pass into circulation. Again, it may happen that some inquiry has to be carried on under special conditions. An example of this is the work done at the zoological station at Naples. This is in reality an international institution, although it has been chiefly originated by one man; such an institution ought to be international, and ought not to depend for its existence upon the energy of one man.

One more instance. The condition of scientific literature can only be described as one of chaos. Think of the literature that a scientific worker has to read through before he can know what has been done by others—journals, weekly, monthly, yearly, in all languages, journals upon all subjects! Whereas, if all the papers on one subject could be collected under one cover, think of the saving of time! Even if this cannot be done, at least it might be possible to have a universal index which should appear at frequent intervals, and which should be reclassified every five, and again in ten years, and so on. Such a list of titles would enormously lessen our labours. I would suggest that this Congress should initiate the work, should set in motion the formation of such an index. If this be done it will be a commencement in organisation, and if this be done successfully we may then pass on to other international works which may present more danger and greater difficulty.

AN ADDRESS
ON THE
GROWTH AND REGENERATION OF THE ORGANISM.

Delivered before a General Meeting of the XIth International Medical Congress, held in Rome, 1894.

By GIULIO BIZZOZERO, M.D.,
Professor of General Pathology in the University of Turin

[Abstract.]

Introduction.

After a few introductory remarks in which he stated that he could only give a bare outline of his subject in the time at his disposal, and must therefore reserve a fuller discussion of details for a work which he was preparing, Professor Bizzozero set forth the points which he proposed to treat as follows: 1. By what histological modifications do the tissues of our organism grow, and how is that continuous physiological process of regeneration effected by means of which its constitution and properties are preserved unchanged? 2. How are the various tissues enabled to repair the losses to which they are subjected pathologically? 3. What part in the carrying out and direction of these processes of growth and regeneration is played by the blood vessels, nerves, and tissue elements themselves respectively?

The Mechanism of Growth.

A part can grow—leaving out of sight other secondary factors, such as the increase of interstitial tissue and vessels—in three ways: By increase in the number of its elements; by increase in the size of these elements; and lastly, by increase of the secondary products of the elements, such as the cortical layers and prolongations of the nerve cells, the contractile substance of the muscles and the fundamental substance of the connective tissue.

As regards the increase in volume of the cells and their secondary products, numerous researches had been made, beginning with the work of Harting, which had been somewhat neglected by more recent observers.[1] With respect to duration and intensity of the processes of cellular multiplication, the state of our knowledge was much less satisfactory. This was due to the impossibility of determining whether the multiplication of the cellular elements had ceased in a part, and when this had occurred. This difficulty had been in great measure overcome by researches to which the way had been opened by the discoveries of Flemming; these researches had shown that certain characteristic forms assumed by the nucleus indicate with certainty that the cell to which

[1] Harting, *Recherches Micrométriques sur le Développement des Tissus et des Organes du Corps Humain*, Utrecht, 1845.

it belongs is multiplying itself by division, or more exactly by that form of division most common in the upper vertebrates, and known as "indirect division," "mitosis," or "karyokinesis." This furnished the criterion sought for whereby both the intensity with which multiplication of tissue elements was proceeding and the duration of the process could be determined. The presence or absence of mitosis in a full grown tissue affords a means of determining whether or not the tissue is undergoing physiological regeneration, and with what activity this process is going on. Time will not allow a detailed description of the process as seen in the several tissues; all that can be done is to give a rapid sketch of the part played by the cells, that is to say, of the real factors of growth and regeneration. From this point of view the tissues may be divided into three groups. First, one in which they continue to multiply throughout the life of the individual; to this class belong the parenchyma of glands secreting morphological elements (spleen, medulla of bone, lymphatic glands, ovary, testicle), epithelial coverings and their glandular prolongations, etc. These are tissues with transient elements (*elementi labili*).

To the second group belong those whose elements multiply by division up to the time of birth, or even for some time after it, that is to say, up to a time when the elements have assumed their specific characters. Beyond this limit no further multiplication and no process of regeneration take place. This class includes the tissue of glands such as the liver, kidney, pancreas, salivary glands, lachrymal glands, etc., the secretion of which is amorphous; connective tissue, cartilage, bone (in which mitosis is prolonged up to the time when the skeleton is fully developed) and unstriped muscle. These are the tissues with stable elements (*elementi stabili*).

To the third group—or, if thought preferable, to a subdivision of the second—belong the striped muscle and nervous tissues. In these multiplication by mitosis ceases at a very early stage of embryonic life, before the elements have assumed a specific character. After this period I do not believe—until the contrary is proved—that in mammals either the number of nerve cells or of striped muscular fibres can increase. This distinguishes them from the tissues of the first and second groups, in which the number of elements goes on increasing during the whole of intrauterine life or even after birth. Striped muscular and nervous tissue might therefore be designated tissues with perennial elements (*elementi perenni*). The blastodermic derivation of the tissues has no influence on these differences, nor is there any warrant for supposing that there is any relation between them and complexity of structure and of function. The aptitude for regeneration is more closely related to the losses of elements which the tissues undergo in working than to anything else. New production makes up for loss, and thus physiological equilibrium between waste and growth is maintained.

Reparative Power of Tissues.

With regard to the reparative power of the tissues it is obvious that it is most active in those which are normally the seat of regeneration, as in epithelial coverings and the glands which secrete morphological elements. The case is different as regards the epithelium of glands whose secretion is amorphous; in the case of these aptitude for repair had been denied by some and by others only admitted as probable. The question has now been settled by the criterion of karyokinesis. Within the last few years regenerative processes have been demonstrated by Golgi in the kidney, by Canalis and Podwyssozki in the liver and in the submaxillary glands, by Di Mattei in the pancreas, by Podwyssozki in the Meibomian glands, by Coen and Canalis in the mammary gland, by Drogoul in the prostate, by Vincenzi and Ribbert in the thyroid, by Canalis and C. Martinotti in the suprarenal capsules, by Canalis in the lungs, by Griffini and Vassale in the glands of the stomach, and by Vivante in the pyloric glands.

It has thus been established that although the elements of these glands have in their normal state the character of stability, they have not lost the faculty of multiplying themselves when the necessity for doing so arises. When a gland in any morbid process loses a large number of its elements it can reproduce them and thus return to its normal state. So great is this reparative aptitude that, as is well known, Ponfick, after extirpation of a large part of the liver in animals, saw that organ quickly regain its original volume. Equally great is the reparative faculty of connective tissue as was shown long ago by Virchow. Newer researches have shown that mitosis of connective cells is so frequent in all those cases in which there is hyperplasia of tissue that it is no longer necessary to have recourse to a transformation of the leucocytes to explain the origin of the new formed connective cells.

Repair of Unstriped Muscle.

Little that is new has been discovered with regard to cartilage or bone, but important results have been obtained as regards unstriped muscular tissue. Investigations made in my laboratory by Busachi have shown that the aptitude of unstriped muscular tissue to proliferate is greater than had previously been suspected, and that the production of new elements takes place in this case also by mitosis of the pre-existing elements. For instance, if a stenosis of the intestine is produced, two days afterwards the muscular tunic above the narrowing is thickened, and the muscle cells in it are seen greatly increased in volume, and not a few of them in course of division. To increase of function the tissue responds by hypertrophy as well as by hyperplasia. Contradictory results were obtained from the investigation of regeneration of striped muscular tissue. In any case, such regeneration as takes place is very limited, and can have no influence on the functional perfection of the muscle, since the cicatrix which results is formed almost exclusively of connective tissue.

Repair of Nerve.

Still less regenerative activity is found in nervous tissue. It is true that after injury to the nervous centres Mondino, Coen, Sanarelli, and others observed that the nucleus of the nerve cells quickly assumed some of the forms characteristic of karyokinesis. These, however, were irregular forms, and the process could never be followed up to division of the cell. Cicatrisation of the wound always takes place by multiplication of the connective cells and neuroglia; in no case in mammals could it be ascertained with certainty that new cells were formed. In contrast with the cells are the nerve fibres, which, as has been long known, are regenerated very actively, but, as is equally known, the fibres are not true tissue elements: they are a product of cellular activity, simple prolongations of the cell, and are reproduced only by the action of the cell from which they in the first instance originated.

The Mechanism of Repair.

This rapid survey of pathological repair will serve to show that as regards the energy with which this takes place the tissues may be divided into two categories: 1. Those in which regenerative activity leads to the production of new elements, to a true hyperplasia, those tissues displaying the greatest intensity and rapidity of reparative action which are normally regenerated in the adult organism (investing epithelium, glands secreting morphological elements, glands with an amorphous secretion, connective tissue, cartilage, bone, and smooth muscular tissue. 2. Those in which a true hyperplasia has not yet been proved to occur (striped muscular tissue and nervous tissue). The tissues of the former group have this in common, that their elements continue to multiply by mitosis till some time after birth, or even throughout life. On the other hand, in striped muscle mitosis ceases with the appearance of the contractile substance—that is to say, at a very late period of embryonic life. In nervous tissue, also, mitosis is seen only in the germinal cells; then at a particular period, which varies in different parts of the nervous system, the germinal cells cease to multiply, and are all transformed into nerve cells. The provision of germinal cells thus remain exhausted, and it appears that in the upper vertebrates there is no other element from which it can be renewed.

The Factors of Regeneration.

The next thing to be considered is what part in the processes referred to is taken by the supply of nutritive material, by nervous influence, and by the inherent properties of the nerve tissues respectively. With regard to the first of these, it used to be held that the hyperæmia of a part led to proliferation of its cell elements; an important part of

Virchow's scientific work consisted in combating this notion. Cohnheim, on the other hand, laid special stress on circulatory changes as explaining even the formation of new growths: increase of nutrition causing hypertrophy or hyperplasia of tissue. Thus, while one school of pathologists holds that in the case of investing epithelia and connective tissues, which are the most important in pathological new formations, the energy of production depends on one factor—that is to say, the quantity of blood flowing to the part—the others maintain that increased nutrition can only favour proliferations which have been started by an altogether different cause. The study of this fundamental question has been somewhat neglected in the last few years by reason of the absorbing attention which has been given to infective processes. Clinical observation gives little help towards a solution of the problem; for, although cases are not infrequently met with in which hyperæmia of some part or other of the body has lasted a long time, it can seldom be determined that the congestion is really active hyperæmia. Moreover, such congestions are usually accompanied by other pathological conditions, and especially by lesions of the nervous system, and it is impossible to be sure whether the tissue changes which are eventually produced depend on the congestion or on these complications.

INFLUENCE OF NUTRITION ON GROWTH.

Recourse must therefore be had to experiment, and the present time is specially opportune for this. Not more than fifteen years ago the formative activity of the tissues could not be measured with precision, nor could the modifications of the process under varying conditions of nutrition be studied. Now, however, we have in karyokinesis a sure and most delicate index of the existence of a process of proliferation and of the energy with which it is going on. For the solution of the problem it was necessary to study the influence of diminution as well as of increase of nutritive material. If diminution of nourishment could arrest the multiplication of elements, it might be assumed that such arrest would be observable in an animal dying of starvation, in which so many organs are the seat of extreme atrophy. On this subject only a few fragmentary observations of Flemming on amphibia and of Hoffmeister on the lymphoid tissues of the cat had been recorded. Dr. Morpurgo at my request has studied the question thoroughly. Rabbits were chosen as the subjects of experiment; both adult and growing animals were used with the view of determining the influence of insufficiency of nourishment on the proliferation, which serves for the regeneration of tissues, as well as that which conditions their growth. The results were constant, and may therefore be looked upon as having a general validity. They may be summarised as follows: In organs in which there exists normally a process of cellular new formation by mitosis, this persists even in the severest stages of acute inanition; and it persists in adult as well as in growing organs. The sole difference to be seen between starved and well nourished organs is that in the former the number of mitoses is smaller, and cellular proliferation is therefore less active than in the latter.

Another important point brought to light by Morpurgo's researches is that during inanition cellular proliferation can be reawakened even in organs in which it seems to be abolished. The liver is a stable-celled gland, and accordingly in the adult hepatic cells are never found in a condition of karyokinesis. If a small portion of liver be excised from a fasting animal, five days later the parenchyma around the site of the wound will be found to present mitoses of the connective as well as of the hepatic cells. It is clear, therefore, that even in the case of pathological regeneration, scantiness of nourishment does not hinder cellular proliferation. This conclusion is made all the more decisive by the fact that the liver during inanition loses as much as 50 per cent. of its weight, this loss being in large measure due to shrinking of the cells of the parenchyma. Nor is it only the secondary constituents of the cell that lose size and weight; on the contrary, Morpurgo's experiments show that the nuclei also shrink. From this it may be concluded that the process of division continues in elements which have actually suffered much from inanition.

In studying the effect of increased nutrition, overfeeding could not be employed because, as has long been known, the superabundance of nourishment only leads to an accumulation of material in certain tissues—for example, adipose tissue, and to a greater elimination of the products of the decomposition and oxidation of the ingesta. Localised increase of nutrition was therefore employed, and the research was begun by studying the effect of congestion of the rabbit's ear produced by extirpating the superior cervical ganglion. This experiment had previously given contradictory results in the hands of Snellen, Virchow, Cohnheim, Samuel, and Recklinghausen. The reason of the discrepancy is probably to be found in individual variations in the course of the vasomotor fibres, which would naturally give rise to diversity in the results of extirpation of the ganglion. Out of eight large rabbits in which Dr. Morpurgo repeated the experiments, in only four was marked and lasting hyperæmia of the ear, accompanied by rise of temperature, produced. This hyperæmia after a time gradually diminished, but in each of the animals it was perceptible two months after the operation. Pursuing the experiments on these four animals, Dr. Morpurgo made openings of exactly equal size in the lobes of both ears at spots corresponding to each other in their relation to the largest vessels of the ear, and in similar conditions of nutrition. By keeping the animals under close daily observation, and making microscopic examinations of the parts from time to time, it was easy to note the differences in the inflammatory reaction and in the process of cicatrisation in the two ears. Microscopic examination showed that in the hyperæmic ear the proliferation of elements was far more active than in the other; mitoses were more frequent both in the epithelium and in the connective cells of the skin and in the endothelium of the vessels. These results exactly correspond to what is seen with the naked eye. It is constantly observed that in the hyperæmic ear the regenerative processes after wounds began sooner and went on more rapidly than in the other.

As, however, it was open to doubt whether the increased activity of the regenerative processes in the hyperæmic ear might not be due, in part at least, to modified innervation rather than to greater local afflux of blood, another series of experiments was undertaken by Dr. Penzo, in which hyperæmia was brought about simply by raising the temperature of the parts. By means of an ingenious apparatus he succeeded in keeping two symmetrical parts in the adult rabbit (ear or paw) at two widely different degrees of temperature—one, for instance, at 10° C., and the other at 38° C.—for fifteen days, without the health of the animal being in the least affected. The cold ear was obviously anæmic; the other showed clear signs of active congestion, associated on the second or third day with furfuraceous desquamation. On removing after a few days small portions of both ears and examining them with the microscope, it was found that the results of the hyperæmia were not the same in all the tissues of the ear. The epithelial tissue of the epidermis, of the hair bulbs, and of the parietal layers of the sebaceous glands, were the seat of much more active regeneration in the warm ear than the cold one. This favourable influence on regeneration seems to be at its maximum during the first two or three days; it continues, though showing a gradual diminution, during the following days. In the connective and cartilaginous tissues, on the other hand, mitosis was never seen. These observations were confirmed by the examination of thousands of sections; no sign of the proliferative process was ever noticed either in connective or in cartilaginous tissue.

With the object of ascertaining whether similar results could be obtained in the case of growing animals, Dr. Penzo repeated the experiments on rabbits in the second month of their age. The following experiment will serve as a type of the rest. On April 7th, a rabbit 45 days old, whose ears were of perfectly equal length, was placed in the apparatus; after eight days the length of the ear which was kept during all that time at a temperature of 37° C., was found to be greater by 13 mm. than that of the one kept at 12° C. Proportional differences were found in the other measurements of the ear. The animal was then removed from the apparatus and let alone for more than a month. During that time the ear which had been kept warm grew with extreme slowness, whilst that which had been kept cold grew with such rapidity that in a

month there was a difference of only 3 mm. between the two ears. The animal was then replaced in the apparatus, but this time the ear, which in the first instance had been kept cold was kept at a temperature of 38° C., while the other was kept at 11° C. The influence of the temperature and the resulting hyperæmia was quickly seen; the warm ear grew more rapidly than the other, so that in five days it was already as long as its fellow, and in thirteen days it was 4 mm. longer. On examining the tissues microscopically it was found that in the warm ear the mitoses of the epithelial elements were much more numerous than on the opposite side. In the connective and cartilaginous tissues, on the other hand, the mitoses were so scanty that they were insufficient of themselves to explain the rapid increase in volume of the tissue; and as on the other hand there was no difference in the size of the elements on the two sides it could be inferred that the more rapid growth of the connective and cartilaginous tissues was due to a more abundant production of intercellular substance. This experiment, which was repeated on a number of animals, shows that in a part still young the energy of growth may be modified at will by varying the temperature and the blood supply. The result observed when the rabbit was let alone for a month between two series of experiments shows further that in the process of growth there is a mechanism of compensation by means of which arrest of growth in one part is made up by more rapid growth when the disturbing influence ceases.

Influence of Nutrition on Repair.

Dr. Penzo further studied the influence of temperature and increase of nutritive material on the regenerative processes after wounds. The animals were placed in the apparatus after holes of equal size had been made in corresponding parts of the ears, or after symmetrical fracture of a metacarpal bone or ulna in the anterior extremity. The results of all these experiments were constant. In the ears the differences observed by Morpurgo after section of the sympathetic as above related were observed; the differences were still more marked in the fractured bones. Thus, for instance, seven or eight days after the fracture only the first signs of reaction were visible in the limb which was kept cold, and the microscope showed only slight thickening of the deep layer of the periosteum. On the other hand, at the same period, in the limb kept warm the fractured ends were already solidly united by provisional callus, which microscopic examination showed to be almost completely formed.

These results supply an experimental basis for the clinical observations of those surgeons who, like Billroth and MacIntosh, recommend the use of moist heat in the treatment of surgical lesions, and explain how it is that Helferich, Bier, and Buschke have found that the increased afflux of plasma obtained by means of slight venous congestion favours the production of callus in fractures, and the cure of tuberculosis of peripheral parts.

Further, both Morpurgo's and Penzo's experiments are opposed to the view of Cohnheim that in tissues such as connective tissue, bone, and cartilage hyperæmia is of itself sufficient to start new growths. On the contrary, they show that the hyperæmia favours a proliferation already in progress, such as that which occurs in tissues which are physiologically regenerated, and that which is set up in response to irritation (wound or fracture), but cannot reawaken in a tissue a process of proliferation which is already extinct or suspended therein. In adult connective tissue and cartilage neither hyperæmia from section of the sympathetic nor congestion from the application of heat is capable of causing the appearance of mitoses in the cellular elements; and there is no reason to think that the muscular and nervous tissues behave at all differently.

Influence of the Nervous System on Nutrition.

As regards the influence of the nerves upon nutrition, and especially on the setting up of cellular proliferation in the tissues, this may be of different kinds. In the first place, the nerves can modify the afflux of nutritive material by the action of their vasomotor fibres; the effect of the hyperæmia thus produced may be gathered from what has been said. In the second place, the nerve fibres can modify the nutrition of these organs whose functional activity they directly control; it is in this way, for instance, that the division of the motor fibres of muscles or of the secretory fibres of the salivary glands leads to atrophy of the organ concerned. It must not, however, be inferred that in these organs the nutrition of the cellular element is entirely dependent on the nervous system, the nerve fibre stimulates the element and rouses it into activity; the working of the element is attended with loss, and material must be supplied to make good this loss. If the functional stimulus is greater than normal, either in frequency or in intensity, the chemical interchange in the element is also greater than normal, and in order to meet this condition of things sufficiently and permanently it becomes hypertrophied. In some cases also, besides becoming larger, it multiplies by division, as, for example, according to Busachi's observations, happens in the smooth fibres of the muscular coat of the intestine above a stricture, and perhaps also in the secreting cells of certain glands. In these cases it is the nerve that has given rise to hypertrophy or hyperplasia, but indirectly. The motor nerve fibre only places the muscular fibre in such a condition that it must modify the mode of nutrition proper to it, and this is modified accordingly in the part required for working. When, for instance, the sciatic nerve is divided, the supposed directing influence of the nerve fibres being withdrawn, an enormous change in the nutrition of the muscles of the leg might be expected. As pointed out by Vulpian, however, even after a year fibres possessing a certain degree of contractility can still be found, and in the atrophied fibres it is only that part which subserves the special function of the organ—that is to say, the contractile substance—that is diminished in size; of the truly cellular portion of the fibre the nuclei are, if anything, increased in number and the protoplasm is increased in size. The indirect action of the nerve fibres on nutrition is further confirmed by the fact that similar effects on the nutrition of muscles can be obtained without the nerves taking any part in the process. Division of the sciatic nerve leads to atrophy of the muscles of the leg, but the process of wasting can be retarded by frequent electric stimulation of the muscles whose nerve supply has been destroyed, and it is fair to assume that a like effect might be produced by stimulation of a different kind. In such cases it is not the stimulation applied by us that regulates the nutrition of the muscular fibre: we only induce certain conditions which rouse the latter to functional activity, and for this purpose it must modify its metabolism and its nutrition.

Are there "Trophic Fibres?"

A third method in which the nervous system may possibly influence the nutrition is through the so-called "trophic fibres." The existence of such fibres has been doubted by many, and after closely following the experiments and discussions on the subject for more than thirty years, I am still unable to convince myself that they really exist, nor does such a hypothesis appear to me to be required to explain the facts which fall under observation.

The experimental proofs of the existence of trophic fibres which have been advanced (effects of division of the fifth, tenth, and sciatic nerves, etc.) appear to be open to objection. For instance, in what at first sight appears to be the most conclusive of these, namely, division of the sciatic, the results of the operation—atrophy of muscles, inflammation of of skin, subcutaneous and intermuscular connective tissue and periosteum, abscesses, inflammation of joints, caries of bones, etc.—are indirect consequences of the motor and sensory paralysis of the limb. As pointed out by Schiff and others, the circulation in the parts becomes irregular owing to withdrawal of the influence on the vasomotor nerves, and this leads to vulnerability. The more it is protected from irritation the less are such alterations of nutrition observed. A few days ago I left in my laboratory at Turin two young rabbits in which the sciatic and crural nerves had been divided. After the operation no precautions had been used beyond keeping the animals in a wooden box, the bottom of which was covered to a depth of some centimetres with sawdust, which prevented rubbing of the injured limb against the floor, and absorbed the urine. Twenty-two days after the operation—that is to say, at a period when the changes have, as a rule, made marked progress—no lesion of any kind except wasting of the muscles was visible. Similar experi-

mental results have been obtained by Dr. Salvioli in the case of fowls.

Nor is the evidence for the existence of trophic nerves from irritation experiments more conclusive. Gaule's experiments on the rabbit (irritation of certain sympathetic and spinal ganglia causing exudations, hæmorrhages, and rupture of fibres in certain muscles), have been repeated by Salvioli with results similar to those of Gaule. They are, however, open to a very different interpretation, namely, that the lesions are produced by the violence of the muscular contractions. Of this there is a double proof: the muscular lesions do not manifest themselves when, after irritation of the ganglia, the leg in the muscles of which the changes should take place is left free, instead of being kept on the stretch; and, on the other hand, the lesions are produced when without the least irritation of the ganglia violent contraction of the muscles is induced. Samuel's experiment of producing hypertrophy of one testicle by removal of the other does not seem more conclusive as to the existence of trophic nerves; the hypertrophy may be explained by simple vasomotor hyperæmia following the operation. The testicle is a gland whose elements are continuously regenerated; hyperæmia, therefore, increases the number of mitoses, and this is sufficient—if waste be not increased at the same time—to bring about enlargement of the gland.

Nor does the clinical evidence in favour of trophic nerves seem to me more decisive. Facial hemiatrophy and hemihypertrophy—considered by Samuel to be good examples of neurotic atrophy and neurotic hypertrophy respectively—can be explained with equal probability as being the result of vasomotor disturbance together with the increased vulnerability of tissue to which this gives rise. In acromegaly also, which is sometimes attributed to changes in the trophic fibres, it is impossible to exclude vasomotor influence. Herpes zoster, again, which is believed by some to be dependent on changes in the trophic nerves, may also depend on an alteration of the vasomotor nerves leading to diminished resistance on the part of the tissues to pathogenic agents, and especially to the action of microbes. De Paolis modified the nutrition in the ear of a rabbit by extirpating the superior cervical ganglion on one side; he then inoculated the same quantity of the same culture of the streptococcus of erysipelas in both ears, and it was found that on the side on which the ganglion had been divided the disease ran a more rapid and more acute course, and resolution took place more quickly, the same effect was produced when the streptococcus culture was first inoculated in both ears and the ganglion removed on one side afterwards. Similar differences between parts whose innervation is normal and others whose nerves have been cut have been observed by Charrin and Ruffer in the case of the bacillus pyocyaneus, and by Hermann in the case of the staphylococcus albus. In herpes zoster changes are often found in the nerve trunks supplying the diseased parts. May it not be that a consecutive vasomotor change has made the elements of the part itself more susceptible to the influence of certain pathogenic organisms? In view of some of the clinical phenomena of zoster, and especially of its occasional epidemic occurrence (Weis), it appears clear that before admitting as probable the trophic nature of the affection, its origin from an infection implanted in a part weakened by vasomotor lesion must be excluded. The same may be said with regard to other skin affections (eczema, pemphigus, ecthyma, ichthyosis, etc.), which have also been attributed to changes in trophic nerves.

As diminution of nourishment to an extent short of causing death diminishes but does not abolish proliferation, so increase of nourishment stimulates proliferation which already exists, but cannot create it; within these limits, therefore, is confined the action both of the circulation and of the vasomotor nerves. As regards the functional nerves these act on the elements indirectly, and modify their constitution and their activity only through that part which subserves function. When, therefore, we see a proliferative process awakened or extinguished, the cause must be sought for nowhere else than in the elements themselves.

The Part of the Elements in Regeneration.

As regards the nutritive and formative activity of the elements, I still hold with Virchow that each part of the body represents a multiplicity of small active centres or elements, and that there is no anatomical centre from which all the activities in the body are directed.[2] In the fertilised ovum long before the nervous system or the circulation comes into play, we see that the cells multiply, arrange themselves in an orderly manner, and differentiate themselves according to the parts into whose structure they are later to enter. This is regulated by causes unknown to us, and which we look upon as transmitted by heredity. No one has yet shown that the causes in obedience to which the elements increase and multiply in extrauterine life are different from those which regulate their activity in the fecundated ovum. Experiments have shown that the causes are not to be found either in the circulation or in innervation; we are therefore driven to the conclusion that they continue to be inherent in the elements. These react one upon another, and it is probable that the elements of one organ may be capable of acting on those even of distant organs; in this way it is from the reciprocal action of the elements and their groupings that the harmonious development of the different parts of the organism results. The same conception may also be extended to regeneration. Here also the same processes are at work as go on in the ovum before the development of vessels and nerves. In the adult animal these proceses of regeneration also manifest themselves but to a more limited extent, and the limitation is the greater the higher we rise in the zoological scale. The differences of regenerative activity have nothing to do with the circulatory and nervous systems, but depend on the remarkable differences as regards aptitude for regeneration presented by the elements of the various classes of the animal kingdom. When a limb is removed from a mammal it is not reproduced, as in the triton: the cartilages of a mammal have not the proliferative power sufficient to supply the new cartilaginous nuclei which would be required to reproduce the lost pieces of the skeleton, and the striped muscles can no longer furnish the embryonic cells, which alone can form new muscles. What regenerative power, however, remains, even in the higher organisms, is shown by what occurs after section of a nerve when new fibres grow from the central end, and run through the whole of the peripheral end to its ultimate terminations.

In the Element is the Life.

In the foregoing remarks, regard has been had only to the processes of growth and regeneration. It is clear, however, that the same principles apply to those proliferations which are called pathological, which owe their origin to an irritant. Without discussing the nature of irritation, I wish only to point out in passing that inasmuch as no change in circulation or innervation can produce any proliferation whatever, irritative proliferations can only be conceived of, as taught by Virchow, as the result of an action exercised directly upon the elements. However numerous and complex these aggregations of elements which constitute a part may be, and however close and manifold may be the vascular and nervous relations which connect them with each other and with the elements of the other parts of the organism, still vessels and nerves can only constitute a medium—that which lives, that which feels the action of irritants, and that which reacts to them is always the element.

[2] Virchow, *Cellularpathol.*, 4e Auf., 1871, p. 329.

Hygienic Exhibition.—The ninth exhibition of hygienic and alimentary products organised by the International Association for the Furtherance of Hygiene, which has its headquarters at Brussels, will take place in Rome in June, 1894, under the presidency of His Excellency Professor Baccelli. Authors and publishers wishing to send books, etc., are requested to communicate with the Administrator-General, M. Louis de Vriese, 3, Rue des Régnesses, Ghent, Belgium.

Cottage Hospital at Tilbury.—In response to a pressing appeal from the inhabitants of the Tilbury district, Mr. Passmore Edwards has offered to build a cottage hospital at a cost of £2,000. At present, cases demanding hospital treatment have to be sent to Gravesend on the one side of the Thames and to the London Hospital on the other side.

AN ADDRESS
ON
THE POSITION OF THE STATE IN RESPECT TO MODERN BACTERIOLOGICAL RESEARCH.

Delivered before a General Meeting of the XIth International Medical Congress, held in Rome, 1894.

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[Abstract.]

The health of the community is under the care of the Department for Internal Administration of the State; and inasmuch as health is essential to the happiness of the individual and the development of human energy, it appears, for most important economic reasons, to have a first claim on the Government. Those learned in such matters are, however, of opinion that, in spite of its immense importance, of all the different departments of internal administration that of hygiene has remained the least developed in Europe. I will first attempt to throw light on this sad circumstance, affecting as it does the most valuable of human possessions—one that gives value to other possessions—and then I will search for means to obtain for sanitation its proper position amongst State institutions.

I.—Historical Survey.

The care of public health does not necessarily advance hand in hand with education; a lively and practical public spirit and a great vitality in the people cause a place to be yielded to the demands of State sanitation. The oldest civilised peoples regarded it as a public duty to protect the health of the individuals. With a view to this, the laws of Sparta, of the ancient Egyptians, and of the Israelites had more hold than modern legislation on the life of individuals. Still, their rules were not founded on any sure basis, but rested entirely on old traditions and experiences, which the spirit of the period clothed in religious or political dress.

In the laws of these old nations matters were regulated, which, according to our modern feelings are now left to the care of the individual, and sexual disease was more rigorously opposed than it is at present. Leprosy, from which the first civilised nations ran great danger, was opposed by more rational laws than it is thought can be opposed to the just as dangerous or more harmful diseases of to-day. The good results of the working of the Mosaic laws can still be seen even in our days when State sanitation can derive so much aid from modern sanitary science. The Mosaic laws owing to their religious form took deep root in the domestic life of the people, and the vitality of the Jews of to-day bears witness to their wisdom. The Jews thrive where the native population, in spite of special legal protection, is decimated by infant mortality and infectious diseases. The hardening of the constitution, the dress and baths of the people are neglected by modern legislation for the reason, though expressed in various ways, "that the State has only to look after the health of individuals so far as the health of individuals affects the community."

When one contrasts this vaunted principle of individual liberty with the limitation of this liberty which is effected in the interest of religion, of the ruling classes, and even of traditions and conventional ideas, one cannot repress the thought that this magnanimous permission of the State allowing each individual to make himself ill if he likes, to treat himself as he thinks best, and spread his illness, is not merely dependent on the principle of individual liberty.

But also in another direction did the civilised nations of antiquity set us a good example—namely, in the repression of general causes of disease. Aqueducts and canals were made at great expense, marshes were drained; during the plague of Athens great fires were made and excreta burned, dead bodies were cremated, and the principles of public hygiene were also popularised by lectures. In spite of the much greater State incomes and the technical facilities of modern times, most modern States cannot nearly rival those of ancient times in the proportion of their sanitary undertakings to the number of their population.

In respect of public health, Rome advanced still further than Eastern civilisation. Aqueducts and canals were undertaken in early times; owing to the number of public baths in Rome, probably each citizen could have a free bath daily, and similar establishments existed in the smaller towns of the Roman empire. The irruption of barbarian hordes on the Roman empire disturbed the whole organisation of public health, and Christianity to some extent helped in producing this disturbance, especially by its ascetic disregard for corporal welfare, and by the absolute separation, which it enjoined, of religion from all matters of bodily health.

Epidemics raged and exercised a wholesome influence, in part by reducing the population, and by directing attention to the infectious nature of diseases. People began to notice that contagion was carried about by men and clothing, with the result that quarantine and sanitary police were introduced by some towns of Upper Italy. Venice was particularly active in these matters of hygiene, but the unsettled political state of Italy long prevented the proper development of State sanitation. After the unification of Italy this development soon began to show itself, and the law of 1866, and particularly that of 1888 ("Sulla tutela dell, Igiene e della Sanità publica"), were framed, the latter of which might serve as a model to other States of Europe, with the exception perhaps of England. By this law the authorities on hygiene take that position which, as competent authorities, is due to them. As well as a competent upper board of health there are provincial boards of health, all of which of their own initiative can move proposals on hygienic questions, and must be consulted on sanitary ordinances. These boards of health are not dependent on the administrative officers, and all urgent measures recommended by them must be immediately carried out by the prefects.

In England a practical public spirit early developed itself. What was accomplished in hygiene began from below, and took deep root in the customs of the people, before developing into institutions of the State; this insured its usefulness and recognition. The practical independence of the parishes, as well as the Parliamentary system of that country, showed to advantage in this matter; there were water supply committees, and the parishes left to the sanitary authorities the choice of their own methods. As in other countries, infectious diseases first gave occasion for thorough trial of sanitary arrangements. Committees were formed for statistical inquiry into mortality with regard to soil, overcrowding, with regard to the pollution of air, water, etc., and the activity of these committees led to important conclusions regarding the artisan population, which had attained so great an importance owing to the growth of the manufacturing towns.

The Public Health Act of 1848 was formed in accordance with the then existing state of scientific knowledge on a statistical basis, a testimony to the public spirit of the country. Local bodies, under the guidance of a doctor, had executive power, and could levy rates to cover the expense of water supply, canalisation, etc. Unfortunately, as usually happens in such cases, when a better hygienic condition was reached, the means by which it had been obtained were neglected. The Board of Health was abolished, but, on the other hand, the Local Boards gained in power. In 1871-72 a Board was instituted for seeing to the poor, sanitary matters, and Local Government, the whole country being divided up for this purpose into sanitary districts. Each of these districts possesses a medical officer of health, a sanitary inspector, and a public analyst. These officers work in connection with each other, and with the central officers, and possess the power of taking measures to oppose epidemics.

In Prussia the sanitary arrangements have a bureaucratic aspect. There was a College of Medicine and a special College of Hygiene, to which the doctors of towns and districts were subservient. In 1862 officers were appointed to the dif-

ferent provinces, but their power was limited by the central bureau.

In Austria, since 1870, there has been a chief sanitary officer working with the junior ones, who, at all events, have the power to take first steps.

In Roumania, by the law of 1873, the sanitary administration is placed in active communication with the doctors of towns and districts, and controls them by yearly inspection. The latter are, in the same way as the hospital doctors, recommended by the special sanitary adviser to the central administration.

In France, although the medical schools are distinguished, public health is not sufficiently cared for, because the learned scientific bodies have hardly any voice in its administration. The prefect and the mayor do all the administrative work, and an authority on hygiene is only consulted when the prefect thinks fit.

Of late years attempts have been made to include institutions for the furtherance of scientific medicine within the State organisations for hygiene. We shall see that just the most rational hygienic measures are opposed and partly abolished on the plea of their being inconvenient to commerce and intercourse, and to the influential Government administrators. International arrangements for protection against epidemics have also lately several times been neglected for the sake of the commerce and intercourse of the great nations, and partly at the sacrifice of smaller nations with less complete sanitary arrangements.

II.—The Position of Doctors towards the State.

The medical profession in many countries is not permitted to exercise any executive right to protect the country against epidemics. It must be allowed that there is a tendency for the scientific men employed in some State institutions of hygiene to separate themselves from the statesmen who founded these institutions. It must appear to us doctors unintelligible that, though statesmen recognise the immense importance of public health, they will not surrender the executive power of sanitary administration into the hands of those who have made it their special study. Doctors constitute a hard-worked class, possessing neither the time nor the authority to make their claim felt, and it is to be regretted that so few members of the upper classes of society devote themselves to medicine, which offers them such a field for useful work.

Doctors are not much attracted towards State matters of hygiene, because of the smallness of the pay allowed to those who enter the service of public hygiene. The State should pay its sanitary advisers better, since it expects of them a special professional education, and should at the same time forbid them the practice of ordinary or legal medicine. Doctors would then be able to devote themselves to finding out and remedying the causes injurious to public health, just as they would those injurious to the health of a family. Finally, every facility should be given them of making themselves familiar with the science of government, especially legislation, political economy, and statistics.

III.—Government Sanitary Institutions.

The best way to improve the quality of the doctors is for the State to afford them the means of attaining the highest essential education. This necessitates State institutions specially designed for the purpose. An attempt of this kind was made in 1876 in Germany, but want of understanding and money caused the institution to fall short of the mark. The Imperial Board of Health at present does not possess, as it was at first intended, the superintendence either of medical and veterinary measures or of medical instruction, neither are the laboratories sufficiently endowed to meet the requirements of proper sanitary research. Nevertheless, with the exception of Roumania, no other country possesses a similar institution, though they possess institutions, privately erected, for the study of infectious diseases, which act more or less in harmony with the State administration.

A few words, therefore, may be said on this institution of Roumania. As Roumania stands on the boundary between East and West, it was peculiarly exposed to infectious diseases, not to mention several imperfectly known diseases of the country itself. In 1887, epidemics amongst the cattle and widespread hydrophobia rendered it advisable to establish such an institution in Roumania; moreover, no sort of institution for pathological anatomy, pathology, or bacteriology existed there at that time. The institution is well endowed, and adapted to meet the requirements of scientific investigation and instruction, but unfortunately possesses no administrative authority.

In the veterinary department light was thrown on the nature of Roumanian endemic diseases (infectious hæmoglobinæmia, endemic disease of sheep, horse-typhus), and methods for the diagnosis and cure of other diseases (*morvine*) were found; the connection of *rouget du porc* with the pneumo-enteritis bacilli was studied, as well as the etiology of horse typhus and pigeon diphtheria; the heredity of the sequelæ of the latter disease was determined.

In the department for curative and protective vaccinations the mortality of hydrophobia in man was reduced by the vaccination method from $\frac{1}{2}$ per cent. to a minimum, and already (in 1889) the protective power of the blood of highly immunised animals was demonstrated; the method of conveyance and working of the hydrophobic poison was investigated, as well as the characteristic lesions it produces in the brain. The influence of normal nerve substance in certain nervous diseases was established, and the extraordinary reaction of lepers to tuberculin was described.

In the bacteriological department investigations were carried out on the existence and distribution of leprosy, the Roumanian forms of malaria, the nature of bilious infections, of hepatic abscess, of peculiar intestinal affections and forms of pemphigus. The researches into influenza and its bacillus yielded important results, notably the "bacterial associations," which play a real part in bronchitis. The microbes of hæmorrhagic infections, of scurvy, of noma, etc., were established, and specific means of disinfection against infectious diseases (diphtheria) were found). We were able to discover the so important "bacterial associations" in nearly all infectious diseases.

In the chemical department the sterilisation of water, especially by the precipitation method, was investigated, as well as the subject of bacterial products.

In the pathological department the systematic examination of all corpses from the hospitals showed the unexpected extent of bacterial associations and of bacterial invasion in non-infectious diseases; important results were moreover arrived at regarding the varieties and extent of variation in microbes, those of septicæmias, pneumonias, scarlatina, enterica, and hæmorrhagic infections being especially studied. All these investigations demonstrated the vastness of the problems which must be studied. Work was also done in the pathological section on the pathology of nervous diseases, on the pathological histology of nerve endings in muscles, on the origin of tumours and various diseases.

This short account is sufficient to show in what way a State institution of this nature may, even in spite of special difficulties, render service to hygiene and science. It may be remarked that Roumania presented to some extent a "virgin soil" for such undertakings, untrammelled by prejudices, and it was remarkable how rapidly the people realised the great use of such an institution. Not only did medical men benefit by its teaching, but the educated classes are beginning to understand the ordinary principles of hygiene as they concern the homes and habits and daily work of the people. The universities and most institutions of other countries are hardly in sympathy with the general wants of the people and hygienic administration; such institutions are generally few in number, and with their attention concentrated on special researches. Their chief shortcoming is, however, to be found in the fact that their directors, partly through their own fault but chiefly through that of the administrative authorities, are not called on to step out across the university walls, and to examine into the actual life of the people. Even measures founded not on absolutely certain knowledge but on great probability, should be carried out and tried by their result in place of old measures which rest on no scientific basis at all. However much trouble this may give to some, the goal to be aimed at is worth the labour spent in reaching it. We may see how Koch's sphere of work—at first very limited—gradually enlarged, until the richly-endowed institution was gained of which he was appointed the head.

Such an institute should always be in connection with a hospital for infectious diseases, and the institute itself should be divided into five or six closely-connected parts: (1) For clinical treatment and experimentation; (2) for pathological anatomy, bacteriology, and experimental pathology; (3) for infectious diseases of animals; (4) for chemistry; (5) for statistics, superintendence, and the library; (6) for lecture rooms, museum, and management.

The building should consist of a main edifice and several pavilions. The chief edifice must be for laboratories, and, if outside the town, there must be a dwelling house close by for the director, staff, and servants. There must be a completely isolated pavilion for inoculation of men and about three others for examination of animals, and there must be several places for breeding animals.

The staff should consist of director, about four superintendents of departments, eight assistants, officials in charge of statistics, a librarian, a manager, and about eight or ten servants. The total cost of the undertaking would reach about 1,000,000 francs.

The director and his staff should give lectures, etc., with special regard to hygienic administration in its widest sense—for doctors in the public service, for candidates desirous of obtaining medical offices, for architects, engineers, administrative officials, and students. The institute for pathology and bacteriology might be under the control of a "home office" or a "health office," but must have the right of preparing hygienic laws for the State authorities.

Besides this great institution there should be well-endowed professional schools for lower officers of health, and the elements of hygiene should be taught by capable teachers in all schools. No public buildings, aqueducts, or canals should be constructed by persons who have not received proper instruction in hygiene.

Institutions of this kind could systematically investigate the most important hygienic and medical questions. In times of peace the fight should be for the people's health, and only a scheme of this kind will enable hygiene to secure her place as the most important part of statesmanship.

IV.—The Attitude of Statesmen towards the Claims of Hygiene.

The chief reasons advanced why statesmen refuse to give very great power to the hygienic authorities, may be enumerated as follows: That the necessary means are wanting to enable the State to undertake the task demanded; that the personal liberty of the individual would be endangered; that the scientific basis is still not sufficiently sure; that the demands of science are very often hard to carry out; and, lastly, that if they were carried out, other equally necessary State duties might have thereby to be neglected, or the consequences might be injurious to the State (Löhning).

(*a*) *Liberty of the Individual.*—Different countries and schools are not agreed on its proper bounds. One opinion is that the State has not the right to exercise restraint on a man, provided that he hurts himself only. Stein, on the other hand, considers that the health of the individual affects the community just as much as it does the individual himself; and indeed so many diseases have turned out to be more or less of infectious nature that the ground is now removed on which the former opinion was founded. Some hold up as their model English principles of individual liberty, whereas it is exactly in England that the sanitary authorities have most control over this individual liberty. It is obviously not logical to argue that because it is not right to compel a man to undergo an ordinary amputation, therefore one should have no power over a man when he has an infectious disease. Again, if the State is compelled to control the liberty of a criminal, why should it not also control that of persons affected with syphilis or tuberculosis, who may spread their diseases and thus harm others? Another reason (less frequently mentioned) against the right of restricting individual liberty is that this power might be misused for the sake of party politics, etc. This affords an additional argument in favour of having a sanitary administration quite independent of party politics.

(*b*) *The Disposal of Public Funds.*—A more difficult question is whether the State possesses money enough at her disposal both for looking after public health and the health of individuals. Emergency measures adopted during epidemics such as cholera can often not be carried out owing to want of previous organisation in the hygienic department. A bureaucratic paper regiment is nowhere so unpractical as in battle against the powers of Nature. The administrations for war and religion in most large nations are best endowed, whilst the condition of the other administrations depends greatly on the energy and influence of the Minister at the time, and since hygiene is usually included in the department of the Minister for the Interior, who is no professional man, but often influenced by party interests, the prospect in this direction is not very hopeful. An independent Ministry of Hygiene with a professional man at its head could do much more.

Under the present state of "armed peace" in Europe, the maintenance of such large armies is very costly to the different Governments. Part of the army might possibly be made use of for sanitary purposes without impairing its power in case of war. But besides the army, other departments (religion and law) are richly supplied in comparison with hygiene. On the whole, it seems that hygiene is neglected because the State funds are employed for other and less necessary purposes.

(*c*) *The Importance of Hygiene in Comparison with other State Expenses.*—It must be allowed that quarantine is hurtful to commerce, but modern quarantine methods are much less so than the older ones. Quarantine is also a hindrance to intercourse, but in this respect affects the ruling and wealthy classes rather than the lower ones, to which latter, on the other hand, epidemics are more baneful. If the money gained by neglecting quarantine arrangements were spent for other sanitary purposes or for the lower classes, one could not object so strongly, but it is spent on the army, and therefore against the direct interests of the lower classes.

It is objected that quarantine is unpractical. I cannot enter on that question here, but perhaps the failure of quarantine measures on the frontier depends not so much on the nature of the infectious disease as on insufficient knowledge or want of exactness in carrying out the measures. At any rate no international arrangement has the right to withdraw rational quarantine from a State which has hitherto been protected by it and whose internal arrangements are not sufficiently organised to suppress an epidemic should one arise. The Hamburg cholera epidemic was more injurious to the town than a rational quarantine would have been. However important school instruction may be to the State, schools should be closed immediately on the outbreak of an epidemic. The danger in institutions for small children is especially great on account of their peculiar susceptibility to disease and mortality from it.

V.—Position of Modern Bacteriology with Respect to its Usefulness to the State.

One reason given for the State neglecting the care of health is the belief that medical science and hygiene cannot on sure ground fight against and keep off disease. This cannot be altogether denied and must be discussed as regards the various diseases, but the belief arises in part from the means employed by the State against the diseases being insufficient and therefore failing to produce the required effect.

(*a*) *Precautions about Water and Soil.*—Modern science has demonstrated the important part played by drinking water in the production of some diseases. Cholera bacilli have been found in bad drinking water, so also saprogenic bacilli, which, according to my investigation, play an important part in infantile diarrhœa, enteric fever, and dysentery. The bacteria of suppuration have likewise been found in drinking water; and, according to my latest investigations, it appears that the parasites of malaria pass through one stage of their development in water. It is therefore clear that one urgent duty of the State is to provide good drinking water. This may be obtained from deep wells or from springs direct from the rocks, or (under careful management) by filtration through sand. Our discovery that by small quantities of alum, water may not only be clarified, but also sterilised, may in time be made of some practical use. On the whole, one must doubt whether water obtained by sand filtration is sufficiently good to be used as drinking water, and the various household filters must be rejected.

The soil must be purified by drainage, but the canalisation of towns is still an open question. The drains of a town can only be carried into a river when the river is of large size. In last year's cholera epidemic in Roumania I found that the water from the centre of the Danube was almost sterile at only a small distance below the infected towns, although the cholera bacillus could be repeatedly found in the water of the immediate neighbourhood of the towns. Therefore, although drinking water from the Danube in the immediate neighbourhood of the towns could undoubtedly be a cause of the spread of cholera, it seems to me very unlikely that a town can be infected from another town lying much higher up on the river.

(*b*) *Contamination of the Air: Hospitals.*—The air can only be rendered infective through dust, though different gases in impure air can produce other illnesses. Possibly the money spent on the complicated disinfection of hospitals could be better spent on more complete asepsis and antisepsis, and particularly on better isolation arrangements. In the medical wards of a modern hospital we find patients with tuberculosis, pneumonia, and bronchitis, grouped together with patients who, although their main disease is non-infectious, suffer from "bacterial associations." As regards these last, I could hardly find 50 amongst 350 patients with non-infectious diseases who did not suffer from "bacterial associations," and a great part of the patients with non-infectious diseases died in consequence of these "bacterial associations."

The commonest of these complications are septic or pyæmic, local or general infection, gangrene, pneumonia, and inflammation of serous membranes. The commonest causes of these complications are: (1) Putrefactive bacilli, which constitute a series from those like typhoid bacilli to the bacillus coli, and still more saprogenic bacilli; some forms are more pathogenic than the typhoid bacillus. (2) Streptococci and pneumococci. (3) Staphylococcus aureus. (4) Forms of proteus. (5) Pseudo-diphtheritic bacilli.

Probably these bacteria can spread by contact from one patient to another, just as the forms described by me, proteus septicus and bacillus transparens septicus, can produce endemics amongst the animals experimented on. My latest experiments have made it clear to me that at certain periods particular bacteria acquire a peculiar virulence and exert a bad influence on most diseases. So there may be a great mortality from influenza epidemics, and also from other "bacterial associations" at different times. There are months when all deaths in the hospital show "associations" with streptococci or with the staphylococcus aureus.

Such observations show how necessary it is for the directors of hospitals to have professional knowledge. It is sad to see how often the direction of hospitals is entrusted to non-medical persons.

(*c*) *Means to Counteract particular Diseases.*—Probably the most terrible and deepest rooted disease of our state of civilisation is tuberculosis. It is the duty of the State to oppose this widespread and still extending disease; nevertheless the most competent hygienic authorities do not dare to propose radical measures, and seem themselves to believe that the disease can be exterminated by teaching the patients only to spit into spittoons. Even if we cannot quickly overcome the evil, even if two generations of consumptives become martyrs for the good of future generations, we ought to demand powerful State measures in this direction. I am convinced that we have at present no specific against phthisis, and the different methods we have tried have no greater effect than that of Koch. If we could introduce a thorough reform into social conditions, something after the model of England, only entering still more fully into the social misery of the working classes, we might in this way form a radical obstacle to tuberculosis, but it would take several generations to produce any appreciable result by this means.

We are not justified in waiting, with our hands idle, for the discovery of some cure for tuberculosis, since we have already sure means at our disposal against this greatest enemy of our civilisation and of human happiness. I cannot here go over the whole plan of operation, but the beginning would have to be some arrangement of social conditions by which all classes of the people have at least the right to live and work assured to them. Instructions for the prevention of infection should be given in all families and schools, and the carrying out of the instructions should be superintended. State institutions for the reception, care, and isolation of the tuberculous should be erected. The suckling by tuberculous mothers and the care of children by the tuberculous should not be allowed, and children should not be permitted to stay with tuberculous families, neither should the tuberculous be allowed to marry. Tuberculous animals should be recognised, isolated, and only used for purposes where there is no chance of infection. Such measures might be modified from time to time, and examined by an international committee.

Energetic State measures against infectious sexual diseases appear to be just as much required, notably against syphilis. Although as yet we do not know what the virus of syphilis is, we know enough about the modes of its infection to get the better of it by the aid of a properly-instituted sanitary police, the notification of cases of syphilis, and prohibition of marriage to infected persons. Even if notification of the infectious diseases, tuberculosis and syphilis, were necessary merely for those applying for work, especially nurses, soldiers, factory labourers, etc., the danger of infection would be considerably lessened. The latter measures have been carried out with success in some German States. The difficulties in the way of carrying out the former measures can only be overcome when the mysterious prejudices against the "secret diseases" have been dispersed by broad-minded and wise teaching.

Other diseases against which the State should interfere are cholera, typhus, yellow fever, the plague, and small-pox.

Cholera is introduced by human intercourse, and epidemics are produced by the multiplication of the bacilli in water when it has been contaminated, especially by fæcal material from persons affected with cholera; owing to modern bacteriological research, it can be prevented and resisted. It is certainly not right to condemn modern rational quarantine methods as "Asiatic" or "mediæval." When the community is convinced of the great importance of health, such measures will be reintroduced and not confined to the frontiers merely. Although with proper internal sanitary arrangements, with sufficient number of doctors and sufficient intelligence amongst the people it may be considered "Asiatic" to close the frontiers, it will be considered still more so if quarantine arrangements be neglected, although there be too few doctors and insufficiency of sanitary arrangements in the interior of the country.

I cannot understand how our best hygienists can believe that a sanitary inspection of travellers on the frontier is sufficient to shut out cholera, since we must also take into consideration the incubation period of the disease, and the articles which the travellers may be carrying with them, and which may remain infectious for several days. If there were a really thorough organisation, which might also have means for compensation at its disposal, the usefulness of measures taken on the frontier would be quite different; the travellers might be transferred to isolated huts, erected with all the necessaries of modern hygiene, and the less important ways across the frontier might be closed up by a strong military *cordon*. In countries where commerce is too great, and where at the same time the hygienic arrangements are good, such measures might be replaced by a rational internal organisation. Even in such countries quarantine arrangements may be of some service, as the measures regarding ship passengers in Germany have shown. Moreover, I fail to understand why hygienists have made so complete a difference in regard to quarantine by land and by sea. In badly-arranged ship quarantines the water may easily become contaminated, and on land statistics show that hardly a one-thousandth part of travellers crossing the frontier will succeed in escaping the sanitary inspection.

For the proper prophylaxis of cholera, England, in conjunction with other great Powers, should watch over the nurseries of cholera, and take precautionary measures to prevent the spreading of these centres. With sufficient means and energy the disease could probably be nipped in the bud. Other places where cholera has become established should be found out and quickly brought into a sanitary condition. Commercial and political interests, however, form a great obstacle in the way of the proper organisation for such measures.

When cholera has once effected an entry it is absolutely necessary that the first cases should be diagnosed with certainty, and no private interests should prevent a doctor from notifying cases. In Roumania I convinced myself that it was possible soon to get the better of the epidemic by preventing the people from drinking the contaminated water, and in Bulgaria the limited epidemic was immediately suppressed when my advice was followed, namely, that no one should be allowed to take the infected water of the Danube.

The undoubted specificity of the cholera bacillus is a real help to us in adopting measures against cholera, whereas in enteric fever we have the close relation between the typhoid bacillus and the putrefactive and fæcal bacilli. To oppose enteric fever we must take all measures to prevent the entry of fæcal and decomposing materials into food and water used for drinking or general use.

Endemic dysentery probably depends on similar insanitary conditions, and our latest experiments show that it is only in part dependent on amœbæ, in part also on other microbes related to putrefactive bacilli and those of suppuration. The same causes are at work also in the production of the ulcerative intestinal inflammation of the East, which may be associated with hepatic abscess.

The common exanthemata constitute a different group, and attack children especially. Though we do not yet know their exact nature, experience has taught us important points concerning them. For instance, vaccination against small-pox is of the greatest importance, and it is disgraceful that with the present state of sanitary organisation so many civilised countries should still suffer so much from this disease. Those authorities may well think of this, who look for all cure in a specific treatment of diseases, for, with our present deficiency in sanitary organisation, the rooting up of a disease by such methods is hardly to be expected; the German army, however, shows us that by careful and rational arrangements something may really be done in this direction.

In the treatment of diphtheria, the most terrible of children's diseases, some hints have certainly been derived from the discovery of the bacillus, but disinfection of the pharynx and "sero-therapy" have as yet in the case of human beings not given sufficiently sure results. The protection afforded by serum injections, comparable to Roux's measures against tetanus, is, however, in some cases probably worth a trial. In the treatment of diphtheria, the presence in the mouth and pharynx of streptococci is a difficulty; I am sure that they cause septic infection in diphtheria, and believe that the term "pseudo-diphtheritic bacilli" includes a series of different bacilli, of which some play an actual part in the necrotic processes of mucous membranes, and one, under certain not exactly understood conditions, gives rise to diphtheria. It is not, indeed, certain that this bacillus may not in attenuated condition be present in healthy persons as a "pseudo-diphtheritic bacillus."

Energetic isolation and disinfection is the duty of the State in regard to scarlatina, and especially typhus.

Although we cannot always prevent the spreading of scarlatina and measles, we ought to adopt measures against the "bacterial associations" found by us in these diseases, especially as possibly one of these bacteria may be causally related to the disease. Such bacteria are usually those which in attenuated form are found in the mouth and pharynx of children. I have found that the bronchitis of measles is usually due to streptococci, pneumococci, mucus-producing bacteria and staphylococci, whilst the pneumonia of measles and the pneumonia and nephritis of scarlatina are caused by streptococci or pneumococci; noma is caused by a proteus or by other bacteria, which I have lately described.

Much more surely can septic puerperal processes be avoided by proper antisepsis, and as in the laboratory we are constantly finding that more diseases belong to the septic group, it will not be too much to demand that neglect, leading to such complications, on the part of the doctor or other persons concerned in the treatment, should be punished. Just as a wound under improper careless treatment may give rise to suppuration, erysipelas, gangrene, sepsis or tetanus, so we know that the same bacteria which cause these diseases may more commonly be predisposed to by constitutional causes, such as weakening of the body by disease or misery.

Even the most civilised States hesitate to effectually ensure the hygiene of the poor, for fear lest protection of the factory labourers should go far enough to damage the capitalist in respect of foreign competition. It is just as unpractical to hope for specifics against diseases called into existence by social misery, as to expect to cure phthisis by some mixture or other.

The "trade diseases" are diminishing, but form only a part of the illnesses produced by social misery; the larger part of the latter are infectious diseases. Virchow long ago pointed out that the most rational method of opposing relapsing fever was to remedy the social misery, and we can say the same of infantile diarrhœa, tuberculosis, pellagra, leprosy, and scurvy. I have lately described the bacillus of scurvy, and it forms a good example of a disease in which an ordinary parasite, frequently present in the mouth, becomes pathogenic, owing to malnutrition of its host; and in all these diseases the cause is usually similar.

Some of the causes of a large group of diseases can be probably reached by State means; to this group belong varieties of bronchitis and pneumonia, as well as emphysema, meningitis, and peritonitis, and perhaps they are the commonest cause of death, in consequence of persons being rendered susceptible to them by other past infectious or neglected diseases. Their frequency can certainly be diminished by State care (especially afforded to those unable to care for themselves), and by the prevention of the predisposing diseases, such as tuberculosis, the exanthemata, etc. By such measures, even influenza (whose cause is probably the bacillus first discovered by me in 1890, and then cultivated by R. Pfeiffer) would be rendered less harmful, since it acquires its severity from earlier diseases of the respiratory system.

Another group of infectious diseases which the State can ward off is that which men derive from animals. Perhaps it is not sufficiently known how often different forms of glanders are met with in men. In order to make the diagnosis of glanders more easy we introduced a substance, "mallein," obtained from cultures in a similar way to tuberculin, and this substance has since been used for diagnostic purposes in Germany, France, and Russia. If tuberculin was largely used by the State for the diagnosis of tuberculosis in animals, much would be gained towards prevention of this disease.

Hydrophobia is the most terrible of the diseases which we get from animals. Only Germany, by stringent sanitary police measures, succeeded in overcoming it, whilst other States had to replace these rational measures by the more expensive and less useful method of Pasteur. In the latter direction we can note considerable advances, and our experience has led us to a harmless method of protecting dogs against hydrophobia; ours were, indeed, the first attempts to battle with a natural disease by the help of blood serum from immunised animals. The State might also take measures against other diseases, as echinococcus disease, derived from dogs.

From these few examples it becomes manifest that a State, perfected in the way I have laid down, could by the means at our disposal already do much more for the health of its citizens than it does at present, and it is clear that the erection of proper institutions would help to this end. It is clear also that we are not justified in separating the public health from that of the individual, but just on this account the State work will be increased and a thorough reform of the sanitary administration appears necessary.

If we were to contrast the demands made here with those acknowledged by statesmen, we should see that the latter limit the rights of the State too much and do not take the universal importance of hygiene into due consideration. Although they profess to acknowledge the immense importance of hygiene, they place other State interests in the front, which prevent the carrying out of measures for the advantage of hygiene; they only recognise certain conditions under which the State can take care of the health of individuals, and they always dread the interference of the State with family life though in the interest of public health.

Against these objections science will be powerless until it can practically and clearly demonstrate the results of modern research; but on our part it will first be necessary to free

ourselves of all non-scientific interests, and leave to others the interests of commerce, industry, politics, the army, and the family. There should be doctors who are not fettered by practice, but specially trained to make known to the ruling bodies—especially the Parliament—the advances and practical application of science, so as to obtain that position for the organisation of hygiene which belongs to it as being of the greatest importance for the happiness of the citizens.

The first result of this should be the erection of a richly-endowed institute of State hygiene, in which laboratory work may be turned to practical use, and which may serve as a high school for the statesmen in question, directors of hygiene and hospitals, and all Government officials, whether of the departments for instruction, medicine, or the useful arts, who occupy themselves with matters of hygiene.

An international and social reform should be obtained, because individual health cannot be separated from public health, because the health of one class is necessary to the health of other classes, and the health of the lower classes is of the highest economical value to the State. The health, however, of the lower classes is affected by an unjust want of the primary necessities of life and health, as well as by the insufficient care taken by the State for public and private health. A settling of the social question becomes, therefore, essential for public health.

Furthermore, there would have to be an international agreement by which the sanitary interests of the working classes are placed above the interests of capital and competition, and by which a part of the expensive State institutions—namely, the armies—are lent or given up for hygienic purposes.

The position of the sanitary officials should be raised, and all the strength of the sanitary department should be used to fill up lacunæ in professional knowledge. The sanitary administration should have equal power with the Ministry, but should be without the political instability of the latter, and, on urgent occasions, should have the free right of direction. Its organs should be more numerous, higher placed, well paid, and excluded from all other political or medical work.

Under such conditions sanitary questions can be thoroughly and scientifically considered, and the proper extent can be found to which the State shall enter on matters of individual and public health.

Although the free mental development of the individual is necessary for progress, the proper conditions for bodily development, which consist chiefly of the keeping off of harmful external influences, are more and more found to belong to the sphere of State work. The State thus perfected is justified and bound to interfere directly or indirectly in the freedom of individual life, and moreover to a much greater extent than before seemed justifiable, because modern research tells that this is in favour of the sanitary development of the community.

Although the sanitary administration of to-day, even in the best developed countries, is but poorly furnished with power, and in most civilised countries is absolutely powerless; nevertheless, in some few countries rational measures could be carried into effect which would clearly show how beneficial the general adoption of such measures would be. As soon as a sanitary measure has been approved anywhere, as soon as some hygienic discovery has been made in the workshops of medical science, it should be the duty of the State to try it, to estimate its practical value, and to make it generally known.

It is only by such means that hygiene will become a science, that this science will become the most important part of statesmanship, and that the State will become, as it ought to, a healthy State.

According to a recent decision of the Supreme Court of Iowa a practitioner is liable for damages accruing from his having dismissed a case too soon as cured.

The Veterinary Section of the Würtemberg Academy of Medicine has decided to establish a laboratory for the preparation of protective vaccines against various infectious diseases according to the method of M. Pasteur. The laboratory will bear the name of the distinguished French investigator.

AN ADDRESS

ON

"IDIOPATHIC HYPERTROPHY OF THE HEART" AND ON DEGENERATION OF THE HEART MUSCLE.

Delivered on March 31st, 1894, before a General Meeting of the XIth International Medical Congress held in Rome.

By S. LAACHE, M.D.,

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Historical.

Gentlemen,—The pathology of the heart presents, as you are aware, this peculiarity, that in considering it we are not able to go back to the father of medicine as to a fountain, ever fresh and living, from which we may always draw. Owing to their preconceived ideas as to the functions of the heart, the physicians of antiquity arrived at a result which appears to us at the present day to be a paradox. They held that the heart itself could not be diseased. In those ancient times when, in a few rare cases, the question of cardiac disease arose, the disturbance was always set down to "polypi." Throughout the whole of the Middle Ages also the true pathology of the heart remained a *terra incognita*. This want of knowledge is the more striking because it is in strong contrast to the clear and very precise knowledge long possessed as to the anatomical structure of the heart, and as to the affections of the neighbouring organs—the lungs and pleura.

To William Harvey belongs an imperishable honour. Theophile Bonet, also, on account of his *Sepulchretum*,[1] and some other observers deserve to be held in honourable memory. Yet it was left to this country, in which we are to-day guests, and to the Eternal City to make light penetrate the thickness of this darkness. Lancisi,[2] with his two works *De Subitaneis Mortibus* and *De Motu Cordis*, takes us at once *in medias res*. Albertini, the Professor of Bologna, deserves to be always saluted as the real father and founder of cardiac diagnosis. Beside these names we may place with gratitude those of Vieussens, of Sénac, and others. Yet it was not until a whole century after Albertini's day that Laennec, the famous inventor of mediate auscultation, arose to place the crown on the edifice.

From that time there has been an uninterrupted series. In the course of the enormous and increasing advances made by French clinical medicine during the first half of this century, cardiac pathology was always and justly in the front rank. Among its most brilliant exponents we early find the name of Bouillaud; yet in proving how endocarditis is related to rheumatism, this author made a discovery which, up to a certain point, was fatal to the study of the subject which claims our attention to-day, for it has had the effect of putting the valves and their diseases too much into the front rank. This observation, taken together with the unexpected and striking results afforded by the new method—auscultation—led to the too great neglect of the non-valvular, primary, idiopathic hypertrophies—previously described, indeed, by, among others, Corvisart—the aneurysms of the heart, as they were formerly called, and also of some other affections not directly involving the valves. It is in this way that we must explain the fact that when Baur, about thirty years ago, in his Giessen thesis, since so well known, described eighteen cases of hypertrophy of the heart without lesion of the orifices, it was supposed to be a new discovery.

The disease very soon became fashionable, and materials for its study were supplied abundantly from all countries—from England, the United States, France, Russia, and the Low Countries. The Scandinavian countries also contributed

[1] *Sepulchretum, sive Anatomia Practica ex Cadaveribus Morbo denatis*, etc., published at Geneva in 1679. Bonet was born in 1620, and died in 1689.

[2] Lancisi was born in 1654, and died in 1720.

their modest contingent, but the larger part of the work, and that the most important, came to us from Germany.

Definition of the Subject.

How is the subject to be defined? It is impossible to give an exact definition in a few words. We have presented to us in reality a clinical picture—a little vague, it is true—embracing organic affections very different the one from the other, but all having one common characteristic: enlargement of the heart without obvious anatomical—or, if the term is preferred, mechanical—obstacles to the circulation, while at the same time the valves are intact, or are affected only by lesions in no way proportional to the other leading anatomical and clinical symptoms.

The degree of enlargement may vary also within very wide limits. On the one hand, it is in this condition that we meet with the *cœur de bœuf* in its most characteristic form, while on the other we shall fall into error if we fix our attention on size alone. A large heart may work well, as is well known, while a heart but little enlarged may, on the contrary, work very ill. In the case of the heart, it is the same as in the case of another hollow muscle of the body—the stomach. The important point is not the actual size of the organ but the way in which it acts or its insufficiency. For a certain number of cases it is not possible to find a more appropriate designation than the English term, "weak heart;" in consequence this term has been introduced into Continental usage to signify cardiac degeneration in the most general sense.

Etiology.

As compared with valvular affections in which rheumatism plays so predominant a part, the etiology of the affections we are considering offers many points of interest, especially from the hygienic—or, if the term be preferred, the social—point of view.

Time will not allow me to enumerate all the predisposing causes, and I shall confine myself to citing here (1) heredity, one of the principal causes indicated by Albertini; and (2) those conditions which, to use the phraseology of Bouchard, betray their influence by defective nutrition (*ralentissement de la nutrition*).

Among the determining causes there are two which, above all others, have given rise to discussion during recent years—alcoholism and excessive muscular exertion.

Alcoholism.

Alcoholism is in this connection an influence of considerable importance, especially when it takes the particular form of beer drinking which, according to the interesting researches of Bollinger, is the preponderating cause of the form called pure idiopathic hypertrophy. Plethora caused by the ingestion of immoderate quantities of beer and the augmented blood pressure thus produced, combined with a direct injurious action upon the heart muscle, afford an explanation of the increasing part which cardiac affections have come to take in the mortality of the city of Munich, disputing as they do the first place with tuberculosis. "Beer heart" is indeed the sad reverse of the medal, if I may so say, of that Bavarian beer which is so justly renowned. It is also a new, and not the least interesting, side of the multiform manifestations of chronic alcoholism.

"Overstrain."

Let us now pass on to consider overstrain, excessive muscular exertion (*surmenage physique*), the injurious influence of which is so evident in all obvious affections of the heart, and used formerly to be regarded as itself sufficient to provoke the gravest perturbations in the action of the heart muscle. This heart strain (*surmenage du cœur. Ueberanstrengung des Herzens*), deserves, according to the majority of contemporary writers, a large place among the determining causes of the non-valvular hypertrophies. It is true that all physicians are not in complete agreement on this point.

Nevertheless, though it is proper to be a little cautious, yet if we take into consideration the numerous and conscientious observations proving the dangers of heart strain, it is impossible to feel any doubt on the point. I would refer in this connection to the well-known labours of Fraentzel, Leyden, and others. Ought we then to draw the moral that all muscular efforts which might be called a little violent ought to be forbidden absolutely in order to prevent the heart from any risk? No, far otherwise.

Athletics.

To understand the subject the better we must not fail to consider here for a moment a question which, in the present day, is setting minds in movement and muscles in activity in every part of the world—sport. Among us in Norway, in the ancient times of the Sagas and the Vikings, it was considered a disgrace to die in one's bed ("*paa sotteseng*") far from the field of battle. In those barbarous times, I say, the art of exercising the body was naturally brought to the highest degree of perfection. In later times it fell into decadence, and in Scandinavian countries was very little practised except as an indispensable element in existence. For a long time town dwellers remained almost completely ignorant of it.

Now all this is changed. At the present time it is the youth of towns who stand in the forefront, not only the men and boys, but also the young women and even little girls of 6, 8, or 10 years, who, it is clear, do not intend to let themselves be beaten by anybody. Almost all our young people enjoy sleighing (*Kjaelkeagning*), skating, and, still more, the use of the "ski," during our long winter of four or five months. Our summer exercises are the same as in other countries. The use of the "ski"[3] or snow skates, thanks to which Dr. Nansen was able, in 1888, to traverse the snows of Greenland, demands, however, muscular efforts which are considerable, and even under certain circumstances, as when the character of the country is very difficult, enormous. Anyone may become completely convinced of this by witnessing one of the annual races, when it is not rare to see the competitors, not so much the winner himself, if he be a record breaker, as his less fortunate rivals, arrive at the goal completely out of breath, with extreme dyspnœa, bathed in a cold sweat, their lips cyanosed, and a pulse of from 150 to 180 a minute.

In consequence of observations such as these, which were well calculated to give rise to certain apprehensions, the hygienic influence of sport was set down for discussion about two years ago at the Medical Society of Christiania. It is true that one case was related, a curious instance, in which a medical man died suddenly on the spot immediately on his return from a "ski" excursion, but no details were obtainable. Attacks of a nervous character have also been observed, but only very rarely. Moreover, this form of exercise naturally gives rise to some traumatic lesions, but their number is not so great as is generally believed. As a general conclusion, it may be said that it is not possible to prove that any permanent derangement of the functions of the heart is produced. This is due to the fact that youth, on the whole, has so much elasticity, and the heart so much reserve force.

But the members of the Society were in agreement upon two points: in the first place, as to the dangers of the abuse of sport and as to the evil which it may bring about when it becomes simply a matter of fashion; and, in the second place, we were in agreement as to the necessity of precautionary measures, and especially of an age limit in all races. If a competitor makes reasonable demands upon himself, if he be properly trained, and if, it can be hardly necessary to add, alcohol be always severely banished, sport under its various forms ought not only to be considered permissible, but also, it cannot be doubted, the most perfect means of training the muscles of the body in general, and of strengthening the cardiac muscle in particular.

Overpressure.

We must not leave this part of our subject without saying something of intellectual overpressure also, the cause of that

[3] The "ski" may be described as a kind of immense wooden skate without a blade. Each is about 8 feet or 9 feet long, about 4 or 5 inches wide, tapering towards the front, and about an inch thick in the middle under the foot, but thinned down to about half an inch at either end. A special soft shoe is worn, to which the "ski" is attached by straps. The races are not run over a prepared track, but over a course which would be called in England cross-country. The sport is pleasantly described in a recent book, *A Winter Jaunt in Norway*, by Mrs. Alice Tweedie, a daughter of Dr. George Harley.

psychical enfeeblement, so common in our time, which has given rise to the present use of the phrase "*fin de siècle*," and which, though veiled under an appearance of energy, will not escape the eye of the attentive observer. In this age, remarkable for the wonders of electricity, the telegraph, and the telephone, the world is moving with the rapidity of an express train, and the individual succumbs but too easily in the "struggle for life," as he does in the battles of the mind. The "boredom of living" (*fatigue de vivre*) thus offered itself as a ready-made subject to the psychological novelist.[4] And as a matter of fact it is safe to affirm the existence of an enfeeblement of the heart, a heart fatigue alongside of brain fatigue, which has long been a recognised term.

It follows from what has been said that the affections which claim our attention to-day are, in large part, diseases of civilisation for which we must seek in large towns rather than in country districts. If, on the one hand, they are, owing to their connection with alcoholism and excessive muscular exertion, to be found especially among the proletariat; on the other, owing to various causes—such as a sedentary life, over-feeding, over-smoking, and *excess* of every kind—the wealthier classes are so far from being exempt that it is not uncommon to meet with these diseased conditions on the highest rungs of the social ladder.

Symptomatology.

The symptoms of idiopathic hypertrophy obey naturally in their general character the laws which govern the valvular affections, of which the diagnosis is generally so easy. But, from another point of view, the diseases under consideration present a special character, an individuality in their mode of development, often insidious, or, as may be said, masked, so that their diagnosis is rendered the more difficult, a characteristic of these disorders which was well expressed in a remark once made to me by a venerable colleague as the result of his long experience: "Those affections of the heart which are most dangerous are just those which are most difficult to diagnose."

The examination of the pulse naturally comes first. It may be normal, but the contrary condition is not infrequent and the anomalies may be either irregularity or slowness. I omit all other details, and shall enlarge no further on the question of diagnosis, though it has a poignant interest for the clinical observer and for the physician in his daily practice, in order that I may discuss briefly the question of prognosis.

Prognosis.

It would seem that in the minds of the general public the prognosis is almost inevitably sudden death. It is, as you are aware, generally asserted that this mode of death has greatly increased in frequency in our day and it is indeed probable that this opinion is not without some foundation, although statistics are wanting upon the point. As a matter of fact one can hardly open a newspaper without seeing a report of the unexpected death of some person or other due, it is added, to a paralysis of the heart. On the other hand let us not forget that nowadays every such event affords the subject of a report in the newspapers and that the works of Lancisi himself prove that sudden death was by no means unknown in his day.

The converse result is also fairly frequent. We may even say that the diseased organ, the heart, proves itself under certain circumstances to possess a power of resistance which is almost incredible, a fact which explains how it was that Haller, in his day, came to apply to it the epithet *ultimum moriens*.

Treatment.

In speaking of treatment I must confine myself to sketching some of its main features. When, to use a popular expression, the heart has been declared bankrupt, our object should be, as you are aware, to establish compensation, and to take any steps calculated to bring it about. The object may be attained in different ways. Among the drugs recommended—their number is legion—to regulate the secretions we may employ, according to the circumstances of the case, digitalis, iodide of potassium, strophanthus, and so on, the last named drug being generally as innocuous as it is efficacious.

The method, which consists in exercising and "training" cardiac muscles, was not unnaturally employed long ago in the treatment of fat persons and of persons who seldom took any exercise except in a carriage. But as contrasted with the method diametrically opposite, the method, that is to say, of "nursing" the heart daily employed by physicians, and that to which the patients themselves instinctively have recourse, it may be said that "training" has only recently been reduced to a system by Oertel in the work which is familiar to everybody. But the most important point is to prevent the development of the evil. Prophylaxis, at least in so far as concerns a particular individual, does not exceed the limits of the possible. The truth of this will be seen from the observations which I have already made.

Let me borrow an image from your ancient history, let me recall to you how Menenius Agrippa, in his celebrated speech to the people before the war against the Volscians described the stomach as the chief organ of the body whence all the members drew their nourishment. Well, from the physiological point of view, and with much better grounds, we may say that it is the heart which ought to be considered as the centre whence force and sap are distributed continually to the other parts of the human body. Hygiene is at the present time occupying itself with success in matters concerning the lungs, the digestive organs, and the nervous system; but it may be that we have a little neglected the heart. May we not henceforth expose ourselves to this reproach? Would it not be, if we think well on this matter, a great mission to study thoroughly the hygiene of this noble organ, and thus to achieve the true ideal of our programme:

COR SANUM IN CORPORE SANO?

[4] The allusion is to *Trætte Mænd (La Fatigue de Vivre)*, Arne Garborg's romance published in Christiania in 1892.

AN ADDRESS
ON
THE ADAPTATION OF THE ORGANISM TO PATHOLOGICAL CHANGES.

Delivered before a General Meeting of the XIth International Medical Congress, held in Rome, 1894.

BY PROFESSOR DR. H. NOTHNAGEL,
Vienna.

[ABSTRACT.]

PROFESSOR NOTHNAGEL began his address by observing that Darwin's researches in the field of natural history had produced a mighty effect on all branches of intellectual activity. The fundamental conceptions which he had formed had reached to the groundwork of all human knowledge which could be acquired by the inductive method. Two of the most wonderful of Nature's processes, adaptation and compensation, must be studied from this point of view, processes through which the organism was able to resist and overcome pathological changes.

Every practitioner had daily the opportunity to observe how diseases frequently disappeared completely.

The ligature of a blood vessel gave origin to a complete collateral circulation. The resistance produced in a hollow muscular organ, and the obstruction to the circulation produced by valvular disease of the heart, might be compensated to a certain extent by muscular hypertrophy. If one kidney were removed its functions were discharged by the other, the loss of a portion of the liver was made good by the formation of new hepatic tissue, the extirpation of the spleen by the activity of the bone marrow. Chronic fibrosis of one lung led to an increase of the respiratory surface of the other. Pathological changes produced in the bones were compensated by modifications in their structure. After an old dislocation of the jaw, morphological changes might be produced, and result in an almost complete restoration of its functions. If, owing to atrophy of its mucous membrane, the stomach secreted little or no acid, the complete digestion of albuminous bodies could be accomplished in the intestine. If

one vagus were cut, the other continued to exert a regulating action over the movements of the heart.

Such examples proved that permanent damage might be compensated by functional or structural changes to so great a degree that the health of the individual was restored. Every pathological change, whether produced rapidly or gradually, must at some moment be attended by a structural alteration. Examples of rapid production of a change calling for compensation were extirpation of one kidney and ligature of a femoral artery: of changes slowly produced, the slow shrinking of a cardiac valve produced by endocarditis, and the gradual increase of resistance to the passage of the intestinal contents caused by the development of a carcinoma in the intestinal wall. In the one class of cases as in the other the difficulty was overcome by increased functional activity, which was rendered possible by a special power possessed by all active tissues and organs which might be described as reserve force.

What, he inquired, was the source of this power of compensation and accommodation? The answer was that the increased activity of an organ or a tissue was only to be accounted for by assuming an increase in its specific activity due to the increased stimuli received by it; but such increased functional activity was only possible when similar stimuli acted on tissues of like nature. Failing an adequate stimulus and an impressionable tissue the compensation could not be produced. When adequate stimuli could act on a specific tissue or organ the functional compensation of the pathological change must ensue, and must contribute to the well-being of the individual.

Functional accommodation often, but not always, involved structural adaptation. Examples were afforded by the cardiac muscular fibres, by the hollow muscular organs, by the epithelium, the vessels, and the convoluted tubes of the kidney, and by the changes already referred to in the internal structure of bones. They were traceable to increased functional stimulation.

It was important to remember that changes, the necessary consequences of the lesion, might be of such a degree as to be injurious to the organism. It was impossible to formulate any invariable rule, and it must be admitted that the compensatory processes were due to inevitable natural laws which governed and regulated all biological processes.

PROCEEDINGS OF CONGRESS.

Inaugural Ceremony.

[*Specially Reported for the* British Medical Journal.]

Thursday, March 29th.

The eleventh International Medical Congress was inaugurated on March 29th in the presence of the King and Queen of Italy, of the principal Ministers of State, of the Ambassadors to Italy of the courts of Germany, France, Turkey, Holland, Sweden, and Greece; and of an immense number of members of the Congress, and of ladies and other guests. The ceremony took place in the Costanzi Theatre, and this great building was, to quote the words of an Italian newspaper, "as full as an egg" an hour before that fixed for the commencement of the ceremony. It must be confessed that the arrangements for the comfort of those who attended left much to be desired. The parterre reserved for members of the Congress contained no seats, and the scene which ensued as the floor became full was compared not unfairly to a football scrimmage. The dais or platform on which chairs were placed, and from which the speeches were made, was erected at the extreme back of the stage, and to the whole of the audience, except a few who were within the wings, the whole ceremony passed in dumb show. The representatives of the press were particularly unfortunate, being placed in stage boxes from which it was impossible to see, much less to hear. The Roman papers which published full reports of the ceremony the same evening had to rely entirely upon copies of the speeches, which the orators supplied to reporters after the ceremony, or furnished to them beforehand.

The scene, however, in spite of drawbacks which appeared serious at the time, was a most brilliant one, and it is only just to recognise the evident desire of the King and Queen to give distinction to the occasion. The visit was paid in full state, the King in full uniform with decorations, accompanied by his military household and the Queen, whose grace charmed all observers, accompanied by her ladies in waiting. The royal party was received with much cheering by the crowded theatre, which was flooded with the light of an Italian spring morning. The King remained standing during the ceremony. First, Signor Crispi stepped forward, and those who were in the body of the theatre heard the full tones of a rich Italian voice, and saw gestures which they were fain to believe were appropriate to the words which they knew by faith were being uttered, but not one of which could be caught.

Signor Crispi in the first place saluted the members of the Congress in the name of Italy, and expressed the pleasure with which Italians saw such an assembly in their capital. "You labour," he said, "in two different directions for the benefit of humanity; in the one you teach us how to prevent evil, in the other how to remove it. Through hygiene, by purging the air and the earth of poisonous miasma, you preserve the health of mankind; through the use of remedies which cure and give hope, you remove diseases. Thanks to you cities once unhealthy have become flourishing, and districts once deserted and insalubrious have been transformed into gardens. Rome, the mother of all, gave to the ancient world civilisation and law. To-day, thanks in no small part to you, there will go forth from Rome a fertile promise of peace—peace which is the necessity and the hope of the modern world, peace which will be made the more sure by this International Congress, which is a sign of the brotherhood and of the oneness of nations."

Professor Baccelli, President of the Congress and Minister of Public Instruction, then stepped forward, and his appearance was the sign for immense cheering. He spoke in Latin, and in such Latin, we are assured, as was spoken here in Rome in the times of Cæsar and Augustus. And this, rendered into commonplace English, was what he said:

The great difficulties which necessarily attend the civil and political new birth of a nation render the dearer to Italy the pledges of good will and of honour which she has received since she has attained her unity and reconquered her rights. Last year to the festival at Genoa the peoples of nearly all the world sent their navies to render a well-merited honour to Christopher Columbus, an Italian citizen. To-day they have sent to Rome men learned in the biological sciences in order that the bonds which unite us may be drawn the more tightly in the interest of the public good. The learned who have come to Rome will remember that in ancient times the most distinguished public men cultivated *medicina politica* (hygiene), which the ancients esteemed highly, to which Cicero and Cato bear abundant witness. I greet you, then! You are welcomed with joy by this classic land, where the breath of liberty has survived the memory of the ancient greatness of its people. Here no one is a stranger; here, where every country finds some remembrances of its past, where all the human race form one great family, may each one of you in thought and act seek the preservation of nations and the health of mankind. Then will the maxim of our ancestors shine through you with a new brilliancy: "*Salus populi suprema lex esto*," et "*nulla re magis homines ad Deos accedere quam salutem hominibus dando.*" .....I am proud to be able, in the name and by the wish of the King, to declare the Eleventh International Medical Congress open in Rome.—*Undecimum omnium gentium de medicina conventum hodie Roma auspicatur.*

Prince Ruspoli, syndic of Rome, then welcomed the Congress in the name of the city of Rome. The earliest scientific congress met in Rome, and it was then that the conflict between science and prejudice began. In the time of Cæsar a great scientific congress met in Rome to discuss a proposal for altering the course of the Tiber. The governing class then rejected all proposals with the famous epigram of Pisonius: "*Nil mutandum.*" Since that epoch circumstances and habits of thought had changed, and Rome welcomed this Congress of scientific men with heartfelt gratitude.

Professor Virchow was then called upon, and his appearance was much applauded. Speaking in Italian, he referred first to the history of the struggles by which Italy had at-

tained to unity. The last Congress, in choosing Rome as the place of meeting of the eleventh, had desired to pay homage to the ancient traditions and the new glories of Rome.

Professor Maragliano, the Secretary-General, then made a report on the organisation of the Congress, and announced that the total number of papers announced was 2,700, and that the number of foreign members was as follows: Germany, 900; England and British Colonies, 700; Austria-Hungary, 700; France nearly as many; 200 from Spain, Russia, Switzerland, and the United States of America, and some 500 others from Portugal, Sweden and Norway, Holland, Belgium, Turkey, Roumania, Servia, Greece, Mexico, South America, Japan, and Borneo. Thirty-two Governments and 425 scientific bodies were represented. There were also a large number of guests, including many ladies. He then called upon the representatives of the various countries, who each spoke a few words: for Austria, Professor Nothnagel; for Belgium, Professor Crocq; for Egypt, Hassan Mahmoud Pasha; for Denmark, Dr. Salomonsen; for France, Professor Bouchard; for Germany, Dr. von Köhler, of the Army Medical Department; for Norway, Professor Laache; for Holland, Professor Stokvis; for Ireland, Sir William Stokes; for Portugal, Professor Rocha; for Roumania, Professor Severeano; for Russia, Dr. Sklifossovsky; for Spain, Dr. F. Caro; for Sweden, Professor Holmgren. Speaking for England, Sir William Mac Cormac expressed the pleasure which he and his colleagues felt at being present that day in the glorious capital of beautiful Italy. They looked forward with interest to the scientific work of the Congress because they knew what a part Italy had taken in the scientific progress of the world. They were welcomed by the President, himself a great physician, a Senator of Rome, and one of the King's most trusted Ministers. They knew in England of the good work done by such men as Tommaso Crudeli, Golgi, and Marchiafava, and by surgeons like Postempski and Durante, who was the first to remove a tumour from the brain.

On the proposition of Professor Virchow, the President and members of the provisional Committee were formally elected president and officers of the Congress. The ceremony, which had lasted an hour and a-half, then came to an end.

In the afternoon the Sections assembled in the rooms assigned to them at the Policlinico, and elected their officers.

SECTION OF INTERNAL MEDICINE.

Friday, March 30th.

This Section held a preliminary meeting on March 28th, under the presidency of Professor Baccelli. At this meeting, secretaries for the different official languages were appointed. Professor Baccelli was unanimously elected acting president, and Professor Gerhardt, Professor Bouchard, Professor von Ziemssen, Dr. Grainger Stewart, and Dr. Dreschfeld were amongst those appointed honorary presidents. It was arranged that all the papers upon one subject be taken together; and for this purpose the subjects were divided into the following groups: The first sitting will be devoted to pathological conditions of the blood; the second to infection and auto-intoxication; the third to tuberculosis; the fourth to respiratory diseases exclusive of tuberculous affections of the lungs; the fifth to affections of the heart and blood vessels; the sixth to abdominal diseases; the seventh to the nervous system; the eighth to diabetes; the ninth to general diseases; and the tenth to affections of the kidney. On March 29th, at 8 o'clock, the first meeting for the reading and discussion of papers was held, at which the attendance was very large.

Pathology of the Blood.

Owing to the construction of the room and the noise going on all the time, it was almost impossible to hear what was said by the readers of papers, so that after Professor von Ziemssen had read a paper upon transfusion, the numbers rapidly diminished.

Dr. Warfringe read a somewhat lengthy paper upon the arsenical treatment of pernicious anæmia, leukæmia, and pseudoleukæmia, in which he stated that in all these diseases he had succeeded in obtaining excellent results.

Dr. A. Murri (Bologna) then read a paper on cold as a cause of chlorosis, which he considered to be due to some disturbance of the vasomotor centres in the medulla and cord.

At this stage of the proceedings Dr. Baccelli announced that he had just heard with great regret of the death of Professor Brugnoli, of Bologna.

Professor von Ziemssen then read a paper on the intravenous transfusion of undefibrinated blood. He stated that the operation was not an easy one, although in experienced hands there were no serious difficulties to be overcome, and the results obtained were excellent. In cases of chronic anæmia he considered that the repeated injection of small quantities of blood is a most valuable mode of treatment.

Dr. G. De Luca read a paper, in which he stated that he had produced jaundice by the injection of toluol-diamine.

Dr. P. Castellino (Pisa) advocated the treatment of anæmia by corrosive sublimate.

Dr. L. Carrieri (Grottaglia) described the supervention of purpura hæmorrhagica in the course of a case of chronic articular rheumatism.

Dr. L. Cantu discussed gastric disturbances as a cause of chlorosis.

The meeting then adjourned to hear the address of Professor Virchow.

SECTION OF PATHOLOGY.

Professor Virchow in the Chair.

Friday, March 30th.

The arrangements in this Section were not altogether satisfactory. It was impossible to know at what time the Section was to begin, and after waiting more than one hour Professor Virchow at last took the chair. No abstracts of any papers were to be obtained, and the task of reporting discussions held in four languages was well nigh hopeless.

Glanders.

Professor Bonome's paper on glanders dealt with investigations on the biological action of the products of the bacillus of glanders. These products varied in their action according to the animals used and the mode of cultivating the bacillus. Rabbits infected with the bacillus of glanders, even when the latter was attenuated, were extremely sensitive to mallein, even when the animals were to all appearances in good health. These poisons gave rise to nodules scattered throughout the organs, and the same results might be obtained in guinea-pigs. Twenty-four horses out of 32 suspected of glanders reacted to mallein, and 17 were found to be infected whilst 6 were not, so that the reaction was not an absolute proof the presence of glanders. Very small doses of mallein injected in a man suffering from glanders produced typical symptoms of reaction lasting from six to thirty hours, as well as great amelioration of the symptoms and even cicatrisation of the nodules. In horses he got very good results with a mallein obtained from the blood and organs of cats. He was able to cure one horse which was suffering from typical glanders. The same result was obtained in dogs, whilst the control animals not inoculated with mallein all died from glanders.

Professor Virchow spoke of the excellent results obtained in Germany by using a dried preparation of mallein for the diagnosis of glanders.

Pyrogenic Substances.

Dr. Julius Donath and Dr. Geyza Gara read a paper on fever-producing substances. The fever depends on the kind of microbes which are used, whilst some do not produce any fever at all. With anthrax products the fever appeared in rabbits on the second day, and lasted four to five days. The same result was produced on sheep, whilst he obtained similar results in horses with the products secreted by the streptococcus. He confirmed the fever-producing action of the chemical products of the bacillus pyocyaneus discovered by Charrin and Ruffer. Extracts of the spleen of animals which had died from infectious disease—for example, swine fever—proved extremely toxic, and their injection was followed by fever.

Exclusion of Light in Small-pox.

Dr. Salomonsen (on behalf of Dr. Finssen) read a paper on the treatment of small-pox in a red room. The author stated that suppuration was prevented by this treatment, and no scars were produced. He based his treatment on the fact that in 1830 Picton showed that darkness had a favourable effect

on the course of small-pox, and also on the experiments of Charcot and Hanau, Unna, Malakoff, and others. Four physicians tried the treatment, and only one (Juhel-Rénoy, of Paris) was dissatisfied. Four non-vaccinated children treated at Bergen by this method showed no fever and no suppuration. At Copenhagen eleven patients were so treated, with similar results. Another physician obtained the same effects, whilst the vesicles which had not yet dried at once began to suppurate when exposed to normal light. The paper was illustrated by several extremely interesting photographs. Great care must be taken that the treatment should be complete and continued right through the course of the disease.

Entero-hepatitis Suppurativa.

Professor Babes (Buda Pesth) referred to certain diseases prevalent in Roumania, especially a disease which he called entero-hepatitis suppurativa, which is not dysenteric in character. It begins in the lower part of the ascending colon by means of small pustules which then burst. There was well marked œdema of surrounding parts which might go on to retroperitoneal abscesses perforating the intestine, or gangrene of the bowel might follow. This enteritis was always accompanied by an abscess of the liver or necrosis of certain parts of this organ. Amœbæ were found in the intestines but had also been found in ordinary diarrhœa, but he did not meet with them after death or in the abscesses of the liver during life or after death. As a rule the abscesses were sterile, but in some cases there were various ill-defined micro-organisms.

Professor Cornil drew attention to Zancarol's work in Egypt, who did not find amœbæ in all cases of abscesses of the liver. He considered that no organism has been proved to be the cause of dysentery.

Dr. Kauffmann (Cairo) found amœbæ in dysenteric diarrhœa in a large number of cases of dysentery, especially when the stools contained blood. He considered that amœbæ were the cause of dysenteric diarrhœa, and he had also seen them in one case of abscess of the liver. He had noticed that abscesses of the liver might appear one year or more after the dysentery is cured, and an epidemic of dysentery was always followed by an epidemic of abscesses of the liver.

Professor Virchow said that he had himself showed amœbæ in cases of dysentery, but that their etiological action was uncertain.

Saturday, March 31st.

Discussion on Cancer.

A discussion on Cancer had been arranged to take place on this day, and the room was crowded from 9 a.m. until the close at 3 p.m., the debate being followed with close attention, and every point made on either side being loudly applauded. Professor Pio Foà, of Turin, and Dr. Armand Ruffer, of London, led those who spoke of the existence of the parasites of cancer, while Professor V. Cornil, of Paris, championed the opposite cause.

Professor Pio Foà, who opened the discussion, said that it was difficult to give a historical account of the etiology of cancer, as this would simply mean giving the history of medical doctrines from the earliest times. The idea that cancer was an infectious disease was as old as medicine itself, but lately facts had been accumulating which placed this idea on a more secure basis. He referred to the observation that in many places cancer occurs with startling frequency, and that the mortality in such places sometimes amounted to 15 per cent. of that of the whole population, whilst in other places it fell as low as 7 per cent. Although the cases of actual contagion were few and far between, yet he thought such cases undoubtedly existed. Cancer grafting had also been successful, for, although it was impossible to graft the cancer of man on animals, yet the experiments of Hanau and others proved that cancer of animals could be successfully inoculated in another animal of the same species. He would now limit himself to the question of the existence of protozoa in cancer. This was, in his opinion, an extremely complicated question, as different observers had described as parasites things which had nothing in common with each other. He was of opinion that the parasites described by Darier, Wickham, Podwyssozki and Sawtschenko, Korotneff, and others were simply invaginated cells or products of degeneration. On the other hand, he was of opinion that the structures described by himself, Ruffer, Plimmer, Sudakewitch, and others had all the characteristics of parasites. These parasites all gave the same reactions, and consisted of a central corpuscle or nucleus which did not stain with basic aniline dyes, surrounded by a variable amount of clear protoplasm, the whole being enclosed in a distinct capsule. He confirmed the observations of Ruffer and Plimmer as to the distribution of these parasites in cancerous tumours, and called attention to the fact already described by the same observers, namely, that the larger and more cystic forms occurred in the centre of the cancerous tumour, and the smaller ones at the periphery. He had seen several such large parasites form together, and he thought that the multiplication of parasites might occur by the breaking up of the nucleus into small round bodies, though he did not consider this interpretation to be absolutely certain. He had seen the figures of division as described by Ruffer and Plimmer, but was not satisfied as to whether their interpretation was the correct one. He concluded by saying that there undoubtedly existed in cancer certain well-defined bodies which were easily recognisable, which had characteristic staining reactions, and which could be easily distinguished from cellular invaginations and degenerations. The address was illustrated by some beautiful specimens stained with saffranin, hæmatoxylin, and orange, which brought out the points of Professor Foà's discourse.

Professor Trasbot (Alfort) said that he would speak from the veterinary point of view. Cancer was fairly common in dogs and horses, but less frequent in cattle: the tumours previously described as carcinoma and sarcoma of cattle, having lately been proved to be cases of antinomycosis. In dogs cancer was common enough, but in a great many cases tubercle of dogs had been mistaken for cancer, and hence the so-called successful inoculations of cancer in dogs must be regarded with the greatest scepticism, unless controlled by an accurate histological examination. Personally he had made numerous inoculations of canine carcinoma into other dogs, and had only once obtained a positive result. But in that case even the tumour grew for a few months only, and was then reabsorbed without any metastases forming in internal organs. He was of opinion, therefore, that cancer could not be inoculated from one animal to the other.

Professor V. Cornil (Paris) said that he had been working at this subject for some considerable time, but that he was unable to agree with the conclusions contained in Professor Foà's and Dr. Ruffer's published papers. According to his observations the nucleus of the cancer cell consisted of two substances which had different chemical affinities: (1) The nuclein which stained intensely with the ordinary nuclear dyes; and (2) the paranuclein, which stained with protoplasmic dyes. He described how in certain nuclei the hypertrophy of the nucleus was accompanied or preceded by a multiplication of the paranuclein bodies normally present in the nucleus. Parts of the nucleus were then cut off, and formed bodies which, in Dr. Cornil's opinion, were identical with the parasites described by Foà and Ruffer. Dr. Cornil showed a few sections and a large number of beautifully-executed drawings to illustrate his opinion. He did not deny that in all probability parasites were present in cancer, but he thought that at present they had not been satisfactorily demonstrated. He pointed out that, clinically, there were a great many facts showing that cancer could be propagated from point to point by auto-inoculation, as, for instance, from one side of the labia majora to the other or from the lower lip to the upper. He also referred to cases in which, after an exploratory puncture, cancer developed along the track of the needle. He thought there was evidence showing that in certain cases cancer could be communicated from one person to the other. He concluded by saying that at the present moment the discussion ought to be narrowed down to the explanation of certain well-defined structures found in cancer cells.

Dr. Cazin (Paris) spoke of the inoculation experiments which he had performed on dogs suffering from cancer. Inoculations into animals of the same species had hitherto proved unsuccessful, except in three cases of non-malignant tumours of the penis. In these three cases he had been able to reproduce the same tumour by grafting it into other ani-

mals; but all cases in which he had grafted epithelial tumours had uniformly proved unsuccessful. Graftings from the tumour of a dog to another part of the same animal's body had always been attended with success. He had also performed experiments on rats, which were, however, not yet ready for publication.

Professor SCHRÖN (Naples) said that he could confirm the opinions expressed by Professor Foà, Dr. Ruffer, and others as to the parasitic character of the bodies described in cancer, but he was of opinion that besides these one could trace the evolution of these undoubted coccidia into an adult gregarine. He also thought that in some cases he had seen falciform bodies, and insisted on the necessity of examining fresh specimens.

After some remarks made by Drs. MORPURGO and GALLIOTTI in reference to the minute structure of the cancerous body,

Dr. M. ARMAND RUFFER (London) said that he regretted being opposed to MM. Cornil and Fraenkel and many other eminent observers, but his researches in collaboration with Drs. Walker and Plimmer had led him to precisely the same conclusion as his friend Dr. Foà. In all the cases of cancer that he had examined he found the bodies which gave distinct staining reactions differing entirely from those of the nuclei of cancerous cells. He, with his collaborators, had frequently observed the appearances described by MM. Cornil and Fraenkel, and had even illustrated some of them in published papers, but he maintained that these appearances differed essentially from the parasites described by Professor Foà and himself. The reactions of the paranuclein of M. Cornil much resembled those of the nucleus of the cancer parasite; but this parasite, like many protozoa studied by Dr. Ruffer, never contain real chromatin, and he believed that in the pathological human cell there was no nucleus which did not contain chromatin. Some of the figures of MM. Cornil and Fraenkel resembled very closely those described by Martin Heidenhain in the epithelial cells of the triton helveticus. Dr. Ruffer had also studied phagocytosis in cancer, and it was indubitable that the leucocytes penetrated into the epithelial cells, and carried off the parasites which they found there. He had observed this occurrence a number of times in young metastases of the liver, and of internal glandular organs. He had not studied the inoculation of cancer into animals, but believed that, in order to obtain positive results, it would be necessary to inoculate the metastases, and not the primary tumour; for the grafting of sarcoma only succeeded when one inoculated metastatic tumours. He quite agreed with MM. Duplay and Cazin that the coccidia of Wickham, Korotneff, Podwyssozki, and Sawtchenko, and other observers, were only invaginated and degenerated pathological cells; he believed that to be admitted now by most observers. With regard to the multiplication of the parasites, Dr. Ruffer had nothing to add to the notes published a year ago by Dr. Plimmer and himself. He believed that little result would be obtained by the usual methods of fixing and colouring, and that recourse must now be had to a new method. He and Dr. Plimmer had for some months past studied fresh preparations mounted in cancer juice; on taking care to lower the condenser and to use an oblique light the parasites could most clearly be seen in the cells, and even the nuclei were distinct. He had even observed movements, which he hoped to be able to photograph later on. If such a preparation be stained with Loeffler's blue, with the addition of a few drops of methylene green, a very characteristic reaction was obtained; the cancerous cell took a dark blue colour, the nucleus of the parasite a pale pink with a clear part in the middle, and its protoplasm a very light blue. If one daily examined a cancer after removal one could follow all the stages of the degeneration of these parasites, and also certain phases of the life-history of these protozoa, on which Dr. Ruffer hoped to speak on a future occasion. Loeffler's blue was not the only reagent which gave differential staining, for very beautiful preparations had also been obtained with aniline stains, such as eosine, for example.

Dr. HANAU said that with reference to the frequency of cancer in dogs and horses as described by M. Trasbot, the reason for this was probably that horses and dogs were allowed to live to an advanced age, and only killed when age or infirmities rendered them useless; whereas cattle, sheep, and other animals were destroyed for food at an early age; hence it was not likely that one could have many opportunities of seeing cancer in them. He would not give an opinion on the histological appearances (?) of cancer parasites. He was of opinion, however, that his own successful experiments on rats had shown that it was possible to inoculate cancer from one animal to another of the same species; though he did not consider this a proof of the infectiousness of cancer, but rather in the light of a successful transplantation of tissue. He thought there were many difficulties in the explaining of cancer by the assumption that it was an infectious disease, chiefly owing to the peculiar localisation in certain parts of the body, and to the fact that the metastatic growths of carcinoma presented exactly the same structure as those of the parent tumours. He agreed with Dr. Ruffer in thinking that histology had done all it could be expected to do in this question, and that for future work we must trust rather to experimentation, and to the observation of fresh specimens.

Dr. CORNIL, in summing up, congratulated the Section on the interesting discussion to which they had listened. He thought it was valuable, not only for the facts which had been adduced for and against the parasitic origin of cancer, but also because this discussion would serve for future workers as a guide to the points which still remained to be investigated.

The meeting then separated.

SECTION OF DISEASES OF CHILDREN.

Friday, March 30th.

PRESIDENTIAL ADDRESS.

THE President of the Section (Dr. BLASI, Rome) opened the proceedings by giving an address in which, after indicating the scope of the Section, he sketched the history of pediatrics in Italy. After mentioning some of the earliest observations on embryology, which dated back to the sixteenth century, he referred to the observations of B. da Carpi, who in the early part of the sixteenth century recognised the existence of hereditary syphilis; of di Aquila; of de Vizo, of Genoa, who had discovered the specific treatment; of Curzio, who had studied the phenomena of malaria in children; of Montani, of Venice, who in 1560 had described tetanus neonatorum, of Cortesi of Bologna, who had first described hydrocephalus; of Carnevale di Rapoli (1620), who had written one of the earliest known descriptions of diphtheria; of Martino Chigi, of Bologna, who had written a stupendous monograph on croup. The list of Italian physicians who from early times had given attention to diseases of children, would, he said, occupy too much time, but he mentioned the names of Bagellardo, of Venice, who in 1481 published a work, *De Ægritudinibus Infantum*, now very rare: and of Mercurialis, who in somewhat more recent times had printed a work entitled *De Morbis Infantum*. Altogether Italy might well be proud of the contributions made to the study of diseases in children, and to their relief through the establishment of hospitals, which had been established in most of the principal cities by public or private charity.

DISCUSSION ON DIPHTHERIA AND CROUP.

Professor T. ESCHERICH (Graz) observed that there were two factors to be considered in the pathogeny of diphtheria: the resistance of the tissues and the virulence of the bacillus: but that secondary infections by pyogenic organisms frequently determined the clinical character of any particular case. The successful treatment of diphtheria might be grounded on the destruction of the bacilli, on the reduction of their virulence, or on some method of rendering the individual immune.

Professor BAGINSKY (Berlin) related the results of a systematic examination of the kidneys in cases of diphtheria complicated by albuminuria and nephritis. This research, in which he had been assisted by Dr. Bernhard and Dr. Filsenthal, had shown that the morbid process in the kidneys was a glomerular nephritis attended with considerable desquamation of the epithelium and the appearance of cylindrical, epithelial, and hyaline casts in the urine.

Professor HEUBNER (now of Berlin) gave some statistics of

diphtheria during three periods, first without the use of anti-diphtherial serum, secondly with it, and a third period again without it. His general conclusion was that the serum had no influence on the course of the disease.

Professor Mya (Florence) read a paper on the occurrence of mixed infection in diphtheria, which he had found to be an extremely frequent occurrence. His researches conducted in association with Dr. Giavvé showed that the presence of streptococci did not exercise any apparent influence on the course of the general toxic symptoms, but they had an effect in increasing the rapidity of the process, and in determining the production of albuminuria. The diphtheritic infection predisposed the tissues to become the seat of septic pneumonia.

Dr. Luigi Concetti (Rome) said that for the production of true diphtheria the presence of the bacillus of Loeffler was necessary, though membranous affections due to streptococci might give rise to croup and general symptoms of a severe type. As to the relative frequency of diphtherial laryngitis and non-specific croup, he stated that in 22 children affected with primary croup he had isolated the bacillus of Loeffler in 19. Antiseptic medication was most to be relied upon, especially a spray of corrosive sublimate, which might be used in solutions as weak as 1 in 10,000. Boric acid spray, 2 in 100, was also valuable; also nitrate of silver, 1 or 2 in 30, thymol 5 per cent., and many other antiseptics. A thorough douching of the mouth and fauces with an antiseptic solution was to be recommended when the case was first seen. Mercurial preparations were also of use for internal administration.

Professor Ranke said that Behring's serum had been tested by himself and Professor Oertel in the Children's Clinic at Munich in cases of diphtheria of the pharynx with laryngeal complication necessitating intubation. During recent years the average mortality of such cases had been 37 per cent. The strongest serum was used. The first case recovered, but in the six following cases pneumonia supervened, apparently of a special type, and led to a fatal termination.

Professor Soltmann (Breslau) considered it important to recognise that though under the local treatment recommended by Escherich the membrane might diminish in quantity, the temperature must be taken as the safest guide, and the patient must not be considered to be convalescent until the temperature had become normal. He referred to the necessity for disinfection of the mouth, which should be continued after convalescence for at least a week before the patient was allowed to mix with others.

Professor Malinowski (Warsaw) said that he had employed intratonsillar injections with excellent results. Recently he had used aqua chlori, and all the cases so treated had recovered; but when symptoms of croup were present injections did not give good results. Intercurrent pneumonia he looked upon as due to an infection taking place perhaps contemporaneously with the diphtherial infection.

Professor Heubner (Berlin) had not observed pneumonia after injections with Behring's serum. He referred to the importance of mixed infection in determining the clinical character of an attack of diphtheria, and expressed the opinion that personal predisposition was an important factor.

Professor Escherich expressed the hope that the treatment by serum might yet be proved to give good results.

Professors Mya, Baginsky, Rehn, Fede, and Consetti also made some brief remarks, after which the Section adjourned for luncheon. On resuming,

Dr. Raffaelle Sarra (Mentara) read a paper on the local treatment of diphtheria by methyl violet, which in his hands had not yielded satisfactory results, the rate of mortality being 66 per cent.

A paper on intubation and tracheotomy was read by Dr. Francesco Egidi (Rome), who recommended intubation on the ground that it might be performed at an early date, and that it did not at all prevent, but rather facilitated, the subsequent performance of tracheotomy.

Professor Pietro Masucci (Naples) read a paper on the spread of diphtheria through schools, day and boarding. He thought that every boarding school should be provided with an observation as well as isolation wards, and dwelt on the importance of also isolating the attendants on suspicious cases. He spoke in favour of compulsory notification.

Short papers on the treatment of diphtheria were also read by Dr. Szillai (Roumania) and Dr. Guelpa (Paris), and Professor Comby (Paris) and Professor Masucci made some remarks upon them.

Saturday, March 31st.

Discussion on Rickets and on its Relation to Spasmodic Affections.

Dr. J. Comby (Paris) discussed the relation of rickets to convulsive attacks in children. He found that in every 100 rickety children about 10 had suffered or were still suffering from convulsions more or less serious, and either general or involving only the glottis. The occurrence of general convulsions or glottic spasm did not stand in any special relation to craniotabes or rickets. The digestive troubles which preceded and accompanied rickets were responsible for the convulsions which were due to the absorption of toxins from the alimentary canal.

Professor A. Gamba (Turin), in discussing the etiology and pathology of rickets, expressed the opinion that the disorder was a constitutional malady dependent on a vice of nutrition, associated especially with an imperfect assimilation of phosphate of calcium. Treatment should be mainly hygienic.

Dr. Chaumier (Tours) made an elaborate communication founded upon a special mission which he had undertaken at the direction of the Minister of Public Instruction of France for the purpose of studying rickets in Italy. He had arrived at the opinion that rickets was a specific disease produced by a microbe as yet undiscovered. It was contagious, endemic in towns, and sometimes epidemic. It was met with as a spontaneous and epidemic disease among young swine, the osseous lesions being identical with those observed in children. The germs of the disease seemed to be able to exist in houses for a long time, and it was probable that cases of apparent heredity might thus be explained.

Dr. Nicolò Fede (Naples) had been led to the conclusion that rickets was to be attributed to a disturbance of assimilation, traceable to the absorption of toxins produced by putrefactive changes in the intestinal canal.

Professor Adolphe D'Espine (Geneva) considered that the remarkable researches of Escherich on tetany in infants had proved the frequent existence of nervous hyperexcitability in spasm of the glottis, and in many other conditions produced by digestive disorders in infants under 1 year. He, however, objected to the employment of the word "tétanie" as synonymous with reflex hyperexcitability.

Professor Fede (Naples) was led by his experience to accept the views advanced by Professor Comby.

Dr. Mensi (Turin) from a study of the gastric contents in rickets had found that the total acidity was excessive, that hydrochloric acid was deficient, and that abnormal acids, the product of fermentative processes, were present.

Professor Borelli (Naples) considered that the conditions of intrauterine life had an important share in the production of rickets, in predisposing the infant to develop the disorder after birth.

Dr. G. B. Viali from observations made in Constantinople had come to the conclusion that rickets was a predisposing, but not a determining, cause of laryngismus stridulus.

Dr. Pavone (Naples) thought that it was easy to exaggerate the importance of gastro-intestinal disturbances as causes of rickets. Common as rickets was, such digestive disturbances were far more common.

Professors Escherich, Baginsky, Rehn, Soltmann, and Ranke also took part in the discussion.

Infantile Form of General Paralysis.

Dr. A. Moussous (Bordeaux) read a paper on the Infantile Form of General Paralysis. The lesions, both naked-eye and microscopic, in a case recorded by him in 1891, were in every respect similar to those observed in the adult. Since that date he had observed a second case. The cases, taken together with observations made at Bicêtre, had convinced him that general paralysis would come on in childhood. Development went on normally until the age of 2, 3, 4, 5, or 6 years, but convulsions were often observed indicating an undue excitability of the nervous system. The onset of the disease was marked by symptoms of meningitis, of apoplectic

symptoms, or severe convulsions. The manner of the patient was subsequently changed, and characteristic symptoms developed with greater or less rapidity—vertigo, tinnitus, epileptic fits, partial or complete, with or without paralysis. Next ensues, slowly or rapidly, the stage of dementia, which becomes absolute. Death ensued in from one to four years, determined sometimes by an attack of meningitis, sometimes by an epileptic attack, with hyperpyrexia, sometimes by marasmus.

Papers were also read by Professor REHN (Frankfort) on Congenital Myxœdema; and by Professor SOLTMANN (Breslau) on Cyclical Hæmoglobinuria. Dr. SOPHIE BAKUNIN (Naples) read an elaborate paper on the Comparative Embryonic Anatomy of the Genito-urinary System in Man and other Animals; and Dr. F. CERNA (Naples) made a communication on the Diagnostic Value of Indicanuria in Children.

SECTION OF DERMATOLOGY AND SYPHILOGRAPHY.

Friday, March 30th.

Dr. KAPOSI, of Vienna, President, in the Chair.

THE BLENORRHAGIC PROCESS.

DR. TOUTON (Wiesbaden) made a communication on the gonococcus of the blenorrhagic process. He insisted that the gonococcus was the cause of blenorrhagia, and that the diagnosis of the disease can only be made certain by the microscope. The gonococci are usually most abundant at first, but if at later periods the microscopic examinations are negative, the micro-organisms can be made evident by a provocative irritation. Sometimes cultures by Wertheim's method may be necessary for diagnosis. He maintained that the tissues beneath the epithelium are invaded, as well as the softer epithelial cells, but not the horny cells. The infection extends by the lymph channels.

Other papers on genito-urinary subjects were read by the following members: Dr. PADULA, on the Infective Fever of the Blenorrhagic Virus. Dr. GRÖNFELD, on the Present Position of Urethroscopy. Dr. ROCA, on Lemon Juice in the Treatment of Blenorrhagia. Dr. BARRUCCO, on the Local Treatment of Urethritis with a New Form of Syringe.

Drs. BARDUZZI, MIBELLI, BRÖSE, NEISSER, JULLIEN, WAHRSCHEWSKI, v. PETERSEN, MANGE, and CASPER, took part in the discussion.

Dr. NEISSER (Breslau) doubted the invasion of connective tissue by the gonococci, except rarely. He considered that frequent examinations for the micro-organisms were necessary, and if, after repeated trials, none were found, the case might be regarded as non-infective, and the individual allowed to marry, even though abundant secretion were present. He did not think that the clinical conditions alone, the presence of flocci, etc., were of so much importance.

The afternoon sitting was presided over by Dr. HALLOPEAU. Several papers were on the list, but were not all presented.

Saturday, March 31st.

The second sitting was presided over by Professor LANG.

NEW EPIDEMIC SKIN DISEASE.

Dr. SAVILL (London) communicated his researches on a new form of epidemic skin disease occurring in London, and exhibited a large series of photographs and drawings.

THE LICHEN GROUP.

An important discussion on the present state of the lichen question was then opened by Dr. NEISSER, who considered that the term "lichen" should be confined to the disease known as "lichen ruber," which presents two principal forms: "lichen (ruber) planus" of Wilson and "L. ruber acuminatus" (Hebra, Kaposi).

Mr. MALCOLM MORRIS followed with a paper in which, after reviewing the literature that had appeared on the subject of lichen since the Dermatological Congress in Paris in 1889, he said lichen had no more right to be erected into a group than pityriasis or purpura. After sorting out of the lichen group those elements that belonged to definite diseases, such as eczema, syphilis, etc., the only affection left was the lichen planus described by Erasmus Wilson. He summed up his conclusions as follows: 1. Lichen is not a disease, but a type of lesion. 2. The term should be reserved for the clinical entity described by Erasmus Wilson under the name of lichen planus, which is the same as Hebra's lichen ruber. 3. The affection described by Kaposi under the name of lichen ruber acuminatus is identical with that described by Devergie and Besnier as pityriasis rubra pilaris. 4. Other forms of lichen—obtusus, hypertrophicus, verrucosus, etc.—are variants of the typical form, the Hebra-Wilson lichen ruber planus. 5. The group of symptoms to which the name of lichen planus is applied is probably caused by a variety of factors, but at present we are almost entirely in the dark as to its pathogenesis.

Drs. MAJOCCHI, EHRMANN, ORO, SCHWIMMER, SCHIFF, HALLOPEAU, and TOMMASOLI joined in the discussion; Dr. Schiff maintaining that "L. ruber acuminatus" is identical with Devergie's "pityriasis rubra pilaris," and that the affection is quite distinct from L. ruber planus. The present confusion is caused by employing the term "lichen" for all these conditions.

OTHER PAPERS.

Among the papers read was one by Dr. ALFRED EDDOWES (London) on the Treatment of Ringworm, giving statistics of a large number of cases treated by Unna's method, and detailing the modifications he now employs. He strongly disapproved of epilation, and thought that, with proper care, children might be allowed to attend school while under treatment.—Dr. ABRAHAM (London) communicated a New Method of Treating Obstinate Parasitic Diseases of the Scalp by the Application of Parasiticides under Pressure, and exhibited an apparatus which he had constructed for the purpose. During the past few months he had successfully employed the method in several cases which had long resisted other treatment.

SECTION OF LARYNGOLOGY.

President, Professor F. MASSEI.

THIS section was very well attended. The following were the officers elected: *President:* Professor Massei (Naples). *Honorary Presidents:* Drs. Fraenkel, Schmidt, Chiari, Semon, Gouguenheim, Moure, Ruault, Schmiegelow, Botey, Sajous, Lowman, Heryng, Sokolowsky, and Onodi. *Secretaries:* Drs. Nuvoli (responsible secretary), Egidi, Trifiletti, Karis, Flatau, Bronner, St. Clair Thomson, Rougé, and Roquer y Casadesús.

The PRESIDENT gave a stirring inaugural address, in which he made a sympathetic reference to the late Sir Morell Mackenzie.

PACHYDERMIA LARYNGIS.

Papers were read by Professor CHIARI on pachydermia of the larynx and on the nature of fibroma of the vocal cords. In regard to pachydermia he excluded Virchow's verrucose form, which he considered to be only the clinical papilloma. Pachydermia diffusa was, in his opinion, a phase of some other diseased condition of the larynx, and not a disease *sui generis*. He distinguished the primary or idiopathic form, the result of simple chronic catarrh, and the secondary or accessory form, which was part of some other disease such as perichondritis, tubercle, or syphilis. Iodide of potassium was occasionally beneficial, but in some cases was injurious to the general health, and was often powerless even in cases of undoubtedly syphilitic origin. The treatment he recommended most strongly, when called for, was electrolysis, which he believed to be the most efficacious in preventing the recurrences which were too apt to take place.

Vibratory massage of the mucous membrane of the upper air passages was recommended very highly by Drs. BRAUN (Trieste), DIONISIO, and GARNAULT, but decried by Dr. CHIARI. Good effects were claimed for it in the treatment of ozæna.

INTUBATION.

A paper on intubation of the larynx in the adult was read by Dr. SCHMIEGELOW, and a good discussion took place, specially with reference to its use in cicatricial contractions in the larynx and upper part of the trachea. Several speakers referred to the excellent results obtained from thyrotomy and excision of the cicatrical tissue, and also from dilatation from below upwards through the tracheotomy wound.

SECTION OF OTOLOGY.

President, Dr. Emilio Rossi.

The inaugural meeting took place on the afternoon of Thursday, March 29th, and the following officers were elected:—*President:* Dr. Emilio Rossi (Rome). *Honorary Presidents:* Drs. Calladon (Geneva), Gellé (Paris), Moos (Heidelberg), and Politzer (Vienna). *Secretaries:* Drs. Ferreri, Dundas Grant, Ludewig, Garnault, and Sartori.

The actual work commenced on the following day.

The President's address was followed by the description of a case of otitic thrombosis of the lateral sinus by Professor Moos. The mastoid process was trephined, and, after death from pyosepticæmia, the lateral sinus disease was found, in spite of the absence of the characteristic temperature and rigors. Professor Moos advises bacteriological examination of the blood as an aid to diagnosis in such obscure cases.

Dr. Moure (Bordeaux) described a case of latent cerebral abscess due to ear disease in which sudden death took place. No necropsy was obtained. Several similar cases were related by others.

Dr. Rheinhardt (Duisburg) read a paper on the treatment of cholesteatoma by operation. He recommended in the operation the transplantation of flaps from the back of the ear, and the leaving of an opening in the mastoid region, especially in women, where it could be hidden by the hair. There was freedom from recurrence in those cases in which the opening was left.

Professor Gradenigo dealt with the subject of auricular affections in hereditary syphilis, which might be either suppurative or non-suppurative, and might occur even in advanced life.

Dr. Gellé reported cases in which antisyphilitic treatment produced rapid benefit where other means had quite failed.

In the afternoon,

Dr. Calladon read a paper on fixation abscesses in otology, meaning thereby the derivative action of an abscess in the external in effecting the cure of middle ear inflammation. He employed applications of thymol as being an antiseptic irritant.

The pathogenesis of Ménière's disease was discussed by Professor Gradenigo, who considered most cases to be of the spurious or reflex type, and due to disease of the tympanum.

Dr. Avaledo described a case in which Ménière's symptoms were well marked, and in which recovery took place after the performance of Stacke's operation.

On the second day, among the papers read were those by Dr. Kirchner (Würzburg), on the value of gymnastics of the ossicles, and on necrosis of the cochlea; one by Dr. Gellé on the osseous casing of the facial nerve and its lesions, directing attention to a case in which the extraction of an ordinary aural polypus was followed by facial paralysis. Professor Politzer described a new form of disease of the ear, with progressive deafness, in which a kind of inflammatory hyperostosis took place round and in the fenestra ovalis. It occurred chiefly in the later years of life, and sometimes was associated with the arthritic or syphilitic dyscrasiæ. Professor Moos showed and described some beautiful sections illustrating disease of the inner ear. Professor Grazzi read a paper on the injurious effects of railway signals of a noisy nature on those employed among them, and insisted on the necessity for examining the ears as much as the eyes of railway servants. Dr. Corradi, in some studies on the influence of asymmetry of the cranium on Weber's tuning-fork experiment, arrived at the conclusion that the influence was *nil*.

THE INTERNATIONAL MEDICO-HYGIENIC EXHIBITION.

The main part of the exhibits are in the Palazzo di Belle Arti, but they are so numerous that they have overflowed into Eldorado in the Via Genova, and in addition occupy an open space of ground between these two buildings.

The main building is approached from the Via Nazionale by means of a grand flight of steps, and in honour of the exhibition the front of the palace has been gaily decorated: the building consists of a large circular central hall with a dome, and four large and four small halls radiating from the central one. Opening out from this building is a glass pavilion, and leading from the pavilion is a passage which leads into the avenue in the Via Genoa.

The exhibition was opened at ten o'clock on Wednesday, March 28th, without any special ceremony, but within half an hour of the time fixed for the admission of members the building was crowded and presented a gay and animated scene. Signor Crispi was conducted over the building during the morning by Professor Pagliani and Prince Ruspoli, and showed great interest in the various exhibits.

Professor Pagliani, the Director-General of Public Health, organised the exhibition, and he has spared neither time or trouble in trying to make it as great a success as possible. From the day of opening until Sunday the rooms were constantly well filled, and the general opinion expressed by the visitors as to its excellence was certainly well deserved. On Saturday afternoon, the King and Queen were conducted round the building, and showed great interest in many of the exhibits.

The central buildings are filled with surgical and medical exhibits, and models of hospitals. From the central hall a staircase leads to a gallery which contains chiefly books and plans of the domestic water system of various Italian towns, and the annexe is chiefly devoted to the exhibition of mineral waters.

The chief objects of interests in the gallery are those of German exhibitors, and consist of medical, hygienic, and scientific books and anatomical plates. In addition to these there are on the walls a series of very instructive plans of the water supply of Rome and several Italian towns, showing that, at any rate, in the north and centre of Italy the supply of water is generally both plentiful and good, the chief danger to be feared being imperfect or insanitary storage cisterns rather than risk of contamination of the water outside the towns. These plans are exhibited by the Società Italiana per Condotte d'Acqua. In addition to the plans of the water supply there are a series of maps exhibited by the Minister of Agriculture, showing at a glance the special characters, from an agricultural point of view, of land in different parts of the country.

In the annexe devoted to mineral waters the collection is unusually large and interesting, as various Italian waters are here brought to the notice of the profession, in addition to the better known German ones. Thus, amongst many others, the purgative waters of Castiglione, the chloride of sodium waters of Battaglia, and the saline waters of Salsomaggiore, are shown, together with analyses of their composition. Of English waters, the Harrogate stall is well furnished and carefully arranged.

Messrs. Burroughs, Wellcome and Co. make an important exhibit of great interest, including Explorer's Tabloid Medicine Chests, as used in the important expeditions of recent years, so compact that, fitted with tabloids of compressed drugs, they occupy about one-tenth the space of ordinary equipments. The Kepler Products, a group of digestives and nutrients, are as well known on the Continent as they are here, and every endeavour is evidently made to keep up the high character of these favourite preparations, including the Kepler Malt Extract, with its high diastasic power and soluble phosphates and full percentage of albuminoids: the Kepler Solution of Cod-Liver Oil in Malt, a highly palatable form of administering cod-liver oil: the Kepler Essence, a liquid non-intoxicating unfermented malt beverage, having, it is claimed, ten times the nutritive value of the best stout or ale. The exhibit includes besides: Tabloids of Compressed Drugs in large variety, illustrating their advantages as to portability, purity, exactness of dose, solubility, and convenience in dispensing: Emol Keleet, an emollient, and absorbent, and soft dusting powder, valuable as a drying and soothing agent in eczema, moist, sensitive, irritated, or inflamed surfaces, eruptions, sores, etc.; softening hard and rough skin, acting as a natural soap, and softening hard water; Ophthalmic Tabloids having obvious advantages over solutions and most other mediums for applying remedies to the eye; they are accurate and reliable; Hypodermic Tabloids, accurate in compaction, not containing any irritant, and quickly soluble, so as to produce promptly physiological effect, and retaining their efficacy in any climate. In addition there were shown Tabloids of Pure Compressed Tea, a

remarkable and valuable novelty. One or two small tabloids make an excellent cup of tea in two minutes; they have the advantage of being highly portable, and half the cost of the same tea in leaf.

Messrs. Oppenheimer, Son and Co. showed a complete range of Palatinoids and Bipalatinoids; in the latter they present for the first time a properly prepared combination of permanganate of potassium. In the line of digestive ferments they exhibit one of the most complete ranges ever shown, because by the Weber process, which is used by the Oppenheimer laboratories in manufacturing pepsines, a very satisfactory and high testing product is secured. They exhibit Pepsinum-Oppenheimer in different digestive strengths, ranging from 2,000 up to 30,000; this latter high strength has been considered almost an impossibility up to late years, but by the Weber process it is possible to obtain this. They also exhibit Pancreatin, Amylopsin, Trypsin, Diastase, and Granular Rennin.

The Apollinaris Company exhibit their famous natural mineral water, and this time also in an exceedingly convenient form of half-bottles, put up at the spring. Additional importance is attached by medical men throughout the Continent to the use of Apollinaris as a pure natural table water since the recent observations of Moissan reported to the Académie de Médecine of Paris, showing that many of the most famous natural mineral waters in vogue in France and throughout the Continent are, owing either to the carelessness of the mode of bottling or the inadequate depth at which the water is captured, or to some other circumstances, frequently loaded with bacilli, many of them of a pathogenic character. This was particularly the case also with many of the American natural mineral waters examined, while the Apollinaris proved on examination to be in a high state of purity, and absolutely free from pathogenic bacilli. From a hygienic point of view this is, of course, of great importance, especially in all periods of choleraic or diarrhœal prevalence or risk.

Messrs. Hertz and Collingwood exhibited specimens of their Cocoa Champagne, absolutely sugar free and carefully titrated, and also of their Sugar Free Champagne, Grand Vin Brut of Laurent Perrier, and analyses and reports showing its remarkable freedom from saccharin material, whether residual or added, and its superiority in this respect over any of the ordinary champagnes of commerce.

In the connecting passage between the annexe and the main building, there are displayed a large number of drain pipes, latrines, and flushing cisterns, none of which call for any special notice. In this section a pail is shown by Messrs. Ernst, of Turin, provided with a rubber-bound lid, which, when applied, almost hermetically closes the pail, allowing it to be readily carried from place without allowing any odour from the contents of the pail to escape.

In the same section Messrs. Vianini, of Rome, exhibit various forms of cement floors for hospital wards, corridors, and operating rooms, and several portable and fixed Henneberg's disinfectors are well displayed by Messrs. Rietsebel and Henneberg, of Berlin.

In the Pavilion, the Minister of Public Instruction shows a collection of old books and manuscripts of the greatest interest to students of the history of medicine. In the same section are also shown some interesting old surgical instruments.

In the Central Hall there are exhibited instructive models of a sewage farm and pumping station, and of a lunatic asylum animal lymph station from Germany, and of the Policlinico in Rome, as it is intended to be when completed. If the proposed Policlinico buildings are all eventually constructed, it will, when finished, be undoubtedly one of the most perfect and complete hospitals in the world. In common with most Italian hospitals, considerable attention is paid to the great necessity of having a well-appointed observation ward for the admission of doubtful cases before they are passed into the main buildings.

To the right of the entrance is one of the side halls. Kral, of Prague, shows a series of bacterial colonies mounted for demonstration purposes; each cultivation chamber consists of a glass flask flattened into the form of two flat dishes, and provided with a narrow neck which can be readily sealed. In the same section there are a number of specimens of flowers hair, and pathological objects put up in formol (1 in 10 and 1 in 20), which have completely retained their colour, although some of them had been for over six months in the fluid. These preparations have naturally called out many favourable comments from pathologists. They are exhibited by Dr. Blum, of Frankfort. The other exhibits in this hall which are of especial interest are some excellent microphotographs by Dr. Neuhaus, an instructive series of parasitic worms, a number of very well executed lantern slides of pathological conditions of the blood and of the development of blood corpuscles by Engel, of Berlin, and some excellent vertical head sections shown by Professor B. Fraénkel, of Berlin.

In the next hall Dr. A. Hartmann, of Berlin, shows various new instruments for the treatment of ear, nose, and throat affections; the Pathological Institute of Breslau exhibits a very interesting collection of bones, showing the effects produced by the growth of the actinomyces; and Dr. Scholz, of Bremen, has a valuable series of photographs of facial types in insanity.

In the third side hall Dr. Hennig, of Vienna, exhibits a large number of very life-like wax models of skin affections, which, although not done with the delicacy of execution of Towne's models, yet are of much value from a teaching point of view.

The Prussian War Minister has sent a completely-fitted field hospital, consisting of a ward for 14 beds, well ventilated and lighted, and provided with every convenience, bed lockers with drawer and glass tops, comfortable chairs, etc.—a field operating barrack, provided with an operating room, fitted with every appliance for antiseptic surgery, operating table, cabinets for instruments so arranged as to enable the surgeon readily to find any instrument he may want, a bathroom containing a portable 5-feet bash with a water heater attached to it, steam sterilisers, and small rooms for special cases.

The food and drink section does not call for any special description, the most interesting exhibits being those connected with the sterilisation of milk and the diabetic foods.

The remaining halls are chiefly filled with surgical instruments, a large variety of operating tables, and one is devoted to medicines, soaps, etc.

Reichert shows a very convenient oleorefractometer, and Nemetz, of Vienna, an inexpensive small centrifugalising machine; this is arranged so as to be driven by either air or water, but is not so convenient as a small centrifugaliser, made by Zambelli, of Turin, to be driven by an electro-motor, and stated to make 25,000 revolutions a minute.

Owing to the great interest taken in the exhibits a movement is on foot to obtain the consent of the authorities to a prolongation of the period during which the exhibition will remain open.

ITALIAN ASSOCIATION OF ALIENIST PHYSICIANS.

The Associazione Freniatrica Italiana held its eighth annual meeting in the great hall of the University of Rome on the two days preceding the opening of the International Medical Congress. Among the foreign alienists present were Professors Rothe of Warsaw, Hitzig of Halle, and Benedikt of Vienna. An inaugural address was given by Professor Tamburini, and subsequently Professor Bonfigli, director of the lunatic asylum at Rome, was elected President.

The Emperor William telegraphed to King Humbert on March 29th, congratulating him on the success of the Congress, which has brought together in Rome the most illustrious physicians of the world. The King of Italy also received a large number of telegrams from Italian and foreign universities to the same effect.

The reception on March 28th in the Exhibition was attended by an enormous number of persons, but was otherwise not altogether a success. The crowd, which included a large number of persons who were not members of the Congress, was tremendous, and a little inclined to be disorderly. The Roman Committee has not only extended invitations to a great number of guests of members, but has

also invited to the receptions and *fêtes* a large number of persons not connected in any way with the Congress. In consequence, as the number of members and recognised guests is officially stated to be over 7,000, the crowds which assemble are utterly unmanageable.

The opening of the new buildings of the Policlinico as the chief centre and meeting place of the Eleventh International Medical Congress having served in some sort as an inauguration of this fine series of pavilions, the King and Queen of Italy on the day before the formal opening of the Congress received the chief architect, Giulio Podesti, and his assistants, C. Salvadori, Edgardo Negri, L. Rolland, V. Manni, and Mongini, who presented to their Majesties two albums of drawings of the Policlinico.

The German medical men present at this Congress appear far to exceed in number any other nationality, unless, indeed, it be the Italians themselves; though, to judge from the language most generally heard within the Policlinico, this would not seem to be the case.

The German physicians representing the Imperial German Department of Public Health had an interview with Professor Baccelli on March 28th, to congratulate him on the excellence of the arrangements. The section of the Exhibition given up to this department is one of the most important and well filled. It contains some excellent models of public institutions.

On the evening of March 28th a reception was given to the members of the Congress and their guests, by the General Committee in Rome, at the Palazzo di Belle Arti. Owing to the very large number of people who attended, the building was so crowded that it was impossible for members to do more than walk round and then pass out again. The number of members and guests is so greatly in excess of what was expected, that it has been found impossible to prevent a considerable amount of overcrowding, and in all the Congress rooms this was especially the case at the reception.

On an open space at the rear of the Policlinico the Association of the Italian Knights of the Sovereign Military Order of Malta erected a portable military hospital for 50 beds. It consisted of two wings, each holding 24 beds, and connected by a wide anteroom, in which was erected a portable altar. The framework of the hospital was of wood, with double canvas roof and walls partly of canvas and partly of wood. Each wing was divided into two wards by a canvas screen running in the length of the wing. The central portion of the hospital was prolonged to the rear, and here there were apartments for stores, boxes for linen, etc., an operating room, and a kitchen. The operating room was fitted with a portable operating table, douches, charts for dressings, splints, white aprons for the surgeons, and cases of instruments of the newest pattern, and contained a small pharmacy. The kitchen was very well and completely appointed, and in the passage was a portable filter and icebox. The central portion of the hospital contained a bedroom for the principal medical officer and a room fitted with a telephone for the surgeon on duty. At the end of each long ward was a small private ward, holding one bed and a bathroom, with full-sized bath. A little to the rear of each ward and at the end furthest from the kitchen was a covered latrine with closet and urinal, which appeared to be of somewhat unnecessarily heavy pattern. Two isolated tents served respectively for isolation of doubtful cases of infection and for a mortuary. The hospital was lighted throughout with large paraffin lamps, and for this tent a special tent and attendant were provided. The hospital throughout was well designed and constructed, and afforded many points for study and imitation.

The Central Committee of the Italian Red Cross Society fitted up a hospital train of sixteen corridor carriages. The carriage at one end of the train was a kitchen with cooking range, charcoal bunkers, and all appliances; the second carriage was divided into two parts, of which one was for food stores, and contained a filter and icebox, and the other was the pharmacy, and contained a large store of dressings. The ordinary ward waggons were all of the same type; each was almost devoid of furniture beyond 12 stretcher beds, hung in the length of the train, six on each side, three above and three below. The stretchers were supported on brackets projecting from the sides of the carriage. The officers' ward carriage contained 8 stretchers, and in a small compartment in front cots for the surgeon and pharmacist.

An eloquent proclamation, of which the following is a translation, was posted in the public places of Rome by order of Prince Ruspoli, Syndic of Rome, on the day before the opening of the Congress:

Citizens!

An event of happy augury for the progress of civilisation is about to take place in Rome.

There are coming among us, from all countries of the world, men trained in the assiduous care of the suffering, and in the severe study of science, impelled by a noble emulation in the acquisition of useful knowledge, by their high mission, and by an honourable fraternity.

Here where the civilisation of Rome once gave forth the universal laws of hygiene, personal and public, intellectual light will shine forth once more from this new brotherhood formed to attain, through greater freedom and wider knowledge, an amelioration of the lot of humanity.

Citizens!

The municipal representatives, interpreters of your wishes, offer an affectionate welcome to our illustrious guests, and invite you to give them a joyous reception.

May they all, through your actions, carry away with them a grateful recollection of the ancient motto—Roma Communis Patria.

The Syndic: E. Ruspoli.

At a meeting held at the house of Dr. Blasi, the President of the Section of Pediatrics, on April 1st, it was resolved to organise an International Pediatric Society, with the view of encouraging the study of disease in children, and increasing the facilities for instruction. It was proposed to form an International Committee, and to ask the following to act as representatives of the various countries: Germany, Dr. Steffen (President); Austria, Professor Escherich; Belgium, Dr. Tordeus; Denmark, Dr. Hirsprung; France, Dr. Comby; Italy, Professor Massini (Genoa); Great Britain, Dr. T. Barlow; Hungary, Dr. Bokai; Norway, Dr. Johanessen; Russia, Professor Filatow; Spain, Dr. Vargez; Sweden, Dr. Medin; Switzerland, Professor D'Espine (Geneva); Turkey, Dr. Viola; United States of America, Dr. A. Jacobi.

The hospitality shown by Professor Baccelli, President of the Congress, has been most princely. In addition to entertaining every evening a large number of the official delegates and representatives of Governments, he gave on April 1st a large banquet of 250 covers to representative members of the Congress in the Sala Umberta, a large concert hall in the centre of the town. Amongst those present were M. Crispi, the Prime Minister; the Duke of Caetani, Vice-President of the Chamber of Deputies; several members of the Ministry; Professor Virchow; Sir W. Mac Cormac; Sir Dyce Duckworth; Professor Colin (Paris); the Syndic of Rome; Professor von Köhler; the Prefect of Rome; Mr. Makins; Dr. Glover; and Dr. Dawson Williams. M. Crispi, before the conclusion of dinner, made a short speech, in which he expressed his pleasure in taking part in the Congress, and concluded in the following words: "I drink to a general peace, a peace which is in the hearts of all, which is desired by all, a peace which will give tranquillity and prosperity to Europe"—a sentiment which was much ap-

plauded. Professor Baccelli, a little later, drank to the health of the King and Queen of Italy, and concluded, after expressing his gratification at meeting so many colleagues from many nations, by proposing the health of M. Crispi, which was drunk with enthusiasm. Professor Virchow, M. Colin, the Syndic of Rome, and Professor Margraf (Bulgaria) also spoke, and a very pleasant gathering was brought to a close by a speech from Dr. Stokvis, who in the name of the foreign guests expressed in fine rolling Italian the thanks of those present for the cordiality of the welcome extended to them.

The following letter has been addressed to Professor Baccelli by Sir Joseph Lister, and has been published in the *Giornale Uffiziale*:

Lettre Adressée à M. le Prof. Baccelli.

(*Texte original.*)

12, Park Crescent, Portland Place.

Londres, le 26 mars, 1894.

Illustre Professeur.—Après le très grand honneur que m'a fait, à l'instance de M. le professeur Durante, votre ville classique, en mettant mon effigie sur votre nouvelle Clinique chirurgicale, il serait naturellement pour moi non moins un devoir qu'un grand plaisir d'assister au Congrès, dont vous serez le président, et de vous présenter personnellement mes remerciments et mes hommages. Mais le coup terrible que je viens d'éprouver par la perte de ma chère femme, m'a enlevé tout cœur pour cette entreprise.

Je vous prie donc, mon cher M. Baccelli, d'agréer mes excuses et en même temps mes félicitations de l'honneur que nous a fait votre Roi en vous confiant le Ministère de l'instruction publique.

Mon cœur sera avec vous dans le Congrès, auquel j'augure un succès brillant.

Votre ami et admirateur Joseph Lister.

The Sectional Organisation has been at this Congress more distinct and defined than at most previous gatherings, and the President and Italian Committee of each Section have shown the greatest hospitality to members who attached themselves to the Section. A series of banquets have been given by the Presidents and Committees, to which a large number of foreign guests have been invited. By universal accord these gatherings have been most agreeable social reunions, and have afforded opportunities for making many most agreeable acquaintances.

On Monday afternoon the King and Queen gave a garden party in the gardens of the Quirinal Palace, to which between 1,000 and 2,000 members of the Congress were invited. The weather was beautifully fine though cold, and the reception was attended altogether by between 6,000 and 7,000 people. Owing to the comparatively small number of invitations issued to members of the Congress, when contrasted with the total number of members and guests present, some heartburnings have arisen, and there is no doubt that the selection of those to whom invitations were sent has not always been happy, official delegates in some instances being omitted. The gracious intention of the Court has, however, been manifest, and will be generally recognised.

The fact is, however, that the Congress has been swamped by numbers. Not only has the number of members been very large, but the number of guests has been prodigious. The organisation of Professor Maragliano and his coadjutors was most admirably planned, but the strain upon it created by the enormous numbers calling for attention has been too great, and the result has been a great deal of friction and much private grumbling. Many are disposed to foretell the early doom of these gigantic assemblages. Further, the distance of the Policlinico in which the sectional meetings are held from the centre of the town has been a source of great inconvenience, though when once arrived there members have found that the arrangements in the reception room, post office, and the writing rooms, though at first inadequate, were eventually sufficient to meet all needs. The buildings of the Policlinico, barely completed, covered an enormous extent of ground, and even the members of the Roman University were unfamiliar with its plan and arrangements. This gave rise to some confusion at first, but, as has been said, the arrangements eventually worked smoothly, especially in regard to English members, who are particularly indebted to Mr. Makins, the Secretary of the English Committee, for his uniform courtesy and readiness to place at their disposal all information in his possession.

On April 1st a number of short excursions were organised, the most important being those to Tivoli and Frascati, where members attending were entertained by the towns people. A large party of military medical officers attending the Sections of Military Medicine and Surgery were taken to Tivoli in the hospital train, to which reference is made elsewhere.

THE SECTIONS.

Complaints have been rife as to defective organisation of the work of the Sections—complaints true as to certain Sections, false as to others. The decision of the Organising Committee, taken at a late date, not to put into print beforehand the abstracts of the papers, has been a source of great inconvenience, and has undoubtedly detracted a good deal from the value of the discussions. The original intention of the committee was to print all abstracts received before a certain date, but for some reason this was altered at the last moment, too late for the deficiency to be remedied by private initiative. The alteration of plans has been particularly inconvenient to the press, and some strong remarks have been made by some of the newspapers. It was announced that the *Giornale Uffiziale* of the Congress would publish every morning a summary of the proceedings of the previous day, to be furnished by the secretaries. This, however, has been found impossible, owing to the magnitude of the task. The number of Sections is enormous, and the daily programme of the papers to be read occupies some fifteen columns, equivalent to some four or five pages of the British Medical Journal. In some of the Sections the general arrangements have been defective, and it has been difficult to obtain, even from the secretaries, any reliable information. It will not be possible, therefore, to furnish any connected account of their proceedings. Exception must gratefully be made in speaking of the Sections of Medicine, Children's Diseases, Laryngology, Otology, Pathology, and Hygiene, though in the last named the papers contributed have been chiefly of local interest.

The meetings of the Sections above indicated have been as a rule, especially in the mornings, well attended, and the Section of Surgery has also been crowded, although the acoustic defects of the large room in which it is held and its contiguity to a very much frequented corridor have rendered it exceedingly difficult to follow the proceedings. In the afternoons it must be confessed that the counter-attractions of Rome have exercised a powerful influence over the majority of members.

Although the number of English, Scottish, and Irish members present is considerable, very few papers in the English language have been read, and the majority of these have been contributed by Americans. The attendanee of British subjects at the Sections is not good, a circumstance to be accounted for partly no doubt by the fact that but few of our countrymen understand the Italian language, in which the proceedings are for the most part conducted.

Female Students in Paris.—At the commencement of the present academic year, the total number of female students in Paris was 343, of whom 171 were of French, and 172 of foreign, nationality. They were distributed in the various faculties as follows: Law, 3, of whom 1 was French; Medicine, 155, of whom 16 were French; Science, 16, of whom 7 were French; Letters, 164, of whom 141 were French.



THE POLICLINICO UMBERTO I.

Thanks to the enterprise and photographic skill of Dr. Dawson Williams, our chief representative at the Congress, we are enabled to present our readers with an excellent illustration of the Surgical Clinic of the Policlinico Umberto I, showing the Lister frieze, a photograph of which we published last week on p. 714. A short description of this magnificent institution was published in the British Medical Journal of March 31st. The building is not yet complete in all its details. When finished it will be one of the finest institutions in existence for the study of disease in the light of the most advanced scientific thought.

It is intended to gather under its roof all the clinics of Rome now scattered about in different parts of the city. The convenience of this arrangement for teaching purposes is self-evident; and it will be equally advantageous to patients to have their ailments thoroughly studied with all the aid that can be furnished by fully equipped laboratories and by instruments of precision such as can hardly be available in any single hospital. The Policlinico Umberto I is largely the work of Professor Baccelli, and is the fruit of twenty years' struggle against difficulties of all kinds.

The Italian capital is to be congratulated on the possession of a temple of medical science which is worthy to stand as a symbol of scientific progress among the architectural glories of the Eternal City.

NOTES ON BOOKS.

The Microscopical Examination of the Human Brain. By E. Goodall, M.D.Lond., B.S., M.R.C.S. (London: Baillière, Tindall, and Cox. 1894. Demy 8vo. pp. 190. 5s.)—The author has himself designated this work a compendium, and such it is. It contains a collection of methods for examining the brain microscopically in the fresh state, and for hardening, cutting, staining, and mounting portions of the organ. An appendix deals with the preparation of specimens for museum purposes, preserving media, the way to make casts of the brain and interior of the skull, and certain other matters of less importance. The book will chiefly be of use to those who rely solely on works in the English language for their information, or who, from want of time or opportunity, are unable to consult the literature in other languages. It is convenient to have the methods which are especially useful in the microscopical examination of the nervous system collected together; but we question the advisability of multiplying the number of books of the class of the present one, and consider that it would have been better had the methods for examining the spinal cord and peripheral nerves been included in the present compilation, instead of being reserved for future separate publication.

Having regard to the alarming increase of small-pox cases in the West Ham district, the Board of Guardians have decided to at once summon the defaulters of vaccination notices, and 3,000 summonses have been applied for.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

J. W. Hulke, F.R.C.S., F.R.S., President, in the Chair.

Friday, March 30th, 1894.

Resection of Bladder for Recurrent Epithelioma.

Mr. Hurry Fenwick read the history of a patient who had been under the care of Dr. Mackenzie, of Caerphilly. The symptoms were typical of villous growth of the bladder, but electric cystoscopy revealed a small tough epithelioma of the left base. Mr. Fenwick removed this perineally in May, 1891, and Mr. Targett reported that the tumour, microscopically, was a malignant epithelial growth. Symptoms recurred in a year. Suprapubic cystotomy was, therefore, performed, and the tumour thoroughly removed, and the base seared with Paquelin cautery. Seven months afterwards the symptoms again recurred. The tumour and the left lateral wall and base of the bladder, upon which it was placed, were completely resected suprapubically. The wound healed *per primam*. The patient now—nine months after the operation—was apparently in good bladder health, holding his urine from four to seven hours, and he had gained in weight. Mr. Fenwick only advised resection when the epithelioma was primary, tough, single, and small, when the submucous tissues were found glued to the base of the growth, and only in those cases where the patient's strength warranted so severe an operation. Separation of the symphysis pubis would be but rarely needed. Mr. Fenwick, in reply to Mr. Pearce Gould and Mr. W. G. Spencer, said that, though primary union of the vesical incision might be hoped for in children, it was otherwise in adults. He thought it advisable, therefore, in the case of adults to leave in a drainage tube. If the growth involved the peritoneum it was advisable to leave it alone. He had raised the peritoneum to a level with the posterior reflection.

Rectangular Ankylosis of Hip-joint.

Mr. Christopher Heath reported two cases treated by operation. The first was in a girl, aged 14, with complete osseous ankylosis of the hip at a right angle, but with no sinuses and no dislocation. The neck of the femur was divided by Adams's method, and eventually an excellent straight limb was obtained. The second patient, a girl, aged 19, had dislocation of the head of the femur, with sinuses leading down to the bone. Division of the femur between the trochanters (Sayre's operation) was performed with complete success. Photographs of the patients before and after the operation were shown, and the patients were exhibited.

Mr. Bowlby considered that Adams's operation risked the spreading of the infection by the saw which passed through the diseased tissues. Further, the neck of the femur might be greatly thickened or might be absent. He preferred to divide the femur below the lesser trochanter, so that when the lower limbs were put in apposition the pelvis might be tilted backwards on that side.

Mr. Keetley remarked that rectangular deformity could not be remedied except by removal of a wedge-shaped piece of bone, with free division of the soft parts. He had operated on about thirty cases of strumous hip disease, in all of which except one there was rapid healing.

The President said the important point was to fix the limb so that if ankylosis took place the limb might be in the position the most useful for the patient.

Biliary Colic: Removal of Calculi.

Mr. Arbuthnot Lane reported the case of a woman, aged 35, who during the last twenty-two months had frequent attacks of biliary colic. The jaundice remained after the attacks. On admission (December 11th, 1893), she was wasted and prostrate. The abdomen was distended and very tender. The edge of the liver could be detected by sitting her up, and the gall bladder could not be felt. On December 21st, by means of a long vertical incision, Mr. Lane found the gall bladder flaccid and containing some mucus and three small stones, with a strong fæcal odour. There was a stone fixed in the cystic duct, and several large ones in the common bile duct. A small incision was made into the common duct when much clear mucus with a fæcal odour escaped. On attempting to get at the calculi, a free escape of what was apparently fluid fæces took place from the opening in the duct. The incision into the duct was sutured, a tampon of iodoform gauze was introduced into the peritoneal cavity, and through its centre a glass tube was placed with its orifice close to that in the duct. The stone in the cystic duct was not removed, as it was hoped it would prevent the exit of bile by the gall bladder, which it served to do effectually. The patient was much improved by the escape of the dammed-up mucus. On January 3rd the opening in the duct was enlarged sufficiently to allow of the introduction of the finger, when the stones were broken up, and much *débris* and fluid of a stercoraceous character evacuated. It appeared as if one stone projected into the second piece of the duodenum. After a few days the urine lost its tinge of bile, the fæces regained their normal colour, the opening in the abdominal wall closed, except where the gall bladder opened, and from it mucus continued to escape. The patient rapidly gained health and strength. Mr. Lane pointed out the remarkable simplification of such operations by the use of the gauze tampon. Although normal bile had no deleterious influence on the peritoneum, the secretions of the liver, as the surgeon met them in cases in which he was obliged to open the common hepatic and common bile ducts, probably always contained organisms capable of setting up a fatal peritonitis.

Traumatic Rupture of the Common Bile Duct.

Mr. W. H. Battle contributed this case. A boy, aged 6, was admitted to the Royal Free Hospital, having been run over by a hansom cab. There was but slight shock, no bruising of the abdomen or special tenderness. He vomited soon after admission. The case was regarded as one of "contusion" of the abdomen. On the third day the urine was high coloured, the evening temperature was 101.2°. He vomited occasionally, and was restless. On the fourth day respiration was spasmodic and entirely thoracic. The bowels were acting. Temperature at 6 P.M., 102.3°. On the fifth day still restless and looking ill. Slight jaundice present. Sixth day, slight dulness in right side of abdomen, vomiting more troublesome, temperature normal. Seventh day, much worse, looking very ill, with sunken eyes, deeply jaundiced and much emaciated, frequent vomiting in the manner of those suffering from peritonitis, pulse rapid, dorsal decubitus with flexed thighs. The condition of the abdomen was one of flaccid distension; it was but slightly tender, and without muscular rigidity. Mr. Battle thought the fluid in the peritoneal cavity was bile, with inflammatory effusion; that the supply was through a small opening in the duct apparatus, and not due to rupture of gall bladder or liver. He proposed abdominal section, but was not able to do this until twenty-four hours later, when the symptoms were much more grave. An incision was made in the right linea semilunaris, and a good deal of almost pure bile evacuated. The weak state of the patient prevented prolonged examination, and nothing abnormal could be felt with the finger. The coils of intestine were congested. He died on the morning of the ninth day. At the *post-mortem* examination the intestines were injected, and had thin layers of lymph on them, especially on the right side. The liver and gall bladder were intact, but the common bile duct was torn transversely completely through. No other injury was found. Bile was absent from the motions during the last two days of life only. Mr. Battle pointed out the usual course of symptoms in these cases: severe injury followed by shock and few definite abdominal signs until after some days. Then the appearance of fluid in the abdomen. This was the only case he could find of complete transverse rupture of the duct without laceration of liver.

Mr. Gould asked if Mr. Lane, when he passed his finger into the common duct, could pass it into the duodenum. The explanation of the fæcal odour might be from the passage of the pancreatic secretion into the wound. Was it fæcal in the common sense of the term or like the ordinary odour of the contents of the duodenum?

The President said that both cases showed the innocuousness of healthy bile in the peritoneum.

Mr. Lane, in reply, said the smell resembled that of fæces in the large bowel. He could pass his finger up to the transverse fissure of the liver, but not down to the duodenum.

Aneurysm by Anastomosis.

Mr. G. R. Turner read notes of a case of aneurysm by anastomosis, said to be congenital, which occupied the right temporal region of a girl aged 16. The skin over the tumour was thin and discoloured. The tumour grooved the bones, but had no intracranial communication. Under an anæsthetic several dilated thin-coated vessels were exposed in the normal situation of the temporal artery and ligatured. Pressure on the growth was followed for a time by marked improvement. Various vessels at the outer canthus and in the frontal region which appeared to feed the growth were then ligatured and pressure again employed. These proceedings were followed by temporary improvement only. The girl returned home, and although there lately had been some further extension of the swelling, her parents refused further treatment. According to Gosselin's classification, this was a case of aneurysm by anastomosis rather than arterial varix or cirsoid arterial varix. From the capillaries and skin being implicated, excision of the mass was impossible, and had he obtained permission from the parents he would have ligatured the external carotid artery. He did not think that surgeons of the present day should be deterred by statistics of a past age, before the introduction of antiseptics and the use of absorbable ligatures, from ligaturing either this vessel or indeed the common carotid artery in such cases as the one recorded. He drew attention to frequency of the temporal region as the affected site, and mentioned a case he had seen occupying the whole of one side of the scalp.

Mr. W. G. Spencer said that the large size of the tumour probably necessitated ligature of some of the large vessels going to the tumour, to be followed by obliteration by electrolysis of the capillary growth attached to the skin. In case of failure by such measures, the tumour might be excised and the gap filled by skin-grafting.

The President remarked that there was a graphic illustration of this affection by John Bell in his *Principles of Surgery*, edition of 1801. He handed round the volume.

MEDICAL SOCIETY OF LONDON.

Sir William Dalby, M.B., F.R.C.S., President, in the Chair.

Monday, April 2nd, 1894.

Acute Intestinal Obstruction by Constricting Bands.

Mr. H. P. Dean and Mr. J. Hutchinson, jun., reported a case of acute intestinal obstruction due to strangulation of the small intestine by a band, in which abdominal section was successful on two occasions. The patient was a young man, aged 20, who came to the London Hospital on December 23rd, 1892, with symptoms of acute intestinal obstruction. Mr. Dean operated on the day of admission, and found a tight fibrous band constricting a loop of small intestine. This band gave way, and was excised as far as possible. The peritoneal cavity was cleansed, and the wound secured by sutures traversing the whole thickness of the abdominal wall. The patient made an uninterrupted recovery, and remained well until September, 1893, nine months later, when he was again seized with acute obstruction, and was operated on by Mr. Hutchinson, jun. The incision on this occasion was made through the left linea semilunaris. This was fortunate, because extensive adhesions between the small intestine and the scar were seen to be present which would infallibly have led to the gut being opened had the incision been made through the site of the first incision. The strangulated loop was 8 inches in length, greatly distended and purple in colour, constricted by a tight narrow cord-like band, which was connected with the intestine, adherent to the linea alba. The adhesions were carefully separated, and only then could the constricting band be thoroughly exposed and cut through. It was remarkable how suddenly the congested intestine returned to its normal colour. The peritoneum was brought together over the raw surface by a continuous suture in order to lessen the risk of adhesions to the scar, and the cut edges of the rectus left were united with buried silk and catgut sutures. No difficulty was experienced in returning the intestine, there being little distension. The operation took about an hour, and the patient was not collapsed. An evacuation was obtained at the end of the third day by means of an enema, the wound healed by first intention, and the patient, who left the hospital at the end of three weeks, had remained well ever since. Success under these circumstances ought to encourage them to early operative interference in these cases. Every hour's delay when there was a fairly clear diagnosis was unjustifiable, and if this principle were acted upon the statistics would be improved. The statistics compiled from the cases published in the medical journals were useless, because as a rule only successful cases were recorded. Curtis[1] gave a percentage of recoveries in a series of 328 cases of acute intestinal obstruction of 31 per cent., of 97 cases due to bands or diverticula recovery followed operation in 41 per cent. The diagnosis was clear in this case. It is very doubtful whether enemata or abdominal massage would have been of use in this case, for considerable force would have been required to rupture the thin cord-like band. Although only fifteen hours after the onset of the symptoms the constricted portion of intestine was already greatly distended and deep purple in colour. In a few hours the gut would undoubtedly have lost its contractile power. It was noteworthy that the constricting band was closely connected with the adhesions to the old scar, and this confirmed the view of the importance of separately suturing the peritoneum.

Dr. Pasteur and Mr. Bland Sutton reported the case of a married woman, aged 23, whose illness dated from her last confinement, in June, 1893. A month later she had had an attack of perimetritis, lasting about a week. On September 6th acute abdominal symptoms supervened with distension, acute tenderness, and some vomiting. When she was admitted to the Middlesex Hospital on September 27th there had been total obstruction for four days. The face was pinched and anxious, the belly much distended, with visible coils of intestine, occasional hiccough, and a little stercoraceous vomiting. A hypodermic injection of morphine was given and the stomach thoroughly washed out, and Mr. Sutton operated the same evening. On opening the peritoneum in the middle line below the umbilicus a loop of intestine presented, which was surrounded but not constricted by an inflammatory band. This was ligatured in two places and divided and immediately beneath this some collapsed gut was seen, and on raising the distended loop of intestine a tightly constricted band was exposed. This was similarly ligatured and divided, and immediately the contents of the distended bowel were seen to flow freely into the collapsed portion of intestine. No other bands could be discovered but the patient was by that time in a dangerous state of collapse and could not be removed from the operating table for more than an hour. Her recovery was seriously jeopardised on the fourth day by an attack of lobar pneumonia. The crisis occurred on the ninth day, and from that time she made steady progress. They attributed the patient's recovery to early resort to surgical intervention and to the accessible position of the constricting band. They were disinclined to admit any causal relationship between the pneumonia and the abdominal trouble.

Mr. Lockwood said he did not think that Mr. Hutchinson's method of triple suture presented any advantage in incision through the linea alba, though it might be desirable elsewhere. It was a great advantage in the event of collapse to be able to close the wound rapidly by a single row of sutures. He preferred the incision through the linea alba for exploration in cases of obstruction of doubtful nature, and he thought the proposal to cut down in the region of the ileo-cæcal valve was based on erroneous conceptions. The great thing was to operate early in these cases, before the bowel had lost its contractility. He despaired of cases in which there was much abdominal distension. The passage of flatus was a good sign, and he had never seen an abdominal case go wrong in which this had taken place. On the whole, there was less risk after a properly conducted laparotomy than with the so-called abdominal massage.

After remarks by Mr. Stephen Paget, Mr. Clinton Dent and Mr. Egerton Jennings, Mr. Bland Sutton advocated the incision through the linea alba in exploratory operations, and objected to the practice of triple rows of suture, which went far to compensate for the gain resulting from the abandonment of the practice of cutting each layer of the abdominal parietes on a director. He himself always used the single row of sutures.

[1] *Annals of Surgery*, 1888, p. 329

Mr. HUTCHINSON, jun., in reply, said he did not advocate suturing layer by layer, though he adhered to his view in respect of the desirability of suturing the peritoneum separately, especially in operations like ovariotomy, in which time was not of primary importance. It took very little longer, and saved the patient from many risks, immediate and remote.

Harveian—*March 15th*—Mr. GEORGE EASTES, President, in the chair.—Dr. SAMUEL WEST introduced a discussion on influenza. After describing the clinical features of the disease, he said influenza was a germ disease, and therefore communicable, but not necessarily infectious, that is, conveyed directly from sick to healthy. Instances of direct infection were recorded, but in the majority of cases infection did not follow. The disease might be communicated through the air. One attack of influenza gave no protection, but rather seemed to make a patient more liable to have another. The most useful drugs were strychnine and citrate of caffeine.—Dr. KANTHACK demonstrated pure cultivations of influenza bacillus on both gelatine and agar-agar. He showed that the bacillus grew well on artificial media at 37° C. Specimens were shown under $\frac{1}{12}$th inch objectives both of influenza bacillus and of the streptococcus of pneumonia.—After some remarks from the PRESIDENT, Mr. D'ARCY POWER said that in his own case the incubation had twice been a period of eight days. The only surgical sequel of influenza which he had seen was tenosynovitis.—Mr. W. SEDGWICK commented on the great tendency to death from failure of the heart's action in cases of influenza in old patients, and especially in those who had a strongly marked and constitutional tendency to gout. In such cases he had found successive doses of strychnine given by hypodermic injection valuable.—Mr. W. H. LAMB stated that in an outbreak of influenza in a girls' school, marked desquamation had followed some cases, with a rash resembling that of measles, others that of scarlet fever, and also in cases where no rash had occurred.—The discussion was continued by Mr. CHIPPS LAWRENCE, Mr. HAZEL, and Dr. ST. CLAIR THOMSON, and Dr. WEST replied.

REVIEWS.

A TEXTBOOK OF DISEASES OF THE EAR. By Dr. JOSEPH GRUBER. Translated from the second German edition by EDWARD LAW, M.D., C.M.Edin., and COLEMAN JEWELL, M.B.Lond. Second English edition. London: H. K. Lewis. 1893. (Royal 8vo, pp. 672. 28s.)

POLITZER'S TEXTBOOK OF DISEASES OF THE EAR. Translated by OSCAR DODD, M.D. Edited by Sir W. B. DALBY, F.R.C.S. London: Baillière, Tindall and Co. 1894. (Demy 8vo, pp. 750.)

THE almost simultaneous appearance of an English version of new editions of the works of these two well-known Vienna aural surgeons seems to show that among English-reading practitioners there is a demand for complete and exhaustive books on the subject such as these are well known to be.

In the first of the above books Drs. LAW and JEWELL have not only provided an excellent translation of the second edition of GRUBER'S book, but they have added numerous valuable notes, some of considerable length, extending over several pages. Although we cannot agree with all the statements made in these notes—for example (p. 386), the remark that when in removing adenoid vegetations the surgeon trusts entirely to his finger nail, recurrence may be said to be the rule rather than the exception—they are clearly written, and show evidence of wide acquaintance with the literature of the subject.

Amongst the topics treated of by the translators in their notes are adenoid vegetations, cerebral complications of middle-ear suppuration, excision of the drumhead and ossicles, injections of pilocarpin, and deaf-mutism.

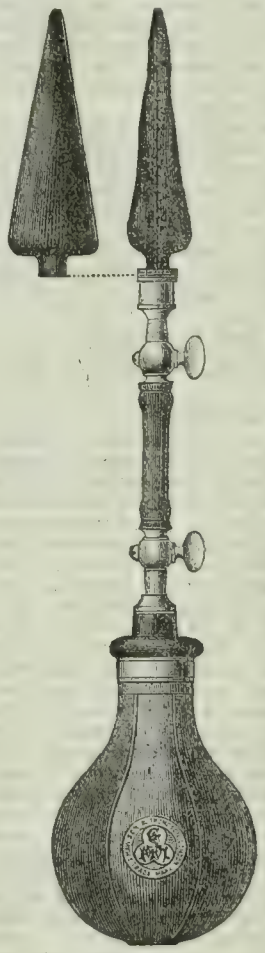
The second edition necessarily contains many improvements and additions, for the first German edition appeared as long ago as 1870. The book contains two chromo-lithographic plates, each having thirty-five representations of normal or diseased tympanic membranes, and is furnished with a separate index of authors and subjects. We have no hesitation in recommending this work in its English garb to all who are interested in aural surgery. The exhaustion of the first edition of the English translation in the space of two years shows that it has met a distinct want in the profession.

Dr. DODD'S translation of POLITZER'S textbook has been made from the third edition of the original, and has been revised in its passage through the press by Sir W. DALBY. The first edition was translated into English by the late Dr. Patterson Cassells, of Glasgow, although we have not found any mention of this in the present volume. Professor Politzer has brought this edition up to date, and discussed the newer methods of aural surgery, such as excision of the ossicles and chiselling away of the posterior superior wall of the meatus, the latter being illustrated by numerous woodcuts. It is needless to say that this standard work will be welcomed by all aurists, and from its clearness of diction it is equally valuable to those less experienced in the speciality.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

NEW METHOD OF DILATING THE FEMALE URETHRA.

DURING the last two years I have employed an elastic air cushion for dilating the female urethra, and this departure from the usual method of stretching the canal by metal and wooden instruments presents many advantages. The operation can be performed quite as rapidly as with the three-bladed dilator, and there is no risk of injuring the mucous membrane. The elastic pressure is equally distributed over the whole surface, and the dilatation is accomplished by alternate distension and relaxation of the urethral walls. The instrument consists of a metal tube perforated in several places at one end, and covered with a conical india-rubber bag. The point of the cushion is made of firm material, for the purpose of facilitating its introduction into the urethra. The tube is fitted with stopcocks, and to it the handball is secured by a screw. It can be employed either as an air or water dilator. The empty bag is easily introduced into the urethra, and the dilating process is rapidly performed by intermittent distension of the canal, and at any moment, by turning the stopcock and detaching the handball, the inflated cushion can be left within the urethra. I have practised this method for the extraction of small calculi, the removal of vesical tumours, and the relief of local pain and irritability, and the operation has been followed by very little incontinence, and the normal tonicity of the urethra has always been rapidly restored. The dilator is made by Messrs. Maw, Son, and Thompson, with inflating bags of various sizes.



JOHN WARD COUSINS, M.D., F.R.C.S.,
Senior Surgeon of the Royal Portsmouth Hospital.

AT a public meeting held at Thurmaston recently, Mr. William James Spence, of Syston, was presented with a handsome carved oak hall barometer bearing a suitable inscription as a recognition of his services as lecturer on first aid. All the candidates who presented themselves for examination were successful.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

Subscriptions to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, APRIL 7th, 1894.

THE ARMY MEDICAL SERVICE AND THE INDIA OFFICE.

It will be in the recollection of many of our readers that on May 15th last year a deputation of the Parliamentary Bills Committee of the British Medical Association waited upon the Secretary of State for India at the India Office to suggest amendments in the conditions of service of the Army Medical Department at home and abroad. One of the subjects then brought before the Secretary of State for India was the necessity of granting a staff allowance for the charge of station hospitals in India. To this recommendation on the part of the Parliamentary Bills Committee, Lord Kimberley's reply was that the point would be referred to the Government of India. This has been done, and in an official reply (signed by Lord Reay) from the India Office, under date March 20th, 1894, received by the Chairman of the Parliamentary Bills Committee, the following passage appears: "The Government of India do not consider that in their present financial position they would be justified in recommending the grant of such charge allowance; and in this view the Secretary of State for India in Council feels himself compelled to concur."

This, we may consider, closes the subject, at all events for the present. It is, however, relevant to place on record some facts which prove that the decision arrived at is inequitable and unjust.

It is computed that on the establishment in 1882 of the station hospital system in India a large saving, estimated variously at from 8 to 10 lakhs of rupees, was annually effected, and it was earnestly hoped by the Medical Department that at least a portion of this sum would be expended in charge pay for station hospitals, such charges, especially of large hospitals, having brought serious responsibilities, both professional and financial, on the senior officers holding them. In view of this it was suggested that a sliding scale of charge pay from Rs.250 to Rs.50, according to the number of beds in a military hospital, should be granted to officers in charge. Charge pay and staff salary may be taken to be almost synonymous terms, and are in the essence of Indian military administration passed for all staff duties in every department; for example, the adjutant and quartermaster general's branches, including station staff officers at depôts, cantonments, and forts, signalling and musketry. Charge pay is also granted to the Indian Medical Service for charge of native corps. Thus the officers of the Army Medical Staff are, in this respect, placed in an exceptional position. Further, it must not be lost sight of that in 1880 or 1881 a despatch written, it is believed, by General Newmarch, and signed by General Wilson, was transmitted to the Secretary of State for India, in which a staff allowance for charge of station hospitals was strongly recommended, but it was refused. Again, in 1887, memorials were submitted to the Secretary of State, asking for a staff allowance, and Sir John Gorst, writing to Sir William Fletcher, M.P., admitted these to be "just claims," yet once more the Government of India did not recommend the grant. So that, as has already been stated in the British Medical Journal, we have the Government of India recommending, in 1880 or 1881, what in 1887 they refuse to grant, and we find the Secretary of State for India in 1887 admitting charge pay as a "just claim," though in 1880 or 1881 he refused to sanction the allowance being given.

Medical officers serving in India have, it is well known, grievances, and the refusal of the India Office to compensate them for the increased work and responsibilities, which the charge of large station hospitals brings, will but serve to intensify one of considerable standing. It is true that the financial condition of India is one for anxiety; but it is ill timed economy that denies to a department which has done so much in India for the Government the just settlement of a reasonable and fair claim.

THE LEGAL RESPONSIBILITY OF MEDICAL MEN.

An action against a medical man, in which a Scottish jury last month returned a verdict for the pursuer, is one which from its circumstances claims the serious attention of the profession. The pursuer is a labourer in Dalkeith, Midlothian, and the defender, M.D. of Aberdeen University, has been in practice in that district for the last twenty-seven years. The issue which was tried by the jury, was "whether the defender undertook to attend the pursuer professionally, and through unskilfulness or negligence failed to supply proper surgical and medical treatment to the pursuer while suffering from an injury to his leg, to the loss, injury, and damage of the pursuer." Five hundred pounds damages were claimed. It appears that on Friday, November 27th, 1891, the pursuer met with an accident during his first day of work at a mill in Lasswade, the consequence being that he sustained a simple fracture of the tibia of his right leg, just above the ankle. The defender, as nearest medical man, was sent for, and came immediately to the man's house, where in the meantime he had been taken in a cart. The doctor found the man not in a fit state, from cold and sluggish circulation, to have his leg set then, and, having done all that was necessary, returned the same forenoon and set the leg in splints and bandages. The defender explained that for several reasons, one of which was the shortness and softness of the bed, he made up his mind that the man would be better in the infirmary at Edinburgh, six miles off; and that, having thus done up the leg for removal, he told him to go there, and intimated he would have nothing more to do with the case.

A week after the doctor was attacked by influenza, which was then raging in the district, and was laid up for over a month, being so ill that cases could not be reported to him.

It is true that the assistant who had been engaged during his illness called once to see the man when a message was left; but, if his evidence is to be believed at all, he, on hearing the circumstances of the case from the doctor's wife, went back and told the man he ought to be in the infirmary, and that he would take no responsibility. This was nearly three weeks after the accident. The pursuer's name was certainly not on the list of patients supplied to the assistant. Although averred on record, the pursuer at the trial never attempted to prove unskilfulness or carelessness on the part of the doctor on the occasion of his two visits on the day of the accident; the case therefore turned on the point as to whether there had been neglect. The defender's contention was that he never undertook the case, and could not therefore be made liable for failure to discharge duties he never undertook to perform. The pursuer laboured under the idea all along that the defender was the doctor for the mills he was working at, and was bound to attend him gratis as one of the *employés*. This was conclusively proved to be not true. There was a good deal of conflicting evidence, but it seemed clear that the man must have been advised by the doctor to go to the infirmary. One of his own witnesses testified to the fact that he had gone there the day of the accident, and made inquiries for a bed. It may be mentioned that the young house-surgeon, probably not over-anxious to be troubled with a simple fracture, although he did not refuse the case, yet helped undoubtedly to dissuade the man from coming in next day. His conduct in doing so and in writing a letter to the doctor to the same effect was criticised by the learned judge and characterised as "foolish." The doctor had weighed the *pros* and *cons* and would not have sent the man without some reason. At any rate the man did not go, but lay for weeks in a bed the unsuitability of which had been pointed out by the doctor. The pursuer and his wife gave testimony, which was not supported by any other witnesses, that the defendant made two visits between the date of the accident (November 27th) and the date on which he became ill (December 3rd). These visits were denied by the defender, who was corroborated by an independent witness, a friend of the pursuer, who was nursing his wife at the time. The defender, be it noticed, was not the man's regular medical attendant. Their family doctor was actually attending on the wife, who had given birth to a child five days before the accident. Further the defender never entered the man's name in his books, and had never asked for nor expected any fee for what he did.

The defender, on recovering from his illness, had the case once more brought under his notice in January as parochial medical officer, owing to the pursuer having made application for parochial relief. He then saw the man once or twice and finally got him removed to the infirmary. By that time, however, the mischief had been done, the bone was protruding and, as the result of the operation found necessary, one leg is now shorter than the other. Undoubtedly if the leg had received proper care and attention this would not have happened. But was the defender responsible for this?

The learned judge (Lord Adam), who charged the jury strongly in favour of the defender, showed them that the case turned altogether on the question as to whether the defender undertook in November to give his professional attendance. His lordship instructed the jury clearly as to the law and pointed out that because a doctor attended a man in an emergency he was not bound to go on with the case. Unless it was proved that besides doing what he could on that occasion he also undertook to treat the man as his patient his obligation then ceased. In going over the evidence his lordship also commented adversely on the pursuer's demeanour in the box and the caution with which his credibility was to be accepted. In spite of the judge's charge the jury, after an absence of half an hour, returned with a verdict for the pursuer of £50 damages.

The case is, it will be admitted, a serious one for medical men. If this verdict is to be upheld it will mean that a doctor called in on emergency to a stranger may at any time, by a combination of circumstances, find himself brought into a court of law to answer for failure of his duties unless he choose to avoid litigation by paying over a sum in settlement. What did the pursuer do here? He chose to remain in his own house, where he lay for weeks without being attended by any medical man; if the doctor he expected did not come he certainly never took the trouble to call in another, not even his own family doctor. He made no complaint to the defender nor to any other one at any time of want of attention although he swore in the box he suffered excruciating pain continually and never slept for six weeks, and the first intimation received by the doctor was a letter from a lawyer claiming damages for the pursuer and sent nearly two years after. We are not entitled to say more on this case. The jury have found the man had grounds for his claim, and until their verdict is set aside it must be accepted. But everyone knows how easily, if lawyers are to be found willing, cases may be trumped up, and how often the law itself can be little protection to men where it is possible to entrap the sympathies of a jury.

Possibly in this case the defender might, morally speaking, have done more, and probably the fact that the influenza was raging at the time, and that another doctor was attending the house, would account for it. But legally he had done all he was bound to do, and so the learned judge expressly informed the jury. It may be that some medical men in cases of accident are more careful than others in seeing the injured into the infirmary. Much will depend on circumstances and the nature of the injury. But take a case of a simple fracture of the leg. Surely a doctor in a busy country practice is not called on (as one young doctor suggested) to see the man to the infirmary gates, or to see a conveyance is got for him; and still less would this be so when the injured man is not his patient. If medical men in the midst of their duties are to have the thought of such actions as this over their heads, they will naturally be more chary in giving their assistance in cases of emergency. The question is thus an important one for the public. No doctor is bound to give the benefit of his skill and knowledge; and it is a serious matter if the shadow of the law courts is thus with medical men to make the promptings of humanity give way to the necessity of consulting their own interests. Take the case of the doctor here. When the case came under his notice again after his illness, no matter whether it was as parochial medical officer, or simply because he knew the man had not gone to the infirmary, his proper and safe course, from a legal point of view, would have been to tell the man that as he had not followed his instructions,

he would have nothing to do with him. The doctor, doubtless without any thought of law, took the more humane course. He visited the man, did his best for him, and took means to get him into the infirmary. He has suffered for his humanity and kindness. Naturally it was open to the other side to suggest he had done this because he knew he had done wrong before. Men, however, often say and do things when, could they foresee what was to be made of their actions afterwards, they would have acted otherwise at the time.

Although in the limited space at our command we cannot go more fully into this matter, we have pointed out the salient points sufficiently to show that the case is one which deserves the attention and consideration of all medical, and even professional, men, and which will call for their sympathy to the defender.

PARISH AND DISTRICT COUNCILS.

A revolution in the sanitary government of the country is to take place in November next. Local boards, improvement commissioners, rural sanitary authorities, parochial committees, and highway boards will disappear, in name at all events, and will be replaced by urban and rural district councils and rural parish councils. A further factor, the parish meeting, is added in all rural parishes. The new titles are convenient and explain themselves pretty clearly. In most instances the local areas will no doubt remain as at present constituted, but something will be done to remedy the more glaring absurdities of many of the existing boundaries. A parish is not to be divided between two county districts nor a rural county district between two administrative counties unless the county councils think fit to allow such an arrangement to continue for special reasons. The whole of each parish must be within the same county. Small parishes and small rural districts may be grouped into workable units. Some alteration of boundaries, possibly those of counties and unions as well as those of parishes and urban and rural county districts, will thus become necessary, and powers are given to county councils for the purpose. The county authorities and their officers have a truly formidable task before them to get the whole of the new machinery into working order by the appointed time.

Rural district councils may confer upon parish councils the same powers which under the Public Health Act could be conferred upon parochial committees, but in the new order of things much is added to the hitherto shadowy delegated powers, quite apart from any voluntary concession on the part of the rural district councils. As long as they do not interfere with private rights, the parish council may "utilise any well spring or stream within their parish, and provide facilities for obtaining water therefrom," and "deal with any pond pool open ditch drain or place containing or used for the collection of any drainage filth stagnant water or matter likely to be prejudicial to health by draining cleansing covering it or otherwise preventing it from being prejudicial to health." There is a curious, and perhaps not entirely unintentional vagueness about this part of the parochial charter which seems likely to cause some doubts as to the real extent of the privileges conferred by it, and these doubts will not be lessened by the absence of any legal or medical advisers of the parish councils. The intention is evidently to give them the power to deal summarily and simply with minor matters, and no doubt the effect will be beneficial in many cases of the kind. They, or rather the parish meeting, have the right to adopt certain optional Acts, thereby making provision for lighting, baths and washhouses, burial grounds, and other needs. They may set in motion the rural council with regard to unhealthy dwellings or obstructive buildings, under the Housing of the Working Classes Act, and in the event of inaction appeal to the county council, and ultimately to the Local Government Board. They may also, subject to certain limitations, acquire or rent land for allotments, or make formal representations to the rural council for the purpose, but if power of compulsory purchase or hire be needed application has to be made to the county council. It may be anticipated that considerable use will be made of these privileges, but a limit is placed upon the power of expenditure, which will serve as a check upon hasty action. The sum raised for parish council expenses in any year must not exceed sixpence in the pound, nor even threepence without the consent of the parish meeting. No expenditure involving a loan can be incurred without the sanction of the parish meeting and of the county council. Another important innovation is that the parish council may complain to the county council that the district council have failed to make proper provision for the sewerage or water supply of the parish, or for the care of highways, or have failed to enforce any part of the Public Health Act. The county authority may thereupon take over to themselves and carry out the duties so neglected. It is a matter of common knowledge that there are many parishes where such an appeal would be fully justified, and in the future the remedy will be ready to the hand of the parish council. We shall see whether they are as anxious for their own sanitary welfare as their advocates believe them to be, or whether there is truth in the plea of the inert rural authorities that much of their inaction has been due to purely local opposition to expenditure.

Urban sanitary authorities are little affected by the new Act. They become urban district councils, unless their district happens to be a borough, but their sanitary powers remain as before. Rural sanitary authorities are replaced by rural district councils, who take over the charge of highways. They will have the present powers and duties of their predecessors, but the Local Government Board may, by general Order, confer upon rural councils any urban powers that they think fit, and in the event of application being made by the county council or by the parish council, the central authority can grant urban powers with regard to a particular area. The effect of the change will of course be to lessen and ultimately to remove some of the present difficulties of sanitary government in rural districts, and to assimilate it to that of urban districts.

County councils receive some accession of power of control in sanitary matters, limited, however, to cases of appeal from parish councils; otherwise their position, like that of county boroughs, is scarcely affected.

Any person holding paid office under a parish or district council or a board of guardians is very properly disqualified for membership of that particular body; and as rural district councillors also represent their districts on the board

of guardians, an officer paid by the guardians cannot serve on the rural district council. Women are eligible for membership of parish and district councils, but not for the distinction of serving as justices of the peace for the county, a dignity which is to devolve *ex officio* upon the chairman of each district council.

The new Act places the local government of the country upon a more democratic footing, and in rural districts the reform is likely to be far-reaching, though in urban districts the change will be of less moment. Mr. Fowler's great measure is another step in the direction of the guarded decentralisation which is so characteristic of modern sanitary legislation, leaving purely local questions to local decision, while retaining central control over matters which require the application of broader principles.

DR. BRAXTON HICKS has presented to the Hunterian Society a framed cast of Tassie's medallion portrait of John Hunter. The original portrait was "done from life" by Tassie in 1791 in wax, and then in "Tassie's paste," a readily fusible opaque glass. An engraving of it appears as the frontispiece to the "New Edition" of the "Treatise on the Blood, Inflammation, and Gunshot Wounds," 1828.

PROFESSOR GAMGEE.

A REGRETTABLE misapprehension has led to the following notice in *Virchow's Archiv* (vol. 135, No. 3, p. 571): "Cheltenham. Dr. Arthur Graham Gamgee, emer. Prof. der Physiologie in Manchester, hat in einem Anfall von Wahnsinn Hand an sich selbst gelegt (BRITISH MEDICAL JOURNAL, 1894, i, p. 47)." By reference to the JOURNAL of January 6th, it will be seen that the paragraph reports the death of Dr. Gamgee's only son, and not of the distinguished physiologist himself. We are glad to learn from Berne that Dr. Gamgee, though naturally in deep grief at the loss of his brilliantly promising son, has not suffered in health. He has been working in the laboratories of the University of Berne with Professors Kronecker and Drechsel, and has just completed an important research on the spectra of the colouring matters of the blood.

MR. DURHAM AND GUY'S HOSPITAL.

MR. DURHAM "went round" his wards for the last time on Saturday last, being accompanied by a very large number of students. In the evening he was entertained at dinner at the St. James's Restaurant by about ninety of his past and present pupils at Guy's, who had assembled from all parts of the country to do honour to their friend and teacher. The chair was taken by Mr. W. H. A. Jacobson, who proposed the health of the guest of the evening in eulogistic terms. Mr. Durham responded, and gave an interesting account of his own career. The health of the chairman was proposed by Dr. Goodhart. The proceedings were of an enthusiastic character throughout, and the presence of so large a number of former pupils evidently gave great satisfaction to Mr. Durham.

A DUBLIN LAWSUIT.

WE have received a letter from Messrs. W. G. Bradley and Sons, Solicitors to the Executors of the late Mr. Gervas Taylor, of Dublin, in reference to a paragraph under the above heading which appeared in the BRITISH MEDICAL JOURNAL of March 31st. They complain that it is "calculated to prejudice a case which is *sub judice*." We have read the paragraph again, and we confess that we are unable to place this construction upon it. That is, however, a matter of opinion. We can only say that we had no such intention in referring to a matter of public interest, and that we extremely regret if in any way our paragraph can affect the case which is about to come before the Irish Law Courts.

THE LIBRARY OF ST. BARTHOLOMEW'S AND ITS CATALOGUE.

A CATALOGUE of the books in the Library of St. Bartholomew's Hospital and College has just been issued from the press. The catalogue makes a goodly octavo volume of 450 pages; the size of the book is, however, in great measure due to the form of printing adopted, especially in the cross references; for instance, four lines are used to mention the fact that Mr. Berkeley Hill was an editor of the *Med.-Chir. Transactions*. Some of the entries in the catalogue come as surprises. It will probably be news to Dr. Bristowe to find that he is the author of "A Treatise on the Diseases of Women," which has gone through six editions. Mr. Warrington Haward appears as M.D., and also as the author of "Taking Cold the Cause of Half our Diseases." Mr. Henry Smith is credited as being the author of "Fly Handbook for Midwives." The late distinguished French anthropologist would hardly have recognised himself as Quater Cages (p. 180). One would scarcely have expected in a publication issuing from St. Bartholomew's to be told that Sir William Savory's name was "Scobell;" this occurs twice. Mr. C. Macnamara and Mr. C. N. Macnamara are treated as different authors; whilst Mr. Thomas Smith, who is not unknown at St. Bartholomew's, appears as three separate individuals. These catalogues of hospital libraries are of great use, and it is a pity that some more careful person did not look over the proofs and correct the errors which appear on nearly every page of this publication. The issue of such a book from St. Bartholomew's is all the more to be wondered at when we remember the many excellent bibliographical articles which have appeared in the *Hospital Reports* by members of the staff. The medical officers and lecturers defrayed the cost of preparing the manuscript, and the governors of the hospital that of printing the catalogue.

EXCEPTIONAL CHILDREN.

AN article contributed to the *Nineteenth Century* by Sir Douglas Galton, chairman of the Committee on the Mental and Physical Conditions of Children, has attracted considerable notice. A report of the first 50,000 children examined was printed in full by the American Government, our own Government, to whom it was first presented having failed to do so, and numerous papers on the subject have been published. A second series of 50,000 children has since been examined by Dr. Francis Warner, and a further report in more complete form is being prepared by the Committee. It is understood that the new Educational Code lays additional stress on the importance of physical training; and Mr. Acland, in his parliamentary speech on August 3rd, took credit for efforts being made by his department for the care of "children not imbecile but presenting a defect." On both grounds it behoves the Education Department to examine the results of this inquiry, which clearly indicates the direction in which physical training is most needed, and the number, distribution, and educational requirements of all classes of "exceptional children," who appear to form about 16 per 1,000 of the school population.

THE WOMEN'S VOLUNTEER MEDICAL STAFF CORPS.

THE attempt to organise a corps of women for ambulance work with our armies in the field opens up many possibilities which may, or may not, come to anything. Even the promoters of the scheme will hardly, we should imagine, expect that their services would ever be asked for in foreign warfare; and in case of invasion and war within our coasts, it may well be questioned whether women, who are willing to undertake the trouble of being trained, would not be far more useful in the hospital than on the field. In actual

war transport is the great difficulty, and anything which in the slightest degree complicates that has to be pushed on one side. What would really be of use in case of invasion would be a well-trained corps of women in every town who would be willing at once to undertake the care of the wounded in their own locality, so that wherever a battle might be fought, one might feel secure of an immediate supply of nurses for the immense mass of wounded who in modern warfare so suddenly cover the field after a great battle, and swamp all the resources of the place. This is the direction which the patriotism of the women has taken in France, and is probably the most useful line it could follow here. Meanwhile, the newspapers make merry over the new uniforms, and one foresees a possibility that, whatever else may be the outcome of the new movement, the lady volunteers and the lady cyclists may between them effect some long needed modification of feminine attire. Anything which will relieve women of the social necessity of dragging with them a fringe of dirt whenever they walk abroad will be remembered by posterity with gratitude.

THE HEALTH OF WORTHING.

It is not to be wondered at that Worthing, which was hit so hard last year by its epidemic of typhoid fever, should wish to let the public know that now it has a clean bill of health, and is ready to receive visitors. It is no doubt somewhat unfair to a watering place that a bad name, once earned, should hang about it for so long; for, in fact, a town which, like Worthing, has had its lesson, and has put its house in order, is often really in better sanitary condition than many another which, for want of such a salutary warning, is able to trade on its good reputation while its evil courses remain unchecked. We understand that there has not been any case of enteric fever in Worthing or its neighbourhood since the beginning of January, and that the two cases which were then notified occurred in a house where the disease had previously existed, and were of an unusually mild type. During the past quarter also, commencing December 20th last, we believe no death from any infectious disease has been registered. An abundant supply of pure water has been obtained from a well to the north of the village of Broadwater, but for the future permanent source of supply, to avoid all chance of pollution by any extension of the town, the corporation has gone further afield, and selected a site on the slopes of the South Downs, where they expect to obtain a daily supply of two million of gallons of pure and excellent water.

DANGERS OF THE STREETS.

The recent accident in Regent Street, in which a "boat," full of painters who were suspended in mid-air painting the fronts of the houses, fell with a crash into the street, killing two of its occupants and inflicting injuries on others, including several passers by, points again to the perils to which we are exposed in our daily walks. We are on the look out for danger in crossing the roadway; it is well understood that in making the attempt, unless under the safe guardianship of the policeman, we risk our lives: islands of refuge are put up to aid us in the perilous adventure, sanctuaries to which we may run, like man-slayers in olden times, to escape the avenger, who now takes the form of the rapid hansom or the ponderous van, but we do expect when walking on the footpath to be at peace. Is it too much to ask, when dangerous processes are being carried on aloft, when painters are being slung on ponderous platforms, when buckets of mortar are being carried up lofty ladders, and when hods of bricks are hovering in mid air above, that some form of barrier should be set up so that passers-by may not expose themselves unknowingly to such easily avoided risks? If shopkeepers choose to decorate their house fronts just at the time of year when all the world is out of doors, they might at least be made to keep the people from their windows while the process is going on. There can be but little doubt that the strain which town life throws upon the nervous system is greatly increased by the continuous tension produced by the habit of constant watchfulness. To wake up at every crossing is a necessity, but to people whose only chance of exercise and fresh air, from year's end to year's end, is what can be got while perambulating the footpaths, it is rather hard, and decidedly exhausting to the man of nerves, that one should at every step have to look downwards in search of orange peel, and upwards on the look out for stray bricks or falling scaffolding, besides keeping up a general survey, on one's own horizon, of the ordinary obstacles in one's course. The bundles and the baskets on people's heads: the perambulators full of babies, or of linen from the wash; the crates and bales hurried across the footpath to the railway van; the point of the workman's saw projecting from his basket; the inverted walking stick threatening to the eye; the shutter suddenly uprising from a hidden opening in the pavement; all these are bearable and in the day's adventures, but these sudden onslaughts from above are extras, and from them we ask protection.

THE ROYAL COMMISSION ON LABOUR.

An important section of the forthcoming report of the Royal Commission will have reference to the employment of women. Not only does it appear that the average wages of women employed in manual labour are little more than half those of men, but while men's wages have on the average steadily increased, those of women—excluding domestic servants, who, so far as wages go, appear to be the fortunate class—have during the same period (1830 to 1886) either remained stationary or increased in very much smaller proportion. The root of the difficulty is that the average wage of women is determined from a much smaller number of occupations, a large number of which are unskilled and overcrowded, and hereby hang many medical problems of no small interest. With the loosening of family ties, and the semi-independence which young girls of the working classes, that is, the mass of rising women, partly claim and partly have forced upon them, we have before us the prospect of the women of the future, the mothers of the race, having, during the most important years of their development, to go through a period of trial and adversity which ill fits them for the duties of maternity. So long as this was a matter of outdoor work, and so long as, by the co-operation of the whole family, the diet was fairly plentiful, it did not matter, but the life led by working girls in towns is thoroughly bad as a preparation for motherhood. Great as may be the difficulty met with by the Royal Commission in disentangling the labour question as it touches men, both the difficulty and the importance of doing something to prevent the deterioration of the coming race of mothers would seem even greater still.

A CASE OF ABDOMINAL GUNSHOT WOUND.

We have been favoured by Dr. Arthur Nulton with the following report on the state of Mrs. Eliza Elliott, who was shot by her husband on the evening of March 24th. Mrs. Elliott was brought up to St. Thomas's Hospital in a very excited state but not showing any considerable signs of shock or of great loss of blood. She was able to give a very clear account of the occurrence to which she owed her wound. She was in little or no pain. There was a wound about the size of a shilling, with irregular edges blackened from charring at two or three places, from which there had been very little hæmorrhage. The wound was situated in the abdominal wall, nearly half way between the anterior superior spine of the ilium and the umbilicus. It was not possible to say by inspection what direction the bullet had taken, owing to the overlapping of the muscular layers of the abdominal wall. No careful search was made to find the bullet. An antiseptic dressing was applied and the

patient sent to bed. There was no abdominal pain, distension, or rigidity; no abnormal dulness or resonance. Some hours afterwards, during which the patient had slept a short time and remained free from pain, a patch of discoloration from extravasated blood appeared about an inch behind and as much above the great trochanter on the left side, and an inch behind this could be felt on palpation a distinct hard mass apparently three-quarters of an inch deep, which was taken to be the bullet. The patient had still no abdominal distress and no signs of shock. There was very little discharge from the wound. The patient was left quiet in bed till the 26th, when the bullet was cut down upon and removed. It was about three-quarters of an inch deep in the subcutaneous tissue; no sign of clothing or other foreign material was found. The wound was washed and sewn up. It healed by first intention. The front wound was left to granulate. There was no rise of temperature and no sign of suppuration. The patient left on the 31st with a not quite healed wound in front, apparently quite well. The bullet, which was irregularly flattened and had a small piece of bone wedged in it, weighed 202 grains—rather a large weight for a pistol bullet.

THE ADMINISTRATION OF THE ARMY MEDICAL DEPARTMENT.

The reply given by the Secretary of State for War to Captain Norton's question in the House of Commons on April 2nd, on the duties of the "Professional Assistant" to the Director-General at the medical division of the War Office, is not by any means satisfactory; but, on the contrary, misleading, as may be proved by reference to an official publication, "The War Office List and Administrative Directory." The object of the question, as we understand it, was to draw public attention to a detail of the duties at the medical division which is causing considerable dissatisfaction among the officers of the department.

THE RESPONSIBILITY OF JOURNALISM: QUACK ADVERTISEMENTS.

The facts which were elicited in the trial of John M. Conville, who was sentenced at the Liverpool assizes to five years' penal servitude for fraud in connection with his dealings in so-called electric belts and other quack remedies, show the readiness with which the public parts with its money if its fears are but tickled the right way. The police stated that he was known to make between £3,000 and £4,000 a year; college lads and clergymen figuring among his victims. From the *Times* report it would appear the the precise charge was of having, by false pretences, obtained several sums of money amounting to £53 12s. from a man named Gardner, with intent to defraud. The case for the prosecution was that the prisoner held himself out as a duly qualified medical practitioner, and advised and sent prescriptions as such to Gardner. Having treated this patient for a year, he strongly recommended an electric belt, which he obtained for him at, as he said, the "cost price" of twelve guineas. After getting various sums on account, the prisoner told Gardner that his "combination treatment" would be a certain cure. No good effect however was produced. Now it is very satisfactory to hear of even one of this fraternity meeting with proper punishment, but it is by no means comforting to think that he is but one example of a widespread system of swindling and terrorism by which those who are once drawn within the net, by the advertisements which are scattered on every side and intruded even into families and schools, are made miserable for years, and sometimes have their pockets emptied of every penny they can scrape together. This particular man has been convicted, but by how much is the stream of foul advertisements diminished? There is no sign of any lowering of the flow, and anyone who takes the trouble to inquire must feel assured that exactly the same sort of thing is still going on unchecked. The reward of quackery in fact is great, and we need not feel surprised at many entering the field when an income of £3,000 a year is gained by it. Perhaps the knowledge that its reward in full completeness involves penal servitude may deter some of these gentry from their more outrageous promises and their more brazen false pretence, but we entertain no doubt that quackery and swindling will go on so long as respectable newspapers consent to publish advertisements of this class.

LEGISLATION AGAINST INVOLUNTARY CREMATION.

The death of five people in Clerkenwell, in a fire caused by the breaking of a paraffin lamp, again draws attention to the extreme danger attending the use of such fragile contrivances. It seems strange that, while the character of the oil sold in the shops is regulated by law, that of the lamp in which it is to be burned is not taken cognisance of by the authorities. Such, however, is the fact, and herein lies the danger. One may say broadly that lamp accidents never happen nowadays in consequence of the dangerous quality of the oil; it is always a broken lamp or a flashing down of the flame into the oil reservoir that causes the mischief. There are various contrivances in the market by which the lamp is made to extinguish itself when it is upset; but things of this sort are not altogether satisfactory so long as the reservoir is made of a brittle material such as glass. Half a pint of inflammable oil suddenly scattered over the hearthrug in front of a warm fire is a danger, whether the lamp itself goes out or not. The only protection against this risk is that the reservoir should be made of metal. The explosion of a lamp depends on the upper part of the oil reservoir becoming charged with an explosive mixture of air and oil vapour, which catches fire from the flame of the wick. Doubtless this always happens in consequence of the wick not fitting its tube sufficiently tightly, and therefore could in most cases be prevented by care in the fitting of the wick. To trust to such a precaution as this, however, is to place our lives at the mercy of those who trim our lamps—not always the most careful specimens of humanity. The common-sense way out of this danger is to take care, in purchasing a lamp, that the wick tube goes to the bottom of the oil chamber, so that the end of it always lies in oil, and thus, as by a trap, all communication between the flame and a portion of the reservoir filled with air is entirely cut off. The universal adoption by lamp makers of these two simple precautions would prevent a large number of horrible deaths every year.

NURSES' WORK AND RECREATION.

A paper recently read by Miss Stewart, matron of St. Bartholomew's Hospital, on Nurses, their Recreation and their Work, tells us something both as to what our nurses have and what they ask for in this regard. At the institution with which she was connected the sisters had a week's holiday in the spring followed by a month in the summer, whilst the nurses had three weeks' holiday besides occasional hours of leisure during the week. She thought it was generally agreed that the eight hours' system could not be applied to nurses, but that compensation would be found in a longer holiday, which should be extended to two months. As to ordinary pastimes, walking, golf, cycling, tennis, university extension classes, and the reading of good novels, were all suggested as means of maintaining health and relieving tedium and monotony. Judging by the standard here put forward the lot of a nurse would not seem to be altogether an undesirable one. When, however, we are assured that such holidays as these are necessary for mere purposes of health, we are forced at once to ask the question whether work which requires such play to counteract its evil effects can be properly organised. We know well enough that in the competitive struggle of professional life work is sometimes so ardently and almost recklessly accepted and anxiety is often so pressing that complete nervous break-

down is apt to follow unless ample holidays are allowed, but we may fairly doubt whether it is judicious to arrange the work of a class of women who after all are subordinates, and ought to be quite free from all anxiety except the mere daily strain while on duty, in such a way that its pressure should be so great as to justify the demand for two months' holiday a year.

THE CHOLERA CONFERENCE IN PARIS.

We understand that the reservations made by the British representatives on the signing of the International Cholera Conference in Paris are only of a temporary character, and will not in any way interfere with the efficient carrying out by Great Britain of the Convention in principle. We have reason to believe that the Indian Mohammedan authorities will in fact entirely approve of the prohibition of pauper pilgrims from undertaking the journey to Mecca, and that it is contrary to Koranic prescription that they should so depart without leaving due provision for their families. The information furnished on this head to Mr. Ernest Hart prior to his making the proposals which have formed the bases of the recent International Conference in Paris came from an authorised Mohammedan source in India, and no difficulty is apprehended in carrying out the conditions of the Convention in a practical shape in this matter.

THE SIR ANDREW CLARK MEMORIAL.

We understand that the Duke of Cambridge has fixed Thursday, May 3rd, at 4 P.M., as the date at which he will preside at a public meeting to be held at Princes' Hall for promoting a memorial to the late Sir Andrew Clark, and that Mr. Gladstone will attend and speak at the meeting. It is intended that the memorial shall take the shape of an "Andrew Clark" wing of the London Hospital, in which some necessary extensions of certain departments of the hospital will be made.

AN OBJECT LESSON FOR ANTIVACCINATORS.

The official *Bulletin* of the Iowa State Board of Health for the month of February contains a statement as to the result of the introduction of small-pox infection to an isolated household, the members of which differed in regard to vaccination. We reproduce Dr. Kennedy's account in his own words. The facts need no comment:

A few months ago a family of antivaccinationists lived in a county in this State. One member of the family—consisting of father, mother, and four children was vaccinated, the others not. They lived happily, and apparently safely so far as small-pox was concerned, on their quiet Iowa farm. A nephew from Germany came into the family, coming from the Fatherland to find a home in this great land. On the vessel on which he was a passenger small-pox broke out, and he was exposed. He had been vaccinated, and escaped the disease. His uncle's family into which he went with his infected clothing, with the exception of the mother, were destitute of the protective influence of vaccination. Within twelve or fourteen days after the advent of this nephew and cousin small-pox in a malignant form broke out, and father and four children were smitten down with the dread disease, and four out of the five, including the father, died, the mother and the young man alone escaping, and they simply because they had been fortunate enough, sensible enough, to be vaccinated. And yet the antivaccination fanatics would ignore all such lessons, and see nothing in them except a coincidence.

TREATMENT OF INEBRIETY IN ENGLAND.

It is gratifying to record that of the 40 patients admitted to the Dalrymple Home at Rickmansworth during the past year, 23 went in under the provisions of the Inebriates Act. Particulars are given in the Report of the 344 cases which have been discharged from the institution since its opening. Of the whole number, less than half, or 159, were received under the Acts. As to length of residence, 79 entered for the full legal period of 12 months, 22 for 9 months, 4 for 8 months, and 86 for 6 months. The remainder entered for 3 months, except 5 for 4 months. The tendency of late has been to apply for the shorter terms, which is not so satisfactory, as 6 months is the shortest term which can reasonably be expected to yield, as a rule, permanent recoveries. Between 30 and 40 years of age seems to have been the main period of proclivity, 183 applicants having been within these terms. Between 40 and 50 come next, showing 85 requests for reception, the interval being 20 and 30, ranking next, being responsible for 58 entrances. While patients have been received from the Colonies and other countries, the bulk of the inmates, 284, as was to be expected in an English home, came from England, Scotland following with 22, Ireland with 17, and Wales with 1. Curious to relate, though Switzerland has compulsion, 3 inmates were admitted from that country. About a fourth had had a college education. In nearly one-half of the cases there was a family history of inebriety or insanity. The after-history has revealed the encouraging fact that 31 per cent. of the whole number have done well. It is very desirable that other genuine homes for inebriates should follow the example set by the Dalrymple Retreat, and publish full reports, especially of the after-history of the patients. Accurate records would dispel much of the ignorance which disposes the credulous to believe the assertions of the proprietors of a host of alleged "cures," that they "cure" all, or nearly all, even of the worst cases.

THE HERMITE PROCESS OF TREATING SEWAGE.

An elaborate report on the results of the trial of M. Hermite's system of treating sewage matter with electrolysed sea water has been prepared by Dr. C. Kelly, medical officer of health for Worthing and the combined sanitary district of West Sussex. The report contains the results of chemical and bacteriological analyses, made by Dr. Dupré, of Westminster, and Dr. Klein, of St. Bartholomew's Hospital. Dr. Kelly has not gone into the question of expense, but he points out that, besides the annual cost of producing sufficient electrolysed fluid, there would be a very great outlay in putting down a fresh set of mains, pipes, and cisterns, so as to convey it to each house. The results of the various tests are set out in detail, and Dr. Kelly concludes: "Since there is no instantaneous decomposition of fæcal matter, and no sterilisation of sewage, I am of opinion that the process, as far as the late trials have gone, has therefore failed to produce the results which are claimed for it by its inventor." This is the first time M. Hermite's system has been publicly tested in England.

THREE DEATHS UNDER CHLOROFORM.

We extract the following details from the accounts forwarded to us regarding three recent cases of death during the administration of chloroform. Dr. Dain reports a case from the Birmingham General Hospital. The patient, a retail brewer, aged 41, was a large stout man, suffering from intestinal obstruction. He was under the influence of opium, and alcohol had been administered. He had marked bronchitis, and had suffered from gout. During administration the pupils continued contracted. During the progress of laparotomy thirty-five minutes after the commencement of chloroform administration, the breathing ceased quite suddenly, and at the same time the pulse became imperceptible. The chloroform was given on lint, and about ℥ij were used altogether. At the *post-mortem* examination all the cavities of the heart were found empty, and the heart muscle was in a state of fibrous degeneration; the lungs showed bronchitis and hypostatic congestion at both bases; the liver was large and cirrhotic.—Dr. D. N. Jackson, House-Surgeon to the Royal Infirmary, Newcastle, reports the following case. A man, aged 51, was admitted January 14th, 1894, with fibrous ankylosis of elbow for the purpose of having the adhesions broken down. The chest was emphysematous, and a systolic murmur was heard at the apex, but there was no sign of cardiac dilatation. About ℥ij of chloroform were used, the joint was wrenched, and when the patient was recovering, about a quarter of an hour after

he was anæsthetised, he suddenly became cyanosed, and respiration ceased. The pulse was still beating. Artificial respiration was at once started, and in two minutes he made four or five voluntary attempts at respiration, and again stopped breathing. Artificial respiration was continued, ℥iij of ether were injected hypodermically, brandy injected into the rectum, oxygen freely administered by the nasal tube, the interrupted current applied, and the sphincter ani forcibly stretched. The pulse stopped about five minutes after the cessation of voluntary respiration. No *post-mortem* examination was allowed.—We are indebted to Mr. Faulder White for an account of a death under chloroform, which occurred in the Coventry and Warwickshire Hospital on March 3rd. The patient was a married woman, aged 40, from whom it was proposed to remove some polypoid growths in the right nasal fossa. Nothing abnormal was discovered with the stethescope in the heart or lungs, but the patient seemed anxious in regard to the operation. The chloroform was administered on a single layer of flannel, stretched on a wire frame, the patient being in a recumbent position. As soon as the chloroform was applied there were signs of excitement, and a little struggling took place, and on this ceasing, certainly within three or four minutes of the commencement of the administration, it was found that there was no pulse at the wrist. At this moment respiration was still proceeding, but almost immediately there supervened a rigidity of the muscles of the lower jaw and arm, and possibly the spasm also affected the respiratory muscles. Artificial respiration was performed, ether and strychnine injected, nitrite of amyl administered, the battery applied, a vein was opened, and the patient was inverted, but all without effect. No *post-mortem* examination was permitted.

SMALL-POX AT WHITTINGTON.

THE *Derbyshire Times*, in a recent issue, makes a long and severe attack on the Whittington Local Board, for neglect of its sanitary duty in general, and of an existing small-pox outbreak in particular. Judging from a lengthy report of the board's proceedings, we are bound to say that the *Times* has good ground for indignation. In spite of the advice of their medical officer, the board has refused to adopt the Notification Act; neither have they provided hospital accommodation for their district. They seem, however, to have been, until within the past three or four weeks, in the habit of sending cases to a hospital belonging to the Corporation of Chesterfield, the fee charged being 25s. weekly, but since Chesterfield, in addition, decided to charge an admission fee of a guinea, the Whittington Board have allowed cases to remain at home. Our contemporary does not hesitate to describe the local board as caring nothing, though the lower part of the parish is practically one gigantic cesspool, the roads at the same time being "almost impassable from sludge and boulders," and no locality in the county being "in such a disgraceful condition from a sanitary point of view." In such circumstances, as to notification, hospital accommodation, and sanitation, it is not surprising that the small-pox cases have mounted up to fifty, and that neighbouring authorities are in alarm, asking for the assistance of the Local Government Board to galvanise the Whittington authority into something like activity. The discussion on the subject at the Whittington Board meeting was characterised by an utter incapacity to grasp the seriousness of the situation. From beginning to end its distinguishing notes were feebleness and parsimony. here was a case of small-pox in a hotel, and, to meet the emergency, two bills, embellished with red crosses, had been posted, but somebody had torn them down again. The statement that children had been attending school from this house caused "sensation" at board meeting. But in the absence of compulsory notification what can the board expect? Then, as to the hospital, the question was, Could better-off people be compelled to pay? The clerk thought they could, but was not sure, and, at any rate, such people would reply that they paid their rates, and, in addition, were doing a public service by sending their cases to hospital. The next question was whether the sanitary authority should pay funeral expenses; the next, whether the guardians should pay for paupers; another, who would get the halfcrowns if the Notification Act were adopted—and the fact that some other authority had had to pay £3 for notifications seemed to be of consequence. Then the conversation drifted on to the subject of a choked drain, as to which one member avowed that "something will have to be done," the reply being that the clerk had received instructions, "but then we had not the necessary money to go on with," while the comforting conclusion of the whole silly drivel was that "the law is defective." That was all; no further steps were agreed on as to dealing firmly with the outbreak, and there can be no doubt of the urgent need for interference by the central authority with the action, or inaction, of the Whittington Local Board.

TREATMENT OF CHRONIC INTERMITTENT FEVER.

AN article by Dr. Pierez, of Antigua, in the *Leeward Islands Medical Journal*, 1893, on the "Microscopic Appearances of the Blood in Chronic Malaria, and the Treatment of such Affections by a New Remedy," is of great practical as well as of scientific importance. The author relates a number of cases of chronic intermittent fever, in which, after the failure of quinine, an almost immediate and apparently permanent cure was effected by an infusion of parthenium hysterophorus, locally known as "whitehead." Any one with much experience of malarial fevers knows very well that quinine is by no means a specific for every case; a substitute, therefore, for this drug, one of proved efficacy in the cases in which quinine has failed, would be a most valuable addition to the *Pharmacopœia*. We trust Dr. Pierez will continue his investigations on this promising new drug, and that he may send supplies to other malarial countries and to England for independent experiment. In the absence of measurements, and of the illustrations Dr. Pierez refers to in his paper, we are hardly in a position to pronounce on the nature of the bodies he describes as abounding in the blood of his fever patients, or to say if they were the malarial organism, or, at all events in some instances, forms of degenerated blood cells. The amœboid intracorpuscular bodies certainly answer in their description to one form of the plasmodium malariæ, but there is no mention of the pigment particles, either in these or in the free extracorpuscular bodies, which are so characteristic a feature in most of the forms of the malaria parasite. It is evident that Dr. Pierez has not come across the flagellated organism, or the centrally pigmented crescents so graphically described and figured by Laveran and others; such bodies when once seen cannot be mistaken. Now that this subject has been broached we shall doubtless hear more on the matter from the West Indies. It is desirable that special study should be given to the pigmented forms of the plasmodium. It is necessary to work only with the very thinnest films of fresh blood. A speck of blood the size of a pin's head is quite enough to take up on the cover glass in preparing the slides for examination. Unless the blood runs out when applied to the slip in a single layer, and with the corpuscles lying quite flat, it should be rejected and another preparation made. It is almost useless to look for the plasmodium in slides in which the corpuscles are collected in rouleaux, and present their edges to the observer. In properly prepared slides, that is, slides in which the red corpuscles are in a single layer, and are lying flat, it is only a question of perseverance and a good microscope to find the malaria parasite in the blood of all ague patients who have not been treated recently with quinine.

SEVEN cases of cholera were announced in Constantinople on April 4th, of which five proved fatal.

THE CHOLERA CONFERENCE: ITS CONCLUSIONS.

The labours of the Conference are virtually at an end. A final meeting was held on April 4th, when the Convention was signed by all the Powers with the exception of Turkey: but the objections of the Porte are not regarded as final, and hopes are entertained that she will ultimately defer to the wishes of united Europe. England is considered to have made very material concessions, but on three points she has made special reservations. In the first place she declines to accept all the proposals made by the Conference for the protection of the Persian Gulf, on the ground that they are unnecessary, excessive, detrimental to trade, and, above all, because 98 per cent. of the whole trade of the Gulf being in the hands of England, any harm that might accrue from the omission of the measures recommended must fall on her alone. The second point which England is unable for the present to accept is that which exacts that a space of two metres shall be provided on board ship for every individual pilgrim. France and Holland, whose pilgrims are relatively few, concede two metres; but England only allows one metre, the same space as for soldiers. England's Moslem subjects are so numerous that, were two metres allotted, the cost of transport would be so increased that many thousands of pilgrims would possibly be prevented by the increased fare from performing the pilgrimage which is one of the essential rites of the Mussulman religion. The third point which England objects to is the clause enacting that no pilgrims shall be permitted to embark without proving that they possess adequate means to pay for their homeward journey, and to provide for the maintenance of their families during their absence. Many of the Moslem subjects of the British Crown are poor, and the enforcement of this condition would be virtually prohibitive of the pilgrimage, and would constitute an interference with the religious rites of the Mussulmans which Her Majesty's Government are not prepared to assent to.

The execution of the precautionary measures to prevent cholera from being imported into Europe has been entrusted by the Conference to a Commission delegated by the Sanitary Board of Constantinople, composed, in addition to the Turkish delegates, of the representatives of the Powers that have adhered, or shall adhere, to the Conventions of Venice, Dresden, and Paris. The Convention just signed has for its principal object the checking of the cholera at its source, and on its march to Europe. Such results as have been obtained would have been impossible a few years ago, when each of the various nations of Europe had its particular views concerning the epidemic. In closing the Conference M. Casimir-Périer made a speech congratulating the representatives of the Powers on the great success of their labours. He called special attention to the great benefit which must result from what had been done for the preservation of human life. Count Knefstein, the chief Austrian delegate, replied in a complimentary speech, thanking the French Government, in the name of the Conference, for its hospitality.

THE OPIUM COMMISSION.

It is announced that the British members of the Opium Commission will assemble in London on the earliest convenient day after the arrival of the *Sunbeam*, for the purpose of agreeing upon the terms of their report. The *Times* states that Lord Brassey explained to his colleagues, before leaving Bombay, the opinion which he had formed as the result of the inquiry, and, the majority of the Commissioners concurring, the consideration of the chairman's draft is not likely to occupy much time. The Maharajah of Darbhanga and Mr. Haridas Veharidas, who represent the Indian community on the Commission, are in sympathy with the majority, but there is a preponderance of feeling sufficient to ensure the adoption of Lord Brassey's report without their aid, and they will not participate in the final deliberations of the Commission, their views being formulated in a separate document dealing with the case mainly from the native point of view. It is expected that the anti-opiumist conclusions will be set forth in a minority report drawn by Mr. H. J. Wilson, though some uncertainty prevails as to whether Mr. Arthur Pease, the second anti-opiumist nominee, will be able to endorse these conclusions in their entirety. Mr. Pease is believed to have been impressed by the testimony of the military doctors, which was that while opium smoking is productive of harm, opium eating, when not carried to excess, is distinctly helpful, especially to soldiers who have to undergo great fatigue. The medical evidence went to show that opium eating produces no organic disease, and that if any attempt were made to prohibit it the use of other stimulants in the Indian army would increase, with results of the most deleterious character. It further appears that the practice of opium smoking is not by any means so common as that of opium eating, and is, moreover, strongly deprecated by the native officers.

THE INDIAN ARMY MEDICAL SERVICE.

The following official letter has been addressed by Lord Reay to Mr. Ernest Hart, on the question of charge allowances to medical officers of the larger Indian station hospitals.

India Office, Whitehall, S.W.
March 20th, 1894.

Sir,—With reference to this office letter, No. M. 2695, of June 15th, 1893, in which you were informed that the question as to whether any extra allowances should be granted to medical officers in charge of the larger Indian station hospitals would be referred to the Government of India, I am directed to inform you that their reply on this question has now been received by the Secretary of State in Council.

The Government of India do not consider that in their present financial position they would be justified in recommending the grant of such charge allowances: and in this view the Secretary of State for India in Council feels himself compelled to concur. I am, Sir, your obedient Servant,

Reay.

Ernest Hart, Esq., 429, Strand, W.C.

LITERARY NOTES.

The *Medical Magazine* for April contains an article "On the Value of Carbolic Acid in various Forms of Neuralgia, and especially in Tetanus," from the pen of Dr. Guido Baccelli, Professor of Clinical Medicine in the University of Rome, and President of the International Medical Congress.

A new edition of the Argentine *Pharmacopœia* is now in the press. It has been prepared by a special committee of experts, presided over by Professor Quiroga.

Professor Gurlt and *Docent* Dr. Posner have been chosen to collaborate with Professor Virchow in the editorship of the *Jahresbericht über die Leistungen und Fortschritte der gesammten Medicin* in the room of the late Professor A. Hirsch.

An *Atlas der topographischen Anatomie des Menschen*, by Dr. K. von Bardeleben, Professor of Anatomy, and Dr. H. Haeckel, *Privat-docent* of Surgery in the University of Jena, has just been published. The work, which is of portable size, contains 128 coloured plates representing dissections of all the important regions of the body with elucidative letterpress in which all the essential parts of human anatomy are briefly but clearly set forth. The plates, which are most artistically executed, are likely to be especially useful in refreshing the memory on the eve either of an important operation or of an examination. Dr. Karl von Bardeleben is the son of the distinguished Professor of Surgery in the University of Berlin, and Dr. Haeckel is the son of the famous biologist of Jena.

We have received the first number of *Teratologia: Quarterly Contributions to Antenatal Pathology*, a new periodical devoted to the pathology of the embryo, fœtus, and newborn infant. It is edited by Dr. J. M. Ballantyne, of Edinburgh, and published by Williams and Norgate. The number contains valuable and interesting papers on the Fœtus Amorphus and on Fœtal Pathology in the Past, by the editor, together with reviews and abstracts of current teratological literature. The periodical fills an important gap in the scientific literature of this country, and Dr. Ballantyne is to be congratulated on

his public-spirited undertaking and on the successful embodiment which he has given to his journalistic idea.

Of the making of medical journals there is no end. Here are some of the new journalistic planets which have recently swum into our ken: (1) *L'Italie Médico-Chirurgicale*, published at Naples, and edited by Dr. A. Ferranini. Its special mission is to justify the ways of Italian medicine to mankind at large; it is, therefore, issued in French. (2) The *Louisville Medical Monthly*, edited by Drs. James B. Steedman and George W. Warner. (3) The *Rassegna di Pedagogia ed Igiene pur l'Educazione dei Sordo-muti e la Profilassi del Sordomutismo*, edited by Professor Ernesto Scuri, with the assistance of Professor V. Cozzolino as regards the hygienic and otological part. (4) *Medisch Weekblad voor Noorden Zuid-Nederland*, published at Amsterdam under the direction of Drs. A. Claus, A. N. Nolst Trenité, C. N. Van Poll, A. Voûté, and others. (5) *Internationale medicinisch-photographische Monatschrift*, published by G. H. H. Mayer, of Leipzig, and edited by Dr. Ludwig Jankau, of Munich, with the collaboration of Drs. Ed. Fridenberg, of New York: Max Hery, of Vienna: A. Kollmann, of Leipzig; and L. Minor, of Moscow. It is to be published in twelve yearly parts, and is to be devoted, as its title imports, to photography as applied to medicine and the ancillary sciences.

Sir William Moore, in a recent number of the *Humanitarian*, sums up his views as to the probable consequences of the suppression of the opium trade in India as follows: "If the anti-opiumists had their way, there would be a great increase of malarial disease in India. There would be a loss to India estimated at about £13,000,000 annually. Mr. Alexander, the Secretary of the Anti-Opium Society, states that the British taxpayer would gladly make up the loss to India! The native princes would be aggrieved by the loss of much revenue. The people would be discontented by being deprived of a source of enjoyment and of relief from pain. One section would believe it was done to give impetus to the importation of British spirits into India. Another section would realise that the missionaries are the motive agency, and would regard it as a step towards interference with Eastern religions. The importance of the subject, whether regarded sanitarily, socially, politically, financially, or religiously, cannot be exaggerated. If the use of opium is materially interfered with, the results will cause such interference to be regarded in future years as the great absurdity of the Victorian era."

In a recent number of the *New York Medical Journal* Dr. W. Bodenhamer recalls some "interesting and curious incidents in the history of anal fistula." He quotes Astruc as saying that for a long time before 1687, when Louis XIV, the Grand Monarque, had to submit his august person to the surgeon's knife, the disease had "sunk into oblivion," patients who were the subjects of it concealing it from false delicacy—probably also from a not altogether unnatural dread of the procedures employed in those days for its relief. Among "celebrated persons who were the subjects of anal fistula" Dr. Bodenhamer mentions Innocent, a famous lawyer of Carthage in the fourth century, who was miraculously cured when the best surgeons of Carthage and Alexandria were preparing to operate, as told by St. Augustine (in *De Civitate Dei*, lib. xxii, cap. viii); Henry V of England (Falstaff's "Hal"), who, according to Hume, "was seized with a fistula, a malady which the surgeons at that time had not sufficient skill to cure," and died on August 31st, 1422, in the 34th year of his age; and of course Louis XIV, who was operated on by his first surgeon, Félix de Tassy, on November 18th, 1687, bearing the operation, as we are told by Madame de Sévigné, with the greatest courage. The royal patient made the disease fashionable, courtiers insisting on being operated on for the *maladie du roi* whether they had it or not. The king gave the operator a fee of 50,000 crowns, estimated by Dr. Bodenhamer as equivalent to £6,000. The physicians and assistants present were also liberally rewarded: M. Daquin receiving £4,000, M. Fagon about £1,000, M. Bessière about £1,500, four apothecaries about £500 each, and M. Raye, the operator's apprentice, about £200. Truly might an old writer in the *Medico-Chirurgical Review* exclaim: "These were royal days for surgeons."

The first number of the *Archivio d'Ostetricia e di Ginecologia*, a new periodical founded and conducted by Professor Ottavio Morisani, the reviver of symphysiotomy, has just appeared. It is to be devoted, as its name imports, to midwifery and diseases of women, and it will contain original articles and abstracts of the current literature of these subjects.

Sir Richard Quain's address at the inauguration of the Medical Faculty of the University College of South Wales and Monmouthshire, at Cardiff on February 14th, has been printed for private circulation.

La Medicina Contemporanea, a medical journal which has been appearing in Madrid for a year past under the editorship of Drs. Manglano, Pinilla, and Compaired, has ceased to exist.

The *Zeitschrift für physiologische Chemie* has, under the able guidance of Professor Hoppe-Seyler, now entered on its nineteenth volume. It still maintains its position as the leading journal in the province of physiological chemistry, and Part I of Volume XIX, just issued, contains papers of special interest. We would call particular attention to those by Hammersten on nucleo-proteids, by Schulze on cell membranes, and by Freund and Töpfer on the acidity of urine and of the gastric juice.

The last fasciculus issued by the United States National Academy of Sciences contains a most elaborate monograph on the human bones of the Hemenway collection in the United States Army Medical Museum, by Dr. Washington Matthews, Surgeon U.S. Army, with observations on the hyoid bones of this collection by Dr. J. L. Wortman. It forms a quarto volume of 140 pages, with, in addition, 58 lithographic plates, some of them being diagrams and others finished drawings.

Dr. Strahan, writing in *The Humanitarian*, shows himself by no means satisfied with the views of Dr. Alfred Russel Wallace as to the influence of female choice in marriage in eliminating the unfit. According to Dr. Wallace, "in a reformed society, the vicious man, the man of degraded taste or of feeble intellect, will have little chance of finding a wife, and his bad qualities will die out with himself;" while "as things are, women are constantly forced into marriage for a bare living or a comfortable home," the moral being that, if they were economically independent, their power of selection in marriage would quickly "cleanse society of the unfit." To this Dr. Strahan retorts, as Adam did of old, that the woman is to blame. First of all, he tells us that there are as many unfit—that is, lunatics, idiots, and persons of unsound mind—among the females as among the males; and then, taking hæmophilia as an example, he shows how certain morbid conditions, although appearing in the male, are transmitted always by the female parent. Neither of these instances, however, appears to us to have much bearing on the question of natural selection. Of much more importance is the point urged by Dr. Strahan, that as a matter of fact women who are by no means forced by economic necessity into marriage seem to exercise no better choice than others in the selection of mates. "In Lancashire, Yorkshire, and almost every other manufacturing centre, the females often earn better wages in proportion to their wants than do the males. Yet these women marry as young and as unwisely as any in the country. A stage higher in the scale—saleswomen, female clerks, milliners, dressmakers, nurses, etc.—are as independent pecuniarily as are the males in the same level of society; yet here, again, we find neither marked desire for single blessedness, nor any special display of wise discrimination in the choice of husbands." Women of wealth and culture, also, says Dr. Strahan, are daily entering into marriages with men they neither "love nor esteem;" with "men who are vicious, degraded, of feeble intellect, and unsound bodies," and it is notorious that they much more frequently contract the *mariage de convenance* than those of any other class of the community. We fear that the truth is that while the principles of natural selection hold good, and female choice in marriage remains a determining influence in evolution, the points which make a particular male "preferable" are somewhat different now from what they were in earlier phases of the world's history. And so we tend to breed a race which can spin and weave and gamble in the markets, and, for a time, by turning the handle of a machine gun, can hold its own. After that, the deluge, or, may be, the lesser evil of an incursion of hardy Norsemen.

The Fortschritte der Krankenpflege, hitherto edited by Dr. Schwalbe, will change its name to *Zeitschrift für Krankenpflege* on April 1st. It is in future to consist largely of original communications, and it will be under the direction of Professors von Esmarch, Gusserow, Jolly, Leyden, Merkel, Nothnagel, Pfeiffer (of Weimar), Rubner, Sander, and Spinola. The editor is Dr. M. Mendelsohn.

A new edition is announced and will be very shortly forthcoming of Quain's *Dictionary of Medicine*, of which the earlier issue has had a quite unprecedented success, upwards of 30,000 copies having, it is believed, been sold in this country and abroad. We notice, however, some strange peculiarities in the form adopted by the publishers, which certainly cannot meet with the approval of the distinguished author, and would be very unpopular in the medical profession. The last edition was issued, if we remember rightly, at 35s., and sold practically at 30s. through the discount booksellers. The present edition is announced as in two volumes, price 2 guineas nett, or in four divisions at £2 10s. nett, or in eight sections at 40s. in paper covers, or at £2 12s. nett in cloth covers. It is also announced that this work is not obtainable in this form through the ordinary bookseller, but only through special agents. This mode of publication, like some other measures recently adopted to sell off the later copies of the original issue, are not such as are likely to be approved by purchasers of the book, and will certainly interfere with its popularity and impede its sale. It is not easy to see any good reason why the book should not be published and sold in the same manner and on the same terms as the original edition.

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Twenty-fifth List.

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AMERICAN JOURNAL OF THE MEDICAL SCIENCES. New series, vols. 4, 5, 1842-43; vols. 14, 15, 1847-48; vols. 18-30, 1850; vol. 33, 1857; vol. 46, 1864-65 vols. 59, 60, January, 1870; vols. 89, 90, 1892-93; vols. 94, 106.
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ROYAL COLLEGE OF PHYSICIANS.

A comitia of the College was held on Thursday, April 5th; J. Russell Reynolds, M.D., F.R.S., President, in the chair.

A communication was received from Earl Cadogan, President of the Chelsea Hospital for Women, inviting the College to nominate a representative to serve on a committee to investigate the charges brought against the hospital by Dr. Louis Parkes, Medical Officer of Health for Chelsea. In the discussion on this letter the President, Drs. Cullingworth, W. S. Griffith, and John Harley, Sir G. Buchanan, and Sir R. Quain took part; and it was resolved that the request should be acceded to, and the President undertook to nominate a Fellow to represent the College.

The consideration of the report of the delegates on the following Report of the Royal Commission on the Gresham University Charter was then taken up:

"The Delegates report that they have taken into consideration the report of the Commissioners appointed to consider the draft Charter for the proposed Gresham University in London, and that they have unanimously agreed to the following resolution, which they recommend the two Royal Colleges to adopt, namely:

"'That the delegates of the two Royal Colleges do cordially approve of the general provisions in the report of the Gresham University Commission, particularly in so far as they relate to the said Colleges, regarding them as being in accordance with the principles which the Colleges have hitherto affirmed and accepted, and as constituting the most comprehensive and academic scheme hitherto proposed.'"

Dr. Allchin moved that the report should be received, adopted, and entered on the minutes. Dr. Norman Moore seconded the motion. Dr. John Harley moved to omit: "general," "particularly," and all words after accepted. This was seconded by Dr. J. E. Pollock. Dr. Wilks spoke in support of the motion. Dr. Isambard Owen pointed out the objection that existed to the proposed constitution of the Academic Council and to the powers there were to be allotted to it, and believed that when the Statutory Commission had been appointed it would be too late even to amend the detail. Dr. Norman Moore replied to the objections raised by Dr. Owen.

Dr. John Harley's amendment was then put and lost.

Dr. Owen moved a resolution approving the report in general terms as affording a basis for a new university. This was seconded by Dr. Curnow, and on being put was lost.

Dr. Allchin's motion was then put and carried.

Dr. Allchin then moved that the resolution be communicated to the Royal College of Surgeons, the Senate of the University of London, and the Home Secretary.

Dr. Victor Ritter von Hacker, head of the Second Surgical Clinic at Vienna, has been unanimously recommended by the Professorial College to succeed the late Professor Billroth in the Chair of Surgery in the University of Vienna.

The Dublin Water Supply.—The Corporation of Dublin has resolved, on the recommendation of the city engineer, not to proceed with the scheme for utilising Lough Dan in co. Wicklow for an additional water supply. They had, in the panic of last year, applied for powers to raise £120,000 for this purpose, but fuller inquiry and the protest of the public have led them to believe that the undertaking would be unwise. There does not appear to be any reason now for incurring the enormous expense contemplated. The canal supply on the north and south side of the city has been secured for any emergency that may occur. The Dublin Sanitary Association point out that in Dublin the supply per head is excessive as compared, for instance, with Manchester, being 34 as compared with 21 gallons, and they urge that no proper means are taken to detect the districts in which waste may be going on. There are now quite efficient methods for doing this, as has often been pointed out, and these should immediately be adopted.

BRITISH MEDICAL ASSOCIATION.

SIXTY-SECOND ANNUAL MEETING.

The sixty-second Annual Meeting of the British Medical Association will be held at Bristol on Tuesday, Wednesday, Thursday, and Friday, July 31st, August 1st, 2nd, and 3rd, 1894.

President: George Hare Philipson, M.D.Cantab., D.C.L., F.R.C.P., Professor of Medicine in the University of Durham.

President-Elect: E. Long Fox, M.D.Oxon., Consulting Physician to the Bristol Royal Infirmary.

President of the Council: J. Ward Cousins, M.D.Lond., F.R.C.S., Senior Surgeon to the Royal Portsmouth Hospital.

Treasurer: Henry Trentham Butlin, F.R.C.S., D.C.L., Surgeon to St. Bartholomew's Hospital, E.C.

An Address in Medicine will be delivered by Thomas Grainger Stewart, M.D.Edin., Professor of the Practice of Physic and Clinical Medicine in the University of Edinburgh.

An Address in Surgery will be delivered by James Greig Smith, M.B., F.R.S.E., Surgeon to the Bristol Royal Infirmary.

An Address in Public Medicine will be delivered by Sir Charles Cameron, Medical Officer of Health, Dublin.

A. Medicine.—*President:* Frederick T. Roberts, M.D. *Vice-Presidents:* E. Markham Skerritt, M.D.; R. Shingleton Smith, M.D. *Honorary Secretaries:* W. T. Brooks, M.D., 32, Holywell, Oxford; J. Michell Clarke, M.D., 28, Pembroke Road, Clifton, Bristol.

B. Surgery.—*President:* W. Mitchell Banks, M.D. *Vice-Presidents:* Nelson C. Dobson, F.R.C.S.; Professor Victor Horsley, F.R.S. *Honorary Secretaries:* G. A. Wright, M.B., 8a, St. John Street, Manchester; James Swain, M.D., 14, Buckingham Place, Clifton, Bristol.

C. Obstetric Medicine and Gynæcology.—*President:* Professor J. G. Swayne. *Vice-Presidents:* E. Malins, M.D.; A. E. Aust-Lawrence, M.D. *Honorary Secretaries:* R. Boxall, M.D., 29, Weymouth Street, London, W.; Walter C. Swayne, M.D., 3, Leicester Villas, St. Paul's Road, Clifton, Bristol.

D. Public Medicine.—*President:* Professor W. H. Corfield, M.D. *Vice-Presidents:* J. Lane Notter, M.D.; S. Davies, M.D. *Honorary Secretaries:* B. H. Mumby, M.D., Town Hall, Portsmouth; J. C. Heaven, M.R.C.S., 2, Queen Square, Bristol.

E. Psychology.—*President:* G. F. Blandford, M.D. *Vice-Presidents:* S. R. Philipps, M.D.; Fletcher Beach, M.D. *Honorary Secretaries:* C. S. W. Cobbold, M.D., Bailbrook House Asylum, Bath; R. S. Stewart, M.D., Glamorgan County Asylum, Bridgend.

F. Pathology.—*President:* G. Sims Woodhead, M.D. *Vice-Presidents:* Joseph Frank Payne, M.D.; M. A. Rufer, M.D. *Honorary Secretaries:* Norman Dalton, M.D., 4, Mansfield Street, London, W.; C. A. Morton, F.R.C.S., 24, St. Paul's Road, Clifton, Bristol.

G. Ophthalmology.—*President:* F. R. Cross, M.B. *Vice-Presidents:* H. E. Juler, F.R.C.S.; Simeon Snell, F.R.C.S. *Honorary Secretaries:* C. H. Walker, M.B., 3, Leicester Villas, St. Paul's Road, Clifton, Bristol; J. Tatham Thompson, M.B., 24, Windsor Place, Cardiff.

H. Laryngology and Otology.—*President:* P. McBride, M.D. *Vice-Presidents:* W. H. Harsant, F.R.C.S.; Barclay J. Baron, M.B. *Honorary Secretaries:* P. Watson Williams, M.D., 2, Lansdown Place, Victoria Square, Clifton, Bristol; W. Milligan, M.D., 28, St. John Street, Deansgate, Manchester.

I. Dermatology.—*President:* A. J. Harrison, M.B. *Vice-Presidents:* Stephen Mackenzie, M.D.; H. Waldo, M.D. *Honorary Secretaries:* J. Hancocke Wathen, M.R.C.S., 16, York Place, Clifton, Bristol; H. Leslie Roberts, M.B., 46, Rodney Street, Liverpool.

J. Diseases of Children.—*President:* W. Howship Dickinson, M.D. *Vice-Presidents:* John Edward Shaw, M.B.;

FREDERIC S. EVE, F.R.C.S. *Honorary Secretaries:* R. W. MURRAY, F.R.C.S., 15, Rodney Street, Liverpool; BERTRAM M. H. ROGERS, M.D., 11, York Place, Clifton, Bristol.

PROGRAMME OF PROCEEDINGS.

TUESDAY, JULY 31ST.

9.30 A.M.—Meeting of 1893-94 Council.
11 A.M.—First General Meeting. Report of Council. Reports of Committees and other business.
3 P.M.—Sermon.
8.30 P.M.—Adjourned General Meeting from 11 A.M. President's Address.

WEDNESDAY, AUGUST 1ST.

9.30 A.M.—Meeting of 1894-95 Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting. Address in Medicine.

THURSDAY, AUGUST 2ND.

9.30 A.M.—Meeting of Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting. Address in Surgery.
7 P.M.—Public Dinner of the Association.

FRIDAY, AUGUST 3RD.

9.30 to 11 A.M.—Sectional Meetings.
11 A.M.—Concluding General Meeting. Address in Public Medicine.

SATURDAY, AUGUST 4TH.

Excursions.

THE ANNUAL MUSEUM.

THE Annual Museum in connection with the sixty-second meeting of the British Medical Association will be arranged in the following sections:

SECTION A.—Food and Drugs, including Prepared Foods, Chemical and Pharmaceutical Preparations, etc. (Honorary Secretary, Dr. Parker, 14, Pembroke Road, Clifton.)

SECTION B.—Instruments, comprising Medical and Surgical Instruments and Appliances, Electrical Instruments, Microscopes, etc. (Honorary Secretary, Mr. W. M. Barclay, Queen's Road, Clifton.)

SECTION C.—Books, including Diagrams, Charts, etc. (Honorary Secretary, Mr. H. F. Mole, 5, Meridian Place, Clifton.)

SECTION D.—Sanitary and Ambulance Appliances. (Honorary Secretary, Dr. Davies, 60, Oakfield Road, Clifton.)

An exceptionally fine and well-lighted hall will this year be utilised for the purposes of the Museum. This room is 150 feet in length and 90 feet in width, and immediately adjoins the University College, where the sectional meetings will be held.

Exhibitors (other than members of the medical profession) will be charged for table, floor, and wall space as follows: In Sections A, B, and C, table space from 3s. 6d. to 2s. 6d. per square foot, depending on the position of the table; tables 3 feet and 3 feet 6 inches wide being provided. In Section D, 6d. per square foot for floor space (all fittings to be provided by the exhibitor). Wall space (where available) will be charged for advertisements at 6d. per square foot.

Advertisements in Museum Catalogue.—A catalogue will be printed, and from 1,200 to 1,500 distributed gratis to members of the Association. Prepaid advertisements, to be sent before July 1st, will be inserted. Further particulars will be sent on application.

The plans of the hall and forms for application for space will be ready early in May.

Regulations.

1. All communications on general matters connected with the Museum, and all applications for space, should be addressed to Mr. John Dacre, 14, Eaton Crescent, Clifton, Bristol, before June 20th. N.B.—No space will be allotted before that date.

2. A brief description of each exhibit for insertion in the Museum Catalogue must be in the hands of the respective Secretaries before July 1st.

3. Space will, as far as possible, be allotted in the order of application and in proportion to the amount applied for, the Committee reserving power to give preference to *bonâ fide* inventions and improvements not previously exhibited, and also to refuse any exhibit they may consider unsuitable.

4. In the event of more space being applied for than is actually available, the allotment will be made at the discretion of the Committee.

5. The Committee reserve to themselves the power to utilise any of the floor space set apart for Section D (if it is not all required for sanitary exhibits) for the erection of additional tables or for any other purpose they may think fit.

6. All exhibits should be addressed to "The Secretaries of the Museum, British Medical Association, Drill Hall, Queen's Road, Clifton, Bristol," with the name of the Section for which they are intended. Packages should not be addressed to a firm's representative at the Museum.

7. All exhibits must be delivered between July 23rd and July 28th, and each package must bear a card showing the name and address of the exhibitor.

8. All exhibits must be placed in the allotted space by 2 P.M. on July 30th.

9. The Committee will exercise every care regarding the exhibits submitted to them, but all risks and expenses must be borne by the exhibitor.

10. No signs or placards will be allowed in the hall which may interfere with neighbouring exhibits. No exhibit or placard on the central tables must reach higher than 2 feet 6 inches from the table. The arrangement of signs, placards, exhibits, etc., will in every case be subject to the approval of the Committee.

11. Intimation of the space allotted to each exhibitor will be sent as promptly as possible after June 20th, marked upon a plan. On receipt of cheque for the cost of such space, a card for the admission of the exhibit will be sent.

12. All cheques to be made payable to Mr. John Dacre, 14, Eaton Crescent, Clifton.

13. No exhibits will be received except on the understanding that the above regulations are strictly complied with.

Mr. L. M. GRIFFITHS, Chairman, 9, Gordon Road, Clifton,
Dr. J. E. SHAW, Vice-Chairman, Caledonia Place, Clifton,
Mr. JOHN DACRE, Secretary, 14, Eaton Crescent, Clifton,
} Annual Museum Subcommittee.

PATHOLOGICAL MUSEUM.

SPECIMENS of interest for exhibition in the Museum should be forwarded, addressed to "The Secretary of the Pathological Museum, British Medical Association, University College, Bristol," during the last week in June, and a brief description of each exhibit, for insertion in the Museum catalogue, must be in the hands of the Secretary by the end of June. Intending exhibitors are requested to communicate with the Secretary of the Pathological Museum, Charles A. Morton, F.R.C.S., 24, St. Paul's Road, Clifton, Bristol, before sending any specimen. It is only proposed to exhibit rare specimens, or those not usually seen in ordinary pathological work. All specimens must be mounted ready for exhibition.

DR. RITCHIE, of Pollokshaws, has been presented by his friends with an illuminated address written on vellum, enclosed in a silver casket, and a deposit receipt of £100, as a mark of their esteem.

LORD ARMSTRONG, if he obtains the consent of the High Court to the purchase of Bamborough Castle, Northumberland, intends to endow it with £20,000 and utilise the ancient and historic fortress as a convalescent home.

DONATIONS.—Baron de Hirsch has sent a donation of £500 to St. George's Hospital. He has also forwarded a donation of £200 to the Royal Hospital for Diseases of the Chest, City Road, E.C.—The late Mr. Samuel Weston, of Manchester and Pendleton, who died in February last, has by his will bequeathed £50,000 to the Manchester Royal Infirmary, £10,000 to the Salford Dispensary, £10,000 to St. Mary's Hospital, Manchester; £10,000 to the Convalescent Institution, Pendlebury; £5,000 to the Hospital for Incurables, Ardwick; £2,500 to the Manchester Eye Hospital; and £2,500 to the Hospital for Sick Children, Manchester.—The East London Hospital for Children, Shadwell, has received a donation of £100 from Mr. John Stefanovich Schilizzi and Mr. Paul Stefanovich Schilizzi in memory of their brother, the late Demetrius Schilizzi.—The sum of £40,000 has been bequeathed to local authorities by the late Miss Tuson, who died last week at Preston, Lancashire. Of this sum £6,000 is to be applied to the Preston and County of Lancaster Infirmary.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 11th day of April next, at 2 o'clock in the afternoon.

The following Committees will also meet:

Tuesday, April 10th, 1894.—2.30 P.M. Subcommittee on Payment of Parliamentary Bills Committee Expenses.—3.0 P.M. Premises and Library Committee.—4 P.M. Medical Charities Committee.—5.0 P.M. Parliamentary Bills Committee. *Wednesday, April 11th, 1894.*—11 A.M. Journal and Finance Committee.

FRANCIS FOWKE, *General Secretary.*

April, 1894.

NOTICE OF QUARTERLY MEETINGS FOR 1894. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on April 11th, July 11th, and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, June 21st and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. FRANCIS FOWKE, *General Secretary.*

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the Office.

BRANCH MEETINGS TO BE HELD.

NORTH OF IRELAND BRANCH.—The spring meeting will be held in the Museum, College Square North, Belfast, on Thursday, April 26th, at 4 P.M. Gentlemen who wish to read papers, show patients, or bring any other business before the meeting will kindly communicate as early as convenient with JOHN CAMPBELL, M.D., F.R.C.S.Eng., Honorary Secretary, 21, Great Victoria Street, Belfast.

SOUTH-EASTERN BRANCH.—A conjoint meeting of East and West Sussex Districts will be held at Worthing Infirmary on Thursday, April 12th, at 3.30 P.M. Dr. Ewart, Mayor of Brighton, will preside. Dr. Kelly (M.O.H.) will read a paper on "The Epidemic of Typhoid Fever at Worthing in 1893." Dinner at the Royal Hotel at 5.30; Mr. Augustus H. Collett in the chair; charge 6s., exclusive of wine. It is requested that members who can do so will show cases of interest.—J. W. BATTERHAM, FRANK HINDS, Honorary Secretaries.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The next ordinary meeting will be held at Neath on April 26th. Members wishing to read papers, etc., should send titles to Dr. Sheen, Cardiff, before April 10th.—A. SHEEN, D. A. DAVIES, Honorary Secretaries.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

THE second meeting of the 37th session was held at Maidstone on March 6th, Dr. T. JOYCE, of Cranbrook, in the chair.

Confirmation of Minutes.—The minutes of the last meeting were read and confirmed.

Next Meeting.—It was proposed that the next meeting be held at Gravesend in May, and that Dr. Firth be asked to preside.

New Member.—Dr. Ryan, of Maidstone, was admitted a member of the Branch.

Communications.—Mr. PRIDEAUX SELBY read a paper on the diagnosis and treatment of Perforating Ulcer of the Stomach. He dwelt on the not infrequent occurrence of perforating ulcer in chlorotic girls without any definite symptoms, and quoted two cases occurring in his own practice.—Dr. GIRARD read a paper on the Sequelæ of Diphtheria. Paralytic sequelæ are rarely seen before the third week from the commencement of the attack, absence of the knee-jerk taking place between the fourth and tenth weeks. Paralysis of the soft palate, occasionally unilateral, was generally accompanied by anæsthesia of the palate, pharynx, and larynx. The eye failed owing to muscular paralysis. Paralysis of the diaphragm was not uncommon, and was of serious import, especially if there were any tendency to pulmonary catarrh. Patients should not be allowed to leave their beds too soon, a variable pulse being always a dangerous symptom, and the recumbent position absolutely necessary as long as any cardiac instability remained. Sickness and diarrhœa were also unfavourable symptoms.—Dr. JOYCE read a paper on the differentiation of Tuberculous Disease of the Kidney from Renal Calculus. He cited the case of a patient who had suffered for a long time from attacks of hæmaturia, suggesting the presence of tuberculous kidney or renal calculus. The question was finally solved by first inoculating guinea-pigs with pus taken from the urine, with negative results, and then exploring the left kidney, from the pelvis of which Mr. Victor Horsley removed a large calculus with some difficulty. The patient made a complete recovery.—All the papers were of great interest, and several members took part in the discussion which followed.

Dinner.—Eight members afterwards dined together at the Mitre Hotel.

BRITISH GUIANA BRANCH.

THE annual meeting of this Branch was held at Georgetown. In the unavoidable absence of the President (the Hon. R. Grieve, M.D.), the SENIOR VICE-PRESIDENT (Dr. J. S. Wallbridge) took the chair. There were present Drs. Neal, A. T. Ozzard, Conyers, Daniels, G. Bezbaroa, F. Law, Egan, J. Gomes, E. G. Leary, Texeira, A. D. Williams, and E. D. Rowland (Secretary). Dr. J. H. Ross was present as a visitor.

Confirmation of Minutes.—The minutes of the last meeting were read and confirmed.

Illness of the President.—The VICE-PRESIDENT then moved a resolution expressing the Branch's sympathy with the Surgeon-General's illness, and expressed the hope that on his recovery he would deliver his usual address. This was seconded by Dr. LAW, and agreed to unanimously.

New Member.—The VICE-PRESIDENT reported the election to the Branch of Dr. A. A. McKinnon, of New Amsterdam.

Communication.—The SECRETARY (Dr. Rowland) read a paper entitled Rationalism in the Practice of Physic. A short debate followed, in which Drs. OZZARD, CONYERS, NEAL, LAW, and BEZBAROA took part. The PRESIDENT summed up, and Dr. ROWLAND replied.—Dr. DANIELS showed some specimens: (1) The Amœba Coli from a dysenteric stool; (2) the Head of a Tinea Saginata from a Hindu who had been several years in the colony; (3) Thrombosis of Abdominal Aorta and Inferior Vena Cara; (4) Four Skulls showing various conditions probably arising from syphilis.

SPECIAL CORRESPONDENCE.

PARIS.

Health of Paris.—Hygiene in the French Army.—The Association des Internes.—The Académie de Médecine and Mineral Waters.—French Medical Association.—Paris Cremation Society.—General News.

INFLUENZA is rife in Paris, but it is of a milder character than in former years. There were seventy deaths from typhoid in the week ending Wednesday, March 28th, at midnight. This does not show a diminution in mortality from the epidemic, but the number of hospital patients has fallen from 281 to 131. The districts that have most are those of

the Champ de Mars, the low part of the Faubourg St. Germain, and of the Faubourg St. Marcel. It is universally admitted that these were due to the distribution of polluted water of the municipal authorities.

The War Minister has published a circular concerning army hygiene. He insists on a constant examination of drinking water, properly-organised waterclosets and shower baths. He condemns the custom of increasing the wine ration, and prefers that the meat ration be increased and the wine reserved for special occasions when considerable fatigue has been undergone. The Minister wishes to see roasting stoves organised in the army; also messes and clubs for the non-commissioned officers. He recommends that the canteens be supervised, both as regards the comfort and the quality of food they provide. General Mercier wishes to see reading rooms and *salles de jeu* organised in barracks.

The "Association des Internes" has held its general annual meeting. The Dean of the Faculty was in the chair. It was demanded that in consequence of the present military law no change should be made in the "*interne*" competitive examination regulation, which will be put in force in 1896, according to which medical students cannot compete before their sixth year of medical study. The military law obliges those who are not "*internes*" or doctors of medicine at 26 years of age to complete their two years of military service from which they have been exempted. The female students, foreigners, and students exempted on account of weak health could compete more often than the able-bodied French students if an "age limit" had not been fixed. The Association moved that the public authorities should be petitioned to reconsider the law; also that the military age limit be fixed from 26 to 28, that foreign students be not admitted to compete at the *internat* examination unless on the same scholastic footing as the other candidates.

The Academy of Medicine Mineral Water Committee considers the process of gasification and bottling to be the causes of transmission of pathogenic bacilli, and urges that mineral waters be not offered for sale unless authorised by the Academy, which is to be provided with a laboratory where water bacteriology is to be studied. The names of mineral waters containing pathogenic bacilli will be made public by the Academy.

At the annual meeting of the Association Générale des Médecins de France M. Lereboullet stated that this year 88 pensions have been granted, 78 of £24 a year and 10 of £32; £4,000 have been devoted to relieve members in difficulties or help their widows and orphans. The capital of the Society increases, and reaches nearly one million francs (£40 000).

At the general meeting of the Cremation Society M. Bourneville stated that from January 1st, 1894, to March 29th there have been 1,005 cremations; from 1893 to 1894 there were 3,011. The meeting passed a resolution condemning the maintenance of fourteen cemeteries in the centre of Paris.

The Sisters of the Order of Saint Vincent de Paul have lost the action they brought against the Public Assistance. Before the Revolution the three houses which were the subject of the action were bequeathed to the poor, with a clause that the Sisters were to live in them. The court has decided that the poor are entitled to the benefit of the legacy, and as the law has transferred to the Public Assistance the responsibility of providing for the poor, the claims of the religious community cannot be entertained.

Mme. Bouisson's legacy of the Chateau de Grammont and its magnificent grounds to the Montpellier Medical Faculty will be utilised as a hospital and a charitable institution.

PHILADELPHIA.

The Suppression of Bovine Tuberculosis.—The Prevention of Tuberculosis in Man: Recommendations of the Pathological Society of Philadelphia.—Nostrum Advertisements.—The Dangers of Football.—Mrs. Ernest Hart and the Irish Peasantry.—Post-graduate Teaching.—The Etiology of Carcinoma.—Hydrophobia.

THE State Board of Health of Pennsylvania reports that tuberculosis amongst cattle no longer exists within the borders of the State, all infected animals having been destroyed.

The subject of municipal action to prevent the spread of tuberculosis amongst men has been again brought before the Board of Health of the City of Philadelphia, this time by a committee from the Pathological Society. The recommendation of this Society steers a middle course between that of the County Medical Society and that of the College of Physicians. It is in effect that the Board of Health should "by frequent publication inform all persons that, upon request of the attending physician and with the consent of the family, the Board of Health will undertake the disinfection of premises vacated by tuberculous patients." There can be no valid objection to this, provided the "publications" of the Health Office are drawn up by someone with a due sense of proportion and some respect for the eternal verities. "The Pennsylvania Society for the Prevention of Tuberculosis" issues circulars containing, together with true statements and sensible advice, such startling propositions as that it is well for consumptives to "avoid shaking hands with anyone!"

The question of the publication of nostrum advertisements in the *Journal of the American Medical Association* is once more being agitated. The code of ethics of the American Medical Association forbids the use or recommendation of nostrums "or any action that will promote their use." When the subject was brought to the attention of the Association at its annual meeting held at Detroit, Michigan, in 1892, by a committee from the Medical Society of the State of Pennsylvania, and a communication from the Philadelphia County Medical Society, the Association unanimously passed a resolution directing the attention of the trustees of the Association's *Journal* to the fact that the code prohibited such advertisements, and instructing them to obey the code. Nevertheless the trustees have continued to publish advertisements of some of the most offensive secret preparations. An energetic letter of protest addressed to the *Journal* has brought forth no official reply, but an anonymous correspondent writes that the protest was "undignified and unprofessional." Evidently the old game of "abusing the plaintiff's attorney" is to be again tried. Such abuse, however, does no harm to the object of it. Probably the best abused man in the United States to-day by nostrum makers, homœopaths, quacks, "sneak advertisers," and such gentry generally is Dr. Gould of our *Medical News*, the result of all which has been to concentrate upon Dr. Gould the loving esteem of the best men in the medical profession, to increase the circulation of the *Medical News*, and to give it a commanding influence in shaping public opinion. Dr. Reeves, of Chattanooga, still keeps up his brave fight against the quack "Amick cure." It is disheartening, however, to find a long article in defence of Amick in the *Cincinnatti Medical Journal*, hitherto considered reputable. The power of the advertiser and the advertiser's pocketbook are great!

Football was the subject of a recent discussion before the Contemporary Club, in which several physicians participated. Among those who deprecate or oppose the "American game" as now played by the "teams" of leading colleges were Dr. Burt Wilder, of Cornell, who was present by special invitation; Dr. G. M. Gould, editor of the *Medical News*; and Dr. W. W. Keen, Professor of Surgery in Jefferson Medical College. The only medical champion of the game was Dr. Horatio Wood, of the University of Pennsylvania. The statistics brought forward by Drs. Wilder and Keen certainly show, at the least, a pressing need for careful revision of the rules of the game. The great loss of life, and the many serious injuries resulting from the so-called "sport," cannot be lightly be spoken of as "unavoidable risks," or as "the necessary element of danger that develops manliness." The subject is a burning one among educationists in this country, although upon your side of the water it probably attracts less attention.

Mrs. Ernest Hart has been spending some weeks in this city as the guest of Dr. and Mrs. Gould, and has been the recipient of much attention while labouring earnestly in behalf of her "Donegal Industries." The "Irish Village Exhibit" from the World's Fair has been substantially reproduced at Mr. Wanamaker's store, where it attracts many visitors whose interest, it is to be hoped, will be of material

assistance to the good work. At a reception given to Mrs. Hart at the Art Club, by a number of ladies and gentlemen prominent in medical and social circles, she explained the situation in the congested districts of Ireland, and the measures instituted for the relief of the people.

The Philadelphia Polytechnic and College for Graduates in Medicine has accepted a contract for its new hospital extension and laboratory buildings. The total cost of the improvements will be about 50,000 dollars, and when they are completed this institution will be admirably equipped for the extension of its work in post-graduate teaching.

The etiology of carcinoma was the subject of a recent discussion at the Pathological Society. Drs. Laplace and Guiteras upheld the parasitic view of its causation, while Dr. MacFarland admirably presented the contrary opinion. He presented slides and drawings to illustrate his contention that a chain of intermediate forms could be demonstrated between ordinary cancer cells and those exhibiting the appearances described as being due to coccidia, and that the latter were therefore merely various forms of degeneration independent of parasitic action. Dr. Coplin presented a theory of the relation between malignant growths and malnutrition, in which he compared the neoplasms to lower forms of life nourished by less highly elaborated pabulum, and apparently argued that owing to the presence of these growths the full processes of metabolism were not completed and thus the higher tissues failed to receive assimilable food.

Dr. Dulles read a paper on hydrophobia before the College of Physicians, in which he exposed the unreliable character of most of the reported cases in this country and contended that the complex symptoms to which the name "hydrophobia" was given did not represent a specific disease. He was especially severe upon the methods of Pasteur and the Pasteur Institutes. Dr. Abbott, however, vindicated the laboratory methods, and the general consensus of opinion seemed to be that, while much exaggeration and misconception exists, there is a specific disease transmissible to man from rabid animals.

CORRESPONDENCE.

THE GENERAL INSPECTORS OF THE LOCAL GOVERNMENT BOARD.

Sir,—Many of us in the public health service who have read in this week's British Medical Journal of the awful revelations of cruelties and bad sanitary arrangements at a workhouse in Devonshire, would, I have no doubt, be glad if you would enlighten us as to the functions, or supposed functions, of the "general inspectors" of Her Majesty's Local Government Board. By referring to *Whitaker's Almanack* it will be seen that there are some sixteen of these gentlemen who are paid at higher salaries than those which at the present day are deemed sufficient for highly-trained experts in other departments of the Board's service, whose work has been of undoubted service to the public. I have been in the public health service for more than twenty years, and have also been associated with an important Poor-law authority, and yet I must confess my ignorance of the use of the non-expert inspectors of Her Majesty's Local Government.

Perhaps, Sir, you may be able to enlighten the many readers of the Journal who, no doubt like myself, are specially interested in the question at the present time.—I am, etc.,

F.R.C.P.

OUT-PATIENT HOSPITAL ABUSE.

Sir,—The case of the "Teutonic Baron," reported in last week's British Medical Journal, by Dr. W. R. Gowers, is sufficiently striking. It is probable that many similar cases are known to medical men. If they are they should certainly all be published. Here is one which is known to me at first hand, in every detail: D. O., a prosperous business man who kept a carriage for his private use, repeatedly sent his little son to the out-patient department of a London children's hospital. The child suffered from diseased bone of strumous origin. To my certain knowledge D. O.'s income was not less, probably much more, than £1,500 a year, of which he spent about a half. Some time ago D. O. himself died. His widow, with six or seven children, and no money at all except what he left to her, now keeps a carriage with two men servants and three or four women servants. I saw the lady, in her carriage, with her liveried coachman, less than three weeks ago. No inquiry was ever made at the hospital about D. O.'s circumstances: nor was the case "recommended" by a medical practitioner. The patience and "whispering humbleness" of family practitioners in the matter of hospital abuse is beyond all parallel, but it certainly does not appear to be beyond all praise.—I am, etc.,

King Street, E.C., March 30th. Geo. W. Potter.

Sir,—I fully endorse the remarks made by Dr. Gowers in a letter published in last week's British Medical Journal, under the above heading. Undoubtedly numbers of cases are sent to the out-patient department of both general and special hospitals by general practitioners, some of whom could pay, occasionally even consulting fees. If these general practitioners find themselves unable to resist the demand of well-to-do patients to be sent with their card to a hospital for consultant's opinion, cannot they understand how hard it must be for a hospital physician or surgeon to discriminate between the honest poor and the knave? So long as we present a broken front to the public, so long will that public turn our disunion to their own advantage, by playing one medical practitioner against another.—I am, etc.,

Weymouth Street, March 31st. Griffith Charles Wilkin.

TYPHOID FEVER IN THE TEES VALLEY.

Sir,—Among the various accounts of sudden explosions of enteric fever which I have had to examine for the concluding volume of my *History of Epidemics in Britain* (now being printed) is the Government report on the outbreaks at Middlesbrough, Stockton, and Darlington in the autumn of 1890 and winter of 1890-91. Read beside many other epidemiological records, English and foreign, it is clear that Dr. Barry's report is what the Royal Commission on Water Supply called it—"an argument." It is an extremely narrow and biassed piece of pleading for a view of the circumstances and conditions of enteric fever, which appears to have taken the fancy of Sir George Buchanan some twenty years ago, and to have become a tradition of the Government office over which he presided until lately. For want of a better name this theory of enteric fever may be called "a theory of slops." It ignores altogether the well-established generalities concerning the enteric poison as a soil poison, under the influence of the ground water much more than of the surface water, which pass under the name of Professor von Pettenkofer. It is not to be expected, of course, that medical men who occupy posts under our Government should not have their own notions in pathology and epidemiology, or should not seek to give effect to them on every occasion. But a report which is studiously silent on one whole aspect of the case has no claim to be judicial, and, in my opinion, should have been subjected to a very different kind of handling from that which it has received in your columns.

I am led to say this on account of a paragraph in the British Medical Journal of March 24th commenting on a letter which you have received from Dr. John Mitchell, of Barnard Castle. May I be allowed to remark that it is unusual to comment editorially upon a communication without at the same time printing the text of it? So far as Dr. Mitchell's criticisms have been indicated by you, they are precisely those that occurred to myself when I studied Dr. Barry's report side by side with the figures of enteric fever at Middlesbrough, Stockton, and Darlington in the Registrar-General's tables for the last two decennial periods, and along with the history of the disease in other mining districts of Durham and of the Rhondda Valley. There is a "boom" at present in waterborne contagia. The Editor of the Journal has given the weight of his personal authority to it, as he is well entitled to do, but he can hardly expect to make the profession speak with one voice in this matter, and a voice which

happens to be an echo of biassed official opinion or tradition.—I am, etc.,

March 10th. C. Creighton, M.D.

*** Dr. Creighton pits his *ipse dixit* against the skilled investigations of the medical department of the Local Government Board; but as he attempts no other criticism of the proofs upon which rests the recognition of waterborne typhoid in general and that in the Tees Valley in particular, and as full details respecting the latter were given in the Journal of January 20th, it is only necessary to say that neither Dr. Barry's report nor the comments upon it which have appeared in these columns were written without some knowledge of von Pettenkofer's work and of the Registrar-General's records.

"SCARLET FEVER AT LEWISHAM."

Sir,—As the paragraph in the British Medical Journal of March 31st under the above heading is likely to lead to some misapprehension, I think it desirable to send you at once the following particulars as regards cases in this district:

In February there were 7 cases of scarlet fever in Blackheath and Lewisham in this district notified to me, and there has been the same number notified in the present month. No case of scarlet fever has been notified during that period from any farm, dairy, or milkshop in this district. It is therefore clear that the reported outbreak is not to be ascribed to this district; and I should be glad if you will, in justice to Lewisham, insert this explanation in your next issue.—I am, etc.,

S. Blake Jolly, M.B Cantab., M.R.C.S.Eng.,

April 2nd. Medical Officer of Health for the Lewisham District.

*** On inquiry we find that the following notifications of cases of scarlet fever have been made to the Metropolitan Asylums Board during the seven weeks ended March 31st, from the parishes of Greenwich, Lewisham, Lee, and Plumstead:

Parish.	Week ended February 17th.	Week ended February 24th.	Week ended March 3rd.	Week ended March 10th.	Week ended March 17th.	Week ended March 24th.	Week ended March 31st.	Total.
Greenwich	29	23	23	14	16	33	35	173
Lewisham	9	8	8	6	3	4	7	45
Lee	5	7	2	4	—	19	29	66
Plumstead	8	7	5	7	4	4	5	40
	51	45	38	31	23	60	76	324

It will be noticed that the notifications in question came chiefly from Lee.

"UNCERTIFIABLE PATIENTS."

Sir,—I have read your remarks on the recent action, Regina *v.* Sherrard, with much interest. I quite agree with what you suggest as to the advisability of those who receive persons suffering from nervous complaints into their private houses being guarded by a certificate from the specialist in attendance and also the medical practitioner, as to the case being a suitable one to be treated outside an asylum. It would prevent many complications. It is a monstrous thing to incarcerate all persons when first mentally afflicted in a lunatic asylum. I do not of course allude to maniacal cases. I would further suggest that when the amending of our present wretched and ineffective Lunacy Act is under consideration, it might be desirable to insert a clause enabling medical men to receive at least four patients in their houses not under certificate, who might be so treated not as compulsory but as voluntary patients, and that previous to their reception, two certificates, as suggested by you, should be obtained as to their unfitness for asylum treatment. The present section allowing medical men to receive more than one patient into their house is monstrously absurd. It is as follows: If one person under certificate is under the care of a medical man in a private house, then a second can be admitted, if it can be shown that it is for the benefit of the first patient that another should be received. In other words, the patient already certified has to give his consent to this. Such a section is so absurd that the sooner we get some more tangible way of dealing with curable cases of mental unsoundness in the way I have suggested the better it will be.—I am, etc.,

Devonshire Street, W., April 2nd. Forbes Winslow.

Sir,—The importance of the late trial, The Commissioners in Lunacy *v.* Sherrard, cannot, I think, be overrated; and it opens up questions of the gravest importance to the public at large, as well as to the profession.

The question raised was practically, Should cases of "climacteric mania" be certified as persons of "unsound mind," and only be admissible to an asylum or a house licensed for the reception of lunatics?

Had the jury decided that such was the law, it is difficult to realise what would have been the consequences, as there are undoubtedly a large number of women suffering from this form of disease who are now treated, without in any way being certified as being of unsound mind, a very large percentage of whom recover completely.

It is equally true that many women thus suffering are certified as insane, and are placed in asylums. Now, had the Commissioners obtained a verdict in the above-named trial, then women must in the future, suffering from climacteric mania, be certified as being of unsound mind, and be branded as insane. Not only would this have affected the unfortunate women themselves, but also their families, as there would always be the stigma attaching to them that there was insanity in their family, when in reality the disease would have been purely functional, and in the majority of cases curable. There is no doubt that these cases require the utmost care and attention, and during certain periods have to be attended to very closely, and here it is that the hardships of the law, as it at present stands, are most felt; for if women suffering in this way are not sufficiently well off to afford to have proper attendance at home, or to be placed in a home under the care of some medical man, then the only place available is the asylum, to gain admittance into which she must be certified as being of unsound mind.

Thus there is established one law for the rich and another for the poor, which is manifestly wrong. To remedy this state of affairs it appears to me that there should be homes or hospitals established into which patients suffering from temporary mania might be placed for treatment without being certified, or there might be wings attached to existing asylums with the same object.

If, after a given time, these patients do not recover, and undoubted signs of insanity develop themselves, then, and not until then, let a certificate of unsoundness of mind be granted, and the patient removed to an asylum or a house licensed for the reception of the insane.

It would be interesting to know how many persons suffering from aberration of mind, who have been placed in asylums, have actually become insane from contact with hopelessly insane people, as compared to those treated in homes, or at home under proper care and supervision, not having been in contact with actual insane people.

The importance of this subject is so vast that I trust no apology is due for bringing under the notice of the profession, with the hopes of eliciting the views of the general physician, the psychologist, and the gynæcologist.—I am, etc.,

Fred. Bowreman Jessett, F.R.C.S.

Buckingham Palace Mansions, W., March 22nd.

UNEDUCATED AND UNRESTRICTED MIDWIVES.

Sir,—A case which last week came under my notice is, I think, worthy of being generally known, in that it shows the danger to which women are exposed at the hands of ignorant so-called midwives.

I was engaged some two months ago to attend a woman in her confinement, and having attended her in three previous

labours, all of which were difficult, I fully expected to be called in. As the time when she expected confinement had passed, I called to see how matters were, and found that the accouchement had taken place that morning with only a midwife in attendance. This woman I questioned as to the nature of the labour, and particularly as to whether the placenta had come away easily, and was assured that everything had come away easily.

I saw the woman and found that she was fairly well, but was complaining of after-pains. She said to me that she thought she was doing very well, and that if anything went wrong they would let me know, and that I need not call otherwise.

Five days after I received a message to go over at once, as they thought the woman was dying. I found on arrival a temperature of 102.5°, and pulse quite uncountable, the face blanched, and indeed all the signs of syncope. On questioning the nurse I found that large clots had been coming away almost constantly since the confinement. On examination the vagina was found to be full of clotted blood, and on removing these a large spongy substance could be felt protruding through the os. I gave a full dose of brandy, and proceeded to dilate the os and withdraw this substance, which proved to be the placenta. No sooner had I effected this, than with a gasp the woman died.

I gave a certificate to the effect that death was due to hæmorrhage caused by retained placenta after confinement attended by a midwife. Nothing further has been heard of the case, burial taking place in due course.

Does it not seem to you, Sir, that some inquiry ought to have been held?—I am, etc.,

Burnley, April 2nd. J. M. Ferguson.

APPENDICULAR COLIC.

Sir,—Mr. Jessop's valuable paper in the British Medical Journal of March 24th, is an important contribution to the elucidation of appendix disease. I have no doubt that the cases to which he calls attention form a large proportion of the whole. The causation is not ascertained because so many recover spontaneously.

In September, 1892, I removed in the Cumberland Infirmary the appendix from a man, aged 35, who, during the previous year, had eight attacks of pain, etc., in that region. My friend, Dr. Helm, whose patient he had been, told me that some of these were very severe, the temperature running up to 102° and 103°, with great local tenderness, and on several occasions much swelling, a distinct tumour being felt. It would not have been unreasonable to expect a very adherent appendix and surroundings, but both it and the intestines were quite free. It was, however, bulbous outside, its walls were thickened, and the interior bottle-shaped, with a very narrow neck near its insertion. Evidently during an attack it became occluded at this neck, it filled up, and then after a time the obstruction yielded, and recovery followed.

I would, however, doubt somewhat the advisability of adopting "appendicular colic" as a descriptive term for the symptoms. Colic is a rather indefinite expression; for instance, renal colic may be due to at least four different conditions. Then, in the disturbance of the appendix under consideration, the temperature marks it off from a simple distension, as of the gall bladder or urinary bladder. Probably the contents rapidly become septic, owing to contamination with the intestinal fluids. On the other hand, appendicitis covers the whole case, and it can be amplified by stating the cause as "due to stricture," "due to concretion," etc. This has still the advantage of distinguishing such cases from perforation of the appendix. For, from a surgical point of view, we mainly want to know in a given case whether we have to deal with a distended inflamed and intact appendix, or, on the other hand, with a perforated appendix and suppurative peritonitis of extent varying according to circumstances.

But, however this may be, I think Mr. Jessop will have no difficulty in convincing surgeons of the advantage of using such names as refer the disease to the structure which is its true seat.—I am, etc.,

Carlisle, March 24th. Roderick Maclaren.

ARE OUR PRISONS A FAILURE?

Sir,—Following on the judicious remarks in the British Medical Journal of March 31st on this subject, we now have an article in the current number of the *Fortnightly Review* by the Rev. W. D. Morrison headed "Are our Prisons a Failure?" The writer indulges in many gloomy forebodings on the crime problem, and sets forth several views on prison questions which are rather startling to many of us who have been in quite as close official contact with prisoners as himself. He tells us that as deterrent agencies prisons are, under present management, a signal failure; that recidivism is largely on the increase; that official statistics are for the most part untrustworthy; and, lastly, that the present system is rapidly manufacturing lunatics and unfitting prisoners for earning their living outside. These are all grave charges, but it is to the last of them I would more particularly direct attention.

For seventeen years past it has been part of my daily routine duty to inquire into the mental as well as the physical condition of prisoners in convict and local prisons. Many thousands of cases with mental symptoms—some real and others feigned—have come under my observation, calling for a definite and responsible opinion, which has frequently involved the important question of fitness for punishment. I can safely say that the fingers of one hand would more than suffice to reckon the concrete instances of insanity caused by imprisonment which have come under my own notice, and I believe the experience of other prison medical officers would give similar results. The writer's statements, therefore, as to prison-produced insanity come somewhat as a surprise. He states confidently that our present system causes a high ratio of insanity, and gives the following table by way of illustration and comparison:

Annual ratio of insanity arising in the general population over the age of 15 for the three years 1890-92	8 per 10,000
Annual ratio in local prisons, 1890-92	226 per 10,000

Assuredly, if these figures were free from fallacy they would disclose a very serious state of affairs; but let us see what explanation can be given in regard to them. The official returns in reference to insanity cases in prison are, fortunately, very full, and detailed particulars are given of each case in the reports of the Prison Commissioners. Let us take those for the year ending March 31st, 1893, which yield the largest number on record, as a fair sample. They are to be found on page 62 of the last report. I append a table which summarises the 307 cases of insanity that occurred in the year:

1. Cases showing symptoms of unsound mind on reception in prison, on trial, or within seven days	260
2. Cases showing symptoms within a month	16
3. Cases showing symptoms within two months	12
4. Cases showing symptoms within three months or over	19
Total	307

It will be seen that, of the whole 307 cases, but a small proportion—certainly not more than 47—can be said to have arisen in prison at all. The total number of prisoners received during the year was 157,168, and the daily average population of the prisons for the year was 13,821. The percentage, then, of insanity for a criminal population, even in this year of highest record, would not appear to be as high as might be expected.

But Mr. Morrison gives us nothing more than a random statement when he couples imprisonment and insanity together as cause and effect. He tells us that there is a want of mental balance in the criminal class, and it is just as reasonable to assume that drink, or worry, or the vicissitudes of a life of crime, or other influences from which the prisoner is exempt might upset this unstable equilibrium, as the "discipline" which he believes to be the exciting cause of the mischief. If enforced industry, cleanliness, order, sobriety, obedience, and other necessities of a prison existence lead to insanity, surely this is a strange result: but if by discipline is meant severe punishments, facts do not bear out the discipline theory. A reference to the Blue Book will show that punishments are few and light, and that out of 147,000 men no fewer than 128,000 incurred no punishments for breach of rules.

In contrasting the cases of insanity amongst prisoners with those arising in the general population Mr. Morrison pro-

duces astonishing results, but we must bear in mind that no trustworthy comparison can fairly be instituted between criminals and non-criminals in respect of their mental stability, any more than in respect to their sobriety, their exercise of the Christian virtues, or their degree of education. Habitual criminals are for the most part moral incurables; they are on a different mental level from that of the general community. Some may lapse into crime in the first instance from misfortune, but the greater number seem to follow crime for a living, and accept the risks it involves with an indifference that suggests mental enfeeblement. Whether they receive sentences of seven years as they did twenty years ago, or twelve months as they do under the present system of short sentences, they inevitably return to prison. It is hardly to be wondered at that under such circumstances recidivism should be increasing. Mr. Morrison traces the growth of recidivism to the increase of crime, but with the short sentences now in fashion it is easy to see how this may be accounted for on a simple principle. Everyone knows the old trick of the stage army, and what a brave show may be made by a handful of warriors passing in at one wing and out at another. If this explains the repeated convictions that are taking place—and there is an actual decrease in the number of persons engaged in crime to support the theory—we can hardly look on recidivism either as an indication of the growth of crime or of the failure of our prison system.—I am, etc.,

April 2nd. R. F. Quinton, Medical Officer H.M. Prison, Wandsworth.

TROPICAL ABSCESS OF THE LIVER.

Sir,—In the review on *Hygiene and Diseases of Warm Climates*, published in the British Medical Journal of March 17th, the sentence quoted from my article on Tropical Disease of the Liver does not fully express my meaning, as the latter part of the sentence is omitted. The full sentence reads: "We seldom meet with cases of hepatitis or liver abscess in total abstainers, *except the pyæmic form directly associated with dysentery*." Now the latter part of the sentence (in italics) greatly modifies the first part, as a very considerable proportion of cases of liver abscess in hot climates are associated with dysentery, and the opinion I expressed, and which my experience very strongly confirms, regarding the non-liability of total abstainers to liver abscess, was not intended to apply to these dysenteric cases, nor to the cases of amœboid abscess also associated with dysentery, but which have not yet, perhaps, been fully worked out, but referred only to the common cases of liver abscess so prevalent in tropical climates, but not associated with dysentery.

I beg the favour of your publishing this brief explanation of the statement referred to.—I am, etc.,

March 30th. Henry Cayley.

*** We should regret having to any extent misrepresented the meaning of Dr. Cayley. At the same time, we would point out that a large and increasing proportion of observers deny that there is any such disease as tropical abscess of the liver which is dependent on dysentery. Dr. Neil McLeod, whose experience has been a very large one, in the Journal of March 31st distinctly asserts that tropical abscess of the liver is invariably the result of dysenteric ulceration.

EPIDEMIC JAUNDICE.

Sir,—As the originator of this interesting correspondence on epidemic jaundice, I desire to make a few remarks on the letter of Dr. Bartlett in the British Medical Journal of March 24th.

We seem all agreed on the point that jaundice is a sequela of influenza, and that its appearance is favoured by open, mild, wet weather in the autumn. But there is difference of opinion in regard to jaundice in an epidemic form, which appears not to be a sequela of influenza. I hold that in this case it is an attendant upon influenza. We have not yet heard of such an epidemic occurring when influenza was not prevalent in the country.

Again, influenza is a disease of protean manifestation, and in those cases in which the jaundice does not appear as a sequela I am strongly inclined to think that it is only one of the many modified forms of the disease with special intestinal manifestations, affecting chiefly the region of the duodenum.

In some of my cases, but for the prevalence of influenza, one would not have known that one had anything more than a case of somewhat acute jaundice to deal with. The two were so closely related, the jaundice appearing before the temperature had declined.

We seem, then, to have established these facts—that jaundice is a sequela of influenza, and that jaundice is a concomitant of influenza; and I think we have established the additional fact that in those cases where the jaundice appears seemingly independently, at a time when influenza is prevalent, we have to deal with an uncommon manifestation of the latter.

I think this is a rational conclusion from the facts.—I am, etc.,

Melrose, March 27th. W. Hall Calvert, M.D.Edin.

PROPOSED SOCIETY OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Sir,—In the annotation on the above subject, which appears in the British Medical Journal of March 24th, it is stated that: "This proposed new Society, so far as can be judged by reading between the lines of their circular letter addressed to the Fellows, appears to be nothing more than an attempt to form a combination by which to upset the growing influence of the Association of Fellows."

If this be true of any of those who attended the meeting on March 8th, it is certainly not true of all; and if members of the Association of Fellows will attend the meeting called for April 5th, they may greatly help to clear up the question and to define the true object and scope of the proposed new Society.—I am, etc.,

Sheffield, March 26th. R. J. Pye-Smith.

NAVAL AND MILITARY MEDICAL SERVICES.

ARMY MEDICAL STAFF EXCHANGE.

The charge for inserting notices respecting Exchanges in the Army Medical Department is 8s. 6d., which should be forwarded in stamps or post office order with the notice. The first post on Thursday mornings is the latest by which these announcements can be received.

A Surgeon-Captain, who came out to India ("Bengal") end of 1890, and who is likely to go home trooping season '95-96, but is certain to go in '96, wishes to exchange with an officer whose tour expires next trooping season—'94-95—or with one in a Colonial or Mediterranean station who has only two or three years, or less, left to complete his tour.—Please state terms to "Exchange," care of Wm. Watson and Co., Kurrachee, India.

A Surgeon-Major on leave from India wishes to exchange with an officer on the home roster who has at least two years to serve at home.—Address, Anglo-Indian, care of Holt and Co., 17, Whitehall Place, London.

THE NAVY.

The following appointments have been made at the Admiralty: George S. Smith, Staff-Surgeon to the *President*, temporarily, April 5th; Thomas R. Pickthorn, Staff-Surgeon, and Daniel J. P. McNabb, Surgeon, to the *Undaunted*, April 17th.

ARMY MEDICAL STAFF.

Surgeon-Lieutenant-Colonel J. D. Edge, M.D., who is at present serving at Deolali, in the Bombay Presidency, has been appointed Honorary Surgeon to the Governor-General of India.

INDIAN MEDICAL SERVICE.

Surgeon-Lieutenant-Colonel E. R. Johnson, who has retired from the service from January 2nd last, is gazetted Brigade-Surgeon-Lieutenant-Colonel from October 1st, 1893.

Brigade-Surgeon-Lieutenant-Colonel D. Sinclair, M.B., of the Madras Establishment, and Surgeon-Major S. H. Browne, of the Bengal Establishment, have been appointed Honorary Surgeons to the Governor-General from January 27th.

Brigade-Surgeon-Lieutenant-Colonel G. C. Ross, Bengal Establishment, is promoted to be Surgeon-Colonel from January 1st. He entered the service as Assistant Surgeon October 2nd, 1865, and became Brigade-Surgeon-Lieutenant-Colonel April 30th, 1890.

Brigade-Surgeon-Lieutenant-Colonel W. P. Warburton, M.D., Bengal Establishment, is also promoted to be Surgeon-Colonel from January 17th. He was appointed Assistant Surgeon March 31st, 1866, and Brigade-Surgeon-Lieutenant-Colonel April 1st, 1891.

MILITIA MEDICAL STAFF.

Surgeon-Lieutenant-Colonel R. Bradshaw, 5th Battalion the Connaught Rangers (Roscommon Militia), has resigned his commission, retaining his rank and uniform, April 4th.

THE YEOMANRY AND RIFLE VOLUNTEERS.

The undermentioned gentlemen are appointed Surgeon-Lieutenants to the corps specified, all dated March 28th: John Robinson Harper, Royal North Devon Hussars; Richard Nelson Jones, 3rd Glamorgan Rifles; Alexander Alexander, M.B., 1st Sutherland (the Sutherland Highland) Rifles.

Surgeon-Captain G. G. Sparrow, 2nd Hampshire Artillery (Southern Division Royal Artillery), is promoted to be Surgeon-Major, March 28th.

Surgeon-Lieutenant G. G. Ferguson, M.B., from the 1st Tower Hamlets Rifle Volunteer Brigade, is appointed Surgeon-Captain to the 7th Middlesex (London Scottish), March 28th.

Surgeon-Lieutenant H. Baldwin, 18th Middlesex, is promoted to be Surgeon-Captain, March 28th.

Surgeon-Captain E. Martyn, Nottinghamshire Yeomanry (Sherwood Rangers), has resigned his commission; and Mr. Christopher Fleming is appointed Surgeon-Lieutenant to the same corps April 4th.

Surgeon Major R. Gooding, M.D., 2nd Kent Artillery, is promoted to be Surgeon-Lieutenant-Colonel, April 4th.

Mr. G. T. Cattell, formerly Surgeon-Lieutenant, is now appointed Lieutenant in the 2nd Volunteer Battalion the Royal Fusiliers (City of London Regiment), April 4th.

Surgeon-Lieutenant H. Skelton, M.D., 1st Volunteer Battalion the Gloucestershire Regiment (late the 1st Gloucestershire), has resigned his commission, which was dated November 21st, 1891.

Mr. George Rory John Fletcher is appointed Surgeon-Lieutenant to the 22nd Middlesex (Central London Rangers), April 4th.

Mr. Julius Hamel, M.B., is appointed Surgeon-Lieutenant to the 1st Volunteer Battalion the York and Lancaster Regiment, April 4th.

Captain Samuel Braithwaite, 1st (Cumberland) Volunteer Battalion the Border Regiment, is appointed Surgeon-Lieutenant in the same corps, April 4th. He was appointed Lieutenant in this Regiment, February 13th, 1886, and Captain, April 11th, 1891.

Surgeon-Lieutenant-Colonel John D. Harris, retired, 1st (Exeter and South Devon) Volunteer Battalion the Devonshire Regiment, and Surgeon-Lieutenant Colonel William Robert Smith, M.D., 3rd Volunteer Battalion the Queen's Own Royal West Kent Regiment, have been awarded the Volunteer Officers' Decoration.

THE INDIAN MEDICAL SERVICE.

The Secretary of State for India has agreed to the proposal of the Government of India to increase the cadre of the Indian Medical Service gradually by eighteen officers, namely, eleven for Bengal, three for Madras, and one for Bombay, and the usual reserve of 25 per cent., in order to meet the increased demands on it which will result from the acceptance of the recommendations of the Committee on Gaol Administration, the Superintendents of Central Gaols should be commissioned medical officers, the exception being the Lahore Central Gaol, but this will be absorbed when it falls permanently vacant. In Bengal there are as many as six such appointments held by non-medical men belonging to a trained service which will, however, gradually disappear under the operation of the new arrangement.

EXAMINATION FOR PROMOTION TO THE RANK OF SURGEON-MAJOR.

If the reports to hand are to be relied on, there was considerable dissatisfaction at the last examination owing to the nature of the questions on surgery, medicine, and hygiene. In the first the subject given was osteomyelitis. It was questionable whether a score of army surgeons have ever come across such cases for treatment, and even if so the diagnosis may have been very doubtful. There was considerable scope for more practical questions, and on conditions more frequently observed in military life. In hygiene a question was set on the potential energy in foot tons of articles of diet. Such a subject would better suit the examination of probationers than of officers with from eight to ten years' service. The prevention of enteric fever, the care of water supply, the selection of encampments, and kindred subjects, would have been a better test of knowledge. It is high time some reform was initiated in these examinations.

CIVIL EMPLOYMENT FOR THE MEDICAL STAFF.

A correspondent wants to know when the order was abrogated that an officer of the Army Medical Staff was ineligible for civil employ while on full pay, and states that an officer on full pay was appointed superintendent of the Royal Infirmary of Edinburgh. We never heard that the rule was abrogated; in the instance he quotes the officer retired altogether to take up the appointment. In answer to a further question, we have always understood that an officer liable to recall to service is under certain disabilities as to employment, travelling, foreign residence, etc., the State claiming the first right to his services.

THE ADMINISTRATIVE DEADLOCK.

A correspondent writes: It is rumoured a scheme for dealing with the hitch that has arisen in filling officers with sufficient years to run to fill the administrative appointments is mooted; simply, not to promote an officer to surgeon-colonel or surgeon-major-general unless he can put in three years in the rank. Were such adopted, many would be passed over, and much discontent engendered. Why not meet the difficulty by extending the age of the two administrative ranks to 62, and of the executive to 57? In the combatant ranks a major-general serves till 62, and a lieutenant general to 67. The surgeons of the London Hospital serve till 65 years.

"*" We are unable to say whether the rumour here referred to has any substantial basis. Should such a scheme, however, be adopted, we doubt not, as always heretofore, some compensation would be given to officers adversely caught in the meshes of a new rule. The alternative of extending service would doubtless afford temporary relief, but would not permanently cure the evil, which would probably crop up in an aggravated form within a few years. The limitation of the tenure of administrative appointments, especially in the rank of surgeon-colonel, would clear the list, but would of course be hard on individuals.

ARMY MEDICAL TITLES.

A.M.S. writes: The *Army and Navy Gazette* publishes letters regarding our rank which may be characterised as venomous. For instance, "Ne Sutor" says, let the medical officers try the experiment of addressing an official letter to any of the authorities signing themselves colonel, captain, etc., and see what a reply will be received. I would urge that should "Ne Sutor" and his like address any of us otherwise than by the title to which we are entitled, let the letter be forwarded to the general officer of the division, where serving, and see what would be the reply. I would earnestly discountenance letter writing to the Service papers, but in the event of any slight would report officially at once.

MEDICO-PARLIAMENTARY.

[Specially Reported for the "British Medical Journal."]

HOUSE OF COMMONS.

Quarantine.—On going into Committee of Supply, there being an item of nearly £1,600 under the vote for the Privy Council Office for the maintenance of quarantine regulations, in accordance with the Act 6 George IV, c. 78, Mr. T. G. Bowles called attention to the "system of quarantine as by law established." He pointed out that the subject of quarantine under the Act was not yellow fever, but "the plague or other infectious disease or distemper highly dangerous to the health of His Majesty's subjects." The provisions of the Act were in the present day ridiculous and ineffectual. We maintained, at an annual cost of £1,600, four hulks on the Mother Bank in the Solent, between Cowes and Ryde, and a lazaretto near the mouth of the Thames, in Kent. This being the case, the influx of foreigners into this country was left untouched, and if quarantine was enforced at all, it should be at such places as Folkestone, Dover, and Harwich. He believed, however, that quarantine did more harm than good, and that foreign countries kept it up only in order to provide fees for their Vice-Consuls. Here, in England, we ought either to render it effectual, or abolish it altogether.—Mr. Shaw-Lefevre, on the part of the Government, was disposed to agree with much that the hon. member had said. Yellow fever did come within the purview of the Act of George IV., but the few cases that occurred might very well be dealt with by the port sanitary inspectors. The difficulty was that the Act, whether effective or not, could not be repealed without the assent of other powers with whom we had conventions on the subject. On the whole, he considered the Act obsolete, and communications were now passing between the Privy Council and the Foreign office with regard to it.

Medicine at the War Office.—In answer to a question from Captain Norton, Mr. Campbell-Bannerman stated that the professional assistant to the Director-General of the Army Medical Department was his deputy in all matters, acting for him in his absence, and assisting him generally when present. He was also the permanent President of the Medical Board at headquarters.

The Gresham University.—Sir A. Rollit asked the Chancellor of the Exchequer whether and when it was intended to propose legislation in pursuance of the report of the University of London Commission, and what would be the general character of procedure in reference to the subject.—Sir William Harcourt, in reply, said that the Government had had this matter under their very careful consideration, but he was afraid it would be impossible to introduce legislation upon the subject in the present session.

London Bakeries.—The Home Secretary replied to Mr. Barrow that his attention had been called to Dr. Waldo's report on the London bakeries. He had communicated with the local authorities, and as soon as he obtained some information he would inform the hon. member of its purport.

Anthrax.—Mr. H. Gardner, in reply to Mr. Fellows, said he should be happy to consider whether an inquiry by a departmental committee would be of advantage; but he wished in the first instance to be in possession of certain reports for which he had called respecting the feasibility of inoculation for anthrax, and as to the measures adopted in foreign countries to prevent the spreading of the disease.

New Bill.—Sir C. Cameron obtained leave to bring in a Bill to amend the Sale of Food and Drugs' Act, 1875, and the Margarine Act, 1887. The Bill was then read a first time.

Hop Substitutes.—Mr. Brookfield obtained leave to bring in a Bill to regulate and restrict the use of hop substitutes.

OBITUARY.

HENRY SMITH, F.R.C.S.Eng.

Mr. Henry Smith died at Summerhill, Horsell, Surrey, on Sunday, March 25th, at the age of 70. He was Emeritus Professor of Surgery at King's College, London, of which institution he was also Honorary Fellow and Associate; Consulting Surgeon to King's College Hospital and to the Westminster General Dispensary; and Corresponding Fellow of the Pathological Society of Montreal. He had been President of the Medical Society of London.

Mr. Henry Smith will be well remembered by more than one generation of surgeons as the assistant of Sir William Fergusson, and as an active Fellow of the Royal College of

Surgeons, at one time much interested in Council elections. His main contributions to surgery were in connection with Sir William Fergusson's favourite subject of joint excision. He made for himself a special reputation in the treatment by the clamp and by nitric acid of hæmorrhoids and other affections of the rectum, and gave the Lettsomian Lectures on the Surgery of the Rectum in 1865. Bluff, jovial, and breezy in manner, he was, in his day, a man of no small activity and influence, and won the goodwill of a large circle of friends, who will read with regret of his passing away. Up till a very recent date Mr. Smith was in active practice.

Dr. F. AUBREY THOMAS, who died at Plymouth on March 18th, was born at Devonport in 1845, and educated at Guy's Hospital. His first appointment was as house-surgeon at the South Devon and East Cornwall Hospital, Plymouth, which he held for a space of two years. In 1871 Dr. Thomas was despatched by the Red Cross Society to the Franco-German war, and he was present at Sedan. On his return Dr. Thomas was appointed medical officer for the Plymouth Workhouse, which post he occupied until the time of his death.

WE regret to announce the death of Dr. JUHEL-RÉNOY, physician to the Hôpital Cochin, and one of the most distinguished of the younger generation of practitioners in Paris, which occurred on March 19th from typhoid fever. Jean Edouard Juhel-Rénoy was born in 1855, and was therefore only 39 years of age. He was the author of numerous contributions to medical literature, among which may be mentioned the articles on "Cough" and "Voice" in the *Dictionnaire de Médecine et de Chirurgie*, and the articles "Epilation," "Epilatories," "Diseases of the Hair," "Ringworm," etc., in the *Dictionnaire Encyclopédique des Sciences Médicales*. Dr. Juhel-Rénoy was a great advocate of cold baths in enteric fever, a subject which he dealt with in communications to the Société Médicale des Hôpitaux (1885 and 1888), and in the *Bulletin Médical* (1888).

DEATHS IN THE PROFESSION ABROAD.—Among the members of the medical profession in foreign countries who have recently passed away are Dr. Carl Schmidt, Professor of Physiological Chemistry in the University of Dorpat since 1852, and author of important publications on the chemistry of digestion and nutrition, aged 72; Dr. L. A. Frankl, Ritter von Hochwart, of Vienna, a poet of considerable reputation among whose works may be mentioned a satire entitled *Hippokrates und die moderne Medizin*, published in 1854, aged 84; Dr. Victor Dlauhy, surgeon to St. Josefspital, of Vienna; Dr. Alberto Illich, of Vienna, author of a valuable monograph on actinomycosis, and formerly operating assistant in the clinics of Professors Albert and Schauta, aged 29; Dr. Bernhard Segnitz, of New York, one of the best-known German medical practitioners in the United States, aged 84; Dr. Pouchet, Professor of Comparative Anatomy in the Natural History Museum, Paris, and author of several works on anatomy, aged 60; Dr. J. Arnould, Professor of Hygiene in the Medical Faculty of Lille; Dr. Friedrich Birnbaum, Extraordinary Professor of Obstetrics, Gynæcology, and Diseases of Children in the University of Giessen; Dr. W. Delffs, some time Professor of Chemistry in the University of Heidelberg, and the Senior Professor in the Medical Faculty; Dr. Vicente A. Garcia, President of the Society of Medicine and Natural Science of Bolivar (Columbia); and Dr. J. C. Snavely, formerly a member of the Pennsylvania State Legislature and Ex-President of the Lancaster County Medical Society, aged 75.

WE regret to announce the death of Dr. SAMUEL JOHNSTON MOORE, of Blythswood Square, Glasgow. Dr. Moore graduated with honours as M.D. in the University of Glasgow in 1863, and became a Fellow of the Faculty of Physicians and Surgeons in 1868. He was examiner in medico-legal cases for Glasgow and Lanarkshire, and was formerly pathologist to the Glasgow Royal Infirmary, assistant physician to the University Lying-in Hospital, and physician to the Dispensary for Skin Diseases, and to the Dispensary for Diseases of the Ear. Dr. Moore had been incapacitated by illness since last August. He was a popular and respected member of the profession.

WITH deep regret we announce the death of Dr. BROWN-SÉQUARD, who died in Paris on April 1st. He was born at Port Louis, Mauritius, on April 8th, 1817. In 1838 he went to Paris to complete his medical studies, and he was admitted a Doctor of Medicine by that Faculty in 1840. From the beginning of his career he devoted himself with great ardour to experimental physiology. In 1858 he delivered a course of lectures at the College of Surgeons on the "Central Nervous System." He was a Fellow of the Royal Society, and was at one time Physician to the Hospital for the Paralysed and Epileptic. In 1864 he was appointed Professor of Physiology and Nervous Pathology in the University of Harvard. Five years later he returned to Paris, but in 1873 he went back to the United States, settling for a time in New York, where he founded the *Archives de Médecine Scientifique et Pratique*. In 1878 he was recalled to Paris to succeed Claude Bernard in the Chair of Experimental Medicine in the Collège de France. In 1886 he was elected a member of the Académie des Sciences. He had been decorated with the Legion of Honour in 1880. Want of space has prevented our publishing this week a fuller notice of the career of this distinguished man, which we hope to do in a future issue.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

WORKHOUSE HOSPITALS.

A POOR-LAW medical officer of 25 years' experience writes to endorse our remarks relative to the condition of the aged and sick in the great public institutions of this country. He says the condition of many of our Poor-law infirmaries at the present time is lamentable; the medical officers have to find medicines for their patients and to dispense them; the nursing is defective and the general surroundings are bad. Reform should not be left to the personal initiation of the medical officer, but should be undertaken by the Local Government Board. Just as the Education Department compels school managers to erect suitable buildings and to staff the schools in accordance with their regulations, so should the Local Government Board do if their powers are sufficient, and if not sufficient they should be extended. The Local Government Board might say: "You undertake the care and treatment of the aged and sick, and as you accept this responsibility we require from you (*a*) suitable wards and furniture; (*b*) nursing of the same kind as in the voluntary hospitals; (*c*) so many nurses for so many cases; (*d*) resident medical officer for so many patients; (*e*) visiting medical officers to assist and act as consultants; (*f*) all medicines and appliances to be found and dispensed; (*g*) a proper system of classification, book-keeping, hospital reports; (*h*) a yearly report to be published of work done with full results."

What, adds our correspondent, has sickness to do with a workhouse? Why should a sick man, or an old man of 80 or 90, ever enter a workhouse? A hospital is the place for one, a home or asylum for the other. We have been for years acting on the wrong principle. Poverty is synonymous with sickness and old age, but we have made poverty penal, and so have punished and humiliated those who have been compelled by misfortune to seek the aid of the Poor Law. The infirmaries for the treatment of the sick poor should be entirely distinct from the workhouses. The workhouse master has but little sympathy with hospital work, and where the workhouse and the hospital are on the same ground and under the workhouse master, friction between the different authorities cannot be avoided. Inspection also should be more complete, taking cognisance of the sort of work done in these hospitals, and inspectors might well be chosen from among men who have had practical experience of Poor-law duties, for they should not be critics only, but inspirers of good work in others.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns, including London, 5,969 births and 4,010 deaths were registered during the week ending Saturday, March 31st. The annual rate of mortality in these towns, which had been 19.2 and 19.8 per 1,000 in the preceding two weeks, further rose to 20.0 last week. The rates in the several towns ranged from 12.2 in Portsmouth, and 14.5 in Bristol to 23.7 in Plymouth and in Birkenhead, 24.5 in Liverpool, and 25.8 in Salford. In the thirty-two provincial towns the death-rate averaged 19.4 per 1,000, and was 1.4 below the rate recorded in London, which was 20.8 per 1,000. The zymotic death-rate in the thirty-three towns averaged 3.1 per 1,000; in London the rate was equal to 3.7 per 1,000, while it averaged 2.6 in the thirty-two provincial towns, and was highest in West Ham, Liverpool, and Birkenhead. Measles caused a death-rate of 1.7 in London, 2.1 in Birmingham, and 3.0 in Birkenhead; whooping-cough of 2.0 in Birkenhead and 2.5 in Cardiff; and "fever" of 3.0 in Norwich. The 96 deaths from diphtheria included 57 in London, 7 in Manchester, 5 in West Ham, and 4 in Birmingham. Five fatal cases of small-pox were registered in West Ham, 3 in Birmingham, and 1 each in Bristol, Manchester, and Oldham, but not one in London or in any other of the thirty-three large towns. There were 81 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, March 31st, against 87, 87, and 85 at the end of the preceding three weeks; 14 new cases were admitted during the week, against 20 and 17 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,117, against 2,153, 2,107, and 2,103 at the end of the preceding three weeks; 215 new cases were admitted during the week, against 222 and 233 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday, March 31st, 969 births and 584 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality, which had declined from 21.1 to 18.7 per 1,000 in the preceding three weeks, rose again to 20.5 last week, and exceeded by 0.5 per 1,000 the mean rate during the same period in the thirty-three large English towns. Among these Scotch towns the death-rates ranged from 13.3 in Paisley to 29.1 in Perth. The zymotic death-rate in these eight towns averaged 3.0 per 1,000, the highest rates being recorded in Paisley and Perth. The 295 deaths registered in Glasgow included 17 from whooping-cough, 9 from "fever," and 3 from scarlet fever. Eight fatal cases of whooping-cough were recorded in Edinburgh, and 1 death from small-pox occurred in Leith.

A QUESTIONABLE ARRANGEMENT.

In the course of a discussion in Plymouth on the desirability of reducing the amount of alcoholic intoxicants in the workhouse, consequent on the death of the late medical officer, who appears to have ordered such beverages freely, a letter published in the *Western Mercury* merits consideration. The clerk to the Swansea guardians writes that no alcoholic liquor is given there at the cost of the rates. The clerk adds that it is not given "unless the medical officer pays for it himself, which the guardians said he might do." We doubt whether the Local Government Board would sanction such an agreement. The guardians pay for all medicines used in the workhouse, and if intoxicants are required medicinally it is only right that they should be paid for by the guardians, as other medicines are. The medical officer is responsible for the medical treatment, and guardians who are very properly desirous to reduce the consumption of intoxicants would do more good by concentrating their energies on supplying the responsible surgeon in charge, with reliable information, on the decreasing estimation of the value of intoxicants or therapeutic agents, by Poor-law medical officers and the profession at large. It is well known that the total amount spent for alcoholic liquors in British workhouses has gone down sixty per cent.

LONDON BAKERIES.

The address given by Dr. Waldo at the Sanitary Institute on the sanitation of places where food is stored and prepared, a short notice of which was given in the British Medical Journal at the time of its delivery, has now been issued in pamphlet form, and contains much interesting information regarding the baking trade. According to the census of 1891, there are no fewer than 18,029 bakers in London, and 84,158 in England and Wales, not including pastrycooks, who also form a very large class, many of whom work in basements, as is so commonly the case with the metropolitan bakers. Seventy-two hours weekly would seem to be the average in the better class trade, with Saturday evening and Sunday free; nor is it easy to see how, with the present system of making bread by hand, this time could be materially shortened. In the poorer districts, however, things are much worse, and there the baker works from eighty-four to a hundred hours weekly, in addition to which he frequently bakes dinners up till half-past one on Sundays. We may take it as a fairly correct assumption that about one half of the Londoner's daily bread is derived from underground bakeries, and it is in regard to these that Dr. Waldo more particularly protests, and especially where, as in his district of Southwark, they are liable to be flooded with regurgitant sewage. We need not go over again the revolting revelations recently made regarding the filthy state of some of these places—their dirt and want of ventilation, the ants, cockroaches, rats, and other "small deer" with which they so often swarm.

The laws for the better regulation of the baking trade in the metropolis have undergone many changes, and their enforcement has oscillated between different authorities, but, as they stand at the present time, they are incorporated in the Sections 26 and 27 of the Public Health (London) Act, 1891. Dr. Waldo advises that all bakehouses should be compulsorily licensed, and that such licence be renewable annually; that the granting of licences be vested in the London County Council; that the by-laws regulating the conduct of retail bakeries be uniform throughout the metropolitan area, being made by the County Council but enforced by the sanitary authorities; and, among various other matters, that the weight of flour sacks be reduced from 280 to 140 lbs. There can be no doubt that a trade of this character, intimately touching as it does the food supply of the great majority of the people, requires most careful regulation. At the same time it must be remembered that the law as it now stands gives a very large amount of control to the authorities, and powers which have so far been but very imperfectly exercised. Many of the sanitary deficiencies which have been more especially complained of are certainly violations of the existing law, and the Act of 1891 gives very large powers indeed which, according to Dr. Waldo, have only quite recently been successfully put in operation for the first time. There can be no doubt that the steady enforcement of existing law would go a very long way in checking the abuses which Dr. Waldo and others have lately so graphically portrayed.

USE OF UNDERGROUND PREMISES AS A BAKEHOUSE.

An application for permission to construct a baker's oven under the footway of a street in St. James's, Westminster, was under consideration at the last meeting of the vestry. The surveyor recommended that permission should be granted, but, on the other hand, it was alleged that the proximity of a dustbin and watercloset and the unsuitability of the situation made this inadvisable. If the statements made are correct it certainly appears undesirable to encourage the use of such premises for the purpose contemplated. The matter was very properly referred by the vestry to the sanitary committee for investigation.

INCREASE OF SMALL-POX IN EDINBURGH.

At the meeting of the Edinburgh Town Council on Tuesday last the convener of the Public Health Committee reported an addition of 5 small-pox cases on March 31st, confessed that thus far they not been able to trace the origin of the cases, and that they were not thus far, as heretofore, entitled to give Leith the blame. Altogether there were 11 cases in the hospital, besides 12 persons in quarantine.

CHARGE OF NEGLECT AGAINST A POOR-LAW DISTRICT MEDICAL OFFICER.

We see by the *Coalville Times* that at a recent meeting of the Ashby-de-la-Zouch Board of Guardians a serious charge of neglect of duty in reference to non-attendance on three different patients was made against Dr. J. C. S. Burkitt, one of the district medical officers of the Union, in a letter which had been received by the Board at the previous meeting. A lengthy discussion ensued, and it was stated, in answer to a question put by one of the guardians, that the writer of the letter of complaint had himself applied for Dr. Burkitt's appointment.

Dr. Burkitt was present at the request of the Board, and after hearing the charge against him, at once satisfied the guardians by the explanation he gave. He was then addressed by the Chairman as follows: "I am exceedingly sorry you have been put to such trouble. The Board are perfectly satisfied with the explanation you have given."

We sincerely congratulate Dr. Burkitt on the decision, which must be in every way satisfactory to him and his friends.

THE EXCLUSION SYSTEM AT SCHOOLS.

A very important addition has been made to the Code of Regulations for Day Schools for 1894, issued by the Education Department. It has long been felt to be a hardship that the lesser interference with scholastic work which is involved by the exclusion from school of particular scholars in the face of infectious disease should entail any loss to the school in the way of annual grant; and we are pleased to see in the present code that where by reason of notice given by a sanitary authority or by any statute the average attendance at a school has been "seriously diminished," so as to cause loss of grant, the amount so lost shall be made up. We think this just concession will strengthen the hands of local health officers. As officers under the Local Government Board they are called upon to use discretion as to the exclusion system as an alternative to total closure of schools, and the action of the Education Department furnishes them with the power of advising the smaller procedure without making them the indirect instruments whereby the schools have been monetary losers.

NOTIFICATION OF INFECTIOUS DISEASES IN PUBLIC INSTITUTIONS.

Mr. E. C. Barnes, as surgeon to a convent, has had occasion to notify cases of erysipelas. The sanitary authority contend that these occurred "in his practice as medical officer of a public body or institution," and that the fee payable is therefore only a shilling. Mr. Barnes, on the other hand, claims the usual half-crown fee, holding with much reason that the "institution" is a private one over which no public body has any control. It is probable that, in the unlikely event of his thinking it worth while to enforce his claim, he would succeed; but an authoritative interpretation of this and other points in the Notification Act is much needed.

THE BRADFORD SANITARY ASSOCIATION.

This Association justifies its existence by its report. It is a mutual society for insuring the periodical sanitary inspection of the dwellings of its members, of whom there are but 144. Yet within the past year its engineer was able to discover in the course of his first inspections 243 sanitary defects. The members would appear to be mostly men in good position, who would be likely to live in houses in the erection of which there could be no excuse on the ground of poverty for sanitary shortcomings, and yet in a total of 37 houses inspected for the first time 243 sanitary errors were discovered. It would be well for every town to to possess an association of this kind.

THE MANCHESTER AND SALFORD SANITARY ASSOCIATION.

This Association, with its affiliated societies, the Ladies' Health Society, the Noxious Vapours Abatement Association, the Committee for Securing Open Spaces for Recreation, and the Children's Holiday Fund, form a group of agencies acting for the public good, the existence of which

speaks well for the public spirit of the people of these districts. From the report for the past year it would appear that one or other of them have taken cognisance of almost every question touching sanitation and public health which has arisen during that period, and one cannot but feel that, however active a public sanitary authority may be, it must receive both a stimulus and a support in its operations from the influence upon public opinion of a voluntary association of this character.

Among many interesting facts mentioned in the report is an observation in regard to the relation of earth temperature and diarrhœa: "The intense, early, and prolonged heat of the summer afforded an opportunity of testing and proving the theories of Dr. Ballard as to the relation of the earth temperature, as shown by a thermometer sunk four feet in the soil, and the prevalence of diarrhœa. Dr. Ballard's critical temperature, 56° F., was reached this past year six weeks earlier than in 1892, and its attainment was marked at once by the rise in the number of deaths from diarrhœa."

REPEATED PROSECUTIONS UNDER THE VACCINATION ACTS.

A. G.—We would refer our correspondent to the interim report of the Royal Commission on Vaccination, the text of which was published in the BRITISH MEDICAL JOURNAL of May 14th, 1892. The Commissioners there say they think that repeated penalties in respect of the non-vaccination of the same child should no longer be possible, and various recommendations are made with that object. But before the issue of this report it had been decided, in a case brought before Mr. Justice Lawrance and Mr. Justice Wright, on appeal from the justices of Portsmouth, that after one conviction it was necessary to obtain another order to vaccinate before a man could be fined a second time for disobedience.

DUTIES OF MEDICAL OFFICERS OF HEALTH.

G. P.—The medical officer of health may have exceeded his duty or carried it out improperly in some of the instances referred to, but, in the absence of any opportunity of hearing his version of the facts, we cannot assume that he was necessarily in the wrong throughout. In one instance in particular our correspondent seems to have judged rather hastily; the medical officer of health would be open to censure if he did not seek to gain knowledge of unreported cases, or if, having ascertained their existence, he did not try to enforce proper measures of precaution. The absence of any medical attendant increases rather than diminishes the need for his official intervention. We have repeatedly expressed strong objection to the health officer undertaking any examination of cases which have been notified by another medical man and which remain under his care.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF OXFORD.

EXAMINATIONS IN MEDICINE AND SURGERY, TRINITY TERM, 1894.—The Final Examination for the degree of Bachelor of Medicine will commence on Monday, June 4th; that for the degree of Master in Surgery on Wednesday, June 13th; and the First Examination for the degree of Bachelor of Medicine on Friday, June 22nd, at 10 A.M. each day. The names of candidates will be received up to the following dates at the office of the Secretary to the Board of Faculties: The Final Examination for the degree of Bachelor of Medicine (fee £1 11s. 6d.) on Saturday, May 19th; for the degree of Master in Surgery (fee £5) on Wednesday, May 30th; and the First Examination for the degree of Bachelor of Medicine on Thursday, June 7th, from 9.30 to 10.30 A.M. each day.

UNIVERSITY OF EDINBURGH.

THE following gentlemen have passed the First Professional Examination for the degrees of M.B. and C.M.: W. Anderson, F. J. H. Bateman, S. Champion, J. V. Fox, W. H. Goldie, J. Grieve, W. J. H. Hislop, A. H. James, M. W. Manuk, E. J. Nichols, J. Stevenson, W. E. Williams, R. A. Walter, C. J. Caddick, M. Mackenzie, J. B. Boyd, J. Cæsar, W. C. Foster, A. J. W. Buchanan, E. V. Collins, T. M. Continho, J. T. Hurst, D. J. C. Oliver, F. W. Rigby, G. R. Twomey, M. Varis, R. Crawford, R. Cumming, J. H. Gordon, J. T. P. Heatley, F. O. Lasbrey, E. W. Lewis, W. J. Nutter, J. M. Reid, W. Tarr, R. J. Dick, C. L. Dunn, D. Forbes, R. Hill, R. F. M'N. Scott (with distinction), W. W. Maxwell, W. Burns, M.A., D. V. M. Adams, J. R. Anderson, W. Bell, S. Branch, W. H. Dickinson, A. Fordyce, A. T. Gailleton, W. Gorrie, J. S. Low, R. W. Mackenna, J. Miller, L. H. B. Mills, W. M. A. Smith, E. Sommerville, G. E. T. Mobcey, A. E. Burroughs T. Rogerson, W. B. Thain, A. J. T. Allan, E. P. Baumann, W. S. Eaton, J. S. Fraser, W. C. M'Kechnie, H. Taylor, V. G. Anderson, D. Clow, R. V. Cowey, L. W. Davis, J. E. Dods, P. Kinmont, J. D. S. Miller, F. M. Parry, H. R. Phillips, and A. G. Worrall.

The following candidates have passed in Physics for the same examination: A. E. C. Rees, A. J. Ryle, W. G. Sheriff, D. Wallace, C. S. Brebner, R. G. Carr, B. G. Forman, T. L. Gilbert, J. Hunter, E. M. Lithgow, R. A. Macneill, L. C. More, J. Monroe, T. A. Price, G. W. Smith, W. C. Spisner, C. G. Steavenson, F. H. Stirling, A. H. Thompson, A. K. Traill, H. Wade, W. E. Wallis, D. Wardrop, D. B. Waters, A. E. B. Wood, and A. H. Wood.

The following candidates have passed in Chemistry and Practical Chemistry: D. G. Barclay, J. A. Barnardo, J. Barnet, M.A., W. Craig, W. E. Hutchison, H. M'Calman, D. V. M'Intyre, J. Paterson, W. C. Wilson, P. S. Hopkins, S. J. Grinsell, L. Kingsford, P. D. Fordyce, B. Gregg, P. H. Henderson, T. Henderson, G. R. Laing, A. S. Parker, C. M. Robertson, G. W. N. Thomas, E. R. Branch, G. J. R. Carruthers, W. D. S. Harrison, J. W. Ingles, W. Lockerbie, P. E. Millard, A. B. Shed, and J. A. Small.

The following have passed in Chemistry and Physics: W. N. Barker, J. M. Bowie, R. Bruce, J. M. Campbell, R. Cameron, G. Dick, C. Forsyth, A. B. George, W. A. Gilbert, A. M. Greene, G. Hamilton, H. T. Holland, C. A. B. Horsford, A. Hunter, B. S. Hyslop, S. H. Johnson, C. King, G. E. J. King, R. King, A. C. Kirkpatrick, J. Leggate, P. L. M'All, J. C. M'Conaghey, E. M'Culloch, P. H. Macdonald, J. M'Gregor, J. W. M'Kenzie, D. W. Maclaghan, E. C. G. Maddock, T. R. Matthews, T. Meldrum, W. P. Meldrum, J. Raeburn, W. Raine, G. A. Rorie, Ibrahim Shalabay, A. Shearer, J. A. C. Smith, and Ward Smith.

The following have passed in Chemistry and Zoology: I. Aird, J. Aleindor, F. P. Bester, T. C. Caldwell, E. Cyrian, C. H. Durrant, C. H. Elmes, C. H. G. Gard, W. W. Garthwaite, F. J. Gray, A. A. Gunn, G. de Latat, D. A. MacVean, H. J. Patchett, A. de St. L. F. Perigat, J. H. Rhodes, A. C. Sandstein, S. C. Bose, R. W. Ewart, and C. R. Maude.

UNIVERSITY OF ST. ANDREWS.

THE following gentlemen, having passed the required examinations, had the degree of Doctor of Medicine conferred upon them on March 30th: W. A. Dingle, M.R.C.S.Eng., L.R.C.P Lond., L.S.A. Lond.; B. H. J. Gardiner, M.R.C.S.Edin., L.R.C.P.Edin., L.S.A. Lond.; B. W. Gathergood, M.R.C.S.Eng., L.S.A.Lond.; A. R. Hopper, M.R.C.S.Eng., L.R.C.P Lond.; T. J. Monaghan, L.R.C.P.Edin., L.R.C.S.Edin.; E. B. Reckitt, L.R.C.P.Edin., L.R.C.S.Edin.; T. Robinson, M.D.Brux., M.R.C.S.Eng., L.R.C.P.Lond., L.S.A.Lond.; M. F. Simon, M.R.C.S.Eng., L.R.C.P.Lond; W. H. Thomas, M.R.C.S. Eng., L.R.C.P.Edin.; J. Wilson, M.R.C.S.Eng., L.R.C.P.Lond.; J. Key, M.A., M.B., C.M.St.And.

The following have passed in Chemistry and Botany: G. B. Pemberton J. M. Deas, A. E. Goldie, R. Ritchie.

The following have passed in Zoology: H. C. Gibson, E. R. Grey, D. D. Farquharson, R. Gibson, A. Gilmour, W. J. Baird, A. C. Brown, J. M. Cuthbert, H. Faulkner, C. M. Pearson, G. F. B. Simpson, R. C. Verley, C. W. F. Melville, R. A. J. Ashbury, G. Fourie, and E. F. M'Neave.

The following have passed in Botany and Zoology: A. P. L. Brown, G. L. K. Finlay, B. N. Mullan, M. E. Jones, H. Mellins, and J. G. Mitchell.

The following have passed in Botany: J. J. A. Pillay, C. J. Wotherspoon, B.A., E. G. Ford, B. Head, A. G. Hamilton, C. W. Donald, C. H. G. Ritter, J. P. Thorne, J. M'Gibbon, G. H. C. Orr, and K. P. Chattergie.

The following have passed in Botany and Physics: H. L. S. D. Belasco, G. C. Ghese, and T. B. H. Scott.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

THE following gentlemen passed the Second Examination of the Board in the subjects indicated:

Monday, April 2nd:

Passed in Anatomy and Physiology.—G. P. Anning, G. Hardwicke, J. Holmes, J. Levi, A. J. Manasseh, N. G. Meade, students of Yorkshire College, Leeds; A. Cotterill, H. J. Crossley, and W. A. Ferguson, of Owens College, Manchester; G. E. Leary, A. Ward Shedden, E. C. Temple Smith, H. E. White, L. Whitfield, and W. B. H. Wood, of Mason College, Birmingham; A. Bradford, of Trinity College, Toronto, Canada; W. J. Woods and J. A. Corbitt, of Queen's College, Belfast; C. Hudson, of Charing Cross Hospital; W. R. Judd, of University College, Liverpool; S. O. Hatherley, of Frith College, Sheffield; and A. W. Sikes, of St. Thomas's Hospital.

Passed in Anatomy only.—T. A. Caley, of Yorkshire College, Leeds; F. P. Gill, of University College, Bristol; L. L. Allen, of St. Bartholomew's Hospital and Mr. Cooke's School of Anatomy and Physiology; H. B. Oldham, of University College, London; E. H. Milson, of Guy's Hospital; G. E. Palmer, of the Royal College of Surgeons of Ireland and the Catholic University, Dublin; F. M. Aldred, of University College, Liverpool; H. Greaves, of Owens College, Manchester; and F. H. Nimmo, of St. Bartholomew's Hospital.

Passed in Physiology only.—D. C. M. Shaw, of Owens College, Manchester; and H. G. Mallam, of Oxford University and St. Mary's Hospital.

Seven gentlemen were referred in both subjects, 4 in Anatomy only, and 8 in Physiology only.

Tuesday, April 3rd:

Passed in Anatomy and Physiology.—R. T. Ellis, student of Yorkshire College, Leeds; J. M. Keegan, of Queen's College, Galway; L. Wood, F. R. Greenwood, and E. T. Burton, of Mason College, Birmingham; W. B. Bennett, of University College, Liverpool; H. A. Belbin, of Firth College, Sheffield; E. J. O'Meara and S. Batchelor, of Guy's Hospital; A. Burn, of St. Mary's Hospital; J. Martin and C. B. Gervis, of University College, London; C. P. Lankester, and J. I. Langley, of St. Thomas's Hospital; R. G. Whiting, of St. Bartholomew's Hospital; J. R. Long and A. Riley, of Westminster Hospital; F. G. Peck, of St. George's Hospital; and J. W. King, of Charing Cross Hospital.

Passed in Physiology only.—A. C. Nicol, of Yorkshire College, Leeds; and E. H. Collins, of Mason College, Birmingham.

Fifteen gentlemen were referred in both subjects, and 2 in Anatomy only.

The following gentlemen passed the Second Examination of the Board in the subjects indicated on Wednesday, April 4th:

Passed in Anatomy and Physiology.—L. Jones, T. C. L. Jones, T. D. Jago, and E. S. E. Hewer, students of St. Bartholomew's Hospital; C. P. Weekes and E. Evans, of Guy's Hospital; F. Mannington and D. T. F. Davies, of Middlesex Hospital; E. P. Chennells, of University College, London; A. C. Robinson, of St. Thomas's Hospital; W. G. Westcott, H. B. G. Walton, C. B. Whitehead, and F. J. Ayre, of St. Mary's Hospital; G. Hutcheson, of London Hospital; and J. G. Emanuel, of Mason College, Birmingham.

Passed in Anatomy only.—A. B. Cridland, of University College, Bristol; J. F. Swift, of Firth College, Sheffield; R. Tarbuck, of Owens College, Manchester; W. E. Waymark and E. C. Hort, of Guy's Hospital; and E. J. Hynes, of London Hospital and Mr. Cooke's School of Anatomy and Physiology.

Passed in Physiology only.—F. Bennett, of St. Bartholomew's Hospital and Mr. Cooke's School of Anatomy and Physiology; and H. C. Cooper and A. E. Rouse, of St. George's Hospital.

Eleven gentlemen were referred in both subjects, 3 in Anatomy only, and 6 in Physiology only.

SOCIETY OF APOTHECARIES OF LONDON.

Pass List.—The following candidates passed in:

Surgery.—M. T. Archdall, Charing Cross Hospital; P. Best, University College; A. H. Bird, St. Mary's Hospital; G. J. Branson, Birmingham; L. L. Burton, London Hospital; E. S. Chilcott, St. Mary's Hospital; T. M. Clayton, Durham; E. H. J. Danaher, London Hospital; R. J. Farman, Charing Cross Hospital; J. D. Galloway, London Hospital; W. E. Stanton, London Hospital; S. A. Stride, London Hospital.

Medicine, Forensic Medicine, and Midwifery.—A. W. Austen, Westminster Hospital; T. W. W. Burgess, St. Bartholomew's Hospital; L. L. Burton, London Hospital; H. C. Dixon, London Hospital; J. D. Galloway, London Hospital; C. D. Garrett, Westminster Hospital; K. M. Hunter, Royal Free Hospital; D. S. Owen, London Hospital; G. H. Pooley, St. George's Hospital; C. W. Williams, St. Bartholomew's Hospital.

Medicine and Forensic Medicine.—P. H. Court, Middlesex Hospital.

Medicine and Midwifery.—F. H. de G. Best, St. Bartholomew's Hospital.

Medicine.—W. C. Lattey, St. George's Hospital.

Forensic Medicine and Midwifery.—R. J. Farman, Charing Cross Hospital; G. H. Poole, St. George's Hospital.

Forensic Medicine.—H. R. Evans, St. Thomas's Hospital.

Midwifery.—R. B. Allen, St. Mary's Hospital; F. E. Feilden, St. Bartholomew's Hospital; A. T. Savage, Birmingham; H. C. Venis, St. Mary's Hospital.

To Messrs. Austen, Best, P. Bird, Burgess, Burton, Chilcott, Danaher, Farman, Galloway, Lattey, Owen, Pooley, and Venis was granted the diploma of the Society entitling them to practise Medicine, Surgery, and Midwifery.

MEDICO-LEGAL AND MEDICO-ETHICAL.

COURT OF APPEAL.—April 4th, 1894.

(Before Lords Justices Lindley, Lopes, and Kay.)

Bloxham v. The Medical Defence Union, Limited.

This was an appeal by the plaintiff, Dr. Bloxham, against the refusal of Mr. Justice Chitty to grant an interlocutory injunction restraining the defendant Union or their Council, etc., from subscribing, advancing, or paying out of the Union's funds any moneys towards the costs and expenses of a member of the Union in litigation with another member, and from undertaking the conduct of any such litigation, and in particular from subscribing, etc., any moneys towards the costs and expenses of a member in a litigation pending between the plaintiff and that member, and from undertaking the conduct of that litigation. The defendant Union was registered as a limited company under the Companies Acts. By the memorandum of association (clause 3), its objects were stated to be "(1) to protect and support the character and interests of medical practitioners practising in the United Kingdom; (2) to promote honourable practice, and to suppress or prosecute unauthorised practitioners; (3) to advise and defend or assist in defending members of the Union in cases where proceedings involving questions of professional principle or otherwise are brought against them; (4) to consider, originate, promote, and support (as far as is legal) legislative measures likely to benefit the medical profession." By the articles of association it was provided: "(39) The Council may, after due investigation, undertake the conduct or defence of, or assist in conducting or defending, any proceedings, whether of a strictly legal nature or otherwise, concerning or affecting any member of the Union who may desire their assistance, provided that the cause of action or the proceeding have not arisen or been commenced prior to the date of the commencement of his membership of the Union; and provided also that such member give a written undertaking to abide absolutely by the decision of the Council as to the conduct or defence of the case. The Council may also appoint one or more arbitrators either from their own body or from among the members of the Union or otherwise, for the settlement of professional difficulties and disputes in which any member of the Union desiring the assistance of the Union may be concerned." The plaintiff and a Dr. Collie are both members of the Union. They entered into a partnership agreement. A dispute arose between them in connection with this agreement, and cross actions between them have been instituted, and are now being proceeded with in the Queen's Bench Division. The defendant Union, purporting to act under Clause 3 (3) of the memorandum and Section 39 of the articles, resolved to aid and have aided Dr. Collie in his litigation with the plaintiff. It did not appear that any allegation of professional misconduct was made against the plaintiff, and, if there was any professional question at all involved in the Queen's Bench actions, it was not stated at the hearing of the motion by Mr. Justice Chitty, the Union declining, through their counsel, to make any statement, on the ground that the matters in dispute were *sub judice*. The plaintiff rested his claim to an injunction on the ground that the Union, in undertaking the cause of a member when litigating with another member, was acting beyond the scope and powers of the memorandum and articles, and he also raised a subsidiary point, namely, that the acts complained of were unlawful "maintenance," or that the articles were open to the objection that they promoted "maintenance" of actions.

Mr. Farwell, Q.C., and Mr. Cababe, were for the plaintiff; Mr. Bryne, Q.C., and Mr. Boome, were for the defendants.

The arguments upon the appeal occupied the greater part of April 3rd, and were not concluded.

At the sitting of the Court on April 4th, Mr. Bryne, Q.C., said that since the rising of the Court on April 3rd he had considered the matter in conjunction with his clients, and they had come to the conclusion, having regard to what had fallen from the Court during the argument as to the unfairness of not allowing Dr. Bloxham to put his case before the Council of the Union, that an error had been committed. The defendants were, therefore, willing to consent to a perpetual injunction, restraining them from applying the corporate funds to the litigation between the plaintiff and Dr. Collie. The learned counsel added that Dr. Collie, though he was not a party to this action, entirely acquiesced in this view of the case. Moreover Dr. Collie was perfectly willing that all matters in dispute between himself and the plaintiff should be referred to arbitration, the arbitrators to be appointed by the Council of the Union under the articles.

Lord Justice Lindley, in reply, said in fairness to the parties he ought to say they were of opinion that the course which had been taken by the defendants was a very proper one.

In the Court of Appeal on April 3rd Dr. R. B. Anderson applied in person for an order to have tried at Bar an action for damages for an alleged malicious prosecution which he brought against Sir J. Gorrie and other persons who had been Judges of the Supreme Court of Trinidad and Tobago. A Divisional Court refused to make the order which Dr. Anderson asked for. This decision was now affirmed and the application was refused.

AGREEMENT NOT TO PRACTISE.

Inquirer writes: Would it be admissible, or a breach of ethics, for a medical man who has sold his practice and engaged not to practise in the town or locality, to continue to reside there, and take resident patients (mental) into his house?

*** The admissibility depends on the terms of the agreement, which would probably preclude the medical man in question from taking resident patients (mental or otherwise) into his house. Apart from the agreement, we do not see that there is any etiquette applicable to the case. It is, of course, contrary to ethics to break an agreement into which a man has deliberately entered.

THE "SECOND OPINION" QUESTION.

A Member writes: A. and B. practise in the same town, with others. A patient of A.'s asks for a second opinion. A. says that one is not necessary. The friends ask B. to call, and they tell him that A. has been asked to have a second opinion, but that he declines. Is B. justified in taking over the case, the patient and the friends not being satisfied with A., and determined to have some one else?

*** The following is the rule in relation to the above case: "Whenever a second opinion is desired or suggested by a patient or his relatives, it should, as a rule, be at once courteously acceded to by the attending practitioner, who too often demurs or unwillingly assents, under the erroneous impression that a consultation detracts from his professional status, and evinces personal distrust in himself; whereas it should be regarded simply as the very natural desire on the part of the relatives to leave nothing undone that might perchance, however forlorn the hope, tend to restore the health, or, it may be, save the life of the loved one, cost what it may. But even were it otherwise, it must not be forgotten that the patient has an indisputable right to 'further advice,' if he wishes it; and the family attendant will do well, for his own sake as well as that of the patient, to let the responsibility be shared by a second practitioner."—*Code*, chap. ii. Sect. 4, rule 10. If, therefore, A. declines to accede to the request of the patient's friends to have a second opinion, B. will be justified in accepting charge of the case, in which event A. should previously be notified by the friends of the patient that his (A.'s) professional services will no longer be required.

MEDICAL OFFICERS OF HEALTH AND PRIVATE PRACTITIONERS.

A. and B.—A careful and dispassionate consideration of the points involved in the lengthy statement of case and correspondence which has passed between A. and B. with reference to their relative duties as medical officer of health and medical attendant on a case of infectious disease leaves no reasonable doubt upon the mind that if B. had fulfilled the public and professional obligations imposed upon practitioners by the Notification of Infectious Diseases Act the regrettable controversy in question would have been avoided. Be that as it may, we note with satisfaction the unexceptionable tone which characterised, under somewhat difficult circumstances, A.'s correspondence with B. in reference to the latter's omission to fulfil a clearly-defined public duty; nor, in our opinion, can exception be justly taken to the general tenour of A.'s purely formal report (made in entire ignorance of the identity of the defaulting practitioner) to the sanitary authority. Moreover, we are clearly of opinion that if A. had neglected to report he would have justly subjected himself to the charge of a grave dereliction of official and moral duty to the public. Need we add that in our opinion B.'s contention in regard to an antedated notification form is morally and legally inadmissible.

LONDON GRADUATES AND GENERAL PRACTICE.

Liverpool writes: In reply to "Ignoramus," I may state that there are many London M.D.'s in general practice, and, seemingly, none the worse.

CONSULTANTS AND PRACTITIONERS.

B. writes: If a medical practitioner is called in consultation by a patient's medical attendant, at the request of the patient's friends, does this fact in any way justify the consultant in taking shortly afterwards sole charge of the case? Does the fact of being originally proposed as a consultant by the family place such a consultant on a different footing from the one proposed by the medical attendant himself?

*** To the first question the reply is a simple but emphatic negative, to which may be added the following note appended to the ethical rule relating thereto (*Code*, chap. ii, sec. 4, rule 12): "N.B.—Should the practitioner who has been called in consultation be subsequently requested to take sole charge of the patient, he should courteously but firmly decline." The answer to the second query is on each point also in the negative.

G. S. T. writes: A. is attending a patient for eight days. One day, after seeing the child at 11 o'clock in the forenoon, again at 5 in the afternoon, at a third visit at 11 at night, he finds the child has been visited and prescribed for by B., who subsequently forwards the accompanying letter (copy enclosed). A. replies (copy of letter enclosed), and receives a further reply from B. Kindly express an opinion as to the merits of this case.

*** B.'s course of action in the above case should have been governed by the following rule (*Code*, chap. ii, sec. 5, rule 9):—"When a practitioner is called into or consulted by a patient who has recently been, or still may be, under the care of another for the same illness, he should on no account interfere in the case except in an emergency, having provided for which he should request a consultation with the gentleman in previous attendance, and decline further direction of the case except in consultation with him."

UNQUALIFIED ASSUMPTION OF MEDICAL TITLES.

SPEY.—If the name of the person referred to has not only been erased from the *Medical Register* but also from the Lists of Licentiates of the Licensing Bodies mentioned, we think that proceedings could be taken under Section 40 of the Medical Act, 1858.

In Scotland these proceedings would have to be taken in the manner prescribed by Section 41 of the above Act, by the Procurator Fiscal of the county, or by any other person before the Sheriff or two justices.

A *LOCUM TENENS* AS A RIVAL PRACTITIONER.

X. writes: A. has a wide country practice, and some time ago, when ill, he engaged B. to act as *locum tenens*. After a few weeks, when A. recovered, he dispensed with B.'s services; but B. remained in the district and began practice on his own account at a place well within the radius of A.'s practice. B. afterwards wrote to A., expressing his wish to arrange a partnership with him. C. is in practice in a neighbouring town, and is asked by B. to meet him in consultation. C. refused, and gave as his reason, B.'s unprofessional conduct towards A. Under the circumstances would C. have been justified in meeting B. in consultation, or in having professional relations with him?

*** Although there is not, to our knowledge, any ethical rule that would (otherwise than inferentially) debar C. from meeting B. in consultation, under the circumstances related, we have no hesitation in affirming that in declining so to do for the reason assigned, namely, indefensible conduct towards A., his late principal C. acted in strict accord with the true spirit of professional ethics.

The incident tends to illustrate the necessity for caution in engaging a *locum tenens* without the essential legal restrictions as to future practice in the professional district of his principal.

INDIA AND THE COLONIES.

NEW ZEALAND.

MEDICAL EDUCATION.—At an ordinary meeting of the Wellington Branch of the New Zealand Medical Association on October 11th, 1893, a committee was appointed to consider the question of medical education and examination in New Zealand. This committee presented a report in which the opinion was expressed that the time had "not yet arrived when medical degrees may with advantage be granted in the Colony." This opinion was based on the following grounds: 1. That, owing to the sparseness of the population, there is not enough material from which to provide for effective clinical instruction. The Dunedin Hospital serves, it is estimated, a population of about 120,000 people; it has a daily average of 80 patients. Less than 1,000 in-patients are treated annually, and 1,384 out-patients. 2. That facilities for teaching morbid anatomy and practical midwifery can scarcely be said to exist. 3. That it is impossible for a small staff composed of busy general practitioners to devote the necessary time to clinical instruction. If it be decided to continue the grant of medical degrees, the committee further hold that the existing system of examination "is wrong in principle and dangerous in practice:" for the first and second and a portion of the final examination students are examined by their own teachers, and the opinion is expressed that in the three main branches—medicine, surgery, and midwifery—and preferably in all other subjects, the examination should be conducted by independent examiners. In conclusion, the committee express the opinion "that only such scientific subjects, the materials for teaching which do not depend upon population, can be taught with advantage in Dunedin; and that students ought to be compelled to seek for their clinical work a wider field than New Zealand can for many years to come possibly afford. In no other way can the University fulfil its undoubted duties to the public by turning out safe and reliable practioners, who have been properly and soundly trained not only in scientific but in practical work." This report was adopted by the Wellington Branch of the New Zealand Medical Association, and copies directed to be sent to other Branches of that Association, to the members of the Senate of the Zealand University, to the members of the Cabinet, the members of the General Assembly, the newspapers of the Colony, and to every registered practitioner in New Zealand. The Otago Branch of the New Zealand Medical Association have replied to the report in a circular signed by Dr. J. O. Closs, Honorary Secretary, in which exception is taken to the circulation of the report beyond the Branches of that Association. As to the capabilities of the Dunedin Hospital, it is stated that there is a daily average of 100 patients, an annual number of 1,100 in-patients, with 330 operations, of which 200 were major operations, and 1,500 new out-patients making 9,100 attendances. Further, the students attend the Benevolent Institution, with its 200 inmates, and the Seacliff Asylum with 500 lunatics. Practical midwifery is attended in the lying-in ward of the Benevolent Institution, or in the course of outdoor work. Practical instruction is given in pathological histology and bacteriology, and the number of *post-mortem* examinations in the last two years was 50 and 26 respectively. The staff of the hospital consists of "three surgeons, three physicians, specialists for diseases of women, eye, ear, throat, and skin diseases, two house-surgeons, and a pathologist. The members of the staff, on an average, devote about two hours a day to clinical instruction and superintending students in their work, an amount of teaching which compares very favourably with the London hospitals." As to the conduct of examinations it is stated "that at every professional examination here there is an examiner appointed by the New Zealand University with equal powers to act with the teacher of the subject in which the student is to be examined. The same rule applies in the final examination, at which the coexaminer in every subject except one (medical and surgical anatomy, a subject just recently included in the curriculum) is brought from outside Dunedin." The question appears to have excited a good deal of interest in the colony, and a good deal of not always very wise comment in the press. The *Lyttelton Times*, for instance, makes use of the occasion to advocate laxity in examination, and talks nonsense about the "close corporation of qualified practitioners," finally makes use of the following childish argument: "Surely, when we in this part of the world allow faith healers, magnetic healers, and red flannel healers to treat those who are ill, or who imagine themselves to be ill, *we run no added risk* (the italics are ours) in permitting physicians and surgeons trained in our own colleges and hospitals to prescribe for us and operate on us."

MEDICAL OBSERVATIONS AMONG THE ESQUIMAUX.—Dr. Frederick Cook, ethnologist to the Peary North Greenland expedition, recently read an interesting communication on the Esquimaux at the New York Obstetrical Society. The true Esquimaux, who dwell between latitude 76° and 79°, live on meat alone, and never use salt or any other condiment. For nine months they have to melt ice or snow in order to procure water. They never bathe. The average male stands 5 feet 1 inch in height, weighing less than 10 stone; the average female stands 4 feet 8 inches, and weighs 8½ stone. The subcutaneous fat is very thick. The heavy cheeks are due to the practice of chewing great quantities of skins, as part of a home industry supplying boots, etc. The women are married between 12 and 14, but do not menstruate till they are past 19. During the long Arctic winter suppression of menses is normal, only one woman in ten continuing to menstruate. The sexual passion is suppressed during the Arctic night, but a kind of *rut* affects the young population when the sun reappears. Hence the majority of children are born nine months later, when the four months of perpetual night begin. Delivery is often difficult and dangerous. Sterility annuls marriage. In times of famine barren and old women are turned out to starve, and their bodies are certainly devoured by surviving members of their race. Lactation is prolonged for from four to six years. The women, as well as the men, do not consume as much oil as is generally supposed; they eat a great deal of fat as we eat cheese, but not as a regular diet. Infanticide, in accordance with complicated family prejudices, is universal under fixed conditions, such as the death of the father before the child is 3. The Esquimaux adhere to their ideas of morality, and seem free from gross vices except in the south of Greenland, where they mix with other races. In the north there is little illness, rheumatism, tonsillitis, and mild influenza being the commonest diseases. The southern mixed Esquimaux suffer very severely from phthisis. Dr. Cook finds that the Arctic night is the cause of the yellow colour of the skin. He and his comrades found that when the sun came back they were not anæmic, but of the same complexion as the natives.

MEDICAL NEWS.

Miss Lillian Hamilton, M.D., who for some years past has been in charge of the Lady Dufferin Hospital, Calcutta, has been selected to proceed to Cabul, in response to a message from the Ameer. The appointment is for six months.

A farewell dinner was recently given to Mr. Robert O'Callaghan, F.R.C.S., previous to his departure for London, at Ogle's Hotel, Carlow, by the members of the Carlow Masonic Lodges. Dr. R. Malone, who was in the chair, presented Mr. O'Callaghan, on behalf of the brethren of Lodges 116 and 91, with a beautifully illuminated address.

Edinburgh Royal Infirmary.—The following gentlemen have been appointed resident physicians for the ensuing six months: Mr. A. M. Easterbrook, M.B., C.M., and Mr. W. Thompson Hall, M.B., C.M. Mr. Muir Sandeman, M.B., C.M., has been appointed resident surgeon. Three gentlemen were at the same time appointed non-resident clinical clerks for a period of six months from May 1st next.

We are informed that the Secretary of State for the Home Department has made nominations to the two fresh appointments of female inspector of factories and workshops which were recently authorised, and that he has also filled the additional appointments of assistants to inspectors of factories. There is no likelihood at present of any further vacancies in the staff.

Cæsarean Section in Argentina.—In the Buenos Ayres *Semana Medica* of February 22nd, 1894, Dr. Bozzetti reports a successful case of Cæsarean section performed by him in the Hospital Rivadavia of that city. The patient was an Italian woman, aged 22, primipara, suffering from spinal curvature and contracted pelvis. The operation was performed on December 12th, 1893, strict antiseptic precautions being taken. The operation lasted one hour and a quarter. On the third day there was vomiting with tympanites of the abdomen, but these symptoms yielded to smart purgation, and the mother and child (a boy) were discharged quite well on December 31st. This is the second successful case of Cæsarean section performed in the Argentine Republic. The first was done by Dr. Alfredo Lagarde on September 14th, 1892.

An English Fever Hospital at Cannes.—At the end of last year a new law for the notification of infectious diseases came into operation throughout France, and visitors to the Riviera thus became liable to be removed to the municipal hospitals if they should happen to be attacked by infectious diseases. A committee was therefore appointed at Cannes last spring to collect funds for the provision of a building for the reception of English or American visitors and residents suffering from acute illness. As the result of this action a house has been leased and fitted up for the reception of patients, and the institution is now in full operation under the management of Mrs. D. Norris, the Honorary Lady Superintendent, who has the assistance of a trained nurse. It is proposed to provide a second building for acute cases of a non-infectious nature, and an isolation block is now being erected. The institution was opened last December. Payment is required from the patients, the first-class fee being 12 fr. 50 c., and the second-class 6 fr. a day, including ordinary diet and nursing.

British Dental Association.—The annual meeting of the British Dental Association commenced at Newcastle-on-Tyne on March 29th, when Mr. W. H. Breward Neale was succeeded in the presidency by Mr. C. S. Tomes. Professor Philipson, on behalf of the Durham College and medical profession, welcomed the conference to the city. The treasurer submitted his report, which showed a balance in hand of £475 12s. 11d. The number of members was 763. It was agreed that the meeting of 1895 be held in Edinburgh, and that the president be Mr. Beaumont McLeod of that city. In the evening Mr. Tomes, the president, delivered his address, in which he spoke of the qualifications of a dentist, and urged that there should be culture and acquirements, kindliness of manner, and physical capacity beyond mere manipulative dexterity. It was in attention to minutiæ that, just as in modern surgery, the difference between success and failure lay. By success he did not mean merely a pecuniary success. He did not call it a real success unless a man stood in the opinion of his own professional brethren at least as high as, or higher than, he did with the public.

A Fatal Case of Hiccough.—The *Boston Medical and Surgical Journal* of March 8th reports a case of death from hiccough. The patient was a bar-tender, aged 33, at Newark, N. J., and had suffered from hiccough continuously for thirteen weeks. After a number of remedies had been tried to no purpose, the following operation was undertaken as a last resource. On the hypothesis that the source of the trouble was irritability of the inferior dental branch of the inferior maxillary nerve, communicated to the phrenic nerve, the inferior dental was cut down upon and divided. Some temporary improvement in the patient's condition followed this procedure, but the hiccough soon returned. The only thing that seemed to be of any use in controlling the paroxysms was ice cream, which the patient took freely. He gradually, however, became weaker, and finally died of exhaustion. When first seized with the affection the man was strong and robust, and weighed 150 lbs., but just before his death his weight was only 80 lbs. No mention is made of a *post-mortem* examination.

MEDICAL VACANCIES.

The following vacancies are announced:

BEDFORD GENERAL INFIRMARY AND FEVER HOSPITAL.—House Surgeon, doubly qualified. Salary, £100 per annum, with apartments, board, lodging, and washing. Applications to the Secretary by April 10th.

BIRMINGHAM GENERAL DISPENSARY, Birmingham.—Resident Surgeon. Salary, £150 per annum, with an allowance for cab hire, and furnished rooms, fire, lights, and attendance. Applications and testimonials to Alex. Forrest, Secretary, by April 11th.

BURY DISPENSARY HOSPITAL, Bury, Lancashire.—Senior House-Surgeon, doubly qualified. Salary, £100 per annum, with board, residence, and attendance. Applications to the Secretary, Mr. Henry Webb, by April 16th.

CANCER HOSPITAL (Free), Fulham Road, S.W.—House-Surgeon. Appointment for six months. Salary at the rate of £50 per annum, with board and residence. Applications to the Secretary by April 9th.

CARNARVONSHIRE AND ANGLESEY INFIRMARY, Bangor.—House-Surgeon. A knowledge of the Welsh language is desirable. Salary, £70 per annum, with board and lodging in the house. Applications and testimonials to the Secretary by April 7th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—Pathologist. Salary, 100 guineas per annum. Applications to the Secretary at the Office, 24, Finsbury Circus, E.C., by April 12th.

DENTAL HOSPITAL OF LONDON AND LONDON SCHOOL OF DENTAL SURGERY, Leicester Square. Demonstrator. Honorarium, £50 per annum. Applications to Morton Smale, Dean, by May 14th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Two Assistant Anæsthetists. Applications to J. Francis Pink, Secretary, by May 14th.

DERBY COUNTY ASYLUM.—Clinical Assistant. Appointment for six months. Board, lodging, and washing, provided. Applications to the Medical Superintendent, County Asylum, Mickleover, Derby.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, £120 per annum, with furnished house, rent and taxes free; also coal, light, water, and cleaning, or, in lieu thereof, £20 per annum. Knowledge of Welsh desirable. Applications to W. T. Cole, Secretary, Board Room, Bagillt Street, Holywell, by May 15th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Resident House-Physicians. Applications to the Medical Committee by April 19th.

LIVERPOOL EYE AND EAR INFIRMARY.—House-Surgeon, doubly qualified. Salary, £80 per annum, with residence and maintenance. Applications to Reginald Haigh, Honorary Secretary, 13, Bevey's Buildings, George Street, Liverpool, by April 7th.

NATIONAL HOSPITAL FOR DISEASES OF THE HEART AND PARALYSIS, 32, Soho Square, W.—Resident Medical Officer, doubly qualified. Appointment for six months. Honorarium, £10 10s. Applications to the Secretary by April 11th.

NEWCASTLE-ON-TYNE DISPENSARY.—Resident Medical Officer. Salary, £250 per annum, with furnished residence. Applications to the Honorary Secretary, R. W. Sisson, 13, Grey Street, Newcastle-on-Tyne by April 20th.

OLDHAM INFIRMARY.—Senior House-Surgeon. Salary, £80 per annum, with board and residence. The Junior House-Surgeon is a candidate, and if elected there will be a vacancy for Junior House-Surgeon. Salary, £50 per annum, with board and residence. Doubly qualified. Applications to Harold Lees, Secretary, by April 10th.

ROYAL COLLEGE OF PHYSICIANS.—Milroy Lecturer. Applications to Edward Liveing, M.D., Registrar, by April 9th.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to the Secretary by April 11th.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road, E.C.—Resident Medical Officer. Appointment for six months, when re-election is required. Salary at the rate of £100 per annum, with furnished apartments and board. Applications to the Secretary by April 11th.

ROYAL VICTORIA HOSPITAL, Bournemouth.—House-Surgeon and Secretary. Salary, £100 per annum, with board. Applications to the Chairman of Committee by May 1st.

THE COPPICE, Nottingham.—Assistant Medical Officer; unmarried and not more than 28 years of age. Salary, £120 per annum, with furnished apartments, board, washing, and attendance. Applications to Dr. Tate at the Asylum by April 11th.

WEST RIDING ASYLUM, Wadsley, near Sheffield.—Fifth Assistant Medical Officer. Salary, £100 per annum, rising £10 annually up to £150, with board, etc. Applications to the Medical Superintendent by April 17th.

WIRRALL CHILDREN'S HOSPITAL, Woodchurch Road, Birkenhead.—Resident House-Surgeon. Salary, £50 per annum, with board, lodging on the premises and washing. Applications to P. W. Atkin, Honorary Secretary, 25, Lord Street, Liverpool, by April 24th.

YORK DISPENSARY.—Medical Officer, unmarried. Salary, £150 per annum, with furnished apartments, coals, and gas. Applications to Mr. W. Draper, De Grey House, York, by April 10th.

MEDICAL APPOINTMENTS.

BATHURST, Lullum W., M.R.C.S., L.R.C.P.Lond., M.B.Lond., appointed Resident Clinical Assistant to the St. Marylebone Infirmary, Notting Hill, *vice* O. Maurice, M.R.C.S., L.R.C.P.Lond., resigned..

BELL, W. B., M.B., C.M., appointed House-Surgeon to the Edinburgh Royal Infirmary.

BRYAN, J. M., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer of the All Saints District of the Northampton Union.

CADDY, Duncan J., M.B., F.R.G.S., appointed Surgeon in Her Majesty's Colonial Medical Service.

CHADWICK, Charles M., M.A., M.D.Oxon, M.R.C.P.Lond., appointed Honorary Physician to the Leeds General Infirmary, *vice* E. H. Jacob, M.A., M.D.Oxon., deceased.

COLDSTREAM, G. P., M.B., C.M., appointed Resident House-Surgeon to the Edinburgh Royal Infirmary.

CROCKER, J. Healey, M.B.Vict., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer of Health for the Borough of Eccles, *vice* C. H. Tattersall, L.R.C.P.Lond., M.R.C.S.Eng., resigned.

CROWTHER, Thomas, M.D., M.R.C.S.Eng., appointed Medical Officer of Health of the Luddenden Foot Urban Sanitary District of the Halifax Union, *vice* E. D. Wellburn, L.R.C.P., L.R.C.S.Edin.

DEMPSEY, Martin J., B.A., M.D.R.U.I., appointed Medical Examiner for Dublin to the Union Assurance Society.

DUPONT, George H., M.B., C.M., appointed Resident House-Physician to the Edinburgh Royal Infirmary.

GRAVELEY, Wm. H., L.R.C.P.Edin., M.R.C.S.Eng., appointed Medical Officer for the Sixth District of the Cuckfield Union, *vice* Mr. T. Gravely, deceased.

GRAY, Mr. J., appointed Medical Officer of Health for the Stanhope Urban Sanitary District of the Weardale Union, *vice* William Robinson, M.D.Durh., resigned.

HASTINGS, Edwin B., M.D.Lond., M.R.C.S.Eng., appointed Assistant Medical Officer to the Workhouse of the Whitechapel Union.

HOFFMEISTER, William, M.D.Heidel., L.R.C.P.Lond., M.R.C.S., Eng., reappointed Medical Officer of Health to the West Cowes Local Board.

JOHNSON, H. S., M.R.C.P.I., L.F.P.S.Glasg., reappointed Medical Officer of Health to the Totnes Rural Sanitary Authority.

LEWIS, Ernest Wool, M.R.C.S.Eng., L.R.C.P.Lond., late House-Surgeon, appointed House-Physician to the West London Hospital.

MCCARTHY, Beckett, L.R.C.P. & S.Edin., appointed Resident House-Physician to the Edinburgh Royal Infirmary.

NEVINS, J. Ernest, M.B.Lond., M.R.C.S., appointed Honorary Medical Officer to the Liverpool School for the Deaf and Dumb, *vice* Dr. Macalister.

PATERSON, James V., M.A., M.B., C.M., appointed Resident House-Physician to the Edinburgh Royal Infirmary.

PIGGOTT, Fred. C. H., M.D., reappointed Medical Officer of Health to the Teignmouth Urban Sanitary District.

PRINGLE, G. L. K., M.B., C.M., appointed Resident House-Surgeon to the Edinburgh Royal Infirmary.

PROSSER, Frank, M.B., C.M.Glasg., reappointed Medical Officer of Health to the Rainford Local Board.

ROBERTS, Charles, M.R.C.S.Eng., reappointed Medical Officer of Health to the Uxbridge Union Rural Sanitary Authority.

SCOTT, T. Goldie, M.B., C.M., appointed Resident House-Physician to the Edinburgh Royal Infirmary.

SELBY, T. J., M.B.Durh., L.R.C.P., L.M., L.R.C.S.Edin., L.F.P.S.Glasg. appointed Medical Officer to the Runcorn Union Workhouse, *vice* John Robinson, M.R.C.S.Eng., L.R.C.P.Lond., resigned.

STEAD, John, M.B., C.M., appointed Resident House-Physician to the Edinburgh Royal Infirmary.

STAR, Paul, M.R.C.S.Eng., L.R.C.P.Lond., appointed Senior House-Surgeon to the Clayton Hospital and Wakefield General Dispensary, *vice* J. W. Bone, M.B., C.M.Edin., resigned.

STEVENSON, Edgar, M.D., C.M.Aberd., appointed Assistant Surgeon to the Liverpool Eye and Ear Infirmary.

SUTTER, Robert Ross, M.B., C.M.Aberd., M.R.C.S., L.R.C.P.Lond., appointed House-Surgeon to the West London Hospital.

TAYLOR, Ashby, M.R.C.S.Eng., L.R.C.P.Lond., appointed Resident House-Surgeon to the Royal Infirmary, Glasgow, *vice* A. Watson, M.B., C.M. Glasg.

TWYFORD, Walter, M.R.C.S.Eng., appointed Medical Officer for the Audlem District of the Nantwich Union.

VERNON, J. J. D., M.B.Lond., M.R.C.S.Eng., reappointed Medical Officer of Health to the Audley Local Board.

WELLIS, Hope, L.R.C.P., L.R.C.S., L.F.P.S.Glasg., L.M., appointed an Assistant Colonial Surgeon of the Gold Coast Colony.

WOOD, Wm. Dyson, L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health to the Chipping Norton Rural Sanitary Authority.

DIARY FOR NEXT WEEK.

TUESDAY.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M.—Mr. E. Durham: On Persistence of the Thyreo-glossal Duct with remarks on Median Cervical Fistulæ and Cysts due to Embryonic Remnants. (Communicated by Mr. Arthur E. Durham.) Dr. Ernst Michels: Case of Supraperitoneal Vesical Hernia. (Communicated by Mr. R. W. Parker.)

WEDNESDAY.

SANITARY INSTITUTE, PARKES MUSEUM, 74A, Margaret Street, W., 8 P.M.—Mr. L. H. Isaacs: The Construction of Roads and Streets from a Sanitary Point of View.

LARYNGOLOGICAL SOCIETY OF LONDON, 20, Hanover Square, W., 5 P.M.—Discussion on the question of Anæsthetics in Operations for Post-nasal Adenoid Growths.

POST-GRADUATE COURSE, West London Hospital, Hammersmith, W., 5 P.M.—Mr. MacAdam Eccles: Head Injuries.

HUNTERIAN SOCIETY, 8.30 P.M.—Clinical evening. Dr. William Ettles: Buphthalmia. Dr. Arnold Chaplin: General Glandular Enlargement. Dr. Arthur Davies: Leucodermia. Dr. Fred. J. Smith: (1) Charcot's Joint Disease; (2) Cerebral Tumour. Sir Hugh R. Beevor, Bart.: Myxœdema. Dr. Stowers: Unusual Syphilitic Eruption. Mr. J. F. Woods: Cases illustrating Treatment by Suggestion. The President will also show cases.

THURSDAY.

BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M.—Dr. Routh: The Conservative Treatment of Diseases of the Uterine Appendages.

NORTH LONDON MEDICAL AND CHIRURGICAL SOCIETY, Great Northern Central Hospital, N., 9 P.M.—Dr. C. E. Beevor: On a case of Cerebral Tumour, with remarks on certain Degeneration of Nerves and consequent Symptoms. Illustrated by means of the lantern. Mr. C. B. Lockwood: A case of Enterectomy and Intestinal Suture after Strangulated Hernia. Recovery.

FRIDAY.

CLINICAL SOCIETY OF LONDON, 8.30 P.M.—Dr. Finlay: A case of Abscess of the Spleen. Dr. T. J. Maclagan: Cases of Myocarditis. Mr. Arbuthnot Lane: Cases illustrating a more Effectual and Scientific Treatment of Fracture of the Tibia and Fibula than that in Common Use. Mr. G. R. Turner: A case of Pelvic Enchondroma. Mr. R. W. Parker: A case of Strangulated Femoral Hernia complicated by Volvulus, with especial reference to the Continuation of Obstruction after Herniotomy.

BRITISH LARYNGOLOGICAL AND RHINOLOGICAL ASSOCIATION, 11, Chandos Street, W., 2 P.M.—Dr. J. Macintyre: The Use of the Phonograph in Teaching and in Practice. Mr. Geo. Stoker will open a discussion upon the Expediency of Tracheotomy as a Preliminary to Thyrotomy for Removal of Foreign Bodies from the Larynx.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 8s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTHS.

CONSTANT.—On March 30th, at Argyll Lodge, Scarborough, the wife of Thos. E. Constant, M.R.C.S.Eng., L.R.C.P.Lond., L.D.S., of a daughter.

ROBERTS.—On April 1st, at the Beeches, Lowestoft, the wife of Reginald J. Roberts, B.A., M.B., B.C., of a son.

TURTON.—On April 1st, at 73, Preston Road, Brighton, the wife of James Turton, F.R.C.S., of a son.

MARRIAGES.

HUNTER—FIELDEN.—April 2nd, at Nutfield Church, Surrey, by the Right Rev. the Lord Bishop of Southwark, assisted by the Rev G. Hartwell Jones, M.A., rector of Nutfield, William Hunter, Esq., M.D., M.R.C.P., 54, Harley Street, Cavendish Square, W., to Beatrice, youngest daughter of the late Joshua Fielden, Esq., M.P., of Nutfield Priory, Surrey.

SILLAR—HALLARD.—On March 29th, at St. Paul's, York Place, Edinburgh, by the Rev. Rowland Ellis, assisted by the Rev. Walter Hazlewood, William Cameron Sillar, M.B., B.Sc., to Eleanor Fanny, daughter of the late Sheriff Hallard, 61, York Place.

DEATH.

LANSDOWN.—On April 2nd, at Samber House, Clifton, Bristol, Elizabeth Blaker, wife of Francis Poole Lansdown, Surgeon.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

Communications for the Current Week's Journal should reach the Office not later than Midday Post on Wednesday. Telegrams can be Received on Thursday Morning.

Communications respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the Journal, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the Journal be addressed to the Editor at the Office of the Journal, and not to his private house.

Authors desiring reprints of their articles published in the British Medical Journal are requested to communicate beforehand with the Manager, 429, Strand, W.C.

Correspondents who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

Correspondents not answered are requested to look to the Notices to Correspondents of the following week.

Manuscripts forwarded to the Office of this Journal cannot under any circumstances be Returned.

Public Health Department.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* British Medical Journal *are devoted will be found under their respective headings.*

QUERIES.

A.M.B.M.A. would be much obliged for any information as to a home or institution for epileptic females, with the fees required.

Anti-Scalptor writes: Can any of your readers inform me of a reliable remedy for pruritus ani? I have had several cases, all young or middle-aged men of cleanly habits, two of them unusually robust. In all cases I tried a succession of likely applications, some of which were of no use at all, and others damned with faint praise. I now dread a case turning up, but have one on hand at the present time doing no better than the rest. If I hear of anything to relieve him through the columns of your valuable paper, both he and I will be greatly obliged.

ANSWERS.

P. M. writes: Unna's plastic inunction can be obtained from Bell's, Oxford Street, London; Hanbury's, Vere Street; and most of the leading chemists.

Analysis of Food and Drugs.

Hygiene.—There is no single work on these subjects. For articles of food Bell's is a useful book. Water analysis is now considered to require bacteriological as well as chemical operations in order to obtain satisfactory results, and the necessary information is scattered.

The F.R.C.S.Edin. Examination.

Spes.—No books are generally recommended to be read for the Edinburgh College of Surgeons' Fellowship. Any of the standard textbooks of surgery will suffice, such as Erichsen, Treves, Holmes, etc. The section on genito-urinary surgery in any one of these should be specially studied, and perhaps any one of the good monographs on that group of surgical ailments.

Income Tax.

Old Student of St. Mary's.—It would be much simpler for our correspondent to deduct the whole expenses of his assistant from his private practice than to put a part to the private practice and a part to the parish appointments. If over-assessed on his private practice why does he not put the matter in the hands of the Income Tax Repayment Agency, 25, Colville Terrace, W.? The house and stables appear to be rightly assessed, so he has no remedy.

Purchase of Practice.

A Member writes: Will you kindly reply to the following two questions: 1. When a general practitioner sells a share of his business to an incoming partner what price ought he to ask—a one, two, or three years' purchase of the average nett profits, calculated on a three years' average? 2. Am I right in asking a two years' purchase for the share and the partner to have the whole of his midwifery fees?

*** The information required amounts to a valuation of the practice and cannot be answered in general terms. An expert should be consulted who should be supplied with all the particulars of the practice.

Incontinence of Urine.

Liverpool writes: In answer to "Member," who writes about incontinence of urine, let me suggest to him the following, which has answered well in my practice: ℞ Tr. lycopod. clar. (Christy's); tr. cardam. co. āā 3ijss; syrupi 3ss; aq. ad 3vi. M. 3ss 4tā quāque horā. This prescription appeared in the British Medical Journal of October 11th, 1890.

Mr Slade I. Baker (Abingdon) writes: I would strongly recommend "A Member B.M.A." to try the remedies I have found eminently successful in three or four cases. In the morning I give a dose of tinct. ferri and liq. strychn. and at bedtime potass bromid. gr. x, and tinc. belladonnæ mx. Three times a week I apply the continuous current for ten minutes with one pole on the sacrum, and the other alternately over the pubes and over the perineum. The use of galvanism was suggested to me some years since by Dr. Althaus. The patients were healthy boys from 14 to 16 years of age, and were all cured.

NOTES, LETTERS, Etc.

Irish Medical Schools and Graduates' Association.

It should have been mentioned that Dr. Stewart, one of the hon. secretaries, was present at the annual meeting and dinner on March 17th.

Paisley Jurymen Fined: Sheriff Cowan on Medical Certificates.

At the Sheriff Court, on March 26th, three persons were each fined in 100 merks Scots for failing to attend as jurymen when cited. Sheriff Cowan, who occupied the Bench, said he had received a medical certificate on behalf of one of the parties, but the specific illness from which he was suffering had not been stated. Medical gentlemen must state the nature of the illness or the certificate could not be accepted.

The Dickinson Testimonial.

The general meeting of the subscribers to the Dr. Dickinson Testimonial Fund will be held in the Board Room of St George's Hospital on Tuesday, April 10th. His Royal Highness the Duke of Cambridge, K.G., has consented to preside on the occasion, and will take the chair at 12 noon. The subscription list will be kept open until April 10th, and intending subscribers should communicate before that date with either Mr. Laurence Read, Honorary Treasurer, at 11, Petersham Terrace, S.W., or Mr. Gerard Carré, Honorary Secretary, at 1, St. George's Place, S.W.

Thymol in Typhoid.

Dr. Richard Neale (South Hampstead, N.W.) writes: "J. H. W." writes at page 668 of the British Medical Journal, "I do not know whether thymol has yet been tried.....in typhoid fever....." A glance at Section 1503-06 of the *Medical Digest* at once gives the information; and, turning to the Journal, vol. i, 1889, p. 430, it is seen that Testi used this drug in 150 cases with great success.

Assistant Medical Officers in Asylums.

A Medical Officer to a County Asylum writes: I think that the time has now arrived when the position of medical officers in asylums might be fairly reconsidered, and their pay readjusted in some fair proportion to that of the medical superintendents and other officials. If Dr. J. Rees Philipps, as Vice-President of the Psychological Branch of the British Medical Association, could bring forward some resolution bearing on the subject at their meeting in June, a copy of which should be sent to the committee of every asylum, I venture to think that it would carry more weight than abuse of the medical superintendents.

One more A.M.O. writes: Now that the grievances of an apparently numerous body of asylum assistant medical officers have been made generally known, there can be little doubt that the matter will be treated in the manner suggested by Dr. Rees Philipps. If "Late A.M.O." who writes in the British Medical Journal of March 24th, remained for seven long years in circumstances such as he describes, the remedy surely lay in his own hands. If he is now, as I apprehend he may more than possibly be, a superintendent, his specious advocacy of the A.M.O. appears to be somewhat incongruous. A temperate suggestion such as that of Dr. Rees Philipps, seconded, I see, by Dr. Goodall, will surely supply the matter with an unquestionably honest *motive*, and whatever the outcome be, let us trust that all may be for the State and not for the party. In conclusion, let me thank you for your extended interest in a branch of the medical profession, which in consequence cannot but be brought into a less "alien" position than it has hitherto occupied.

Probatum Est contends that, whatever the principle adopted as a basis of reform, the same must be extended to all county and borough asylums. It would be a mistake to think that an assistant medical officer of an institution, with a resident population of from 350 to 450, has any less responsible duties than the senior of a large asylum with a population of 600 to 800, with a proportionate medical staff. In almost every case in the smaller asylums, with one assistant medical officer the drudge and immediate responsibility from hour to hour are practically thrown on the one assistant, who is the first accessible medical officer in every emergency. His position therefore is onerous, with no corresponding advantages such as the so-called senior of a larger asylum enjoys. In the smaller asylums, therefore, the frequent change of assistants is all the more to be deprecated; and, in fact, is seldom desired by the superintendent if the assistant shows himself to be in the least efficient. He hopes when the time comes for council and action there will be sufficient manhood left in each individual assistant medical officer to stand by each other, and with all self-sacrifice help to win in some measure the better efficiency of asylums, and the sweets and success of a professional life, to which under the present system none is offered.

Dirty Hands and Frozen Meat.

Mr. J. Lawrence-Hamilton, M.R.C.S. (Brighton) writes: In the British Medical Journal of March 3rd and 17th Dr. Leslie Phillips's interesting remarks concerning frozen meat impetigo are in their present form calculated to convey an erroneous impression. The frozen meat trade is an immense one, and furnishes us with what we presume to be pure meat. At the time of slaughter any pathogenic organisms, such as anthrax, tubercle bacilli, and pyococci, which might have been present in the animal will in all probability become inert by the prolonged refrigeration. The impetigo does not arise from handling meat derived from infected carcasses, but the cold acting injuriously on the dirty hands of the butcher is a factor producing infective inflammation. In this case the butcher contaminates the healthy meat. In the trade there is a belief that the handling of meat furnished by overdriven animals causes eczema about the hands of the salesman, whilst the danger of handling anthrax meat has long been known.

Belladonna and Epilepsy.

Dr. James Cameron (Member Medico-Psychological Association, Hampstead, Dublin) writes: The observations of Dr. C. Black in the British Medical Journal of January 6th on the treatment of epilepsy, at least as far as belladonna is concerned, deserve some little attention. An admirable account of the use of belladonna in epilepsy was given by Dr. Ramskill in a clinical lecture reported in the *Medical Times and Gazette*, November 22nd, 1862. The whole argument of the effect of belladonna in cerebral and spinal local blood pressure and of its use in epilepsy, together with the views of Brown-Séquard, Fuller, and Trousseau, is fully discussed. The theory that belladonna constricts the "cerebral" blood vessels (which is denied by Ramskill while he accepts it with respect to the spinal vascular system) is no doubt highly suggestive for a rational treatment, and on the analogy of this vasomotor effect on the frog's web, we have tried it in the early melancholic stage of *folie circulaire*, which in many respects has points of analogy, if not of homology, with epilepsy, with a slight amount of apparent success. But in these cases, where there seems even more *primâ facie* evidence of the existence of venous engorgement and vascular sluggishness, the success was only partial, and we had to fall back on sulphonal, etc., as the maniacal symptoms developed, so also in several cases of melancholia at the menopause. It is a notorious fact that even after epileptics have been at death's door in the status epilepticus they may not have another fresh fit or series of fits for six weeks. As Dr. Conolly [1] says: "The remarkable suspension of the attacks in some cases which arises from natural causes not at present understood, sometimes imparts what appears to be legitimate credit to any medicine which has been latest given"; clinical experience confirms this even where belladonna has been used.

The success in epileptic attacks of the diametrically opposite (vasodilator) action of chloral on the vessels and blood pressure militates against the curative effect, if any, of belladonna as due to its vasomotor action on the cerebral vessels. The same remarks apply to our experience of digitalis and other vasomotors in epilepsy, and in melancholia with lowered arterial tension. In fact, when we look at the toughened brain of a chronic epileptic in the *post-mortem* room (and practically all cases met with for treatment are chronic), we are driven to admit that although vasomotor and other drugs may through their vascular effects condition the circumstances of fresh attacks, they can have little effect in the pronounced morbid changes of the brain in epilepsy. Practically we have always to fall back on the bromides, which perhaps have a nervous as well as a purely vascular effect, and in our hands—particularly the bromide of lithium—they have met with the ordinary measure of success along with general hygienic treatment.

Twin Pregnancy with Abnormal Placentæ.

Mr. G. G. Sinclair, L.R.C.P. and L.R.C.S.Edin., L.F.P. and L.F.S.Glasg. (Esh, co. Durham) writes: On February 23rd, 1894, I was telephoned for at 8 P.M. to go immediately to Mrs. C. H. I arrived at 8.30 P.M., and found the head in the first position in the vagina. The child was born at 10 P.M.—a strong healthy female child, measuring in length 20 inches and weighing 10 lbs. Immediately after the birth of this child there was a tremendous gush of liquor amnii. After separating the cord and giving the child to the nurse I found a second child, shoulder presenting. I performed podalic version by the bipolar method, and delivered her of another female child at 10.35 P.M., measuring in length 18 inches and weighing 8½ lbs. The placentæ were expelled at 10.50 P.M., weighing 2 lbs. 10 ozs. There were two distinct placentæ united together by cotyledons, each placenta having a cord. The placentæ were expelled *en masse*. Immediately after the placentæ were expelled I administered ergot. The uterus contracted normally, the pulse remained good. The mother and firstborn child are doing well, the second child expired ten minutes after birth. The patient is of small stature but very healthy and strong. She is 32 years of age and has had eight children, twins once previously.

First Description of Exophthalmic Goitre.

Mr. A. Maude (Westerham) writes: Your correspondent in Rome remarks of Flajani that he "has the credit here of being the first to describe exophthalmic goitre, a credit generally given to Graves or Basedow." Flajani was undoubtedly the first to publish a description of this condition, in 1802; an undoubted case is described anonymously in 1816 (*Medico-Chirurgical Journal and Review*), and another in 1820 (*New England Journal*, October), while Demours described it in his great treatise (1818). In 1825 Hillier Parry's works were published, containing a careful description, written in 1796. Other papers were published in Germany and France in 1828 and 1830. Graves's description did not appear till 1835 (*London Medical and Surgical Journal*, vol. vii, No. 173, Renshaw's Series). Pauli (*Heidelberger Medic. Annalen*, 1837) preceded von Basedow's paper (*Casper's Woch.*, 1840).

"Medical Matters in Japan."

There is reason to believe that the "silly season" has arrived somewhat prematurely. Reserving the gigantic gooseberries and the rest for the autumn, the *Daily Telegraph* has gone as far afield as Japan for something quite new. The same journal some years ago announced that the Japanese Government, having forbidden the Samurai to carry their swords in public, might soon be expected to issue an edict compelling them to cut off their pigtails. We are now gravely informed, on the somewhat vague authority of "a French journal," that "the "mother-in-law of the Mikado having become very unwell, it has been thought necessary to consult 423 specialists in her case." Now the accommodation of the imperial palace did not appear to be suitable for so large an assemblage of experts, so the Lord Chamberlain, having engaged "the operating theatre of the largest hospital," conveys thither his august patient and summons the 423 specialists to examine and debate upon her case. The result must have been overwhelming; but we are told—and we can well believe it—that "after the end of the first hour the Mikado's mother-in-law showed signs of the greatest exhaustion," and the royal lady, finding science too complex, dismissed the faculty to fight out the diagnosis as they best might, and determined to resort to the simple and on the whole more satisfactory expedient of a faith cure. To this end a Buddhist priest was called in, and he with prompt conviction pronounced that "the malady was due to the introduction of railways in Japan." The remedy was obvious, but we have yet to learn whether the Mikado has determined to sacrifice his relative or the shareholders.

It is surely time that such imbecilities should cease to find a place in European journals concerning a country which already in the course of a few decades can boast of eminent physicians and surgeons who rival in results and methods the most eminent European practitioners. There is reason to believe, for example, that the statistics of laparotomy and ovariotomy in Japan at least equal those of the best and most successful operators in Great Britain or America.

[1] *Treatment of the Insane*, 1856, p. 73.

LETTERS, COMMUNICATIONS, Etc., have been received from:

(**A**) Another Member; Anti-Scalptor; A.M. B.M.A. (**B**) Messrs. Barr and Son, London; Messrs. W. G. Bradley and Sons, Dublin; Mr. W. Berry, Wigan; Mr. A. H. Butcher, Birkenhead; Mr. S. I. Baker, Abingdon; T. A. Buck, M.B., Ryde; R. C. Bailey, M.B., London; Mr. A. Baron, Nottingham. (**C**) Mr. J. G. Christie, Scarborough; Chronic; Dr. H. Cayley, Woolston; D. J. Caddy, M.B., London; Mr. L. J. G. Carré, London; Mr. W. T. Cole, Holywell; W. L. Cullen, M.B., St. Boswells; Mr. F. A. Corsard, Huddersfield; C. H. L.; Dr. C. M. Chadwick, Leeds. (**D**) W. Duncan, M.B., London; Dr. T. M. Dolan, Halifax; Dr. W. Donovan, Birmingham; Dr. M. J. Dempsey, Dublin; Dr. L. Durno, London. (**E**) Enquirens; Dr. A. A. Edward, Rawtenstall; Sir P. Eade, Norwich. (**F**) Mr. R. W. Frankham, London; Mr. E. G. Farish, London; F.R.C.P.; Mr. S. Fuller, Ramsgate; Mr. W. Flemming, London; E. B. Fuller, M.B., Cape Town; Mr. J. M. Ferguson, Burnley; Dr. T. Fiddes, Urmston; Mr. J. B. Fairmann, Dewsbury; Mr. T. F. Foveaux, Brighton. (**G**) Dr. W. R. Gowers, London; Mr. A. E. Gooch, London; Mr. J. F. Gummow, Wrexham; Herr H. Gruntzdorff, Hamburg; Mr. W. R. Griffith, Ravenglass. (**H**) Mr. F. A. Hocking, London; Dr. W. P. Herringham, London; Mr. W. A. Hayes, Calne. Mr. H. Jackson, Manchester; Sir George Johnson, M.D., London; S. B. Jolly, M.B., Catford; Mr. R. Jones, Liverpool. (**K**) Dr. T. N. Kelynack, Liverpool; Dr. C. Kelly, Worthing; Mr. J. Kirkland, Airdrie. (**L**) The Liquor Carnis Co., London; Mr. J. R. Lunn, London; Mr. J. W. Ley, Newton-Abbot; Liverpool: Mr. C. Lunn, Edgbaston. (**M**) Dr. Stephen Mackenzie, London; Mr. R. P. Martin, London; Mr. A. Maude, Westerham; Mr. B. B. Macpherson, London; Mr. C. H. Mears, Liverpool; Dr. R. F. McCraith, Liverpool; Mr. A. R. Miller, London; Mr. F. Mockler, London; Medicus; Mr. R. Malone, Carlow; D. MacRitchie, M.B., Huntingdon; Dr. A. Mizulieff, Brenkelen. (**N**) J. E. Nevins, M.B., Liverpool; Nottingham Medico-Chirurgical Society, Secretary, Nottingham; Dr. R. Neale, London. (**O**) One More A. M. O. (**P**) Mr. C. S. Palmer, Redhill; Dr. J. Priestley, London; J. F. Porter, M.B., Helmsley; Probatum Est; Dr. A. Pullar, London. (**Q**) Mr. R. H. Quine, Pendleton; Mr. R. F. Quinton, London. (**R**) Mr. B. Redwood, London. (**S**) Mr. W. R. Stewart, London; Mr. W. J. Spence, Syston; S.; Mr. A. B. Spence, Dundee; Dr. A. Strange, Shrewsbury; Dr. A. Swann, Batley; C. W. Steenberg, M.B., Baksburg. (**T**) Tradesmen's National Union, Secretary, London; Mr. J. Turton, Brighton. (**V**) Variola. (**W**) Messrs. Wood and Co., New York; Mr. G. C. Wilkin, London; Dr. F. Winslow, London; Mr. H. Wellis, London; Mr. W. Wingrave, London. (**Y**) Mr. E. S. Young, Dundee; Mr. E. S. Yonge, London, etc.

BOOKS, Etc., RECEIVED.

Disease and Race. By Jadroo. London: Swan Sonnenschein and Co. 1894.

Das Pyrogento, seine Entstehung, Entwickelung und seine gegenwärtige Vollendung. Von Antonio Mistaro. Wien: Im Selbstverlage des Verfassers.

Psychiatrie. Von Dr. Th. Ziehen. London: Williams and Norgate. 1894.

Das neue Krankenhaus der Stadt Berlin am Urban: seine Einrichtung und Verwaltung. Von A. Hagemeyer. Berlin: A. Hirschwald. 1894.

Des Lésions de l'Endocarde chez les Tuberculeux. Par Dr. P. Teissier. Paris: J. B. Baillière et Fils. 1894. Frs. 7.

Traité des Maladies Mentales. Par Dr. H. Dagonet. Paris: J. B. Baillière et Fils. 1894. Frs. 20.

Premiers Secours à donner aux Malades et aux Blessés. Par S. Osborn. Paris: J. B. Baillière et Fils. 1894. Frs. 2.

The Pharmacopœia of the Evelina Hospital for Sick Children, Southwark. London: Adlard and Son. 1894. 1s.

Atlas of Diseases of the Skin. By Dr. Radcliffe Crocker. Part III. London: Young J. Pentland. 1894. 21s.

*** **In forwarding books the publishers are requested to state the selling prices.**

A CLINICAL LECTURE
ON A
SERIES OF 46 CASES OF REMOVAL OF ONE-HALF OR THE WHOLE OF THE TONGUE,
WITH ONE FATAL RESULT.

Delivered at St. Bartholomew's Hospital.

By HENRY T. BUTLIN, F.R.C.S., D.C.L.,
Surgeon to the Hospital.

[The first part of the lecture was devoted to a demonstration of Whitehead's method of removal of the tongue with scissors, and operations for the removal of glands and ligature of the lingual artery. The lecturer stated that all his operations had been performed by Whitehead's method, and that the lingual artery had been tied in those cases in which the disease was situated wholly at the base of the tongue, and in those in which the situation of diseased or suspected glands was such that the same incision was suitable for ligature of the artery. He strongly recommended that such wounds should be drained for a week or ten days, especially when the submaxillary salivary gland had been removed, for the discharges proceeding from the wound in the mouth sometimes sink down into the deeper wound, and occasion troublesome inflammation of it. He drew the attention of the students to the ordinary causes of death after operations on the tongue, particularly to general sepsis, and septic affections of the lungs, which form the very large majority of causes of death after these operations. The knowledge of the causes of death naturally leads to the consideration of the measures which should be taken to prevent them.]

The after-treatment of operations on the tongue should be chiefly directed to (1) maintaining the wound in the mouth as aseptic as possible; (2) diminishing the tendency of the wound discharges to pass down the air passages; (3) preventing food from passing down the trachea into the lungs.

The first indication is, I believe, better fulfilled by the frequent use of powdered iodoform to the mouth wound than by any other means. As soon as the operation is over, and before the patient is put back to bed, the surface of the fresh wound is covered with powdered iodoform. And, for a week or ten days, iodoform is blown on to the surface of the wound by means of a proper insufflator. For this purpose, Kabierske's insufflator is the best instrument. Powder must not be ladled into the wound with a spoon, but must be blown directly into the cavity, so as just to cover the raw surface. I have never seen any symptoms which could be attributed to iodoform when it has been applied in this manner, and I know of no dressing which maintains the wound in such a healthy condition. In addition, the patient may use a mouth-wash of Condy's fluid or weak carbolic solution to help to cleanse the interior of the mouth of the fluids which collect there.

The second indication requires that the patient's head should be kept low, and that he should lie on one side. I only allow one small pillow, and insist that he should lie well over on the side from which the greatest amount of tongue has been removed. The discharges then have a tendency to sink into the cheek, and are frequently washed out or allowed to run out, and there is thus the least possible inclination of discharges to sink down towards the back of the mouth and larynx.

The feeding of these patients needs very great attention. When only half of the tongue—whether a lateral half or the front half—or two-thirds has been removed, liquids can generally easily be taken on the day following the operation from a feeder with a spout, provided a piece of india-rubber tubing, 3 or 4 inches long, be fixed on to the spout. If the right half of the tongue has been removed, the patient should lie over on the left side during feeding, so that the food is kept as far as possible away from the wound, and passes over the parts which have been least interfered with.

When the whole of the tongue has been removed the difficulty of swallowing is much greater, and many days may elapse before the patient acquires the knack of swallowing liquids without permitting a small quantity to pass down the air tubes. During the first forty-eight hours these patients are fed through the rectum with nutrient enemata. At the end of that period I allow the patient to make a first attempt to swallow a little liquid, and water is chosen for the experiment, because the entrance of a little water into the trachea is seldom followed by any serious consequences. Milk and beef-tea are more dangerous; they hang about the air tubes, are difficult to get rid of, and are very prone to undergo rapid decomposition, and occasion the much-dreaded swallowing pneumonia (*Schluck-pneumonie*). If the experiment is successful other liquids may be tried, and the problem of feeding is really overcome. But if there is any difficulty I feed the patient as long as may be necessary through a tube. I believe that no instrument is so good for this purpose as a black bulbous catheter, about No. 9 or 10, attached to a long piece of india-rubber tubing, to the other end of which a small glass funnel is fixed.

The throat is first sprayed with a 3 or 4 per cent. solution of cocaine; the tubing is clamped with forceps just above the attachment of the catheter, and the funnel and tubing are filled down to the clamp forceps with warm food. The catheter is very gently passed down the pharynx, and hitches at the posterior border of the larynx. The patient is directed to swallow, and as he does so the catheter is easily passed on into the œsophagus. For the moment discomfort is created, and the patient often struggles. He is directed to close his mouth, and no attempt is made to pass the catheter farther down for half a minute or longer. Then it is slowly and gently passed down to a distance of about 11 inches from the teeth. When the annoyance of the presence of the catheter has ceased, the clamp is removed and the food is allowed to run slowly down into the stomach. If there is an inclination to regurgitation or to cough, the descent of liquid is instantly arrested by pressing on the tubing with the finger and thumb, and the nurse lowers the funnel until the dangerous moment has passed. By attention to these details a pint or a pint and a-half of liquid may easily be introduced into the stomach without danger. Before removing the catheter the funnel is raised high up, so as to get rid of the contents of the tube; and during the actual removal of the catheter the tubing is kept tightly pressed between the finger and thumb in order to prevent the entrance of even a few drops into the larynx. When the feeding is carefully carried out according to these directions, I have known patients so satisfied with it that they have sometimes insisted on being fed through a tube for a much longer period than I have deemed necessary.

Results.—I do not know whether it is to the great care which has been bestowed on these measures, or whether it is due to a long spell of good fortune that I have removed at least half the tongue in forty-six consecutive cases with one fatal result. The great majority of the operations were, of course, uncomplicated, that is, they were not complicated by the removal of lymphatic glands or of ligature of the lingual artery. But they were performed on persons varying in age from 33 to 75 years, and nineteen of them were performed on patients over 60 years of age. Some of the patients were suffering from organic disease of internal organs, and some of the operations were very severe. They may be thus classified:

1. Uncomplicated operations, 30: removal of one lateral half of the tongue, 13; removal of anterior half or two-thirds, 12 (in several of these the floor of the mouth was at the same time freely dealt with); removal of the whole tongue, 5.

These uncomplicated operations were recovered from in almost every instance without any drawback. One old man, aged 72, suffered from retention of urine a few days after the operation, due to enlargement of the prostate, and I was obliged to tap the bladder above the pubes and insert a tube; but his progress to good recovery was not interrupted by this accident.

Another patient, 46 years old, had an attack of secondary

hæmorrhage from the right lingual artery eleven days after the removal of the whole tongue. An anæsthetic was administered and the artery tied in the floor of the mouth, after which he made a steady recovery.

In an old man, aged 72, severe bleeding took place on the day of the operation, not from the tongue but apparently from the back of the throat. I thought he must have died of this; but after some time the hæmorrhage ceased and he slowly recovered, but his recovery was seriously retarded by the loss of blood.

2. Complicated operations, 16: removal of half of the tongue and lymphatic glands, 2; removal of the whole of the tongue and lymphatic glands, 1; removal of half of the tongue, ligature of the lingual artery in the neck, removal of glands, etc., 10; removal of the whole tongue, ligature of the lingual artery in the neck, etc., 3.

These complicated operations were for the most part recovered from with greater difficulty than the uncomplicated operations. Infiltration took place from the wound in the mouth into the deeper wound in several of them, and, in one case in which this occurred, the patient was for two or three weeks seriously ill. Since then I have almost invariably drained the lower wound for the first few days after the operation, a precaution which I had seldom previously taken.

In one of these patients, 51 years old, hæmorrhage occurred six days after the operation from a deep cavity which had been made in the floor of the mouth, and recurred during three or four days. It was ultimately arrested by thoroughly clearing out the wound to the bottom, and plugging it with iodoform gauze. And in a man, aged 49, secondary hæmorrhage set in from the wound in the neck nine days after the operation. The hæmorrhage was arrested also by plugging, and the patient slowly recovered.

A patient, aged 45 years, was seized with a rigor on his return to the ward immediately after the operation, and for five days in succession his temperature was between 101° and 102°. I was naturally anxious on his account, examined the wound in the mouth carefully day by day, and had the external wound dressed much more frequently than I should otherwise have done. But the most careful examination failed to discover sufficient cause for his condition, and I could not but observe that he did not seem really very ill. On the sixth day he was attacked with acute gout in the great toe (he had been subject to gout), when his temperature fell to normal, and remained there until his discharge from the hospital.

The fatal case was that of a man, aged 71, who suffered from an epithelioma of the anterior portion of the left half of the tongue, and associated enlarged glands. I removed the left half of the tongue, the enlarged glands, and tied the lingual artery in the neck. The operation was performed on September 18th, 1891. In the course of a day or two the wound in the neck was foul, apparently from the sinking down of discharges into it from the mouth; it had not been drained. The patient had rigors and high temperature. He appeared to improve for a while after the condition of the wound had been bettered, but he finally died on October 22nd, five weeks after the operation. There was no *post-mortem* examination.[1]

I have thought this series of cases worthy of publication on account of the almost complete absence of general septic poisoning and of septic affection of the lungs. At first I thought that my success was but a part of the general success which at the present time attends these operations, but hospital statistics and tables show that this is not the case, and that the percentage of deaths after such operations as I have put together above is still considerable, and that nearly all the deaths are due either to general or to pulmonary sepsis. Such septic conditions are by no means limited to the larger operations or to those in which the entire tongue has been removed. But I regard the complicated operations as more dangerous than those which are not complicated by any external wound, and I would rather remove the whole tongue than one-half of the tongue, and at the same time perform a severe operation on the side of the neck.

So far as I can judge, the manner of performing the operation has less to do with the recovery of the patient than the after-treatment. I greatly prefer Whitehead's method of removing the tongue with scissors to any other method, and have exclusively employed it for six or seven years. But other surgeons still prefer to use the *écraseur*, and remove the whole or large portions of the tongue with it very satisfactorily.

No special care was taken to select the forty-six patients on whom these operations were performed. In every case in which it appeared likely that an operation would benefit the individual and prevent recurrence in the mouth it was undertaken, even if he was in a bad state of health. For the sufferings endured by those persons who die of actual cancer of the tongue moved me to extend the operation, even for the sake of palliation, to persons on whom I should not otherwise choose to operate.

[1] At the time this lecture was delivered I believed that I had had a series of 45 cases without a death, for I had overlooked this case. I performed the operation during the long vacation for one of my colleagues, and only took charge of the patient until his return to town at the end of September. The man was not in Mr. Smith's ward, to which I was at that time assistant surgeon, and I really did not know of his death, for his case is not entered in the registration book in which the cases under the care of Mr. Smith and myself are placed. Fortunately, before I sent the lecture for publication, my attention was called to the case, for the fatal result of which I am, of course, wholly responsible.

A CLINICAL LECTURE
ON
TWO CASES OF LUPUS TREATED BY THYROID EXTRACT.

Delivered at the Edinburgh Royal Infirmary.

By BYROM BRAMWELL, M.D., F.R.C.P.Edin.,
Assistant Physician to the Edinburgh Royal Infirmary.

[With Special Plate.]

To-day I propose to bring before your notice two cases of lupus which have been treated and materially benefited by the internal administration of thyroid extract, and by this treatment alone.

I have already explained my reasons for employing the thyroid treatment in cases of psoriasis. The desquamation and the remarkable improvement in the nutrition of the skin which the remedy produced in the first case of myxœdema, which I had the opportunity of treating by thyroid feeding, suggested to me that the remedy would probably be beneficial in some skin diseases. The rapid and marked improvement which occurred in the first case of psoriasis in which I employed the thyroid extract confirmed this opinion, and led me to suggest that it would probably be useful in ichthyosis, exfoliative dermatitis, and perhaps in other forms of skin disease. Now, just at the time that I was making my first experiment in psoriasis, this girl, M. M., was sent into my ward by Drs. Allan Jamieson and Norman Walker, suffering from lupus, in order that she might have her face scraped; and, after observing the case for a time, I determined, before anything was done to the face, to try the effect of the thyroid treatment.

I was anxious to give the remedy a trial in lupus for two reasons:—

1. As an experiment. Having observed the benefit which seemed to be produced in the course of a few days in psoriasis, I was anxious to see whether it might not possibly produce some improvement in lupus. But I must confess that this, the purely experimental reason, did not hold out to my mind any reasonable hope or expectation of success. Psoriasis is one thing, lupus is another and quite a different thing. Lupus is one of the most intractable and incurable of all skin diseases. The mere fact that the remedy was useful in psoriasis—a disease which often spontaneously subsides, and which, in individual cases, is beneficially influenced by many different forms of treatment—did not, to my mind, afford any adequate reason for supposing that it would be beneficial in lupus.

2. But I had another and, as I thought, a more satisfactory and promising reason for hoping that the thyroid extract

might be beneficial in lupus. Lupus is generally regarded as a tuberculous affection of the skin. Now patients affected with myxœdema not infrequently die from tubercle. In the first part of my *Atlas of Clinical Medicine*, I have referred to a case of myxœdema, in which the patient died at the age of 72 from extensive miliary tuberculosis of the lungs and peritoneum. The important point in the case is this, that diffuse tuberculosis is very rare in old people. Professor Greenfield has also directed attention to the liability of myxœdematous patients to tubercle. Knowing then that myxœdematous patients often die from tubercle, I concluded that they probably have a special liability to tubercle. I reasoned that, if this is so, it is perhaps the fact that the absence of thyroid secretion from the juices and tissues of the body predisposes to the production of tubercle. Further, I reasoned that if the absence of thyroid secretion predisposes to the production of tubercle, the converse proposition, namely, that thyroid extract may perhaps prevent the development of tubercle, or exert a beneficial influence upon tuberculous lesions which are already present, and particularly upon tuberculous lesions of the skin (for I knew that the thyroid extract had a markedly beneficial effect upon the nutrition of the skin), may perhaps turn out to be the case.

Let me now briefly detail the history of these two cases and the effects of the treatment.

Case I.—History.

The patient (M. M.) aged 16¾, was admitted to Ward 5A, on January 25th, 1893. The history which she gave of the previous course of the disease was as follows:

In 1884, nine years ago, when she was 7 years of age, a small brown spot appeared below the angle of the jaw on the right side. It gradually extended, being sometimes better, sometimes worse. Her mother did not pay much attention to it, as "she though it was just from glands."

In 1888 a little knot appeared below the right eye; it burst and ulcerated. She consulted a doctor, who told her to leave it alone, and gave her some medicine. This patch gradually extended, until it finally became continuous with the patch which had commenced at the angle of the jaw.

In 1890 the patient consulted Dr. Allan Jamieson, at the infirmary. She was sent to Dr. Muirhead's ward, where she remained for eight weeks, the disease being treated with local applications. After being in the infirmary for three weeks the patient had an attack of erysipelas, the result, she says, of sitting in a draught. She was confined to bed for eight days. The erysipelas extended from the right ear over the face, scalp, and back of the neck. On recovering from the erysipelas the patient was sent home. When she came back to the infirmary to show herself the face was considerably improved. In the course of a short time the disease again got worse, and extended to the opposite side of the face.

In January, 1891, the patient was again admitted into the infirmary under the care of Dr. Muirhead, and was treated by injections of Koch's tuberculin. After the fifth injection erysipelas developed. This (the second) attack of erysipelas was worse than the first. The patient was removed to the Observation Ward, where she remained for seventeen days. On her discharge the lupus was considerably improved; she says that the doctor thought that the erysipelas had done it good. She was readmitted to Ward 25, and had four additional injections of tuberculin; she was then sent home considerably improved. The face remained fairly well for about a year; the disease then again developed. About this time the patient had a third attack of erysipelas. It was severe. She was confined to bed for three weeks. After this attack the lupus seemed somewhat improved, but the improvement was very temporary. The disease soon extended, and became much worse than it had ever been before. Accordingly, the patient again consulted Dr. Allan Jamieson, who sent her to Ward 5A, to which she was admitted on January 25th, 1893, as stated above.

Condition on Admission.—The condition of the face at the time of her admission is accurately represented in the accompanying illustrations (see Figs. 1 and 2). The disease was, you will see, extensive. The nose, left cheek, and upper lip were thickly covered with scabs; a ring of scabs extended from each angle of the mouth down to the chin; the lower lip and the skin immediately beneath it were unaffected. An extensive cicatrix, in the midst of which there were many ulcerated patches and lupus nodules, covered the cheeks. The cicatrix was of a deep red colour. The edges of the cicatrix were thickly studded with lupus nodules, and there were several outlying nodules ("satellites," as Mr. Jonathan Hutchinson would term them) in the adjacent sound skin of the cheeks and face. The cicatricial tissue which covered the cheeks was hard and brawny. The patient's general health was good. There is nothing that need be noted with regard to the general condition except this, that she had never menstruated. The family history need not detain us; it is unimportant.

Treatment and its Results.

Some days after the patient's admission to hospital, an ointment containing salicylic acid was applied to some of the scabs and lupus ulcerations. The result was a marked increase in the redness and suppuration. The application was therefore discontinued, and nothing more was done until February 13th, when a quarter of a lobe of raw thyroid gland was given, finely minced and concealed in rice paper.

On February 15th, 17th, 22nd, 24th, 26th, 28th, and March 2nd and 4th, half a lobe of fresh thyroid was administered.

On March 6th, 20 minims of Brady and Martin's extract, and on March 8th and 10th half a lobe of fresh thyroid were given.

On March 11th, 10 minims of Brady and Martin's extract, and on March 12th, half a lobe of the fresh gland. This dose—10 minims of Brady and Martin's liquid extract one day, and half a lobe of the fresh gland the next day—was continued until March 22nd, when the dose was reduced to 5 minims of the liquid extract, and a quarter of a lobe of the fresh gland on each alternate day. The patient continued to take this dose—5 minims one day and a quarter of a lobe of fresh thyroid the next day—until April 13th, when the fresh gland was finally discontinued, and 15 drops of Brady and Martin's fluid extract of thyroid were given every day. This dose was continued until May 15th, when the patient was sent to the Convalescent Home. The results of the treatment were as follows:

February 14th (the day after the thyroid treatment was commenced). The patient feels sick, and complains of feeling tired and sick; she was therefore kept in bed.

February 16th. The patient says she is much better, and that she is hungry. The temperature has risen to 99° F. The face feels less hot, and it certainly looks less red and angry. Some of the crusts seem to be drier than they were before the treatment was commenced.

February 18th. The patient says that the face feels a great deal better, and that it is not nearly so tight. There is more suppuration over the nose. The patch below the right eye seems to be improving.

February 21st. The patient says that she feels quite well. There seems to be rather more suppuration, and some fresh crusts over the left cheek. In other places where the lupus nodules are small—as on the right side of the face below the eye—there is a distinct improvement.

February 23rd. The half lobe of thyroid, which was again administered yesterday, has not produced any sickness or disturbance.

February 27th. The patient continues to feel quite well.

March 1st. Some of the crusts have fallen off, the face is certainly better; it is much cooler looking and less red.

March 17th. The patient says that the feeling of heat and tightness in the face has entirely disappeared. Most of the crusts have disappeared from the right side of the face, leaving a healthy cicatrix in their place.

April 13th. The fresh thyroid to be discontinued and the patient to take 15 minims of Brady and Martin's extract every day. The face continues to improve. Some of the scabs on the right cheek, upper lip, and nose, have fallen off. The redness has almost entirely disappeared; the outlying nodules are much less noticeable.

May 15th. The patient was to-day sent to the Convalescent Home. The face looks very much better than it did at the time of her admission to the hospital. During her stay at the Convalescent Home the patient is to continue the thyroid treatment and to come in at the end of a fortnight to show herself.

I may here note that on several occasions, between February 13th and May 15th, the thyroid extract was purposely discontinued for a few days, in order to observe the effects of the remedy. The invariable result was that the face became more red and injected when the remedy was discontinued, and that the redness perceptibly diminished shortly after the extract was resumed.

May 28th. The patient came in to show herself to-day. The face continues to look well.

Erysipelas.—May 29th. The patient was sent back to the infirmary this morning looking collapsed and ill. It seems that she returned to the Convalescent Home yesterday on the top of a omnibus, the face being exposed to a cold wind. During the course of the evening she had a shiver; she then became feverish and ill, and was accordingly sent back to the hospital this morning. She was sent to the Observation Ward, for there was a patch of commencing erysipelas on the right side of the face. The temperature was 103° F., pulse 130. Ichthyol ointment was applied locally, and tincture of the perchloride of iron (20 minims every four hours) and quinine (5 grains every six hours) were given internally.

The attack of erysipelas proved to be severe, the whole face, head, and adjacent parts of the neck were involved. The highest temperature reached was 104° F. During the attack of erysipelas, the hair, which was very luxurious, was cut short.

On May 5th the temperature, which the previous night had been 103.6°, fell at midday to the normal. After this convalescence was rapid.

On June 20th the patient was readmitted to Ward 5A, feeling, she said, quite well. The scabbing round the mouth and on the left side of the face is rather less marked than before the attack of erysipelas, but the redness and injection have distinctly increased. Five drops of thyroid extract to be taken daily.

The photograph which is represented in Fig. 3 was taken on June 22nd. On comparing it with those which were taken at the time of her admission (January 25th, 1893), it will be seen that the disease has distinctly improved. This improvement was due to the thyroid treatment and not to the attack of erysipelas.

June 23rd. The face is not nearly so red to-day.

June 27th. The patient says that the face feels quite cool.

June 28th. The patient complains of sickness and faintness and pain in the lower part of the abdomen. The thyroid extract was accordingly suspended for two days.

July 3rd. The face looks very much better; it is much paler.

July 28th. The patient says that she feels weak and shaky. She complains of pain in the lower part of the abdomen. Thyroid stopped.

In the paper which I read at the Newcastle meeting of the British Medical Association,[1] in referring to the case I said: "I have administered thyroid extract in one case of lupus with the effect of apparently producing distinct improvement." That statement does not convey an adequate idea of the degree of improvement which had taken place at this date (July 28th). But the statement was made with a purpose. In reporting the results in this and in all the cases of

[1] See British Medical Journal, October 28th, 1893, p. 934.

skin diseases which I have treated with thyroid extract. I have been most careful to guard against any exaggeration, and have habitually and purposely underestimated rather than overestimated the degree of improvement which has from time to time taken place.

After this date I did not see the patient until

September 2nd, when I returned from my holiday. The following note was then made: During the past month the patient has not had any thyroid extract. The face looks more red and injected and distinctly worse than it did on July 28th, the scabs are more numerous. The thyroid treatment to be again commenced—two tabloids every day.

September 9th. The face looks decidedly better; it is less red, some of the scabs have again become detached.

September 20th. The patient looks pale and says she feels ill. She complains of pain in the lower part of the abdomen, headache, and sickness. Thyroid stopped. Fomentations applied over the abdomen.

On consideration I came to the conclusion that this attack was probably due to a menstrual disturbance rather than to the thyroid extract. The patient had never menstruated. On June 28th and July 28th she had complained of similar symptoms (pain in the abdomen, headache, sickness, faintness, and general *malais-*) and on inquiry I ascertained that a similar attack had occurred towards the end of August, no thyroid having been administered for a month previously. The occurrence of subsequent attacks of a similar kind (on October 21st, November 25th, December 30th, and January 26th, 1894) proved, I think that this opinion was correct.

September 25th. The patient is better. Thyroid treatment resumed.

September 29th. The patient feels quite well. The face looks better than it has done since the treatment was commenced, Many of the scabs have disappeared. The patient says that the face has never been so well since the disease became severe five years ago.

October 14th. The face continues to improve.

October 21st. The patient again complained of pain in the abdomen, weakness, headache, and general *malaise* (menstrual disturbance). Thyroid suspended.

October 28th. The patient feels quite well; thyroid resumed.

November 4th. The patient was discharged very much improved but not cured.

November 13th. The patient was readmitted for further treatment. The face does not look quite so well as it did a fortnight ago. Ten minims of thyroid extract to be taken each day.

November 20th. Face again improving.

November 25th. Menstrual disturbance (pain in the lower part of the abdomen, headache, general *malaise*) again recurred but there has been no menstrual flux. Thyroid suspended.

November 28th. Patient feels well; thyroid resumed.

December 13th. Dose of thyroid increased; 30 minims of Brady and Martin's extract (three 10-minim doses) each day.

December 20th. Patient shown to the Medico-Chirurgical Society.

December 30th. Menstrual disturbance, same symptoms as before; thyroid suspended.

January 3rd, 1894. Thyroid resumed; 10 minims three times in the day.

January 14th. Patient complains of headache and vomiting; tongue clean; pulse 108; face very much flushed; thyroid omitted.

January 16th. Patient better; thyroid resumed.

January 17th. Patient was again shown to the Medico-Chirurgical Society.

January 20th. Patient sent home for a time.

Additional Note.—On February 3rd the patient returned to the infirmary, and the following note was made: The face looks remarkably well, and the patient says that she feels much stronger and better. Since her discharge a fortnight ago she has been taking a smaller dose of the thyroid—two of Burroughs and Wellcome's tabloids each day. To continue to take two tabloids daily. A few days after going home she had another menstrual attack.

February 10th. Face red and angry-looking; rather more superficial scabbing.

February 12th. Three tabloids, instead of two, daily.

February 16th. Face looking very well, less red, fewer superficial scabs.

The photographs (reproduced in Figs. 4 and 5) show the condition the face on January 7th. On comparing the photographs with those which were taken before the thyroid treatment was commenced, you will see that a remarkable improvement has taken place. This improvement is entirely the result of the internal administration of thyroid extract. During the time—almost a year—which she has been almost continuously under thyroid treatment, either in or out of hospital, no local application of any kind has been employed. The patient has not even been allowed to wash the face with soap. None of the scabs have been artificially detached. The disease, so far as local treatment is concerned, has been left to take care of itself.

The disease is not yet cured, but it is very greatly improved. There is, I think, reason to hope that further treatment will produce further improvement; but whether in the course of time a cure will result it is impossible to say. The patient and her friends state that the face has never been anything like so well as it is now since the disease became severe five years ago. But it is only right to state that the vascularity of the face varies considerably from time to time. As a rule, the face and cheeks are pale (this was the condition when the photographs reproduced in Figs. 4 and 5 were taken). Every now and again, and without any apparent cause, the cicatrix becomes much more deeply injected, and the lupus nodules which still remain much more apparent; these attacks are generally followed by the formation of new superficial scabs on the unhealed parts. These vasomotor changes are partly, perhaps, the result of the prolonged administration of the thyroid extract, and partly the result of the general condition of the patient. She is anæmic, and for the past two months has been very easily upset. The fact that she has never menstruated, and that the menstrual flux is "trying to appear," probably accounts in part for this constitutional (vasomotor) instability. How far the prolonged administration of the thyroid extract may be the cause of the anæmia and debility I am not prepared to say. (The marked improvement in the general condition of the patient, which took place between January 20th and February 3rd, when the dose of thyroid was reduced in quantity, seems to show that the anæmia and general debility were in great part due to the prolonged administration of large doses of the remedy). But, be that as it may, the general condition of the patient undoubtedly constitutes a difficulty in the further treatment of the case. It prevents us pushing the remedy as we otherwise would feel disposed to do. The anæmic condition naturally suggests the administration of iron; and for a few days iron and arsenic, in small doses, were administered, but they were almost immediately discontinued, for under their use the hyperæmia and redness became aggravated. For a fortnight prior to January 20th the patient took small doses of quinine and strychnine. These remedies have not had any material influence upon her condition. The remarkable improvement which has taken place cannot in any degree be attributed to their use.

Note on the Subsequent Course of the Case.—After the lecture was delivered the patient remained much *in statu quo* until February 28th, when she was discharged. On March 31st, when she came to report herself at the infirmary, the nose was decidedly worse, the other parts of the face if anything better than at the time of her discharge a month previously. She was feeling well, but was still very anæmic. The dose of thyroid was increased from two to three tabloids per diem.

The next case I wish to bring before your notice is that of R. D., who was admitted into Ward 27 on December 13th, 1893, suffering from extensive and old-standing lupus of the face. Many of you are well acquainted with the case, for, during the past year, the patient was more than once in Ward 5, under the care of Mr. Cotterill.

CASE II.—HISTORY.

The patient, a girl aged 18, has suffered from the disease since she was 10 years old, that is, for eight years.

In 1886 a small patch of lupus developed at the outer angle of the left eye. Three months afterwards the disease extended to the outer and inner side of the left nostril and gradually involved the adjacent parts of the face.

In 1887—about a year after the disease commenced—the patient was admitted into the infirmary under the care of Mr. Joseph Bell. She remained in the infirmary for eight months. During that time the face was scraped five times. Very decided improvement resulted from these repeated operations, but when she left the infirmary the disease was not healed. Unfortunately, the improvement was only temporary; soon after her discharge from hospital the disease again began to develop, and gradually extended over the greater part of the face. Nothing more was, however, done until the year 1893.

On January 9th, 1893, she was admitted into Ward 5, under the care of Mr. Cotterill. The disease was then very extensive; it involved the greater part of the face. The face was scraped and afterwards washed with superfatty soap, and dusted with aristol. The result was eminently satisfactory, for the patient was discharged from the infirmary towards the end of January, the ulceration being healed.

She returned to the infirmary in May, the lupus having recurred towards the end of March. The ulceration was much less extensive than at the beginning of January. The face was again scraped. Very distinct improvement again resulted from the operation. The patient was discharged from the infirmary in the middle of June much better than at the date of her admission, but the lupus ulceration was not completely healed. A small patch remained unhealed between the nose and the mouth. Two months after leaving the hospital the disease again began to develop; the ulceration extended round the mouth, involved the nose, and finally attacked the right eye.

At the beginning of December she was again admitted to the infirmary under Mr. Cotterill's care. One day, on going round Ward 5a, I happened to see the patient, and the idea at once occurred to me that the case would be a very suitable one to try the effect of the thyroid treatment—a bad case of lupus, and therefore a good test case. I accordingly requested Mr. Cotterill to transfer the patient to me, and he very kindly

and generously consented. It was in this way that the patient came under my notice.

Treatment and its Results.

The thyroid treatment was commenced on December 13th, 1893, 5 minims of Brady and Martin's extract being given each day. The patient was placed on the ordinary diet of the hospital no local treatment of any kind being employed.

On December 17th the patient was shown to the members of the Medico-Chirurgical Society. At that time the treatment had not produced any perceptible effect. My object was to afford the members of the Society an opportunity of seeing the disease in its original (untreated) condition.

On December 18th, the dose was increased to 10 minims, and on December 27th to 15 minims of Brady and Martin's extract night and morning, that is to say, 30 minims per diem.

On January 9th, one tabloid was added to this dose of the liquid extract. From this date till February 3rd the patient continued to take one of Burroughs and Wellcome's tabloids, and 30 minims of Brady and Martin's liquid extract every day. The result, up to the present time, has been a decided and, comparatively speaking, rapid improvement.

On January 9th (the day of your return after the Christmas holidays) you will remember that I asked you to state individually your opinions as to the change which had taken place in the condition of the face during your absence (a fortnight). Every one of you, without exception, said that it looked better. Some of you were chiefly struck by the marked diminution in the vascularity, the cheeks and cicatrix were much less red. Most of you said that the scabbing was less extensive. Both statements were correct.

Within a month from the commencement of the treatment, unmistakable improvement had taken place (see Figs. 6 and 7). The improvement has steadily continued up to the present time.

After the thyroid treatment had been employed for ten days or a fortnight, the scabs began to dry and contract. At the end of a month some of the superficial scabs had fallen off, leaving a smooth cicatrix in their place. By comparing the photographs (which are reproduced in Figs. 6 and 7) you will see that the greater part of the scab around the right eyelid has been detached, and that the scabbing is less extensive on the left side of the nose, inner side of the left nostril, left side of the mouth, at the angles of the mouth, and on the lower lip. The redness of the face is markedly less, and the little outlying nodules of lupus tissue are much less apparent. The girl herself says that the face is much better; it feels, she says, "less tight." She also states that the inside of the mouth and the eyelid—for the disease not only affects the outer surface of the lips and cheeks, but it extends for a short distance on to the mucous membrane covering the adjacent part of the lower lips and cheek, and it involves the conjunctiva—feel better. The discharge from the ulcers which cover the nose and mouth is much less than it was before the treatment was commenced. (The secretions from the nose and mouth, which run over the upper lip and over the angles of the mouth, interfere with the rapidity of the healing; they keep the scabs over which they flow moist).

We may confidently say, then, that between December 23rd and January 9th a decided improvement had taken place, and that the improvement has been maintained up to the present time.

On January 17th the patient was again shown to the Medico-Chirurgical Society, and on February 2nd to a conjoint meeting of the local Branches of the British Medical Association.

During the six weeks that the patient has been under treatment the appetite has been good and there have been no unfavourable symptoms. The temperature has remained, if anything, subnormal, but the pulse frequency has increased. The pulse has varied from 80 to 112, the average being from 95 to 100.

(At the end of the first week of the treatment the conjunctiva of the right eye became inflamed, in consequence, apparently, of the pus from the ulcerated lid being retained and getting into the eye. The eye was consequently covered with a shade and the conjunctiva was bathed with a weak solution of tannin—cold tea. In the course of a few days the conjunctivitis was better and the shading and bathing were discontinued.)

February 3rd. Liquid extract stopped; to take three tabloids daily.

February 8th. Pulse 120; headache; temperature 100°; gumboil forming. To remain in bed: dose of thyroid reduced to two tabloids; face looking very well.

February 9th. Patient better; to get up.

February 18th. Has continued to take two tabloids daily since last note; the face continues to improve; is looking better to-day than it has done since the treatment was commenced; the scabbing is less extensive.

Note on the Subsequent Course of Case 2.—The improvement has slowly continued and now (March 31st) the face is better than it has ever been since the treatment was commenced; but it is yet far from cured.

In this case the improvement has perhaps been more rapid and more striking than in the first case. In this, as in the first case, absolutely nothing whatever has been done in the way of local treatment; the patient has not been allowed to wash the face with soap, and none of the scabs have been artificially detached even when they were loose. The only treatment which has been employed has been the internal administration of thyroid extract.

I trust that the improvement, which is already considerable, will continue, and, judging from the result of the treatment during the past six weeks and from the remarkable improvement which has occurred in the first case, there are good grounds, I think, for expecting that this will be the case.

At present it is premature to say more than this: that both of these cases of lupus have been benefited—the first case greatly benefited—by the treatment. I have no wish to exaggerate the improvement; I prefer to err on the side of caution. I do not say that it is possible to cure lupus by the internal administration of thyroid extract. The results which I have up to the present time obtained do not warrant any such conclusion. But I do say that in some cases of lupus a remarkable improvement does undoubtedly result from the thyroid treatment. The improvement which has been effected in these two cases leads me to hope that in some cases of lupus a complete cure may perhaps, after a prolonged course of treatment, result.

I think I am fully justified in stating that the effect of the treatment in these two cases of lupus has, up to the present time, been satisfactory. As I have already told you, lupus is a most intractable disease. Cod-liver oil and other remedies, which improve the condition of the general health, and remedies such as creasote, guaiacol, etc., which are useful in tuberculous affections of the internal organs, are no doubt to some extent beneficial in lupus; but, so far as I know, they do not, unless combined with local treatment, produce any directly curative effect upon the disease. I have never heard (but my acquaintance with the literature of lupus is not extensive) of anyone having ever seen, in two consecutive and unselected cases of lupus, the same amount of improvement produced by any internal remedy given by the mouth, as has resulted fpom the thyroid treatment, in the two cases which I have brought before you. So far as I know, the universal experience of all physicians and surgeons is that in cases of severe and actively-progressing lupus, remedies which are given by the mouth are powerless, in the absence of all local treatment, to arrest the active progress of the disease. In actively-progressing lupus, local means of treatment (scraping, thermo-cautery, free excision, the application of caustics, acids, etc.) are, so far as my information enables me to judge, in this country universally employed. No one, so far as I know, claims to be able to arrest the progress of the disease by any drug remedy given by the mouth alone.

Midway between the local and internal means of treatment, Koch's tuberculin plan of treatment (the subcutaneous injection of tuberculin) should perhaps be placed. Some three years ago, when Koch's treatment was for a time the rage, the injections of tuberculin were extensively employed in lupus. The treatment produced intense local reaction (great swelling and inflammation of the affected part), very profound constitutional disturbance, great elevation of temperature, and in some cases even death. The inflammatory condition which developed at the seat of the disease seemed in many cases to eradicate, for a time at least, the lupus. In many cases the lupus ulcerations were completely healed after a course of tuberculin injections, but in almost all cases, so far as my information enables me to judge, the disease after a time relapsed. I have never employed this plan of treatment, either in lupus or any other tuberculous affection, and, so far as I know, no one employs it now, in this country at least. As originally introduced it was a dangerous plan of treatment. In a modified and improved form it is still used on the Continent, and is said to be a satisfactory method of treating lupus. But this question need not detain us. My object is not to give a lecture on lupus, nor to contrast the different methods of treating lupus, but to give you my experience—very limited, it is true—of the effects of the thyroid treatment. You may naturally, perhaps, say that two cases are altogether insufficient to allow of any reliable conclusion. That would be a legitimate argument in the case of many diseases, but it applies much less forcibly to lupus than to most other diseases; for actively-spreading lupus does not tend of itself to get well. In actively-spreading lupus that source of fallacy can be eliminated. It is impossible, I think, to doubt that the improvement which has taken place in these two cases is the direct result of the thyroid treatment.

We will continue to watch the result in these two cases, and no doubt before long we shall have other cases with which to test the treatment.[2]

[2] My object in publishing these cases in their present incomplete state is to direct the attention of the profession to the subject, in the hope and expectation that other independent observers will give the trea

In the two cases of lupus which I have brought before you, the improvement has, as I have already stated, been entirely effected by the internal administration of thyroid extract. I do not say that this is the best method of treating lupus. I fancy that the most effective means of treating the disease in all probability is to administer thyroid extract internally, and at the same time to employ some one or other of the various local applications or methods of surgical treatment, which experience has shown to be useful and beneficial. In these cases of lupus, as in the cases of psoriasis and ichthyosis which I have treated by thyroid extract, I have purposely avoided any form of local treatment. My object has been to see whether the thyroid extract, administered by the mouth, produces a beneficial effect upon the disease.

The Possibility of the Thyroid Treatment being Beneficial in Cases of Internal Tuberculosis.

The improvement which has resulted from the thyroid treatment in these two cases of lupus has naturally suggested to me the possibility (I do not go so far as to say the probability, for, so far as I know, there are no good grounds for assuming that the thyroid secretion exerts the same beneficial effects upon the nutrition of the internal organs—the nervous tissues perhaps excepted—as it does upon the nutrition of the skin) of the thyroid extract being useful in other forms of tuberculous disease. This idea occurred to me many months ago, when I first became satisfied that unmistakable improvement was being produced in the case of M. M. I have prescribed the remedy in one or two cases of phthisis, but without any apparent benefit. It is only right, however, to say that up to the present time I have not made any real and serious trial of the remedy in cases of phthisis. Thyroid extract in full doses is apt to produce considerable depression. I have hesitated to run the risk of producing this depression in phthisical patients; and in the very few cases of phthisis in which I have employed the remedy I have so far been content to give very small doses.

Before employing the remedy in phthisis it would, I think, be advisable to test the effect which it produces in cases of scrofulous disease of the cervical glands, bones and joints, in which the disease is not sufficiently advanced to demand operative treatment. If the result is beneficial, the remedy might then be tried in suitable cases of phthisis and other forms of internal tuberculosis.

I need not say that in treating cases of phthisis and other forms of internal tuberculosis by any new plan of treatment, very great caution is required in judging of the results. There are many sources of fallacy. I need not stop to discuss them now.

The Possibility of Thyroid Extract being Beneficial in Leprosy.

It is probable, I think, that the thyroid extract produces its beneficial effect in lupus by improving the nutritive condition of the skin tissues, and enabling the cells to overcome the invading tuberculous organisms which are the active agents in the production of the disease or to resist the prejudicial effects which the toxines generated by the bacillus produce upon them. If this theory as to the mode of action is correct—and it is, I think, more probable than the alternative theory that the thyroid extract has a directly antagonistic action on the tubercle bacillus—it is not improbable that the remedy may be beneficial in other diseases of the skin (possibly in some general diseases and diseases of the internal organs) which are due to micro-organisms. Now there is a micro-organism, very similar in structure to the tubercle bacillus, which produces lesions in the skin, which in their chronicity closely resemble lupus. I refer to the bacillus of leprosy. Many months ago the idea occurred to me that thyroid extract might perhaps be beneficial in leprosy as in lupus. I mentioned this to Dr. Allan Jamieson at the beginning of October, when we were sitting together in the saloon of the Royal Hotel at the presentation of the gift of the citizens of Edinburgh to the Duke and Duchess of York. I have not had the opportunity of trying the effect of the remedy in leprosy. We very rarely see cases of leprosy in Edinburgh; indeed, I have only had one case (but it was a very marked case) under my care during the fifteen years that I have been in practice here. I was, therefore, very much interested to see that Dr. Abraham had given the thyroid extract in three cases of tubercular leprosy of the skin, and that some improvement had been produced.

For the reasons I have stated to you, it is eminently desirable, I think, that the remedy should be thoroughly tried in leprosy. It is possible that it may be found to exert a beneficial effect both on the skin lesions, and on the leprous lesions of the nerves and other tissues.

The Possibility of Thyroid Extract being beneficial in Cases of Cancer.

There is another disease in which I think it is perhaps just possible—I carefully guard myself from saying more than this—that the thyroid extract may be useful, and that is cancer. As yet I have only given the remedy in one case of cancer, the case of a woman who was admitted to Ward 27 on November 8th, and who left the hospital (notwithstanding my strong advice to the contrary) on December 20th. She was suffering, you will remember, from an abdominal tumour which was diagnosed as cancer, probably connected with the body of the stomach. During her stay in hospital that patient undoubtedly improved; she was firmly persuaded that the tumour decreased in size, and some of us were disposed to think that her opinion was perhaps correct. Now I do not wish you to think that I attach any importance whatever to the result of the treatment in that particular case. The improvement in the general condition of the patient might, of course, be quite readily explained by, and was I think in all probability due to, the improved conditions in which the patient was placed during her stay in hospital (rest in bed, careful feeding, etc.); and I attach no importance whatever to the slight diminution in size of the tumour (if there was any diminution) which perhaps took place. The only thing which the case proves is this—that the possibility of the thyroid extract being beneficial in cancer occurred to me some months ago. I merely suggest this as a possibility. I do not put it forward even as a probability. You may perhaps think I am mad on thyroid extract, that I am pushing this idea to an insane extreme, but it is not so. I have certainly been building therapeutic castles in the air; but it is sometimes advantageous to allow one's scientific imagination to have some play. The scientific imagination, if kept within due bounds and if directed and guided by reasoning based on some foundation of clinical fact, is a valuable aid to scientific inquiry and therapeutic discovery.

The idea that the thyroid extract may possibly be useful in cancer is based on the following reasoning:—The remedy is undoubtedly beneficial in some cases of lupus. It probably produces benefit in lupus by strengthening the resisting power of the tissues, and enabling them to overcome and destroy the tubercle bacillus. Some recent pathological observations suggest that cancerous growths are perhaps due to an organism. Cancer is essentially a disease of old age. The reason why cancerous growths—if cancer is due to an organism—chiefly occur in old people is probably this, that the tissues of the old are unable to resist and withstand the invading organism. Possibly, then, if cancer is due to an organism, the thyroid extract may help the tissues to resist, or even to expel, the cancerous organism, as I suppose it helps them to overcome and to expel the lupus organism.

That is my chain of reasoning; but I have another possible link to add to it. In a discussion on the pathology of the thyroid gland at the Newcastle meeting of the British Medical Association, Professor Victor Horsley suggested that the dry, wrinkled, atrophic condition of the skin in old age is perhaps due to diminished or defective thyroid secretion. After I heard Professor Horsley's suggestion, the idea occurred to me that it might perhaps have some bearing upon the subject which I am at present discussing. If the thyroid secretion is defective in old age, the increased liability to cancer which old people present may, perhaps,

ment a trial. But the trial to be satisfactory must be a fair one, the treatment must be carefully and persistently carried out for a prolonged period (for several months at least) in the wards of a hospital. I trust that the treatment may be found to be beneficial both in out-patient and private practice, but the trial (test) cases should (in order to show whether the treatment is really effective or not) be continuously observed in the wards of a hospital.

in some degree be due to the same cause. And conversely, the administration of thyroid extract may possibly, by strengthening the resisting power of the tissues of old people, enable them to withstand, or even perhaps to expel, the organisms which are perhaps the cause of cancer.

This reasoning is, you will observe, entirely theoretical. As I have already said, I have no facts which show that the thyroid extract is of the slightest use in cancer. I hope you will clearly understand my position in this matter. Do not go away and say that I believe, or that I have suggested, that thyroid extract will cure cancer. I have made no such statement; I make no such suggestion. All I say is that for the reasons I have stated to you I am anxious to see the remedy tried in cancer. I think it is just possible that it may be beneficial in cancer, and especially, perhaps, in cancer of the skin. I repeat that I have no facts to support this idea—this bare possibility. But any plan of treatment which affords even the remotest possibility of being useful in such diseases as leprosy and cancer deserves a trial. This is my reason for bringing the matter before you and—through the pages of the British Medical Journal—before the profession.

I may add that I should like to see the remedy also tried in xeroderma pigmentosum, in epitheliomatous conditions of the skin, and in rodent ulcer.

Note.—The thyroid treatment of ichthyosis will be considered in a subsequent communication.

AN ANOMALOUS CASE OF STONE IN THE BLADDER IN A FEMALE.

By JAMES OLIVER, M.D., F.R.S.Edin.,
Physician to the Hospital for Women, Soho Square.

F. B., aged 30, married ten years, had had five children. The last child was born twelve months before the patient came under my observation. It was suckled for two months only, but the menstrual discharge did not reappear until six months after this confinement.

Since six weeks after this confinement she had complained of passing a thick purulent-looking material with the water and the motions. There was pain during and after micturition, which continued for about half an hour. She had never passed any blood with the water. She stated that ten years ago the abdomen became much enlarged, but the swelling suddenly disappeared when an unusually large quantity of urine was passed. The first child was born eight years ago.

There was nothing to note about the abdomen. The cervix uteri, which was lying towards the left side of the pelvis, was much torn. In front of the cervix was felt a short ridge in the vaginal roof, and anteriorly this ridge terminated in a small nodule which was tender to the touch. The body of the uterus was slightly and uniformly enlarged.

The catheter was passed, and on being withdrawn impinged against a solid body, which proved to be a phosphatic calculus with a uric acid nucleus. The stone was embedded in a pouch of the bladder. The urine drawn off was muddy and offensive; it contained a large quantity of pus, and its specific gravity was 1023.

Remarks.—Ten years before this patient came under observation she had probably suffered from hydronephrosis, and it is quite possible that the calculus which produced this disorder was the nucleus of the stone removed from the bladder. Augmenting in size, it had probably lain during these years in a pouch or diverticulum of the bladder without producing any untoward symptom until the fifth parturition excited some inflammatory disturbance in the tissues which surrounded it.

Medical Magistrates.—Dr. T. J. Higgins, Louth, Lincolnshire, has been placed on the Commission of the Peace of the county of Lincoln.—Mr. J. West Walker, M.B. Lond., of Spilsby, President-elect of the Midland Branch, has been appointed to the Commission of the Peace for the Parts of Lindsey, county of Lincoln.

THE ELEVENTH INTERNATIONAL MEDICAL CONGRESS.

Held in ROME, March 29th to April 5th.

[FROM OUR SPECIAL CORRESPONDENTS.]

AN ADDRESS ON THE PART PLAYED BY NERVOUS DEBILITY IN THE PRODUCTION OF FEVER.

Delivered before a General Meeting of the XIth International Medical Congress, held in Rome, 1894.

By Professor BOUCHARD,
Paris.

Having had the honour of being invited to present to the Congress the result of some of my observations or experiments, I have chosen some which relate to fever, and which, in some respects, appear to me to be of a nature to throw light upon questions of physiology, pathogeny, and pathology which are still undecided. What I have to submit to my colleagues is not a synthetic exposition of doctrines as to fever, but a series of fragmentary studies in which clinical facts, very common, but, perhaps, somewhat neglected, have been grouped, analysed, and controlled by experiment.

Causes of Rise of Temperature in Debilitated Persons.

A fact which has, doubtless, been very frequently observed, but of which little mention is made and of which little explanation is forthcoming, is that patients suffering from fever who are brought to hospital have, at least four times out of five, a temperature higher by one degree and more than they will be found to have on the morrow and ensuing days. It is a well-known fact that visits received by patients suffering from fever cause an immediate rise in their temperature, and that during convalescence when the fever has subsided these visits often make it reappear in the form of a short, but sometimes violent, paroxysm. It is well known that an article of food taken inopportunely during the course of a continued fever increases that fever, and that in febrile diseases the first food allowed is very often the occasion of a fresh rise of temperature. It is also known that muscular fatigue exaggerates or rekindles fever; that the getting up for the first time is often in the case of a patient who has recovered from typhoid the occasion of a rise in temperature, and that phthisical patients are often found, on returning even from a very moderate walk, to have a temperature higher by two degrees than when they set out. Lastly, I would call attention to the fact that in persons who are weakly or who are actually ill or who are convalescent, an intellectual or emotional disturbance is sufficient to rekindle or to induce fever. These causes do not produce fever in a healthy man, nor is the fever which is seen to follow them in persons who are ill generally attributed to them. Indeed, inasmuch as these facts, which daily observation confirms, are undeniable, they are interpreted in a different way. Thus, it is said that indigestion, bodily or mental fatigue, moral disturbances—factors whose etiological part in the development of diseases has been established empirically—may act in the same way to aggravate these diseases or to interfere with recovery therefrom. According to this view, the nervous, muscular, or digestive disturbance aggravates the typhoid fever or the tuberculosis; the fever is produced by intensification of these diseases and not by the disturbing influence, which is only an indirect cause. My belief is that these returns of fever, produced under such diverse circumstances by causes

such as I have indicated depend directly on the cause itself, which finds in a man weakened by disease more readily than in a healthy man a nervous system susceptible to the action of influences which disturb the production and loss of heat.

THERMOTAXIS: PROPHYLACTIC AND CURATIVE.

Our organism is so regulated as to keep itself automatically—I do not say at a constant temperature, since even in a medium at a fixed temperature the thermometer placed in an internal organ regularly indicates in a normal condition oscillations of one degree in each period of twenty-four hours—but so as automatically to prevent deviations of more than half a degree upwards or downwards from that mean temperature which Jürgensen has taught us to look upon as a constant. Our body is a thermostat less rigorous but far more delicate and complex than those "made with hands." As in these, the elevation of internal temperature moderates the combustion which produces the heating; as in these, the lowering of the internal temperature heats the furnace. But, unlike our thermostats, our body, when it becomes heated, if it does not moderate the source of heat, increases the loss of it; and when it becomes cool, it restricts this loss at the same time that it quickens combustion. Further, this double moderating action on the production and loss of heat is exercised not only when the body is already heated or cooled, but before the slightest deviation of temperature has occurred, when it is merely threatened, at the moment when there are produced in the external medium changes of temperature which might have the effect of heating or cooling the organism.

Thermotaxis is, if I may say so, prophylactic and curative. We protect ourselves against external heat and cold before they have had time to affect our temperature; in like manner we struggle against elevations or depressions of our internal temperature which have already taken place. If the temperature of the external air rises above or falls below the degree for which our thermogenesis and the activity of our heat-expending apparatus have been regulated, then the variations of temperature of the ends of our cutaneous nerves cause a sensation which may induce us to uncover or to protect ourselves; but especially do they, without the intervention of consciousness, set up reflex actions which automatically serve for defence. Among these reflexes are some which restrain or quicken the internal chemical processes which produce heat; other reflexes set in motion or inhibit the heat-losing apparatus. We know, in fact, that external cold, even of moderate degree, increases the production of carbonic acid, and even the formation of urea, and that a slightly more intense cold causes shivering, with muscular tremor. Greater activity of destruction of matter in the cells and muscular contraction increase the production of heat. On the other hand, we know that external cold brings about a spasm of the superficial muscles which prevents the blood from coming in such large quantity to be cooled on the skin. We also know that it suppresses cutaneous evaporation, another source of cooling of the blood. Thus by these two kinds of reflexes the external cold increases the production, and tends to restrict the loss of heat. If the external air becomes warmer whilst remaining below the temperature of the body, will the heated nerve endings check the internal combustions? I do not know, but the superficial vessels become dilated, circulation and respiration are accelerated, sweating is set up, the blood comes in larger quantity to be cooled by contact with the external air, but, above all, it loses heat by evaporation from the lungs and skin. This loss by evaporation, again, is sufficient to prevent heating of the body even if the air is warmer than the body; but if the air be warm and moist, evaporation no longer taking place, the resistance to heating becomes paradoxical, and vascular dilatation and circulatory and respiratory activity can only accelerate the heating of the blood. The reflexes therefore protect us infinitely better against external cold than against external heat.

It is not reflexes that protect us against internal cold or internal heat. In that case the nervous system intervenes by a direct action brought into play by the cooling or heating of the nervous centre or more precisely by the encephalon. Ch. Richet has taught us that when the central temperature of the body falls to 34° C.; shivering with muscular tremor comes on. Then the quantity of carbonic acid is increased, the temperature rises again and muscular contraction comes to the assistance of heat production. Division of the medulla abolishes shivering in the trunk and limbs, but leaves it to continue in the face. This is the "heating shiver" caused by central cooling, which must not be confounded with the other shiver, also heating, of which I spoke just now, which results from peripheral cooling. The internal heat also brings into play the apparatus by which heat is lost. All those who have studied the action of hot baths, whether of water or vapour—or, as I have done, the action of air at the exact temperature of the body, but saturated with watery vapour—know that the central temperature rises rapidly, and that at the same time the heart is accelerated to over 200 beats per minute, and respiration becomes very frequent. This is the "thermic dyspnœa" of Fick and Goldstein; this is what Lorain so justly called "temperature moderating dyspnœa." It is due to heating of the centres and not to heating of the peripheral nerve endings.

RISE OF TEMPERATURE AND SWEATING.

Sweating also soon comes on in extreme abundance. Luchsinger attributes it to stimulation of the nerves of perspiration by hotter blood. My experiments prove that thermic sweat has two origins, and that the rise of temperature of the centre is one of these origins. In experiments on muscular work, of which I will speak further on, I found that during moderate exercise sweating always appeared the instant that the rectal temperature reached 37.6° C.; this occurred equally when the temperature of the air was 15° and when it was 26°; only the sweating broke out after nineteen minutes of work when the air was at 15°, and after eight minutes when it was 26°. This influence of the heating of the centre on the production of sweat does not, as I have just said, prevent there being reflex thermic sweats due to heating of the ends of the cutaneous nerves. In a man who perspires more easily in the upper half of the body, I lower the rectal temperature to 37° C., and even to 36.8° C., by rest in the horizontal position. At this moment I am able, simply by covering certain regions, to cause local sweating in them. If I cover the groin and the neck, perspiration takes place there; if I cover the groin more than the neck, sweating occurs more quickly in the groin than in the neck. At the moment that sweating begins in the groin, I note a temperature of 35.9° in that part; at the same instant the skin of the neck which does not sweat is at 35°. A lowering of the central temperature by 3° produces a heating shiver; a raising of it by 0.4° is sufficient to bring about a cooling perspiration. This means that if the reflexes protect us better against external cold than against external heat, the variations of temperature of the nervous centres protect us more quickly against internal heat than against internal cold. The rapidity however, is very relative: it is on the average eleven minutes in my experiments when sweating is induced by heating caused by muscular work, whilst the processes of protection against cooling which result from the external application of cold are performed with the rapidity of a reflex.

The course of events is not always so. In the pathological state there often intervenes a morbid poison which, in spite of the high temperature both of the centre and of the periphery, makes sweating impossible. In the same subject who in the normal state sweats in a region of the skin which is at 35.9° when the centre is at 36.8°, I have seen during an attack of influenza the skin remain dry at temperatures of 37.5° to 38.2°, when the temperature of the rectum was from 38.1° to 38.8°. Nevertheless, an antagonistic poison, antipyrin, in a dose of 1 gramme 50 centigrammes, triumphs over this resistance to sweating, and the evaporation of the sweat makes the skin pass from 37.5° to 37°, whilst in consequence, the temperature of the centre falls from 38.1° to 38°. All that we know as to the conditions of the automatic regulation of the temperature teaches us that man is much better armed to prevent his temperature from ceasing to be normal than to restore it to the normal state. The consequence is that he resists for a long time constant disturbing influences without the vigilance and energy of his nervous system being found at fault until he is exhausted by the struggle; then comes defeat. Has not Chossat shown

us that in starvation the temperature keeps almost normal up to the day of death? On that day it falls rapidly 2.5°, and at the moment of death it falls from 13° to 14°. Inversely has not Bernard taught us that in animals placed in an overheated medium the temperature, after reaching 40° to 41°, keeps for a long time at that level without going beyond it? Then all at once, the resistance being overcome, it rises to 45°, and the animal dies. This period, during which the nervous system struggles effectually against the causes of hyperthermia, is of greater or less duration according as its energy is more or less considerable; the consequence is that in weakly or weakened individuals, in those who suffer from constitutional debility, in those who are exhausted, in those who suffer from chronic diseases or acute diseases of long standing, and in convalescence one sees attacks of fever or recrudescences of fever occur as the result of causes which in the healthy man may indeed increase calorification, but do not suffice to raise the temperature. In this way is to be explained the singular fact that, during the decline of typhoid fever, the same cause may produce indifferently syncope or a febrile attack. It is for this reason, also, that in convalescence the rise of temperature which follows each time of getting up gradually diminishes in proportion as an increased amount of food restores the patient's strength.

The Fever of Muscular Exercise.

In the same manner, in the case of those who begin to practise various kinds of sport, the fever of muscular exercise diminishes in proportion as their strength increases, and becomes *nil* when they are trained. It is also in this manner that I explain why the strong man shows only slight oscillations of temperature. The night fall in him is slight, while the day rise is slightly marked. His thermic line approximates to a straight line, while the curve of the weak man shows great oscillations. In this weak man, however, the thermic line becomes almost straight when some temporary energy is restored to his nervous system by the administration of moderate doses of quinine.

The Fever of Unrest.

Let us examine in the light of these explanations, and analyse the clinical facts which I mentioned at the beginning of my discourse. Among the instances which I have given there are some presenting a certain complexity, and the interpretation of which will come of itself if we succeed in understanding the simpler facts. When in hospitals we observe in a febrile patient on his admission a temperature markedly higher than that which will be recorded at the same hour on the following days, it might be said that the treatment carried out shows its efficacy in this manner, or that the patient feels the sedative influence of the place and the repose communicated by the things and persons about him. This must be so; but is not this the same thing as saying that the elevation of temperature kept up by the agitation of the external medium falls when this cause is suppressed? Moreover, it has often been proved that a typhoid patient during the days which had preceded his admission to hospital had had the same temperature as during the days which followed it, and that the temperatures of the day of admission differing, as they do, from the previous and subsequent ones by excess, constitute a genuine attack. The causes of this access of thermic recrudesence may be numerous. Independently of the want of quiet from which poor patients suffer in small tenements where their neighbours continue to live their ordinary life about them, there is unrest, repugnance, resistance.

There is next the fatigue—often very great—entailed by the removal. Then do not the disturbances—mental, emotional, volitional—and the bodily fatigue, each and all have a share in the production of this febrile attack? Similarly, in the febrile attacks caused in some patients by the weekly or biweekly visits in hospitals, the blame may be laid on the emotion, or the bodily fatigue caused by talking; sometimes also by the premature partaking of food. To which of these causes must the recrudescence of the fever be attributed?

Rise of Temperature and Muscular Work.

There are cases in which, as only muscular work has intervened, that alone can explain the rise of temperature. A patient, during the decline of typhoid fever, or at the commencement of convalescence, who gets up, or even performs some simple toilet operations in bed, has in consequence a rise of temperature. Experiments on healthy men had already demonstrated to Liebermeister that differences of some tenths of a degree may be observed in the axillary temperature according as the subject is recumbent, sitting, or standing. I have frequently had occasion to make the same observation as regards the rectal temperature, care being taken to make the experiment in the middle of the day, some time from the period of normal fall of temperature during the night's repose. The reason why these febrile attacks in typhoid or phthisical patients are attributed rather to pathological causes than to the heat produced by muscular work, is to be found in the fact that the experiments of Liebermeister, like my own, are far from being generally accepted. I leave on one side the question of the mechanism of rise of temperature due to muscular work in the healthy man. I do not seek to determine the part belonging to the muscle, nor that which might be assigned to the nervous system; but I would recall the fact that, since the observations of J. Davy, heating by muscular exercise has been noted too frequently to be at all doubtful. I have myself observed a temperature of 39.2° after exercise for forty-five minutes. Fovel cites an elevation of 1.34°, and Bergmann has seen the temperature of a dog rise from 39.3° to 40.5° after a run. I have made on a healthy man of moderate strength, accustomed to exercise but not really trained, a series of experiments in which the same exercise was gone through every day, during the same length of time, and at the same rate of speed. This exercise began immediately after getting up, at a time when the rectal temperature, lowered by the night's rest, had risen again to 37° or 37.1°. The average elevation in half an hour was 1°. The rise, at first rather rapid, gradually became slower from the commencement of sweating, then remained stationary in spite of the prolongation of the work. By varying the experiment, I recognised that the rise of temperature was proportional to the intensity of the effort rather than to its duration. When I caused a strong but brief effort to be made, I observed that the temperature continued to rise for ten to fifteen minutes after the cessation of the exercise. In the ordinary experiments the fall of temperature used to begin from sixteen to twenty-two minutes after the termination of the work. The man being placed at rest in the horizontal position, the temperature returned after one or two hours to the point at which it had been at the time of awaking, or one-tenth of a degree lower; then it rose again a little above that point, and recovered its original equilibrium after one or two oscillations; similar oscillations were noted in the frequency of the pulse and of the respiration. The unvarying regularity of these results warrants me in affirming that, in the normal condition, moderate work produces in man a marked rise of temperature, which is soon limited by the loss of heat which takes place at the surface of the skin as soon as sweating begins, and which first cools the skin, and next the whole body. This fall of the skin temperature which, in the case of muscular work, begins to be produced while the rectal temperature is still rising is, I believe, the circumstance which explains why so many experimenters, who have made the research under the same conditions as myself, have denied the occurrence of fever as the result of muscular work. They took the temperature of the skin whilst I took that of the rectum. I took the temperature of the skin and of the rectum simultaneously in a healthy man at rest. The mean of a large number of observations has shown me that the temperature of the groin is lower by 0.6° than that of the rectum. In the same person, if sweating is induced by muscular work, the difference becomes accentuated and reaches 1.2°. It would seem that the same thing takes place when the rise of temperature is due to a febrile disease. As long as the disease interferes with perspiration, the skin and the rectum keep pace in their rise of temperature; the mean of the differences in a patient was 0.6°. When the hyperthermia reaches such a degree as to overcome the resistance and to bring on sweating, the difference becomes 1.1°.

The laws of the variations of the central and of the skin temperature under the influence of muscular work, there-

fore, seem to me to have positive bases. For a convalescent woman to do her hair in bed is a muscular work a hundred times less than that done by the subject of my experiments. Nevertheless, it causes in her a degree of fatigue which may induce syncope; it causes as a rule an attack of fever with a rise of 1°, either because her nervous system has been too weak to moderate the chemical processes which during muscular contraction generate heat, or because it has been unable to adjust the working of the heat-losing apparatus to the amount of heat produced.

The Effect of Food on Temperature.

It is still more difficult to determine in the healthy man the reality of the thermogenic effect of meals. This action is not denied; if oxygen takes part in the production of heat there is no doubt that the food, directly or indirectly, supplies the combustible element. It is also known that the working of the digestive and salivary glands and of the liver is a source of heat. But the production of heat is one thing, rise of temperature is another. Under conditions of health and moderate feeding no marked rise of the central temperature is observed in a man after a meal. Under normal conditions an animal, to keep itself at a constant temperature, constantly destroys matter, first the food in the form of circulating material, next its reserves, and in case of need the substance of its cells.

The supply of fuel, however, is intermittent, and it does not burn as soon as it is introduced; one part of it serves for the repair of the cells, one reconstitutes the reserves, only one part burns as soon as absorption allows. Thus the reserves are spared, and the cells protected.

The Fever of Indigestion.

But when too much food has been taken, or when the digestive process is sluggish, a meal is followed by a rise of temperature either owing to greater energy of glandular activity, or to an influence exerted on the nervous system by products of imperfect digestion; this is the fever of indigestion, the fever of the dyspeptic. This dyspeptic fever is a reality; the flushing of the face, the dyspnœa, the excessive acceleration of the pulse are simply the results of reflexes set up by the contact of too large a mass of food with the normal mucous membrane of the stomach, or of a normal mass with an excitable mucous membrane—this is the syndrome of a true fever, with elevation of the central temperature. I have seen this temperature rise to 39.4°. As owing to the periodicity of meals these attacks are also periodic, I have seen such fevers treated with quinine. These fevers, which are not rare in adults, are frequent in children.

When the weakness of a long illness or of convalescence has caused the digestive canal to lose its functional energy, the first meal or meals disproportionate to the patient's strength induce febrile attacks, which must not be attributed to a relapse or to recrudescence of the disease.

Effect of Intellectual Work on the Temperature.

I in nowise call in question the experiments which prove that intellectual work produces heating of the nervous system, but what does not appear to me to be demonstrated is that this heating causes a rise of temperature of the whole body. The muscles, which in the whole of the body represent a mass twenty-four times greater than that of the brain, may well, in becoming heated by work, heat the whole body. After five minutes of work the temperature of a muscle rises one degree. The temperature of the brain does not by intellectual work rise by one degree either in five minutes or in an hour. It does not rise during that time by 0.4°, since when the body rises in temperature to that extent above its normal standard sweating commences; and sweating is only exceptionally the result of intellectual work. But cerebral activity may, when it takes place, go beyond the intellectual zones, and reach the thermic zones. Fever might then be produced by an action on the nutrition of the whole body. This elevation of the temperature by intellectual work, which is not very evident or even doubtful in the case of normal man, is certain in persons who are ill.

Effect of Emotions on the Temperature.

All clinicians know that in the febrile state, or during convalescence, talking, reading, or attending to business may be a cause of recrudescence or return of fever. Emotions—particularly disagreeable emotions—discussions, anger, moral resistance, cause febrile attacks in debilitated persons. In the treatment of typhoid fever I have given nearly 60,000 cooling baths. These baths, the initial temperature of which is only two degrees lower than that of the rectum, are cooled by one degree every ten minutes down to 30°; they lower the temperature from half a degree to one degree, sometimes three degrees. In some cases the temperature remains stationary; it may even rise. With very few exceptions these elevations of temperature in the cooling bath have been noticed only in women who were refractory to treatment, who refused the baths, and only submitted thereto on compulsion.

These facts, which may elucidate one side of what is called "hysterical fever," have nothing to do with auto-suggestion. They are the effect of struggle and nervous fatigue. As in the case of fever from muscular work, they show that if a robust nervous system can protect the economy against variations of temperature, nervous debility makes this protection less vigilant and less effectual. One can then see, as with a magnifying glass, effects which are but slightly visible in the normal state. The causes, the reality of which is called in question, then produce effects which are clearly manifest. The weakened nervous system is a reagent peculiarly sensitive to the action of the factors which produce fever.

AN ADDRESS

ON THE

RELATION OF CHEMISTRY TO PHARMACOTHERAPY AND MATERIA MEDICA.

Delivered before a General Meeting of the XIth International Medical Congress, held in Rome, 1894.

By Professor STOKVIS,
Amsterdam.

[Abstract.]

In the course of his address Professor Stokvis observed that the progress recently achieved by chemistry, especially by its newest department, theoretical chemistry, was of the greatest importance to pharmacotherapeutics. The experiments of Raoul Pictet and others had shown beyond reasonable doubt that two most indispensable conditions of life, warmth and water, were also conditions *sine quâ non* for all chemical phenomena. Life, however, was not a mere chemical function; rather chemical action was in itself a kind of molecular life. The influence of infinitesimally minute quantities of medicinal and toxic substances in cell life, the varying reaction of different cells of the living organism in the presence of different chemical substances, the fact that some perfectly insoluble substances exercised an influence upon the organism, the fact that the same substance could act as a stimulant or as a depressant according to the dose, and, finally, the fact that neutral solutions of certain salts (iodides and bromides) produced effects which must be attributed to free molecules (of iodine and bromine) were all phenomena which, up to the present time, it had been sought to explain by the theory that the cell possessed inherently a certain quantity of vital energy.

Theoretical chemistry taught that the same phenomena occurred in organic chemistry whenever a solution was made, and had propounded the new theory that the solution of any substance was due to the continuous action of chemical molecules endowed with kinetic, osmotic, and electrolytic properties directly proportional to their molecular weights (Van t'Hoff and Arrhenius), a conception which explained perfectly well all the facts which he had enumerated. It explained also, not only the diuretic and purgative action of salts (H. de Kries, Hofmeister, Wladinadski), but, further, taught that the catalytic or fermentative processes also belonged to the domain of inorganic chemistry. The systematic application of the new method to physico-chemical

investigations furnished further results of great importance concerning the physiological action of drugs.

Chemistry was not less important when considered in relation to materia medica. With regard to the alkaloids and other chemical compounds derived from the vegetable kingdom, it was desirable to insist on the fact that crystallisation was a phenomenon which belonged to the domain of inorganic chemistry. It was an error to suppose that the occurrence of crystallisation was a proof of the organic purity of a substance. By adopting this erroneous view, and by denying the fundamental therapeutic principle that two substances administered together might have an effect quite different from that of either administered separately, the dosimetric system of medicine had condemned itself.

Professor Stovkis then drew attention to the importance of all civilised nations coming to a mutual understanding as to the method of verifying the chemical identity of preparations which bore the same name. Chemistry, he continued, had also rendered important services to materia medica by the synthetic formation of new alkaloids and new chemical bodies unknown to our forefathers. Bacteriology also, and biological chemistry were placing at the disposal of medical men preparations derived from microbial cultivations or from the organs of animals. No hesitation had been shown in giving to many of these substances names which indicated the therapeutic purposes which they were supposed to serve, and at the present day the drug market was flooded with new preparations. The blame did not lie on chemistry, nor on bacteriology, nor on biological chemistry, but on medical men, who did not ascertain thoroughly the true principles of the therapeutic art. Clinical therapeutics proved that it was only by prolonged and repeated researches that an opinion could be formed as to the value of a drug, and had proved, too, that these new remedies for the most part were of very secondary importance, or had no value at all. These new substances were recommended on the strength of hasty or imperfect observations. It was as wrong to give up old remedies because they appeared to be antiquated, as to take up new ones merely because they were new. It was dangerous to be carried away by the old maxim of Celsus. *In ancipite morbo plus valet anceps remedium quam nullum.* Prudence should always be observed in the employment of remedies, and it should never be forgotten that the same remedy administered in varying doses and in different manners might produce very different therapeutic effects, as a musician obtained different notes from the same instrument.

Pharmacotherapy and materia medica therefore owed much to chemistry, and to theoretical chemistry, which had contributed to explain vital and electrolytic phenomena, and the mention of which brought to mind the imperishable renown of three great Italians—Matteucci, Volta, and Galvani.

PROCEEDINGS OF SECTIONS.

[*Specially Reported for the* British Medical Journal.]

SECTION OF INTERNAL MEDICINE.

Saturday, March 31st.

Spread of Infective Diseases.

Dr. Reger (Hanover) read a paper upon the way in which infective diseases are spread, in which he stated that in his opinion the micro-organism of a disease produces effects only when it is mature, and that the breaking out of the malady and the migration of germs to other people take place at the same time, the periods of incubation and of desquamation not being contagious. He supported his conclusions by a very elaborate series of statistical tables.

Effects of Removal of Liver from the Circulation.

Professor Queirolo (Pisa) showed several *post-mortem* specimens from animals in which he had removed the liver from the circulation by uniting the portal vein with the vena cava inferior. He described his method of operating, and gave a brief review of the results he had obtained.

Drs. Rummo and Albertoni criticised Professor Queirolo's methods and results, and Professor Baümler (Freiburg) considered that the toxins, not being eliminated by the liver, would be sure to produce diarrhœa.

Dr. G. Zagari (Naples) stated that as the results of his experiments he had come to the conclusion that the liver had important functions in the destruction and elimination of toxins and of bacteria.

Injections of Yeast.

Dr. de Backer (Paris) communicated the results of an extensive series of observations upon the injection of sterilised cultures of yeast in the treatment of certain infectious diseases, especially tuberculous affections, and stated that this method of treatment had in his hands been most successful.

Miscellaneous.

Dr. Mendizabal read a paper on influenza, in which he discussed the most important clinical varieties.

Dr. Szillai read a paper in which he stated that he had obtained good results by the treatment of croup with hydrochlorate of pilocarpin.

Monday, April 2nd.

Diagnosis and Treatment of Tuberculosis.

The work of the Section commenced with a paper by Dr. Revilliod (Geneva), in which he drew attention to the great frequency of phthisis in men, and of the large number of cases in which an apparently complete cure occurs.

Dr. S. Bernheim (Paris) read a paper in which he stated that immunised serum had a specific vaccinal action against tuberculous diseases.

Dr. S. Laache (Christiania) strongly advocated the early resection of a rib in empyæma: and Professor Baümler (Freiburg) advocated early aspiration of the chest, and, if necessary, resection of a rib in empyæma in tuberculous patients.

Dr. O. Schrön (Naples) read three papers, in the first of which he described and pointed out the diagnostic import of certain crystals which he had found in the sputa of phthisical patients; in the second he suggested a new method of discovering tubercle bacilli in sputum; and in the third he recorded finding coccidia containing tubercle bacilli in symbiosis in the lung in a case of rapid phthisis.

Dr. E. Grande stated that in his opinion corrosive sublimate and methylene blue may be used with advantage in the treatment of pulmonary phthisis.

Dr. Crisafulli read a paper in which he stated that, in his opinion, traumatic and rheumatic tetanus are identical.

Dr. C. Forlanini (Turin) gave his reasons for considering that the production of pneumothorax artificially was only of value in pulmonary phthisis if done in the early stages.

Dr. E. Pittarelli described a new form of combined aspiration and injection syringe.

Dr. F. Rivalta (Rome) discussed the etiology of pulmonary œdema in croupous pneumonia, and Dr. F. Chaborg read a paper upon the influence of nasal affections upon various diseases of the pulmonary organs.

Tuesday and Wednesday, April 3rd and 4th.

Amongst the very large number of papers read in this Section on Tuesday and Wednesday, the following were of special interest: Dr. Carmon y Valle (Mexico) suggested that the muscular inco-ordination in locomotor ataxy is due to unequal relaxation of the muscular fibres.—Professor Stokvis (Amsterdam) described a method for the ready detection of hæmatoporphyrin in the urine, and stated that he considered its discovery to be of some diagnostic value.—Dr. Fraser (Edinburgh) discussed the treatment of myxœdema by thyroid gland, and also described a case of pernicious anæmia which had received benefit from bone marrow.—Dr. E. Guerra described a case of solitary tubercle in the neighbourhood of the right fissure of Rolando.—Dr. Gouvea recorded an interesting case of apparent pulmonary phthisis which was shown to be pulmonary diastomiasis by the discovery of a distoma hepaticum in the expectoration.—Dr. Calabresi stated that the presence of either sugar or uric acid in the blood lessened its bactericidal power, and that quinine increased it.—Dr. Da Rocha discussed the pathogenesis of those cases of diabetes characterised by dilatation of the stomach and diminished peristalsis of the intestine.—Dr. De Renzi (Naples) stated that he had produced diabetes by excision of the duodenum and of

the salivary glands, and that in his opinion the diet in diabetes should, at any rate at first, be purely vegetable. In some cases such a treatment had in his hands resulted in the complete disappearance of sugar from the urine.—Dr. A. GIOVANNI (Padua) spoke of the necessity of treating the individual rather than the disease, each individual being characterised by a predisposition to a special class of disease. In his opinion, human beings can be divided into three groups, the first consisting of those who were especially liable to diseases of the respiratory organs, the second of those who had a predisposition to diseases of the circulatory organs, and the third of those in whom the digestive organs were especially liable to be attacked.—Dr. A. JOLLES (Vienna) described a method for approximately determining the quantity of biliary pigment in the urine.—Dr. TISON stated that he had found nitrate of aconitine of some value in the treatment of erysipelas, neuralgia, and laryngitis.—Professor BOUCHARD mentioned those clinical cases which had led him to conclude that the early appearance of pruritus in icterus suggested the presence of a neoplasm: and Dr. BACCELLI read a paper upon a special method that he had devised for making heart measurements. He stated that the total action of the heart can be reduced to a parallelogram of forces, and if the movements of the heart are to be understood, they must be considered as a whole, and not as consisting of distinct systolic and diastolic phases. So far, experiments upon animals have not in his opinion resulted in solving the problems presented by the apex beat, and if they are ever to be solved, he considered that it must be by looking at the movement as a systolic-diastolic one, the improvement being due not to the action of any one part of the heart, but to the movements of the heart as a whole, including those of the large vessels.

SECTION OF PATHOLOGY.

Monday, April 2nd.

Professor CHIARI in the Chair.

ON VACCINIA AND SMALL-POX.

PROFESSOR GUARNIERI (Pisa) stated that for some years he had been working on the question of the etiology of vaccinia and variola. He referred to the researches previously made in order to discover the active agent of both diseases, and showed that all attempts at isolating it had proved fruitless. Most of the previous investigators had thought that bacteria were the causative agents of this disease, but, from his own observations, he concluded that the active agents of vaccinia and variola were, in all probability, protozoa. He had found in the epithelium of the vaccinia and variola pustule a parasite which resembled some well-known protozoa. It was a small round body, easily stainable with hæmatoxylin, lying in a clear vacuole in the protoplasm of the epithelium cells. It was constantly present in both diseases, and when vaccine or variola was inoculated on the cornea of the rabbit, the cells of the epithelium of the cornea were found to contain these parasites in large numbers. He had been able to see the movements of the parasite, and he considered that it multiplied by simple division into two or more young protozoa. He thought that, although he could not bring absolute proof that this was the cause of vaccinia or variola, yet, in all probability, considering its constant presence in all cases, it would ultimately be proved to be so.

Professor MONTI stated that, from his own researches, he had come to the same conclusion as Professor Guarnieri.

Dr. M. ARMAND RUFFER (London) said that, in conjunction with his friend Dr. Plimmer, he had examined a large number of vaccinia pustules in the cow, in the monkey, in man, etc., as well as three cases of severe variola, and that in all these he had found the cell enclosures described by Professor Guarnieri. He had seen that the epithelium in the neighbourhood of these structures penetrated deeply into the tissues around, and that in this way appearances much resembling the early stages of cancer were produced. These bodies, he considered, were most probably parasites, though he was unable to assign to them their proper place in the animal kingdom. They differed essentially in their staining reaction and in their appearance from those previously described by Pfeiffer, van der Loeff, and others, and also from the cancer parasites, as described by Professor Foà, himself, and others. He had, with Dr. Plimmer, studied minutely their occurrence in the various stages of the formation of the vaccine pustule, and had been able to obtain a characteristic staining reaction, founded on the combined use of carmine and lichtgrün.

THE PANCREAS IN DIABETES.

Professor HANSEMANN gave an account of the morbid changes found in the pancreas of diabetic patients after death. He said that numerous experiments on dogs had shown that the total extirpation of the pancreas was followed by diabetes. He asked himself whether the facts of human pathology showed that there was a connection between disease of the pancreas and diabetes or not. In his opinion, diabetes might exist without disease of the pancreas, but in 50 per cent. of all cases diabetes was associated with disease of the pancreas; the most frequent lesion was simple atrophy, which might be easily distinguished from the cachectic atrophy. Moreover, he found sclerosis due to the excess of fibrous tissue; atrophy, after blocking up of the duct, through tumours, etc. This last disease only led accidentally to diabetes—that is, when the atrophy had gone far enough; but the real primary atrophy of the pancreas was the disease which produced diabetes, even in the early stages of the disease. Diabetes occurred seldom only in cases of necrosis of the pancreas, owing to the rapid course of this disease, as it took time for the glycosuria to be established; however, as it often disappeared just before death in cases of total extirpation of the pancreas, there was not sufficient time left for the appearance of the glycosuria. Cancer, as a rule, did not produce diabetes, because the cancer cells, being descended from pancreas cells, no longer secreted, but were able to fulfil their function—that is, the internal secretion.

Tuesday, April 3rd.

Professor SALOMONSEN in the Chair.

NECROSIS OF THE PANCREAS AND ITS ASSOCIATION WITH FAT NECROSIS.

Dr. JOHN LINDSAY STEVEN (Glasgow) read a paper on this subject. A short summary of the literature was given, and the work of Zenker, Balser, Chiari, Fitz, and Langerhans was more particularly referred to. Two cases of pancreatic disease associated with multiple fat necrosis were then related in detail. The first occurred in 1889, and was that of a very stout man, a heavy drinker, aged 30, who died after an illness of four days, during which the symptoms were mainly those of acute intestinal obstruction with collapse and fulness in the epigastrium. At the *post-mortem* examination there was found multiple fat necrosis of the abdominal fat, with hæmorrhage, enlargement, and infarction of the pancreas. The second case was that of a woman, aged 34, who had been suffering from gastric pain for five months, since the birth of her last child. An obscure tumour was detected during life in the upper part of the abdomen, but it was impossible definitely to make out its precise nature. After death entire sequestration of the pancreas was discovered, the necrosed organ being contained in a large peripancreatic peritoneal cyst containing inky-black fluid. Here also there was multiple fat necrosis, and the body was very obese. In neither case was there anything remarkable in the other organs of the body. A short statement of the microscopic appearances was then given, after which the author formulated his conclusions thus: (1) In fat necrosis and necrosis of the pancreas we have two distinct and independent lesions, that is, the one may exist without the other. It is possible, also, that fat necrosis occurring in very fat subjects may be analogous to coagulation or caseous necrosis occurring in the central parts of a large neoplasm. (2) If fat necrosis be very extensive it may lead by confluence of neighbouring areas either to localised or complete necrosis of the pancreas; and the two cases recorded may be looked upon as illustrating different stages of the same process. It is necessary, however, to place pancreatic necrosis arising from this cause in a category by itself.

COMPARATIVE PATHOLOGY OF NECROSIS.

Dr. O. ISRAEL (Berlin) spoke on the comparative pathology of necrosis. He said that practically the necrosis of the cells of the vegetable and animal kingdoms were one and the same process, and he gave an account of the various appearances

seen during the process of dying, and after death. It is impossible in this short account of the proceedings of the Pathological Section to do more than mention this important paper, which was well illustrated by drawings, photographs, and microscopical preparations.

The Liver in Infectious Diseases.

Professor Roger (Paris) spoke of the functions of the liver in infectious disease. He said that most infectious diseases might determine anatomical lesions and functional disturbances in the liver. The lesions varied, not only in different diseases, but even in one and the same disease, following its course in animals of different or the same species. In tuberculosis, for instance, one saw that the disease produced vitreous degeneration of the liver cells of the fowl: amyloid degeneration of the same cells in pheasants, true tuberculosis or sclerosis of the liver in guinea-pigs, and in rabbits tubercles of a special cachexia. With a microbe which he called the bacillus septicus putidus, he had produced in the liver thrombosis, hyaline degeneration, embryonic tissue, and systematic periportal thrombosis. All these lesions he had also produced with the soluble substances contained in the cultures of this bacillus, and they were, in fact, all caused by the same toxic process. It was not enough to know the anatomical lesions of the liver without studying the state of its functions. It was well known that the liver arrested and transformed a large quantity of poisons brought to it by the portal vein, and more especially the microbic poisons, this function being, as he had shown, connected with the presence of glycogen. He was led to inquire what became of the glycogen during infectious diseases. He studied, in rabbits, anthrax and the disease produced by streptococci, and he saw that the quantity of glycogen contained in the cells remained normal during the first stages of this disease, in spite of the rise of temperature, which might exceed 103°. The quantity of sugar in the blood did not vary. Later on, when the serious symptoms appeared and the temperature became lower the glycogen gradually disappeared, the sugar in the blood increased, and in cases of anthrax might contain 2 or 3 per 1,000 of sugar; but on the contrary the sugar diminished or disappeared in the disease due to streptococci. One might conclude from these facts that, in spite of the fever, the liver might continue to destroy the toxines which were formed during acute diseases. These results had many clinical applications. They enabled one to understand the seriousness of infectious diseases in patients whose liver has been previously the seat of disease. It would appear, according to some observations of Professor Roger, that the lesions of the liver were a predisposing cause in producing delirium tremens; but infectious disease occurring in the course of a hepatic disease was very often mortal, owing to the diseased state of the liver cells.

Wednesday, April 4th.

Professor R. Virchow in the Chair.

Parasites of Malaria.

Interesting papers were also read by Professors Marchiafava, Bignami, and others, on the minute structure of malarial parasites.

SECTION OF DISEASES OF CHILDREN.

[*Conclusion.*]

The Chair was occupied at various times by Dr. Blasi (President), Professor Baginsky, and Dr. A. Jacobi.

The work of the Section of Pediatrics was continued with much vigour to the end, and a large number of papers were read: but the subjects were not related to each other, as in the discussions of the opening days, and, the interest being somewhat divided, it is impossible to give any general sketch such as it is alone proposed to furnish here. Among the papers were some, as those by Escherich, Steffen, Soltmann, and some others which were of the nature of preliminary communications, and will be dealt with in the Epitome after their publication in full. Other papers were mere relations of cases which it would be tedious to reproduce here.

Professor Baginsky (Berlin) described the Kaiser und Kaiserin Friedrich Children's Hospital in Berlin, and explained its construction and administration. His remarks were illustrated by plans and diagrams. The most striking feature in the administrative work of the hospital appeared to be the care taken to exclude all sources of infection, not only infections from scarlet fever and other exanthematous disorders, but also infection through air, water, and milk, which are, there can be little doubt, responsible for much of the diarrhœa and bronchitis which now decimates so many children's hospitals in summer and winter respectively.

Dr. J. Bauzen (Chalon-s.-Sâone) read a paper on icterus neonatorum, in the course of which he said that he had found that 57 per cent. of all children were affected to some extent by a benign form of icterus. His observations were made in private practice, and compared with those made in hospitals—80 per cent.—showed a smaller proportion. As a rule, the icterus was not accompanied by any symptoms. It was due merely to the effusion into the cutaneous structures of colouring matter derived from a degeneration of the blood cells. Too early ligature of the cord was apparently a determining cause, the predisposing cause being some condition of general debility. He divided the more serious cases, in which the icterus generally came on later, into three main categories: (1) due to venous blood changes; (2) due to abnormal destruction of biliary pigments; (3) due to hepatic derangements, and indicated numerous sub-classes.

Dr. A. Titomanlio (Naples) read a careful paper in which he sought to prove that congenital syphilis was a much more common cause of hydrocephalus than was generally supposed. As a rule the cases were chronic, but occasionally subacute or acute. Generally the acute cases were those which came on at an early age, the chronic those which developed later. The old belief in the value of mercury in hydrocephalus was probably founded on the existence of these syphilitic cases, and Dr. Titomanlio recommended the inunction of calomel combined with the administration of iodide of sodium or potassium.

A paper by Dr. Celli (Cremona) on vaccination in whooping cough led to a prolonged but desultory discussion, in which the author's view that vaccination had any influence over the disorder did not meet with much acceptance.

In addition to the official dinner of this Section and of the Section of Medicine, held together on April 4th, most of the foreign members who took an active share in the work of the Section were entertained by the President and officers of the Section at a private dinner on April 4th. For the general excellence of the arrangements in this Section special thanks are due to Dr. Blasi, President, and Dr. Concetti, Secretary.

SECTION OF DERMATOLOGY AND SYPHILOGRAPHY.

Monday, April 2nd.

Professor Neisser in the Chair.

The Nature of Eczema.

An interesting discussion on the nature of eczema was opened by Dr. Schwimmer (Buda-Pesth).

Dr. Breda (Padua) spoke next. He considered the micro-organisms found in eczema as secondary and not the cause of the disease.

Dr. Kaposi (Vienna) considered that such forms of eczema as impetigo and eczema marginatum are probably caused by micro-organisms, which grow in a skin predisposed to them. He insisted, with Hebra, that typical eczema can be provoked in normal individuals by extraneous causes, such as heat, chemical action, etc., and that a lowering of the general nutrition will so affect the skin that it will be unable to resist the effect of such external irritations. Eczema, indeed, should be regarded as an inflammation of the skin which may be complicated by many concomitant conditions.

Several other members spoke on the subject, including

Dr. Neisser, who believes that eczema is caused by micro-organisms, and that impetigo contagiosa is a separate disease.

Malignant Form of Molluscum Fibrosum.

Dr. Kaposi related a case of peculiar growths in the scalp of the nature of molluscum fibrosum, but malignant, and exhibited a beautifully-executed model.

Dr. Radcliffe Crocker stated that a case of similar character had been shown in London by Mr. Morrant Baker, and that it was proved to be a sarcoma, but a curious point was that some of the growths became absorbed.

Dr. Thin (London) also alluded to the London case.

Syphilis Without Initial Lesion.

A paper on *Syphilis d'emblée* was read by Dr. Verchère (Paris), who believed that syphilis could be contracted without the usual initial lesion. He reported three cases which had been under close daily observation from the beginning, and alluded to experimental inoculation from them in which no chancres were produced.

Miscellaneous.

Dr. Reale showed a large number of cultivations of the fungi microsporon furfur and M. minutissimum.

Dr. Giovannini detailed the histological appearances observed by him after electrolytic epilation.

SECTION OF OTOLOGY.

Removal of Ossicles in Chronic Otorrhœa.

Dr. Ludewig contributed a paper recommending the more extended practice of the operation of removal of the ossicles in chronic otorrhœa.

Professor Ferreri, while approving of it in the main, referred to the possibility of infecting the site of operation, and dwelt on the necessity for the thorough employment of the caustic treatment.

Dr. Dundas Grant exhibited and described a magnifying aural speculum adapted for operations, and a recurved bistoury for aural furuncles.

SECTION OF LARYNGOLOGY.

Monday, April 2nd.

Dr. Felix Semon in the Chair.

Surgical Treatment of Laryngeal Tuberculosis.

The discussion on the scope and limits of the surgical treatment of laryngeal tuberculosis was opened by Dr. Gouguenheim. He expressed himself a strong partisan of energetic surgical interference even in the most advanced cases, recommending the use of a punch forceps for the removal of the diseased arytenoid cartilages—arytenoidectomy.—Dr. Heryng (Warsaw) related instances of recovery as far as the larynx was concerned from surgical treatment, and showed a form of forceps with various attachments adapted for cutting in every direction. He stated certain indications and contra-indications, but admitted that they were not absolute. Tolerance, patience, and faith on the part of the patient were among the most necessary conditions.—Professor Massei spoke very highly of the application to the larynx of a solution of pure phenol in sulpho-ricinate of soda, especially after the appropriate surgical treatment by means of curettes or cutting forceps, as introduced and recommended at the same meeting by Dr. Ruault, of Paris.—The tone of the discussion which followed indicated a strong feeling in favour of very great moderation in surgical activity in cases of laryngeal tuberculosis.—Dr. Bronner read a paper on the intratracheal injection of medicated fluids; and Dr. Dundas Grant exhibited his safety endolaryngeal forceps.

SECTION OF HYGIENE.

This Section met under the presidency of Dr. Pagliani, Medical Officer to the Home Department of Italy.

Quarantine.

A discussion on quarantine was introduced by Dr. L. Csatáry de Castar (Buda-Pesth), who proposed that the Section should adopt a resolution to the effect that quarantine, especially land quarantine, was useless.

A short discussion took place, in the course of which Professor Ruata (Perugia) observed that it was important that, under the pretence of "isolation," quarantine should not be re-established.

No speaker opposed the resolution, which was unanimously adopted.

The Prevention of Cholera.

The subject of the prevention of cholera was raised by Dr. Bocci (medical officer to the Province of Rome), who stated that by the adoption of isolation and disinfection cholera which had appeared in the province last year had been held in check, so that only some 100 cases had occurred, and the disease had never become epidemic.

Dr. Paolo Merlo described the precautions taken at the seaports, which had been most successful; in no case had the disease spread from them. Infected ships were sent to the island of Asinara, an island off the coast of Sardinia, where they underwent disinfection.

Professor Pagliani spoke on the general precautions taken in Italy, and presented an elaborate report.

Dr. Terni showed that in 1884 cholera reached the head waters of the Brembo, the infecting agent being a man who had arrived from Marseilles suffering from the disease. Subsequently all the villages and towns on this river suffered from epidemic cholera, but only these villages; others in the neighbourhood drawing their water supplies from other sources escaped.

Vaccination.

A discussion on vaccination was opened by Dr. Leoni (chief physician to the Italian Vaccine Establishment), who described certain experimental researches which had enabled him to make improvements in the method of preparing the vaccine. He described the sources from which the lymph might become contaminated by pyogenic organisms, and detailed the precautions taken to obtain a lymph which was pure but specifically powerful. He spoke strongly as to the value of vaccination as a prophylactic.

Alcoholism.

The subject of alcoholism was introduced by Dr. Fazio (Naples), who presented a large series of statistics, which showed that excessive consumption of alcohol was nowhere prevalent in Italy to anything like the extent which prevailed in the northern countries of Europe. Curiously also it appeared that alcoholism was more common within the bounds of Italy in the northern provinces, Lombardy and Venice, than in the southern provinces of Umbria, Tuscany, and Rome, and least of all in the province of Naples and in Sicily.

Registration of Plumbers.

The question of the necessity for some effective test of the competency of plumbers was brought before the Section by Mr. Coles and Dr. W. R. Smith. The importance of good plumbing work as a link in the chain of sanitary security was generally recognised. After some discussion a resolution was adopted, recommending the Director of Public Health to inquire into the matter, with the view of establishing a system of registration of qualified plumbers in Rome and other Italian cities.

At the conclusion of its work the Section of Hygiene visited the works on the Tiber, which are on a very large scale. The river for the whole extent of its course through the city is being enclosed in embankments of great height and massive construction. The work, which has involved an enormous expenditure not only in the actual construction of the embankments, which are of masonry, but also in the reconstruction of bridges and the rearrangement of sewers and drains, will, it is hoped, have a very considerable effect in increasing the healthiness of the city by preventing the occurrence of floods. There will also be a considerable advantage in the substitution of broad open boulevards along the river side for all sorts of irregular buildings which formerly backed on to the river, and by their sewerage contributed to its befoulment.

SECTION OF MILITARY MEDICINE AND SURGERY.

The work of this Section was carried on with much spirit, and was largely attended, especially by officers of the Italian military medical department. Several interesting discussions took place, among which mention may be made of that on the arrangements of the sanitary service on shipboard in future naval engagements, having regard to the peculiarities of construction of warships of the present types and the novel conditions of modern warfare. To this discussion Inspector-General Macdonald contributed an opening paper, in which he discussed the ambulance appliances suited for the naval service both ashore and afloat. The discussion was continued mainly by Italian officers. Questions connected with the influence on military surgery of the introduction of the new small-bore rifles occupied much of the time of the Section, many papers dealing more or less directly with this subject being read, and two formal discussions thereon were arranged. One afternoon was devoted to an inspection of the great military hospital of Rome, the general features of which were described in the British Medical Journal of March 31st. During this visit Dr. Jacoby demonstrated two new patterns of stretchers in use in Germany, and Dr. Strauss explained the construction of the special stretchers employed in the French army. The Section also inspected the hospital train described last week, and made a journey in it to Tivoli.

Proposed Medical Press Section.

A special general meeting of the Congress in Rome was held, under the presidency of Professor Wichérkiewicz, to consider a proposition made by Dr. H. Dobrzycki, of Warsaw, to form in future Congresses a special section for the medical press. Dr. Dobrzycki, in a somewhat lengthy speech, dwelt on the multiplicity of journals now published in many different languages, and devoted, in most cases, to special departments. The medical press had become a great power and a great influence for good as a diffuser of knowledge. He thought it would be to the advantage of all parties if those who were specially engaged in the editing of medical periodicals had occasional opportunities for meeting to discuss questions of special interest to them and for forming personal acquaintance with their literary colleagues. With this object in view he proposed that at the next International Congress there should be a special section for the medical press. He read a letter from Professor Lépine, of Lyons, editor of the *Revue de Médecine*, supporting the scheme, and, after some discussion, the proposal was approved unanimously. A provisional committee, consisting mainly of Russian representatives, was appointed to make the necessary arrangements. Of this committee Professor B. Wichérkiewicz, of Posen, was elected Chairman, and Dr. W. Mayzel, of Warsaw, Secretary.

Illuminations and Entertainments.

An enormous crowd, consisting not only of members of the Congress, but also of a very considerable number of residents, occupied the reserved areas to witness the illuminations of the Platea Archæologica, which comprises the greater part of ancient Rome of which the ruins have been brought to light, from the Forum Romanum to the baths of Caracalla. In addition, all the streets and hills which commanded a view of any part were densely crowded with the Roman people, who have not lost their ancient love of public shows. The King and Queen were present, and occupied an elevated tribune at the top of the Palace of the Cæsars. The stupendous crowd, it must be confessed, detracted considerably from the pleasure of the occasion, but for the more robust visitors the sight, that is both the illuminations and the crowd, was curious and fascinating.

On April 3rd a reception was given in the Capitol Museum and the Palace of the Conservators which was attended by a very large number of members of the Congress and ladies. The whole of the great square between the two buildings mentioned, which contains the renowned equestrian statue of Marcus Aurelius, was brilliantly lighted up, as were also the great sculpture galleries, and in some instances special devices in the illumination were resorted to in order to enhance the beauties or the impressiveness of certain of the more famous statues, as, for instance, the Capitoline Venus and the "Dying Gladiator." The invitations to this *soirée* appear to have been more strictly limited to members of the Congress than those to some other entertainments, and in consequence the crowd, though so large as at one time to make circulation almost impossible, was never unmanageable, and perhaps we may add without offence, it was better behaved.

The lunch at the Baths of Caracalla was another gigantic entertainment, the like of which in numbers present can hardly have been witnessed in Rome since the palmy days of those ruined baths, when the cue of the ruling class to keep the plebs in order was the old catch word *panem et circenses*. The arrangements for the actual lunch were well designed, and involved the preparation of astonishing quantities of eatables and drinkables—1,000 chickens, 80 lambs, and as many quarters of veal, 400 fillets of beef, 40,000 rolls of bread, 12 butts and 6,000 bottles of wine, and 3,000 bottles of Italian champagne were among the items which figured on the list. At midday the feast began at the sound of the trumpets of the municipal band, and a few minutes later an enormous number of pigeons were liberated by hundreds at a time from one of the huge arches of the baths, and at the same time were let fall thousands of coloured cards, each bearing the motto, *Excipit omne genus sapientiæ Roma resurgens*. Before the crowd departed Professor Baccelli made a short speech, in which he hinted that the occasion recalled the rude prodigality of ancient Rome, but contrasted the humane objects of those assembled with the tyrannous and bloody characteristics of the assemblages of earlier days on the same spot.

Finally the people of Rome themselves took up the task, and in the evening packed the Corso with a crowd which came partly to admire the illuminations, which were general, of that street, and partly to contribute themselves to the brilliancy of the scene. Nearly everybody carried a light, and many special groups and processions were formed. Groups of students, some bearing many-coloured lanterns, others lanterns all of one colour; a group of students of the University of Rome carrying lanterns bearing the arms of all the countries in the world, a group holding aloft lanterns showing transparencies of all the principal monuments in Rome, slowly wound their way through the dense crowd for the whole length of the narrow street, and viewed from the windows of the houses the effect was very pretty and characteristic. Finally the processions arrived in the Piazza Venezia, and then a demonstration in honour of Professor Baccelli was made in front of his house.

Place of Meeting of Next Congress.

On Thursday, April 5th, the closing meeting of the Eleventh International Congress was held under the Presidency of Professor Baccelli, who in a few words expressed his gratitude to the members and augured that the result of their labours would conduce to the benefit of humanity. The members attending the Congress and the numbers of papers contributed had exceeded all expectations and had shown once more that science knew no frontiers. He concluded by announcing that the next Congress would be held in Russia.

Professor Danilewsky said that Russian medicine was growing daily greater and stronger and presented certain original and individual characters which proved that it was entering gradually into the stage of autonomy proper to every

organism reaching maturity. But whatever its independence and its individuality it never forgot that it must use its newly-found strength in constant harmony with the common sources of human intellect and human knowledge. A period of independence must, however, succeed the period of formation, from this law no advancing nation could escape. Russian medical science had done much work though its extent was not well known, since the mother tongue of Russia was understood by few. The desire to follow its original bent was now growing stronger. Russian medicine acknowledged heartily the bonds which bound it not only to Germany and France, from which countries it had drawn, so to say, the nourishing sap of the love and understanding of science, but also to Italy, to England, to Spain, and to other countries in which it had found those treasures of science which urged it ever forward. Russia already had periodic congresses, which had produced satisfactory results. But the exchange of ideas within the family, as it were, though very useful, was apt to confine scientific thought within the narrow bounds of individual opinions and the special needs of a single country. Complete scientific development was possible only within wider limits. It required the bringing together of more varied scientific characters, it needed international communion. Professor Danilewsky then, in the name of the Russian Government, and in the name of the Russian medical world, formally proposed that the twelfth Congress should be held in Russia. "Our country," he said, "has not an azure sky, nor a sea of deepest blue; it has no boskets of lemon and orange trees. But you will find Nature there, vivifying and stimulating, if stern; you will find the most hospitable and warmest of welcomes, and also complete liberty to discuss all scientific questions." In conclusion, he expressed, in the name of the representatives of Russian medicine, their thanks for the selection of that country as the place of meeting of the twelfth International Congress.

Hassan Pacha Mahmoud, speaking in the name of Egypt, said that the delegates had decided that the next Congress should be held in Russia, and had taken a note of a proposal made by Spain. The current of scientific medicine was setting from the North towards the South, and he hoped that the turn of Egypt would come. On the banks of the Nile would be found the wonderful antiquities of Egypt and of Egyptian medicine. History pointed to Egypt as the original home of medicine. Teta, the son of the Pharaoh Menesses, was a healer of the sick 6,000 years before the Christian era.

The thanks of the members of the Eleventh Congress to the Italian executive were then offered by the representatives of France (Professor Bouchard), Japan, Great Britain (Sir William Mac Cormac), Norway (Professor Laache), Russia (Professor Sklifossovsky), Spain (Dr. Fernandez Caro), United States (Dr. A. Jacobi), Sweden (Professor Holmgren), Denmark (Professor Salomonsen), Mexico (Professor Lavista), Venezuela, Sweden (Professor Kocher), and Holland (Professor Stokvis).

Professor Baccelli then declared the Eleventh International Congress closed.

The following is a translation of the letter addressed to Dr. Fernandez Caro, delegate of the Spanish Government and of the Spanish Medical Association, and Surgeon-General of the Army, by Professor Baccelli:

Most Honoured Colleague,—If Spain has not, on this occasion, been chosen as the place of meeting of the next International Medical Congress, it is due to the understanding come to in 1890 at Berlin with Russia, which had prayed to be preferred to Italy. In asking for Spain, the well-beloved sister of Italy, the honour then sought by Russia, you, my illustrious colleague, have taken the place which that nation held at the last Congress. I doubt not, therefore, but that, after Russia, Spain will be preferred over all other nations. So much is due to the great past of your beautiful country, to your science, to your patriotism, and to your colleagues, whom I am glad to honour in this letter. Believe me, your devoted *confrère* and friend, Guido Baccelli.

The number of demonstrations given during the Congress was not very numerous. Dr. Max. Nitze explained some recent advances in cystoscopy, and showed his methods. Professor Levachen gave a demonstration on the etiology of infectious diseases in the Zoological Institute, and Drs. Ferrier and Turner gave a demonstration of the degeneration following lesions of the cerebellum and its peduncles in monkeys.

On the evening of March 31st, Dr. and Mrs. Edmonstone Charles gave, in their house in Rome, an entertainment to British members of the Congress. A well-selected programme of music was given by one of the most celebrated Italian quartettes, and the graceful and cordial hospitality shown was very greatly appreciated by the large number of guests invited. The British members were also much indebted to Dr. Charles, whose acquaintance with the antiquities of Rome is very extensive, for his advice and guidance on more than one occasion. Mr. Searle entertained a small party of English-speaking guests at Tivoli on April 6th; he conducted the party to the most interesting spots in the neighbourhood, and explained his grounds for identifying a certain site with the villa, which Horace, it is said, erected when he was advised, for the cure of his insomnia, to reside where he could always hear the roar of falling water. The British visitors to Rome were also much indebted to Mr. and Mrs. Mackenzie to Dr. Prochet, and to Dr. Sampen, who by their assiduous kindness contributed much to render the visit to Rome agreeable and enjoyable.

During the meeting of the Congress the Committee formed to erect a monument to the memory of Malpighi made a special appeal for subscriptions, and many members interested themselves in the task of finding fresh supporters.

On March 31st Mr. S. M. Burroughs gave a concert and cinderella dance to English and American members. The entertainment, which was given at the Grand Hotel, was very largely attended.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

THE TREATMENT OF INTUSSUSCEPTION BY GENERATING CARBON-DIOXIDE WITHIN THE BOWEL.

On December 21st, 1890, I was called to see F. D., a labourer's son, aged 8 months. The mother stated that the child had a "restless night, that he suddenly started out crying, and at times was rolling with pain." The child was well nourished, and appeared healthy and well developed. He had suffered from slight diarrhœa during the week, and for the last twenty-four hours had violent straining, and passed slimy mucous stools tinged with blood. When put to the breast, he soon stopped sucking, and immediately vomited. Cow's milk with water and all other nourishment was likewise quickly rejected. The vomit had an offensive smell, but was not stercoraceous. The abdomen was somewhat distended. Midway between the umbilicus and the crest of the ilium on the left side a swelling was visible; it was doughy to the feel, dull upon percussion, sausage-shaped, its long axis lying parallel to the fold of the groin. There was tenderness on pressure in the vicinity of the swelling.

Having tried all the prescribed methods of treatment, including kneading, inversion combined with manipulation, injection of warm water, and insufflation of air, and all being of no avail. I suggested laparotomy, but the parent would not consent to any "cutting" operation.

It occurred to me if it was only possible to generate gas within the intestine, and prevent its escape through the anus, the gas passing upwards might reduce the intussusception. I therefore procured two basins, each containing about half a pint of warm water. In one I dissolved a drachm and a half of citric acid, in the other two drachms of bicarbonate of soda. A flexible catheter was attached to a Higginson's enema syringe, and passed into the bowel to the extent of 9 inches; first the acid was injected, afterwards (slowly) the alkaline solution. The result was the generation of carbonic acid gas which was perceptible by a distension of the abdomen. The catheter was quickly withdrawn, and the nates held firmly together for two or three minutes, so as to prevent the escape of the gas. During this time the child made strong efforts to dispel it. After a few minutes the abdominal swelling above described had entirely disappeared. The child

ceased vomiting and in two days passed a natural stool, when the recovery was quite complete.

Remarks.—It could be easily ascertained what volume of gas is generated by a combination of various acids with carbonates, and it would be of value to know what amount of gas (CO_2) could with safety be rapidly generated within the bowel, for as these cases call for prompt treatment, it might be necessary on an emergency to use such domestic remedies as chalk or washing soda with vinegar (or a seidlitz powder). Of course this treatment is not free from danger; in a case which is far advanced, and where gangrene has set in, it might cause rupture of the gut; but if the case is taken early, and all other means having failed, laparotomy not being allowed, I believe one is quite justified in resorting to this mode of treatment.

J. T. C. Williams, M.R.C.S., L.R.C.P., L.S.A.
Whitland, South Wales.

THE INHALATION OF OXYGEN GAS.

The beneficial effect of the inhalation of oxygen gas has lately been well exemplified in a patient of mine, a lady, aged 75, with failing dilated right heart, tricuspid insufficiency, considerable œdema of both legs extending up to the hips, œdema of the left arm, scanty urine, and, beyond all, most severe dyspnœa. Before resorting to the inhalation of oxygen gas the administration of digitalis improved the action of the heart, but caused nausea; strophanthus, the same, but did not cause nausea; diuretin increased the flow of urine, and freshly-made broom-top tea did likewise, but the dyspnœa remained unrelieved. After the first inhalation benefit was undoubted. The inhalation was repeated every half hour for about six hours; it was then used two or three times a day, and natural refreshing sleep was obtained by the tired-out sufferer. The gas has been regularly supplied by the Brins Oxygen Gas Company, and my patient has inhaled from the commencement, in December, to the present time 183 feet.

Windsor. W. B. Holderness.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Jonathan Hutchinson, F.R.S., President, in the Chair.

Tuesday, April 10th, 1894.

Persistence of the Thyreoglossal Duct.

This paper, by Mr. H. E. Durham, was communicated by Mr. Arthur E. Durham. Three cases of persistent ductus thyreoglossalis were described; especial attention was given to the histological characters of the specimens removed in these cases. Case I. Removed from a man, aged 19. The specimen showed two lumina lined mostly with ciliated epithelium; at the upper part (level of lower border of hyoid bone) patches of squamous epithelium occurred; also a small tract of thyroid gland follicles. With the median position these facts indicated the thyreoglossal duct origin. Case II. Removed from a child, aged 6 years. The specimen also showed paired lumina, the epithelium being cylindrical below and squamous above. The median position was likewise evidence of derivation from the thyreoglossal duct. Case III. Goitre of the isthmus glandulæ thyreoideæ, associated with persistent thyreoglossal duct in a girl, aged 18. The diagnosis of ductus thyreoglossalis rested upon the presence of ciliated cavities in the tumour and the section of a process running upon the thyroid cartilage at the operation. The following classification of congenital cysts and fistulæ of the mid-line of the neck and of the base of the tongue was given and discussed. 1. Dermoid cysts and fistulæ—(*a*) due to persistence of ductus lingualis, (*b*) due to persistence of sinus præcervicalis, (*c*) of independent origin. 2. Mixed dermoid and mucoid cysts and fistulæ—(*a*) due to persistence of ductus thyreoglossalis, (*b*) due to persistence of sinus præcervicalis and both epiblastic and hypoblastic gill pouches. 3. Mucoid cysts and fistulæ—(*a*) derived from the mucous glands of the ductus lingualis, (*b*) due to persistence of the ductus thyreoideus. It was suggested that many of the cases recorded as branchial fistulæ were rather to be regarded as persistent thyreoglossal ducts. Cases were cited to support this opinion. Next, certain modes of origin of median cervical cysts and fistulæ which had been hypothesised in the past were dealt with. These were: (*a*) præ-epiglottic mucous glands, (*b*) tracheal and laryngeal herniæ, (*c*) bursæ about the hyoid bone. The records of such cases were to be considered doubtful. Remarks upon the method of treatment were also made.

Mr. Bland Sutton, after congratulating the author on his very able paper, said that he was surprised that anyone could still doubt the existence of the thyreoglossal duct, as the question had been set at rest by Mr. Marshall's case. The duct required no microscope to demonstrate its existence. One important point had been brought out by Mr. Raymond Johnson, that there was no congenital opening, but that at some time after birth a cyst formed which was opened, and then remained as a permanent fistula, whereas branchial clefts were always congenital. The characters of epithelium were not to be relied on as affording certain evidence of origin, as it was now well known that, contrary to what used to be taught, such characters were liable to vary. The duct did not run into the tongue, as with the development of the hyoid bone it was divided into two halves, which never remained continuous.

Mr. Raymond Johnson congratulated Mr. Durham on his paper, which would throw much light on a doubtful problem. Since his own communication to the Pathological Society he had had, through the kindness of Mr. Godlee, an opportunity of examining microscopically a third specimen, obtained from a lad aged 19, in whom a cyst had been forming for two years before it was opened. In this case a probe was passed up the duct nearly as far as the foramen cæcum. His first specimen showed under the microscope only one lumen and no epithelium; the second thick squamous epithelium and a doubtful second lumen; and the third a lumen along which the probe had passed, and two or three large spaces lined peripherally with rounded, and centrally with distinctly columnar, apparently non-ciliated, epithelium cells. He had taken these spaces to be glandular follicles which had opened into the main duct, but they might be, as the author had suggested in his paper, separate lumina of the duct. The cases showed that the prognosis as to cure was unfavourable unless radical measures were adopted.

Mr. Barker mentioned the practical difficulty of tracing these ducts in the tongue. He related a case in which he had removed a duct almost as far as the foramen cæcum, and yet the discharge recurred some time later. He thought it would be justifiable to remove a considerable portion of the tongue with them. He mentioned a case at Brighton in which a cyst had first appeared; this was opened, leaving a fistula, and the duct had finally been excised and handed to him for microscopic examination.

Mr. Howard had removed two cysts from a child, about 5 years old, which were of this nature. They were situated one above and one below the hyoid bone. The patient made a complete and permanent recovery.

Mr. Herbert Durham thanked the Society for the kind way in which they had received his paper. He could not agree with Mr. Sutton that there was no longer any doubt as to the persistence of the thyreoglossal duct. Even Mr. Marshall's case already quoted was not quite proved, and might turn out to be a persistent sinus pæcervicalis. Again, he could not agree with him that there was no need of the microscope to demonstrate its presence, as it was a structure invisible to the naked eye, and its presence could only be determined by the discovery of the characteristic epithelium. He agreed that thyreoglossal fistulæ were secondary, but branchial fistulæ were not always congenital, being occasionally, at any rate, preceded by cysts. He thought that in Mr. Barker's case there may have been two ducts, of which only one was removed. Steckeisen had mentioned several cases of multiple cysts similar to Mr. Howard's. In treatment he thought that there would be no necessity to remove large portions of the tongue, as Mr. Barker had suggested.

Dr. Samuel Pozzi, the well-known gynæcologist of Paris, has been promoted to the rank of Officer of the Legion of Honour.

OBSTETRICAL SOCIETY OF LONDON.

G. E. HERMAN, M.B.Lond., F.R.C.P., President, in the Chair.

Wednesday, April 4th, 1894.

ASSOCIATED PAROVARIAN AND VAGINAL CYSTS, FORMED FROM A DISTENDED GARTNER'S DUCT.

DR. AMAND ROUTH read this paper. Details of three cases of the above were given, and also of two analogous cases of patency of the whole length of the duct, with an anterior opening allowing free discharge, and thus preventing distension of the duct along its course. Comparison was drawn between such cases and those of distended but imperforate Müller's ducts. Evidence adduced from these cases was thought to establish, or at least to render plausible, the following propositions: 1. That Gartner's duct could be traced in some cases in the adult female from the parovarium to the vestibulum vulvæ, ending just beneath and slightly to one side of the urethral orifice. 2. Homology tended to show that Max Schüller's glands were diverticula of Gartner's ducts, just as the vesiculæ seminales were diverticula of the vasa deferentia. Some evidence was given that Skene's ducts were not necessarily identical with the anterior termination of Gartner's ducts (as most of those who had traced Gartner's duct to the vestibule had thought), but that Skene's ducts led directly and solely from Max Schüller's urethral glands, Gartner's ducts being continued to the vestibule behind, but parallel to, Skene's ducts. 3. That Gartner's duct, if patent, might become distended at any part of its course, constituting a variety of parovarian cyst if the distension were in the broad ligament portion, and a vaginal cyst if the distension were in the vaginal portion. The cases described were instances of the association of both of these cysts, owing to simultaneous patency and distension of both portions of the duct. 4. Attention was drawn to these cases as affording explanations of some obscure cases of profuse watery discharge from the vagina, not coming from the uterus or bladder. 5. The question of treatment was also approached, and the opinion was expressed that where the whole duct was distended the vaginal part of the cyst might be laid open as far as the base of the broad ligament, and the broad ligament portion encouraged to contract and close up.

Mr. ALBAN DORAN thought that if cysts of the parovarium and vagina were found in the same subject, the theory that the vaginal cysts were developed from Gartner's duct was thereby supported. Fischel found that in one human fœtus the duct ran into the cervix, and turning upwards ended in a blind extremity without reaching the vagina. This did not prove that the tube did not at an earlier stage of development run further. Mr. Bland Sutton's theory as to the homologies of Skene's tubes might be perfectly correct, even if Gartner's ducts could be traced running outside the urethra and ending in the vestibule. Skene's tubes might have been cut off and displaced at an earlier stage—a common phenomena in embryology. Vaginal cysts tended to burrow upwards so as to come in contact with the parametrium, peritoneum, and large vessels. Hence their total extirpation was rarely advisable; in this they differed from large cysts of Cowper's glands, which could not burrow in the same direction.

Dr. OLIVER said that during the last twelve months he had had six cases, two of which he believed originated in Gartner's duct. One of these contained 3 ounces, the other 6 ounces, of a fluid similar to that found in parovarian cysts.

Remarks were also made by the PRESIDENT, Mr. BLAND SUTTON, Drs. LEITH NAPIER, HERBERT SPENCER, and GRIFFITH.

Dr. AMAND ROUTH, in reply, said he was glad to find Mr. Doran and Mr. Bland Sutton in the main agreeing with him in his conclusions. The latter had suggested that the cyst laid open might have been a distended ureter, but this could hardly have been so, as it granulated up after incision. He had not found the lining of the cyst anywhere papillomatous.

Harveian—*April 5th*—Mr. GEORGE EASTES, President, in the chair.—Dr. LEONARD GUTHRIE showed two infants, aged 3 and 6 months respectively, suffering from congenital respiratory spasm. Both inspiration and expiration were accompanied by phonation. The condition had been almost constant since birth, but varied in severity. The dyspnœa caused no apparent distress. Cyanosis had never been noticed. Cry and cough were both natural. The pharynx, as far as could be seen, was healthy, and there was no nasal obstruction. The larynx could not be examined satisfactorily. There were no signs of atelectasis, but slight bronchial catarrh in both cases. Their general health was fairly good. The younger child, however, had had frequent convulsions. There was no family history of similar respiratory affection. In the absence of satisfactory laryngoscopic examination he was inclined to agree with Dr. Thomson in regarding the condition as a "developmental neurosis," or congenital inco-ordination of the thoracic, pharyngeal, and laryngeal respiratory muscles, perhaps, dependent upon immaturity of the respiratory centres. Dr. C. W. CHAPMAN had some years ago a case with symptoms similar to those in the children present. Dyspnœa became urgent, and tracheotomy was performed. Three weeks later a *post-mortem* examination revealed numerous papillomatous growths scattered over the interior of the larynx. Dr. GUTHRIE, in reply, said that one of the infants had been treated with small doses of strychnine, and the other with bromide of potash, combined with cod-liver oil. Both had improved considerably under treatment. The malformation of the epiglottis described by Dr. Lees, and mentioned by Dr. Phillips, had not been found in all cases.—Dr. G. A. SUTHERLAND showed two cases of gummata of the liver in children, a girl aged 10 and a girl aged 15. These cases illustrated some of the later developments of hereditary syphilis in children. They occurred frequently at or about the age of puberty, and seemed to delay the normal physiological changes of that period of life. Inunction had given better results than the internal administration of mercury, but the treatment in all cases must be prolonged. Dr. ILLINGWORTH submitted that the reason why Dr. Sutherland secured better results by treatment with mercurial inunction with iodide of potash internally than by solution of the perchloride alone internally was that the iodide of potassium acted as a solvent upon the mercury absorbed, forming the solution of the biniodide. This solution, being penetrant and easily eliminated, was non-poisonous, and hence superior to the bichloride.—Mr. F. J. ROYNTON showed a case of persistence of the third branchial arch on either side in an infant of 15 days old. There were no other evidences of arrest of development in the child, nor was anything of the kind present in the mother or in her other child, aged 3 years.—Mr. JULER showed a child suffering from some obscure intracranial lesion following middle ear disease. He was inclined to believe that the trouble was a chronic abscess dependent on the ear trouble rather than a glioma, and that it was localised either in the pons or, more probably, in the cerebellum. Dr. JAMES TAYLOR said that the case was without doubt one of abscess or tumour in the cerebellum, the symptoms being so remarkably in accordance with that condition. Dr. WILLIAM HILL was inclined to think that the case might be one of subdural suppuration, and urged that the treatment was an exploratory incision. Dr. GUTHRIE had seen a case in which the symptoms were identical, and in which death ensued. At the *post-mortem* examination no evidence of disease or tumour was found in the cerebellum, but the lesion was in the region of the optic commissure. Remarks were also made by Dr. ILLINGWORTH.—Dr. SYDNEY PHILLIPS showed a woman, aged 24, who had suffered from paroxysms of pyrexia each day since September, 1893, with a short interval. The chart for the last eight days showed a daily rise of temperature to nearly 103° F., with subsequent fall each day to the normal. There was a gumma on the right arm, a much enlarged spleen, and periosteal nodes on tibiæ and on olecranon process. The pyrexia had not yielded to treatment by quinine or by salicylates, and Dr. Phillips regarded the case as one of syphilitic fever resembling ague, similar to that he had recorded in the Medical Society's *Transactions*, vol. xii.—Dr. JAMES TAYLOR showed two cases of Friedreich's ataxy. Both patients were males, aged 16, not in any way related.

Hunterian—*March 14th*—Mr. F. C. SYMONDS, President, in the chair.—The PRESIDENT showed a large multilocular fibroid tumour of the uterus, for which he had removed the uterus and appendages. He had used the clamp and the patient made a good recovery. He had had two similar cases; in one he had used the clamp and in the other had divided the cervix and had sutured the peritoneum over the stump. Both cases recovered.—Dr. GALLOWAY showed a specimen of tubal gestation which had ruptured half an hour before death. He judged the age of the gestation was about two months. The patient died of hæmorrhage and shock. After remarks by the PRESIDENT and Dr. PERCY WARNER, Dr. HERMAN said he considered that it was certain that the gestation went on longer when the sac was situated in the outer part of the Fallopian tube. He could not see what a sudden intra-abdominal hæmorrhage in a woman who presented signs of pregnancy could be except a ruptured gestation or a ruptured varicose vein of the broad ligament. The treatment of both was the same.—Dr. F. J. SMITH, Dr. HADLEY, and Dr. BRAXTON HICKS mentioned cases (typhoid perforation and hæmorrhage from a varicose vein of a twisted ovarian pedicle) illustrative of sudden collapse followed by death, simulating the symptoms of ruptured tubal gestation.—Dr. W. ECCLES exhibited a cast of a monocular fœtus. The brain was reptilean in character, the cerebellum not being covered by the cerebral hemispheres. The case was of interest because it caused difficulty in diagnosing the exact presentation. Dr. HERMAN mentioned that in Ahfeld's atlas Dr. Eccles would find a complete list and description of almost every known variety of malformation. Remarks were made by Mr. OPENSHAW, Dr. HINGSTON FOX, and Dr. F. J. SMITH.—Dr. MANSON exhibited under the microscope the blood of a malarious patient, containing specimens of the organisms of malaria. They were crescentic bodies, and stained with methyl blue; in the centre were dark pigmented specks. Dr. Manson said the organism existed in several forms, the relations of which to each other had not yet been decided. Two forms were well known: (*a*) the intracorpuscular form, consisting of corpuscles with pale black pigment in the centre, exhibiting amœboid movement at the edge, and (*b*) a central spherical mass of black pigment, to the periphery of which cell there were flagella attached; a third form consisted of egg-shaped oval red bodies. Remarks were made by Dr. GALLOWAY and Dr. FYFFE, and Dr. MANSON replied.—Dr. MANSON also exhibited micro-

scopical specimens of sputum containing ova from a case of pulmonary distomiasis, a disease common in China and Japan. The parasite lived in burrows in the lung substance and bronchial walls, and gave rise to signs which simulated aneurysm, cough, and sanguineous expectoration. Distomiasis might affect the cerebral cortex and give rise to typical Jacksonian epilepsy. Dr. Manson had tried inhalations of turpentine, cousso, and santonin, but without success.—Dr. Galloway exhibited an uncommon form of secondary carcinoma from a patient who died of dyspnœa. Both elbow-joints were enlarged, and the lower ends of the humeri were involved in carcinomatous growths; in one arm there had been a spontaneous fracture of the humerus. In a case of adenoma of the thyroid, published by Dr. Coats, there were secondary deposits in the cranial bones. In this case also the thyroid tumour was an adenoma; at no point was any carcinomatous structure seen. The cases were important as showing how intimate was the relation between adenoma and carcinoma. The President had seen secondary carcinoma of the lung associated with tumour of the thyroid.—Dr. Fyffe exhibited a specimen of thoracic aneurysm with ulcerative endocarditis, patches of ulceration in the aortic valves in which diplococci had been found. He said that until micro-organisms were found ulcerative endocarditis ought not to be diagnosed. In reply to Dr. Hadley and Dr. Chaplin, Dr. Fyffe said about six weeks was the duration of life. He had once seen the tricuspid valve affected in a case of congenital heart disease.

West London Medico-Chirurgical—*April 6th*—Dr. Donald Hood, President, in the chair.—Mr. L. A. Bidwell contributed remarks upon amputation of the breast for cancer. He urged very free removal of skin and of glands in every case; sixty-three cases without a death were referred to; and allusion was made to the work of Cheyne, Dennis (of New York), and Halsted on this subject. So-called "cases unfit for operation" were discussed, the author recommending operation in every case without secondary deposits, always provided that the operation was free and complete. Mr. Bowreman Jessett and Mr. Keetley endorsed Mr. Bidwell's views.—Mr. Jessett read a paper on the treatment of advanced cases of cancer of the uterus, advocating in those cases past removal of the organ the clearing out of the cavity with his dredger, and packing with chloride of zinc wool. Drs. Schacht and Roe and Mr. Bidwell took part in the discussion.—Specimens were shown by Mr. C. M. Bluett, Mr. C. M. Yearsley, and Dr. H. Wilson.

Edinburgh Medico-Chirurgical — *March 7th* — Dr. Blair Cunynghame, Vice-President, in the chair.—Mr. Cotterill showed: (1) A patient from whom he had removed half the tongue for malignant disease. The remaining half had so accommodated itself to its altered circumstances as to simulate a healthy tongue. (2) A man whose larynx had been in part removed for malignant disease. A preliminary tracheotomy had been performed, and Trendelenburg's tube used. (3) A little girl who had an intussusception of the colon. Inflation and water distension were useless, so he cut down in the middle line and pushed out the intussusception with a perfect result.—Dr. Byrom Bramwell showed a case of lupus and a case of ichthyosis under thyroid treatment, both of which had been exhibited at a previous meeting, and were now brought up to note progress.—The President, Dr. T. S. Clouston, gave a demonstration of the microscopical pathological changes found in the brain and its membranes in insanity, illustrated by a series of microscopic sections and microphotographs. Dr. Clouston said he was the spokesman, but that the work had been largely done by his assistants Dr. Middlemass and Dr. W. F. Robertson. The demonstration began with the cerebral meninges and proceeded inwards. The diseases illustrated were general paralysis, alcoholism, epilepsy, etc. The pyramidal cells in the cortex of a newly-born infant and those of an epileptic idiot were shown to be remarkably alike. Deiter's cells in pathological states were shown to become spider and scavenger cells.

Royal Academy of Medicine: Section of Obstetrics—*March 9th*—Dr. R. D. Purefoy, President, in the chair.—Dr. Alfred Smith showed tubes and ovaries removed from a patient, aged 35, other methods of treatment having failed. The tubes and ovaries were removed. The patient suffered great pain after the operation, due to metrostaxis; the pain was only relieved when a discharge of blood from the uterus occurred. On the third day after operation an attack of pseudo-ileus supervened; this was relieved by a turpentine enema. Her recovery from this was rapid and uneventful. Dr. Atthill said there were some severe cases of dysmenorrhœa which justified removal of the ovaries.—The President related some cases of uterine myomata treated by injection of ergot. Injections of ergot in two cases caused the disappearance of the tumour, in nearly all controlled the bleeding and relieved the pain, and in one case stopped the vomiting also. In only one case was there trouble from sloughing of the tumour. In one the hæmorrhage was not checked, and removal of the ovaries effected a cure. The preparation used was Squibb's ergot (a syringeful the amount generally used) at intervals of several days, and in no case was abscess caused by the treatment. Dr. Smith said his own experience with regard to ergot hypodermically for these cases was unfavourable. Dr. Atthill said that he had given this treatment a fair trial in the Rotunda many years ago and had been unfavourably impressed by it. He had found local abscesses which caused considerable trouble to follow his injections. The President replied.—Dr. Lombe Atthill related a case in which he watched the growth of a uterine fibroid from nearly its earliest stage till it attained the size of the fœtal head at full term, its growth being attended by profuse, sometimes alarming, hæmorrhage. About two years and a-half ago the patient became insane, shortly after which menstruation ceased to recur. Recently, an ovarian cyst being diagnosed, he had performed ovariotomy, and the uterus was found to have atrophied to such an extent that it was but little larger than the healthy organ should be previous to the occurrence of the climacteric period. This rapid atrophy was doubtless accelerated by abstinence; she was with difficulty induced to take sufficient food to support life. Recovery was rapid. The patient was stated to be in her 50th year. In reply to Dr. Smith, Dr. Atthill stated that the operation was done merely to prolong the patient's life. He did not expect any improvement in her mental state as she was sullen, and had no sexual desire.

Liverpool Medical Institution—*March 29th*—Mr. Puzey, in the chair.—Mr. Robert Jones reported a case in which he had operated for intestinal obstruction of twelve days' duration. It was caused by a band which pressed on and completely blocked the ileum; when this was divided the patient made a good recovery. Mr. Jones also related a case of hydatid of the liver which he had incised, and stitched to the abdominal wall by a double row of sutures; 120 ounces of fluid escaped, and the young woman made an excellent recovery.—Dr. Archer read notes of a case of idiopathic tetanus occurring in a telegraph boy of 15. He presented himself one evening apparently suffering from acute tonsillitis; two days later a hurried message was sent that the boy was choking. He was found to be in a state of great physical depression: there was spasm of the respiratory muscles, and of certain of the muscles of the extremities, with retching, and difficulty in swallowing fluids but not solids. There was no trismus or opisthotonos. The boy died four hours later from cardiac exhaustion. No history of any wound or injury could be obtained. Dr. Glynn referred to certain cases which had come under his notice where the specific poison of tetanus appeared to have been introduced through very slight abrasions. Dr. Bradshaw said the rapid fatal issue, the difficulty in swallowing, and, above all, the absence of trismus, were very unusual in idiopathic tetanus. The case as related reminded him forcibly of hydrophobia.—Dr. Alexander described the case of a boiler maker, aged 52, who was struck by a heavy plank across the loins. Three days later he was admitted suffering great pain, and with retention of urine. A gum elastic catheter drew off about 2 pints of very bloody urine. The next day a catheter was tied in the bladder, which was washed out twice a day with a solution of hamamelis until all trace of blood had disappeared. All went on well for nearly a month, when he was again seized with great pain and inability to pass water. Although the bladder was greatly distended, the passage of an instrument failed to evacuate it. Perineal section was performed, and a large-sized tube tied in the bladder, but only a very little urine escaped. Two days later the withdrawal of the tube was followed by the extrusion of what looked like a piece of roughened mucous membrane, but which proved to be a whole cast of the inside of the bladder. After this came away all difficulty was at an end, and the man was progressing very favourably.—Dr. Hope read a paper on insanitary property and artisans' dwellings, most of the property specifically dealt with was erected prior to 1847, and was in a ruinous condition. The construction of back-to back houses was not put an end to until 1864. A large insanitary area was pulled down under Cross's Act, and in 1883 the Victorian Artisans' Dwellings were opened on the old site. Since 1884, 2,860 houses of the type described had been demolished, the entire amount expended by the corporation in this work since 1864 being upwards of £265,000. Dr. Steeves said that in the sanitary area of the Toxteth Local Board he had only once had to take action under the Artisans' Building Act, and to advise the demolition of eighteen or twenty houses. Dr. Craigmile said that not many years ago there was much insanitary property in Seacombe, but that during the last ten years most of this had been done away with. Having plenty of available space good cottage houses were built near the old rookeries, and the population soon migrated to these newer buildings, the old insanitary property remaining for a long time uninhabited: the owners pulled them down and built good class property in their place. Drs. Moore, Alexander Davidson, Permewan, Taylor, and A. Wilson also took part in the interesting discussion.

Midland Medical—*March 7th*—Mr. A. H. Evans, President, in the chair.—Mr. Haslam showed a specimen of a fibrous growth that he had removed from the cervical vertebræ of a boy aged 14. Symptoms of pressure on the brachial plexus had existed for two years, and the tumour was too widely attached to permit of complete removal.—Mr. Barling showed a patient, aged 17, from whom he had removed the right lobe and the isthmus of the thyroid for the relief of pressure symptoms. The operation presented nothing unusual, and a good recovery followed. At the date of report, three weeks after the operation, the stridor remained the same, but the patient felt greatly relieved in his breathing. His neck measured an inch and a-half less in circumference than it did.—Dr. T. Sydney Short read a paper on the clinical aspects of the later stages of gout, rheumatism, and rheumatoid arthritis.

Manchester Medical—*March 21st*—Professor Dixon Mann, in the chair.—Mr. J. E. Platt read a communication on fistula-in-ano. During the past twenty months he had observed 76 cases of this affection, of which 68 were men and 8 women; 63 occurred between the ages of 20 and 50 years; 28.7 per cent.—a larger proportion than was given in most statistics—were associated with more or less advanced tuberculosis of the lungs, and in addition to this five or six others gave a family history of consumption. The average time taken by ten phthisical fistulæ to heal after operation was a little over nine weeks, and by 37 non-phthisical fistulæ a little over seven weeks, from which it appeared that healing took on an average a longer time in phthisical than in non-phthisical cases. In deciding on the advisability of operation in phthisis the activity of the lung disease must be the guide; if very active do not operate; if comparatively quiescent, operation was safe and would in most cases give good results. The patients had been watched to see if the lung disease became more active after the cure of the fistula, and it was found that, with one exception, the health improved and remained good for a considerable time after operation, whilst two patients, one ten months and the other eighteen months afterwards, were apparently in perfect health.—Mr. E. Stanmore Bishop showed (1) a case of congenital hygroma of the neck, after operation, and the cyst, which clearly demonstrated its multilocular character, and the secondary septa. The cyst was removed. Primary union followed, and the child (aged 3) was well in ten days. (2) A case of rectal carcinoma in a patient aged 59. Growth situated on anterior wall 2½ inches up. Removed by anterior incision on December 1st, 1893. Recovery. The patient had gained nearly two score

pounds since leaving hospital.—Dr. ALFRED BROWN read notes of a case of acute œdema of the larynx, which occurred during an attack of rheumatism in a man aged 48. The following points were specially referred to: (1) Its mode of commencement, the œdema being infraglottic and not an extension from the pharynx or tonsils. (2) The abatement of the inflammation of the joints while the larynx was most affected; they varied inversely. (3) The fact of there being no albuminuria throughout the illness, and that no heart affection was discoverable. (4) The treatment throughout was anti-rheumatic, and scarification was not performed. (5) The rarity of the occurrence of œdematous laryngitis as a complication of rheumatism.

Birmingham and Midland Counties Branch—*Feb. 23rd*—Mr. F. MARSH in the chair.—Dr. LESLIE PHILLIPS presented a case of adenoma sebaceum in a youth aged 19, in whom it had appeared.—Mr. MORRISON showed a boy on whom he had successfully operated for advanced double talipes equinus.—Mr. HASLAM showed a specimen illustrating the conditions seen in an old-standing case of talipes equinus.—Dr. DOUGLAS STANLEY showed (1) intestine showing a perforation in the cæcum about one inch from the ileo-cæcal valve. It seemed to have originated in a cæcal ulceration. There was a history of sudden severe pain in the right iliac region, with rise of temperature, six months previous to the patient's death from pneumonia. (2) Intestine showing extreme typhoid ulceration, the lower seven feet of the ileum being involved; there was extensive perforation. The patient was at work a week before his death. —Mr. LUCAS showed an appendix, with fæcal concretions, from a man, aged 41. There was vomiting and almost complete obstruction. The abdomen was therefore opened, but the patient died before the operation could be completed. The *post-mortem* examination showed old-standing disease of heart, lungs, and liver, and a patch of congestion at the upper part of the small intestine, as if this had been a volvulus.—Dr. FOXWELL showed specimens of fibrosis of the heart, left lung, and liver from a single woman, aged 32.—Mr. CLAYTON read notes of a case of rupture of mucous membrane of stomach, published in the BRITISH MEDICAL JOURNAL of March 24th, p. 634.

Sheffield Medico-Chirurgical—*March 15th*—Mr. R. FAVELL, President, in the chair.—Dr. HELM showed a syringe that could be readily and effectively sterilised with which he had been injecting Brown-Séquard's fluid for the palliative treatment of a case of cancer of the tongue too advanced for operation.—Dr. HARGREAVES showed a cystic growth he had removed from the breast.—Dr. WATERS showed a case of traumatic hemianæsthesia with hyperidrosis in a man, aged 30, who attributed his symptoms to a fall three years before. The left half of the body was constantly moist with perspiration, which became excessive on the least exertion.—Dr. PEARSON read notes of a case of excision of the shoulder. Though the patient had been losing flesh and unable to work for a year and a-half before the operation, he was able to do light work two months after it, and in six months he had gained 2 stone, could lift considerable weights with the affected arm, and follow his employment, that of a policeman in the fire brigade.—Mr. FRANK HARRISON read notes of a case of dental replantation. A left upper central incisor, which had been knocked out at the age of 10 and immediately replaced, was removed fifteen years afterwards by Mr. Harrison. The general aspect of the tooth was healthy, and the central canal contained perfectly normal healthy pulp.—Dr. GWYNNE read notes of a case of embolism of the pulmonary artery occurring three weeks after labour. The PRESIDENT, Mr. ATKIN, Dr. PORTER, Dr. HELM, Mr. WEST JONES, Dr. HARGREAVES, Dr. SINCLAIR WHITE, and Dr. JOHNSTONE made remarks.—Dr. WEARNE CLARKE read a paper on appendicitis. The PRESIDENT, Dr. GWYNNE, and Dr. SINCLAIR WHITE joined in the discussion which followed.

Nottingham Medico-Chirurgical—*March 21st*—Dr. HUNTER, President, in the chair.—Mr. CHICKEN showed a tumour the size of a hen's egg, which he had removed from a young woman, and in discussing the treatment of thyroid enlargement in general, he recommended, where pressure symptoms existed, either excision of a portion of the gland or division of the isthmus. This latter proceeding in some cases caused the growth to diminish in size.—Mr. ANDERSON delivered an address on "The Surgical Treatment of Prostatic Enlargements." He divided the treatment into that necessary before the commencement of catheter life, and that after. With reference to operative treatment he described prostatotomy and perineal prostatectomy, but preferred and advocated suprapubic prostatectomy. He further described the results of six cases on whom he had operated and removed by the suprapubic method prostatic tumours. In the discussion which followed, the PRESIDENT, Messrs. T. WHITE, CHICKEN, PRYCE, and TRESIDDER took part, and Mr. ANDERSON replied.—Dr. MICHIE read notes of two cases on whom he had successfully operated. (1) Cholecystotomy for gall stones; in this case on the day after the operation he found that the peritoneal cavity contained a considerable amount of bile. This complication he treated by a glass drainage tube, inserting through a small incision above the tubes into Douglas's pouch, and thus relieving. Messrs. ANDERSON, CHICKEN, and WATSON spoke, and Dr. MICHIE replied.

SOCIETY FOR THE STUDY OF INEBRIETY.—The annual meeting of this Society was held at 11, Chandos Street, on April 5th, the President, Dr. Norman Kerr, in the chair. Brigade-Surgeon Pringle read a paper on the proper mode of dealing with pauper inebriates mentally deranged, and urging the need for an institution between the workhouse and the asylum for the reception and temporary care of the alcoholically insane. Dr. Stanley Haynes, Malvern, read a paper on the Causation, Prevention, and Prophylaxis of Inebriety, contending for the therapeutic seclusion of inebriates as diseased persons.

REVIEWS.

CANCER, SARCOMA, AND OTHER MORBID GROWTHS CONSIDERED IN RELATION TO THE SPOROZOA. By J. JACKSON CLARKE, M.B.Lond., F.R.C.S. London, Paris, and Madrid: Baillière, Tindall, and Cox. 1893. (Cr. 8vo, pp. 103. 3s. 6d.)

THIS is a reprint of a series of three papers which appeared last autumn. A summary of the literature of the subject is followed by a number of observations on psorosperms found in the ureter. The author also describes a series of other tumours, such as sarcomas, especially of the testicle; squamous epithelioma, various forms of cancer of the breast and penis, and, lastly, the contents of a cyst in an adenoma of a cat's lip, comparing these with growths that are met with in the coccidial adenoma of the rabbit's liver. In one or other of these various positions the author maintains that he has found almost every sporozoöid form described by pathologists, and the very completeness of these pictured forms, as compared with the somewhat indefinite descriptions given in the text, makes it an exceedingly difficult matter to go fully with the author without further corroboration of his results being obtained by others.

The author is evidently of opinion that the Morbid Growths Committee appointed by the Pathological Society was not competent to deal with his work, but his reasons for this, given on pages 31-2, do not seem to be sufficient for the wholesale condemnation of an opinion that was no doubt very carefully considered. We feel disposed to think that Mr. CLARKE has mixed up his facts and his suggestions in a way that makes it difficult to determine where one set begins and the other ends. There is certainly quite as much reasoning based on suggestion as there is on well ascertained facts. We do not say this with any desire to minimise the credit that is due to the author for his careful preparation of a most interesting little work, for interesting it is in that it gives what may be looked upon as a semi-idealised theory along with the evidence to be derived from the works of others on which such a theory may be based.

Those who have worked on epithelioma, and have seen the almost innumerable modifications undergone by the epithelial cells in such a growth, will be very loth indeed to accept the interpretation that the large proportion of forms given by Mr. Jackson Clarke are really parasitic; certainly the "parasites" found in such enormous numbers in certain forms of sarcoma by this investigator appear in many cases to need very much further investigation before they can be accepted as being of parasitic origin at all.

We hope, however, that Mr. Jackson Clarke will continue his investigations, and that at some future period he may either corroborate or correct observations which, in their present form, though exceedingly interesting, appear to be somewhat indefinite and very much wanting in form and accuracy.

LECTURES ON THE SURGICAL DISORDERS OF THE URINARY ORGANS. By REGINALD HARRISON, F.R.C.S., Surgeon to Peter's Hospital, etc. Fourth edition, rewritten. London: J. and A. Churchill. 1893. (Demy 8vo, pp. 603. 16s.)

WE are glad to notice the appearance of a new edition of this well-known work, the third edition of which had been for some time out of print. The thirty-six lectures of which the book now consists were delivered, in their original form, during the time Mr. HARRISON held the posts of Surgeon to the Liverpool Royal Infirmary and Lecturer on Clinical Surgery in the Victoria University. In the present edition the substance of the author's Lettsomian lectures (1888), as well as of his Hunterian lectures, delivered at the Royal College of Surgeons in 1891, have been included. The whole work has been carefully revised, and some new illustrations have been added.

The rapid progress made by urinary surgery of late years has necessitated many important additions to the text, and the reader will find that Mr. Harrison has fully availed himself of the opportunity to bring his book up to date. In proof of this may be mentioned the lectures dealing with morbid growths of the bladder, towards the more exact diagnosis and

treatment of which the use of the electric cystoscope has done so much. The pathology of stricture, the function of the prostate, and the combination of internal urethrotomy with puncture of the membranous urethra through the perineum in certain cases of stricture, are all subjects of which Mr. Harrison has made a special study, and which in turn receive due consideration. Mr. Harrison does not favour the operation of lithotrity in male children to the extent advocated by some surgeons of late years; in fact, "having regard to the good results obtained from lithotomy" in children in this country, he seems disposed to limit the crushing operation to cases in which the stone is small enough to be pulverised "by one or two grips of the lithotrite."

Passing on to that most important of all the urinary organs, the kidney, it is disappointing to find this organ so inadequately dealt with. The book, it is true, is already a large one, but it now includes certain subjects—varicocele, for example—which are really not urinary affections at all, and which, in the circumstances, might well be omitted. In view of the great advances recently made in renal surgery, it seems most desirable that a work on the surgical disorders of the urinary organs should deal at least as fully with the kidney as with other portions of the urinary system. Mr. Harrison would certainly increase the value of his admirable but at present incomplete work if in his next edition he would do for the kidney what he has already done so well for the other urinary organs.

A Textbook of Physiological Chemistry. By Olof Hammarsten. Translated by John A. Mandel. New York: John Wiley and Sons. 1893. (Demy 8vo, pp. 522. 20s.)

There is, perhaps, no one better qualified to write a textbook of physiological chemistry than Professor Hammarsten. His original work has embraced nearly all the subjects included under that heading, and the thoroughness and value of his researches are known to all students of this branch of physiology. Those who are unable to read the book in the original Swedish, or in the German translation which was made by Professor Hammarsten himself, will welcome the appearance of his book in English dress. Dr. Mandel has, perhaps, erred in being a little too literal a translator; but that is a better fault than the reverse. Another fact which cannot but detract from the high estimation in which this work will be held is that it is not brought fully up to date: no additions are made to what was written in the German translation, and in the three years that have elapsed since that appeared many important researches have been published. In a second edition this can, however, be easily remedied; we would also suggest as an improvement that full references should be given to the authorities quoted, the names only of investigators being at present given. The original Swedish edition contained some very beautiful plates of crystals; we are disappointed at not finding them in the English translation, for, with the exception of a somewhat imperfect plate of absorption spectra, there are no illustrations at all.

Grundriss der Histologie für Studirende und Aerzte. [Elements of Histology for Students and Practitioners.] Von Dr. Bernard Rawits, Privatdocent an der Universität, Berlin. Berlin: S. Karger. London: Williams and Norgate. 1894. (Demy 8vo, pp. 262. M. 6.)

Dr. Rawits has departed somewhat from the ordinary methods of book making, in that he has been content to confine himself entirely to a description of tissues, without giving any of the methods used for preparing such tissues for examination.

The first section of the work is devoted to a study of the cell, which he describes clearly and briefly, giving a number of illustrative figures of the various essential constituents and vital phenomena of these elementary organisms or morphological and physiological units. He takes up the more recent discoveries relating to "centrosomes" and "attraction spheres," and also deals with Altmann's "granula" theory, pointing out wherein it runs counter to ordinarily accepted theories. One interesting feature of this part of the work is that he considers that Van Beneden's and Boveri's researches on the eggs of ascaris justify his conclusion that the division of the cell substance is actually already complete when nuclear division sets in, and that the impulse to division comes from the cell substance and not from the nucleus. As may be gathered from this, he strongly combats Weismann's theories as to the importance of the chromosomes as bearers of heredity.

The second section of the work, devoted to the description of the tissues, is exceedingly good and well illustrated. Some of the views appear to be somewhat heterodox, especially that referring the origin of adenoid or reticular connective tissues to the epiblast and not to mesoblast; for this a sufficient amount of corroborative evidence is not produced. The sections on the structure of the nervous system, and on the blood and lymph, are also exceedingly good.

In the third section of the work the various organs or systems are described. The sexual system, as will be gathered from what has been already said, is exceedingly fully and accurately described, and the author maintains strongly Bardeleben's theory that the spermatozoon is a cell fully equivalent to the ovum cell, and not merely a nucleus.

The work is provided with an index, and, taking it altogether, is an exceedingly practical little work, and one that to any intelligent student offers a thorough knowledge of present day histology.

NOTES ON BOOKS.

The Open-air Treatment of Phthisis, as practised at Falkenstein in the Taunus Mountains, Germany. A sessional lecture of the Royal British Nurses' Association. By W. Bezly Thorne, M.D., M.R.C.P. (London: J. and A. Churchill. 1894. Crown 8vo, pp. 31, 6d.)—Dr. Bezly Thorne does wisely to call attention to the open-air system of treating phthisis as carried out at Dr. Dettweiler's well-known sanatorium at Falkenstein. The good results obtained by Dr. Dettweiler certainly challenge comparison with those obtained in climates which are regarded as far more favourable to the arrest and cure of phthisis than that of the Taunus Mountains, where Falkenstein is situated, at an elevation of only 1,400 feet above the sea level. But the rule that each patient shall pass the entire day under the influence of fresh air in the open country, away from the habitations of man, is a form of antiseptic treatment of the most rigid kind. Dr. Bezly Thorne gives a sketch of the life at Falkenstein and its minute details as rigorously enforced by Dr. Dettweiler and his assistants. This method of treatment is spreading in every country, strange to say, but our own; and Dr. Bezly Thorne might well have called attention to the remarkable fact that while within twenty or thirty miles of London admirable sites exist for sanatoria for the treatment of consumption, in this metropolis the sufferers from this disease, amongst the necessitous class, are shut up in hospitals in the midst of the population.

Anatomy, Descriptive and Surgical. By Henry Gray, F.R.S. Thirteenth edition. By T. Pickering Pick. (Longmans and Co. Imp. 8vo, pp. 1152. 36s.)—The thirteenth edition of this old and well-known textbook of human anatomy requires little criticism. It has been edited by Mr. Pick, as was the case with the previous editions. The whole work has been carefully revised, and in some cases a rearrangement of minor details has been made. The section on the skeleton is still one of the best in the book, whilst those on the anatomy of hernia still remain amongst the most clearly written descriptions to be found in any anatomical textbook. It would have been better if, in the description of the peritoneum, a short account of its development had been added, since it is very difficult for the majority of students to understand the arrangement of this serous sac, unless the formation of its folds are explained embryologically. The book would also have been much more complete if the chapters on surgical anatomy had been extended. It is the fault of too many textbooks on human anatomy to allow the surface anatomy of the various organs to be overshadowed by the details of their individual description.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

IPECACUANHA *SINE EMETINA* TABLOIDS.

THE chemistry of ipecacuanha is still incomplete, and the therapeutic value of its constituents requires yet further research. Experiments have been made upon the therapeutic value of ipecacuanha deprived of its emetine, and the results have shown that the deëmetinised drug proves to be a most satisfactory remedy in cases of acute dysentery, and is free from the disadvantage of causing depression or nausea so often produced by even small doses of the ordinary root. It appears from these researches that the antidysenteric value of ipecacuanha does not depend on the emetine present in it, and preparations are now being made from which the alkaloid has been removed, while the antidysenteric principle is retained. The tabloids made by Messrs. Burroughs, Wellcome, and Co. contain five grains each of deëmetinised ipecacuanha. They furnish a ready means of administering the drug in a form which causes no distress to the patient.

A SIMPLE GAG.

DR. HERBERT A. SMITH (Ealing) has designed a gag, which he claims is simple, efficient, and cheap. It is made of boxwood, and is 5 inches long. As will be seen from the woodcut,



it has a cone-shaped end, a neck, and a body. It is introduced broadside, rotated so as to bring the width perpendicular to the teeth, and then carried to the intermolar region, where the neck engages in the natural interspace between the teeth in this region; it takes a grip from the inner crown of the last molar tooth, on which the angle of the cone rests. For children the instrument can be used on the flat. The spindle is protected by tape. When in position the gag is well out of the operator's way. The point of the cone is formed by a metal rod, which perforates the stem. The gag was designed to be placed in an antidote case made by Messrs. Burroughs and Wellcome, for use in emergencies, such as poisoning cases, forcible feeding, and minor operations about the mouth. It is manufactured by Messrs. Arnold and Sons (West Smithfield), and its price is 5s.

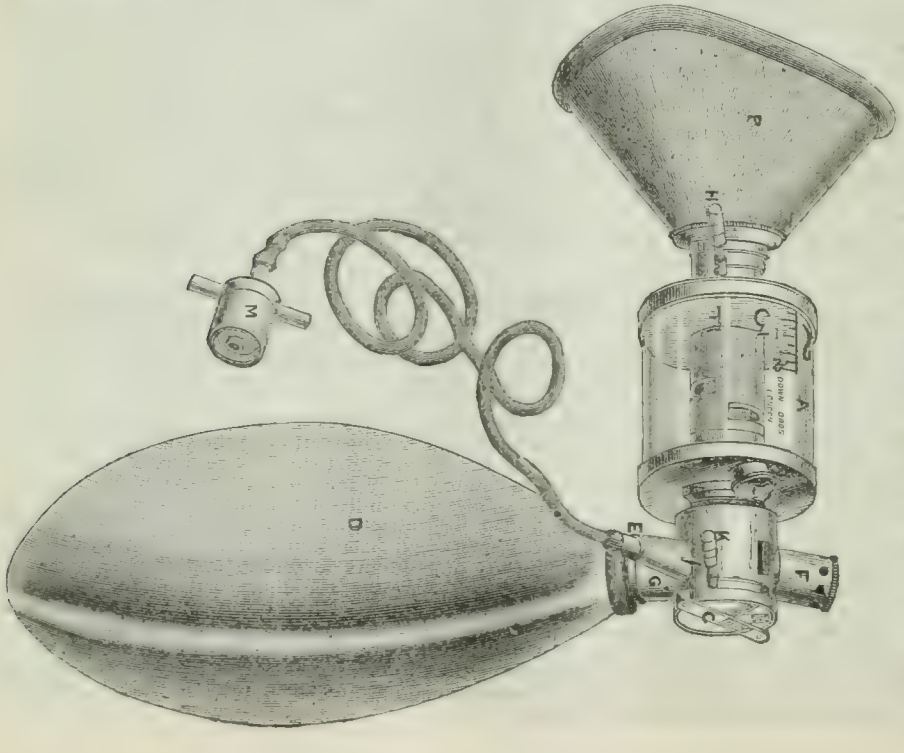
AN ASEPTIC TONGUE SPATULA.

WE described some time ago (BRITISH MEDICAL JOURNAL, July 9th 1892, p. 81) a simple tongue depressor manufactured by a German firm, which was intended to do away with the danger of carrying infection on an imperfectly cleaned tongue depressor. The danger was obviated by supplying at a cheap rate wooden spatulæ which could be burnt after use. Messrs. Maw, Son, and Thompson, Aldersgate Street, London, have made for Dr. M. Knox Soutter a boxwood tongue spatula of better design than that sent from Germany. It is a simple flat pattern, with a handle slightly cut away. Two sizes are made, five and six inches long, for children and adults respectively, and are sold at 12s. and 15s. a gross, which is considerably cheaper than the German pattern. The idea is undoubtedly a good one, and it would be well if these innocent tongue depressors came to displace altogether the use of the domestic spoon or the silvered instrument of the consulting room.

AN IMPROVED GAS AND ETHER INHALER.

MR. SYDNEY RUMBOLL, F.R.C.S.Ed., of Leeds, sends us a description of an improved gas and ether inhaler, to which he proposes to give the name "Rumboll-Birch." The advantages which he claims for it are that it is extremely simple and portable; that the body being of glass the amount of ether can always be seen; that by giving gas first the struggling stage is done away with; that the patient does not perceive the nauseous smell of ether; and that there is a great saving of time, anæsthesia being established in from one and a-half to three minutes.

The construction of the appliance is shown in the accompanying drawing; A is the glass body containing the ether, B is the facepiece, and E an india-rubber tube for conveying gas from the bottle to the india-rubber bag D; an inspiratory valve for gas is placed in the tube G, to prevent the patient breathing back into the gas-bag when inhaling nitrous oxide; F is the expiratory valve for gas; H is the handle by which the ether chamber may be turned on or off from the mouthpiece; K is the handle by which the admission of gas, air, or ether is regulated.



The patient first of all is allowed to breathe air: the gas is turned on, and when sufficiently insensible to smell ether is turned on. Anæsthesia is then continued with the mixture of gas and ether until complete insensibility is produced, when the gas is shut off and etherisation continued.

The apparatus can be used also as an ether inhaler alone, or as a gas inhaler alone. Mr. Rumboll states that he has given the inhaler a thorough trial in over 400 cases, and has found it to work satisfactorily. It can be obtained from Messrs. Down Brothers, St. Thomas's Street, Borough, S.E.

THE Dental Hospital of London, Leicester Square, has received the sum of £500 from Mr. Henry Harben, as a special donation towards the £40,000 required for the purchase of a site and the rebuilding of the Hospital.



A Tangier Street Group.

THE NEAREST AFRICAN HEALTH RESORT.

III.

Racial Types.—Diseases and their Treatment in Morocco.—Enthetic Disease.—Si-Edris: His Book.—The Fire Cure.—Leprosy. Vermifuges.—Wound Dressings.—Midwifery.—Cold Affusions.

The anthropological "types" in Morocco are of great interest. They include the Moors of the interior (Fez Marakeesch, etc.) the Berbers, the negroes of the Soudan (largely intermarried with the Moors), the Riffs, and the Jews. Of these I present some characteristic examples chiefly from photographs by myself and Mr. Cavalli.

The best account of diseases and their treatment in Morocco is furnished by Dr. Rohlfs, whose account I have corrected and supplemented by information derived from conversations with Dr. Wood and Dr. Terry. In Morocco every disease is thought to be a judgment, and the best medicines are amulets and prayers. Nothing is known of those great physicians who once lived in Morocco and Spain. It is doubtful whether their works are preserved in the library of Uesan and Fez. No Moorish doctor knows that Abu-el-Kassem, Calif-ben-Abbes (Abulcasis), who invented lithotomy,[1] was a countryman of theirs. Avenzoar, who ventured against the prejudice of his countrymen to unite medicine and surgery, and who first had the idea of bronchotomy, is unknown in Morocco. Nor have the Moors ever heard of the great Averroës, who in the reign of the Sultan Almansor was invited to Morocco, where he died. No tombstone or memorial of these celebrated persons exists in the land. The modern doctors in Morocco fully deserve the degraded position which they occupy, for they are only respected when they happen to be also doctors in theology. If they happen to be also sheriffs they enjoy a great reputation, patients coming to them and begging for prayers, blessings, amulets, or written charms as medicine for their complaint.

There are no regular apothecaries' shops. The physician prepares his medicines for himself and gives them to his patients. If the doctor is not known and if the individual is a man of importance, the former must taste the medicine he administers, and is sometimes obliged to drink up half of it.

The commonest of all maladies of Morocco is syphilis, so that there is scarcely a family in the great cities which is not tainted by this disease. The Moors called it *mard-el-kebir* "the great sickness," or "the woman's sickness"; *mard-el-insa*, or *el-noma*, "the flowers." In many families it has become hereditary. A man may often be heard to say, "My parents were quite healthy, yet I have inherited the *mard-el-kebir*," but on inquiries being made it is found in such cases that his grandparents had the disease.

The best remedies which the Moors make use of are the hot sulphur springs of Ain-Sidi-Jacob, probably those which the Romans called Aquæ Daciæ.

It is needless to say that amulets and charms are also abundantly employed. Little scraps of paper, with Koran verses written upon them, are sewed into the clothing or into little leather cases. Some written scraps of paper are washed off into water, and the ink is drunk, or sometimes the paper itself is rolled up and swallowed like a pill.

The use of mercury for syphilis is practically unknown in Morocco. A preparation of mercury is used with which pads are impregnated and placed under the armpits of very evil-smelling slaves for disinfecting purposes. A great remedy for syphilis is sarsaparilla. They make a decoction of the bark and break the pieces up together. Dr. Wood does not accept the statement of Rohlfs that sublimate quicksilver is used as fumigation for syphilis, and has never seen or heard of it being employed. Syphilis in Morocco is

[1] Portal, *Histoire de l'Anatomie et de la Chirurgie.*



Moorish Types.

singularly amenable to mercurial treatment, apparently severe cases yielding after a few weeks to small doses, especially when combined with iodide of potassium. The purge used is always senna. Senna was especially recommended by the prophet Mohammed as a purgative.

Intermittent fevers prevail in the lowlands, along the banks of rivers, and in marshy plains in all times of the year. The sickly appearance of children and women in the Kharb provinces shows clearly enough that this people are as much subject to ague as ourselves. It usually takes the tertian, but sometimes the quartan, form; and those who have once been attacked seldom are able to get rid of the disease. Quinine is not known in Morocco, except at the seaports, and a popular remedy is a strong purge. Liver complaints and yellow jaundice are common, and are treated with cuminum cyminum (Linnæus). The remedy for diarrhœa and dysentery is the rind of the pomegranate roasted sufficiently to be reduced to a fine powder, and taken in doses according to the caprices of the administrator. Dyspepsia, rheumatism, and gout are treated with the application of hot iron—a favourite remedy of the Moors in spite of the torture which it causes. In Fez are fire doctors, who sit in the street which joins the old town to the new town. Before them they have an iron pot, with a grate, on which a fire is burning. A little basket with charcoal is on one side, and a goatskin bellows. A patient appears; he has perhaps slept out of doors in the rain, is ill in consequence, and supposes that he has been bewitched. He presents himself before the famous fire doctor, Si-Edris, a man all the more famous because he is a "Thaleb"—that is, he can read—as a proof of which a thick folio lies beside him. The doctor does not read very well, no better, in fact, than a child of 6, though he is 60; but, on the other hand, it is not a book that is very difficult to read, for from beginning to end it is only one sentence over and over again, "There is no god but God, and Mohammed is His Messenger."

In the meantime he has worked the fire with his bellows into a glow, and made white hot several iron rods about 2 feet long, and with wondrous knobs and hooks at the end. The sick man lies down on his face, and draws up his clothes from his back; the passers by collect into a crowd; the doctor draws a red hot iron from the fire, and saying, "In the name of God," passes it with great deliberation here and there over the back and loins, so that it makes a hissing noise, and a smell of burnt flesh ascends into the air. The patient does not utter a cry; he grinds his teeth together, and only the drops of sweat upon his forehead betray the pain he undergoes.

The operation being over, he lies for some time upon the ground, as if in a fainting state; the spectators pass their beads through their fingers, and praise God and Mohammed. Presently the man turns his head, and says "Si-Edris, Si-Edris," "What do you want?" "Another fire." Then give me my due," replies the doctor. The patient produces a *motona* (about the fourth part of a groschen) from the fold of his clothes, and the operation is renewed. Si-Edris is always paid in advance, and will never permit any disputing as to his fee.

The great reputation which the hot iron medicine enjoys is partly owing to the fact that, in some cases, it is certainly attended with good results.

The Moors like a tangible result, and if a patient suffers plenty of pain from such remedies he is quite contented, whether he is cured or not. They themselves make a preparation of cantharides with honey and *haschisch* into a paste, to serve as an aphrodisiac, and it is needless to say that such sweetmeats (called *madjen*) are exceedingly injurious.

Diseases of the lungs are scarcely known in Morocco, and are treated only with amulets, that is, they are left to nature. Dropsy is a common complaint, partly owing to suppressed perspiration, partly to the immoderate use of hot baths in the towns. The Moors believe that this disease is something

caused by drinking water; for instance, the water of Tangiers is said to have that effect. Purges are administered, but diuretics are not in use.

Ambergris is one and the great treatment for sexual weakness. Syphilitic enlargement of the liver and spleen is very common, and kidney disease is far from uncommon. Valvular disease and enlargement of the heart are very common, as also is dilatation. Their licentious mode of life is probably the cause of this.

The plague was at one time a frequent visitor, apparently introduced by the Mecca pilgrims, but of late it has not appeared. The last epidemic of that kind was in 1799, and, according to Jackson's statement, 65,000 people died in Fez alone. On such occasions the haughty Moslems condescend to beg the Jewish Rabbi to offer up public prayer; Jews and Moslems walk together through the streets calling upon God to spare their lives. Typhus fever is rare and confined to certain spots. The Moors drink large quantities of olive oil when they are attacked with this disease, or, if they have no oil, liquid butter without salt.



Moorish Women from the Country

Hydrophobia is one of the commonest affections in Morocco, and is known as *saar*, and a person bitten by a rabid dog is known as *mesaher*. It is not confined to any particular place, but is spread generally throughout the empire.

The Arabic name for cholera is *Abou galib*, which means "the father of the clearing out." For cholera the Moors give large quantities of hot drinks, preferably tea.

Madness is an exceedingly widespread affection in man, and is very often traceable to the excessive use of *haschisch*. In men and women alike hysteria is extremely frequent, and is probably due to their excessively licentious mode of life.



A Khabyl.

Amongst women the various forms of melancholia are frequently met with.

The pock-marked features of the Moors sufficiently show that small-pox is common in the land. The Moors are acquainted with the art of inoculation, which they say they derived from their Arab forefathers. The operation is as follows: An incision is made on the dorsal aspect of the finger-webs of the right hand (the left being considered unclean); the lymph is taken directly from the human pustule, and well rubbed in. The lymph is from the human subject. Another mode of inoculation with children is to take a raisin, rub it well in

the lymph from a pustule, and give it to the child, who immediately swallows it. The Arabic name for small-pox is *el jideri*.

Leprosy, like the plague, was formerly more common in Morocco than it is at present. This disease, which the Moors call *Djidam*, is scarcely ever to be met with in the northern parts of the country.

Elephantiasis occurs in Fez, Mequinez, and other northern



Snauer dancer: Negro of the Soudan.

towns; but whether this disease is to be regarded as a sequence of leprosy I will not undertake to say. People afflicted with that complaint are not separated, and are allowed to marry with healthy persons; yet in such cases some of the children usually inherit the disease.

Lepers may only marry with lepers, and are forbidden to enter a village or town; no one may buy anything from them, and therefore they practise no handicraft or trade, but live upon alms. They are usually seen singly or in families, near the roadside. They cry out from a distance to the passers-by "*medjdum*" (a leper), and put down a little plate into which the charitable cast some money or provisions. There are some thriving families of lepers, who possess herds of cattle and cultivate the ground, and near the town of Morocco is a village inhabited by lepers.

As regards the appearance of these unfortunate persons, some are marked with hideous white spots, others have lost their noses, eyes, or ears, others are afflicted with open sores surrounded by swollen and thickened skin. The whole body is sometimes covered with boils. But there are lepers who



Women at the Well: Negritic type.

do not differ in outward respect from healthy men. The Moors believe that the argan oil (obtained from the tree *Elacodendron argan*, growing on the western slopes of the Atlas) causes this disease, or, at least, predisposes the system to receive it. The Europeans who live in Mogador and Asfi have never observed any such effects resulting from the use of the oil; and in the provinces of Abda and Schiadma, where the oil tree grows abundantly, leprosy is never to be seen. On the other hand, in Haha, another district of the Argan, lepers are more numerous than they are anywhere else, and, strange to say, they take a decoction of the leaves of the tree to alleviate their pains, and place pounded leaves

on their sores. A paste of henna leaves, mixed with earth, is also used for the same purpose. Scabies is frequent, but not so frequent as one would suppose from the dirty habits of this people. The medicine they use is black soap (made in Morocco), mixed with sand in equal quantities, and well rubbed in. This certainly cures the patient, as I have often had occasion to observe.

It is, probably, that the indiscriminate use of dirty razors for shaving the head convey the infection of ringworm from head to head, inasmuch as they are not at all particular about washing them after use. You will see quite as many horrible cases in girls as in boys. The better class people are extremely particular as to the matter of cleanliness in shaving their heads, and their barbers are very careful not to use dirty razors or implements in shaving them.

The Moors employ as ordinary vermifuges a decoction of *Thymus hyrtus* and *Rosmarinus offic.*, with other odoriferous plants, or sometimes a decoction from the roots of *Genista*



A Riffian.

Saharæ. The tænia solium is expelled as follows, according to the statements of the Morocco doctors: The patient takes a tablespoonful of dry pounded *haschisch*, which sends the worm to sleep, and it is then ejected by a purgative composed of aloes, sulphur, and senna leaves, which grow wild in the southerly parts of Morocco. The guinea worm is rarely to be met with, and only in negroes, who have brought it from Soudan.

Conditions of climate and the filth of the people render disease of the eye exceedingly frequent in Morocco. The farther one travels to the south the more often such cases occur, till at last, in the oasis of the Sahara, it is quite the exception to meet with a man who has two sound eyes. Diseases of the cornea are most common, and are called by the Moors *Abou tillis*, "the father of the veil." This disease is sometimes arrested in its incipient stages by the application of fire to the temples, the neck, or behind the ears. Lemon juice and water are sometimes dropped into the eyes, but blindness ensues when the eyes are seriously attacked. Antimony (kohol) is also employed as a medicine for the eyes. As a beauty powder it is used not only by the ladies of Morocco and all the countries of North Africa, but also by ladies in Europe as well. Another remedy is pepper blown into the eyes. It is scarcely necessary to say that the Moors have no idea of inward applications for external complaints, and when, on several occasions, Dr. Rohlfs administered calomel or cathartics in cases of ophthalmia, he was earnestly begged to desist, and was assured that "they were ill in the eyes and not in the stomach." Another remedy for ophthalmia is powdered canary seed mixed with equal parts of powdered sugar, and blown into the eyes.

Cataract is not rare in a country where almost everyone suffers from some diseases of the eyes, and strangely enough there are families in Morocco whose vocation it is to operate for this disease. They are settled chiefly on the great Atlas, and the art is perpetuated from generation to generation, the son being the apprentice of his father. The two cataract operators with whom I became acquainted were both of Berber descent, and did not deign to cure any eye diseases of less importance than cataract. They made a good thing by their profession, and might readily be regarded as good specialists had they been able to make an accurate diagnosis; but this they were not able to do, being frequently misled by other internal diseases of the eye; for instance, they often mistook gutta serena for gutta opaca. I never attended one of their operations, and therefore can only say that the instrument they make use of is like a needle in shape, and is introduced sideways. The lens is merely pierced, and is left in the eye to be reabsorbed. They are apparently not acquainted with the art of extracting or depressing the lens. Thus it will be seen that surgery is far more advanced than medicine among the Moors (and, indeed, in Europe itself); that is natural enough, for in surface diseases the cause is usually apparent, and therefore the cure is comparatively easy.

Wounds are common enough in a country where fighting is so frequent. They are dressed either with a paste made of *Lawsonia inermis* and *Malva parviflora*, or with fresh melted butter flavoured with *Artemisia odorif.*, the perfume of which overpowers the offensive odour of the wound. The commonest dressing for wounds is fresh honey. Powder burns are treated with thick cream of milk. The recovering powers of the Moors from wounds are extraordinary. Injuries that in Europeans would be quite sufficient to destroy life at once are recovered from in a few weeks. The general vitality of the race is very great.

The common method of dressing fractures is to apply a linen bandage soaked in strong starch made of flour and water, which is left on to dry. It is not removed for twenty-eight days, and is in every respect an excellent contrivance, except that it does not permit the escape of pus, which sometimes causes evil results. Amputation is never practised, the Moors regarding it as sinful. Hands or feet which are cut off as a punishment for crime are carefully buried, that they may not be missing at the resurrection day: the stumps are dipped in boiling butter or oil to stop the bleeding. Dislocations are simply treated by a general long pull, a strong pull, and a pull altogether. Medicines are never given in cases of outward injury, but armlets and charms are extensively applied.

As regards midwifery it is difficult to get accurate information, as women are only allowed to be present at a birth. Dr. Rohlfs mentions that in a small oasis in the desert his hostess brought forth a child in the night, and cooked his breakfast for him in the morning.

When a woman is about to be confined there are two rings put in the ceiling, to which a towel is attached for a puller. When the head begins to come down a towel is coiled up into a sort of cone. The woman is then put on the edge of a box, and the towel is placed underneath the perineum and forms an admirable support. She is then supported by a woman on each side and a woman behind her, the midwife squatting in front. Immediately after her confinement she is dosed with a mixture of honey, aromatics, and herbs, of which lavender is the chief.

She then receives a portion of broth, and at no time during her puerperal period is animal food withheld. Upon the birth of the child it is simply smeared over with henna (which is believed to strengthen its constitution), without washing. The cord is tied in the usual manner, and the child is wrapped up in any piece of cloth or rag which comes handy. When it is a fortnight old it is then dressed in completely new clothes, like those worn by adults. The child is not washed at all till it is a fortnight old.

When the child is invested with its new clothes, the practice is to take it up by the feet, hold it up and give it a smart smack on the bottom, and turn it completely over. This is supposed to secure long life for it. In cases of abnormal presentations a large earthenware pot or pan is placed upon the abdomen, and is twisted about with great pressure, so as to produce a sort of external abdominal version. This, unfortunately, often results in the death of the child and the mother. Moorish women are invariably delivered squatting. The mortality among the mothers is comparatively small owing to the easy birth. The mortality among the children of the first year is enormous. The diseases which carry them off in the greatest numbers are small-pox, diarrhœa, dysentery, fever, and diphtheria. Child life in Morocco is literally a survival of the fittest.

A curious belief among Moorish women is as follows: A woman will come to you saying that at the end of the third, fourth, fifth, or sixth month of pregnancy she has severe hæmorrhage, and that the child has remained in the womb perhaps three, four, and sometimes as much as seven or eight, years, and they will ask you if you have no remedy to extract the child which remains in the womb. In the majority of cases the poor woman is not without foundation for her belief, for the supposed fœtus *in utero* turns out to be a tumour. It is almost impossible to ascertain the nature of the tumour owing to the impossibility of making anything like a careful examination *per vaginam*.

The Moors distinguish between ordinary fever and typhoid fever. The malarial fever often tends to assume a typhoidal type extending over periods of seven, fourteen, or twenty-one days, and often much more, and these are distinguished by the Moors themselves from typhoid fever, which is perfectly well known. The malarial fever is called *skhana*. The typhoid fever is recognised as a distinct disease, and is called *hauma*. In both sorts the Moors are quite helpless and without remedies.

The use of cold affusions which is recommended by Mohammed in one of the twenty-four books of medicine, where he advocates the use of cold baths. So the practice is at least 1,200 years old, and not as recent as some German travellers imagine. In practice it consists simply of pouring cold water over the patient.

Ernest Hart.

THE BRITISH DENTAL ASSOCIATION.

The annual meeting of this Association was held in Newcastle at the College of Medicine on March 28th, 29th, and 30th. Professor Philipson, the President of the British Medical Association, was present to offer a welcome to the British Dental Association.

Installation of New President.

Mr. Charles Tomes, F.R.S. (London), was installed President for the ensuing year.

Reports of Treasurer and Secretary.

Mr. Woodruff, the Treasurer of the Association, submitted a satisfactory report, which was adopted.—Mr. Patterson, Honorary Secretary, submitted the Executive's report for the year, which had been one of considerable anxiety.

Next Meeting.

It was decided to hold the next meeting in Edinburgh in August, 1895, and Mr. Bowman Macleod was nominated for the Presidency.

The Teeth of School Children.

The fourth report of the Committee appointed by the Representative Board of the British Dental Association to conduct the collective investigation as to the condition of the teeth of school children was presented. The Committee, while fully admitting the value of the information already collected, did not consider it sufficiently complete for the purpose aimed at.

Microscopic Section.

Mr. Howard Mummery presided at the Microscopic Section.

Papers in this Section were read by Dr. A. W. W. Butler (Dublin) and Dr. Miller (Berlin) dealing with methods for mummifying the pulps of teeth after they have been devitalised.

Papers were read by Mr. Lennox (Cambridge) on Matrices, how to make them and how to apply them; by Mr. Constant (Scarborough) on the *Dentists' Register;* Mr. Brunton (Leeds) on Carborundum, a new combination destined to supplant the old corundum wheels and discs.

President's Address.

The Presidential Address was delivered by Mr. Charles Tomes at the *conversazione* in the Assembly Rooms. He gave a short review of the conditions of the dentist's life: of that which conduced to his success or failure; and of the manner in which these conditions reacted upon the man himself.

Training in Mechanical Dentistry.

The Honorary Secretary read a paper by Mr. Cunningham on Methods of Training Dental Students in Mechanical Dentistry. He suggested the founding of an institute of technology, and stated that such an institution would provide a more thorough education than was possible in the laboratory of a private practitioner. Provision should be made for two classes of students, one class to receive the required three years.

Mr. A. J. Watts said at present the pupil was entrusted to the instruction of the mechanical assistant.

Mr. Newland-Pedley was opposed to the establishment of a technical school.

Mr. Ackery moved: "That it is desirable that an examination in mechanical dentistry should be passed prior to the admission of students into hospital for surgical training."

Mr. Watts seconded, and the motion was carried unanimously.

Annual Dinner.

The President gave the toast of the evening, "The British Dental Association," with which he coupled the name of Mr. J. Smith Turner. The Association now numbered more than 800 members. Amongst such a body there must at all times be differences of opinion, but if they did not meet together in a friendly way, these differences of opinion might develop into something more. At this meeting he noticed that some of their differences had been smoothed over and were now things of the past.

Mr. J. Smith Turner, in responding, said since the Dental Act was passed and the Dental Association was formed, the dentists had been welded together in a body, and they had thus felt the power of united action. If they looked back to fifteen or sixteen years ago, they would find that in those days a dental hospital was a rarity. There were one or two in London and one in Edinburgh. Now they had dental hospitals all over the country, recognised by the public and supported more or less by the public, though, perhaps, not so generously as they ought to be, and by the medical professions.

Other toasts followed, Mr. S. J. Hutchinson proposing and Professor Philipson replying for the University of Durham and Newcastle College of Medicine.

Mr. Neale proposed the Mayor and Corporation; the Mayor and Sheriff responded.

Demonstrations.

Demonstrations of a purely technical character were given by various members of the Association, and Dr. Frederic Hewitt gave an interesting account of his further experiments with oxygen and nitrous oxide gas.

M. Leopold Hugo has founded a quinquennial prize of 1,000 francs (£40), to be awarded by the Paris Academy of Medicine to the author of the best work on the history of medicine. The first award will be made in three years.



Fig. 1.—Lupus (M. M.); showing the condition before treatment, February 13th, 1893.



Fig. 2.—Lupus (M. M.); showing the condition before treatment, February 13th, 1893.



Fig. 4.—Lupus (M. M.); showing the condition on January 7th, 1894, after eleven months of thyroid treatment.



Fig. 5.—Lupus (M. M.); showing condition on January 7th, 1894, after eleven months of thyroid treatment.



Fig. 3.—Lupus (M. M.): showing the condition on June 22nd, 1893, after recovery from attack of erysipelas. The improvement which is noticeable was not due to the erysipelas, but to the thyroid feeding.



Fig 6.—Lupus (R. D.); showing the condition on December 12th, 1893, before thyroid treatment commenced.



Fig. 7.—Lupus (R. D.); showing the condition on January 13th, 1894, one month after the thyroid treatment was commenced.



Fig. 8.—Lupus (R. D.): showing the condition on February 16th, 1894, two months after the thyroid treatment was commenced.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

Subscriptions to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, APRIL 14th, 1894.

THE INTERNATIONAL MEDICAL CONGRESS, ROME.

The Eleventh International Medical Congress is at an end, and the main, broad recollection left in the memory of those who have taken part in it is one of its hugeness and vastness. Rome itself, so rich in memories of the past, so big with promises for the future of united Italy, produces an effect upon the mind which is difficult to analyse, but into which the ideas of greatness, of bigness, and of permanence enter. The visitor has thrust upon his attention at every turn the evidences of the persistence from age to age of intellectual qualities and æsthetic prepossessions which he finds are still ruling factors in the feverish life of the Rome of this last decade of the nineteenth century. The love of bigness and solidity in public buildings found expression in the huge baths and circuses, whose ruins still cover immense tracts of ground, which were erected for the amusement of the populace in the times of the Empire; the great revival of the fourteenth and fifteenth centuries has left evidences of the same love in the huge fabric of St. Peter's, and in many another church; the renewed life breathed into Rome when she became the capital of a united Italy has again found expression in the erection of magnificent buildings, whose purpose is neither amusement nor worship, but educational or administrative. The most recent of these great buildings is the Policlinico, which was hastily got ready to accommodate the Congress. The site which it occupies is extensive, and the series of pavilions, large and well built; the cost must have been very great. The expenditure of so much money on a scheme which is partly benevolent, but mainly educational in its objects, is thoroughly typical of the spirit which animates the intellectual life of the Italy of to-day.

The vitality, the energy, and the individuality of the Italian school have been brought home to the world by this meeting. As students of minute anatomy, normal and pathological, such men as Bizzozero and Foà have no superiors and few equals; Baccelli is no mean successor of Lancisi, and in Durante the Roman school has a brilliant operator and teacher, adept in all modern methods, whom any university in the world might be proud to claim for its chair of surgery. The list of men of eminence and individual distinction whose reputation deserves to be European attached to one or other of the Italian universities might easily be made a long one, but the point of real interest and hopefulness is that these men are surrounded by bands of younger men, who work zealously under their direction both in teaching and research. The influence of the German University system on that of Italy is very apparent, though the system of hospital administration approaches more nearly to the French.

To Professor Baccelli much of the social success of the gathering must be attributed; eloquent, courteous, and hospitable, he made an admirable President, and the special privileges which in his capacity as Minister of Public Instruction he was able to afford to members of the Congress for seeing the monuments, the museums, and the galleries of Rome, rendered it possible to combine the business of section-going with the amusement of sightseeing to a degree that would otherwise have been impossible. To him, to Signor Crispi, the Prime Minister, and not least to the King and Queen of Italy, who in many ways testified their lively interest, the members of the Congress, and through them the whole medical profession of which they were representatives, owe a deep debt of gratitude for the bountiful goodwill shown and the cordial and genial welcome extended.

The Congress, which was formally closed on April 5th, was remarkable for the enormous number of persons who, in various capacities, attended it; for the gigantic scale on which its business and its pleasures were organised; and, as has been said, for the cordiality and geniality of the welcome extended by all classes to foreign visitors. Rome boasts herself to be the mother of all—as the Congress was reminded by Signor Crispi in the first of the many hundred speeches which were addressed to it—and the very name has a fascination for thousands bred in the old classical tradition. Doubtless many of those who took advantage of the special facilities offered for reaching Rome were actuated more by a desire to find a good excuse for a spring holiday than by any ardent wish to increase their own knowledge or to contribute to the advancement of the science and art of medicine. Those, however—and their number was very large—who made more or less regular attendances at the meetings of the Sections in the new Policlinico found much that was interesting and suggestive, though little that was absolutely new.

Of the scientific work accomplished it cannot be said that it was in any direction remarkably brilliant. Among the general addresses, though all from one point of view or another were valuable and interesting, there was no one which stood forth as strikingly original in matter or form. Professor Michael Foster, indeed, attacked with courage an international problem of vast importance in his address on the organisation of science, but he did little more than stir the question. A good working scheme to prevent the waste of time and energy due to the present haphazard system under which so much work is done in duplicate, investigators racing for "priority," and so many round men are jammed into square holes, would be of enormous advantage to the advancement of science. It is to be hoped that Professor Foster's proposal may not be lost sight of, and that in the future some organised system may be got into working order. Such a result would be an outcome of International Congresses of greater ultimate value than the reading of the immense number of papers which it was announced would be presented at Rome. As a matter of fact, probably not a

third of the papers announced were read, so that the boast of the General Secretary, Professor Maragliano, on the opening day as to the magnitude of the scientific labours of the Sections turned out to be somewhat empty. In fact, the attempt to deal with a mass of material so enormous did, on the contrary, jeopardise the success of the Sectional meetings.

The convenient plan of having abstracts of the papers, or at least of those communications which were intended to serve as introductions to discussions printed, was not followed, and as four official languages were recognised, it was frequently extremely difficult to follow the course of the debates in the absence of any such preliminary notion as an abstract affords. It may be convenient, and even courteous, to assume that everyone understands three languages besides his own, but it is not a theory which works in practice, and it would undoubtedly have contributed to the interest of the discussions if there had been but one official language, and that French, which appears to be spoken by most Italian medical men. If this difficulty existed in Italy, it is likely to be still greater at the Twelfth Congress to be held in Russia. If these assemblages are not to degenerate into national congresses combined with international picnics, the early receipt of abstracts of all papers to be read, and of all reports and introductions to discussions must be insisted on, and a member of the Congress on arriving at the place of meeting should receive a printed copy with his card of membership, as was done in London in 1881.

The plans of the Roman Executive Committee for the amusements and entertainments of their guests were sketched on a large scale, and the members who were anxious to attend showed that their hospitable intentions were fully appreciated. A *conversazione* in the Capitol Museum, and a luncheon party in the Baths of Caracalla, which were confined with some strictness to members and guests of the Congress, were yet remarkable for the immense crowd of persons who assembled; but the most characteristic and, to persons of robust frame, the most interesting and amusing of the entertainments, were the illuminations of the ruins of the ancient city, when one-half of Rome was within the reserved enclosures and the other half in the streets around, and the *fête* in the Corso after the formal closure of the Congress, when the Roman people turned out in their thousands to amuse and to be amused.

We may, perhaps, refer very briefly to another aspect of the festivities which aroused in some onlookers a certain amused interest and in others a quite unnecessary irritation. It was not altogether forgotten by the Italian press that Professor Baccelli is not only Professor of Medicine in the University of Rome but also an active politician and a member of the Cabinet of all the talents which it is hoped may rescue Italy from the financial quagmire into which she has floundered. Peace, disarmament, goodwill among men were not inappropriate watchwords for an international gathering of members of a profession whose one aim is to better the common lot of man. It would be ungracious to blame Italian statesmen if they seized the occasion to forge a new link in the chain of peace which binds the nations by showing special attentions, giving special prominence to the courteous utterances of Professor Bouchard and the other French representatives. Between old and tried friends such as Great Britain and Italy much may be understood with few words.

If some mistakes were made which caused a little soreness at the time they were so obviously due to want of knowledge of the very peculiar hierarchical system of British medicine, and were for the most part so speedily remedied, that their recollection has been completely obliterated and the British members of the Congress will always gratefully remember the fraternal welcome which they received in Rome. They have carried away impressions which will bear fruit in the future, for after all the highest mission of this Congress has been less the announcement of new scientific facts or speculations—for even of the latter there has been a singular dearth—than the presentation to the world of a united scientific Italy, as vigorous, as characteristic, as proud of the past and as hopeful for the future as the united Italy of the politicians.

THE PLIGHT OF THE HOSPITALS.

We have received reports of the annual meetings of three hospitals—University College, London; the General Hospital, Birmingham; and the Cheltenham General Hospital. They are all of interest at the present time when there is so much difficulty in carrying on the work of general hospitals from chronic want of funds (aggravated at present by the pressure of hard times) and so much controversy as to the relations of hospitals to the profession and to the poor.

First, as to want of funds. Here all are in the same tale. University College complains of a falling off of about £100 in subscriptions and £700 in donations coincident with a rising expenditure on general purposes, and the pressing need for a new hospital building—a need which all will allow who are familiar with that now in use. This building, however, cannot be commenced till £30,000 has been collected. In like manner the Cheltenham Hospital speaks of decreased receipts—though only to a trifling extent—with increased salaries, more expenditure on in-patients, and on nursing, and on building; while the Birmingham General Hospital, though no details are given, hints that its present pecuniary position is not very satisfactory, by saying that the Jaffray Convalescent Hospital is in a far better position than the parent institution; and here also the need for the erection of a new hospital imposes on the governors the task of collecting £50,000 beyond the sum in hand. People have got so accustomed to hear of charities being in want of money, and are so easily able to console themselves by the silly fallacy that it is "good for them," that we fear the public will not appreciate the grave condition in which our hospitals find themselves till some great misfortune, such as the closing of one of these splendid institutions would be, arouses them from their apathy. Old buildings, erected before any accurate ideas of hospital hygiene prevailed, must be renewed, if patients are to have their due chances of recovery; nursing has become more laborious and more costly as surgery and medicine have advanced; the expense of keeping up the establishments has risen with the falling value of money; and no check has as yet been put on the wasteful and mischievous out-patient system. How much cause then have we to regret that no public body, like that contemplated in the report of the Lords' Committee, has been—or, as far as

we can see, will be—founded, by which the needs of our hospitals could be constantly kept before the public, which could give their governors skilled advice and assistance in details of management, and which could dissuade the foundation of the many undeserving institutions which now divert funds from the real "public charities?"

Nor would such a body be less useful in regard to the relations of hospitals to the profession and the poor. All these reports agree in regarding the number of persons treated as in- and out-patients as the test of hospital efficiency. No regard is paid to the serious question whether all these persons were proper objects of gratuitous treatment. Yet the governors present cannot be ignorant how widely that question is being discussed and how important a bearing it has on the whole subject of hospital management and finance.

Much of the time of the meeting at Cheltenham seems to have been consumed on a personal question involving the necessity for a medical officer obtaining the leave of the weekly board when he wishes to take a holiday. This was opposed on behalf of one of the physicians by a majority of the governors present; so that the proposal to introduce such a regulation was lost. We can only say that we regret it. The rule prevails in all well-managed hospitals with which we are acquainted, and seems to us necessary in the interests of the patients, in order to avoid the simultaneous absence of too many of the staff.

Mr. H. M. Stanley has consented to lay the memorial stone on April 21st of a new cottage hospital to be erected at Dartford, and to be called the "Livingstone Cottage Hospital," in accordance with the wish of Mr. S. M. Burroughs, who is defraying half the cost of the building.

Mr. Robert H. Woods has been elected to the office of Secretary of the Royal College of Surgeons in Ireland in the room of Dr. Jacob, resigned. Mr. Woods is a Fellow of the College and Surgeon in charge of the Throat Department of the Richmond Hospital.

We have received several communications *pro* and *con.* concerning the recent case of Bloxham *v.* Collie, and the intervention thereon of the Medical Defence Union. We are informed, however, that it is proposed to call at an early date a special general meeting of the Union, at which the views and action of the Council, and the objections which have been taken thereto, will be discussed by the members.

MILK SCARLATINA.

Dr. Scarlyn Wilson records in his report for 1893 an outbreak of scarlatina at Hastings during last November, when the general prevalence was on the wane. Of 26 houses invaded during that month, 18 had milk from one dairy, and throat illness appeared in other two such houses. In addition to 70 per cent. of invaded houses consuming the one milk, the facts show that 30 per cent. of the total houses taking the milk were invaded. Investigation failed to trace the source of infection of the milk, but the cattle, while free from external suspicious symptoms, "were found to be all more or less suffering from febrile disturbance." Analysis and bacteriological examination of the milk of each cow was suggested, but only one sample of "mixed" milk was tested, and therein, we are told, "bacteria were detected." The report is silent as to stoppage of the milk supply; and the occurrence of the localised epidemic remains, like too many others, unexplained as to origin of the mischief. But Dr. Wilson, at least, seems free from blame in this respect.

THE MOHAMMEDANS AND THE CHOLERA.

We understand that at the recent annual meeting of Mohammedans visiting or residing in England, especial reference was made by the Chairman to the urgent desire of the intelligent Mahomedan people that measures should be taken, under the high auspices of the Sultan of Turkey and of the Shah, to apply such sanitary reforms in the pilgrimage and at Mecca as may diminish the enormous cholera mortality among them, and lessen the risk of its importation into Europe. The precautions referred to were those suggested in Mr. Ernest Hart's addresses on "The Pilgrim Path" and "The Nurseries of Cholera," and such as have been endorsed in due sequence by the recent International Cholera Conference in Paris.

THE COST OF AN EPIDEMIC: £10,000 WORTH OF TYPHOID.

The question of the total cost to the borough of Worthing of the typhoid epidemic last year is now made known. Altogether the direct and incidental expenses connected with the epidemic, which was found to be wholly due to a defective water supply, appear to have amounted to nearly £10,000, a sort of argument against such common neglects which is perhaps the most effective. To this loss is to be added that due to the relative desertion and emptiness of the town for the season. The corporation is now spending £50,000 in drainage works and £20,000 on new permanent waterworks—an economical expenditure which has been too long deferred.

CREAMERIES AND TYPHOID FEVER.

Another very important case has occurred in Ireland, in which it is alleged that the poison of typhoid fever has been distributed through the agency of a creamery. It seems that there is at present a serious outbreak of enteric fever in and around Castleisland, and that a local creamery had received milk from farms on which the disease existed, had separated the cream, and then distributed the "skim" in proper proportion among the different farms. No proof was offered that this was the cause of the epidemic; the charge brought against the creamery being that, "being purveyors of milk or occupiers of a milk store," they had allowed the milk to be handled by a person in contact with one suffering from a dangerous infectious disorder. A penalty of £5 was imposed. The recent enormous extension of the creamery business, involving as it does the mixing of the milk from whole districts, evidently brings with it many dangers. Formerly milk typhoid was characterised by sudden outbreaks widely spread among the customers of infected farms, but under the creamery system, by which each farmer receives back his proper proportion of skim from the general stock, enteric poison on any one farm tends to be rapidly distributed throughout the dairies served by the creamery, and it becomes quite obvious that, if the creamery system is to be safely worked, a very careful and thorough system of inspection of the farms must go along with it.

METEOROLOGICAL INSTRUMENTS.

The fourteenth annual exhibition of meteorological instruments arranged by the Royal Meteorological Society was opened on April 10th, in the rooms of the Institution of Civil Engineers, at 25, Great George Street. Among the exhibits are instruments for ascertaining the height and velocity of clouds and for photographing them, hygrometers, Dine's recording anemometer, a compact universal sundial, which can be used at any place north or south of the

equator, barometers, and thermometers. There is a fine collection of photographs and sketches of the various types of clouds, including some which are not met with in this country, such as the festooned cumulus and the tornado's cloud. Pictures of meteorological phenomena, such as lightning, waterspouts, and hailstones, are also shown; and there is a good show of lantern slides illustrating the same subjects. The exhibition will remain open till Friday, April 20th.

THE DR. DICKINSON TESTIMONIAL.

At a meeting of the subscribers of the Dr. Dickinson testimonial held at St. George's Hospital on April 10th, under the presidency of H.R.H. the Duke of Cambridge, it was proposed by the Earl of Cork and Orrery, seconded by Mr. Timothy Holmes and resolved: "That the presentation to Dr. W. Howship Dickinson take the form of a portrait of himself to be presented to the governors of the hospital to hang in the board room, an autotype engraving of the portrait, and the balance to be expended in a personal gift of silver plate on which shall be engraven the names of all subscribers." Subscriptions will be received up to April 30th by the Honorary Secretary, Mr. Gerald Carré, 16, Bryanston Street, W.

THE DUBLIN STUDENTS.

We are very glad to know that the difficulty between Dublin students and the Royal College of Surgeons in Ireland has terminated. The Council of the College has promised to accede at once to the minor requests, and, with regard to the fees for licence, to consult with the College of Physicians with a view to their reduction. The fees for re-examination will be modified. At a students meeting it was resolved that they should at once enter for the summer classes, and so the unpleasantness has come to an end.

THE UNIVERSITY OF WALES.

The first meeting of the University of Wales was held, at the summons of the Lord President of the Council, in the Privy Council Chamber in Downing Street, on April 6th. Some ninety of the one hundred members constituting the University Court were present. Lord Rosebery, as Lord President, took the chair at the opening of the meeting, and delivered a charge on behalf of the Crown. Mr. Acland, who had taken especial interest in the foundation of the University, followed. A vote of thanks to Her Majesty's Ministers for the grant of the charter having been proposed by Lord Aberdare, carried by acclamation, and responded to by the Premier, the two Ministers retired, and the Court proceeded to business. Lord Aberdare was elected provisional Chairman, and Dr. Isambard Owen undertook, at the request of the meeting, the direction of a provisional Secretariate until the appointment of a Registrar. The meeting continued for about an hour and a-half, during which time a Committee was appointed to draft the general statutes of the University, another to determine the departments of study to be recognised in the constitution of the Senate or academic body, and a third to advise upon the organisation of the Theological Faculty. It was resolved to hold the second meeting at Shrewsbury not later than the beginning of June. Correspondence for the present is to be addressed to the Provisional Secretary, care of Messrs. Faithfull and Owen, Solicitors, 11, Victoria Street, Westminster.

DEATH UNDER CHLOROFORM.

Dr. T. J. Wood, house-surgeon to the Bradford Infirmary, has favoured us with the following account of a case of death under chloroform. The patient was a man, aged 42, suffering from necrosis of the metatarsal bones, the result of an accident on the railway. He had been an inmate of the infirmary for two months. He had a somewhat rigid chest, and was the subject of emphysema of the lungs. At the time of the operation he was fairly free from bronchitis, but had a rather severe attack of this at the time of admission. On April 2nd it was decided to open up the sinuses in the foot, and remove if possible any sequestra present. Chloroform was administered on a Skinner's inhaler. The patient took the anæsthetic well; 3 drachms were used. He was fully under the influence of the anæsthetic, and the operation was in progress, when, without any warning, the respirations stopped; at the same time, the pulse at the wrist became very greatly reduced in volume and force. The operation was at once suspended, and artificial respiration commenced, the head being lowered; hypodermic injections of ether and cutaneous stimulation by means of hot and cold water to the surface of the chest were also employed. Laryngotomy was performed subsequently, and the lungs directly inflated through the tube. The patient made two or three spontaneous efforts at respiration, but these were not continued. The heart was heard beating several minutes after the respiration had ceased. At the necropsy, twenty-eight hours after death, all the organs except those in the chest were natural. There was an old fracture of four ribs on the right side. The left lung was extensively adherent but the right was free. The lungs were emphysematous and engorged with blood, but were crepitant throughout. The heart was empty and flaccid, and there was a considerable amount of fat on the surface. The wall of the right ventricle was thin, the left appeared of normal thickness. The muscular substance was softer than natural, but fatty infiltration was not obvious. The valves were natural.

METEOROLOGY IN RELATION TO HYGIENE.

The Councils of the Royal Meteorological Society and the Sanitary Institute have jointly arranged a course of lectures on subjects connected with the important question of weather and climate in relation to health and disease. The lectures will be delivered at the Parkes Museum, at 8.30 p.m. on Mondays and Thursdays, from April 23rd to May 10th. The following is the programme of the course:—April 23rd, Mr. G. J. Symons, "Instruments and Observations on their Representation"; April 26th, Dr. H. R. Mill, "Temperature of Air, Soil, and Water"; April 30th, Mr. R. H. Scott, "Barometric Conditions and Air Movements"; May 3rd, Mr. W. Marriott, "Moisture: its Determination and Measurement"; May 7th, "Dr. C. Theodore Williams, "Climate in Relation to Health and Geographical Distribution of Disease"; May 10th, Mr. F. Gaster, "Fogs, Clouds, and Sunshine." Tickets may be obtained from Mr. W. Marriott, Assistant Secretary, Royal Meteorological Society, 22, Great George Street, Westminster, or Mr. E. White Wallis, Secretary of the Parkes Museum, Margaret Street, W.

THYROID FEEDING.

The very interesting lecture by Dr. Byrom Bramwell on two cases of lupus treated by thyroid extract, which we publish to-day, raises questions which, if not entirely novel, demand careful consideration. It has been perhaps too readily assumed that the influence which thyroid feeding exercises is something specific. As regards myxœdema, no doubt the reasoning appears perfect. The complete removal of the gland produced a group of symptoms which could be prevented by leaving a portion of it. Analogous symptoms were shown to be associated with deficient function of the thyroid, and in these cases relief was obtained by injecting its juice, or feeding on the gland itself. But how about these other conditions in which its administration has been found so useful? In their case it becomes very difficult to explain its action on the simple hypothesis that thyroid feeding supplies to the economy something which it lacks in

consequence of thyroid atrophy. Either we must admit that thyroid extract has many other actions besides taking the place of the lacking thyroid secretion—in other words that it is a drug, a different substance from that which is normally found in the body—or we must attribute to the thyroid gland a much more widespread and important influence in the economy than most physiologists will be inclined to admit. Dr. Byrom Bramwell has already shown its activity in the treatment of psoriasis, now he points to its action upon lupus. He reminds us that some benefit has been observed to follow its use in leprosy by Dr. Abraham. He also holds out to us various possibilities as to its use in tuberculosis, in various skin diseases besides those already named, and even in cancer. Are we then to attribute to the thyroid gland so great an influence, and to its extract so wide a specificity; or are we to hark back, and while accepting its specific action in myxœdema, look on the good which sometimes follows its administration in other cases as analogous to that which we occasionally observe after the administration of active drugs of most diverse nature, and even after the intercurrence of acute diseases, an effect which, for want of a better term, we speak of as alterative? We can go no further without more facts. The only fact which at present is quite positive is that, in regard to certainty of effect, the administration of thyroid extract stands on quite a different footing in myxœdema from what it does in any other disease.

INSANITARY BAKEHOUSES.

We have again and again drawn attention to the insanitary surroundings of the bakeries of London, and have shown that, while in some of the larger factories the manufacture of bread is carried on with reasonable precautions against contamination by dirt, in a very large proportion of cases the surroundings amid which this most important article of diet is produced are filthy to a degree. We have also pointed out that, although as a counsel of perfection, it might be desirable that the trade should be hedged round with many new laws and regulations, we can hardly ask Parliament for more in this direction until it is made clear that the sanitary authorities have thoroughly put in force the powers which they already possess under the Public Health (London) Act, 1891, and have shown them to be ineffectual. It would seem, from an answer given by Mr. Shaw-Lefevre in the House of Commons, that this is also the view taken by the Local Government Board. He is reported to have said that there were provisions in the existing Acts under which sanitary authorities could take action to put a stop to abuses which rendered bakehouses unfit for use, and that till an attempt had been made to enforce these remedies, and had failed, he did not think it would be necessary to propose further legislation. He would certainly, however, so far as his power went, do all that was possible to stimulate the flagging action of the local authorities in this matter.

PUBLIC HEALTH SERVICES IN LONDON.

The unwillingness to pay for public health services, on which we have previously commented, is now manifesting itself in Westminster. The Sanitary Committee recently had under consideration the appointment of a successor to the late Mr. Barnard Holt, and arrived at the conclusion that a salary of £400 per annum should attach to the appointment of medical officer of health, and that he should be allowed to engage in private practice. When this recommendation came before the Westminster Vestry it was opposed on two grounds: the one that the officer ought to devote his whole time to the public health work of the district, the other that £400 a year was more than the district ought to pay for part of the time of a medical man. Ultimately the Vestry decided to offer £250 per annum and to allow the officer to engage in private practice. The result is altogether unsatisfactory. The district is undoubtedly small, and the authority was, we think, justified in its conclusion that Westminster did not need the whole of the officer's services. But the district is also one that contains many poor persons, and requires the services of a man of ability who will give to his work a considerable share of his time. This the poor of the district are entitled to, but this, under the proposed arrangements, they cannot now have, for any man of ability will not be likely for this sum to give as large a share of his time to the work of the district as its necessities demand. We sincerely trust the Local Government Board will intervene and will decline to sanction any appointment which does not include the payment of a salary at least as large as that recommended by the Sanitary Committee. The democracy is supposed to be in favour of the payment of inadequate salaries for public health services. If this is so, we doubt very much whether they will long be of this opinion. If there is one office which affects the welfare of the poor, it is that of medical officer of health, and this sooner or later must be recognised.

THE STUDY OF BIOLOGY AND CHEMISTRY AT PUBLIC SCHOOLS.

A correspondent writes: Considerable outcry is being raised at the present time in regard to the action of the Conjoint Board of the English Colleges in recognising St. Paul's and some other public schools as institutions where chemistry, physics, and biology may be taught. Even the University of London is brought under the same ban, because it has passed a resolution that "matriculated students of the university intending to graduate in the Faculty of Medicine be advised that they should register themselves as medical students immediately after passing the matriculation examination, unless they have previously so registered," the suggestion of the objectors being that these proceedings are a wholesale evasion of the recent regulation of the General Medical Council enforcing a five years' curriculum on all medical students subsequent to their being registered. We fail to see what wrong is being done. As soon as the "preliminary" examination in general education is passed a student may enter a medical school, and may work at chemistry, physics, and biology, or he may attach himself to certain colleges of science for the same purpose. Why should he not take out these studies at his own school? If he has the luck to belong to a school with a good science side, it is far better for him to be kept under the school discipline and authority until he has passed in these subjects and can enter the dissecting room, and thus come under the eye of the demonstrators, than for him to enter his student life with these subjects before him. So much, in fact, are these elementary subjects looked upon as standing in the way, that nearly all the schools advise their students to enter in May, and get them done with before the real work of October commences. The boy from a private school has for this purpose to be thrown loose in London as a medical student before he begins his really medical studies at all, much to his own detriment: it would be hard, indeed, that the boy who can get the necessary teaching under proper discipline at his own school should be tempted to throw away these advantages, and become prematurely a "medical student" merely for the sake of making his time of study count.

FALSE CHARGES AGAINST A MEDICAL PRACTITIONER.

Dr. Griffiths is to be congratulated on the completeness with which all the false charges brought against him in the divorce case, Gwynne-Vaughan *v.* Gwynne-Vaughan and Griffiths, have been cleared away by the verdict, and on the sympathy with him expressed by the jury who had investigated all the facts of the case, and who could therefore

well appreciate the hardship and the injury which it must have been to him to have these cruel charges brought against him. All the profession will join in these expressions of sympathy, and none the less heartily from the knowledge that the same thing might happen at any time to anyone engaged in medical practice. The trumping up of false charges against medical men is fast becoming quite a mania if not a trade, and if so specious a case could be made out against a man occupying the position of Dr. Griffiths, many of us whose comings-in and goings-out are less matter for public observation may well ask where we should find evidence of our doings day by day if such malicious charges were levelled against us. Fortunately Dr. Griffiths was able to prove in the most positive manner that the meetings charged against him could not have taken place; definite evidence was also given that the operation which he performed was a perfectly legitimate one, and enough was elicited regarding the mental condition of the respondent at the time she made her so-called confession to render the jury unwilling to accept her statements. On all this we congratulate Dr. Griffiths. The lesson to the profession is to be always on one's guard, and to be most wary in dealing with women, and especially with those whose relations with their husbands are not quite satisfactory. Dr. Griffiths is, perhaps, not much the worse; he is surrounded with friends and congratulations, but a smaller man might have been ruined. It is no light thing to a man in whose profession reputation is everything, to have a false charge like this hanging over him for a year, and to be put to an expense of £1,500 in defending himself from it. We are happy to find the feeling of indignation we have expressed at the ease with which such charges can be trumped up against medical men echoed in the lay press. Thus the *Daily News* says: "The Welsh divorce suit has ended as might have been foreseen. The petition is dismissed, and in a manner that entirely clears the character of Dr. Griffiths. The circumstances of the case made his character the real issue which the jury had to try, and threw the matrimonial differences of Mr. and Mrs. Gwynne-Vaughan into the background. If the petitioner could have established his charges, Dr. Griffiths would have been deservedly ruined. The cruelty of most importance in the case was really the cruelty alleged against him. When the jury had made up their minds upon that point, the counter-charge against the husband became absolutely a minor issue. Happily, it is in the nature of such accusations as those made against Dr. Griffiths to inspire a wholesome caution in the minds of those who are asked to believe them. In this instance the whole burden of proof was very properly thrown on the person by whom they were made, and it was not sustained in its lightest part. Dr. Griffiths will have the sympathy of his profession and of the public—as he had of the jury and his judge—in the suffering he has endured by the false charges brought against him, and is to be heartily congratulated on the complete success with which he has repelled and disproved them." The *Daily Graphic* observes: "The chief, if not indeed the only, interest of the case of Gwynne-Vaughan *v.* Gwynne-Vaughan and Griffiths lies in the fresh illustration which it affords of the peculiar dangers of the medical calling. Charges of impropriety are, in consequence of the confidential position which they occupy, especially easy to bring against physicians, and exceedingly difficult to disprove; and Dr. Griffiths may be cordially congratulated on the success with which he has cleared himself of the accusations brought against him." The *Morning* says: "Doctors are peculiarly exposed to these accusations, and their only protection is that somewhat uncertain quantity, the common-sense of a jury. It might, perhaps, have a salutary effect if the Public Prosecutor were occasionally to prosecute one of these hysterical ladies for perjury." "After a trial extending over seven days, the Welsh Divorce Case," says the *Daily Chronicle*, "came to an end on April 10th. Had the jury been less clear sighted in estimating the true value of what was placed before them in support of the petitioner's case, the trial might still be going on. Happily, the public has been spared a longer exhibition of the squalid and miserable picture which the evidence in this case has unfolded. By the time that Dr. Griffiths had commenced the task of disproving in detail the monstrous charges made against his character the jury had already made up their mind. They had, in fact, found a sufficient answer to these charges in the utterly rotten nature of the case advanced on behalf of the petitioner himself. The verdict given on April 10th was little more than a formality. It expresses, however, as emphatically as words may, the entire groundlessness of the cruel insinuations made against Dr. Griffiths, and completely clears his character from a most damaging accusation. The case throws up in very forcible colours the perils run by medical men from false accusations of this type."

HABITUAL DRUNKARDS AND THE SUPPLY OF DRINK.

Strong attempts are being made to urge the Government to include in their amended Bill on habitual drunkards a clause prohibiting the sale of intoxicants to habitual drunkards. This provision is in force in some of our colonies, and has been found useful. But the advocates of a similar clause in Britain seem to have formed an exaggerated idea of the effect that would be produced, judging from letters that have recently appeared in the daily press. In a small population, such as a village, the habitual drunkards are known, but in a city it is otherwise. However, the proposal is praiseworthy, provided care be taken in the definition of the term "habitual drunkard." The description in Mr. Charles Bill's Bill now before the House of Commons, defining the interdicted as a person who had been convicted of drunkenness twice within the previous twelve months is too stringent and would include many drinkers who could not reasonably be called "habitual." Three or four convictions within the twelve months would be quite drastic enough. The subjoined table, quoted from the Liverpool police report for 1893, is full of interest, and a similar table might be embodied in all similar reports: Once convicted, 5,409; twice, 384; thrice, 375; four times, 212; five times, 130; six times, 66; seven times, 91; eight times, 48; nine times, 54; ten times, 20; eleven times, 33; twelve times, 12; thirteen times, 13; fourteen times, 14; fifteen times, 15; nineteen times, 19; twenty-four times, 24.

"AFTER A STORM COMES A COMMITTEE."

Convocation of the University of London came, on the whole, to a wise decision at its meeting summoned for Tuesday last to consider its attitude towards the Gresham Commission's report. The meeting, as was anticipated, proved rather a stormy one, the men of moderate counsels in it finding themselves between the eager supporters of two opposite and equally extreme opinions. On the one side was the academic Chauvinism of the majority of the Annual Committee, disposed to subordinate wider questions to the paramount object of retaining the existing rights and privileges of Convocation intact; on the other were the thoroughgoing advocates of the Commissioners' scheme, meeting, as usual, all objections to its details with the confident assurance that everything will be put right by the Statutory Commission, if only that *deus ex machinâ* can be got appointed. If the Statutory Commission is to reopen half the questions and make half the changes which the promoters of the scheme are in the habit of promising that it will reopen and make, we may safely predict that its career will be neither a short nor a merry one. But it may not be useless to point out that the Statutory Commission

contemplated in the report of the Gresham Commission is to do neither the one thing nor the other, but is to be a purely executive body, empowered only to carry out the scheme as the Royal Commissioners have drawn it, and such, doubtless, will actually be the limit of its scope unless the attention of the Government is pointedly drawn to the more questionable points in the scheme at the time when its general principles are being approved. Finding itself thus between the Gresham Commission and the deep sea, Convocation, as we have said, took probably the wisest course open to it in accepting Sir Albert Rollit's *eirenicon* and referring the whole matter back to the Annual Committee "with power to nominate members of a joint consultative committee of the Senate and Convocation." It is understood that the Senate is prepared to fall in with this plan, but whether under the circumstances Sir Albert Rollit intends to withdraw or persist in his Parliamentary resolution, set down for April 20th, urging the Government to immediate action in the matter, does not appear.

ANTIRABIC VACCINATIONS AT THE PASTEUR INSTITUTE.

In the *Annales de l'Institut Pasteur* of March 25th, M. Henri Pottevin gives statistics of the antirabic inoculations performed in the Pasteur Institute of Paris during 1893. The total number of persons who went through the complete course of treatment was 1,648. Of these, 6 died of hydrophobia, in 2 of whom the first symptoms of the disease showed themselves less than fifteen days after the last inoculation, and should therefore, according to M. Pasteur's contention, be excluded from the list of cases in which the treatment failed; this leaves a total of 4 deaths among 1,648 treated, a mortality of 0.24. Three persons were seized with hydrophobia during the inoculations; a fourth, who, in spite of all remonstrances, insisted on discontinuing the treatment, also died. As the treatment in these four cases was incomplete, they are not included either in the number of cases treated or in the deaths after inoculation. The statistics for previous years are as follows:—1886: total number of persons treated, 2,671, with 25 deaths, a mortality of 0.24 per cent.; 1887: total 1,770, 14 deaths, or 0.79 per cent.; 1888: total 1,622, 9 deaths, or 0.55 per cent.; 1889: total 1,830, 7 deaths, or 0.38 per cent.; 1890: total 1,540, 5 deaths, or 0.32 per cent.; 1891: total 1,559, 4 deaths, or 0.25 per cent.; 1892: total 1,790, with 4 deaths, or 0.22 per cent. These figures, with those above given for 1893, make up a total of 14,430 persons treated during the last eight years, with 72 deaths, being an average death-rate of 0.50 per cent. Of the 1,648 persons treated in 1893, 1,470 were French and 178 foreigners. Among the latter the largest contingent (43) came from Spain; Greece stands second with 35; then comes England with 23 and Belgium with 22; Egypt furnished 18 patients, British India 14, Switzerland and Holland 9 each, Portugal 6, Germany and Turkey 2 each, and Austria, the United States, Brazil, Russia, and Morocco 1 each.

THE OLD AND NEW UNIVERSITY OF LONDON.

One of the chief hindrances to a peaceful solution of the university question in London has been in the past the apparent antagonism of the Senate and Convocation of the present University. The Upper House, which is the sole executive body, has, as it seems to outsiders, been too little inclined to consult Convocation, notwithstanding the fact that to the Lower House belongs, under the present charter, the power of vetoing any change proposed to be made in that charter, whilst Convocation was accustomed to use this power freely whenever appeals to its dignity were made. Happily during the past week counsels of moderation have prevailed with the majority in both those bodies. Whether the threat of a Statutory Commission to settle the question without reference to either Senate or Convocation, as recommended by the Gresham University Commissioners, may have brought about this more favourable state of things is perhaps a question, but that the situation generally is greatly improved by the change admits of no doubt whatever. It will be seen from the report of the meeting of Convocation on Tuesday last, published at page 831 of to-day's Journal, that the whole of the antagonistic resolutions of the Annual Committee of Convocation proposed for adoption by Convocation were in one way or another put aside in a full house, and that, thanks chiefly to the tact and moderation of Sir A. Rollit, M.P., it was resolved to invite the Senate to meet Convocation in a joint consultative committee to deliberate upon the proposed scheme of the Gresham Commissioners; and that as Convocation separated without placing upon record its views respecting that scheme, its delegates will go into that consultation absolutely unfettered. It is agreeable to be able to add that the large committee of the Senate, which has been formed to consider the new scheme, at its meeting on the following day (Wednesday) decided by a considerable majority to express no opinion upon the merits of the scheme, but to recommend the Senate to appoint delegates to the proposed joint consultative committee of the Senate and Convocation. There thus appears good room for expecting that, unless in the future very distinct grounds can be shown for disagreeing with the terms of the Commissioners' proposals, the present University will not take up that position of decided hostility to the scheme which the proposed resolutions of the Annual Committee of Convocation seemed until Tuesday last to foreshadow. In this respect, and to this extent, the prospects of the new scheme are undoubtedly improved by the events of the week.

WATERBORNE TYPHOID FEVER.

The remarkable epidemic of enteric fever which has been running its course in Paris during the past six weeks seems likely to be full of interest from an etiological point of view. For some years there had been a notable diminution in the prevalence of this disease, when suddenly, in the middle of February, at a time of year when typhoid is not especially common, and when the general mortality was below the normal, an outbreak occurred which quickly ran up the number of those in hospital to a considerable figure. We gather that from January 1st to February 18th not more than an average of 11 cases of typhoid fever a week entered the Paris hospitals, when suddenly the numbers rose to 237 in the last week of February, and 217 in the first week in March. Or, putting the matter another way, while on February 21st there were 79 patients under treatment, on March 13th there were 588. Since March 9th the number of fresh cases has been decreasing. Here we have a sudden outbreak such as is characteristic of waterborne typhoid. The sources of the water supply are, then, of great interest, and especially the relation of the areas of distribution of the different waters to the intensity of the epidemic. Paris is supplied with drinking water, *eau de source*, from three sources—the Dhuys, the Vanne, and the Avre, and in many of the different districts served by these sources shows that the part of Paris supplied by the Dhuys is but little affected by the epidemic, also that served by the Avre, while that of the Vanne has been specially attacked. For each 1,000 inhabitants the mortality is in the Vanne district 0.46, in the Avre 0.20, in the Dhuys 0.16, showing a large preponderance of the epidemic on the Vanne supplied district. On further inquiry into the incidence of this outbreak of fever we note the following important facts: 1. The onset of the epidemic was sudden and unforeseen, recalling rather an attack of acute poisoning than the gradual spread of an ordinary epidemic. 2. The typhoid fever remained exclusively confined to the *enceinte* of Paris and to the garrison within the walls. 3. The barracks supplied with Vanne water were alone attacked; those supplied with water from the Dhuys, the Marne, and even the Seine have fur-

nished no case of typhoid fever. Under these circumstances it is a matter of great interest to hear that at Sens, a town situated on the Yonne, near the point where it receives the Vanne, 70 miles or so above Paris, an epidemic of typhoid fever was in progress at the same time. We shall await with much curiosity the report of the Commission which has proceeded to Sens to investigate the affair. For both Paris and Sens are supplied with Vanne water.

BITING THE TONGUE.

This well-known accident is generally believed to be trivial as far as prognosis is concerned, and Bérenger-Féraud[1] and Peltier[2] have shown, on the evidence of fourteen bad cases, that wounds of the tongue heal quickly. A piece of the tongue almost severed by the sharp incisors usually fails to slough away. Nevertheless, it is the duty of the attendant to be on his guard against injury to the tongue in any case of convulsions. Puerperal eclampsia is a very grave disease, and the obstetrician's attention is directed in most instances of this disorder, rather to the emptying of the uterus than to the protection of the tongue. Dr. Matthai, of Berlin, has recently shown that we must not rely too much on the evidence of Bérenger-Féraud as to the healing of bitten tongues, whilst Professor Veit has brought forward a case where a wound of the tongue placed the patient in immediate peril. Dr. Matthai states that a woman was admitted into the Berlin University Lying-in Hospital deeply comatose after twelve fits. The tip of the tongue, blue and swollen, projected from the mouth, but the assistants did not take steps to protect the organ. Delivery followed quickly on admission, and it was not till the second day, when the patient awoke from her coma, that a deep oblique wound was discovered, about an inch behind the tip of the tongue. A thin band connected the damaged part with the rest of the organ. That part became very putrid, and separated on the seventh day. Neither taste nor deglutition were affected after recovery. In Dr. Veit's case a pregnant woman, sleeping alone, had convulsions, and bit her tongue badly. Next morning she was found senseless and blanched, profuse hæmorrhage having occurred through injury to the lingual artery. She recovered. The point of the tongue did not slough off, but permanently lost all sense of taste.

BACTERIOLOGY: A MEDICAL OUTLOOK.

The relations existing at present between bacteriology and chemistry were recently summed up by Professor Frankland. After dealing with the questions of chemical tests as a means of identification and the somewhat abstruse subject of selective fermentation, Professor Frankland gave some account of what may be called educational culture. By this term is meant the artificial impression of new characters on an organism. The characters thus impressed are often quite permanent; for example, a variety of anthrax may be obtained by cultivating the ordinary bacillus in broth containing minute proportions of certain substances in solution, such as phenol or potassium bichromate. The variety thus obtained is absolutely incapable of producing spores under any known conditions, and it maintains this peculiarity even after passing through the bodies of animals. Of more interest perhaps are the changes of function which can be produced by suitable means. Such changes are well known, and often induced in the production of vaccines for preventive inoculation. Thus Laurent found that a bacillus (*bacillus ruber* of Kiel), which is characterised by the production of a red pigment, might be deprived of this property almost permanently by exposure to bright sunlight for a period of three hours. The great interest that attaches to these and similar observations is the possibility of some such similar modifications occurring in Nature. It is the dream of many bacteriologists that in the no very distant future medicine will become almost entirely preventive. But if the evolution of new forms of bacilli is continually going on the outlook is very different. It seems probable that organisms in such lowly positions in the living world as bacilli are very susceptible to changes in external conditions, and the determining factors in their evolution work more quickly than in the case of higher forms. This is more or less confirmed by what we know of the pathogenic bacilli which exist in Nature. When such forms occur they are nearly always accompanied by other forms which resemble them very closely, but are saved from actual similarity by some trivial characteristic; at least, the minute differences observed between such forms are no greater than the differences which can be artificially induced. Here, then, we have very strong evidence that the evolution of bacilli is at present going on, and it is not too much to imagine that with the altered physiological conditions attendant on civilisation pathogenic forms might arise to meet these conditions. Strong evidence of this nature is not wanting. To take only one case of the many cited by Professor Frankland, the bacillus of anthrax is often found temporarily residing in the soil, and with it has been found by Hueppe and Cartwright Wood an organism indistinguishable from it in all except its pathogenic properties. So close is the resemblance that this second bacillus is found to be capable of conferring immunity against virulent anthrax when inoculated into rabbits and mice. This second bacillus is then almost identical with an attenuated anthrax bacillus. One explanation which may be offered of this is that the soil bacillus is the near ancestor of the anthrax bacillus. Much work of this sort is needed, and the little that has been done in this direction cannot fail to afford subject for speculation to those interested in the future of preventive medicine. To those so inclined it is open to imagine that advances in bacteriology will keep pace with the tendency of the bacillus to become virulent, and that in the end the combat will result in victory to the bacteriologist.

[1] *Gazette des Hôpitaux*, Nos. 53 and 56, 1870.
[2] *Mouvement Médical*, No. 6, 1876.

WINTER FROSTS, 1841-1894.

The past winter has been generally a very mild one, the only period of really cold weather having been in the early part of January, when the temperature fell below 20° on five nights. The winter has been remarkable for the large number of gales that have swept over the British Isles, and also for the absence of those dense irritating fogs which so often prevail in the metropolis during the winter months.

As "London fogs" usually occur in still cold weather it is not surprising that they were so very numerous during the winters 1884-93, as frosts were very numerous during this period.

The average number of days on which frosts occurred during the five months, November to March, was as follows:

Nov.	Dec.	Jan.	Feb.	March.	Total.
6.2	10.2	12.8	10.5	10.6	50.3

The greatest total number of days of frost was 76, which occurred in the winters 1854-55, 1878-79, and 1886-67. The winter with the least number of frosts was 1883-84, which had only 19 days; the next was 1850-51, with 23 days, and 1881-82 had 27 days.

There were only 6 months out of the whole 265 months included in the 53 winters which had no frosts at all. These were November, 1852, 1872, 1888: December, 1862; and February, 1867, 1872.

Temperatures below 20° were recorded on 140 occasions, and were spread over the months as follows: November, 2; December, 43; January, 64; February, 26; March, 5. In both February, 1855, and January, 1881, the temperature fell below 20° on 10 occasions.

Successful Vaccination.—Mr. G. Oscar Jacobsen, public vaccinator for the No. 3 District of the Royston Union, has been awarded the grant for successful vaccination.

PROPOSED SOCIETY OF FELLOWS OF THE COLLEGE OF SURGEONS.

A largely-attended meeting was held on April 5th, at St. Martin's Town Hall, Charing Cross, for the purpose of considering the desirability of forming a Society of Fellows of the Royal College of Surgeons.

Mr. H. Page was voted to the chair, and in opening the meeting explained that the movement for the formation of this society was started at a meeting recently held in Chandos Street. That meeting had been called to consider the new departure in the history of the Royal College of Surgeons by reason of the proposal that two meetings of the Fellows should be held every year at the College. The Fellows considered that the time had now arrived when some advantage should be taken of this proposal of the College. The outcome of that meeting had been embodied in a circular which had been sent to each Fellow, and to that circular there had been no fewer than between 245 and 250 answers expressing approval of the proposed society, and also a desire to become members; whereas there had not been more than 17 who had written expressing disapproval of the objects of the society. They were, therefore, that day hoping to go a step forward, and proceed to the formation or a society with objects similar to those set forth in the circular. It had been objected that this proposed society would be very poor in proposals of reform, but admirable in organisation; but amongst those whose who had had to do with the movement so far there was an earnest desire, as there had been for many years, to see reform in various ways in connection with the affairs of the Royal College of Surgeons. If the apathy of the Fellows in regard to the College was to come to an end, it could only be by combination, conjunction, by harmonious action and concerted opinion and deliberation on the part of the general body of Fellows, not on the part of the London Fellows only, but on the part of London and provincial Fellows also, and that could only be brought about by some such organisation as that which would be proposed to the meeting that afternoon. They hoped that by means of the organisation of the central executive and branch executives throughout the country both London and country Fellows would come to know each other better with reference to the combined interests they ought to have in connection with their College. The formation of anything like a clique in the Fellows was absolutely opposed to their very nature, and if what was proposed to be done then was to degenerate into a clique, his connection with it would not last for another minute. Then he trusted that the society would take into consideration the interests of Members as well as those of the Fellows. He was altogether opposed to the Members being left out in the cold. The Council of the College had themselves for years felt that the apathy of the Fellows in connection with College affairs had been most detrimental to the College itself, and they hoped that this movement would enable that condition of affairs to come to an end. The society, if it were formed, would be as eager to advocate and support as candidates for the Council of the College of Surgeons men who were not members of the society as well as those who were, provided that those who were not members were suitable.

Mr. Rushton Parker then moved the following resolution: "That in view of the two annual meetings of Fellows now arranged for by the Council, a Society of the Fellows of the Royal College of Surgeons be forthwith formed with the object of ascertaining by conference and otherwise the opinion of the general body of Fellows on any subjects which may properly be brought forward at the official meetings of the Fellows at the College, and of presenting them thereat to the Council, and in addition of taking such steps as from time to time may seem best calculated to promote the interests of the College."

Mr. Warrington Haward seconded the resolution.

Mr. Timothy Holmes said the motion ought not to be allowed to pass *sub silentio*. He would therefore give his reason for voting against it—it was that such a society already existed in the Association of Fellows of the College of Surgeons, to which he was very much astonished no reference had been made either in the circular or in the Chairman's speech. That Association had existed for the last ten years, and had been most useful. It was animated by the utmost friendliness to the Council, although its criticisms had not always been met in the same friendly spirit. He contended that there was no necessity whatever for the formation of any other society, especially one having no object which it could formulate. The Association had opinions and objects, and had promoted them to the best of its ability. The right of the Fellows to meet by themselves in the College was a matter which the Association urged upon the Council for some time without effect, being met by a simple *non possumus*. The concession had now been made, and he claimed that it was entirely due to the action taken by the Association. If there was anything they really wanted to do, he had no objection to the existence of another society, but, unless the objects and methods of the existing Association were disapproved, he could not see the reason for forming a new one. It was said it was very desirable that the Fellows should be whipped up to take their share in these meetings. The Association was most anxious to carry out that object. Stress was again laid on the fact that something or another was to be done to prevent the election from falling into the hands of a political caucus. If it was meant to infer that the Association was a political caucus, he would not characterise that language further than to say it was most unhappy. Nothing could be less true than to say the Fellows who, by means of the support of the Association, had been elected to the Council were elected by anything which had the slightest resemblance whatever to the action of a political caucus. The members so elected were, he contended, some of the College's most efficient councillors. On all grounds he thought the formation of this society was perfectly unnecessary, and he should vote against it.

Mr. James Black expressed his sympathy with Mr. Holmes in his plucky support of the Association, but at the same time should join the society, which he looked upon as rather occupying the position of Liberal Unionists as opposed to the Radicals.

Mr. Norton claimed that as the result of the action of the Association nearly all the concessions had been made by the College which were asked, and if, as was hoped, the Council would concede the right of the Fellows to appoint a committee to consider and report upon subjects referred to them, and to confer when necessary with the Council of the College, there would be no further necessity for any Association of Fellows or any society such as was proposed.

The resolution was then put, and carried with six dissentients.

Mr. Barling (Birmingham) moved that a central executive council be formed in London, which should be empowered to enter into negotiations with Fellows of the College in various centres for the formation of branch executives, and that it should be the duty of the central and branch executives to draw up regulations for the conduct of the business of the society.

Mr. Treves seconded, and Mr. Macdonald Brown supported, the resolution, which was agreed to.

On the motion of Mr. Barling, seconded by Mr. Brown, the following gentlemen were elected on the executive: Messrs. F. Treves, H. Page, C. H. Golding-Bird, W. H. Bennett, Anthony Bowlby, Bernard Pitts, George Eastes, John Morgan, and F. Wallis.

The proceedings closed with a vote of thanks to the Chairman.

MERCHANT SHIPPING LEGISLATION.

The Need for Annual Medical Reports upon the Health of Merchant Seamen.

We have suggested that an annual report upon the health of the merchant service should be published: such a report besides giving a fuller, more reliable and accessible account of the mortality of crews and passengers than can now be obtained, should also contain a record of injury and of sickness both at home and abroad, returns as to the physical condition of seamen, and matters affecting their accommodation on board ship, provisions and water, so far as they can be ascertained from various official sources, such as consular reports, the reports of port medical officers, seamen's hospitals, and the Board of Trade offices. Quaran-

time, both foreign and domestic, and records of official inquiries bearing upon sanitary subjects might also be included. The officer to whom the task would be committed would derive his authority from each and all of the departments concerned in the subjects with which he would have to deal; and if he was in the regular service of one or other of them there would be little difficulty on the score of emolument.

Sickness depends very commonly on preventable causes, and there is no reason to believe that on board ship and in foreign ports there is less disease of a preventable kind than elsewhere. It was thought by Dr. Harry Leach, who had very large experience in these matters, that ships were sometimes lost through the unseaworthy condition of the crew on account of sickness. Whether this is really so or not we cannot say, but we certainly sometimes hear of vessels which have thus become disabled; a case in point occurred only a short time since; from the account given in the newspapers it would seem that two-thirds of the crew were prostrate from sickness. Although a vessel so situated may be skilfully handled and brought safely into port, as this one was, the result may sometimes be otherwise.

The utility of publishing periodical medical reports upon public health and matters affecting it is obvious, and universally recognised; but we ought to know how we stand. The Public Health Act of 1872, with which the Merchant Shipping Bill now before Parliament, in respect of its being a consolidating measure, has been compared, was the Act by which urban, rural, and port sanitary authorities were instituted, and medical officers of health appointed. In some senses it was a revolutionary Act, for by its provisions the sanitary interests of the public were secured in a way they had never been before, and health officers became responsible to the Local Government Board itself, which was provided with an efficient medical staff, and was invested with a large amount of administrative power; above all, their authority and duties were clearly defined. One of the most important of these duties was to prepare and submit an annual report upon the public health of their district, the sanitary condition of habitations, localities, and occupations, and, in short, any conditions which might injuriously affect the public health, giving also tabular statements of mortality and sickness. If any one thing more than another has contributed to the reduction of mortality and sickness in the community, and the more general diffusion of sanitary knowledge, it is in all probability the publication of these reports. Hence it will be seen that in contending for a similar record in the merchant service we are contending not for a shadow, but for a real and substantial benefit.

It is further a part of the medical officer's duty to advise his authority as to all matters affecting the health of his district, especially in times of epidemic disease. Had such a system existed in the merchant service a hundred years ago there can be little doubt but that scurvy, which has been one of its worst and most fearful scourges, would soon have disappeared and a vast amount of the disease and death which it has caused since then have been prevented. The use of lime or lemon juice[1] was made compulsory in the Navy in the year 1795, on the recommendation of the Medical Commissioners of the Admiralty, and Herschel states, in his *Preliminary Discourse on the Study of Natural Philosophy*, that, while in the year 1780 there were no fewer than 1,457 cases of scurvy admitted into Haslar Hospital, in the year 1806, and again in 1807, there was only 1. Nearly fifty years were to elapse before it became compulsory in the merchant service. This was before the Board of Trade became responsible for the general superintendence of matters relating to merchant ships and seamen. Since then the law in this respect, as well as in so many others, has gradually been made more stringent, and now we very seldom hear of deaths from scurvy. The disease may, indeed, have assumed an invisible form and have disappeared from view like the "horse and trap" in the skipper's account, but its diminution is probably real, and may be ascribed to the stringent provisions of the law and the substitution of steam for sailing ships, with the greater rapidity of voyages. It is comparatively easy to understand the difficulty shipmasters sometimes experience in distinguishing between rheumatism, syphilis, and scurvy, or between different forms of fever; but when they fail to make any report at all of sickness they may have on board it denotes either wilful neglect or gross disregard of duty. Yet it appears from reports made officially that this has been done, even when the question has been put to them directly.

In the United States false declarations of this kind are subject to severe penalties, and from the last report upon the health of the Port of London it would appear to be a matter of urgent necessity to legislate at once upon the subject. The courts of justice visit such offences, when they occur upon dry land and in the case of private persons, severely and there is no reason why shipmasters should be allowed to deliver cases of infectious and contagious disease free over board to spread disease and probably death among the population. If the plea of ignorance is to be accepted as an excuse, Dr. Collingridge thinks that nothing short of compulsory medical inspection previous to the entry of vessels bringing passengers homewards will suffice for the protection of the public health.

We do not wish to exaggerate the importance of these matters, and we quite admit that much has been already done to improve the health of merchant seamen, but more might still be done in this direction. The gross mortality has certainly diminished considerably during the last few years, as a glance at the following table, which is based upon figures given in the Registrar-General's annual reports, will conclusively show:

Table I.

Average Annual Mortality per 1,000 of Strength.	R.N.	M.M.
For the five years 1857-61	18.32	20.34
,, ,, ,, 1862-66	12.42	21.62
,, ,, ,, 1867-71	11.68	24.60
,, ,, ,, 1872-76	8.78	22.14
,, ,, ,, 1877-81	10.72	20.88
,, ,, ,, 1882-86	7 66	19.72
,, ,, ,, 1887-91	6 80	14.00
Total average	76.38	143 30
Average for each quinquennium	10.91	20.47

From this it will be seen that, while the average annual mortality in the navy as compared with that of the mercantile marine in the first of these periods stood in the ratio of $\frac{18}{20}$ or $\frac{9}{10}$, in the last the proportion was only $\frac{1}{2}$; that the like mortality for each of the successive periods in the merchant service was nearly double what it was in the Royal, and that while the one has shrunk by nearly two-thirds, the other has shrunk by less than one. Taking the general reduction, however, that has occurred in both services, we find by a second table that, though there is still a wide difference in their relative mortality, the average decline in each is very nearly equal.

Table II.

Average Annual Mortality per 1,000 Strength.	R.N.	M.M.
For the six quinquenniums 1857-86	11.59	21.55
,, last ,, 1887-91	6.80	14.00
Difference	4.79	7.55
Reduction per cent.	41.32	35.03

This happy result may be due to the agitation that arose in the year 1873 with reference to the loss of life at sea and the subsequent legislation. But we find that in the merchant service the relative mortality from disease and from shipwreck have not become materially changed. In the thirty-fourth annual report of the Registrar-General a table was given which showed that in the year 1871 two-thirds of the deaths were due to "causes other than disease;" the same ratio obtains to-day (1891-92). The decline is therefore more probably due to a different cause—namely, the

[1] Woodall wrote upon the use of lemon juice as a remedy for scurvy in the year 1656, but its efficacy was first clearly demonstrated by Captain Cook in a paper read before the Royal Society in 1776.

transformation of the trade by the introduction of steam. And there is room to doubt whether disease itself has really decreased. Steamers carry larger crews than sailing vessels, space is more valuable, the men are more frequently berthed below, where light and air are deficient, and they make worse weather. These conditions we know are not only conducive to the development, but are also productive, of tuberculous disease; and cases of this kind would but rarely prove fatal at sea. But while they diminish the death-rate there, they help to swell the death-rate ashore. Dr. J. O. McWilliam was enabled many years ago, by the courtesy of Lord Farrer, to show that when deaths that occurred in foreign and colonial ports were included in the return, the average mortality rose from 18.62 per 1,000 to 20.66; they do not figure in the records from which we have been quoting; and if these and those that occur at home could both be included, as they are in the navy, we should be in a much better position to form a true estimate of the mortality of merchant seamen. National interests, both in peace and war, are involved in the preservation of their health: a considerable amount of good and no evil whatever would result from the publication of an annual report upon the subject, and we commend the matter earnestly to the careful attention of the Government.

LITERARY NOTES.

Among Mr. H. K. Lewis's forthcoming publications are a volume on *Diseases of the Throat and Nose*, by Dr. de Havilland Hall, and a new edition of Dr. Norman Kerr's well-known book on *Inebriety*.

An index to the first twenty volumes of the *Archives Italiennes de Biologie*, 1881-1893, prepared by Dr. G. Manca, has just been issued by Loescher, of Turin.

The *Deutsch-Amerikanische Monatsschrift*, which has recently begun to appear under the editorship of Drs. Blech and Baer, of St. Louis, claims to be the organ of the German practitioners of medicine in America. The special "platform" of the journal is "the fraternal unification of all physicians and surgeons of the German tongue in the United States." There is already a German-American journal of medicine, the *New Yorker Medizinische Monatsschrift*, which is published at New York.

A Bulgarian translation of Charles Darwin's works is announced. The publishers have preferred, for reasons best known to themselves, to translate a German version of the great English author's writings—a fact which recalls the Bulgarian translation of *Gulliver's Travels*, which appeared a couple of years ago, and which was made, not from the original, but from one of the numberless Russian translations. Such literary *naïvetés* of our Bulgarian friends are to be treated more or less leniently in consideration of the circumstance that similar "double distillation" procedures are not altogether unknown even in Russia, in spite of the traditional interest taken in English literature in that country. A typical bibliographic curiosity of this kind is offered by a Russian reproduction of Mr. Lawson Tait's *Theory of Menstruation*, published by Mr. K. P. Karbasnikoff at Moscow in 1892. The title page informs us that this has been "translated from the French" by a lady physician, Dr. E. A. Mikhailova, "corrected after the English original text and edited" by Professor A. P. Gübareff, and "supplied with a preface" by Professor V. F. Snegireff.

Some of the French publishers are breaking away from the old habit of issuing their books in paper covers only. The medical and scientific books lately published by MM. Rueff et Cie., of Paris, have been issued in very neat limp leather bindings, with the top edge of the book gilt. This not only gives a superior appearance to the book, but also saves the purchaser the annoyance of using an unbound book, and the subsequent cost of binding.

The *Gazzetta degli Ospedali e delle Cliniche* (published at Milan) has a special Congress number, which contains portraits and biographies of prominent representatives of the various nations which sent contingents of medical practitioners to the great gathering in Rome, with a history of previous meetings of the Congress, and illustrations of the Policlinico and other public buildings. Interesting sketches of the medical institutions of Italy, and a brief account of its sanitary organisation are also given. Students of handwriting will find special edification in a collection of *facsimile* signatures of many of the leading luminaries of contemporary medicine. To judge from these specimens of calligraphy, one may say that the popular notion that greatness of genius is measurable by badness of handwriting is not true as far as the medical profession is concerned. Most of the signatures—even including those of the French celebrities—are quite legible, and several—notably those of Professors Nothnagel, Mikulicz, Golgi, and Bassini—may almost be called artistically beautiful.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1894. ELECTION OF MEMBERS.

Meetings of the Council will be held on July 11th, and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, June 21st and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. Francis Fowke, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

Oxford and District Branch.—The next meeting will be held at the Radcliffe Infirmary, at 3.15 p.m., on Friday, April 27th. Notice of papers, cases, etc., should be sent to the Honorary Secretary, W. Lewis Morgan, 37, Broad Street, Oxford, on or before April 18th.

Border Counties Branch.—The spring meeting will be held at Whitehaven on Friday, May 4th, in the afternoon. Papers have been promised by Dr. Maclaren, Carlisle: Dr. Crerar, Maryport: Drs. Jackson and W. I'Anson, Whitehaven. Any member wishing to make any communication please give notice to the Honorary Secretary, J. Altham, Penrith.

Shropshire and Mid Wales Branch.—The spring meeting will be held at the Salop Infirmary on April 17th, at 3 p.m. Dr. Hyla Greves will read a paper on the Prognosis and Treatment of Phthisis; and Mr. T. Law Webb will read a short paper on the Protozoon of Carcinoma, illustrated by microphotographs shown by means of the projector lantern. Members having cases of interest to show are requested to communicate with the Secretary as soon as possible.—H. Willoughby Gardner, Honorary Secretary.

North of England Branch.—The spring meeting will be held at Morpeth on Thursday, May 3rd. Members wishing to bring forward patients, specimens, or papers are requested to send notice at once to the Honorary Secretary, G. E. Williamson, F.R.C.S., 8, Eldon Square, Newcastle-on-Tyne.

South of Ireland Branch.—A Council meeting will be held on Saturday, April 14th, in the School of Art, at 5 p.m. Business: (1) Benefit Society; (2) Midwives Registration Association: (3) Communication—Poor-law Medical Officers, Hospital Abuse.—Philip Lee, Honorary Secretary, 25, St. Patrick's Hill, Cork.

North of Ireland Branch.—The spring meeting will be held in the Museum, College Square North, Belfast, on Thursday, April 26th, at 4 p.m. Gentlemen who wish to read papers, show patients, or bring any other business before the meeting will kindly communicate as early as convenient with John Campbell, M.D., F.R.C.S.Eng., Honorary Secretary, 21, Great Victoria Street, Belfast.

South Wales and Monmouthshire Branch.—The next ordinary meeting will be held at Neath on April 26th. Members wishing to read papers, etc., should send titles to Dr. Sheen, Cardiff, before April 10th.—A. Sheen, D. A. Davies, Honorary Secretaries.

Southern Branch.—The next meeting of the South Wilts District will be held at the White Hart Hotel, Salisbury, on Wednesday, April 25th, at 2 o'clock. Papers will be read by Mr. Luckham, Dr. Williams-Freeman, and Mr. Kingscote. Luncheon will be provided at 1 o'clock, at 2s. 6d. a head. Members wishing to attend to send their names to the Honorary Secretary, H. J. Manning, Laverstock, Salisbury.

BATH AND BRISTOL BRANCH.

THE fifth ordinary meeting of the session was held in the Medical Library of University College, Bristol, on March 28th, Dr. CROSSMAN occupying the chair. There were also forty-eight members present.

New Members.—The following gentlemen were elected:—J. M. M. Thomas, M.R.C.S., L.R.C.P., Bristol; T. W. S. Morgan, M.R.C.S., L.S.A., Pill; C. H. Wakeham, M.R.C.S., L.R.C.P., Wotton-under-Edge.

Registration of Midwives.—A communication on this subject from the Lancashire and Cheshire Branch was read, and was ordered to be acknowledged.

Communications.—Mr. C. A. MORTON read a paper on Aneurysm of Subclavian Artery unsuccessfully treated by Macewen's operation and by Amputation at the Shoulder-Joint; the specimen was exhibited.—Dr. J. MICHELL CLARKE showed specimens from a case of Aortic Aneurysm. The following gentlemen took part in the discussion upon these communications: Mr. BARCLAY, Dr. MARKHAM SKERRITT, Mr. HARSANT, and Dr. ROGERS.—Dr. J. G. SWAYNE read a paper on Ergot of Rye as an Oxytocic, which was discussed by Drs. AUST LAWRENCE and BROOM.—Dr. B. W. H. ROGERS read a paper on the Skin Eruptions seen in Septic Conditions. Drs. SWAYNE, AUST LAWRENCE, FISHER, MARKHAM SKERRITT, and EDGEWORTH, Messrs. WALLEN, MORTON, and BARCLAY, Drs. SWAIN and MICHELL CLARKE, and Messrs. PENNY and PRITCHETT joined in the discussion which ensued.

WEST SOMERSET BRANCH.

THE Spring meeting of this Branch was held at Taunton on March 30th, under the presidency of Mr. R. J. COLLYNS, of Dulverton. Thirteen members and one visitor attended.

Confirmation of Minutes.—The minutes of the last meeting were read and confirmed.

New Member.—William Flegg, M.D., of Bishop's Lydeard, who was already a member of the Association, was elected a member of the Branch.

The late Dr. Currie.—A letter from Mrs. Currie was read, conveying her thanks in the warmest terms to the members of the Branch for the resolution passed at the last meeting after the death of her husband.

Pathological Museum.—A letter from Mr. C. A. Morton, as to sending specimens for exhibition at the annual meeting to be held at Bristol on July 31st next and following days, was read.

Midwives' Registration Association.—A letter was read from the Lancashire and Cheshire Branch, enclosing copy of resolution passed on March 9th by that Branch, protesting against the legislation proposed by the Midwives' Registration Association for the registration of midwives. The meeting decided to take no action in the matter.

By-Laws.—A letter from the General Secretary of the Association, dated March 17th, 1894, as to framing by-laws for the Branch, was read and discussed. It was resolved: "That the West Somerset Branch, having existed for a great number of years without by-laws, this meeting sees no necessity for framing any at present."

Communications.—Mr. RIGDEN exhibited a patient in whom Skin Grafting had proved very successful.—Mr. PART showed a good specimen of a perfect epithelial cast from the large intestine in a case of Desquamative Colitis.—Mr. COSENS opened a discussion on the subject which had been previously settled by the Council, namely, "Common Diseases of the Eye, as met with in General Practice," and he was much thanked for his paper. The subject was discussed in an interesting and animated manner for over two hours.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.

A MEETING of this Branch was held at Aberdeen on March 21st; Professor STEPHENSON, President-elect, in the chair.

Confirmation of Minutes.—The minutes of the last meeting were read and confirmed.

New Member.—Dr. P. Clason Garson (Huntly), was balloted for and admitted a member of the Branch.

Communications.—Professor STEPHENSON communicated a report of a case of Facial Lichen Menstrualis, occurring in a woman, aged 29, which had lasted for three years, which was relieved by treatment directed to menstruation, namely, permanganate of potash 2 grains, thrice daily for eight months, with small doses of Fowler's solution.—Dr. CLARK (Woodside) read notes of a case of Perihepatitis affecting the left lobe, which terminated in recovery after running a protracted course.—Dr. MACKENZIE BOOTH exhibited a patient who had suffered from complete Dislocation of the left Knee-Joint. The patient could walk with some difficulty, but movement of the joint was restricted to an angle of 5°.—Dr. BLAIKIE SMITH read notes of two cases—Locomotor Ataxy and Ataxic Paraplegia—and afterwards exhibited the patients. In the case of locomotor ataxy there was absolute paralysis of both irides, with paresis of the right external rectus muscle. A band of hyperæsthesia encircled the lower part of the trunk, contrasting markedly with the anæsthesia which existed over the thorax, and on the limbs. Other symptoms suggested the presence of general paralysis of the insane in an early stage. The case of ataxic paraplegia was recognised chiefly by the extent of the anæsthesia, the peculiar gait and the exaggerated knee-jerks. Both the patients were males. Neither of them was syphilitic.—Dr. FERDINANDS related his experience of subconjunctival injections. He found sublimate of mercury useful in gummatous scleritis, but neither the sublimate nor the salicylate of soda proved useful in rheumatic scleritis. He was inclined to think that the success of the sublimate lay in its irritant capacity, while its antiseptic property made it a safe injecting solution. He advocated the wider use of subconjunctival injections.

BURMAH BRANCH.

AT the twenty-eighth regular meeting of this Branch, held at the Bishop's Court, Dr. C. F. BRITTO showed a patient recovering from extensive sloughing of the scrotum with denudation of the cord, testes, and a greater part of the perineum.

Surgeon-Captain G. G. GIFFORD read notes of a case of a hospital assistant who contracted severe malarial fever.

The twenty-ninth meeting was held at Surgeon-Colonel S. B. Hunt's residence on January 8th.

New Member.—Surgeon-Captain G. G. Gifford, I.M.S., M.R.C.S., L.R.C.P., was elected a member.

Audit of Accounts.—Drs. Pedley and Davis audited the accounts and found them correct.

Election of Office Bearers.—The members then elected the following office bearers for the year 1894: *President:* Surgeon-Colonel S. B. Hunt. *Vice-President and Treasurer:* Surgeon-Lieutenant-Colonel O. Baker. *Editorial Secretary*: Dr. T. F. Pedley. *General Secretary:* Dr. N. N. Parakh. *Members of Council:* Dr. Pedley, Surgeon-Lieutenant-Colonel H. Johnstone, Surgeon-Lieutenant-Colonel J. Backhouse, Surgeon-Captain R. E. S. Davis, and Dr. H. Findlay.

Secretary's Report.—The HON. SECRETARY read his third annual report.

Communications.—The HON. SECRETARY read a case of Ainhum communicated by Surgeon-Captain C. L. WILLIAMS.—Dr. PEDLEY showed a Collapsible Tube as a means of storing prepared vaccine lymph paste for transit, and some fine Needles mounted on pencil for scarification.

The thirtieth meeting was held on February 8th, at the Freemasons' Hall, where Surgeon-Lieutenant-Colonel O BAKER showed a Hindu lad suffering from profound Anæmia the consequence of anchylostomiasis.

Fees to Medical Witnesses.—The following resolution was passed: "That in the opinion of this meeting it is highly desirable and urgently necessary that rules for the payment of fees to expert or professional witnesses as well as for the reception of certificates from duly qualified practitioners in courts of justice should be framed by the proper authorities." This was forwarded to the Registrar of the Recorder of Rangoon.

The Opium Question.—Dr. T. F. PEDLEY proposed and Dr. DEY seconded that the following resolution, as drawn up by Surgeon-Colonel S. B. Hunt and Dr. Pedley be forwarded to the Secretary of the Opium Commission: "The members of the Burmah Branch of the British Medical Association being deeply interested in the questions now under investigation by the Opium Commission and having many oppor-

tunities of observing the effects of the use of opium in this country they desire to convey to them an expression of their opinion upon this subject, affecting as it does the welfare and happiness of the people among whom the members of this Association follow their profession either in the Government service or as private practitioners. They hold that opium is not only the most valuable medicine which Providence has bestowed upon the human race, but that its use is especially beneficial in the treatment of many of the diseases peculiar to these climates and peoples, and that by its use a vast amount of suffering is relieved both by the hands of native practitioners as well as those who follow European methods of practice. While recognising the fact that the abuse of opium must be followed by injury, they believe that in small quantities it may be used for long periods without serious effects upon the system, and they feel convinced that the accounts which have been circulated in England concerning the effects arising from its habitual abuse have been greatly exaggerated by those engaged in promoting the agitation for its prohibition. They believe that the increasing use of alcoholic liquors in this country is giving rise to far more disease and crime than the use of opium. The members of this Branch Association believe that the measures now adopted by the Government to regulate the traffic in and consumption of opium are in Burmah more than sufficiently stringent to meet the necessities of the case, and that any effort of Government to prohibit or even to further restrict its sale will only result in driving those who now use opium to take to much more harmful substitutes, as alcoholic stimulants and hemp drugs."

SPECIAL CORRESPONDENCE.

PARIS.

Army Nurses.—Overcrowding in Paris Dissecting Rooms.—Hospital Physicians and Surgeons.—Medical Providence.—General News.

In the army there are six categories of male nurses, called *infirmiers*, one regimental, the others stationed in the military hospitals. The hospital nurses are classed in sections; there are twenty-two in France, one to each *corps d'armée*. The seven thus remaining unaffiliated are stationed in Paris, Versailles, Vincennes, Lyons, Alger, Oran, Philippeville, and Tunis. The organisation for supplying army nurses is very defective. They are taken from all classes. The Health Service has not the means to give the necessary instruction to the army male nurses chosen haphazard and quickly by the military authorities. If such instruction be given as the regulations prescribe, an army surgeon must be told off to devote himself exclusively to training the *infirmiers*. The military hospitals are not sufficiently well provided with *aides-major* for the purpose.

This year 1,200 medical students were entitled to dissect in the dissecting rooms of the Paris Medical Faculty. How many of these were actually able to do so is another question. Last year there were from 700 to 800 dissectors, and complaints were frequent and well founded. At the present juncture both space and material are wanting, the latter to such a degree that at the *Travaux Pratiques* of the Faculty there was almost a panic a very short time ago, when the classes of operative surgery began. The question of inducing medical students to remain longer in provincial schools is again on the *tapis*.

According to a list drawn up by the Public Assistance, there are 202 hospital physicians and surgeons, 16 honorary physicians, and 9 honorary surgeons. The oldest physician, Dr. Massenet, is aged 83; Dr. Maisonneuve, the oldest surgeon, is 85. There are 88 physicians and 44 surgeons in active service. The Bureau Central counts 18 physicians and 18 surgeons; there are 7 accoucheurs and 4 assistants.

At the yearly general meeting of the Caisse des Pensions de Retraite du Corps Médical Français, the report, read by the treasurer, stated that, up to March 31st, 1894, £19,000 had been paid in. This year the retiring pensions will be paid. Up to the present all the financial business and office details have been attended to; seven pensions are decided on.

The new law concerning the medical curriculum will be in force after November; the naval Corps de Santé will be affected by it. According to the decree, the three preparatory schools of Brest, Rochefort, and Toulon will cease to exist. Up to the present time these establishments have been considered so necessary that they withstood the cyclone of reform: it is predicted that by the change expenses will be greatly increased without any adequate result.

Dr. Bossy, of Havre, whose centenary was celebrated last year, has completed his hundredth and first year. He declares that he is in perfect health and spirits, and mentally and bodily sound.

CORRESPONDENCE.

OUT-PATIENT HOSPITAL ABUSE.

Sir,—A tradesman, whose income is about £400 a year, and who had been recommended to take one of his family to consult a Liverpool oculist, gave me the following account of his experiences a few days ago: "I called at the doctor's residence, and was told that he was at the Eye Infirmary, and would not be home for some hours. As I had not made arrangements to stay overnight, I said I could not wait so long, and was recommended to go and see him at the infirmary. I did so, and found myself in a room with about 150 or 160 other persons, mostly, so far as I could judge, working-class people like myself and in easy circumstances. Looking around I recognised an old friend of mine from Blackburn, and asked him what on earth he was doing there. He said he came up regularly to have his eyes looked after. 'Why,' I said, 'you could afford to pay this man a guinea every time, couldn't you?' 'Yes,' said he; 'but what is the use of being such a fool as to throw away your guineas when this chap will see you for nothing?' I was never so surprised in all my life. Here was a room full of fellows all being treated for nothing, and most of them smart-looking chaps, apparently earning good wages."—I am, etc.,

Kendal, April 10th. Wm. R. Parker, M.D.

Sir,—The numerous letters which you receive regarding abuses of the hospital out-patient system, and some of which you publish from time to time, show that, whatever the facts of the case may be, the feeling, especially among general practitioners, is very strong that the system is so intimately mixed up with abuses of every kind that it ought at almost any cost to be abolished.

Nevertheless, it is not difficult to see that many of those whose long years of work among out-patients entitle them to speak with knowledge if not authority on the subject, although they may not care to champion the system exactly as it stands, yet find so much good in it that they dread reform almost more than they do the abuses which are spoken of.

With a trace of that optimistic confidence which says that what is is right, it is pointed out that this system, with all its abuses, whether it be a rank weed or a useful plant, is one, at any rate, which grows with great vitality wherever it takes root, and therefore presumedly fulfils a want; and reformers are reminded that institutions, like plants, which are suited to their environment are by no means easily abolished.

In all our dealings with this question we have first of all to recognise the fact that the out-patient system at the London hospitals exists and that it occupies the field. Abuse or no abuse, injury to the profession or no injury, there it is. It has sprung up in a comparatively short time with an energy which indicates an intense vitality which must have some significance. It grows almost independently, it flourishes everywhere, and has attained such development as to excite the consternation of many. Evidently it has its

roots in some need of the public, in some instinct of the profession which cannot be ignored. What are the facts?

First, as regards the public. A considerable number of persons need—not merely would like, but really require—better advice than they can get for the fees they can afford to pay. They need better advice than they can get from four-fifths of the practitioners whom their means permit them to consult, and it is a mere chance whether they hit upon the fifth. It is not easy, perhaps, to find a consultant who will put the case so brusquely as this: self-assertion is not good form, and one hesitates to proclaim one's own superiority for fear of hurting the feelings of those below, but there can be no doubt that this feeling that their advice is something better and superior is at the bottom of the lukewarmness in regard to measures of reform which is characteristic of so many of those who are on the staffs of our larger hospitals.

We are told by those who ought to know that these patients who need this better advice make up about half the out-patients at the hospitals which are not free, while at those which are free they constitute a much smaller proportion, the remainder in each case being composed of patients who either do not need this better advice or whose maladies cannot be cured. Now the ideal system would be that the crowd should go through a process of weeding out and filtering, and that only the filtered residue who really need the skilled advice they cannot otherwise obtain would reach the room of the skilled physician. At least so says a correspondent who is a consultant, but I think it not improbable that many practitioners on the other side of the fence would be ready to maintain that they could give for half-a-crown better advice than the ordinary out-patient does *de facto* get in an ordinary out-patient consultation.

The matter, however, does not exclusively concern the public. Both hospitals and consultants are concerned. Hospitals with schools attached must have cases for clinical purposes, and no means of obtaining them has yet been discovered so simple and convenient and at the same time so useful in training and keeping together the junior staff as the maintenance of a large out-patient department. The physician also must live, and if he is even to begin to live as a physician he must spend laborious years in gaining knowledge which must, above all, be practical.

The hardest thing one can say against any man is that he is theoretical. A practical contact with crowds of patients he must get somehow if he is to become that superior thing—a skilled physician. It is idle then to expect the junior staff to do more in the way of reform than growl a little at the work thrown upon them; certainly they are not likely to enter heartily into schemes for the abolition of out-patient departments wherein they gain what is absolutely essential to their future fame and fortune. Nor are they to be entirely blamed or called mercenary for this. What is the symbolism of the wrapped-up fee which the physician receives? There was a time when there was a soul in medicine, and, although it may be dulled, the soul has not yet quite departed from the body. The physician did all the good he could; he did his best for all—and he did it for nothing. The fee was a something offered by those who could afford it, in order that the poor man might have some means of subsistence, but it was not, and still is not, his right; hence the wrapped-up fee pocketed without investigation. The physician's conscience, then, does not prick him when he sees hundreds of out-patients for nothing, to the disgust and indignation of the general practitioner, for, in fact, he feels it is his duty. His very mission is to use his knowledge and do all the good he can for nothing, and if some golden recompense should ultimately come so much the better.

These, then, are the roots which strike so deep and which make the out-patient system hold its place so firmly—the demands of the public, the necessities of the schools, and the fact that the physician's duty is to use his knowledge without thought of reward. No doubt the general practitioner will say that all three are founded on dishonesty or cant; but they have to be reckoned with all the same.—I am, etc.,

April 11th. S.

Sir,—The following will show that the patients are not always the worst offenders: I had a child who was, I was sure, suffering from an empyema (? influenza). On calling one morning to see him I was told he had been sent into the country. Many months after I was told the true story, which was that the father had taken the child to a consultant in the West End, who called in another, and between them they arrived at the same diagnosis that I had, and sent the child to Great Ormond Street, where the operation I had proposed to do, and which could as well have been done at home, and for which the father could have well afforded to pay my fee, was done. It seems to me the consultants behaved shabbily to me; they were told of my attendance, and could have easily found me in the *Directory*, and also acted improperly in sending a patient, who they could readily see was not a fit recipient of charity, to the Children's Hospital. I will give the Great Ormond Street Committee my name if desired.—I am, etc.,

April 9th. B.

THE NEW SOCIETY OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Sir,—I attended the meeting held on April 5th, under Mr. Page's presidency, about the formation of a new Society of Fellows of the College of Surgeons. My object was chiefly to ascertain, if possible, the views of those who wish to form such a society. I was, of course, aware that if its formation had been determined on, no opposition which the members of the existing Association of Fellows could offer would prevent the trial of a rival society; but I thought that a plain statement to the meeting of the objects contemplated by the Fellows' Association—objects which have been partly secured by the perseverance of that body through ten years of arduous struggle — must have elicited from the proposers of the new society some indication whether they adhere to or differ from those objects. I was ably seconded in this effort by Mr. Norton; and the circular issued by the Association had recently reached, I believe, every Fellow in the room. But my expectations were wholly disappointed. No word fell from Mr. Page or his associates to indicate whether they agree or differ with us. The vague and unmeaning words of Mr. Page's circular were supplemented by speeches equally vague. We were told that it was very improper to have any definite opinions or objects, and "quite fie-fie" to take practical steps for the purpose of getting such opinions supported by votes in Council. We are left then to our own interpretation of the language and action of the founders of this society. Fortunately this is very easy. Apart from the questions of detail which crop up from time to time there are two definite parties among the Fellows; the one which wishes for a new charter by which a larger share in the management of the College shall be given to the general body, and the other which is satisfied with the present state of things. In order that there might be no mistake to which side the promoters of the new society belong we put the views and the claims of the present Association prominently before the meeting, and urged those who are in favour of our views to join us. As no reply was vouchsafed either by the chairman or the other speakers, we can only conclude that they think that the present charter puts the Fellows in their proper position in the College, in which case their society will be an obstacle to all substantial reform. I am not imputing any motives or implying any blame. They may have the most friendly feelings towards us (and I believe many of them really have), but the existence of a society of this kind must necessarily strengthen the obstructive party.

I hope, therefore, you will allow me to use your powerful aid in urging on all the Fellows who think with us the necessity of joining the Association, and promotion the election into the Council of Fellows who will support their views. There is an ambiguous sentence in Mr. Page's circular which appears to insinuate that the Association is a small committee which, without having any truly representative character, might tend to influence and, in the end, control elections to the Council by methods akin to those of the political caucus of the day. I am very little skilled in "reading between lines," or understanding the meaning of ambiguous hints like this, nor do I see how any small committee could

persuade a large body of Fellows to vote for a candidate whom they did not wish to vote for, nor what the methods are which Mr. Page's circular compares to those of a political caucus. The Fellows' Association has always signified in the plainest words possible what its views are: and when it has found candidates who would support those views, it has taken the most open and public means for the purpose of promoting their election. It is in no way ashamed of this course, and has not (as far as I know) any intention whatever of abandoning it. It is the only intelligible method of promoting reform; it has had considerable success hitherto, and will, I believe, ultimately succeed in securing the end we have in view. I firmly believe that the Fellows are generally of our opinion; so I hope the new movement will result in increasing our Association till it includes a majority of the whole body.—I am, etc., T. Holmes.

Great Cumberland Place, April 10th.

THE HYDERABAD CHLOROFORM COMMISSION.

Sir,—I enclose copy of a letter addressed to the Minister of Hyderabad, and beg you will do me the favour of publishing it in an early issue of the British Medical Journal.—I am, etc., Ed. Lawrie, M.B.

Hyderabad, March 22nd.

From the Residency Surgeon, Hyderabad.
To the Private Secretary to the Nawab Vikar-ul-Umbra Bahadur, Prime Minister, Hyderabad (Deccan).
Dated Hyderabad Residency, March 19th, 1894.

Sir,—I beg to acknowledge your letter of March 7th, 1894, enclosing copy of a letter addressed to His Excellency the Prime Minister by Drs. Gaskell and Shore, in which they state that their desire throughout has been to carry on their investigation in a scientific spirit entirely apart from clinical observations; that they reject (without giving any reason) the cross-circulation experiments carried out in Hyderabad; and that they consider the cessation of the respiration before the cessation of the heart's beat is of no value in supporting my conclusion that chloroform does not directly affect the heart in any way.

2. In reply, I have the honour to state that in my opinion it is not necessary for the Minister to answer this letter. In spite of Drs. Gaskell's and Shore's unchanged opinion, the Hyderabad cross-circulation experiments with chloroform hold the field, the Cambridge physiologists having so far made no attempt whatever to disprove our results or to confirm their own. The regrettable circumstance of Drs. Gaskell and Shore differing from me—regarding the interpretation of the fact that respiration invariably fails first in death from chloroform—is a matter of absolutely no consequence in the practical conclusion, and is manifestly due to their exclusively "scientific spirit." It does not, moreover, in the least detract from the value of their assistance to His Highness the Nizam's Government; in fact their aid in making purely physiological experiments is all the more valuable, as they are evidently not biassed by any desire to get practical results. I have the honour to be, Sir, your most obedient Servant, Edward Lawrie, M.B.,
Surgeon-Lieutenant-Colonel, Residency Surgeon.

"UNCERTIFIABLE PATIENTS."

Sir,—We think it would conduce to a clearer conception of the views expressed by Mr. Jessett under the above title in the British Medical Journal of April 7th, if he would specify what he means by the term "climacteric mania." Apparently he does not mean insanity. The condition, however, is outside physiological limits, for it is subsequently referred to as a "disease," which, furthermore, is "purely functional." We submit that the effect produced upon the reader's mind by such terminology is one of confusion. It is to be gathered from Mr. Jessett's observations that persons may suffer at the climacteric from a "temporary mania" (sufficient to justify their confinement in "hospitals," or "wings attached to existing asylums," and of such a nature as to demand "the utmost care and attention") without being insane. What is the correct designation for the mental state of such patients? Clearly mental alienation in some form or other exists in these cases. They require "the utmost care and attention;" therefore the alienation is not slight in degree. Neither is it likely to be a mere temporary disturbance; for, as far as we know, there is nothing of this kind in the mental disorders of the climacteric. If, as seems evident, the cases alluded to by Mr. Jessett show undoubted mental alienation, we quite agree with him that they require great attention, more especially when the suicidal proclivity at the menopause (illustrated in the case which forms the basis of Mr. Jessett's letter) is borne in mind. Proper care and attention can only be given, in our opinion, in an asylum, private or public according to the case. But few patients can be properly treated at home, for economic reasons; and we may add that in practice it is found that the publicity attaching to home treatment is not much, if at all, less than that associated with asylum care. We do not think it would be feasible in practice to institute a half-way house between the home and the asylum, such as Mr. Jessett suggests, since there are, indeed, no half-way cases. The mental changes associated with the climacterium are either physiological or pathological (constituting insanity). If the changes have exceeded healthy limits then the potentialities in the case are endless, the risk cannot be estimated, and the only prudent course is to place the patient in some institution where every means of meeting eventualities is at hand, namely, an asylum. As a matter of fact, the system of voluntary boarders in vogue at certain asylums was introduced to meet the necessities of the class of case for which Mr. Jessett pleads. Certainly this system might with advantage be universally adopted. Mr. Jessett asks: "How many persons suffering from aberration of mind, who have been placed in asylums, have actually become insane from contact with hopelessly insane people as compared to those treated in homes, or at home under proper care and supervision?" We assert confidently that this "contact insanity" is in the highest degree uncommon; that practically it is a myth. The subject, in fact, is one for the novelist rather than the physician. Space fails, or experience disproving this idea could be adduced. It would be more useful to institute inquiry as to the prospects of chronicity in cases from which asylum treatment has been withheld and which have been kept "at home under proper care and supervision."—We are, etc., Maurice Craig, M.B.
Edwin Goodall, M.D.

West Riding Asylum, Wakefield, April 8th.

ASSISTANT MEDICAL OFFICERS IN ASYLUMS.

Sir,—I had no intention of taking any part in the correspondence now going on in your columns, *re* the position of assistant medical officers in asylums, until I came across the remark by an asylum medical officer, to the effect that he despaired of getting the opinion of superintendents on the question, and stating that "their silence might well be taken as an admission of its fairness."

I wish, Sir, to point out that asylum superintendents have as yet had nothing to reply to. The several anonymous letters, presumably from assistant medical officers, may, I think, be divided into two classes: (1) Those who—like "Experientia Docet," "Probatum Est," and "Late A.M.O.," March 20th—content themselves with abuse of their asylums, superintendents, and the regulations under which they have had to work. To these gentlemen I would suggest that they should have the honesty to give their names, and to state where they have suffered the treatment they complain of. Until they do so they can scarcely complain if I, and others, venture to doubt the accuracy of their statements, or to regard them as gross exaggerations.

The second class of your correspondents are presumably from men for whom all heads of asylums cannot fail to have sympathy. They have probably been some years in the speciality, and have, so to speak, stuck where they were, and see little hope of advancement. But I think it must not be forgotten that in many of the larger asylums the pay of the senior assistant is fairly good. I imagine that your correspondents hail from asylums of under 1,000 population, and requiring only two assistants. These men appear to me to think that because they have been so unfortunate as not to get promotion, and because they are getting older, and so, possibly, less fit for another life, a special post should be invented for them. I think in this, beyond bare assertion, they fail to show that any benefit would accrue to anyone but themselves. I can imagine no position worse than that of an old married assistant with no prospect of promotion and no hope of change. Better, far better, for a man where sufficiently early in life he finds he is not likely, either from want of interest or from other reasons, to rise to the rank of superintendent, that he should seek some other walk in his profession rather than sink into that very undesirable person—the chronic A.M.O.

I entirely differ from your correspondents who think that a permanent senior assistant is as essential to the good working of an asylum as is a permanent superintendent, and also with the opinion that it is of no importance how long a junior

medical officer remains, or what may be his status. A policy of this kind would be a block to all promotion, for it is only from good juniors that we can hope to fill up the vacancies in our senior staff.—I am, etc.,

ARTHUR STRANGE, M.D.,
Medical Superintendent, Salop and Montgomery
April 3rd. Counties Asylum.

THE DIAGNOSIS OF SEPTIC ENDOCARDITIS.

SIR,—I am sure that the author of the excellent lectures on Heart Inflammation in Children would wish that any misapprehension of my views should be corrected. Dr. Sturges says: "It is Dr. Sansom's opinion that excessive degrees of dicrotism are not met with unless a severe form of endocarditis be present." By severe endocarditis I understand the septic form attended with the presence of micro-organisms within and about the vegetations of the endocardium. I do not hold the opinion Dr. Sturges ascribes to me, and I have never held it. What I did say was that when there is a concurrence of signs, often obscure, suggesting septic endocarditis, the discovery of an extremely low arterial tension (perhaps unsuspected) may determine the diagnosis.

My words are: "The continued manifestation of very low tension, with murmurs, perhaps, of very slight intensity, there being marked physical depression and, perhaps, some slight mental disturbance, justify the diagnosis of grave endocarditis of septic origin."[1] I would not rely on the pulse signs alone.

It has been thought that the diagnosis of septic endocarditis may be made from an inspection of the temperature chart—that the peaks representing high elevations and rapid falls are characteristics of the disease—but I have found[2] that this sign cannot be relied upon, for the grave disease can progress without elevation of temperature. It is in cases where the diagnosis is very difficult that the observation of the vasomotor paralysis indicated by the extremely dicrotic pulse comes as an important indication.—I am, etc.,

Harley Street, April 9th. A. ERNEST SANSOM, M.D.

MEDICAL DEFENCE UNION.

SIR,—Will you allow me, through your columns, to request members or would-be members of the Medical Defence Union to direct any communications relating to the Union to me at 64, Longridge Road, S.W., for the present.—I am, etc.,

A. G. BATEMAN,
April 9th. Honorary Secretary.

EPIDEMIC JAUNDICE AND INFLUENZA.

SIR,—Since 1888 there have been in this district three distinct epidemics of jaundice. The first occurred in the autumn of 1888, and was confined to an area of about a mile all round; there were twenty-three cases, and all in children. The second was in July of last year, fifteen cases coming under observation; two of the cases were adults. The third was in January of this year, about twelve cases coming under my notice, though I was aware of the fact of there being a considerable number more.

In almost all, when one child in a family developed it, the rest as a rule followed suit, and with the exception of the two adult cases in July, 1893, the disease was strictly confined to children. As to its causation, I was quite, and still am, at a loss. Certainly as regards the theory that it is either a precursor or sequela of influenza, my own experience makes me rather sceptical, and makes me look upon it more as a disease *per se* of an epidemic nature, and to a large extent confined to children. My reasons for my scepticism as regards its being allied to influenza I now tabulate:—

1. The epidemic of 1888 took place at a period antecedent to the appearance of influenza in an epidemic form in this country.

2. During the great epidemic of influenza in 1891, out of several hundred cases I did not come across one of jaundice.

3. Though influenza was endemic in the country in July of last year, in the area affected by the epidemic jaundice I neither had nor knew of a single case of influenza.

4. Just now there are three of the families suffering from influenza who in January last had epidemic jaundice. Two of the children in one family and one in another have escaped the influenza as yet, but it has included the father and mother in both cases, who in January escaped the epidemic of jaundice.—I am, etc.,

S. Boswells, N.B., April 2nd. WM. L. CULLEN, M.B.

[1] *Diagnosis of Diseases of the Heart*, p. 450.
[2] *Loc. cit.*, p. 327, *et seq.*

RECTANGULAR ANKYLOSIS OF HIP-JOINT.

SIR,—In the discussion on Mr. Heath's cases at the Clinical Society reported in the BRITISH MEDICAL JOURNAL of April 7th what I wished to say was, briefly, that there were many cases of ankylosis of the hip which should be operated on by removal of a wedge and free division of soft parts, and that one of Mr. Heath's cases would have shown an improvement even on the actual excellent result had this been done. Further, my thirty operations had, to speak accurately, nearly all been performed on strumous cases. Nine were reported by me in the JOURNAL for February 9th, 1884. If there are any tuberculous foci at the site of operation, a wedge excision removes them. At the same time, it is only in the minority of cases that simple osteotomy does not suffice.—I am, etc.,

Grosvenor Street, W., April 9th. C. B. KEETLEY.

MEDICO-LEGAL AND MEDICO-ETHICAL.

GWYNNE-VAUGHAN v. GWYNNE-VAUGHAN AND GRIFFITHS.

IN the Divorce Court on April 10th, the Lord Chief Justice and a special jury concluded the hearing of the suit Gwynne Vaughan *v.* Gwynne-Vaughan and Griffiths, brought by a farmer for a divorce on the ground of the adultery of his wife with the co-respondent, Dr. T. D. Griffiths, of Swansea. Mr. Lockwood, Q.C., and Mr. Searle appeared for the petitioner; Mr. T. Terrell and Mr. Sargeant for the respondent; and Sir E. Clarke, Q.C., Mr. Barnard, and Mr. Ivor Bowen for the co-respondent. Dr. Griffiths, the co-respondent, further cross-examined by Mr Lockwood, Q.C., said that he did not write telling Mr. Gwynne-Vaughan he had ceased to attend his wife. At this point the jury desired to retire. They did so, and returned finding that the respondent had not committed adultery with the co-respondent, and that the co-respondent had not committed adultery with the respondent. Mr. Lockwood said that on the question of cruelty he could have pointed out to the jury how flimsy the evidence was against the petitioner. His lordship said he thought so too. Mr. Terrell said that the cruelty of the condonation would not be pressed, in the hope that hereafter the petitioner and the respondent might live together again. Both of these charges would be withdrawn. At the request of Sir E. Clarke, Dr. Ebenezer Davis, a surgeon practising at Swansea, was examined. He said: In 1891 he was called in to attend Mrs. Gwynne-Vaughan. He was present when the operation was performed. There was no ground whatever for the suggestion that any improper operation was performed. The petition was then dismissed with costs as against Dr. Griffiths, the usual order being made for the wife's costs. The jury expressed their deep sympathy with Dr. Griffiths in the unfounded charge which had so long been hanging over his head. His lordship said he was glad to hear that, and in it he quite concurred.

LOGIE v. MAXWELL.—A LIBEL CASE

(Before Mr. JUSTICE HAWKINS and a Special Jury.)

THIS was an action to recover damages for libel and slander; and the defendant by his pleadings denied liability, and also pleaded privilege. Both the plaintiff and the defendant were medical men in practice at Woolwich. The plaintiff, Dr. Logie, in 1885 left Bishop Auckland, and became assistant to Dr. Sharpe, the business being carried on in their names at Woolwich. The plaintiff entered into a bond that he would not, whilst he was assistant to Dr. Sharpe, nor after that service had ended, practise within three miles of the place of business of Dr. Sharpe. In 1887 the plaintiff left Dr. Sharpe, and entered into a partnership with Dr. Parkin at Tunstall, in Staffordshire. In 1888 Dr. Sharpe died, and the plaintiff sought to buy his practice, and at the end of that year left Tunstall, and commenced practice at Woolwich, his view being that the bond was put an end to by the death of Dr. Sharpe. In February, 1889, he applied for the position of medical officer to the Woolwich branch of the Hearts of Oak Benefit Society; and in September, 1891, Dr. Butler, who was medical officer for the East district of the Woolwich Union, appointed him to carry on his business whilst he was away owing to ill-health. Dr. Butler died in June, 1893, and the plaintiff sought to succeed him in his office, but was not successful, and Dr. Fuller was elected. The plaintiff now complained that, pending the election, the defendant wrote to Colonel Martin Frobisher, one of the guardians, and spoke to one or two other guardians about the plaintiff. These communications were to the effect that plaintiff in setting up at Woolwich had acted contrary to his bond; that he had applied to be medical officer to the Hearts of Oak Society, offering to take it for a lower price than was usual, thus trying to undersell his fellow practitioners; that he was not recognised by local members of the profession, and that a gentleman should be appointed whom local professional men could meet. The plaintiff lost the election, and it was suggested that this result might probably be due to what had been said of him by the defendant. There was some evidence that the slander had been communicated by the defendant to other persons than guardians; and there was also evidence that a number of medical men at Woolwich had no objection to associate with the plaintiff, and that it was not true that he was not recognised by the medical practitioners at Woolwich. Mr. Jelf, upon the conclusion of the evidence for the plaintiff, submitted that no case had been made out, that the occasion was privileged, and that there was not a tittle of evidence to

show malice on the part of the defendant. Mr. Justice Hawkins had no doubt that the occasion was a privileged one, but he thought it better that he should not stop the case. Mr. Jelf said that under the circumstances he should call no witness for the defence; and he addressed the jury, contending that there was no evidence whatever to show malice on the part of the defendant, and without such evidence he said they would not be justified in finding a verdict for the plaintiff. The jury retired, and at the end of three-quarters of an hour they returned and gave a verdict for the defendant. His lordship entered judgment in accordance with the finding, but postponed any application as to costs and as to a certificate for a special jury. Subsequently Mr. Justice Hawkins declined to give the plaintiff Dr. Logie any costs.

THE ROYAL NATIONAL PENSION FOR NURSES, *v.* THE RECORD PRESS, LIMITED.—A LIBEL CASE.

Justices Wright and Bruce, in the Queen's Bench Division, on April 10th, heard the suit of the Royal National Pension Fund for Nurses, *v.* The Record Press, Limited.—Mr. Finlay, Q.C. (with him Mr. Longstaffe) said that the plaintiff's association was formed for the purpose of providing a system of assurance for nurses, but it was not a commercial association, and they sought for no profit. The defendants were printers of literature in connection with nurses. The action was one of libel printed in the *Nursing Record* on July 22nd, 1893, in which it is said that nurses who insured with the plaintiffs would have to pay from 20 to 26 per cent. higher premiums than they would have to pay in old-established commercial offices. The defendants delivered their defence to the action, but afterwards obtained an order to allow the withdrawal of this defence. Against this the plaintiffs appealed, and it was urged that their lordships should say that it was not a case which should be sent down to be disposed of in the Sheriff's Court, but in the High Court, where the amount of damages should be assessed. Further, the plaintiffs asked that there should be an injunction to restrain any further publication of the libel. It might be said in the Sheriff's Court that the plaintiffs were a charitable institution, and therefore had suffered no pecuniary damage from the libel, but the contention of the plaintiffs was that nurses who acted upon the statement in the *Record* would be likely to be deprived of the benefit of the plaintiff's institution, and that, under these circumstances, the case was one for substantial damages.—Mr. Justice Bruce inquired whether the learned counsel could not now arrange the amount of the damages which should be recovered.—Mr. Finlay said they had already offered that if the defendants would make a proper apology, to be sufficiently published, they would withdraw from the action.—Mr. Linden Bell, for the defendants, said that he admitted that his clients were wrong in their calculations, but it was a *bonâ-fide* mistake, and they would, under these circumstances, consent to judgment, and they would pay the costs of the action and of advertising the apology in two papers, but he asked that the present appeal should be dismissed with costs.—After some discussion it was arranged that the matter should stand over for the terms of the apology to be settled, and there should be a verdict for the plaintiffs for 40s. damages and costs, and that the defendants should consent to there being an injunction.

BEATTY *v.* CULLINGWORTH.

In the Queen's Bench Division on April 10th, Justice Grantham and a common jury heard the suit of Beatty *v.* Cullingworth, an action to recover damages for assault, false imprisonment, and malicious prosecution. Mr. Candy, Q.C., and Mr. H. G. Farrent were for the plaintiff; and Mr. Cock, Q.C., and Mr. Bankes for the defendant.

It was stated that the plaintiff was a nurse in a Dublin hospital, and the defendant was a well-known surgeon in Brook Street. The plaintiff some time ago held a position in the British Association for Nurses, and in August, 1892, she had occasion to call upon the defendant to perform an operation upon her, the necessity for which was obvious to medical men. According to the plaintiff's case, he promised to perform it only to a certain extent, but he found it necessary to go further. On July 10th, 1893, she went to the house of the defendant to see if anything could be done for her. She had brought an action against the defendant, but that action was not proceeded with, a fact that had damaged her in her profession. She asked for an apology, and the defendant, not knowing the action against him had been discontinued, refused to have anything to do with her. The plaintiff refusing to leave his house, a policeman was called, and the plaintiff was given in charge. The magistrate discharged her.

The plaintiff's case was that they threatened to put her into a lunatic asylum, and sent for Dr. Savage. She, therefore, insisted upon waiting until the doctor came, but she was not allowed to do so. In her cross-examination the plaintiff admitted that she had threatened to shoot the defendant, and to die on his doorstep.

In his evidence the defendant said that he had made no promise as to carrying the operation only to a certain extent. He made no charge for that operation, and gave up part of his holiday to perform it. In his opinion the operation was absolutely necessary, and saved the plaintiff's life. Afterwards the plaintiff became very excited, and issued a writ against him. So far as he knew the action was pending when she visited him in the following year. He had heard what she had said about shooting him on July 10th, 1893. He was just recovering from a long and severe illness, and was lying down when he received a message that she was at the door. He said that he would see her, and rose to receive her. She said, "Now I hope you are satisfied with having wrecked my life." He said that he did not see that any benefit could come from their talking on the matter, and as it was in the hands of her solicitor she should proceed through him. She said that she would shoot him, and also that she would come and die on his doorstep. He never said anything about putting her into a lunatic asylum.

The jury expressed their opinion that the defendant was justified in the course that he took.

Mr. Justice Grantham expressed his high opinion of the way in which the defendant had given his evidence, and trusted that the plaintiff, having had an opportunity of ventilating her grievances, would form a better opinion of him.

Verdict for the defendant.

AN AMERICAN JUDGE ON MALPRACTICE.

Judge McAdam, of New York, recently delivered an address before the Society of Medical Jurisprudence on the subject of malpractice, from which we take the following extracts: Malpractice is bad or unskilled practice in a physician or other professional person whereby injury is caused. Malpractice can only be affirmed where the physician has set aside established principles and neglected to employ means which are universally held to be necessary in the given case. The reasonable and ordinary care, skill, and diligence which the law requires of physicians and surgeons is such as physicians and surgeons in the same general neighbourhood in the same general line of practice ordinarily have and exercise in like cases. One practising in a small town or sparsely-settled district is not to be expected to exercise the care and skill of one residing in and having the opportunities afforded by a large city. He is bound to exercise the average degree of skill possessed by the profession in such localities generally. The burden of proof is upon the plaintiff to show that there was a want of due care, skill, and diligence. The mere failure to effect a cure raises no presumption of the want of these. A physician and surgeon engages to bring to the treatment of his patient care, skill, and knowledge, and, while exercising these, he is not responsible for mere errors in judgment; he is chargeable with knowledge of the probable consequence of an injury or of neglect in his treatment or unskilful treatment. Physicians and surgeons should keep up with the latest advance in medical science and use the latest and most improved methods and appliances, having regard to the general practice of the profession in their locality. If they depart from generally approved methods, and the patient suffers an injury thereby, they will be held liable, no matter how honest their intentions or expectations of benefit to the patient. The failure to use the most improved methods is not conclusive of negligence; if those used were reasonably safe and such as were employed by other reputable practitioners in the neighbourhood no liability is incurred. Yet it is advisable for all to recognise the progress of science and to keep abreast of it to avoid charges which are easily made and are lasting in their effects though unwarrantable by the facts.

CORONERS AND *POST-MORTEM* EXAMINATIONS.

The proceedings at a recent inquest lead us to draw attention afresh to the necessity of conducting *post-mortem* examinations in as complete a manner as possible whenever the cause of death is doubtful, or when they are ordered for medico-legal purposes.

In the case in question a man had dropped dead on the platform at Vauxhall, after hurrying upstairs to catch a train. A medical man, who had been instructed to make a *post-mortem* examination, said he was of opinion that death was due to disease of the heart producing syncope. Finding that the state of the heart was sufficient to account for death he had not thought it necessary to open the head. He explained that he made it a practice not to disfigure the head unless it was absolutely necessary. The coroner, quite properly, said it was not a question of disfigurement, but of correctly ascertaining the cause of death, and asked the doctor to return to the mortuary and complete his examination. In medico-legal cases there can be no doubt that the pathologist should hold himself apart, as far as possible, from the clinician. The very object of the *post-mortem* examination is to check the observations made during life not to confirm them. If the discovery of organic heart disease, which might prove fatal on exertion, were to be accepted as sufficient cause of death, the unfortunate possessors of cardiac *bruits* would never be safe from the machinations of evildoers. It should be understood and recognised by the public that in cases of unexpected death not only will a *post-mortem* examination be made, but that it will be of a searching character, and that portions of the viscera will be preserved for examination in regard to poisons if that should seem desirable. For the safety of the living the investigation of all doubtful deaths should be complete.

ILLEGAL OPERATIONS.

At the Central Criminal Court on April 11th, before Mr. Justice Kennedy, Arthur Edwin Sharp Evans, 54, described as a medical assistant, was indicted for having, on October 9th, 1893, unlawfully used a certain instrument on Edith Olive Banister. Mr. Charles Mathews, Mr. Bodkin, and Mr. Hewitt prosecuted; Mr. Rooth defended. Mr. Mathews said the prisoner for some years prior to November, 1893, had been a lodger at the house of Mr. Baker, of 68, Wrotham Road. In January Mrs. Baker was convicted of the manslaughter of Edith Olive Banister. A lodger in the house, named Cole, saw Miss Banister going to 68, Wrotham Road, in the company of Mrs. Baker. On October 11th, the young woman called there again, and, according to the evidence of Mrs. Baker, she made certain statements to Evans, who went with her alone to the bedroom. Death ensued on the morning of November 3rd. The medical gentleman having declined to certify, an inquest was held on November 7th. Mrs. Baker was called as a witness, and on the termination of the inquiry she was arrested and charged with having caused the young woman's death. On the same day the prisoner disappeared from his apartments in the Wrotham Road, and went to a common lodging house in the Balls Pond Road, where he was arrested. The jury found the prisoner guilty. The milkman, Warland, who was convicted, on April 10th, of the manslaughter of Rosa Reed, was placed in the dock for sentence. Warland was sentenced to twelve months' hard labour, and Evans to three years' penal servitude.

DOCTOR OR SURGEON-DENTIST.

R. G.—Inasmuch as no benefit can, in our opinion, accrue to the faculty or the public by according insertion to our correspondent's views on the subject therein referred to, we deem it best to abstain from any comment thereon.

A QUESTION OF FEES.

S.—We think that a fee of 10 guineas is not at all excessive for a journey of forty-nine miles and back, undertaken at the request of a man who was in good circumstances and who preferred the attendance of his own medical man to that of a stranger, for the performance of a minor operation often involving a good deal of trouble and inconvenience.

NAVAL AND MILITARY MEDICAL SERVICES.

ARMY MEDICAL STAFF EXCHANGE.

The charge for inserting notices respecting Exchanges in the Army Medical Department is 3s. 6d., which should be forwarded in stamps or post office order with the notice. The first post on Thursday mornings is the latest by which these announcements can be received.

A SURGEON-CAPTAIN, likely to go abroad next trooping season, wishes to exchange with an officer who has just returned home. Reply to "Surgeon-Captain," care of Messrs. Holt and Co.

THE NAVY.

THE following appointments have been made at the Admiralty: ROBERT BENTHAM, Staff-Surgeon to the *Colossus*, April 5th; ROBERT F. BOWIE, Surgeon to the *Calypso*, April 17th; THOMAS D. HALAHAN, Surgeon to the *Wildfire*, April 6th.

INDIAN MEDICAL SERVICE.

SURGEON-MAJOR-GENERAL W. F. DE FABECK, M.D., Surgeon-General with the Government of Madras, has, it is said, been recommended by his Government for an extension of his appointment for one year, from next month.

ARMY MEDICAL STAFF.

SURGEON-CAPTAIN C. S. ROBINSON is placed on temporary half-pay on account of ill-health, April 7th. His commission dates from February 2nd, 1884. He arrived in India for service, April 5th, 1890, but has been on sick leave since October 8th, 1892.

Surgeon-Colonel R. P. FERGUSON, Principal Medical Officer of the Sirhind District, Bengal, has leave out of India for eight months on private affairs

Surgeon-Major-General W. COLLIS, Principal Medical Officer in Ireland, attains the age of 60 on April 14th, and therefore vacates his post, after a tenure of two years. He is to be succeeded by Surgeon-Colonel J. COLAHAN, who was 58 last month.

ARMY MEDICAL RESERVE.

SURGEON-MAJOR GEORGE WYNDHAM MURPHY, having resigned his Volunteer appointment, ceases to be an officer of the Army Medical Reserve, April 11th.

THE YEOMANRY AND RIFLE VOLUNTEERS.

SURGEON-LIEUTENANT (HONORARY SURGEON-MAJOR) J. C. WOODBURN, M.D., Lanarkshire (Queen's Own Royal Glasgow) Yeomanry, has resigned his commission, April 7th.

Surgeon-Major A. BALLANTYNE, M.D., 6th Volunteer Battalion the Royal Scots (formerly the 2nd Midlothian), is promoted to be Surgeon-Lieutenant-Colonel, April 7th.

Surgeon-Lieutenant R. BAILLIE MACBEAN, M.B., 3rd (Dumfries) Volunteer Battalion the King's Own Scottish Borderers, has resigned his commission, which was dated June 7th, 1890.

The undermentioned gentlemen are appointed Surgeon-Lieutenants in the corps specified, dated April 7th: ANDREW MACGREGOR SINCLAIR, M.B., and THOMAS HOLT, M.B., 2nd Volunteer Battalion the East Lancashire Regiment; LEWIS THOMAS FRASER BRYETT, M.D., 3rd Volunteer Battalion the Queen's Own Royal West Kent Regiment; CHARLES EDWARD MILNES HEY, 1st Tower Hamlets (the Tower Hamlets Rifle Volunteer Brigade).

Second-Lieutenant CORNELIUS FREDERICK GLINN is appointed Surgeon-Lieutenant to the 4th Volunteer Battalion the Devonshire Regiment, April 7th; he joined the corps as Second Lieutenant, May 6th, 1893.

THE MEDICAL DIVISION OF THE WAR OFFICE.

WE had occasion to comment in the BRITISH MEDICAL JOURNAL of April 7th on the unsatisfactory, if not misleading, reply given by the Secretary of State for War to Captain Norton on the duties of the "professional assistant" to the Director-General at the medical division of the War Office and to state that the present distribution of duties in that office is causing considerable dissatisfaction among the officers of the department. It now becomes necessary to develop the subject somewhat in order to justify the remarks we have thought it our duty to make.

An official publication, *The War Office List and Administrative Directory for the British Army*, enables us to ascertain that the respective branches of the War Office have subdivisions, names of officials employed in each, and the business on which each official is engaged. On referring to the detail in the medical division we are forcibly struck by the fact that no duties whatever are assigned to the "professional assistant" to the Director-General, whose name simply appears as such. It is, however, generally known that his duties are of a trifling nature and that, in fact, he is not, as was stated by the Secretary of State for War, the director-general's "deputy in all matters." Were he so why is the professional assistant's title not altered to "Deputy Director-General," which would be more in consonance with his military duties? The designation "professional assistant" carries no meaning to the mind of the department, seeing that strictly professional duties are not performed by him. When, however, we glance at the business of the chief civil *employé* termed "acting principal," who, be it noted, heads the list of medical officers employed, we find him to be a War Office clerk to whom the following work is allotted:

"Administration and correspondence of Army Medical Staff, reliefs, estimates, appointments, promotions, and retirements, services of medical officers, medical boards, arrangements for competitive examinations of candidates and further examination of officers previous to promotion, female nursing service, appointments of officers of the Volunteer Medical Staff Corps and Army Medical Reserve, examination of rules of private practitioners."

The questions that now arise are these: Could not some of these duties be under the immediate control and supervision of the "professional assistant?" Is it right that details so materially affecting army medical officers should be in the hands of a War Office clerk who is, we may say, out of touch with the department? More and more forcibly has expression of late been given by a body of experienced and able officers to the feeling that there is an urgent and crying need of a secretary to the Director-General of the Army Medical Staff, who shall be a medical officer of at least brigade-surgeon's or surgeon-lieutenant-colonel's rank. It seems anomalous that such a secretary should be sanctioned for the Principal Medical Officer of the Forces in India while the Director-General of the Army Medical Staff, whose duties are infinitely more responsible, should be without one.

It is in the experience of army surgeons, no matter what their rank, who have had occasion to visit their headquarter office when requiring information respecting transfers, orders for India, positions on the roster, or exchanges, etc., that, in the absence of the Director-General on duty or on leave, such information is not procurable from his "professional assistant," but is obtainable only through the "acting principal."

It would be easy to extend this article to a considerable length, but we now take the opportunity of only emphasising a widely-spread feeling which exists among army medical officers regarding the present arrangements, and of noting the lines on which reform may well be carried out at the medical division of the War Office. The War Secretary would therefore act wisely by taking the subject into serious consideration with a view to remedying a defect causing dissatisfaction. Our remarks are confined, as must be seen, to pointing out a faulty system and not towards indicating individual imperfections. All that is demanded by the department is that the "professional assistant" shall be, in fact and in truth, Deputy-Director-General, and not relegated to a tertiary position in the medical division which he now undeniably occupies.

RETIRED MEDICAL OFFICERS AND THE SUFFICIENCY OF THE ARMY MEDICAL STAFF.

IT is not easy to arrive at the object of Mr. Webster's query to the Secretary of State for War on April 6th. Putting this, however, for the moment aside, we may safely assert that the strict accuracy of Mr. Campbell-Bannerman's reply is open to dispute. If the reports from India, from Ireland, and other quarters are to be relied on, there is very decidedly a paucity of medical officers for duty, which results in many army surgeons being unable to obtain privilege leave. Further, now that the militia trainings are about to commence, it will be worth ascertaining how many civilian practitioners will be employed in say, for example, the Irish command, so as to set medical officers free for their own duties. To place a reply such as Mr. Campbell Bannerman's on record is to evoke considerable surprise among the officers whose interests are concerned. Will it ever be possible for Cabinet Ministers connected with the army and navy to give plain, accurate, and fully sufficient replies to the questions of members of Parliament on army or navy matters?

In reference to that part of Mr. Campbell-Bannerman's answer which notes that a medical officer voluntarily retired is not eligible for reinstatement, but liable to recall for duty up to 55 years of age, in case of emergency; that is a truism. The Director-General of the Army Medical Staff and Surgeon-Lieutenant-Colonel Briggs, however, afford examples in the past of reinstatement after voluntary retirement, the voluntary action of the latter officer being, of course, subject to qualification.

VENEREAL DISEASES IN THE ARMY.

REFERRING to a review of a return on this subject, which appeared in the BRITISH MEDICAL JOURNAL of March 24th, Francis H. Spencer, M.D., late Surgeon-Captain, Army Medical Staff, sends us his pamphlet, entitled "How Can These Things Be? being an Inquiry into a Social Question," namely, some moral aspects of the Contagious Diseases Acts. The pamphlet, which it is stated was "revised and approved" by Dr. Birkbeck Nevins, was apparently compiled some years ago, and contains extracts from the evidence of experts on the Acts given in the early seventies; it has therefore no direct bearing on our remarks. The writer of the review of Mr. Jeffrey's return, lately submitted to Parliament, has no desire or intention of opening a controversy on the ethics of the repression of venereal diseases, although it is a question he would not shrink from if need be. He dealt with the statistical aspects of the problem as set forth in the return in question, and from these deduced the legitimate conclusion that, but for the intrusion of what he believes to be "perverted" moral sentiments into the matter, much might be done to lessen military inefficiency from venereal diseases by the re-enactment of wise sanitary police regulations in our camps and garrison towns.

VENEREAL DISEASES IN INDIA.

DR. W. DUNCAN (London) writes: Permit me to note some few objections to the Contagious Diseases Act, as administered in India, which ought not to be lost sight of. I have seen virgins not arrived at puberty and concubines under protection of private individuals unconnected with the army presented at lock hospitals by the police for public examination because they were unable to satisfy the demands made on them for blackmail. Within a radius of five miles around a cantonment it was considered unsafe for any ordinary labouring woman to be met alone by a policeman. The cantonment police officials are poorly paid, and earn an income by levying blackmail on prostitutes (one-fourth of a prostitute's earnings are claimed by the police) and others, whom they threaten to bring under cantonment regulations. It was generally believed that any complaint lodged against the police would be rewarded by the cantonment magistrate with confinement in gaol for eight days. I have only once heard of a complaint against lock hospital officials being entertained, and that was before a High Court, after long delays and heavy expenditure. Poor people were unable to protect themselves, and only too willing to stretch a hand for help to people with "perverted moral sentiments," or whatever came in the way. The natives, except the few obtaining profit, detested the measures introduced by the military authorities for the surveillance of their women.

If medical men are really anxious to contend seriously and effectively with venereal disease, and consider legislation to be necessary for such an object, I think it is their duty to agitate for legislative measures in order that venereal diseases may be classified among other dangerous and infectious diseases requiring special treatment. It is fortunately too late in the day to ask for special bonds of servitude or degradation to be placed on any one particular class or sex.

I am aware the Contagious Diseases Act is professedly in abeyance in India. I am equally well aware the military authorities are, or were lately, carrying on operations exactly as when the Act was in force. Such being the case it will be interesting to have some explanation of them, as to the alleged increase of venereal diseases in 1891, etc. Is there again cooking of the returns for a special purpose?

OVERCENTRALISATION IN THE ARMY MEDICAL STAFF.

A long article appears in the *United Service Gazette* of March 31st drawing attention to defects of overcentralisation in the administration of the Army Medical Staff, and also to the strength of medical officers in commands and districts being below that of requirements for the efficient performance of military, sanitary, and professional duties. The necessity of amalgamating the Medical Staff with the Medical Staff Corps, and thus bringing about a homogeneous body, is also advocated. No greater force can be given to this advocacy than the fact that both Lord Morley's and Lord Camperdown's Committees, respectively, in 1883 and 1889, strongly recommended the procedure. Why successive Secretaries of State for War do not carry out this much-needed reform it is difficult to say, except it be that the "military advisers" block the way.

AN OVERWORKED OFFICER.

Surgeon-Captain F. Lindesay Carte, whose death is announced at Allahabad on April 2nd, entered the service on August 1st, 1885, and arrived in India on March 26th, 1889. There can be little doubt Surgeon-Captain Lindesay Carte's death was in no small degree attributable to overwork and the performance of important duty under high pressure, owing to the undermanning of the Army Medical Staff, and the consequent impossibility of obtaining any but sick leave.

DRAINAGE OF BELFAST BARRACKS.

Some £1,800 have been voted to improve the notoriously insanitary conditions of the Victoria Barracks, but not before cases of typhoid fever, owing to escape of sewer air into living rooms, have occurred. There was a strong effort made to postpone and delay the money expenditure on this necessary scheme; but we understand that the Commander of the Forces in Ireland urgently pressed the rectification of grave defects. It is to be hoped the medical and Royal Engineer authorities will see that the work is effectually executed.

SUICIDE IN THE GERMAN ARMY.

According to statistics published in a foreign military paper, the rate of suicide in the German army is 6.33 per 10,000, as against 3.33 in the French and 2.07 in the English army. The causes of suicide in the German army are said to be the exaggerated sense of honour in the German soldier, the fear of punishment, and last but not least ill treatment. The largest number of suicides is found in soldiers from Prussian Saxony and from Silesia. Suicide seems to be more common among civilians as well as among soldiers in Germany than in other European countries. Thus, in the whole population, civil and military, the ratio of suicide in Germany is 2.71 per 10,000, whilst in France it is given as 1.87; in Austria, 1.60; in England, 0.76; and in Spain, 0.35. The cause is stated to be the greater sentimentality of the German race.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF LONDON.

An extraordinary meeting of Convocation was held on Tuesday last. There was a full attendance of graduates from all parts of the kingdom; and Mr. E. H. Busk, Chairman of Convocation, presided. The object of the meeting was the consideration of the report of the Gresham University Commission, and the report of the Annual Committee of Convocation thereon. This latter report, of which an abstract was published in the British Medical Journal for March 31st, page 692, was presented by Dr. T. B. Napier and Mr. H. A. Nesbitt, who respectively moved and seconded its reception. This was carried.

Dr. T. B. Napier moved the first of the five resolutions recommended for adoption by the annual Committee. These resolutions were printed *in extenso* in the British Medical Journal of March 24th, at page 651. The first of the five resolutions was in the following terms: "That Convocation protests against the withdrawal, without its consent, of the Charter of the University of London as proposed by the Gresham Commission, and notes with satisfaction that the Commission quotes, and does not dissent from, the praise which the Commission of 1888 accorded to the University in respect of the manner in which it has fulfilled all the functions hitherto entrusted to it." The mover dwelt upon the high position attained by the University of London, which had most worthily and successfully fulfilled the functions for which it was originated. The report of this Commission proposed that the Charter of the University should be taken away by a Statutory Commission, and a new Charter for the University be created. The Commission had not upon it a single representative of Convocation, and Convocation therefore was justified in not accepting its decisions. He considered that no case had been made out for the forfeiture of their rights, as the University had not failed in its work nor neglected it.

Dr. H. L. Hart seconded the resolution.

Dr. Silvanus Thompson expressed approval of the scheme of the Commission, as it would enlarge the functions of the University, and ought, therefore, to be welcomed. They must consider the higher needs of education in London, and not stand on the restricted pedestal on which they had hitherto stood; otherwise they would be let severely alone, and a new and greater University would arise with which the present University would be out of touch. It would be a gigantic blunder to do anything that would cause the creation of two Universities in London; one, not called the University of London, doing the real work of teaching, and the other called the University of London, restricted to the one narrow groove of examining. The new scheme was large, carefully thought out, and met some of the views that had been often and earnestly debated in Convocation. It was in the main a real working scheme for the University. They should cordially approve of it in the main, and then later they would have opportunities of modifying objectionable details. He moved as an amendment: "That Convocation reaffirms its desire that power should be conferred on the University of London to make provision for teaching and for the advancement of learning, and for original research in London; and, therefore, is prepared to give a general approval of the scheme of the Royal Commissioners."

The Chairman ruled that this proposal was not an amendment.

Mr. Thiselton Dyer said that the speeches of the mover and seconder of the original resolution would have been more appropriate twenty years ago than they were now. They could not ignore the outside world, and argue the question now in debate from the point of view of the University of London alone. The report of the Commission should be discussed on its merits. As to the resignation of the Charter, the grounds on which it was recommended must be examined. Such a glorious prospect of enlarging its boundaries was now offered the University as had probably never before been offered to any other University in Christendom. All kinds of good gifts were before them for acceptance, and they should not too carefully look this gift horse in the mouth. No scheme that could be drawn up would please everybody. They should not be frightened at the threat of a Statutory Commission. There was work for the University on every side, and the University would yet have a glorious future.

Dr. W. J. Collins thought a Statutory Commission might work extremely well, but so did a guillotine. He spoke as a peacemaker, and suggested the formation of a joint consultative commission of the Senate and of Convocation to thresh out the question.

Sir Albert Rollit, M.P., hoped that each side would give and take, and so effect a compromise. If the old antagonism between the Senate and Convocation continued, there could be no early solution of the University question in London; and it ought to be settled soon on all accounts. Without some agreement between themselves the Government could not be expected to try to end the present almost ridiculous position of affairs. The Senate had purposely deferred any definite resolution on the matter until the day following this meeting of Convocation; and conciliation was still possible. He thought Convocation received in the new scheme sufficient consideration for its surrender of its rights under the present Charter. They should not stand too much on their own dignity. The House of Commons might be trusted to see that justice was done to the present University; besides, Convocation could go to the Statutory Commission, which would deal with the question impartially, and listen respectfully to the wishes of all parties of the University. If Dr. Napier's resolution were persevered with, it would be an impassable barrier to the doing of much good work in the future, for it would allow the evil work of the past to continue, and would be used by the petty factions of all kinds who were opposed to the formation of a great metropolitan University. He thought the Commissioners' scheme had great merits, though capable of improvement. The University would develop, and would attain a better type than that of a mere examining body. They should lay aside details and technicalities, and look at the broad view of the question, especially from the side of University education in London. He proposed that they should pass over this first resolution, and proceed to the consideration of the second resolution.

Mr. H. M. Bompas strongly deprecated such a proceeding, and urged the passing of Dr. Napier's resolution.

Sir Philip Magnus proposed, as an amendment, that "The House now pass to the consideration of No. 2 resolution."

Mr. T. S. Osler seconded the amendment. It was not possible to place any entire scheme before a meeting of Convocation, and think it could ever be carried *en bloc*.

Mr. R. H. Hutton thought there was all the difference in the world between the former scheme brought down from the Senate, and the present greatly superior scheme.

Sir Philip Magnus's amendment was carried by an overwhelming majority.

Dr. T. B. Napier moved: "That Convocation reaffirms its desire that power should be conferred on the University of London to make extended provision for teaching and for the advancement of learning and for original research in London according to the schemes of 1886 and 1893 adopted by Convocation, or with modifications thereof."

Mr. W. J. Spratling seconded the resolution.

Mr. F. V. Dickins amidst signs of dissent, read a lengthy amendment, setting forth that Convocation approved of the scheme of the Commissioners.

Professor Carey Foster seconded the amendment.

Sir Albert Rollit, M.P., endeavouring to act as peacemaker, and with a view to co-operation between the Senate and Convocation, was willing to propose a joint consultative committee of those two bodies.

Dr. Silvanus Thompson said the real desire of Convocation was that the University should be expanded into a teaching university.

Mr. A. McDowall thought Sir A. Rollit's suggestion the best way out of the difficulty.

Dr. T. B. Napier was willing to accept the amendment.

Mr. J. Anstie said that if the proposed joint committee was agreed to no other resolutions should be passed, Convocation should go into the Committee absolutely unfettered.

The resolution of Dr. Napier and Mr. Dickins's amendment were both withdrawn.

Sir Albert Rollit, M.P., proposed an amendment which, on a suggestion from Mr. R. W. Hinton, was eventually worded as follows: "That with a view to the speedy and satisfactory reconstitution of the University it is desirable to secure, if possible, the co-operation of the Senate and Convocation, and that with this object Convocation refers the whole question of the reconstitution of this University to the Annual

Committee, with power to nominate members to the Joint Consultative Committee of the Senate and Convocation."

Dr. W. J. COLLINS seconded the amendment.

Dr. SILVANUS THOMPSON doubted if the Annual Committee was the best body to represent Convocation in view of the hostile report on the subject of reconstruction which they had that day presented to Convocation, in which it was said they would rather have a second University in London than agree to the development of the present University in accordance with the Commissioners' recommendations.

Mr. T. S. OSLER acknowledged that conferences between the Senate and Convocation had been failures, but did not doubt at all that the Senate would enter such a consultative committee as that proposed by Sir A. Rollit.

Mr. J. ANSTIE could at any rate remember one occasion on which a free interchange of views took place at a conference between members of the Senate and a deputation of Convocation.

A MEMBER thought Convocation should appoint its own members on the Consultative Committee, and not leave the appointment to the Annual Committee.

Another MEMBER suggested that the names of the members of the proposed Committee might be put before Convocation at the annual meeting to be held on May 8th.

The CHAIRMAN remarked that all notices of resolutions to be moved on that occasion must, according to the standing orders, be in the hands of the Clerk of Convocation at the latest on Tuesday next, April 17th. Moreover, it was not yet certain that the Senate would consent to co-operate with Convocation in such a joint committee as was proposed in the amendment.

The amendment was unanimously adopted.

The meeting then terminated.

UNIVERSITY OF GLASGOW.

FOLLOWING the close of the winter medical session, the professional examinations for degrees in medicine have been carried on and came to an end this week. At this term three of the four professional examinations are held, the final being reserved for July. A proportion of students are still candidates under the old regulations. The following are the returns: For the first examination (old regulations) there were 36 candidates, of whom 12 passed; under the new regulations there were 106 candidates (17 women), of whom 68 passed (15 women) in one or more subjects. For the second examination (old regulations) the candidates numbered 88 (9 women), of whom 55 passed (7 women); under the new regulations the candidates were 2 (1 male and 1 female), both of whom failed. For the third examination (old regulations) the candidates were 67 (2 women), of whom 44 passed (2 women). The medical session, which closed on March 23rd, reopens for the summer on April 23rd.

The following have passed the First Professional Examination (old regulations) for the Degrees of Bachelor of Medicine (M.B.) and Master in Surgery (C.M.): J. M. Bonar, J. T. Bowie, J. R. Burns, W. Colquhoun, M.A., A. Hardie, S. Martyn, J. Millar, G. Moreland, J. M'Craig, L. M. Mackay, T. D. Newbigging, and J. R. Ratcliffe.

The following have passed the First Professional Examination (new regulations) for the Degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.) in the subjects indicated after their respective names (B—Botany, Z—Zoology, P—Physics, C—Chemistry): J. Aird (P., C.), J. Bain (Z.), R. F. Ballantyne (Z., C.), J. Barrowman (Z., C.), W. Bennett (Z., C.), W. A. Benson (B., Z.), G. M. Blair (Z., C.), J. G. W. Boleyn (C.), J. Brunton (Z., C.), W. A. Burns (Z., C.), J. Carruthers, M.A. (B., Z.), A. Clark (P., C.), G. Clark (Z., P.), R. Crawford (B., Z., B., C.), J. Crow (B., C.), J. Cullen (B., Z.), J. L. Davie (Z., C.), J. Drummond (B., Z.), J. F. Findlay (B., P.), J. F. Fleming (B., Z.), D. J. Fletcher (Z., P.), A. Garrow (Z., C.), W. Gibson (B., P.), J. G. Green (P., C.), E. F. L. de Jersey (B., P.), A. Jubb (Z., C.), A. M. Lindsay (Z., C.), W. G. Liston (Z., C.), J. W. Little (P., C.), R. Lunan (C), W. M. Mather (P.), E. W. Milne (Z., C.), S. J. Moore (Z., C.), M. Macdonald (Z., C.), J. W. McDougall (Z., C.), A. F. Macewan (B., Z.), A. G. M'Kendrick (P., C.), L. A. Mackenzie (Z., P.), P. L. Pearce (Z., C.), R. Rennie (B., Z.), J. Shaw, M.A. (P.), J. M. Sloan (Z., C.), S. M. Sloan (B., P.), J. Smith (B.), F. R. Stewart (Z., P.), J. M. Stewart (C.), P. D. Strachan, M.A. (Z., P.), A. Taylor (B., P.), M. L. Taylor (Z., C.), A. D. Thompson (Z., C.), W. Webster (B., P.), E. R. Weir (B., Z., C.), M. W. Williams (Z.). Women Candidates: Auguste Boyes (B., Z., P., C.), Daisy Annabella Murdoch Clark (C.), Jane Grant (P., C.), Mary Longmire (Z., C.), Karen Margrethe Myhre (B., Z., P., C.), Eva M'Call (P., C.), Margaret Wallace Howie M'Neild (P., C.), Margaret Elizabeth M'Neill (P., C.), Mabel Catharine Poulter (P., C.), Jean Effie Prowse (P., C.), Agnes Renton Robson (C.), Marion Jamieson Ross (B., Z., P., C.), Maud Spencer (B., Z.), Agnes Lillias Stiell (P., C.), Sara Whiteford (Z., C.).

The following have passed the Second Professional Examination (old regulations) for the degrees of Bachelor of Medicine (M.B.) and Master in Surgery (C.M.): J. Adam, F. J. Barker, M.A., T. Baxter, H. Borland, G. A. Brown, J. R. Brown, J. Butler, C. H. Cairns, D. M'G. Campbell, M. Dunning, R. M. Fraser, M.A., J. Gardner, R. H. Gemmell, J. Gordon, W. Graham, W. Hansen, G. Hanson, G. Hodge, J. W. Jackson, E. B. Jago, J. W. Johnstone, G. Jubb, J. Kirkland, A. Livingston, C. Lowson, J. Marshall, F. Mort, J. W. Munro, N. M'Callum, D. M'Donald, J. M'Gowan, A. M'P. M'Intosh, W. J. Mackinnon, H. M'Laren, N. Macnair, W. J. Orr, W. S. Paterson, J. A. Paton, R. Rillie, A. Robertson, J. M. Robertson, W. K. Russell, A. Scott, J. Stirling, H. H. Thomson, E. T. K. Walker, H. M. Watson, H. Yearnshaw. Women Candidates: Ursula Chaplin, Christina Fraser, Mary Philip Graham, Norah Kemp, Madge Speirs Maclean, Mildred Ransome, Merbai Ardesir Vakil.

The following have passed the Third Professional Examination (old regulations) for the degrees of Bachelor of Medicine (M.B.) and Master in Surgery (C.M.): (A) Including Pathology: A. R. Anderson, J. Anderson, M.A., J. J. Anderson, W. S. Baird, A. W. Cunningham, J. Drummond, W. D. Findlay, J. L. Forrest, W. Grove, R. Kirk, J. Kirkwood, D. Lewis, J. D. Louttit, J. M'Cash, D. M'Coll, D. MacDonald, A. MacGregor, A. N. M'Lellan, M. N. MacLeod, A. R. Oliver, S. K. Roy, A. Shearer, H. B. Smith, H. Stevenson, M. Watson, W. H. de Wytt. Women Candidates: Alice Lilian Louisa Cumming, Elizabeth Dorothea Lyness. (B) Not including Pathology: T. W. Bayne, J. Boyd, J. C. Davies, R. J. Edwards, S. English, W. Hay, B.D., A. B. Hughes, W. J. Kerr, H. E. H. Lewis, J. Morton, D. M'Donald, C. M'Kay, A. A. M'Nab, D. M. MacRae, J. Sandilands, R. Wilson.

UNIVERSITY OF ST. ANDREWS.

BY a majority of 7 to 3 St. Andrews University Court have resolved, on the motion of Sheriff Campbell Smith, to petition Parliament and Her Majesty in Council, or do whatever may be necessary, to have substituted for said sections in Ordinance St. Andrews, No. 4, the following section for provision: "It will be competent for the University of St. Andrews to confer medical degrees after a certified medical curriculum of five years at recognised medical schools, and after careful examination, conducted under the inspectors of the General Council of Medical Education and Registration of the United Kingdom, on candidates who have not studied medicine at St. Andrews or any other of the Scottish universities, provided that the degrees under this section shall be given only to the licentiates of the Royal College of Physicians of Edinburgh, of the Royal College of Surgeons of Edinburgh, and of the Faculty of Physicians and Surgeons of Glasgow."

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

THE following gentlemen passed the Second Examination of the Board in the subjects indicated:

Thursday, April 5th:

Passed in Anatomy and Physiology.—F. G. Flood, G. M. Harston, and S. E. Aubrey, students of Charing Cross Hospital; A. J. Malcolm, F. S. Lloyd, and J. O. Skevington, of St. Mary's Hospital; A. E. Baker, of Middlesex Hospital; M. H. Thornely, W. H. M. Smith, and F. W. Goldie, of Guy's Hospital; H. G. Harris and M. G. Dyson, of St. Bartholomew's Hospital; A. Osborne, S. N. Babington, and A. E. Elliott, of St. Thomas's Hospital; H. M. Cade and S. R. Smith, of Westminster Hospital; T. S. Novis, of London Hospital; G. R. Barton, J. M. S. Coutts, C. M. Atkinson, and A. W. Oxley, of University College, London.

Passed in Anatomy only.—A. E. B. Crosby, of Guy's Hospital; L. Gilbert, of St. Thomas's Hospital; R. A. MacLeod, of Westminster Hospital; and L. E. L. Parker, of St. George's Hospital.

Passed in Physiology only.—H. W. Abbott, of Charing Cross Hospital; and John N. Walker, of St. Thomas's Hospital.

Ten gentlemen were referred in both subjects, 2 in Anatomy only, and 4 in Physiology only.

Friday, April 6th:

Passed in Anatomy and Physiology.—L. C. Lander, W. Anderson, R. Maxwell, and J. H. Arthur, students of London Hospital; S. C. Clapham, H. V. Smith, E. I. Spriggs, of Guy's Hospital; C. H. Benham, H. Clifford, and W. H. Peile, of University College, London; A. L. Edwards, D. Brewer, A. H. Brodribb, A. E. Payne, and A. P. Eldred, of St. Mary's Hospital; C. G. Seligmann, of St. Thomas's Hospital; J. Broch and S. F. Smith, of St. Bartholomew's Hospital; F. C. W. Clifford and S. Clark, of King's College, London; C. Roberts, of Middlesex Hospital, and A. E. Jerman, of Westminster Hospital.

Passed in Anatomy only.—G. D. Howlett, of St. Thomas's Hospital.

Passed in Physiology only.—A. G. Eastment and G. W. Procter, of Middlesex Hospital; and A. R. Jones, of St. Thomas's Hospital.

Ten gentlemen were referred in both subjects, 3 in Anatomy only, and 1 in Physiology only.

Monday, April 9th:

Passed in Anatomy and Physiology.—A. Howell and H. Rose, students of St. Mary's Hospital; C. T. Anderson, R. P. Rolands, R. T. FitzHugh, W. N. East, N. Lavers, and C. R. Hodgson, of Guy's Hospital; W. Liversedge, W. B. L. Trotter, and H. W. Jackson, of University College, London; A. G. Everard, of Charing Cross Hospital; W. G. Bennett, of St. Thomas's Hospital; E. C. Corfield, J. A. Dredge, and J. L. Maxwell, of St. Bartholomew's Hospital; A. G. Wilson, of London Hospital; D. E. Curine, of Cambridge University and King's College, London; and W. F. Tyndale, of St. George's Hospital.

Passed in Anatomy only.—H. C. Jones and J. A. A. Rouillard, of St. Thomas's Hospital; M. A. Cholmeley, of St. Bartholomew's Hospital; and C. A. Vertannes, of Westminster Hospital.

Passed in Physiology only.—F. C. Blakiston and E. H. Scott, of St. Thomas's Hospital; and T. A. Ellwood, of Charing Cross Hospital.

Ten gentlemen were referred in both subjects, 3 in Anatomy and 4 in Physiology only.

Tuesday, April 10th:

Passed in Anatomy and Physiology.—C. V. Knight, H. Mundy, H. J. Horder, and N. H. Harris, of St. Bartholomew's Hospital; W. S. Nowell, S. F. Rose, H. J. Relph, and G. P. Bletchley, of Middlesex Hospital; E. Chatterton and C. Bolton, of University College, London; J. P. Scatchard and H. J. Marriage, of St. Thomas's Hospital; J. Howells and J. H. Fenn, of London Hospital; A. G. Sargent, St. Mary's Hospital; and H. J. Starling and W. C. Pritchard, of Guy's Hospital.

Passed in Anatomy only.—C. F. Clowes, of Guy's Hospital; and A. H. Burt, of King's College, London.

Passed in Physiology only.—R. H. Hyde, of University College, London; and H. D. Peile, of Guy's Hospital.

Fourteen gentlemen were referred in both subjects, 2 in Anatomy only, and 2 in Physiology only.

Dr. TAULIER has been elected a member of the French Senate, as representative of Vaucluse.

SOCIETY OF APOTHECARIES OF LONDON.

PRIMARY EXAMINATION, Part I. April, 1894.—The following candidates passed in

Chemistry, Materia Medica, and Pharmacy.—M. E. Bennett, Royal Free Hospital; E. Brice, Birmingham; W. A. King, Charing Cross Hospital; W. McCall, Charing Cross Hospital; M. Pantin, Royal Free Hospital.

Chemistry.—P. E. Johnson, Leeds; W. O. Piper, Westminster Hospital; A. D. B. von Rosen, City School.

Materia Medica and Pharmacy.—A. N. Clemenger, St. George's Hospital; H. C. F. Dalton, Charing Cross Hospital; H. Roberts, St. Mary's Hospital.

Biology.—J. G. Gowlland, St. George's Hospital; P. E. Johnson, Leeds.

Pharmacy.—W. O. Piper, Westminster Hospital.

Anatomy and Physiology.—H. R. R. Fowler, Birmingham: F. Harvey, St. Bartholomew's Hospital; J. R. Hatfield, Leeds; R. Jones, Edinburgh; L. R. Marshall, St. Mary's Hospital; C. E. Moore, St. Thomas's Hospital; R. L. Storrar, St. Thomas's Hospital; H. Towers, Leeds; E. M. Vernon, Royal Free Hospital.

Anatomy.—E. E. Evans, Royal Free Hospital; E. J. Howley, Dublin; J. C. McWalter, Dublin; M. Molloy, Charing Cross Hospital; G. H. Ormsby, Westminster Hospital; A. W. Shea, Sheffield; E. G. Smith, Westminster Hospital; T. W. Wakem, Charing Cross Hospital.

Physiology.—J. N. Bahadhurgi, University College; W. A. Bibby, Manchester; G. J. D. Davies, Leeds; C. R. Dearden, Sheffield; A. R. Mansell, St. Bartholomew's Hospital; J. W. F. Rait, University College; C. J. H. Riches, Middlesex Hospital; R. Rudland, Middlesex Hospital; G. H. Wilkinson, Birmingham.

OBITUARY.

ARTHUR HILL HASSALL, M.D.

We regret to announce the death of Dr. Arthur Hill Hassall, whose investigations and writings have covered a wide field and have been spread over so long a period that some of them have been wellnigh forgotten. He had reached a ripe old age, and during fifty years, over which his recently published autobiographical *Narrative of a Busy Life* extended, he was engaged in medical practice, but found time to occupy himself with excellent effect in the study and practical applications of natural history, chemistry, and kindred subjects. Dr. Hassall was educated in Dublin under the auspices of his uncle, Sir James Murray. During his early years of practice, and indeed while preparing for his examination, he began the study of the British fresh water algæ, and his work published in 1845 entitled *History of the British Fresh Water Algæ* was long a standard authority. Starting in practice in London, he spent his spare time in the *post-mortem* room of St. George's Hospital studying the microscopical structure of the tissues, and in 1852 he published the first complete book in the English language devoted to this subject, having 400 illustrations, mostly handcoloured, and entitled *The Microscopic Anatomy of the Human Body*, a book of historic interest.

In 1850 he turned his attention to the question of the adulteration of food, making a series of interesting observations and a microscopical study of coffee and sugar. The attention of Parliament had been specially directed to this subject, and the late Mr. Thomas Wakley engaged him to make a series of analytical reports for publication. During the next three years upwards of 2,500 samples of food were examined and reported on, and in no case was any error made nor did any action result. His book entitled *Adulterations in Food and Medicine*, brought out in 1857, was a work of great public value: and in the year 1856 he was presented with a public testimonial "in recognition of public benefits conferred by his rare scientific skill and indefatigable labour in the detection and exposure of a pernicious and systematic adulteration of food and drink." A Parliamentary inquiry in 1854 was followed by legislation. Later on Dr. Hassall took an important part in the microscopical investigation of the water supply of London, especially during the cholera outbreak of 1854. It was a natural sequence of his previous studies that he should apply the microscope to the study of the urine in health and disease, on which he published an interesting book in 1863.

In 1866 symptoms of consumption showed themselves, and Dr. Hassall suffered from severe hæmoptysis. He had to take up his residence at the Undercliff, Isle of Wight, and there he founded the now important and well-known hospital for consumption built on the separate system, consisting of sixteen houses in all, each house to accommodate six patients, each patient to have a separate bedroom facing south; two sitting rooms in each house to be used in common for the six patients. Within two years after his arrival at Ventnor the first block of two semi-detached houses was completed, and the second block was opened by the Princess Louise on behalf of the Queen, in 1869. There is now accommodation in the hospital for 134 patients. The special principle on which this hospital was planned has been much studied, admired, and imitated throughout the world. In some recent communications to the British Medical Journal Dr. Hassall drew attention to the importance of adopting a variety of precautions with a view to diminish the risk of bacillary infection. In 1877 Dr. Hassall thought it necessary to arrange to spend his winters at least, and ultimately to pass his whole time, in the mild climate of the Riviera, and he removed to San Remo, which was his home for the last fifteen years. His book, published in 1883, on *San Remo, Climatically and Medically Considered*, is full of interesting meteorological and natural history observations.

Dr. Hassall lived an active, useful, and energetic life. He was a man of great scientific aptitudes, and had a quick perception of the application of his scientific instruments and methods. Frail in body and more than once stricken with severe illness, he made even his infirmities the means and the reasons for starting in fresh spheres of utility. Originally a contributor trained under Mr. Wakley, he became in later years greatly attached to the British Medical Journal, and was a valued contributor to our columns.

J. M. BRYAN, M.D.,

Northampton.

Dr. John Morgan Bryan, of Northampton, who died not long ago at the age of 84, was born in 1809. At the age of 19 he commenced his pupilage with Dr. Clark, in due course proceeding to Guy's Hospital. He became M.R.C.S. and L.S.A. in 1833, proceeded to the degree of M.D.Aberd. in 1852, and was made F.R.C.S.Eng. in 1857. He settled in practice in Northampton in 1835.

His connection with the British Medical Association was a long and eventful one, and in it, and especially in the South Midland Branch of it, he always took the deepest interest, and filled various offices in the Branch. In 1860 Dr. Bryan was appointed co-secretary, an office which he continued to fill for seventeen years. During all this time he also undertook the duties of treasurer. He resigned the office of secretary in 1877, but retained the post of treasurer for a further term of six years, his duties of secretary and treasurer thus extending over the long period of twenty-three years.

He was President of the Branch in 1873, and for several years represented the Branch on the General Council and on the Parliamentary Bills Committee of the Association. On his final retirement from the post of secretary in 1877, Dr. Bryan was presented with a testimonial, consisting of a silver salver with suitable inscription, by the members of the South Midland Branch, "as a slight recognition, and to mark their appreciation of the value of his services to the Branch during a long series of years."

In reference to Dr. Bryan's zeal and interest in the work of the Association, a near relative says: "During the many years he was connected with the Branch, his whole heart and soul were in the work, and he was never happier than when attending its meetings, and the social intercourse he had with members in different parts was one of the delights of a busy and arduous life."

Dr. Bryan had a genial disposition and other good social qualities, as well as medical skill, which gave him local name and fame.

His funeral was attended by several representative members of the profession and other near friends, thus testifying to their respect to his memory, and their regard for and appreciation of his social worth.

Dr. F. W. Weber, Dr. of Medicine and Philosophy, died on April 5th at his residence in Nieheim, in Westphalia. Besides being highly valued as a physician in his native province, he was one of the foremost German poets of the day. His chief productions were the epic poems "Dreizehnlinden" and "Goliath," besides a large number of lyrical pieces and excellent translations of Tennyson's "Maud," "Enoch Arden," and "Aylmer's Field." The esteem in which he was held is further shown by the fact that for thirty-two years (1861-1893) he represented his

native district as a member of the Prussian Landtag. He was born in 1813 of humble parentage, and his studies were pursued under under many privations. Although his inclinations originally turned more to philological studies, in which he was always remarkably proficient as an amateur, the healing art was to him a holy duty, which he followed with ardent devotion, even to the last days of his life.

WITH much regret we have to announce the death of Dr. JOHN H. RAUCH, the distinguished American sanitarian. Dr. Rauch, who was 65 years of age, was found dead in his bed on March 25th. He served during the Civil War, and at one time occupied a Chair in Rush Medical College, and also in the College of Pharmacy of Chicago. He organised the first Board of Health of Chicago, and was at one time Superintendent of Public Health in that city. He was one of the founders of the Illinois State Board of Health, of which he was at different times President and Secretary. Dr. Rauch was a recognised authority on medical education.

WE regret to report the death of Mr. D. W. CROMPTON, which took place on March 31st at his residence in Edgbaston. In 1829 he became M.R.C.S.Eng., and F.R.C.S.Eng. in 1843. Some sixty years ago he began practise in Temple Row, Birmingham, and he was afterwards appointed Surgeon to the General Dispensary. In 1835 he joined the staff of the Birmingham Eye Infirmary, but resigned this appointment in 1843, on being chosen to fill a vacancy at the General Hospital, of which institution he was consulting surgeon at the time of his death.

MR. J. H. KIMBELL, of Knowle, who died recently at the age of 74 years, became M.R.C.S.Eng. in 1842, and F.R.C.S.Eng. in 1864. He was Honorary Consulting Surgeon to the Midland Counties Idiot Asylum, Knowle, a medical officer under the Factory Acts, and a justice of the peace for the county of Warwick.

WE regret to announce the death of ALEXANDER KNIGHT, M.D.Glasg., which occurred on March 23rd, at Clones, in his 72nd year. In the district around Rosslea, where for about thirty-five years he had acted as dispensary doctor, his name will long be remembered with respect and reverence.

DEATHS IN THE PROFESSION ABROAD.—Among the members of the medical profession in foreign countries who have recently passed away are: Dr. Lhéritier, who was private physician to Napoleon III, and *médecin-en-chef* of Plombières, aged 85; Dr. Anton Loeff, of Vienna, formerly Chief of Department 14 in the Austrian Imperial Ministry of War, aged 74; Dr. Hampton E. Hill, of Saco, Maine, U.S.A., an excellent surgeon, especially in the sphere of abdominal surgery, aged 44; and Dr. Fritschi, of the University of Freiburg, the oldest *Privatdocent* in Germany, aged 82.

MEDICO-PARLIAMENTARY.

[SPECIALLY REPORTED FOR THE "BRITISH MEDICAL JOURNAL."]

HOUSE OF COMMONS.

The Water Supply of East London.—The discussion on the second reading of the East London Water Bill resulted in the motion for the second reading being carried against the Government by a majority of 1. Professor STUART, who led the opposition to the Bill, argued that the company was already able to give a supply that would be adequate for several years to come, and that the Bill tended to prejudge the question of the water supply of London in future. The promoters of the Bill had spoken of the alarming increase of population in the district served by the company, but the fact was that while 40 million gallons per day were now required, the supply was such that the increased population five years hence would receive 42 million gallons, and ten years hence 44 million gallons per day. As things were the company had on many occasions supplied 37 million gallons per day from the Lee, 10 million from the Thames, and 7 million from their own wells—54 million gallons without additional provision, or 10 million gallons more than were expected ten years hence. The storage, too, of this company was not a six days' supply like that of most companies, but was of 910 million gallons, equivalent to fourteen or fifteen days' consumption; and its filtering appliances also were above the above average. For these reasons the Bill was, in his opinion, unnecessary.—Mr. BOULNOIS insisted on the necessity of ample storage and efficient filtering before the delivery of water to the consumers. The Bill was intended to provide money for these purposes.—Mr. SHAW-LEFEVRE objected to the Bill that its proposals were not in accordance with the recommendations of the Royal Commission. A short delay was unimportant, and in another year the London County Council would be in a better position for dealing with the subject.—The subsequent discussion turned mainly on the urgency of the application for further powers, and on the policy of the County Council as regards the water supply. Ultimately the second reading was carried by 228 votes to 227.

Lunacy Administration in Ireland.—In reply to Mr. MCCARTAN, Mr. MORLEY said that 41 deaths had occurred in Belfast workhouse since November 1st, and 10 inquests had been held. Epileptics were still kept in the lunatic department, but occupied separate dormitories, day rooms, and sick rooms, and associated with the lunatics only in the eating room. A Bill had been prepared dealing with the whole subject of lunacy reform; but as some of provisions its were contentious, he saw no prospect of carrying it into law this session.

Retired Army Medical Officers.—In answer to Mr. R. G. WEBSTER, Mr. CAMPBELL-BANNERMAN said that a medical officer who had retired voluntarily from the army was not eligible for reinstatement in the service, although up to the age of 55 years he was liable to be recalled for duty in case of emergency. At present there was no such emergency, and no paucity of medical officers for service either in India or elsewhere.

Seaports and Cholera.—It will be remembered that last session Mr. Heneage and other members for seaport towns, particularly on the East Coast, made urgent representations to the Government for assistance in defraying the serious expenditure which had been incurred by their constituencies in taking special precautions, by order of the Local Government Board, to prevent the introduction of cholera, precautions taken in the interest, not only of the seaports, but of the country at large. Mr. HENEAGE renewed his appeal to the Government on Monday, but the CHANCELLOR OF THE EXCHEQUER again stated his view that the ports had established no special claim to assistance, and saw no reason to depart from that opinion.

Sanitary Inspectors and Irish Gaols.—Mr. T. M. HEALY asked the Chief Secretary had his attention been called to the directions given by the prison's board to the Governor of Dundalk Gaol not to admit the sanitary inspector of nuisance (under the Public Health Act) within the gaol; had the local magistrates fined the governor in consequence; would the Prisons Board pay the fine; and what steps would be taken for the protection of public health where it was alleged to be imperilled by nuisance within gaol walls.—Mr. J. MORLEY said his attention had been drawn to the case referred to, and to the fact that the governor of the prison had been fined for refusing to obey an order of the magistrates to admit the sanitary inspector to the prison premises for the purpose of inspecting an alleged nuisance. The Prisons Board would, he presumed, under the circumstances, pay the fine. With regard to the last paragraph, the board informed him that it was not possible that any dangerous nuisance could exist in a prison with the existing precautions taken, and having regard to the statutable duties required to be performed by the medical officer and the governor.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

AS OTHERS SEE US.

DR. HEWITT, the Secretary of the Minnesota State Board of Health, in a recent number of the official organ of the Board, has some remarks to offer as to the persistency of small-pox in England, and he as matter of first instance lays blame on the use of lymph other than that of the National Vaccine Establishment at Whitehall. Why blame attaches hereto we cannot quite understand, since wherever the distribution takes place the sources of collection must always be numerous and themselves widely distributed. But Dr. Hewitt goes on to twit the anti-vaccinators—impersonated by "the Editor of a Leicester newspaper"—with creating panic with the view of repealing the compulsory clauses of our vaccination law after having themselves secured the personal protection of vaccination, probably also of revaccination. We do not doubt that such regard for personal safety is much in vogue among these agitators. Again, Dr. Hewitt lays stress on the fact that whilst great store is placed, and rightly placed, on infantile vaccination, the English law lacks in the absence of compulsion as regards revaccination. Very true; and Mr. Ernest Hart has not been slow to show up this fatal omission from our statutes in the recently issued Essays on State Medicine relating to the subject. Again, Dr. Hewitt looks upon our health officers as being in nowise masters of the situation as regards disease prevention, they being far from possessing the "responsible" powers laid upon them in the United States, where they are virtually vested with the sole power of control; but we look forward to the time when our local health officers shall be emancipated from those intolerable petty hindrances to independent action which now too often thwart their best efforts.

We really cannot refrain from quoting a few words of reference to the Royal Commission on Vaccination from Dr. Hewitt's pen. He says: "This Commission has been some five years officially at work and not yet through, though it has published a library of testimony, much of it beside the question, some for no other purpose than strife, a mass of rubbish and evidence upon which it is expected to base its judgment and advice, if it ever gets to an opinion."

There is, however, one point of vast importance which Dr. Hewitt fails to notice—namely, the enormous amount of private scratching which is legally dubbed "vaccination," those ever-growing cases whereby the letter of the law is fulfilled and its spirit entirely evaded. To our mind it is this accepted farcical method of offering so-called protection against small-pox which more than anything else casts a slur upon vaccination, and leads to spread of infection by slight attacks in the victims of the "sixpenny doctor."

ENGLISH URBAN MORTALITY IN THE FIRST QUARTER OF 1894. The vital and mortal statistics of the thirty-three large English towns dealt with by the Registrar-General in his weekly returns are summarised in the accompanying table. During the three months ending March last, 83,349 births were registered in these thirty-three towns, equal to an annual rate of 32.0 per 1,000 of their aggregate population, estimated at nearly ten and a half millions of persons. In the corresponding periods of 1892 and 1893, the birth-rate in these towns averaged 31.6 and 33.2 per 1,000 respectively. In London the birth-rate last quarter was equal to 31.4 per 1,000, while it averaged 32.4 in the thirty-two provincial towns, among which it ranged from 22.4 in Huddersfield, 24.4 in Halifax, 25.3 in Brighton, and 26.6 in Croydon to 36.0 in Cardiff, 36.3 in West Ham, and 37.0 in Liverpool and in Sunderland.

During the quarter under notice 54,639 deaths were registered in the thirty-three large English towns, which corresponded to an annual rate of 21.0 per 1,000, against 25.8 and 22,0 in the first quarters of the preceding two years, 1892-3. In London the rate of mortality was equal to 21.2 per 1,000, while it averaged 20.8 in the thirty-two provincial towns, among which the death-rate ranged from 16.1 in Croydon, 16.4 in Portsmouth, 16.8 in Leicester, and 16.9 in Derby to 23.1 in Manchester, 23.5 in Salford, 25.9 in Norwich and in Liverpool, and 28.1 in Plymouth. The 54,639 deaths registered in the thirty-three towns last quarter included 6,304 which were referred to the principal zymotic diseases, equal to an annual rate of 2.4 per 1,000; in London the zymotic death-rate was equal to 2.8 per 1,000, while it averaged 2.1 in the thirty-two provincial towns, among which it ranged from 0.4 in Brighton, 0.6 in Halifax, 0.9 in Portsmouth, and 1.0 in Blackburn to 3.2 in Burnley and in Liverpool, 3.4 in Salford, and 4.7 in Birkenhead. The 6,304 deaths referred to the principal zymotic diseases included 2,064 which resulted from whooping-cough, 1,392 from measles, 1,106 from diphtheria, 598 from scarlet fever, 518 from "fever" (principally enteric), 465 from diarrhœa, and 161 from small-pox. The 2,064 fatal cases of whooping-cough were equal to an annual rate of 0.79 per 1,000; in London the rate of mortality from this disease was equal to 0.86 per 1,000, and slightly exceeded the mean rate in the thirty-two provincial towns, among which whooping-cough was proportionally most fatal in Plymouth, Bristol, Cardiff, Swansea, Birkenhead, and Sheffield. The deaths referred to measles, which had declined from 1,243 to 773 during the four quarters of last year, rose again to 1,392 during the three months ending March last; in London the measles death-rate was equal to 0.73 per 1,000, while it did not exceed 0.40 in the thirty-two provincial towns, among which this disease showed the highest proportional fatality in Wolverhampton, Leicester, Birkenhead, Liverpool, Salford, and Burnley. The fatal cases of diphtheria, which had steadily increased from 912 to 1,377 in the preceding five quarters, declined to 1,106 during the quarter under notice; in London the death-rate from this disease was as high as 0.67 per 1,000, while it averaged only 0.25 in the thirty-two provincial towns, and was highest in West Ham, Cardiff, Birkenhead, Manchester, and Salford. The deaths from scarlet fever, which had increased from 659 to 889 in the preceding three quarters, declined to 598 during the three months ending March last; in London the rate of mortality from this disease was equal to 0.25 per 1,000, and slightly exceeded the average rate in the thirty-two provincial towns, among which scarlet fever showed the highest proportional fatality in Liverpool, Burnley, Huddersfield, and Bradford. The deaths referred to different forms of "fever" (including typhus, enteric, and simple and ill-defined forms of fever), which had risen from 363 to 936 in the preceding three quarters, declined to 518 last quarter; in London the "fever" death-rate did not exceed 0.13 per 1,009, while it averaged 0.24 in the thirty-two provincial towns, among which it was highest in Nottingham, Liverpool, Sunderland, and Gateshead. The 465 fatal cases of diarrhœa were equal to an annual rate of 0.19 per 1,000; this disease showed the highest proportional fatality in Bolton and Burnley. The deaths from small-pox in the thirty-three towns, which had been 141 and 172 in the preceding two quarters, declined again to 161 during the three months under notice, of which 66 were recorded in Birmingham, 22 in Bradford, 21 in West Ham, 11 in London, and 10 in Bristol.

The rate of infant mortality in the thirty-three towns, measured by the proportion of deaths under 1 year of age to registered births, was equal to 154 per 1,000, and was slightly below the average. In London the rate of infant mortality was 145 per 1,000, while it averaged 161 in the thirty-two provincial towns, among which it ranged from 108 in Halifax, 125 in Portsmouth, 128 in Bradford, and 130 in Croydon to 182 in Birmingham, 185 in Swansea, 193 in Bristol and in Burnley, and 235 in Plymouth.

The causes of 1,038, or 1.9 per cent., of the 54,639 deaths in the thirty-three towns during the first quarter of this year were not certified, either by registered medical practitioners or by coroners. The proportion of uncertified deaths in London did not exceed 0.9 per cent., while in the thirty-two provincial towns it averaged 2.6 per cent. The causes of all the deaths in Croydon during the quarter were duly certified; in the other towns the lowest proportions of uncertified deaths were registered in Birkenhead, Wolverhampton, Portsmouth, and Leeds, and the highest in West Ham, Birmingham, Preston, Halifax, and Hull.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns, including **London**, 6,810 births and 3,923 deaths were registered during the week ending Saturday, April 7th. The annual rate of mortality in these towns, which had increased from 19.2 to 20.0 per 1,000 in the preceding three weeks, declined again to 19.6 last week. The rates in the several towns ranged from 12.7 in Brighton and 14.2 in Swansea to 24.8 in Oldham, 25.3 in Liverpool, and 27.4 in Salford. In the thirty-two provincial towns the death-rate averaged 19.9 per 1,000, and was 0.9 above the rate recorded in London, which was 19.0 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.7 per 1,000; in London the rate was equal to 3.5 per 1,000, while it averaged 2.1 in the thirty-two provincial towns, and was highest in West Ham, Birkenhead, and Birmingham. Measles caused a

Analysis of the Vital and Mortal Statistics of Thirty-three of the Largest English Towns during the First Quarter of 1894.

Towns.	Estimated Population middle of 1894.	Births.	Deaths.	Annual Rate per 1,000 Living. Births.	Deaths.	Principal Zymotic Diseases.	Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-Cough.	Fever.	Diarrhœa.	Deaths of Children under one year of age to 1,000 Births.	Rate per cent. of Uncertified Deaths
33 Towns	10,458,442	83,349	54,639	32.0	21.0	2.4	6,304	161	1,392	598	1,106	2,064	518	465	154	1.9
32 Provincial Towns	6,109,276	49,291	31,650	32.4	20.8	2.1	3,253	150	604	322	378	1,132	373	294	161	2.6
London	4,349,166	34,058	22,989	31.4	21.2	2.8	3,051	11	788	276	728	932	145	171	145	0.9
West Ham	238,184	2,156	1,118	36.3	18.8	3.1	183	21	34	12	50	53	9	4	143	4.7
Croydon	111,921	741	450	26.6	16.1	1.5	43	—	3	4	8	20	4	4	130	0.0
Brighton	118,715	748	556	25.3	18.8	0.4	12	—	—	1	4	4	2	1	140	1.1
Portsmouth	170,973	1,243	699	29.2	16.4	0.9	38	—	3	1	12	13	6	3	125	0.7
Plymouth	87,931	672	617	30.7	28.1	3.1	68	—	—	4	1	57	3	3	235	1.8
Bristol	226,578	1,758	1,290	31.1	22.8	3.0	169	10	16	4	13	102	11	13	193	1.3
Cardiff	148,890	1,338	715	36.0	19.3	2.5	94	1	7	1	19	53	5	8	163	1.0
Swansea	95,399	793	449	33.3	18.9	2.1	49	—	8	4	—	29	5	5	185	1.8
Wolverhampton	85,036	723	485	34.1	22.9	3.1	66	—	44	6	6	5	1	4	159	0.6
Birmingham	492,301	4,090	2,754	33.3	22.4	2.4	300	66	80	18	18	67	25	26	182	5.9
Norwich	105,645	831	682	31.6	25.9	1.6	42	—	13	4	7	7	11	—	177	1.6
Leicester	189,136	1,510	791	32.0	16.8	1.6	74	—	52	9	1	3	7	2	156	2.1
Nottingham	223,584	1,653	1,072	29.7	19.2	1.9	106	3	15	18	9	21	29	11	175	1.0
Derby	98,796	737	416	29.9	16.9	1.2	30	—	1	5	3	9	8	4	144	1.4
Birkenhead	105,627	864	587	32.8	22.3	4.7	124	—	69	3	14	28	3	7	137	0.2
Liverpool	507,230	4,684	3,278	37.0	25.9	3.2	404	1	88	61	26	116	81	31	167	4.2
Bolton	118,303	977	616	33.1	20.9	1.8	54	—	1	3	3	28	7	12	154	1.6
Manchester	520,211	4,208	2,992	32.4	23.1	2.6	338	1	48	27	58	129	27	48	168	1.0
Salford	205,828	1,829	1,207	35.6	23.5	3.4	176	—	53	15	26	50	16	16	178	3.1
Oldham	138,755	967	699	28.0	20.2	2.2	77	19	11	6	7	22	3	9	162	1.0
Burnley	96,478	758	525	31.5	21.8	3.2	77	—	18	21	7	7	7	17	193	2.3
Blackburn	125,797	960	593	30.6	18.9	1.0	30	—	6	1	2	7	4	7	141	3.9
Preston	111,425	959	598	34.5	21.5	1.5	41	—	5	9	3	10	7	7	173	5.9
Huddersfield	98,511	550	441	22.4	18.0	1.1	26	—	—	8	4	8	2	4	173	4.1
Halifax	92,861	565	408	24.4	17.6	0.6	13	2	—	2	6	1	1	1	108	6.4
Bradford	223,985	1,521	1,035	27.2	18.5	1.7	96	22	1	21	8	23	11	10	128	1.1
Leeds	388,761	3,245	1,812	33.5	18.7	1.2	117	2	1	15	19	53	16	11	138	0.7
Sheffield	338,316	2,888	1,623	34.2	19.2	2.1	180	—	22	10	19	103	17	9	160	4.3
Hull	212,679	1,714	1,073	32.3	20.2	1.4	73	1	2	14	4	39	8	5	151	4.6
Sunderland	136,101	1,255	687	37.0	20.2	1.3	45	—	1	10	4	8	19	3	147	1.3
Gateshead	93,372	826	436	35.5	18.7	1.3	30	1	—	2	5	11	8	3	159	1.4
Newcastle-on-Tyne	201,947	1,528	946	30.3	18.8	1.5	76	—	2	3	12	46	7	6	166	0.5

death-rate of 1.9 in Leicester and 2.0 in West Ham, in Birmingham, and in Birkenhead; and whooping-cough of 2.1 in Newcastle-upon-Tyne and 2.5 in Cardiff. The 80 deaths from diphtheria included 63 in London, 3 in Manchester, and 3 in Leeds. Four fatal cases of small-pox were registered in Birmingham, 2 in London, 2 in West Ham, and 1 in Bradford, but not one in any other of the thirty-three large towns. There were 95 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, April 7th, against 87, 85, and 81 at the end of the preceding three weeks: 36 new cases were admitted during the week, against 17 and 14 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,110, against 2,107, 2,103, and 2,120 at the end of the preceding three weeks: 255 new cases were admitted during the week, against 232 and 217 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday last, April 7th, 927 births and 606 deaths were registered in eight of the principal Scotch towns. The rate of mortality in these towns, which had been 18.7 and 20.5 per 1,000 in the preceding two weeks, further rose last week to 21.2, and was 1.6 per 1,000 above the mean rate during the same period in the thirty-three large English towns. Among these Scotch towns the death-rates ranged from 15.4 in Perth to 23.0 in Glasgow. The zymotic death-rate in these towns averaged 2.1 per 1,000, the highest rates being recorded in Glasgow and Aberdeen. The 304 deaths registered in Glasgow included 16 from whooping-cough, 4 from diphtheria, and 1 from small-pox. Seven fatal cases of whooping-cough were recorded in Edinburgh.

SMALL-POX IN MARCH.

IN the four weeks ending March 31st there were in London 60 cases of small-pox recorded, making a total of 184 during the past three months, during which period the registered deaths from the disease were 11 in number. In West Ham March saw as many as 104 attacks, and 26 in Leyton. The most serious prevalence in regard of actual numbers last month was in Birmingham, where some 240 attacks were heard of, over 200 patients remaining under treatment last week. In the Manor of Aston, close at hand, over 30 cases were recorded. At Walsall the disease has shown marked diminution, only 16 attacks occurring in March, and 43 during the quarter. In Handsworth, Staffordshire, the respective figures were 13 and 43. In Bristol there were 40 cases in the month. Manchester had but 4, and Oldham 30 cases, whilst at Bradford rapid decline has been manifested, only 12 cases coming to light last month, against 100 in the preceding two months.

PREVENTION OF SMALL-POX.

IT is cheering nowadays to hear of action taken by a sanitary authority for checking the spread of disease of a character that speaks of regard for the public weal rather than for the pennywise policy so often foolishly adopted. Accordingly we gladly point to what was done last year at Stretford, when a case of small-pox appeared. Dr. Haslop, the health officer, states that small pox, after raging in the city of Manchester and the borough of Salford for some time, appeared in the district in the early part of the year in the person of a young girl, the daughter of a milk purveyor and greengrocer. The case was at once removed to hospital, all the family revaccinated, the entire contents of the shop burnt and compensation given, and the house thoroughly disinfected. Notices were placarded through the township stating that Dr. Brierley, the public vaccinator, would at stated hours vaccinate or revaccinate any person desirous of obtaining this protection. In so far as the case was concerned these measures were attended with success.

SMALL-POX AT WYKE: ILLEGAL QUARANTINE.

SMALL-POX continues to spread at Wyke. In less than two months nineteen cases have been removed to the North Bierley Joint Hospital. When a patient is removed to the hospital the rest of the family are supposed to be kept in quarantine; but it is questionable whether this is effectively done. We should like to ask what is the authority for keeping these people in quarantine. So far as we are aware there is no authority, and the money expended will doubtless be surcharged by the auditor as illegally drawn from local rates, and the members of the sanitary authority signing the cheques mulcted in the amounts.

SMALL-POX AND VACCINATION.

MR. POLLARD, in presenting the weekly health report to the Edinburgh Town Council on April 3rd, said he thought the public ought to have the fact before them that in all the experience the Public Health Committee had had in the last two attacks of small-pox, there had not been a single case of a person attacked with small-pox who had been vaccinated in adult life.

HOW CHOLERA IS SPREAD.

THE United States Consul at Odessa, in reporting on cholera in his district during 1893 draws attention to the Russian custom of taking a meal in the room where a dead body is resting, as many as twenty-five or thirty persons gathering at times for this purpose in small country hovels. As a result, cholera, when that disease is in question, spreads among the feasting party, who only too frequently, as a further consequence, furnish among their number occasions for like feasting, with attendant continued spread of the disease. Thus the epidemic becomes more and more widespread as the result of a custom which the local authorities attempt to stop in the face of desperate opposition. In many instances, such opposition has led to the abandonment of the attempt.

CHOLERA IN CONSTANTINOPLE.

M. PROUST read on April 10th, at a meeting of the Consulting Committee of Public Hygiene, a statement as to the present sanitary situation in the East. There are now on an average from five to ten cases of cholera a day at Constantinople. It is, for the most part, the Greek population that suffers from the plague. No Europeans have been attacked as yet. The disease had invaded several quarters almost free hitherto from infection, such as Therapia and the Princes' Islands. The Sultan has decreed that Ottoman doctors shall make a declaration of all cases under penalty of a fine of from 10 to 40 Turkish pounds, and that foreign physicians who are found guilty of failing to make the proper declaration shall be expelled from the country. As some people who have had cholera caught it from eating shellfish, the sale of all shellfish is prohibited, as well as the sale of vegetables. The cholera has lasted now for some seven months at Constantinople; in all the previous epidemics, except in 1847 and 1848, it had died out by the end of January.

SOME OBSERVATIONS ON ERYSIPELAS AND ITS CONNECTION WITH WASHHOUSES.

MR. JAMES PRIESTLEY (Vestry Hall, Paddington) writes: Permit me to call attention to the following matters of importance:

(*a*) Washhouses in populous districts seem to lessen the prevalence of erysipelas. Thus, the parish with which I am connected is divided into two districts—a north and a south. The population of the north is roughly 2½ times that of the south. Now, in 1891, erysipelas cases were 8⅔ times more numerous in the north than in the south district, whilst scarlet fever and diphtheria were only 4⅔ and 6½ times respectively. In 1892 these numbers were: for erysipelas 4 times, for scarlet fever 3 times, and for diphtheria 3½ times. And again, in 1893: for erysipelas 6½ times, for scarlet fever 4½ times, and for diphtheria 4⅔ times. Erysipelas is, therefore, excessive in the north district, not only in proportion to its population, but also in proportion to the amount of scarlet fever and diphtheria.

A very important factor, probably, in causing this excess is that the north district is not provided with public washhouses, and the south is. The consequence is that a very large proportion of people are living—have to live—from day to day in an atmosphere of almost maximum humidity. Other factors probably are: (1) more mistakes in diagnosis; (2) more dwellings insanitary; and (3) occupations rendering the inhabitants more liable to injury. But these three taken together would not, in my opinion, account for the excess.

It is a curious fact that after the erection of the washhouses in the south district, in 1874, the number of deaths from erysipelas in the parish markedly declined. Thus the numbers for the years 1870-1874 were 15, 17, 18, 27, and 31; but for the years 1875-1881 the numbers were 19, 18, 6, 2, 7, 16, 6, notwithstanding the increase in population. However, this may be merely *post hoc*, and not *proctor hoc*.

(*b*) Hirsch points to a probable connection between humidity and erysipelas; the seasonal curve of erysipelas also does so. But when heat is associated with humidity—as is the case in clothes washing—the growth and development of the micrococcus will all the more be favoured, and suitable conditions afforded for its transformation from a non-pathogenic to a pathogenic form, if such occurs.

ARSENICAL POISONING.

THOSE who are interested in the question of poisoning by arsenical wall papers will find the matter most fully and ably discussed in a monograph by Charles R. Sanger, reprinted from the *Proceedings* of the American Academy of Arts and Sciences, vol. xxix. The subject is treated historically, and finally experiments by the author are quoted which fully confirm the work of Gosio, who found that certain moulds had the power of forming volatile arsenical compounds in the presence of organic matter containing arsenic. The mould which is found to be most active in forming this volatile arsenical compound is the penicillium brevicaule discovered by Saccardo on decaying paper. The presence of the volatile arsenical compound can be recognised by a peculiar alliacious odour which it possesses. Mr. Sanger describes a number of cases of arsenical poisoning of the chronic form, all traceable to wall papers and fabrics.

REGISTRATION OF PLUMBERS.

AT a meeting of the Liverpool Medical Institution on March 29th the following resolution was proposed by Dr. Steeves, seconded by Dr. Carter, and carried unanimously: "That the members of the Liverpool Medical Institution fully recognising the great importance of an efficient system of registration for plumbers are of opinion that such registration should without delay be placed on a firm legal basis by Act of Parliament."

MEDICAL OFFICERS OF HEALTH AND THE ESTABLISHMENT OF TRADES.

VARIOLA asks what trade is specially placed under the supervision of the medical officer of health. Section 112 of the Public Health Act, 1875, enacts that it is illegal to establish certain trades within the district of an urban sanitary authority without their consent. This may be what "Variola" has in his mind, or he may be thinking of the power of regulating the sanitary condition of bakehouses given to the medical officer of health by the Factory and Workshops Act of 1883. The information "Variola" asks for under his second and third heads he will find in Dr. Whitelegge's *Hygiene and Public Health*; and there is a book on *Climate and Health Resorts*, by Dr. Burney Yeo. These volumes are both published by Messrs. Cassell.

MEDICAL CERTIFICATES AND SCHOOL ATTENDANCE.

X. Y. Z. sends a copy of a circular letter which has been addressed to medical practitioners in the borough in which he resides by the town clerk, asking them if they will be willing to give certificates for school attendance purposes gratis, if they are supplied with printed forms. The letter points out that sickness is so often pleaded as an excuse for non-attendance at school, that it is necessary to insist upon the production of medical certificates, and that the fee for obtaining such certificates is a drain upon the resources of the poor. "X. Y. Z." does not believe it has been customary for medical men to charge for certificates; personally he generally declines to give one. While sympathising with "X.Y.Z." when he alludes to the tendency which exists nowadays to multiply requests for the performance of gratuitous work by medical men, we think the object in view in this particular instance is of sufficient importance to merit special consideration.

MEDICAL NEWS.

Dr. Ludwig Pfeiffer, *Privatdocent* at Munich, has been appointed Professor of Hygiene in the University of Rostock.

Post-Graduate Course, Metropolitan Hospital.—A course of lectures and demonstrations will be given by the staff of the Metropolitan Hospital, Kingsland Road, N.E., on Wednesdays, at 5 P.M., commencing May 2nd. The fee for the course of twelve lectures is £1 1s. For full particulars, and for the subjects of the lectures, application should be made to the Honorary Secretary, Mr. Stephen Paget, 57, Wimpole Street, W.

Dr. Sinclair Coghill, Senior Physician to the Royal National Hospital, Ventnor, has received from His Majesty King Alexander, through the Servian Minister in London, the Diploma and Insignia (collar and jewel) of the Fourth Class, Knight Commander of the Royal Servian Order of St. Sava. This order consists of five classes, and is conferred for distinction in science, literature, or affairs.

Queen Margaret College, University of Glasgow (Women's Department).—In addition to various other handsome gifts to the University of Glasgow, the Bellahouston trustees have intimated the following: A capital grant of £5,000 towards the erection and equipment of buildings at Queen Margaret College for the medical and scientific instruction of the students attending there, provided the University Court is willing to undertake the pecuniary responsibility of erecting the buildings in question.

Cremation in France.—So great has been the use made of the crematorium at Père Lachaise Cemetery, that the French Cremation Society recommends the placing of a similar establishment in every one of the Paris burial grounds. Members of the Society, for some reason, are not satisfied with the name usually employed to designate the destruction of the body by fire. At their last meeting they carried a resolution abolishing the name "Cremation Society," and adopting in its stead the title "Society for the Promotion of Incineration."

Inquest on a Herbalist's Child.—At an inquest at Aberavon, reported in the *Neath Gazette*, on the body of an infant boy, aged 2 months, whose parents had not consulted a doctor, the medical evidence was to the effect that death had been due to double pneumonia. The father of the child was a herbalist, and had, it was stated, contented himself with prescribing some carraway water. The jury found a verdict in accordance with the medical evidence, and censured the parents for not calling in medical aid, and the coroner advised the parents to be careful in the future, and not to trust to herbs and their own ignorance in the treatment of the sick, telling them that they should be the last to treat their own children.

The Medical Profession in Russia.—For all that we hear about the overcrowded state of the medical profession, there would seem to be parts of the world in which a doctor is decidedly a *rara avis*. The total population of the Russian empire is said to be 110,000,000, and the number of practising doctors 18,334. This gives about 1 doctor to every 6,000 of the population. But the position of affairs in Russia is hardly adequately expressed by these numbers, for the doctors, like all other people, flock to the towns, and so it happens that, while the proportion in the capitals and large provincial towns is 1 doctor to every 2,700 inhabitants, in the best-supplied village districts the proportion is 1 to 30,000 peasants, and in some of the more remote provinces it is said that there is only 1 to every 120,000 inhabitants.

The Sanitary Institute.—The ordinary general meeting of the Sanitary Institute was held on April 5th, at the Parkes Museum, Margaret Street, Sir G. M. Humphry, the Vice-President of the Institute, in the chair. The annual report, together with the balance sheet and statement of accounts, was received and adopted. Sir Thomas Crawford, Chairman of Council, said, in reading the report, that the work of the Institute had been carried out and extended with good results during the past year. He particularly referred to the lectures on the Sanitation of Industries as a new departure in the work, and to the practical demonstrations now given to students as part of their training for sanitary inspectors. The members and associates of the Institute at the end of 1893 numbered 1,319, and the income for the year amounted to £3,415. The Duke of Westminster was re-elected President. The meeting closed with the usual vote of thanks to the chairman.

The Lansdowne Hospital at Udaipur.—When Lord Lansdowne visited Udaipur, the principal of the Rajput States, in November, 1890, the Maharana decided to build a hospital in honour of the event, and to name it after the late Viceroy of India. The building took three years to construct, and has just been opened by the Governor-General's agent in Rajputana. The building, which is described as a fine one and a worthy specimen of Rajput architecture, is constructed entirely of stone, and presents an imposing façade to the street, flanked on each side by two high towers, and surmounted in the middle by delicate tracery. The ground floor contains a receiving room for patients, a dispensary, an operating room, several spacious wards, and various offices. On the first floor there are several wards and some sick rooms, in which patients can obtain private accommodation by payment.

MEDICAL VACANCIES.

The following vacancies are announced:

ANCOATS HOSPITAL, Manchester.—Resident Junior House-Surgeon. Salary, £50 per annum, with board and washing. Applications to the Secretary.

BOROUGH OF EASTBOURNE.—Medical Officer of Health. Salary, commencing at £250 per annum, and increasing during satisfactory service by £25 yearly to £350. He will be required to act as Medical Officer to the Sanatorium and as Police Surgeon, for which additional sums of £50 and £25 per annum respectively will be paid. Applications to H. West Forvargue, Town Clerk, Town Hall, Eastbourne, by April 24th.

BURY DISPENSARY HOSPITAL, Bury, Lancashire.—Senior House-Surgeon, doubly qualified. Salary, £100 per annum, with board, residence, and attendance. Applications to the Secretary, Mr. Henry Webb, by April 16th.

CITY OF LIVERPOOL INFECTIOUS DISEASES HOSPITAL, Parkhill.—Resident Medical Officer, doubly qualified. Salary, £100 per annum, increasing £10 yearly to £120, with board, washing, and lodging at the hospital. Applications, endorsed "Resident Medical Officer," to be addressed to the Chairman of the Port Sanitary and Hospitals Committee under cover to the Town Clerk, Municipal Offices, Liverpool, by April 23rd.

DENTAL HOSPITAL OF LONDON AND LONDON SCHOOL OF DENTAL SURGERY, Leicester Square. Demonstrator. Honorarium, £50 per annum. Applications to Morton Smale, Dean, by May 14th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Two Assistant Anæsthetists. Applications to J. Francis Pink, Secretary, by May 14th.

DEWSBURY AND DISTRICT GENERAL INFIRMARY.—House-Surgeon, doubly qualified. Salary, commencing at £80 per annum, with board and residence. Applications, endorsed "House-Surgeon," to the Chairman of House Committee, Infirmary, Dewsbury, by May 1st.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, £120 per annum, with furnished house, rent and taxes free; also coal, light, water, and cleaning, or, in lieu thereof, £20 per annum. Knowledge of Welsh desirable. Applications to W. T. Cole, Secretary, Board Room, Bagillt Street, Holywell, by May 15th.

GENERAL HOSPITAL, Birmingham.—Assistant House-Surgeon. Appointment for six months. Residence, board, and washing provided. No salary. Applications to the House-Governor by April 28th.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway Road, N.—House-Physician. Salary, £60 per annum, with board and lodging in the hospital. Applications to the Secretary by April 23rd.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Resident House-Physicians. Applications to the Medical Committee by April 19th.

NEWCASTLE-ON-TYNE DISPENSARY.—Resident Medical Officer. Salary, £250 per annum, with furnished residence. Applications to the Honorary Secretary, R. W. Sisson, 13, Grey Street, Newcastle-on-Tyne by April 20th.

MANCHESTER ROYAL INFIRMARY.—Assistant Medical Officer at the Monsall Fever Hospital, unmarried. Salary, £100 per annum, with board and residence. Applications to the Chairman of the Board, Royal Infirmary, Manchester, by April 21st.

MARTLEY UNION.—District Medical Officer and Public Vaccinator. Salary, £50 per annum and the prescribed extra fees and statutory allowance for vaccination. Applications to A. W. Knott, Clerk, 14, Foregate Street, Worcester, by April 26th.

PARISH OF ST. MARY, STOKE NEWINGTON.—Medical Officer of Health. Salary, £200 per annum. No private practice allowed. Applications, sealed and endorsed "Medical Officer of Health," to Geo. Webb, Clerk, Vestry Offices, 126, Church Street, N., by April 26th.

ROYAL VICTORIA HOSPITAL, Bournemouth.—House-Surgeon and Secretary. Salary, £100 per annum, with board. Applications to the Chairman of Committee by May 1st.

ST. ANDREW'S HOSPITAL, Northampton.—Junior Assistant Medical Officer, doubly qualified. Salary, £150 per annum, with apartments, board, and washing. Applications to the Medical Superintendent by April 25th.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck Street, Cavendish Square, W.—Honorary Physician. Applications to the Secretary by April 30th.

THE COPPICE, Nottingham.—Assistant Medical Officer; unmarried and not more than 28 years of age. Salary, £120 per annum, with furnished apartments, board, washing, and attendance. Applications to Dr. Tate at the Asylum by April 14th.

WEST RIDING ASYLUM, Menston, near Leeds.—Resident Clinical Assistant. Appointment for six months. Board and residence provided. Applications to the Medical Superintendent.

WEST RIDING ASYLUM, Wadsley, near Sheffield.—Fifth Assistant Medical Officer. Salary, £100 per annum, rising £10 annually up to £150, with board, etc. Applications to the Medical Superintendent by April 17th.

WIRRALL CHILDREN'S HOSPITAL, Woodchurch Road, Birkenhead.—Resident House-Surgeon. Salary, £50 per annum, with board, lodging on the premises and washing. Applications to P. W. Atkin, Honorary Secretary, 25, Lord Street, Liverpool, by April 24th.

MEDICAL APPOINTMENTS.

ADDISON, Christopher, M.D., B.S.Lond., appointed Medical Tutor at the Sheffield School of Medicine.

BAYLEY, Cecil, L.R.C.P., L.R.C.S.Edin., L.F.P.S.Glasg., appointed Junior Assistant Medical Officer to the County Asylum, Whittingham, Lancashire.

BAYLEY, J. H., M.B., C.M.Edin., appointed Senior Assistant Medical Officer to the St. Andrew's Hospital for Mental Disease, Northampton.

BERKELEY, G. H. A. C., M.B., B.C.Cantab., appointed Obstetric House-Physician to the Middlesex Hospital.

CONRAN, Patrick Aloysius, L.R.C.P., L.R.C.S.Edin., L.F.P.S.Glasg., appointed Assistant Colonial Surgeon at the Gold Coast, Colonial Medical Service.

COOK, Dr., appointed Medical Officer to the Workhouse of the Plymouth Union, *vice* F. A. Thomas, L.R.C.P.Edin.

CROCKER, J. H., M.B., Ch.B.Vict., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer of Health for the Borough of Eccles.

DAVIES, Mr. T., appointed Assistant Medical Officer of the Infirmary of the Whitechapel Union.

EASTERBROOK, A. M., M.B., C.M., appointed Resident Physician to the Edinburgh Royal Infirmary.

EDWARDS, Mr. A. J., appointed Resident Medical Officer to the French Hospital and Dispensary.

FORREST, Dr. A., appointed Medical Officer for the Fourth District of the Morpeth Union.

GALLETLY, Wm. Gloag, M.B., C.M., appointed Medical Officer and Public Vaccinator to the Northwold District of the Thetford Union.

GARLAND, Edward Charles, L.R.C.P.Edin., M.R.C.S.Eng., reappointed Medical Officer of Health to the Yeovil Town Council.

HALL, W. Thompson, M.B., C.M., appointed Resident Physician to the Edinburgh Royal Infirmary.

HAMMOND, Wm., L.R.C.P.Edin., M.R.C.S.Eng., appointed Medical Officer for the No. 6 District of the Liskeard Union, *vice* J. T. Cheves, M.R.C.S.Eng.

HICKINBOTHAM, J. R., M.R.C.S.Eng., L.R.C.P.Lond., appointed Resident Surgical Officer to the Birmingham Children's Hospital, *vice* E. St. J. Whitehouse, M.R.C.S.Eng., L.R.C.P.Lond.

KEYWORTH, Arthur E., M.R.C.S., appointed Medical Officer of Health to the Marple Urban Sanitary District, *vice* James J. Bailey, M.D., resigned.

LEATHEM, Robert R., M.B., B.Ch.I., appointed Junior House-Surgeon to the Bolton Infirmary and Dispensary, *vice* W. J. Galletly, M.B.Edin., resigned.

LEIGH, Albert, L.R.C.P.Lond., M.R.C.S.Eng., appointed Senior House Surgeon to the Bootle Borough Hospital.

MCKENDRICK, Dr. J., appointed Medical Officer for the First Division of the Greystoke District of the Penrith Union.

NICOLL, J. Vere, M.R.C.S., L.R.C.P.Lond., appointed Honorary Surgeon to the Stoke Newington Dispensary, *vice* William C. Toulmin, deceased.

NICHOLLS, J. M., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer of Health to St. Ives Town Council.

OSWALD, H. Isard, M.B., C.M.Edin., appointed Assistant House-Surgeon to the District Hospital, West Bromwich, *vice* W. A. Rutherford, M.B., C.M.Edin., resigned.

PAGET, Charles E., M.R.C.S., appointed Lecturer in Practical Hygiene at Owens College, Manchester.

PRATT, John Wyatt, L.R.C.P.Edin., M.R.C.S.Eng., reappointed Medical Officer of Health to the Wiveliscombe Local Board.

RANSOME, Arthur, M.D., F.R.S., appointed Professor of Public Health at Owens College, Manchester.

REYNOLDS, Dr., appointed Medical Officer for the Newton Poppleford District of the St. Thomas Union.

RUTHERFORD, Alexander, M.B., C.M.Edin., appointed Dispensary Surgeon at the Bradford Infirmary, *vice* S. A. Shiach, M.B., C.M.Edin.

ANDEMAN, Muir, M.B., C.M., appointed Resident Surgeon to the Edinburgh Royal Infirmary.

SHIACH, S. Allan, M.B., C.M.Edin., appointed Junior House-Surgeon to the Bradford Infirmary, *vice* A. E. P. Hughes, M.R.C.S.Eng., L.R.C.P. Lond., resigned.

STUBBS, H., M.R.C.S.Eng., appointed Medical Officer for the Madeley District of the Madeley Union.

SYME, William Smith, M.B., C.M.Edin., appointed Medical Officer for the Gamlingay District of the Caxton and Arrington Union, and for the Third District of the St. Neots Union, *vice* W. T. Burr, M.B., resigned.

TERRY, John, M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Surgeon to the Royal Surrey County Hospital, Guildford.

TREVELYAN, E. F., M.D.Lond., B.Sc., M.R.C.P., appointed Honorary Assistant Physician to the Leeds General Infirmary.

WAY, William, M.R.C.S.Eng., L.R.C.P.Lond., appointed Junior House-Surgeon to the Clayton Hospital, Wakefield.

WHITEHOUSE, E. St. J., M.R.C.S.Eng., L.R.C.P.Lond., appointed Resident Medical Officer to the Birmingham Children's Hospital.

WHITFIELD, Dr. D. W., appointed Medical Officer for the Iron Bridge District of the Madeley Union.

DIARY FOR NEXT WEEK.

MONDAY.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Clinical evening. Mr. Keetley: Two Cases of Retained Testis presenting Special Points of Interest. Mr. Goodsall: Case of Intestinal Obstruction; Left Inguinal Colotomy; three years later, cause of obstruction having been removed, Closure of Colotomy Opening. Mr. Ballance: Case after Excision of Ankle. Mr. Hurry Fenwick: (1) Case of Thiersch-Gould Operation; (2) Case of Multiple Urethral Growths. Mr. Battle: (1) Case of Twisted Carotid Simulating Aneurysm in a Child; (2) Case of Spinal Rotation without Curvature. Mr. J. Hutchinson, jun.: Case of Secondary Syphilitic Epididymitis. Dr. Lewis Jones: Case of Paralysis of Sterno-mastoid, Trapezius, and Face on One Side. Dr. Guthrie: Case of Osteitis Deformans.

SOCIETY OF MEDICAL OFFICERS OF HEALTH, 20, Hanover Square, W., 8 P.M.—A discussion on the Training and Qualification of Medical Officers of Health, introduced by Dr. Ransome, F.R.S.; Dr. Armstrong, Dr. Sykes, Dr. Parker, and Dr. Manley.

TUESDAY.

PATHOLOGICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. Charters Symonds: Epithelioma of Bladder involving the Urethra. Mr. L. Bidwell and Dr. Abraham: Sections of Skin Formed after Thiersch's Grafts. Mr. G. Heaton: Sarcoma of the Rectum. Mr. S. G. Shattock: Two Specimens of Ectopia Vesicæ. Dr. Norman Moore: Tuberculous Ulceration of Large Intestine. Dr. Newton Pitt: Aberrant Renal Vessels as a Cause of Hydronephrosis. Dr. Habershon: Gangrene of Lung from a Syphilitic Patient. Card Specimens:—Dr. Newton Pitt: (1) Supernumerary Suprarenals; (2) Fat Necrosis of Omentum with Pancreatic Disease.

THE CLINICAL MUSEUM, 211, Great Portland Street.—Open at 2, Lecture at 4.

WEDNESDAY.

EPIDEMIOLOGICAL SOCIETY OF LONDON, 8 P.M.—Dr. Caiger: On the Associated Incidence of Different Infectious Diseases in the Same Subject.

ROYAL METEOROLOGICAL SOCIETY, 25, Great George Street, Westminster, 8 P.M.

THURSDAY.

NEUROLOGICAL SOCIETY OF LONDON, National Hospital for the Paralysed and Epileptic, 8.30 P.M.—Dr. Sharkey: A Case of Cerebral Tumour. Dr. Colman: (1) Dry Museum Specimens of Brain, by Whitwell's Carbolic Method; (2) Three Specimens of Tumours involving the Floor of the Fourth Ventricle. Dr. Risien Russell: Defective Development of the Central Nervous System in a Cat (with lantern demonstrations). Dr. Turner: Tumour of Corpora Quadrigemina. Dr. Tooth: The Peripheral Nerves in Alcoholic Neuritis.

HARVEIAN SOCIETY OF LONDON, 8.30 P.M.—Dr. James Taylor: Lantern Demonstration, "On Points of Clinical Interest in Nervous Diseases."

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTHS.

CASTLE.—On April 5th, at 99, The Mall, Newport, I.W., the wife of Hutton Castle, M.B.Lond., of a daughter.

ROBERTS.—April 4th, the wife of Ernest T. Roberts, M.D., of Keighley, of a son.

MARRIAGE.

ROBSON—PRICE.—On the 10th inst., at Christ Church, Sunderland, by the Venerable Archdeacon Long, M.A., Frederick Robson, M.B., B.S., of Newcastle, to Rebecca Price, of 6, Esplanade, Sunderland.

DEATH.

ROBERTS.—On April 9th, at The Beeches, Lowestoft, Catharine Sarah (Katie), wife of Reginald J. Roberts, B.A., M.B., B.C., and daughter of George Kett, Esq., J.P., Wymondham House, Cambridge, aged 30.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

Communications for the Current Week's Journal should reach the Office not Later than Midday Post on Wednesday. Telegrams can be Received on Thursday Morning.

Communications respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the Journal, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the Journal be addressed to the Editor at the Office of the Journal, and not to his private house.

Authors desiring reprints of their articles published in the British Medical Journal are requested to communicate beforehand with the Manager, 429, Strand, W.C.

Correspondents who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

Correspondents not answered are requested to look to the Notices to Correspondents of the following week.

Manuscripts forwarded to the Office of this Journal cannot under any circumstances be Returned.

Public Health Department.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* British Medical Journal *are devoted will be found under their respective headings.*

QUERIES.

J. M. asks where in this country the "Rongoa" ointment—the extract from the leaf of the Rongoa bush, which has such a high reputation in New Zealand—can be obtained.

Dr. B. B. Macpherson (Southbar, Cambuslang) asks for any information regarding: (1) The application of the antiseptic treatment of wounds in the Franco-German and Russo-Turkish wars, and in recent military operations. (2) The prevalence of pyæmia in the American civil war, the Franco-German,and Russo-Turkish wars.

Galactorrhœa.

A M.B.M.A. writes: I send notes of a case of galactorrhœa, in which the usual remedies have failed to have any effect. The patient's only child is 4 years old, and was weaned when he was 16 months old. She has had severe pains in the breasts all the time; otherwise she has enjoyed fair health. Menstruation slightly irregular. Belladonna, vin. antimon., pot. iod. to 35 grain doses, and acid mixtures have been given, also friction, without any effect whatever, the milk flowing freely from both breasts, and soaking her dress through. I should be glad of the opinion of some of your readers.

Thyroid Extract in Exophthalmic Goitre.

E. S. Yonge, M.B. (Burlington Street, W.), writes: Will you be kind enough to inform me whether feeding with thyroid extract has been found successful in exophthalmic goitre. I can only find a record of one such case, namely, in the British Medical Journal of December 2nd, 1893.

*** Only amelioration has been noticed as far as we are aware, and no actual cure in exophthalmic goitre.

ANSWERS.

Nocturnal Incontinence of Urine.

Another Member writes: I found of use for myself, after several doctors had tried: Tr. nucis vom., 3j; tr. hyoscyam., 3ij; aq. menth., pip., ad 3viij. 3ss ter die. And every morning before dressing took a cold bath, and allowed the spray to run on to the lower part of the spine and pubes. This, with about a month's trial, entirely cured me after fourteen years, in which never a night passed without urinating the bed.

Mr. T. Hawksley (Oxford Street) writes: As a means of preventing incontinence of urine in a boy aged 17 years, I have made for the profession for more than twenty years a "jugum penis" for that purpose, and have not yet heard of its failing in a single instance.

The "Tyson Cure."

Medicus.—The "Tyson Cure" has been vigorously denounced in some Scotch papers by someone who seems to have made a trial of it on some friend, and has been dissatisfied with the result. Accounts have also been given in the press of the lapse of many of the test cases in Belfast and elsewhere. We know nothing of the composition or character of the "cure," and can at present only say that all "cures," the true composition of which is not disclosed, are better avoided by self-respecting practitioners of legitimate medicine.

Pruritus Ani.

Mr. Norris F. Davey (Abergavenny) writes: "Anti-Scalptor" will probably find the following useful as a local application: Calomel 3iss; cerati cetacei 3j. M. It should be made with less than the *B.P.* proportion of oil, and the calomel stirred in till cold. I have personally found this very efficacious when the pruritus has been in connection with sluggish liver; 10 grains of pil. hydrargyri at night and a seidlitz powder in the morning being taken as a preliminary. In the case of a very muscular man who suffered greatly from pruritus ani and perineal chafing, everything failed until I tried a queer remedy which I learned from an old North Sea fisherman—namely, the application of a roll or pledget of fine, soft, tarry oakum. The relief was immediate As ung. picis co. did not give similar results, I concluded that however auxiliary the tar may have been, the oakum acted chiefly in keeping the surfaces asunder and promoting coolness and ventilation. As "Anti-Scalptor" says that some of his cases have been "unusually robust," they may have been caused, like the foregoing, by too close approximation of the surfaces.

Mr. Garry Simpson (East Acton) writes: "Anti-Scalptor" will find the following ointment a most reliable remedy: R cocain. hydrochlr., gr.ij; atropin. sulph. gr.½; morphin. acetat. gr.ij; ung. plumbi acet., ad 3j. M. Ft. ung.

C. M. I. writes: The remedy for pruritus ani will depend upon the cause of the discomfort. Mercurial preparations are about the best local application—calomel, white precipitate, or citron ointment at bed time. As two patients were robust, the common mist. alba of the hospitals would be most suitable for such night and morning. For others 5 grains of salicylate of soda in pills two or three times a day will be useful. Dr. Neale's *Digest* should be referred to for further information if above found not suitable. I venture to hope "Anti-Scalptor" will state his result in his present case.

Arsenic for Badness of Wind in Horses.

Dr. W. A. Hayes.—Our correspondent's question is somewhat vague, and it is impossible to say what is best upon the premisses offered. "Bad in wind" includes many respiratory troubles, and, according to veterinary authorities, long experience has proved that arsenic given to horses in the majority of respiratory troubles is useless. A safe dose for a horse is half an ounce of Fowler's solution poured over the food or given in the drinking water night and morning. This should not be continued for longer than twelve days. An interval of four or five days should elapse before recommencing, and it may then be given, half an ounce of the same solution at night only. The arsenious acid is not a good preparation to use, although often given, as it is apt to accumulate in the manger, and produce toxic symptoms. If a horse be a "roarer," or suffers from emphysema, the best treatment is to give him a wineglassful of cod-liver oil every night mixed up with his last feed; this is less harmful and more beneficial than arsenic.

NOTES, LETTERS, Etc.

Erratum.—In the editorial comment on Dr. H. Cayley's letter published in the British Medical Journal of April 7th, p. 774, the word "not" should have preceded the words "dependent on dysentery."

Medical Women as Workhouse Doctors.

Miss E. Winifred Dickson, M.B., F.R.C.S.I. (Vienna) writes: With regard to medical women as workhouse doctors, I wish to say to "M.D." that I hold the moral standard to be alike for men and women, and cases which in women may be attended by a man, may in men be attended by women on exactly the same ground. And as I hold that a man has a right to learn all the work and attend all classes of cases when occasion arises, so a woman has a right both to learn and to practise all. When specialism is possible, venereal cases, etc., in men should be attended by men, and gynæcological cases by women. In private practice these questions settle themselves by the choice of the patient; in public institutions containing patients of both sexes, I hold that a doctor of either sex has a right to practise. I believe that the majority of women, especially of the lower classes, do prefer to be treated gynæcologically by women. I have frequently been assured of the contrary by men, but very rarely by women. I would remind "M.D." that the specialism of gynæcology is of very recent date, say fifty years or so, and certainly has not been practised for "centuries."

London and Counties Medical Protection Society.

Dr. Geo. B. Mead (National Liberal Club, S.W.) writes: As some little misunderstanding is being caused by my resignation of the financial secretaryship of the London and Counties Medical Protection Society and the appointment of Dr. Foulerton, will you permit me to state the causes which led to this. In the early part of the Society's existence it was advisable that the Secretary should be well acquainted with the details of the amount of pecuniary support we received; in fact, to enable us to cut our coat according to our cloth. Happily our success has been such that this is no longer necessary. The general work of the Society has now become so enormous from the mixing the financial with the ordinary secretarial work, especially the receival of subscriptions, that I was compelled to ask my Council to relieve me of those duties, and the Treasurer (Dr. Heron) required more effective help than I could give him. Dr. Foulerton has now kindly undertaken the duties. All letters on financial matters received by me are at once forwarded to Dr. Foulerton, unless there are other special matters requiring an answer from me. This, I hope, will tend to greater efficiency and precision in our work.

The Electricity of the Body.

M.D. writes: Paragraphs are continually appearing in the papers which to the lay mind seem to show, and are probably intended to suggest, that after all electricity plays a larger part in the economy of the body than doctors are inclined to admit. We are told that every function of the body is accompanied by a development of electricity, and that by delicate galvanometrical arrangements a current can be demonstrated even on the passage of sensory impulses. All this is interesting, no doubt, and to some appears extremely novel; to such, however, it should be pointed out that, after all, the electricity so developed is but a sort of waste product, and has no more to do with the production of vital activity than the heat in the escaping steam has to do with the power of a steam engine. When the potential energy of food and living

tissue changes into the kinetic energy of bodily activity, it does not at all become manifest in the same, nor always in the most useful, form. While some may take the form of motion, much flies off as heat, and some as electricity; but these are by-products, and have no influence in aiding the bodily powers. In the production of these by-products—these more or less wasteful forms of energy, the animal body is on the same footing as every other kind of machine. Every time a railway engine whistles it pours out streams of electricity; every revolution of a spinning frame develops such an amount of electrical action that cotton mills would be set on fire if the atmosphere were not kept a little damp; and as for waste energy in the form of heat, that occurs in every machine. Steam engines turn into power only a small fraction of the energy in the coal they burn, and the energy wasted in this way by the animal frame is obvious in every perspiring labourer. But such heat is of no use, nor is the electricity which is no doubt produced by every thought or movement, but which in ordinary conditions at once becomes diffused and lost.

*** The statements of our correspondent are in the main correct. By means of suitable recording devices, such as a galvanometer or electroscope, electrical phenomena may be detected wherever in Nature there are molecular changes in progress, be the changes due to chemical action, heat production or absorption, light, or mechanical movements. The existence of these electrical changes has no doubt been utilised in an improper way by interested persons; as witness the phrase, "electricity is life," etc.

It is not quite certain, however, that all the electrical phenomena of living tissues are mere signs that small amounts of energy are being dissipated in that particular way; for instance, the "current of action" of contracting muscle may possibly have some deeper significance. At least the remarkable manifestations of electricity in the torpedo and some other fishes seem to suggest that in their case a "current of action" has been of service to the species.

Out-Patient Hospital Abuse.

Suture writes: Any general practitioner whose lot has been cast amongst the working classes of Lancashire or Yorkshire, must have felt the pecuniary loss from the presence or establishment of a voluntary hospital in his district. Few such practitioners are there who could not recount case after case of those who, having previously paid their accounts, but once having tasted the economies of the hospital, ever after look upon the payment of fees as unnecessary and even foolish.

At the same time the hospital is not altogether an unmitigated curse, for undoubtedly is it an advantage to be able to transfer patients who, from their position or complaint, are unable to pay the usual fee; more particularly those cases requiring more than usual attendance (as catheter cases, etc), where their means do not afford an adequate, or any recompense at all for a long and close attendance. There is another and large class of patients, where from the unusual grouping of symptoms or the absence of response to ordinary treatment it is desirable to have another opinion, and where, could the patient afford it, a consultant would be called in; in these cases the hospital serves a very useful office. The hospital therefore may relieve the general practitioner of his unremunerative and difficult cases.

The hospitals ask funds from the charitable public on the grounds that they cater for the poor (not paupers), the unremunerative of the general practitioner, and that they provide specialists for those who cannot pay consultants' fees, the difficult cases of the general practitioner. Yet the consultants complain that their time and skill is wasted on the investigation of trivial ailments, and as yet no satisfactory method of selection has been adopted.

Thus each branch of the profession has a hospital grievance; the consultant that it wastes his time, and the general practitioner that it robs him of his practice.

Now, Sir, may I be permitted to suggest what seems to me a simple method of solving this difficult problem, somewhat on the lines of the practice between solicitor and counsel, namely, that out-patients should only be admitted on the recommendation of a medical practitioner, and that the consultant decline to go into any case not so recommended (accident and emergency cases of course excepted). Such a scheme would limit, if not end, the present scandalous out-patient abuse, spare the time of the staff, economise the funds of the institution, provide selected clinical material for teaching purposes, relieve the truly necessitous and suffering, and be a boon alike to the staff and the general practitioner.

I trust, in the interests of the poor and afflicted, of the hospitals, of the profession, such a scheme may meet with your approval and support.

The Passage of the Catheter in Prostatic Disease.

Dr. W. Donovan (Erdington) writes: Dr. J. M. F. Miles, of Dingle, had he done me the honour to carefully read the original note on the above subject, would see that the quotation from *Bryant* was as inapt as it could well be. Bryant's method and mine are as different "as chalk is from cheese." The finger in the rectum, distasteful alike to surgeon and patient, in "Bryant's method," is dispensed with in mine, and I think with advantage. If Dr. Miles had only considered what he proposed to criticise before committing himself to paper, he would have saved my time and your valuable space.

A Narrow Escape.

Dr. A. Ledlie (Belfast) writes: My attention has been drawn to a brief communication *re* the above case appearing in the British Medical Journal of March 17th, which had escaped my notice. The explanation therein suggested appears to be inapplicable. The contused band on the thigh embraced fully one third of its circumference, and was very much nearer the horizontal than the vertical. Obviously this could not have been caused by the wheel striking the boy while standing. The abraded band of scalp had an even well defined margin posteriorly as well as anteriorly. Obviously this could not have been caused by the wheel merely grazing the head. The eye-witnesses, too, have been ignored.

LETTERS, COMMUNICATIONS, Etc., have been received from:
(**A**) Another Member; Dr. A. G. Auld, Glasgow; Dr. C. Addison, Lincoln; J. H. Aytoun, M.B., Bonnyrigg. (**B**) Mr. L. A. Bidwell, London; Mr. J. Bayley, Northampton; Mr. W. Berry, Wigan; Berkeley; Dr. F. W. Bennett, Leicester; B.; H. M. Barker, M.B., Sandown; B.Ch.; Mr. A. Bartorchi, Pisa: Dr. C. G. Bennett, Buckie. (**C**) Mr. C. F. Cuthbert, Gloucester; Messrs. J. W. Christy and Co., London; C. M. J.; Mr. H. J. Collins, Birmingham; Mr. L. J. G. Carré, London; Mr. R. W. Councell, London; Mr. E. Coles, London; Dr. W. T. Cocking, Sheffield; Catholic Priest; Mr. J. H. Chaldecott, London; Dr. J. G. S. Coghill, Ventnor. (**D**) Mr. M. P. Duke, Montserrat; E. W. Dickson, M.B., Vienna; Dr. D. S. Davies, Bristol; Mr. P. H. Dawkins, Henley-on-Thames; Mr. N. F. Davey, Abergavenny; Dr. J. Dunlop. Glasgow. (**E**) Eagle. (**F**) Mr. J. B. Footner, Tunbridge Wells; Mr. J. M. Fox, Lymm; Mr. C. Frier, London; Mr. A. Fraser, Normanton. (**G**) W. Gordon, M.B., Exeter; Mr. G. S. Greenwood, Ossett; Dr. H. W. Gardner, Shrewsbury; G. P.; Dr. Gradenigo, Ferrovia; A. W. George, M.B., London; W. G. Galletly, M.B., Northwold; Mr. R. P. Goodworth, Winterton. (**H**) Mr. T. P. Hawksley, London; Hadji Stavros; Mr. T. J. Higgins, London; Dr. A. Hollis, Yarmouth, I.W. (**I**) Dr. C. R. Illingworth, London; Inquirer; I.M.S. (**J**) Mr. G. O. Jacobsen, Ashwell; Dr. A. O. Jones, Harrogate; Mr. E. Javal, London; J. M. (**K**) Dr. C. Kelly, Worthing; Mr. P. Q. Karkeek, Torquay; Dr. W. M. Kelly, Taunton; Dr. J. Kerr, Bradford. (**L**) Mr. A. Ledlie, Belfast; Mr. E. A. Lubbock, London; L.R.C.P.Ed.; Dr. Lord, Crewe; Mr. A. Leigh, Liverpool. (**M**) Mr. C. A. Morton, Bristol; Dr. C. Müller, Buda-Pesth; Mr. W. Marriott, London; Mr. A. McLean, Paisley; Mr. J. N. Macnaughton, London; Mr. W. L. Morgan, Oxford; Mr. R. T. Manson, Darlington; M.D.; M.A., M.B.; Matron; M. O. H. (**N**) Mr. T. V. Nicoll, London; Mr. R. Nesbitt, Sutton-in-Ashfield. (**P**) Dr. C. E. Prior, Bedford; Dr.T. L. Pennell, Edwardesabad; Dr. W. R. Parker, Kendal. (**R**) R. J. Roberts, M.B., Lowestoft; Dr. A. Robertson, Glasgow; Mr. G. F. Robinson, Sydney; Mr. T. A. Reed, London. (**S**) Mr. R. R. Sleman, London; Dr. J. L. Steven, Glasgow; Mr. W. Smith, Dukinfield; Mr. G. Simpson, London; Dr. J. G. Swayne, Clifton; Mr. R. B. Sawyer, Hull; Dr. A. Sykes-Ward, Nottingham; Dr. A. E. Sansom, London; A. W. Sinclair, M.B., South Petherton; Dr. E. M. Skerritt, Clifton; Messrs. Seagrave and Woods, London; Dr. S. Sunderland, London; Mr. F. Sorel, London; Dr. W. W. Stainthorpe, Saltburn-by-the-Sea. (**T**) Mr. J. Tay, Bristol; Dr. J. C. Thresh, Chelmsford. (**U**) Useless Without Transport. (**V**) G. C. L. Vintras, M.B., London; Verax. (**W**) Dr. F. J. Waldo, London; J. W. Walker, M.B., Spilsby; Mr. W. H. Wright, Derby; Dr. T. J. Wood, Bradford; Mr. C. H. Whitcombe, Westerham; Mr. E. W. Wallis, London. (**Y**) Mr. P. M. Yearsley, London; etc.

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***** In forwarding books the publishers are requested to state the selling prices.**

A POST-GRADUATE LECTURE

ON

THE INFLUENCE OF THE ARTERIOLES IN RELATION TO VARIOUS PATHOLOGICAL CONDITIONS.

By Sir GEORGE JOHNSON, M.D., F.R.S.,

Emeritus Professor of Clinical Medicine, Consulting Physician to King's College Hospital, and Physician Extraordinary to Her Majesty the Queen.

The Structure and Function of the Arterioles.—Apnœa (Asphyxia).—Anæsthesia by Nitrous Oxide and by Nitrogen.—The Pathology of Choleraic Collapse.—Variations of the Pulse.—The Cardio-vascular Changes in Bright's Disease.—Raynaud's Disease.

The most important and fruitful addition to our knowledge of the circulation of the blood since the time of Harvey has been the discovery of the muscularity of the middle coat of the arterioles and the stopcock function of these small vessels in regulating and controlling the amount of blood transmitted to the capillaries and veins.

In 1840 Henle[1] described the circular muscular fibres in the middle coat of the arterioles and demonstrated their identity with unstriped muscular fibre in other parts of the body.

In 1852 M. Claude Bernard[2] published the first of his series of observations on the influence of the vasomotor nerves and the arterioles. His researches, together with those of Brown-Séquard, Waller, Ludwig, and others, have proved that the function of the arterioles is that of regulating the blood supply to the various organs and tissues; while some pathological phenomena to be presently described clearly indicate that the impediment caused by a general contraction of the systemic or the pulmonary arterioles is more than equal to the propelling power of the left or the right ventricle respectively.

My main object in the present communication is to prove that a due appreciation of the action of the arterioles is essential for a correct interpretation of some highly interesting and important pathological phenomena.

Apnœa or Asphyxia.

There are few subjects which have given rise to so many conflicting statements and opinions as that of the immediate cause of death by deprivation of air. The application of the term asphyxia, which signifies an arrest of the pulse, to a condition whose primary cause is impeded or suspended breathing—apnœa[3]—has been one source of confusion which I will avoid in the present communication.

Dr. John Reid, in his paper "On the Order of Succession in which the Vital Actions are Arrested in Asphyxia,"[4] has given a very complete account of the various attempts which had been made to explain the phenomena previous to the year 1840, when his paper on the subject was read at the British Scientific Association. He shows that before his own researches began no satisfactory explanation had been given of the impeded circulation through the lungs, and the consequent distension of the right side of the heart in the last stage of apnœa.

By making animals breathe nitrogen Dr. Alison and Dr. Reid proved that the impeded pulmonary circulation "is dependent upon the cessation of the chemical changes between the blood and atmospheric air in the lungs, and not upon the arrestment of the mechanical movements of the chest," as some of their predecessors had supposed, and they suggested that the arrest occurs in the pulmonary capillaries. This explanation, before the discovery of the structure and function of the arterioles, appeared sufficiently plausible. The most interesting original observation made by Dr. Reid was that of the increased pressure in the systemic arteries during the earlier stages of apnœa. This he explained by "an impediment to the passage of venous blood through the capillaries of the systemic circulation." As Dr. Reid's experiments were conducted, the observation of the blood pressure was somewhat interfered with by the sudden variations which resulted from the violent respiratory efforts of the suffocated animals; but Mr. Erichsen[5] subsequently, in a series of highly instructive experiments, got rid of this disturbing element by dividing the spinal cord as near to the cranium as possible, the animals then being kept alive for a time by artificial respiration. The results obtained by this method of experimenting were in entire agreement with those of Dr. Reid.[6]

It is a well-known fact that newly-born animals bear the exclusion of air much longer than the same class of animals a few days older. Thus Dr. M. Foster says,[7] "while in a full-grown dog recovery from drowning is unusual after one minute and a-half, a newborn puppy has been known to bear an immersion of as much as fifty minutes;" and he goes on to say: "The cause of this difference lies in the fact that in the quite young or rather just born animal the respiratory changes of the tissues are much less active. These consume less oxygen, and the general store of oxygen in the blood has a less rapid demand made upon it." There is probably some truth in this statement, but the explanation ignores the fact that in these animals for some days after birth, and so long as their eyes remain closed, the foramen ovale is open, so that when air is excluded from the lungs the blood passes directly, as in the fœtus, from the right to the left side of the heart, and so escapes the controlling influence of the pulmonary vessels.

Mr. Erichsen performed some interesting experiments on these newly-born animals, and found that not only did the circulation continue much longer after the exclusion of air than in older animals, but when the chest was opened after death there was no distension on the venous side of the heart, and the amount of blood on the two sides was nearly equal.

The description and explanation of the process of apnœa which had been published by Dr. John Reid and Mr. Erichsen were generally accepted by physiologists, and were repeated in all the textbooks until the year 1867, when Professor Burdon Sanderson, in his Croonian Lecture at the Royal Society,[8] made the following statement: "It may be concluded that the extraordinary elevation of arterial pressure which has been long known to occur during the second minute in death from apnœa is not due, as was supposed by Dr. Alison and Dr. John Reid, to obstruction of the capillary vessels, either pulmonary or systemic, but to the violence of the respiratory efforts. The cavity of the chest being closed, the force exercised by the respiratory muscles expresses itself in variations of tension of the enclosed air, which are communicated through the intrathoracic arteries to those outside of the chest, producing those violent oscillations of the dynamometer which have been referred to. In support of this inference it was shown that in an animal under the influence of worara[9]—when all respiratory movement ceases while those of the heart are unaffected—the process of apnœa is not only of greater duration, but is not attended by any of those greater disturbances of the circulation which have been hitherto attributed to capillary obstruction. The gradual extinction of the force of the contractions of the heart is indicated by a slow and uninterrupted subsidence of the arterial pressure."[10]

In the *Handbook for the Physiological Laboratory*, published in 1875, Dr. Sanderson states that after death from apnœa "it is always found that all the heart's cavities are filled to distension, the quantities in the right and left cavities respectively usually being to each other in the proportion of about two to three."[11] The inaccuracy of this statement may be proved by an experiment which need occupy only a few minutes. I have been present on two occasions when the heart of a dog has been examined immediately after death from a ligature on the trachea. In the case of a large dog 2 ounces of blood gushed from the distended right cavities, while 2½ drachms trickled from the flaccid left side. In a small dog the distended right side of the heart contained 5½ drachms of blood, the left a quarter of a drachm.[12]

What, then, is the explanation of the results obtained by Professor Sanderson? Simply this, that the dose of worara which he administered to the dogs—one-tenth of a gramme—was sufficient to paralyse, not only the voluntary muscles,

but also the muscular walls of the arterioles, both systemic and pulmonary, and thus to render them powerless to impede or to regulate the onward movement of the blood.

Professor Rutherford, in a lecture on the circulation,[13] says that "the dose of curara should be just sufficient to paralyse the voluntary muscles; if the dose be excessive the vasomotor nerves are also paralysed. The amount given should be 12 milligrammes for a small dog, and 18 milligrammes for a large one." Thus Professor Sanderson's dose of one-tenth of a gramme (that is, 100 milligrammes) is more than five times the amount which Professor Rutherford employs for a large dog. I have at different times witnessed experiments which clearly show that when a moderate dose of curara is injected the results of apnœa are essentially different from those described by Professor Sanderson, while an excessive dose gives results which are in entire agreement with his.

I will now describe the most interesting and conclusive of these experiments.

In 1873 I witnessed a very instructive experiment by Dr. Rutherford when he was Professor of Physiology in King's College. Into the trachea of a large dog, previously anæsthetised, a tube was tied and connected with a bellows for artificial respiration. The voluntary muscles were then paralysed by a moderate dose of curara, and the animal was kept alive by artificial respiration. The sternum and portions of the ribs were removed, and the pericardium opened so as to expose the anterior surface of the heart. One common carotid was divided, and a dynamometer tube connected with a kymograph was tied into its proximal end. Artificial respiration being suspended there was first a steady rise of pressure in the carotid, and soon distension and dilatation of the *left* cavities of the heart (Fig. 1), then a rapid fall of

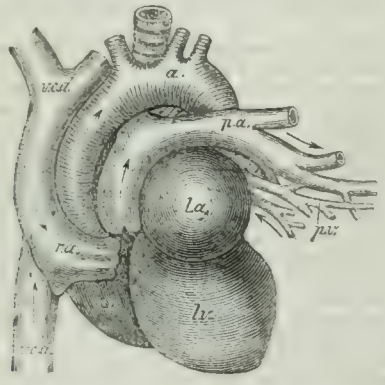


Fig. 1 represents the distension of the left cavities of the heart and aorta in the first stage of apnœa (asphyxia). *l.a.*, Left auricle: *l.v.*, left ventricle. Both greatly distended, the former like a smooth india-rubber ball. *a.*, Aorta distended; *p.a.*, pulmonary artery; *p.v.*, pulmonary vein; *r.a.*, right auricle; *r.v.*, right ventricle; *v.c.d.*, descending vena cava; *v.c.a.*, ascending vena cava. The right cavities of the heart, the pulmonary artery, and the systemic veins are in a state of normal fulness. The right ventricle is partly overlapped by the distended left.

pressure, distension and dilatation of the *right* cavities, with collapse and almost complete emptying of the left side (Fig. 2).

The explanation of the facts is briefly this. Venous blood passing into the systemic arteries excites through the vasomotor ganglia, nerves, and centres,[14] contraction of the arterioles, with resulting high arterial tension and distension of the left side of the heart from backward pressure. When the deoxidation of the blood exceeds a certain degree,[15] the vasoconstrictors of the lungs impede the passage of the blood, the result being that the left side of the heart receives but little blood, and that of a venous character, the systemic arterial pressure falls, while the right cavities, the large veins, and the pulmonary artery are distended with blood. This unequal distribution of blood, which is invariably found when the chest is opened soon after death from apnœa, was, in the course of Dr. Rutherford's experiment, plainly seen to occur during the lifetime of the animal.

The suggestion that the empty condition of the left ventricle after death from apnœa is the result of rigor mortis is obviously not in accordance with the facts thus demonstrated. And it is evident that in Dr. Rutherford's experiment the increased arterial pressure during the first stage of apnœa was not the result of "violent respiratory efforts."

Some physiologists assert that in the final stage of apnœa the systemic arterioles dilate in consequence of a supposed exhaustion of the vasomotor centre by deoxidised blood; of this, however, there is no proof, and the assumed condition would not explain the facts. Dr. M. Foster says:[16] "The blood pressure, in spite of the continued arterial contraction, begins to fall, since less and less blood is pumped into the arterial system." The condition of the heart's cavities soon after death from apnœa clearly indicates that the immediate cause of death is primarily the arrest of the pulmonic, and, as a consequence, that of the systemic circulation. It will be seen that there are two distinct stages in the process of apnœa: (1) that of systemic arterial obstruction, with distension of the left cavities of the heart; (2) that of pulmonary arterial obstruction, with distension of the right cavities. The two sides of the heart, therefore, are never fully distended at the same time, since in the final stage of apnœa, while the distension of the right cavities is rapidly increasing, that of the left is with equal rapidity passing away. It is also evident that the contraction of the pulmonary arterioles in the final stage has the double effect of increasing the resistance to the propelling force of the right ventricle while the walls of the heart are weakened by the scanty supply of deoxygenised blood to the coronary arteries.

It has often been noted after death from apnœa that more or less numerous ecchymoses appear beneath the pleura and pericardium. These are obviously the result of back-

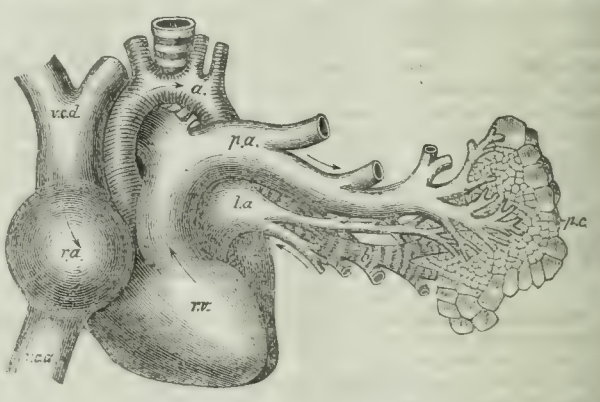


Fig. 2 represents the distension of the right cavities of the heart, of the pulmonary artery, and the large systemic veins in the final stage of apnœa (asphyxia). The letters have the same significance as in Fig. 1. In addition, *p.c.* indicates the anæmic condition of the pulmonary capillaries; *b.*, left bronchus. The right auricle and ventricle and the pulmonary artery are fully distended, the auricle having the form and smoothness of a distended ball, while the left cavities of the heart and the aorta are collapsed and nearly empty.

ward engorgement of the bronchial and coronary veins and capillaries which share in the distension of the whole systemic venous system.

We have now to show that when the arterioles are paralysed by an excessive dose of curara or by other substances which are known to have that effect the results are identical with those described by Professor Sanderson.

My friend Mr. Charles James Martin, M.B., B.Sc., who is now teaching physiology in the University of Sydney, while Demonstrator of Physiology in King's College four years since, performed, at my request, some experiments, the results of which throw much light upon the complex phenomena of apnœa. All the animals experimented on were under the influence of anæsthetics, which, while they prevented pain, did not interfere with the physiological results of the experiments.

Into the peritoneum of a cat a decigramme of curara was injected, the animal being kept alive by artificial respira

tion. A manometer connected with a kymograph was introduced into one carotid. When the respiration was suspended the pressure in the carotid immediately began to fall and artificial respiration was resumed to prevent the arrest of the circulation by cardiac paralysis. The same result followed more than once upon suspension of the respiration. At length after an interval of nearly an hour, suspension of respiration was accompanied by a rise of pressure in the carotid; and the heart having been exposed there was seen to occur the usual distension, first of the left cavities, then of the right, with shrinking of the left. In this experiment the excessive dose of curara paralysed the arterioles and weakened the heart. The suspension of respiration still further weakened the heart and lessened the arterial pressure. After a time a portion of the curara was eliminated, probably by the kidneys, a large amount of urine having been passed upon the operating table, and then the usual results of apnœa, with a moderate dose of curara, were observed.

A moderate dose of curara was injected into a cat. Suspension of respiration was followed by the usual rise and subsequent fall of the systemic arterial pressure. The circulation having been restored by artificial respiration, sulphate of atropine was injected into the jugular vein, after which the arrest of the breathing caused no rise of pressure in the carotid, and when the heart was exposed no unequal distension of its cavities was observed. The arterioles, both systemic and pulmonary, were paralysed by the atropine.

Into the trachea of a small dog, prepared with the chest and pericardium open, and kept alive by artificial respiration, a glass tube was introduced, through which pure nitrous oxide gas was passed into the lungs, whilst the expired gases escaped into the air. As usual in cases of apnœa, first the left then the right cavities of the heart became distended, and in one minute the heart's action had nearly ceased, with enormous distension of the right side. Then without loss of time inhalation of nitrous oxide, mixed with the vapour of nitrite of amyl, was substituted for the pure N_2O, by means of a two-way stopcock, and the result was that almost immediately the distension of the right cavities began to subside, and in two minutes they had nearly regained their normal size. In this experiment we have evidence that the contraction of the pulmonary arterioles—a result of deprivation of air—which caused the distension of the right cavities of the heart was quickly removed by the paralysing effect of the nitrite of amyl on the arterioles, atmospheric air being all the time strictly excluded by N_2O.

Some facts which tend to complete and confirm the theory of apnœa which I have here set forth yet remain to be mentioned. It has been noticed by different experimenters that during the earlier stage of apnœa the resistance resulting from the contraction of the systemic arterioles has a retrograde influence, not merely on the left side of the heart, as we have seen, but also upon the pulmonary veins, and even so far as the pulmonary artery, in which a slight increase of pressure occurs almost if not quite simultaneous with the much greater increase of pressure in the systemic arteries. In the final stage of apnœa, while the pressure in the systemic arteries is falling to zero that in the pulmonary artery is continually rising—an increase which can be explained only by the contraction of the pulmonary arterioles. The anæmic condition of the pulmonary capillaries which is always observed when the lungs are examined immediately after death indicates that the mass of the blood has been arrested before it has reached the capillaries, and when the lungs are exposed during life they are found to become visibly paler during the final stage of apnœa. The extreme collapse of the lungs when the chest is opened after death is a result of the bloodless condition of their minute vessels.

Dr. Rose Bradford and Dr. Percy Dean[17] have proved the existence of pulmonary vasomotor nerves, and that the pulmonary circulation is comparatively independent of the systemic, but they say "it is probable that the vasomotor mechanism is but poorly developed as compared with that regulating the systemic arteries." It might with equal reason be suggested that the muscular walls of the right ventricle are "but poorly developed," since they are unable to overcome the resistance resulting from the contraction of the pulmonary arterioles in the final stage of apnœa. That the pressure in the pulmonary artery and its branches can never equal that in the aortic system is obvious from anatomical considerations alone, but it may be safely assumed that the vessels of the lung, through which all the blood in the body has to pass, have the same regulating and resisting power compared with the force of the right ventricle as that possessed by the systemic vessels in relation to the left ventricle; and I am convinced that much of the confusion and contradiction which appear in the explanation of the phenomena of apnœa given by different physiologists is a result of their ignoring the influence of the pulmonary arterioles.

It is certain that by no experiment that has hitherto been devised can the actual propelling force of the right ventricle or the resisting power of the pulmonary arterioles be even approximately determined; and this for the obvious reason that any impediment to the flow of blood through the lungs, by mechanical compression of the pulmonary artery or its branches, weakens the heart by lessening the blood supply to the coronary arteries. So in the last stage of apnœa, when Mr. Martin has found the pressure in the pulmonary artery to be nearly doubled while that in the carotid is rapidly falling, the heart is weakened, not only by the small amount of blood which reaches its nutrient vessels, but by the fact that even that small supply of blood is entirely deoxidised. The convulsions which always precede death from apnœa when the muscles have not been paralysed by curara, and which tend to increase the distension of the right side of the heart by the pressure of the convulsed muscles on the veins, are the result of cerebral anæmia, the small amount of blood which reaches the brain being also entirely deoxidised. These convulsions are similar to those which result from a copious and rapid hæmorrhage from embolic plugging of the pulmonary artery, from the forcible entrance of air into a vein, or from ligature of the carotid and subclavian arteries.[18]

Summary of Conclusions relating to Apnœa.

That the immediate cause of death from apnœa is the arrest of the pulmonary circulation is proved by the following facts: 1. When the chest of an animal is opened immediately after death by apnœa, the right cavities of the heart are found enormously distended while the left are comparatively empty. 2. When the heart of an animal is exposed during the progress of apnœa, the right cavities are seen to become distended, while the left cavities, which had been previously gorged, are rapidly unloading themselves. The obstruction in the lungs which causes the distension of the right cavities lessens the blood supply to the left. The two sides of the heart, therefore, are never fully distended at the same time. 3. In the final stage of apnœa there is a continuous rise of pressure in the pulmonary artery, while the systemic arterial pressure is falling. 4. That the arrest of the circulation through the lungs is caused by contraction of the pulmonary arterioles appears to be proved by the influence of agents which are known to paralyse those vessels—namely, nitrite of amyl, atropine, and an excessive dose of curara, the result being that deprivation of air is unattended by distension of the right cavities of the heart and other evidence of obstructed pulmonary circulation, the life of the animal is prolonged for several minutes, and death ultimately results from the toxic action of deoxodised blood upon the cardiac and nervous tissues. 5. It is an acknowledged fact that these paralysing agents act alike upon the systemic and the pulmonary arterioles, but the successive phenomena of apnœa are inconsistent with the idea that the distension of the right side of the heart is a result of systemic arterial obstruction acting backwards through the left side of the heart and the lungs. One result of such a retrograde influence would obviously be engorgement of the pulmonary capillaries, a condition the reverse of that which is found immediately after death from apnœa.

(To be continued.)

Notes and References.

[1] *Wochenschrift für die gesammte Heilkunde*, 1840, No. 21. [2] *Comptes Rendus*, March 29th, 1852. [3] The function of respiration requires a free access of air to the pulmonary cells and of blood to the capillaries. The exclusion of the former is apnœa, of the latter asphyxia. [4] *Physiological, Anatomical, and Pathological Researches.* [5] *Edin. Med. and Surg. Journal*, 1845. [6] It has been ascertained that the vasomotor centre in the medulla is not the only one, but that there are others along the whole length of the spinal cord and in the ganglia of the sympathetic, which, after section of the cord, may act as centres for the vasomotor fibres in parts

below the division of the cord. See Dr. M. Foster's *Textbook of Physiology*, 5th edition, p. 329; Cohnheim's *Lectures on General Pathology*, New Sydenham Society's translation, vol. i, p. 113; and Vulpian's *Leçons sur l'Appareil Vasomoteur*, Tome I, p. 284. [7] *Op. cit.*, p. 608. [8] *Philosophical Transactions*, 1867; *Proc. Roy. Soc.*, 1867. [9] One of the aliases for curara or curare. [10] *Proc. Roy. Soc.*, 1867, p. 393. [11] For an account of the influence of Professor Sanderson's teaching upon subsequent writers on the physiology of asphyxia see my *Essay on Asphyxia (Apnœa)*. [12] When the chest of an animal is opened immediately after death caused by a sudden deprivation of air the proportion of blood on the right and left side of the heart respectively is about that of 8 to 1, or ounces to drachms. After a prolonged and complicated experiment ending in apnœa, the heart's walls and the arterioles are enfeebled, and the disproportion of blood on the two sides is consequently less. Care must be taken to avoid wounding a large vein in opening the chest. Such a wound would quickly reduce the amount of blood in the right side of the heart, and the previously distended cavities would be found nearly empty. [13] *Lancet*, February 17th, 1872, p. 213. [14] It has been shown in Ludwig's laboratory that the arteries of an organ that has been withdrawn from all nervous influence contract when venous blood flows through them. Cohnheim, *Op. cit.*, p. 112. [15] The difference between ordinary venous blood and the blood in the veins and the right side of the heart after death from apnœa is that the former contains some oxyhæmoglobin, as shown by the spectroscope, while the latter contains none. [16] *Op. cit.*, p. 626. [17] *Proc. Roy. Soc.*, vol. xlv, p. 369. [18] See Kussmaul and Tenner on Epileptic Convulsions from Hæmorrhage, New Sydenham Society's collected *Monographs*, 1859, and the Pathology and Treatment of Epilepsy in my *Medical Lectures and Essays*, p. 236.

A CASE OF "FILARIAL DISEASE" OF THE LYMPHATICS IN WHICH A NUMBER OF ADULT FILARIÆ WERE REMOVED FROM THE ARM.

BY SURGEON-MAJOR J. MAITLAND, M.D.,
General Hospital, Madras.

WITH A DESCRIPTION AND IDENTIFICATION OF THE FILARIÆ
BY PATRICK MANSON, M.D., M.R.C.P., LL.D.

THE following notes of a case of filarial disease are of much interest, and bring to light some new facts regarding the behaviour of these parasites.

T. L., aged 30, a Eurasian, and turner by trade, was admitted into hospital on September 11th, 1893, complaining of pain and swelling of the arm. The patient stated that he had always been in good health until four years previously, when he received a contusion of the left upper arm, which was followed by the formation of an abscess in that part. Since that time he had been subject to slight attacks of fever. The attacks used to come on at night, and last for about twelve hours, and were accompanied by pain running down the spine. They were not severe and never kept him away from work. A week before admission to hospital he received a blow on the left upper arm; not however a severe one. Six days afterwards the arm became swollen and painful.

He was found to be suffering from lymphangitis, affecting the lower part of the inner surface of the left upper arm. The blood examined at night was found to contain embryo filariæ. After suitable treatment the lymphangitis subsided, leaving some thickening extending along the inner side of the arm, from its middle to a point just below the elbow-joint.

As it was thought probable that the lymphangitis had been set up by the presence of filariæ, it was decided to explore the parts in the hopes of discovering and removing the parasite. Chloroform was therefore administered, an incision made and the whole of the thickened tissue removed. The wound healed by primary union, but some thickening formed at its lower extremity. The blood was examined after the operation, and found still to contain embryo filariæ. Eighteen days after the first operation another similar one was performed and the rest of the thickened tissue removed. The second wound suppurated slightly, and was followed by considerable thickening around the cicatrix. The blood still contained young filariæ. The patient was discharged on October 25th, as he was anxious to return to work.

The tissues removed on these two occasions were macerated in a mixture of nitric acid and chlorate of potash, and examined by Dr. Bourne, of the Presidency College, who found in the lump first removed seven specimens of the adult filaria sanguinis hominis, and in the second lump one filaria. Three of these were males and the remainder females. Those first discovered were coiled up together in a mass, and appeared as if lying in a lymphatic channel, but owing to the maceration of the tissues it was difficult to be certain of this.

The operations on this patient were undertaken with the express purpose of removing the parasite, and by this means getting rid of a probable source of further mischief. Although the result shows that all the worms have not been removed, yet the fact that it was possible to diagnose the presence of the parasite and remove a number of them should, I think, encourage us to undertake operations of a similar nature in other cases.

In the *Indian Medical Gazette* of October, 1891, I suggested that operations of a similar nature might be undertaken in cases of lymphangiectasis, and I published the notes of a case in which such an operation had been performed with great benefit to the patient. This patient was cured of the attacks of inflammation to which he had previously been subject, and the embryo filariæ disappeared from his blood. At the time that the case was published, two years and a-half had elapsed since the operation, and the patient remained well, but I have lately heard that although he still remains in comparatively good health, yet a new swelling has developed on the opposite side of his body, and filariæ are again to be found in the blood. Since 1889, ten operations for the removal of lymphangiectasis have been performed in the Madras General Hospital. In some of these cases filariæ were found in the blood, in some they were not found, but all the cases were considered to be of filarial origin. One of these patients returned to hospital two years and a-half after operation suffering from elephantiasis of the leg. In five of the cases the operation has been so recently performed that no opinion can yet be formed as to the result. Unfortunately none of the other cases have been heard of since the operation.

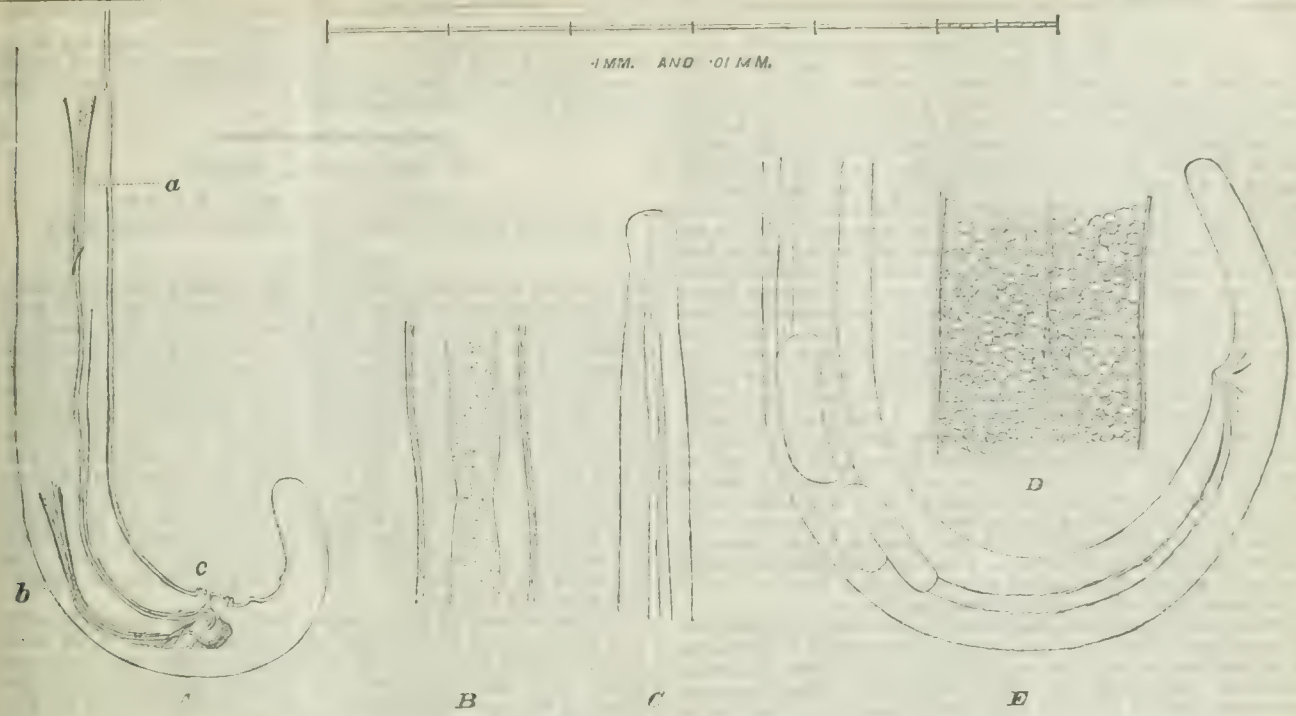
An interesting point in the case just related is the great number of the parasites that were found, and also the fact that they appeared all to be intimately associated with one another. So far as I know, such a large number of these parasites have never before been found in one individual, nor have they been found coiled up together in one mass as a number of these were. This arrangement is, however, found in the cases of other varieties of filariæ, and therefore it is probable that it is not an unusual one in the case of the parasite under discussion. Another point of interest in the case lies in the situation occupied by the worms. There is still some uncertainty as to the exact part of the lymphatic system usually selected by the parasites for their habitation, and whether they remain permanently located in such situation or not. There is, however, strong reason to believe that in the great majority of cases they lodge in the distal lymphatics of the limbs.

The case furnished another proof, if such were wanting, that the lesions produced by the adult parasites themselves are not such as result in elephantiasis and lymphangiectasis. Although this small colony of filariæ had managed to set up local irritation and inflammation of the lymphatics, yet the main circulation of lymph throughout the limb was in no way interfered with.

DESCRIPTION AND IDENTIFICATION OF THE PARASITE BY DR. MANSON.

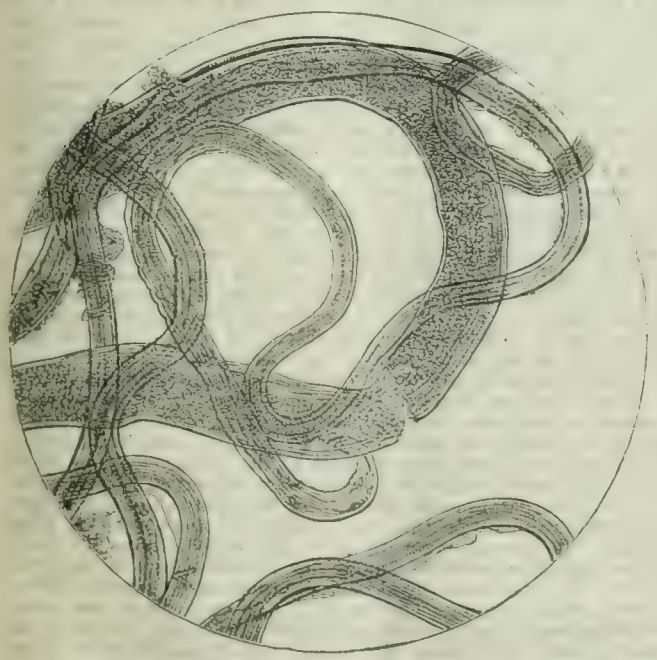
[Along with the foregoing interesting and important communication, Surgeon-Major Maitland sent two slides containing specimens of the parasites referred to; these were handed to Dr. Manson, who reports as follows]:—

Of the two slides one contains the greater part of two female *filariæ bancrofti*; unfortunately the tail end of both worms is missing. The other slide contains three complete male and one complete female *filariæ bancrofti* in a fair state of preservation. The parasites are mounted in balsam which has caused considerable contraction and, here and there, actual shrivelling of the structures: on the whole, however, and by supplementing what is invisible or obscure in one worm by what is distinct in the others, a fairly complete idea of the coarse anatomy of *filaria bancrofti* can be obtained.

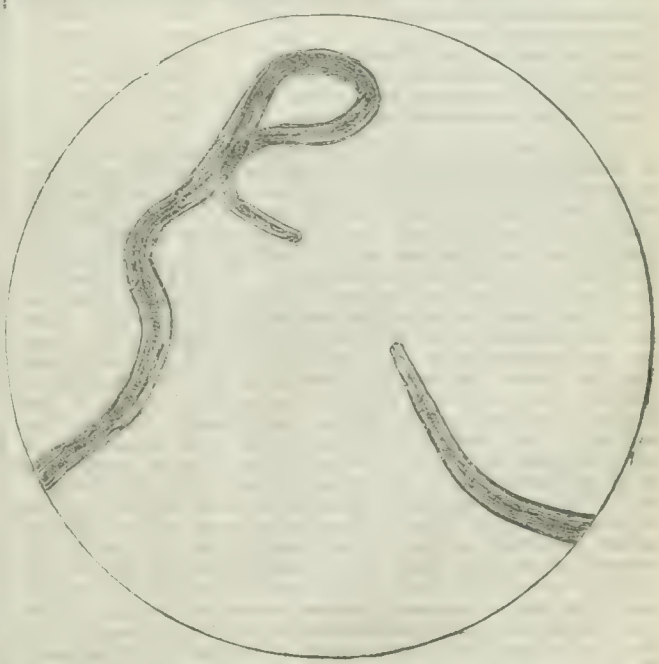


A Tail end of male parasite; B showing constriction marking union of œsophagus and intestinal canal C head of male parasite; D from broadest part of female parasite showing double uterine tubes stuffed with ova; E tail of female parasite showing termination of intestine, convolutions of ovarian tubules, and position of anus.

It is unnecessary to repeat the description of those points already made out by Cobbold, Lewis, Sibthorpe, and myself; I shall therefore confine myself to supplementing, as far as the specimens permit, these descriptions where defective, or correcting them where they appear to me to be wrong.



oils of male a d male, the former showing the tail. × 40.



The heads of two males. × 40.

The most important feature ascertained by the examination of Dr. Maitland's filariæ is the structure of the caudal end of the male worm (A). This, hitherto, has never been seen quite intact. The tail of the male is strongly curved resembling a coil of rope in the case of one of the worms, and is provided with two spicules, a long (*a*) and a short (*b*); in all three specimens the spicules do not protrude, but are retracted just inside the cloaca (*c*). Both spicules, but particularly the longer, are divisible into two parts—a basal and a terminal; the basal portion is manifestly rigid, chitinous in character, reddish-brown in colour, and is thinly dotted over with minute, ill-defined, short, broad-based spines. In the case of the long spicule, and springing abruptly from the

pen-shaped distal end of the broader, darker, coarser base, the organ can be traced backwards as a long, colourless, cylindrical, slightly wavy filament, the free end of which, lying just inside the cloaca, is turned backwards in the case of one of the worms, forming a sort of crook like the handle of a walking stick. The shorter spicule is about the same size at the base as the longer, but its free end is slightly thicker and coarser, and can with difficulty be distinguished from the sheath in which it lies. In the case of the short spicule the chitinous character of the base seems to be extended along the dorsal aspect of the sheath as far as the free end of the organ, which is somewhat sharply turned towards the cloacal orifice by impinging on a sort of chitinous flange or projection. The cloaca terminates in two somewhat protuberant lips, an anterior and a posterior; but I failed to make out distinctly any preanal papillæ. Faint traces of the remains of three pairs of postanal papillæ, which the maceration the specimens were subjected to has rendered indistinct, are possibly faintly discernible. I was able, I thought, to make out in one of the male worms that the junction of œsophagus with intestine is marked by a slight yet distinct constriction (B); possibly this is artificial. In the case of two of the female worms the uterine tubes could be traced forward past the vulva for a considerable distance; the vagina, formed by the union of the uterine tubes, therefore courses backwards to the vulva. I also remarked that although the male worms were quite colourless, the females in all three instances had a distinct brownish tinge.

Owing to the manifest longitudinal shrinkage and inextricable coilings of the male worms, it is impossible to give even an approximate estimate of the length of these particular parasites. Allowing for this shrinkage, the following measurements of some of the details may be relied on as being fairly accurate.

	Male. mm.		Female. mm.
Diameter of head (C)	0.035	...	0.030
Diameter of neck...	0.030	...	0.025
Diameter of body (greatest)	0.100	...	0.185 (D)
Diameter of body 0.05 mm. from tip of tail ...	0.030	...	—
Diameter of body at base of short spicule ...	0.080	...	—
Distance from anus to tip of tail, following curve	0.130	...	0.170 (E)
Distance of vulva from mouth	—	...	1.200
Length of œsophagus ?	1.000	...	—
Length of short spicule, following curve ...	0.200	...	—
Length of long spicule, following curve... ...	0.600	...	—
Length of chitinous base of short spicule ...	0.120	...	—
Length of chitinous base of long spicule ...	0.170	...	—

It is of the utmost importance that the zoological features of these and similar parasites should be accurately made out, as great confusion is apt to arise in so complicated a subject from careless or vague statements. Some time ago Magalhaes gave a very complete and careful description of two mature filariæ—male and female—which had been found in the left ventricle of a child in Rio de Janeiro. Until I examined Dr. Maitland's filariæ I was inclined to believe that the parasites Magalhaes described were the mature *filaria bancrofti*. Now, however, on comparing Maitland's filariæ with the drawings and measurements of Magalhaes's filariæ, I am convinced that the worms are not the same, and that they belong to different species, that of Maitland being *filaria bancrofti*, and that of Magalhaes being quite a new species. In this connection I may mention a circumstance with which I have lately become acquainted, and which may throw some light on Magalhaes's filariæ. In slides of blood which Dr. Newsam, of St. Vincent, West Indies, sent to me some time ago I have in two instances found a number of very minute, sharp-tailed, sheathed, embryo filariæ, which are present in the general circulation both by day and by night, and which, judging from their size and absence of periodicity, are certainly not *filaria nocturna*—the free embryo of *filaria bancrofti*. Considering the geographical proximity of St. Vincent to Rio de Janeiro and the hæmatozoal character of Magalhaes's filaria, it seems not unreasonable to suppose that the latter may be the parental form of these minute St. Vincent filariæ.

It is evident that much work has yet to be devoted to the study of the bloodworms of man before the subject is thoroughly worked out and understood. Already we are partially acquainted with at least four species, possibly five; observers must therefore exercise great care in arriving at a diagnosis of any bloodworm they may encounter, and must always be alive to the possibility of its being a species other than the common *filaria nocturna*.

ON INFLUENZA, 1893-94.

By Sir PETER EADE, M.D., F.R.C.P.,
Consulting Physician to the Norfolk and Norwich Hospital, etc.

Mortality.

During the three months ending mid-February, 1894, influenza was again exceedingly prevalent in Norwich and the surrounding districts. After the blizzard of the first week of January, with its attendant and consequent very low temperature, the fatality of the disease suddenly increased, so that in the week following this storm the mortality of Norwich from chest diseases registered as influenza, bronchitis, etc., and, excluding eight cases of ordinary phthisis, amounted to 47 cases. This was at about the ratio of 27 per 1,000, due to this cause. It is notable that these deaths were almost exclusively of either very young, or of elderly or aged persons. The total mortality of Norwich in this week rose to 60 per 1,000; whilst in the following week it amounted to the lesser but still very high number of 42 per 1,000. In the week next succeeding, the mortality fell to the more normal rate of 21 per 1,000.

Our experience of this disease, both in its uncomplicated and complicated forms, has consequently again been very large. And it seems worth while to inquire whether any fresh light has been recently thrown upon it, and also whether we have obtained any fresh information as to the best method of treating or managing it.

Symptoms.

Continued observation has added little to our knowledge of the symptoms. They still are, briefly, sudden sharp fevers, terminating in the simple cases almost abruptly at the end of three or four days, and then a reduction of the temperature to normal, or something below this. But close observation of the thermometric register in acute and especially in prolonged and complicated cases has shown how constantly this temperature runs a very definite cyclical course; how usually it steadily rises after about 8 A.M., and reaches its highest point (varying from two to five degrees above normal) in the afternoon or late evening. It will then constantly remain nearly stationary until about 12 P.M., after which time it begins steadily to fall, reaching its lowest point at 6 or 8 A.M.; in some cases almost punctually at 6; after which it again begins to rise; and it is remarkable that the temperature registered at this early hour will often be 99° to 98°, or even less, even when a rise to 101° to 102°, or more will again take place during the ensuing day or evening. May it not be fairly asked whether this cyclical course does not indicate a fresh multiplication or swarming of the micro-organisms of the disease during the period of the higher temperatures, and a corresponding diminution of the activity of the germ life in the six or eight hours after midnight?

The peculiar brightness of the eyes without suffusion of the conjunctivæ has been constantly present at first in the severer cases; so also has a red suffused condition of the fauces; and very frequently, as observed by Dr. Shelly, a vesicular eruption has been present on the soft palate, followed often by a soft follicular exudation—more often observed on the left side of the palate—and then later on occasionally by a dry desquamation or peeling of the mucous membrane of this part. The tongue in severe cases, and especially in old persons, has often been brown, dry, or almost horny for several days. Eruptions on the skin, erythematous or papular, have been not uncommon; and, as in other years, there has constantly been much general relaxation of the skin, shown by a warm, soft, perspiring (in every degree) condition of this membrane. Albuminuria has also been present in a considerable proportion even of the simple cases, but it appears to have passed away without causing serious special symptoms.

Constipation has often been very marked and troublesome from the first, even in those whose bowels were previously in

a normal state. The bowel has apparently suddenly become feeble and insensitive, and repeated and often strong aperients as well as enemata have frequently been necessary, to the great discomfort of weakly patients. It has been observed in several instances that the expulsive power of the rectum has returned almost suddenly at the end of between five and six weeks. On the other hand, as in former years, diarrhœa and sickness have been not infrequent at first and for a time.

Pathology and Physical Signs of the Pulmonary Lesions.

In almost all the severer cases there has been some affection of the bronchial membranes, indicated by sounds of the most varied character—sibilus, rhonchus, sibilant rhonchus, with or without crepitation, either large or what is called "large-fine crepitation." The amount of dulness on percussion has been comparatively slight, and neither the voice nor the breath sounds have ever indicated any large amount of pulmonary condensation. In fact, so marked an absence of this has there usually been that it would seem probable that the diseased process, as a rule, scarcely penetrates beyond the smallest bronchial tubes, and, unlike that of ordinary pneumonia, involves but slightly the pulmonary vesicles or true parenchyma of the lung. This view agrees with the results of microscopical investigation, and would seem to be confirmed by the fact that even in the cases in which the lung is most extensively affected a deep inspiration will usually cause a current of air to pass, as it were, through the crepitation, and often produce a sound of pure or pronounced vesicular respiration beyond it.

The morbid breath sounds are varied and peculiar, but they all resolve themselves into those produceable by a swollen mucous membrane of the tubes, or by this *plus* adherent mucus secreted by it. In fact, the true influenzal lung affection would, as has been said, appear to be bronchitic, and rarely of the parenchyma of the lung, and, therefore, neither a true pneumonia nor what is termed congestive pneumonia. It differs from ordinary bronchitis, in that the two lungs are generally very unequally affected, and that their bases are by no means so chiefly and uniformly the seat of the *râles* as in the ordinary disease of that name. It differs from ordinary pneumonia in that in addition to the locality (usually the base of the lung) principally affected, there are always, or nearly always, varied bronchial *râles* in the lung above this, or even in both. It has been noted that the right lung has in the majority of cases been more extentively affected than the left. May not this be due to the larger size of the opening at the tracheal division on the right side allowing of a greater indraught of the germ-carrying air, and so of a larger dose of the infective agent being introduced into this lung?

The researches of Professor Klein[1] and others have proved that the bacillus influenzæ abounds in the mucus secreted by the air tubes (being also found in the mucous membrane of the mouth), and it would seem almost certain that the impingement of the germs upon the bronchial surfaces, and their development there, is the essential local irritative cause of the resulting phenomena, and of their continuance throughout the illness. In other words, the pulmonary portion of the disease is chiefly, if not absolutely, a purely local *parasitic* affection, every sibilant or rhonchal point indicating the growth on that spot of a smaller or larger colony of influenzal bacilli; other distant inflammations or affections being due, either to the development of the streptococcus,[2] or to the effect of the produced and absorbed ptomaines or secretion products of the bacillus. Up to the present time, compared with 1893, there has been a much-diminished number of cases in which the nervous centres have been involved, either primarily or actively, or with the well-known paretic sequelæ.

Treatment.

As to treatment, continuous experience shows that as we have a parasitic and infective disease to deal with, so—as in other zymotic affections—all active efforts to cut short the fever and stamp out the disease are futile or even hurtful. Depressants, febrifuges, sudorifics, are of only occasional value. A few doses of either antipyrin or salicylate of soda quite at the first often seem to soothe and comfort a little; but my experience shows that these doses should not usually exceed 5 to 10 grains of either at shorter intervals, and that even these should not be given too freely, and scarcely at all if the patient is either old or weakly. Ammonia has almost always been suitable and helpful, and either from the first or within two or three days of the commencement of the illness, when there is depression and bronchial complication, a mixture composed of aromatic spirits of ammonia with chloric ether and compound tincture of bark, has been largely used and found to be exceedingly suitable and comforting. Where the patient has been old or feeble, or there have been symptoms of heart weakness or failure, the sulphuric ether has been well substituted for the chloric ether. In a good many cases, where there has been much soft cough, and where the chest *râles* and crepitations have been widespread and abundant, it has yet been noticed that the expectoration has been almost *nil*. In others it has been very scanty, and again in others—especially the old and weakly—it has been copious and almost purulent. In some of these very decided relief has been obtained by inhaling from a pocket handkerchief frequently and well into the lungs, some 10 or 15 drops of the oil of eucalyptus. Doubtless other similar antiseptics inhaled are also useful, but this special oil has been so serviceable that it may well be recommended as both not disagreeable and sufficiently potent.

In prolonged cases, where the age is considerable, the expectoration muco-purulent, and exhaustion threatening, good doses of iron have been of unquestionable service. In one especial case, aged 82, which recovered, half a drachm of the tincture of perchloride of iron, with sulphuric ether and quinine, was taken every six hours for at least ten days, with the most manifest advantage.

Attention has recently been called by Dr. Wilks to the occasional value of opium in this disease. It is of unquestionable utility in soothing the cough and procuring sleep, especially in the form of Dover's powder, and does not appear to disagree with the patients or with the disease. But sulphonal has often seemed to be of at least equal value.

Of the numerous specific remedies recommended for influenza I can say little. Perhaps the bicarbonate of potash and benzol are those which have been most pressed upon our attention as "speedy cures" for the disease. My experience of either is not very large, nor such as to confirm the advantages claimed for them. Moreover, theory deduced from our knowledge of the nature of the disease is against them, as well as the analogy of similar specific fevers.

The experience of the past four years shows that the influenza begins by scattered cases in November or December; that its greatest virulence (except in 1891) has been in the months of January and February; and that it has practically died out by the end of May, that is, when the sun-warmed air is again that which we breathe. The same experience has also told us that exposure to cold and the inspiration of air of very low temperature will constantly convert a simple case, that is, with fever only, into one complicated by bronchial or pulmonary inflammation. Why is this? The normal temperature of the tissues, and doubtless of the bronchial tubes, is 98.4° F., whilst that of the air inspired varies with the season from about 40° to 70°. The effect of inhaling extremely cold air—say, of from 20° to 30°—is doubtless partially to benumb the sentient surface of the bronchial mucous membrane, and so to diminish its resisting power to the invasion of microbal life. Further, the advent of the influenza with the cold weather of our winter proves almost certainly that the bacilli influenzæ thrive and flourish most in a medium of low temperature. We can readily understand, therefore, how it is that the inhalation of cold air may in both these ways favour the development of the causative germs.

A sudden outbreak of the disease has been known to follow the breaking up of a frost and the thawing of the snow. On the other hand, it has been shown that influenza germs are killed or rendered very inactive by drying. Again, the advent of "bronchitis" and "pneumonia," if not already present, can almost certainly be prevented by keeping the patient during the febrile stage in a very warm atmosphere, so that

[1] See Report on Influenza to the Local Government Board, 1893, by Drs. Parsons and Klein.
[2] Klein, *loc. cit.*, p. 125

the air inhaled shall not be of a lower temperature than from 60° to 65°. As the germ thrives in moisture and fades in dry conditions, it is probable that the dryness of the air in a very warm room is of almost equal importance with the temperature.[3] And this would seem to have a distinct bearing upon one point in the treatment of the "bronchitis." It is very usual in such cases to set the "bronchitis kettle" to work upon the stove, and as far as possible to keep the atmosphere of the room impregnated with moisture. But if the influenza germ loves moisture, and dies with dryness, this practice must necessarily be distinctly injurious; and, indeed, even in cases of ordinary bronchitis and pneumonia I have often thought the propriety of the use of this kettle at the very least doubtful, for necessarily the moisture in the air speedily becomes condensed and falls, with the liability to produce damp sheets, damp pillows, damp carpets, and damp walls.

ON THE TREATMENT OF DETACHMENT OF THE RETINA.

By J. R. WOLFE, M.D., F.R.C.S.Ed.,
Melbourne, Victoria; late Ophthalmic Surgeon to the Glasgow Royal Infirmary.

IT is now nine years since I demonstrated in the National Ophthalmic Hospital of Paris my operation in cases of detachment of the retina.[1] The recollection of one case is still vividly impressed upon my mind. When the eyes were opened on the fifth day after the operation, and the patient, Madame B., cried out, "Mon Dieu! je vois!" I felt as if my head were touching the stars. The operation was then on its trial. A number of successful cases have since been reported from my Glasgow clinic and by others.[2] But there is something intensely interesting in the case which I am here to record.

On November 23rd, 1893, some days after my arrival in Melbourne, I was asked by one of the leading physicians to meet two well-known oculists in consultation in the case of the manager of a large financial establishment in Australasia, who became totally blind from detachment of the retina of both eyes. He is a highly esteemed citizen, and his case has elicited the sympathy and concern of all classes of the community.

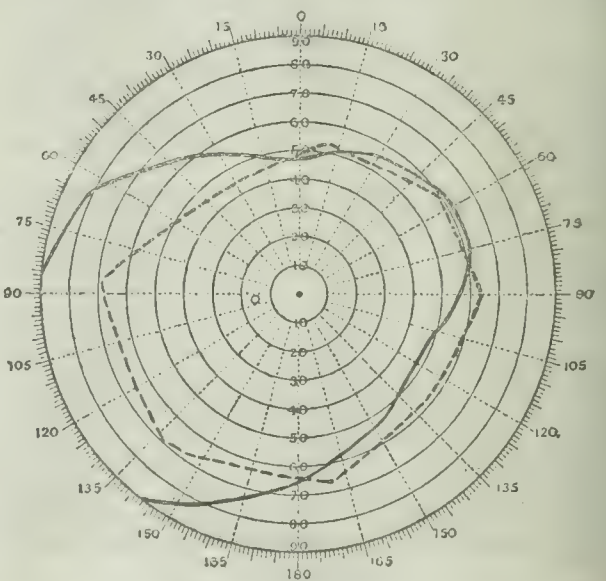
CASE.—Mr. W. C., aged 59, of excellent health, six feet high, never had an illness till two years ago, when he suffered from an attack of influenza, which has left a tendency to frequent recurrence of naso-pharyngeal catarrh. He never had any eye trouble, but he is myopic (M. 6 D) without posterior staphyloma. About a year ago he began to feel some trouble in his left eye. He saw frequently what appeared like a shower of rain before him, and in shutting his eyes alternately he found that this optical delusion was owing to the condition of his left eye. The sight of that eye gradually deteriorated until it was entirely gone. In September last year his right eye began to be similarly affected, for which he was treated; but the disease made rapid progress so that he could not sign his name, and had to do it by means of a seal. On November 20th, however, he could not even see where to affix the seal.

The condition of the patient on November 23rd was: Left eye could not see the flame of a lamp before him in any direction; right eye could see the flame only outwards and downwards but not upwards and inwards. The map of the visual field, taken some days previous to the consultation, showed great limitation with central scotomata. But it was taken under unfavourable conditions, as he could then scarcely see the white spot of the perimeter. Ophthalmoscopic examination showed large retinal detachment in the lower and outer area with general retinal engorgement in both eyes. In the left a piece of retina was floating in the effusions, and the region of the macula was invaded.

The patient was ordered to keep the recumbent position for a few days, with the view of causing the effusions to gravitate downwards, and also to enable me to ascertain, by repeated examinations, where the effusion tended. The recumbent posture cleared up some part of the fundus.

On November 30th, with the assistance of my *confrères* and the physician in attendance, who administered chloroform, I operated on the left eye, the one first affected and the worst of the two. I made a vertical incision into the conjunctiva, less than half an inch long, corresponding to the region of the detachment. The lips of the wound were kept separated in a horizontal direction by means of two strabismus hooks. I then opened Tenon's capsule, laid bare the sclerotic and rotated the eyeball in such a manner as to expose the corresponding part towards which the fluid inclined. Into that part I introduced a narrow sclerotome obliquely, in such a manner that the edges of the scleral wound should overlap each other and not remain gaping when the instrument was withdrawn. Only two drops of yellow coloured fluid followed the withdrawal of the instrument. I then introduced into the wound my fine silver spatula, and pressing upon the lips of the wound a little more fluid came. After a few moments' rest I again introduced the spatula and rotated the eyeball so as to incline the cornea downwards and outwards, when there came a considerable quantity of fluid. After using friction upon the scleral wound, I brought the edges of the conjunctiva together by means of one silk ligature. The dressing consisted of court plaister, dry lint, and a bandage to the eyelids. No reaction occurred. On the fifth day the eyelids were opened, and everything looked well. The seventh day after the operation, the ligature being still in the conjunctiva, we examined the operated eye, and found that he could distinguish features and see colours. The visual field, taken in a rough way, was found satisfactory. On December 22nd vision was improving. He could see the time on a watch, and could write a short note with pencil. He left town for his country house, where on December 29th he had a smart attack of influenza, which lasted for a few days. This, however, did not affect his sight.

On January 10th the visual field was taken by M'Hardy's



Left eye: The continuous line indicates M'Hardy's average normal field and the dotted line shows the patient's usual field after operation.

perimeter in the presence of the physician in attendance and one of the ophthalmic surgeons. The right eye had improved so that he could see persons with the outer part, and objects did not appear crooked as before. We intended to have operated on this eye also, but owing to the loss of time

[3] I have not overlooked the fact that Kitasato states that in culture experiments the bacilli do not thrive at temperatures below 37° C. (=82.2 F.). But he further says that in gelatine at this temperature the cultures soon die; and, moreover, the two conditions in many ways are not comparable.

[1] Communication addressed to the Académie de Médecine of Paris, October 14th, 1884; La France Médicale, and BRITISH MEDICAL JOURNAL, December, 1884.

[2] BRITISH MEDICAL JOURNAL: *Lancet*, July, 1885; *Original Contributions to Ophthalmic Surgery*, Churchill, 1890; Report of M. Coppez to the French Ophthalmological Society, BRITISH MEDICAL JOURNAL, June 4th, 1887.

caused by the influenza we had to defer for the present, as his business requires his personal attendance.

Now (February 6th), after the lapse of two months, he can see the second pointer of a watch, reads 20 Snellen at 3 feet distance and 20 Jaeger. He has been attending to his business five hours a-day, where he can see his clients and draft his letters, and does his work satisfactorily.

ON HÆMOPTYSIS.[1]

By ARTHUR FOXWELL, M.A., M.D.Cantab., F.R.C.P.,
Physician to the Queen's Hospital, Birmingham.

[Dr. Foxwell first dealt in some detail with the vascular supply to the lungs, and discussed the general pathology of hæmoptysis, and various minor causes of its occurrence. He then continued:]

Thrombosis producing an infarct is not an uncommon cause of hæmoptysis. The amount of blood lost is not usually large and a fatal issue directly from the bleeding is extremely rare. This condition arises from various states of cardiac weakness but, once established, the pathology is identical. The pulmonary arterioles being non-anastomosing terminal vessels, the portion of lung beyond the block is deprived of all blood from the pulmonary artery, and also, which is the more important event from the hæmoptoic point of view, of the pressure which is derived from the pulmonary artery. The blocked area is now only supplied with blood from the bronchial, œsophageal, and other small vessels; these are sufficient to keep the area full, but have not enough pressure to maintain a proper flow against the reflux pressure from the veins, which pressure is maintained by the other—unblocked—branches of the pulmonary artery. Stagnation results; the affected tissues, including the walls of the involved vessels, necrose, and hæmoptysis often results; or the proximal portion of the artery containing the original thrombus may give way, and then a serious hæmorrhage, having behind it all the force of the pulmonary artery, may ensue.

It is evident, therefore, that the hæmoptysis does not occur at the moment of the occlusion, but only after an interval, during which vascular degeneration has taken place, allowing extravasation of blood. Clinically, too, we find this to be so, for if immediately after a spitting of blood in, say, a case of mitral stenosis, we examine the chest, it is very rarely indeed that we shall be unable to discover localised signs of pleurisy and of inflammation of the lung parenchyma—that is, signs of degeneration in the area of the infarct.

Excessive strain of an otherwise healthy but weak heart may, though rarely, bring about a similar condition of things. Exhaustion of the right ventricle reduces the pressure in the pulmonary artery, and at the same time exhaustion of the left ventricle impedes the flow from the lungs into the left auricle; slowing and stagnation of the blood in the lungs ensue perhaps over a wide area, or, by inducing thrombosis, over two or three smaller ones, and, in a day or two, hæmoptysis arises. It is noteworthy that in all the records of fatal hæmoptysis from severe strain which I have read, the spitting of blood never occurred immediately after the exertion. Such was the nature of a case sent me by Dr. Newey, of Dudley, a few weeks ago.

A young man, of somewhat feeble physique, ran more than two miles to fetch a doctor to his recently married wife, who had accidentally poisoned herself. He hurried home again, all the time and for some time thereafter, being in a state of much mental depression and anxiety. A fortnight later he had a large hæmoptysis, extending over four days, in all a quart. The blood was almost black, and came up in clots. After a rest of three weeks (more for the sake of precaution than because of serious ill-health) he returned to his occupation, that of a commercial traveller, and continued at it for ten weeks, when, after an unusually heavy journey in Scotland, he had a return of similar hæmoptysis to a less extent. On its cessation Dr. Newey sent him to me. I found the right side of the heart much dilated, reaching 2 inches to the right of the sternum. The radial pulse was 120 and small, but of high tension. On examining the lungs, dulness was found throughout on the right, but this was most marked at the base; the breath sounds were diminished very much at the base and bronchial in quality, while in the upper half they were less bronchial and fuller. My diagnosis was base full of effused blood and infarcted matter, with upper part of lung somewhat collapsed, owing to distension of the lower half. I directed my attention to strengthening the heart with absolute rest, good food, digitalin, and nux vomica, adding some bromidia to soothe the nervous system. I have heard since that he has much improved, though, as this was only some fortnight back, it is manifestly too soon to decide as to whether my diagnosis or that of tuberculous hæmoptysis be the correct one.

[January, 1894. This patient has again consulted me, and the condition of the right lung has greatly improved.]

Injury without puncture may so contuse a portion of lung that inflammation and suppuration result, when, if a vessel be involved, hæmoptysis may occur. I have now in the Queen's Hospital a little girl who was knocked down by the shaft of a cart hitting her just below and outside the right nipple. On the following day rather profuse hæmoptysis occurred and continued for ten days; then, according to the history of Dr. Haynes, of Evesham, who sent me the case—which history, by-the-by, was the model of what such histories ought to be—she had an attack of pneumonia of the right lung, from which after three weeks she appeared to be convalescent. But a fortnight later, with a sudden fit of coughing, a large quantity of pus was expectorated, with the usual signs of abscess of the lung. Later, signs of pleural effusion with blood-stained serum in small amount arose, at which time she came under my care. She is now fast recovering; seems perfectly well in herself, and the chest exhibits the usual signs of contracting cavity with much thickened pleura.

The explanation is evident. The blow contused the lung parenchyma, and so damaged the walls of one or more vessels that they gave way, hæmoptysis resulting. During the hæmoptysis pneumonia arising from the contusion crept on, and, by the time the hæmoptysis had ceased, had fully declared itself. This pneumonia was of such severe type that a portion of the inflamed lung necrosed, became isolated, and broke down gradually into pus, which latter found its exit by a bronchus. Meanwhile, however, some inflammatory material was conveyed by the lymphatics or by direct extension to the pleura and set up pleurisy with effusion.

But it is in association with the tubercle bacillus that the great mass of hæmoptysis occurs. I say "in association" designedly, for that there is no indissoluble bond between the spitting of blood and the bacillus is evident in the fact that more than half the cases of tuberculous phthisis run their course without any hæmoptysis; in the fact that in acute pneumonic phthisis and in acute miliary tuberculosis of the lungs, two diseases where the bacilli lead the most virulent life and bring hasty death, hæmoptysis is most rare; in the fact again that in other primary lung affections, such as emphysema and fibroid disease, where bacilli play no *rôle*, yet hæmoptysis is at least as common as in those two previously mentioned, where they play their greatest *rôle* of all; and finally, in the fact that hæmoptysis unites with the bond of a common symptom these primary diseases with those which are purely secondary to cardiac mischief, a mischief which is supposed by many to be positively inimical to bacillary life.

Yet hæmoptysis and tubercle are too closely related to be looked on as mere concomitants, however much stress we may lay on the very great frequency of tuberculous phthisis as compared with all other diseases of the lungs.

Indeed, they both depend upon a common cause: the "dispositio catarrhalis" of the old writers, which I may best define as a tendency to a sluggish catarrh occurring in places where the circulation is feeble. The circulation is not sufficiently feeble to bring about degenerative inflammation and its resulting hæmoptysis in previously well-disposed tissue, as we have seen may result from that far greater enfeeblement of circulation which follows cardiac failure: nor is the catarrhal tendency sufficiently active to start into being where the circulation is energetic, as occurs with the inselective catarrh of pneumonia. But where the catarrhal tendency and the feeble circulation both exist, there we have a constant focus of depressed activity, gifted with a dogged persistence which the strongest tissue must in time give way to, a veritable quicksand where it wallows helplessly, and in which at last, after passing through the stage of fatty degeneration, it dies suffocated. Such a slough of despond is the birthplace of hæmoptysis and the rich foster mother of the bacillus.

All hæmoptysis in tuberculous phthisis arises from a perforating ulceration of a vessel's wall, or from the solution of

[1] A paper read before the Midland Medical Society, December 6th, 1893.

its continuity after fatty degeneration and necrosis, or, by far the commonest of all, from the rupture of an aneurysmal dilatation of it.

Granted my position as to the pathology of hæmoptysis, the *rationale* of its treatment is simple, and the best means to carry out this *rationale* easy of acquirement. It will be best to consider these means under two heads: (1) when the hæmoptysis arises from lung mischief secondary to cardiac failure, and (2) when it is due to primary lung disease.

The hæmorrhage occurring in cardiac disease is due to a degeneration of the endothelium with consequent thrombus in a branch of the pulmonary artery owing to feeble circulation, thus causing an infarct; the hæmorrhage itself arising from necrosis of a vessel or vessels in the infarcted area from inflammation in the tissues surrounding it. But the tension of blood is very low, the effused blood quickly clots and lies against the opening, the blood within the vessel looks on this clot as a foreign body and forms a thrombus upon it which soon occludes the bleeding point.[2] The indication in cardiac hæmoptysis is therefore to prevent a repetition, and to effect this we have to strengthen the heart by horizontal rest and such tonics as strychnine and digitalis; personally, I find subcutaneous injections, or rather intramuscular ones—for it is high time we did away with the term subcutaneous—of liq. strychninæ in the doses we are accustomed to give it by the stomach, 3 to 5 minims thrice daily to be the most efficacious of all means for stimulating the weakened musculature of the heart.

Should the initial cardiac hæmoptysis be very severe we must at first have recourse to the treatment I am about to suggest for hæmoptysis due to primary lung disease; but even then we must be very chary in adopting measures which depress the heart.

In primary lung disease we should look upon the bleeding point much as a surgeon would look upon a bleeding vessel in a sloughing ulcer of the leg, which he had to treat without the aid of any chirurgical skill. I take it he would be very ill-advised to employ ergot or any other vasomotor contractor, for the vessel in the neighbourhood of the bleeding point is diseased, its muscle fibres are degenerated, and therefore the drug will act less upon them than upon the fibres of all the other arterioles of the body; the injured arteriole it will not contract, but it will raise the pressure of the blood within it by its effect on all the healthy arterioles; the result will therefore be an increase rather than a lessening of the bleeding, unless, indeed, you should so press your ergot that the general contraction resulting produced heart failure and in this way lessened the flow of blood at the bleeding point, though not to so great an extent as would occur elsewhere. I do not think this procedure will for a moment commend itself to us; it is a far more dangerous and a far less efficacious method of producing heart failure (that is, faintness) than Nature's own. She does it by bringing the tension of the blood to a minimum, and the blood ceases to gush from the extreme weakness of the propelling force; there is the rest of sheer exhaustion; and during it mechanical and chemical (not physiological) forces create a plug for the hole in the relaxed and flaccid vessel. All the arterial system is in a state of half-empty flaccidity, so that the feeble flickerings of the heart have every encouragement to continue, for Nature has provided that it shall have the least possible work to do. And so life is kept going with the smallest possible amount of blood pressure, thus allowing the plug the best possible chance of establishing itself. But in ergot faintness the blood, so long as it moves at all, must move under considerable pressure, and hence plugging will be much less likely to take place. Moreover, the strong contraction of the arterioles gives the worn-out heart far less rest, and it has to re-establish the circulation in the least, instead of the most, advantageous circumstances.

As to ergot itself, I think I have given it a fair trial. My routine treatment when resident medical officer at the General Hospital was 30 grains of Bonjean's ergotine injected deeply into the muscles of the buttock. I never saw any injurious effect, local or general, result from such treatment; nor can I say that I was ever able to definitely associate any cessation in the hæmoptysis with its use. But even were it good to contract the arterioles of the lungs, how do we know that ergot will do this? As I stated before, the calibre of the pulmonary vessels is under very different governance from that of the systemic ones, and I am aware of no evidence tending to show that ergot can contract them.

Venesesection is, I think, sometimes of value at the outset; if the pulse be strong, the individual full-blooded, or if venous congestion exist, then it is easy to see how a timely venesection may diminish the loss of blood. For half a pint of blood withdrawn quickly will lower tension, etc., as much as a pint removed slowly; that is, the quick withdrawal of blood by venesection may do at once what Nature is striving to accomplish more slowly, namely, produce a faintness of the circulation.

Again, anything which keeps the blood in the systemic circulation and so produces anæmia of the lungs, is beneficial. We know that the splanchnic area can contain all the blood of the body; any therapeusis, therefore, tending to fill this area must be good; large doses of nitrites, which relax the systemic arterioles, should thus prove of service, as well as the constant supply of small portions of food so as to keep up a constant demand for blood in the alimentary tract.

To fulfil the same end ligatures may be applied to the thighs and upper arms to prevent the blood reaching the right heart, a procedure well spoken of by Walshe. Leeches to the anus or a hot foot bath have proved similarly useful. Till faintness come on the sitting posture is preferable; in this way the head is less supplied with blood, and so less able to stimulate the heart's action than if the horizontal position were maintained.

Any means which may increase the coagulability of the blood is evidently of value. It is for this reason that the swallowing of gallic acid is recommended, though the method of its action is unknown to me. Nor do I think the evidence in its favour is considerable. That it does reach the blood in these cases is shown by the fact pointed out by Wood, that the blood spat up after its exhibition often has a greenish hue.

In July, 1893, Professor A. E. Wright, of Netley, made a communication to the British Medical Journal on the Value of Calcium Chloride as an Increaser of the Coagulability of the Blood. He showed, also, that in too large doses it delayed greatly the period of coagulation. In cases of chronic bleeding—for example, hæmophilia—doses of 5 grains taken thrice daily were most beneficial, but to produce a sudden and complete effect such as would be our desideratum in severe hæmoptysis, a large single dose of half a drachm would obtain the maximum effect which, in the professor's own case, reduced the coagulation time of his blood from 4 to $1\frac{3}{4}$ minutes.

Of all measures for the relief of hæmoptysis perhaps the induction of vomiting has the strongest clinical value of any, but the *rationale* of its action is certainly obscure, and, though I have thought much about it, I am in no position to offer any elucidation of the problem. It matters little what drug be employed for the purpose; whether it be a local irritant, such as salt and water, or one acting on the centre, such as antimony. Personally I prefer antimony, as it produces relaxation of the systemic arterioles as well.

Hydragogue purgatives are of extreme value, as they deplete the abdominal organs, and so enable them in turn to drain other parts of the body. Amongst them, calomel possesses a double virtue, as mercury is one of the best, if not the best, drugs we possess for lowering arterial tension. Its great antiphlogistic power adds still more to the efficacy of mercury.

The great thirst which often accompanies prolonged bleeding is best assuaged by the sucking of small pieces of lemon, as the exhibition of fluid drinks, except as nutriment, is to be deprecated, our aim being to keep the quantity of the blood as low as possible and its quality as concentrated.

A cool atmosphere is supposed to be advantageous. There is no doubt it is so in the case of epistaxis, and the nose is one portion of the respiratory tract. So it is hoped that it will be so to the vessels of the lung parenchyma, though we must remember, first, that, whatever the temperature of the outside air may be, that in the air sacs is constant; and, secondly, cold air is a stimulant to cardiac action—an action we wish to depress. Hence I believe a warm room to be preferable.

[2] On this question of thrombosis I have chiefly followed Cohnheim.

I must not forget one important aid with which Nature has provided us: she has given us a most capable ligature in the elasticity of the lungs. As blood is effused and more blood from the right heart takes its place within the vessel the effused blood distends those alveoli into which it flows, and the elastic walls of these in turn increase the pressure which they had previously exerted, and so press the effused blood with increasing force against the ruptured wall of the vessel. This natural ligature it is evidently our duty to aid by all the means at our disposal, and for this reason I would shun any method of therapeusis which would accentuate the act of inspiration, such as the inhalation of astringent sprays.

The application of an icebag to the præcordium, inasmuch as it is a powerful cardiac depressant, is valuable, but, in so far as it chills the surface of the body, it is undesirable. As ice in some form or other is usually importuned for by the patient, it is, perhaps, well at once to resort to this method of its exhibition, and the bag will be most wisely placed upon the præcordium. As to its local application over the bleeding point, even if we could accurately localise this, I doubt the advisability, owing to our want of knowledge of the effect of cold on the pulmonary vasomotor nerves and of the depth to which the cold of an icebag can penetrate. Experimentally, but not yet my to mind clinically, it seems to have been shown that the cutaneous application of ice to the chest has produced local anæmia of the subjacent lung.

I would conclude this paper with the exhortation, "Above all things let the thought of morphine be kept ever in mind." As a chain's strength is that of its weakest link, so is the hæmoptoic force of a circulation that of its strongest pulse. One strong beat may thrust away the plug which many feeble predecessors have allowed to form. A vascular serenity is, therefore, an absolute essential in the treatment of hæmoptysis.

REMARKS ON THE ETIOLOGY OF CANCER.[1]

By C. H. CATTLE, M.D.Lond., M.R.C.P.

I propose to speak, almost exclusively, of the etiology of cancer in the strict sense of the word—that is, of malignant tumours of the epithelial type. This subject has attained to great prominence during the last few years on account of the alleged discovery of parasitic protozoa in cancerous tumours. No one will be able to adopt a narrow view of the etiology of cancer who has read in Mr. Hutchinson's *Archives of Surgery* the series of admirable clinical records, in which is shown the connection of cancer with other morbid processes, especially chronic inflammatory lesions. While bearing in mind as much as possible of what has been imparted to us by eminent observers, I have no wish to dissemble my personal bias towards a belief in a specific parasitic agent as one factor, and that probably a necessary one, in the causation of cancer. Leaving this for the present, I will glance very briefly at some contributory influences, which have received more or less general acceptance.

Heredity.—Under this head we have to distinguish carefully between diseases in which the disease itself is unmistakably inherited, and those in which a want of resistance or vulnerability of certain tissues is inherited, which may lead to the development of the disease if certain other conditions are favourable. To the first class belong syphilis and hæmophilia; to the second, in the great majority of cases, tuberculosis and cancer. It must also be remembered that in dealing with such a common disease as cancer the influence of heredity may be apparent rather than real; for although the same disease may affect the offspring as affected the parent or grandparent, yet the explanation may be that the individual was in both cases exposed to similar extraneous influences. Among private patients Sir James Paget estimated that a history of hereditary influence could be obtained in one case of cancer in every three. This estimate, high as it may seem, would still leave 66 cases in every 100 to be otherwise accounted for. Well authenticated cases have been recorded of cancer affecting many members of the same family, and extending over several generations.

[1] A contribution to a debate at a meeting of the Sheffield Medico Chirurgical Society, March 1st.

Age and Sex.—Statistical tables and daily experience inform us that cancer is most commonly met with in persons between the ages of 40 and 60, and not infrequently between 60 and the end of life. The sudden rise between 40 and 50 is due mainly to the liability of the breast and uterus at this period of life to become cancerous. Females are about twice as liable to cancer as males; but if the reproductive organs are left out of account, cancer is much more common in males. Cancer of the lip is a hundred times as common in men as in women, and cancer of the œsophagus four times. In Continental statistics the stomach is invariably at the head of the list as regards liability to cancer, the position of the uterus, and still more of the breast, being comparatively insignificant. While allowing due weight to the obvious fact that cancer is, in the majority of cases, a disease of the decline of life, it would be a mistake to allow ourselves to be so dominated by this fact as to ignore the occasional occurrence of cancer before the usual age. I think some light may possibly be thrown on etiology by a more careful study of cancer occurring comparatively early in life. I may quote four instances of early cancer which I have come across quite lately without being at any trouble to search for records. The first case, which came under my own notice, was one of cancer of the breast in an unmarried woman of 33. Careful inquiry failed to elicit any evidence of hereditary transmission. The second case, also of cancer of the breast, was related to me by a medical friend. The patient's age was 34, and no evidence of hereditary influence could be discovered. The third and fourth cases have been recently reported. One was a case of cancer of the rectum in a woman of 30,[3] and the other of cancer of the cæcum in a girl of 22.[4] In neither case is anything stated for or against the influence of heredity.

Chronic Irritation.—It has been said that parts which have long been in a state of chronic inflammation or irritation are liable, under the influence of heredity or senility, to become cancerous. The well-known records of "lupus cancer" are a case in point. The cancerous process is something so specific, so different from ordinary chronic inflammation, that I cannot bring myself to believe in the evolution of the one condition from the other, without the superaddition of a specific cause. To my mind such influences as heredity, senility, local damage to parts, and the involutional changes in organs whose functional days are overpast, are so many predisposing causes to a specific disease, which prepare the way for the entrance of a specific poison to the tissues. While saying this I must, however, admit that Mr. Hutchinson's records of warts and moles in the aged becoming malignant appear to afford strong ground for a belief in the evolution of cancer from simple and innocent modifications of structure. Some rare cases are on record in which cancer has followed the long-continued administration of arsenic.

The Seat of Cancer, etc.—It is a well-established observation that those parts which are frequently the seat of primary cancer are little liable to secondary deposits and *vice versa*. While these propositions will be generally admitted, it would be no easy matter to give reasons for all the observed facts on which they rest. For instance, in the case of mammary cancer, why is the liver so often affected by secondary growths while the lungs may escape? If cancerous emboli can get lodged and grow in the capillaries of the liver, why does the same result occur but seldom in the case of the stomach, spleen, intestine, and kidney, which are nourished by the same cancer-laden blood? Auto-inoculation has been observed occasionally where a healthy surface has lain in contact with a cancerous one. Cases are also known in which inoculation of the stomach or intestines has been effected by means of fragments detached from growths higher up the alimentary canal. I may just mention, without comment, the liability to cancer of orifices, the narrowings and flexures of hollow organs—in short, parts exposed to friction and other local damage.

Geographical Distribution.—Cancer is said to be more common in Europe than in any other continent. By some authors it has been thought to be more common in low-lying districts, especially near river banks, than in elevated re-

[2] British Medical Journal, February 3rd, 1894, p. 271.
[3] British Medical Journal, February 10th, 1894, p. 299.
[4] *Ibid.*, Epitome, January 27th, 1894, p. 14.

gions. It has also been stated that in France cancer is more common in the country districts than in towns.

Cancer a Specific Disease.—Cohnheim's theory of the origin of new growths does not, I think, carry us very far towards explaining cancer. It is more applicable to the case of simple tumours, and, perhaps, sarcoma. The epithelial cells of cancer have undergone a specific metamorphosis. Normal epithelium transplanted to an abnormal situation, as may occur accidentally in surgical operations, does not grow into a cancer. A piece of scirrhous cancer transplanted into a rabbit disappears; the thyroid gland of a sheep transplanted into a man is in like manner absorbed. What, then, is the specific force which not only causes cancerous epithelium to proliferate, but also enables it to maintain its existence against the disintegrating action of the invaded tissues? Sir James Paget has made an interesting comparison between cancer and the group of diseases which we are accustomed to call specific. He points out that the members of this group differ from one another quite as much as any one of them differs from cancer. If we compare the characters of syphilis, tuberculosis and cancer we shall find they present certain rough and general analogies; objection may no doubt be raised to points of detail. In each, for instance, the initial lesion is often solitary and local. This is followed by general infection of the system, effected primarily by means of the lymphatics and afterwards by the blood vessels. The tendency of each disease, if unchecked, is to destroy life. In each, again, after a prolonged struggle, the disease may die out and the patient survive. In only one of these diseases has a specific parasite been conclusively demonstrated as the cause, but can there be reasonable doubt that, in the case of diseases so similar in their course and development, a similar cause will eventually be demonstrated for all three?

The Specific Agent.—It is hardly likely that cancer is caused by a bacillus, for its characteristic structure is very different from that of the lesions occurring in those diseases which we know to be caused by bacilli: but it is quite conceivable that protozoa living in the cancer cells might determine their proliferation, and by means of their toxic products exercise a more extended influence than the actual number of parasites would account for. I shall be told, I know, that the secondary deposits of cancer are all grafts from the primary one, and that the supposed parasite, if it be a *vera causa*, ought, acting by itself alone, to excite the disease in whatever situation it becomes implanted. The criticism is perfectly just. Let me try and state the parasitic theory a little more explicitly. It assumes that the association of the parasites with the epithelial cells, having once taken place, becomes permanent, both as regards the primary and the secondary manifestations of the disease; that epithelial proliferation alone does not constitute cancer; and that protozoa do not excite cancer in epithelial tissues unless favoured by a certain preparedness of soil. These assumptions, if proved true, would explain much that is obscure in the etiology of cancer. The theories of cancer are not few, and we may fairly ask: Does any of them give a better explanation of the cardinal features of the disease—of its pertinacious growth, its widespread generalisation, its inexorably lethal tendency? I do not assert that the bodies which have been found in cancer during the last few years by many observers, and described as protozoa, are the cause of the disease. But a disproof of all connection between these bodies and the origin of cancer would not weaken the force of the general argument in favour of a specific parasite. Microscopic evidence alone will not settle the questions at issue. There is reason to believe, however, from evidence gained from the examination of specimens while still quite fresh, that some of the bodies described as parasites are at least living. What is necessary to make the evidence convincing is that the supposed specific cause should be shown to be capable of exciting cancer in an animal previously healthy, either acting alone or in presence of certain known concomitant conditions.[5]

[5] The paper was illustrated by lantern-slide photographs by Dr. Millar, of Nottingham, and by coloured drawings made for the author.

The Clothworkers Company have sent a cheque of £50 to the Chelsea Hospital for Women.

THE ELEVENTH INTERNATIONAL MEDICAL CONGRESS.

Held in ROME, March 29th to April 5th.

[FROM OUR SPECIAL CORRESPONDENTS.]

AN ADDRESS ON NON NOCERE.

Delivered before a General Meeting of the XIth International Medical Congress, held in Rome, 1894.

By Dr. JACOBI,
New York.

[Abstract.]

The medical profession suffers injury in various ways. By the possible preponderance in International Medical Congresses of the social over the scientific elements, by the excessive number of specialists insufficiently grounded in general medical knowledge and practice, and by the excessive modesty of some practitioners who send to these specialists a large number of the cases which come into their hands, and thus teach the public to prefer an almost empirical method of practice to true science; by the manner in which medical men persuade themselves that manufactured products (medicines and foods) are preferable to the *Pharmacopœia*; and, lastly, by an excessive tendency to follow new fashions and customs (tuberculin, elixir). The cause of all this is the desire to do good and this also explains the eager hunting after new products of organic chemistry, which too often are employed in excessive doses. The reproach which has been brought against the medical profession of always wishing to do too much in the way of operative interference and medication is certainly not without some foundation. But the administration of remedies in insufficient doses is even more injurious than giving them in exaggerated quantities.

Many chances of saving human life are thrown away by too great delay in interfering medically, and this occurs especially in inflammatory and infective fevers. The so-called "expectant" method is frequently a most pernicious proof of indifference or ignorance.

Side by side with exaggerated or insufficient medication goes exaggerated or insufficient nourishment. Sugar of milk, if used as the sole food of infants, is injurious to them. Cow's milk, even if sterilised by boiling, cannot acquire the physiological properties of woman's milk, and if used alone is unfit for the nourishment of infants. Infants suffer greatly if they are treated too late or injudiciously. Asphyxia of the newborn impairs for ever both bodily and mental health, and therefore necessitates prompt intervention on the part of the medical practitioner. In such cases, however, electrical treatment is not to be recommended unless it is applied with care, and with the necessary interruptions. The perils of infective lesions are also frequent, but can easily be avoided. The cause of the obstinate constipation described by the author (even if the only food given is woman's milk) consists in abnormal length of the sigmoid flexure in the newborn infant and baby. In such cases purgatives must be avoided; daily enemata must be given until in five or six years a normal condition has been brought about.

Interference by tracheotomy in diphtheria is pernicious except in the case of children of a certain age and of a submissive disposition. The struggles of infants cause exhaustion, cardiac paralysis, and death. Nasal diphtheria necessitates frequent injections; glandular abscesses of the neck, if they tend to become very large or to be the seat of a necrotic process, should be freely opened and disinfected.

Lannelongue's operation for microcephalus and idiocy has not answered the expectations formed of it; death has often been the result. The improvement that has followed the procedure is slight, and is not attributable to the operation. On the contrary, instead of an expansion there is a diminution of the cranial cavity. This fact was demonstrated on a skull which had been operated upon.

AN ADDRESS
ON
THE GROUND-SUBSTANCE OF PROTOPLASM AND ITS MODIFICATIONS BY LIFE.

Delivered before a General Meeting of the XIth International Medical Congress, held in Rome, 1894.

By Dr. DANILEWSKI,
St. Petersburg.

[Abstract.]

The material basis of all vital phenomena, without exception, is the protoplasmic substance. This is the invisible source of the feeling of health. If its plastic action is manifest in the development of the embryo, on the other hand this shows itself only indirectly in the phenomena of life. Its principal active principle is protoplasm, that molecular-chemical complex which shows in its physico-chemical properties the features proper to the chemical complex in general. The protoplasmic complex is a whole, and not a simple mixture of its constituent parts. If the protoplasm is living, it acts on an entity which does not allow its individual parts to be seen in the working of its vital activity.

Albumin being the principal constituent of the protoplasmic complex, and in view of the differences in albuminous substances in different parts and of the forms of protoplasm, it can be understood that the quality of the albumin determines the kind and character of the vital activity, and that the phenomena of life depend, on the one hand, on the fundamental properties and the nature of the functions of the protoplasm, and, on the other, on the chemical constitution of the albumin.

The albuminous molecule is itself a chemical complex consisting of atomic groups which form *series* constructed uniformly but yet distinct one from the other. Certain albuminoid substances are particularly rich in a certain kind of series; others contain none of certain series. The richer the albuminous molecule is in atomic groups of various kinds, the wider and freer is the share it takes in the vital phenomena of the protoplasm; the more uniform the quality of the groups in the albuminous molecule, the narrower and more restricted is the biological *rôle* of the latter. The incomplete albuminous molecules in superior organisms are derived from complete molecules. In the lower organisms there are no complete molecules analogous to the albuminous molecules of the superior protoplasm.

A comparative study of the albumin of superior and lower organisms leads to the conclusion that in Nature the albuminous substances are not formed all at once, and that the complete albuminous molecule of the superior protoplasm is the result of a philogenetic development parallel to the perfecting of organic forms on earth. In this development the albuminous molecule displays the faculty of accommodation. The external causes which bring about its complexity do not act directly on the albuminous molecule but on the protoplasmic complex, the latter being the defender of the albuminous molecule, and at the same time the transmitter of external influences. The new atomic groups which finally have entered into the constitution of the albumin must at the commencement of development have been constituent parts of the protoplasmic complex, but their existence not being of a lasting character these new groups acquire permanent and biotic character in becoming a constituent part of the albuminous molecule.

Protoplasm may differentiate itself into two distinct forms —namely, hyaline and "stromic." The former first receives the shock of external actions, and in like manner its complex is first reconstituted under their influence, and its albumin is first invaded by the new atomic groups, whilst the stromic protoplasm follows the hyaline step by step in its development. The hyaline protoplasm keeps more feebly that which it acquires, whilst stromic protoplasm assimilates less readily but keeps more persistently what it has acquired. The phenomena of heredity are explained by close connections gradually formed between these two forms of protoplasm and the external world.

Civilised man uses alcohol so extensively, and has done so for so long, that one may with certainty affirm the existence of an alcoholised protoplasm in drunkards just as one finds morphinised protoplasm in cases of chronic intoxication with morphine. The existence of arsenic in the protoplasmic complex of arsenic eaters, consequent on the fact that they are incapable of subsisting normally without that element, can no longer be questioned. In these three facts we have the proof that man by introducing into his body stimulant, narcotic, and alterative substances even to excess becomes accustomed thereto to such a degree that without them his organism is not at peace. Hence it follows that the complex of protoplasm and albumin is adaptable, that it is not incapable of being disturbed in its fundamental constitution and in its properties, and that it is reconstructed with difficulty. This, however, is not to be taken as meaning that such a thing never happens, and it does so with greater readiness in a regressive than in a progressive direction.

PROCEEDINGS OF SECTIONS.

[*Specially Reported for the* British Medical Journal.]

SECTION OF DERMATOLOGY AND SYPHILOGRAPHY.

Tuesday and Wednesday, April 3rd and 4th.

Presidents, Drs. v. Petersen, Neisser, Schwimmer, and Wahrschewski.

Idiopathic Sarcoma of the Skin.

A discussion on multiple idiopathic primary sarcoma of the skin and its nomenclature was introduced by Professor Kaposi (Vienna), and gave rise to an extended debate. Professor Kaposi exhibited a number of drawings of his typical cases of idiopathic sarcomata. Among other points upon which he insisted was the fact that the pigmentation was due to hæmorrhages into the adjoining tissues, and not to pigmented cells as in ordinary melanotic sarcomata.

Syphilis.

A discussion on the nature of the simple contagious ulcer was introduced by Drs. Kreftung and Ducrey, and one on the treatment of syphilis by Dr. Jullien.

In the discussion on the treatment of syphilis, the majority of the speakers, who included Drs. Schiff, Touton, Grunfeld, Brada, Ravogli, and Schwimmer, insisted on the importance of continuing mercurial treatment for a lengthened period of time, even for two to four years, to ensure a cure.

Dr. Jullien recommended calomel as having less deleterious effects; he always gave it with the syringe.

Dr. Schiff advised excision of the primary sore, preferably, of course, before induration appeared; most of the other speakers did not agree that the excision was prophylactic.

Dr. Touton considered that inunction was by far the best method of administering mercury.

Cold as an Etiological Factor in Diseases of the Skin.

The only paper read in English was a communication by Dr. Corbett (Cleveland, Ohio), who called attention to a disease of the skin etiologically allied to the prurigo hiemalis of Duhring, yet presenting the clinical features described by Hutchinson under the title, "Some Peculiar Eruptions allied to Chilblains." Fourteen cases were reported, and the following conclusions were drawn: That three conditions are necessary for its production —namely, a low temperature, air in motion and humidity. Again, there is noted a preponderance of the male sex, who are more exposed to inclement weather. No trade or social condition had any no-

ticeable influence. Neither were chilblains or lupus erythematosus met with in the cases reported. Prominent among the morbid changes in the skin was the dusky, almost cyanotic, appearance of the lesions, which changed in tint according as the position of the hand was raised or dependent. They were also influenced by the temperature of the room. In one case there was a marked disturbance of the peripheral circulation, as pointed out by Mr. Hutchinson; but except in this case, no such disturbance was apparent. In the treatment of the disease, local measures afforded the greatest relief. These included emollients, soothing applications and astringents, as were indicated in its different stages. Protecting the surface, although not always effectual, is to be recommended. Failing in these, we still possess one panacea—a change of climate. In conclusion, the cases reported presented a well-defined type, of which there seemed to be two varieties, possessing the following distinctive features: 1. Sudden appearance at the approach of cold weather. 2. Spontaneous cure in the spring. 3. Liability to return in successive years, occupying the sites previously involved. 4. Its characteristic position is the dorsal surface of the hands, next in frequency the corresponding positions on the feet. 5. The disease shows little or no tendency to spread to other parts of the body, nor, after the lesions are fully developed, to extend at the periphery. 6. The eruption is characterised by variously-sized, round, or, as involution proceeds, horseshoe-shaped patches, which are slightly, sometimes markedly, thickened, having an abrupt, well-defined margin, and of a dusky red or slightly erythematous colour. At first vesicles are present which easily rupture, leaving denuded, weeping, irregular, pinhead to lentil-sized surfaces, whose colour is perceptibly stronger than the surrounding patch, and may be likened to a raw ham tint. The disease at this time often presents a striking resemblance to herpes. Later the patch takes on a faded-rose-coloured hue, and becomes covered with a thin layer of adherent scales, when it might readily be mistaken for lupus erythematosus. This may mark the subsidence of an annual attack, or after many years the eruption may assume this form. 7. Itching may or may not be present when present it is paroxysmal. 8. Finally, as observed by the writer, the eruption is not associated with any other disease, nor has it been ascribed to any special bodily condition. With these distinctive characters, it seemed to the author that we are justified in looking upon the affection as a disease *sui generis*, for which he suggested the name of dermatitis hiemalis. Coloured photographs and drawings were shown in illustration.

SECTION OF PATHOLOGY.

Wednesday, April 4th.

TYPES OF MALARIAL FEVER SEEN IN BALTIMORE.

A PAPER on this subject was read by Dr. JOHN HEWETSON, Assistant in the Medical Clinic at the Johns Hopkins Hospital. The communication consisted of a brief report on 531 cases of malarial fever observed in Professor Osler's clinic during the past four years, and analysed by Dr. W. S. Thayer and the writer. Laveran's organism was invariably found before a diagnosis was made, and the three types described by the Italian observers confirmed. Of the 458 cases in which the nature of the infection could be definitely made out, 113 were found to be due to a single tertian, 158 to a double tertian, and 175 to an æstivo-autumnal infection. There were in addition 2 cases of quartan infection, and 10 cases in which the tertian and the æstivo-autumnal organisms were combined. In the spring and early summer the infection was almost invariably due to the tertian type of organism, while in the latter part of the summer and in the fall both tertian and æstivo-autumnal types were found. Thus, during the first half-years there were 64 cases of a single or a double tertian infection, and only 4 in which the æstivo-autumnal organism occurred. In each of these latter there was serious doubt as to whether the initial infection had really occurred in the spring. A combined infection was found in 3 instances. During the second half-year there were 271 cases of single or double tertian infection, 175 cases of æstivo-autumnal, 2 of quartan, and 7 in which there was a combined infection. The frequency of the occurrence of the æstivo-autumnal organism in the fall was more strikingly shown in the fact that, while between January 1st and September 1st there were 136 cases of single or double tertian infection, and only 27 of æstivo-autumnal, with 4 combined, there occurred between September 1st and January 1st only 135 cases of single or double tertian infection, and 148 in which it was due to the æstivo-autumnal organism. There were in addition 2 cases of quartan and 6 of a combined infection. The organism found associated with the tertian infection was in every way similar to that described by the Italian observers, and this was also true of the quartan organism, although it was very rarely met with. The entire cycle of the development of the æstivo-autumnal organism was not observed, as blood from the spleen was seldom aspirated, and the segmenting form was never seen in the peripheral circulation. The various other stages were, however, entirely in accord with what has been described in Italy and elsewhere. No definite decision was reached regarding the *rôle* played by the crescentic form of the organism. Flagellating forms were seen associated with both this and the tertian type of organism, invariably arising from the crescent or ovoid form in the former. They were, however, never seen in either case until after the blood had been upon the slide for some few minutes, and were regarded as degenerative forms. The types of fever were found to vary much with the organism causing the infection, being much more constant when associated with the tertian than with the æstivo-autumnal. In the two cases of infection with the quartan organism regular chills occurred every fourth day, the temperature being normal or subnormal during the interval. The chief differences existing between paroxysms associated with tertian and æstivo-autumnal organisms were as follows. In the first type the paroxysm comes on more abruptly, reaches its climax sooner, and the fever falls to normal in a much shorter time than in a paroxysm of the æstivo-autumnal type. While the average duration of a tertian paroxysm was between eleven and twelve hours, the length of the æstivo-autumnal was more nearly twenty-four. Perhaps the most striking difference, however, was the tendency on the part of the fever to become remittent when due to an æstivo-autumnal infection. The authors believe, then, that in malarial fever in Baltimore three distinct types of organism can be distinguished; the organism of tertian fever, the organism of quartan fever, and that associated with the irregular æstivo-autumnal fevers; the cycle of development of the tertian organism occupying about forty-eight hours, that of the quartan seventy-two hours, and that of the æstivo-autumnal usually twenty-four hours, although there is reason to believe the cycle of the latter may vary much. In other words, the malarial fevers observed in Baltimore correspond closely to those occurring in Europe and elsewhere, the same observations having been made by them as by the Italian writers, the sole difference being, perhaps, the relative infrequency of the quartan fever.

DEGENERATIONS FOLLOWING LESIONS OF THE CEREBELLUM.

Dr. ALDREN TURNER gave a lantern demonstration of the degeneration following lesions of the cerebellum and its peduncles in monkeys, of which the following is an abstract: The degenerations following removal of the lateral lobe of the cerebellum, or section of the superior peduncle, showed that this structure contains an efferent tract to the opposite red nucleus and optic thalamus, and an afferent tract, which appears to be the cerebellar termination of the antero-lateral ascending tract of Gowers. Lateral lobe extirpation, or section of the middle peduncle, was followed by diminution of the transverse fibres of the pons Varolii on the side of the lesion, and atrophy of the cells of the nucleus pontis on the opposite side. Lateral lobe extirpation, or section of the inferior peduncle demonstrated the existence of an efferent tract to the opposite inferior olivary body, and of an afferent tract to the cortex, chiefly of the lateral lobe. Extirpation of the middle lobe occasioned no degeneration in the superior, middle, or inferior cerebellar peduncles, but was followed by degeneration and scleroses of the tract which passes from the vermiform process to Deiters's nucleus—the "direct sensory cerebellar tract" of Edinger. No confirmation of Marchi's statements was obtained as to the existence of a direct efferent cerebellar tract in the spinal cord, or of degeneration

in the anterior nerve roots, mesial fillet, or posterior longitudinal bundles, after cerebellar extirpation. In two cases of lateral lobe extirpation, however, degeneration in the anterior and lateral columns of the spinal cord respectively, in the position indicated by Marchi, was observed. In the case, however, in which there was marginal degeneration in the anterior column, the nucleus of Deiters, on the same side, was implicated; while, in that in which degeneration in the lateral column was present, there was a lesion of the tegment of the pons, involving the nucleus of the lateral fillet. The same degeneration was induced by lesions specially made in the lateral fillet. Destruction of the clavate and cuneate nuclei was followed by degeneration, on the one hand, through the restiform body into the cerebellum; and, on the other hand, through the internal and middle arcuate fibres to the opposite interolivary layer and mesial fillet. This latter structure was traced to the anterior quadrigeminal bodies and optic thalamus. Owing to lesion in some of the experiments of the roots of the fifth cranial nerve, special investigations on its central connections were made. Degeneration and sclerosis of the so-called "ascending root" was traced as far as the second cervical nerve, after section of the sensory division; and atrophy of the so-called "descending root" was observed after section of the motor division.

SECTION OF OBSTETRICS AND GYNÆCOLOGY.

The President of this Section was Professor Pasquali (Rome), and the Honorary Presidents were Sir Spencer Wells, Dr. Robert Barnes, Dr. Granville Bantock, Professors Simpson, Martin, Gusserow, Winkel, Pawlik, Péan, Pinard, Charpentier, Edebohls, Dimitri, and Ott.

Symphysiotomy.

A discussion on symphysiotomy was opened by Professor Morisani (Naples) and Dr. Leopold (Dresden).

Professor Morisani considered that the operation was justifiable when it afforded good hopes of the birth of a living child. It was applicable when the true conjugate diameter was between 6.8 and 8.6 centimetres (2⅔ to 3⅜ ins.). The proper moment to perform it was when, in a pregnancy at term, labour was well advanced and the dilatation of the os almost complete. The combination of premature delivery with symphysiotomy he did not think justifiable in the present state of experience, since it greatly increased the risk to the child. In operating, he had found no difficulty in dividing the symphysis with the same bistoury as the soft parts, but if the symphysis was ossified, he would not hesitate to employ a chain saw. Whether the symphysis was divided from above or below was not a matter of consequence, but it was important to divide the subpubic ligament, since the object of the operation was to ensure separation of the bones. Strict antiseptic precautions should be observed; he had never found any difficulty in arresting hæmorrhage with a pad of gauze, and thought there ought to be no danger of rupturing the bladder or vagina. After division of the symphysis delivery was generally completed spontaneously, but if not the forceps should be applied. In the after-treatment he did not consider that either bone suture or a plaster apparatus was necessary. It was enough to apply a supporting bandage, and to keep the thighs tied together. In his opinion symphysiotomy ought certainly to be preferred to embryotomy when the child was living, and would probably replace Cæsarean section in the majority of cases in which that was now the operation of election. The question as to the class of cases which were most suitable for premature delivery, and which for symphysiotomy remained to be settled, but his statistics of the latter operation were favourable. The number of women operated on had been 241, and the death-rate 11.6 per cent.; of these deaths, 6 were due to intercurrent diseases; 48 children were lost. The sources of death were the application of the operation to unsuitable cases (as where the contraction was very great or the patient was in a very unfavourable general condition), faults in operating, or a failure to select the opportune moment as mentioned above. Among the causes of the infant mortality were delay, and difficulty in extraction after the operation.

Dr. Leopold (Dresden) thought that while the operation might be considered to be firmly established as a justifiable procedure, when all the assistance and appliances found in hospitals were at hand, it would yet never replace version and embryotomy in general practice, owing to the risk of hæmorrhage, the danger of wounding the vagina, and the difficulties in delivery which might be met with after operation. He thought the operation might be resorted to with a conjugate diameter of 6.5 centimetres (2½ ins.), and even with 6 centimetres, though he considered embryotomy preferable in such a case. If the pregnancy had not reached full term, and if the conjugate was under 7.0 centimetres (2¾ ins.), it was desirable to induce premature labour; if full term had been reached, he recommended waiting until dilatation was complete, then attempting extraction after turning, and, if this failed, resorting to symphysiotomy.

Dr. Zweifel (Leipzig) did not accept the view that symphysiotomy was an operation which could not be undertaken in general practice. He believed that it was destined to replace embryotomy. He accepted the limit of 2½ ins. for the conjugate diameter as the smallest which rendered the operation justifiable. He preferred to make the incision through the soft parts transverse, and to divide the symphysis with a blunt-pointed bistoury. Care should be taken not to separate the patient's thighs, and an Esmarch's bandage should be applied after the operation. He had performed symphysiotomy 23 times without a maternal death, and had lost only 2 infants.

M. Varnier (Paris) also dissented from Professor Leopold's opinion as to the value of symphysiotomy in general practice. The operation had already been performed in private practice with encouraging success. Premature delivery gave a mortality of 30 per cent., symphysiotomy only about 9 per cent., so that, in fact, it ought to be preferred to turning.

Professor Sänger (Leipzig) did not believe that symphysiotomy would ever replace Cæsarean section. He had performed the latter operation 12 times without a death. He agreed with Professor Morisani that symphysiotomy was indicated with a diameter between 6 and 7 centimetres, but he thought it would be well if more Cæsarean sections and fewer symphysiotomies were performed. The former operation was more quickly performed, and the after-treatment was almost *nil*, whereas with the latter it was necessary to catch the opportune moment, and the after-treatment was tedious.

Drs. Pinard (Paris), Caruso (Naples), and Planellas (Barcelona) also took part in the discussion.

Treatment of the Pedicle in Myomectomy.

A discussion on this subject was introduced by Professors Mangiagalli (Milan) and Martin (Berlin).

Professor Mangiagalli gave a summary of the history of the operation of hysterectomy, and sketched the various methods of operating employed. He then proceeded to criticise the statistics of the operation, concluding that a reliable opinion could only be drawn from a study of the results of individual operators, who published every case upon which they operated. Even here it was difficult to form an opinion as to the relative severity of the various cases, though it was clear that the rate of mortality decreased year by year whatever method of operation was followed. The importance of the method of treating the pedicle had been exaggerated. It was not the only, nor perhaps the chief, source of danger. For instance, the prognosis was *cæteris paribus* very much worse in intraligamentous growths. The mortality for subserous, submucous, or interstitial tumours, was on the average 5 per cent., whether the pedicle was treated by the intra-abdominal or the extra-abdominal method. In his opinion the intra-abdominal method was to be preferred except in a few rare cases. He considered Zweifel's method, which was simple and rapid, the best as a rule, but the permanent elastic ligature presented certain advantages if care was taken to cover it with peritoneum. With regard to intraligamentous fibromata, which yielded so high a mortality, it was as yet difficult to say what was the best method of operating, further than that extirpation should only be attempted after laparotomy. Vaginal hysterectomy was a valuable operation when confined to the class of cases for which it was suitable. It might often with advantage replace castration in many cases in which that operation was now performed. Vaginal

hysterectomy, however, did not give good results if the volume of the fibromatous uterus exceeded that of the pregnant uterus at the fourth month. The statistics of vaginal hysterectomy could not, for this reason, be compared with those of the abdominal operation, which was applicable to the largest tumours.

Professor Martin acknowledged the indebtedness of German surgery in this matter to Professor Péan, of Paris. Hegar, who was the first to perform the operation in Germany (at Freiburg) had employed the extraperitoneal treatment of the pedicle; but that method had now been abandoned, castration being less dangerous, and giving as good results. Schröder had introduced the intraperitoneal method of dealing with the stump, and numerous plans had been devised, each of which had yielded good results, though none were altogether satisfactory. The risks of hæmorrhage from the stump and infection from the cervical canal were very real, and in any case the presence of the stump retarded recovery. These reasons had led him in 1888 to replace supravaginal amputation by total extirpation. The method of operating he now employed was as follows: (1) The cavity of the uterus was curetted, and, together with the vagina, rendered antiseptic; (2) cœliotomy; (3) removal of the tumour, with the uterus and appendages; (4) ligature, and division of the broad and round ligaments; (5) opening of the posterior *cul de sac*; (6) suture of the vagino-peritoneal edges; (7) excision of the cervix and completion of the suturing; (8) the suture ends brought down into the vagina, and the peritoneum closed. The bladder was not distended before operation. In his earlier cases he had employed abdominal drainage, but had abandoned it subsequently. His results had been as follows: In the first series, with drainage, 43 operations, with 30 recoveries, a mortality of 30.23 per cent.; in the second series of 54 cases he had had 49 recoveries, a mortality of 9.25 per cent.; in the third series, in which the operation had been performed in the manner above described, he had 26 cases with 25 recoveries, a mortality of 3.84 per cent.

Professor Landau (Berlin) said that his results with the intraperitoneal method had been so good (30 cases with 1 death) that he was unwilling to change; at the same time, he recognised that the stump was an element of danger, and therefore gave the preference to Péan's method or Martin's modification. His general rule was, if called upon to treat a tumour which did not rise above the umbilicus, to perform vaginal hysterectomy by *morcellement*, but if the tumour were larger he enucleated through the abdomen, performed hysterectomy, and removed the stump by the vagina. He considered it important not to close the peritoneal cavity completely.

Dr. Granville Bantock described the operation which he now performed. The several steps were as follows: To secure the broad ligaments, and, if possible, the uterine arteries, by ligature: to apply a temporary elastic ligature around the base of the tumour; to divide the peritoneal envelope of the uterus all round, about two to three inches in advance of the temporary ligature; to isolate the uterine body down to the level of the internal os, and there apply a *serre-nœud*, or permanent elastic ligature; to arrest any bleeding that may occur on removing the temporary elastic ligature; and finally to secure the uterine envelope to the parietes by double sutures, and then remove any redundancy of tissue and pack the cavity with iodoform and absorbent gauze after the closure of the parietal wound. The ovaries may be removed at any convenient stage of the operation. The redundant portions of the uterine envelope are best removed by means of Paquelin's cautery. The mortality with this operation, although reserved for the most difficult cases, had been 1 death in 23 operations: the patient in this fatal case was suffering from albuminuria, and death, which ensued seventeen days after operation, was mainly due to this complication. His general result in 166 cases treated by the extraperitoneal method was a mortality of about 15 per cent. (18 per cent. in the first half of the cases, 12 per cent. in the second half, and only 6 per cent. in the last quarter of the series). As he only operated in cases in which life was imperilled by hæmorrhage or degeneration of the tumour, he thought that these statistics would be considered good.

Professor Carle (Turin) considered that uterine fibromyomata should only be treated surgically when pain, loss of blood, or derangement of the functions of the bladder or rectum rendered interference imperative. He now operated by a method which differed from that described by Professor Martin, in that he performed first subperitoneal enucleation of the uterus; secondly, ligature of the uterine arteries; thirdly, he dissected up the cervix to its vaginal insertion, clamped below the cervix, and cut through the vaginal walls. The vagina was closed by sutures, thus avoiding the risk of septic infection from it. He had performed this operation twenty times without a death. His early results were: 11 laparomyomectomies with extraperitoneal treatment of the stump, 10 recoveries; 9 cases in which the treatment of the stump was intraparietal, with 8 recoveries; 52 cases in which the pedicle was treated by the intraperitoneal method, with 47 recoveries; 11 vaginal hysterectomies, all successful; 11 cases of enucleation and *morcellement*, all successful.

Dr. Jacobs (Brussels) insisted on the advantages to be gained by operating rapidly and preventing loss of blood, and to this end used special pressure forceps to prevent bleeding. He operated as follows: (1) The vaginal *culs de sac* were opened and the uterine arteries clamped by pressure forceps. (2) Cœliotomy; the tumour was brought out, and pressure forceps applied to the broad ligaments; the tumour was removed whole, the wound closed, and the vagina dressed.

Professor Calderini (Parma) had performed hysterectomy with extraperitoneal treatment of the pedicle in 18 cases, with 9 recoveries.

Dr. Doyen (Reims) spoke in favour of vaginal hysterectomy; and Professor Chiarleoni defended complete vagino-abdominal extirpation. After Professor Mangiagalli had replied briefly on the discussion,

Dr. Péan (Paris) read a paper on the extirpation of large uterine fibromyomata of the body of the uterus. The principles which guided him in resorting to operation were (*a*) that submucous and interstitial tumours of the body ought to be removed early; (*b*) that preference should be given to a method of operating which preserved the uterus while permitting extirpation of the tumour; (*c*) that, other things being equal, large tumours should be removed through the abdomen, small or moderate-sized tumours through the vagina; (*d*) that if the tumour could not be removed without serious mutilation of the uterus, it was better to remove the uterus and appendages; (*e*) that tumours originating in the posterior uterine wall, and growing down in the recto-vaginal septum, were best approached through a perineal incision. In performing this operation he employed two long-bladed toothed clamps, one blade being passed into the vagina, the other into the rectum. Hæmorrhage was thus prevented, and when the perineum was divided in the median line the tumour came into view, lying between the mucous membranes of the vagina and of the rectum. The tumour was then seized with toothed forceps and removed in fragments. Hæmorrhage was controlled by pressure forceps, left in place, if necessary, for some hours. Into the large cavity left by the removal of the tumour a large fenestrated elastic drainage tube was introduced, and packed with sponges treated with iodoform or salol, and provided with threads. The rectal and vaginal mucous membranes and the intermediate tissues were united by sutures. The sponges were withdrawn on the second or third day, but the drainage tube was retained for some time longer to permit antiseptic irrigation of the cavity.

SECTION OF SURGERY AND ORTHOPÆDICS.

Cerebro-spinal Surgery.

The first subject discussed by this Section was that of the surgery of the cerebro-spinal system. Dr. Lucas-Championnière read a paper on the operation of trephining founded on 64 cases on which he had operated. In 54 cases the operation was done for diseases or old-standing injury, in 10 for recent injury. In performing the operation the bone was laid bare by reflecting a flap; the trephine, which might be of any desired size, was then used, and the opening enlarged if necessary with curetting forceps. Over-refinement in localisation before operation was not to be commended, as it was in every respect better to make a large aperture in the skull. The 10 operations for recent injury had given on the

whole satisfactory results; three patients whose condition was desperate succumbed, but others who appeared to be in a state not less desperate had recovered; one patient had already survived for nineteen years. The 54 cases done for old standing mischief afforded still more striking proof of the harmlessness of the operation; only 7 deaths had occurred, and in all a fatal termination seemed almost certain before the operation was undertaken. In 2 cases life was probably shortened by the operation. There were examples of widespread diffuse lesion, and in such cases the amount of shock was considerable. In conclusion, he said that the field of intracranial surgery was not limited by limitations of the power of precise localisation. In certain conditions producing general symptoms, such as compression, the opening of the dura mater might produce very striking results. True epilepsy and periencephalitis also might be benefited, especially if the operation was undertaken early enough. The operation itself was not dangerous; he had never encountered suppuration.

Professor Macewen (Glasgow) discussed the causation of intracranial abscess, and demonstrated by means of drawings and specimens the mode of operating which he followed. He said (1) that all abscesses of the brain are formed subsequently to a primary focus of infective diseases situated elsewhere; (2) that the chief infective foci are formed in connection with middle-ear disease: (3) that abscesses of the brain originating in middle-ear disease are generally in direct contact with the primary source of infection: (4) that such abscesses are generally best reached in the first place through the mastoid antrum: (5) that the mastoid antrum is most easily opened through the supramental triangle, from which the whole tegmen antri and tegmen tympani may be exposed: (6) it is necessary to remove the whole infective tract: and (7) after this has been done the skull is trephined over the tempero-sphenoidal lobe of the brain.

Dr. E. Masse (Bordeaux) said that he had made use of a special method of "autogravure" applied to the head of the cadaver to trace the lines corresponding to the Rolandic and Sylvian fissures. He had then determined the relation of these lines to two main guide lines—the one medio-cranial, the other horizontal—to which he proposed to apply the term cranial equator. These two main lines gave the latitude and longitude, so to speak, of the cranium, and the position of the Rolandic and Sylvian lines in relation to them could be determined with almost mathematical accuracy: he had, in fact, calculated the fractional numbers which expressed the relation which existed constantly between these lines and the segments of the circle which cut them. He had tested his calculations on many heads, the measurements being made with a metal tape, and the results had always been concordant.

Dr. Argento also described a method which he had devised for determining the position of the fissure of Rolando.

Professor Lavista (Mexico) said that his experience was that, while the removal of intracranial cysts was followed by recovery unless secondary affections coexisted or complications occurred, the extirpation of tumours was not successful. At the same time, the operation of trephining did not render the condition of patients suffering from cerebral tumours less favourable, but rather the contrary, some amelioration occurring in most cases, especially in those in which the growth was superficial. In more deeply-seated tumours the operation involved so much disorganisation of the substance of the brain that recovery was impossible. The general rule should be to operate early, and not to delay until secondary complications arose. In doubtful cases he considered an exploratory operation justifiable.

Dr. D'Antona communicated the results of observations and experiments on division of the fifth cranial nerve at its point of emergence. The tissues which were deprived of their innervation by the operation underwent atrophy owing to a diminution of their vitality, and for the same reason became very vulnerable, so that the epithelium of the cornea easily degenerated and desquamated, with as a result ulceration and deep suppuration.

Dr. Postempski related the results of twenty cases in which he had performed craniectomy. Precise localisation was unnecessary, but it was important to make a large enough aperture. On the whole, the results had been disappointing, and the operation appeared to be of as little benefit in microcephalous and hydrocephalous patients as in those suffering from grave epilepsy.

Professor Sacchi showed two specimens illustrating plastic operations on the skull, completed by the introduction of osteo-cartilaginous discs taken from the dog.

Professor Zuccaro advocated resort to trephining as a temporary or exploratory operation, and showed a trephine which he had designed for this purpose.

The diagnosis and treatment of traumatic haemorrhage from the middle meningeal artery was discussed by Dr. Mugnai; and Professor Grande related a remarkable case of gunshot wound of the frontal region, with complete recovery on the twenty-seventh day.

Professor Bruno (Valencia) read a paper on homonymous hemianopsia after lesion of the cerebellum. The portions of the fields affected were the right upper quadrant. The lesion in the case in which the observation was made was a localised abscess in the left hemisphere of the cerebellum. The hemianopsia developed some six months after the first symptoms, staggering gait, were noticed. In discussing the case, Professor Bruno expressed the opinion that pressure effects would not account for the definite distribution of the hemianopsia; he thought there were some physiological grounds for supposing the existence of conducting paths between the cerebellum and the retina.

Dr. Caselli made a communication advocating temporary laminectomy in lesions of the spinal cord and its membranes. The operation would, he contended, afford much information if regarded as an exploratory operation alone, and might result in cure. His experiments proved that the bony structure would reunite without deformity or any bad after-effects. He related a case in which he had operated for slowly-developing symptoms of compression of the cord. Resection at the level of the third, fourth, and fifth dorsal vertebræ revealed an exostosis and pachymeningitis. Removal of the exostosis was followed by complete recovery, though the paraplegia had been complete.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

THE RADICAL CURE OF HERNIA BY KOCHER'S METHOD.

As this operation is of comparatively recent origin, and as no case has to my knowledge yet been published in this country, it may be of interest to record its performance.

C. T., a healthy boy of 16, consulted me during January, 1894, about a scrotal hernia which he had had since he was 6 months old. At first it was easily reducible, and for many years was kept back with more or less success by various trusses; latterly, however, it had increased rapidly in size, and, for the last year also, had been partially irreducible. As the boy was strong and of athletic habit, being very fond of gymnastics and football, it had been a source of great discomfort and even danger to him, and he had often had to eschew all exercise for some days at a time.

In the right side of the scrotum was a tumour which measured 3 × 1½ inch. It could be returned within the abdomen with the exception of a small piece. The external ring admitted the forefinger easily. I advised an operation, and, accordingly, on January 27th, with the help of my friend, Dr. Dean, I proceeded to operate.

An incision was made in the direction of the inguinal canal, over its whole length, extending from a point over the internal ring to half an inch below the external ring. The hernia was found to be congenital. The sac was opened and a piece of adherent omentum the size of a small hen's egg was ligatured and removed. The sac was then divided transversely and the lower part stitched up to form a tunica vaginalis; the upper part was then drawn down and split up longitudinally so far as the internal ring, to release the spermatic cord. A small opening was then made through the tendon of the external oblique and that part of the internal oblique lying over the internal ring, a pair of fine forceps passed through this and down the canal, and the free end of the sac seized. The forceps were then withdrawn and the sac pulled through this opening. It was next twisted firmly and laid over the inguinal canal, though, of course, outside the external oblique tendon. It was then firmly fixed there by deep stitches, the last two including the pillars of the ring as well as the end of the sac. The superficial part of the wound was then brought together, no drainage being employed.

The progress of the case was uneventful. When dressed on the eighth day the wound was found to be soundly healed. On February 5th the patient was allowed to be on a couch, and on February 10th to walk about his room. On February 14th he went out. When last seen, on March 8th, there was no impulse, and the boy said he felt quite strong.

The advantages of this operation seem to be:

1. The lumen of the sac is occluded at the internal ring by torsion and also by the deep sutures.

2. No sac is left in the canal to keep it open.

3. The rope formed by the sac is pressed inwards and backwards over the whole length of the inguinal canal, lying as it were in a gutter.

It will be noticed that there were two slight modifications of Kocher's procedure:

1. As the hernia was congenital the sac had to be split longitudinally.

2. The sac was brought, not only through the tendon of the external oblique muscle, but also through those fibres of the internal oblique which lie over the internal ring.

A word may be added concerning the sutures. They were all of catgut; it does not appear necessary to use any non-absorbable material.

A. S. Barling, M.R.C.S., L.R.C.P.,
Late House-Surgeon, Leeds Infirmary.

Lancaster.

RECURRENCE OF DIPHTHERIA.

The following I think is of interest as showing the predisposition of diphtherial patients to a second attack:

On December 1st, 1893, I was called to see B. G. and D. G., aged 5 and 3 years, and found them suffering from a well marked attack of diphtheria. This ran its usual course, convalescence being established in three to four weeks.

On January 1st, 1894, the servant of the household was attacked and was ill for about three weeks. On her convalescence the house was thoroughly disinfected by the local health authority, the drains in the meantime having been taken up and relaid.

On January 29th I was again called to see D. G., and found her suffering from a recurrence of the disease, which was followed this time by paralysis of the ocular muscles, of the pharynx, and lower limbs, with absence of reflexes.

On March 9th B. G. was found to be again suffering from the complaint, and it is now running a rather severe course. I think, taking into account the presence of albuminuria in both cases and paralysis in one, there can be no doubt of the correctness of the diagnosis.

Leonard Dobson, M.D.Lond.

Hanwell, W.

IS OZÆNA INFECTIOUS?

The recognition of the fact that a certain disease is of bacterial origin almost inevitably entails the acceptance of the belief that it may at least be contagious. So much is this a statement of the logical position of the case that it appears to me the onus of proof rests with those who hold with regard to any disease admittedly bacterial that it is non-infecting.

But I have not heard yet any positive assertion that ozæna is infectious, notwithstanding the discovery that the specific decomposition characterising that disease is due, as one would expect, to a micro-organism—the bacillus ozænæ. With the view of strengthening the presumption of infectiousness allow me to relate a recent case.

A short time ago I was consulted by a young lady for, amongst other things, ozæna. She gave the following history: always strong and healthy and of a strong and healthy family on both sides, one of nine children all grown up, and, with some minor qualifications, healthy. One sister, an elder one, has had ozæna for over ten years, and during the whole of this period our patient has slept with her with the exception of some four years about the middle of the period, but had slept with her again for at least a year before she also became affected.

The question naturally arises why did she not catch it before? The reply, obvious though perhaps inadequate, is that during the first period she was in excellent health, but about two years before she contracted the disease she had become seriously deranged in health from nervous exhaustion, chronic constipation, absolute amenorrhœa, etc., and in consequence her resistance to microbial invasion may be assumed to have become seriously deteriorated.

Wm. Hardman.

Blackpool.

Dr. R. M. Brown has been appointed medical officer to Denholm, near Hawick.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

F. W. Pavy, M.D., F.R.S., in the Chair.

Tuesday, April 17th, 1894.

Squamous-celled Carcinoma of the Bladder.

Mr. Charters J. Symonds reported the case of a man, aged 48, admitted into Guy's Hospital in September, 1893. In the spring of that year he had observed blood occasionally in the urine. Six weeks before admission he was seized with severe pain, and from that date micturition had been painful and frequent. No stone was discovered by sounding. The chief part of the growth was removed suprapubically, to the great relief of the patient. Suppuration ensued in the infected inguinal glands, and diffuse cellulitis supervened, death eventually occurring from pyæmia. New growth was observed during life at the meatus externus, which made it clear that the whole of the urethra was involved. At the operation the prostatic portion of the urethra was found to have been destroyed by the disease. After death secondary growths were found in the liver and lungs, and small suppurating foci in the left kidney. The whole of the posterior wall of the bladder had been destroyed, but the vesical fascia and peritoneum were intact, and were bulged backwards so as to form a shallow pouch.

Mr. J. H. Targett remarked that hydatid cysts in connection with the bladder invariably lay between the muscular coat and the fascia, the vesiculæ seminales and vasa deferentia being always found on their posterior surface. He knew of a case in which a cancer of the bladder extended some way up one of the ureters, but extension along the urethra was very rare.

Microscopic Sections of the Skin after Thiersch's Grafts.

Mr. L. Bidwell and Dr. Phineas Abraham exhibited sections of a graft implanted after excision of lupus in December, 1892. About two-thirds of the graft "took," the rest of the surface healing by granulation. Portion of the new skin, including the graft, was removed nine months afterwards for recurrence. In the situation of the graft there was a definite cutis, with well-formed papillæ, but no glands or hairs; The subjacent tissue was more richly celled than normal. The sensibility of the graft, as Mr. Bidwell had often noticed, became practically normal.

Melanotic Sarcoma of the Rectum.

Mr. G. Heaton exhibited a specimen obtained from a man, aged 48, who who had suffered for twenty-five years from hæmorrhoids. He subsequently observed that a lump was protruded from the anus during defæcation. This growth was found to spring from the posterior wall of the rectum. Excision of the lowest part of the gut was performed, and, as a higher group of smaller tumours was then detected, a second portion of the bowel was excised; a still higher mass could be felt lying without the wall of the rectum. Death took place from septicæmia. The chief tumour was separated from the piles at the anus by a distinct zone of normal mucosa. The highest growths of all were found after death to involve post-rectal lymphatic glands. There was a small pigmented growth in the left lobe of the liver, but the other organs were healthy. The muscular wall was infiltrated by the several tumours, which consisted of round pigmented cells between which lay free granular pigment. An extension of the growth was found in one of the veins. The exhibitor suggested the possibility of the disease having started in a "mole" of the rectum; the pedunculated character of the lowest and chief of the tumours was due to traction; the higher he thought due to submucous metastasis.

Mr. Anthony A. Bowlby had seen one case of melanotic sarcoma of the rectum; and this also extended as isolated growths in the same way that such new formations become disseminated in the skin. The lymphatic glands were not affected. As to other mucous membranes, he knew of one case where the palate, and another where the gums, were the seats of such tumours; in both, no gland infection took place, and the growth was slow, Complete absence of gland disease was the rule in the case of melanotic sarcoma of the eyeball.

Dr. Newton Pitt said Dr. Hilton Fagge had pointed out the fact that the rectum is one of the primary seats of melanotic growth. Melanotic sarcoma was not infrequently met with in grey horses.

Mr. S. G. Shattock added that in grey horses the primary tumour was commonly seated at the anus.

Ectopia Vesicæ.

Mr. S. G. Shattock showed in the first of the specimens, that the muscular wall of the bladder was firmly attached to the posterior surfaces of the separated pubic bones. Since first observing this he had carefully dissected three other specimens, one of these being from an adult male, another from an adult female; and the same disposition held true in all. Anatomically the attachment corresponded with that of the normal pubo-vesical muscles; but it was greatly more pronounced. As the bladder was no longer a hollow organ it ceased to have any expulsive function. Nevertheless in place of atrophy the muscular tissue underwent hypertrophy. This result he considered due to the resistance it offered to hernial protrusion of the intestines, the vesical wall really forming part of the abdominal parietes. The longitudinal fibres (pubo-vesicales) would especially undergo hypertrophy, since their attachment to the bones would enable them to act at the most advantage. In another preparation, was shown by dissection the relative position of the corpus spongiosum and corpora cavernosa in epispadias, associated with ectopia vesicæ. The corpus spongiosum was diminished in length, but not so the cavernosum, which was thrown into an S-shaped curve beyond its attachment to the ramus of the os pubis. On meeting the side of the corpus spongiosum the corpus cavernosum proceeded forwards on the outer aspect of the latter, but the penis was in these cases so short that by the time it reached the base of the glans it still lay by the side of, and never surmounted, the corpus spongiosum.

Mr. Charters J. Symonds, in operating for ectopia by Milton's method, had been struck by the difficulty of turning down the bladder, and had no doubt it was for the reason given by Mr. Shattock.

Aberrant Renal Vessels as a Cause of Hydronephrosis.

Dr. Newton Pitt exhibited four specimens in which he thought this was shown. In one, from a woman, aged 36, the renal vein divided an inch and a-half from the hilum, the upper branch running on the front, the lower on the back of the distended renal pelvis. The ureter lay posterior to this lower vessel, which it crossed near its origin. Their relative position was such that a slight dilatation of the pelvis was sufficient to cause the vein to compress the ureter between the pelvis and itself, and lead to obstruction. Slight lateral pressure on the pelvis released the obstruction, and the urine was enabled to flow away; it could be thus understood how massage or irregular movements might suffice to empty the distended pelvis. In the second case, obstruction was produced by an aberrant descending branch of the renal artery with which there ran an aberrant vein. Case 3 resembled that first described. Case 4 was due to an aberrant renal artery round which the ureter curved. Dr. Fagge and Sir William Roberts had referred to the condition. Professor Cunningham had tabulated the variations of the renal artery, but those of the vein had still to be investigated. The conclusions drawn were that whenever there is a lower branch of either artery or vein given off to the hilum some distance from the kidney, and especially when it enters posteriorly, a condition results which may readily lead to hydronephrosis. The pelvis, should it become temporarily distended, may push in front of a descending vessel if it runs a long course, although initially these vessels may be anterior to it. When there have been inflammatory changes, and the vessel has become adherent to the ureter, this is still more likely.

Mr. Charters J. Symonds inquired whether the orifice of the ureter was contracted in any of the cases?

The President compared the condition to that of volvulus of the intestine.

Mr. J. H. Targett had dissected two such specimens. In these, the aberrant vessels were not firmly adherent to the distended renal pelvis; in the case of "band" the intestine was furrowed by the constricting body, but nothing of this kind was seen in the kidney; he thought the process must be started by some kind of torsion or fold.

Dr. Charlewood Turner, like the preceding speaker, did not believe that an aberrant vessel could be the initial cause of hydronephrosis; as the latter in such circumstances would be always congenital.

Gangrene of Lung from a Syphilitic Patient.

Dr. S. H. Habershon reported the above case. The patient, a man aged 32, had been treated for syphilis; his present illness commenced with cough, foul expectoration, and emaciation. In the lower lobes of both lungs there were signs of excavation. No tubercle bacilli were found in the sputum. One lung was drained. After death sloughing cavities were found in both lungs, but no appearance of tubercle, though tubercle bacilli were found in sections and a few giant cells. There were no gummata in the internal organs.

Supernumerary Adrenal.

Dr. Newton Pitt exhibited a kidney beneath the capsule of which, and continuous with the renal tissue, was an accessory adrenal, consisting of cortex and medulla, and almost as large as the normal organ, which occupied its usual position. There was a similar condition on the other side.

Fat Necrosis.

Dr. Newton Pitt exhibited also a case of fat necrosis, in which the necrosis in the omental fat was associated with carcinoma of the pancreas. The patient complained of intense pain, but nothing else. There was no pancreatitis or peritonitis.

CLINICAL SOCIETY OF LONDON.

A. B. Duffin, M.D., F.R.C.P., Vice-President, in the Chair.

Friday, April 13th, 1894.

Pelvic Enchondroma.

Mr. G. R. Turner read notes of the case of a man, aged 50, admitted into St. George's Hospital, March, 1890, with a large globular tumour of eight years' growth on the inner aspect of the left thigh, extending into the perineum and groin. The hip-joint and thigh moved freely, and were not implicated in the growth, which was attached to the rami of the pubes and ischium by a broad hard base. The patient was shown at the Clinical Society on March 14th, 1890, and the general opinion was that it would be inadvisable to attempt removal. In 1892 the tumour had extended into the perineum and ischio-rectal fossa, interfering with micturition and defæcation. The mass of the growth was cut through, and it was removed in halves after an ineffectual attempt to get at the base. The mass removed weighed upwards of 7 pounds. The man made a good recovery.

Strangulated Femoral Hernia complicated with Volvulus.

Mr. R. W. Parker read notes of this case. His patient was a woman, aged 44, who came under treatment on the sixth day of strangulation. Herniotomy was performed, and as the gut was gangrenous an artificial anus was made, but no fæces escaped. Sixteen hours later, the abdomen being more distended, laparotomy was done. A volvulus was discovered and adjusted, immediately after which fæces began to flow from the artificial anus. The woman, however, died in about twelve hours.

Mr Barker said that even if there was doubt as to the exact nature of the obstruction, abdominal section enabled the surgeon to resolve the doubt. He never knew a surgeon to regret having intervened too early, whereas the postponement of intervention was constantly a subject of regret.

Mr. Parker, in reply, agreed that a very slight twist might produce complete obstruction, and the displacement was very easily remedied. No time whatever was lost in operating on the patient after her admission.

Myocarditis.

Dr. T. J. Maclagan recorded three cases in which inflammation of the muscular substance of the heart occurred in the course of acute rheumatism, without accompanying endo- or pericarditis, and in which the disease was diagnosed. The points insisted on were the absence of any special physical signs by which myocarditis could be diagnosed; and the presence of delirium of a low type, and of muscular tremors. The gravity of delirium as a symptom occurring in the course of acute rheumatism was pointed out. The complications to which it was generally due were hyperpyrexia, myocarditis, pericarditis, and pneumonia. It might be stated generally that delirium occurring in the course of acute rheumatism which was not due to one of these complications was symptomatic of myocarditis. Attention had been called by various writers to the occasional occurrence of sudden death in acute rheumatism. It was probable that latent myocarditis was the cause of such deaths. In one of the cases given death was sudden.

The Chairman said primary myocarditis was possibly more frequent than was supposed. It should be treated by diffusible stimulants, not probably by salicylates. He preferred a combination of alkalies and quinine, as suggested by Sir A. Garrod.

Dr. Hale White said that in well-marked myocarditis the salicylates should be given with caution: in one case moderate doses thereof marked the onset of a downward course.

Abscess of Spleen, with Secondary Abscesses in Liver.

Dr. D. W. Finlay described this case. The patient, a domestic servant, aged 20, had been delivered of a child some months before, since which her health had not been good. Three months ago she had an attack of "pleurisy," lasting about a week. The illness for which she sought admission consisted of pain in the left side, with shivering and sickness. The symptoms were suggestive of pleurisy with effusion. The temperature reached 103° on one occasion, and 105° on another. Further fluctuation in the temperature and occasional sweatings led to the belief that the supposed effusion was purulent, and the exploring syringe was introduced in the eighth interspace below the inferior angle of the scapula. Only a few drops of blood were withdrawn. Subsequently four other exploratory punctures were made in various situations with negative results. She lost strength and became anæmic and emaciated, and she gradually sank and died. At the *post-mortem* examination the spleen was firmly bound to the diaphragm and surrounding parts by adhesions, and at its anterior end, encapsuled with adhesions, was a collection of thick greenish pus about the size of an orange. The lower third of the spleen was the seat of several abscesses containing curdy pus communicating with the purulent collection just described, the remaining two-thirds of the organ being healthy. The right lobe of the liver was riddled with abscesses, and the left pleura contained about 2 ounces of blood-stained serum, the base of the left lung being adherent to the diaphragm. The etiology of the splenic abscess was altogether obscure. Possibly an injury, or some septic condition connected with the pregnancy the evidence of which had disappeared, might have accounted for the beginning of the disease in the spleen; the abscess in the liver was obviously secondary.

The Chairman referred to a case of acute abscess of spleen recently under his care. The patient was a young woman, who had very severe pain at the left lower ribs, but with no other sign of pleurisy. She lay on her back with the left leg drawn up, and winced visibly if the region of the spleen was only touched. She died ten days later. Ulcerative endocarditis was found *post mortem*; the spleen was half as large again as usual, and adherent to neighbouring parts, especially the diaphragm. Two abscesses existed in the spleen.

Operative Treatment of Oblique Simple Fractures of the Tibia and Fibula in certain Classes of Labourers.

Mr. Arbuthnot Lane read this paper. He believed that the average financial depreciation of the labourer as a machine after such an injury amounted to nearly 70 per cent. of his original value. This he thought due to alteration in the lines of pressure through the several joints of the lower extremity, resulting from deflection of the lower fragments from their original relationship to the upper. In consequence of this alteration insecurity and pain were experienced in the joints, especially the ankle and foot, and increased with the age of the individual. Pathologically there was a progressive mechanical arthritis in the joints. Mr. Lane consequently advocated operative measures entailing a minimum of risk to the life or limb of the patient, by which the fragments could be brought into apposition and so retained with perfect accuracy that the skeletal mechanics of the individual remained as perfect after the injury as they were before. He cut down on the fracture of the tibia and exposed the broken ends freely, removing any tissues intervening between the sectional surfaces, bringing these surfaces into accurate apposition, partly by traction on the foot, partly by means of elevators, and partly by means of lion forceps, by which last instrument apposition was continued till holes had been drilled and the bony surfaces brought together immovably and forcibly by the introduction of steel screws. He read notes of three cases which he had operated on in the same week. The results were extremely satisfactory, since the fragments had united perfectly. The paper was supplemented by a brief account of forty cases collected by Mr. F. J. Steward, which fully bore out the truth of Mr. Lane's statements.

Mr. H. P. Symonds (Oxford) had been dissatisfied with the old treatment of these oblique fractures of the leg, and had therefore used pegs and wire to the fragments. He used Thomas's knee splint and did away with the upright footpiece. He had wired the fragments two or three months after the injury; there was difficulty then in doing the operation, and some shortening usually resulted.

Mr. Gould said Mr. Lane's plan was the amplification of that advocated by Sir Joseph Lister for fractures of the patella. But, as it was the conversion of a simple into a compound fracture, it would be a very serious affair indeed if the practice of cutting down were to become the general treatment. In many cases there would be disastrous results.

Mr. Lane, in reply, acknowledged the force of the objection urged by Mr. Gould. He might mention that their President (Mr. Hulke) had, when questioned on the subject of the financial depreciation of labourers who had met with this accident, put it at 70 or 80 per cent.—a result that tallied exactly with the speaker's own estimate.

EPIDEMIOLOGICAL SOCIETY.

J. F. PAYNE, M.D., President, in the Chair.

Wednesday, March 21st, 1894.

CERTAIN AFFECTIONS OF THE MUCOUS SURFACES AND THEIR RELATIONS WITH DIPHTHERIA.

DR. S. W. WHEATON read a paper on this subject. During the last four years he had been able to observe some 150 cases in South London, of 30 of which he had taken notes. The general symptoms were high initial temperature, flush and puffiness of the face, enlargement of the glands persisting after convalescence and great debility. The tonsils were often unaffected, but a constant symptom was the presence on the soft palate and fauces of bright red patches, on which a pellicle formed, which, though adherent, soon disappeared, leaving a velvety surface, and which consisted almost wholly of swollen epithelium, wanting the fibrinous character of diphtherial false membrane. None were followed by paralyses, though in some the knee-jerk was lost and none ended fatally. In London he had not been able to connect these with cases of true diphtheria, but he had, in a town with a population of 10,000 persons, in which 28 deaths had occurred from diphtheria, seen large numbers, and the prevalence of the same prior to the outbreak had been reported to him by the local practitioners, and it was evident that both affections were largely spread by means of the schools, though he did find some families suffering from sore throat that could not be thus explained. Sore throats coexisted with diphtheria in an outbreak involving 8 deaths in a children's hospital, but neither attended one of the exudative vulvitis in a lying-in hospital under his care, nor in that of the Paris Maternity reported by Favre and Ehrhard. To sum up this affection, though resembling diphtheria in the presence of a pellicle, differed from it in the structure and transient character of the exudation, in the absence of albuminuria, paralysis, or tendency to a fatal termination. He had failed to detect the bacillus of diphtheria, the only microbe constantly present in these cases being a coccus in yellow colonies, and he did not think that there was any closer connection than the increased susceptibility to the infection of diphtheria induced by any sore throat.

DR. PARSONS could not but believe that many of these throats were simply mild cases of diphtheria.

DR. COUPLAND was quite satisfied as to the diphtheritic nature of these throats, and thought the loss of knee-jerk suggestive or confirmatory.

DR. WILLOUGHBY agreed with Drs. Parsons and Coupland as to the infinite gradations in the phenomena and severity of diphtheria.

DR. SEATON agreed with Dr. Willoughby that in the spread of epidemics of diphtheria through personal intercourse, especially in schools, the mildness of the initial cases, and the lateness of the inquiries, their origin and insanitary conditions were apt to be lost sight of, and he therefore encouraged the notification of all suspicious sore throats as possibly cases of diphtheria.

DR. GOODALL remarked that tonsillitis, etc., might be caused by like insanitary conditions and yet be independent of coexisting diphtheria. He entirely agreed with Dr. Willoughby as to the accidental character of the false membrane, which might be absent in genuine diphtheria, and present as a result of scalds or caustics.

After some remarks from Dr. SISLEY,

THE PRESIDENT said that while agreeing with those who held that false membrane was not essential to diphtheria, he thought that Dr. Wheaton had described a new or at least an unrecognised disease.

DR. WHEATON, in reply, observed that in his cases the tonsils were only exceptionally affected, and the knee-jerk was lost from the first.

MEDICAL SOCIETY OF LONDON.

Sir WILLIAM DALLY, M.B., F.R.C.S., President, in the Chair.

Monday, April 16th, 1894.

CLINICAL EVENING.

OPERATION FOR UNDESCENDED TESTIS.

MR. C. B. KEETLEY showed two lads to illustrate a mode of operating for undescended testis. The organ, after being freed from its fibrous attachments in the inguinal canal, was brought down and two skin wounds were made in the scrotum and neighbouring part of the thigh respectively. The wounds were then sutured to the fibrous tissue always found attached to the testis or epididymis, the sutures piercing the tunica vaginalis. In one case the testis had been left fixed to the thigh for five months without inconvenience; in the other it was left in that position only a month. In both an operation for radical cure of hernia was done at the same time, and in one of them an umbilical hernia was also dealt with.

MR. SWINFORD EDWARDS commented on the fact that the testis in the elder lad was atrophied, and asked whether the author thought this was likely to improve; if not, he thought it would have been better to remove it.

THE PRESIDENT mentioned that the lad himself was under the impression that the testicle had enlarged, and he suggested that, in order to settle the question the author should bring them before the Society again in two or three years' time.

MR. KEETLEY said the testicle had certainly grown, and, in any event, there was positive evidence that atrophied retained testes were not necessarily functionless.

CLOSURE OF COLOTOMY WOUND AFTER THREE YEARS.

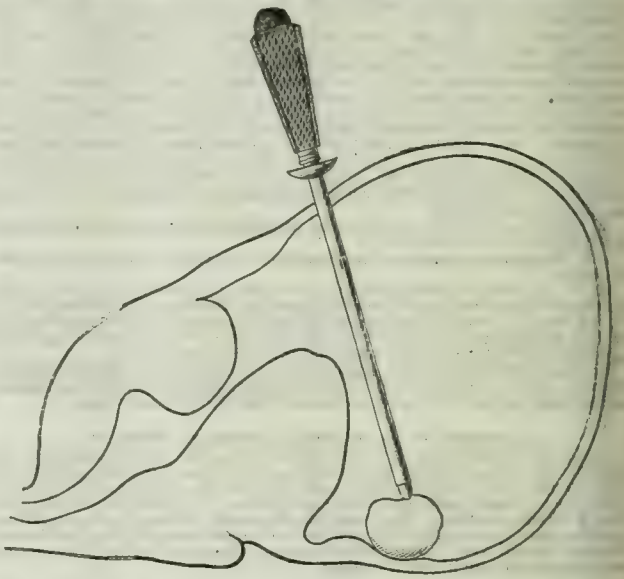
MR. GOODSALL showed a woman, aged 27, upon whom in December, 1890, he had performed colotomy for intestinal obstruction of eighteen days' standing. In June, 1891, he had made a first attempt to close the wound, but failed, in consequence of vomiting resulting from the anæsthetic. Two subsequent attempts proved unsuccessful from the same cause. In October, 1893, he explored the abdomen, and came across a band of omentum passing loosely over the lower part of the sigmoid flexure. On removing this band the vomiting did not occur on recovering from the anæsthetic, and two months later he at last succeeded in effecting the closure of the wound. The bowels had since acted regularly through the rectum, and menstruation, previously irregular, had become normal.

THIERSCH-GOULD OPERATION.

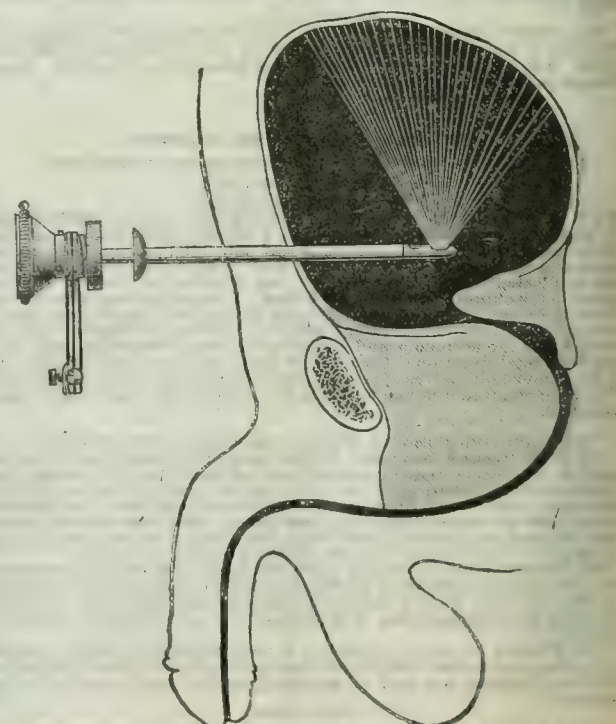
MR. HURRY FENWICK showed a man, aged 39, who formerly suffered from congenital phimosis, on whom he had effected the removal of the testicles, scrotum, and penile structures down to the perineum, for epithelioma, by a modified Thiersch-Gould method. The wound had healed by first intention, and the man was now in good health, and could hold his urine without difficulty.

SUPRAPUBIC SOUNDING FOR CALCULUS AND SUPRAPUBIC ELECTRIC CYSTOSCOPY.

MR. HURRY FENWICK drew attention to the difficulties in sounding for stone in certain cases of much enlarged or of irregularly enlarged pro-



state, and said that calculi were sometimes so deeply fixed behind and below an upraised median lobe or collar, that the sound introduced *per urethram* could not reach them however much rotated it was, or however forcibly it was thrust toward the base over the lobe. Moreover, harmful pressure was often exercised in this manœuvre upon the prostate, and cystopyelitis and hæmorrhage was apt to ensue. He suggested that



whenever the prostate was very large, or whenever it was difficult to traverse, or if it bled easily that an aspirator trocar and cannula should

be thrust suprapubically into the full cleansed bladder, the trocar replaced by a loosely-fitting blunt pilot, and the *post*-prostatic pouch and bladder base, carefully prodded with the latter to ascertain the absence or the presence of stone without incurring those risks which are consequent upon urethral sounding (Fig. 1). If it had been determined to drain the bladder suprapubically, a larger trocar and cannula could be employed, and through the latter a straight electric cystoscope, which he had made, could be introduced into the washed-out bladder, and the interior examined (Fig. 2). Mr. Fenwick advised this latter procedure in cases of much-enlarged prostate, in which a suspicion of benign growth existed; for in these cases the ordinary cystoscope could not be used. If a stone or benign growth was discovered, a director could be passed through the cannula, the latter withdrawn over the director, and the bladder opened by a limited incision on the director. The disease could then be dealt with, and the bladder drained. He submitted that this method of sounding and cystoscoping would save exploratory suprapubic cystotomy, which was a severe procedure in old age, and one which should not be undertaken lightly.

Papillomatous Growths Removed from the Urethra.

Mr. Fenwick also showed some papillomatous growths removed from the urethra in a man who suffered from obstinate gleet. The diagnosis was made by means of the urethroscope.

Paralysis of the Sterno-Mastoid and Trapezius and Right Side of Face.

Dr. Lewis Jones showed a young married woman, aged 19, suffering from paralysis of the trapezius and sterno-mastoid muscles, together with paralysis of the face and deafness. The soft palate was not affected. The history of the onset was somewhat vague, but it seemed to have been gradual and accompanied by pain in the shoulder. He pointed out that the association of paralysis of the seventh cranial with the spinal accessory nerve was unusual.

Dr. Beevor supposed that the symptoms were due to pressure on the facial and auditory nerves, and pressure lower down on the spinal accessory. He commented on the fact that the accessory to the vagus was not involved, as evidenced by the escape of the soft palate, and observed that the non-involvement of the hypoglossal was also rather extraordinary.

Dr. Guthrie thought that a single lesion would explain the symptoms if this were situated at the posterior part of the petrous bone extending down towards the foramen magnum. He suggested that the pressure might be due to some inflammatory affection of the neighbouring bone.

Electrolysis in Nævus.

Dr. Lewis Jones also showed a lad with a nævus on the cheek which had practically been cured by electrolysis.

Osteitis Deformans.

Dr. Guthrie showed a woman, aged 62, with osteitis deformans. The patient dated the onset of the symptoms from an injury to the thigh twelve years before. She first complained of pain running up the abdomen and down into the legs. Six years later both legs below the knees began to become tender and painful, and began to bend in the shape of a hoop. The pelvis was flattened antero-posteriorly, and widened laterally, and there was a slight curvature of the upper dorsal region. There was no history of syphilis, gout, or acute rheumatism. The distal phalanges exhibited Heberden's nodes. The interest of the case lay in the fact that the cranial bones and clavicles were not affected. If the affection really dated from the injury it pointed in favour of Hutchinson's view of the infective nature of the malady.

LARYNGOLOGICAL SOCIETY OF LONDON.

Felix Semon, M.D., P.R.C.P., President, in the Chair.

Wednesday, April 11th, 1894.

The Choice of the Anæsthetic in Operations for the Removal of Post-nasal Adenoid Growths.

(By special invitation of the Council of the Society the members of the Anæsthetists' Society were invited to take part in this discussion.)

Dr. Dudley Buxton thought that the best anæsthetic was that which could be quickly administered and which was capable of prolongation if necessary. Much depended upon the method of operation which was employed, but any plan which limited the anæsthetist to a definite period was to be condemned. For the majority of cases he preferred the use of nitrous oxide, followed by ether, supplemented in some cases by chloroform vapour blown over. He discussed the various objections which might be raised to every form of anæsthetic, and laid stress upon the occasional shock produced by chloroform.

Mr. Butlin expressed the opinion, in writing, that while in some few cases nitrous oxide alone might be sufficient, there were very many in which he at least could not complete a satisfactory and thorough operation in the short time which it allowed.

Mr. Tyrrell advocated the use of chloroform throughout, and especially in the case of children, but warned against its too rapid administration and against the induction of too deep anæsthesia.

Dr. William Hill referred to the danger of operating without any anæsthetic, and related a case of death from fright. He thought that prolonged anæsthesia was necessary for a complete operation, and that the anæsthetic should always be given by a skilled man.

Dr. Hewitt would employ gas followed by ether and chloroform in the longer cases, but had found that gas alone supplemented by oxygen was enough for the shorter cases. The patient's stomach should always be empty before operating upon the upper air passages under an anæsthetic. Anæsthesia should be fairly complete, but before passing from ether to chloroform the patient should be allowed to regain his reflexes, and should be placed on his side directly the operation was concluded.

Mr. W. R. H. Stewart had had large experience of this operation, and had used Gottstein's curette before its regular introduction into this country. He thought that for removal of adenoids only by that method gas with a little ether was sufficient. If tonsils were removed as well, more ether would be required. Anæsthesia should not be too deep. He mentioned a fatal case in which the patient apparently died from exhaustion from having been kept too long without food before the operation. The anæsthetist and the operator should be accustomed to working together, but the former must be entirely responsible for the choice and administration of the anæsthetic. The lateral position was the best directly after the operation. The head need not be pulled over the edge of the table.

Dr. Silk considered that gas, or gas and ether, must be regarded as the safest form of anæsthetic, but the comfort of the patient and the convenience of the operator ought also to be considered. For the rapid operations gas was sufficient, but for the more prolonged ones he would begin with A.C.E. mixture, and maintain by chloroform vapour blown through Junker's inhaler. The patient's breathing was liable to be suspended by the presence of the instruments or the surgeon's finger, and without due care too strong a dose of vapour might be inhaled with the first gasps which followed such suspension.

Dr. Scanes Spicer called attention to the possibilities of sharp hæmorrhage or of unforeseen difficulty in removing growths, which might render an operation longer than was expected. He would greatly prefer the slight extra risk of prolonged anæsthesia to the possibilities of a hurried or incomplete operation.

Mr. Davis used chloroform in children under 7 years, but never pushed it to complete anæsthesia, or repeated the inhalation after the operation was once begun. After the age of 7 he used gas and ether. He advocated the practice of hanging down the head, so that the roof of the mouth should receive the blood.

Dr. Dundas Grant referred to the recorded cases of death from chloroform, and to the danger of using too much of the drug. He claimed for gas that its short duration might be neutralised by the practice of rapid operation. The addition of oxygen seemed to him very satisfactory. He generally operated with the nail, followed by rapid removal of the parts thus scraped together, by means of Schech's forceps. Recurrence of symptoms did not always prove recurrence of growth, as they might be due to other causes.

Mr. Richard Gill thought that too empty a stomach was as dangerous as too full a one. Chloroform, which he preferred, should be regulated by the depth of the respiration and by the contraction of the pupil. Its chief dangers were from hæmorrhage, sickness, and fainting.

Dr. Whistler advocated prolonged and complete anæsthesia by chloroform. These patients were usually bad breathers to begin with, and hence the pharynx should be obstructed as little as possible by the surgeon's fingers.

Mr. G. H. Bailey observed that no positive rules could be laid down. There was danger in all anæsthetics, to children as well as to adults. Each administrator preferred his own. He generally used gas and ether, and thought that all reflexes should be abolished before the operation was begun.

Mr. Walsham spoke in favour of complete removal, the anæsthetics not being pushed too far.

Mr. Parker had found that recurrence was more common where rapid operations had been performed than where prolonged anæsthesia had been induced.

The President pointed out that the discussion had proved the impossibility of laying down arbitrary laws on the question. The methods of each surgeon must to some extent determine the best means of inducing anæsthesia for his operations. The safety of the patient and the completeness of the operation must be the chief points to consider. The practice of performing such operations on out-patients was very deplorable, as no control could be exercised over them either before or after the operation. He objected strongly to the induction of complete anæsthesia. The anæsthetic should always be given slowly until the ocular reflex was abolished, but the cough reflex should remain, as after its abolition nothing could prevent the entry of blood into the larynx and the lower air passages. Fortunately the cough reflex was always the last to go. A skilled anæsthetist ought always to be employed in these cases. He had seen a good many instances of recurrence, and urged the necessity for thorough removal of all growths. A rapid operation was not always a complete one, and he strongly deprecated attempts at "beating the record." The debate had shown that the choice of the anæsthetic must be left free, and that no blame or "criminality" could attach to the selection of any one of them.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Surgery.

Edward Hamilton, P.R.C.S.I., President in the Chair.

Friday, March 30th, 1894.

Lacerated Wound of the Upper Third of the Thigh.

Dr. Pratt read a paper on a case of lacerated wound of the upper third of the thigh, in which the great sciatic nerve was divided and much torn, necessitating resection of about an inch of the nerve, and subsequent nerve stretching before sutures could be applied. After the cut ends were brought together they were sutured with carbolised silk in a very small needle; the divided muscles were then united in the same manner, the skin brought together with pins, and the whole dressed with iodoform and alembroth gauze. The man had recovered cutaneous sensibility altogether, and muscular power to a considerable extent.

Dr. Myles said restoration of cutaneous sensibility alone was a fallacious test owing to the existence of recurrent sensibility through the union of nerve filaments of the divided nerve with filaments of intact nerves.

Dr. Brooks said he thought the restoration of sensibility was through the great sciatic nerve. In the hand there was a considerable area of skin which had a double nerve supply. Adjoining nerves invaded each other's territory. This was not so in the case of the foot.

Dr. Wheeler narrated the case of an officer whose musculo-spiral nerve was cut, and several months afterwards, on cutting down on the nerve, the ends were found widely separated, and unable to be brought together. By the advice of the late Mr. Corley he divided the shaft of the humerus, and resected a portion of it, and was then able to bring the

ends of the nerve together. Recovery was perfect in every respect as regards power and sensation.

Dr. PRATT replied.

POPLITEAL ANEURYSM.

MR. LENTAIGNE read a paper detailing the history of three cases of popliteal aneurysm, which he had cured by ligature of femoral artery after compression and flexion had been tried without success. Catgut ligature was used in all cases. In all the cases the course was perfectly aseptic, and the wounds gave no trouble whatever. In all the cases flexion was systematically employed for some time before the operation with a view to setting up free collateral circulation at the knee-joint in the event of its failing to cure the aneurysm itself.

The PRESIDENT referred to the comparative rarity now of cases of popliteal aneurysm.

Remarks were also made by Mr. WHEELER, Dr. BROOKS, Dr. MYLES, Mr. SWAN, Mr. FRANKS, Dr. DOYLE, and Dr. THOMPSON; and Mr. LENTAIGNE replied.

MANCHESTER MEDICAL SOCIETY.

Professor DIXON MANN, M.D., F.R.C.P., President, in the Chair.

Wednesday, April 4th, 1894.

FRIEDREICH'S DISEASE.

DR. DRESCHFELD showed two cases: (1) A girl, aged 18. No other member of the family affected, no history of alcoholism in the parents. Ten years ago she noticed that she could not walk so well; five years ago, after an acute febrile attack, she became worse, and was much affected in her walking; and three years ago, after another acute febrile attack, she got much worse, and since then had not been able to walk or stand by herself. She was of diminutive size. Slight horizontal nystagmus on fixing a certain object, when the muscles of the neck also showed slight movement, and speech affected. The upper extremities showed inco-ordination, the lower extremities marked inco-ordination. There was both static and motor ataxy; the superficial reflexes were present, the deep reflexes absent. There was no anæsthesia, and no affection of the bladder and rectum. The patient complained of slight pain in the arms and legs. The toes were forcibly flexed, and there was beginning talipes. (2) A boy, aged 16. No other member of the family affected; father was a drunkard. The symptoms date from early infancy. The patient is able to stand and walk, but his gait was markedly ataxic. Occasional slight nystagmus; no affection of speech, tremor of tongue. Upper extremities showed slight inco-ordination, lower extremities marked inco-ordination. The peronei and tibialis anticus were weak and somewhat atrophied; the big toes hyperextended; the appearance of the foot when in recumbent posture resembled that seen in the early stage of peripheral neuritis. The electric reactions, however, were normal, the superficial reflexes, except plantar reflex, were normal; the deep reflexes absent. There was no anæsthesia; when walking and standing there was marked lordosis. No affection of the bladder or rectum. Intelligence fairly good, growth somewhat stunted. With the peroneal type of myopathic atrophy this case, owing to the atrophy and weakness of the peronei, had some resemblance; but the marked ataxy, the absence of anæsthesia, and the normal state of the electrical reactions were sufficiently distinguishing.

ANÆSTHETICS.

DR. PRINCE STALLARD read a paper on the choice of an anæsthetic in minor operations. As a general anæsthetic in operations of short duration the use of chloroform was condemned as being the most dangerous drug; and the employment of nitrous oxide gas, combined if necessary with ether, was recommended.

THE BEGINNINGS OF SURGICAL DISEASE.

Professor LUND read a paper on possible errors or oversight in dealing with the incipiency of surgical disease. He related cases which showed how easily the earliest signs of surgical disease might be overlooked until conjoined with other associated changes, which threw new light upon the case, and altered its general aspect, the discrepancies vanished. He gave five well-marked instances illustrative of such errors or oversights.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

W. HUNTER, M.D., President, in the Chair.

Wednesday, April 4th, 1894.

ABDOMINAL SURGERY.

DR. ELDER delivered an address on a year's work on abdominal sections performed for diseases of the uterus and its appendages. A series of 51 operations with one death, or a mortality of less than 2 per cent. was dealt with. The list consisted of hysterectomies 2, ovariotomies 16 (one unsuccessful), removal of the appendages for inflammatory diseases 24, for uterine myomata 2, extrauterine fœtation 1, incision and drainage in tuberculous peritonitis with effusion 1, and exploratory incisions 5. Various points in connection with these cases were described. In the discussion which followed the PRESIDENT and Drs. STEVENSON, BURNIE, BELCHER, WATSON, and MICHIE spoke; and Dr. ELDER replied.

ULCERATIVE ENDOCARDITIS.

Dr. HANDFORD showed the heart from a case of ulcerative endocarditis. The patient, a man aged 37, had rheumatism nine years ago, and his fatal illness commenced with a fresh attack. The most prominent signs commenced with a rapid increase in his aortic incompetence, and the wide daily variations in the temperature, which often reached 103° F. in the evening. There were no rigors, no signs of embolism, and but little precordial pain. He obtained no benefit from potassium iodide, quinine, or salicylates, and his temperature was not in the least reduced by them. He obtained marked relief from repeated small doses of opium. Malignant endocarditis was easily diagnosed in the case, which lasted in all seven months. *Post mortem* a pint of fluid was found in the pericardium. The surface of the heart was smooth, except a slight roughness over the right auricle. The heart weighed 23½ ounces. The aortic valves presented a peculiar worm-eaten appearance; a long tag of vegetation hung from one of the curtains. On the side adjacent to the mitral valve some small punched-out ulcers were seen. The chordæ tendineæ of the mitral valve showed a few vegetations, and on the curtain adjacent to the aortic orifice was seen projecting an aneurysmal swelling the size of a small bean. There were no infarctions.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

RICHARD FAVELL, M.R.C.S., President, in the Chair.

Thursday, March 29th, 1894.

CASES.

DR. PORTER showed a girl, aged 14, the subject of gradually progressive Paralysis of the Muscles of the Extremities and Trunk following an attack of scarlet fever six years ago. There was loss of reaction to both faradic and galvanic currents; pronounced lordosis on standing; knee-jerks abolished; family history negative.—Dr. ALFRED ROBINSON showed a case of Bradycardia in a man aged 71. The heart beat was 30 per minute. The most marked symptom was periodical attacks of fits with complete loss of consciousness. The heart trouble dated from an attack of rheumatic gout twenty years ago.—Dr. BURGESS showed a case of Addison's Disease.—Dr. CLARK (Harthill) showed a photograph and read notes of an anomalous case of Chloasma in an unmarried kitchen maid aged 22. There were two sharply defined symmetrical black patches on the cheeks extending from the eyebrows down to the level of the upper lip, and from the nose to within an inch of the ears. There were also several pigmented spots on the chest, but these were not so dark as the patches on the face. The discoloration persisted for some months, and during this time the patient was subject to attacks of vomiting, the pigmentation being deeper just before and after these attacks. No sign of hysteria; no uterine or ovarian disorder. There was marked hyperæsthesia of the discoloured areas.—Dr. KNOX showed a specimen of Perforating Ulcer of the Stomach.—Mr. SNELL read notes of a case of Osteoma of the Orbit.—Mr. ATKIN showed an Osteoma removed from the left nostril; the growth weighed 294 grains, was 2 inches long, 1 broad, and 1½ deep; it had become spontaneously detached, and was simply jammed in the nostril.—Dr. PEARSON gave particulars of a case of Trephining for Depressed Fracture of the Skull in a child, the result of a blow from a slate. Four days after the accident twitching of the face and limbs set in. These fits persisted until the operation, a week after the accident. On removing a disc of bone at the seat of the fracture 3 drachms of pus escaped. The patient was now quite well.

LIVERPOOL MEDICAL INSTITUTION.

Thursday, April 12th, 1894.

CHAUNCY PUZEY, F.R.C.S., President, in the Chair.

CASES.

MR. ARTHUR WILSON related the case of a man, aged 65, who Swallowed a Toothplate. All efforts at extraction having failed, œsophagotomy was performed twelve hours later, and the plate removed by two pairs of dissecting forceps. The patient died from exhaustion on the fourth day.—Dr. BRIGGS mentioned a case of Prolapsus Uteri with a Phosphatic Vesical Calculus. The patient was aged 35, and the prolapsus had existed for five years. An anterior elytrorrhaphy and a colpo-perineorrhaphy cured the prolapse. Three weeks later a large calculus was removed from the bladder by a longitudinal incision in the vesico-vaginal septum.

AN OBSCURE CASE OF SUDDEN DEATH.

Dr. A. C. E. HARRIS read notes of a case of sudden death in an infant aged 8 months, for which he had been unable to determine the exact cause. Up to twenty-four hours before death the child had been satisfactory in every respect. Dr. Harris saw it at 10 o'clock in the morning, because it had had a crying night and seemed in pain. Temperature, pulse, and respirations normal; nothing abnormal in chest; abdomen slightly tender, but without tumefaction; urine said to be scanty. Diagnosis made of intestinal irritation, and a dose of castor oil ordered at at once, and 5 drops of sweet spirits of nitre occasionally during the day. The bowels were copiously moved, and during the afternoon the child seemed nearly all right again. At five minutes to 6 it began to take a bottle, and three minutes later it suddenly died. There was no choking, cough, or struggle; the face was quite pale. At the *post-mortem* examination all the thoracic and abdominal organs healthy; cardiac ventricles in firm systole; intestines empty without ecchymoses or adhesions; a little milk in the stomach. The brain was not examined.

PUERPERAL FEVER.

Dr. ALEXANDER read a paper on puerperal fever based on his experience at the Liverpool Workhouse Hospital. He quoted statistics from all the lying-in registers he could find, namely, for twenty-six years. During that period 8,323 women had been confined. The mortality from septic influences was 0.5 per cent., and from all causes 1.4 per cent. The causes of death, which were generally verified by necropsy, were described in detail. The author showed that the arrangements of Nature, at and after confinement, in ordinary cases, were admirably adapted for the healing of the intrauterine wound, aseptically and safely. In his opinion puerperal fever was a wound fever. The contagious fevers, such as scarlet fever, had no influence in producing it unless the patient at the same time contracted the contagious fever, when she would probably suffer from it and not from puerperal fever. He then described the lying-in wards at the workhouse, the staff employed there, and the means adopted for the prevention and cure of puerperal fever.

Dr. MACFIE CAMPBELL said the only cases of puerperal hyperpyrexia he had had in his own practice were due to the careless use of douching by nurses. He had ceased to attend scarlatina and erysipelas for many years past.

Dr. T. B. GRIMSDALE said he would prefer to get rid of the name "puerperal fever." As used at present it included a large variety of pathological conditions. Treatment would be infinitely simplified by using the term "puerperal sepsis" instead of puerperal fever.

Remarks were also made by Dr. BRIGGS and Dr. GEORGE JOHNSTON.

MIDLAND MEDICAL SOCIETY.

A. H. Evans, M.R.C.S., President, in the Chair.

Wednesday, April 4th, 1894.

CASES.

Mr. L. Freer showed a boy with Severe Rachitic Curvatures of the Lower Extremities.—Mr. Wm. Thomas exhibited three cases of Congenital Malformation: (1) An infant, 8 months old, with right talipes equino-varus. In the left foot the great toe was almost absent, and appeared to have been obliquely sliced off, and the tip of the stump united to the next toe; the other toes were somewhat rudimentary. In the lower third of the leg a deep groove completely surrounded the limb. The groove and perhaps to some extent the malformation of the toes were apparently due to constrictions by the umbilical cord during intrauterine life. (2) An infant, 8 months old, whose right foot was uniformly swollen and œdematous, giving an appearance of elephantiasis. The left arm and forearm were perfect, but the whole of the hand was rudimentary, being represented by a small stump with the rudimentary fingers and thumb hanging from its extremity. (3) This case was somewhat similar to the last, but the patient was a boy, aged 9 years.—Dr. Fairley showed a Full Term Fœtus from a case of placenta prævia. The specimen had severe talipes varus of the left foot. The right thigh had suffered intrauterine amputation at the junction of its middle and upper thirds. The stump was well formed. It was the fifth child. All the others had been healthy.

PAINFUL MENSTRUATION.

Dr. Christopher Martin read a paper on this subject. He said dysmenorrhœa was a symptom, not a disease. He divided cases into *(a)* uterine, *(b)* extrauterine. In treatment he touched on domestic remedies, anodynes, and the abuse of alcohol and opiates. The indications for surgical interference—dilatation, conservative operations on the appendages, removal of the appendages—were discussed.

REVIEWS.

Burdett's Hospital and Charities Annual, 1894. Fifth Year. London: The Scientific Press, Limited. (Cr. 8vo, pp. 852. 5s.)

We noticed, with its due meed of praise, this useful publication last year, and need only say of this number that it is on the same lines and is of at least as great merit as its predecessors, and we are glad to hear from its enterprising author that the support his publication has received is sufficient to make him feel sure of its taking a permanent place among our annual publications: for the book is, indeed, almost a necessary one for those who are professionally concerned in the management of our public charities.

One or two points in this number we may, perhaps, be allowed to notice.

In the first place, we are glad that Mr. Burdett has in this volume dropped the highly-controversial matter which he inserted in the Preface to the last with reference to the quarrel about the London Hospital, and contents himself with a reference to the more appropriate columns of a daily paper, where, we doubt not, he has given a good account of his opponents.

An interesting chapter (Chapter iii) is devoted to the cost of hospital management, and, in fact, much of the value of this book consists in the suggestions found in it to the managers of hospitals for the improvement of the details, both in efficiency and economy, two particulars which are by no means identical. In fact, so far is this from being the case in Mr. Burdett's opinion, that we have the singular charge (on which we commented last year) again brought against one of our large hospitals, St. George's, of spending too little on the salaries of their officials. We are quite disposed to admit that cheapness and economy are not the same thing, and that parsimony either in nurses' or servants' wages, or in the salaries of higher officers, would be injudicious management. But we do not even yet apprehend the ground of Mr. Burdett's dissatisfaction with what at first sight looks like a good feature in the accounts of this institution. He says (p. xlvii) that if we "would pause to calculate how considerable a sum 1 per cent. on the expenditure of a large hospital like St. George's does in practice amount to," our difficulty would never have arisen. We confess that our apprehension is not so quick as Mr. Burdett believes it to be. If the hospital in question spends £26,000 a year, which is, we believe, about the fact, an addition of 1 per cent. would give them £260 with which "to give their responsible officers," in Mr. Burdett's words, "much more adequate salaries than are paid at present." But Mr. Burdett shows no grounds for believing that these salaries are now inadequate, or that the work is not efficiently done. In fact, for all that we or the public know, St. George's, where the administration only bears the proportion of 3.827 per cent. to the total expenditure, is as well managed as University College, where the same percentage is 12.387. Of course, as Mr. Burdett points out, the different circumstances of general hospitals in regard to the necessity for appeals, advertisements, etc., necessarily causes a considerable difference in these proportions.

We are glad to see that all the elaborate researches made in this and other works by Mr. Burdett shows the strict economy which prevails in the management of our large metropolitan hospitals.

There are many other points in this interesting work on which we would gladly remark, but we must limit ourselves to two only. The first is the institution of "Homes for the Dying," of which the establishment recently opened near the Swiss Cottage, under the name of Friedenheim, is the best known example, and is described on p. lxx. There is no doubt as to the great good which such institutions may do, under judicious regulations, for, as Mr. Burdett points out, most patients who are really dying are ineligible for admission to our general hospitals, as displacing curable cases. But we note here the absence of any information on the essential point of the definition of the term "dying," and we would suggest to Mr. Burdett, or to the managers of this home, that a statement of their rules for admission would enable the public to judge better of its claims to support.

We note that Mr. Burdett is a warm advocate for "Pay Hospitals and Paying Wards" (p. lxxvii). The question is a very important one as regards the desirability of giving beds in our general hospitals at a certain price. Our own feeling is, we confess, in favour of keeping pay hospitals separate from the gratuitous general hospitals, though we are fully convinced of the necessity for pay hospitals—in large cities at any rate; but we should be glad to see the question more fully argued than it has yet been, and more fully illustrated by foreign experience, and any home details that the managers of Guy's Hospital can furnish—for there, we believe, the system is to some extent in action. The block of St. Thomas's which is set apart for pay wards, is really, for the present, no part of the hospital.

In concluding this notice we must congratulate Mr. Burdett on his success hitherto, and hope that his *Annual* will take a high place among the documents of our charitable system.

Beri-beri: Researches concerning its Nature and Cause, and the Means of its Arrest. By C. A. Pekelharing and C. Winkler. Translated by James Cantlie, M.A., M.B., F.R.C.S. Edinburgh and London: Young J. Pentland. 1893. (Demy 8vo, pp. 174. 10s. 6d.)

Drs Pekelharing and Winkler were commissioned by the Dutch Government to inquire into the nature and cause of beri-beri, a disease which had been giving rise to an enormous mortality in their naval and military establishments in the East Indies, particularly at Sumatra, where the Dutch were engaged in a long and harassing war with the Atchinese. The Commissioners proceeded to the East in 1886, and for eight months prosecuted their investigations under the most favourable circumstances and with great diligence. On their return to Europe they presented the report, of which this volume is a translation. Their work is, in its particular line, perhaps the most thorough which has yet been done in connection with this disease, and it advances our knowledge materially on more than one point. At the same time, it cannot be said to have settled the important question of etiology, nor to have added materially to our resources in the way of treatment or prophylaxis.

Dr. Cantlie has done a real and disinterested service in rendering Pekelharing and Winkler's report available to such English students as do not read Dutch or French. We regret to note that in his preface the translator has been decidedly unjust to English observers; he says that they have done nothing to advance our knowledge of beri-beri. He surely overlooks the original and important work of Malcolmson, Carter, Anderson, Simmons, Eldridge, Wallace Taylor, Rowell, and a good many others: nor is he either just or accurate in his allusions to Giles, who distinctly and pointedly disclaims that the disease called "beri-beri" in Assam,

and with which he concerned himself, has any connection with the peripheral neuritis described by Pekelharing and Winkler. It is not very encouraging to English writers to have their work thus ignored, belittled, and slumped together as "a few unimportant papers." Dr. Cantlie's translation conveys the meaning of the original as a whole very well, although here and there we remark a certain amount of obscurity and even perversion of the sense of the original. The illustrations have been beautifully reproduced, and add very much to the value of the work.

Die Zaraath (Lepra) der hebräischen Bibel [The Zaraath (Lepra) of the Hebrew Bible.] Von G. N. Münch, Ord. O. Professor der Universität zu Kiew. Hamburg and Leipzig: Leopold Voss. 1893. (In paper covers. Roy. 8vo, pp. 173, two plates. M. 6.)

This brochure appears as one of the series of *dermatologische studien* published by Leopold Voss, and forms a useful work of reference to writers who take up the study of that most difficult and obscure subject, the leprosy of the Hebrew Scriptures.

In the second chapter will be found brought together in sequence extracts of all the important passages of the Bible in which reference is made to the disease, and in several succeeding chapters an account is given of the views of all the principal writers on Bible leprosy—Mead, Larry, Michaelis, Schilling, Hensler, and amongst more recent authors Danielssen and Bœck, Er. Wilson, Tilbury Fox, Milroy, and Haeser who consider the biblical disease to be actual leprosy; Liveing, Monro, and Hirsch who consider that with leprosy it includes other diseases; whilst Huthius, Dunbar-Walker, Ouselius, Balmanno Squire, Hillary, Finlay, Raymond, and Hebra believe that it had nothing to do with the disease we know as leprosy.

The author carefully analyses the bearing of the references to leprosy in the Septuagint translation and the expressions and injunctions laid down in the Talmud, and comes to the conclusion that biblical leprosy (zaraath) embraces two distinct affections—vitiligo (leukoderma) and herpes tonsurans (ringworm)—and cannot be consider as a serious or dangerous disease.

The legal and social penalties against lepers were directed only against Jews who belonged to the Mosaic ritual. The spots on the persons of so-called lepers were an outward manifestation sent by the Deity to mark the individual as having committed some great sin, and the priest in pronouncing sentence only gave expression to the will of God in judging that the sinner was unclean (spiritually) and was as a sinner unfit to associate with the congregation of the Lord.

The data from which a conclusion can be formed regarding this difficult subject are too indefinite to enable students to come to a convincing conclusion, but those whose tastes and training fit them for studies of this kind will find Professor Münch's essay exceedingly suggestive and instructive.

NOTES ON BOOKS.

Public Health Problems. By John F. J. Sykes, M.B.Edin., B.Sc., Medical Officer of Health for St. Pancras, etc. Illustrated. (London: Walter Scott. 1892. Cr. 8vo, pp. 382. 3s. 6d.)—More than one attempt has been made of late to meet a want which is generally felt—the want, that is, of a concise scientific explanation of some of the pressing questions of preventive medicine, written in such a way as to reflect faithfully the present position of medical knowledge and medical thought with regard to them, but in a form available for non-medical readers as well as for those to whom the subjects are already familiar. Few of these attempts have been altogether successful. Some have fallen short of their object by undue insistence upon a particular hobby, others by want of balance and breadth of view. Not so Dr. Sykes's work, which forms one of the well-known Contemporary Science Series, and consists of a number of thoughtful essays on such subjects as heredity, etiology, epidemiology, isolation, quarantine, vaccination, disinfection, and house construction. While avoiding over-elaboration, and particularly (as he claims in his preface) statistical excesses, the author has contrived to present in reasonable compass a clear and instructive account of the subjects selected for consideration, all the better for the care which he has taken to keep clear of dogmatism, and to do justice to both sides in matters which are still in debate. It is, however, not necessary to attempt any detailed review of the *Problems* which Dr. Sykes has helped to elucidate. This notice has, by inadvertence, been long delayed, and, meanwhile, *Public Health Problems* has already attained some of the recognition and popularity which it deserves. It is no mere compilation, but contains much original thought, while giving ample proof of familiarity with current foreign as well as English public health literature and practice.

The True Position of Oxygen as a Restorative in Carbonic Acid Poisoning. By W. E. Thomson, M.D. (Glasgow: Printed privately by Alex. MacDougall. 1894. Demy 8vo, pp. 48.)—The work on which this paper was based was undertaken at the suggestion of the Council of the Mining Institute of Scotland, and, when presented as his thesis for the M.D. degree of Edinburgh, gained for its author a gold medal. As the result of carefully-planned experiments on animals, Dr. Thomson says: "There is little doubt in my mind that there is absolutely no advantage to be gained by miners having cylinders of oxygen at various accessible places in the mine, that is to say, no advantage over cylinders filled with air." As regards its clinical uses, the author is decidedly sceptical, but he makes a qualified exception in favour of pneumonia.

Ueber Tag- und Nacht-harn. [Night and Day Urine.] Von H. Quincke. (Leipzig: J. B. Hirschfeld. 1893. Demy 8vo, pp. 32.)—In this pamphlet Professor Quincke records some elaborate researches into this subject. Reference is first made to the effects of position and sleep upon the secretion of urine in health. Short clinical details are given of the cases investigated, as well as tables showing the amount and specific gravity of the day and night urine, the quantity of fluid taken, the weight of the patient, etc. The author comes to the following conclusions: (1) whereas in health the night urine is less in quantity than the day urine, the proportion being 1:4 to 1:2, in disease the relation is reversed, and stands at 1:2. This was found to be the case whether the patient was up or in bed. (2) The increased nocturnal excretion in disease also applies to the solids of the urine; and (3) this polyuria by night is present in cardiac and renal disease, in old people with arteriosclerosis, and in diabetes insipidus.

The Healing of Rodent Cancer by Electricity. By J. Inglis Parsons, M.D. (London: John Bale and Sons. 1893. Crown 8vo, pp. 90, 3 plates. 5s.)—In this little book Dr. Inglis Parsons describes his procedure in destroying rodent ulcer by electrolysis, and compares it with the other modes of treatment by excision, cautery, and caustics. The advantages gained by the employment of electricity consist chiefly in the nicety with which the process can be regulated; the absence of hæmorrhage and the comparative freedom from pain after the operation are also important. The chief point of interest in the author's method is that the direction of the currents is changed during the progress of the treatment. Large currents of 300 or 400 milliampères acting during a shorter time are preferred to smaller currents acting for a longer time. It is very properly pointed out that the cardiac region is the part most likely to be unfavourably affected by electrical currents of magnitude. Four cases are described in detail; in two, if not in three of them, there has been some recurrence of the disease subsequently, but only such as could be easily dealt with at a second operation.

Mr. Percy Wood has been chosen to execute the statue of Surgeon-Major Parke, who accompanied Stanley through Africa, and whose many deeds of heroism are well known, notably sucking the poisoned wound over the heart of Lieutenant Stairs. The statue is to be erected in Dublin, and will be colossal and of bronze. It will depict Surgeon Parke as an African traveller, and the treatment will be extremely picturesque.

PARLIAMENTARY BILLS COMMITTEE.

A meeting of the Parliamentary Bills Committee was held at the office of the Association, 429, Strand, W.C., on Tuesday, April 10th, 1894,

Present:

Mr. Ernest Hart in the Chair.
Dr. Ward Cousins, President of Council.
Dr. Philipson, President.
Mr. Butlin, Treasurer.

Dr. Agar (Henley in Arden).
Mr. D. B. Balding (Royston).
Mr. Wickham Barnes (London).
Dr. J. W. Browne (London).
Dr. Cameron (Leeds).
Dr. Esler (London).
Mr. Galton (London).
Dr. Bruce Goff (Bothwell).
Dr. Wm. Gordon (Exeter).
Mr. Hemming (Kimbolton).
Dr. Holman (London).
Dr. Robert Jones (Claybury).
Dr. Lowe (Burton-on-Trent).
Mr. Macnamara (London).
Dr. Mickle (London).
Dr. Isambard Owen (London).
Mr. Noble Smith (London).
Dr. Somerville (Galashiels).
Dr. Strachan (Dollar).
Mr. Street (Newton le Willows).
Dr. Winterbotham (Bridgwater).

The minutes of the last meeting were read and confirmed.

Letters of apology for non-attendance were read from Mr. Walter Rivington, Dr. Harrison, Dr. Ross, Dr. Barnes, Mr. W. D. Spanton, Dr. Stanley Haynes, Dr. C. Gross, Dr. J. Murphy, and Dr. E. M. Cooke.

A letter was read from Mr. Jonathan Hutchinson, stating that it would be impossible for him to attend the meetings of the Parliamentary Bills Committee.

The letter was ordered to be entered on the minutes.

The Gresham University.

The Chairman presented the following memorandum on the position and powers of the Academic Council in the University scheme proposed by the Gresham Commission.

MEMORANDUM ON THE POSITION AND POWERS OF THE ACADEMIC COUNCIL IN THE UNIVERSITY SCHEME PROPOSED BY THE GRESHAM COMMISSION.

This memorandum has been prepared with the object of showing the true position of the "Academic Council" in the Commissioners' scheme, attempts having in some quarters been made to deny or minimise the virtual autocracy in academic matters which it is proposed to vest in this small professorial committee, on which Medicine is so inadequately represented.

1. The Academic Council and its Powers.

"We accede.....to the view that a select body of teachers should be formed to which (with some reservations) executive powers should, subject to the Ordinances of the University, be entrusted.....On account of the *vital importance of this part of our scheme* we proceed to describe it in detail before dealing with the constitution of the Governing Body." (P. xxv, Cl. 31.)

"We propose that an Academic Council shall be constituted, to be presided over by the Vice-Chancellor of the University, and to consist, in addition to the Vice-Chancellor, of 15 members, elected by the Faculties as follows: Arts 4, Science 4, Medicine 3, Law 2, Theology 1, Music 1.....To this body will be entrusted the duty of regulating, subject to the Ordinances of the University, the teaching, examinations, and discipline of the University, and of determining what teachers in any School of the University shall be recognised as University Teachers, and to what Faculties they shall be assigned." (P. xxv, Cl. 32.)

"We have thought it necessary to create in the Academic Council a central organ to deal with the numerous detailed and complex questions which must arise, to invest it for that purpose with considerable executive powers, to make the constitution and functions of the Boards of Studies to a large extent dependent on its directions, and, as a necessary consequence, to restrict its numbers within limits consistent with the exercise of these administrative duties." (P. xxvi, Cl. 35).

(From Summary, p. l.)

"Subject to the Statutes and Ordinances of the University, the Academic Council will have power:—

"To recognise Teachers in any admitted school of the University as Teachers of the University, and to withdraw such recognition.[1]

"To assign such teachers to their respective faculties.

"To determine curricula of study and examination, after having had before them the opinion of the Board or Boards of Studies of the Faculty concerned.

"To settle University courses of study to be pursued at any School of the University, after consultation with the authorities of the institution concerned.

"To arrange for the holding of University Examinations for Internal Students, in so far as separate from those for External Students, and to fix the times and places at which they shall be held."[2]

2. The Constitution of the Faculties.

The "Faculties" in this scheme consist only of teachers appointed or recognised by the University.

"The Teachers of the University will be distributed in, and will constitute, the Faculties of Arts, Science, Medicine, Law, Theology, and Music, and will be of the following classes:

"1. Professors, readers, and lecturers appointed by the University [that is], appointed and paid by the Senate, and also such demonstrators and assistants, appointed by the University [ditto], as may be placed upon the Faculties by the Academic Council.

"2. The recognised Teachers of the various University Schools [that is, such as are recognised by the Academic Council, *vide supra*]." (P. xxiv, Cl. 29.)

Class 2 will form the bulk of the faculties.[3]

"Recognition" by the Academic Council for admission to Class 2 is not to be *en masse* or *ex officio*, but individual (P. xix, Cl. 20, lines 10 to 13).

Each faculty is to be at liberty to meet and to consider "any matters concerning courses of study, examinations, degrees, diplomas, certificates, and teaching in subjects within the province of the Faculty," and may "report thereon to the Academic Council:" but no effect is necessarily to follow its representations. (P. xxvii, top.).

3. Boards of Studies.

In each faculty a board or several boards of studies are to be constituted. (P. xxv, Cl. 33.)

The Academic Council is to be bound to take the opinion of a board or boards of studies of the faculty concerned before making or changing any rule respecting "the determination of curricula and the making of regulations respecting examinations." (P. xxvi, Cl. 34 *a*; p. l, par. 11.)

"The number and composition of the Boards, and the number of members on each Board, together with the mode of election, period of service, and mode of retirement of the members of the Boards, should be determined by the regulations of the Academic Council."[4] (Pp. xxv-xxvi, Cl. 33.)

The Academic Council may appoint one-fourth of the members of each board. (*Ibid.*)

The members appointed by the Academic Council need not,

[1] Nothing about withdrawal of recognition appears in Part 1, but the power seems a necessary corollary from that of recognition.

[2] This paragraph seems to represent Cl. 48 (p. xxxii), which does not apply to Medicine.

[3] The faculty of Arts, therefore, will mainly consist of the arts teachers of University and King's Colleges and the Bedford College for Women. Their representatives on the Academic Council will not improbably be all University and King's men. The faculty of Science will consist mainly of science teachers at the above colleges and also at the Royal College of Science and City and Guilds Institute. The Faculty of Law, unless the Inns of Court join in, will be manned only from University and King's Colleges. The Faculty of Medicine will consist of: *a*. Such teachers in the London medical schools as may be recognised by the Academic Council. *b*. Such teachers of physics, chemistry, biology, physiology, or hygiene in any of the above science schools of the University as the Academic Council may assign to the faculty (pp. xli-ii). The proportion of medical men among the three representatives of the faculty on the Academic Council will depend on the relative preponderance of classes *a* and *b*, as determined by the Academic Council.

[4] The proportion, therefore, of medical men, as opposed to teachers of laboratory science, upon the Medical board of studies is to be settled by the Academic Council.

apparently, be members of the faculty concerned. This is, perhaps, only an oversight.

The Academic Council is expressly absolved from any obligation "to conform itself to the view expressed by the bodies which it consults." (P. xxvi, Cl. 34, last par.)

The boards of studies are to possess no administrative or executive functions, unless expressly delegated to them by the Senate or the Academic Council. (P. xxvi, par. 3.)

4. POWERS OF THE SENATE OVER THE PROCEEDINGS OF THE ACADEMIC COUNCIL.

The powers of the Academic Council, like those of the other authorities of the University, are to be secured to it, in accordance with the recommendations of the Commission, by statutes of foundation, drawn up by a Parliamentary Commission. (Pp. liii, liv.)

These statutes cannot be changed by the Senate without an appeal to the Crown and a right of hearing to Convocation before the Privy Council. (P. xxx, Cl. 41, par. 2; p. xxxiv, par. 5.)

The Senate is empowered to enact "Ordinances to regulate, consistently with the provisions of the Statutes of Foundation, all matters concerning the University.[5] (P. xxx, Cl. 41, par. 1.)

The proceedings of the Academic Council, it is stated, are to be "subject to the ordinances of the University" (*vide suprà, apud* Academic Council).

General statements of this kind have, of course, to be construed subject to any specific limitations contained in the same document.

An implied limitation of a significant kind is contained in the last par. on p. xxx: "Omitting the more formal matters relating to the conduct of the business and management of the property of the University, there may be named as among the more important matters with which the Senate will have to deal" etc.

A list of twelve "matters" follows, but amongst them is not found any reference to the determination of curricula of study or examination, to the "recognition" of teachers as University teachers, to the withdrawal of such "recognition," to the assignment of teachers to their respective faculties, or to the constitution of boards of studies.

It may be fairly argued, therefore, that it is intended to exclude these "matters" from the cognisance of the Senate, or at any rate to give an indication to the Senate that the regulation of them is not part of its legitimate business.

In the summary, p. xlix, where the list is extended to twenty functions which the Senate is "in particular" to exercise, the exclusion is still more marked.

But, even waiving this point, the powers of the Senate are limited to laying down "ordinances" in advance. As long as the ordinances are not transgressed, the acts of the Academic Council are final. There is no appeal against its decisions either mentioned or implied in any clause of the scheme, and no obligation laid upon it even to report its proceedings to any superior body.

The significance to be attached to the absence of any mention of appeal or report is emphasised by the language of Clauses 48-9, pp. xxxii-iii. Here we find a clear distinction drawn between things which are to be done by the Senate, things which may be done by the Senate on report from the Academic Council, and things which the Academic Council alone is empowered to do.

As regards the ordinances of the Senate, a glance at the composition of the Senate (see Summary, p. xlviii) is sufficient to show how incompetent so miscellaneous a body must be to lay down any but the barest outlines of regulations on academic matters, and how completely, under any circumstances, it must be in the hands of a compact expert executive authority.

5. CONCLUSIONS.

It follows, therefore, that in the proposed University

1. The determination of the medical curriculum will practically rest with a body of fifteen teachers, of whom three at the most, probably less, and not necessarily any, will be medical men.

2. The voice of practical medicine in this "Academic Council" will, even at the most favourable estimate, be outweighed by that of the teachers of science, whose interests and views are in some respects opposed to those of practical medicine.

3. The views of the great body of practising medical men will have no opportunity whatever of expression in the body which will determine the medical curriculum.

4. The constitution of the Board of Medical Studies, which the Academic Council is supposed to consult in medical matters, is to be at the will of the Academic Council, which is alone to decide how far medicine and surgery, and how far the contributory sciences, are to preponderate in its decisions.

5. The constitution of the very Faculty of Medicine which is to elect the medical representatives on the Academic Council is to rest largely with the Council itself.

6. The university position of every teacher in every medical school of the University will be held only at the grace of the Academic Council.

7. It will, therefore, be in the power of the Academic Council to inflict a serious stigma upon members of hospital staffs by refusing them recognition as university teachers.

8. And this although the members of the Academic Council may be, and for the most part will be, in no way competent to judge of medical qualifications.

9. It will be in the power of the Academic Council, notwithstanding the illusory guarantees of Cl. 21, par. 5, practically to close any medical school as a university school at any moment by refusing or withdrawing "recognition" of some one or more of the teachers necessary to its completeness.

10. And this although its powers are not to be balanced by any pecuniary responsibility for the medical schools on the part of the University.

11. The staffs of University and King's Colleges will, through the Faculties of Arts, Science, and possibly Law, probably possess a permanent majority on the Academic Council.

Mr. MACNAMARA said he could not help thinking that this memorandum was out of place at the present time. The matter had occupied his attention on the part of the British Medical Association for fourteen years, and the general conclusions arrived at by the Commission were distinctly those which he had advocated, believing that he was acting on the part of the Association, and according to the resolutions arrived at in the Report of 1885. It was on this Report that all their subsequent action was based. The interests of the medical profession on the Gresham University Commission were represented by Lord Playfair, Sir George Humphry, Sir Wm. Savory, and Professor Burdon Sanderson. Those gentlemen had all signed the report, and the Royal Colleges of Physicians and Surgeons and University College had accepted the general principles it contained. These bodies had come to the conclusion that the present was not the time to enter into details, as an opportunity would be afforded for going into such matters when the Statutory Commission was appointed as the report proposed. This Commission would take evidence as to the various matters of importance connected with the formation of the University, and he thought that when the Statutory Commission was at work would be the time to move in matters of detail, such as those referred to in the memorandum prepared by Dr. Isambard Owen. If the Committee believed as he did that the report of the Commission was upon the lines which the Association had advocated since 1885, the Committee ought to support it and not bar it at this stage by crowding it out in details. He should be extremely sorry to see anything but general approval expressed to the scheme, and strong approval to that portion which would combine the Society of Apothecaries with the Royal Colleges of Physicians and Surgeons and with the University in a board of examiners which graduates would have to pass in order to take degrees. The Colleges might be disposed now to like a more favourable view of this matter than they did a few years ago. If this idea was carried out the profession would have, what they had long striven for, the one portal system in the

[5] Compare also: "The Senate, subject to whose Ordinances the internal organisation of the University already described will be carried on" (P. xxix, Cl. 39). "The Senate will be the supreme Governing Body of the University" (P. xlviii, near the bottom). "The Senate will further have power to make, alter, or revoke Ordinances for regulating all matters concerning the University, and to exercise all powers and do all things authorised to be exercised and done by the University" (*Ibid.*).

metropolis. He was quite sure that the Commissioners' report would do very much for medical education in London and there was a great deal in the report which was admirable. He moved a resolution as follows:

That the Parliamentary Bills Committee of the British Medical Association approve of the general provisions contained in the report of the Gresham University Commission, forming as they do the principles advocated by the Association as to the means by which medical education in London may be improved. The Committee are of opinion that the suggestions of the Commission should be enforced, so as to unite the Royal Colleges and the Apothecaries Society for examining for degrees.

Dr. Isambard Owen said Mr. Macnamara had stated that if the Gresham scheme was proceeded with by the Government a Statutory Commission would be appointed, which would be empowered to take evidence and to open up practically the whole question again. He had heard the same stated by a large number of people in various discussions on the subject at which he had been present, but he had never yet discovered upon whose authority it was stated that the Statutory Commission to be appointed was to have any such powers. It seemed an improbable thing that a small body such as a Statutory Commission generally was would be empowered to go again into a subject which the Royal Commission took two years to take evidence upon and consider. On pages 53 and 54 of the Commission's report, from which the idea of a Statutory Commission originated, the Committee would find that the suggestion of the Royal Commission was the appointment of a Statutory Commission to carry the report into execution, but it did not in the least degree contemplate the Statutory Commission being given any such powers of revision as Mr. Macnamara suggested. The functions which it was recommended that the Statutory Commission should exercise were all set out in elaborate detail; and, as regards the foundation of the University, all that it was suggested the Statutory Commission should do was to frame statutes of foundation in accordance with the recommendations of the report as they stood. He therefore felt that a resolution expressing general approval of the scheme would be apt to cause considerable misunderstanding. If a resolution of approval was passed there should be added an express reservation that there were certain points in the scheme which the Committee did not at all approve of. The portions of the scheme objected to were not at all matters of "mere detail"; they were matters of great importance, provisions forming a part of the scheme which the Commissioners themselves described as being "of vital importance." It was the only part of the scheme which they had described as being "of vital importance"; those provisions concerning the powers and the functions of the Academic Council. The question, again, of a "retrospective" degree was one of great importance. He did not know what might be the feeling of the profession outside London, but the Metropolitan Counties Branch had had the question of a University for London under consideration for many years, and one of its fundamental demands was that in that University a medical practitioner, doubly qualified, who had been a student in London before the foundation of the University, should be allowed to go in for the examinations of the University and get his degrees without having to go back to a medical school. Mr. Macnamara had been twice deputed to urge that question upon the Royal Commission. That question had been absolutely ignored in the report, and he thought every one would admit that a university constituted as the Commissioners proposed would be exceedingly unlikely to meet the wishes of practitioners on the subject.

Mr. Macnamara said he believed that the Statutory Commission would be able to make the alterations he had referred to. He did not think the proposed scheme contemplated giving degrees to practitioners who came up whenever they wished to pass an examination. Such powers would be exceptional. He had pleaded for facilities being granted to practitioners obtaining degrees, but the Commission had not seen their way to allow men who had not passed through the University course to go up for degrees.

After some further discussion, a new resolution was drafted and Mr. Macnamara withdrew his first resolution and thereupon it was proposed by Mr. Macnamara, seconded by Dr. Philipson, and resolved:

That the Parliamentary Bills Committee of the British Medical Association approves of the general principles on which the scheme of the Gresham University Commission is based, but at the same time feels bound to take serious exception to certain details, especially as regards the constitution and powers of the Academic Council.

The Parliamentary Bills Committee is also of opinion that provision should be specifically made for the graduation of doubly qualified men who pursued their studies in London previous to the foundation of the new University.

It was further resolved:

That the Chairman be instructed to convey copies of the resolution with regard to the Gresham University to the Home Secretary and also to Earl Cowper as Chairman of the Commission.

(*To be continued*).

ARCHÆOLOGICA MEDICA.

VII.—THE DEATH OF FRANCIS II: A HISTORICAL CASE OF ADENOID GROWTHS.

Though the sentiment expressed by Johnson in the following well-known lines

> Of all the woes that human hearts endure
> How small the part that kings can cause or cure,

is (in spite of Macaulay) true in the main, it is self-evident that the diseases and bodily infirmities of sovereigns who govern as well as reign may seriously influence the condition and destinies of their subjects. *Quicquid delirant reges plectuntur Achivi.* Some at least of Lobengula's tiger-like thirst for blood may have been due to the gout from which he suffered. Indigestion, brought on, it is said, by a surfeit of shoulder of mutton stuffed with onions lost the first Napoleon the battle of Leipzig, and the intellectual energy of Napoleon the Third was, no doubt, greatly impaired by the pain of the calculus which ultimately killed him. If we were, in the words of Shakespeare, to "sit upon the ground and tell sad stories of the death of kings," we should be able to explain by the simple mechanism of a diseased liver or a degenerated brain many events of far-reaching consequence which historians and politicians attribute to more complicated causes.

An interesting contribution to medico-historical literature has been made by M. Potiquet relative to the disease which led to the premature death of Francis II of France, the first husband of Mary Queen of Scots.[1] That disease may thus be regarded as the indirect cause, not only of the many sorrows of that unfortunate queen, but of much else, including the massacre of St. Bartholomew. The young king appears to have been the subject of those adenoid growths in the post-nasal space, the pathological importance of which as regards the development both of the body and the mind, and in particular as regards the production of ear disease, is only just beginning to be recognised by the profession at large. Francis was an unwholesome-looking boy, with a colourless, pimply face and marked dulness of intellect. He suffered from obstruction of the nasal passages, his breath was offensive, and his mouth was always open. He died of meningitis or cerebral abscess dependent on suppurative disease of the ear. His contemporaries seem to have recognised the connection of his ear trouble with the obstruction in his nose. In their rude pathology the process was expressed as a "formation of corruption in one of his ears which discharged the function of the nose," or, as Henri II expressed it, "the humours of the little king were discharged by a wrong channel owing to his not being able to blow his nose."

It is clear from all this that the king, so far from deserving the contemptuous abuse lavished on him by Michelet and other historians, was simply, in the first instance, the subject of what Guye, of Amsterdam, has called "aprosexia," or want of the power of mental application, and subsequently fell a victim to the consequences of post-nasal vegetations allowed to grow with unchecked luxuriance. Nor need we lay the flattering unction to our souls that such a thing could not happen in these days of surgical sweetness and light. It is only twenty-five years since Meyer, of Copenhagen, revealed the existence of post-nasal growths to the Royal Medical and Chirurgical Society, and his communication lay buried in archives of that learned body for years, known only to a few specialists. Only some ten or twelve years ago one of the *summa cacumina* of the profession confessed that he had never heard of the disease, and other superior persons did not attempt to hide their conviction that it was a figment of the

[1] *La Maladie et la Mort de François II, roi de France* (Paris: Rueff et Cie).

specialist imagination. Even now knowledge on this subject has not thoroughly leavened the mass of the profession, and it is too certain that for many persons childhood is made miserable and adult age a failure, by a condition which is easily recognisable when looked for, and perfectly curable when rightly treated.

CHOLERA.

At a recent meeting of the *Comité Consultatif d'Hygiène Publique* in Paris, M. Brouardel stated that cholera is on the increase at Constantinople. There are from five to six cases a day. The Greek population suffers the most, the Mohammedans very little, the Europeans not at all, the Armenians and the Jews more than the Mohammedans. Three-fourths of the people who have indulged in large quantities of mussels have been attacked by cholera. Dr. Nicolle declared that there is no doubt that the epidemic is one of cholera; Koch's cholera bacillus was present in the stools. The Sultan has decided that the following measures be adopted: Mohammedan dealers who fail to notify cases will be fined from £9 to £39; foreign doctors will be forbidden to practise. Houses surrounded by the *cordon sanitaire* shall be thus isolated during ten days. The sale of mussels shall be forbidden, likewise all molluscs, and such fruit and vegetables as are likely to disturb the digestion. Notwithstanding the expense that has been incurred for sanitary improvements, the sanitary condition of Constantinople is no better than formerly.

The most recent news from Hedjaz and the Red Sea and the Camaran stations is satisfactory. Nearly 15,000 pilgrims have stopped at the Camaran lazaretto; they arrived there and left free from cholera. Bagdad and Erzeroum are free from cholera.

THE ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS, ENGLAND.

A meeting of the Committee of the Association of Fellows of the Royal College of Surgeons, England, was held on April 11th, Mr. George Pollock, President, in the chair. There was a large attendance.

The Honorary Secretary, Mr. Percy Dunn, reported that in accordance with the instructions of the subcommittee he had issued a circular letter to the Fellows. He further reported that as the result of this statement of the work of the Association to the Fellows, he had received several communications from Fellows expressing their desire to join the Association. The Honorary Secretary also reported that having observed that Mr. Rushton Parker had taken an active part in the promotion of the new Society of Fellows, he had written to Mr. Parker to inquire whether it was his intention still to remain a member of the Association. Mr. Rushton Parker, in reply, wrote tendering his resignation, which was accepted with regret.

Mr. Timothy Holmes reported that he had attended the meeting of Fellows called on April 5th at St. Martin's Town Hall in reference to the formation of a new Society of Fellows, with the result mentioned in his letter published in the British Medical Journal of April 14th.

It was decided to hold the annual meeting on Thursday, June 14th next.

The list of names of the new candidates on the Association, having been proposed and seconded, was carried unanimously.

Some further matters relating to the organisation of the Association having been dealt with, the Committee adjourned.

INDIA AND THE COLONIES.

INDIA.

The Calcutta M.D. Degree.—An agitation has been raised by medical graduates for the purpose of rendering the acquisition of the degree of M.D. of the Calcutta University more easy than it is at present. The University of Calcutta, which is an examining institution, incorporated on the model of the University of London, grants three medical degrees—a licence in Medicine and Surgery, the degree of M.B, and the degree of M.D. The regulations and examinations for these degrees are separate and distinct. The licence is in reality a diploma analogous to those granted by British colleges; but, as no incorporated colleges exist in India, the function of granting medical diplomas entitling to practise has been assigned to the universities. The examination for the diploma is as nearly as possible on a level, in point of education, general and special, demanded and standard with those of British colleges and corporations. The rules and examinations for degrees have been framed with a view to ensuring a higher grade of general and scientific culture in the candidate, and thus rendering them a sign of superior capacity, deeper and more extensive study, and greater scientific and professional attainment than are necessary for a mere licence. Accordingly it has been ordained that the possession of the degree of B.A. is an indispensable requisite for aspirants to the degree of M.D., for which a special examination in medicine, surgery, midwifery, hygiene, and pathology is held, and a period of from two or five years spent in hospital or private practice after passing the L.M.S. or M.B. required. It is contended that only two British Universities (Oxford and Dublin) require the possession of the degree of B.A. for the M.D. degree; that, as a matter of fact, those B.A.'s in Calcutta who have studied medicine have not succeeded better than undergraduates; that it is a mistake to encourage or require men to pursue literary studies after having commenced their professional studies; that an inordinate time of study is necessary for attaining the M.D. degree, and that the higher degrees in arts, law, and engineering can be got without sacrifice of so many years. It is also a fact that since the incorporation of the Calcutta University in 1857 only eight persons have obtained the degree of M.D. This result may be due either to the difficulty or expense of the necessary course of study and examination, or to the absence of ambition or effort to secure a high and select degree—probably the latter. The present agitation is a manifestation of a constant endeavour in India to lower standards, and render the attainment of literary and scientific distinction easy. The signs of such distinction are the same as in this country; the social and educational circumstances of India differ much from those of Great Britain; and it was the object of those who drew up rules for these degrees to render the conditions of their possession as nearly equal to those required elsewhere as possible. The First Arts Examination of the Calcutta University implies a fairly good general education, and suffices for the lower degrees, but it is idle to contend that it calls for the measure of literary and philosophical cultivation which the holder of an M.D. degree should possess. The period of time required for securing this degree is overstated in the graduates' memorial. It may be gained after nine years of study, two of which may be passed in practice. The University permits an L.M.S. or M.B. to proceed to the B.A. Examination without two years' study in a college after passing the First Arts Examination, and if the candidate elects the B.A. course he need only be examined in English, mathematics, and physiology, or chemistry, or physics, or geology, subjects the study of which can very advantageously be pursued during the five years of the medical curriculum without serious hindrance to the latter—rather the reverse. In this country very many students find it to their benefit to take literary degrees before entering on the study of medicine, and an ordinance which requires a similar course for the highest medical degree in India is salutary if not necessary, if the degree is to retain the value and respect which have hitherto been accorded to it.

For these and other reasons which might be advanced, we hope that the present agitation to lower the Calcutta M.D. degree will fail. Aspirants for this coveted distinction ought rather to work up to its requirements, which are by no means difficult or prohibitive, than endeavour to drag it down to a lower level, and thus deprive it of its present worth and honour.

Testimonial to Dr. Stopford Taylor.—It is an appropriate, as well as an exceedingly pleasant, incident that the late medical officer of health for Liverpool should, on his retirement after a long and valued public career, receive a memento of respect from the leading corporate officials who were so long associated with him in the discharge of his important duties. The chiefs of the various corporate departments have presented, in the shape of a testimonial, a magnificent vase to Dr. Taylor on the occasion of his retirement from the public service. The accompanying letter expressed the esteem and regard entertained for him by the officials of every class during the many years he occupied the important position of medical officer of health.

Society for the Relief of the Widows and Orphans of Medical Men.—The Quarterly Court of Directors of the Society was held on Wednesday, April 11th, in their new offices, 11, Chandos Street, Cavendish Square, Mr. Aikin, Vice-President, in the chair. Four new members were elected, and the deaths of five were reported. A fresh application from a widow was considered, and a grant at the rate of £30 per annum was made. It was resolved that a sum of £1,236 be divided among 56 widows, 9 orphans, and 4 orphans on the Copeland Fund at the July quarterly court. The following members were nominated for election as officers of the Society at the annual general meeting—namely, Mr. Merriman as a Vice-President, Dr. Church as a Treasurer, to fill the vacancies caused by the death last year of Mr. Fuller; Dr. Braxton Hicks, Dr. Russell Reynolds, Dr. Morison, Mr. Langton, Mr. Rouse, Dr. Wharton Hood, and Dr. Oswald as directors in place of Dr. Church and the six senior directors who retire. The annual general meeting was fixed to be held on Friday, May 25th, at 5.30.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

Subscriptions to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, APRIL 21st, 1894.

BONDS AND CONTRACTS IN RESTRAINT OF PRACTICE.

It not infrequently happens in cases of employment of qualified assistants, as well as on the occasion of the sale of a practice, that the assistant or the vendor, as the case may be, is required to become bound, in some cases under a penalty, not to carry on practice within a given radius of the town or district in which the business of the employer or vendor is or was carried on. The comparative frequency of applications to the Court to determine questions which from time to time arise touching the construction of such contracts or bonds is a sufficient testimony to the great care which should be exercised in arranging the precise terms of the restraint intended to be imposed.

It would seem that such contracts or bonds are strictly construed, having regard, no doubt, to the principles of law governing restraints of trade, under which head necessarily falls a contract in restraint of medical practice. The recent case of Logie *v.* Maxwell was an action of libel and slander, in which the plaintiff alleged that by statements made concerning him by the defendant accusing him of unprofessional conduct, he had been damaged in his character and reputation, and prevented from obtaining at the hands of the guardians the appointment of medical officer. The defence was that the statements were made without malice upon a privileged occasion.

On the facts of this particular case, so far as regards the immediate subject before the Court, we have no desire to comment except in so far that the question of the construction of a bond given by the plaintiff not to practise (as previously mentioned) formed an important element for consideration in the summing up by the judge. It would appear from the report of the case that the plaintiff, in 1885, came as assistant to the late Dr. Sharp at Woolwich. During the time that he was acting as such assistant Dr. Sharp permitted him to have his name associated with his though he was not a partner, so as to place him in a position to attend Dr. Sharp's patients during that time as though he was a member of the firm. Mr. Logie was, however, required to enter into a bond in the sum of £500, which was dated February 2nd, 1886. The bond, after reciting the fact of Mr. Logie's employment and that Dr. Sharp was then practising as a medical practitioner at Woolwich under the style of Sharp and Logie (notwithstanding which Mr. Logie was an assistant only and not a partner), and that it had been agreed that Mr. Logie should continue in such service as assistant on his entering into the bond thereinafter contained included the following condition: "That if James Logie shall either directly or indirectly, and either as principal assistant or otherwise during such period as he shall continue in the service of the said Sharp, or after the determination thereof, practise in his own name or otherwise, except as assistant to the said Alfred Sharp, within the radius of three miles as the crow flies from Charlinge (*sic*) Rectory Place, Woolwich, or such other residence or place of business of the said Alfred Sharp for the time being, then the obligation shall be void, but otherwise shall remain in full force and effect."

Now, it does not appear to have become necessary in the judgment given in the case to which we have referred, that a judicial construction should be put upon the bond; and Mr. Justice Hawkins, in referring to the subject, and the construction which we understand Mr. Logie to have placed on it, that the contract ceased on Dr. Sharp's death, said: "It may be that different views may be taken of it. It may be that in strict law Mr. Logie is right. It may be in strict law Mr. Logie is wrong."

It was suggested by counsel for the plaintiff that he thought the plaintiff was right. It was suggested by counsel for the defendant that he thought, in point of fact, that he was wrong. Whether rightly or wrongly, it appears that Mr. Logie, on the death of Dr. Sharp (whose service he had left some time before), returned to Woolwich with a view of acquiring Dr. Sharp's practice by purchase. It was, however, sold to another medical man; and then we gather from the judge's summing up that Mr. Logie considered he had a right to practise within the radius without any bargain at all, relying upon the bond terminating on the death of Dr. Sharp.

It seems that Mr. Logie subsequently became a candidate for the post of medical officer, and it was in connection with this election that the defendant circulated the alleged libel and slander complained of. It appears from the report that the defendant wrote to one of the guardians, Colonel Frobisher, stating that it was undesirable to elect the plaintiff, and that the latter had come back to Woolwich although he had promised not to do so, and that he was not recognised by the other professional men practising in the neighbourhood. The defendant is alleged to have repeated these charges to other persons, and to have added that the plaintiff had been guilty of unprofessional conduct in trying to undersell the other candidates for the post of doctor to a friendly society.

The circulation of these statements had the effect of preventing the plaintiff, as was alleged, from being elected as medical officer to the union, and there appears to have been evidence on both sides—on the one hand that Mr. Logie was, in consequence of what had taken place, not recognised by the medical men in the neighbourhood, and on the other that it was not true that he was not so recognised.

The judge, having dealt with the question of the bond to which we have referred, stated that the question was whether the plaintiff had acted shabbily in exacting all the law allowed to him, and if so, whether persons of right feeling might justifiably condemn his conduct. It seemed that the defendant had helped Dr. Sharp's widow in disposing of the goodwill, so that he had an interest in the matter. Coming to the incident of the election, it was undoubtedly

desirable that anyone appointed to such a post should be *persona grata* to his *confrères*. What the jury had to consider was whether in the statements made by the defendant he had acted honestly and *bonâ fide* believing in their truth; if so, being made on a privileged occasion to persons interested, such as guardians and ratepayers, the statements were protected.

The jury gave a verdict for the plaintiff; damages one farthing, the Judge subsequently declining to give the plaintiff any costs.

Whether the bond given by Mr. Logie was such as legally to prevent his carrying on practice within the radius referred to after the death of Dr. Sharp is, it seems, undetermined: but looking at the facts it certainly seems to us as being within the spirit of the agreement that the bond was intended as a protection not only to Dr. Sharp during his lifetime but also to his representatives with regard to the goodwill of the practice in the event of his death.

Having regard, however, to the strict manner in which the letter of such bonds is apparently construed, too great particularity and care cannot be exercised in prescribing their terms.

With regard to the general rules relating to such cases it must be borne in mind: (1) That the restraint must be partial only either as to duration or with regard to the limit as to space; (2) there must be some good consideration; and (3) the contract must be reasonable.

PATENT MEDICINE AND PROPRIETARY POISONS.

SINCE patented medicines are exempt from the provisions of the Pharmacy Act relating to the sale of poisons, it is obvious that the patenting of medicines containing poison within the meaning of that Act must be inconsistent with public interests and the intention of the statute, and we observe with much satisfaction that this view of the matter, which has long been urged by Mr. Ernest Hart, acting on behalf of the Parliamentary Bills Committee of the British Medical Association, is now being carried out in practice. In three cases petitions have been presented to the Court of Chancery by the Pharmaceutical Society praying for the revocation of letters patent, on the ground that the medicines to which the patents relate contain poisons within the meaning of the Pharmacy Act. In two of these cases the patents have been revoked, but as this result has been obtained by the consent of the patentees, there has not been any authoritative decision of the point of law involved. The third case heard by Mr. Justice Stirling last Saturday has been postponed in consequence of one of the patentees being absent from England; it relates to the preparation known as Kay's essence of linseed, and will probably afford opportunity for the legal question as to the effect of the Pharmacy Act, 1868, in limiting the possibility of patenting medicines to cases in which the medicines do not contain poisons within the meaning of the Pharmacy Act. This is a matter of great public importance, for since it has been decided in law, as is obvious in common sense, that the popular application of the term "patent medicine" to all proprietary medicines is incorrect, recourse has been had to the patenting of these articles in order to escape the Pharmacy Act and secure a free sale for them without complying with the requirements of the law in regard to the sale of poisons.

STUDIES IN THERAPEUTICS.

III.—INTESTINAL ANTISEPTICS.

THERE is, perhaps, no more promising field for investigation than that offered by the study of the nature and effects of the poisons formed in the alimentary tract of man and animals.

It is well known that food, in the physiological changes it undergoes preparatory to absorption, passes through stages, some of which are actually poisonous; peptones, for instance, injected into any part of the venous system other than the portal, produce coma, convulsions, and death. Of the alkaloids elaborated by the living body, for which Gautier has proposed the name "leucomaines," we know at present very little, in spite of the large amount of work that has been done on the subject. Several such bodies have been isolated, but their study and identification present unusual difficulties. Of the substances formed by simple putrefaction of the intestinal contents our knowledge is somewhat more full, as the products indol, skatol, phenol, etc., occur also in albuminous putrefaction outside the body. They are themselves antiseptic, and are poisonous; but in the liver they become combined with sulphuric acid, and having thus been rendered innocuous are excreted by the kidneys. The amount of these "aromatic sulphates" present in the urine forms an exact index to the amount of putrefaction in the intestine.

In estimating the clinical importance of intestinal septicism, we must remember that besides the direct action of the bodies thus produced, there are certain pathogenic microbes, which can only elaborate their poison in the presence of those of putrefaction. Bocklisch has shown this to be the case with sporadic cholera.

During the last few years a number of drugs have been introduced which restrict more or less intestinal putrefaction. The preparations of mercury have long been used for this purpose, but our recently acquired knowledge has rendered their use more intelligent and more efficacious. The solution of perchloride of mercury is widely prescribed for the summer diarrhœa of children, which probably depends, to some extent at least, on the increased liability of milk to decompose in hot weather.

A special impetus was given to this branch of therapeutics by the introduction by Bouchard of beta-naphthol. This drug and its allies hydro-naphthol, naphthaline, and alpha-naphthol are powerful antiseptics, and at the same time non-poisonous, owing to their insolubility. Salol, which passes through the stomach unchanged, but in the small intestine splits up into carbolic and salicylic acids, is especially useful in the so-called "duodenal indigestion," where excessive fermentation in this part of the gut causes pain and distension some hours after food, with irregular action of the bowels, and frothy, offensive stools. In the same class of cases betol may be used, which is broken up by the succus pancreaticus into beta-naphthol and salicylic acid, substances which are more powerfully antiseptic, and are also innocuous. Carbolic acid, the sulpho-carbolates, aseptol, creasote with its derivative guaiacol, iodoform, chlorine, benzoate of sodium, resorcin, thymol, and boracic acid may all be useful in special cases, but as intestinal disinfectants labour under the disadvantage of either being poisonous, or of being too soluble and not reaching the intes-

tine. In many cases it is advisable to complete the cleansing of the tract by irrigation of the lower bowel with a solution of boracic acid, salicylate of sodium, or other antiseptic. As regards diet it has been proved that on a milk regimen intestinal putrefaction is less active than when the food is more largely proteid, which fact lends rational support to the general custom of relying chiefly on milk in the feeding of patients suffering from typhoid fever and Bright's disease. Broadly speaking, the condition which calls for the administration of these remedies is abnormal decomposition in the intestine. Obvious symptoms of this are diarrhœa, with excessively offensive and, perhaps, fermented stools, and flatulence with abdominal pain and distension. More obscure symptoms are caused by the entrance into the circulation of the poisons generated in the intestines and comprise ænæmia, malnutrition, vomiting, headache, and other nervous manifestations. The relationship of the so-called "biliousness" to these poisons has been ably discussed by Dr. Lauder Brunton.[1]

To the surgeon, the application of this treatment lies in the cleansing of the gut preparatory to enterotomy, which is usually aimed at by the administration of a purge only.

An intestinal antiseptic and the administration of a food admitting of the minimum amount of decomposition—such as sterilised milk—are all that is required wherewith to meet the disorders caused by simple putrefaction in the alimentary tract, and this treatment may claim to be specific in those cases of enteritis due to consumption of food already "on the turn."

In a much larger number of diseases, however, their action is confined to lessening the amount of poison formed and palliating its effects. Contradictory results have been recorded of the antiseptic treatment of cholera and dysentery; but in typhoid fever it is admitted that the diarrhœa, offensiveness of stools, and meteorism are controlled by antiseptics. This alone would render them invaluable in many cases. More than this, however, is claimed by many recent writers of the highest authority for the antiseptic treatment of typhoid. Different observers who have used calomel, pure carbolic acid, creasote, chlorine, thymol, naphthaline, betanaphthol, and other antiseptics, maintain that they succeed in lessening the mortality of typhoid, curtail the fever, shorten the duration of the disease, and diminish the number of its complications. We must wait for further records to establish their exact value, and to determine which of the long list of antiseptic drugs is best adapted for use in enteric fever.

The naphthol group and salol have proved very useful in tuberculous enteritis, but from its special action on tubercle bacilli it might be expected that most good would be obtained from the use of guaiacol, which, suspended in cod-liver oil, has helped in the arrest of several such cases. Dr. William Hunter has found, from observation of the large amount of aromatic sulphates excreted in the urine, that pernicious anæmia is characterised by excessive intestinal decomposition. He supposed that a hæmolytic poison is thus generated, and recommends intestinal antisepsis as the rational treatment of the disease.

The advantage gained in chlorosis by clearing out the bowels with purgatives suggests the use of intestinal antiseptics in this disease, but so far they have not been shown to affect the condition of the blood. There are, however, cases of anæmia which directly depend on an unhealthy condition of the bowel, accompanied by diarrhœa of a peculiarly fœtid character, and here a cure has been effected by betanaphthol.

In spite of the vast amount of work that has been done on the subject, we are still uninformed about the poison of uræmia. There are grounds for regarding it as toxic matter formed in the intestine and absorbed by the blood, which the diseased kidneys fail to excrete. The treatment by milk diet and purges, which is generally adopted, bears out the theory to some extent.

Quite recently intestinal antiseptics have been recommended for diabetes,[2] as the next best treatment to opium, thus adding another to the long list of theories regarding the pathology of this disease.

Some affections of the spinal cord have been ascribed to poisons generated in the bowel, and this may be the explanation of the occasional association of pernicious anæmia with spinal cord affections. Does rheumatic fever own a similar origin? The salicylates are active intestinal antiseptics, and the benzoates, which also control rheumatism, have the same power.

Enough has been said to indicate the large number of trials and observations that require to be made with these remedies before the limits of their use can be said to have been reached. The insoluble members of this group of drugs are free from danger, and have, moreover, been found to interfere but little with ordinary digestion.[3]

[1] *Disorders of Digestion*

[2] *Therapeutic Gazette*, 1893, vol. xvii.

[3] *Practitioner*, July, 1890.

The annual dinner of the Army Medical Staff will be held at the Whitehall Rooms, Hôtel Métropole, London, at 7.30 P.M., on Monday, June 18th, 1894, the Director-General of the Army Medical Department in the chair. Brigade-Surgeon-Lieutenant-Colonel J. Hector is acting as honorary secretary to the committee.

In his statement on introducing the Budget, the Chancellor of the Exchequer was content with mentioning the fact that an additional duty of sixpence a gallon will be charged upon spirits. There is, however, a group of pharmaceutical manufactures which will share in the increment of taxation. Among them are compounds such as chloroform, collodion, and chloral hydrate.

The Presidents of the Royal Colleges of Physicians and Surgeons have agreed to depute a member of each of these bodies to represent them on the proposed Committee of Inquiry with regard to the sanitary condition of the Chelsea Hospital for Women. Lord Sandhurst, Lord Balfour of Burleigh, and Sir Charles Dilke have also agreed to serve. The consulting medical and surgical staff of the hospital have declined the invitation to join the Committee.

Dr. Tilden, F.R.S., who has presided over the chemistry department of Mason College, Birmingham, ever since the college was opened in 1880, has accepted a similar appointment at the Royal College of Science, South Kensington, a position which has been vacated by the appointment of Dr. Thorpe, F.R.S., to the position of chief analyst to the Inland Revenue Department.

WATERBORNE TYPHOID.

A paragraph in the report of Dr. Dyke, the Merthyr medical officer of health, traces with "Sherlock Holmes-like precision" the source of an outbreak of enteric or typhoid fever amongst the girls engaged at the Cyfarthfa Brickworks. This is shown, as is so often the case, to have originated from drinking water at a spout supplied from two feeders to the ironworks—one from Taff Fawr, and the other from Taff Fechan. Into one of these, at the bottom of the village of Cefn Coed, there is surface drainage, and a distinct proof given of the pollution of the water, hence the outbreak. It must be a consolation to the inhabitants of Cardiff to know that there is no tapping of their water supply, which is rigidly iron-bound from the fountain head near the Beacons, right through Cefn Coed to Cardiff, and by no possible chance can it be contaminated.

WOMEN MEMBERS OF WORKHOUSE COMMITTEES.

It is stated by the correspondent of the *Manchester Courier* that, in consequence of the recent workhouse scandals, particularly that at Newton Abbott, a strong effort will be made to induce the Government to provide for the appointment of women on the visiting committees. It is urged that men, with the very best intentions, are indifferent judges of such household matters as the cleanness of linen and of cooking utensils. Several members of the Government have been sounded on the demand, which is put forward by members on both sides of the House, and they regard it as entirely reasonable. No immediate action will be taken, because the report of Lord Courtenay, who investigated the Newton Abbott case, has yet to be considered by the Local Government Board. Still an early opportunity will, it is stated, be taken for considering the question in all its bearings, more particularly the difficulty of supplying efficient lady visitors in districts where they are not naturally forthcoming.

AN ATTRACTIVE MARINE ZOOLOGICAL STATION.

The Berlin Aquarium Society have just issued a report on their marine zoological station at Rovigno on the Adriatic. Primarily intended as a source of supplies for the Berlin Aquarium, it is also fitted up for scientific work, which can be pursued much more cheaply and perhaps quite as effectually in that pleasant town as in Naples, where the great Dohrn establishment is situated; for, among other attractions, Rovigno is healthy and hospitable. No charge is made for working in the laboratory, which is not quite the case at Naples and elsewhere; and, besides lodgings being low priced, the aquarium authorities can "put up" four naturalists at the extremely moderate charge of 1s. per diem. Finally, says the *Daily Chronicle*, the directors give great prominence to the fact that there is to be had in the Mecca to which they hope to attract many slender-pursed pilgrims "an excellent light wine at half a mark (6d.) per litre." One is reminded on reading this touting passage of the bibulous farmer's preference for the "Green Boar" over the "Blue Lion."

THE NICETIES OF MARKET GARDENING.

The study of hygiene and the teaching of its doctrines may, perhaps, some time or other lead to our being a cleanly people. Meanwhile, the few who are already trained to sensitiveness in regard to dirt find their difficulties increased in no small degree. In matters of food supply ignorance is bliss indeed; and, while we accept the dogma that knowledge is to be sought above all things, we are fain to admit in all sorrow that it rather tends to make life a burden to those who look on cleanliness as an essential virtue. A correspondent draws attention to what he terms the "objectionable practice" of suburban market gardeners utilising old watercloset pans and soil pipes for the purpose of propagating rhubarb plants, a nasty idea certainly, but probably an æsthetic difficulty rather than a hygienic danger. When he speaks of "the practice of returning empty fruit baskets on the top of loads of manure, hot and reeking with every abomination of the slaughterhouse, etc.," he is on more solid ground. The fact is the whole business of market gardening, as conducted in the neighbourhood of large towns, is full of nastiness. Fruit and vegetables ought to be the purest forms of food, freshly made in Nature's laboratory. Unfortunately, the laboratory of the market gardener is a very different affair, a mere arrangement for converting manure into vegetables with the greatest speed attainable; and many people would be surprised at the speed which is nowadays attained by aid of active breeds of maggots, microbes, and other accessories to decomposition and nitrification. Strawberries, lettuces, and celery are toothsome additions to ordinary diet. It is well, however, not to think of market gardening at dinner time.

THE DOCTOR'S WIFE.

Our attention has been called by a distinguished member of the profession and an authority on life assurance to a paragraph in Henry Vizetelly's *Glances Back through Seventy Years*. At page 415, vol i, after discussing the Rugeley poisoning case, Vizetelly writes: "Mayhew, besides interviewing Dr. Taylor, had conducted an inquiry for the paper at the principal life assurance offices with somewhat startling results.....That the dishonourable portion of the medical profession was largely mixed up with these frauds, and that most offices made it a rule never to insure the life of a medical man's wife." It may hardly seem necessary to take notice of this statement, unsupported as it is by any evidence, and we should have treated it with silent contempt had not our opinion been asked by one of the leaders of the profession. This being the case, we communicated with some of the leading actuaries of the day, and they all agree in affirming that they have never heard of any such rule, and that both now as well as in the past the wives of medical men have just the same facility for assurance as the wives of other men.

THE SIR ANDREW CLARK MEMORIAL.

We understand that at the Andrew Clark memorial meeting at Princes' Hall, on Thursday, May 3rd, at 4 p.m., which will be presided over by his Royal Highness the Duke of Cambridge, among the movers of resolutions in addition to Mr. Gladstone will be Cardinal Vaughan and the Right Hon. T. H. Huxley. Seats will be reserved on application for all subscribers of a guinea and upwards.

NOTIFICATION PAYMENTS: ILLEGAL DECISION.

The Hartley Wintney rural sanitary authority have recently been guilty of a high-handed proceeding in reference to payments under the Infectious Diseases (Notification) Act of 1889. They have passed a resolution to the effect that 2s. 6d., and no more, shall be paid in respect of any one house where multiple attacks of notifiable disease occur simultaneously. The illegality of this ruling would seem to be beyond question, and seriously affects many very important considerations. If persisted in, we trust that some practitioner will be public-spirited enough to contest the matter. From a statistical point alone, to say nothing of others, the subject is of immense interest; and, as we have before pointed out, the notification of multiple attacks in houses may often be a direct help in the elucidation of cause of disease. It would seem that a rural authority in Cheshire set the example which Hartley Wintney has followed.

ARMY MEDICAL OFFICERS AND SANITARY WORKS.

Our reference in the British Medical Journal of April 14th to the sanitary improvements at Belfast barracks has brought out one or two matters which are of serious im-

portance to the service and to the public. We are informed that no plan or proposal connected with a drain or building is submitted to the medical department for remarks before action is taken regarding their construction. The work is carried out by the Royal Engineers, and then a board of combatant officers, with no knowledge of sanitation, inspects the building and pronounces it fit for habitation. A medical officer "attends" the board and sees the building, often for the first time; but of the nature of the foundations, drains, etc., he has usually no personal knowledge. If this accurately represents the method of work in the War Department a change must be brought about. The Engineer officers should from the outset act in concert with the Medical Department, or with some officer who has special knowledge of sanitary science. Modern hygiene is too complex to expect that Engineer officers should be acquainted with its full significance and requirements. The Royal barracks in Dublin and now the Belfast barracks testify to the need of advice from efficient medical sanitarians. The lives of our troops are too valuable to be jeopardised by an adherence to the old departmental prejudices, and the public will demand that the Medical Department shall be accorded its rights and responsibilities in this matter.

THE BOARD OF TRADE AND THE EYESIGHT OF RAILWAY SERVANTS.

The Board of Trade, following upon the report of the Royal Society's Committee on Colour Vision, and of a special report on the same subject from the British Medical Association, addressed a circular to the Railway Companies on August 31st, 1892, inviting their careful attention to the recommendations of the Committee as to the methods of testing the eyesight of railway *employés*. We have before us the replies received by the Board. Without discussing them in detail, we may say that while they afford evidence of a general stirring of the railways to a deeper sense of their responsibilities in the matter, and while in individual instances there is a goodly display of pious resolutions for the future, and in a select few an intelligent and gratifying movement of reform, it is no less evident that many of the railway managers and directors have not yet grasped the situation, and do not accept their responsibilities. The Board of Trade appends no comment upon the correspondence in the official document which they publish. It is no secret that it does not at present possess authority over the railway companies to enforce proper examinations of eyesight such as it has had over the Mercantile Marine since 1854, by the Merchant Shipping Act of that year. But one thing is clear, that the Board cannot allow the matter to stop here, since the conditions recognised as necessary to the public safety are not fulfilled, nor in a fair way to be fulfilled. If more power and newer implements are needed, the public and the press will certainly support the application for them.

SMOKE ABATEMENT BY PRIVATE INITIATIVE.

A novel proceeding under the "smoke nuisance" clauses of the Public Health Act has recently taken place at Sheffield. The complainants were not the local authority, but a private firm, and it was also stated to have been the first case in the city under the "fireplace or furnace" provisions of the Public Health Act. An order was made by the stipendiary magistrate for the abatement of the nuisance forthwith. No penalty was inflicted, but the costs were to be paid by the defendants, amounting to close upon £8. A case of this kind should act as an encouragement to private individuals to put the law in operation themselves when the local authorities are supine.

THE POLICEMAN'S UNIFORM.

A question put by Mr. Bayley to the Home Secretary, in the House of Commons raises anew a matter to which we drew attention last year, namely, the heavy clothing worn by the police during the summer months. To some it appears obvious that to wear the same clothing all the year round is ridiculous, but, in fact, the problem is more complex than they seem to imagine. Those who would maintain the *status quo* point to the extreme variability of our climate and say that, of the two, it is better to be too warm than too cold, and in truth so it is. A large portion of an ordinary constable's time is occupied in either standing still or walking at a pace which cannot be materially varied; when he goes out in the morning he can never foretell what the day may bring forth, either in the way of tumults on earth or tempests from heaven; he must then be prepared for all emergencies, and as it is recognised by those in authority that damp and cold are much more deadly foes to the policeman than the occasional broiling to which he is subjected, it is considered that in our changeable climate the safer course is to be provided against the greater risk. At the same time, while quite agreeing with this estimate of the situation, we think that common sense suggests that if the men are not to be provided with a variety of uniforms the dress itself should be so contrived as to be adaptable to varied conditions. We can quite believe that more harm than good would come of leaving it to each policeman to clothe himself according to his own forecast of the weather, but that in no way takes away from the absurdity of making all the men pass all their days alike, not only in the same clothes, but with them buttoned up to the same tightness. What is wanted is a dress which can be loosened without breach of discipline. A pleated garment, which could be drawn in for warmth, or left loose for the sake of ventilation when warmth is not required, would be a very great comfort to a most deserving set of men. If anyone who habitually wears a frock coat will consider what life would be worth if he were compelled to keep it always buttoned to the top, he will the better appreciate the importance of this question. The first step to comfort is to unbutton and unbelt, as Tommy Atkins always shows us in his moments of greater freedom and lessened responsibility.

THE REMOVAL OF POSTNASAL ADENOID GROWTHS.

The serious and far-reaching influence which adenoid vegetations in the postnasal space, if not removed, may have on the bodily health and mental development of growing children is now generally recognised. Not many years ago such operations were in the hands of one or two specialists whose procedures were looked upon by the profession at large as something in the nature of esoteric mysteries; now the postnasal space is no longer a surgical *hortus inclusus*. Although the operation has become almost a matter of everyday surgery, there is still considerable diversity of opinion among operators, not merely as to the details, but to some extent as to the principles of procedure. The discussion at the Laryngological Society of London last week was, therefore, as opportune as it was important. With regard to the specific point in debate, namely, the choice of an anæsthetic, this appeared to be, as in other operations, largely a matter of individual preference. There was, however, practical unanimity as to the necessity of the anæsthetic, whatever it might be, being administered by a specially skilled expert. As to the degree to which anæsthesia must be induced, we agree with the President, Dr. Felix Semon, that it should never be pushed to the abolition of the laryngeal reflex, so that the patient may retain the power of coughing up any blood that may find its way into the larynx. That the removal of postnasal growths is not free from danger is sufficiently proved by the fact that a certain number of deaths have been recorded, and several others are known to have occurred which have not been published; in most of these cases it is probable that the immediate cause of death was the entrance of blood into the

lungs. Another conclusion to be drawn from the discussion is that in the removal of adenoid growths the operator must, like Strafford, take "Thorough" as his guiding principle. He must remove the growths completely, and he should allow himself sufficient time to do so; attempt at display or "record-breaking" is here altogether out of place. Rapidity in operating too often means recurrence of the disease, and consequent disappointment to the patient's friends and discredit to the surgeon.

A CORONER ON INEBRIETY.

AN inquest was held at North Finchley recently, on a woman who had been drunk for several weeks without intermission, never having been to bed during the whole time, and who was found dead on the floor. Her face was covered with bruises, which the husband said were none of his doing. He simply let her lie where she fell. The coroner, Dr. Danford Thomas, pointed out that the cost of the inquest and the life of the deceased might have been saved if there had been some public institution where she could have been put under restraint. In reply to the objection urged against such provision, Dr. Thomas showed that the cost of dealing with habitual drunkards at police courts was a very serious item, and the money might be more profitably spent on curative restraint than on punishment.

THE RESULTS OF VACCINATIONS AGAINST ANTHRAX AND SWINE ERYSIPELAS.

M. CHAMBERLAND gives an account, in the current number of the *Annales de l'Institut Pasteur*, of the results of the vaccinations against anthrax and *rouget de porc* in France since these preventive methods were introduced. The veterinary surgeons who practise the vaccinations are requested each year to report: (1) the number of animals vaccinated; (2) the number dying after the first vaccination; (3) the number dying within twelve days of the second vaccination; (4) the number dying during the rest of the year; (5) the mean annual mortality before the year's vaccinations have been practised. During the twelve years which have elapsed since the famous experiment at Pouilly-le-Fort, reports have come to hand dealing with the results of 1,788,677 vaccinations of sheep and 200,962 vaccinations of oxen against anthrax, these figures representing something like half the number of animals actually vaccinated. The mean total loss among sheep has been about 0.94 per cent. during the twelve years, and among oxen the loss has been from 0.34 to 1.3 per cent. Before the annual vaccinations the mean annual mortality for sheep has been about 10 per cent., for oxen about 5 per cent. The value of the lives of the sheep thus saved may be estimated at five million francs; the lives of the oxen saved may be valued at two million francs. Vaccinations against *rouget* were commenced in 1886. The mean loss during five years was from 1.45 to 1.5 per cent. Before the annual vaccinations the mortality was about 20 per cent., in some cases being so high as 60 to 80 per cent. All the reports from veterinary surgeons speak of the method in terms of the highest praise.

STANDARD ELECTRICAL APPARATUS.

THE American Electro-therapeutic Association, at their annual meeting in Chicago last September, devoted much time to the discussion of the important question of the designing of standard apparatus, and have now formed a number of subcommittees to collect information upon the best forms of electrical apparatus for medical use, with a view to the adoption of a series of standard instruments. The step taken by the American Association will be viewed with satisfaction by those interested in medical electricity. The innumerable varieties of apparatus now catalogued and offered for sale by the instrument makers is perplexing in the extreme, and much of it is unnecessary or useless. In the present limited state of our knowledge respecting the characters and properties of induction coil currents, for example, it is absurd to read of the elaborate machines, warranted to give six, eight, or ten different kinds of shocks, which are advertised for sale both here and in America. These complicated things, the creations of ingenious constructors of apparatus, do not supply any real want in medical practice, and the development of the induction coil remains at a standstill because it has received little or no attention from those who are fitted to examine its electrical and physiological properties. The name of Mr. A. E. Kennelly, chief electrician in Edison's Laboratory, appears in the list of the American Subcommittee on Standard Induction Coils, and leads us to hope that their report, when published, may have a scientific value. In the circular which we have just received the Association asks for suggestions upon induction coils, galvanometers, statical machines, batteries, rheostats and current controllers electrodes, and electric lighting instruments. Under each of these headings is given a list of points to be considered, and instrument makers as well as medical men are invited to assist with their knowledge and experience towards the elucidation of the many problems which need investigation. While recognising the importance of the work which the Association has taken in hand, we cannot help thinking that in the lists of "points to be considered" which have been drawn up there are a few which are likely to provoke a smile from any electrical expert who may happen to glance through them. Still, half a loaf is better than no bread, and the movement is decidedly in the right direction, and we hope that by-and-by the labours of the American Association may bear fruit in the shape of some useful reports upon the forms of electrical apparatus best suited for medical use. We understand that the circular can be obtained from the Secretary of the American Electro-therapeutic Association, 68, Madison Avenue, New York.

LANOLIN.

THE lanolin case before the Court of Appeal has ended in a decision upholding the patent of the Darmstaedter Lanolin Fabrik, and maintaining the injunction which had been granted by Mr. Justice Romer against an English firm for an infringement of it. It was interesting to find English judges discussing evidence on this question obtained from ancient authors such as Livy, Ovid, and Dioscorides, but they all agreed that the wool fat of those days—the substance called "œsypus," as described by Dioscorides—was a very different material from that which we know under the name of "lanolin," as introduced by Professor Oscar Liebreich. What the ancients did was to get wool fat out of wool; what is done now is to get the substance called lanolin out of wool fat. As we all know, lanolin consists chiefly of cholesterin in combination with stearic and other fatty acids, mixed up with a certain quantity of water. The lye or liquor in which wool has been washed by an alkaline solution is the basis from which it is obtained as a commercial product. This lye consists of water, dirt, soapy matter (that is, the glycerine fats converted into soap and glycerine by the alkali), and fat which is not combined with the alkali, and is not soapy (that is, the cholesterin fats). These constituents differ in specific gravity, and that of the cholesterin fats being the highest, the patentees are able by a centrifugal machine, like a cream separator, to separate these from the rest. The cholesterin fats so obtained then go through various processes of purification, and, being then kneaded up with a certain proportion of water, produce the material we know as lanolin. It had been contended that the thing patented was the use of the centrifugal machine, and that if the same separation could be obtained by a process of subsidence, by the action of gravity alone, the patent would not be infringed by so doing. The Court held, however, that the patent covered

any mechanical method of effecting the separation at the stage indicated, even although it might not be done by the precise machine which was selected as the best. So there was an end of that side of the case. It had also been contended, if it were not the particular method by the use of a centrifugal machine, but the whole process which was claimed by the patentee, that in that case the patent had been anticipated by the process described by Dioscorides. But the judges held that this old process did not produce lanolin but only wool fat; the separation, in fact, was not performed by it, and there was no anticipation.

THE BUDGET AND ALCOHOL.

The statistics of the last year's duties on various kinds of intoxicants presented by the Chancellor of the Exchequer in his Budget speech on Monday are full of interest. On foreign spirits there was an increase of £39,000, but a large diminution on rum. Curious to relate, the loss on spirits was compensated by a gain on beer, the receipts from which were £91,000 more than those of the previous year, being the highest on record. The consumption of wines has been steadily decreasing since 1876, falling from 18,600,000 to 14,150,000 gallons. The strong wines had diminished, but the lighter wines had gone up. The former—port, sherry, etc.—had receded from 11,000,000 gallons in 1876 to 4,700,000 in 1893; the light had risen from 7,600,000 gallons to 9,500,000. Though coffee had been going down, tea had risen by £101,000, an increase of 6,000,000 lbs. in weight. Whatever the explanation of the rise and fall in different beverages, as a whole these figures attest the growth of temperate living among the general population. An increase in the number of temperate people cannot fail to promote national health and prosperity.

SWORN CERTIFICATES.

A correspondent draws attention to the following words printed at the end of a jury summons: "Medical certificates as to inability of jurors to attend on account of illness must be verified on oath before a justice of the peace by the medical gentlemen giving such certificates." This he considers an insult to the medical profession. We do not think, however, that it was ever intended as such, nor would we advise medical men to take offence at matters of this description. If we take part at all in public affairs we must conform to rules laid down for the good of all. A juror who fails to attend in pursuance of his summons is liable to a fine "unless some reasonable excuse is proved by oath or affidavit." Medical certificates are not received as evidence in courts of justice concerning matters which require to be strictly proved, but in that they do not differ from certificates of other kinds. Of course a practitioner is not bound to give a certificate, or in fact to do anything else, for his patient, but if he declines to give the information in the proper form his services are not particularly useful. Our correspondent further says "I declined to verify on oath and gave an ordinary certificate which was accepted." That, however, must have been done as a special courtesy to him, and certainly does not form a precedent on which others can safely act.

MR. PUZEY AND THE LIVERPOOL MEDICAL INSTITUTION.

At the last meeting of the Liverpool Medical Institution, held on April 12th, it was announced by the Secretary, Mr. Charles H. Shears, that Mr. Chauncy Puzey, President of the Institution, had on that day been unanimously elected an Honorary Fellow of the Royal College of Surgeons of England. The announcement was received with enthusiasm by the meeting, and Dr. Macfie Campbell, as one of the senior members present, and as an old hospital colleague, congratulated Mr. Puzey on the honour conferred upon him, and through him, upon the Institution of which he is President, and upon the profession in Liverpool. Mr. Puzey, to whom the announcement came as a complete surprise, acknowledged the congratulations in a few well-chosen words, and said that he felt that the honour he had received was due more to the fact that the members of the Institution had elected him their President than to any merits of his own. Mr. Puzey has been for many years one of the surgeons to the Northern Hospital, and has filled with great ability and modesty several offices in the Medical Institution, of which he is now President.

THE DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND.

The first meeting of the newly-formed Dermatological Society of Great Britain and Ireland was held on April 12th, when Dr. Pye-Smith, F.R.S., were elected President. Professor McCall Anderson, Dr. Hughlings Jackson, F.R.S., Dr. Robert Liveing, and Dr. Samuel Wilks, Vice-Presidents; Mr. W. Anderson, Dr. R. L. Bowles, Dr. Radcliffe Crocker, Mr. A. J. Harrison, Mr. Jonathan Hutchinson, F.R.S., Dr. Allan Jamieson, Dr. Stephen Mackenzie, Mr. Buxton Shillitoe, Professor Walter G. Smith, Mr. Waren Tay, Dr. Frederick Taylor, and Dr. J. F. Payne were chosen members of Council; Mr. Alfred Cooper, Treasurer; and Dr. J. Herbert Stowers (41, Finsbury Square) and Mr. Marmaduke Sheild (20, Stratford Place), Honorary Secretaries. The new Society will be inaugurated by a congress at the rooms of the Royal Medical and Chirurgical Society on May 31st.

THE CONSTRUCTION OF ROADS AND STREETS.

Good service has been done by Major Isaacs in his lecture, before the Sanitary Institute, on the cleansing of road and street pavement. Major Isaacs claimed an abundance of water for this purpose, and contrasted the methods in existence in Paris, Berlin, Vienna, and even Buda-Pesth, with that of London. His own opinion appears to have been in favour of asphalte as compared with wood paving, although he recognised the value of a noiseless pavement as relieving the brain and nerves from the strain and wear and tear of the usual noises in great city thoroughfares. With us this relief has great weight, and although we acknowledge that the cleanliness of asphalte is more easily maintained than that of wood, we would fain hope that the abundant supply of water which he deems to be necessary would go far to make wood paving and asphalte on a level in this respect. In streets fringed by houses occupied by the poor and visited by costermongers who throw their refuse into the road, asphalte is obviously preferable, but for other roads there is much to be said for the use of wood.

DEATH UNDER CHLOROFORM.

Dr. Walter J. Hill, House-Surgeon to the Royal Infirmary, Bristol, has favoured us with the following report of a death under chloroform, which occurred in that institution. A man, aged 22, was admitted into the Bristol Royal Infirmary on March 16th, 1894, with tuberculous arthritis of right elbow of six months' duration, and of right knee of two or three years' duration. He had also scars of old abscesses and bone disease of the right thumb and the left index, ring, and little fingers; the second toe of the right foot was amputated under an anæsthetic two years ago. Patient thin and rather anæmic: no albuminuria. On April 4th the chest was examined immediately before administration of the anæsthetic. Heart, no abnormal physical signs; lungs, slight depression and impaired percussion resonance below left clavicle, no moist sounds. After consultation it was decided to excise the right elbow joint. Chloroform was administered on a double fold of towelling on wire frame open at the sides. After three or four breaths the patient struggled slightly and held his breath; this was only momentary, and passed

off, leaving him quite conscious, and pulse quick and full. He continued to inhale for three or four minutes, rather less than two drachms of chloroform being used, when he suddenly became cyanosed, the pulse stopped, and the breathing became deep and laboured, the pupils were dilated and fixed (no previous contraction had been observed). The head was lowered, and artificial respiration resorted to, when the breathing improved, the cyanosis less marked, but the pulse still imperceptible. For ten or twelve respirations the patient breathed spontaneously, but as his breathing became stertorous artificial respiration was again proceeded with, and continued for nearly half an hour without effect, the patient making no sign of recovery. At the *post-mortem* next day the brain and heart were found to be normal; there were few pleuritic adhesions, cicatricial contraction at apex of left lung, both lungs being engorged, kidneys congested, a small mass of caseating tubercle fn the left.

THE CHELTENHAM MINERAL SPRINGS.

THE medical men in Cheltenham are desirous of re-establishing the once brilliant reputation of Cheltenham Spa, before express trains and quick steamboats existed to convey patients to distant Continental resorts. Professor Thorpe has made a recent analysis of the chief springs at Cheltenham, and this, and a report of the Medical Committee on the subject, are under the consideration of the Town Council. The Medical Committee point out that the present is a suitable time to redevelop the use of these waters, and they are of opinion that with proper provision for water drinking, and the erection of a well-appointed bathing establishment, together with the provision of such additional attractions as exist in the more popular Continental spas, a great revival in the use of the Cheltenham waters may be confidently expected. They also state it to be their belief that the town "possesses to-day in its mineral waters a source of profit and importance which, properly treated, may once more raise Cheltenham to that premier position among the spas of Great Britain which it so long held and enjoyed in former years." The forthcoming annual meeting of the British Medical Association in the chief town in the West of England will afford an excellent occasion for the medical authorities of Cheltenham to advocate the merits of their mineral springs, to discuss their composition and properties, and to present samples for the estimation of the members.

THE COST OF TEMPORARY HOSPITALS.

THE Metropolitan Asylums Board is being subjected to a good deal of criticism in regard to its expenditure on hospitals. The fact that the Fountain Temporary Hospital at Lower Tooting has cost about twice as much as the North-Eastern Temporary Hospital at Tottenham has caused especial indignation. It should, however, be remembered that the two buildings are of an entirely different character. Both, no doubt, cost a good deal more than they would have done had more time been allowed for their erection, but the one at Tooting is of a better and much more durable nature than the purely temporary structure which was put up at Tottenham. The pity, of course, was having to put such a building on such a site, but everyone knows how difficult it it has been to obtain sites for the purposes of the Board. If, however, we take the cost of the Fountain Hospital, namely, £246 per bed, as representing that of a really useful and efficient hospital of the temporary type, one that is capable of lasting say thirty years if carefully watched and kept in good repair, and compare it with the proposal to spend £386 per bed on a permanent building at Shooter's Hill, the cost of this latter does not strike one as so extravagant as it seems to have appeared to some of the vestrymen who have spoken so indignantly on the subject. We are told that the cost of building has increased 25 per cent. since the erection of the other permanent hospitals which the Board possesses. Now the average price per bed of these five hospitals for acute disease works out to £298, allowing 2,000 cubic feet of air per patient in all alike, which, with the addition of 25 per cent. comes to £372 per bed. The estimated cost of the Shooter's Hill hospital is £386 per bed, being thus £14 per bed more than the average of the permanent hospitals now existing, not an excessive advance if we are to believe what we are told about the proposed building—that it is to be the most perfect thing of the sort yet attempted. If then we compare the cost of these two hospitals, both of which may be taken as good and satisfactory examples of their type, we find that the expense of putting up a temporary structure amounts to 0.63, or a good deal more than half that of erecting buildings of a permanent and substantial character. This is a matter worthy of the attention of the many sanitary authorities who feel tempted to spend their money upon flimsy structures the cost of which evidently runs a long way into the expense of more satisfactory arrangements. A good deal however will depend on the interest at which money can be obtained and upon the expense of repairs. There can be but little doubt that temporary structures will towards the end of their life be expensive to maintain, otherwise their desirability could almost be expressed in terms of interest. At 3 per cent. a sum doubles itself in twenty-four years. Unless then a temporary building, costing half what a permanent one would do, will last at least twenty-four years without requiring more repairs than would be wanted by a permanent structure its erection would be unprofitable. Of course with different interest a different amount of durability would be necessary to escape loss.

DISEASES OF ANIMALS AFFECTING MAN THROUGH FOOD SUPPLIES.

A LECTURE on this subject was delivered at Leamington before the Inspectors of Nuisances of Warwickshire on Wednesday, April 11th, by Dr. Alfred Hill, Medical Officer of Health for Birmingham. A general description was given of the signs of health in the living animal, and the characters of the carcass and the meat. In connection with this question, the practice of substitution of one kind of flesh for another was remarked upon. The substitution of horse flesh was the most common of all, though it has been said that goat flesh has been known to be substituted for mutton, and kid and even dog flesh for that of lamb. It was pointed out that the law does not prohibit the sale of horse flesh, but requires that the horse flesh shall be sold as such under a distinct announcement, and that it shall be in a healthy condition. After giving a description of healthy, diseased, and decomposed meat, Dr. Hill went on to point out some of the principal diseases affecting animals, and prejudicially influencing the quality of the meat, more particularly anthrax and tuberculosis, pleuro-pneumonia, etc., and directed special attention to those two parasitic diseases of swine, "measles" and trichinosis. He made special reference to the dangers of tinned foods, and showed that they resulted largely from imperfect sealing, and that the majority of cases of illness caused by tinned and other meats were produced by the flesh of swine, as shown by the well-known cases which occurred at Welbeck and Nottingham, and in the cases inquired into a few years ago by Dr. Ballard of the Local Government Board. A specimen was shown of what is known as a "swell" or blown tin, and the lecture was illustrated by means of a lantern.

THE thirty-fourth annual dinner of the Old Students of King's College, London, will take place at the Holborn Restaurant on May 30th, at 6.45 for 7 o'clock. Sir Richard E. Webster, Q.C., M.P., will take the chair.

MEDICAL MAGISTRATES.—Professor Crookshank has, on the nomination of the Lord Lieutenant, been appointed a Justice of the Peace for the county of Sussex.—Dr. Richard Hill Norris, of Aston, has been appointed to the Commission of the Peace for Warwickshire.

OUR NEW AFRICAN PROTECTORATES: THEIR CLIMATOLOGY AND HEALTH-CONDITIONS.

The decision of the Government to place Uganda under the protection of Great Britain, and to administer British East Africa as a Crown Colony, will doubtless lead to an influx of Englishmen into a country towards which so much public attention is being drawn. Men will go to seek their fortunes in a new country, to find fresh markets for trade, to administer for the Government, and to build and superintend the promised railway into the interior. It is not, therefore, premature to make inquiries into the climatic and hygienic conditions of the country, and to ascertain if British East Africa and Uganda can possibly become centres of colonisation for Europeans.

British East Africa.

In the partition of East Africa, the fertile uplands lying to the north of Mombasa and the mountain mass of Kilimanjaro, and the highlands along the northern shores of the Victoria Nyanza, fell to the lot of Great Britain. The line of the Equator passes through the centre of this district.

We are so accustomed to read accounts of the miseries of fever and malaria endured by the courageous explorers of Africa, that in the minds of many Central Africa is synonymous with unhealthiness, and it is hastily concluded that colonisation by Europeans under the belt of the equator in the Dark Continent would be an attempt as dangerous as it would be impracticable. Better acquaintance, however, with British East Africa will show not only that these fears are groundless, but that on the elevated plateaus, even on the line of the equator, temperate climates and salubrious conditions of life may be obtained highly conducive to successful and prosperous colonisation.

When the route of the early travellers to Tanjanika and the Victoria Nyanza lay through the desert of Toru and the waterless plains of Ugogo the accounts which reached us of the toils and sufferings endured induced one to think that the fertile and picturesque country of Uganda, which must be reached on foot through this savage land, would long remain of interest only to the explorer. But the exploration of Masailand by the intrepid traveller Thompson, the opening of the caravan route to Uganda by way of Kikuyu and the east shore of the Nyanza, and the survey of this route for the projected railway, have made known to us a new Africa, not that of burning deserts and impenetrable forests, but of mountain masses, of elevated plateaus, of temperate climates, and of park-like pastures.

Its High and Salubrious Plateaus.

Africa may be compared in configuration to an inverted plate. From an elevated plateau in the centre the land slopes gradually to the seashore. From the coast to about 100 miles inland the elevation is gradual and attains only to the height of 1,000 feet. From to 100 to 200 miles from the coast line the land continues to rise till the great plateaus of Kikuyu and Maw are reached, which lie at an elevation of from 5,000 feet to 9,000 feet above the sea level. From these great central plateaus rise the great mountains of Kenia 18,370 feet high, and Kilimanjaro 19,700 feet, the summits of both of which are covered with perpetual snow. From these highlands the land slopes towards the Victoria Nyanza, the waters of which are 3,840 feet above the sea. The countries surrounding its shores, namely, Usoga, Uganda, and Karagwe are at a mean elevation of 4,000 feet. To the north-west, in Unyoro, the land attains to an elevation of 5,000 feet, the Albert Lake lying in a cleft 1,700 feet lower.

From these figures it will be seen that the country, in which we are interested as a new area for British enterprise and British colonisation, is, though equatorial, composed of elevated highlands reaching up into the regions of perpetual snow. The necessity of connecting Uganda with the coast by a railway is obvious, and also the strategical and commercial importance of carrying this line through British East Africa instead of through the more level country south of the Nyanza and under German administration. It must therefore be carried through the great highlands of Kikuyu, Masai, and Kavironode, and will thus open up a land of the greatest promise to agricultural and stock-raising colonists. The unhealthy belt of the coast and the waterless wastes of the Toru desert must, however, be passed before the land of promise is reached. This includes Ukambo, at an elevation of 5,000 feet: Kikuyu, 7,000 feet; Masailand, 6,000 feet; and the Mau plateau, about 8,000 feet.

The Climate and Cool Temperature of the Plateaus.

The climate of these vast and and generally uninhabited uplands and their hygienic suitability for English colonisation is thus reported upon by travellers and experts:

Captain Lugard says: "The soil is rich, the country is well watered with numerous streams, and the rainfall is abundant.

"The climate is cold and bracing, slight frosts occur at night, the hills are clothed with a springy turf or covered with bracken, the flora is largely that of Europe. The district between Kikuyu and Mount Kenia is spoken of as specially healthy and fertile."

The Railway Survey report "that the climate is temperate, the rainfall ample, English vegetables grow luxuriously, and there is excellent grazing."

The *Times*, quoting its special correspondent (February 9th, 1893), says: "Our correspondent confirms the glowing accounts of his predecessors in this region of its fertility, salubrity, and great industrial capabilities."

Herr Wolf says: "There is everything that can be desired ready to hand—plenty of water, fuel, a rich and fertile soil, a tractable population, a healthy climate, and cheap means of sustenance for settlers."

The land is described as consisting of park-like stretches of pasturage, over which roam immense herds of wild cattle or are driven the herds of the Masai. For the raising of grain, cereals, tobacco, coffee, maize, yams, sweet potatoes, and timber, and for the breeding of cattle these uplands offer, it is considered, a new and extensive field for the English settler. At present a scientific investigation into the climate, rainfall, water supply, and local diseases is called for.

The Elevation and Climate of Uganda.

Uganda, which the East African Company have handed over to the British Government for administration, lies at an elevation of about 4,000 feet on the north-west shores of the Victoria Nyanza. The country consists for the most part of rounded hills of red marl. In the valleys between is a rich black loam, through which meander streams, which in the rainy season degenerate into broad marshes of tall rank grasses. These river marshes are productive of malaria, from which European residents suffer; but with an intelligent system of drainage this cause of unhealthiness will probably disappear. The rainfall is abundant. Mr. Mackay, who kept observations between the years 1879-86, reports the extremes of 41 and 50 inches. They are regularly distributed over the year, but are heaviest in April and May, and again in October and November. The mean temperature of Uganda is from 70° to 80°. Though lying under the equator, the elevation of the land makes the climate comparatively cool.

"The nights are always cold throughout the year, while the days, except for a very short period in the summer, are not uncomfortably hot," reports Captain Lugard, who lived three years in Uganda.

The Rev. C. J. Wilson, who lived long in the country, says: "The climate of Uganda is remarkably mild, and very uniform all the year round. During my residence the temperature never rose above 90°, and rarely fell below 50° at night. There is, however, a good deal of ague, which will doubtless become rarer among Europeans as better houses are built." Speke, who was charmed with Uganda, said: "The temperature was perfect: wherever I strolled I saw nothing but richness." In this beautiful country, rich soil, and temperate climate; everything can be produced, coffee, wine, bananas, cotton, spices, rice, rubber, gum, tea, date, palms. In a few graphic words Emin Pasha gives a picture of it from the natural and social point of view: "This is indeed a beautiful, well favoured land, with its red soil, its green gardens, its lofty mountains, and its dark snug valleys. Nature has profusely lavished her charms, and man alone destroys the harmony of these scenes. Corpses in the middle of the paths compelled us to step aside; at our approach the small

Uganda vultures left their ghastly meal with a noisy rush. Four dead bodies were lying there slain by the hand of the executioner. Young and old lay gathered together; the throat of one was deeply gashed to the very spine, the head of another had been smashed by a heavy blow, and every day, nay, every hour, people pass these corpses, themselves perchance only too soon to meet a like fate." British administration will increase the fertility of the verdant hills and valleys, and decrease the insecurity of life and the cruelty of native government.

How to Preserve the Health in British East Africa.

The two important points for European settlers to pay attention to are the avoidance of malarial fever and the preservation of temperate habits. The experience of the late Surgeon Parke, who accompanied Stanley in his march through Darkest Africa, is valuable on these matters. He says that he found that the administration of quinine after the attack of fever had commenced was entirely useless, that it was nearly always rejected, and if retained it did no good; but that prophylactic treated adopted betimes was more effective than any curative treatment. A dose of 4 grs. of quinine twice a day prevented, he found, malarial attacks, when those who did not take this precaution suffered severely. He found, moreover, that in Central Africa persons are subject to attacks of fever at all altitudes, even as high as 10,000 feet above the sea level. All intending settlers in Uganda or British East Africa should, therefore, provide themselves abundantly with quinine tabloids, and should not omit to take a small dose every day till thoroughly acclimatised, and the hygienic condition of the country has been improved by drainage and cultivation. Secondly, as to temperance. Surgeon Parke noted the extraordinary immunity of their party from sunstroke, and he ascribed it partially to the carriers having their heads covered by the loads they carried, but also to their abstinence from alcoholic liquors, and he makes the striking statement: "As a matter of fact, I have seen more cases of sunstroke in one day at Aldershot than I have ever met with in the whole course of my seven years' African experience, including the Egyptian war of 1882, and the Nile campaign of 1884-5, although in the latter I went as far south as Metammeh, within sixty miles or so of Khartoum. Drink is certainly the most powerful predisposing cause of the development of the symptoms of sunstroke."

Armed with quinine, and avoiding alcohol, English colonists may, we believe, seek with safety the equatorial districts of Kikuyu and Uganda. In the meantime we should like to see a scientific commission sent out to inquire into and report on the climate, soil, products, and races of these districts, so that colonists may bring to their aid all the resources of science in what cannot but be a long and difficult struggle with untamed Nature and savage races.

SMALL-POX AND VACCINATION IN 1893.

Birmingham.

Some striking facts have come to light as to the part played by vaccination in relation to small-pox at Birmingham last year. From January 1st, 1893, to January 31st, 1894, there were 1,203 cases of small-pox in that city, 96 being fatal, or 8 per cent. of attacks. This percentage was made up of 4 as regards vaccinated cases, and 36 as regards unvaccinated cases. Moreover, no vaccinated child under the age of 3 years contracted small-pox, whilst not only did 35 children of such years catch the disease, but as many as 20 died of it, this being a per-case mortality of 57.1 per cent. No person revaccinated during the epidemic has contracted small-pox.

This experience is precisely similar to those already reported by us from Leicester, Aston Manor, Salford, Warrington, and elsewhere; and in this connection it seems desirable to record here in the briefest possible manner the main facts which have come to light in several towns where small-pox has prevailed in 1892-93, and for which the data have been collected and published in the BRITISH MEDICAL JOURNAL.

But before passing on we desire to draw attention to another item of news from Birmingham, one which has reference to the recent experience of the nurses at the workhouse and the workhouse infirmary. These two institutions are contiguous to the city small-pox hospital, and the guardians therefore deemed it prudent, on the recent outbreak of the small-pox epidemic, to have the nurses vaccinated. Two of the nurses —one in the workhouse and one in the workhouse infirmary— refused to submit to the operation. The one in the workhouse caught the disease, and died about two months ago. The one in the workhouse infirmary was also seized, and her case ended fatally a month back. None of the nurses who were vaccinated have been affected.

Treating now the facts elicited from various small-pox invaded towns, we give a summary of ten others as follows:—

Leicester.

Of 146 cases of small-pox dealt with by the health officer in his report on the outbreak of 1892-93, there were 10 which proved fatal, a per-case rate of 6.8 per cent. Of 89 vaccinated patients, 1 died, or 1.1 per cent., whilst of 57 unvaccinated persons attacked 9 died, or 15.8 per cent. Under the age of 10 years there were 7 cases in vaccinated children, not one being fatal; but of 50 in unvaccinated children 8 were fatal, a rate of 16 per cent. And further, whilst only 7 per cent. of attacks among vaccinated persons were of children aged 10 years and under, as many as 88 per cent. of the unvaccinated cases were so aged.

Brighouse.

The health officer of Brighouse reported 134 cases in 1892, of which 15 died, a per case rate of 11.2 per cent., made up of 103 vaccinated patients, 6 dying, a rate of 5.8 per cent., and of 24 unvaccinated patients, 9 being fatally attacked, a rate of 37.5 per cent. There were 7 attacks of revaccinated persons, but all ended in recovery. Under the age of 10 years 6 cases were of vaccinated children, all recovering, while 19 were of unvaccinated children, 7 dying, or a rate of 37.0 per cent. of attacks.

Manchester.

Data kindly furnished by Dr. Tatham for 1892-93 related to 406 cases of small-pox, 27 proving fatal, or at the rate of 6.7 per cent. Of these, 335 were of vaccinated persons, and 14 died, or 4.18 per cent.; and 42 were of unvaccinated persons, of whom 8 died, or 19.05 per cent. Under 10 years of age 4 vaccinated children were attacked, and all recovered; and 19 unvaccinated children were attacked, 3, or 16 per cent., dying. Only one revaccinated person was attacked, and that 37 years after the operation.

Salford.

Dr. Paget's recent report shows that of 173 cases of small-pox 22 proved fatal, a mortality of 12.7 per cent. Vaccinated persons furnished 132 cases and 9 deaths, a death-rate of 6.8 per cent.; and unvaccinated persons 35 cases, with 12, or 34.3 per cent., fatal. Under 10 years of age vaccinated children contributed 7 cases and no deaths, and unvaccinated children 20 cases and 7 deaths, a mortality rate of 35.0 per cent. of attacks.

Glasgow.

Dr. Russell's very exact data, kindly sent to us last year, comprised 279 cases of small-pox, 23 of which were fatal, a rate of 8.2 per cent.; and of these 248 were in vaccinated persons, 11, or 4.4 per cent., dying; whilst 11 were of unvaccinated persons, as many as 7 being fatal, or 63.6 per cent. of attacks. Under 10 years of age vaccinated children attacked numbered 10, and all recovered; whilst both of 2 unvaccinated children died. Only 2 revaccinated persons were attacked, and both recovered, not one case being among the hospital staff of 34 persons.

Liverpool.

In Liverpool there were 194 cases of small-pox in 1892, 15 proving fatal, 77 per cent. of attacks; 170 cases were in vaccinated persons, 6 were fatal, 3.5 per cent.; and 24 were in unvaccinated persons, of which 9 were fatal, a percentage of 37.5 of attacks. Under 10 years of age one death occurred in 7 cases in vaccinated children, or 14.4 per cent., and 5 deaths in 11 unvaccinated children, or 45.5 per cent. Of the total vaccinated cases 15.9 per cent. were confluent, whilst as many as 58.3 per cent. of unvaccinated cases were of that nature.

Halifax.

Dr. Ainley's capital report on the small-pox epidemic of 1892-93 gives 513 as the total of cases, 44 as fatal, or 8.5 per

cent. of attacks. Vaccinated cases numbered 425, and deaths among these 8, or 1.8 per cent. Unvaccinated cases numbered 88, with 36, or 40.9 per cent., fatal. Under 10 years of age, 4 cases in vaccinated children all ended in recovery; while of 67 in unvaccinated children, 22 died, or 32.1 per cent. Moreover, 76 per cent. of the whole number of cases were of children under 10 years of age, only 1 per cent. being of vaccinated children; and whereas the attacks among vaccinated persons furnished confluent cases to an extent of only 9 per cent. of the whole, those among unvaccinated persons furnished 60 per cent. of a like character.

Warrington.

The Warrington small-pox epidemic of 1892-93 comprised 598 cases, and 60 were fatal, or 10 per cent. Vaccinated attacks were 530 in number, with 32 deaths, or 6.0 per cent.; and unvaccinated cases 68, with 28, or 41.0 per cent., fatal. Under 10 years of age, 24 vaccinated children all recovered from attack; whilst out of 33 unvaccinated children attacked, 14, or 42.4 per cent., died. Not one case occurred among the police force or postmen, all of whom were revaccinated; nor among the hospital staff of 23 revaccinated persons.

Aston Manor.

In 1893 there were 113 cases of small-pox here, with 6 deaths, or 5.3 per cent. There were 97 cases in vaccinated persons, and only 1 death; the remaining 5 deaths occurring among 15 unvaccinated persons, or 33.3 per cent. No fatality took place among persons having three or more vaccination marks, and no revaccinated person is known to have been attacked.

St. Albans.

In his annual report for 1893, which we have not previously referred to, the health officer records 58 cases of small-pox, with 6, or 10.4 per cent., fatal. There were 48 vaccinated cases, with 2 deaths, or 4.1 per cent., against 10 unvaccinated cases, of which 4, or 40.0 per cent., proved fatal. Vaccinated cases were severe in 22 per cent., and unvaccinated cases in 88 per cent., of attacks, the severe vaccinated cases being nearly all in persons possessing indistinct scars. No case occurred in a revaccinated person.

Such, very briefly stated, are the main facts concerning the relation of small-pox and vaccination in eleven towns during recent times; and whilst we cannot well tabulate all the facts, we do summarise most of them below, in order that they may the more readily catch the eye from a statistical point of view.

Relation of Small-pox and Vaccination in Eleven Towns, 1892-93.

Towns.	Vaccinated. Cases.	Vaccinated. Deaths.	Vaccinated. Mortality per cent. of Cases.	Unvaccinated. Cases.	Unvaccinated. Deaths.	Unvaccinated. Mortality per cent. of Cases.	Mortality among Unvaccinated Cases, that among Vaccinated being taken as unity.	Mortality per cent. of Cases, 0 to 10 Years. Vaccinated (Cases [ ]).	Mortality per cent. of Cases, 0 to 10 Years. Unvaccinated (Cases [ ]).
Birmingham ...	—	—	4.00	—	—	36.0	9	—	—
Leicester	89	1	1.10	57	9	15.8	14	[7] 0.0	[50] 16.0
Brighouse... ...	103	6	5.80	24	9	37.5	6	[6] 0.0	[19] 37.0
Manchester ...	335	14	4.18	42	8	19.0	4	[4] 0.0	[19] 16.0
Salford	132	9	6.80	35	12	34.3	5	[7] 0.0	[20] 35.0
Glasgow	248	11	4.40	11	7	63.6	14	[10] 0.0	[2] 100.0
Liverpool ...	170	6	3.50	24	9	37.5	7	[7] 14.4	[11] 45.5
Halifax	425	8	1.80	88	36	40.9	23	[4] 0.0	[67] 32.1
Warrington ..	530	32	6.00	68	28	41.0	7	[24] 0.0	[33] 42.4
Aston Manor ...	97	1	1.00	15	5	33.3	33	—	—
St. Albans ...	48	2	4.10	10	4	40.0	10	—[1]	—
—	2,177	90	4.10	374	127	33.9	8	69 cases, 1 death. = 1.4	321 cases. 69 deaths. = 31.2

Surely the foregoing furnish such facts as need no comment: and so we will close with only two deductions from the table, namely, (1) had the 374 unvaccinated patients died only at the rate of those vaccinated, they would have furnished, not 127, but only 5 deaths; (2) had the 2,177 vaccinated patients died at the rate of those unvaccinated, they would have furnished, not the actual 90, but as many as 738 deaths.

THE SCANDAL OF THE FOREST GATE SCHOOLS.

There is a general agreement among all who care for the welfare of the waifs and strays of society that the system of pauper district schools organised on the "barrack" principle should be mended or ended as soon as possible. But the facts which have recently been disclosed at Forest Gate, after what looks suspiciously like a long attempt to hush them up, are worse than even the enemies of that most vicious system alleged. We make no apology therefore for stating them fully, in the hope that the fullest disclosure of what lies behind may be made and that the necessary steps may be taken by those who are responsible for the life and health of the 700 children concerned.

The immediate origin of the present phase of a long discussion was the receipt by the managers of the Forest Gate School of a letter of censure from the Local Government Board, as the outcome of an inquiry which was made some months ago by Mr. Hedley into certain charges made by a man named Elliott, who was an old officer of the school, himself in charge, with his wife, of the receiving ward. It will be remembered that in the middle of last summer a great number of the children at this establishment were suddenly taken ill, with symptoms traceable to ptomaine poisoning. Some died and an inquest was held. The officials "afforded every facility," as is the wont of officials on such occasions, and they discussed, as it appeared to some people, every possible cause except the right one. They doubted the soup; they queried the salt beef, which, by the way, was supplied by a contractor; and they could not imagine, in fine, why the poor children died. The coroner was about to sum up, when Elliott said he had further evidence to give, and, being sworn, he declared that on a stated day, shortly before the children were taken ill, his wife and he had seen a quantity of maggots in the receptacle for the gravy upon the cutting board, from which the meat for the children in the dining hall was served. This was indignantly denied on the part of the superintendent, Mr. Duncan, who is responsible, of course, for the supervision of such matters, and on the part of the managers. In cross-examination, Elliott admitted he ought to have made complaint at the time, but he excused himself by saying that he had "made hundreds of complaints to the superintendent." The managers thereupon catechised Elliott and suspended him, on the suggestion that this was merely a piece of personal malice against Duncan. However, they asked for and got a Local Government Board inquiry, at which the charge was gone into fully. It then appeared that there was considerable corroboration of the maggot story, and there was some reason, as we gather, to believe that these additions to the children's meat had been seen more than once. But that was not the most grave matter. It was admitted by Duncan and the other officials, when they were pressed, that instead of using fresh meat for the children, portions of what was called "officers' waste" was served up as cold meat in the dining hall. In other words, the leavings of the officers' dinners were served out, in direct violation of the rules, and with certain obvious risks of mischief. On the part of Elliott it was suggested that the maggots had come from just such "waste" as this, and Duncan was asked to produce his provision books to show what was entered for that day. Mr. Hedley refused to allow the complainants to look into these books and examine Duncan upon the entries generally; but it appears that the Local Government Board has felt bound to go a little further into it since the public inquiry was closed. As we have no desire to do anyone an injustice, we will simply quote the terms of the Board's final letter to the managers, which appears to us to be sufficiently damning:

"With regard to the explanation of the School Superintendent forwarded with your letter, the Board consider it extremely unsatisfactory that 52 lbs. of meat should have been charged as taken out of the store on June 22nd last to make soup for the children, when in fact the greater portion of the meat used for the soup was meat remaining from officers' joints taken out of store on previous days. The Board consider it equally unsatisfactory that the superintendent should have to admit that, instead of soup being entered as being given to certain of the children on the same

day, bread pudding, not entered in his accounts, was given them; and that, moreover, he omitted to charge in his accounts for meat used to make beef-tea on the following day. It is clear that these occurrences seriously affect the reliability of the entries throughout the Provision Receipt and Consumption Account as a true record of actual facts. They lead the Board to fear that entries, instead of being always made from statements by the responsible officers as to the provisions weighed out from the stores day by day and distributed to the children, have been sometimes made from a computation of the quantities that should have been consumed, regard being had to the numbers in the school and the prescribed dietary and ingredient tables.

"The Board trust that the Superintendent will in future be careful to see that a repetition of such errors shall be practically impossible."

Official English is always a little obscure, but we understand by this that the Superintendent, who appears to be solely responsible for the receipt of provisions from the contractors and the issue of the proper quantities for use, is bound, as the sole check upon himself, to keep a set of official accounts. These, we understand, purport to show, on the one hand, that all that was paid for by the managers was received by the school, and, on the other hand, that these amounts were served out of store in stated quantities at stated times. The latter entries purport, of course, to be statements of fact, and they ought of themselves to show whether any variance from the prescribed dietary has occurred. If, for instance, on a given day there were 100 children who by the dietary should have had each a pound of bread, and if for some cause 80 lbs. or 120 lbs. was actually served out, this "Provision Receipt and Consumption Account" is supposed to show it. Indeed, we do not see what other safeguard there is against the possibility of a dishonest Superintendent. Now the Local Government Board are "led to fear" that this account has been mere guesswork; and they record the Superintendent's own admission that, in fact, it was absolutely incorrect the very week of the disaster into which they were inquiring.

All this is sufficiently unpleasant when we remember that 700 children, whose condition is bad enough at the best, are practically dependent on the working of this curiously ill-constructed machinery. But we confess the attitude of the managers amazes us still more. The managers are a case of the unfortunate plan of indirect election. As the "School District" comprises both the Poplar and Whitechapel Unions, the boards of guardians can only act on the school through an independent and hybrid authority.

This little coterie have arrived at the conclusion that "it is satisfactory to find that nothing more serious has resulted than the errors in bookkeeping referred to in the letter of the Local Government Board." After this we are prepared for anything. But the boards of guardians themselves will probably have something to say upon the matter. The point to which we have directed attention is only one of many. The Local Government Board appear to have reprimanded the medical officer and the superintendent for not paying sufficient attention to the poisoned children even when the attack did break out. They have also found, in fact, that, though Elliott's allegations were in some respects exaggerated, "certain of those made in regard to the provisions are not altogether without foundation," and they have directed the formal removal of his suspension. In a word, the Local Government Board has gone far to condemn the management of the school. We are informed that the school has suffered from a series of calamities, and, looking to the growth of population round it, it seems clear that the time has come when it should cease to exist in its present shape. New brooms, perhaps, may sweep a little cleaner.

As is not unusual in the case of official inquiries of this sort the one man to whom the public, the Institution, and the Local Government Board are indebted for the information courageously tendered as to the cause of all these ills is made the scapegoat. He has to resign and as a poor man is ruined for life, all others go scot free. The whole affair is undoubtedly a serious scandal and one in which full justice has not yet been done, or the public interests adequately safeguarded.

MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

Increase of Membership.—Value of Sickness Allowances.—The Frequency of Accidents.—A Special Professional Risk.

The quarterly general meeting of this Society was held on April 11th at 429, Strand, W.C. The Chairman, Mr. Ernest Hart, presided, and there were also present the Deputy-Chairman, Dr. De Havilland Hall; Dr. G. E. Herman, Mr. F. Swinford Edwards, Mr. Edward Bartlett, Dr. W. Knowsley Sibley, Dr. Alfred S. Gubb, Dr. M. Greenwood, Dr. J. W. Hunt, Mr. Frederick Wallace, Dr. F. J. Allan, Dr. G. W. Crowe (Worcester), Dr. F. Robertson Mutch (Nottingham), and Mr. R. S. Charsley (Slough).

The reports presented showed that during the three months ending March 31st last the Society had received 62 proposals for new membership, the largest number received in the same time since the starting of the Society in 1884.

During the quarter the sum of £1,244 0s. 2d. had been paid to disabled members as sickness allowance. The amount is somewhat larger than usual, and the sick list is more than usually interesting from its containing an unusual proportion of claims caused by accidents. In one case the member is permanently disabled, having lost a leg and sustained other injuries in a railway accident; sick allowance has been paid in this case for more than two years. In another instance the member has been severely injured in a trap accident, having been thrown violently against a brick wall. The experience of the Society shows that members of the medical profession, especially those practising in the provinces, are especially liable to accident whilst riding or driving.

A not infrequent source of claim is "poisoned wound of hand" when operating, and two cases of this kind were on the list. In such cases the aid of the Society is found very useful, and it often enables the member to take the immediate rest which he requires. Among the many letters received acknowledging the value of the sickness pay, few are more earnest than those which relate to the accident claims.

Prospectuses and all particulars can be obtained on application to Mr. F. Addiscott, Secretary, F.I.A., Medical Assurance Society, 33, Chancery Lane, London, E.C.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1894. ELECTION OF MEMBERS.

Meetings of the Council will be held on July 11th, and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, June 21st and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. Francis Fowke, *General Secretary.*

BRANCH MEETINGS TO BE HELD.

Metropolitan Counties Branch: East London and South Essex District.—The next meeting will be held, by kind invitation of Dr. Adams, at Brooke House, Upper Chapter, on Thursday, April 26th, at 8.30 P.M. The chair will be taken by Dr. Aveling, vice-president of the District. Dr. Stephen Mackenzie will give a Demonstration of cases of Skin Disease. Visitors will be cordially welcomed.—H. E. Powell, Honorary Secretary, Glenarm House, Upper Clapton.

Bath and Bristol Branch.—The sixth ordinary meeting of the session will be held in the Grand Pump Room Hotel, Bath, on Wednesday evening, April 25th, at 7.30 o'clock. Dr. Shingleton Smith, President. The following communications are expected: A. E. Aust Lawrence, M.D.: 1. Saline Transfusion in Hæmorrhage. 2. Concealed *Post-partum* Hæmor-

rhage. R. J. H. Scott: A Case of Colotomy, patient to be shown. T. Wilson Smith, M.D.: A Case of Aortic Aneurysm. Preston King, M.D.: A Case of Pneumonia. J. Michell Clarke, M.D.: Remarks on a Case of Hemiplegia and Aphasia without organic lesions.—W. M. Beaumont and E. Markham Skerritt, Honorary Secretaries.

Oxford and District Branch.—The next meeting will be held at the Radcliffe Infirmary, at 3.15 P.M., on Friday, April 27th.—W. Lewis Morgan, Honorary Secretary, 37, Broad Street, Oxford.

Border Counties Branch.—The spring meeting will be held at Whitehaven on Friday, May 4th, in the afternoon. Papers have been promised by Dr. Maclaren, Carlisle: Dr. Crerar, Maryport; Drs. Jackson and W. Tanson, Whitehaven. Any member wishing to make any communication please give notice to the Honorary Secretary, J. Altham, Penrith.

North of England Branch.—The spring meeting will be held at Morpeth on Thursday, May 3rd. Members wishing to bring forward patients, specimens, or papers are requested to send notice at once to the Honorary Secretary, G. E. Williamson, F.R.C.S., 8, Eldon Square, Newcastle-on-Tyne.

North of Ireland Branch.—The spring meeting will be held in the Museum, College Square North, Belfast, on Thursday, April 26th, at 4 P.M. Gentlemen who wish to read papers, show patients, or bring any other business before the meeting will kindly communicate as early as convenient with John Campbell, M.D., F.R.C.S.Eng., Honorary Secretary, 21, Great Victoria Street, Belfast.

South Wales and Monmouthshire Branch.—The next ordinary meeting will be held at Neath on April 26th.—A. Sheen, D. A. Davies, Honorary Secretaries.

Southern Branch.—The next meeting of the South Wilts District will be held at the White Hart Hotel, Salisbury, on Wednesday, April 25th, at 2 o'clock. Papers will be read by Mr. Luckham, Dr. Williams-Freeman, and Mr. Kingscote. Luncheon will be provided at 1 o'clock, at 2s. 6d. a head. Members wishing to attend to send their names to the Honorary Secretary, H. J. Manning, Laverstock, Salisbury

NORTH WALES BRANCH.

The intermediate meeting of this Branch was held at Wrexham on April 3rd, Dr. John Roberts, J.P., President, in the chair.

Luncheon.—The members present, numbering 30, were entertained at lunch by the Wrexham and District Medical Society. At its close the President, in graceful terms, proposed a hearty vote of thanks to the Society for their hospitality, and wished it every success. Dr. H. V. Palin suitably responded.

New Members.—The following gentlemen were elected members of the Association and Branch: J. Griffiths, M.R.C.S. Eng., Bethesda; H. O. Hughes, L.R.C.P. and L.P.C.S.Edin., Abergele; J. O. Williams, M.R.C.S.Eng., L.R.C.P.Lond., Carnarvon.

Treasurer's Report.—In the absence of the Treasurer, Dr. Samuel Griffiths (Honorary Secretary) read the balance sheet for 1893, which showed a balance in favour of the Branch of £38 11s. 7d. On the motion of the President, seconded by Dr. John Roberts, J.P. (Chester), it was unanimously adopted. A vote of sympathy with the Treasurer in his recent accident was passed. Happily it had had no very serious consequences.

Registration of Midwives.—A communication from the Lancashire and Cheshire Branch *re* the Midwives Registration Bill was read, and was referred to the annual meeting for further consideration.

Papers.—Mr. Hugh E. Jones (Liverpool) read a paper on the Radical Cure of Otorrhœa, and related two cases, in one of which he had performed Schwartze's operation and in the other Stacke's. He strongly maintained the necessity of having free drainage in such cases, thorough clearing out of everything in the tympanic cavity, and the establishment of a permanent opening communicating with the external meatus. Mr. Damer Harrisson concurred. Dr. Drinkwater joined in the discussion, and Mr. Richard Williams (Liverpool) laid stress upon the importance of the early treatment of otorrhœa.—Mr. Damer Harrisson read a paper on the Treatment of Acute Delirium Tremens, advocating the old treatment by tartar emetic. He related some cases in which this, with small doses of chloral hydrate, had been very successful. Drs. Moss, W. R. Parry Jones, J. Taylor, and the President joined in the discussion.

SYDNEY AND NEW SOUTH WALES BRANCH.

The annual meeting of the Branch was held at Sydney on March 2nd, Dr. Worrall, President, in the chair. The following members were present: Drs. Jenkins, Knaggs, Bohrsmann, C. D. Clark, Clubbe, Huxtable, Sydney Jones, Tidswell, James Dick, W. Chisholm, Hankins, Chambers, McMurray, Todd, Lyden, Narrie, Wood, F. A. Bennet, Crago, Jarvie Hood, Abbott, McKay, T. M. Kendall, Quaife, Barkas, A. Parker, Thring, Power, Jamieson, Kenna. Dr. R. Power was present as a visitor.

Confirmation of Minutes.—The minutes of the previous meeting were read and confirmed.

New Members.—The President announced the election of the following new members: Drs. James Struthers, F. G. Dalton, James B. Crabbe, J. McGill, A. G. Cribb, Chenhall.

President's Address.—The President read an address, which will be published.—Dr. Crago proposed a vote of thanks to the President for his address.—Dr. Chambers seconded the proposition, and said he was pleased to be present and hear the instructive address of Dr. Worrall. The various suggestions were well worthy of consideration, and could be carried away and thought over.—Dr. Worrall thanked the members for the vote of thanks.

Statement of Accounts.—Dr. Clubbe read the statement of accounts, showing a credit balance of £331 5s. 2d. The credit balance had been increased by £50, although the sum of £32 had been expended on snake poisoning researches by Dr. Charles Martin.—The report was adopted.

Election of Officers.—The following gentlemen were elected office-bearers for the ensuing year:—*President:* Dr. Crago; *Vice-President:* Dr. E. J. Jenkins. *Councillors:* Drs. Fiaschi, Worrall, Wm. Chisholm, Sydney Jones, Clubbe, Angel Money, Huxtable, and Thring. *Auditors:* Drs. A. Jarvie Hood and MacSwinney.

Resolution.—The Hon. Secretary moved that the following resolutions, already carried and adopted by the Branch, be incorporated in the by-laws of the Branch: "No member shall be party to the appearance of a notice of his life in the public press, or insert any advertisement, beyond an announcement of change of address or commencement or resumption of practice. No member shall communicate to the lay press particulars of the proceedings of meetings, except by special resolution of the meeting." This was carried.

SPECIAL CORRESPONDENCE.

PARIS.

Sanitation and Mortality at Havre.—England and the Sanitary Convention.—The Drought and the Paris Water Supply.—General News.

The total mortality of Havre (according to Dr. Gibert, who recently presented a report on this subject to the Académie de Médecine) has been for the last decade 30 per 1,000, but in certain neighbourhoods and certain streets and houses it has been as high as 56 to 60, and even 110 per 1,000. The highest mortality was not confined to quarters inhabited by the poorest population: the rate of mortality was the same in wealthy neighbourhoods. At Havre, phthisis, diphtheria, and typhoid fever present the same geographical distribution; these diseases are concentrated in the same neighbourhoods. Dr. Gibert maintains that phthisis is transmitted from one flat to another, like diphtheria. During the last cholera and typhoid epidemics, these two diseases attacked the same streets and even the same houses. Dr. Gibert furnishes data which he considers prove that cholera was imported into Havre, and then spread by direct contagion, and not by water. He advances the same hypothesis with regard to typhoid fever, and attributes the last epidemic to contamination of the soil on which the city is built. The reason that Dr. Gibert gives for rejecting the water hypothesis is that the presence of the Eberth bacillus was not detected. M. Dujardin-Beaumetz maintains that water may transmit typhoid fever when the specific bacillus is absent. This is the case with the present Paris epidemic: in the Vanne water the Eberth bacillus is conspicuous by its absence.

According to the *Temps*, England was very much opposed

to an international sanitary convention, but, nevertheless, adopted in India some of the measures recommended at the Constantinople Conference. The same journal states that in the course of twenty years cholera has appeared seven times at Mecca. Last year the epidemic was more terrible than those of preceding years. It is estimated that 40 per cent. of the pilgrims were attacked by the cholera.

In consequence of the drought of the last few days, some parts of Paris are insufficiently provided with water for more than a month. The Avenue Trudaine and the streets near were provided with water during ten hours a day; now they have water from 11 P.M. to 5 A.M., and this state of things, it is predicted, will continue for some time.

The annual dinner of the dentists of France took place a few days ago. Several deputies and medical celebrities were present. M. Poinsol, the director of the dental school, expressed the wish to see good fellowship among all the members of the dental profession without respect to nationality.

In the Villette market for live stock, the sheep imported from Germany sent to the Villette Sanatorium were attacked with foot and mouth disease the day after their arrival; 872 were seized and slaughtered the same day. A special meeting of the Superior Council for Epizootic Diseases was convened two days subsequently. Veterinary surgeons of the Alford school inspected the sanatorium, and declared that three-fifths of the animals were attacked.

MELBOURNE.

Indigenous Drugs and the British Pharmacopœia.—The Art of Living in Australia.—Elections at the Melbourne Hospital.—A Half-Guinea-cologist.

In response to a circular note issued by the General Medical Council requesting information on the value of indigenous drugs, a meeting of a committee appointed by the Victorian Branch was held to draw up a report on the subject. At the preliminary meeting it was elicited that although we had a number of plants known to be possessed of powerful physiological virtues, still a systematic investigation to render them of any value has never been made. It was felt that under such circumstances great difficulties stood in the way of rendering a concise report such as was required. It was, however, decided to make full inquiries, and to invite Baron von Mueller and Mr. Bosisto to join in the deliberations of the committee. Dr. P. W. Farmer, the lecturer on pharmacy at the Pharmacological Institute, suggested that it might not be inappropriate to take the opportunity of including in the report some suggestions bearing on the character of the *British Pharmacopœia*. He seemed to consider that our present system of weights and measures is obsolete, inaccurate, and unworkable, and that the metric system should be adopted as speedily as possible. The volumetric estimation in its working with grains was not in accordance with the progress of modern science. There seemed also to be some confusion in the understanding of the ounce weight, for while the *Pharmacopœia* adopts the ounce of 437.5 grains, the practitioner generally regards the ounce as containing 480 grains. So, for example, while the strength of the mistura amygdalæ was 1 in 8, the pharmacist was apt to use 60 grains to the fluid ounce instead of about 54.7. In dealing with morphine and strychnine this might lead to unpleasant results. Another element of irregularity in strength might occur with liquor strychninæ. While directions were given to dissolve the strychnine with heat, nothing was said as to any addition of water to make up the required standard. It was apparent that one pharmacist might boil for five minutes, and another for two or ten minutes, until the alkaloid was dissolved. Directions should be given as to the quantity of water which should be added to make up a definite quantity of the solution. The same remarks would also apply to infusions.

Dr. E. P. Muskett, a native of Melbourne, and now senior resident medical officer of Sydney Hospital, is the author of a work which he has taken three years to prepare, and which is entitled *The Art of Living in Australia*. The object which the author indicates he has set himself to achieve is to impress on us that we have not learned to adapt our modes of life, our food, our clothes, and our sports to the climatic conditions under which we are living. He tells us that we live in direct opposition to the conditions of our semi-tropical environment. The consumption of butchers' meat and of tea is enormous and far in excess of any requirements, and is paralleled nowhere else in the world. The meat consumed by each member of the community every year in Victoria is 275 lbs., in New South Wales it is 291 lbs., in Queensland it is 370 lbs.; on the other hand, in the United Kingdom it is only 109 lbs., and in the United States of America it is 150 lbs., while the figures for the different European countries show an average of no more than 70 lbs. Of tea, for each inhabitant of Victoria is required 7.7 lbs., for each in New South Wales 7.8 lbs., South Australia 6 5 lbs., and Queensland 8.4 lbs.; in Western Australia it is 10.6 lbs. In the United Kingdom it is only 5 lbs., while for the United States of America it is but 1.5 lbs. Dr. Muskett accuses us of neglecting alimentary resources which would be more beneficial to us and by the cultivation of which we could provide employment for hundreds of persons who are now unable to find work. There has been no attempt, he says, to develop our deep-sea fisheries, market gardening is deplorably neglected, salads which are easily within the daily reach of every home are conspicuous by their absence, and Australian wine, which should be the national beverage of everyday life, is at table almost a curiosity. Although the author is not a vegetarian, he urges strongly that we should partake more of fruits, vegetables, and fish than we do. He enumerates a large number of vegetables which we might use with advantage but which are never seen in our markets, though they are agreeable, palatable, desirable, and salutary. Dr. Muskett is to be congratulated on having successfully written a very interesting and readable book, containing a good deal of useful information and new matter on a subject which should influence people in this new world in directing their mode of living more in sympathy with the character of their climatic surroundings. He appends to his work 300 cookery recipes for Australian kitchens.

As the time for the Melbourne Hospital elections comes nearer so do suggestions for an improved method of election become matter for public consideration. The latest proposals for amendment of the by-laws were submitted to the governors at a special meeting. They sought to provide against any subscriber having a vote at elections whose subscription had not been paid nine months beforehand, and that the committee should be permitted to appoint the lecturer for the time being on Surgery and Medicine at the University as surgeon and physician to the hospital. The meeting decided against all the proposals by a large majority of votes.

The very depressed state of our finances is responsible for the following: A lady who was suffering from an ailment peculiar to her sex called on a specialist for advice, and was asked by him why he had the honour of being selected by her, to which she replied that "just then she could not afford to consult a guinea-cologist, but that she had heard that he was only half-a-guinea-cologist!"

CORRESPONDENCE.

A GIGANTIC ABUSE.

Sir,—Your correspondent S. attempts to support the out-patient system on three different grounds:

1. The demands of the public, a considerable number of whom "need better advice than they can get from four-fifths of the practitioners whom their means permit them to consult."

2. The necessities of the schools, in the case of such hospitals as have any students in attendance, which a great many have not.

3. *Noblesse oblige*, or the duty of the physician to use his knowledge without thought of reward.

Allow me to test these grounds by a bit of experience. A few years ago I was a regular attendant at Moorfields for about twelve months, and having to write a thesis for my M.D. degree I made a study of 100 cases of interstitial kerat-

itis, which I collected in nine months out of a ninth part of the practice at that hospital, and was led to infer that about 1,000 cases of this complaint were treated there in one year. Now is it suggested that these 1,000 cases cannot be adequately treated by four-fifths of our medical practitioners? Is such a slur cast upon the teaching at our medical schools or upon the intelligence of general practitioners that a simple disease, which can usually be diagnosed at a glance, is beyond their capacity? If so, would it not be better to discontinue the present foolish plan of compelling students to waste their time attending courses of theoretical lectures on medicine, surgery, pathology, obstetrics, etc., and allow them more time to devote to practical and clinical work? Is it suggested that the patients could not afford to pay a moderate charge for their treatment? If so, I can state that I made a point of seeing the parents and brothers and sisters of most of my cases in order to study the history and signs of syphilis in each family, and I am confident that the vast majority were well able to pay reasonable fees; moreover, I still have the names and addresses of all my cases and will hand them over to anyone who will undertake to investigate this point. Is it suggested that 1,000 cases of interstitial keratitis are needed annually at one hospital for teaching purposes? If so, it is remarkable how very little use was made of the material in my time either of this or any other disease. Is it suggested that parents in easy circumstances who have gone out of their way to transmit disease to their offspring should claim gratuitous relief for the consequences of their folly? If so, let us say adieu to thrift.

The cases at almost any other hospital would have done equally well as a test, that is the hundreds of cases of epileptic fits at Queen Square, of tinea or psoriasis at the skin hospitals, of rickets at the children's hospitals, etc. The whole system is a gigantic public scandal.—I am, etc.,

Kendal, April 15th. WM. RUSHTON PARKER, M.A., M.D.

SIR,—In a letter by "S." on out-patient abuse we are told that it is the duty of a medical man to do work for nothing, and that he has no right to his fee. Unfortunately for his argument, the law of the land recognises the right of the doctor to his fee, which can be recovered in the county court. One would have thought that the notion that the acceptance of fees is derogatory to the medical man had by this time disappeared into the limbo of exploded superstitions. Every labourer is worthy of his hire, and to the credit of the present age it is recognised that money earned by fair honest work ennobles the receiver, whether medical or lay.

In the old days, when work of any kind was considered "low," the wrapped-up fee was intended as a delicate compliment to the medical man. Except when used to cover the substitution of halfpence for sovereigns, it is nowadays merely ridiculous.

The general practitioner is, to quote "S.'s" words, "disgusted and indignant" when he sees his patients leave him to go to the hospital, not because they expect to obtain "superior treatment" there, but because it is cheap and convenient, costing them nothing. He naturally asks whether it is fair to him to allow these abuses to go on, for, after all, bread and butter are as essential to him as to the patient, and as yet there are no free bakers' shops for him to go to.—I am, etc.,

April 15th. A. G. W.

MIDWIVES REGISTRATION.

SIR,—We beg to enclose a copy of a letter which has this week been sent to the Branches of the Association throughout Great Britain and Ireland, and to other medical societies. It fully explains itself, and therefore comment on it is unnecessary.—We are, etc.,

ROBERT BOXALL, M.D.,
ROWLAND HUMPHREYS,
April 18th. Honorary Secretaries.

"SIR,—We observe that at a recent meeting of the Lancashire and Cheshire Branch of the British Medical Association, it was decided to forward to your [Branch] [Society] a resolution moved by Dr. Rentoul against proposed legislation for the registration of midwives. The Executive Committee of the Midwives Registration Association, anxious that your [Branch] [Society] should be put in possession of both sides of the case, has directed us, as secretaries, to forward to you the circular of that Association. From this you will that the contention of Dr. Rentoul that our Association has been formed 'in reality for the creation of an independent order of midwifery practitioners' is unfounded. But we may point out that in forwarding a copy of this our printed circular to the medical journals for publication, Dr. Rentoul omitted the word 'medical' before control and supervision in the sixth paragraph.[1]

"We may add that the executive of our Association has still under consideration the principles upon which future legislation might be based, and it is not as yet in a position to publish any complete scheme, still less to put forward a Bill. The sweeping statement concerning our Association with which Dr. Rentoul's resolution opens is therefore, to say the least, premature. We hope soon to be in a position to put forward a draft scheme which, if acted upon, will save the poor from the dangerous practices of incompetent midwives, and at the same time shall duly safeguard the interests of the medical profession, and do justice to the midwives themselves. In the meantime, we are sufficiently agreed upon the following general proposition: That the present system allowing any woman, even without the slightest training or fitness, to practise as a midwife and under no control is unsatisfactory.[2] We recognise the necessity for legislation in the interest of the public, but Dr. Rentoul and his following do not. We shall be glad, therefore, to receive an endorsement of this principle by the members of your [Branch] [Society].—We are, etc.,

"ROBERT BOXALL, M.D.,
"ROWLAND HUMPHREYS,
April, 1894. "Honorary Secretaries."

ARTIFICIAL FEEDING OF THE INSANE.

SIR,—I hope you will allow me a word in reply to the chief critics of my paper of January 27th.

My own experience of nasal feeding in acute melancholia has not been very favourable. In the last case of this disease in which I tried it, the nostrils were stuffed with inspissated mucus, making it difficult to pass one of the limbs of a double nasal tube, and impossible to pass the other. But the chief objection to the method is the uncertainty as to where the slender nasal tube may go. The risk of sending such a tube into the larynx, and pouring the food into the patient's lungs instead of into his stomach is a real one, and is greatest with acute melancholiacs, who always resist to some extent, and often resist frantically and desperately. The superiority of mouth over nose feeding lies in the paramount fact of its greater safety.

Dr. Russel, after describing practical details to the verge of tediousness, said it was surprising to be charged with encouraging my readers "to take it for granted" that the œsophageal tube "must infallibly go into the stomach." Dr. Russel says that this doctrine, which he attributes to me, may at any time, if accepted, lead to "disaster," and that he himself has "many times" passed such a tube into the larynx. I can only say that I have never done so. If Dr. Russel will refer to my paper he will see that the tube sometimes kinks in the pharynx, causing spasmodic dyspnœa for a few seconds, and he will learn the method of dealing with the occurrence. It is a misuse of language to call this occasional inconvenience "a disaster," or to say that the tube "enters the larynx." No doubt if a surgeon takes things "for granted," in this or any operation, he will soon have "disasters," but that is just what a surgeon never does.

As to the screw gag. I have not found that it "frequently slips," as Dr. Herbert says, though no doubt it would slip unless properly held. The danger to the teeth has been exaggerated, and a tooth ought not to be broken. The gag should not be plucked out of the mouth, as an unskilful assistant will do. When the food has been administered, give the screw a couple of turns backward. The prongs will then collapse sufficiently to allow the gag to drop easily from the mouth. It is true that the dry lips of the melancholiac

[1] BRITISH MEDICAL JOURNAL, December 16th and 23rd, 1893.
[2] See Reports of Select Committees of House of Commons, address of President of General Medical Council, and charge of Recorder of City of London.

will sometimes crack and bleed when stretched by the gag, and this objection to the instrument must be admitted.

Some of the methods described by your other contributors I have practised, and, for various reasons, abandoned. One of these is feeding while the patient is held or tied in a chair, the food being injected by a complicated pump.

Attempts are now being made to treat acute mental cases in private dwellings. The practitioner of general medicine who attends such cases may at any time have to feed forcibly without having had an opportunity of seeing the operation performed. My object was to give such a description of a good method of feeding as would be useful in such circumstances.—I am, etc.,

Warneford Asylum, April 14th. James Neil.

SICKNESS AND MORTALITY IN THE MERCANTILE MARINE.

Sir,—As I had noticed an article in the British Medical Journal respecting the sickness and mortality on board mercantile ships, and their undermanning more especially, I beg to draw the attention of your readers to another serious defect in vessels of even modern construction. This is the inadequate provision made for the housing of the crews, which I have observed many times in cargo as well as passenger ships, even of first-class rated boats, sailing or steam.

I take as standards troopships and battleships of the day, and one sees the Mercantile Marine is much behind them in this respect, though the cubic space of the Navy is being now gradually reduced as the crews get crushed out by machinery.

The forepeak berth for the crews of the cargo ship looks more like a guard room or police room, as the light and air are frequently deficient, and the men have wooden bunks to sleep in, without mattress or pillow. You will see no pegs to hang up wet clothes to dry, no lockers to keep their dry things in, and no table to sit at, to read or write letters, often no lamps.

There may be no lavatory to wash in with basins and taps, and the men (seamen and firemen) may have to wash their hands and faces in a swill tub on the open deck outside in all weathers.

This slaver-like deck contrasts painfully with the luxurious fittings of the first class passenger a few yards off on the same vessel, and reminds one that traces may still be found in modern ships of the old press-gang life.

The seamen and firemen of first-class liners are now of a superior order of men than used to prevail formerly, as they are now educated and of better conduct, and may likely be skilled workmen.

They are entitled to better accommodation, then, than that given to the victims of the press-gang of old times, who were mostly British natives, unable to read or write, or do any handicraft, and probably gaol birds.

The greatly improved accommodation given now to the British soldier in modern barracks, over the barracoons of old times, points an example of progress in military life which the marine might well take to heart, by improving theirs in turn.—I am, etc.,

W. G. Black, F.R.C.S.E.,
Edinburgh, April 17th. Member Sanitary Institute.

CANCER AND SENILITY.

Sir,—In Dr. Bramwell's remarks on the conceivable possibility of curing cancer by thyroid extract he says: "Cancer is essentially a disease of old age. The reason why cancerous growths chiefly occur in old people is probably this, that the tissues of the old are unable to resist and withstand the invading organism."

What I wish to point out with regard to this statement is that it is one of those myths which, by dint of continual repetition, has gained widespread credence, without there being a particle of truth in it. In no sense whatever can cancer possibly be regarded as a senile disease, nor does the liability to it increase with old age.

The proportionate death-rate from cancer during the age period 45 to 55 is 1 in 14; whereas during the age period 65 to 75 it is only 1 in 21; and after 75 it only amounts to 1 in 48. On investigating the mortality from cancer of centenarians and aged persons of 80 years upwards, I have found that cancer seldom originates in old age.[1] Of 797 centenarians only 5 died of cancer; of these 208 were males, of whom 2 died of this disease; and 589 were females, of whom 3 died of it.

Humphry's report[2] on the Maladies of Old People is of similar import. Among 202 persons 90 years of age and upwards there was not a single instance of malignant disease; and of 622 persons between 80 and 90 there were only 14 instances of it. Thus, of these 824 aged persons cancer was met with in the ratio of only 1 in 58.8.

These facts show that cancer is not a senile disease; and that senility *per se* plays no part in its development.—I am, etc.,

Preston, April 14th. W. Roger Williams.

GENERAL INSPECTORS OF THE LOCAL GOVERNMENT BOARD.

Sir,—I beg to protest against the sweeping though veiled accusation of "F.R.C.P." against the general inspectors of the Local Government Board. Of course there are doubtless inspectors and inspectors. Still, even granted that the inspector in the Devonshire district has been at fault, this does not justify your correspondent in indiscriminately abusing all. It has been my pleasure to come in contact with a general inspector in the North of England who was most energetic, able, and devoted to his work, and many were the improvements he effected for the benefit of the poor and sick.

With the recollection of this conscientious, thorough, and withal kind-hearted and gentlemanly official, "F.R.C.P.'s" remarks appear to me as uncalled for, as they would most certainly be untrue, if applied to the general inspector I now refer to.—I am etc.,

April, 1894. M.B., D.P.H.

ASSISTANT MEDICAL OFFICERS IN ASYLUMS.

Sir,—There is another side to the woeful picture drawn by various assistant medical officers which may be in turn presented to their vision. Asylums, like hospitals, are institutions for the cure or alleviation of the suffering inmates, and those medical officers who are put in charge of the same are in conscience bound to use every means to remedy their unfortunate condition. As medical men and not legislators, their duty lies merely in the investigation of disease and its cure, be the cause ever so preventable, but this duty is manifestly urged upon everyone who takes a position in an asylum; otherwise, in plain words, he occupies it under false pretences. How should we regard the members of a hospital staff who paid only routine visits to their patients, and made no attempt at an entire investigation? And some reasonable hope for the better treatment of the insane in their asylums should stimulate medical officers to imitate the efforts of their hospital colleagues. Fortunately, less inertia is now being shown by assistant medical officers in the matter of work than formerly, but out of the entire list what proportion contribute a quota to scientific research? Surely the number who remain unheard-of are not so apathetic or unfitted for any investigatory work that they need be ciphers in their speciality.

I think that if most superintendents gave voice to their feelings, they would be heard to say that they want men of energy as their officers, who will prove themselves workers in the advance of the treatment of their patients, and that when they secure such colleagues, they will do their best to obtain a suitable recompense for the efforts put forth.

I do not believe there is any superintendent who will discourage scientific research by his staff, and very few, if any, who are not sufficiently medical men to be proud of any advance proceeding from their asylum. And I can quite imagine many putting slight value on officers who move amongst their patients as mere routine prescribers and note-takers. I myself only too well understand and regret the influence of the pessimistic atmosphere of an asylum, but I confidently assert that the most gloomy and discontented asylum officer is he who counts his duty finished when

[1] *Medical Chronicle*, September, 1892.
[2] British Medical Journal, March 5th, 1887.

he has perfunctorily entered his notes and dispensed his sedatives.

With regard to the amount of work and the insufficient pay of asylum officers, I would quote the words of a well-known superintendent to me: "Let these querulous gentlemen try for a change a little club practice in a colliery district." There are, no doubt, a few instances of undue severity and lack of conscience on the part of superintendents; at least, we hear of such from injured subordinates; on the other hand, superintendents confess to being occasionally aggrieved by their assistants.

Finally, I do admit that in some asylums much might be done to render the position of the staff as bearable as possible, for even with the pursuit of the best work and an entire devotion to duty the life of the assistant medical officer in course of years becomes a very depressing one from the special nature of his surroundings. Doubtless, however, as men show increased earnestness in their work in this department of medicine, it will encourage those who have the power of improving their position to do so.—I am, etc.,

Bristol, April 14th. F. St. John Bullen.

WHAT CONSTITUTES UNSOUNDNESS OF MIND?

Sir,—Drs. Goodall and Craig ask me to define my meaning of the term "climacteric mania" as used in my letter in the British Medical Journal of April 14th, and add that it is pretty clear I do not mean "insanity." They are quite right: I most emphatically do not mean "insanity." My contention is that women passing through the climacteric are in the first instance rarely "insane." That in some instances, if great care and attention is not bestowed upon them, insanity supervenes there is no doubt; and if it is desired to accomplish this end I can conceive no more certain way of doing so than by placing these cases into an asylum, where their associates are confirmed lunatics and the surroundings depressing. Drs. Goodall and Craig say "that all who have experience of asylums will agree that this 'contact insanity' is in the highest degree uncommon, that practically it is a myth." I shall be forgiven, I trust, if I venture to question this statement; and I contend it is only by most careful and searching inquiry that such a question can be answered in a trustworthy manner.

The term "mania" as applied to this disease is certainly misleading; a more correct meaning would be conveyed by the expression "mental disorder connected with the climacteric." The whole nervous system is in disorder, and most susceptible to develop unhealthy tendencies. It is, then, I contend, absolutely necessary that those suffering in this way should have the utmost care and attention.

How? Certainly not by placing them into an asylum, for here, in my opinion, the mental and moral influences are exactly what should be avoided.

Take those showing a tendency to melancholia or hypochondriasis. Is it to be supposed that these are likely to derive benefit by being placed, more or less, under lock and key, and associated with others suffering from different forms of insanity? Does not common sense dictate that such cannot be the most appropriate form of treatment? What, then, is required is that women suffering in this way should be removed from their home associations and be placed elsewhere, where they could have bright surroundings, cheerful companions, change of air and scene, and be as much as possible supplied with bodily and mental amusements.

It is here, as I have pointed out, that the difficulty arises, for among those who are unable to pay for such a change at present there is no home provided into which such patients can be removed, and thus the chances of their recovery are much lessened. If such homes did exist, I am strongly of opinion that a large percentage of cases would be safely guided through this critical period, and that it would be found that many more than 30 to 40 per cent. would recover.

The question is, to my mind, so large and important that I cannot help thinking much good would accrue if a committee were formed composed of equal numbers of general physicians, psychologists, and gynæcologists, to inquire into and report upon the subject.—I am, etc.,

Fred. Bowreman Jessett, F.R.C.S.

Buckingham Palace Mansions, April 17th.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

The following appointments have been made at the Admiralty: M. J. O'Regan, Surgeon, to the Hong Kong Hospital, April 13th; W. B. Drew, Fleet-Surgeon, to the *Mersey*, temporarily, April 14th.

ARMY MEDICAL STAFF.

Surgeon-Lieutenant-Colonel B. W. Fowler retires on retired pay, April 18th. Appointed Surgeon September 30th, 1873; he was made Surgeon-Major September 30th, 1885, and Surgeon-Lieutenant-Colonel September 30th, 1893. He has no war record in the *Army Lists*.

Quartermaster and Honorary Captain Henry Johnson is placed on retired pay April 16th. He was appointed Lieutenant of Orderlies June 9th, 1877, and Quartermaster Medical Staff July 1st, 1881, receiving the honorary rank of Captain June 9th, 1887. He was engaged in the Zulu war in 1879, and received the medal for that campaign.

Sergeant-Major John Tandy, of the Medical Staff Corps, is appointed Quartermaster, with the honorary rank of Lieutenant, *vice* Honorary Captain H. Johnson, April 16th.

Deputy Inspector-General Francis Reynolds died at Rathmines, co. Dublin, on February 18th last. He was appointed Assistant Surgeon August 7th, 1846; Surgeon December 8th, 1854; Surgeon-Major August 27th, 1866; and Honorary Deputy Inspector-General on retirement on half-pay September 20th, 1871.

INDIAN MEDICAL SERVICE.

Brigade-Surgeon-Lieutenant-Colonel D. F. Keegan, Bengal Establishment, has retired from the service, which he entered as Assistant Surgeon March 31st, 1866, becoming Brigade-Surgeon-Lieutenant-Colonel August 11th, 1891. He served in the Afghan war in 1879-80, took part in the march to Candahar under Sir Frederick Roberts, and was present at the battle of Candahar, receiving the medal with clasp and the bronze decoration.

Surgeon-Colonel E. O. Tandy, Bengal Establishment, has also retired from the service. He was appointed Assistant Surgeon February 10th, 1859; and rose to be Surgeon-Colonel from April 2nd, 1889. He was engaged in the Sikkim campaign in 1861, in the campaign on the North-West Frontier of India in 1863, including the second Eusufzai Expedition and the capture of Umbeyla (medal with clasp); in the operations against the Bezoti Afridis in 1868, and in the Afghan war of 1878-80 (medal).

Surgeon-Lieutenant-Colonel James Reid, M.D., Bengal Establishment, has likewise retired. His first commission dates from April 1st, 1870; and that of Surgeon-Lieutenant-Colonel from April 1st, 1880.

Surgeon-Colonel Henry Wakefield, late of the Bombay Establishment, died at 19, Prince's Square, London, on April 12th, aged 65 years. He entered as Assistant Surgeon February 14th, 1855; and became Surgeon-Major February 14th, 1867; retiring from the service March 24th, 1875.

THE VOLUNTEERS.

Surgeon-Captain J. T. Thomas, from the 1st Monmouth Volunteer Artillery, is appointed Surgeon-Captain to the 1st Devon Artillery (Western Division Royal Artillery), April 18th.

Mr. David Theophilus Richards, M.D., is appointed Surgeon-Lieutenant to the 1st Monmouth Artillery, April 18th.

Surgeon-Major R. F. Cook, M.B., 1st Newcastle-on-Tyne Engineers, Fortress and Railway Forces Royal Engineers, is promoted to be Surgeon-Lieutenant-Colonel, April 18th.

Surgeon-Captain W. J. Brown, M.B., 4th Volunteer Battalion the Durham Light Infantry (late the 4th Durham), has resigned his commission.

Surgeon-Captain R. J. Stewart, 9th Lanarkshire, has also resigned his commission.

"DEGRADATION OF MEDICAL OFFICERS."

We have received, from reliable authority, a contradiction to the statements reported in the British Medical Journal of March 10th, respecting the order said to have been issued by the general officer commanding at Karachi (Sind District) prohibiting the wearing of swords by medical officers at inspections. While on this subject it may be as well to note that no small number of medical officers express a view that on the official inspection of hospitals, not only might the general officer commanding and staff dispense with swords, but also the medical officers doing duty. The clanking of swords and spurs must be disturbing to such severe cases as must necessarily be under treatment.

THE INDIA OFFICE AND THE ARMY MEDICAL STAFF.

A correspondent writes: The article in the British Medical Journal on April 7th only concisely dealt with the inequitable decision arrived at by the Secretary of State for India in respect of charge allowance. The subject is capable of amplification. The plea that the Government of India in their present financial condition do not consider they would be justified in recommending the grant is scarcely tenable while certain facts are adduced to show that if economy in certain quarters were carried out, the first claim of the medical officers might be fairly met.

In India command, pay of 400 rupees a month is granted to commanding officers of battalions for supposedly increased responsibilities; why then deny it to medical officers in charge of hospitals? The Brigade-Surgeons-Lieutenant-Colonels who chiefly hold the charges of large hospitals derive no advantages of pay for their rank in India, although they do so in England and the Colonies, so that there is the greater reason why these officers should receive extra remuneration for their charges. If the medical officers of Lieutenant-Colonel's rank are to live on their pay of 1,093 rupees per mensem, why not the battalion commanders? Or, what reason is there for not reducing the command pay of commanding officers of corps to something approaching the home allowance?

Further, let us consider the high rates of pay of staff corps officers compared with those of the Queen's service. Could not the pay of the former be levelled down to that of the latter?

It seems strange that with this plea of financial difficulties the Indian authorities have never cordially and earnestly taken in hand the disestablishment of regimental hospitals for Indian troops and, in their place, instituted station hospitals similar to those for European soldiers. Such a step would doubtless effect a large saving, as it has done in the treatment of the British forces, but without any appreciable benefit to the Army Medical Staff. The pay and allowances of former years and the consolidated pay of the present time as regards Brigade-Surgeons and the Surgeon-Majors of over twenty and twenty-five years' service under the old system may be noted as follows:

Old System.				*New System.*			
Surgeon-Major of 20 years' service, ranking with Lieut.-Colonel	Rs. 1,056	9	7	Brigade-Surgeon-Lieut.-Colonel ...	Rs. 1,093	2	0
If with Cavalry or R.H.A., horse allowance extra ...	90	0	0				
Total ...	Rs. 1,146	9	7	Loses from Rs. 53 odd, to Rs. 90 monthly.			
Surgeon-Major of 25 years' service ...	Rs. 1,093	2	0				
If with Cavalry or R.H.A., horse allowance	90	0	0				
Total ...	Rs. 1,183	2	0				

I. V. R. C. writes: The recent decision of the Secretary of State for India, that charge pay and allowances cannot be granted to officers of the Medical Staff because the revenues of India are at present unable to bear the strain opens up an important series of questions. If Indian finances cannot bear legitimate pay rates to army medical officers, how are extravagant pay rates continued to several Indian services, civil and military, to be defended? Economy is excellent, but it should be practised all round and not at the cost of a single class, and that the one battling with one of the greatest dangers to the State—tropical disease. Look at command pay to an officer commanding a battalion—at home 3s., per diem, or say £4 13s. a month; in India 400 rupees per mensem. Is there not room for saving here? Again, a surgeon-captain receives 317.8 rupees a month, an infantry captain 415 rupees, what can support one can surely support another. Further, an Indian Staff Corps subaltern at once receives 320 rupees a month; medical officers are kept five years on 317 rupees. If pay is to suit Indian finances, let economies be practised all round and not on one class only. Let members of the Indian Council ponder the anomalies of Indian pay.

MEDICAL TRANSPORT IN THE SWISS ARMY.

USELESS WITHOUT TRANSPORT writes: The following is an extract from a letter lately received from the headquarters of the Swiss army:

"The transport division (*Abtheilung*) of the field hospital certainly wear the Red Cross badge. This division has nothing to do with the transport of ammunition and war material; it is exclusively concerned with the transport of the sick, the movement of hospital wagons, and the transport of provisions for hospital requirements. A certain number of transport officers are attached to the transport division, who have charge of the special transport service but are under the command of the senior medical officer."

This statement shows that what we need is a certain number of companies of our Army Service Corps permanently detailed for field hospital and bearer company service.

*** A recent answer to a question in the House of Commons conveyed the impression that the field hospital transports of the great Continental armies was not special, but only a branch of a general intendance, which donned and doffed the Geneva badge as convenient, like the proposed arrangement in our Army Service Corps. The above letter appears to contradict that statement, and it is clear that further questions will have to be addressed to our Secretary of State for War before the whole truth can be extracted.

DRESS DISTINCTIONS.

I.M.S. writes: The dress of the medical services might be altered with advantage in various ways. The closed up mess waistcoat is utterly unsuited for India; it should be open, which would be more sanitary and comfortable. The white uniforms are not distinctive enough, although an "M" is worn on the shoulder straps and a dark blue tab on the collar. Being proud of our position as doctors, it ought to be more distinguishing.....I would suggest on the shoulder strap a disc of gilt metal with a Geneva cross cut out of the centre, and a piece of scarlet velvet let in behind, with the letters A.M.S., or I.M.S., or S.M.D. in gilt metal below; the blue tab to be abolished. One great advantage of the Geneva cross would be that it would distinguish a doctor from anyone else. I know medical officers have an objection to wear Geneva crosses, but why I could never understand.

*** The Geneva cross is not the distinguishing mark of a "doctor," but in war of a non-combatant engaged in hospital services; it entitles him to certain immunities, but in no way can or does prevent his being killed or wounded, as statistics show. Nothing would please certain "combatants" more than to cover medical officers with Geneva crosses, and so impress civilians that the doctors do not share in the dangers of war; but as men, and more so as Englishmen, the medical officers decidedly object to be so "ticketed," and our correspondent seems to be oblivious of such a rooted objection so often expressed.

SUPERSESSION IN INDIA.

X. writes: From recent remarks you do not seem to be aware that the officers of the Indian Medical Service have been again and again superseded by the Medical Staff in Indian administrative appointments. Surgeon-Colonel Bradshaw, when promoted to surgeon-major-general, superseded the senior surgeon-colonel of the Bengal Medical Service, who was more than seven months longer in the service, and was thus forced to retire.

*** We are well aware of the bygone supersessions to which our correspondent alludes. We expressed the opinion that, under the new army corps system in India, the more rapid promotion in the Indian Medical Service would cause friction by the habitual supersession of seniors in the Medical Staff.

MEDICO-LEGAL AND MEDICO-ETHICAL.

IRREGULAR SALE OF POISONS.

SEVERAL interesting cases of prosecution under the Pharmacy Acts were brought before the magistrate at the Leeds Town Hall last week, in which three local chemists were charged with having sold an arsenical preparation known as "Cooper's Sheep Dip," without conforming with the regulations as to registration of the sale, required by the Act. Another Leeds chemist was charged with the same omission in selling chlorodyne, which was alleged to be a preparation of hydrocyanic acid, and therefore required to be treated as a poison in the first part of the schedule. Similarly enough these prosecutions were instituted by the "Patent Medicine Vendors' Association," which has recently been contesting the claim put forward by the Pharmaceutical Society that it is the intention of the Pharmacy Act, 1868, to restrict the sale of articles which are poisons within the meaning of that Act to registered chemists and druggists. The action taken by the society to enforce the law in that sense, and the success with which it has been attended in several instances, appear to have excited a feeling of resentment on the part of the Patent Medicine Vendors' Association, and taking advantage of the laxity of procedure, which is probably too general even among chemists, the Association has obtained evidence of irregular sales of poisons in chemists' shops, and instituted proceedings under the 17th Section of the Pharmacy Act, which allows of such action being taken by anyone who thinks fit to do so. In three of the cases above referred to the charge was admitted and the defendants were fined. In the other case, there being a conflict of evidence as to whether the chlorodyne sold contained hydrocyanic acid, and the sale required to be registered, the magistrate reserved his decision. It seems probable that the trade associations which have been unsuccessful in defending free trade in poison will now apply their energies to keeping chemists up to the mark in fulfilling the requirements of the law, and though such a stimulus ought not to have been needed, it cannot fail to be of service, from the point of view of public interest and safety, that the provisions of a statute so useful as the Pharmacy Act should be enforced in one way or another, whatever may be the motives of the action taken for that purpose.

THE PATENTING OF PROPRIETARY MIXTURES.

HIGH COURT OF JUSTICE, CHANCERY DIVISION.
(Before Mr. Justice STIRLING.)
In re RENDELL'S PATENT.

THIS was a petition presented by the Pharmaceutical Society of Great Britain asking that certain letters patent, granted to the respondent for an alleged invention stated to consist in a combination of drugs for the treatment and cure of cholera, dysentery, diarrhœa, and other similar complaints, might be revoked. The Pharmaceutical Society is a society formed for objects which include the protection of those who carry on the business of chemists and druggists, and was incorporated by charter in 1843. By the Pharmacy Act, 1868, 31 and 32 Vic., cap. 121, the society was entrusted, in the interest of the public safety, with certain powers in relation to the sale of poisons. In consequence of a decision in a case of The Pharmaceutical Society *v.* Piper, *L. R.*, 1893, 1 Q. B., 686, whereby it was declared that medicines entitled to be called patent medicines were not within some of the provisions of the statute relating to the sale of poisons, a considerable number of persons had applied for, and obtained letters patent for, medicines containing poisons with a view, as the petitioners alleged, to evading the operation of the Act. The petitioners accordingly felt that it was their duty to take proceedings for the revocation of these patents whenever they were in a position to prove their case. The respondent had taken out a patent for a medicine compounded of the following ingredients:—Sal volatile, 2 ozs.: peppermint, 2 ozs.; spirits of camphor, 2 ozs.; and laudanum, 2 ozs. The Society, with the leave of the Attorney-General, presented this petition, praying that the respondent's letters patent might be revoked. Mr. Roger Wallace appeared for the petitioners. Mr. Wright Taylor, for the respondent, without admitting that the letters patent had been obtained for any such purpose as was suggested, consented to an order being made for revocation of the patent on the sole ground that, for want of novelty, the patent could not be supported. Mr. Justice Stirling made an order revoking the patent, and gave the Society the costs of the petition.

PAYMENT OF CONSULTANT FEES.

TWO years ago A. attended a patient who requested B. should be called in consultation. B. goes but is not paid his fee at the time. After waiting a year B. writes to A. asking him to kindly collect his fee. A. replies that he will ask the patient to pay it. B. waits another year and again applies to A. for his fee, who in reply says he will again ask the

patient for it, and adds "in future it will be as well you should get your fee at the time or else apply direct to the patient." B. asks whether this is the correct way of treating a consultant?

*** Our correspondent will perceive from the following rule that essentially desirable though it be for the family attendant to intimate to the patient the consultant's customary fee and the mode and time of payment prior to the consultation being arranged, he is not held personally responsible therefor: "It may here be well to allude to the anomalous custom existing in various rural districts and which indicates an erroneous view of the relative pecuniary obligations that should subsist between the consultant and the ordinary medical attendant. The conventional practice referred to being that the practitioner in attendance is held responsible for the payment of the consultant's fee, and has subsequently to charge it to the patient. It may therefore be desirable to note that in cases of consultation the duty which ordinarily devolves on the family medical adviser is simply to intimate to the patient where necessary what the consultant's usual or expected fee is and as far as possible to see that it be paid at the time, unless for financial or other valid reasons deferred payment be deemed expedient. But there is no professional obligation whatever on the family doctor to do so out of his own pocket. A rule to such effect is unreasonable, and, albeit a district custom, one not to be commended." —*Code*, chap. ii, sec. i, rule 11.

INQUESTS AT WORKHOUSES.

M.A., M.B. writes to ask: Must an inquest be held on an inmate who dies within a certain time of admission? If so, what is the limit of that time?

*** There is no such limit of time, but if our correspondent is in doubt as to being able to certify the cause of death as arising from natural causes or finds himself placed in any difficulty with regard to the case he should communicate with the coroner for the district, stating facts, and await his reply.

NOTICE OF CESSATION OF CONTRACT.

Verax writes: I have been surgeon for some years to a friendly society, have always been paid every twelve months, and never had any agreement as to length of notice to be given to terminate the appointment. At the end of last December I received six months' notice to terminate my appointment, which I intimated I would not accept, as I should require twelve months' notice. At the end of March I received a three months' notice, the Secretary stating this was sent as I would not accept the previous one.

*** As a general rule the length of notice should correspond with the intervals between periodic payments of salary, but we cannot advise our correspondent to rely on this in his case. The only certain principle of law with regard to this point is that the notice shall be "reasonable," and what is reasonable notice will depend on the particulars of each individual case and is usually a question for a jury. Probably in our correspondent's case they would consider six months reasonable notice.

MEDICAL STUDENTS AS ASSISTANTS.

Inquirer.—In response to our correspondent's queries we may note that the practice of a pupil apprentice or unqualified assistant (which we assume to be the position of the student in question) must, as laid down in the case of the Apothecaries' Company *v.* Greenwood, be limited to his master's house. We may observe, moreover, that unless "Inquirer" keeps an open surgery for the sale and compounding of poisons, the so-called student "can legally dispense drugs, and also visit, prescribe, and vaccinate under the authority and supervision of a qualified practitioner;" but the latter cannot, if the account be disputed, recover any charge in a court of law for professional services wholly rendered by such, or an unqualified assistant.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF EDINBURGH.

Second Professional Examination for the Degrees of M.B. and C.M.—The following gentlemen have passed:

W. J. Bell, A. J. Copplestone, W. Evans, W. J. Graham, W. T. Grant, J. H. Lamb, H. A. Leebody, G. R. Leighton, G. R. Livingston, R. A. Milne, A. G. Naylor, T. T. Ormerod, W. H. Price, E. S. Reid, T. Roberts, E. W. K. Scott, W. H. Thomson, H. H. Balfour, J. M. Dawson, D. F. Dewar, D. Evans, A. W. Fletcher, G. B. French (with distinction), G. King, F. W. Fitchett, J. Allison, J. Bannerman, N. D. Bardswell, G. J. Blackmore, J. B. Blaikie, A. S. Brass, D. Brough, H. S. Brockway, J. W. Geddes, F. M. Gibson, B.Sc.; J. Gilchrist, A. M. Love, W. L. Lyall, J. Massey, A. McC. Morrogh, W. C. W. McDowell, S. G. Ogilvie, G. L. Proctor, E. G. Richards, J. G. C. Scott, T. B. M. Sherwen, J. B. Siewart, H. G. Waugh, S. Carmichael, H. C. Colman, W. J. C. Coulthard, J. Crawford, R. W. Cunningham, T. Davidson, M. Dee, A. Dickson, J. A. Forrest, W. C. H. Forster, F. Gardiner, W. E. Gibbons, J. D. Gilruth, L. Grant, M.A.; J. Gray, J. R. Lord, J. McDonald, W. McDonald, T. H. Macfie, J. Maciver, D. M. McKay, C. MacLaurin, J. Macmillan, J. Mason, J. R. Muir, R. Owen, A. D. Prill, W. J. Penfold, R. L. Roe, T. M. Scott, C. M. Simpson, E. M. Skeete, B.A.; D. C. Sutton, A. T. Evans, R. Haygarth, C. M. Hector, G. Henderson, G. P. Henderson, J. H. Henderson, B.A.; J. T. Hewetson, J. A. Hewison, A. L. Husband, F. R. Jones, J. Kirk, R. M. Leith (with distinction), W. Lillie, W. J. Lewis, W. R. Mander, J. L. Marjoribanks, J. S. Martin, G. H. Masson, J. G. P. Murray (with distinction), R. B. Purves, J. K. Raymond, H. Richardson, R. S. Rodger, A. T. Samson, J. E. W. Somerville, J. Stenhouse, A. Steven, J. Stoddart, J. C. Stuart (with distinction), A. C. Sturrock, M.A. (with distinction), H. F. L. Taylor, F. S. C. Thomson, C. H. Wilson, D. Waterston, J. Watt, B.A., G. A. Welsh, L. A. Williams, A. D. Yule (the latter with distinction).

The following gentlemen have passed in the First Division of the Second Professional Examination—that is, Anatomy and Physiology:

J. Ballantyne, E. Bramwell, J. Bence, W. J. Buchanan, W. H. Corse, J. H. Dixon, A. O. Dougall, A. W. Easmon, A. M. Fleming, W. G. C. Geikie, W. Hewison, J. S. Norwell, G. F. Whyte, and W. Mowat, R. Thornton, A. Wallace, A. E. White, T. Gibson, A. D. Macpherson, M.A.; T. H. Merry, A. J. Park, M. W. Marriott, W. T. Ritchie, W. H. Robb, D. Roger, J. T. Shirlaw, T. O. de Souza, G. E. Stewart, W. H. Hill, J. F. Lindsay, A. P. Low, S. M'Donald, and A. L. Owen.

First Professional Examination for the Degrees of M.B. and C.M.—In addition to those already published in the British Medical Journal, the following gentlemen have passed this examination:

C. W. Breeks, M. N. Chandhuri, M. Corry, F. F. Kerr, J. Mackenzie, N. H. Ross, J. O. Williams, G. L. K. Finlay, B. N. Mullan, H. L. S. D. Belasco, A. Goodall, R. Pugh, G. H. Stewart, A. Wood, G. J. Young, A. H. Thomson, W. E. J. Wallis.

The following have passed in *Physics and Chemistry*.—J. M. Gray, T. E. Hincks, W. Macniven, F. H. Stirling, A. K. Traill, H. Wade, D. Wardrop, D. B. Waters, A. H. Wood.

In Zoology.—D. D. Farquharson, H. G. P. Raeburn.

In Physics.—F. G. Middleton, W. C. Spooner, C. S. Steavenson, A. E. B. Wood.

In Botany, Chemistry, and Physics.—E. G. Ford.

In Zoology and Chemistry.—E. R. Grey, R. Gibson, A. Gilmour, T. Jenkins, P. G. L. du Tait.

In Botany and Zoology.—H. J. Barnes, P. M. Carlyle, S. Taed, R. H. White-Jones, A. P. L. Braum.

In Botany.—E. R. S. Hale, N. M. Morrison, B. B. Head, A. G. Hamilton.

In Chemistry.—D. C. Sethua, W. L. Tellett, W. W. Thom, A. H. Thomas.

UNIVERSITY OF DURHAM.

Faculty of Medicine: April, 1894.—First Examination for the degree of Bachelor of Medicine. The following candidates have satisfied the examiners:

Elementary Anatomy and Physiology, Chemistry with Chemical Physics, and Botany with Medical Botany.—Honours: First Class: R. B. Greaves, Sheffield School of Medicine. Pass List: J. R. Askew, College of Medicine, Newcastle-upon-Tyne; and D. W. Patterson, College of Medicine, Newcastle-upon-Tyne.

Elementary Anatomy and Physiology.—W. P. A. Hardwicke, College of Medicine, Newcastle-upon-Tyne; W. Hall, College of Medicine, Newcastle-upon-Tyne; E. A. McLean, College of Medicine, Newcastle-upon-Tyne; and S. Southam, Owens College, Manchester.

Chemistry with Chemical Physics, and Botany with Medical Botany.—R. A. Dunn, M.R.C.S., L.R.C.P., St. Bartholomew's Hospital; T. H. Gibbs, College of Medicine, Newcastle-upon-Tyne; J. B. Hughes, University College, Liverpool; P. W. James, St. Bartholomew's Hospital; H. H. Markham, College of Medicine, Newcastle-upon-Tyne; F. W. Rix, M.R.C.S., L.R.C.P., Westminster Hospital; E. G. Simmonds, St. Bartholomew's Hospital; W. E. Smith, College of Medicine, Newcastle-upon-Tyne; E. Turner, M.R.C.S., L.R.C.P., St. Bartholomew's Hospital; and J. Wreford, M.R.C.S., L.R.C.P., London Hospital.

Chemistry with Chemical Physics.—H. H. P. Cotton, L.R.C.P., L.S.A., Westminster Hospital; H. L. Hatch, M.R.C.S., L.R.C.P., D.P.H., St. Mary's Hospital; and H. Simmons, M.R.C.S., L.R.C.P., L.S.A., Bristol Medical School.

Botany with Medical Botany.—J. J. Foster, Guy's Hospital.

First Examination for the Degree of Bachelor in Medicine New Regulations. The following candidates have satisfied the examiners:

Elementary Anatomy and Biology, Chemistry, and Physics.—Honours—Second Class: T. G. D. Adams, College of Medicine, Newcastle-upon-Tyne; and N. McCall-Smith, College of Medicine, Newcastle-upon Tyne. Pass List: J. T. Bell, College of Medicine, Newcastle-upon-Tyne; C. E. Gun Munro, College of Medicine, Newcastle-upon-Tyne; T. J. Phillips, College of Medicine, Newcastle-upon-Tyne; and C. A. Vogwell, College of Medicine, Newcastle-upon-Tyne.

Chemistry and Physics.—F. A. Davies, Mason College, Birmingham; H. Ferens, College of Medicine, Newcastle-upon-Tyne; W. Hodges, St. Thomas's Hospital; S. P. Johnson, Mason College, Birmingham; R. A. Morland, College of Medicine, Newcastle-upon-Tyne; W. Owthwaite, College of Medicine, Newcastle-upon-Tyne; H. F. Shea, St. Thomas's Hospital; C. S. Smith, Mason College, Birmingham; and A. E. Stevens, St. Thomas's Hospital.

Elementary Anatomy and Biology.—C. Johnson, College of Medicine, Newcastle-upon-Tyne.

ROYAL COLLEGE OF SURGEONS.

A quarterly Council was held at the College on April 12th; Mr. J. W. Hulke was in the chair. The minutes of the last meeting of the Council were read and confirmed.

On the recomendation of the Jacksonian Committee the subject selected for the Jacksonian Prize of 1895 was "Tetanus."

Mr. Chauncy Puzey, as a Member of twenty years' standing, was elected a Fellow of the College.

A report was read from the committee of management, recommending that the course of laboratory instruction for the diploma in public health at the following institutions should be recognised by the two Colleges: Guy's Hospital Medical School; University of Durham College of Medicine; Yorkshire College, Leeds. The report was approved and adopted.

A report was received from the Committee on By laws, recommending that Clauses 5 and 6 of Section IV should be altered to the following form: "Proposed By-Law. Section IV.—Election and Admission of Members of Council.—5. Not less than ten days prior to the day fixed for such meeting, the secretary shall deliver or send by the post to every Fellow of the College, whose address in the United Kingdom is registered at the College, a voting paper, in such form as the Council of the College may from time to time direct. 6. Every such Fellow, if he desires to vote at such election by voting paper, and not in person, shall return such voting paper marked, enclosed, sealed, authenticated, and attested in such manner as the Council shall from time to time direct and require, and so as the same shall be received by the secretary, or person acting for him, not later than the time appointed for the commencement of such election." This was adopted subject to the approval of the Secretary of State, but will not take effect before 1895.

The Committee appointed by the Council to consider the proposals of the executive committee of the Sir John Tomes Prize Fund for the foundation of a triennial prize to be open to Licentiates in Dental Surgery, recommended the adoption of the following regulations: 1. The John Tomes Prize shall be awarded triennially. 2. The Prize shall consist of the amount of the interest accruing from the John Tomes Fund during the triennial period. A document, declaratory of the award, sealed with the College Seal, and signed by the President, shall be presented with the Prize. 3. The Prize shall be open to any person registered under the Dentists Act of 1878, who shall hold a diploma in dental surgery of one of the licensing bodies in Great Britain or Ireland included in the schedule of the said Act. 4. The Prize shall be awarded for original or other scientific work, done either partially or wholly within the triennial period, on the subjects of dental surgery and pathology, dental anatomy and physiology (including histology), or dental mechanics. 5. The Prize shall be awarded by the Council on the recommendation of a Committee at the quarterly meeting of the Council in the April following the expiration of the triennial period. The Council shall, however, withhold the prize if, in the opinion of the Committee, no work within the prescribed time be of sufficient merit to justify its award, and in such case shall either invest the dividends to augment the capital of the fund, or adjudge the Prize to the author of some original scientific research, deserving recognition, in other than dental subjects, which may have been carried out by any person eligible for the Prize. 6. The Committee shall consist of five members, and shall be appointed by the Council not less than one year prior to the date of the award of the Prize. The Committee shall not of necessity be confined to members of the Council. 7. No essays shall be submitted in competition for the Prize in the case of the first award, which shall be for the period ending December 31st, 1896; but it shall be open to the Committee to recommend to the Council that essays should be called for before the second or any subsequent award. 8. The Fund shall be invested in the name of the Royal College of Surgeons of England as trustee thereof. 9. The interest on the Fund shall be invested not less than once a year to augment the capital of the Fund.

After consideration of the report of the delegates of the two Colleges upon the Gresham University scheme, the Council adopted the following resolution: "That the Council of the Royal College of Surgeons of England do cordially approve of the general provisions in the report of the Gresham University Commission, particularly in so far as they relate to the said College, regarding them as being in accordance with the principles which the College has hitherto affirmed and accepted, and as constituting the most comprehensive and academic scheme hitherto proposed."

THE following gentleman, having passed the necessary examinations, and having now attained the legal age of 25 years, was, at the quarterly meeting of the Council on April 13th, admitted a Fellow of the College:

A. S. Blackwell, M.B., B.S.Lond., L.R.C.P.Lond., St. Bartholomew's Hospital, Diploma of Member dated February 11th, 1892.

The following gentlemen, having passed the necessary examinations, and having conformed to the by-laws and regulations, were at the same meeting admitted members of the College:

R. S. Fairbank, L.S.A.Lond., King's College Hospital; A. H. Reinhardt, L.S.A.Lond., London Hospital and Yorkshire College and General Infirmary, Leeds; A. L. Tatham, Exams. for L.R.C.P.Lond., St. George's Hospital.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

THE following gentlemen passed the Second Examination of the Board in the subjects indicated:

Wednesday, April 11th:

Passed in Anatomy and Physiology.—R. W. Mayston, student of Guy's Hospital; W. R. Gibson, F. Whincup, and F. V. O. Beit, of St. Bartholomew's Hospital; P. C. Colls, R. P. Williams, and S. F. Lynch, of King's College, London; S. H. Berry, S. J. Wareham, and E. H. Mountford, of Charing Cross Hospital; J. S. Barnes and B. S. Wills, of St. Thomas's Hospital; A. F. Rykert and F. W. Mulligan, of Trinity College, and Toronto University, Canada.

Passed in Anatomy only.—G. Smith and W. J. Richards, of St. Bartholomew's Hospital; and D. L. Smith, of Guy's Hospital.

Passed in Physiology only.—H. C. Jackson, of University College, London; and W. J. Humby, of Middlesex Hospital.

Sixteen gentlemen were referred in both subjects, 2 in Anatomy only, and 3 in Physiology only.

Thursday, April 12th:

Passed in Anatomy and Physiology.—H. H. Cheeseman, of Westminster Hospital, and A. J. Cleveland, of Guy's Hospital.

Passed in Anatomy only.—A. R. Greenwood, of Middlesex Hospital; F. G. Verity, of Charing Cross Hospital; and G. E. Gardiner, of St. Bartholomew's Hospital.

Passed in Physiology only.—F. B. Mudd, of Middlesex Hospital; A. H. Gadsden, of St. Mary's Hospital; S. S. Simmons, of St. George's Hospital; and H. K. Palmer, of St. Bartholomew's Hospital.

Six gentlemen were referred in both subjects, 2 in Anatomy only, and 7 in Physiology only.

The following gentlemen passed the First Examination of the Board in the subjects indicated under the "Four Years" Regulations in the subjects indicated, namely:

Part I. Chemistry and Chemical Physics.—E. Q. Ambrose, London Hospital; S. S. Broadbent, Firth College, Sheffield; J. W. Cheese, University College, London; H. Clapham, Firth College, Sheffield; E. R. M. C. R. Cousins, University College, London; F. W. Croft, Westminster Hospital; E. C. Davies, Guy's Hospital; J. C. S. Dunn, St. Bartholomew's Hospital; R. S. Elvin, Mason College, Birmingham; H. J. Farki, Syrian Protestant College, Beyrout; J. J. C. Hamilton, King's College, London; A. R. Hoare, St. Thomas's Hospital; F. C. R. M. Knight, Guy's Hospital; E. C. Mehany, St. Thomas's Hospital; A. F. Millar, St. Thomas's Hospital; D. K. L. Nasmyth, Charing Cross Hospital; H. J. Viney, Middlesex Hospital; E. C. Wills, University College, Bristol; J. Wood, private study.

Part II. Materia Medica and Pharmacy.—N. H. Austin, St. Mary's Hospital; H. Bayliss, Mason College, Birmingham; F. Bennett, St. Mary's Hospital; N. S. Bickford, Charing Cross Hospital; P. M. Brittain, St. Bartholomew's Hospital; E. Brodribb, St. Mary's Hospital; C. C. Bullmore, University College, London; E. G. Bunbury, Cambridge University and University College, Bristol; L. H. Callender, St. Mary's Hospital; H. W. Carson, St. Bartholomew's Hospital; H. N. Collier, Guy's Hospital; F. C. Collinson, Yorkshire College, Leeds; W. Cooper, Yorkshire College, Leeds; S. Crompton, Mason College, Birmingham; E. J. Deck, St. Bartholomew's Hospital; J. L. Elliott, Yorkshire College, Leeds; H. R. Ellis, St. Bartholomew's Hospital; A. Farr, Charing Cross Hospital; J. F. Fernie, St. Bartholomew's Hospital; J. E. Francis, University College, London; W. L. Freer, Mason College, Birmingham; A. S. Grant, London Hospital; L. A. Grimes, St. George's Hospital; H. A. Hall, St. Mary's Hospital; A. E. Hodgkins, St. Bartholomew's Hospital; B. W. Holmes, St. Bartholomew's Hospital; D. F. Jones, Middlesex Hospital; H. G. Jones, St. Mary's Hospital; J. H. Jones, Middlesex Hospital; F. J. Keats, Middlesex Hospital; T. G. King, London Hospital; J. E. Langley, Middlesex Hospital; E. T. Lauyon, King's College and London Hospital; A. T. Latchmore, Yorkshire College, Leeds; D. E. Leclézio, St. Bartholomew's Hospital; A. G. Littlehales, Westminster Hospital; E. E. Lloyd, St. Mary's Hospital; J. N. Macdonald, St. Mary's Hospital; E. C. Mahany, St. Thomas's Hospital; S. W. May, Owens College, Manchester; G. L. Meredith, London Hospital; G. V. Miller, University College, London; D. O'Sullivan, London Hospital; B. E. Potter, Charing Cross Hospital; C. A. K. Renshaw, Owens College, Manchester, and Cambridge University; C. Rundle, St. Mary's Hospital; H. G. F. Stallard, University College, London; S. Stephen's, St. Mary's Hospital; R. A. Taylor, London Hospital; A. Tenison, St. Mary's Hospital; A. S. Turner, Guy's Hospital; J. B. Wall, St. Mary's Hospital; C. E. S. Watson, Guy's Hospital; E. A. Weber, St. Bartholomew's Hospital; W. C. P. Winter, Guy's Hospital; A. B. Wright, London Hospital; J. W. Yorke-Davies, Charing Cross Hospital.

Part III. Elementary Anatomy and Elementary Physiology.—E. Ashby, Guy's Hospital; A. Atherton, St. Thomas's Hospital; G. L. Atkinson, King's College, London; H. C. Barlow, Westminster Hospital; H. H. Beale, St. Mary's Hospital; J. Bennett, Owens College, Manchester; J. Birch, Owens College, Manchester; W. E. J. Clarke, Guy's Hospital; P. D. Cogswell, St. Mary's Hospital; H. A. Colwell, St. Bartholomew's Hospital; H. S. Crapper, Guy's Hospital; H. Davies, St. Bartholomew's Hospital; E. J. Distin, King's College, London; A. Farrington, St. Bartholomew's Hospital; C. T. Fox, University College, London; C. Franks, Westminster Hospital; W. Green, Charing Cross Hospital; J. J. C. Hamilton, King's College, London; L. E. C. Handson, Guy's Hospital; H. E. Hewitt, St. Thomas's Hospital; T. H. Hulme, London Hospital; C. W. Iliffe, Owens College, Manchester; F. A. Johns, London Hospital; J. L. Jones, University College, London; F. H. Lawson, Middlesex Hospital; J. A. N. Longley, Mason College, Birmingham; G. R. Lucas, Edinburgh University and Mr. Cooke's School of Anatomy and Physiology; G. H. Lucas, Middlesex Hospital; E. H. Musgrove, University College, Cardiff; T. Marles-Thomas, University College, London; W. J. May, Charing Cross Hospital; A. F. Millar, St. Thomas's Hospital; T. Morgan, Guy's Hospital; W. E. Morgan, Charing Cross Hospital; E. C. Morland, St. Bartholomew's Hospital; N. H. Oliver, Guy's Hospital; J. L. Payne, Guy's Hospital; A. W. Penrose, Guy's Hospital; O. T. A. Phillips, University College, Cardiff; E. C. Plummer, King's College, London; P. D. Pywell, St. Thomas's Hospital; A. E. Relph, Middlesex Hospital; J. W. Rollings, University College, London; E. M. Saunders, King's College, London; A. E. Seller, London Hospital; A. J. Stanley, Mason College, Birmingham; B. C. Stevens, St. Thomas's Hospital; G. B. Thwaites, St. Thomas's Hospital; H. J. Viney, Middlesex Hospital; A. W. Walker, Mason College, Birmingham; J. H. Williams, London Hospital; W. E. A. Worley, St. Bartholomew's Hospital; B. M. Young, St. Thomas's Hospital.

Passed in Elementary Anatomy only.—Le D. B. Cogan, Guy's Hospital; C. Dykes, University College, London; C. H. Sanders, St. George's Hospital.

Passed in Elementary Physiology only.—E. G. Battiscombe, London Hospital; E. G. Bunbury, University College, Bristol; J. Butterworth, Owens College, Manchester; A. M. Crosfield, University College, Liverpool; W. H. Howard, Owens College, Manchester; J. P. Kenny, Catholic University, Dublin; R. McKay, Middlesex Hospital; S. D. Oldham, Owens College, Manchester; R. Sykes, Yorkshire College, Leeds; E. R. L. Thomas, London Hospital; G. L. J. Wilson, St. George's Hospital.

OBITUARY.

FRANCIS LINDESAY CARTE, L.R.C.P. and S.I., Surgeon Captain A.M.S.

Dr. F. L. Carte, whose premature death we announced last week, was born in November, 1862. He obtained his commission August 1st, 1885, when not yet 23. In 1886-7, when the death-rate was alarmingly high, he served in Assouan, and his "record of service" contains an entry marking how thoroughly and devotedly he performed his heavy duties during this trying period. The *Tasmania*, in which ship he was returning home, was wrecked in the Straits of Bonifacio, when the captain and twenty-four officers and men were drowned or died from exposure. For a considerable time subsequent to this Surgeon-Captain Carte suffered from a severe attack of rheumatic fever, the result of more than thirty-six hours' exposure on the sinking vessel when he was already in an indifferent state of health after his arduous service in Egypt.

In February, 1889, he proceeded to India, and served with distinction in the Burmah campaign of 1889-90, for which he obtained the medal and clasp. Subsequently he did duty at Rawul Pindi during the cholera outbreak, which carried off several medical officers. He was himself struck down by fever, and returned to England in April, 1893, greatly broken down in health. On September 30th, 1893, he once more embarked for India, having to complete his six years' tour. We are informed that during the whole period he was abroad he was unable to enjoy any leave or rest, for, although granted a short furlough in 1892, he was recalled after a few days, when he completely broke down, and was sent home when strong enough to bear the voyage. His case is therefore a very sad and striking example of the system which works medical officers to death in India.

Surgeon-Captain F. L. Carte was the third son of Dr. Wm. Carte, J.P., F.R.C.S.I., medical officer to the Royal Hospital, Kilmainham, and Headquarters Staff in Ireland, who has faithfully served his country for forty years. His eldest brother is Surgeon-Major W. A. Carte, of the Grenadier Guards.

His numerous friends will be greatly shocked by the news of his early death, and his loss will be sincerely deplored, for he was beloved by all who knew him. There was no more popular or more promising officer in the Army Medical Department.

Dr. Henry Welch, who has just died at the early age of 37, graduated M.B. and C.M. at Edinburgh in 1878. In 1882 he took the degree of B.Sc. (Public Health), and in 1887 the degree of M.D. with honours. After serving as house-physician at the Liverpool Royal Infirmary and house-surgeon at the Royal Southern Hospital, he was appointed medical officer of health at Blackpool in 1883. Here he worked most assiduously, and it was on his initiative that the corporation built the Sanatorium (an infectious hospital) and the refuse destructor, and resolved upon the erection of the public abattoir not yet completed. He contributed a paper on the Relation of Diphtheria to Scarlet Fever to the *Practitioner* in 1886, and another to the same periodical on the Etiology of Phthisis in 1890, and took much interest in the work of the North-Western Association of Medical Officers of Health, of which he was elected president in 1890. The following year he suffered so much from pulmonary phthisis that on medical advice he resigned his appointment and retired to a little property at Halton which he had inherited. He spent two winters at Davos Platz, and the winter of 1892-93 at Bloemfontein, in the Transvaal, but gradually declined in health, and the end came peacefully at Halton on April 2nd. Dr. Welch had a versatile mind and a most amiable disposition. He was never married, and was the last of a family of five, all of whom died of consumption.

A career of great promise was prematurely closed on April 11th by the sudden death, in her 27th year, of Miss Jessie Flewitt Hatch, M.B.Lond., one of the resident medical officers at the North-Eastern Fever Hospital at Tottenham. A distinguished student of the London School of Medicine for Women, Miss Hatch graduated last year at the University of London, taking high honours in medicine and the gold medal obstetrics. She subsequently became a member of the staff of the new Hospital for Women in the Euston Road. She was the daughter of Mr. S. C. Hatch, of Blackheath.

Dr. O'Meara, J.P., of Carlow, who was in his 78th year, succumbed to a brief illness last week, after practising in his native town for more than half a century. For years the deceased took an active interest in public affairs, and in matters affecting the interests of Carlow. He leaves two sons, both medical men, and two daughters.

MEDICO-PARLIAMENTARY.

[Specially Reported for the "British Medical Journal."]

HOUSE OF LORDS.

Marking of Foreign Produce.—There was a short discussion on this subject on Monday, when Lord Ribblesdale, on behalf of the Government, moved for a Select Committee to consider whether legislation was desirable for the purpose of requiring the foreign or colonial origin of imported agricultural produce, and especially meat, cheese, and fruit, to be marked thereon or otherwise indicated.—Lord Teynham observed that only last week, in the other House, Mr. Mundella had ridiculed a similar proposal that had been brought forward in the interests of British fruit growers. He should, however, welcome the appointment of a Committee.—The Earl of Onslow laid great stress on the widespread misrepresentation that had been shown to exist as to the origin of meat sold in this country, giving evidence of the customary and habitual sale of American or New Zealand meat as English beef or mutton. Similar frauds were very common in regard to butter, cheese, and bacon. The Board of Trade rarely used their powers of prosecution, powers which should also be extended to the Board of Agriculture. Whatever method were adopted for the protection of the consumer, such as marking of meat, or the compulsory registration of importers and dealers in foreign meat, those who paid a proper price for English meat were entitled to get it.—Lord Playfair replied that the Government would do all in their power to secure the object in view. The Board of Agriculture might well be entrusted with the power of prosecution in these matters, though, as the Board of Trade had found, it was difficult to get cases likely to lead to convictions. Cases of wilful misrepresentation might be taken up by local authorities. When the proposed Select Committee had reported a Bill would, no doubt, be founded on their recommendations. —The motion for a Select Committee was then agreed to.

HOUSE OF COMMONS.

The Clothing of the Police.—In answer to Mr. E. H. Bayley, the Home Secretary stated that, after consultation with the chief surgeon of the Metropolitan Police, the Commissioner had come to the conclusion that the variable character of our climate and the nature of the various duties of the London police rendered it inadvisable to provide the men with light clothing during the summer months.

Richmond Lunatic Asylum, Dublin.—In reply to Mr. W. Kenny, Mr. J. Morley said he was aware that this asylum was overcrowded, its inmates numbering about 1,500, while there was proper accommodation for only 1,000. Steps, however, had been taken to acquire a site for an auxiliary asylum at Malahide. The question of cost as between the three counties served by the asylum—namely, the City and County of Dublin and the Counties of Louth and Wicklow—was to be considered immediately by the Privy Council, and, when that matter was settled, there would be no unnecessary delay in regard to the works.

Vivisection.—On the motion of Mr. G. Russell, a return was agreed to showing the number of experiments performed on living animals during the year 1893 under licences granted under the Act 39 and 40 Vict., c. 77, distinguishing painful from painless experiments.

Leave was obtained to introduce the following Bill, which was brought up and read a first time by Mr. P. A. M'Hugh: Bill to Amend the Law relating to the Qualification of Members of Dispensary Committees in Ireland.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE TRUE DEATH-RATES OF LONDON DISTRICTS DURING THE FIRST QUARTER OF 1894.

In the accompanying table will be found summarised the vital and mortal statistics of the forty-three sanitary districts of the metropolis, based upon the Registrar-General's returns for the first or winter quarter of this year. The mortality figures in the table relate to the deaths of persons actually belonging to the various sanitary districts, and are the result of a complete system of distribution of the deaths occurring in the institutions of London among the various sanitary districts in which the patient had previously resided.

The 34,058 births registered in London during the three months ending March last were equal to an annual rate of 31.4 per 1,000 of the population, estimated at 4,349,160 persons in the middle of the year. In the corresponding periods of the preceding three years the birth-rates were 33.9, 31.6, and

32.7 per 1,000 respectively. The birth-rates last quarter in the various sanitary districts showed, as usual, wide variations, owing principally to the differences in the age and sex distribution of the population. In St. George Hanover Square, Westminster, St. James Westminster, St. Martin-in-the-Fields, London City, and Lee, the birth-rates were considerably below the average; while in Clerkenwell, St. Luke, Shoreditch, Bethnal Green, Whitechapel, St. George-in-the-East, Newington, and Bermondsey, the birth-rates showed a marked excess.

The 22,573 deaths of persons belonging to London registered during the quarter under notice were equal to an annual rate of 20.8 per 1,000, against 23.4, 27.8, and 21.7 in the corresponding periods of the preceding three years. The rate last quarter was below that recorded in the first quarter of any year since 1889, and was 2.4 per 1,000 below the average rate in the corresponding periods of the preceding nine years 1885-93. The lowest death-rates in the various sanitary districts were 13.0 in Hampstead and in Stoke Newington, 13.9 in Wandsworth, 15.7 in Lee and in Plumstead, 16.1 in Lewisham, and 17.0 in Battersea; in the other districts the rates ranged upwards to 26.8 in St. Martin-in-the-Fields, 27.1 in Limehouse, 27.2 in St. George Southwark, 27.4 in St. Giles, 27.8 in St. Olave Southwark, 31.8 in Strand, and 32.9 in St. George-in-the-East. During the quarter under notice 3,021 deaths were referred to the principal zymotic diseases in London; of these, 932 resulted from whooping-cough, 787 from measles, 712 from diphtheria, 273 from scarlet fever, 168 from diarrhœa, 142 from different forms of "fever" (including 1 from typhus, 136 from enteric fever, and 5 from simple and ill-defined forms of fever), and 7 from small-pox. These 3,021 deaths were equal to an annual rate of 2.8 per 1,000, against 1.8, 2.9, and 2.0 in the corresponding periods of the preceding three years 1891-2-3. The lowest zymotic death-rates during last quarter in the various sanitary districts were 0.8 in Stoke Newington, 1.1 in Chelsea, 1.4 in St. George Hanover Square, in Hampstead, and in London City, 1.5 in Wandsworth, and 1.8 in Paddington and in Camberwell; in the other districts the zymotic death-rates ranged upwards to 3.7 in Fulham and St. Olave Southwark, 3.8 in Strand, 4.5 in Bethnal Green, 4.6 in Limehouse, 5.5 in Mile End Old Town, and 6.5 in St. George-in-the-East.

Seven deaths from small-pox of persons belonging to London were registered during the three months ending March last, of which 2 belonged to Lee, and 1 each to Paddington, Mile End Old Town, Poplar, Woolwich, and Plumstead sanitary districts. Measles showed the highest proportional fatality in Fulham, St. George-in-the-East, Limehouse, Mile End Old Town, St. Saviour Southwark, St. George Southwark, and Rotherhithe; scarlet fever in London City and Mile End Old Town; diphtheria in Fulham, Holborn, Bethnal Green, St. George-in-the-East, Mile End Old Town, Poplar, Greenwich, and Lee; and whooping-cough in St. Giles, Strand, Shoreditch, Whitechapel, St. George-in-the-East, Newington, Bermondsey, and Greenwich. The mortality from "fever" showed no marked excess in any of the sanitary distribs.

Infant mortality in London last quarter, measured by the proportion of deaths under 1 year of age to registered births, was equal to 144 per 1,000, and slightly exceeded the average rate in the corresponding periods of the preceding nine years 1885-93, which was 141 per 1,000. Among the various sanitary districts the rates of infant mortality were lowest in Stoke Newington, Hackney, St. Luke, St. Saviour Southwark, Battersea, Wandsworth, Lee, and Plumstead; while they showed the largest excess in Kensington, Westminster, St. Martin-in-the-Fields, Strand, Holborn, St. George-in-the-East, and St. George Southwark.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns, including London, 6,340 births and 3,877 deaths were registered during the week ending Saturday, April 14th. The annual rate of mortality in these towns, which had been 20.0 and 19.6 per 1,000 in the preceding two weeks, further declined to 19.3 last week. The rates in the several towns ranged from 11.6 in Huddersfield and 12.6 in Croydon to 23.6 in Blackburn, 24.7 in Liverpool, and 31.9 in Wolverhampton. In the thirty-two provincial towns the mean death-rate was 19.4 per 1,000, and slightly exceeded the rate recorded in London, which was 19.3 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.6 per 1,000; in London the rate was equal to 3.2, while it averaged 2.2 per 1,000, in the thirty-two provincial towns, and was highest in Wolverhampton, Birmingham, and Cardiff. Measles caused a death-rate of 1.7 in Leicester, 2.0 in Birmingham, and 2.5 in Wolverhampton; scarlet fever of 1.2 in Wolverhampton; and whooping-cough of 2.2 in Sheffield and 2.5 in Cardiff. The 72 deaths from diphtheria in

Analysis of the Vital and Mortal Statistics of the Sanitary Districts of the Metropolis, after Complete Distribution of Deaths occurring in Public Institutions, during the First Quarter of 1894.

SANITARY AREAS.	Estimated Population middle of 1894.	Births.	Deaths.	Annual Rate per 1,000 Living.			Deaths from Principal Zymotic Diseases.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-Cough.	Typhus.	Enteric Fever.	Simple and Undefined Fever.	Diarrhœa.	Deaths of Children under 1 year of age to 1,000 births.
				Births.	Deaths.	Principal Zymotic Diseases.											
LONDON	4,349,166	34,058	22,573	31.4	20.8	2.8	3,021	7	787	273	712	932	1	136	5	168	144
West Districts.																	
Paddington	121,583	735	526	24.2	17.4	1.8	55	1	7	4	20	16	—	4	—	3	136
Kensington	167,350	990	825	23.7	19.8	2.6	107	—	27	11	19	31	—	5	3	11	190
Hammersmith	105,696	745	501	28.3	19.0	2.8	73	—	16	6	12	31	—	3	—	5	146
Fulham	110,993	937	533	33.9	19.3	3.7	103	—	39	8	33	18	—	1	—	4	157
Chelsea	99,052	678	469	27.5	19.0	1.1	26	—	4	1	9	7	—	5	—	—	127
St. George Hanover Square	75,033	374	330	20.0	17.6	1.4	27	—	8	1	6	6	—	4	—	2	128
Westminster	54,414	312	324	23.0	23.9	2.5	34	—	15	3	7	7	—	1	—	1	179
St. James Westminster	23,571	106	128	18.0	21.8	2.9	17	—	6	2	7	1	—	1	—	—	132
North Districts.																	
Marylebone	138,554	1,119	831	32.4	24.1	2.6	91	—	39	14	20	9	—	6	—	3	145
Hampstead	75,443	371	245	19.7	13.0	1.4	27	—	1	1	7	13	—	1	1	3	127
St. Pancras	233,739	1,801	1,271	30.9	21.8	2.1	122	—	21	13	33	37	—	11	—	7	150
Islington	331,900	2,490	1,617	30.1	19.5	2.9	243	—	69	16	68	75	—	8	—	7	127
Stoke Newington	34,172	197	111	23.1	13.0	0.8	7	—	1	2	1	3	—	—	—	—	122
Hackney	211,493	1,599	941	30.3	17.8	3.0	159	—	64	11	36	34	—	8	—	6	122
Central Districts.																	
St. Giles	38,144	260	261	27.3	27.4	2.8	27	—	3	2	5	16	—	1	—	—	162
St. Martin-in-the-Fields	13,783	58	82	16.9	26.8	2.6	9	—	2	—	2	3	—	1	—	1	259
Strand	23,179	130	184	22.5	31.8	3.8	22	—	6	1	4	10	—	1	—	—	208
Holborn	32,438	209	215	25.8	26.6	3.2	26	—	9	—	8	7	—	1	—	1	206
Clerkenwell	65,312	611	380	37.5	23.3	3.1	51	—	10	3	11	20	—	1	—	6	144
St. Luke	41,168	525	274	51.2	26.7	2.1	22	—	6	4	6	5	—	—	—	1	105
London City	34,832	142	216	16.4	24.9	1.4	12	—	—	6	—	6	—	—	—	—	169
East Districts.																	
Shoreditch	123,186	1,190	753	38.7	24.5	3.5	109	—	15	9	26	57	—	1	—	1	162
Bethnal Green	129,840	1,234	807	38.1	24.9	4.5	146	—	33	10	48	44	—	8	—	3	144
Whitechapel	75,498	800	481	42.5	25.6	3.5	66	—	18	9	7	25	—	3	—	4	168
St. George-in-the-East	45,360	493	372	43.6	32.9	6.5	74	—	26	4	13	20	—	3	—	8	189
Limehouse	57,000	502	385	35.3	27.1	4.6	66	—	22	9	11	15	—	4	—	5	155
Mile End Old Town	108,242	997	694	36.9	25.7	5.5	149	1	62	14	23	35	—	2	—	12	153
Poplar	170,217	1,530	920	36.1	21.7	3.5	149	1	46	6	36	44	—	6	—	10	151
South Districts.																	
St. Saviour Southwark	26,712	220	147	33.0	22.1	3.3	22	—	13	—	2	6	—	—	—	1	114
St. George Southwark	60,060	538	408	35.9	27.2	3.5	53	—	21	7	7	17	—	—	—	1	182
Newington	118,512	1,121	750	37.9	25.4	3.6	107	—	22	6	17	53	—	4	—	5	173
St. Olave Southwark	12,981	112	90	34.6	27.8	3.7	12	—	5	2	1	4	—	—	—	—	143
Bermondsey	84,053	818	536	39.0	25.6	3.5	74	—	22	5	8	32	—	3	—	4	183
Rotherhithe	46,365	342	226	34.0	22.6	2.7	27	—	15	3	2	4	—	—	—	3	161
Lambeth	282,574	2,410	1,492	34.2	21.2	2.3	160	—	52	17	35	33	—	12	—	11	126
Battersea	161,558	1,336	684	33.2	17.0	2.4	96	—	27	12	31	12	—	5	—	9	122
Wandsworth	179,518	1,168	623	26.1	13.9	1.5	69	—	3	6	29	14	—	4	—	13	117
Camberwell	248,893	1,920	1,122	30.9	18.1	1.8	113	—	17	15	30	34	—	6	—	11	134
Greenwich	173,128	1,441	898	33.4	20.8	3.4	147	—	11	17	42	70	—	5	1	1	115
Lee	38,172	200	149	21.0	15.7	2.6	25	2	2	1	11	6	1	—	—	2	115
Lewisham	79,903	489	321	24.5	16.1	2.0	39	—	1	4	10	20	—	3	—	1	164
Woolwich	42,309	318	209	30.1	19.8	2.0	21	1	1	3	1	10	—	4	—	1	145
Plumstead	59,233	490	232	33.2	15.7	2.5	37	1	[illegible]	5	8	22	—	—	—	1	102

the thirty-three towns included 50 in London, and 3 each in West Ham, Cardiff, and Leeds. Three fatal cases of small-pox were registered in Birmingham, 2 in West Ham, and 1 in Portsmouth, but not one in London or in any other of the thirty-three large towns. There were 102 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, April 14th, against 85, 81, and 95 at the end of the preceding three weeks; 31 new cases were admitted during the week, against 11 and 26 in the preceding two weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,128, against 2,103, 2,117, and 2,109 at the end of the preceding three weeks: 261 new cases were admitted during the week, against 214 and 255 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday last, April 14th, 897 births and 563 deaths were registered in eight of the principal Scotch towns. The rate of mortality in these towns, which had increased from 18.7 to 21.2 per 1,000 in the preceding three weeks, declined to 19.7 last week, but slightly exceeded the mean rate during the same period in the thirty-three large English towns. Among these Scotch towns the death-rates ranged from 12.5 in Greenock to 20.0 in Glasgow. The zymotic death-rate in these towns averaged 2.2 per 1,000, the highest rates being recorded in Aberdeen and Leith. The 304 deaths registered in Glasgow included 18 from whooping-cough, 5 from diphtheria, and 4 from "fever." Four fatal cases of diphtheria were recorded in Edinburgh, and 1 death from small-pox occurred in Leith.

TENURE OF OFFICE BY SANITARY INSPECTORS.

Attention has recently been directed in the press to the risk of not being re-elected, which it is alleged a sanitary inspector, who conscientiously performs his duties, incurs if he chances to engender ill-feelings by running counter to vested interests. The case of a sanitary inspector who was "not re-elected because he attempted to do his duty" is alluded to, and it is said that sanitary inspectors not unnaturally complain that they have no protection. Medical officers of health, it is added, are no doubt important functionaries, but it is hinted that they should not enjoy privileges which are denied to the sanitary inspector.

Section 108 of the Public Health (London) Act, 1891, however, gives the Local Government Board control over tenure of office in respect of new appointments "of every medical officer of health and sanitary inspector." It is true that Subsection 2 (*b*) which deals with the removal of the medical officer of health being subject to the consent of the Local Government Board, does not apply to the sanitary inspector. The proposal originally was to include that officer, but the words "sanitary inspector" were omitted from the Bill in the House of Lords. Subsection 2 (*c*) again puts the medical officer of health on a different footing to the sanitary inspector, providing that he shall not be appointed for a limited period only.

The sanitary inspector undoubtedly requires to be adequately protected, but it is not clear that Section 108, Subsection 1, does not fairly meet the case. Assuming that the sanitary inspector, who was not re-elected, was a sufferer by reason of the fact that "he attempted to do his duty," it may be presumed that his was not an appointment made under the terms of Section 108 of the Public Health (London) Act, 1891.

THE REMOVAL OF INFECTIOUS CASES.

The wholesome and necessary clause in the Public Health Act which forbids the removal of any person suffering from infectious disease in a public conveyance is stringent enough and perfectly intelligible, but it seems nevertheless from a case reported by Dr. Dudfield, M.O.H. for Kensington, to be not always understood. It appears that a child suffering from scarlatina was removed in a cab from Charing Cross Hospital, and the statement of its parents, who are foreigners, is that they were advised at the hospital to drive her home, previously telling the driver, which they did. The resident medical officer of the hospital states that it was the parents of the sufferer who suggested taking a cab, and adds: "I and one of my colleagues then told them, in the presence of the ward sister, that if they did this they must see that the cab was disinfected afterwards, and pay for the same, or they would be liable to a penalty. Having done this, we felt we were relieved from all further responsibility." As a fact, the cab appears not to have been disinfected, and its number is unknown. Though it is true the driver or owner is bound to give notice that he has carried an infected person as soon as the circumstances comes to his knowledge, with a view to the vehicle being properly disinfected, the carrying of such persons knowingly renders both hirer and driver liable to a penalty of £10. Dr. Dudfield expresses his surprise that the hospital authorities should not have known that for the sum of 5s. (or, with the services of a nurse, 7s. 6d.) an ambulance may be obtained at any hour of the day or night from the Asylums Board for the conveyance of an infectious person to or from any part of the metropolis.

PREVENTION BETTER THAN CURE.

The conduct of the clerk to the West Bromwich Board of Guardians has been called in question in respect of an act for which the constituent districts of the union may well thank him. The board having decided to issue bills with the view of stamping out small-pox, he very wisely inserted those striking facts which have been forthcoming from the experience of Birmingham during last year. The Finance Committee have protested against the cost incurred, £7 5s. One member going so far as to hint that disease had been imported by the medium of bill-posting. When shall we be emancipated from the thraldom of the Poor-law bodies as health administrators in the matter of small-pox prevention? Here is West Bromwich actually cavilling at the expenditure of a few pounds in a manner which in Birmingham has happily led to hundreds of persons seeking vaccination and revaccination, and by those means sparing themselves possible suffering and death, and their local rates from the serious burden which each additional case of small-pox entails. What has achieved such excellent results in Birmingham need not fail in West Bromwich; and the laying out of that £7 5s. may prove to have been a matter of the truest economy.

COMBINED DRAINS.

The difficulties of the vestries in dealing under the Public Health Act with combined drainage, or drains through which more than one house discharges its sewage into the sewers, have become so serious that a number of them have decided, after an exchange of views, to call a conference at Holborn Town Hall on May 17th, to consider what action can be taken in the direction of obtaining an alteration of the law. The conference is convened by Mr. Matthew Hale, Clerk to the Holborn District Board of Works, and each vestry is asked to send two delegates.

THE ARSENIC POISONING CASES AT GLOSSOP.

On April 13th Mr. Davies resumed the inquiry into the cause of the death of Tom Fox, of Wood Street, and Henry Pattersby, of Dyke Street, Glossop, who met their deaths from arsenic poisoning whilst following their employment in the chemical department of the Dover Paper Mills, Glossop, belonging to Captain Partington. It appeared that the deceased had been engaged in boiling hydrochloric acid for the manufacture of tinfoil paper, and had died from inhaling arsenic fumes. Enoch Goldthorpe and Wright Anelay, two other workmen who had been ill from the same cause, gave evidence as to assisting in the boiling of the acid and tin. The jury found that the men had died from the effects of arsenic poisoning caused by inhaling the fumes of the acid, which contained an excessive quantity of arsenic and ought not to have been sent out by the United Alkaline Company in that condition; they further recommended that in future each mug should be filled separately, and covered before another was filled, and that the men engaged in boiling acid be provided with respirators.

THE NEWTON ABBOTT SCANDAL.

The inquiry held by the Local Government Board into the allegations brought against the management of the Newton Abbott Workhouse, to which we drew attention in the British Medical Journal of March 31st, has come to a close, and we await with considerable interest the decision of the Board. The evidence given by the inmates, the nurse, the medical men, and by several of the guardians, not only bears out everything we have said on the subject, but is sufficient to justify even stronger expressions of indignation at a system which allows the perpetuation of such cruelties and indignities on the sick and the infirm.

We will not enter further into the miserable details of neglect and ill-treatment spoken to in the evidence until we hear the conclusions arrived at by the Board, but, in the meanwhile, we feel bound to draw attention to the fact that the sworn statement made by Nurse Hinton, which had been forwarded to the Local Government Board, and into the truth of which this inquiry was held, was but the culmination of a long series of charges which had been made against the management time after time by jury, by coroner, by a reforming minority among the guardians themselves, and by the press, and we cannot but regret that the scope of the inquiry was so narrowed down to the exact charges contained in the nurse's statement that in effect it became an investigation into her veracity rather than into the condition of the workhouse. It came out clearly enough in the evidence that from the moment of the nurse's advent there was a feeling in the house that things would have to be altered.

The most serious and important portions of her evidence therefore had to do with the condition of affairs going on when she arrived, and the refusal to admit any evidence as to the state of things existing before her arrival, things of which she saw just the end, would seem to an ordinary mind not merely to shut out important corroborative evidence as to the truth of her statement, but entirely to destroy the utility of the inquiry so far as it might be a means of eliciting the truth as to the condition of the workhouse. The public cares little about the exact accuracy of Nurse Hinton's statement, and if she has exaggerated a little in her indignation would readily forgive her. What the public really does want to know is whether the charges of cruelty and harsh treatment, which have been made by responsible persons for months past, and of which the nurse's statement is but the finishing touch, are substantially true or not, and, if true, how is it possible that such systematic abuses of authority could go on unchecked under the eye of the guardians of the poor, and of inspectors specially appointed by the Local Government Board to prevent such things taking place.

A DISPUTED DIAGNOSIS.

We have received from Dr. Kirkland a copy of correspondence which has passed between himself and the officers of the local authority of the Burgh of Airdrie. It appears that Dr. Laird, who is Dr. Kirkland's qualified assistant, gave a written certificate that a boy, living in a one-room cellar tenement, was suffering from enteric fever and ought to be removed to hospital. The medical officer of health thereupon visited the patient next day, and told the friends that the case was not one of enteric fever, but omitted to communicate with Dr. Kirkland or his assistant. The original diagnosis was confirmed by Dr. Kirkland and another practitioner. In the course of a long and somewhat one-sided correspondence which ensued, Dr. Kirkland endeavoured in vain to obtain from the town clerk, the medical officer of health, the chief constable (!), or the sanitary inspector any explanation of the very unusual course which had been adopted in this case. There seems to have been neither admission nor denial of the specific points upon which explanation was demanded, but a somewhat inconsistent offer was made to take the patient to hospital if a fresh certificate were given. There may be points essential to the proper understanding of the case of which we know nothing, but at all events there should be little hesitation in answering in the negative the question which Dr. Kirkland repeatedly put, and which the official replies as steadily evaded, namely, Is it or is it not within the province of the medical officer of health to examine patients in cases such as the above, and to criticise the diagnosis without intimation to or conference with the medical attendant? Somewhat similar points arise from time to time under the Notification Act, which by the way was not in force at Airdrie at the time. If there are special reasons which justify the action of the authorities in this matter, they do not appear in the correspondence which has been sent to us, and in

any case it would have been more judicious and courteous to state them frankly in reply to Dr. Kirkland. The latter, and his assistant Dr. Laird, seem to have just ground for complaint.

INSANITARY AREAS IN SOUTHAMPTON.[1]

A REPORT has been prepared in accordance with a resolution of the Southampton Town Council passed on January 14th, 1891, instructing the borough surveyor and medical officer of health to bring up a report setting forth in full the number of dilapidated houses or tenements or outbuildings within the borough, together with the names of the owners thereof. In consequence of the illness of the borough surveyor a further resolution was passed in March, 1892, requesting the medical officer of health to furnish the report. The report contains a short epitome of the Housing of the Working Classes Act, and defines three large areas and twenty-six small ones, which, it is suggested, might be dealt with under the Act. It moreover gives details concerning particular courts and alleys, refers to the thirteen common lodging houses in the borough, and alludes to the effects of residence in the districts described. The total number of houses reported upon is 659, with a resident population of 2,599, an average of 441.4 persons to the acre.

The appendix contains eight outlined plans, which have been prepared from the Ordnance maps, and there are six sheets which present in tabular form a detailed statement as to each individual house reported upon. The report is a most valuable one and the material dealt with in the appendix must represent an enormous amount of labour. It is remarkable, however, that in so carefully and elaborately compiled a statement no reference should be made to mortality statistics.

A picture is given of the insanitary conditions obtaining in Southampton which will be studied with much interest by medical officers of health throughout the country. It is most valuable as a record of a state of things which it is to be hoped will ere long be a matter of past history. The defects described in such minute detail are almost all of a serious character, and the impression derived from consideration of them as a whole is that a very large amount of reconstruction and rearrangement is needed in Southampton.

Many of the courts which appear in the list are the property of the corporation. Of the 659 houses 427 are without backyards, and the majority are dependent for their water supply upon a common stand pipe in the court. A list of back to back houses is given and also a list of what are termed obstructive buildings. With regard to the latter a wide interpretation appears to be given to the expression "obstructive building," and it is not by any means clear that Section 38 of the Housing Act would be held to include many of the houses which appear in the list.

The report is most valuable as an epitome of existing conditions. If at some future time the medical officer of health presents a further report dealing with the manner in which improvement has been brought about the two productions will form a most instructive contribution to the literature dealing with the problem of the management of unhealthy areas.

THE TEES EPIDEMICS.

MR. R. TAYLOR MANSON, L.R.C.P., M.R.C.S., of Darlington, whose name will be familiar to those who have studied Dr. Barry's Tees Report, informs us that he revisited Barnard Castle last month, and found abundant examples of pollution of the river by sewage and other abominations, the Tees being still "relied upon, as it has been for centuries, to do the part of a scavenger's cart, so that from 1887 to 1894 the defilement of the drinking water supplied to Darlington has been continuously going on in a greater or minor degree." Mr. Taylor Manson states that an enteric epidemic occurred in Darlington in 1893, 123 cases being reported between August and November. He quotes with approval the opinion of the medical officer of health that the 1893 outbreak was diffused by means of dust and flies; adding, however, a reminder that the still polluted river may have had a share in its causation. As regards the 1890-91 epidemics, he makes the interesting note that in Darlington the localities most affected had a subsoil of heavy glacial clay, while those which conspicuously escaped were on porous gravel or sand.

CORNWALL COUNTY COUNCIL.

THE Launceston rural sanitary authority have mutinied against the Cornwall County Council to the extent of determining by formal resolution not to furnish copies of the medical officer's reports. The reasons alleged are that the county authority refuse to pay the usual moiety of "an officer's salary" (query, what officer's salary?), and, moreover, "misrepresent the sanitary condition of the district" in the tabulated county returns. Evidently the vigorous sanitary propaganda initiated and carried on by the chairman of the Cornwall Sanitary Committee is by no means welcome in some of the districts honoured by a place on his "black list." A deadlock of this kind ought not to be possible, but it is very doubtful whether the present law provides any remedy, even if appeal be made to Cæsar at Whitehall.

DISEASE ISOLATION.

IN reply to an inquiry by the Guardians of the Clutton Union, addressed to the Local Government Board, as to the relative duties of boards of guardians and sanitary authorities in connection with the isolation of cases of infectious disease, the Central Board have given a pronouncement on the question. Their letter states that where, in the opinion of the board of guardians, a person was not destitute, and his removal to a hospital was required only for the purpose of isolation, the sanitary authority of the district, and not the guardians, should deal with the case under the power conferred upon them by the Public Health Act 1875. If, however, a person attacked by infectious disease were destitute, either wholly or in part, of the means of obtaining all such necessaries (including medical attendance, nursing, and accommodation) as the case might require, it seemed to the Local Government Board that it was the duty of the guardians to give the relief that was needed, and they considered that the guardians, in determining the form in which relief should be provided, should have due regard, not only to the needs of the patient, but also to the prevention of the spread of the disease.

[1] *A Detailed Report of Dilapidated and Unhealthy Houses in the Borough of Southampton.* Prepared by order of the Southampton Town Council by A. Wellesley Harris, Medical Officer of Health, with appendix of tables and plans. Southampton. 1893.

WHITE LEAD COMMITTEE.

THE minutes of evidence taken before the Departmental Committee on the various lead industries have now been published. The evidence is given *verbatim*, and the volume contains a digest of the evidence of each witness, and an index to the evidence given on each subject. The recommendations of the Committee, already published, were summarised in the BRITISH MEDICAL JOURNAL of January 6th, 1894, page 33.

FEE FOR PAUPER LUNACY CERTIFICATES.

A MEMBER of the British Medical Association, whose case is stated in the BRITISH MEDICAL JOURNAL of March 25th, p. 674, and November 18th, 1893, p. 1135, wishes to inform our readers that he has not succeeded in obtaining the fee in question, as the Local Government Board has decided that it is not empowered to extend the time for the payment of fees for lunacy certificates when a period of more than twelve months has elapsed since the order was made by the justice who acted in the case.

MEDICAL CERTIFICATES FOR RETENTION OF LUNATICS IN WORKHOUSES.

JUNIUS writes to ask whether a workhouse medical officer is entitled to a fee for giving the certificate required by the Lunacy Act, 1890, to enable harmless lunatics to be retained in a workhouse?

*** There is no provision for the payment of any fee to the medical officer of a workhouse for this statutory duty.

RETIREMENT OF PUBLIC VACCINATOR.

W. S.—Since W. S. will have held office for two years following upon the last biennial inspection of public vaccination in his union, we would suggest that he lay the facts of his case before the Local Government Board for consideration when next inspecting his present district.

SPECIAL CERTIFICATES IN PAUPER PRACTICE.

INQUIRER, who is a district medical officer, asks whether he is entitled to a fee of 3s. 6d. which he has demanded for examining, at the request of the guardians, a healthy child, whose father is in receipt of relief, and certifying as to fitness for admission to the Church of England Home for Waifs and Strays.

*** In our opinion it is no part of the duty of a district medical officer to give this kind of certificate as it is required by the managers of the institution named, and is not for the guidance of the guardians in the performance of their official duties. The fee appears a proper one for a certificate of this character, but it is doubtful whether it could be recovered. Should the guardians persist in declining to pay this reasonable remuneration, we suggest that our correspondent should in future decline to give any such certificates.

COST OF INFECTIOUS HOSPITAL.

M. O. H. writes: Our local authorities are contemplating erecting an infectious hospital of about twenty beds. Can you give me any estimate of about the cost, the number of separate wards, the best form, and in fact any information useful to lay before the board? Can I refer to any recent book concerning this subject?

*** Our correspondent should procure a copy of the Memorandum on the Provision of Isolation Hospital Accommodation, issued by the Local Government Board (Eyre and Spottiswoode, 2d.), which includes model plans of hospital buildings for 4, 8 and 12 beds. The local authority will be well advised if they proceed to their hospital proposals by aid of the Local Government Board. The cost of a hospital for twenty beds would doubtless be something over £200 a bed, if of a really good class. Nothing is more undesirable than a cheaply-constructed permanent building. Reference is given in the above memorandum to the standard official work on hospitals.

PRESENTATIONS TO THE LIVERPOOL MEDICAL INSTITUTION.—At the annual meeting Dr. John Cameron, a former President, presented a fine bronze medallion of Sir Benjamin Brodie, and engravings of Drs. De Vitre, Currie (the biographer of Burns) and Chalmers. At a more recent meeting Dr. Fingland presented engravings of Drs. Rarth and Sydenham. The Medical Institution has now a good collection of portraits, which are hung in the Upper Library.

THE Marquis of Zetland has consented to take the chair at the festival dinner of the East London Hospital for Children, to be held in the Whitehall Rooms, Hôtel Métropole, on Monday, May 17th.

CREMATION AT MANCHESTER.—Mr. Henry Simon, chairman of the Manchester Cremation Society, writes in a contemporary that since the recent starting of the crematorium at Manchester fifty cremations have been carried out there.

MEDICAL NEWS.

Donations.—The Great Northern Central Hospital has receive a further grant of £40 from the Clothworkers' Company.—The Worshipful Company of Clothworkers has sent a donation of £60 to the Royal Hospital for Diseases of the Chest, City Road.

The Chesterfield Guardians have decided to allow all inmates over 60 years, who have been accustomed to smoke, an ounce of tobacco a week, and have rescinded a previous resolution that the allowance should be at the discretion of the medical officer. The cost was estimated at about £1 a week.

Royal Edinburgh Hospital for Sick Children.—The directors have appointed Messrs. Robert Hutchison, M.B., C.M., and George Elder, M.B., C.M., to be resident physicians in the hospital for a period of six months beginning on May 1st.

The late Dr. S. J. Moore, of Glasgow, has bequeathed the residue of his estate after the payment of other legacies, etc., to found a convalescent home for nurses, to be called by his name. The amount of the bequest is likely to be about £45,000.

Post-Graduate Courses in Bacteriology.—Vacation courses in bacteriology, pathology, and hygiene have been arranged by the London Post-Graduate Committee and will commence on Monday, April 23rd, and Friday, May 4th. Further information can be obtained on application to Dr. Fletcher Little, 32, Harley Street, W.

Miss L. G. Smith, Lecturer and Medallist of the National Health Society, has been chosen by the London County Council as an Inspector under the Infant Life Protection and Shop Hours Acts. There were twenty-three applicants for the post. Miss Smith is the first woman inspector appointed under the Acts.

The Sheffield Board of Guardians have decided to appoint an additional resident medical officer to the Workhouse Infirmary, and that a lady should fill the post. She will be junior resident—the "person appointed to undertake the duties of dispensing as well as the general assistance in the hospitals." The salary is to be £50 a year.

Medical Magistrates.—At the sitting of the North Riding Quarter Sessions, held at Northallerton on April 5th, Dr. Henry Edward Brameld and Dr. William Waters Stainthorpe, both of Saltburn-by-the-Sea, qualified as Justices of the Peace. Mr. Roger Portington Goodworth, of Winterton, Doncaster, has been appointed a Justice of the Peace for the parts of Lindsey.

West Kent Medico-Chirurgical Society.—A meeting of this Society was held on April 6th, Dr. Macgavin, President, in the chair. Dr. Harry Campbell opened a discussion on Headache. Dr. Pitt read a paper on the Pathology of Headache. Dr. Herschell read a paper on the Headaches of Dyspepsia. Dr. Ezard read a paper on the Headaches of Nasal Disease. Dr. Ernest Clarke read a paper on the Headache of Astigmatism.

One of the course of lectures on archæology at University College, London, this term has a special interest at the present moment, since it deals with the Ruins and Remains of Rome. The course, which commences on Tuesday, April 24th, and will be continued on the six succeeding Tuesdays at 11.30 A.M., will be given by E. M. Bonus, late scholar of New College, Oxford. The fee for the course is one guinea, but the first lecture will be free.

Case of Catalepsy.—Recently a young man named Leary was sent back from America by the United States Government to his home at Kinsale in a state of stupor, in charge of one of the sailors. His eyes remain closed, and he continues in any position in which he may be placed. The sailor who accompanied him stated that with the exception of half a cup of tea which was one day forced upon him, he had partaken of neither food nor drink for the previous fifteen days. He has been removed to the Kinsale Workhouse.

Wigan Medical Society.—A meeting of this Society was held on April 12th, Mr. E. H. Monks, jun., President, in the chair. The President delivered an address on Puerperal Eclampsia, which was followed by a discussion, in which Messrs. Brady, Rees, Benson, Prosser White, Monks, Lurion, and Lowe took part. Dr. Garry, of Liverpool, read a paper on the Therapeutic Value of Electricity in Gynæcology, for which a hearty vote of thanks was accorded him.

Patients for M. Pasteur.—There have of late been several cases of rabies in Garston, Woolton, and district, including two singular cases at Speke. The first of these occurred on the farm of a gentleman residing in that parish, a cow having to be slaughtered in consequence of having been infected by the disease, and the second was a case of a cat, which was also killed. In both these cases it was believed that the animals had been bitten by mad dogs, several of which had been killed in Speke. The cat belonged to a teamsman named John Taylor, and it bit him savagely on the arm, the injury being so serious that the man has been sent to Paris to be attended by M. Pasteur.

The Etiology and Early Diagnosis of Diphtheria.—We are asked to state that a special discussion on diphtheria will be commenced at the meeting of the Hunterian Society (at the London Institution, 1, Finsbury Circus) on April 25th, at 8.30 P.M., and continued on May 9th. The discussion will be opened by Dr. Newton Pitt, who will deal with the question of sanitation and that of the diseases of the lower animals. Dr. Goodall, of the Homerton Fever Hospital, will treat of the clinical relations of diphtheria to other diseases of the throat, and its occurrence as a complication of infectious diseases such as scarlet fever and measles. The subject of membranous inflammations and the characteristics of diphtheria as a disease will be treated by Dr. Sidney Martin, whose remarks will be illustrated by lantern slides: while Dr. Washbourn will discuss the early diagnosis of diphtheria with special reference to bacteriology. Dr. Hingston Fox will show diagrams illustrating the mortality from fever contrasted with that from other specific diseases, and among others who will probably take part in the discussion are Dr. Thorne Thorne, C.B., Dr. George Turner, and Mr. Shadwell, M.O.H. for Walthamstow.

MEDICAL VACANCIES.

The following vacancies are announced:

BALROTHERY UNION, Swords Dispensary.—Medical Officer. Salary, £125 per annum, with £20 16s. 8d. as Medical Officer of Health, together with registration and vaccination fees. Applications to Mr. Michael Long, Honorary Secretary. Election on May 1st

BOROUGH OF EASTBOURNE.—Medical Officer of Health. Salary, commencing at £250 per annum, and increasing during satisfactory service by £25 yearly to £350. He will be required to act as Medical Officer to the Sanatorium and as Police Surgeon, for which additional sums of £50 and £25 per annum respectively will be paid. Applications to H. West Forvargue, Town Clerk, Town Hall, Eastbourne, by April 24th.

CHORLTON-UPON-MEDLOCK DISPENSARY, Manchester.—Resident House-Surgeon, doubly qualified and unmarried. Salary, £100 per annum, with furnished rooms and attendance. Applications to the Hon. Secretary by April 20th.

CITY OF LIVERPOOL INFECTIOUS DISEASES HOSPITAL, Parkhill.—Resident Medical Officer, doubly qualified. Salary, £100 per annum, increasing £10 yearly to £120, with board, washing, and lodging at the hospital. Applications, endorsed "Resident Medical Officer," to be addressed to the Chairman of the Port Sanitary and Hospitals Committee under cover to the Town Clerk, Municipal Offices, Liverpool, by April 23rd.

DENTAL HOSPITAL OF LONDON AND LONDON SCHOOL OF DENTAL SURGERY, Leicester Square. Demonstrator. Honorarium, £50 per annum. Applications to Morton Smale, Dean, by May 14th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Two Assistant Anæsthetists. Applications to J. Francis Pink, Secretary, by May 14th.

DEWSBURY AND DISTRICT GENERAL INFIRMARY.—House-Surgeon, doubly qualified. Salary, commencing at £80 per annum, with board and residence. Applications, endorsed "House-Surgeon," to the Chairman of House Committee, Infirmary, Dewsbury, by May 1st.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—House-Surgeon. Board and residence provided, no salary. Applications to Thomas Hayes, Secretary, by May 5th.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, £120 per annum, with furnished house, rent and taxes free; also coal, light, water, and cleaning, or, in lieu thereof, £20 per annum. Knowledge of Welsh desirable. Applications to W. T. Cole, Secretary, Board Room, Bagillt Street, Holywell, by May 15th.

GENERAL HOSPITAL, Birmingham.—Assistant House-Surgeon. Appointment for six months. Residence, board, and washing provided. No salary. Applications to the House-Governor by April 28th.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway Road, N.—House-Physician. Salary, £60 per annum, with board and lodging in the hospital. Applications to the Secretary by April 23rd.

LONDON HOSPITAL, Whitechapel, E.—Medical Registrar. Salary, £100 per annum. Applications to the House Governor by May 5th.

MANCHESTER ROYAL INFIRMARY.—Assistant Medical Officer at the Monsall Fever Hospital, unmarried. Salary, £100 per annum, with board and residence. Applications to the Chairman of the Board, Royal Infirmary, Manchester, by April 21st.

MARTLEY UNION.—District Medical Officer and Public Vaccinator. Salary, £50 per annum and the prescribed extra fees and statutory allowance for vaccination. Applications to A. W. Knott, Clerk, 14, Foregate Street, Worcester, by April 26th.

NORTH STAFFORDSHIRE INFIRMARY AND EYE HOSPITAL, Hartshill, Stoke-upon-Trent. Assistant House-Surgeon. Board, apartments, and washing provided. Applications to the Secretary by May 1st.

NORTH-WEST LONDON HOSPITAL, Kentish Town Road, N.W.—Resident Medical Officer and Assistant Resident Medical Officer. Each appointment for six months. Salary of £50 attached to the senior post. Applications to Alfred Craske, Secretary, by April 27th.

PARISH OF ST. MARY, STOKE NEWINGTON.—Medical Officer of Health. Salary, £200 per annum. No private practice allowed. Applications, sealed and endorsed "Medical Officer of Health," to Geo. Webb, Clerk, Vestry Offices, 126, Church Street, N., by April 26th.

ROYAL VICTORIA HOSPITAL, Bournemouth.—House-Surgeon and Secretary. Salary, £100 per annum, with board. Applications to the Chairman of Committee by May 1st.

ST. ANDREW'S HOSPITAL, Northampton.—Junior Assistant Medical Officer, doubly qualified. Salary, £150 per annum, with apartments, board, and washing. Applications to the Medical Superintendent by April 25th.

ST. GEORGE'S AND ST. JAMES'S DISPENSARY, 60, King Street, Regent Street, W.—Physician for the Diseases of Women and Children. Applications to the Secretary by April 23rd.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck Street, Cavendish Square, W.—Honorary Physician. Applications to the Secretary by April 30th.

SALFORD ROYAL HOSPITAL.—Honorary Medical Officer for the Pendleton Branch Dispensary, doubly qualified. Applications to the Secretary by April 28th.

WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.—Surgical Registrar. Must be F. or M.R.C.S.Eng. Appointment for twelve months. Salary, £40 per annum. Applications to Sidney M. Quennell, Secretary, by May 22nd.

WIRRALL CHILDREN'S HOSPITAL, Woodchurch Road, Birkenhead.—Resident House-Surgeon. Salary, £50 per annum, with board, lodging on the premises and washing. Applications to P. W. Atkin, Honorary Secretary, 25, Lord Street, Liverpool, by April 24th.

MEDICAL APPOINTMENTS.

BAILEY, James Harold, M.B., Ch.B.Vict., appointed Junior House-Surgeon to the Bolton Infirmary.

BALFOUR, J. M., M.B., C.M.Edin., reappointed Medical Officer of Health to the Prestcigne Local Board.

BURDWOOD, James Watson, L.F.P.S.Glasg., L.M., L.S.A.Lond., reappointed Medical Officer of Health for the Bourne Rural Sanitary District.

CAMPBELL, P., L.R.C.P., L.R.C.S.Edin., appointed Medical Officer of Health for the Pontypool Rural Sanitary District, *vice* E. Stanley Wood, L.R.C.P.I., M.R.C.S.Eng.

CLEAVER, Wm. Fidler, L.R.C.P.Lond., M.R.C.S.Eng., reappointed Medical Officer of Health to the Phillack Urban Sanitary District.

COHEN, G. A., M.B., C.M., appointed Resident Medical Officer to the Hospital for Heart Disease and Paralysis, Soho Square.

COVEY, W. J., M.R.C.S., L.R.C.P.Lond., appointed Medical Officer to the Infirmary of the Parish of St. Pancras.

DENT, Ernest A., M.B., C.M., appointed Assistant House-Surgeon to the Devonshire Hospital and Buxton Bath Charity.

FAWSETT, Mr. F., appointed Medical Officer for the Fourth District of the Chailey Union, *vice* L. Smythe, M.D.Glasg., resigned.

GREY, Thomas Campbell, F.R.C.S.Eng., L.R.C.P.Lond., appointed Surgeon to the Union Steamship Company.

LAWSON, T. C., M.R.C.S., appointed Medical Officer for the Ombersley District of the Droitwich Union, *vice* J. H. Hughes, L.R.C.P.Lond., resigned.

MACPHERSON, Dr. J. S., appointed Parochial Medical Officer for Eskdalemuir.

NEWTON, Mr. F. S., appointed Medical Officer for the Teddington District of the Kingston Union, *vice* D. F. B. Cotes, M.R.C.S.Eng., resigned.

ROBERTS, Francis H., L.R.C.P.Lond., M.R.C.S.Eng., reappointed Medical Officer of Health to the Llandrindod Wells Urban Sanitary District.

SLANE, Dr., appointed Medical Officer for the Nafferton District of the Driffield Union, *vice* Robert Savile, M.D.Edin.

THOMSON, Alfred E., M.D., M.Ch., M.R.C.S., appointed Senior House-Surgeon to the Kimberley Hospital.

THOMSON, Dr., reappointed Deputy Medical Officer of Health to the Penrith Rural Sanitary Authority.

UBSDELL, Henry, M.R.C.S.Eng., appointed Medical Officer of Health to the Buckfastleigh Urban Sanitary District.

WATERS, A. J. G., L.R.C.P.Edin., M.R.C.S.Eng., appointed Medical Officer for the Third District of the North Witchford Union, *vice* C. P. O'Connor, M.D.Durh., resigned.

WARRINGTON, W. B., M.B., B.Ch.Vict., M.B.Lond., appointed Junior House-Physician to the National Hospital for Paralysed and Epileptic, Queen Square, Bloomsbury, *vice* A. J. Whiting, M.D., promoted.

WHITAKER, George Hy., L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health to the Horwich Urban Sanitary District.

WHITING, A. J., M.D., C.M.Edin., appointed Senior House-Physician to the National Hospital for the Paralysed and Epileptic, Queen Square, Bloomsbury, *vice* G. E. M. Wood, M.B.Durh., resigned.

WILDING, Walter F. W., L.R.C.P.Lond., M.R.C.S.Eng., reappointed Medical Officer of Health to the Hindley Local Board.

WILKINS, Dr. R. H., appointed Medical Officer for the Fifth (Wickhambrook) District of the Risbridge Union, *vice* R. W. Bateman, M.R.C.S. Eng., resigned.

DIARY FOR NEXT WEEK.

MONDAY.

PARKES MUSEUM, 74A, Margaret Street, W., 8.30 P.M.—Lectures on Meteorology in Relation to Hygiene. I. Instruments and Observations and their Representation. By Mr. G. J. Symons.

TUESDAY.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M.—Dr. Ernst Michels: A Case of Extraperitoneal Vesical Hernia (communicated by Mr. R. W. Parker). Mr. J. N. C. Davies-Colley: An Operation for the Cure of Cleft of the Hard and Soft Palate.

THE CLINICAL MUSEUM, 211, Great Portland Street.—Open at 2, Lecture at 4.

WEDNESDAY.

HUNTERIAN SOCIETY, 8.30 P.M.—Discussion on Diphtheria, in which Dr. Newton Pitt, Dr. Goodall, Dr. Sidney Martin, Dr. Washbourn, Dr. Hingston Fox, Dr. George Turner, Dr. Thorne Thorne, and Mr. St. Clair Shadwell will take part.

THURSDAY.

PARKES MUSEUM, 74A, Margaret Street, W., 8.30 P.M.—Lectures on Meteorology in Relation to Hygiene. II. Temperature of Air, Soil, and Water. By Dr. H. R. Mill.

FRIDAY.

CLINICAL SOCIETY OF LONDON.—Living specimens at 8 P.M. by Drs. Mott, Habershon, Rose Bradford, Hale White, Carr, and Mr. R. J. H. Scott. Papers at 9 P.M.: Mr. Barwell: A Mode of Making Extension in Fractures of the Femur. Dr. Lauder Brunton and Mr. Watson Cheyne: A case of Intestinal Obstruction due to Constriction of the Bowel after Appendicitis. Mr. Silcock: A case of Acute Intestinal Obstruction and Peritonitis, Laparotomy, Incision and Drainage of Small Intestine above Obstruction, Cure.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTH.

DICK.—At Birmingham, on April 15th, the wife of Surgeon-Major W. Dick, M.B., F.R.C.S.Ed., Army Medical Staff, of a son.

MARRIAGES.

BADOCK—ANGELO.—On March 12th, at Rottnest Island, Western Australia, by the Rev. R. Hanlin, Arthur Badock, M.B., B.S., J.P., Medical Officer to the Ashburton District, Western Australia, second son of J. Barlow Badock, Esq., F.R.I.B.A., of Overcliff, Ulundi Road, Blackheath, to Violet Flora Emily, second daughter of Lieutenant-Colonel E. F. Angelo, late Royal Scots.

PEARSE—STEINMETZ.—On March 26th, at St. James's Church, Jagersfontein, Orange Free State, South Africa, by the Rev. J. Thorne, vicar, assisted by the Rev. F. R. Harbord, R. E. Franklyn Pearse, M.R.C.S.Eng., L.R.C.P.Lond., of Bedford, England, to Mildred Josephine Felicita Steinmetz.

REECE—PERKINS.—On April 18th, at Whitchurch, Edgware, by the Rev. J. C. Saunders, M.A., chaplain of Downing College, Cambridge, assisted by the Rev. J. B. Norman, M.A., rector of Whitchurch, Richard James Reece, M.D., only son of the late George Reece, of Kensington, to Ada Eleanor, only child of J. Watt Perkins, of Edgware.

STURROCK—WILSON.—At Bontaskin, Falkirk, on the 11th inst., by the Rev. Alex. Paterson, M.A., assisted by the Rev. James Leask, M.A., of Broughty Ferry, and the Rev. T. M. Laurie, Glasgow, John Frederick Sturrock, M.B., Broughty Ferry, to Agnes, only daughter of James Wilson, of Bontaskin. (No cards.) At Homewood, Broughty Ferry, after May 10th.

DEATHS.

DOW.—At Comely Park House, Dunfermline, Fife, N.B., on the 13th inst., William Oliphant Dow, M.B. and C.M.Edin., aged 33 years.

HASSALL.—On April 9th, at San Remo, Italy, Arthur Hill Hassall, M.D. Lond., M.R.C.P.Lond., aged 76.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

Communications for the Current Week's Journal should reach the Office not later than Midday Post on Wednesday. Telegrams can be Received on Thursday Morning.

Communications respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the Journal, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the Journal be addressed to the Editor at the Office of the Journal, and not to his private house.

Authors desiring reprints of their articles published in the British Medical Journal are requested to communicate beforehand with the Manager, 429, Strand, W.C.

Correspondents who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

Correspondents not answered are requested to look to the Notices to Correspondents of the following week.

Manuscripts forwarded to the Office of this Journal cannot under any circumstances be Returned.

Public Health Department.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* British Medical Journal *are devoted will be found under their respective headings.*

QUERIES.

Secret Medicines.

Enquirer asks: Could any of the readers of the British Medical Journal say what is the basis and composition of "Dr. Oscar Lanyan's antiepileptique?"

Life Assurance.

New Member asks: Is there any office which makes a speciality of the medical profession?

*** The Clerical, Medical, and General Life Assurance Society has a large connection among the medical profession. The Rock Life Assurance Company offers special terms to those who apply through the Medical Sickness Society, 33, Chancery Lane, W.C.

Gleet and Gonorrhœal Infection.

Surgeon-Captain, I.M.S., asks: Should a patient in the following condition be told not to marry? Gonorrhœa was contracted two years ago. For the last six months he has had at intervals "white flakes, banners, and threads," as described by Mr. E. Hurry Fenwick in the British Medical Journal of January 6th, in the morning urine. For a week or ten days they may be entirely absent, but if he drinks beer or has slight dyspepsia, three or four appear; whisky does not increase their number. On passing a full-sized sound slight burning is noticed at the fossa navicularis, halfway towards the bulb, at the bulb, and also at the entrance to the bladder. Its passage is followed by an increase of threads, and a slightly opalescent discharge for a few hours, but without burning or micturition. Complete abstinence from liquors for three months has not kept the urine free of threads, etc., at all times.

ANSWERS.

Justus had better call the attention of the authorities of the College from which the gentleman in question holds his diplomas.

Dr. S. T., Bohemia.—1. A foreign graduate is not admitted to "compete for" the degree of M.D.Lond., that is to say, he would be required to pass through all the examinations, including matriculation. 2. The ethical code frequently quoted in these pages is Dr. Styrap's *Code of Medical Ethics*, published by H. K. Lewis (London), price 3s.

L.R.C.P.Ed.—An agreement with regard to the purchase of a practice need not necessarily be prepared by a solicitor to render it binding, if duly signed and stamped; but where, as in this case, a bond is to be given by the vendor restraining him from future practice within a given radius, we think it would be well to have it prepared or approved of by a solicitor, in order that the intentions of the parties may be precisely defined. Contracts in restraint of practice are, we believe, strictly construed.

Fee for Insurance Death Certificate.

Eagle.—The usual fee for a death certificate to enable a claim to be made on a life assurance policy is one guinea. Should the policy be for only a small amount—£200 or less—half a guinea might be asked.

Pruritus Ani.

B. R. writes: Some time since I saw an ointment of lard and quinine advocated for the above (by whom I forget), and having had a most obstinate case to deal with recently, I tried this application, and the result was most satisfactory, immediate relief being obtained. Just as much lard was used as made the application hold together.

Treatment of Galactorrhœa.

Dr. Percy Newell (Crowborough, Sussex) writes to recommend fluid extract of phytolacca decandra, 5 minims three or four times a day, with the application locally to the breasts of an ointment containing ext. phytolaccæ liq., 3j; lanolin, 3ij; or simply strapping with emp. bellad. or emp. ammoniaci et hydrarg. Old women in the country often apply a poultice of the common mint made with boiling water. In two cases it seemed to act as a powerful lactifuge.

Home for Consumptive Patients.

C. R. I.—It is not easy to recommend a "home" that can be depended on for a young man suffering from early phthisis. Several of the medical men at the various health resorts—Bournemouth, Ventnor, and Hastings—take patients into their own houses, and the National Hospital for Consumption at Ventnor and the Bournemouth Sanatorium admit patients at a fixed charge of 10s. a week. No mention is made of the social status of the youth of 20, but, if he has sufficient means, a medical man's family on the South Coast seems indicated.

NOTES, LETTERS, Etc.

Brilliant Teeth.

Mr. N. Stevenson (Wimpole Street, W.) writes: Some Americans are introducing here the practice of inserting diamonds for vulgar display into the front teeth. It is surely enough that our sense of decency and propriety should be so often shocked by unsightly gold crowns and fillings, without being further offended by this new atrocity. I believe it has only just started here, and this, therefore, is the time to denounce it, and my excuse for troubling you.

"Quacks."

The Lady Morgan of my early days, writes Autolycus in the *Pall Mall Gazette*, used to quote the following (supposed) correspondence with the late Dr. Jenner:

"I've despatched, dear Lady Morgan, this scrap of a letter
To say that Miss Charlotte is certainly better.
A regular doctor no longer she lacks,
And therefore I've sent her a couple of quacks."

(With the above note came a couple of wild ducks.)

Lady Morgan's reply:

"Yes, 'twas politic truly, my very good friend,
Thus a couple of quacks your patient to send,
Since there's nothing so likely as quacks, it is plain,
To make work for a regular doctor again."

"Women as Workhouse Doctors."

Liverpool writes: Many a good cause has been ruined by its advocates going too far, and Miss Dickson is doing her best to render her cause ridiculous. Might we beg some married lady doctor to write her a few lines explaining the matter.

The Fingernail in the Removal of Adenoids.

Mr. P. Macleod Yearsley, F.R.C.S.Eng. (Wimpole Street) writes: I see that in your notice of the translation of Gruber's *Textbook of Diseases of the Ear* you express your disagreement with the translator's remark that "when in removing adenoid vegetations the surgeon trusts entirely to his fingernail, recurrence may be said to be the rule rather than the exception." Will you allow me to give you my support against such a statement? For three years I have not used any instrument save that with which Nature has fitted me, a strong index fingernail. In looking through the notes of my cases (both in hospital and in private practice), I find that I have had but one recurrence. The reason I believe to be this. The growths which reappear are simply those which have been prevented from enlarging by the pressure of those removed by operation. I make it my invariable practice, therefore, after getting away all the vegetations which can be felt, to give the naso-pharynx a final scrape or two in order to destroy such points of adenoid tissue as may be left, and might otherwise enlarge and cause a so-called recurrence. Certainly, if the fingernail only is used the operation not only takes less time, but is easier, and therefore is more likely to be thorough in its effects.

The Passage of the Catheter in Prostatic Disease.

Dr. Ralph Stoney (Approach Road, N.E.) writes: Dr. Donovan's method, as he is pleased to call it, is one I have always adopted in prostatic disease, before attempting Mr. Bryant's mode of introducing the finger into the rectum. I have found it very successful in most cases, but I cannot say in all, possibly due to a want of skill on my part in the delicate manipulation required. I have never thought of describing it. I think Dr. Donovan may fairly lay claim to being the first to place this much discussed treatment before the profession.

Epidemic Jaundice.

Dr. W. Hall Calvert (Melrose, N.B.) writes: Dr. Meinert, of Dresden, in his exhaustive paper on this subject, proves that, of 180 cases of which he had knowledge, the vast majority were undoubtedly sequelæ of influenza. A few gave no such history, but, as they occurred simultaneously, I see nothing irrational or contrary to fact in supposing that the former were relapsing cases manifesting jaundice, while the latter were primary cases with similar symptoms. Other writers in the British Medical Journal, from experience of such epidemics, have come to the same conclusion. The general opinion of a considerable number of the faculty, therefore, appears to be that, apart from influenza, there is no such thing as epidemic jaundice. The only statement of Dr. Cullen's demanding attention is the first reason for scepticism, as it is the only one which seriously confutes the relationship between the two diseases. He says: "The epidemic of 1888 took place at a period antecedent to the appearance of influenza in an epidemic form in this country." Now, though influenza was not epidemic in 1888, does this make it impossible for the disease to appear in isolated instances? Every doctor has seen single cases or localised epidemics of an infectious disease appear in a district and yet no extension occur in the form of a general epidemic. Therefore I hold it is impossible to establish scientifically that the epidemic of 1888 was not a peculiar manifestation of influenza determined by local conditions.

Brachial Monoplegia.

Mr. T. L. Pennell, F.R.C.S. (Medical Missionary, Bannu Mission Hospital, North India) writes: Referring to Mr. Thomas's case of monoplegia, in the British Medical Journal of February 24th, the following analogous case now under my treatment may be of interest: A stalwart Afghan, aged about 45, received a blow from a large stone on the left side of his head in a fight two years ago. He was unconscious for about an hour, and aphasic for twenty-four hours; the right arm was paralysed for two days, when a certain amount of power was regained in it. The wound was superficial, and rapidly healed. Now he has a considerable depression of the skull the size of a shilling, half an inch below and slightly in front of the lesion in the case cited. There is marked atrophy of the interossei muscles, and their special movements are absent (the fingers cannot be extended nor adducted nor abducted). The thenar and hypothenar are somewhat smaller than those of the other hand, but the function of those muscles is fairly present; the arm and forearm muscles are unaffected. The fingers, especially on the ulnar side, show a tendency to glossiness; the nails are rougher, and sensation somewhat impaired. He came complaining of pain in the arm and hand of a shooting character, and inability to extend the phalanges. The injury was evidently a very local one, in the lower part of the arm centre, the face being quite unaffected.

Jaundice and Emotional Disturbance.

Dr. E. A. Lubbock (Fulham Road, S.W.) writes: On the evening of March 31st last I delivered a fragile, highly sensitive young lady (by no means hysterical, by the way), a primipara, of a stillborn male child. The "waters," I was informed, had broken and escaped ten days previously. Delivery was instrumental, and was accomplished, while the patient was under chloroform, with some difficulty. Some thirty-six hours after my patient, otherwise doing well, developed jaundice, which speedily became intense. There was no pain, no nausea, and the temperature was normal. The lochia were foul, otherwise there have been no troubles, and to-day, five days since its appearance, the jaundice is beginning to fade. Four of my medical neighbours whom I have asked have never seen a like case, neither has such a one been seen by my old teacher, a gentleman who has been for many years obstetric physician to one of the great London hospitals, so I venture to bring the case to your notice. Was the jaundice due to emotional disturbance?

Sublimed Sulphur in Diphtheria.

Dr. Walter de Watteville (Kingussie) writes: With reference to numerous communications on the above subject which have lately appeared in the British Medical Journal, I wish to add my testimony in favour of the local application of sublimed sulphur in diphtheria. T. G., aged 13, and D. G., aged 12, were both attacked in March last with pharyngeal diphtheria. In addition to the usual constitutional treatment, I applied sublimed sulphur to the throat, partly by means of a brush, partly by an insufflator. In both cases the membrane separated on the fourth day. The nares, which were much affected, were washed out with boracic acid and boroglyceride solution. The first case unfortunately proved suddenly fatal from heart failure, when convalescence had apparently begun; the second case has made a good and uninterrupted recovery, without untoward symptoms. Albuminuria was marked in the first case, especially on the last day; very slight in the second.

Belladonna in Epilepsy.

Observer writes: The following facts with regard to belladonna in epilepsy may be of interest to some of your readers. M. R., female, aged 30, suffered from epilepsy for at least fifteen years. She has not been under any treatment lately, so I resolved to try the effect of belladonna. Before the commencement of the treatment the number of fits was, on an average, six in the twenty-four hours. For the first fortnight she took 5 minims of the tincture thrice daily, and had on an average a little over six in twenty-four hours; during second fortnight, 10 minims, and had average of over ten fits; during third fortnight, 15 minims, and had average of ten fits; during fourth fortnight, 20 minims, and had average of eight fits; during fifth fortnight drug was suspended, and the average was over nine fits; and since that time an average of seven fits daily. Probably the shortness of the trial may vitiate any deduction as to its efficacy, but from the above figures it would seem that belladonna had absolutely no beneficial effect in this case.

Japanese Infants.

Dr. Grimm has an interesting communication in the *Centralblatt für Gynäkologie*, No. 12, 1894, on obstetrical and gynæcological facts relating to the Japanese. The newborn Japanese infant is of light weight compared to a European child. The scalp is covered with very thick black hair. The skin is extremely vascular, so that the infant is redder than in this country, but within a week the vascularity subsides. Congenital syphilis is very frequent; two cases, both born at the eighth month, bled to death within a few days after birth, the hæmorrhage issuing from the nose, the mouth, the rectum, the roots of the nails, and from many points on the integuments quite free from any visible lesion. The fathers of both these infants were evidently syphilitic. Dr. Grimm has discovered a curious peculiarity in all Japanese babies, from birth till about the fifth year. This is the presence of one or more bluish pigmentary moles on the posterior aspect of the body. They are most frequent over the sacrum or coccyx, and often extend to the margin of the anus, but sometimes invade the nates, the back, and even the extremities.

LETTERS, COMMUNICATIONS, Etc., have been received from:

(**A**) Professor Clifford Allbutt, Cambridge; A. G. W. (**B**) Mr. T. Blair, Leeds; Mr. W. G. Black, Edinburgh; Mr. J. W. Burdwood, Bourne; Dr. R. Botey, Barcelona; Messrs. Burroughs, Wellcome, and Co., London; Mr. J. Barker, Chatham; B. R.; Dr. J. O. W. Barratt, London; Mr. F. St. J. Bullen, Bristol. (**C**) Messrs. Crossley, Moir, and Co., London; Dr. E. Crossman, Bristol; Dr. E. Clarke, London; Mr. E. Carnall, London; Mr. L. G. Carré, London; Mr. G. G. Clarke, Bournemouth; Corrigenda; Dr. W. S. Colman, London; Dr. W. H. Calvert, Melrose; Mr. J. F. Cheesewright, Rotherham. (**D**) Mr. E. Duke, St. Leonard's; A. B. Dalgetty, M.B., Dundee; Dr. F. Dale, Scarborough; Mr. E. I. Day, Coventry; W. F. R. De Watteville, M.B., Kingussie. (**E**) Messrs. J. Elliott and Co., London; Enquirer; Dr. M. Eustace, Greystones. (**F**) Mr. M. Forrest, Alnwick; F. X.; F. G.; Dr. Hingston Fox, London; Mr. E. C. Fawley, London. (**G**) Mr. G. S. Greenwood, Ossett; Mr. T. C. Grey, Weston-super-Mare. (**H**) Mr. J. A. Homan, Westward Ho; Dr. L. Henry, Melbourne; Dr. J. Hamilton, London; Messrs. Hewlett, Preston, and Co., London; Dr. T. W. Hime, Bradford; J. Hector, M.B., London; Mr. W. J. Hill, Bristol. (**J**) Mr. R. Jeffreys, Bromley; Sir George Johnson, London; Justus; Messrs. J. H. Johnson, Son, and Ellis, London; Junius; Mr. F. B. Jessett, London; Messrs. Jameson and Curtice, London; Justitia; Mr. P. Jamieson, Peterhead. (**K**) Dr. W. Keen, London; Dr. T. N. Kelynack, Manchester. (**L**) Mr. C. E. Liesching, Tiverton; Messrs. A. Liney and Co., Dover; Liverpool. (**M**) Dr. B. H. Mumby, Portsmouth; Dr. B. J. Massiah, Manchester; M.B.; Mr. H. J. Manning, Salisbury; Mr. C. A. Morton, Clifton; M.B., D.P.H.; Mr. W. Marriott, London; Dr. W. Murrell, London; Member B.M.A.; Mr. W. J. Morris, Portmadoc; Mr. J. Mudge, Marazion; Mr. A. McLean, Paisley; M.D.; M.B., B.A.; Mr. A. C. Moore, Sydney. (**N**) New Member; Mr. Percy Newell, Crowborough; Dr. R. Neale, London; Dr. J. L. Notter, Cambridge; New South Wales Branch of the British Medical Association, Secretary, Sydney; Dr. J. Neale, Oxford. (**O**) Mr. W. H. O'Meara, Carlow; Dr. T. O'Kelly, Chipping Norton; Observer. (**P**) Mr. H. E. Powell, London; Mr. P. Pirie, London; Perplexed; Dr. W. R. Parker, Kendal. (**R**) Messrs. Reynolds and Branson, Leeds; Mr. K. Roberts, Taunton; Messrs. E. W. T. Richmond and Co., Warrington; Mr. F. H. Roberts, Llandrindod; Dr. H. S. Renshaw, Sale; Royal Hospital for Diseases of the Chest, Secretary, London. (**S**) Dr. F. J. Smith, London; Mr. N. Stevenson, London; Mr. W. Saunders, Melton Mowbray; Dr. W. C. Steen, Rotherham; Sheffield Medico-Chirurgical Society, Secretary, Sheffield; Mr. C. H. Shears, Liverpool; Dr. A. Simpson, Perth; C. E. Salt, M.B., Shrewsbury; Surgeon-Captain I.M.S.; Mr. R. Stoney, London; Mr. H. Spratt, Bournemouth; Mr. P. Swan, Plymouth. (**T**) Dr. Turner, London; Mr. W. Thomas, Pontefract; Dr. S. Thomson, London; Mr. F. H. Thompson, Cleobury Mortimer; M. W. Thomas, Liverpool; Dr. C. L. Tuckey, London; Mr. W. J. Tidy, London; Mr. B. E. Thompson, Birmingham. (**V**) Mr. W. Vincent, London; Dr. C. B. Voisey, Liverpool. (**W**) Dr. C. T. Williams, London; Mr. J. P. Wightman, Leeds; Dr. J. B. Ward, Oxford; Mr. W. Way, London; Mr. C. H. Wakeham, Bristol; Mr. E. J. Webb, Dawlish; Mr. W. Wingrave, London; Mr. W. R. Williams, Preston; The Wigan Medical Society, Secretary, Wigan; etc.

BOOKS, Etc., RECEIVED.

Failure of Brain Power (Encephalasthenia). By Dr. J. Althaus. 4th edition. London; Longmans and Co. 1894. 3s. 6d.

Transactions of the Pathological Society of London. Vol. 44. London: Smith, Elder, and Co. 1893.

A Collection of the Published Writings of Sir W. W. Gull, Bart., M.D., F.R.S. Edited and arranged by Dr. T. D. Acland. London: New Sydenham Society. 1894.

La Pratique Journalière de la Chirurgie dans les Hôpitaux de Paris. Par Prof. P. Lefert. Paris: J. B. Baillière et Fils. 1894. Frs. 3.

Cimiez: its Health and Climate. By Dr. H. E. Crook. London: M'Corquodale and Co. 1894.

La Verità sulle Aberrazioni e i Delitti nell Ordine sessuale. Par le Dr. G. de Letamendi. Madrid: Successori di Cuesta. 1894.

The Use of Hypnotism to the First Degree as a Means of Modifying or of Completely Eliminating a Fixed Idea. By Dr. R. Sturgis. Boston: S. J. Parkhill and Co. 1894.

Lectures on Surgery. By Dr. D. W. Cheever. Boston: Damrell and Upham. 1894.

Das Alkoholsichthum und die Kurzlebigkeit des Modernen Menschengeschlechts. Von Dr. R. Koppe. Moscow; E. Leissner and J. Romatin. 1894.

Public Baths and Wash-houses. By R. O. Allsop. London: E. and F. N. Spon. 1894.

Transactions of the Sanitary Institute. Vol. XIV. London: Sanitary Institute. 1894.

Hospitals, Dispensaries, and Nursing. Edited by Dr. J. S. Billings and Dr. H. M. Hurd. London: Scientific Press. 1894. 21s.

Mental Nursing, or Lectures for Asylum Attendants. 2nd edition. By Dr. W. Harding. London: Scientific Press. 1894. 2s. 6d.

The Organisation of Charities. By Dr. C. Gilman. London: Scientific Press. 1894. 6s.

Transactions of the American Pediatric Society. 5th session. Edited by Dr. F. M. Crandall. Vol. V. New York: Bailey and Fairchild. 1893.

Nature's Hygiene; a Systematic Manual of Natural Hygiene. By C. T. Kingzett. 4th edition. London: Baillière, Tindall, and Cox. 1894. 10s.

***** In forwarding books the publishers are requested to state the selling prices.**

A POST-GRADUATE LECTURE

ON

THE INFLUENCE OF THE ARTERIOLES IN RELATION TO VARIOUS PATHOLOGICAL CONDITIONS.

By Sir GEORGE JOHNSON, M.D., F.R.S.,

Emeritus Professor of Clinical Medicine, Consulting Physician to King's College Hospital, and Physician Extraordinary to Her Majesty the Queen.

(Concluded from page 843).

The Physiology of Nitrous Oxide Anæsthesia.

In the phenomena of apnœa with the resulting rapid impediment to, and even the complete arrest of, the circulation which occur when nitrous oxide gas is inhaled as an anæsthetic, we have an interesting confirmation of the results obtained by excluding air from the lungs; and on the other hand the knowledge obtained by experiments on animals killed by apnœa enables us more completely to interpret the facts of nitrous oxide anæsthesia.

Through the courtesy of the staff of the Dental Hospital in Leicester Square I have on many occasions during the last few years had the opportunity to observe the phenomena which result from the inhalation of the gas, and, in particular, I have carefully noted the changes in the character of the pulse during the successive stages of the inhalation.

In the early stage the respiration is deepened and quickened, while the pulse, which is usually quickened, always becomes fuller and firmer. A few seconds later the pulse is less full and more compressible, and if the inhalation be continued, the pulse becomes so small and feeble as to be scarcely, or even not at all, perceptible; at the same time the breathing is stertorous, the features are livid, and the pupils dilated, while there is more or less jactitation of the extremities, and often general tonic contraction of the muscles. Micturition rarely occurs, defæcation still more rarely. That these symptoms are of an epileptiform character is, I think, unquestionable. The convulsions are sometimes so violent, especially in children, as to throw the patient from the chair.

After the readmission of air the pulse again becomes for a time full and strong, and less frequent, the lividity passes away, and consciousness quickly returns. There is obviously a very close resemblance between these symptoms and those which result from apnœa. When an animal is killed by inhaling nitrous oxide gas convulsions always precede death, and when the chest is opened immediately after death, the right side of the heart is found to be greatly distended while the left is nearly empty, the blood on the two sides of the heart being equally dark. The lungs are pale, their minute vessels are bloodless, and the lungs consequently collapse into a very small space when the chest is opened. These appearances are identical with those which are found after death from apnœa. What, then, is the explanation of the phenomena? It has been ascertained that at the temperature of the body nitrous oxide gives up no oxygen to the blood or the tissues. The gas rapidly replaces the oxygen in the blood and in the tissues; the full and strong pulse, the result of contraction of the arterioles excited by the passage of venous blood into the systemic arteries, is the counterpart of the high pressure in the arteries of animals deprived of air, while the small and weak pulse which follows, like the rapid fall of pressure in the advanced stage of apnœa, is the result of the impeded flow of blood through the lungs caused by contraction of the pulmonary arterioles, the heart at the same time being weakened by the small amount of blood, and that unoxygenised, which passes into its nutrient vessels. Again the convulsive movements which are common to the two classes of cases admit of the same physiological explanation. When in an animal the inhalation of the gas is pushed to a fatal termination, convulsions are as constant and as violent as when death is caused by a ligature on the trachea. The spectroscopic examination of the blood immediately after death shows that the hæmoglobin has been entirely deoxidised.

I find that some anæsthetists who are daily occupied in the beneficent work of administering nitrous oxide, with perhaps a natural unwillingness to admit that the freedom from pain which they ensure is the result of replacing vital air by an azotic gas, maintain that apart from or in addition to its acknowledged deoxidising effect nitrous oxide has a special anæsthetic influence. Of this specific action, however, so far as I can learn, they adduce no proof. True Dr. F. Hewitt states[19] "that the anæsthesia is not due to asphyxia is probable from the fact that it is possible to secure absolute unconsciousness to pain, muscular relaxation, etc., from nitrous oxide mixed with such a proportion of oxygen that the development of obvious asphyxial phenomena is rendered physiologically impossible." Now in making this statement Dr. Hewitt has not taken into consideration the influence of the great solubility of nitrous oxide in the blood as compared with that of oxygen or nitrogen. If a mixture of nitrous oxide with 10 or 15 per cent. of oxygen were inhaled for a minute or so and if the expired gases were analysed it would be found that the relative amount of nitrous oxide and of oxygen has undergone a change, the nitrous oxide being less and the oxygen more in proportion than before the mixed gases were inhaled. The explanation is that a larger proportion of nitrous oxide than of oxygen is for a time retained in the blood, partly in solution and partly in a state of loose combination, and this excess deoxidises the hæmoglobin sufficiently to effect anæsthesia without the development of so-called asphyxial symptoms.

Then it is to be observed that the mixture of oxygen with nitrous oxide considerably retards the production of deep anæsthesia. Thus Dr. Hewitt states that while the average period of inhalation required to produce deep anæsthesia with nitrous oxide alone is 51 seconds[20] the mixture with oxygen requires that the inhalation should be continued for an average period of 110.5 seconds.[21] The presence of oxygen, when not in excess, delays but does not entirely prevent the process of deoxidation.

Nitrogen is much less soluble in the blood than either nitrous oxide or oxygen, yet Dr. Hewitt has obtained, in my presence, distinct anæsthesia in two cases by administering a mixture of nitrogen with as much as 7 or 7½ per cent. of oxygen.[22] Since that proportion of oxygen does not prevent, though it delays, the anæsthetic action of nitrogen, it is quite intelligible that with a larger amount of oxygen the much more soluble nitrous oxide should be an efficient anæsthetic. This, however, requires further explanation.

But before entering upon this there is one important practical point relating to the action of nitrous oxide as an anæsthetic to which I am anxious to direct especial attention, and that is the manner in which the circulatory failure occurs. This failure is not the result of ordinary syncope, but, as numerous observations and experiments have shown, the immediate cause is the arrest of the pulmonary circulation and the consequent over-distension of the right side of the heart. The remedy for this is the free access of air to the lungs, and in the almost infinitely small number of cases in which this fails the cautious inhalation of the vapour of nitrite of amyl, by relaxing the pulmonary arterioles, may succeed in overcoming the impediment. An experiment described in the earlier part of this paper affords a striking illustration of the influence of the vapour in removing the paralysing over-distension of the right side of the heart, even while nitrous oxide gas was still being thrown into the lungs. Another method of relieving the over-distension of the right side of the heart and so increasing its contractile power is to open the external jugular vein. Dr. John Reid in an interesting paper "On the Effects of Venesection in Removing and Increasing the Heart's Action under Certain Circumstances,"[23] has proved by numerous experiments on animals that when, as a result of apnœa, the heart has nearly or quite ceased to beat, its contraction may be renewed or invigorated by "disgorging the right side of the heart."

The Anæsthetic Action of Nitrogen.

It occurred to me, about four years ago, that some light might be thrown upon the anæsthetic action of nitrous oxide by observing the effect of inhaling nitrogen as nearly pure

as it can be obtained. Accordingly I obtained from the Scotch and Irish Oxygen Company of Glasgow a metal cylinder containing 100 cubic feet of compressed nitrogen, in which the proportion of oxygen present was only 0.5 per cent., with 0.3 per cent. of carbonic acid. As a preliminary trial Mr. Woodhouse Braine did me the favour to administer this gas in five instances to members of the staff of King's College who volunteered to submit to the experiment. The result in each case was rapid and complete anæsthesia, with general phenomena precisely similar to those resulting from the inhalation of nitrous oxide; consciousness quickly returned when the facepiece was removed, and there were no unpleasant after-effects.

After this Mr. Braine felt justified in administering the gas as an anæsthetic to patients at the Dental Hospital. On the first occasion nine patients took the gas. In every case there was complete anæsthesia, with general phenomena precisely similar to those resulting from nitrous oxide inhalation. The pulse was first full and throbbing, then small and feeble. In the advanced stage there was cyanosis, the pupils were dilated, and there was more or less jactitation of the limbs. The only difference, in the opinion of some of those present, was that the anæsthesia was rather less rapidly produced and somewhat less durable than that from nitrous oxide, though in each case the tooth was extracted without pain.

On a subsequent occasion the gas from the same cylinder was administered by Dr. F. Hewitt at the Dental Hospital.[24] Nine patients took the gas, with results identical with those observed on the former occasion. Dr. Hewitt says "an onlooker could not have detected any difference between the phenomena produced and those usually met with under nitrous oxide." The maximum period of inhalation required to produce anæsthesia was 70 seconds, the minimum 50 seconds, and the mean 58.3 seconds.[25] In one case two teeth were extracted without pain. In only one case was pain experienced, and in that case, the tooth having been broken and not extracted, the patient said she felt "a smashing up."

Having on several occasions witnessed the administration by Dr. Hewitt of nitrous oxide mixed with about 10 per cent. of oxygen, I determined to try a mixture of nitrogen with a small proportion of oxygen. I therefore obtained from the company before mentioned a cylinder containing 40 cubic feet of nitrogen with 3 per cent. of oxygen, and a second cylinder of the same capacity containing nitrogen with 5 per cent. of oxygen. The 3 per cent. gas was given by Dr. Hewitt to five patients, and the 5 per cent. to four patients. With the 3 per cent. gas the time required to produce anæsthesia varied from 60 to 75 seconds, the mean time being 67.5 seconds. In each case the tooth was extracted without pain, the duration of the anæsthesia being somewhat longer than with nitrogen alone. In each case there was lividity, dilatation of the pupils, and more or less jactitation.

With the 5 per cent. gas the time required to produce anæsthesia ranged from 75 to 95 seconds, the average being 87.5 seconds. In each case the anæsthesia was complete, during which one patient had three molars extracted; and although she said she "felt the last two," the sensation appears to have been that of a mechanical pull and not acute pain. In all four of these cases there was slight lividity before the facepiece was removed, but in only one was there slight jactitation of the limbs. Dr. Hewitt, in describing the results of these experiments with mixed nitrogen and oxygen, mentions one fact which I had not noted, namely, that "there was some excitement after the inhalation in a few of the cases." Such excitement is not uncommon after nitrous oxide inhalation.

In undertaking these experiments with nitrogen, I had little expectation that it would ever come into use as a substitute for nitrous oxide: the practical impossibility of keeping the gas in a liquid form would alone forbid this, but it occurred to me that if the inhalation of a gas which could not be supposed to possess a specific anæsthetic property were found to induce insensibility of which an experienced anæsthetist might say "an onlooker could not have detected any difference between the phenomena produced and those usually met with under nitrous oxide," this would have gone far to prove that nitrous oxide, like nitrogen, produces anæsthesia by depriving the blood and the tissues of oxygen.

It is a confirmation of this view that a longer inhalation is required to produce anæsthesia when a small proportion of oxygen is mixed with either nitrous oxide or nitrogen, while as a result of this the available period of anæsthesia for operation is somewhat prolonged. The obvious explanation is that more of the gas is required to deoxidise the blood and the tissues when vitalising oxygen is mixed with an azotic gas, while a prolonged inhalation carries the process of deoxidation deeper into the fluids and tissues, and so lengthens the period of anæsthesia.

I learn from Dr. Hewitt that in giving nitrous oxide with oxygen he begins with two per cent. of oxygen and gradually increases it to about ten per cent. If nitrogen were given in the same manner and with the same proportion of oxygen the result would probably be identical.

If the late Dr. Snow had lived to see the general use of nitrous oxide as an anæsthetic, he might have referred to it as affording additional evidence in support of his inference from numerous observations and experiments that "the action of the volatile narcotics is that of arresting or limiting those combinations between the oxygen of the arterial blood and the tissues of the body which are essential to sensation, volition, and all the animal functions."[26] He demonstrated that these substances modify, and in large quantities arrest, the animal functions in the same way and by the same power as that by which they modify and arrest combustion, the slow oxidation of phosphorus and other kinds of oxidation unconnected with the living body when these narcotics are mixed with the atmospheric air.

Previous Experiments with Nitrogen.

Until I read Dr. F. Hewitt's interesting book on *Anæsthetics*, I was not aware of the fact that about a quarter of a century ago Dr. Burdon Sanderson, Dr. John Murray, and Mr. Turner had administered nitrogen to six patients for tooth extraction at the Middlesex Hospital, the results of which are published.[27] The object of the experiment was to solve the question: "Does nitrous oxide act as an anæsthetic by excluding oxygen?" In the first two cases the inhalation was discontinued, as "the inhaler did not effectually exclude air." In the other four cases, "with a perfectly fitting inhaler," the results were as different from those which we obtained with nitrogen at the Dental Hospital as the authors rightly declare them to be from the action of nitrous oxide. Thus none of the patients showed any marked effects until the inhalation had been continued for two minutes, and for the production of insensibility the inhalation had to be continued for 3 min., 3 min. 10 sec., 4 min., and 4 min. respectively. There was no lividity, "a marked contrast" (as they say) "to the deep blue produced by nitrous oxide." In two of the cases extraction was perfectly painless, the other two said that although they had no pain they "felt it."

The report concludes by the statement that "the facts above related indicate that there is an essential difference in the mode of action of the two gases" namely, nitrogen and nitrous oxide.

What, then, is the explanation of the contrasted results of these experiments and of those above recorded as having been obtained at the Dental Hospital? The nitrogen may have contained a large admixture of oxygen, which would account for the length of time required to produce anæsthesia. If the gas was pure nitrogen it must have become largely mixed with air during the process of inhalation. Every anæsthetist knows how difficult it is, without a well-shaped and padded facepiece, to exclude air during the inhalation of any gas. It is certain, from our experience at the Dental Hospital, that no one could breathe pure nitrogen for even the shortest time mentioned in the Middlesex Hospital report. Even with a mixture of 5 per cent. of oxygen the longest period of inhalation required to produce unconsciousness at the Dental Hospital was 95 seconds.

It is not without interest to compare the results of the experiments at the Middlesex Hospital with those obtained by Sir Humphry Davy with nitrous oxide. The great chemist would, no doubt, ensure the purity of the gas, but inhaling it, as he and others did, through a wooden tube held between the lips while the nostrils were closed, he could not exclude atmospheric air.[28] The result was, as he says, that he could breathe the gas for rather more than four minutes, but never so long as five.[29] It scarcely need be said that it is as im-

possible to inhale pure nitrous oxide for four minutes as it is to inhale pure nitrogen for that long period.

It is very noteworthy that when care is taken to exclude atmospheric air during the inhalation of the two gases—nitrous oxide and pure nitrogen—the average time required to produce anæsthesia is practically the same: so when the prolongation of the inhalation of nitrous oxide by Sir H. Davy and of nitrogen at the Middlesex affords conclusive proof that air or oxygen has not been excluded the increase of time required to produce anæsthesia was nearly equal in the two sets of cases. If Sir Humphry Davy could have inhaled, or seen others inhale, nitrous oxide unmixed with atmospheric air his account of the physiological effects would have been very different from that which he published at the beginning of the century, and the general use of the gas as an anæsthetic might not have been so long delayed.

I have proved that the inhalation of nitrogen, either pure or mixed with a small proportion of oxygen, rapidly causes anæsthesia not distinguishable from that which results from the inhalation of nitrous oxide. It now remains for anyone who still believes that azotic nitrous oxide, apart from its power of displacing the vitalising oxygen, exerts a specific anæsthetic influence to set forth the reasons for his belief; and in doing this he will, of course, bear in mind that it is worse than useless, it is seriously misleading to institute a comparison between nitrous oxide anæsthesia and the results of mechanical closure of the trachea.

The Theory of Choleraic Collapse.

The right interpretation of the phenomena of apnœa, whether a result of the mechanical exclusion of air from the lungs or of the inspiration of an azotic gas, such as nitrous oxide or nitrogen, affords much assistance towards the solution of some most interesting and important pathological problems, and amongst these the pathology of the collapse stage of cholera is by far the most interesting. The condition of the heart's cavities which I have before described as occurring in the final stage of apnœa is identical with that which is found after death in the collapse stage of cholera.

We are indebted to the late Dr. Edmund Parkes[39] for the first accurate description of the condition of the heart and lungs after death in the stage of collapse. The following is a brief summary of the appearances, which he describes at great length. "The right side of the heart and the pulmonary arteries were generally filled, and in some cases distended with blood; the left side and the aorta were generally empty or contained only a small quantity of dark blood. The inference that was drawn from the state of the cavities in the greater number of cases was that the right side had continued to receive blood till, in some cases, it became full and even distended, while the left side received little or no blood, but had continued to contract upon the last drop of blood which had entered it.....In the lungs there was a remarkable want of air (that is, after the chest was opened); in the most rapid cases a want also of blood in the minute texture, causing the lung to collapse when the chest is opened and its weight to be diminished in a very great degree.....The conditions of the heart and lungs seem to point out unequivocally that in cholera the blood does not pass (freely) through the lungs." The only explanation of the condition which Dr. Parkes could suggest was that "some change in the fibrine" of the blood caused an impediment or arrest in the pulmonary capillaries (p. 113).

Dr. Parkes's book was published in 1847, some years therefore before the researches of Bernard, Brown-Séquard, and others had made known the function of the vasomotor nerves and the arterioles.

In a book on *Epidemic Diarrhœa and Cholera* which I published in 1855, I expressed my belief that the arrest of the pulmonary circulation is a result of contraction of the arterioles excited by the poisoned blood, and I adduced many facts and arguments in support of that theory. The condition of the heart and lungs is identical with that after death by apnœa, the difference in the order of events being this, that in cholera there is a primary asphyxia, that is, an arrest of the blood before it has reached the pulmonary capillaries, and a secondary apnœa, the result of the blood not being brought into contact with the air in the cells of the lung: on the other hand, when death is caused by privation of air there is a primary apnœa. The blood which enters the capillaries not meeting with atmospheric air in the pulmonary cells, asphyxia—arrested circulation—is a secondary result. The term "cholera asphyxia" therefore, which was used by Scot, Bell, and other writers in India, was more strictly accurate than its authors were aware of. They no doubt meant to convey the idea that cholera was a suffocative disease, but the physiology of their time would not enable them to see the precise manner in which the aëration of the blood was prevented.

That Dr. Parkes was ready to accept my explanation of the phenomena which he was the first to describe appears from the following sentences in a letter which I received from him in November, 1865. He had been reading some papers of mine which were published the British Medical Journal, and he wrote: "I feel pretty sure that you are right in attaching great importance to the difficulty of passage of blood through the lungs, which I always fancied depended on some condition of the blood itself, but I see that you attribute great effect to contraction of the arteries. This is certainly a very important point to work out, and seems to have evidence in its favour, at any rate that it is a co-operating cause. From what I have seen of your papers it seems to me that they will be a very important addition to our knowledge of cholera."

The pathology of cholera is too large a subject to be treated in detail in this paper. In the chapter "On the Pathology and Treatment of Cholera," in my *Medical Lectures and Essays*, the whole subject is fully discussed, and all reasonable and unreasonable objections to my doctrines have been, I venture to say, fairly met and refuted. In that chapter (p. 124) I have referred to the effect of the subcutaneous injection of the sulphate of atropine in doses of from $\frac{1}{75}$ to $\frac{1}{50}$ of a grain, as described by Dr. Saunders in the *American Practitioner* (July, 1873). "In some cases the relief afforded was astonishing: the skin grew warm, the pulse rose, the surface previously shrivelled and clammy assumed its natural condition, and in some instances the patient slept soundly for several hours." The explanation is to be found in the removal of the impediment to the pulmonary circulation by the paralysing effect of the atropine on the arterioles. In the same chapter I have shown that the marvellous temporary effect of a hot saline injection into a vein is to be explained partly by the dilution of the poisoned blood, but mainly by the high temperature of the injected liquor causing relaxation of the pulmonary arterioles. The cases recorded by Indian practitioners, in which patients in a state of almost pulseless collapse have obtained astonishing relief by venesection, are explicable by the disgorgement of the over-distended right cavities of the heart. The condition of the heart's cavities is the same as in the final stage of apnœa, in which, as we have before seen, venesection increases the contractile power of the heart, or even restores its contractions after they have ceased.

The time is not far distant when it will be universally acknowledged that the hypothesis which attributes the collapse stage of cholera to the drain of liquid from the blood (the dehydration theory) is inconsistent with the facts, while in its application to practice it has been one of the most disastrous that ever gained general acceptance.

Variations of the Pulse; and the Cardio-vascular Changes in Bright's Disease.

The two physical forces upon which mainly depend the volume and strength of the pulse are the contraction of the left ventricle at one extremity and that of the arterioles at the other. But another important factor is that of the volume of blood in the systemic arteries. For instance, the small and feeble pulse during the collapse stage of cholera is a result of the scanty stream of blood which passes through the lungs to the left side of the heart, the ventricle being also weakened by the defective supply of blood to the coronary arteries. The rapid changes in the character of the pulse during the successive stages of the various forms of apnœa I have already described and explained.

When, as a result of disease of the respiratory organs, imperfectly aërated blood enters the systemic arteries, an unwary practitioner may misinterpret the full and strong pulse

as a favourable sign, whereas it is a result of increasing deoxydation of the blood.

Very valuable information may be obtained from an intelligent observation of the pulse in the various forms and stages of Bright's disease. In cases of acute nephritis with a scanty secretion of urine and consequent uræmia, the pulse is usually full and tense, a result of contraction of the systemic arterioles excited by the impure blood. The fulness and tension pass away when the excretory function of the kidneys has been restored.

The long-continued uræmia which results from chronic degeneration of the kidneys, and especially from the contracted granular kidney, is associated with very remarkable changes in the circulatory system. The radial pulse is very full and tense, the large arteries are thickened and tortuous, and there are the physical signs of hypertrophy of the left ventricle of the heart. Some years since I was led to search for the cause of this condition by the following considerations: Hypertrophy of the left ventricle without disease of the valves or of the large arteries—a fact made known by Dr. Bright in the first volume of the *Guy's Hospital Reports*—is probably a result, as he suggested, of some impediment "in the minute subdivisions of the vascular system." Reasoning from analogy, I thought it probable that the impediment is caused by the contraction of the arterioles excited by the impure blood, and further, that their long-continued overaction would result in hypertrophy of their walls, corresponding with the hypertrophy of the left ventricle. This led me to search for and to find the hypertrophy which I had anticipated in the arterioles of every tissue that I examined—in the kidneys, intestines, skin, muscles, and pia mater. The prolonged overaction of the arterioles registers itself in a conspicuous hypertrophy of their muscular walls.[31]

No kymograph could afford a more certain indication of excessive contraction of the arterioles, with resulting high arterial tension.

My description of the thickened arterioles, after passing through the inevitable ordeal of misrepresentation and ridicule, is now admitted to have been correct. The change in question is an example of true hypertrophy—overgrowth of a tissue without change of texture—not to be confounded with lardaceous degeneration, the irregular thickening which results from any form of arteritis, or the so-called "hyalin-fibroid change." The tortuosity and thickening of the larger arteries in the advanced stage of chronic renal disease are results of the excessive strain to which they are subjected between the hypertrophied left ventricle and the resisting arterioles.

The coexistence of cardiac hypertrophy with high arterial tension is very significant of renal degeneration in an advanced stage.

Some writers appear to assume that high arterial tension implies an increase of pressure within the capillaries, but this is an erroneous assumption. In fact it is obvious that if the increased resistance caused by the contracting arterioles be not compensated by increased propulsion from the heart, the intracapillary pressure would be diminished, but it is probable that the opposing forces are so nicely balanced that the pressure in the capillaries is, in most cases, unchanged.

RAYNAUD'S DISEASE.

A remarkable form of arrested circulation, which was originally described by Dr. Maurice Raynaud in his treatise *De l'Asphyxie locale et de la Gangrène symétrique des Extrémités* (Paris, 1862) is, by general consent, attributed to excessive contraction of systemic arterioles in localised regions. Raynaud's original treatise and his later researches, which were published in the *Archives générales de Médecine*, 1874, vol. i, have been translated by Dr. Thomas Barlow. This translation, together with a valuable appendix by the translator, forms part of a volume of selected monographs which was published in 1888 by the New Sydenham Society. Referring to that volume for the detailed history of this remarkable affection, I can now do no more than indicate very briefly its general characters.

The essential features of Raynaud's disease consist in a local arrest of the circulation, with consequent coldness, blueness, and often dry gangrene of extreme parts, such as the fingers, the toes, the tip of the nose, and the ears. There is also a remarkable tendency to symmetry in the parts affected, so that the disease usually, though not quite constantly, implicates corresponding parts on the two sides. Thus the upper or lower limbs, or all four together, may be bilaterally affected. In some cases the local gangrene is associated with that form of recurring hæmaturia which is called intermittent hæmoglobinuria.

This affection differs from senile gangrene in the fact that there is no structural change discoverable in the walls of the arteries, and in a large proportion of cases the patients are below 30 years of age.

Referring to M. Claude Bernard's researches into the action of the muscular-walled arterioles, Dr. Raynaud says: "The physiology of the circulation has been enriched in late years by one of the most beautiful discoveries of the century." Yet, with a confusing inaccuracy of language, he occasionally speaks of contraction of the capillaries, when from the context it is evident that he is referring to the arterioles. I venture also to criticise his use of the terms "local syncope" and "local asphyxia." The arrested circulation, he says, "can be compared to nothing better than syncope, in which the action of the heart is momentarily suspended" (p. 30). But, surely, to compare the failure of circulation resulting from suspension of the action of the heart with an arrest which is acknowledged to be caused by arterial contraction is to confound phenomena which are essentially different. The proper term by which to designate the arrested circulation in Raynaud's disease is local asphyxia, a result of arterial contraction. Raynaud, however, referring to the presence of unoxygenised venous blood in the implicated tissues, calls this "local asphyxia." The correct term is local apnœa.

The word "asphyxia" has become so closely associated in men's minds with the idea of suffocation that, in spite of its obvious etymological meaning, it is frequently misapplied even in scientific treatises. This misapplication has the further disadvantage of leaving no term by which to distinguish an arrest of the circulation and of the pulse from apnœa (suffocation).

I hope to have established my position that the influence of the vasomotor nerves and the arterioles forms a connecting link between the diverse pathological conditions which are the subject of this communication, but there are many other clinical and pathological facts to the interpretation of which a similar influence is believed to be more or less applicable. M. Vulpian,[32] in the second volume of his work before referred to, has given an admirable summary of many pathological conditions, apparently associated with vasomotor nervous influence.

NOTES AND REFERENCES.

[19] *Anæsthetics and their Administration*, p. 114. [20] *Op. cit.*, p. 106. [21] *Op. cit.*, p. 130. [22] *Op. cit.*, p. 269. [23] *Op. cit.*, p. 51. [24] See Dr. Hewitt's account of this administration. *Op. cit.*, p. 268. [25] Dr. Hewitt (*op. cit.*, p. 106) gives the maximum time of inhalation of nitrous oxide in 40 cases as 70 secs., the minimum 25 secs., and the average 51 secs. [26] See the *Life of John Snow, M.D.*, by Sir Benjamin W. Richardson, M.D., F.R.S., introductory to Dr. Snow's work on *Chloroform and Other Anæsthetics*, p. xiv. Also my lecture on the Pathology of Coma and Anæsthesia, *Medical Lectures and Essays*, p. 290. [27] BRITISH MEDICAL JOURNAL, 1868, i, p. 593. [28] In cases where the form of the mouth prevented the lips from being accurately closed on the breathing tube he used a tin plate conical mouthpiece fixed to the cheeks and accurately adapted to the lips. It would be scarcely possible to make such an arrangement airtight. [29] *Collected Works*, vol. iii, p. 273. [30] *On Asiatic or Algide Cholera*. [31] See *Med. Chir. Trans.*, vol li: and *Medical Lectures and Essays*, p. 694. [32] *Leçons sur l'Appareil Vasomoteur.*

THE Association of American Physicians will hold its ninth annual meeting at Washington on May 29th and three following days. The programme of the public meetings includes a number of subjects of general interest.

METEOROLOGY AND HYGIENE.—Mr. G. J. Symons, F.R.S., gave the first of a series of six lectures on Meteorology in relation to Hygiene at the Parkes Museum on April 23rd. The course has been arranged by the Royal Meteorological Society and the Sanitary Institute acting together, and is designed to serve as a practical introduction to the study of weather and climate in relation to health and disease. Mr. Symons dealt with the instruments and with the method of making and recording observations. It was illustrated by photographs shown by limelight and by specimens of the various forms of apparatus in use at a meteorological station.

THE SURGERY OF THE GALL BLADDER AND BILE DUCTS, WITH BRIEF NOTES OF 78 CASES.[1]

By A. W. MAYO ROBSON, F.R.C.S.,

Honorary Surgeon to the Leeds General Infirmary; Professor of Surgery in the Victoria University; and Member of the Council of the Royal College of Surgeons of England.

In the limited time allowed for a paper it is absolutely impossible to deal fully with such an important subject as that of the diseases of the gall bladder and bile ducts; but fortunately affections of these parts requiring surgical interference can for the most part be considered under the one subject of cholelithiasis, as gall stones are in the greater number of cases the *fons mali*. In a work published by Cassell and Co., London, 1892, I have given detailed histories of 41 operations on the gall bladder and bile ducts; but since the date mentioned I have operated on about 40 cases in addition, and I now have the honour to hand round a printed table of 78 consecutive cases, embodying my personal operative experience of the subject, but at the same time I should remark that my conclusions are based on a much larger number of cases, which I have seen or have been immediately concerned in in consultation with colleagues or other medical friends.

Among the prominent symptoms and complications of cholelithiasis which I have had experience of are:

1. Spasms or biliary colic without jaundice, the attacks being repeated at longer or shorter intervals, coming on without apparent cause, usually starting in the epigastrium or under the right ribs, and radiating to the right scapular region or to the shoulder, and often ending in vomiting, which usually gives relief.
2. Collapse, due to the intensity of the pain, which I have known to cause death without any other complication.
3. Spasms followed by evanescent icterus.
4. Pain followed by persistent jaundice and enlargement of the liver, which may give rise to the suspicion of malignant disease, but which may usually be diagnosed from cancer by the presence of
5. Attacks of pain accompanied by a feeling of chilliness or a rigor, and followed by increased temperature and then by profuse perspiration, the whole attack resembling one of ague.
6. Distension (hydrops) of the gall bladder without jaundice, ordinarily due to impaction of gall stones in the cystic duct.
7. If accompanied by persistent jaundice, distension of the gall bladder raises a suspicion of malignant disease, either of the liver or bile ducts or of the head of the pancreas.
8. Ileus due to atony of the bowel, apparently dependent on the pain producing a profound impression on the nerves of the abdomen, leading to enormous distension and to the symptoms and appearance of acute intestinal obstruction.
9. Acute intestinal obstruction dependent on: (*a*) Paralysis of gut due to local peritonitis in the neighbourhood of the gall bladder. (*b*) Volvulus of small intestine. (*c*) Impaction of large gall stone in some part of the intestine after ulcerating its way from the bile channels into the bowel.
10. General hæmorrhages, the result of long continued jaundice, either dependent on gall stones alone or on cholelithiasis associated with malignant disease.
11. Persistent vomiting, with such serious digestive disturbances as to threaten death from exhaustion.
12. Localised peritonitis producing adhesions, which may then become a source of trouble even after the gall stones have all been got rid of. I believe that nearly every attack of biliary colic is accompanied by adhesive peritonitis, as my experience is that in all cases where there have been characteristic seizures adhesions are found.
13. Dilatations of stomach dependent on adhesions around the pylorus.
14. Ulceration of the bile passages establishing a fistula between them and the intestine.
15. Abscess of the liver.
16. Localised peritoneal abscess.
17. Abscess in the abdominal walls.
18. Fistula at the umbilicus or elsewhere on the surface of the abdomen.
19. Empyema of gall bladder.
20. Suppurative cholecangitis.
21. Septicæmia or pyæmia.
22. Gangrene of the gall bladder.
23. Perforative peritonitis due to ulceration or to rupture of the gall bladder or ducts.
24. Extravasation of bile into the general peritoneal cavity.
25. Pyelitis of the right side.
26. Cancer of the gall bladder or of the ducts.
27. Subphrenic abscess.
28. Empyema on the right side.
29. Pneumonia of the lower lobe on the right side.
30. Chronic invalidism and inability to perform any of the ordinary business or social duties.

A study of the cases in the table handed round will show that where medical means have failed, surgery holds out very good hope of success in nearly every complication of cholelithiasis, if the patient be not too much exhausted to permit of any major operation.

Cases complicated with malignant disease, however, are decidedly unfavourable ones for operation, as will be seen by referring to such cases in the tables. First, because the subjects of cancer are not only as a rule cachectic and worn down by disease before the surgeon is called in, and therefore unfitted to bear the shock of any operation; but, secondly, because such patients are particularly prone to hæmorrhage at the time of operation, or subsequently, which may be uncontrollable.

I would here take the opportunity of correcting an observation made several years ago in a paper read before the Clinical Society of London, which I have since found to need qualification. I then remarked that there was more risk in operating on profoundly jaundiced patients, on account of hæmorrhage. While I still think there is greater risk in operating on such cases, I have found by ample experience that the danger is not simply from the presence of jaundice, but from the presence of jaundice combined with malignant disease; and I feel that I cannot emphasise too strongly the fact that operations undertaken on patients with malignant disease of the head of the pancreas, of the bile ducts, or of the liver, if combined with deep jaundice, are attended with very great risk; and that in such cases the great risk is not compensated for by the slight respite which may be given by establishing a biliary fistula, as recommended by some able surgeons.

It may, however, be worth remarking that, in order to avert the danger of hæmorrhage in jaundiced patients, I have found the administration of chloride of calcium for a few days before operation to make the blood more plastic and to lessen the tendency to bleeding both at the time of operation and subsequently.

For this therapeutic measure I am indebted to Dr. A. E. Wright's researches on the Coagulability of the Blood, published in the British Medical Journal for December 19th, 1891. After operation the drug may be continued either by the mouth or by nutrient enemata for some time with advantage. In jaundiced cases I prefer to ligature all bleeding parts, rather than to trust to pressure forceps for hæmostasis. The subject of diagnosis is too important to pass over in a few words, and too long to discuss in a short paper, but I would remark that there are two main points for consideration: First: Are gall stones present? Secondly: Is there malignant disease? A careful consideration of the previous history will usually enable the former question to be answered, and especially the history of attacks of "spasms" preceding other complications. The latter question cannot, I believe, be always positively answered, but as a rule the preliminary history of "spasms" of pain preceding the jaundice, and of intermittent pyrexia, with the absence of enlargement of the gall bladder, will point to cholelithiasis.

It may be worth noticing that in all the cases of malignant disease with jaundice on which I have operated the gall bladder formed a perceptible tumour, whereas when the jaundice was dependent on gall stones there was no marked tumour present.

Another diagnostic point worth remarking is that in chole-

[1] Read at the Eleventh International Medical Congress held in Rome, April, 1894.

Series of Operations on the Gall Bladder and Bile Ducts.

No.	Name.	Sex.	Age.	Date.	Operation.	Remarks.	Result.	After-History.
1	B. F.	F	33	-6-84	Cholecystotomy	Distended gall bladder; 12 gall stones removed	R	Small mucous fistula persisted; in good health, 1893.
2	H.	,,	22	-7-85	,,	Distended gall bladder; 60 gall stones	,,	Mucous fistula for a time, cured by cholecystectomy; in good health, 1893.
3	V. B.	,,	42	14-1-88	,,	Empyema of gall bladder	,,	Biliary fistula for a time, ultimately quite well and in good health, 1892.
4	E. C.	,,	44	19-3-88	,,	14 gall stones removed	,,	Cured.
5	H. F.	,,	32	2-5-88	,,	42 gall stones removed	,,	,,
6	G. B.	,,	40	14-6-88	,,	Abscess; 2 large gall stones	,,	Cure; no fistula.
7	Mrs. J.	,,	40	9-7-88	,,	Distended gall bladder; 2 large gall stones	,,	Complete recovery and no recurrence.
8	A. H.	,,	42	29-7-88	,,	Slight jaundice; 2 large gall stones	,,	Cure; well 3 years after.
9	S. G.	,,	49	29-8-88	,,	66 gall stones	,,	Complete and permanent recovery; well 5 years after.
10	G. B.	M	50	10-9-88	,,	Intense jaundice; distended gall bladder; cancer of pancreas	D	Ninth day, hæmorrhage.
11	W. T.	,,	42	23-12-88	,,	Deep jaundice; distended gall bladder; cancer of common bile duct	R	Relief for a time; death later from progress of disease.
12	V. B.	F	44	2-3-89	Cholecystenterostomy	Gall bladder united to colon	,,	Quite well, 1893.
13	C.	,,	41	28-3-89	Cholecystotomy	Distended gall bladder; 14 gall stones	,,	Apparent cure.
14	H.	,,	32	2-5-89	,,	Distended gall bladder; 42 gall stones	,,	,, ,,
15	H.	M	55	7-9-89	,,	70 gall stones	,,	Quite well, 1894.
16	A. W.	F	41	26-9-89	,,	3 gall stones	,,	When last heard of, well.
17	F.	,,	34	10-10-89	,,	12 gall stones	,,	Quite well when last seen.
18	H.	,,	32	16-1-90	,,	Distended gall bladder; 2 gall stones	,,	,, ,, ,,
19	G. T.	,,	42	14-2-90	,,	1 large gall stone	,,	,, ,, ,,
20	R.	M	50	5-5-90	,,	1 large gall stone	,,	,, ,, ,,
21	S. G.	F	51	14-5-90	Cholecystectomy	Mucous fistula, stricture of cystic duct, following gall stones	,,	Complete and permanent cure; well, 1893.
22	C.	,,	30	3-6-90	Cholecystotomy	Jaundice; stones crushed in common duct	,,	Well, 1894.
23	B. P.	M	29	19-6-90	,,	6 gall stones	,,	Apparent cure; well, 1892.
24	B.	F	42	22-6-90	Exploratory	Jaundice; tumour close to common duct	,,	Perfectly well some months after.
25	J. E.	,,	25	2-9-90	Cholecystotomy	Gall stones in gall bladder; also abscess of liver, containing gall stones (38 in all)	,,	Apparent cure.
26	H.	,,	30	1-11-90	,,	1 gall stone removed, several crushed in ducts	,,	,, ,,
27	H. E.	,,	68	12-11-90	Laparotomy	Gall stone producing volvulus; laparotomy and untwisting volvulus; large gall stone afterwards passed *per anum*	,,	Heard of as well and healthy a year after.
28	E. W.	,,	40	14-11-90	Cholelithotrity	Large gall stone crushed in common duct	,,	Rapid recovery and apparent cure.
29	R.	M	39	29-12-90	Cholecystotomy	Numerous gall stones	,,	Rapid recovery; well 1893.
30	J. R.	F	45	29-12-90	,,	Cancer of pancreas; intense jaundice; hæmorrhages from nose, bowel, etc.	D	Patient extremely exhausted at time of operation and probably did not much hasten death.
31	E. W.	,,	55	13-1-91	,,	Gall stones crushed in cystic duct	R	Cure.
32	H.M.C.	,,	42	5-2-91	Hepatotomy for gall stones	Cyst of liver due to dilated hepatic duct	,,	Relief; small discharge of bile persisted for a time.
33	T. G.	M	50	17-2-91	Exploratory	Distended gall bladder; 30 oz. fluid removed by aspirator; tumour of head of pancreas	,,	Marked relief; returned home within the month.
34	H.M.C.	F	42	19-3-81	Cholecystotomy	Intense jaundice; gall stone ¾ in. diameter removed from gall bladder	,,	Relief; after returning home at end of month contracted influenza and had fatal pneumonia.
35	F.	,,	35	26-2-91	,,	Stones crushed in common duct	,,	——
36	J. L.	M	45	5-3-91	,,	Deep jaundice; gall stone crushed in common duct	,,	In 4th week diarrhœa and sudden death apparently from perforation of bowel; nothing abnormal in region of bile ducts.
37	B. S.	F	40	12-3-91	,,	25 gall stones removed and 2 crushed in common duct; jaundice	,,	Apparent cure.
38	H.	,,	32	23-3-91	,,	1 gall stone	,,	,, ,,
39	E. R.	,,	40	2-4-91	Cholelithotrity	Gall bladder not opened; 1 stone size of filbert crushed in cystic duct	,,	No recurrence of symptoms; well, 1894.
40	E. S.	,,	50	7-5-91	,,	5 stones crushed with fingers and forceps	,,	Apparent cure.
41	M.	,,	59	5-12-91	Cholecystotomy	Distended gall bladder; movable right kidney	,,	Good recovery in July, 1893; no recurrence of symptoms.
42	J. R.	,,	51	14-1-92	Exploratory	Solid tumour of gall bladder; thought to be malignant; exploration by needles after abdomen had been opened	,,	Ultimate complete recovery without further treatment.
43	C.	F	44	-2-92	Cholecystotomy	8 gall stones removed from gall bladder, 15 from cystic duct	,,	Cured.
44	J. O.	M	51	3-3-92	,,	Gall stones crushed in cystic duct	,,	,,
45	A. M.	,,	37	-3-92	,,	Jaundice; gall stones removed from gall bladder and cystic duct	,,	Biliary fistula persisted for a time, but ultimately closed, to reopen after another attack of biliary colic followed by jaundice.
46	R.	F	56	15-6-92	,,	Gall stones in bladder and in cystic and common ducts, latter crushed, former removed	,,	Cured.
47	F. T.W.	M	18	6-8-92	Exploratory	Recurrent attacks of pain in hypochondrium; extensive adhesions of gall bladder broken down	,,	Gained 2 stones in weight after operation; well 1894.
48	A. M.	,,	38	6-8-92	Cholecystenterostomy	Dilated cystic duct united to colon by small decalcified bone bobbin	,,	Perfectly well for some months, after which jaundice recurred.
49	T.	F	50	29-9-92	Cholecystotomy	Jaundice; shrunken gall bladder; gall stone in bladder and several in cystic and common ducts crushed	,,	Well 1893.
50	E.	,,	50	4-10-92	,,	Jaundice; 2 large stones in gall bladder, 1 in common duct removed by scoop	,,	Well 1893.
51	L. P.	,,	40	12-1-93	,,	6 gall stones from cystic duct; several crushed in common duct	,,	Small biliary fistula persisted, but at times closed; see 65.
52	A. M.	M	—	28-1-93	Choledochotomy	Large gall stone removed from common duct through incision which was afterwards sutured; drainage	D	Fæcal extravasation through small perforation in colon, caused by separating adhesions and unrecognised at time of operation.
53	B.	F	36	24-2-93	Cholecystotomy	6 large stones removed	R	Cured.
54	J. O.	M	51	3-3-93	,,	Contracted gall bladder; numerous stones crushed in common duct	,,	Recovery complete; quite well 1894.
55	A. C.	F	37	11-3-93	,,	Shrunken gall bladder; 1 stone in cystic duct	,,	Cured; well when last seen.
56	H.	M	50	11-4-93	,,	156 gall stones removed	,,	——
57	G. T.	F	41	28-4-93	Cholecystectomy	Mucous fistula over gall bladder	,,	Perfect recovery; well 1894.
58	M. L.	,,	54	5-5-93	Exploratory	Cancer of gall bladder	,,	Wound healed by first intention and patient left apparently relieved.

Series of Operations on the Gall Bladder and Bile Ducts—continued.

No.	Name.	Sex.	Age.	Date.	Operation.	Remarks.	Result.	After-History.
59	E. B.	F	44	6-5-93	Cholecystotomy	Contracted gall bladder; 2 stones in cystic duct; crushed	R	Well when last heard of.
60	H. G.	,,	40	19-5-93	,,	Gall stone weighing 112 grs. removed from cystic duct	,,	Perfectly well some months subsequently.
61	S. J. R.	,,	35	19-5-93	,,	2 large gall stones in cystic duct	,,	Cured.
62	P. S.	,,	31	25-5-93	,,	Stone crushed in common duct	,,	Quite well when seen some time after.
63	F.	,,	54	6-6-93	,,	Distended gall bladder; 3 stones removed from cystic duct	,,	
64	B. B.	M	58	20-6-93	,,	Several large stones in cystic and common ducts; removed crushed	,,	Bronchitis third week, and patient left the infirmary at her own request.
65	L. P.	F	—	31-7-93	Cholecystenterostomy by decalcified bone bobbin	Biliary fistula	,,	Quite well 1894.
66	J. G.	M	52	24-8-93	Cholecystotomy	Large stone in cystic duct	,,	,, ,, ,,
67	C.	F	35	4-9-93	,,	27 gall stones removed	,,	Well 1894.
68	B.	,,	40	26-9-93	,,	Distended gall bladder; 6 stones removed from gall bladder and cystic duct	,,	Perfectly well February, 1894.
69	K. B.	,,	44	22-9-93	,,	Stones in cystic duct and extensive adhesions	,,	Well when last heard of.
70	C.	,,	31	14-11-93	,,	Sinus discharging at umbilicus; 18 gall stones removed from gall bladder, together with pus and mucus	,,	March, 1894, writes to say very well.
71	E. R.	M	56	21-10-93	,,	6 gall stones removed from common duct and several crushed	,,	Cured. Well some months after.
72	M. A. K.	F	30	30-11-93	,,	5 gall stones removed	,,	,, ,, ,, ,, ,,
73	P.	M	19	-12-93	Laparotomy, lavage, and drainage	After symptoms of gall stones for 29 years acute general peritonitis starting over gall bladder. Rupture of bile ducts and extravasation of several pints of bile with pus found at operation	,,	Perfect recovery. Patient well and at business within 2 months.
74	J. G.	,,	39	12-3-94	Laparotomy; separation of adhesions of pylorus to gall bladder	History of cholelithiasis 6 years before; 5 years history of pain, vomiting, etc.	,,	Gained 2 stones in weight in three months. Apparent cure.
75	W. K.	,,	35	-92	Cholecystotomy	Deep jaundice; distended gall bladder; emaciation. No pain. Scirrhus of head of pancreas	D	Patient much exhausted and emaciated at time of operation; almost died under anæsthetic; death, apparently from shock, on second day.
76	H. C.	F	45	18-2-94	,,	6 gall stones in bladder and 23 in cystic duct	R	March, 1894; writes to say "better than for years."
77	L.	,,	32	3-3-94	,,	20 gall stones removed; gall bladder distended no jaundice	,,	Recovering and apparently well.
78	E.	,,	35	7-3-94	,,	Distended gall bladder; 35 gall stones removed; no jaundice	,,	,, ,, ,,

lithiasis there is usually tenderness on pressure over some point between the eighth or ninth costal cartilage and the umbilicus. In three cases the pain in the so-called "spasms" has been referred to the left side, thence radiating to the left scapular region, and in such cases I have found the pylorus adherent to the gall bladder or cystic duct. The so-called diagnostic operations of sounding for gall stones and aspiration of a distended gall bladder I believe to be futile and dangerous, and much better replaced by a small exploratory incision, when treatment can at the same time be carried out if required.

Treatment.—After medical treatment has been fairly tried and failed, I think most surgeons are agreed that surgical measures should be resorted to. While cholecystotomy is generally recognised as the operation to be aimed at in the treatment of affections of the gall bladder or bile ducts, especially in cholelithiasis, it is often impossible to say what operation will have to be done until the abdomen is opened. The indications for operating would seem to me to be as follows:

1. In frequently recurring biliary colic without jaundice, with or without enlargement of the gall bladder.
2. In enlargement of the gall bladder without jaundice, even if unaccompanied by great pain.
3. In persistent jaundice ushered in by pain, and where recurring pains, with or without ague-like paroxysms, render it probable that the cause is gall stones in the common duct.
4. In empyema of the gall bladder.
5. In peritonitis, starting in the right hypochondrium.
6. In abscess around the gall bladder or bile ducts, whether in the liver or under or over it.
7. In some cases where, although the gall stones may have passed, adhesions remain and prove a source of pain and illness.
8. In fistula, mucous or biliary.
9. In certain cases of jaundice, with distended gall bladder dependent on some obstruction in the common duct; but in such cases the increased risk must be borne in mind, as malignant disease will probably be the cause of the obstruction.

Supposing the case to prove a suitable one for cholecystotomy, and the gall bladder and ducts can be cleared without great difficulty by means of forceps within and the fingers outside the ducts, the opening in the gall bladder can be sutured to the aponeurosis, which I think preferable to skin fixation, and drained, which I infinitely prefer to immediate suture of the opening.

But if the ducts cannot be cleared, what may be done?

(*a*) Cholelithotrity or crushing of the gall stones *in situ* by means of the finger and thumb, or by padded forceps, an operation which I have successfully performed on numerous occasions, and which I prefer to the more formidable procedure of incising the ducts or of fixing the gall bladder to the intestine.

(*b*) Choledochotomy, or incising the duct, whether cystic or common, the incision being afterwards sutured, not an easy matter on account of the depth of the parts to be coapted, but which I have found to be best effected by means of a rectangular cleft palate needle. A drainage tube should always be inserted into the right kidney pouch in these cases.

(*c*) Cholecystenterostomy, or the making of an anastomosis between the gall bladder and intestine, easily effected if the gall bladder be dilated, with difficulty performed if the gall bladder be contracted, as is often the case. I have performed this operation three times, with immediate success and recovery in all, and with complete and permanent relief in two. The method I prefer is that by means of my decalcified bone bobbin, which enables the operator to accomplish the anastomosis rapidly, as only two sutures have to be employed.

(*d*) The daily injection of fluids after an interval of some days, through the cholecystotomy opening, which will either soften or dissolve the concretions. For this I have used hot water, a solution of taurocholate of soda, ether, and ether and turpentine, with more or less success; but I think that Dr. Brockbank's suggestion to use an injection of olive oil or a 5 per cent. solution of sapo animalis or oleic acid will be worth more fully trying.

(*e*) Cholecystectomy may be required as a secondary operation in cases of stricture of the cystic duct, the common duct being free. On three occasions in which I have excised the

gall bladder, it has been for mucous fistula depending on stricture of the cystic duct following on gall stones, and all the cases were completely and permanently relieved.

Cholecystectomy can seldom be advisable or necessary as a primary operation in gall stones, and extremely rarely possible in malignant disease. In cholecystotomy, where it is impossible to bring the margins of the incised gall bladder into the wound, and where the parietal peritoneum cannot be tucked down to meet the edges of the opening, I have made a tube of the omentum, but in such cases no hesitation need be felt in trusting to a drainage tube, as the peritoneal cavity soon becomes occluded around the drain, and there is little or no tendency to the passage of bile among the viscera, so that a suprapubic drainage opening is quite unnecessary. With very few exceptions I have found a vertical incision along the upper part of the right linea semilunaris to give ample room, but if required I have not hesitated to get further room by a transverse cut in addition.

Suture of peritoneum, aponeurosis, and skin by separate stitches effectually guards against ventral hernia, if the patient be kept recumbent for from 21 to 28 days, and if a firm oval pad be worn under a belt for a few months subsequently.

In all cases strict antiseptic precautions have been observed, and the abdomen has been left as clean and dry as possible.

In conclusion, I would emphasise that with due skill and adequate care operations on the gall bladder and bile ducts are among the most successful of the major operations, but as many of them are extremely difficult, and as it is impossible to say beforehand whether any case may not prove so, I think such surgical work should be undertaken only by those who have had experience in abdominal surgery, and who have witnessed or helped in several operations of this kind. As soon as this is the case we shall cease to witness the varying rates of mortality in the hands of different operators, of from 50 to almost 0 per cent., and shall probably find that, excluding cases of malignant disease associated with jaundice, the all-round mortality will not exceed 5 per cent. I hope the time is not far distant when it will be fully recognised that though cholelithiasis, so far as its causes and its early treatment are concerned, is distinctly a condition for medical treatment, it is both unjust to the patient and unfair to the profession to continue medical treatment until serious complications supervene, or the patient is almost, if not quite, past relief, before the aid of surgery is invoked.

PERNICIOUS ANÆMIA AT 21.

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PERNICIOUS anæmia is not often met with during the first 25 years of life, and the malady is still so mysterious that any unusual case deserves record, even if it is possible only to give a brief note of it.

A young man, aged 21, was brought to me on February 19th, who presented precisely the aspect which is seen in extreme chlorosis. The skin had the characteristic tint, and the gums and conjunctivæ were very pale. He was feeble, and readily rendered short of breath. The condition was said to have come on gradually during the previous six months. I have since learnt from Dr. Nicholls, of Croydon, that he had seemed well before that time, and in good health, although delicate as a young child.

When I saw him, examination of the blood showed that the hæmoglobin was only a little over 30 per cent., and the percentage of red blood corpuscles was scarcely 25. This of course at once showed the nature of the case. Had it been the common "chlorosis," such as is frequent in girls, with that percentage of hæmoglobin the red blood corpuscles would have been at least 85 or 90 per cent. (It is not unusual in pernicious anæmia for the hæmoglobin to be a little in excess of the corpuscles: each corpuscle has even more than the normal amount.) An examination of the eyes showed numerous flame-shaped hæmorrhages in each retina, and one or two, of more irregular shape, close to the disc. I subsequently learnt from Dr. Nicholls that hæmorrhages had been found a month before, by Mr. C. Wray, of Croydon.

A very grave prognosis was obvious, and the course of the malady corresponded. A fatal ending is almost inevitable with such a reduction in the number of the corpuscles. In spite of careful treatment he steadily failed. There was some elevation of temperature for a few days, and pyrexia returned on March 19th, when a large hæmorrhage occurred in the right eye. Vomiting set in, and the patient died on March 21st.

The course of the disease was rapid, but the significance of the later rapid failure may easily be misconceived. The blood-making tissues depend for their nutrition and functional power on the blood which they have formed; when this has sunk to a low percentage, its effect upon them must be to increase, with augmenting rapidity, their incapacity.

Such a case lends itself to the current tendency to associate all sorts of diseases with specific organisms. But another hypothesis deserves consideration. The failure of tissues soon after they complete their development is not unknown in other structures. We see it, for instance, conspicuously in the so-called "hereditary ataxy" and in some late cases of pseudo-hypertrophic paralysis and allied maladies. We must ascribe these to an inherent defect of vital endurance on the part of the tissues concerned. It may be that a similar defect of vitality or of vital endurance in the blood-making tissues is the cause of such cases of pernicious anæmia.

THE ATROPHIC PHENOMENA OF RHEUMATOID ARTHRITIS.[1]

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IN the first volume of the *International Clinics*, second series, is a plate professing to represent the advanced and final stage of shaking palsy. We are told that in this disease there is no gross lesion, but obscure functional disorder; and that the stability of the nervous system is upset by molecular disturbances in the cortex of the brain. Whether this be so or not we must be struck with the resemblance of the figure on this plate to the last stage of rheumatoid arthritis—that stage, I mean, which implies final wreck and ruin, when joints are disorganised and muscles are wasted beyond all help and hope.

The study of atrophic paralysis has received a new impulse from the exhaustive paper read by Dr. Ferrier before the annual meeting of the British Medical Association at Newcastle-on-Tyne. We welcome and appreciate his lucid grouping of the atrophic palsies into (*a*) those dependent upon primary lesion of the spinal cord (a myelopathy); (*b*) those dependent upon lesion of the nerves (a neuropathy); and (*c*) those dependent upon lesion of the muscles themselves (a myopathy). It is not imagined that these forms of paralysis can always be diagrammatically separated and diagnosed. The order and development of the symptoms belonging to one type of paralysis may merge into those belonging to another; or one type may slide into another, so that the original landmarks become confused and obscured.

I shall try to prove one proposition: that the phenomena of muscular atrophy in rheumatoid arthritis are myelopathic, and capable of definition as a strict spinal paralysis. The argument for this proposition rests upon the fact that the purely rheumatoid phase of the atrophy now and then extends upwards, and that what was originally a myelopathy of spinal nuclei becomes a myelopathy of bulbar nuclei. In plain words, a person suffering from rheumatoid arthritis with much atrophy gradually finds that she cannot masticate or swallow well, nor protrude the tongue; and the expression of her face becomes stolid and almost blank. And we infer the pathology of the former condition from the known pathology of the latter. The atrophy of rheumatoid arthritis is not to be considered as a sequel of the arthritis, but as a concurrent fact. Both are sequences of a common antecedent

[1] Read before the Bath and Bristol Branch of the British Medical Association, on November 29th, 1893.

cause; sometimes the arthritic condition predominates, and sometimes the paralytic.

Often much light is obtained by reasoning backwards, and tracing the etiology of a disease from the remedies which cure it. How lost we were in those old days some of us can bring to mind when we had a case of rheumatic fever before us. We studied what was called, with grim cynicism, its "natural history," simply because we were unable to shorten its course, or even materially to mitigate our patient's sufferings. Dr. Todd and his followers were never tired of advocating humoral doctrines, and rheumatism was *par excellence* a humoral disease. Dr. Farr called it a disease of distinctly miasmatic origin; and, lastly, a school of pathologists arose among whom the opinion was current that rheumatism is a dynamic shaking of the spinal marrow, and perhaps of the higher centres also.

In like manner the form of arthritis which has been called rheumatoid, to denote a particular shape or method of degeneration, has been clothed with many etiologies, some of which are inconsistent with each other. By a process of logical exclusion we have gradually drifted to a neural hypothesis, though even with this landmark the way is by no means clear. It may be said with confidence that rheumatoid paralysis is not a myopathy, for there could not be such an universal and extreme form of muscle degradation. A universal neuritis is equally impossible and out of the question[2]. A spinal myelopathy is the only theory which can hold the field. I press with special force that what is called arthritic muscular atrophy has nothing to do with the muscular atrophy of rheumatoid arthritis, though the two conditions are often confounded. Arthritic muscular atrophy is a pure myopathy, and is connected with injuries or inflammation of joints. It is a reflex trophoneurosis, a pure irritation of the articular nerves leading to atrophy of the related muscles through the anterior crura of the spinal cord. I venture to repeat with emphasis that the arthritic degeneration which is called rheumatoid is accompanied in many cases by muscular atrophy from the beginning. The arthritis does not cause the atrophy; you might as well say that the atrophy caused the arthritis. We have no time to discuss the theme (though supported by Drs. Buzzard and Sansom) that all rheumatoid arthritis depends upon the lesion of a central nucleus devoted to the conservation of joint nutrition. At present our response must be "not proven."

Observe next that the rate of the atrophy is strictly chronic and slowly progressive. Muscles perish fibre by fibre: the paralysis is in proportion to the amount of wasting. The original formula of progressive muscular atrophy—"wasting palsy" it used to be called—was always this: that muscles are weak because they are wasted, and not wasted because they are merely weak. Sooner or later the muscles exhibit the so-called reaction of degeneration, but I have never observed fibrillary twitchings. Atrophy always involves the whole of a muscle, whatever its length; generally the atrophic process continues for a time and then becomes stationary. When the amyotrophy is exaggerated it greatly adds to the distortion which ensues from the enlargement of the articular ends of the bones. Charcot's arthropathy, an outcome of a grave central nerve lesion, is identical in its nature with rheumatoidal disease.

And now I relate the bare outlines of three cases which have points of interest in illustration of my paper:

A lady, aged 45, entrusted to my care by Mr. Edgar Hunt, of Colchester, came to Bath at the end of 1887, with well-marked symptoms of rheumatoid arthritis (of about four months' duration). She had an intensely pigmented face, and resembled a mulatto; the pulse was weak and frequent: and she suffered much and almost constant pain. Along with these undoubted signs of rheumatoid deterioration was a curious inco-ordination of the pharyngeal and palatal muscles, so that the food was sometimes regurgitated through the nostrils. The respiratory acts were defective, and the voice was feeble. Here was the germ of a lower bulbar paralysis, continuous and homologous with the atrophic paralysis which had begun in all the limbs. In a paper published about two years ago I spoke of this trouble in swallowing as a "bulbar warning;" a warning which may pass off as a functional storm, or wax into a gross and definite lesion. My patient devoted herself to the work of amelioration with an energy which deserved all praise. Within a year the pharyngeal and palatal muscles could do their physiological work almost as well as ever, barring a little hesitation now and then in beginning the act of swallowing food or saliva. Six visits to Bath, with a diligent use of the Aix-les-Bains processes, and no end of private shampooings, restored most of the joints and neighbouring muscles to active and harmonious strength.[3]

Both my other cases ended fatally, and a brief study of their leading points cannot fail to be instructive.

A married lady, aged 43, was sent to Bath early in June, 1891, as a typical example of ingravescent rheumatoid arthritis. There had been a careful consultation with Mrs. Louisa Atkins, M.D., and the lamented Sir Andrew Clark. There was the undoubted affection of the joints in all the limbs, and a distinct though moderate atrophy of the muscles of both forearms and both legs. For about a month our thermal and other appliances were used with manifest benefit. Then, very curiously, the arthritic part of her malady began to wane. There was a steady development of bulbar warnings. There was a rather rapid loss of power in the muscles of the arms, shoulders, neck, and chest, and also in the intercostals. The tongue could not be protruded to half the usual distance. The action of the masseter and pterygoid muscles was feeble. There was an altered expression about the lower part of the face. A defective respiratory function was visible in the short panting breaths and in a marked blueness of complexion. I was naturally alarmed by this new and unexpected phase of events, and Mrs. Atkins came down to meet me in consultation. We tried to believe that the disorder was only a passing myopathy—a shadow which might fade when the health was quite restored—but the evidence was strong and irresistible. To correct or confirm our conclusions our patient went to London and saw Dr. Buzzard, in consultation with Mrs. Atkins. His diagnosis was prompt and clear, to the effect that there was polio-myelitis of the anterior grey horns of the cord, especially in the cervico-dorsal region, but, extending also into the medulla oblongata, where certain motor nuclei, continuous and homologous with the anterior horns, were affected, namely, the ninth (hypoglossal), seventh (portio dura), motor root of the fifth, and the root of the spinal accessory. The prognosis, added Dr. Buzzard, must be very grave. Lesion in the bulb was continually threatening vital organs (heart and respiration), and her life was not at all safe. The lady returned to her residence, near Birmingham: and, after many fluctuations, she died early in January, 1892.

In April, 1892, a young lady, aged 22, was sent to Bath, and entrusted to my care by Mr. Beresford, of Egham, in Surrey. The rheumatoid symptoms (a sequel of rheumatic fever about three years before) were accompanied by a serious cardiac lesion; but the arthritis was only moderately severe, with a proportionate wasting of the upper and lower limbs. When I first saw this patient the resemblance of her condition to that of the patient last described was so striking that it aroused my interest immediately, and made me resolute at the very outset that nothing should be left undone in the way of treatment. The identity of the cases was indeed remarkable: and apart from the clinical curiosity of the thing, it seemed an odd chance that they should come under observation in consecutive years. In the present case one was reminded of a type which Erb calls "juvenile muscular atrophy," affecting chiefly the muscles of the shoulder girdle and upper arm; but then this is a pure myopathy, and my patient had the true bulbar symptoms of a small tongue, difficulty of speech and of expression, and a pinched look about the lower part of the face. She left Bath in the early

[2] I have read with care those pages which discuss the atrophic paralysis of rheumatoid disease in the excellent book on *Peripheral Neuritis* by Dr. Bury and the late Dr. James Ross. The paralysis in question is attributed to peripheral neuritis, on evidence which is surely incomplete. It is curious that the term "rheumatoid arthritis" is used in the title of the chapter (p. 335) but not in the text itself. It appears to be called "chronic rheumatic arthritis" on p. 349, which is precisely what rheumatoid arthritis is not, although of course it may be started by ordinary rheumatic and gouty processes. No peripheral doctrine covers the whole range of rheumatoid symptoms, especially those early signs which I originally pointed out—the pigmentation, tachycardia, and sweatings.

[3] I have just seen this lady for the seventh time (January, 1894), and the improvement in all respects is well maintained.

part of June, 1892; and at the request of her local adviser she consulted Dr. Gowers. As I have not the privilege of a personal acquaintance with Dr. Gowers, I did not like to write to him; but his opinion, so far as I could understand it when filtered through a lay medium, was very unfavourable in every way. From time to time I heard through the mother of the patient's downward course; of the little importance of the arthritic troubles as compared with the vital complications of the higher nerve centres; and of the gradual death, which came from paralysis of respiratory nerves in June, 1893.

Reviewing briefly the salient points of these three cases, there are special facts beyond all debate. (1) The rheumatoid phenomena were unquestionable. (2) In the first patient the bulbar disturbance began quite early in the medical history. Candidly confessing as I do that I did not rightly interpret this disturbance, and undervalued its meaning, it may be recorded as a happy coincidence that a firm and persevering treatment, carried on during several years, succeeded in quelling the rebellion of the nerves and nerve centres all along the line. (3) Bulbar symptoms, after they have passed the stage of inco-ordination and are accompanied by clear atrophy, are practically incurable. In the second case they came and developed under my own eyes with startling rapidity, and all the time the arthritis receded and almost went away. (4) Bulbar symptoms and rheumatoid arthritis, with its characteristic atrophy, may develop together, as in my third case. From the very commencement of my patient's illness both groups of lesions went on almost *pari passu*, and even at the last it could not be said that the arthritis had at all gone into the background.

I may be allowed to quote just one more example of an abstruse subject by showing that a paresis of muscle, not reaching the debility of atrophy, may travel downwards in the spinal column instead of upwards. Thus, a lady of middle age, living in Scotland, was sent to me by Dr. Byrom Bramwell in the autumn of 1891. The rheumatoidal symptoms were decided but not severe, and she steadily improved in every way. Her third visit to Bath, in the spring of 1893, was ended by a sort of medical tragedy; for a weakness came like a cloud over the lower limbs, so that she could scarcely move, and could not walk at all. There was little wasting and no increase in the arthritis. I sent her home as soon as possible, but the last news of her (a few weeks ago) was not at all encouraging. Once more: I have watched for ten or eleven years a case of scleroderma of the leg complicated with rheumatoid trouble in the neighbouring knee-joint. I did not know or even suspect that there was any pathological connection between the two until I came across a pregnant and suggestive paragraph in Dr. Jamieson's book on *Diseases of the Skin*, in which he points out that scleroderma and rheumatoid arthritis may occur in the same person because both are essentially atrophic processes.

If I am plainly asked what proof have I given of the proposition with which I started, where are my *post-mortem* examinations, and my microscopic specimens, I must drily answer that people who have rheumatoid arthritis do not commonly die in Bath. Either we greatly relieve them as soon as we can, or we send them away as incurable. To quote from a quaint seventeenth-century writer on the Bath waters, "We prefer that some other bell shall toll for them rather than our own big bell of SS. Peter and Paul." My simple aim has been to scatter a few thoughts worth thinking about; and on a future occasion I may be allowed to offer some suggestions for the preventive treatment of rheumatoid atrophy.

A DIASTOLIC BRUIT AT THE APEX IN THE HEART DISEASE OF CHILDREN.

By THEODORE FISHER, M.D.Lond.,
Registrar to the Bristol General Hospital.

DR. SANSOM, in his recent work upon the diseases of the heart, states that the only *bruit* that can be mistaken for the presystolic *bruit* indicating mitral stenosis is a diastolic *bruit* due to aortic regurgitation heard at the apex. There is another sound that at least may lead observers of limited experience to an incorrect conclusion. That is a diastolic or sometimes presystolic sound not infrequently heard at the apex in association with a dilated heart. Dr. Donkin[1] has noticed a well-marked example, and after speaking of diastolic sounds at the apex says: "And lastly I would record a remarkable case in a child of 8, where a loud and long diastolic murmur as well as a systolic was always heard at the apex, but the necropsy showed a mitral orifice of fully 3 inches round and no lesion other than a few small granulations on the auricular surface. Such a diastolic murmur, as is well known, is usually associated with marked mitral stenosis."

Through the kindness of Dr. Lauriston Shaw I have recently examined the *post-mortem* records of cases of adherent pericardium in children who died in Guy's Hospital during the space of seven years. In all cases (13 in number) presumably due to rheumatism, that is to say in all cases not secondary to phthisis, left-sided pleurisy or some other local cause, the heart was considerably hypertrophied and dilated. In the clinical reports of these 13 cases it was found that in 5 instances a diastolic or a presystolic *bruit* had been present at the apex, yet the necropsy showed that the mitral orifice was dilated and that the aortic valves were not thickened.

The following are brief notes:

CASE I.—Girl, aged 12, admitted under Dr. Goodhart, February, 1886. Loud systolic *bruit* at apex, alternating with a rumbling sound.

Post mortem, heart weight 23 ounces; mitral orifice dilated, the mitral valves slightly thickened. The aortic valves competent, but showed minute granulations along their lunulæ.

CASE II.—Boy, aged 10, under Dr. Frederick Taylor, January, 1887. A loud systolic *bruit* at apex, and something heard after it, "probably a diastolic *bruit*." A thrill was also present, but whether systolic or presystolic was considered doubtful.

Post mortem, heart weight 10 ounces; both the aortic and mitral valves were quite healthy, except that they were fringed with small bead-like granulations.

CASE III.—Boy, aged 13, admitted under Dr. Pye-Smith, November, 1890. Systolic *bruit*, audible at impulse, and rumbling sound presystolic in time.

Post mortem, heart weight 22 ounces; mitral orifice dilated, valves not thickened, aortic valves also healthy.

CASE IV.—Boy, aged 12, admitted under Dr. Hale White, January, 1890. Marked systolic thrill, and a systolic *bruit* audible at impulse. Three months after a diastolic *bruit* became audible at the apex.

Post mortem, heart weight 13 ounces; mitral orifice enlarged, valves not thickened; other valves unaffected.

CASE V.—Girl, aged 11, admitted under Dr. Goodhart, February, 1892. A slight systolic thrill, mitral systolic murmur, and a diastolic murmur at apex.

Post mortem, heart weight 17 ounces; mitral valves thickened, the orifice dilated, aortic valves not thickened.

Here we have five cases in which a presystolic or a diastolic sound was associated, not with mitral stenosis, but with combined dilatation of the left ventricle and of the mitral orifice. It may be said by some that, although there was no actual mitral constriction, the relative size of the mitral orifice was probably small compared with that of the cavity of the ventricle. Whether such is the explanation of the sound or not, it does not alter the fact that the *bruit* did not point to stenosis of the mitral valves. That even relative contraction of the mitral orifice need not be present is shown by a case that recently died under the care of Dr. Harrison in the Bristol General Hospital.

In a boy, aged 13, admitted for cardiac disease, a systolic murmur at the apex was preceded by a rumble. After death the pericardium was found to be universally adherent, the heart greatly enlarged, and the mitral orifice sufficiently wide to admit five fingers. I have seen one other case in which the necropsy showed that a presystolic rumble was unassociated with mitral constriction. It was in a boy, aged 8, under the care of Dr. Wheaton, in the Royal Hospital for Children and Women, Waterloo Bridge Road, S.E. In addition to a systolic *bruit*, a long low-pitched rumble occupied the diastolic interval, and was apparently also heard during the systole. At the *post-mortem* examination the heart was found to be enlarged, weighing 10 ounces. The mitral valves were thickened and contracted, but the mitral orifice measured 3¼ inches. The aortic valves were thickened but not incompetent. In connection with this case it may be mentioned that, as in three of the cases that occurred in Guy's Hospital, a systolic thrill was present. This thrill, at least to a careless or inexperienced observer, might be an additional source of error and be taken to confirm the idea that the presystolic sound pointed to mitral stenosis. The thrill is, however,

[1] *Diseases of Children*, p. 415.

systolic, not presystolic, but if the heart were beating rapidly the exact time of its occurrence would not always be easy to ascertain.

Since the above was written Dr. Sturges has mentioned, in his lectures upon Heart Inflammation in Children, five instances in which a thrill and presystolic murmur were noted during life, while mitral stenosis was found on *post-mortem* examination to be absent. It is noteworthy that Dr. Sturges uses the words "thrill and presystolic murmur," from which we may infer that the thrill was not thought to be presystolic.

Dr. Cheadle has noticed the frequency of a diastolic sound in the early endocarditis of children, and states that, although it may disappear, it generally develops into the presystolic *bruit* of mitral stenosis.[2]

Possibly the diastolic sound that disappears, although indistinguishable at this stage from that of early mitral stenosis, may indicate temporary dilatation of the heart. The sound heard in the diastolic interval in association with a dilated heart may be either a sound separated by an interval both from the second or the first sound, or it may be a low-pitched presystolic rumble. As is well known, the presystolic *bruit* of mitral stenosis may often be replaced by a diastolic sound. The soft presystolic rumble of a dilated heart may also alternate with a diastolic sound.

The presystolic rumble of a dilated heart is, however, probably too low pitched to lead to much difficulty in diagnosis, and, when changed for a diastolic sound, the accentuation and rhythm may be that of the *bruit de galop*. There is, however, a diastolic murmur heard in the dilated heart of children which is presumably due to that dilatation, and is indistinguishable from the diastolic sound of mitral stenosis. It may be best heard at the impulse or just outside it, or over the right ventricle in the third and fourth or fourth and fifth intercostal spaces. In one position it is probably produced in the left ventricle, in the other in the right. In the same heart it may sometimes be best heard in one position, sometimes in the other, and then probably points to general dilatation.

Whether such a murmur indicates mitral stenosis or dilatation of the heart is of some importance. Adherent pericardium is the most common cause of a dilated heart in childhood, and death from such a cause is far more common than from mitral stenosis. Thus the *post-mortem* reports at Guy's for seven years showed that there were only 3 deaths from mitral stenosis of the age of 15 years and under, while there were 13 deaths from cardiac disease with adherent pericardium, in which valvular disease was either absent, or there was merely slight thickening of the mitral valves. Apparently very few children with adherent pericardium survive the age of fifteen, while mitral stenosis is not uncommon in young adults. This suggests that the immediate prognosis is considerably worse in the former affection. A diastolic sound, therefore, indicating persisting dilatation of the heart, is probably of far more serious import than one pointing to mitral stenosis.

A CASE OF SENSORY APHASIA, ACCOMPANIED BY WORD DEAFNESS, WORD BLINDNESS, AND AGRAPHIA.

By HARDING H. TOMKINS, M.R.C.S., etc.,

Late Assistant Medical Officer, Gloucester County Asylum; and Clinical Assistant, West Riding Asylum, Wakefield, Yorks.

I am indebted to my brother, Mr. Alfred J. Tomkins, of Brighton, for many notes and permission to publish the following case:

Past History.—A. N., aged 40, tailor, had had a slight tendency to hæmophilia from youth. In November, 1890, and again in February, 1892, he had slight hæmoptysis, probably from a varicose vein, visible in the pharynx. In April, 1892, he had slight hæmorrhage from urethra after coition (seldom practised for some time previously). He had been something of an athlete and boxer, had lived freely, and still drank beer freely and smoked perhaps to excess. There was no history of syphilis. He had suffered much mental anxiety and business worry due to the recent death of his brother (head of firm), and consequent frequent journeys to London by early train, great activity while there, often without food, resulting in exhaustion on returning to Brighton in the evening. The general health was good, but he was somewhat obese and plethoric in appearance. The heart was hypertrophied, and the second sound accentuated and slapping in character. The pulse was tense, rapid, and powerful.

Attack.—Having felt specially well and bright that day (July 24th, 1892), he was conversing quietly about noon when he suddenly became unable to recollect words. Feeling bewildered and somewhat faint he sat down for a while, but getting worse, and becoming excited in consequence of his inability to make those around him comprehend his meaning, a friend took him nearly home. He then walked on to my brother's house. He next went home, a few hundred yards, and lay down. About an hour after he was visited by my brother, who found that a patch of subconjunctival hæmorrhage had developed at the outer canthus of the left eye. The patient was entirely unable to converse, using wrong words and frequently only syllabic sounds, not real words; he had some pain in the left temple. Deeming it inadvisable to excite him, no further examination was made. Between 1 P.M. and 11.30 P.M. he vomited twice, had free evacuation of the bowels, and passed urine copiously. He was given bromide of potassium and chloral hydrate, and had a fairly good night.

On July 25th he was mostly drowsy, at times excitable and irritable, and complained of pain in the left occipital region. Urine, ¼ albumen, clear, no blood.

On July 26th he was quieter. Bowels and urine as before.

On July 28th he was very restless, and thought himself well enough to go to work; however, he could not understand anything said to him without pantomime (for example, told to put out his tongue he offered his hand, though the pulse had just been taken); he could not whistle to accompaniment (a favourite pastime); could not write to dictation, but when told to write "Wednesday, August 10th, 1893," wrote words most letters of which were intelligible, but which were simply jargon in themselves, as is shown in the reproduction (Fig. 1); some time soon after this he wrote his name fairly well when practising alone. He could not read at all, but used such sounds as "todibeg," "coweid," "wiz," and "schloth"; he could not name his children except the eldest, and could not make himself understood without a good deal of pantomime, as he was unable to compose a sentence, and generally used unintelligible sounds for words. He was ordered liq. hydrarg. et sodii iodidi.

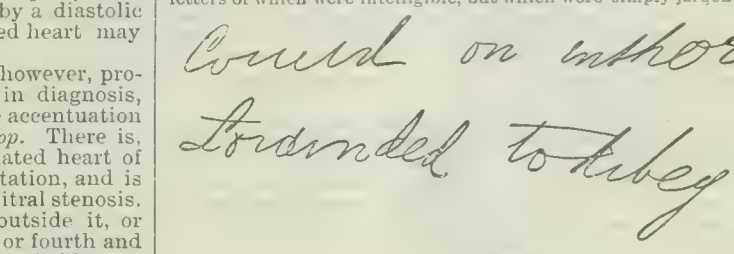


Fig. 1.

From this time onward the albumen decreased to practically *nil*, with an occasional trace, as on August 17th.

By July 31st speech was improving slowly, and urine decidedly less albuminous.

On August 4th, happening to visit my brother, we went to see him, and by ophthalmoscopic examination I found both discs slightly too red, vessels distended and edges of discs slightly but distinctly blurred. No recent or old hæmorrhage or other abnormality; as far as could be ascertained no defect of vision and no hemianopsia; could certainly see small type, though unable to read.

On August 10th, word deafness was less marked, but he did not always interpret well. Word blindness was present. He could not name a child, nor recognise a picture of a fowl or donkey, but called the picture of a little girl "a kid."

On August 11th he could copy the figures in items of a bill for a suit of clothes, and add up correctly. The biniodide was stopped and he was given iodide of potassium gr. v.

On August 17th he talked better, complained of bloodshot eye. Urine which had become normal, now contained albumen; pulse hard, 100.

On September 1st he went to Barcombe for change, as it worried him to try and talk to friends. Previously to this he had regained the power of whistling, and also volunteered that a geranium ought to be taken away as it "had no pictures" (flowers).

During September he steadily improved, having regained the power to read to some extent with difficulty; could spell out meaning of advertisements on hoardings, but books soon tired him too much to continue; could name his children, but always said "he" for "she," though unaware of this habitual error; memory for articles and pictures was perfect, and by September 30th he wrote spontaneously one of several letters (Fig. 2).

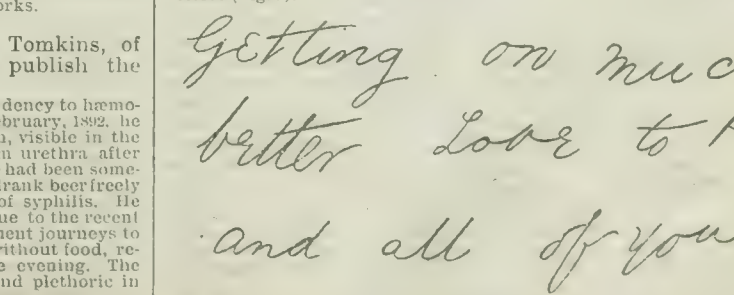


Fig. 2.

[2] *Keating's Encyclopædia of Diseases of Children*, vol. ii, part ii, p. 777.

On October 2nd he discussed a letter and afterwards copied correctly a reply.

On October 4th he wrote a short letter, well worded, correctly punctuated and spelt, in his usually good business hand, with only one error in spelling. He could understand speech well without pantomime, and talk intelligibly, only substituting words occasionally, then saying "Am I talking nonsense?" He however complained frequently of "crashing noises" in his head, which were also excited by rattling of knives, etc.

About two hours after writing this last letter, he had at 10 P.M. a somewhat violent convulsive attack; falling unconscious, he remained so for about thirty-six hours (his friends thought the convulsions bilateral, but there is some doubt). After this attack, though too weak to attempt to write, he regained his speech to a greater extent than before the attack.

On October 12th, about 8 P.M. (having been costive since the second attack), he suddenly pressed his hand, it is said, over the region of his left kidney, with a cry as of acute pain, and became quickly comatose: convulsions followed, and lasted more or less all night, but were not violent as before. He remained comatose till death, about 8 P.M. on October 14th.

There was no *post-mortem* examination, but I am inclined to think the symptoms were due to hæmorrhage from or about the posterior terminal branches of the middle cerebral artery supplying the superior temporo-sphenoidal and superior marginal convolutions. (A somewhat similar case is reported in Suckling's *Diagnosis of Diseases of the Brain*, but due to embolism.) That it was hæmorrhage is almost certain from the previous tendency to bleeding, from the tense rapid pulse, the absence of heart disease other than hypertrophy consequent upon chronic kidney disease, and the immediately preceding mental strain, excitement, and bodily over-exertion; added to which is the fact that, though the onset was sudden, yet the first symptoms appear to have been faulty word memory, indicating a small lesion affecting the superior temporo-sphenoidal convolution; and as the mischief spread, the symptoms became noticeably more, till at last he could neither speak, recognise spoken or musical sounds, read or write to dictation, recognise familiar objects, or copy writing—though it is possible he may have retained the ability to sign his name.

Regarding the reading, in his case the difficulty was twofold, for the peculiar sounds uttered seem to be diagnostic of word deafness, while that he was certainly word-blind also is shown by his inability to recognise pictures or written directions, and the fact that when getting better he still had to learn to spell out advertisements by means of capital letters chiefly. Dr. Broadbent records an interesting case in which a word-deaf patient read aloud: "So sur wisjee coz wenement apripsy fro freuz fenement wiza seconce coz foz no sophias a the freckled pothy conollied." Dr. Ross, on the other hand, reports a case of a word-blind patient, who for "Dear Sir, I shall be much obliged if you will let me know whether or not you consider it likely A. B. will recover," read as follows: "Dear Sir, you are requested to bring this note with you next time you come to the infirmary."

An additional argument in favour of hæmorrhage exists in the fact that after lying down for some time a subconjunctival hæmorrhage appeared, as if from soakage of the fluid blood along the course of the middle cerebral artery, and thence into the connective tissue of the orbit on the side of the lesion. That it was a cortical lesion is probable from the local pain, the vomiting, the absence of unconsciousness, the absence of any definite motor paralysis, except perhaps some paresis of the muscles of the tongue interfering with whistling, though the chief interference was due to inability to interpret the sounds correctly; the centre for this organ is in close proximity to both the centres for hearing and for sight, since some authorities still hold that the centres in the occipital lobes are not the only visual centres, but also those originally mapped out by Ferrier in the supramarginal and angular convolutions. Professor Ranney, of New York, gives a diagram in his work on nervous diseases showing associating fibres between the speech centre and those of hearing and those of sight (occipital lobes), and between the speech centre and the medulla, and also between the hearing and sight centres; now as these apparently, and the second or speech tract certainly, pass antero-posteriorly close to the surface of the hemisphere (Wernicke), one is tempted to think that pressure on and consequent irritation of these would account for symptoms of word blindness, even supposing the supramarginal sight centres to be only motor. If, then, a small artery supplying the hearing centres ruptured, there seems to me every reasonable chance of the effused blood interfering either with the adjacent sight centres in the supramarginal convolution or with those associating fibres, or possibly both.

THE STAINING OF THE FLAGELLA OF BACTERIA.

By JAMES RICHMOND, M.A., M.B.Oxon., D.P.H.Camb.

[From the Pathological Laboratory of the Owens College, Manchester.]

To present to our view all the morphological features of a micro-organism it is necessary to determine the form of the cell body of the micro-organism and especially in the motile species to determine also the presence or absence of flagella. In the ordinary methods of staining bacteria the cell body alone is shown. Several methods have been formulated by which the presence and character of flagella may be demonstrated. The principle underlying all these methods is the same, namely, to act upon the substance of the flagella by means of a mordant, so that these may take up a staining material which when used by the ordinary methods fails to stain them. Methods have been formulated by Koch,[1] Künstler,[2] Neuhaus,[3] Trenkmann,[4] Loeffler,[5] Lubsch,[6] Van Ermengen,[7] Rémy and E. Sugg,[8] Klein,[9] and Nicolle and Morax.[10] The method of the last-named observers is a rapid and effective means of staining flagella. The difficulty to overcome is the precipitation by the mordanting process of foreign substances, which, taking on the stain, obscure the stained flagella. This precipitation they seek to obviate by the following method:—

> They rub in a watchglassful of ordinary tapwater a particle of a recent agar culture of the micro-organism, so that no large particles remain. By means of a pipette, a thin film of this mixture is made on a coverglass held in a Cornet's forceps, and previously strongly heated and allowed to cool. The film is protected from contamination and allowed to dry at the ordinary temperature. A few drops of the mordant are then placed on this film. The mordant is composed of 10 c.c. of 20 per cent. solution of the purest tannin; 5 c.c. of cold saturated solution of ferrous sulphate; 1 c.c. saturated solution of fuchsin in alcohol. The coverglass is then warmed over a flame for twelve seconds, so that the liquid just steams, and it is very important not to heat too strongly or too long. The coverglass is then washed gently but well in a stream of ordinary water. The points of the forceps and the upper surface of the coverglass are then well dried, and the mordant used twice or thrice again in exactly the same way. Too little mordanting shows the bacteria without flagella, too much mordanting precipitates foreign matters and obscures the flagella. Generally three mordantings enable the flagella to take on the stain better than the background. The staining proper may be effected by creasoted or anilin fuchsin, anilin gentian violet or gentian violet. They use Ziehl's phenol-fuchsin. A few drops of the stain are heated on the coverglass in the flame as before for fifteen seconds, and then washed as before. They repeat the staining if they suspect "undermordanting." Then the coverglass may be examined when dry.

By following the clear instructions of these observers and staining with Ziehl's reagent, I obtained good staining of the flagella in the cases of the spirillum Finkleri, sp. Deneke, sp. Metchnikovi, sp. choleræ Asiaticæ (one from Koch's laboratory and three isolated by Professor Delépine[11] from Manchester cases), a spirillum somewhat like Finkler's isolated recently from Manchester sewage, the bacillus of typhoid, and B. coli communis. Well stained flagella of the last-mentioned spirillum, of the sp. Deneke, and of B. coli communis were obtained by diffusing in tap water a twelve hours' drop culture in bouillon, and this method may prove useful if the bacteria do not readily separate from each other when agar cultures are used. The results are not uniform over the whole of the specimen; the ground is, as a rule, very darkly stained, but here and there the bacteria stand out well stained on a clear background.

The method may not be so suitable for photomicrographic purposes as Loeffler's and Van Ermengen's, but for rapid work this is the best method hitherto described. In the spirilla mentioned above the separate segments had each one flagellum situated at one end. Occasionally strings of spirillar segments were seen, the cells being apparently joined by means of their flagella. This recalls the appearance seen in drop cultures of these organisms, in which a single segment follows at a short interval all the slow movements of a spirillum across the field of view, the segment having apparently some attachment to the spirillum, whilst surrounding free segments have a rapid darting motion.

These observations agree with those of Nicolle and Morax

and other observers. By the differences in the character of their flagella Nicolle and Morax divide the spirillum of cholera and its allies into three types :

Type I. A non-motile Indian spirillum from Koch's laboratory not having flagella.

II. Motile spirilla having flagella.

Type A. Having one flagellum at one end or two flagella one at each end. (Sources—Shanghai, Hamburg, Courbevoie, Seine water, and sp. Dencke.) Loeffler, Trenkmann, Neuhaus, and Straus had already noticed this.

Type B. Having four flagella two at each end, or three at one end and one at the other, or having four at one end. (Sources—Massowah, Calcutta, Paris, 1884.)

They never found more than four flagella, and the flagella were often incomplete, being very fragile. They found the character of the flagella to be constant through successive cultures, after passing through animals and man and in the attenuation cultures described by Hueppe as resistent forms. They consider this constancy in the character of the flagella of some value as being the only means of differentiation of spirilla which are isolated from cases of cholera in different places, and analogous in their cultural and pathogenic properties. In B. coli communis they found a maximum of from eight to ten flagella, and these were much more fragile than those of the typhoid bacillus, which were ten to twelve in number. Lubsch[6] says that B. coli communis has only one to three flagella, and the typhoid bacillus eight to twelve. My observations agree with those of the former observers, but possibly the organisms are different from those of Lubsch. At present therefore the character of the flagella does not afford a means of diagnosis between B. coli communis and the bacillus of typhoid.

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A MODIFIED GOLGI'S METHOD FOR THE STUDY OF THE HUMAN BRAIN.

By W. LLOYD ANDRIEZEN, M.D.Lond.,
Pathologist and Assistant Medical Officer, West Riding Asylum, Wakefield.

Golgi's[1] original and later[2] methods give good results with young and embryonic animal brains, but not with adult or human brains. The following method, gradually evolved during the course of a systematic research with various modifications, has given in my hands good results, which are almost constant for the human brain. It is as follows :—

(*a*) Thin slices (2 to 4 mm. in diameter) of brain, with the pia-arachnoid intact, are suspended by a thread or a glass (or platinum) hook, in K. bichromate 2 p. c. — 95 cc., to which, after 10 to 15 minutes, add 5 c.c. of 1 p. c. osmic acid, keep in the dark for 24 hours, (*b*) then change into K. bichromate 2½ p. c. — 90 c.c., osmic acid 1 p. c. — 10 c.c., in which keep specimen (suspended) for 2 days : (*c*) finally change into Golgi's mixture of K. bichromate 3 p. c. — 80 c.c., osmic acid 1 p. c. — 20. The total fixation and hardening of 3½ days shows nerve cells and the two types of glia cells (fibre cells and protoplasmic cells) well ; 4½ days show more nerve cells, especially cell bodies ; 6 days are needed to show axis cylinders, nerve fibres, and collaterals. On an average it is well to have two specimens, hardened 3½ and 4½ days respectively : (*d*) rinse in distilled water for 1 or 2 seconds, and plunge into $AgNO_3$ solution (¾ p. c.) in the dark for 5 to 15 minutes, (*e*) then change into 100 to 120 c.c. of $AgNO_3$ solution, to which 1 drop, not more, of formic acid has been added, and (*f*) place in incubator, in the dark, at T. of 25 to 27° C., changing it for fresh silver solution after 24 hours ; (*g*) the total staining in the silver solution should be 3½ days or 4½ days respectively, often 3 days suffice ; (*h*) rinse in methylated spirit and fix in wax, *or* spirit 15 min. followed by absolute alcohol 15 min, thin celloidin ½ hour, and fix on cork ; (*i*) cut under spirit ; (*k*) pick out the best sections and place in large quantity of distilled water till nearly freed from spirit, about 5 minutes, (*l*) then place sections in ¾ p. c. solution of $AgNO_3$ for ½ to 1 hour ; (*m*) dehydrate in spirit, then in xylol-piridine, equal parts : (*n*) clear in xylol (twice), and mount, after blotting, in xylol dammar, without a cover-glass, hastening the process of drying by placing the slides in the incubator at T. of 37 to 40° C. for 1 day or a little longer. This procedure (*n*) is necessary, otherwise, even after months, the specimens may begin to spoil.

Successful preparations show the nerve cells and their processes down to their finest ramifications and endings, and the same holds with regard to the glia cells, both protoplasmic and fibre cells, *and all these cell elements are sharply differentiated from one another and from the clear ground substance.* Axis cylinders and collaterals are seen, somewhat abundantly, also nerve fibres ascending and ending freely by branching fibrils in the cortex. The method is applicable to brains provided *post-mortem* changes are not too advanced, or the tissue disintegrated or softened. Results obtained from human and animal brains have been noted in two previous papers, namely, British Medical Journal, July 29th, 1893, and *Internat. Monats. f. Anat. u. Physiol.*, 1893, Bd. 10, Heft. 11 ; in the latter of which the author gives special details for the study of the perivascular neuroglia in the human *brain*.

[1] Golgi, *Sulla fina anatomia degli organi centrali del sistema nervoso*, 1885-6.
[2] Sala, in *Zeitsch. für Wissensch. Zoology.*, 1891.

THE USE OF A COMBINATION OF CARBOLIC ACID AND CHLOROFORM IN ENTERIC FEVER.

By Surgeon-Lieutenant-Colonel R. H. QUILL,
Army Medical Staff.

In the early part of last year there appeared in the British Medical Journal two very interesting communications by Drs. Charteris and Wiglesworth, on the effect of the internal administration of carbolic acid in zymotic diseases. As bearing on the same subject, I venture to hope that the following remarks will be of interest to the readers of the Journal.

In the year 1892, 24 cases of enteric fever were treated in the Station Hospital, Kirkee (India), with 9 deaths, that is, the high mortality of 37.5 per cent. In the year 1893, 18 cases of this fever were treated in the same hospital, with only 2 deaths, that is, a mortality of 9 per cent. Of these 18 cases, the last two were under my care from first to last. All recovered perfectly without complication of any kind, or occasion for anything beyond a minimum of anxiety.

None of these cases were diagnosed as examples of enteric fever without a consensus of opinion among the medical officers serving with me as to the unmistakable nature of the fever. All twelve cases had practically the same treatment. This communication being principally concerned with the medicinal treatment of enteric fever, I will not take up space with any remarks regarding the important details of diet and nursing, beyond saying that the greatest care was taken as to the suitability of the former and the efficiency of the latter. On admission, if the fever was within the first week, 3 grains of calomel was ordered at bedtime, and this dose was twice subsequently repeated at a few days' interval. The following combination of pure carbolic acid and chloroform was at the same time prescribed, and administered according to the following directions :

Five doses of the mixture to be given every second hour on the first day. Seven doses on the second day. Ten doses on the third and following days, until a distinct improvement is observed in the general condition of the patient, with a fall of temperature. The doses then to be gradually reduced to seven, five, and three in the twenty four hours, until the medicine is finally abandoned.

It is important to continue giving the mixture in from three to five doses daily for at least a week after the temperature has fallen to normal ; doing so renders the patient less liable to a relapse. The combination I advocate is composed as follows :

℞ Acid. carbol. pur. (Calvert's) mxxxvi ; spt. chloroformi ʒij ; tr. cardamom. co. ʒiij ; syrup. hemidesmi ʒij ; aquæ chloroformi ad ʒxii. M. Ft. mistura. Sig. The carbolic mixture one ounce, with an equal quantity of iced water, every two hours as directed.

In past years carbolic acid has been more than once recommended as an intestinal antiseptic in enteric fever, but has been never generally adopted. I believe that this neg-

fect would not have occurred had the acid been given in sufficient quantity. The usual plan of prescribing the acid in 2- or 3-minim doses three or four times a day is quite futile. To be effectual the acid must be given in full doses at short intervals, freely diluted and suitably combined.

In the series of cases treated by me several took a large quantity of carbolic acid before convalescence was established; yet in none were any ill-effects noticed which could be ascribed to the acid. One patient took, from first to last, over 2 ounces of carbolic acid, with the same quantity of chloroform, and in other cases 1½ ounce of each of these drugs was taken; yet the urine never became black or anything approaching that colour; occasionally it became high coloured, that was all.

The combination of carbolic acid and chloroform was adopted for the following reasons. In 1892 Dr. McIntyre, of Glasgow, conducted some experiments in regard to the action of carbolic acid on the enteric bacillus (Gaffky's), and found that in addition to an antiseptic action on the intestinal contents, the acid controlled the development of the enteric bacillus. Previously to this, in 1890, Werner, of St. Petersburg, made similar experiments with chloroform, and found that a ½ per cent. solution of chloroform killed the enteric bacillus.

Reflecting on these experiments it occurred to me that a combination of these drugs, both of which had a distinctive effect on the specific micro-organism of enteric fever, and one of which had as well a wholesome intestinal antiseptic action, ought, if given with judicious freedom, to be effectual in rendering immune the enteric bacillus and its septic products. So far my expectation has been realised.

I have treated with the carbolic acid and chloroform combination during the past year all the cases of enteric fever that have come under my care, and in each case perfect recovery has followed, without the advent of any symptom calculated to cause anxiety.

It is a gratifying experience to be able to make this record regarding a fever which, in India, has a mortality very considerably higher than that usually experienced in temperate climates.

The following are the effects I have observed as resulting from the use of the carbolic acid and chloroform combination:—1. A reduction in the average duration of the fever. 2. A continuous depression of the febrile temperature. 3. Early cleansing of the tongue, dryness of which was rarely observed, and was then evanescent. 4. An almost complete deodorisation of the stools. 5. Abdominal distension kept in entire abeyance. 6. Tendency to diarrhœa checked. 7. Intellectual clearness of patient preserved, with no tendency to stupor or delirium. 8. Secondary complication of any kind never occurred. 9. Relapses rare; when they occurred they were of short duration. 10. Food invariably well assimilated. 11. Convalescence rapid.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

A COMPLICATED CASE OF FRACTURE OF THE BASE OF THE SKULL.

As the following case has several points of interest, I send it to you for publication.

Miss G., aged 30, on December 13th, 1893, was thrown from a high dogcart, and struck her head on a kerbstone. She was unconscious for about ten minutes, and bled very profusely from a scalp wound, and from the nose and mouth. She was carried immediately into a house within a few yards of where the accident happened, and put to bed as soon as possible.

The following was her condition: There was a contused linear wound 3 inches long over the right temporal region, hæmorrhage from left ear, nose, and mouth, wounds over the bridge of the nose, and on the buccal mucous membrane on both sides of the mouth, severe ecchymosis of the right eyelid, and excoriations from gravel over the whole face. The pupils were equal, moderately dilated, and reacted to light. She could answer "Yes" or "No" to questions, and would move any limb when asked to do so. She vomited a large quantity of blood one hour and a-half and again four hours after the accident, but there was no vomiting subsequently.

The bleeding from the left ear ceased three hours afterwards. It was accompanied by thin serous fluid, presumably cerebro-spinal, and after bleeding ceased about 1½ drachm of this fluid escaped.

On December 14th, twitching of the left forearm, hand, and leg was noticed. There was ecchymosis of the left eyelid as well as the right, but no subconjunctival hæmorrhage. She complained of considerable pain and throbbing on the left side of the head and in the left ear. She could hear a watch tick with both ears. Smell and taste were lost.

On December 16th there was well-marked amnesia; she could not name simple objects, that is, spoons, pencils, etc. She called her eyelids her gums; did not know her right side from her left, but could remember matters foreign to herself and her condition. She could not sustain a conversation owing to loss of words.

On December 19th, for the first time, no recent bleeding was seen in the pharynx.

On December 22nd, crossed diplopia was first noticed. The false image was to the right and below; there was partial paralysis of left internal rectus and superior oblique muscles. Amnesia was slightly less marked. She realised for the first time that she had had some accident.

On December 30th, proptosis of the left eye was first noticed. This increased slightly for two days, and then gradually diminished, but had not entirely disappeared four months after the accident.

This condition is said by some authors to occur from third nerve paralysis, but as the paralysis had begun to improve, and the images to approximate before the proptosis occurred, it must have been due to other causes, probably a lesion of the cavernous sinus.

On January 22nd, 1894, she was removed home convalescent.

On March 12th, she was able to walk about the house, and got out daily in a bathchair. There was slight amnesia when excited, and she complained occasionally of nausea after exertion, but otherwise her condition was most satisfactory.

The temperature remained between 100° and 101° for the first nine days, and then gradually settled to normal, but did not become constant for at least two months. The pulse rose to 112 a few hours after the accident, and then settled to between 70 and 80. This remained very constant. Constipation was most obstinate for a month.

It is interesting to sum up the apparent injuries sustained: (1) A fracture of the middle and anterior fossæ of the base of the skull; (2) intracranial effusion, causing twitching of left leg and arm and proptosis of left eye; (3) injury to left third nerve causing crossed diplopia; (4) well-marked amnesia; (5) loss of smell and taste; and (6) severe scalp wound over right temporal region.

I consider that the severe hæmorrhage at first proved most beneficial, and lessened the chances of intracranial hæmorrhage. Well did Hippocrates say that no head injury was sufficiently slight to be disregarded or sufficiently severe to be despaired of.

Oxted. EDWD. P. FURBER.

INCISED ABDOMINAL WOUND: WOUND OF INTESTINE: RECOVERY.

I THINK the following case is of sufficient interest to justify me in asking you to insert it in the BRITISH MEDICAL JOURNAL.

G. A. W., aged 7 years, fell down twelve steps, which are very steep, with an ordinary chamber utensil in his hand. At the time of the accident he had on only his shirt. The accident happened at about 7.45 P.M. on February 19th. When I arrived shortly afterwards I found the child lying on a couch, with a wound of about three to four inches in length, just above the anterior superior spine of the ilium, and from the wound about four feet of small intestine protruded. On examining the bowel I found a small wound, which was more or less circular, about the size of a sixpenny piece, through which a quantity of fluid fæcal matter flowed. The child was

intensely collapsed, and at the time I thought death was imminent. I closed the wound of the bowel with three catgut sutures, and having put the child under chloroform, washed the bowel well with a carbolic solution, and returned it into the abdomen. This proved very difficult on account of the straining and vomiting which ensued. I then sutured the peritoneum in two places, and finally closed the skin wound with four sutures. I then put on a pad of wood wool, and bandaged firmly. February 20th. The pulse was 120, the temperature normal. There was constant vomiting, and the collapse was passing off. In the evening the pulse was 120. There was no tympanites. February 21st. The pulse was 106, and vomiting still continued; some flatus was passed. In the evening the pulse 120. February 22nd. The pulse was 116, and the temperature normal; there was no sign of peritonitis. In the evening the pulse was 84, and the temperature 97°. The vomiting ceased at night. On February 23rd the pulse was 98, and the temperature normal. On the 24th the pulse was 80, and the temperature normal. The wound was dressed on account of discharge showing through the dressings; there was no redness nor inflammation. In the evening the pulse was 80, and the temperature normal. The wound was dressed on February 25th, 26th, and 27th. On February 28th an enema of soap and water, with castor oil, was followed by a large motion. On March 1st the bowels were open five times; there was no pain, and no swelling of the abdomen. On March 4th the bowels were open naturally, and the child was able to take food. On March 10th the wound was quite healed. The child was able to get up, and was free from pain or discomfort of any sort.

Longsight, Manchester. Owen Gwatkin.

REMOVAL OF A BRISTLE FROM THE METATARSO-PHALANGEAL JOINT OF GREAT TOE.

On February 16th a lady, who had complained of tenderness in the great toe joint of her left foot for eighteen months, was seized, whilst walking home, with a sudden sharp pain in the metatarso-phalangeal joint "like the running in of a hot needle," and became quite lame.

On the following morning I found the joint acutely inflamed and tender to the touch. The suddenness of the onset, character of the swelling, and acute pain suggested gout, but the usual remedies failed to give relief, and the condition remained unaltered until February 21st, when my attention was called to a small black mark on the inner side of the joint. Thinking it to be a splinter which I had overlooked at my first examination, and the possible cause of the trouble, I made an incision, and pulled out from the joint a stiff, black bristle, nearly an inch long.

The acute symptoms immediately subsided, but the joint remains tender, and there is some thickening of the ends of the bones forming it.

How the bristle reached its resting place I am not prepared to say, but it is extremely improbable that it could have worked its way in without the patient's knowledge.

Ramsgate. John B. Berry, M.R.C.S.

AN UNUSUAL CASE OF ALOPECIA.

At the meeting of the Bristol Medico-Chirurgical Society held on February 14th, I showed a boy, aged 5½, who presented a peculiar form of alopecia which, as far as I am able to discover, has not been recorded before. He came under my care in August, 1893, with a patch of alopecia areata, about the size of a penny, over the right parietal bone. Under treatment with chrysophanic acid ointment new hairs soon appeared, but, instead of the disease being cured, a thinning of the hair began round the site of the patch, and has slowly spread ever since. From the right parietal bone the thinning spread forwards, then downwards to the left side of the head, and at the same time on the right side. He presented in February a curious appearance, with a tuft of thick dark natural hair on the upper and back part of his head, and joined to a thin band of similar thick hair running from ear to ear along the lower limit of natural hair growth. Since then the tuft has become smaller and separated from the band, and I have no doubt the whole head will in time present the thinned appearance that the front and sides show now. The thin hair is like that usually seen growing on the site of a patch of alopecia areata. There is no history of ringworm or of any skin affection except slight eczema of the scalp during infancy, and the boy is in robust health.

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Physician to the Bristol Children's Hospital.

REPORTS
ON
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

THE SICK CHILDREN'S HOSPITAL, NEWCASTLE-ON-TYNE.

(Case under the care of Dr. W. C. Beatley and Mr. G. W. Ridley.)

I.—ILEO-CÆCAL INTUSSUSCEPTION IN A CHILD AGED ELEVEN MONTHS: CURE AFTER LAPAROTOMY.

D. W., aged 11 months, was admitted on November 28th, 1893. Her illness had commenced eleven days earlier with abdominal disturbance, accompanied by colicky pain, vomiting, and mucous diarrhœa; child very fretful.

On admission, the child was in a fairly good condition and not collapsed; the abdomen was not distended. There was a palpable sausage-shaped tumour in the position of the sigmoid flexure of the colon, extending to the lower border of the ribs; this was dull on percussion; there was some blood-stained mucus round the anal orifice and the sphincter ani was relaxed. On examination of the rectum by the finger, an elongated soft projection could be clearly felt just within reach, with a central orifice, round which the finger could be freely passed.

Chloroform was administered, and the tumour could be more readily defined. It was decided to endeavour to reduce the invagination by mechanical means. Water at a temperature of 98° F. was injected into the bowel with a 2-feet elevation, the child being inverted during the process: about 2½ pints of water was used on three occasions. On examination afterwards no tumour could be felt in the abdomen or from the rectum; during straining movements, which took place on recovering from the anæsthetic, the tumour recurred. Chloroform was again administered and the bowel inflated with air; this was followed by an expulsion of fluid fæces and disappearance of the swelling. Tincture of opium (♏j) was given and the child put to bed.

The child passed a good night, sleeping five hours; the pulse was 112, regular, and fairly strong; there was no abdominal swelling, and nothing abnormal could be felt by the rectum. She took food well, and passed fæces; no blood or mucus.

On November 30th, thirty-four hours after the treatment above described, the abdominal tumour could again be felt: from the rectum the cervix-like projection could readily be made out, and on the child straining appeared almost at the anus. Some blood and mucus were passed. The same day, forty-one hours after the preliminary treatment, the belly was opened by median laparotomy. On passing the hand into the abdomen, it was found that a large portion of the ileum had prolapsed through the ileo-cæcal valve, the tumour extending diagonally across the abdomen from the right side to the rectum. The invagination being so low down in the pelvis, some difficulty was experienced in grasping the intussuscipiens with the fingers below the intussuscepted portion. This was obviated by an assistant passing up the invaginated portion from below with a finger in the rectum, and the subsequent reduction was comparatively easily accomplished until the point of reduplication was reached. At this point the intussuscepted portion, which was much thickened in all its coats, was distinctly grooved and congested.

After reduction was completed, there was much difficulty in returning the small intestines; owing to their distension with flatus, it was found necessary to puncture with a fine trocar, after which the intestines were returned, and the wound closed by fishing gut sutures in the usual manner.

On December 1st, the child had passed a fairly good night.

There was no vomiting. Some flatus and mucus were passed, but no blood. The pulse was rapid and feeble.

On December 2nd the pulse was stronger. The temperature was normal. Semi-solid fæces were passed.

On the tenth day the wound was dressed and some of the stitches removed. The remaining stitches were taken out on the twelfth day. Recovery was somewhat retarded by a persistent diarrhœa, which was difficult to control. By the end of December recovery was complete. The diet consisted of at first peptonised milk, nutrient suppositories and stimulants, and subsequently of liquor carnis, milk and milk foods.

II. DOUBLE EMPYEMA: CURE AFTER INCISION AND DRAINAGE.

R. D., aged 21 months, was admitted on May 12th, 1893, with a history of cough, wasting, and night sweats extending over a period of three months. The parents could give no definite history of acute pulmonary congestion.

On admission the child was emaciated and anæmic, fingers clubbed, pulse 132, respiration 54, temperature 100°. The thoracic movements were equal on both sides, percussion showed marked dulness at both bases, more extensive on the left side; above the line of dulness, resonance and vocal fremitus were increased. On auscultation loud *râles* were heard over both lungs above the nipple line; over the area of dulness both vocal and breath sounds were diminished; vocal fremitus was absent at the bases; the heart apex was inside the nipple in the fifth interspace. An exploring needle introduced in the seventh interspace, on the left side in the mid-axillary line, drew pus.

On May 14th, under chloroform, an incision was made in the seventh intercostal space on the left side and a rubber drainage tube inserted. No rib was excised; about 10 ounces of thick yellow pus escaped.

The child was much better next morning, but about 9 P.M. the breathing became much embarrassed, pulse 160, temperature 102°. The child was collapsed, with clammy, dusky surface. An exploring needle introduced below the angle of the right scapula drew pus. When the child was placed on the operating table he was apparently moribund, and no anæsthetic was permissible; it was decided to operate as rapidly as possible, and an incision was made in the seventh intercostal space on the right side, and a rubber drainage tube introduced. About 2 ounces of very thick pus escaped at the time. After being put back to bed, stimulants and warmth were applied, and the patient rallied in a few hours.

On May 16th pulse and breathing were much improved. The respiration was 36, the pulse 116. The general condition was better.

With the exception of one rise of temperature, owing to blocking of the drainage tubes, the subsequent progress towards recovery was uneventful.

On June 16th the quantity of pus from either opening was very small. The percussion note at the bases of both lungs was much improved and the vesicular murmur was louder. There was a small patch of bronchial breathing inside the angle of the scapula on the left side, and some crepitation over both bases.

On June 30th the sinuses were healed: there was a good vesicular murmur over both lungs, and the percussion note was almost normal.

On July 14th there appeared to be free entry of air throughout the entire lungs, the percussion note was normal. The child was in good physical condition and had gained weight.

ROYAL NAVAL HOSPITAL, HONG KONG.

GUNSHOT WOUND OF KNEE-JOINT.

[Communicated by the Director-General Medical Department, R.N.]

(By Alexander Turnbull, M.D., Deputy-Inspector-General.)

On November 22nd, 1893, W. W., aged 21, A.B. H.M.S. *Severn*, a man of fine physique and good health, though suffering from urethritis, when acting as marker at a rifle range, at 12.15 P.M., observed a Martini-Henry rifle bullet strike an adjacent rock, and immediately felt a blow on his right knee. The rifle was fired at 600 yards range.

The surgeon in attendance found a penetrating wound on the inner side of the ligamentum patellæ. As there was no active hæmorrhage he applied a pad of lint to the wound, and removed the wounded man to the Naval Hospital.

He reached the hospital at 2.30 P.M. He had complete control of the movements of the injured knee-joint. With strict antiseptic precautions the wound was explored. The projectile had entered over the inner side of the ligamentum patellæ, dividing its inner third, and lodging on the anterior surface of the head of the tibia below the inner condyle of the femur, opening the knee-joint at this point to an extent that readily admitted of the digital examination of the inner side of the articulation. The missile was removed after slight enlargement of the wound, and proved to be a longitudinal section of a 0.45" Martini-Henry rifle bullet, flattened, and with rough inverted edges, to which were adherent threads of his duck trousering; it weighed 150 grains.

As a precaution the wound was then thoroughly syringed with Sir Joseph Lister's strong solution (A.D. 1888)—namely, 5 per cent. carbolic acid in aqueous solution, with 0.5 per cent. of perchloride of mercury. This potent antiseptic solution entered the knee-joint freely. Bicyanide of mercury gauze dressings were applied, and the joint fixed by a back splint and sand bags. The subsequent progress of the case was most satisfactory, and the wound proved aseptic throughout.

For the first two weeks there was a little febrile disturbance; the maximum evening temperature was 101.6° F. on the fourth day. The morning temperature was normal after the eighth day. The patient proved most intolerant of pain, and the necessary confinement of the limb, during the first week, when opiates and aperients were prescribed.

The wound was redressed on the second, fifth, eighth, eleventh, fifteenth, twentieth, twenty-fifth, thirtieth, and thirty-fifth days after the accident. At the first dressing the discharge was hæmorrhagic, with synovial fluid, drainage being free; at the second very similar, synovial fluid exuding from the joint on pressure over the patella. The third dressing indicated that the wound of the joint had closed; there was slight effusion in the joint, the knee was slightly flexed at this dressing without pain. At the fourth dressing the knee was flexed at an angle of 130°. At the fifth the back splint and sand bags were removed, and on the following day, the sixteenth day after injury, the patient moved about his ward on crutches, which he abandoned the next day for a hand crutch. At the sixth dressing the knee was flexed to an angle of 100°; the next day he moved up and down stairs, and walked about the grounds without a hand crutch. This was the twenty-first day after the injury, and on the twenty-fifth day he could run or "double." On the forty-fourth day he was discharged to duty; he could then run, hop on either leg, and almost kneel on his injured knee in the rifle firing position.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Jonathan Hutchinson, F.R.S., in the Chair.

Tuesday, April 24th, 1894.

EXTRAPERITONEAL VESICAL HERNIA.

This paper, by Dr. Ernst Michels, was communicated by Mr. R. W. Parker. A man, aged 48, was admitted into the German Hospital, suffering from inguinal hernia on both sides. On the left side radical operation was done without any difficulty. On the right side the operation was more complicated, owing to the matting together of the different layers. At last what appeared to be the empty sac was reached, isolated with some difficulty, tied at its neck, and cut away; the stump was put back into the abdomen, and the inguinal ring closed. Twenty-four hours after the operation the patient began to complain of pain in the hypogastrium, and the urine contained a large admixture of blood. It was evident now that what had been taken for and treated as an empty hernial sac, was in reality an extraperitoneal diverticulum of the bladder. The abdomen was opened at once, the bladder fully exposed, and a wound discovered in its extraperitoneal part, which was closed by a double row of sutures. A Jacques catheter was passed into the bladder and retained for six days. The patient made an uninterrupted recovery. From the examination of the hitherto published cases it appeared that there were two distinct kinds of vesical hernia. In the great majority of cases the intraperitoneal kind was found, a hernial sac descending through the inguinal ring and drawing down the intraperitoneal part of the bladder, which in these cases was found behind the sac. The descent of the extraperitoneal part of the bladder, of which the case recorded above was an instance, was much rarer, only five cases having hitherto been

published. In both varieties it was extremely difficult to recognise the nature of the structure, no symptoms pointing to the presence of the bladder in the hernial sac, and in almost all the cases the bladder had been wounded; even then in a number of cases the true state of things was not discovered until some time had elapsed and signs of injury to the bladder had developed. The correct treatment consisted in full exposure of the wounded bladder, and closure of the wound by sutures. Under these circumstances the prognosis seemed fairly good.

Mr. Parker said that he had hitherto thought that this condition would scarcely need consideration by practical surgeons, but now that such a multitude of operations were being daily performed for the radical cure of hernia, the possibility of this accident was worth bearing in mind. It appeared from the published records of cases that when early recognised and efficiently treated, it was not such a formidable complication. He had performed a large number of radical cures in young children before the hernia had become large and the relations of the parts much altered; the patients were thus saved from all the grave disadvantages of hernia in later life. He showed a large hernial sac which he had removed from a baker who had been much inconvenienced by the presence of the rupture. In another instance in a child, a hernia suddenly appeared in the canal of Nuck, and its appearance was accompanied by vomiting, but there was diarrhœa. The infant, which was very weak, shortly afterwards died, and the hernial swelling was found to contain a right ovary tightly strangulated and gangrenous.

Mr. Macready remarked that the accidental opening of the bladder in these cases had been done by many accomplished surgeons, and he was therefore not ashamed to confess that an instance had happened in his own practice. The patient was a woman, aged 67, who had been ruptured since the age of 50, but had been always able to return the rupture till the time of her admission with strangulation. The rupture was femoral, and on the right side. The sac was opened, and the gut returned; the sac was then isolated, transfixed, tied in two parts, and the fundus cut off. Three days later there was a sanio-purulent discharge from the wound, staining the dressings. On the ninth day a clear fluid was found trickling from the wound, and a tube being passed into the orifice 3 ounces of urine were drawn off from the groin. The bladder being emptied some Condy's fluid was injected into that viscus, and it returned through the wound. A catheter was tied into the bladder, and the urinary fistula in the wound soon closed, the patient making a good recovery. The presence of the bladder in an inguinal rupture was rare, but in a femoral rupture still rarer. The classification adopted by the author, while unusual, was yet judicious. It was advisable in practice to trace back the neck of every thick sac, and make manifest the point of origin of the thickening. In cases of hernia of the intraperitoneal portion of the bladder it would be difficult to miss detecting the presence of the bladder in the hernia if the finger were passed along the neck of the sac into the ring. Though excellent results might follow the immediate closure of the wound in the bladder, yet it was better practice to avoid the accident.

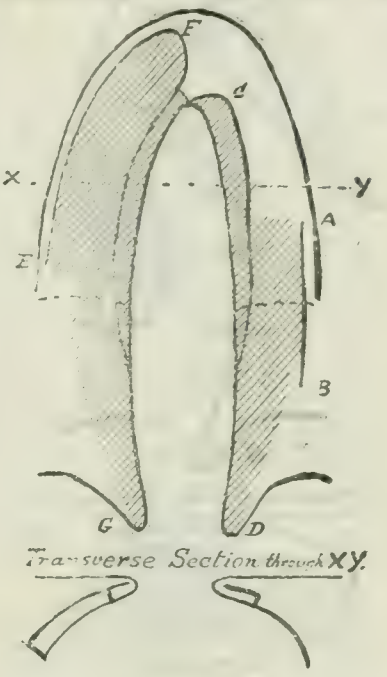
Mr. Keetley said that he believed vesical hernia to be much more common than most surgeons imagined. He had himself seen the bladder three times in a hernial sac, and he had once punctured that viscus with a suture needle while closing the ring. In that case he knew that the bladder was in the wall of the sac, but he was tempted to go a little higher up with his suture than was safe. He sewed up the puncture, and the patient did well. If in the wall of the sac beside or behind the neck a thick cushion of fat were found, the bladder might be suspected to be near at hand. The more frequent occurrence of the bladder in hernia had not hitherto been recognised, because until comparatively recently but little attention had been paid to the contents of hernia in the inguinal canal. He believed that in the great majority of cases in which the bladder was present it was neither altogether intra- nor extraperitoneal, but a mixture of the two. When operating recently on a case in which this condition was present two of the medical men present stated that they had each seen a similar case. He noticed that Pott's classical case had been excluded from the list the author had given; in that instance a calculus was found in the scrotum, but from the description it seemed that the stone must have lain, not in the bladder, but in an unobliterated urachus.

Mr. Godlee wished to know something of the causes of these vesical pouches or diverticula. Were they caused by the hernia, or were they previously existent?

Dr. Michels, in reply, said that the man had never previously had trouble with his bladder, and the diverticulum was perhaps congenital. He had read the description of Pott's case, but he did not regard that as a case of extraperitoneal vesical hernia. The existence of the bladder in the hernia had not, as a rule, been recognised before the operation, and this was especially so when it was extraperitoneal.

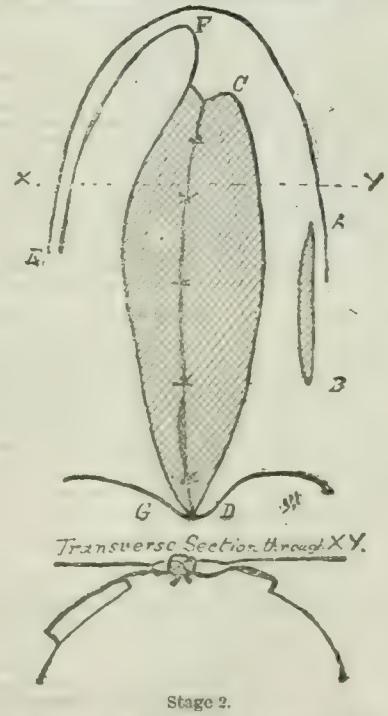
An Operation for the Cure of Cleft of the Hard and Soft Palate.

Mr. N. Davies-Colley read this paper. The following method of closing clefts of the hard and soft palate was devised by him nearly a year ago, and was a modification and extension of an operation for closing clefts of the hard palate published by him more than three years ago. The operation might be divided into three stages: Stage 1.—(*a*) An incision A B is made down to the hard palate in front, and behind through the soft palate, with its centre just internal to the last molar. With a raspatory the muco-periosteum is separated from A B inwards. (*b*) An incision C D is made about a quarter of an inch from the cleft in front. It runs parallel to the cleft backwards, and is continued to the tip of the uvula, splitting the soft palate to the depth of about three-eighths of an inch in front, and a less amount behind. The muco-periosteum between C D and the cleft of the hard palate is separated inwards with the raspatory as far as the edge of the bone. (*c*) A triangular flap E F G is raised from the other side of the palate, in such a way that the anterior extremity is free, and the inner margin runs parallel to the edge of the cleft at a distance of one-sixth of an inch. In the soft palate the incision is continued backwards so as to split that structure in the same way as on the other side. The muco-periosteum of the hard palate internal to F G is separated inwards and left attached to the edge of the bone. Stage 2.—The mesial flaps, namely, those internal to C D and F G, are united by fine silk or catgut sutures; and continuously with this union the upper planes of the split soft palate are brought together. A bridge is thus formed across the whole cleft with a mucous surface directed upwards,



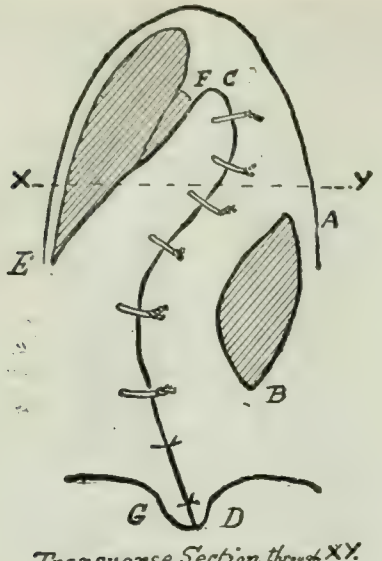
Stage 1.

and a raw surface downwards. Stage 3.—The edge F G of the triangular flap in front, and of the lower plane of the soft palate behind, is united by silver wires and one or two silk sutures to the edge C D of the hard and soft palate of the other side. A second bridge is thus formed across



Stage 2.

the whole cleft, with a raw surface looking upwards and a mucous surface downwards. The after-treatment was that of the ordinary operation, except that as there was no tension in the hard palate, and very little in the soft, the sutures might be left in from three to six weeks. The advantages claimed for this operation were: (1) No tissue has to be pared



Stage 3.

away; (2) a much larger extent of raw surface is brought into close contact than in the ordinary operation; (3) the tension is small; (4) the upward pressure of the tongue is beneficial, as it presses the lower against the upper bridge; (5) Some advantage is gained by using the muco-periosteum of one side in front of the cleft to help in bridging the gap of the hard palate. The only drawback to the operation was that the application of so many sutures made it rather longer than the ordinary operation. In each of the six cases upon which he had employed this method union had been complete over at least four-fifths of the cleft.

Mr. DURHAM remarked that the method proposed was a distinct advance in the treatment of these difficult cases. Mr. Thomas Smith had suggested years ago that it was better to operate on these cases in infancy or in early childhood. With regard to the operation itself, it was a valuable advance to move a flap over from one side, and attach it to the opposite. There was nothing original in the splitting of the flaps, though it was well to draw attention to the value of that measure. He exhibited a large number of instruments which he had used during the last twenty-five years in the treatment of these cases, a variety of instruments being required for the different shapes of palate. If the whole of the gap could not be closed at once, it was better to close the opening in the hard palate first. A large and sufficient supply of blood would flow through the descending and posterior palatine arteries to nourish the flaps.

Mr. MORGAN, though he admitted the value of the newer procedure, said that many surgeons were loth to give up the older method of operation, in the carrying out of which they had met with much success. It was very important that no tissue should be taken away. He thought that in the operation proposed there must be some considerable tension on the upper of the two flaps; and, again, the mucus coming from above and the saliva and food from below might get between the two layers and prevent primary union. It was a great point to operate early in these cases, but in very young children the palate space was exceedingly limited, and this he thought would prevent the possibility in a certain number of cases of carrying out this plastic procedure. In the two hospitals to which he was attached he had operated on 60 cases, 58 being in children; in 34 of these the cleft had been completely closed in 23, the closure taking place with one operation; in 19 the closure was partial and 5 were failures. In future he intended to try the author's method, but would reserve it for selected cases.

Mr. WARRINGTON HAWARD thought the operation best suited for those cases with a wide cleft and a flat palate. In a well arched palate if the muco-periosteum was thoroughly separated the cleft could be closed well by the ordinary method. He asked if hæmorrhage gave much trouble, and he thought it was unwise to attempt to operate too early; in certain cases it was better to wait till the cleft had somewhat closed in the process of growth and the soft tissues had materially thickened.

Dr. SIMMONS, of California, had under his care a case of extremely wide cleft. Recently in Berlin he found that a similar operation to that proposed was in vogue at the clinic of Dr. Julius Wolff. That surgeon separated the flaps and left them for four days in order to control the hæmorrhage, and he had met with great success; one patient on whom he had operated was only three months old.

Mr. DAVIES-COLLEY, in reply, said that he was about to operate on a patient aged 16 months. He had performed the flap opera on 6 cases between the ages of 1 and 2 years, and in all with success. The hæmorrhage was, as a rule, no greater than that in the ordinary operation for cleft palate. In one case there had been some secondary hæmorrhage afterwards, and plugging of the angle of the wound with lint and perchloride of iron had to be resorted to. In speaking of the absence of tension, he alluded only to the lower flap, which was the only one which could be seen. He thought that the union of the upper flap was perhaps usually somewhat imperfect.

HARVEIAN SOCIETY OF LONDON.

GEORGE EASTES, M.B., F.R.C.S., President, in the Chair.

Thursday, April 19th, 1894.

DISEASES OF THE NERVOUS SYSTEM.

DR. JAMES TAYLOR gave a lantern demonstration on points of clinical interest in diseases of the nervous system, showing about forty photographs of patients, and macroscopic and microscopic preparations.

The PRESIDENT asked Dr. Taylor what his opinion was with regard to the presence or absence of optic neuritis in diagnosing the locality of an intracranial tumour.

Mr. PEYTON BEALE remarked upon the photographs shown by Dr. Taylor of degenerations of certain white tracts in the cord. He was anxious to know how the specimens were stained. He had never seen the degenerated parts shown so distinctly before by any method.

Dr. SUTHERLAND asked some questions as to the forms of muscular atrophy, not due to spinal lesions.

Dr. WINSLOW HALL adduced as a proof of the value of the demonstration that one set of photographs shed great light on a nervous case which had long puzzled him, and asked for further information about the affection in question—muscular dystrophy of Erb.

Dr. JAMES TAYLOR, in reply, said that it was very difficult to formulate any rule as to the occurrence of optic neuritis in cases of cerebral tumour. From his own experience, he would be inclined to say that when the tumour was in the cerebellum optic neuritis was almost invariably present; when it was confined to the pons or medulla, especially if of the infiltrating variety, it was more often absent than present; and when it was in the hemispheres sometimes it was present and sometimes absent. A large tumour might not cause neuritis, and, on the other hand, a severe neuritis might exist with any small growth. The rapidity of growth of an intracranial tumour seemed to be an important element in the production of neuritis, and he was inclined to think that the increased intracranial pressure had a very close causal relation to optic neuritis. In reply to questions from Drs. W. Hall and Sutherland, he expressed the opinion that it was much better to term all these cases of muscular dystrophy, for Erb had recently shown that the three usual forms—pseudo-hypertrophic paralysis, idiopathic muscular atrophy, and the facio-scapulo-humeral or Landouzy-Déjerine type—were all varieties of one disease, different forms occurring in members of the same family, and even in the same patient at different times. In reply to Mr. Beale, he said that the Weigert-Pal was very suitable for specimens such as he had shown, the Marchi method being more adapted for conditions in which the degeneration had only lasted a short time.

HUNTERIAN SOCIETY.

CLINICAL EVENING.

C. J. SYMONDS, F.R.C.S., President, in the Chair.

Wednesday, April 11th, 1894.

CASES.

DR. ETTLES showed a case of Buphthalmos in a boy of 4 years, blind from birth, and read a summary of what is known of the condition.—Dr. ARTHUR DAVIES showed a case of Leucodermia in a boy of 11 years; the patches were roughly symmetrical, and chiefly affected the back.—The PRESIDENT showed a case of Lymphadenoma, with peculiar patches on the hands and feet, thought to be due to the use of arsenic.—Dr. STOWERS showed: (1) A case of Acne Varioliformis; and (2) a case of extensive Tertiary Syphilitic Patches resembling eczema.—Dr. FRED. J. SMITH showed: (1) A case of Cerebral Tumour, with paralysis of both sixth nerves as the only localising symptom; (2) a case of General Paralysis of the Insane closely resembling disseminated sclerosis; (3) a case of Charcot's Disease of the right knee-joint in a tabetic man.—Sir HUGH BEEVOR showed a case of doubtful Myxœdema with pitting of the hands; the symptoms had improved under thyroid treatment.—Dr. J. F. WOODS showed several patients whom he had successfully treated by Suggestion, including cases of toothache, melancholia, and severe neuralgia. Dr. MILNE BRAMWELL discussed the subject.

BRITISH GYNÆCOLOGICAL SOCIETY.

W. H. FENTON, M.D., Vice-President, in the Chair.

Thursday, April 12th, 1894.

THE CONSERVATIVE TREATMENT OF DISEASES OF THE UTERINE APPENDAGES.

DR. C. H. F. ROUTH read this paper. After discussing the physiological function of the tubes and ovaries, and the effects of oöphorectomy on women, Dr. Routh supported the conclusion that oöphorectomy, by inducing a premature menopause, had the effect of "unsexing" the majority of those operated on. Dr. Routh next compared the mortality of cases of disease of the appendages when submitted to operation with the mortality among such patients when no operation was performed. In the latter class the mortality was notably lower. The operations for the treatment of diseased appendages were next considered. Finally cases were related which had been treated according to the author's views. These views he sums up in the following conclusions: (1) The ovary, besides being concerned in ovulation, secretes especially, but in conjunction with other glands, a peculiar principle, spermin, which being reabsorbed into the blood is most useful in its nutritive, oxygenating, and recuperating power to maintain the well-being of the female, and the want of which leads to bodily and mental debility. (2) Complete castration in females leads to forced sterility, and in many cases to the

induction of an earlier menopause and premature old age; and frequently to decay and perversion of mind. Partial castration produces the same results in a minor degree. (3) The mortality of cases of diseased adnexa left to themselves varies from *nil* to 4 per cent., but the mortality of cases operated on by abdominal section varies from 2.5 to 12.1 per cent. (4) Complete castration has been practised too frequentiy, and often unnecessarily. (5) Preceded by abdominal section the more conservative modes of operation by resection of tubes or ovaries, and by ignipuncture of cysts in the latter, give more satisfactory results, even in cases of pyosalpinx, than complete castration, with less mortality, and with no impairment of the functions of motherhood. (6) The mode of treating diseased appendages *per vaginam et rectum*, without abdominal section, by acting on the uterus itself, by electricity even in cases of gonorrhœal pyosalpinx, and puncture by aspirator, offers the greatest advantages, the mortality being almost *nil*, the recoveries durable, and the motherhood unimpaired.

The discussion on the paper was adjourned to the next meeting.

BRITISH LARYNGOLOGICAL AND RHINOLOGICAL ASSOCIATION.

J. Macintyre, M.B., President, in the Chair.

Friday, April 13th, 1894.

Specimens.

The President exhibited a specimen of Epithelioma of the Nasal Septum which presented the aspect of an ordinary polypus before removal. He also showed several laryngeal papillomata, which were successfully removed from a child by thyrotomy.—Mr. Wyatt Wingrave exhibited a Pedunculated Fibro-angioma, which grew from an enlarged crypt of the faucial tonsil.

Cyst in Larynx.

Dr. Whistler gave a further report of a case of chronic laryngeal disease which he had presented at the last meeting of the Society. A firm swelling over the thyroid cartilage proved to be cystic, for, on tapping, several drachms of iridescent fluid were withdrawn and the internal deformity of the larynx was diminished.

Cases.

Mr. Mayo Collier exhibited the following patients: (1) A case of Asthma cured by the removal of Polypi from the Middle Turbinated Body; (2) Bilateral Paralysis of the Adductors of the Larynx of Functional Origin; (3) a case of Suppuration of the Frontal Sinus, with nasal obstruction influencing the mental faculties; (4) a large painless Ulcer situated on one side of the Soft Palate which did not yield to mercury.

Syphilitic Laryngitis.

Mr. G. C. Wilkin read notes of a case of syphilitic laryngitis with apical consolidation of the right lung, which rapidly improved under the influence of mercury and iodide of potassium.

Dr. Dundas Grant, Dr. Whistler, Dr. Ed. Law, Dr. Woakes, Mr. Geo. Stoker, and Mr. Wyatt Wingrave joined in the discussion.

The Phonograph in Medicine.

The President gave a demonstration of the uses of the phonograph in clinical teaching. He demonstrated the different phonetic qualities of the voice and cough as associated with laryngeal growths, pressure on the recurrent laryngeal nerve and pressure from mediastinal tumours, etc. He also illustrated the excellent articulation of a patient from whom the whole tongue had been excised.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Obstetrics.

D. Purefoy, M.B.Dub., President, in the Chair.

Friday, April 13th, 1894.

Ovary and Tube Removed for Recurrent Salpingitis.

Dr. Alfred Smith showed a tube and ovary which he removed from a married woman, aged 29, on March 21st, who suffered from severe pain on the right side, which was constant, but at times became very much worse, especially before and during the menstrual periods. There were extensive adhesions of the omentum to the abdominal wall, and evidence of general adhesive peritonitis. Recovery afebrile and uneventful, and the patient left the hospital cured three weeks after the operation.

Myomatous Uteri and Ovaries and Appendages Removed for Recurrent Peritonitis.

Dr. W. J. Smyly showed: (1) A large myomatous uterus, which he had removed by abdominal section. The operation was exceedingly difficult, owing to two of the largest tumours having to be enucleated from the cellular tissue. The vagina was so compressed and distorted as to render its disinfection very difficult, and the patient's death from peritonitis on the third day was probably due to this. (2) A uterus from the first case in which he had removed a large myomatous uterus *per vaginam* by *morcellement*. He was, however, very favourably impressed, especially by the comparative absence from shock. (3) Ovaries and appendages removed for recurrent attacks of peritonitis. Upon opening the tubes after removal he was surprised to find them distended with blood.

Remarks were made by Dr. M'Ardle; and Dr. A. J. Smith replied.

Anencephalic Monster.

Dr. F. W. Kidd exhibited an anencephalic monster. The mother was only 15 years and 10 months old when it was born. She was only seven and a-half months pregnant. The monster presented by the face, the general rule in these cases being breech or transverse; it just breathed after birth. There was only one nostril. There was spina bifida of cervical and upper dorsal vertebræ, and double talipes.

Remarks were made by Drs. Smyly, Tweedy, and Thompson.

Ruptured Tubal Pregnancy.

Dr. Alfred Smith read a paper on ruptured tubal pregnancy successfully treated by abdominal section. He could only find a record of two previous successful operations in Ireland—one by Dr. Smyly, and the other by Professor Byers, Belfast. On March 22nd of this year he was asked to see a married woman whose changes had been regular up to February, when a menstrual period commenced which lasted up to March 22nd, without any unusual pain. She sought his advice because a dose of salts, taken in the early morning, had not acted, and that for the past hour or so before his arrival she complained of severe griping pains in the abdomen, and a feeling as if there was some lump in the back passage which caused a constant desire to stool, but without any result. A diagnosis of ruptured tubal pregnancy, with intraperitoneal hæmorrhage, was made. The abdomen was opened, and the left Fallopian tube, which was ruptured in its outer third, was removed. No trace of ovum could be found, although a careful search was made in the large quantity of blood clots which filled the pelvis. The specimen was shown. The peritoneum was douched with saline solution, and a drainage tube inserted. The recovery, which was perfect, was interrupted by an attack of pneumonia on the second day after operation. The patient received a generous dietary on the second day after operation without any inconvenience following. The case illustrated the value of (1) Trendelenburg's table; (2) the use of saline solutions for peritoneal douche and enema in cases of severe hæmorrhage; (3) that after-treatment in abdominal sections could be guided by rational methods, and that it was not necessary to follow slavishly the old starvation process.

Dr. More Madden said that it was a most interesting feature in the case that no fœtus could be found. The embryo usually escaped into the peritoneal cavity and perished. Cases of tubal pregnancy were more frequent than was usually supposed.

Dr. Smyly was astonished at the number of tubal pregnancies he had seen when in Berlin. An assistant in one of the hospitals told him that they got one on an average every fortnight. He thought Dr. Smith's case to be a typical one of "tubal abortion."

Remarks were also made by Dr. E. H. Tweedy, Dr. M'Ardle, and Dr. Bate.

Dr. Smith, in replying, said it was a curious fact, and perhaps only a coincidence, that all the patients suffering from tubal pregnancies of whom he had any record had been curetted some six or eight months previously.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

Pathological and Clinical Section.

Bennett May, M.B., F.R.C.S., in the Chair.

Friday, March 30th, 1894.

Cases.

Dr. Suckling showed a woman with Paralysis of the Muscles on Both Sides of the Face, due to peripheral neuritis of both facial nerves. The patient was aged 51, and was a twine dresser. Dr. Suckling considered that the case was one of bilateral Bell's paralysis, both sides of the face having been exposed to steam.—Dr. Sinclair showed a lad, aged 18, a subject of Inherited Syphilis. When first seen (July, 1893) he had double optic atrophy, Argyll Robertson pupils, knee-jerks almost lost on both sides, no inco-ordination nor lightning powers, no loss of sexual power, excessive drowsiness at times. Four months later pupils small, motionless to light, and only the slightest contraction with accommodation; the knee-jerks readily elicited on both sides equally; no inco-ordination. At present time condition not much changed, vision deteriorated. The points of interest were (1) the occurrence of central nervous degeneration in inherited syphilis; (2) the marked improvement in the knee-jerks.—Mr. Barling showed a large Cystic Adenoma with papillomatous growths nearly filling the cyst, removed from the left breast of a lady, aged 38.—Mr. John W. Taylor showed two specimens of Uterine Myoma removed by Hysterectomy. The tumours were removed by Mr. Taylor's modification of the usual clamp operation, in which the transfixion pins are passed through the parietal peritoneum as well as through the pedicle of the tumour, the clamp being applied below these and therefore outside the peritoneal cavity.—Dr. Stanley showed the large Intestine and Vermiform Appendix from a man, aged 23, who died of tubercle of lungs and intestine. There was extreme tuberculous ulceration of the ascending and part of the transverse colon; in the lower part of the ileum were ulcers also, but not in any quantity; the appendix was greatly distended, and hung down towards the pelvis; it contained a muco-purulent fluid, and there was general tuberculous ulceration of the whole of its mucous surface.—Professor Allen showed sections of a Testis removed by Mr. Christopher Martin from a supposed hermaphrodite.—Mr. Morrison showed a specimen of Cystic Diverticulum from the Axillary Vein; and a specimen of Dilated Bladder and Ureters with Granular Kidneys for Dr. Kauffmann.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

W. Hunter, M.D., President, in the Chair.

Wednesday, April 18th, 1894.

Spinal Ataxy.

Dr. W. B. Ransom read this paper. Ataxy was defined as irregular and inharmonious working of muscles without paralysis. In ataxy conduction of both afferent and efferent impressions was interfered with. Ataxy might occur without changes in the spinal cord, as was observed in cases of "pseudo-tabes" due to neuritis. In cases of ataxy the lesions usually found after death were degeneration of posterior roots, posterior root zone, and the postero-median columns; the ganglia of the posterior roots were, as a rule, not greatly altered. Extensive degeneration of posterior roots and posterior columns was found *post mortem* in a case of perforating ulcer of the foot under the author's care, but the patient had not suffered from ataxy. The symptoms and *post-mortem* changes met with in true tabes were contrasted with those of ataxic paraplegia. While the symptoms of the latter might resemble those of myelitis, it

was thought to be a well-characterised disease, both in its clinical and its pathological aspects, and not a mere combination of lateral and posterior sclerosis. Whether the lesions in tabes invariably followed an ascending course, in the direction of sensory conduction, was held to be an open question. The paper was illustrated by numerous microscopic specimens and drawings.

The PRESIDENT, Messrs. ANDERSON and TRESIDDER made remarks.

MIDLAND MEDICAL SOCIETY.

A. H. EVANS, M.R.C.S., President, in the Chair.

Wednesday, April 18th, 1894.

DIFFUSE NÆVUS OF THE TONGUE.

MR. GEORGE HEATON showed an infant, aged 5 weeks, with a large venous nævus, situated deeply in the substance of the tongue. The tongue was very much enlarged, bulging the cheeks and protruding from the mouth, and interfering with deglutition and respiration. Operative measures were discussed.

GASTROSTOMY.

Mr. T. F. CHAVASSE showed the œsophagus and stomach of a man who had died of pneumonia six days after gastrostomy by Witzel's method for carcinoma of the œsophagus. The necessity of securely anchoring the india-rubber tube to the stomach wall by some unabsorbable sutures was pointed out. If catgut was employed, as in this case, the tube was apt to become displaced, and difficulty in its reintroduction experienced.

SARCOMA OF BLADDER.

Mr. CHAVASSE also showed the bladder of a man, aged 52, with a large mass of round-celled sarcoma growing from the fundus. It had been removed through a suprapubic opening one month before death but had rapidly recurred, and secondary growths had developed in the muscles on the inner aspect of both thighs. Patches of new growth were also formed in the left kidney, and ureter on the right side was completely blocked.

HYDRONEPHROSIS.

Mr. CHAVASSE also showed a very large hydronephrotic kidney removed from the body of a man, aged 42. The first symptoms were noted twenty years before, and at intervals hæmaturia was profuse. Death finally resulted from chronic alcoholism.

DILATED CÆCUM.

Dr. DOUGLAS STANLEY showed a specimen from a case of intestinal obstruction. On *post-mortem* examination there was found a condition of general peritonitis with some fæcal matter in the peritoneal cavity. The cæcum occupied the left side of the abdomen, being apparently swung over after being distended with fæces. There was a sharp bend between the transverse and descending colon, which would seem to have prevented or hindered the onward passage of the intestinal contents, with consequent dilatation of the cæcum. In passing over across the middle line a well-marked "kink" had taken place in the ascending colon a short distance above the cæcum and in the lower part of the ileum, forming a half volvulus in each instance. On opening the sac formed by the distended cæcum, it was found to contain about 1½ pint of liquid fæces. The mucous membrane showed large ulcerated patches ("stercoral ulcers") with perforation at some points. The appendix was quite healthy.

PAPER.

Dr. J. W. RUSSELL read a paper on Notes on the Use of Oxygen Inhalations.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.

THOMAS WILMOT, M.R.C.S., in the Chair.

Tuesday, February 3rd, 1894.

ANAL TAGS.

MR. HORROCKS read a paper in which it was shown that the formation of the anus was sometimes incomplete, the septum between the proctodeum and the mesenteron remaining, such constituting a form of imperforate anus. Generally the septum was completely removed, but sometimes fragments remained at the junction of squamous and columnar epithelial surfaces. Such fragments constituted anal tags, of which the upper surface pouched was formed by mesenteron, the lower rounded by the ingrowing proctodeum Not uncommonly these tags became abraded by hard motion catching the upper surface. A shallow ulcer formed, which might or might not be painful according to its relation to superficial nerve twigs. It was generally painful on the passage of fæces, and secreted a thin discharge. These ulcers, usually situated above tags, which were painful on pressure, by irritation might form a callous ulcer, painful ulcer, or fissure of the anus, the tag constituting the sentinel or guard pile. Internal *fistula in ano* had been noted as rising from these ulcers probably by septic infection from fæces, this also explaining the frequence of fistula in phthisis. The treatment was stretching of the sphincter, scraping the ulcer after search for any fistula, and removal of any tags.

MOBILISATION AND MASSAGE IN SIMPLE FRACTURE.

Dr. HERMANN BRONNER read a paper on this subject. He contended that in suitable cases one ought not to wait for osseous union before using the joint affected or the proximal joints, but passive and active movements should be commenced and energetic massage applied as soon as the eighth day after fracture, in order to prevent atrophy and stiffness. Such suitable cases were fractures in the proximity of the wrist- and ankle-joints, and knee and elbow, where the dangers of stiffness were great, and where there was sufficient support rendered by other bones, or little leverage exerted on movement. He quoted statistics by Lauderer and some cases of his own in support of this method.

TYPHOID FEVER.

Mr. EMERSON read notes of some unusual cases of typhoid fever. In one case a middle-aged man after a relapse had venous thrombosis of the legs, together with an exceedingly rapid pulse, the tachycardia persisting for three months, but ending in recovery of health. In another case a girl, aged 18, also after relapse, presented symptoms ascribed to peripheral neuritis, and had an exceedingly rapid pulse persisting for some time.

REVIEWS.

SEWAGE TREATMENT AND DISPOSAL FOR CITIES, TOWNS, VILLAGES, PRIVATE DWELLINGS, AND PUBLIC INSTITUTIONS. By THOMAS WARDLE, F.C.S., etc. (Manchester: John Heywood. 1893. Pp. 426. plates 10. figures 59. 15s.)

MR. WARDLE is the inventor of a new and promising method of purifying sewage, and he has undertaken the task of describing and criticising the many processes in and out of use, his own included. To some extent the attempt has been successful, and there is no doubt that the work will be useful to most of the readers into whose hands it may come. The author is evidently anxious to do justice to rival processes, and by no means disposed to press unduly the merits of his own inventions. He speaks highly of the International, Electrical, and Amines systems. Broad irrigation and land filtration he regards with marked disfavour, except as supplementing chemical treatment, urging strongly and repeatedly the objection that there is danger of zymotic disease being imparted by the milk of cows, whose food or water is liable to sewage taint. In this matter Mr. Wardle goes beyond his evidence. For instance, he says that there are "numbers of proved instances of the milk of cows being poisoned by the disease germs of typhus (*sic*) and other diseases in cases where the animals have fed upon land to which sewage in its crude state has been applied." We are unable to agree altogether with the author in the view which the above statement is probably intended to convey. Indeed, his views upon zymotic diseases generally, and their relation to sewage in particular, are of the broadest and most comprehensive, not to say indiscriminating, character. Thus, at page 28, he speaks confidently of the bacteria identified with hydrophobia, measles, and whooping-cough, which most of us have long and vainly wished to see; and at page 34 he finds in the abundant stenches of the Calcutta outfall a sufficient explanation of such pestilences as measles, whooping-cough, and scarlatina. Again, at page 244, after mentioning the exceptionally offensive character of certain sewage, he adds that "there are occasional epidemic outbreaks at this part of the town," giving no information as to the nature of these outbreaks, or reason for supposing them to have anything to do with the condition of the sewers and sewage. There are many vague references of the kind. Although in reviewing this part of the subject in Chapter XXIII he becomes less uncompromising, he adds tuberculosis to the list of diseases to be looked for among the consumers of sewage-farm milk.

A large amount of interesting and useful information is given with regard to a number of sewage-disposal works, but it is not clear that any method was adopted either in the choice of works to be described or the details noted in each. All that we find in the paragraph devoted to the system in operation at Lyons is the laconic statement that "Lyons distributes its sewage down the Rhone valley for irrigation purposes," whereas a few pages later on we are overwhelmed by a mass of totally unnecessary detail respecting the Richmond works, including the name of the person who made the fences. In reviewing a work on sewage disposal it may appear hypercritical to complain of the slipshod style in which the author frequently chooses to express himself, but whatever excuse there may be for careless proof reading, so far as purely literary points are concerned, there is none for inaccuracies in scientific matters upon which he seems to speak from practical experience.

The opening sentences of the second chapter furnish a not unfair example of the loose way in which Mr. Wardle uses technical terms (and for that matter the Queen's English too) to the perplexity of readers who are acquainted with their exact meaning. "It is now conceded by all scientific authorities that the best test results to be regarded are those which give the indications of the exact amount of organic matter in the effluent water which passes away after the sewage has been fully treated in a chemical or agricultural way, or by

both, separately or combined. After such treatment, no matter what system is adopted, there remain certain impurities in this effluent water, the most important of which, so far as health is concerned, are organic nitrogen and organic carbon. These compounds I shall fully explain further on, and I need now only to remark that in the analysing of sewages and effluents they are estimated for free ammonia and albuminoid ammonia, *ad est* (*sic*), that the quantitative estimation of the organic nitrogen is obtained by subjecting it to a chemical process which converts it into ammonia, which is divided into free and albuminoid ammonia, in which state they are most convenient for accurate measurement and estimation" (p. 4). In the following chapter we are told that "bacteria proceed from germs, each kind from its own species;" and that "they cannot thrive in acid media, like the mould fungi which is food for them. They divide by fission, forming (with exceptions) spores; their central mass is albumen, or protoplasm, enclosed in a membrane or cell wall, which in due time bursts, and sets the young bacilli free, generally as spores."

The following rule (p. 231) is calculated to lead to astonishing results: "To convert parts per million into grains per gallon, it is only necessary to multiply by 70 and move the decimal point one place to the left." The converse rule is equally wrongly stated. Nor are 21 grains per gallon "approximately equivalent to 260 parts per million" (p. 52). On p. 286, the writer refers to the "atom of oxygen being eight times greater than the hydrogen atom." On the next page it is stated that carbonic acid "is a gas composed of carbon and oxygen in the proportion of 28 lbs. of carbon to every 72 lbs. of oxygen." A little later comes the safe remark that silica and alumina occur in soil "generally in chemical combination, mostly as aluminic silicates." Mr. Wardle explains rather oddly, the constitution of trimethylamine, "the second syllable of which (methyl) is one of three well-known alcohols, and the last, amine, belongs to the compound ammonia group" (p. 57). Then follows, doubtless owing to a printer's error, an incorrect version of the chemical formula for methylamine. Nor does he succeed in conveying a clear idea of the *modus operandi* of his own process by stating (p. 363) that "on coming into contact with sewage, this protosalt of iron is oxidised at the expense of the sewage; in its new nascent state the oxygen immediately acts upon the organic sewage matter, which falls down in a voluminous flocculent precipitate."

Defects such as these are the more disappointing, since the author's protracted study of the subject ought to have enabled him to give to others in a more accurate and orderly way the benefit of his long experience. Even as it is, the work has considerable value, which is enhanced by a number of plates, and by a summary of the earlier results of the well-known Salford experiments.

Two Great Scotsmen: the Brothers William and John Hunter. By George R. Mather, M.D., F.F.P.S.G. Glasgow: James Maclehose and Sons. 1893. (Cr. 4to, pp. xi and 251, with plates. 10s. 6d.)

It is somewhat remarkable that the two great Scotsmen treated of in this work should so long have been left without a formal biography, though both have had innumerable eulogists, but it is not remarkable that they should have obtained one at the present time. The recent attempt to empower a sale of the Hunterian coins has called renewed attention to the magnificent museum of William Hunter, now in Glasgow, whilst the centenary of the younger brother's death in October last makes the appearance of the present volume especially appropriate.

Dr. Mather has written a chatty volume, which is rendered eminently readable by the care which the publishers have bestowed upon its production, for they have evidently determined to spare no pains to render it a fitting memorial of their illustrious fellow-countrymen. Dr. Mather first gives a clear account of the family history of the Hunters, who can be traced as a branch from the house of Hunterston as far back as the reign of Alexander II, when they were holding land in Cunninghame between 1214 and 1249. He then gives an account of the life of William Hunter, and of the Hunterian Museum in the University of Glasgow.

This is followed by an excellent account of the life and work of John Hunter, in which one or two interesting minor traits in his character are brought into prominence. We are told that one of the amusements in which he took particular pleasure was to mingle with the rabble in the shilling gallery of the theatres, for the purpose of assisting to damn unpopular productions placed on the stage, an office in which he displayed peculiar tact and vigour. There is also a good story of William Sharp, the engraver of Sir Joshua Reynolds's portrait of John Hunter. William Sharp was a great friend of Hunter's. He believed in the divine mission of the madman, Richard Brothers, as well as in the immaculate conception of Johanna Southcote, and engraved their portraits. In the former the writing engraver was too much for the engraver of the portrait. Sharp had written below the portrait of Brothers, "Fully believing this to be the man appointed by God. I engrave his likeness—W. Sharp." The writing engraver put the comma after the word appointed, and omitted it where it ought to have been. This was not discovered till several impressions had been taken, when it was rectified. Dr. Mather concludes the story saying: "Now, if the transposition of this comma was not the work of John Hunter in one of his rollicking moods, it certainly looks very like it."

The work is an interesting addition to the literature of the Hunters, and we hope that in the next edition Dr. Mather will recast the life of the elder brother, will put the explanations of the plates, which are at present relegated to the last page of the appendix, into their proper positions in the body of the work, and above all will add an index, for its absence very greatly detracts from the value of the book. The illustrations are most unequal, the etchings of Hunterston and long Calderwood being especially unsatisfactory.

Pathologie und Therapie der Neurasthenie und Hysterie. Von Dr. L. Löwenfeld. Wiesbaden: Bergmann. 1894. (Royal 8vo, pp. xiii, 744. M. 6.85).

This treatise of the veteran Dr. Löwenfeld, physician for nervous diseases in Munich, is a solid and competent work. The characteristics of the book are chiefly two: it bears the marks of large experience and careful observation, and of a remarkably sound and judicious mind. It strikes us in this way rather than as a work of great originality; there is nothing in it which we can call brilliant, as one would call, for example, such work as it came from the hands of Charcot; but if we may use a slang expression of the day, it is the work of a singularly "level-headed" man. Now, in dealing with the mists and quicksands of hysteria and neurasthenia, this quality of level-headedness is peculiarly valuable. Dr. Löwenfeld tells us in his preface that his aim has been to give trustworthy counsel to the physician in dealing with the diagnosis and treatment of two maladies (neurasthenia and hysteria), which are very serious in their results and very perplexing in their forms. Theoretically, he says, hysteria and neurasthenia are distinct, but the inner relations and the frequent coexistence of the two maladies make diagnosis very difficult. In his endeavours to obtain a clear perception of the syndromata, he pays a graceful compliment to "Charcot, to whom the majority of German physicians are every day more and more sensible of their debt." To Charcot they owe, he adds, services in the investigation of hysteria which are incomparable and unapproachable. Dr. Löwenfeld also fully recognises his debt to other French authors, to countrymen of his own, of course, and to English and American authors such as Erichsen, Page, Beard, Weir Mitchell, Buzzard, Bastian, Playfair, and others.

Dr. Löwenfeld brings out with clearness and force the main clinical distinctions between the groups of symptoms called hysteria and neurasthenia. In many cases, he admits, a diagnosis of "hystero-neurasthenia" (p. 90) must be given, but he insists, as do our own neurologists, that hysteria is a disease, a real malady, and "not merely a higher stage of whimsicality or affectation." Hysteria, he says, is "no psychosis," nor have we "merely to deal with changes in the grey matter of the cortex, but also with subordinate centres"—nay, it is a "disease which can end in death." On the other hand, the author will not have us suppose that hysteria and neurasthenia are the mere outcome of "nervousness." Not only do nervous persons commonly avoid these maladies,

but these arise not infrequently in very healthy persons under the influence of some bodily or mental shock.

Under the head of traumatism, Dr. Löwenfeld's paragraphs seem to us be be very apt and complete, and full credit is given in this respect not only to the work of his own countrymen, but also to that of Erichsen and Page. Other modes of causation are also as fully set forth and as carefully weighed, and the results of the author's cautious habit of mind are well seen in the sections on sex and sexual passions, wherein a due place, and no more than a due place, is given to these factors. In respect of the pathology of these and like maladies, the author leans to the supposition of a defective development of the vessels of the nervous centres; he lays it down as ascertained, at any rate, that the relation between the brain weight and the size of the blood vessels is very variable (p. 32).

Whatever be the fundamental similarity between neurasthenia and hysteria, Dr. Löwenfeld finds it convenient to treat of them in two separate divisions of his book. In the first, after considering the two maladies together, he gives us chapters on the symptomatology, the clinical varieties, the course and prognosis of neurasthenia, on the theory of the disease, and on the diagnosis.

In the eighth chapter he begins to deal with hysteria in like manner, laying much stress, of course, upon the "stigmata" as characteristic of hysteria; the sundry and manifold signs and symptoms of hysteria are here dealt with as thoroughly as definitely and clearly. In the eleventh chapter "hystero-neurasthenia" is described, and in the twelfth and thirteenth chapters the prophylaxis and therapeutics of the two main diseases are dealt with together. Lest our readers be tempted to turn to Dr. Löwenfeld's works in the hope of finding some new methods of cure, we must warn them that no such novelties are offered to us; we admit, indeed, some measure of disappointment on our first perusal of these chapters. But on a second reading we gratefully acknowledge an aid to treatment only one degree less than the revelation of a new method, namely, a most temperate and skilful appreciation of the old methods taken severally and together. The paragraphs on hydropathy, electricity, massage, gymnastics, hypnosis, and suggestion, and so forth, are written evidently on the basis of a large experience, of impartial judgment, coolness of temper, and persevering search after the relief of suffering.

Traité Pratique de Gynécologie. Par Stéphane Bonnet et Paul Petit. Introduction par Dr. A. Charpentier. Paris: J. B. Baillière et Fils. 1894. (Demy 8vo, pp. 816. 15 frs.)

This work is one of great merit. In saying this we judge the book in the light of what seems to us to have been the aim of the writers. We shall best inform our readers of its scope and character if before saying what it is we say what it is not. It is not a record of personal experience. No doubt the opinions expressed, and the practical details described, have been formed and tested at the bedside and in the laboratory. But the book does not contain original observations or statistical tables by which the field of practice it surveys can be said to be additionally illuminated. It is not a guide to practice. It is a systematic treatise. The reader must know what he wants, and turn it up in the index; he must apply for himself the diagnostic information that he finds, and judge for himself of the value of the modes of treatment described. It is not a book which the student or practitioner who knows nothing about gynæcology can take to the bedside, and learn from it how to recognise and treat cases as they present themselves. Lastly, it is not an encyclopædia. It does not contain any account of the literature of the subject, nor does it even attempt to direct the reader to the original sources of instruction.

It may best be described as a sort of abridged encyclopædia. The subject, as in most French books, is dealt with in a very systematic way. Every branch of it is in its place. It is divided into two parts: first, pathology and therapeutic indications; secondly, operative details. In the first part, the matters treated of are arranged under the heads of: (1) Exploration, (2) Functional troubles, (3) Malformations and traumatic lesions, (4) Parasitic lesions, (5) Virulent lesions, (6) Inflammatory lesions, (7) Trophic lesions, (8) Displacements, (9) Tumours, (10) Nervous troubles, and (11) Ectopic pregnancy and hæmatocele. It will be seen that this arrangement is artificial, rather than clinical: helpful to the student's memory, it may be; but it widely separates conditions which in practice are found closely associated. The part on operative detail embraces four books: (1) Asepsis, anæsthesia, union and hæmostasis, electrisation, and massage; (2) Extraperitoneal operations; (3) Transperitoneal operations (that is, those which deal with parts within the abdominal cavity without opening the peritoneal sac, or rather without widely opening it); and (4) Intraperitoneal operations, or laparotomies.

In writing on the different subjects embraced in the book, the aim of the authors seems to have been to give a condensed account of the different opinions held upon each, more especially those of French obstetricians. They give a sort of bird's-eye view of the French gynæcology of to-day. They do not confine their view to the work of Frenchmen, but, as is natural, their knowledge of the work of their own countrymen is more accurate, their appreciation of it higher, and their attitude to it more sympathetic than in the case of English and German writers. Their range of reading is very wide. Their descriptions are always clear. The book is profusely illustrated. Could we say that the authors not only represent the different opinions and practices but give references to the authorities for each view quoted, and to statistical tables giving the results of each operation described, we should be able to describe the work as encyclopædic.

It is a book which must be most valuable to the French student, very instructive to the French practitioner, but not quite so useful to him as to the student, and of interest in England mainly to those who want to know what is being done in gynæcology on the other side of the Channel. It reflects great credit on the industry and ability of the authors.

It is prefaced by an introduction from the pen of Dr. Charpentier, who says: "A book was wanted within the reach of all, from which could be obtained serious and sufficient teaching for the current needs of practice. Such a book exists to-day; it is that which we present to readers, and of which we are happy, so to speak, to be the godfather." We congratulate Dr. Charpentier upon his godchild.

REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

PURE BEER.

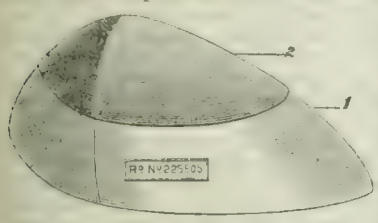
Messrs. Goodman and Young, of the Stamford Hill Brewery, have sent us some samples of ale which they warrant to be brewed from malt and hops only. The ale brewed by Messrs. Goodman and Young is open to no objection as far as its characters and composition are concerned. With an extractive amounting to 2.7 per cent. it contains 47 per cent. of alcohol, equivalent to about 180 grains of proof spirit in 4 fluid ounces. The beer is free from acidity and does not contain any admixture of salicylic acid. It has a well-marked flavour of hops, is very frothy, and, though in some of the bottles the beer is not quite bright and clear, it presents all the indications of having been well brewed and being a perfectly wholesome beer.

IMPERMEABLE BELLADONNA POULTICE.

This preparation consists of the leaf extract of belladonna combined with an emollient antiseptic basis, spread upon a waterproof material. The inside surface is moistened with warm or cold water, and the poultice kept in position with adhesive plaster or a bandage. It appears to be a very effective application, and is certainly much cleaner and pleasanter to use than the emp. belladonnæ or the green extract softened with glycerine. The manufacturer is Mr. J. B. Barnes, pharmacist, Trevor Terrace, Knightsbridge.

FOLDING CHLOROFORM INHALER.

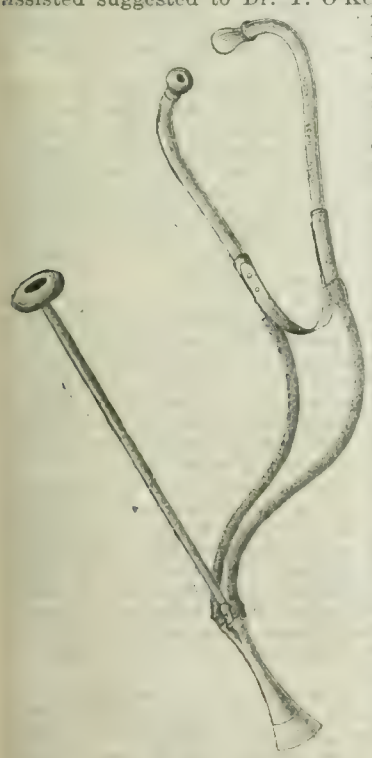
Mr. W. H. S. Fosbery, of Bournemouth, writes that, finding a mask—such as that in use at the Middlesex Hospital—one of the most convenient means of administering chloroform, there were yet two disadvantages: (1) the mask was awkward to carry, and (2) the cover, having only one thickness f flannel, allowed a considerable waste of chloroform, which was also unpleasant to the administrator—especially if he had to anæsthetise several consecutive cases—causing a feeling of heaviness in the head. To meet these objections Mr. Fosbery has invented a folding chloroform inhaler, which is made to fold flat, together with its covering, to go into the pocket. The waste of chloroform he has sought to remedy by means of a detachable air-proof cap placed over the upper part of the mask to prevent the escape of the chloroform vapour. A folded napkin, he says, answers the same purpose, but is not so easily manipulated, and the part on which the chloroform is dropped is apt to come in contact with the face, causing soreness or excoriation. The inhaler, complete in box (price 5s.), may be had of the maker, Mr. Hamilton Spratt, 116, Old Christchurch Road, Bournemouth.



1. The flannel cover. 2. The air-proof cap (detachable) to prevent waste of chloroform.

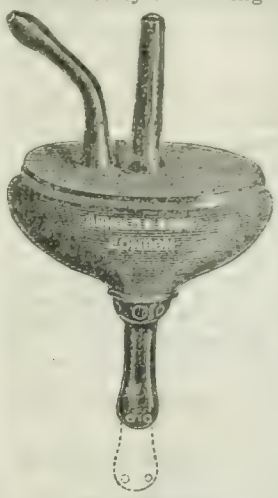
BINAURAL STETHOSCOPE FOR AUSCULTATORY PERCUSSION.

The difficulty of performing auscultatory percussion unassisted suggested to Dr. T. O'Kelly, Chipping Norton, the necessity of an addition to the binaural stethoscope, which should leave the hands of the auscultator absolutely free, while ensuring at the same time perfect contact of the chest piece with the patient's body. Messrs. Down Brothers, under his instructions, have made this addition, which, as will be seen from the annexed engraving, consists of a metal rod 20 cm. in length, and 5 mm. in diameter, surmounted by a metal disc 25 mm. in diameter, and covered by an india-rubber cushion for the forehead to rest upon when in use. The opposite end of the rod is fixed by a bayonet joint on a metal pin 10 mm. in length and 5 mm. in diameter, substituted for Skinner's finger rest. The india-rubber cushion acts somewhat after the manner of a ball and socket joint when in contact with the auscultator's forehead, allowing considerable movement of the head in every direction, without tilting up any portion of the chest piece. The smaller chest piece should be used. The forehead rest can be easily detached and carried in the pocket, while the pin may be utilised as a finger rest. Dr. O'Kelly has had this addition in use for about two years, and has found it invaluable.



IMPROVED FORM OF ARRAN'S TUBE FOR VAGINAL LAVEMENT.

The difficulty of washing out the vagina (without wetting the bed or couch on which the patient lies) with the ordinary means of command, must have been experienced for years past, and endeavour has been made to meet this difficulty by the tube of "Arran": but though admittedly an improvement on the ordinary gum elastic or vulcanite vaginal tube, it fails to keep the return current from finding its way under the person of the patient, and so gives rise to great discomfort and trouble. Dr. Alexander Duke calls our attention to the modified form (of which the woodcut gives a faithful representation), which fits closely to the vulva, and being composed mainly of soft rubber, seals the outlet while the lavement is being administered, the return current finding its way altogether through the exit tube. The makers are Messrs. Arnold and Sons, West Smithfield, London.



AN IMPROVED POISON BOTTLE.

Dr. Quine, of Pendleton, Manchester, has sent specimens of a bottle which he has devised for the purpose of preventing the mistakes which so frequently occur by the substitution of a bottle containing poisonous liniment in the place of medicine to be taken internally. He considers that a poison bottle should have some absolutely distinctive peculiarity; be easily distinguished in the dark without relying upon loose parts such as screw stoppers, etc.: be as convenient for use and as cheap as ordinary bottles. He considers that distinction by colour, fluting, or hexagonal shape is insufficient, and that applications for internal use should be put up in bottles which will not stand upright. His improved poison bottle is made to fulfil these conditions, and it gives every promise of being effectual so far as any device of this nature can be expected to serve the purpose of preventing mistakes.

UNG. HAMAMELIDIS CO. AND MASSAGE OINTMENT.

We have received samples of the above specialities from Messrs. Arthur and Co., manufacturing chemists, 74, Newman Street, London, W. The hamamelis ointment is put up in convenient collapsible tubes, and is intended as an application for hæmorrhoids. The massage ointment is made of cacao butter, deodorised and softened; it appears to be very suitable for the purpose intended.

PROTA SOUP POWDER.

We have examined a sample of the "Prota" soup powder prepared by the "Prota" Food Agency, of 241, Caledonian Road, N. The substance is a fine flour of yellowish colour and pleasant taste, stated to be prepared from arachis hypogœa, the "earth-almond" or "ground nut" of America. It is claimed that the amount of nitrogenous matter is unusually high, and this we find to be the case, the total nitrogenous compounds amounting to 46.2 per cent. The preparation is also rich in oily matter, and contains some amount of starch. It is retailed at 7d. per lb., and we consider that it is worthy of attention, as it is undoubtedly a valuable food product to be obtained at a cheap rate.

GERM WHITE BREAD AND BISCUITS.

We have received from the Malto-Germ Extract Company, of 152, Bermondsey Street, London, S.E., some samples of "white germ bread" prepared by the use of a liquid extract of the germ of wheat, and also some samples of biscuits prepared with the same extract. These samples we find to be genuine and of good quality, and to possess the peculiar and pleasant flavour of the "germ."

PARLIAMENTARY BILLS COMMITTEE.

(Continued from page 867.)

A meeting of the Parliamentary Bills Committee was held at the office of the Association, 429, Strand, W.C., on Tuesday, April 10th, 1894,

Present:

Mr. Ernest Hart in the Chair.
Dr. Ward Cousins, President of Council.
Dr. Philipson, President.
Mr. Butlin, Treasurer.

Dr. Agar (Henley in Arden).
Mr. D. B. Balding (Royston).
Mr. Wickham Barnes (London).
Dr. J. W. Browne (London).
Dr. Cameron (Leeds).
Dr. Esler (London).
Mr. Galton (London).
Dr. Bruce Goff (Bothwell).
Dr. Wm. Gordon (Exeter).
Mr. Hemming (Kimbolton).
Dr. Holman (London).
Dr. Robert Jones (Claybury).
Dr. Lowe (Burton-on-Trent).
Mr. Macnamara (London).
Dr. Mickle (London).
Dr. Isambard Owen (London).
Mr. Noble Smith (London).
Dr. Somerville (Galashiels).
Dr. Strachan (Dollar).
Mr. Street (Newton le Willows).
Dr. Winterbotham (Bridgwater).

Proposed Amendment of the Penal Clause of the Medical Acts.

The Chairman presented the following further report on the strengthening of the penal clauses of the Medical Act. He said it was resolved at the last meeting that it was necessary that the Committee should do something to consider the possible amendment of the Medical Acts. The penal clause was the main clause which required amending. When the Act was drafted, the British Medical Association had a special committee, which did its very utmost to endeavour to get a more stringent penal clause. At that time public opinion would not go further than to make the assumption of a registered title penal. They could not even get Mr. Headlam to propose any more strict penal clause. A considerable revolution of public opinion had taken place during the last year, and articles had been published in the lay papers suggesting that there should be some stricter penal clause instituted in the Medical Acts. He consulted Mr. Upton and other people on the subject, and he had prepared a report setting out the bases on which there were proposals for strengthening the penal clauses. While the matter was being considered he had received a very interesting letter from Dr. Mullen, of Melbourne, enclosing a clause from the Medical Act which has recently been passed in the colony of Victoria, and that clause formed a very valuable suggestion for amendment in the existing penal clause of the Medical Acts. The amendments suggested in the report were drawn up by Mr. Upton, who had full knowledge of all the various decisions, and it seemed to him very well drawn. What he proposed, if the Committee thought well to adopt the report, was that copies should be sent to each of the Branches of the British Medical Association, and ask them to consider it, and to the General Medical Council, and ask them whether the clauses therein drafted for amending the Medical Acts were such as would meet with their support. He thought it quite likely the Committee would get a formal acceptance of it by the General Medical Council, which would help them very much in coming forward next year.

THE PROPOSED AMENDMENT OF THE PENAL CLAUSES OF THE MEDICAL ACTS.

Referring to my report submitted to the Committee on November 22nd, 1893, I have now prepared for consideration by the Committee some clauses for the amendment of the Medical Acts. The present clauses, as will be seen, are directed against the unqualified assumption of medical titles, and not to the actual unqualified practice of medicine or surgery, except where such practice may be implied by the titles assumed. Unqualified practice will therefore at present be left as heretofore to the existing law.

In the clauses now submitted for consideration by the Committee I have endeavoured to provide against the difficulties which invariably beset proceedings under Section 40 of the Medical Act, 1858, more particularly by the elimination of the words "wilfully and falsely," but it will be desirable carefully to consider whether by any possibility under the proposed clauses any qualified practitioner can be injuriously affected. It will be necessary to consider, in relation to this subject, the statement prepared by direction of the General Medical Council showing the conditions under which foreign medical practitioners are allowed to practise medicine in England, for submission to foreign Governments.[1]

I have followed generally the provisions of the penal sections of the Dentists and Veterinary Surgeons Acts, in the case of which Acts it is unnecessary to prove the "wilful and false" assumption of a title. Since I submitted my report to the Committee in November last there have been three very interesting and important cases of legal proceedings against unqualified persons.

One of these cases was a prosecution under the Dentists Act. From the circumstances as detailed in the reports of this case, it would appear that the defendant had recently acted as assistant to a dentist who resided and practised several miles distant, but kept a dental surgery at the place where the proceedings were instituted, which he visited two or three times a week as occasion required. The defendant resided at the surgery, and had cards printed with his name and the words "dental surgery" appended; on the lamp outside the house the words "dental surgery;" and on the inner door the words "co-operative dental surgery." The qualified practitioner's name did not appear.

The prosecution was undertaken by the British Dental Association, on whose behalf it was urged that the use of the words "dental surgery" as above stated amounted to a representation that the person occupying the premises in question was a legally-qualified dental surgeon.

For the defence it was argued that the words on the cards were merely descriptive of the defendant's address, while the words on the lamp and on the door were correct as applying to the employer to whom the business belonged, and who was the lessee of the house, the defendant being merely his paid servant, not practising on his own account at all. The magistrate had difficulty in coming to the conclusion that the provisions of the Act had been infringed, and imposed a penalty of £10 and costs.

I mention this case (and shall presently refer to a case under the Veterinary Surgeons Act) in order that the Committee may have the means of discussing the sufficiency of the clauses now submitted for the amendment of the Medical Acts, to enable proceedings to be taken against persons who use words or letters after their name implying that they are specially qualified to practise a branch of medicine or surgery. I refer in the proposed amended clauses particularly to the words "implying that he is qualified to practise medicine or surgery," or any branch thereof.

In the case above referred to, under the Veterinary Surgeons Act, it appears that proceedings were taken against a person who had for the last twenty-five years displayed in a prominent place on his business premises and on billheads the words "Veterinary Forge" after his name. The magistrate did not think that these words constituted the addition or description, stating that the defendant was specially qualified to practise a branch of veterinary surgery within the meaning of the Act, and dismissed the information.

On a case stated by him under the Act 42 and 43 Vict., cap. 49, Mr. Justice Hawkins, in giving judgment, said: "In this case" (that is, the case of the veterinary forge) "I think that the magistrate ought to have convicted the defendant." "The preamble to the Veterinary Surgeons Act, 1881, runs thus: 'Whereas it is expedient that provision be made to enable persons requiring the aid of a veterinary surgeon for the cure or prevention of diseases in or injuries to horses and other animals to distinguish between qualified and unqualified practitioners.'

"The 16th Section of the Act refers only to the assumption of a name, title, or description which would imply that the person using it was a Member of the College of Veterinary Surgeons, but the 17th Section provides that a person who, without the necessary qualification, takes or uses the title of veterinary surgeon or veterinary practitioner, or any name, title, addition, or description stating that he is a veterinary surgeon

[1] See Minutes of the General Medical Council for 1893, Appendix A, Reciprocity of Medical Practice in relation to Foreign Countries.

or a practitioner of veterinary surgery or of any branch thereof, or is specially qualified to practise the same, shall be liable to a fine. Now what was the defendant's offence? He was charged with having unlawfully used and taken an addition and description stating that he was specially qualified to practise a branch of veterinary surgery. What he did, in fact, was to carry on a shoeing forge, and to put before the word 'forge' on his billheads and notices the word 'veterinary.' It is true that he did not profess that he had himself any veterinary skill, but no one seeing those words 'veterinary forge' could fail to come to the conclusion that he was carrying on at that forge a business which in fact he was not specially qualified to carry on. This, as it seems to me, is exactly the case to which the Act was intended to apply." "A man having no special qualification uses a phrase in describing his business which would cause people to think that he did possess a special qualification. He is not a veterinary shoer of horses in the sense in which those words would be understood by the public generally. There is no suggestion here of any fraudulent or false representation on his part. If there were, the case of Ladd *v.* Gould (referred to in my former report) would be in point. That was a case of fraudulent deception."

The judge concludes as follows: "In my opinion, therefore, the defendant was unlawfully using a description stating that he was specially qualified to practise a branch of veterinary surgery, and the case must go back to the magistrate in order that there may be a conviction."

Mr. Justice Wills concurred, and the case was remitted to the magistrate accordingly.

Another case to which I wish to draw the attention of the Committee on the present subject is that in which the proceedings were taken under Section 40 of the Medical Act for the unqualified assumption of medical titles. The matter was of more than ordinary interest in consequence of its being the first case in which the defence had been set up that the defendant was a Member of the Incorporated Council of Safe Medicine, Limited, the Council of which had awarded to him a diploma which gave the right to make medicines under their formulæ, and that he was a holder of the diploma from that body, and accordingly signed himself M.D.Bc., which, it was elicited, signified the rank of Doctor of Botanic Medicine. The case resulted in the conviction of the defendant, and in a penalty of £10 and £4 1s. 6d. costs, and in default of payment six weeks' imprisonment.

It appeared from the evidence that the defendant in the above case was, up to about eighteen months ago, a miner at one of the pits in the district when the proceedings were taken, and subsequently with the degree of the Council of Safe Medicine, Limited, became M.D.Bc., and practised as a doctor.

The committee will probably have heard of this Council of Safe Medicine, which has been registered under the Joint Stock Companies Acts as a company with limited liability. The objects for which the company is established I find are to grant degrees, etc., in the "magnetic and botanic system" to students passing a satisfactory examination before the General Council of Safe Medicine and to those of the botanic profession of good moral character, and who could produce reliable evidence of qualification or ten years' practice at discretion of the Council.

The highest diploma of the Council confers the degree of M.D.Bc., which signifies the rank of doctor of botanic medicine in contradistinction to surgery and the practice of the allopathic and the homœopathic schools of medicine. It may not, perhaps, be of much moment to inquire into the objects of this company, but it certainly savours of conferring degrees in what would probably be found to be unqualified practice, and which degrees, as appears from the report of the above case, render the person using them liable to conviction of an illegal offence. It costs little to confer such degrees, but a great deal of mischief may be wrought if persons throughout the country styling themselves herbalists or otherwise resort to calling themselves M.D. Bc. by virtue of the company's diploma.

It perhaps would not be undesirable, therefore (in case the General Medical Council has not taken this step), if the Committee were to request that a formal communication on behalf of the British Medical Association should be addressed to the Registrar of Joint Stock Companies or to the Board of Trade, drawing attention to the conviction above referred to, and inquiring whether the company should longer be permitted to remain on the register. It is an essential condition, according to the Joint Stock Companies Acts, that the objects of any registered company should be lawful. By such a representation, a short and simple method might be devised for putting an end to the grant of these so-called degrees.

The next case to which I would refer more strictly appertains to the unqualified practice of medicine; but inasmuch as it involves a reference to an Act of Parliament which I think should be eliminated from the Statute Book, it may be well to mention it. It illustrates the absurd pretensions of the unqualified practitioners in those days.

The case in point was one in which the Society of Apothecaries, acting through the Medical Defence Union of Birmingham, brought an action against a herbalist to recover penalties for unqualified practice as an apothecary, and recovered penalties. The alleged practising was, I gathered, practically admitted, the defendant relying on an Act passed in the reign of Henry VIII. This Act, 34 and 35 Henry VIII. cap. 8, is intituled "An Act that all persons being no common Surgeons may minister medicines outward;" and the preamble commences by the recital of an Act of the same reign for the avoiding of sorcery, witchcraft, etc. Under the Act, all persons having knowledge and experience of the nature of herbs, etc., were entitled to practise and minister to any outward wound, etc., or drinks for stone, strangury, or ague.

This is not the first time that a herbalist, on being proceeded against by the Society of Apothecaries for unqualified practice, has set up this Act by way of defence, it being apparently overlooked that it was decided, as long ago as 1628, in the case of the College of Physicians *v.* Butler, that the statute did not extend either in words or intent to give liberty to any person "to practise or exercise for gain or profit." The judgment in the College of Physicians *v.* Butler decides that the Act was limited to those who were inclined to give their neighbours physic through charity and pity, and not to those who expected gain from it as empirics, and who did nothing in pity or charity, so that this statute excludes all those who take money or gain. The judgmnet was confirmed on appeal on Writ of Error in the case of Butler *v.* the President of the College of Physicians.

I think, therefore, that it is a statute which it would be desirable for the Committee to take early steps to include in some Statute Law Revision Act, and I hope that in the meantime the decision in the recent action by the Society of Apothecaries will have the useful effect of confining the business of a herbalist within its proper limits.

To return once more to the question of the form which the amendment clauses should take, I think there is a point also to consider whether the penalties, instead of being made recoverable under the Summary Jurisdiction Acts, should not rather be recoverable by civil proceedings in the manner prescribed by the Society of Apothecaries Act with reference to the recovery of penalties for unqualified practice as an apothecary, and whether in such a case provision should not be made for some part of the penalty being paid to the informer. It is possible, however, that the Committee will consider that the passing of the Act might meet with opposition in this form, and that it would be more expedient for the proceedings to be taken under the Summary Jurisdiction Acts in the manner suggested by the draft clauses.

I have before me the clause in the Medical Act for the colony of Victoria, and which for the information of the Committee I think it desirable to set out at length.

Cony Clause from the Medical Act of the Colony of Victoria.

"It shall not be lawful for any person, unless registered under Division 1 of this part of this Act, to pretend to be or to take or use the name or title of a physician, doctor of medicine, licentiate in medicine and surgery, master in surgery, bachelor of medicine, doctor surgeon medical or general practitioner or apothecary, or surgeon apothecary or accoucheur or licentiate or practitioner in midwifery, or any other medical or surgical name or title, and every unregistered person so offending shall forfeit and pay a sum not ex-

ceeding £50, to be recovered in a summary manner before any two justices by any person suing for the same in any court of petty sessions. Provided that any person who shall feel himself aggrieved by any such conviction or order of justices may appeal therefrom to the next court of general sessions of the peace, in accordance with the law for the time being in force relating to appeals from justices to courts of general sessions of the peace."

Dr. Mullen, of Melbourne, writes an interesting letter on this clause, of which the following is a copy:—

"British Medical Association (Victorian Branch)
"January 29th. 13, Spring Street, Melbourne.

"Dr. Ernest Hart.

"Dear Sir,—Having seen in the British Medical Journal the report on the penal clause in the Medical Act, 1858, I would like you to look at the penal clause in the local Act originally passed in 1862. First we omit the term 'wilfully and falsely,' a stumbling block in the way of successful conviction in England.

"Next in our drag-net the clause says 'any other medical, or surgical name or title' there is no qualification limiting the term except, of course, it must be ejusdem generis. Your Act limits its drag-net by adding 'implying so and so.' In your proposed drag-net you put in the phrase 'implying that he is a daily qualified medical practitioner': but I do not see that this helps you, as by another section in the principal Act that term means a person registered under the Act. Far better to leave out all words qualifying the drag-net. Under our section, in cases in which I appeared, the terms 'oculist' and 'Chinese doctor' were held by the justices to be illegal, and the Court of Appeal upheld the convictions. Also under our clause *any one can sue*. This is a great convenience, and has been used by persons who were unwilling to proceed civilly or by prosecution for false pretences. Short of prohibition to practise, which has existed in Tasmania for years, our local clause is about as comprehensive as it can well be, and seems exactly to meet the defects in your principal Act.

"The jury in the Indian oculists case regretted the absence of a law preventing surgical practice, but does not such exist?

"Thus 3 Hen. VIII, c. 11, prohibits the practice of medicine, and the memorandum includes surgery. 14 and 15 Hen. VIII, c. 8, allows practice in certain cases, but not where money is taken. (See Little and Oldaker, c. and m. 370, footnote; and Davies *v.* Makuna, 39 ch., D. 596 in the arguments; and in Apothecaries' Company *v.* Collins, 5 C., and P. 319, Mansfield, C.J., stated that anyone can prosecute. These Acts, though so old, are still unrepealed; and as late as the Forties (Dallas *v.* Jones, 26 *L. J.*, Ex. 79) one of them was treated as in force.

"Be this latter as it may, I trust that the local section may be of use.

"Further, in a couple of cases here, I objected that the Medical Board (or Council) can alone look at a medical diploma, except on a mandamus, and the justices refused to admit evidence of the degree alleged to be held by the defendant.—Yours sincerely,

"W. D. Mullen, M.D., LL.B."

In the draft-amending clauses now submitted to the Committee, it will be seen that I have adopted some of Dr. Mullen's suggestions.

Clauses for Amending the Medical Act, 1858.

Whereas in order that persons requiring medical or surgical aid should be better enabled to distinguish between qualified and unqualified practitioners, it is expedient to extend and amend the Medical Act, 1858. Be it therefore enacted, etc., etc.

1. This Act may for all purposes be cited as the Medical Act Amendment Act, 189 .

2. If after the passing of this Act any person other than a person whose name is for the time being on, or entitled to be on, the *Medical Register*, or who prior to the passing of the Medical Act, 1886, would have been entitled to be registered, shall take or use the name or title Physician, Doctor of Medicine, Licentiate in Medicine or Surgery, Bachelor of Medicine, Surgeon, General Practitioner, Medical Practitioner, Apothecary, Aurist, Oculist, Accoucheur, or any title, style, addition, or description, directly or indirectly implying that he is registered under this Act, or that he is specially qualified to practise medicine or surgery or any branch thereof, he shall upon a summary conviction for any and every such offence pay a sum not exceeding £ .

It is hereby declared that the words "title, style, addition, or description," where used in this Act, include any style, title, addition to a name, designation, or description, whether expressed in words or by letters, or partly in one way and partly in the other.

3. With respect to the offence of a person not registered, or entitled to be registered, under the Medical Acts for the time being, taking or using any name, title, addition, or description as above in this Act mentioned, the following provision shall take effect:

(1) He shall not be guilty of an offence under this Act:

(*a*) If he shows that he is not ordinarily resident in the United Kingdom, and that he holds a qualification which entitles him to practise medicine or surgery in a British possession or foreign country, and that he did not represent himself to be registered under the Medical Acts.

(*b*) If he shows that he has been registered, and continues to be entitled to be registered, under the Medical Acts; but that his name has been erased on the ground only that he has ceased to practise.

4. Any penalty to which under this Act any person is liable on summary conviction may be recovered by the General Medical Council, or any person with their consent in the manner provided by section 41 of the Medical Act, 1858, and any sum or sums of money arising from recovery of penalties as aforesaid shall be paid to the Treasurer of the General Medical Council, or person suing with their consent; anything contained to the contrary in the Metropolitan Police Acts or any Act passed before the passing of this Act notwithstanding.

Mr. Macnamara said he had read the report. He thought there would be a strong movement in favour of some provision of the kind, and it seemed to him that the course proposed by the Chairman would be a most advantageous one.

It was proposed by Mr. Macnamara, seconded by Dr. Ward Cousins, and resolved:

That the report and draft clauses be received and adopted and copies be sent to the Branches of the British Medical Association and to the General Medical Council for comment and approval.

(To be continued.)

A BRITISH HOSPITAL IN WEST AFRICA.

Tulloch Memorial Hospital.—A Descendant of the Prophet among the In-patients.—Prevalence of Syphilis among the Moorish Population.—Other Common Diseases.—Objection of the Moors to Operations.—Gynæcological Cases.—Eye Diseases.

I have decided, for a reason which need not here be stated, to close the publication of the series of illustrated papers descriptive of "The Nearest African Health Resort." The rest of the series will appear elsewhere. It is, however, due to the unwearied and unselfish promoters and upholders of an excellent medical institution, which is being carried on there with great devotion, usefulness, and ability, to append a brief note of the Mission Hospital carried on at Tangier by Dr. Terry under the auspices of the North African Mission Society.

The Tulloch Memorial Hospital is named after Miss Tulloch, who died here among the first missionaries, and whose friends liberally subscribe towards its fund. It is situated on the hilly ground called the Marchan on the western side of Tangier, overlooking the Straits of Gibraltar, and stands precisely on the eminence of one of the Pillars of Hercules. It therefore belongs to the *ne plus ultra*, and should geographically, and may perhaps medically, be destined to become the *ne plus ultra* of African medical science. It is at least a pioneer institution.

It is carried on in connection with the mission work of

the North African Mission, of which the London centre is at Barking, the honorary secretary being Mr. E. H. Glenny. The hospital has been in working since 1887, and is now under the medical direction of Dr. C. L. Terry, a graduate of Edinburgh in medicine, and of the University of London in arts. The hospital consists of a building which has been converted from agricultural purposes to its present use. It provides accommodation for 24 in-patients, 16 of the beds being for males and 8 for females. The out-patient department is open four days a-week, and is largely and increasingly frequented by the natives.

The number of out-patients for the year, from January, 1893, to January, 1894, was about 3,900 Moors and Jews, and about 1,000 Spaniards, making a total of nearly 5,000 for the year. The Moorish patients are all Mohammedans. They include a number of people from the towns and surrounding villages, a considerable proportion of field workers amongst the villagers of all kinds, and the smaller traders and market people, porters, carriers, etc.

The pressure on the beds of the hospital is far beyond the present possibility of meeting it. Thus on the day on which this notice was written there were in attendance at the hospital among the outpatients six people, one of whom had come six days' journey from one of the inland mountain villages, and another two days' journey, and others from considerable distances, all hoping and expecting to be taken in, as had happened to persons from the same villages who had been received, supported, and cured in the hospital, and had returned and spread the news in their neighbourhood of its good work.

Among the in-patients at the present moment in the hospital is an old Shereef, one of the lineal descendants of the Prophet Mohammed, who had come six days' journey from Fez. He is suffering from urethral stricture. He had arrived with mules and camping furniture for surgical aid, fully determined to return, and notwithstanding advice to stay in order to have his complaint properly cured, he took what medicine and advice could be given him, and started on his way back to Fez; but before he had gone a day's journey he was again seized with painful retention and obliged to return. He had an impassable stricture, and was treated by suprapubic puncture with drainage of the bladder, and after a time a filiform bougie had been passed, and he is now practically cured, although the stricture is of a kind liable to recur.

Another patient in the wards came from Mogador with chronic diarrhœa of three months' standing. He is under treatment with milk diet with bismuth and Dover's powder. His symptoms are disappearing, and he is on the way to recovery.

A third patient, with hydrocele, is a man from Tadla, twelve days distant from Tangier (a spot inaccessible to Europeans; one or two only are said to have reached there). Tapping and injection have effected a cure. Two hundred and twenty-five in-patients have been treated during the year. There is a trained nurse, who is a member of the mission, and under her direction the nursing is carried on. The total annual expenditure is estimated by Dr. Terry at about £300 for the actual working of the hospital as such, and exclusive of missionaries' allowances.

The prevailing complaint of the country, and that which brings the larger proportion of patients to the hospital, is syphilis—acquired and inherited. Syphilis has prevailed amongst the Moorish population now for many hundreds of years, as has been mentioned elsewhere.

The manifestations of syphilis treated vary infinitely, from mild serpiginous eruptions, which rapidly improve under small doses of iodide of potassium and mercury, to the most severe form of the disease in which the entire nose or the entire palate is destroyed; severe ulcerations of the throat, enlargements of the liver, and literally every form. A great deal of infantile syphilis is seen, but Dr. Terry notes that, amongst the large number of children which have been brought to him suffering with well-marked hereditary syphilis he has not yet observed the notched teeth of Hutchinson, with the accompanying interstitial keratitis, in any one case.

Ague, malaria, and dysenteric affections are, perhaps, the next most frequent class of disease, and these are treated according to the European methods with encouraging results. There are numerous cases of splenic "ague cake," and these are found to be very refractory. Nor has Dr. Terry yet been able to decide what is really an efficient treatment in such cases, so that he will be glad of any hint from others having similar experience in warm climates.

There are many forms of skin disease which are similar to tinea and impetigo, but which, both from their clinical character and their rapid cure under antisyphilitic treatment, Dr. Terry considers to be of venereal origin.

The Moors have a well-known objection to amputation or mutilation. Any kind of mutilation, the loss of a limb or an eye, has long been associated in the minds of the Moors with punishment for theft or for other criminal offences. This reason operates with them powerfully, as well as the well known Mohammedan belief that mutilation is an impediment to their happiness in a future state. There have, however, been three cases of amputation at the hospital in connection with severe gunshot injuries, and in the persons of Moors, as well as minor amputations such as fingers, toes, etc., for injuries from machinery, and other injuries arising from friction through their long awkward shoes in walking. Among other frequent cases requiring surgical treatment are those of gunshot wounds of all kinds and strictures, urinary fistulæ, etc., which are only the natural results of the almost universal prevalence of gonorrhœa.

Among the most frequent operations required are internal and external urethrotomy and divulsion. Stone in the bladder is not very common in Tangier, but is very prevalent in some of the coast cities. A few cases have been admitted for stone in the bladder requiring lithotomy. A set of lithotrites is much required, and would be very useful for the service of the hospital, and a complete set of bulbous-headed silver bougies would also be a great boon.

There is a considerable amount of uterine disease among the women, but there is still very great objection to direct examination. The greater number of female patients up to the present time have been sufferers from induced or inherited syphilis, many of them the innocent victims of the sins of others.

It is a great disadvantage to the hospital that the premises are not adequate to allow of a separate hospital being established for the women, as the Moors have so strong a prejudice for completely secluding the women that their treatment in the same building as the men is very much opposed to Moorish opinion.

Gynæcological cases have come in numbers sufficient to show that if there were a separate hospital it would be taken advantage of by some of the better class as well as the poorer women. One woman of good position came in from a distance with a large uterine fibroid, but the husband refused to allow operation. Three cases of vesico-vaginal fistulæ have been admitted, and one was operated on. Many more similar cases might be named.

Eye diseases include ophthalmia and all forms of corneitis. Trichiasis and trachoma are very prevalent. There is, indeed, a great field for an ophthalmic surgeon here. Some of the villages and towns, such as Alcazar, are literally swarming with ophthalmic disease, inducing relative or complete blindness. So much so that the natives have a legend that the city above mentioned was cursed by a holy man, who condemned the people to blindness, and that ever since they have been stricken with epidemics of disease. There is quite room for a special ophthalmic department, and a highly-skilled ophthalmic surgeon might find himself beneficently and constantly, but not remuneratively, employed.

In one case a patient presented himself from a district to which a patient had returned cured, and said that fifty others of his neighbours had started off to come with him with their eye diseases, but, after coming part of the way, they sent him on to complete the journey as a sort of deputation, and had determined to await the result, as they thought it would be impossible for all of them to be admitted into the hospital. Happily through circumstances it was possible to ward off the invasion *en masse*, and the people only came in a few at a time, instead of in one battalion.

There is a great deal of severe dyspepsia, accounted for partly, Dr. Terry thinks, by the frequent and habitual drinking of repeated draughts of strong, syrupy, green tea, flavoured with mint, which is the national beverage of the

Moor; and partly by the coarse character of their bread, which in the villages is made from Draa, and not from wheat, and is always eaten quite hot: and also partly by ascaris lumbricoides, which nearly all suffer from more or less. The natives thoroughly appreciate the blessings of chloroform, and, as it has become better known and more popular among them, they sometimes come up and demand chloroform for very trifling ailments, even for toothache.

SMALL-POX AT WHITTINGTON.

WE learn from the report of the Medical Officer to the Derbyshire County Council that the small-pox is almost entirely limited to the urban sanitary district of Whittington. The County Medical Officer has made an exhaustive inspection of the district, and it appears that the disease, which was very prevalent in the district during 1893, was nearly mastered in December, in which month only five cases occurred, and that the recrudescence is due to the fact that the authority ceased to remove cases to the Chesterfield Isolation Hospital. Dr. Barwise has made some interesting inquiries respecting the effect of vaccination in controlling this disease, and the following table shows the value thereof:

Ages.	No. of Persons in Invaded Houses.	Attacks.	Deaths.	Vaccinated in Infancy.		Not Vaccinated.	
				Not Attacked.	Attacked.	Not Attacked.	Attacked.
Under 10 years	178	26	Not Vaccinated, 5	148	11	4	15
10 to 20 years	110	33	Not Vaccinated, 1	77	31	—	2
20 to 30 „	85	37	Vaccinated, 2	48	35	—	2
Over 30 „	109	39	Vaccinated, 5	70	39	—	—
	482	135	13	343	116	4	19

The number of persons exposed to the infection by living in invaded houses was 482. Of these, 23 were not vaccinated, 19 were attacked, and 6 died: all the deaths which occurred under the age of 20 years were of persons who had not been vaccinated. It will be seen that the risk of the unvaccinated taking the disease is three and a-half times greater than the vaccinated, and the chance of their dying is seventeen times as great.

The lessons to be learned from the outbreak are:

1. The importance of vaccination in preventing small-pox.
2. The necessity for a conjoint hospital for the district.

INDIA AND THE COLONIES.

AN AUSTRALIAN SANITARIAN ON ENGLISH SANITATION.

THE Hon. H. N. Maclaurin when in England in 1892 was instructed by the New South Wales Government to inquire into the working of the various Acts in force in England relating to public health, with a view to the introduction of similar legislation into the Colony. The result of his investigation is before us in a *Report on Sanitary Legislation and Administration*, which has been published recently by the Government printer in Sydney. The *Report* opens with a historical sketch founded on Sir John Simon's book. The greater bulk of the *Report* is occupied by a study of the present state of sanitary administration. Dr. Maclaurin had the assistance of Dr. Thorne Thorne, Mr. Shirley Murphy, Dr. Sedgwick Saunders, Dr. Tatham, Dr. Russell, of Glasgow, and Dr. Campbell Munro. The summary given is clear and concise, and will well repay perusal, as the powers of the various administrative bodies are very clearly set out. There is a brief section on the shortcomings of our administration. Dr. Maclaurin points out that the great reduction in the death-rate from typhoid fever, so marked in London and in some other towns, has not occurred in some districts, and he instances particularly the eastern parts of the counties of Northumberland and Durham. "From my general acquaintance with the English sanitary system," he writes, "I should expect to find it (the nature of the shortcoming) of twofold origin—arising, first, from the neglect of the local sanitary authority, and, secondly, from the insufficient power in the central authority to compel the local authority to do its duty." A second defect pointed out is in the working of the Infectious Disease (Notification) Act and in the arrangements for isolation. The Act does not require the notification of cases in which the diagnosis is doubtful, so that mild cases of small-pox (varioloid) and other diseases escape notification altogether, and are sources of widespread diffusion of infection. The New South Wales Act, which applies only to small-pox, however, requires the notification of "every case which may reasonably be supposed to be small-pox," and this, we gather, is interpreted to mean every doubtful case. We would commend this opinion to those sanitary authorities who have recently resisted the payment of fees in doubtful cases. It is at least as important for the medical officer of health to know of these cases as of those which are well pronounced. A third fault found with our administration is the want of sufficient power by the port medical officers for dealing with vessels from infected ports, and the want of any official announcements as to what ports are infected. Dr. Maclaurin considers that all vessels from infected ports should be regarded as infected, and prevented from communicating with the shore until after inspection by the medical officer of the port, that all such inspections should be made by daylight, and that for this end the medical officer should have power to detain vessels arriving in the evening until the following morning.

The *Report* concludes with the following criticisms and recommendations as to sanitary legislation and administration:

In New South Wales, he says, "as everyone knows who has been engaged in sanitary administration, we fall in many particulars very far short of the high standard of legislation for the public health which has been attained in England, and our deficiencies in this respect have been frequently pointed out, more especially by the Hon. Dr. Mackellar, the first President of the Board of Health, who prepared a very excellent measure dealing with the subject so long ago as 1885. His Bill was introduced into the Legislative Council and read a first time, but owing to a change of Government no further progress was made with it.

"Since that date one or two useful measures of limited scope have been passed, such as the Dairies Supervision Act, the Leprosy Act, and the Diseased Animal and Meat Act, and two Acts amending the Metropolitan Water and Sewerage Act were passed in 1888 and 1889. But no attempt has been made to pass an Act of general scope and import, and there are many points of the utmost consequence as to which no legislative provision—or, at all events, no adequate legislative provision—exists in the Colony. Among these I may mention the notification and prevention of epidemic disease (excepting with respect to small-pox), the prevention of building on insanitary sites, the dealing with insanitary areas and insanitary buildings (excepting to a certain extent within the city of Sydney), the regulation of common lodging houses, the regulation of factories and workshops, the dealing with noxious and offensive trades, the effectual prevention of the adulteration of articles of food and drink and of drugs, and, though last not least, but greatest in importance, the compelling negligent local authorities to carry out the sanitary powers with which they may be entrusted.

"These are all matters of the highest importance from a sanitary point of view, and I trust that no long time will elapse before a measure embracing a full and complete sanitary code will be laid before Parliament for its consideration."

INDIA.

GRAPHIC REPRESENTATION OF STATISTICS.—The Government of India has approved the suggestion which was made by the Army Sanitary Commission for the purpose of showing the relation between the mortality from small-pox in each district and the successful vaccination recorded in it—namely, that the facts should be brought into one diagram, the lines intended to represent, respectively, the death-rates from small-pox, and the proportion of population protected by vaccination, being drawn side by side for each district.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1894.

Subscriptions to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, APRIL 28th, 1894.

THE PARIS INTERNATIONAL CHOLERA CONFERENCE.

We are enabled to present in advance of its official publication in this country the text of the Convention signed by the delegates and plenipotentiaries of the European Powers and the Shah of Persia, with the view of regulating the measures to be taken for the prophylaxis of cholera in relation to the pilgrimage to Mecca and the sanitary supervision of the Gulf of Persia. The Convention, it will be seen, is divided into four heads, the first relating to the sanitary police in the ports of departure of pilgrim ships coming from the Indian Ocean and from Oceania, including measures to be taken on board pilgrim ships, and precautions during the journey: the second relating to the sanitary surveillance of pilgrims in the Red Sea, including the sanitary *régime* applicable to pilgrim ships at the health station at Camaran, and the ameliorations to be carried out at that station as well as at Jeddah and Djebel Tor, and the ports of the Hedjaz; the third division concerns the protection of the Persian Gulf, and prescribes regulations for the ships concerned in the pilgrim traffic and the establishment of a number of sanitary posts at specified ports: the fourth division confides the execution of the prescribed measures to a committee of the Superior Council of Health at Constantinople composed of three representatives of Turkey and representatives of the Powers adhering to the sanitary conventions of Venice, Dresden, and Paris. The expenses are to be divided among the nations according to an agreement which has been entered to.

A consular commission is constituted at Constantinople to take cognisance of infractions of the Convention and to deal with complaints and defence thereunder, and the fines and penalties involved. It is noticeable that this Convention is not signed at present by the representatives of Turkey or of the United States. It may further be observed that one of the most important questions raised, namely, the internal sanitation of Mecca itself, which was brought under the notice of the Convention, and has been fully and graphically illustrated in Mr. Ernest Hart's publications on this subject, is not dealt with by the Conference. It is obvious, indeed, that this is a matter exclusively within the domain of the Sultan of Turkey, and depends wholly upon his enlightened will; but it is understood, from information conveyed to the Conference, that, without any formal declarations, the Sultan is desirous of doing all in his power to put an end to the fearful destruction of life which has hitherto attended the Meccan pilgrimages, and with that object is disposed to make a considerable expenditure for very necessary sanitary reforms both at Jeddah and at Mecca, without which, indeed, no measures can be more than partially effectual. Considerable support to such measures may be expected from independent Mohammedan sources throughout Turkey, Persia, and India. It will be remembered that when Mr. Hart broached this subject in detail in the *Nineteenth Century*, public meetings of Mahommedans were held in India, at which resolutions were passed urgently calling for the sanitary reforms of the Meccan pilgrimage therein indicated as necessary to prevent the huge mortality among the pilgrims and during the sacred rites at Mecca. Mecca possesses now a considerable supply of pure water brought from the mountain of Arafat. This, it is stated, was done by public subscription, and at the cost chiefly of the Mussulmans of India, who are deeply concerned in putting an end to the deplorable loss of life and constant recurrences of cholera epidemics due to the pilgrimage as now carried on, a mortality as much deplored by all Mussulmans as it is a source of danger to Turkey, Egypt, and Europe. The proposals of the present Conference in this matter will no doubt have their warm support, and the further enlightened co-operation of the Sultan and his advisers is confidently counted upon.

STUDIES IN THERAPEUTICS.

IV.—Strophanthus.

Despite its undoubted efficacy in a large number of cases it cannot be gainsaid that strophanthus has not had the extensive employment as a cardiac tonic which Professor Fraser's admirable researches seemed to have assured for it. The chorus of approval which ascended when first it was introduced to the profession in 1885 in the form of the tincture has been followed by the records of numerous cases in which it has either been found of no effect or has been provocative of alarming cardiac disturbance, so that at the present moment it must be admitted that digitalis and its preparations still hold the field as the cardiac tonics most generally employed and most generally satisfactory.

Yet if the two be compared experimentally there can be no question that the active principle of strophanthus hispidus has an action upon the heart more powerful by far than any one of the principles that have been separated from the leaves of digitalis. Apart from potency, strophanthus would appear to possess the advantages of acting to a less extent upon the vessels and of causing less gastric disturbance, and again of producing its effects with far greater rapidity. How rapid is its action may easily be determined by taking a sphygmographic tracing before giving the ordinary dose of the tincture and a second tracing from ten to fifteen minutes later. The change in the state of the pulse is very remarkable.

All these advantages ought, it would be thought, to have ensured its general employment. That it is still distrusted by so many would seem to be due to the fact that the commercial tincture is not of constant strength, and some would go so far as to suggest that inasmuch as the supply of the seeds is not equal to the demand many of the preparations are practically worthless. There can be no question that the tincture varies considerably in strength. In the first

place it is extremely probable that the pods imported from western equatorial Africa belong to more than one species. In addition to strophanthus hispidus, the closely allied S. kombé is declared to be in the market. There is no assurance that the pods are obtained at like periods of maturity, indeed the varying colour and condition of the seeds is against this idea; and passing to the preparation of the tincture it may be added that while strophanthin is found in largest quantity in the seeds it is present also in the seed-cases. Hence tinctures made from the seed alone and from the entire pod would differ greatly in strength. All these facts add to the probability borne out by clinical experience that tincture of strophanthus is rendered unsatisfactory by its lack of constancy, and the probability is rendered a certainty by testing the tinctures supplied by the leading firms both in this country and abroad.

This has been recently done on behalf of the Therapeutic Committee of the British Medical Association. The results were so far satisfactory, inasmuch as they proved that all the samples were of very considerable strength; nevertheless, there was great variation in the power of the individual samples as determined by their action upon the frog's heart. A few acted with considerably greater force than the standard solution.

We have become accustomed to the irregularity in the action of tincture of digitalis due to this same inevitable variation in the amount of active principle present in the portions of the plants subjected to the process of extraction, but when a preparation of a new drug is brought forward manifesting a like defect, it is, perhaps, only natural that the preparation, and, indeed, the drug itself, should become discredited in the eyes of many physicians. It is true that the strength of any given sample of the tincture might roughly be determined by the practitioner were he to administer to himself or some other healthy adult a given dose, say of 3 or 5 minims, and then determine the period elapsing before the sphygmographic tracing showed a definite increase in the individual pulse beats, but even this is asking far too much. Such procedure is not calculated to add greatly to the employment of the drug. In fact, if strophanthus is to become popular as a cardiac tonic it must be exhibited in the form of a stable preparation of constant strength. This can only be accomplished by extracting the active principles (whether by Gerrard's[1] or other method) from the seeds, and if necessary from the other parts of the plant, for, according to Professor Fraser, it is present in all portions save the hairs covering the seeds. We must employ carefully determined doses of strophanthin, and not the tincture, if strophanthus is to become the supplanter, or the alternative, to digitalis or digitalin. If the pharmacology of the future is to approximate to an exact science, these vegetable tinctures and extracts of inconstant strength are assuredly doomed.

IGNORANCE IN ENGLAND AND INDIA.

We learn from the *Times of India*, March 30th, that a large and influential meeting was held at the Town Hall, Bombay, His Excellency Lord Harris, Governor of Bombay, in the chair, in order to promote the establishing in India of an institute for the preventive treatment of hydrophobia on the same lines as the Pasteur Institute in Paris.

[1] Gerrard, *Pharm. Jour. and Trans.*, May 14th, 1887.

Mr. E. H. Hankin, Fellow of St. John's College, Cambridge, and Government Analyst at Agra, gave an interesting lecture on the results following the researches of Louis Pasteur and his pupils, and Lord Harris, having referred to the excellent work already done in India by Dr. Lingard, spoke very strongly in favour of the proposed institute. A resolution was unanimously adopted urging the establishing of the institute in India, and a committee was elected in order to carry this resolution into effect.

As was to be expected, the same opposition which has proved so complete a failure over here is now attempting to make itself felt in India, and in both countries the same methods are adopted in order to foster this agitation.

We have only to compare the speech reported to have been made by Dr. Bahadurjee at Bombay with the letters written by the antivivisection agitators in this country. In both we find the same confusion of ideas and the same erroneous statements; so much so that it is difficult to believe that Dr. Bahadurjee has not taken many of the alleged facts contained in his speech from the pamphlets issued by these antivisection societies. Dr. Bahadurjee, however, is a medical graduate, and might have been expected to verify his facts before he committed himself to the extraordinary statements with which he regaled a large audience of natives at Bombay.

Dr. Bahadurjee told his audience "that there was nothing certain known as to what caused hydrophobia, or that at the time of biting a person a dog was or was not rabid, though for the purpose of statistics the former was allowed to be the case." Now it is well known that the symptoms of hydrophobia are so characteristic that there are but few cases in which veterinary surgeons are unable to diagnose the disease with ease and certainty. Since the classical researches of Pasteur it is an acknowledged fact that the inoculation of hydrophobia under the dura mater is always followed by death from hydrophobia, and that no other inoculations of any other virus is ever followed by the same train of symptoms. Dr. Bahadurjee implies that the statistics at the Institut Pasteur are not accurate, whereas, as a matter of fact, exactly the contrary is the case. The history of every patient at the Institut Pasteur is recorded, and notes kept of it. In column A of the statistics of the Institut Pasteur, for instance, only persons are entered who have been bitten by an animal proved to have been rabid by the inoculation of another animal, or by the fact that some other person not inoculated and bitten by the same animal died of the disease. Of this column Dr. Bahadurjee, who says that he has studied the working of the Pasteur Institute in Paris, must either have been very culpably ignorant or he must have garbled the facts for the purpose of this agitation. A little further on Dr. Bahadurjee tells us that by his inoculations Pasteur has caused his patients to suffer from a disease that had previously never been known, and has had to confess that persons had perished who, but for his practice, would never have died from hydrophobia. With regard to the latter part of the sentence it is difficult to believe that any professional man could have made such an accusation, which is entirely without foundation, and we challenge Dr. Bahadurjee to give us the chapter and verse for the statement which he attributes to Pasteur.

As regards the disease previously unknown, from which

patients inoculated by Pasteur's treatment suffered, in all probability Dr. Bahadurjee refers to the cases of paralytic rabies which have occurred after Pasteur's treatment. It would then be interesting to hear how Dr. Bahadurjee explains the cases of paralytic rabies which occurred in the time of Morgagni, more than 200 years before Pasteur was ever heard of; and also those recorded by Le Blanc, Gamaleïa, and others, in persons who have never undergone any preventive treatment whatever.

It is satisfactory to find that in England the public have learnt the ways of the antivivisection agitators, for strangely enough at Chelsea the antivivisection opposition to the British Institute of Preventive Medicine has practically stopped, and at the deputation to the Home Secretary by a few residents of Chelsea hardly any allusion was made to the question of vivisection, but strong objections were raised against the Institute on the grounds of the danger to health. As a matter of fact, the objection is more than ridiculous; it is well known that similar institutes have been built in Paris, Berlin, St. Petersburg, Vienna, Munich, Lyons, Buda-Pesth, etc., in the centre of the town, and that up to the present time no cases of infection have been traced to such institutes.

One of the members of the deputation, a gentleman named Irons, laid special stress upon the fact that by means of the Institute phthisis might be carried about. It would be interesting to know how this gentleman reconciles his objections to the Institute with the fact that hundreds, we may say thousands, of phthisical patients walk about London in broad daylight and large consumption hospitals have been built in London. The Home Secretary on April 24th told the deputation practically that he saw no reason for interfering, that he had no power to do so if he wished, that no licence for vivisection had been applied for, and that he would enter into the matter when the licence was applied for.

Meanwhile we rejoice to hear that, both in England and in India, the march of science is not to be arrested by a few ignorant fanatics like Dr. Bahadurjee or the fifteen persons from Chelsea who interviewed the Home Secretary.

The German Emperor has bestowed the Order of the Red Eagle (third class) upon Dr. James Reid, Her Majesty's physician.

Dr. L. T. F. Bryett has been appointed medical officer of health for the parish of Shoreditch, at a salary of £500 per annum. The number of medical officers of health a moiety of whose salaries is at present payable by the London County Council is 27 out of a total of 56.

The Secretary of State has communicated to the London County Council that no fees can be taken by constables other than those included in a table made under Section 23 of the Police Act, 1890, which does not include fees to be paid to constables who are coroners' officers for services rendered in attending inquests and summoning juries and witnesses. The fees fixed by county councils for payment to police constables acting as coroners' officers varies within the metropolitan police district from a minimum of 3s. to a maximum of 10s. The fees have now been revised and included in the Secretary of State's Table, since it is desirable that, where practicable, police constables should be employed as coroners' officers in preference to other persons.

We learn that Mr. Gladstone, Cardinal Vaughan, Professor Huxley, Sir James Paget, Mr. Jonathan Hutchinson, Mr. J. H. Buxton, and Mr. Ernest Hart, are the appointed speakers at Princes Hall on Thursday, May 3rd, in support of the proposed memorial to the late Sir Andrew Clark. Mr. Roberts (London Hospital) has already received announced subscriptions to the value of about £1,500. The sum needed is, we believe, about £5,000. Reserved seats are kept for subscribers, and the applications for those are already so numerous that the free seats in the body of the hall must be curtailed accordingly. Among the subscribers of £100 are Mr. Gladstone, Sir Donald Smith, Mr. W. Rathbone, Mr. James Knowles, and Mr. W. H. Cullingford.

THE PROPOSED RECONSTITUTION OF THE UNIVERSITY OF LONDON.

We learn that the Senate of the University of London has appointed a Committee, including Sir James Paget, Sir Henry Roscoe, Sir William Savory, Dr. W. J. Collins, Professor Carey Foster, and Sir John Lubbock, to meet representatives of Convocation to consider the suggestions made in the report of the Royal Commission for the reconstitution of the University.

THE GENERAL MEDICAL COUNCIL.

We understand that the spring session of the General Medical Council will commence on Tuesday, May 22nd, and the Executive Committee will meet on the previous day. Among the business which will be brought before the Council will be the Visitor's Report on the Examinations of the Royal College of Surgeons, Ireland, and the Apothecaries' Hall, in Dublin, which have already attracted so much attention.

THE APPOINTMENT OF INTERNATIONAL QUARANTINE OFFICERS.

We are privately informed that the Egyptian Government have just appointed an Austrian physician (Dr. Blatteis), a French physician (Dr. Delarue), and an English physician (Dr. Attfield) as quarantine medical officers at Suez. These are new appointments made in pursuance of the resolutions adopted at the International Cholera Conferences at Dresden and Venice. Their main duties will be the inspection of ships coming from the East and passing through the Suez Canal, and the superintendence of the embarkation and debarkation of the Meccan pilgrims at Moses Well and at Tor. A senior medical officer has been appointed on the spot. This medical staff will be under the supervision of the Maritime Sanitary and Quarantine Board of Egypt, of which M. Miéville is President, and on which Dr. Mackie, of Alexandria, is the British delegate.

PEACEABLE ANNEXATION.

The short series of articles published on "Our Nearest African Health Resort"—three of which have appeared in our columns, but which will be completed elsewhere—have attracted a good deal of attention abroad, and some quaint as well as much complimentary comment. "The English," writes a prominent French journalist, "have long cast envious eyes and stretched out grasping hands towards Morocco, that rich but mysterious country, once the granary of Europe, and with whose destiny is still wrapped up the final mastery of the Mediterranean. The Ministers of France, of Spain, and of Italy, backed if necessary by all the resources of those countries, are there to prevent her from seizing this much-coveted territory. But England has more than one mode of annexation, and now Mr. Ernest Hart—who has more than once in the service of his country made international sanitary regulation the cover for extending and protecting British interests and maritime domination in the East, and has succeeded in blinding Europe and hoodwinking the Powers into freeing the Suez

Canal, and making British ships the monopolists of commerce between Europe and the Far East—has undertaken, in the national interest of Albion, a further crusade in Western Africa. He has discovered a new sanatorium in Tangier, which he describes, in the glowing language and flowing periods which we reproduce, as a sort of earthly Paradise and as "Our Nearest African Health Resort.' We may expect now to see flocks of English tourists and settlers pouring into Tangier and its suburbs; hotels and business establishments starting up under British influence, and the Englishman established in 'Nearest Africa' by this new and most modern method of 'peaceable annexation.' There is nothing to be said against this proceeding, which is irreproachable in method, however insidious and dangerous to other European influence. But why cannot France do the same? And why should not our French invalids, holiday makers, tourists, and capitalists take their share in this new African crusade?" To which we can only reply, Why not? Everyone would be benefited and no one injured. Needless to say that the designs so romantically invented exist only in the imagination of the writer, and it is certain that in the cosmopolitan city of Tangier all comers of whatever nation may count upon an equally hospitable reception.

DOWE'S SHOT-PROOF BODY COVERING.

After one of the meetings of the Surgical Congress last week in Berlin, the Congress *in corpore* adjourned to the "Wintergarten," a sort of *variété* theatre, to witness a series of shooting experiments on Herr Dowe's famous shot-proof body covering. Gun cartridges having been examined and found correct by the military surgeons present, Herr Dowe offered his chest to be shot at, and received five shots without flinching. Then a horse clothed in the protective covering was shot at again and again, and quietly continued feeding the while. No doubt more than one of those present, on seeing these astonishing experiments, felt that prevention is better than cure.

POOR-LAW BARRACK SCHOOLS.

The Forest Gate scandal, to which we referred last week, has been the subject, we observe, of strong comment in the public press and also of a somewhat inconclusive debate at the Whitechapel Board of Guardians, but the school managers evidently do not in the least realise the gravity of their position. Until there has been a full and impartial inquiry into the charges which affect the management of the school, not merely as regards the facts surrounding the deplorable deaths by ptomaine poisoning, but as regards the whole arrangements for the food supply and the care of the children, we cannot regard the Forest Gate School as anything but a public danger. Unfortunately, upon the top of this discussion comes the scandal in Hackney. Our readers are aware that there are said to be 161 children at the Brentwood District Schools suffering from ophthalmia, and that scarlet fever has also broken out in that huge establishment. The Hackney guardians have not succeeded in finding even temporary accommodation outside the one great barracks upon which they rely. The result is that it was reported to the Hackney guardians last week that there were 139 children of school age already accumulated in the workhouse, and that many more would soon be transferred there from the infirmary. Amongst these children also ophthalmia has broken out, and the medical officer reported "the children's wards on both sides are overcrowded, and the supervision is insufficient." Many of the children, according to the report of the Workhouse Committee, have been kept in the workhouse under these lamentable conditions for months. It appears, therefore, that by the irony of fate these "associated" schools are driving us back to the very mischief of the workhouse contamination of poor children which they were originally created to remove. The fact is that, either from the point of view of health or humanity, these enormous and unnatural institutions have proved to be unworkable. The obvious remedy is to break them up, and the sooner the Local Government Board makes them impossible the better.

THE SINGAPORE DEBATING SOCIETY AND OPIUM.

At a meeting of the Singapore Debating Society held on March 26th, under the presidency of the Hon. W. R. Collyer, Mr. C. Kelman moved the following resolution: "That all revenue derived from the sale of opium is immoral, and that the sale of the drug should be restricted to doctors and chemists." Mr. J. C. Cuff opposed the motion. There was a large attendance, and the debate was carried through with much enthusiasm. At the close of the meeting the motion was lost by 12 votes to 6.

SIR RICHARD OWEN.

Mr. Brock, R.A., has completed a small clay model of his statue of Sir Richard Owen. The distinguished palæontologist wears the professorial gown in which he delivered the Hunterian lectures. In his left hand he holds the fragment of a femur of one of those gigantic extinct birds of New Zealand which he was the first to describe.

MEDICAL RESEARCH SCHOLARSHIPS.

Notification is given by the Grocers' Company of the institution by them of three scholarships—each of the value of £250, and open only to British subjects—"as an encouragement to the making of exact researches into the causes and prevention of important disease." The Company appoint annually. Particulars may be obtained on application by letter, before the end of April, to the Clerk of the Company, at Grocers' Hall, Princes Street, E.C.

WATERBORNE TYPHOID IN FRANCE

The typhoid epidemic which in many parts of France causes mortality in studs and stables has, says the Paris correspondent of the *Daily News*, been traced to the water in different garrison towns along the Loire. Cavalry horses as well as their riders and infantry soldiers suffer alike. Orders have been given to serve only boiled water to horses in these places. Next session a Bill will be presented to the Chamber to protect from pollution spring-heads which are the sources of water supplies for towns. The spring water supply of Havre is found to swarm with typhoid bacilli, which are washed into it by rain from fields manured with sewage.

SO-CALLED "MEDICAL ASSISTANTS."

We do not wish to pose as purists, or to stickle too tenaciously for words being given their proper meaning, but should like to inquire, in all seriousness, how it is we so frequently find in newspaper reports of criminal proceedings the description of some ruffianly fellow as a "medical student," or of some wretched abortionist as a "medical assistant;" such descriptions are habitually unfounded and ought not to be permitted. Perhaps it is too much to expect that those whose weary duty it is to boil down contemporary history into paragraphs for the mental food of our morning meal should possess very accurate ideas on the multitudinous subjects on which they write, but one would expect that magistrates and judges would see the injustice of allowing such an erroneous description to pass unnoticed. They cannot think that the persons who so glibly call themselves "medical assistants," "medical rubbers," "medical electricians," "medical botanists," or medical anything else, have any part or lot in the medical profession. One would fancy, from the easy way in which people of education accept the impudent assumption of medical titles by quacks and impostors of every grade, that they imagined there were grades in the profession, and that these charlatans were but

a lower order of a professional brotherhood. Surely it should be well known that entry to the profession of medicine can be obtained only by hard study and stringent examination, and that all this has been arranged by Parliament for the protection of the public. And it is only right that the public should understand that the quacks and abortionists who figure in police courts under the title of "medical assistants," have no connection whatever with the medical profession.

POISONING BY CARBOLIC ACID.

Judging from Mr. Acland's reply to a question put by Dr. Macdona in the House of Commons on April 20th, the Government is still impressed with the idea that it is not expedient to place restrictions on the sale of an article so largely used for disinfecting purposes as carbolic acid. We fail, however, to perceive that the utilisation of carbolic acid for sanitary purposes necessarily involves the sacrifice of human life, which is now continually taking place by its misuse and by accidents. Those deplorable results are to a very large extent attributable to the undue facility with which carbolic acid is obtainable, and to the absence of any precautionary regulation of its sale. Whether persons can be restrained from suicide by law is not a question to be considered in relation to this subject, and it is reasonable to expect that with more suitable regulation of the sale of carbolic acid accidental poisoning with it would be less frequent. Even in regard to suicide it would be beneficial to make the procuring of carbolic acid a matter of greater difficulty, and the usefulness of the article for sanitary purposes need not be at all interfered with by applying the restrictions of the Pharmacy Act. The Council of the Pharmaceutical Society, in performance of its public duty, has repeatedly recommended that course as desirable for public safety, and in view of the numerous fatalities caused by carbolic acid it seems unaccountable that doctrinaire notions of an opposite tendency should have prevented the Privy Council from approving that recommendation.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

The Cavendish Lecture in connection with the above Society will be delivered by Sir William Broadbent, M.D., F.R.C.P., Bart., at the West London Hospital on Thursday, June 14th, at 8.30 P.M., the subject being Some Points in the Treatment of Typhoid Fever. After the lecture the President and Council propose to entertain the members at a *conversazione*. The annual dinner will take place at the Criterion Restaurant on Wednesday, May 30th, at 7 for 7.30 P.M. Members desirous of being present and of introducing guests are requested to intimate their intention to the Senior Secretary, Dr. Clemow, 1, Comeragh Road, West Kensington.

THE FALLACY OF QUARANTINE.

Dr. Collingridge, the Medical Officer of Health for the Port of London, read a paper before the members of the Shipmasters' Society on the follies of quarantine. It rested (he said) upon the traditions of medicine, and, with the advance of knowledge of diseases, has lost all justification for its continuance. In this country, as a protection against disease, it has proved to be absolutely useless, and, indeed, in some respects absolutely dangerous. It can never be relied upon, nor carried out in such a way as to prevent the possibility of disease being imported, while it has been one of the most serious hindrances to commerce which has ever been conceived. As a matter of fact, a perfect system of quarantine is unknown, and as practised has never prevented extension of an epidemic. Hence it is that Great Britain has absolutely declared for many years past in favour of a rational system of medical inspection, the detention of the sick, the disinfection and release of the ship and all persons in good health, and this lead is being steadily followed by other countries. The last great steps in this direction have been taken by the Dresden Conference and the Conference recently held in Paris, both of which will have enormous influence for good. It is true that quarantine is still retained upon our statute book; but this is only for the purpose of avoiding certain disabilities to which our shipping would be subject in countries where the fetish of quarantine is still worshipped. All diseases except yellow fever and plague are now in practice dealt with by the port sanitary authority, and it cannot be long before even these two will also pass into their hands. The cost of an imperfect quarantine—for at its best it can only be this—is simply ruinous to the trade of a country, and one-tenth of the money wasted upon this barbarous and antiquated system, if spent upon works of a sanitary character, would have an infinitely greater result in the prevention of infectious disease. If there were need it would be an easy task to expose the absurdities and cruelties practised under the guise of a system of protection, but this must be done on a future occasion if necessary.

SURGEON-MAJOR LLOYD, V.C.

Surgeon-Major O. E. P. Lloyd, stationed at Mandalay, was on March 21st presented by General Bird with the Victoria Cross which had been awarded him by Her Majesty. General Bird congratulated Dr. Lloyd on winning the highest distinction that a British soldier could win, and said he had been asked to express the Commander-in-Chief's regret that the non-arrival of the decoration had prevented him from performing the ceremony himself during his recent visit to Mandalay.

PRESENTATION OF PORTRAITS TO PROFESSOR REDFERN.

The presentation of portraits to Professor Redfern, late Professor of Anatomy and Physiology in the Queen's College, Belfast, took place in the great hall of the College on April 13th. President Hamilton occupied the chair, and was supported by nearly all the members of the professoriate staff. The address, which was beautifully illuminated, was read by Professor Sinclair, M.D. It spoke of Dr. Redfern's thirty-three years of office: of the great development in numbers, buildings, and efficiency which had characterised the Belfast Medical School during that period; of Dr. Redfern's eloquence, energy, and inspiring force as a professor: and of his constant interest in the welfare of the Queen's College, and of university education in Ireland. Dr. Redfern replied at length, and was much affected. Appropriate addresses were delivered by the President, Professor Purser, and Mr. Thomas Sinclair, D.L. General satisfaction was expressed that Dr. Redfern was still in the enjoyment of vigorous health, and that his wisdom and ripe experience would still be available by the President and the College. There were two portraits presented—a full-length portrait for the Examination Hall of the College, and a replica for Dr. Redfern's family. Both are the work of Mr. Ernest Taylor, and are much admired.

CRUELTY TO PAUPERS.

Pending the report of the inspectors sent down by the Local Government Board, we do not care at present to refer any more to the Newton Abbot affair. We do, however, think it very desirable not to forget that there is much reason to believe that, disgraceful as was the state of things described in the evidence, it is only a type of what is going on in other places. The details no doubt differ; what is alike is the indifference, the heartlessness, and often, we fear, the cruelty with which the helpless are treated by officials, and the extreme laxity of the supervision exercised by visiting committees. We understand that last week the Hackney Board of Guardians received a recommendation from their School Committee that one of the nurses at the Board's

school at Brentwood should be summarily dismissed for cruelty to the children there. Mr. Fenton Jones (the chairman) is reported to have said that he could hardly use words strong enough to speak of the gross cruelty which had come to the knowledge of the committee. We are glad to find committees waking up; but how long had this "gross cruelty" been going on? What we want to see is not the dismissal of some official here and there who, having accepted bad traditions, has gone a little further than the rest, but an alteration of the traditions themselves. Surely in every board of guardians, however strongly the majority may be tied down by custom and deference to authority, there must be a few people with sufficient backbone to make use of the powers given them last year, when a general order was issued giving authority to any guardian to visit any part of the workhouse at any time he may think fit. With such a power no guardian has a right to shelter himself behind the plea of ignorance or to relieve himself of full responsibility for the management of the workhouse of his union. We would draw attention to the following extracts from a general order which has been in operation since 1847, and from a letter of instruction issued in July, 1868, regarding the duties of "visiting committees," who are bound to answer the following among other questions: "Q. 4. Are the infirm of each sex properly attended to, according to their several conditions? The Committee cannot satisfactorily answer this query without personally communicating with the aged and infirm inmates in their several wards. As a general rule it is desirable that the officers of the workhouse should not be present at interviews between the Committee and the inmates." (*Letter of Instruction.*) There can be no escape from the fact that whatever the condition of workhouses at the present day, the responsibility lies directly on the guardians. Whether the Local Government Board is not responsible for allowing bad traditions to grow up unchecked among the guardians is another matter.

ANDERSON *v.* GORRIE.

THE case of Anderson *v.* Gorrie and others,[1] in which Dr. Anderson, formerly of Tobago, sues to recover damages for false imprisonment and alleged malicious prosecution, has been occupying Lord Coleridge and a special jury this week in the Queen's Bench Division. The proceedings are still incomplete.

THE NOTIFICATION OF MEASLES.

THE borough of Jarrow seems to be specially liable to epidemic visitations of measles, and 1893 was no exception to the usual experience of the town. Compulsory notification of the disease was adopted during the wane of the epidemic of 1887, but trustworthy data are forthcoming in respect of measles for and since 1889, as follow, the bracketed figures representing deaths:

1889.	1890.	1891.	1892.	1893.
613 (28)	18 (1)	502 (19)	1,196 (48)	883 (73)

Having stated these figures, Dr. Weir, in his report for last year, gives it as his opinion that in Jarrow compulsory notification of measles has failed in its purpose of limiting epidemicity of the disease, and his reasons are worth reproduction. They are the highly infectious nature of the disease in its pre-eruptive stage; impossibility of isolation in hospital and the utter worthlessness of so-called isolation at home; the nature of the population being almost altogether working class, with a high proportion of children; the large proportional number of tenement houses; the aggregation of children in elementary schools; want of universal notification; Jarrow being situated in a thickly-populated district is exposed to importation of the disease on every side. On the other hand, Dr. Weir shows also that it is impossible to gauge with any degree of accuracy the extent of a measles epidemic by the mortality alone, seeing that in 1892 the per-case mortality was 4.0 per cent., whilst in 1893 it was 8.2, the 313 fewer notifications in the latter period carrying 25 additional fatal cases, more than half the total deaths (40) occurring in December, with only 206 attacks freshly recorded, or nearly 1 in 5. This excessive fatality in this winter month—one of great mildness—is attributed to carelessness on the part of parents. It is this same indifference to the disease which so conduces to its spread; and notification will inevitably fail if it does not enable health officers to instil into the minds of parents and guardians the necessity for keeping the sick apart from the healthy, and this not alone in their own homes.

[1] BRITISH MEDICAL JOURNAL, January 28th, 1893, p. 201; *ibid.*, February 3rd, 1894, p. 266.

A DOCTOR IN CONTEMPT.

AT the city commission in Dublin, on April 14th, an unfortunate incident occurred, when Dr. J. Barton was held to be guilty of contempt of court, and was fined £5. A man was on his trial for the murder of his wife, and, for the defence, Dr. Barton had been served with a subpœna to give evidence as to the state of the deceased's health for some time before her death. The officer swore that Dr. Barton had refused to come, stating that he knew nothing about the case. Another officer was despatched, but the witness could not be found. Subsequently, when the jury was considering its verdict, he did appear. He stated that he knew nothing about the case, and accordingly did not come. The judge said it was not for Dr. Barton to decide the value of his evidence. Public justice would be paralysed if such a right were allowed to individuals. He was obliged to adjudge him guilty of contempt of court, and fined him £5. This is an instructive case. Medical men are undoubtedly often forced to appear in speculative civil cases, and are not paid. Here, however, the prosecution was by the Crown, and the witness would have been paid the usual fees. Any witness summoned in a case of this sort is bound to attend. He must fulfil the duty of an ordinary citizen, and tell what he knows as to mere questions of fact. Dr. Barton was under a misapprehension, and of course he meant no discourtesy to the Court.

CHLORODYNE AS A PREPARATION OF PRUSSIC ACID.

IT has always been understood that prussic acid is an ingredient of the preparation known as chlorodyne, and, strictly speaking, though the quantity is small, this article should be subject to the regulations applying to poisons in the first part of the Pharmacy Act schedule. From a medical point of view, however, chlorodyne is more essentially a preparation of morphine than of prussic acid, and its poisonous nature is mainly due to the morphine it contains. For those reasons, probably, it was dealt with in the Treasury prosecution as a poison in the second part of the schedule, though evidence was given as to the presence of prussic acid in small proportion. The possibility of a more strict application of the law appears, however, to have been perceived, and to have led some makers of chlorodyne to omit prussic acid as an ingredient. This fact was brought out at the hearing of a case at Leeds, in which a chemist was summoned by the Patent Medicine Vendors' Association on the charge of having sold chlorodyne without registering the sale, as required for poisons in the first part of the schedule. The chemical evidence as to the presence of prussic acid was conflicting, but the maker of the article testified that prussic acid is not used in making it, and that it does not contain prussic acid. Upon the strength of that evidence the magistrate dismissed the summons. The settlement of

these questions as to the composition of secret medicinal preparations is so desirable in the public interest that action taken by the Treasury department or by the Patent Medicine Vendors' Association is equally useful in that respect, and though the motive of the latter body may be a questionable one, it is to be hoped that chemists, as the legally recognised vendors of poisons in every form, will not furnish grounds for the charge that they neglect the requirements of the Pharmacy Act, or support them only for the sake of maintaining a trade monopoly.

LADY FACTORY INSPECTORS.

Miss Lucy Deane, one of the two lady inspectors of factories and workshops just appointed by the Home Secretary, has been an inspector of workshops, workplaces, and laundries where women are employed, in the service of the Kensington Vestry, for the past six months. Her colleague in that department of the vestry's work is Miss Rose Squire. Both these ladies have shown great capacity for the particular duties entrusted to them, and their appointments, the first made in this country, have proved a conspicuous success. Both ladies, we may add, possessed the certificate of the National Health Society when elected, and both have since obtained the certificate of the Sanitary Institute, after passing the usual examination qualifying for the post of sanitary inspector. The salary attached to the appointment now conferred on Miss Deane is £200 per annum, rising to £300, with travelling expenses.

"A DOCTOR CENSURED."

Such is the heading of a paragraph which has been forwarded to us from the *Manchester Guardian* of April 17th. The censure was inflicted by a coroner's jury in an inquest on a man who died after having swallowed some false teeth. The censure was for not having sent the patient to the infirmary "for an operation" immediately after the doctor had failed in his first attempt to remove the teeth through the mouth. The jury were pleased to mark their high displeasure further by disallowing the doctor's fee for attending court to explain the reason of his treatment, thus confiscating the offending doctor's time. All this is in the genuine style of petty tyranny. A coroner's jury think themselves perfectly competent judges of the medical treatment of any case, however complicated. In fact, they do not seem to know that exigencies occur in practice where the highest authorities may and do differ as to the expediency of operations. They seem always to assume that "operations" are free from all danger, and certain to succeed; and they are free from any of the disturbing influences exercised on the judgment by even rudimentary knowledge of the matter in hand. We speak to some extent in the dark about this case, for the report does not enable us to judge whether the doctor was really justified by the event in not hurrying the removal of the foreign body; but it is of course the most commonplace experience of surgeons in this class of cases that it is often wiser to wait than to resort to instant operation; since an accidental change of position may render easy the removal of the foreign body, or even cause its spontaneous expulsion. It is likely this was so in the case before us, since we are told that "the teeth were recovered" on the second day after the accident, when the man had been taken to the infirmary, and the medical officer of the infirmary seems to have justified by his evidence the course followed by the doctor. The man's death occurred on the following day, after the performance of tracheotomy. This operation was necessitated, we conclude, by laryngitis set up by the foreign body; and if so, it would be a *primâ facie* argument to show that earlier removal would have given the man a better chance, though this is by no means certain, operations in such cases having their own dangers and uncertainties. But the reason which makes us think the matter worth our readers' attention is that it shows well the grave injustice which may be and is done to members of our profession in the inferior courts. The opinion of men like those who compose a coroner's jury on a complicated surgical case is, it is true, of no weight whatever; but their "censure" is a very different matter. It is a public opprobrium cast on a man whose reputation is his livelihood, and published in all the local newspapers for all his enemies or rivals to use against him. It is a cruel mockery of justice that such things should be permitted, and coroners ought to know enough, and to be firm enough, to refuse to receive or record such sentences, except in cases where they think that a charge of negligence or ignorance could be sustained. Certainly nothing of the sort could be even alleged in the instance before us. Since writing the above we have seen a letter addressed to the *Manchester Guardian* by the solicitors of the medical man incriminated. It strengthens our first impressions by showing that the doctor had very reasonable grounds for delay, and deliberately thought, as he still thinks, that it was the safer course. The solicitors add a statement which we quote, though it describes proceedings so irrational and unjust that we would fain hope that there is some error on their part: "The inquest was over when our client was sent for. He was ignorant of what had occurred to Mott since he had been sent to the infirmary. The coroner did not inform him, as he should have done, of the nature of any of the evidence which had been taken in our client's absence, and our client was asked for no explanation, and he therefore tendered none. He was asked simply to answer a few questions, which he did in a straightforward manner. He had not the slightest idea that his own conduct was in question at all in the matter." If this is true, the attention of the Home Office should be called to the coroner's method of administering "justice." But the whole subject of "coroners' censures" is one well deserving of the attention of the Medical Defence Union, and calls for the decisive intervention of the higher legal authorities. We would refer our readers to a leading article with the above heading in the British Medical Journal of January 9th, 1892.

NOVEL TREATMENT OF OBLIQUE SIMPLE FRACTURES OF THE LEG.

Another of the cherished maxims of the surgery of the past is threatened with extinction, although not twenty years ago it passed for the concentrated essence of surgical wisdom. For, if in those days there was one principle in the treatment of simple fractures which prevailed above all others, it was that of preventing such a fracture from becoming compound by every available means. Lister himself first broke this tradition when he treated ordinary transverse fracture of the patella by opening the knee-joint, turning out the clotted blood, and wiring together the fragments of the broken bone. Complete absence of subsequent inflammation in almost all cases thus treated testified to the thoroughness of the antisepticism, whilst the resultant entire soundness of the broken bone, as well as that of the opened joint, has constituted the treatment one of the triumphs of modern surgery. Similar treatment has now been employed, and with equal success, by Mr. Arbuthnot Lane, in the case of simple oblique fractures of the tibia and fibula. He asserts that the relative financial value as a machine of a labouring man who has met with this accident and been treated by the ordinary methods hitherto employed—extension of the fractured limb and its confinement in splints for some weeks—is thereby reduced to the extent of 70 or 80 per cent. of its original value. This depreciation is brought about, not by shortening of the limb, but by the deviation of the axes of the lower fragments from their original direction, which results in a sense of insecurity and pain in the joints, especially of the knee and ankle, and in a progressive mechanical arthritis of those joints. To remedy this disastrous result, Mr. Lane freely exposes the fragments at the seat of fracture, brings

the fractured surfaces into accurate apposition, chiefly by means of lion forceps, drills holes in the broken tibia, and keeps the fragments in permanent apposition by the insertion into these holes of steel screws. The advantages claimed for this treatment in a paper read by the author before the Clinical Society are the immediate relief of pain, the absence of tension and discomfort due to extravasation of blood into the tissues, shortening of the period of treatment, since union is practically by first intention, without any sign of pus, and is consequently rapid and perfect; and, lastly, the restoration of the skeletal mechanics to the condition in which they were before the receipt of the injury. The screw employed is carefully constructed, bears a thread up to the head, and is plated so that it may be boiled without fear of rust. Treatment offering such manifest advantages is not likely to remain long without a trial in hospitals where thorough antiseptic precautions are employed; but unless the surroundings of the patient are of the very best hygienic character, no surgeon will probably deem himself justified in submitting such patient to the largely increased risk that this operative treatment, in the absence of such hygienic environment, necessarily entails.

MR. GLADSTONE.

MR. GLADSTONE'S health, which has lately caused considerable uneasiness among his friends, is, we are glad to be able to state, being gradually restored. The cough no longer troubles him, he eats and sleeps well, and in many ways is better. On Wednesday he was able for the first time lately to join the family party at dinner. His apparently slow progress is accounted for by the persistence of a symptom which, although not in itself serious, has as is only natural in a man of his age, caused some anxiety, and has necessitated rest and perfect quietness; during the last few days, however, this trouble appears to have passed away, and hopes are entertained that in a day or two he may be able to drive out. As regards the eyes, we believe that neither the date nor the place of the proposed operation is yet fixed, and must depend to a large extent on the rate of improvement in the general condition.

DIPHTHERIA AND SCHOOL LIFE.

THE intimate relation between school life and diphtheria has once more received ample illustration in the case of the St. Pancras Workhouse Schools, situate at Leavesden, in Hertfordshire. Dr. Sykes, the medical officer of health of St. Pancras parish, was called in to advise the guardians as to the cause of an epidemic of diphtheria in the schools during January and February last, and as to the methods of prevention best to be adopted. His report is of importance as showing that after very careful inquiry into the whole matter, the essential factors in the spread of the disease are held to have been most probably overcrowding and bad ventilation. There were forty-eight cases of diphtheria, commencing in mid-January, and cropping up until early March, six proving fatal. Howsoever introduced, the infection first attacked the boys' side, and then the infants, some of whom slept on the boys' side, spreading thence through the medium of the infant school classes to the girls. Whilst Dr. Sykes fails to elucidate the problem of importation, he significantly states that seven cases, including the first, came from the most badly ventilated ward, despite the fact that the elder boys slept there. The top-floor wards, the most light and airy, furnished only two cases. We read of the introduction of a hot-water pipe system, and thereafter of fire places being closed up, and also of the majority of the registers being closed up. Dr. Sykes hints strongly at want of means for extracting foul air having had to do with the production of unhealthy throats, especially in the ward occupied by the older boys. The class rooms exhibited difficulties as to change of air, only in a less degree than the dormitories, one room being, moreover, so packed with boys that Dr. Sykes had trouble in getting at the inmates to examine their throats. On examining the throats of 220 girls, he found two-thirds in an abnormal condition, and more than one-half in similar state out of 56 boys examined; whilst of 262 boys since examined, 125 were found with more or less pronounced abnormality of throat. Dr. Sykes lays stress on bad ventilation and overcrowding as factors in the spread of infection, only after setting aside the influence of animals, milk and water supply, and drainage. And we know that Dr. Thorne Thorne, in his work on *Diphtheria*, attaches great importance to the sanitary conditions of school premises, relating one instance where the incidence of diphtheria in two schools in an epidemic area was 20.6 and 34.6 respectively, the one most largely attacked differing only as regards its state of crowding and its defective ventilation. Dr. Sykes states that he regards the outbreak at Leavesden as an indication that too much care is being exercised in the direction of artificial warmth, always carrying with it a tendency to curtail ventilation, conditions under which a limit is soon reached, and the slightest overcrowding is liable at any moment to precipitate the attack of disease upon enervated constitutions; and finally he points the useful and important moral that the effect of details in a large school is increased in direct proportion to the numbers in the schools, so that the effect of the diminution of the air supply by a few cubic feet per head, and the raising of the temperature by a few degrees are sufficient to produce vastly greater results than anticipated.

THE ABUSE OF HOSPITALS.

WE have received a suggestive letter, which appeared in the *Warehouseman and Draper* of April 14th. It refers to a circular issued by the Secretary of the "Linen and Woollen Drapers' Institution," in which the Secretary says that "he has in his possession in- and out-patients' letters for various hospitals, and thus is able to place it within the reach of members to take advantage of these charities." Mr. Edwards, the writer of the letter, who seems to be himself a draper, very properly says that if by the circular is meant that the members of the institution (an institution having a funded capital of £50,000) are themselves to become hospital patients, or to accept medical relief for their own wives and families, such a proceeding is (in his guarded language) "hardly in keeping with respectability." Of course, it may only mean that the members should give the letters to their workpeople, but then this should have been stated. The former is certainly the more natural interpretation. We trust that an explanation may be forthcoming from the Secretary, together with a statement of the precautions taken that the hospital letters which he proposes to issue are only used by persons really entitled to public charity, and that the members themselves—respectable and substantial tradesmen—do not "take advantage" (in every sense) of foundations not intended for persons of their class.

TREATMENT OF INEBRIATES IN SWITZERLAND.

THE Foreign Office has published a useful paper in the miscellaneous series of reports giving a translated summary of laws in force in Switzerland regarding the treatment of inebriates. The laws and regulations in the twenty-two cantons appear to differ but little from each other in their essential points, and are considered in principle as effective measures against intemperance. Habitual drunkards are liable to fine and imprisonment, and compulsory confinement in homes or houses of correction; while considerable responsibility is incurred by publicans who supply strong drinks to children, to those already intoxicated, or to those who are by reason of their intemperance forbidden to enter taverns. The report for the year 1892 of the Ellikon Home for Inebriates shows that for 1891 of those under treatment 37.5 per cent. remained abstainers, 32.5 per cent. remained intemperate, and 30 per cent. relapsed.

THE NEW INTERNATIONAL CHOLERA CONVENTION.

We have been favoured with an early copy of the text of the Convention recently signed in Paris by the delegates of the European Powers and the Shah of Persia, which we are enabled to issue in the subjoined translation in anticipation of its official publication. It furnishes a valuable record of an important step realised in the international effort to arrest the introduction of cholera into Europe.

CONVENTION.

Having decided to come to an understanding with a view of regulating the measures to be taken for the prophylaxis of the pilgrimage to Mecca and the sanitary surveillance of the Gulf of Persia, the Powers recited named their plenipotentiaries, who, having exchanged their full powers found in good and due form, have agreed to the following arrangements.

I. *So far as concerns the Sanitary Police in the Ports of Departure of the Extreme East* (British India, Netherland Possessions, etc.).

The measures indicated and defined in Annex I of the present Convention are adopted.

II. *So far as concerns the Sanitary Surveillance of Pilgrims in the Red Sea.*

The dispositions stated in Annex II are adopted.

III. *Concerning the Protection of the Persian Gulf.*

The dispositions described in Annex III are adopted.

IV. *In respect to the Application of Measures contained in the Preceding Annexes.*

The measures prescribed in Annex IV are adopted.

V. The above annexes have the same value as though they were incorporated in the present Convention.

VI. Those States which have not taken part in the present Convention have the right to adhere to it upon demand. This adhesion will be notified diplomatically to the Government of the French Republic, and by it to the other signatory Governments.

VII. The present Convention will last for five years from the exchange of ratifications. It will be renewed every five years by tacit reconduction, unless one of the high contracting parties has notified six months before the expiration of the said period of five years its intention to let the effects of the Convention cease.

In case of one of the Powers denouncing the Convention, this denunciation would have no effect except in respect to itself.

The present Convention will be ratified, the ratifications will be deposited in Paris as soon as possible, and at the latest within the period of the year dating from the day of signature.

In faith of which the respective plenipotentiaries have signed and sealed it, Paris, April 3rd, 1894.

ANNEX I.

A.—Sanitary Police in the Ports of Departure of Pilgrim Ships coming from the Indian Ocean and from Oceania.

1. Compulsory medical visit, made individually during the day, on land at the moment of embarkation, during the time necessary by a physician delegated by the public authority, of all persons taking passage on board a pilgrim ship.

2. Obligatory and rigorous disinfection made on land under the surveillance by a physician, delegated by the public authority, of every contaminated or suspected object, under the conditions of Article 5 of the first rule inserted in Annex IV of the Sanitary Convention of Venice.

3. Interdiction of the embarkation of any person attacked by cholera, choleriform affection, and of any suspicious diarrhœa.

4. When cases of cholera exist in the port, embarkations are only to be made on board pilgrim ships after the individuals collected in groups have been submitted for five days to observation affording the assurance that none of them are attacked by cholera. It is understood that for the execution of this measure every Government may take into account the local circumstances and possibilities.[1]

5. Pilgrims will be required to show that they possess the means strictly necessary for accomplishing the pilgrimage going and returning, and for their sojourn in the holy places.

[1] The Conference has decided, by way of interpretation, on the one hand, that the five days' observation may be performed on board ship between the medical inspection carried out on departure from British India and the second visit passed at Aden; and, on the other hand, that in Dutch India this observation may take place on board ships in the act of departure.

B.—Measures to be taken on Board Pilgrim Ships. Regulations.

Heading I.—*General Arrangements.*

Article 1. These regulations are applicable to pilgrim ships carrying Mussulman pilgrims to the Hedjaz or bringing them back.

Article 2. A ship is not considered a pilgrim ship which besides its ordinary passengers, among whom may be comprised pilgrims of the superior classes, embarks pilgrims of the last class in less proportion than one pilgrim per 100 tons measurement.

Article 3. All pilgrim ships at the entry and at coming out of the Red Sea must follow the directions contained in the *Special Regulations Applicable to the Pilgrimage of the Hedjaz*, which will be published by the Conseil de Santé of Constantinople, conformably with the principles laid down in the present Convention.

Article 4. Steamships are alone permitted to undertake the transport of the long pilgrimage. This transport is prohibited to other vessels. Pilgrim ships engaged in the coasting trade destined for the transport of short duration called coasting journeys, are included under the directions contained in the special regulations mentioned in Article 3.

Heading II.—*Measures to be taken before Departure.*

Article 5. The captain, or in default of the captain the proprietor or agent, of every pilgrim ship is bound to declare to the competent authority[2] of the port of departure his intention to embark pilgrims at least three days before departure. This declaration must indicate the day intended for departure and the destination of the ship.

Article 6. At the end of this declaration the competent authority proceeds, at the expense of the captain, to the inspection and measurement of the ship. The consular authority to which the ship belongs may assist at this inspection. Inspection alone may be made if the captain is already provided with a certificate of measurement from the competent authority from this country, unless there is a suspicion that the document does not correspond with the actual state of the ship.

Article 7. The competent authority does not permit the departure of a pilgrim ship until it is assured: (*a*) That the ship has been put into a state of perfect cleanliness, and, if need be, disinfected; (*b*) that the ship is in a state to undertake the journey without danger, that it is well equipped, well provided, well ventilated, provided with a sufficient number of boats, that it has nothing on board which may be, or may become, injurious to the health or security of its passengers, that the deck and underdeck are of wood and not of iron; (*c*) that there exist on board over and above the provisioning of the crew, and suitably stowed, provisions as well as fuel, the whole of good quality and sufficient quantity for all the pilgrims and for the whole of the declared duration of the voyage; (*d*) that the drinking water on board is of good quality, and from a source protected from all contamination, that it is of sufficient quantity, and that the water tanks on board are protected from all pollution, and closed so that the distribution of the water can only be made by taps or pumps; (*e*) that the ship possesses a distilling apparatus capable of producing a quantity of at least five quarts of water per head per day for every person on board, including the crew; (*f*) that the ship possesses a disinfecting oven, which shall have been ascertained to offer security and efficiency; (*g*) that the crew includes a doctor, and that the ship possesses medicines conformably to what will be laid down in Articles 11 and 23; (*h*) that the deck of the ship is free from all cargo and objects which may encumber it; (*i*) that the arrangements of the ship are such that the measures prescribed under Heading III can be carried out.

Article 8. The captain is bound to post up on board in a public place, accessible to those interested, placards drawn up in the chief languages of the countries inhabited by the pilgrims embarking, and indicating (1) the destination of the ship, (2) the daily ration in water and in food allotted to each pilgrim, (3) the tariff of any food not included in the daily distribution, and to be paid for separately.

Article 9. The captain can only start when he has in hand (1) a list countersigned by the competent authority, and indicating the name, the sex, and the total number of the pilgrims whom he is authorised to embark; (2) a bill of health setting out the name, the nationality, and the tonnage of the ship, the name of the captain, that of the doctor, the exact number of the persons on board—crew, pilgrims, and other passengers; the nature of the cargo, the place of departure, that of destination, the state of public health in the place of departure. The competent authority will indicate on the bill of health whether the regulation number of pilgrims is reached or not, and, in case it is not, the complementary number of passengers which the ship is authorised to embark in subsequent ports.

Article 10. The competent authority is bound to take effective measures for preventing the embarkation of any person or of any object under suspicion,[3] following the directions laid down as to the precautions to be taken in ports.

Heading III.—*Precautions to be taken during the Journey.*

Article 11. Every ship taking on board 100 pilgrims or more must have on board a doctor, regularly diplomaed and commissioned by the Government of the country to which the ship belongs. A second doctor must be taken on board when the number of pilgrims carried by the ship exceeds 1,000.

Article 12. The doctor visits the pilgrims, cares for the sick, and sees that the rules of hygiene are observed on board. It is his duty, notably, (1) to assure himself that the food distributed to the pilgrims is of good quality, that its quantity conforms to the regulations, and that it is suitably prepared; (2) to assure himself that the directions of the article relative to the distribution of water are observed; (3) if there is any doubt as to the quality of the drinking water, to remind the captain in writing of the requirements of Article 21 below; (4) to assure himself

[2] The competent authority is actually: in British India an officer designated for that purpose by the local government (Native Passenger Ships Act, 1887, Article 7); in Dutch India, the master of the port; in Turkey, the sanitary authority; in Austria-Hungary, the sanitary authority; in Italy, the captain of the port; in France, in Tunis, and in Spain (Phillipine Islands) the sanitary authority.

[3] According to the definition of Annex V, 191, of the Convention of Venice.

that the ship is kept in a constant state of cleanliness, and especially that the latrines are kept clean conformably to the requirements of Article 18 below; (5) to assure himself that the berths of the pilgrims are kept in a salubrious condition, and that in case of transmissible disease disinfection is carried out as stated in Article 19 below; (6) to keep a journal of all the sanitary incidents occurring in the course of the journey, and to present this journal to the competent authority of the port of arrival.

Article 13. The ship must be able to lodge pilgrims between decks. Besides the crew, the ship must supply to each individual, whatever his age, a surface of at least 2 square metres, that is 1 metre by 2 yards, with a height between decks of at least 1 metre 80 centimetres. For ships employed in the coasting trade every pilgrim must be allotted a space of at least 2 metres breadth on the deck of the ship.

Article 14. During the voyage the deck must remain free from any encumbrances, and should be reserved day and night for the persons embarked, and put gratuitously at their disposal.

Article 15. The large luggage of the pilgrims is registered, numbered, and put into the hold. The pilgrims can only keep with them the things which are strictly necessary. The regulations laid down by each Government for its vessels will determine the nature, the quantity, and the dimensions of this luggage.

Article 16. Every day the between decks should be carefully cleaned and rubbed with dry sand, with which will be mixed suitable disinfectants whilst the pilgrims are upon the deck.

Article 17. On each side of the ship, upon the deck, a place should be reserved, hidden from view, and provided with a hand-pump to furnish sea water for the needs of the pilgrims. A place of this kind should be exclusively appropriated to the women.

Article 18. The vessel must be provided, besides the places of convenience for the use of the crew, with latrines supplied with water, in the proportion of at least one latrine to each 100 persons embarked. Latrines should be exclusively appropriated to women. No places of convenience should exist in the between deck nor in the hold. The latrines for the use of passengers, as well as those used by the crew, should be properly kept, cleaned, and disinfected three times a day.

Article 19. The disinfection of the vessel should be carried out in conformity with the prescriptions of the paragraphs 5 and 6 of Article 5 of Annex IV of the Convention of Venice.[4]

Article 20. The quantity of drinking water placed gratuitously each day at the disposition of each pilgrim, whatever his age, should be at least 5 litres.

Article 21. If there be any doubt as to the quality of the drinking water, or as to the possibility of its contamination, whether as to its origin, or as to the course of its passage, the water ought to be boiled and sterilised, and the captain must pour it into the sea at the first port at which he stops where it is possible to procure better.

Article 22. The vessel should be provided with two places appropriated to the personal cooking of the pilgrims. The pilgrims are forbidden to light any other fire, notably upon the deck.

Article 23. Each vessel should have on board medicines and the necessary objects for the care of sick persons. The rules laid down by each Government for its ships to determine the nature and the quantities of the medicines. Attendance and medicines are furnished gratuitously to the pilgrims.

Article 24. A regularly installed infirmary, offering good conditions of security and sanitation, should be reserved for the lodging of the sick. It should be able to hold at least 5 per cent. of the pilgrims embarked, allowing three square metres a head.

Article 25. The vessel should be provided with the means of isolating persons attacked with cholera or choleriform symptoms. Those charged with the care of such sick persons should alone go near them, and should not come into contact with the other people on board. The bedding, the carpets, the clothes which have been in contact with the sick persons should be immediately disinfected; it is especially recommended that this rule should be observed with regard to the clothes of those who come in contact with the sick, and who may have become contaminated. Those of the above-mentioned articles which are valueless should be thrown into the sea if the vessel is not in a port or in a canal, or they should be burnt. The other articles should be carried to the stove in impermeable sacks which have been impregnated with a solution of corrosive sublimate. The excreta of the sick should be collected in vessels containing a disinfecting solution; these vessels are to be emptied into the latrines, which should be rigorously disinfected after each emptying of dejecta. The places occupied by the sick should be rigorously disinfected. The process of disinfection should be made in conformity with Article 5 of Annex IV of the Convention of Venice.

Article 26. In the case of death happening during the voyage, the captain should make mention of the death opposite the name on the list viseed by the authority of the port of departure, and besides inscribe in his ship's journal the name of the deceased, his age, the place he came from, the presumed cause of death according to the certificate of the doctor, and the date of death. In the case of death from communicable disease, the corpse, previously wrapped in a shroud impregnated with a solution of corrosive sublimate, is to be thrown into the sea.[5]

Article 27. The bill of health delivered at the port of departure should not be changed in the course of the voyage. It is viseed by the sanitary authority of each port of call. The latter is to inscribe upon it: (1) The number of passengers landed or reimbarked; (2) the incidents which have occurred at sea and relating to the health or to the life of the persons embarked; (3) the sanitary state of the port of call.

Article 28. At each port of call the captain should have the list drawn up in accordance with Article 9, viseed by the competent authority. In the case where a pilgrim has been landed in the course of the voyage the captain should mention the place of landing opposite the name of the pilgrim upon this list. In the case of landing, the persons landed should be mentioned on this list in conformity with Article 9, and previously to the new visa.

Article 29. The captain should see that all the prophylactic procedures that have been executed during the voyage are entered in the ship's journal. This book is presented by him to the competent authority at the port of arrival.[6]

Article 30. The captain must pay the whole of the sanitary taxes, which should be comprised in the price of the ticket.

HEADINGS IV.—*Penalties.*

Article 31. Every captain convicted of not having carried out, with regard to the distribution of water, the victuals, or the fuel, the engagements undertaken by him, will be liable to a fine of two Turkish pounds. This fine is placed to the credit of the pilgrim who is the victim of the fault of omission, and who can establish the fact that he has in vain claimed the carrying out of the obligation undertaken.

Article 32. Every infraction of Article 8 is to be punished by a fine of 30 Turkish pounds.

Article 33. Every captain who shall commit, or who shall knowingly allow to be committed, any fraud relating to the list of pilgrims or to the sanitary bill of health provided by Article 9, is liable to a fine of 50 Turkish pounds.

Article 34. Every ship's captain arriving without a sanitary bill of health from the port of departure, or without a visa from the ports of call, or not furnished with the list properly drawn up according to Articles 9, 27, and 28, is liable in each case to a fine of 12 Turkish pounds.

Article 35. Every captain convicted of having, or of having had, on board more than 100 pilgrims without the presence of a commissioned doctor, in conformity with the prescriptions of Article 11, is liable to a fine of 300 Turkish pounds.

Article 36 Every captain convicted of having, or of having had, on board a number of pilgrims larger than that which he is authorised to embark in conformity with the prescriptions of Article 9, is liable to a fine of 5 Turkish pounds for each additional pilgrim. The landing of pilgrims which are in excess of the authorised number is to take place at the first station where there resides a competent authority; and the captain must furnish to the disembarking pilgrims the necessary money for pursuing their journey to its destination.

Article 37. Every captain convicted of having disembarked pilgrims in a place other than that to which they were bound, without their consent or by force, is liable to a fine of 20 Turkish pounds for each pilgrim thus embarked.

Article 38. Every infraction of the other prescriptions of the present regulation is to be punished by a fine of from 10 to 100 Turkish pounds.

Article 39. Every offence proved during the course of the voyage is noted upon the bill of health, as well as upon the pilgrims' list. The competent authority draws up a proces-verbal on it in order to remit it to the proper authority.

Article 40. In the Ottoman ports the offence is proved and the fine imposed by the competent authority, in conformity with the dispositions of Annex IV of the Convention.

Article 41. Everyone concerned in the carrying out of these rules is liable to punishment, in conformity with the laws of their respective countries, in the case of faults committed by them in its application.

Article 42. The present regulations shall be posted up in the language of the nationality of the ship and in the principal languages of the countries inhabited by the pilgrims to be embarked, in a conspicuous and accessible place, on board each vessel carrying pilgrims.

(To be continued.)

[4] The cabins and all parts of the ship are emptied. The walls to be disinfected with a solution of corrosive sublimate, to which is added 10 per cent. of alcohol. The spraying shall be done by beginning at the top of the wall, and following a horizontal line, descending successively in such a way that the whole of the surface shall be covered with a layer of the liquid in fine drops. The boards of the floor shall be washed with the same solution. Two hours after the walls and the floor shall be rubbed and washed with clean water. To disinfect the hold of a ship a sufficient quantity of sulphate of iron shall be injected, in order to neutralise the sulphuretted hydrogen, the hold shall be then emptied of the water, and washed with sea water; then a certain quantity of the solution of sublimate shall be injected. The water from the hold of a vessel shall not be emptied into a port.

[5] Convention of Venice, Annex V, Heading II, 6.

[6] Convention of Venice, Annex V, Heading II, 7.

A MEMORIAL TO DR. LIVINGSTONE.

MR. H. M. STANLEY visited Dartford on Saturday, April 21st, to lay a memorial stone of a cottage hospital about to be erected in the town, and to name the institution, at the request of Mr. S. M. Burroughs (a contributor of £1,000), after the great African traveller Livingstone. The town was decorated in honour of the occasion, and the friendly societies of the neighbourhood marched in procession through the town. A large concourse of people gathered to witness the ceremony, which took place in the open air. Mr. Burroughs having introduced Mr. Stanley, Mr. Ernest Hart said that no one better than Mr. Stanley knew the vast extent of the labours of David Livingstone, or their continuing and permanent influence on humanity. Mr. Stanley had stood by Livingstone's side in the hour of his greatest need; and had brought him, through difficulties almost unheard of, the aid which had inspired him with new courage, which enabled him to carry to a successful issue the labours of his later years. The medical profession welcomed Mr. Stanley that day, as the one appropriate man to take the leading part in dedicating this cottage hospital as an enduring memorial to the great physician and African explorer. Mr. Stanley, after declaring the stone duly laid, delivered a lengthy address, in which he touched on the chief features of Livingstone's

life and work. His good-humoured indifference to the discomforts of his wandering life was, he said, as marked as his gracious bearing towards the negroes. His hands were as free from violence as his lips were without guile. His devotions were performed with exemplary regularity morning and evening; profanity was an abomination to him, vice in all forms was foreign to his nature, and they all knew what a long companionship of hapless tribes he maintained against the marauding Arabs. He was the first Caucasian traveller who penetrated into the Zambesi and Lualaba valleys, his was the first voice heard in behalf of the long-buried nations of the Upper Congo region, which denounced the slave trader, and his murderous acts; and in countries which until his time had been unknown to the most learned cartographer, he was the first to imitate the forbearance of the Founder of his religion, and to utter the sweet message of "peace and goodwill to man." His voice was hushed some twenty-one years ago near Lake Bangweolo, but the pale face and bowed head of this man, who had tasted misery to its lowest depths, was still remembered by the Manynema, by the people of Kazembe, and the inhabitants of Ujiji, and for years and years after he had departed for ever from their sight they wistfully expected his return to them, for they knew not that their gentle white friend was dead. Great indeed must be the nation that could produce from among its poorest class a hero of such broad benevolence and wide charity as Livingstone. If any came there that day with a vague idea that the man was a misanthrope from some sense of defeat, from some consciousness that he was not appreciated according to his deserts, such an estimate of Livingstone was wide of the truth. He had met few so quickly responsive to gaiety and the lighter moods, or who were more sociable, genial, tolerant, and humorous. They must think of him as of a contented soul who has yielded himself to a loving submission, and who laboured to the best of his means and ability, awaking to the toils of the day and resigning himself without the least misgiving to the rest of the night, believing that the effect of his self-renunciation would not be altogether barren.

A vote of thanks to Mr. Stanley brought the proceedings to a close.

MECCA AND THE PILGRIMAGE.

The Prescriptions of the Koran.

The question raised at the Paris Conference as to the possibility of limiting the number of destitute Mohammedans who yearly undertake the pilgrimage to Mecca, and by their helpless poverty add so much to the difficulty of carrying out effective measures of sanitary reform, together with the insertion into the Convention of a clause binding the Governments at the point of departure of the pilgrim ships to make the pilgrims show that they are possessed of sufficient means to pay the cost of their journey both ways and their expenses during their sojourn—in other words, to prohibit pauper pilgrims from setting out—make it desirable to ascertain how far it is obligatory on a Mohammedan to make the pilgrimage.

We have had it on good authority that a man is not called upon to undertake the journey unless he is able, not only to pay his expenses, but to prevent his family falling into destitution in his absence; and no doubt the Conference was moved by some information of like nature to insert the clause which it did on the subject; but it is quite clear that this is a matter which is, and always has been, much in dispute in the Mohammedan world. The words of the Koran, as translated by Palmer, are: "There is due to God from man a pilgrimage unto the House, for whosoever can find his way there;" and as translated by Sale: "And it is a duty towards God, incumbent on those who are able to go thither, to visit this House." To this latter version is added a footnote as follows:

"According to an exposition of this passage, attributed to Mohammed, he is supposed to be able to perform the pilgrimage who can supply himself with provisions for the journey and a beast to ride upon. Al Shâfeï has decided that those who have money enough, if they cannot go themselves, must hire some other to go in their room. Malec Ebn Ans thinks he is to be reckoned able who is strong and healthy, and can bear the fatigue of the journey on foot, if he has no beast to ride, and can also earn his living by the way. But Abu Hanîfa is of opinion that both money sufficient and health of body are requisite to make the pilgrimage a duty."

Burton adds that as a general rule in Al-Islam there are four necessary conditions: (1) being a Moslem, (2) adolescence, (3) being a free man, (4) mental sanity. Other authorities increase the conditions to eight: (5) sufficiency of provision; (6) having a beast of burden, if living two days' journey from Mecca; (7) the road being open; (8) being able to walk two stages if the pilgrim have no beast. Others, again, include all conditions under two heads: (*a*) health, (*b*) ability.

Obviously there is plenty of room for argument, and the point has long exercised the casuistic talents of learned Mohammedans. After all, however, what is really of importance to us as a Power having a large number of Mohammedan fellow subjects, is not the question who may be excused, but who may be prevented. Of course, it is open to anyone to say that if a man has not the money he has not the obligation, and that we therefore do not interfere with any duty in preventing him from going to Mecca; but all that is not in the Koran, which merely says the journey is "incumbent on those who are able" or on "whosoever can find his way there," and we believe we are correct in saying that our delegates in Paris received assurances from the highest possible Mohammedan authority to the effect that whatever may be the state of affairs as to admissible excuses, there exists no rule or ordinance by which anyone can be prevented *(interdite)* from undertaking the pilgrimage, and that under these circumstances they declined their assent to the Clause 5, Annex I, binding the authorities at the port of departure to prevent the embarkation of pilgrims without sufficient means.

EDUCATION AND EXAMINATION OF SANITARY INSPECTORS.

Sir Walter Foster on a Central Examining Board.

A deputation from the Carpenters' Guild, introduced by Sir Henry Roscoe, waited upon Sir Walter Foster, M.P., at the Local Government Board, on Tuesday, April 24th. The deputation urged that a representative of that company should be appointed upon the proposed board to examine candidates for sanitary inspectorship. It was stated that the Guild expended large sums every year in teaching those building arts which should be within the practical knowledge of such inspectors. Sir Walter Foster said he was very much obliged for the deputation giving him so much interesting information. The Carpenters' Company was doing a work of considerable importance, and was very valuable to sanitary science as well as to sanitary buildings and sanitary construction. He dared say the object of the deputation was to hear from him something about the proposed board of examination for the purpose of granting sanitary certificates. The matter had apparently come to their ears some time after steps had been taken, but the steps taken were merely preliminary, nothing definite having been arrived at. Nothing was arrived at which would in any way prejudice their claim in the future for a seat on the board, and until some such scheme had been put out on more definite lines he was not in a position to give them a reply to their request for a seat on such a board. They would remember that under the Public Health Act, 1891, it was necessary for sanitary inspectors to take certificates of competence. At the time when the Bill was before the House there was a question to put in one or other bodies as being the bodies to grant such certificates. Finally, it was arranged that the Local Government Board should have authority to appoint an examining board to conduct such examinations. When he went some time ago to the Local Government Board he found that the Sanitary Institute was doing that work, but very soon other bodies began to claim the right to hold examinations, and have their certificates recognised. It became clear to him that sooner or later the monopoly which had been given to the Sanitary Institute would have to be broken down, as other bodies would have to be recognised as granting certificates, unless some scheme was formed which would prevent such a disastrous conclusion to the whole business. If they once got a number of boards competing by granting certificates that competition was a competition downwards. They could not have too many bodies in teaching, but they

could have too many bodies granting certificates. In order to avoid that, he suggested that a conference should be held at the Local Government Board, and that conference was held some weeks ago to consider whether the Sanitary Institute would not be willing to join the other bodies. The representatives of the various bodies attended, and they were enabled to form a committee to act with the Sanitary Institute to consider whether some scheme of joining all together could not be adopted. Whatever that committee might do would not prejudice the claim of any outside body. When once the scheme was brought into shape, there would be applications from other bodies. The Surveyors' Institute, among other bodies, wanted to be present at the preliminary conference, but this was not allowed as the Board did not want to mix up the position of surveyor and the position of sanitary inspector. He would mention to the Committee that the deputation had been there, and lay before them the documents and remarks.

CHOLERA.

Cholera in Lisbon.—A Polluted Water Supply.—Cholera in Russian Poland.

THE existence of cholera in Lisbon is now officially confirmed. A special hospital has been assigned for cholera patients in consequence of the physicians having found the bacilli in the excreta of several patients. The first cases occurred twenty days ago, in the Alcantara suburb, and thence spread to other districts of Lisbon. The epidemic is not yet very serious, few cases having ended fatally, but among them was the royal chaplain, Dr. Manuel dos Santos, who died in Fieras Street, Belem. The Portuguese papers, *Seculo* and *Comercio*, blame the authorities for so long concealing the existence of the epidemic, and state that 18 cases are under treatment in San José Hospital, and many in various parts of Lisbon. The water supply of that capital is in a very unsatisfactory condition. All those who boiled their drinking water are stated to have escaped. It is admitted that this is a "water-borne" epidemic.

According to official information received by the Spanish Government from Lisbon, there were 104 cases of cholerine and 2 deaths at the civil hospital and 1 at the military hospital at Lisbon during the twenty-four hours ending Monday evening, April 23rd.

Several fatal cases of Asiatic cholera are again reported from Western Galicia, close to the Russian frontier. The disease is supposed to have been introduced across the frontier from Russian territory.

Two fresh cases of cholera and 2 deaths were reported on April 23rd from the district of Husiatyn, in the province of Lemberg.

According to official reports from Warsaw, cholera has again taken an epidemic form in several parts of Russian Poland, especially in the frontier Government district of Plock. Several cases and 4 deaths occurred at and near the town of Plock from April 7th to 10th, and 4 cases and 3 deaths in the city of Warsaw from April 10th to 15th.

Owing to the fresh outbreak of cholera in Russian Poland, the Prussian Government has again issued orders for the immediate sanitary supervision, at reduced fees, of the Russian barges, steamers, etc., on the Prussian portion of the Vistula.

LITERARY NOTES.

A FRENCH translation of the ophthalmological writings of Dr. Thomas Young, by M. Tscherning, Joint Director of the Ophthalmological Laboratory of the Sorbonne, will shortly be published by Andr. Fred. Höst and Son, of Copenhagen. The work will contain a portrait of Young, a preface by M. Emile Javal, and a reprint of the *Eloge* of Young, by François Arago.

The new quarterly magazine, entitled *Bibliographica*, contains some beautifully executed coloured plates, accompanying an article by Mr. W. Y. Fletcher, on the copy of Celsus's *De Medicina*, 1497, once the property of Grolier, and now at the British Museum. The binding, which is contemporary with the book itself, is of dark olive brown morocco, having in the centre of the upper cover an embossed medallion representing the leap of Curtius, and on the lower cover a similar medallion of Horatius Cocles.

ASSOCIATION INTELLIGENCE.

PROCEEDINGS OF THE COUNCIL.

AT a meeting of the Council, held in the Council Room of the Association at 429, Strand, W.C., on Wednesday, April 11th, 1894:—

Present:

Dr. J. WARD COUSINS, President of the Council, in the chair.
Dr. G. H. PHILIPSON, D.C.L., President.
Mr. HENRY T. BUTLIN, D.C.L., Treasurer.

Dr. J. BARR, Liverpool.
Dr. G. B. BARRON, Southport.
Dr. R. W. BATTEN, Gloucester.
Dr. M. BEVERLEY, Norwich.
Mr. LANGLEY BROWNE, West Bromwich.
Dr. J. S. CAMERON, Leeds.
Mr. ANDREW CLARK, London.
Surg.-Gen. W. R. CORNISH, London.
Dr. H. R. CROCKER, London.
Dr. G. W. CROWE, Worcester.
Dr. E. H. DICKINSON, Liverpool.
Dr. J. L. H. DOWN, London.
Mr. GEORGE EASTES, M.B., London.
Dr. W. A. ELLISTON, Ipswich.
Dr. R. S. FOWLER, Bath.
Dr. C. E. GLASCOTT, Manchester.
Dr. BRUCE GOFF, Bothwell.
Dr. W. GORDON, Exeter.
Dr. H. HANDFORD, Nottingham.
Mr. J. D. HARRIES, Shrewsbury.
Mr. J. H. HEMMING, Kimbolton.
Dr. C. HOLMAN, London.
Mr. T. V. JACKSON, Wolverhampton.
Mr. T. R. JESSOP, Leeds.
Mr. EVAN JONES, Aberdare.
Mr. N. C. MACNAMARA, London.
Sir W. MOORE, K.C.I.E., London.
Mr. JONES MORRIS, Portmadoc.
Mr. R. H. B. NICHOLSON, Hull.
Dr. C. PARSONS, Dover.
Dr. F. M. POPE, Leicester.
Dr. J. ROLSTON, Stoke.
Dr. R. SAUNDBY, Birmingham.
D. A. SHEEN, Cardiff.
Dr. E. MARKHAM SKERRITT, Clifton.
Dr. R. SOMERVILLE, Galashiels.
Mr. H. STEAR, Saffron Walden.
Dr. J. STRACHAN, Dollar.
Mr. J. TAYLOR, Chester.
Dr. J. ROBERTS THOMSON, Bournemouth.
Mr. W. THOMSON, Dublin.
Dr. T. W. TREND, Southampton.
Dr. A. R. URQUHART, Perth.
Mr. F. WALLACE, London.
Mr. JOSEPH WHITE, D.C.L., Nottingham.
Mr. G. E. WILLIAMSON, Newcastle-on-Tyne.
Dr. W. L. WINTERBOTHAM, Bridgwater.

The minutes of the last meeting having been printed and circulated were taken as read, and, no objection having been offered, were signed as correct.

Read letters of apology for non-attendance from Dr. Mackenzie Booth, Dr. Bridgwater, Dr. Bristowe, Dr. Bateman, Sir Walter Foster, M.P., Mr. Verrall, Dr. Russell (Edinburgh), and the President-Elect.

Read report of the Committee on the payment of Parliamentary Bills Committee expenses, in reference to continued minutes of Council 1925 and 1926.

Resolved: That the Report of the Committee on the payment of the railway fares of the Parliamentary Bills Committee be received and adopted and a copy sent to each of the Branches.

Resolved: That the minutes of the Journal and Finance Committee of to-day's date be approved and the recommendations contained therein carried into effect.

The minutes of the Journal and Finance Committee contain the financial statement for the year ending December 31st, 1893; the particulars of accounts for the quarter ending March 31st, amounting to £7,177 12s. 7d.; particulars of legal charges in the matter of the Hampstead and Charing Cross Railway, amounting to £385 4s. 3d.; and the purchase of a freehold property in Harvey's Buildings for £4,640; and the quarterly report of auditors.

The Treasurer presented the financial statement for year ending December 31st, 1893.

Resolved: That the financial statement for the year ending December 31st, 1893, certified by the Auditors as correct, be approved and published in the JOURNAL in accordance with by-law 26.

BRITISH MEDICAL ASSOCIATION.

FINANCIAL STATEMENT FOR THE YEAR ENDING DECEMBER 31st, 1893.

Balance Sheet.

Liabilities.

Dr.	£	s.	d.
To Subscriptions paid in advance	579	18	1
,, Advertisements ditto	425	14	8
,, Library	58	15	7
,, Contributions	572	10	2
,, Reporting	39	18	0
,, Engraving	104	18	3
,, Printing Journal	360	1	11
,, Paper for Journal	489	14	7
,, Miscellaneous Printing	36	13	4
,, Electric Supply	37	16	4
,, Stationery	42	6	11
,, Coal and Coke	15	18	0
,, Repairs	321	13	9
,, Legal Charges	500	6	10
,, Wood Fund	25	0	0
,, Rates, Taxes, and Gas	132	0	2
,, Plant and Type	34	1	6
,, Sundries	88	13	8
,, Anæsthetic Committee	100	0	0
,, Reference Committee	71	8	0
,, Committee on Investigation of Feeble-Minded Children	100	0	0
Total Liabilities	4,137	8	9

	£	s.	d.	£	s.	d.
,, Depreciation—as at 31st Dec. 1892	5,023	18	11			
,, Addition towards redemption of expenditure on Alteration of Premises, Lease of Premises, and Furniture and Fittings, and Premium on India Stock, and Local Loan Stock	800	4	11			
				5,824	3	10
,, Surplus Account, namely:—						
Balance on January 1st, 1893	50,755	17	6			
Profit for 1893 brought from Revenue Account	5,150	17	11			
				55,906	15	5
,, Balance, being total of excess of assets over liabilities						
				£65,868	8	0

Assets.

Cr.	£	s.	d.	£	s.	d.
By Subscriptions—Amount due				1,328	3	9
,, Advertisements—Amount due				3,500	11	1
,, Sundry Sales—Amount due				122	8	9
,, Lease, 429, Strand				4,500	0	0
,, ,, Agar Street Premises				3,200	0	0
,, Alterations of Premises				4,592	9	11
,, Furniture, and Fixtures at cost				2,373	0	11
,, Library				1,315	5	5
,, Plant and Type				1,894	0	3
,, Interest due on Investments				436	10	10
,, Investments (English Railway Debenture, Corporation, and Bank Stock) at cost				37,149	7	6
,, Cash, namely:—						
London and Westminster Bank on current account	1,418	8	0			
Ditto, on deposit	4,000	0	0			
Ditto, at Office	38	1	7			
				5,456	9	7
				£65,868	8	0

Revenue or Profit and Loss Account for Year ending December 31st, 1893.

	£	s.	d.
Editorial Expenses (Salaries, Contributions, Engraving, and Reporting)	5,383	7	4
Expenses of Journal (Printing, Postage, and Paper)	15,096	12	3
Office Expenses (Rent, Taxes, Office Postage, etc.)	2,500	8	10
Office Salaries and Wages	2,474	4	6
Association Expenses (Scientific Grants, Scholarships, Expenses of Committees, etc.)	3,043	12	6
Plant written off towards Depreciation	350	0	0
Provision towards redemption of expenditure on Alteration of Premises, Lease of Premises, and Furniture and Fittings, and Premium on India Stock and Local Loan Stock	800	4	11
	29,648	10	4
Subscription Losses from death, resignations, etc.	567	19	5
	30,216	9	9
Profit for Year carried to Balance Sheet	5,150	17	11
	£35,367	7	8

	£	s.	d.
Subscriptions	16,080	12	10
do. former years	167	4	8
Advertisements (less discounts and allowances)	15,368	18	5
Sundry Sales of Journal ,, ,,	1,643	4	11
Collective Investigation Record Sales	0	14	3
Sundries—Reading and Binding Covers	94	17	4
Reprints	72	8	6
Interest on Investments	1,205	6	5
Unexpended Grants to Committees returned	106	2	5
Scientific Grants unused and returned	32	2	0
Sale of Waste, etc.	24	1	6
Discount on Printing, Paper, etc.	571	14	5
	£35,367	7	8

Middlemore Fund.

£666 13s. 4d. invested in 3 per cent. North British Railway Debenture Stock, in the name of the British Medical Association. Converted from 4 per cent. into 3 per cent. Stock 1892.

1893.	£	s.	d.
Jan. 1. To Balance brought down	50	3	4
Dec. 31. ,, Interest one year on £666 13s. 4d.	19	9	0
	£69	12	4

1893.	£	s.	d.
Dec. 31. By Balance carried down	69	12	4
	£69	12	4

Stewart Fund.

£579 invested in 4 per cent. Caledonian Railway Debenture Stock, in the name of the British Medical Association.

1893.	£	s.	d.
Jan. 1. To Balance brought down	79	3	1
Dec. 31. ,, Interest one year on £579	22	9	8
	£101	12	9

1893.	£	s.	d.
July 31. By Stanley, Engrossing Certificate	1	17	6
Aug. 10. By Award to Dr. Thorne Thorne	50	0	0
Dec. 31. By Balance carried down	49	15	3
	£101	12	9

We have examined the foregoing Accounts, with the Books and Vouchers of the Association, and find the same to be correct.

March 20th, 1894.

PRICE, WATERHOUSE, & CO.,
44, Gresham Street, E.C.

Resolved: That the minutes of the Premises and Library Committee of the 10th instant be received and approved, and the recommendations contained therein carried into effect.

The minutes of the Premises and Library Committee of February 28th and of the 10th instant contain particulars of the valuation and purchase of 2 and 3, Harvey's Buildings, the Honorary Librarian's report and the rules for letting the rooms to outside societies.

Resolved: That the action of the Treasurer and the Premises Committee in the purchase of freehold in Harvey's Buildings be endorsed and approved.

Read letter from Mr. T. F. Raven, on the suppression of fraudulent and irregular practice.

Resolved: That the President be requested to reply to Mr. Raven's letter that the matter is referred to the Parliamentary Bills Committee.

Resolved: That the proposed by-laws of the Dundee Branch and of the Straits Settlements Branch be referred to the Branch Organisation Committee.

Read letter from the Cork and South of Ireland Branch.

Resolved: That the letter be received and referred to the Parliamentary Bills Committee.

The report on Advertisements for Unqualified Asssistants was then considered.

"That the report on unqualified assistants be received, approved, and the recommendations contained therein carried into effect."

Whereupon an amendment was moved and seconded,

"That the words 'to conduct Branch practices apart from the principal' be omitted from Paragraph 1 of the report."

The amendment having been put from the chair, the same was declared to be lost.

The original motion was then put and declared to be carried.

Report on Unqualified Assistants.

1. That all advertisements for unqualified assistants to conduct branch practices apart from the principal should be excluded from the JOURNAL.

2. That the term "unqualified" should not appear in the advertisements in the JOURNAL. Your Committee suggest that "dispensing assistants," or "surgery assistants qualified to dispense," would be better substitutes, and meet the requirements of those members who have, your Committee feel, a claim to make their wants known through the medium of the JOURNAL.

3. Fourth-year students, being recognised by the General Medical Council as assistants, should be simply advertised as such.

Resolved: That the 212 candidates whose names appear on the circular convening the meeting be and they are hereby elected members of the British Medical Association.

Read communication from the Lancashire and Cheshire Branch, in reference to the Midwives' Registration Association.

Resolved: That the communication be referred to the Parliamentary Bills Committee.

Read letter from the Burmah Branch on the opium question.

Resolved: That the same be referred to the Parliamentary Bills Committee.

Read correspondence with the Victorian Branch and the solicitor relative to the registration of the Branch.

Resolved: That the consideration of the matter be postponed for the present.

Read letter from Lord Stamford in reference to the Joint Committee of the British and West Indian Alliance, and the London and Counties Medical Protection Society.

Resolved: That the President of Council and Treasurer be requested to act on this Committee as representatives of the Council.

Resolved: That the minutes of the Parliamentary Bills Committee of the 10th inst. be received and approved and the recommendations contained therein carried into effect.

The report of the proceedings of the Parliamentary Bills Committee appears separately.

Resolved: That the minutes of the Medical Charities Committee of the 10th instant be received and approved, and the recommendations contained therein carried into effect.

The minutes of the Medical Charities Committee contain the report of the Subcommittee appointed to Visit the Various Medical Charities in accordance with the recommendations of last year's Annual Report, and a proposal to send a letter to the various charities.

Resolved: That Dr. Philipson, President of the Association, the President of Council, and the Treasurer be appointed a Subcommittee to draw up the annual report.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT.—The annual meeting of this District will be held at Tottenham Hospital on Thursday, May 3rd, at 4 P.M. Dr. Lloyd Smith will read a paper on "Hydrocele in the Female," and interesting pathological specimens and clinical cases will be shown. The officers will be elected for the ensuing year. The District Committee are requested to attend at 3.45 P.M.—HUGH WOODS, Honorary Secretary, 11, Archway Road, Highgate, N.

BORDER COUNTIES BRANCH.—The spring meeting will be held at Whitehaven on Friday, May 4th in the afternoon. Papers have been promised by Dr. Maclaren, Carlisle: The Surgical Treatment in Perforating Ulcer of the Stomach, with Notes of Two Cases. Dr. Crerar, Maryport: Furunculosis and its Treatment. Dr. Jackson, Whitehaven: On a Case of Rupture of the Urethra. And one by Dr. W. I'Anson, Whitehaven. Any member wishing to make any communication please give notice to the Honorary Secretary, J. ALTHAM Penrith.

NORTH OF ENGLAND BRANCH.—The spring meeting will be held at Morpeth on Thursday, May 3rd. The following papers are promised: Dr. Murphy: Atresia Hymenalis; Atresia of the Os Uteri; Hæmatometra; Hysterectomy on a Patient aged 42, Recovery. Dr. Gowans: Parts after Operation for Septic Thrombosis of Lateral Sinus and Deep Jugular Vein. Mr. Rutherford Morison: The Use of the Tampon and Temporary Suture in Abdominal Surgery. Members wishing to bring forward patients, specimens, or papers are requested to send notice at once to the Honorary Secretary, G. E. WILLIAMSON, F.R.C.S., 8, Eldon Square, Newcastle-on-Tyne.

LANCASHIRE AND CHESHIRE BRANCH.—A special meeting of the members of this Branch will be held at the Medical Institution, Liverpool, on Friday, May 11th, at 4.30 P.M., to consider the report of the committee appointed "to watch the progress of, and to oppose, any proposed legislation for the registration of midwives."—JAMES BARR, M.D., Honorary Secretary, Rodney Street, Liverpool.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting of this District will be held at the Greyhound Hotel, Croydon, on Thursday, May 10th, at 4 P.M., Mr. Henry Horsley, of Croydon, in the chair. Dinner at 6 P.M., charge 7s., exclusive of wine. All members of the South-Eastern Branch are entitled to attend, and to introduce professional friends. Agenda: (1) Minutes of Upper Norwood meeting. (2) To decide where the next meeting shall be held, and to nominate a member to take the chair thereat. The following papers, etc., have been promised: Dr. W. Hale White: The Dietetics of Chronic Bright's Disease. Dr. Clement Godson: The Best Means of Rendering Obstetric Instruments Aseptic. Mr. Herbert W. Allingham: Some Cases of Intestinal Surgery. Mr. A. Maude: Some Recent Researches into the Pathology of Graves's Disease. Members desirous of exhibiting or reading notes of cases are invited to communicate at once with the honorary secretary. The honorary secretary would be obliged if members would kindly inform him by postcard whether they intend, if possible, to be present at the meeting, and if likely to remain to dinner.—HENRY J. PRANGLEY, Honorary Secretary, Tudor House, Anerley, S.E.

SPECIAL CORRESPONDENCE.

PARIS.

The Académie de Médecine and the Question of a Recess.—A Remedy for Anarchism.—Mad Dogs.—General News.

THE Académie de Médecine at a recent meeting discussed the question of summer holidays. During the autumn the sittings continue, but evidently very few members are present. Nevertheless, the majority of the members decided that matters should remain as they are; and rejected the proposition that a permanent committee should be appointed to give advice on urgent cases occurring during the vacation.

The *Figaro* having asked Dr. Lombroso if he knows a remedy for Anarchism, the Italian *savant* immediately sent a reply, which the *Journal de Médecine* sums up in the following terms: "It must be treated by rendering it ridiculous." The same journal formulates prescriptions in accordance with the *savant's* dictum, with evidently more faith in their power of amusing their readers than in their medical efficacy.

M. Nocard advises people to be on their guard against dogs which appear to have a bone in their throat; this may be a symptom of madness. It is an error to suppose that mad dogs will not drink; on the contrary, they have intense thirst, and drink until trismus prevents them; it is in this condition that they appear to have a bone in their throat, and many people have been bitten in their efforts to extract the imaginary bone.

M. Bertillon, Director of the Municipal Statistical Service, has organised in the Assistance Publique offices an electrical machine similar to those used in America, Austria, Germany, and Italy, for classifying the returns of the census. M. Bertillon adapts this system to his anthropometric service.

Dr. Malassez, head of the Physiological Laboratory of the Collège de France, has been elected member of the Academy of Medicine.

Dr. Patey, Mayor of Tours, has died suddenly, aged 79.

CORRESPONDENCE.

GENERAL INSPECTORS OF THE LOCAL GOVERNMENT BOARD.

Sir, The letter which appears under the above head in the British Medical Journal of April 21st does not answer the question which I put in my letter in the Journal of April 7th. I asked, "What are the functions or supposed functions of the general inspectors of Her Majesty's Local Government Board?"

Admitted that all the general inspectors have the high attributes which your correspondent records, he fails entirely to enlighten us as to the methods by which "improvements for the benefit of the poor and sick" are effected. Will he, or can you, tell us in what way the non-expert general inspectors of the Board effect improvements which might not be equally well, perhaps better, effected by efficient lady visitors?

Setting aside the technicalities of Poor Law and hygiene—which latter subject includes, of course, the construction of dietaries—in both of which expert knowledge is essential, I fail to see what arguments can be adduced in favour of the main body of general inspectors.

It is still more difficult to explain how it can possibly come about that the inspectors apparently sit in judgment to decide issues involving questions of the efficiency of their own inspections. Your readers will have noted that the inquiry at Newton Abbott was held by one of the general inspectors—that is to say, by one of those partly responsible, in an official sense, for the condition of things which is there alleged to have existed. They may also recall the fact that some nine years ago, and again more recently, general inspectors have sat—as representing the Board—presumably to consider and report on the evidence respecting very grave charges of maladministration at an important establishment at the East End of London managed by a Poor-law authority. This establishment these same inspectors were in the habit of inspecting. For what earthly object, then, did they "inspect?" This is a question which I have frequently heard asked, and it is one which I am still quite unable to answer.

In your editorial note at page 891 of the Journal of April 21st you make the following remarks with reference to the Newton Abbott scandal: "What the public really does want to know is whether the charges of cruelty and harsh treatment which have been made by responsible persons for months past, and of which the nurse's statement is but the finishing touch, are substantially true or not: and, if true, how is it possible that such systematic abuses of authority could go on unchecked under the eye of the guardians of the poor and of inspectors specially appointed by the Local Government Board to prevent such things taking place?" I venture to think that I express the opinion of the vast majority of the members of the British Medical Association when I say that it is greatly to be desired that this same question should be raised and explicitly answered in the House of Commons.—I am, etc.,

April 21st. F.R.C.P.

OUT-PATIENT HOSPITAL ABUSE.

Figures!

Sir,—You did me the honour to publish, in the British Medical Journal of April 7th, a short letter on this subject. The *Star* for April 16th, commenting on my letter, urges that I should have given the name of the person whom I stated to have several times grossly abused the out-patient department of a London children's hospital, instead of, as I did, merely giving initials. My answer to that criticism is, that I shall very willingly give the name and other particulars, so soon as there is a properly constituted body which shows an intelligent determination to deal in a practical and statesmanlike way with the whole question. My object in writing was to make what was meant to be, for practical purposes, an "affidavit," recording an individual case of abuse; and it was my hope that other practitioners who knew of similar cases would follow my example, and that thus there might be accumulated in your columns a whole series of "affidavits," made by responsible persons, which would constitute a valuable mass of evidence whenever the subject, as it inevitably must, shall come to be dealt with in a practical and effective way.

These individual cases seem to appeal with unwonted force to the lively imagination of the *Star*. To me they appear to be the merest trifles, however important in themselves, when compared with the impressive spectacle of the out-patient hospital abuse question, looked at from a national standpoint and in the mass. Will you give me a little space in which to set forth some recently collected figures, and certain deductions which legitimately arise therefrom? At p. 283 of the introductory part of *Burdett's Hospitals and Charities Annual* for 1894, there is a table which deals with the out-patient question as it shows itself in 37 of the principal towns of the United Kingdom. Those 37 towns together contain a population of 11,533,214 persons, and their combined hospitals treated in 1893 the striking total of 2,993,806 out-patients. Now, if we assume that these 37 towns fairly represent the whole of the United Kingdom in regard to out-patients, then we have from among the 40,000,000 persons which inhabit the whole of the kingdom the enormous total of 10,383,250 out-patients; let me put it into words as well as figures—ten millions three hundred and eighty-three thousand two hundred and fifty out-patients.

These are the numbers of out-patients which we actually have. Now let us consider the numbers which we ought to have. Fortunately there are published figures which furnish us with quite satisfactory data. We may take Sunderland as a town of fair prosperity containing a pretty evenly mixed population. It is neither a rich nor a poor town, but fairly representative of the general condition of the country. Sunderland in 1893 had a population of 131,015, and a total of out-patients numbering 4,040; that is to say, a proportion of 31 out-patients to every 1,000 inhabitants. If 31 out-patients to every 1,000 inhabitants be the normal state of things for Sunderland and several other large towns, we may take it for granted that such a proportion might very well be normal for the whole kingdom, of which Sunderland is so fairly representative. But we can afford to be generous in the matter, and instead of insisting that 31 per 1,000 should be the normal out-patient standard, let us double the allowance for the whole kingdom, which Sunderland finds sufficient for herself. We thus get at the very generous standard of 62 instead of 31 out-patients per 1,000 for the whole of the United Kingdom.

Will medical men now look at the actual number of out-patients our hospitals do treat annually, and the actual number they ought to treat, allowing them a proportion of 62 per 1,000 of the population? A proportion of 62 per 1,000 of the population gives us 2,480,000 as the number of out-patients which alone ought to be treated gratuitously in the United Kingdom. The number which actually is treated is 10,383,250. These figures are sufficiently striking as figures; but now let us try to arrive at some definite comprehension of their money value. If we grant that 2,480,000 is a generous allowance, and deduct this number from the actual total of 10,383,250, we get as a resultant 7,903,250 persons annually going to the out-patient departments of hospitals who have no sort of right to be there. The significant fact which I

wish to bring home to the imagination of every medical practitioner in the United Kingdom is the annual medical money value of these 7,903,250 out-patient impostors.

It is obvious that these 7,903,250, who can pay but prefer to beg, are not all equally endowed with this world's goods. Let us assume that as many as half of them could only pay very small fees to medical men. Charge the half of them a shilling each for one single consultation in the year. What is the net result in money? It is not less than £197,581 5s. Thus we dispose of half of the total of seven millions odd. Now let us take half of the remainder, and charge them 1s. 6d. each once a year. The net resultant here is £148,185 18s. Following on in this line of things we assume that half of the remainder could pay 2s. 6d. each, and this yields a further sum of £123,488 5s; half of the next remainder could pay 3s. 6d. each, giving £86,441 15s. 6d. The final small remainder could undoubtedly pay the full fees of ordinary consultants at least once a year. Their number, after the various deductions made, is 493,953 for the United Kingdom, and their money value to the consultants of the kingdom would be £1,037,301 6s. If now we put these various sums together, we bring out a total of £1,592,998 9s. 6d., which is no doubt a much smaller amount than that which is actually diverted from the pockets of sorely struggling practitioners every year by the out-patient departments of the United Kingdom. If, again, we assume that there are 40,000 practitioners in the kingdom, most of whom depend upon their work for their living, it will appear that the annual loss to each individual practitioner is not less than £39 16s. If, finally, we consider that not more than half of the practitioners of the kingdom come within the range of the out-patient question, we have the other and more sternly struggling half of the profession suffering to the extent of £79 12s. per man every year.

I must apologise sincerely for the inordinate length of this letter. The figures must be my excuse. It was my intention to have said something about remedies—for remedies there must be unless the poorer members of the profession are to be doomed to worse than Egyptian slavery and poverty. That part of the the subject I may, by your courtesy, return to on a future occasion. May I, in conclusion, express my gratitude to Mr. Morgan Jenkins, M.A.Cantab., Hon. Secretary to the London Mathematical Society, for valuable help in these various arithmetical calculations?—I am, etc.,

King Street, Cheapside, April 20th. GEO. W. POTTER.

THE GRESHAM UNIVERSITY SCHEME.

SIR,—The memorandum on the above scheme, which was discussed at the Parliamentary Bills Committee at its last meeting, seems to me of very great importance, and with all respect to the opinion of Mr. Macnamara, who has devoted so much care and attention to the subject, very much in place at the present time. If Mr. Macnamara could have shown that the conclusions arrived at in it were inaccurate, or not borne out by the report of the Commission, he would have been better entitled, it seems to me, to ask for a resolution of general approval of the report; but if even the first three conclusions are to be accepted as correct, and we are to understand that in the proposed university the determination of the medical curriculum will practically rest with a body of fifteen teachers, of whom three at the most will be medical men; if in the Academic Council the voice of practical medicine will necessarily be outweighed by that of teachers of science; and if the views of the great body of practising medical men will have no opportunity whatever of expression in the body which will determine the medical curriculum, then I think it would have been unfortunate if members of our Association had been committed to an unqualified approval of the scheme. It would afford a striking example of what Sir Walter Foster long ago described as "the powerlessness of the medical profession," if in regard to a matter of such practical importance to us all, we were content to be told that our opinion was not of the slightest consequence.

I notice that in the discussion which followed it was stated that the College of Surgeons had accepted the principles contained in the report, but it should be remembered that neither the separate meetings of Fellows or Members have any right, nor has the Council, to speak in the name of the Royal College of Surgeons of England, and that it is quite possible that when the College meets in November the verdict given in favour of the report by half-a-dozen members may be reversed. It is quite certain, as Dr. Isambard Owen said, that the demand made for years for medical degrees accessible to London students has not been satisfactorily met by this report, nor does it appear that the Royal Colleges are to have the voice which they have hitherto always claimed in the matter. The proposed combination of the Royal Colleges with the Society of Apothecaries for purposes of examination for degrees, might indeed deserve the strong approval which Mr. Macnamara claims for it, if it were in the least likely to produce the result which he expects, namely, a one-portal system in the metropolis; but it is quite clear that as both the Colleges and the Society will continue to give their separate diplomas, it will but add another to the list which is already too long.—I am, etc.,

Dulwich, April 21st. H. NELSON HARDY.

ASSISTANT MEDICAL OFFICERS IN ASYLUMS.

SIR,—In 1889 I read a paper on this subject which was written in collaboration with Drs. Dodds and Greenlees, before the Medico-Psychological Association. The paper was published in the *Journal of Mental Science* for January, 1890, and to it I would direct Dr. Strange's attention. The paper in question was in reality a petition from the assistant medical officers praying for assistance from their superiors in office, and the petitioners set forth their case as delicately and inoffensively as possible. Dr. Strange will not find any abuse of superintendents in the paper, yet if he be really thirsting for something to reply to he may discover it therein.

I agree with Dr. S. Rees Philipps that the matter could best be discussed before the British Medical Association. Of one thing I am certain and that is that there is nothing to be gained by again bringing it before the Medico-Psychological Association. When that was done in 1889 we were told that we had no one but ourselves to blame. One respected senior member said: "Superintendents had nothing to do with the salaries of assistant medical officers." He further asserted that the whole question turned upon supply and demand, and said that so long as committees could get men for the money offered they would give no more.

In winding up the conversation aroused by the paper the President took the same line. He said: "If the county councils can get men to come for the money now paid it was their duty to the ratepayers to take them. . . As long as they will go in for any price that is offered the county councils cannot be expected to raise the value of the post. . . This is the only way we can look at the question." It was not specifically stated that the superintendents' salaries should be governed by the same rule, but the speakers seemed so enamoured of the theory that this omission was a mere slip in all probability. I should also remark that although the paper had been adjourned from the annual meeting in July and had been announced in the circular letter for the November meeting there was not a single superintendent of an English county asylum present to hear it read.

In fairness I must say that several members expressed their hearty sympathy with us in our unfortunate position, but unhappily this fell short of prompting them to grant us the assistance we asked.

Mr. Bullen thinks most superintendents desire men of energy as their officers, who will prove themselves workers in the vanguard of science. I am afraid that few will, with him, expect to find salvation in scientific work; and still fewer believe that either superintendents or committees look anxiously for scientific research at the hands of assistant medical officers. In October, 1886, I read a paper before the Medico-Psychological Association, pointing out how the medical spirit might best be encouraged in asylums. In the discussion awakened by that paper, Dr. Savage boldly admitted that "he feared the want of progress was often due to the jealousy of superintendents. He did not think a superintendent should mind his assistant having better and later medical knowledge than he had himself.....for as a superintendent he had too much administration to do original work himself." When the subject now under consideration was before the same Society in 1889, another superintendent of experience spoke out in the same strain. He

said: "When he (the assistant medical officer) comes under the control of his committee, he finds that they do not care a rap for the scientific work a man does. They get him to do some definite work for them, to look after certain patients, and I do not think they care very much whether he spends the rest of his time in going to dinner parties or in looking at sections through the microscope." This statement was received with laughter and applause. Who ever heard of a man being appointed to a superintendency because of the scientific work he had done? Mr. Bullen's experience may have been exceptional, and on this he is to be congratulated: but he is not to be congratulated on his ignorance of the fact that it has been exceptional. The fact of the matter is a committee want in a superintendent a man to manage their asylum, and if he does that well he will have neither time nor taste for scientific research. And what a superintendent wants in his assistant is someone to relieve him of the routine medical work, to help him in his administrative duties when he requires his assistance, and—to keep dark!—I am, etc.,

Northampton, April 23rd. S. A. K. Strahan, M.D.

Sir,—In his letter that appeared in the British Medical Journal of April 14th, Dr. Strange asserts that assistants who have wrongs to complain of should have the "honesty" to give their names. There is little valour in flinging down a challenge with the knowledge that it cannot be accepted. The reason why these men do not give their names is the very practical one that they cannot afford to quarrel with their bread. Men of the world recognise this as a thoroughly "honest" and legitimate reason.

Dr. Strange's letter goes far to confirm the worst views that have been taken both of the condition of assistants and the temper of superintendents. A man has spent, say, from seven to ten years as an assistant. He has used his opportunities well, his experience is ripe, and he ought to be at the height of his usefulness. Is there any other service where such a man could be branded as "that very undesirable person the chronic A. M. O?" And he is thus branded, be it noted, by his professional brother, whom powerful friends or pure accident have placed officially over him.

In a few cases the pay of the assistant is fairly good, and occasionally he is allowed to marry. Dr. Strange "can imagine no position worse than that of an old married assistant," and most of those who know the speciality will endorse his opinion. But if one "can imagine no position worse than that" of the few fortunate assistants, what is to be said of the average specimens of the class? The state of these has something in it appalling.

Dr. Strange's letter indicates clearly enough what the need of the superintendent is. It is this. The superintendent is the one official of any importance in an asylum. The assistant exists merely on sufferance, and for the personal convenience of the superintendent, and ought to give up his post and begin the world at the beginning again, whenever his master is pleased to get tired of him.

Assistants will look forward with much interest, if with little hope, to the realisation of the scheme of a discussion at the next meeting of the British Medical Association, generously proposed by Dr. Rees Philipps, and seconded by Dr. Goodall. Has it been put before the Council or the local organising secretaries by him? This is obviously necessary. —I am, etc.,

April 23rd. Experientia Docet.

"UNCERTIFIABLE PATIENTS."

Sir,—We are sure Mr. Jessett need not apprehend any disagreement with his contention "that women passing through the climacteric are in the first instance rarely 'insane.'" We observe that he admits that the term climacteric "mania" is certainly misleading, and it is now clear that he does not by it connote alienation, but merely the prodromata of insanity. This being so, it is perhaps a little unfortunate that he takes for the text of his discourse a case in which the patient committed suicide. Now, in his first letter, Mr. Jessett stated that "many women thus suffering" (that is, from climacteric mania) "are certified as insane, and placed in asylums." Climacteric mania, however, is "most emphatically" not insanity. Mr. Jessett, therefore, would appear to hold the opinion that there are in asylums many persons not insane.

Assuming the case of a person whose "whole nervous system is in disorder, and most susceptible to develop unhealthy tendencies"—a case fraught with the potentialities of insanity, the question is as to the best treatment to adopt. We emphatically protest against any plan which favours dilettantism in the treatment of such cases. If the patient can be kept under frequent skilled supervision outside an institution, by all means let this be tried; but if there is not speedy amelioration, the patient's chance of recovery should not be jeopardised through the false shame and ignorant fears still—despite our latter-day enlightenment—engendered by the very thought of that bugbear—the asylum. Such a case could be received as a voluntary boarder. Those acquainted with the modern asylum know well the pains taken to provide patients with the "bright surroundings," "cheerful companions," and "bodily and mental amusements" so justly esteemed by Mr. Jessett.

We would here state our opinion that the system of "single care" is open to great abuse, and should be carefully safeguarded. We believe that certifiable cases are frequently received by medical men whose acquaintance with insanity is extremely limited, and whose sense of responsibility must of necessity be less than that of the asylum physician, since in the former instance there is no official supervision. We have cognisance of cases in point, and if, as we believe, the practice in question is widespread, the risk to recovery—and to life itself—is obvious.

Mr. Jessett holds to his view that asylums are lunacy factories. In opposition to it we would point to the case of voluntary boarders in asylums, of those patients admitted in alcoholic delirium who shortly recover, of others (for example, certain patients with epilepsy or with recurrent mania), who, between bouts of excitement, are sane. All these present "aberration of mind," and yet do not "become insane from contact with insane people." If there is real danger of "contact insanity," how is it that it is not pointed out by teachers, by textbooks, and by the current organs of psychiatry?—We are, etc.,

M. Craig, M.B.,
E. Goodall, M.D.

West Riding Asylum, Wakefield, April 22nd.

Sir.—The recent correspondence on the above is of more than ordinary interest, especially to the general practitioner. It has fallen to my lot in nearly twenty years' experience to come across cases in which the mental condition was such that it seemed an abuse of language to certify the patient as "insane," "lunatic," or "mad." Mental disorders associated with the climacteric are often of a type that the mental condition is most aptly defined by Mr. Jessett as "mental disorder connected with the climacteric." My views and experience in these cases are in the main those of Mr. Jessett. Patients in this mental condition ought not to be sent to an asylum; it is most harmful to the patient's moral and mental nature. They feel most acutely the injustice of being associated with those who are hopelessly insane, and I am convinced reason and experience will be found to confirm Mr. Jessett's views in this matter. The stigma of having been an inmate of an asylum is not a light matter in a social and financial point of view. I know families where this may prejudice the life insurances which may be proposed to a serious extent. Drs. Craig and Goodall "assert confidently that this 'contact insanity' is in the highest degree uncommon: that practically it is a myth." This, we may admit, is their honest conviction, based upon what after all is a short experience of at most seven and nine years respectively. Mr. Jessett's is the ripe experience of over thirty years, and is entitled to, and will command, the respect and support of most medical men. His suggestion of a half-way house between the home and the asylum is a pressing need. It is feasible, and I earnestly hope something may soon be done. I heartily support the suggestion that a committee be formed, composed of general practitioners, psychologists, and gynæcologists, to inquire into the subject. Let them be men who by their age and experience will command the confidence of the profession.—I am, etc.,

Bacup, April 21st. Jno. Brown, M.D. Vict.

SIR,—In the correspondence between Drs. Goodall and Craig and Mr. Jessett, the point seems to be whether climacteric mental disturbances are to be considered as constituting insanity, and treated as such.

It is the old question as to whether the oscillations of a disturbed mental balance have passed beyond physiological limits into the domain of insanity. As well, as Maudsley says, attempt to draw a line between light and darkness.

However, be this as it may, these cases frequently end in pronounced and sometimes incurable insanity. Such being the case, surely in the incipient stages, when mental inhibition is defective or lost, the regularity and discipline of institution life must be of the greatest benefit. When the control over actions and speech is giving way, it is impossible to expect a patient to be firmly and rationally treated in his or her own family.

Although there is no proof that "contact insanity" ever occurs, one cannot help thinking with Mr. Jessett that the association of mild and severe cases of insanity cannot conduce to the benefit of the former. Undoubtedly perfect classification of cases should be the aim of all asylum officials, and I believe more might be done in most asylums in that respect with good results.

I have noticed, without being able to explain how it occurs, that patients who have lived together for years acquire a kind of uniform mental complexion, so to speak, and have a tendency to reach the same level of intelligence.

The "lock and key" reproach one seldom hears from a medical man. It is surely a sentimental objection, as there is virtually more liberty in the spacious apartments and grounds of a modern public asylums than in the alternative private house.—I am, etc.,

Sunbury-on-Thames, April 23rd. W. J. H. HASLETT.

THE ROYAL NATIONAL PENSION FUND FOR NURSES.

SIR,—The Council of this Fund have been reluctantly compelled to bring an action against the publishers of statements to the effect that it charged nurses premiums exceeding by from 20 to 26 per cent. those they would have to pay for similar advantages at old-established London offices. The Council ask you therefore to allow them to state for the information of nurses and the authorities of hospitals and kindred institutions throughout the British Empire that the action resulted last week in a judgment in favour of the Fund for 40s. damages and costs, an injunction restraining the defendants from further publishing the statements, and a public apology, which was advertised in the *Times* of April 19th, 1894, and subsequent days.

The action having been brought, in the words of Mr. Finlay, Q.C., to counteract the mischief "that the publication of the libels was intended to do," the plaintiffs waived their claim to substantial damages.

The investments of the Royal National Pension Fund now exceed £175,000, including a donation bonus fund of upwards of £40 000. There is also a benevolent fund of more than £11,000 for the benefit of those whose means of saving have proved insufficient to secure for them an adequate provision against sickness or incapacity, however caused, and for old age.

The donation bonus fund and the benevolent fund, combined with the principle of mutual insurance, honorary management, and great economy of administration, enable the Royal National Pension Fund to offer to all workers among the sick throughout the British Empire substantial and exceptional advantages which the Council believe to be not otherwise procurable.

The Council are anxious to let nurses in every part of the world know that the misleading statements, now admitted to have been without foundation or justification, in respect of which the action was brought, and which have been very widely circulated amongst them, have been withdrawn and altogether disavowed. For these reasons it is hoped that the Indian and Colonial papers will republish this letter for the information and protection of nurses working in every portion of the Empire.

Signed on behalf of the Royal National Pension Fund for Nurses,

LOUIS H. M. DICK,

King Street, Cheapside, E.C., April 23r . Secretary.

TRAINED NURSES' ANNUITY FUND.

SIR,—There having been of late some misapprehension with respect to the continuance of the Trained Nurses' Annuity Fund, I have been requested to bring this matter once more before the public. In 1874 a letter from me was published which was the means of starting an annuity fund for broken-down trained nurses, and at that time this was the first effort made to assist a most useful and deserving class of women, some of whom, after a life of risk and self-denial, were allowed to end their days in the workhouse.

I thankfully acknowledge the great efforts which have since been made to remedy this deplorable state of things, especially by the creation of the Royal National Pension Fund for Nurses and the Royal British Nurses' Association. At the same time, I wish to draw the attention of the public to the fact that the Trained Nurses' Annuity Fund reaches a class of women who have been precluded by adverse circumstances from insuring their lives in the Royal National Pension Fund, and that it is worthy of a continuance of the support by which twelve annuities have been permanently founded. Most of the original subscribers having passed away, the committee are very anxious to enlist the sympathy of the charitable in a work which has done and is doing great good, and which is founded on such a sound basis that it must in time assume much larger proportions than it has at present.

Subscriptions and donations will be thankfully received by Messrs. Coutts and Co., 59, Strand, or the Honorary Secretary, Mr. R. Gofton Salmond, 73, Cheapside, E.C.—I am, etc.,

GEORGIANA LADY BLOOMFIELD.

Queen's Gate Gardens, S.W., April 20th.

UNIVERSITY HALL, EDINBURGH.

SIR,—I have lately received a request to write a brief account of the aims, growth, and results of University Hall, Edinburgh, as I know them from my four years' residence there.

The Hall was founded by Professor Geddes in 1887 for past and present university students, with a view to meeting a want long felt in Scottish universities, namely, residence under one roof of a number of students, thereby enabling them to enjoy social intercourse and free exchange of opinions combined with various other advantages not usually attainable in lodgings, the idea being to carry on the institution much on the lines of residence in English universities without the restrictions enforced there.

The growth of University Hall has proved conclusively the soundness of Professor Geddes's views. The start was made in 1887 at Mount Place with 7 students, which number had increased, on my going into residence in May, 1889, to 17. There are now additional buildings at Riddles Court, James Court, and Ramsay Garden, with about 45 men in residence last winter, while Ramsay Lodge, opened on April 13th last, contains upwards of forty rooms for the accommodation of students and graduates.

That the results have been highly satisfactory is shown by the steady increase in the number of residents, by the general satisfaction expressed by them, by the large percentage of honours gained, and by the successful manner in which professional examinations have been passed. I may add that my stay at University Hall was one of great pleasure to me, and fully realised the expectations I had formed.—I am, etc.,

Shrewsbury, April 17th. CECIL E. SALT, M.B.

MIDWIVES' REGISTRATION.

SIR,—The communications of Messrs. Boxall and Humphreys do not require much notice, but the position they obtain in the BRITISH MEDICAL JOURNAL as "critics" of the action of one of the most important Branches of the Association leads to the question, Whom do they represent? And who does the "Midwives' Registration Society" represent? I submit, Sir, that the BRITISH MEDICAL JOURNAL is the organ of the Association, and not of its critics.

The Lancashire and Cheshire Branch, described by Messrs. Boxall and Humphreys as Dr. Rentoul's "following" (*sic*)

will probably notice with some interest the process of "climbing down" at present being indulged in by the "Midwives' Registration Society," who, having promoted two Bills in the House of Commons, have "still under consideration" the principles of their final effort.—I am, etc.,

Colin Campbell,
Honorary Secretary L. and C. Branch Committee.

Uppermill, Saddleworth, April 22nd.

"THE DOCTOR'S WIFE."

Sir,—With reference to the paragraph in the British Medical Journal of April 21st, headed "The Doctor's Wife," I beg to say that the report referred to by my late father in his work *Glances Back through Seventy Years*, will be found in Vol. ii of the *Illustrated Times* newspaper, beginning with No. xxxvii., p. 94-95, and continuing on pp. 118, 142, 158, 174, etc. Of course my father was in no way responsible for the report, which bore Mr. Henry Mayhew's well-known name. In column 2, page 95, your correspondent will find instances of insurance companies refusing to insure the wives of medical men. I have not the leisure to go into the matter any further, but the volume of the *Illustrated Times* referred to (January to June, 1856) will be readily found in the newspaper room at the British Museum.—I am, etc.,

Ernest A. Vizetelly.

Chestnut Road, Raynes Park, April 23rd.

P.S.—Looking impartially at Mr. Mayhew's report, it strikes me as showing a strong prejudice against the medical profession. I daresay he would have had trouble to substantiate some of his statements. However, not a single contradiction of any importance appears to have been sent to the paper, though various insurance actuaries wrote to it on trifling matters of detail.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

The following appointments have been made at the Admiralty: James L. Sweetman, Fleet-Surgeon, and Richard L. Price, Surgeon, to the *Repulse*, April 25th.

ARMY MEDICAL STAFF.

Brigade-Surgeon James Kellie, M.D., late of the 17th Lancers and Royal Horse Artillery, died at Notting Hill on April 22nd, at the age of 69. He was appointed Assistant-Surgeon, May 5th, 1848; Surgeon, October 2nd, 1857; Surgeon-Major, May 5th, 1868; and was granted retired pay, with the honorary rank of Brigade-Surgeon, April 21st, 1880. From *Hart's Army List* we learn that he was in medical charge of a detachment of the 86th Regiment in 1857 at the siege and capture of Dhar, the action at Mundesore, the battle of Googaria, and the relief of Neemuch. He was also with the 17th Lancers in Rajpootana and Central India, and was present at the action at Zeerapore in December, 1858 (medal with clasp).

ARMY MEDICAL RESERVE.

Surgeon-Captain William Duncan, M.D., having vacated his medical appointment in the Yeomanry Cavalry, ceases to be an officer of the Army Medical Reserve, April 25th.

Surgeon-Captain Charles Knott, 3rd (Duke of Connaught's Own) Volunteer Battalion the Hampshire Regiment, to be Surgeon-Major, April 25th.

Surgeon-Lieutenant Walter A. Atkinson, M.B., 1st Surrey Rifle Volunteers, to be Surgeon-Lieutenant, April 25th.

INDIAN MEDICAL SERVICE.

The undermentioned Surgeon-Lieutenant-Colonels of the Bengal Establishment, who entered the service April 1st, 1869, are promoted to be Brigade-Surgeon-Lieutenant-Colonels from the dates specified: R. C. Sanders, M.D., October 4th, 1893; B. Franklin, Honorary Surgeon to the Governor-General, January 1st, 1894; R. T. Wright, M.D., January 2nd; G. McB. Davis, M.D., January 17th.

The undermentioned Surgeon-Majors, having completed twenty years' service, become Surgeon-Lieutenant-Colonels from March 31st:—*Bengal*: S. H. Browne, M.D.; E. Mair, M.B.; J. Armstrong, M.B.; H. P. Yeld; J. C. Fullerton, M.B.; C. J. H. Warden. *Madras*: P. H. Benson, M.B.; J. Lancaster, M.B.; W. G. King, M.B. *Bombay*: J. S. Wilkins, D.S.O.; W. A. Barren.

Brigade-Surgeon-Lieutenant-Colonel A. Stephen, Bengal Establishment, is granted the rank of Surgeon-Colonel while officiating as Principal Medical Officer and Sanitary Commissioner, Assam.

The undermentioned officers, having completed twelve years' service, become Surgeon-Majors from April 1st:—*Bengal*: R. H. Charles, M.D.; G. Duncan, M.B.; W. A. Sykes, M.B., D.S.O. *Madras*: E. W. Reilly; J. Scott, M.B. *Bombay*: R. W. S. Lyons, M.D.; J. P. Barry, M.B.

Surgeon-Colonel D. F. Bateman, Madras Establishment, is appointed Principal Medical Officer of the Mandalay District and the Chin Hills command.

Surgeon-Major-General John Pinkerton, M.D., Bombay Retired List, is appointed Honorary Physician to the Queen, *vice* Deputy-Surgeon-General W. Walker, deceased.

The retirement from the service of Surgeon-Lieutenant-Colonel James Reid, Bengal Establishment, which has been already announced in the British Medical Journal, has received the approval of the Queen.

Brigade-Surgeon-Lieutenant-Colonel E. F. Drake-Brockman, of the Madras Establishment, has also retired from the service, which he entered as Assistant-Surgeon, October 1st, 1866, attaining the rank of Brigade-Surgeon-Lieutenant-Colonel, April 21st, 1890.

Surgeon-Major James Hay Blackwell, late H.E.I.C.S., died at St. Andrews, N.B., on April 22nd, aged 75.

THE VOLUNTEERS.

Surgeon-Lieutenant W. H. Brown, Tyne Division, Submarine Miners, Royal Engineers, is promoted to be Surgeon-Captain, April 21st.

Mr. Sidney Arthur Mugford is appointed Surgeon-Lieutenant to the 2nd Volunteer Battalion the Essex Regiment, April 21st.

Surgeon-Major F. J. Pearse, 1st Middlesex (Victoria and St. George's), is promoted to be Surgeon-Lieutenant-Colonel, April 21st.

CHANGES IN THE MEDICAL DEPARTMENT.

The proposed changes in the Army Medical Department in India alluded to in the British Medical Journal of February 10th, p. 330, are, as we have already pointed out, far from being to the advantage of the Army Medical Staff. One of the best stations, if not the best, in India—Bangalore—passes to an officer of the Indian Medical Service. The administration of the Secunderabad Division, one of the largest in India, which has always been held by an administrative officer of the Indian service, will pass to a surgeon-colonel of the Army Medical Staff, who will lose, it is stated, the extra allowance of Rs. 200 per mensem which was always received by the Indian service officer for the additional charge of the Hyderabad Subsidiary Force, commonly called the Hyderabad Contingent, a totally distinct command under a brigadier-general of its own.

We are not informed whether, with the deduction contemplated, the duties and responsibilities of the new administrative officer will be any lighter; if not, the refusal to grant the extra Rs. 200 to the pay of a surgeon-colonel of the Army Medical Staff is invidious and inequitable. The appointment of a surgeon-colonel of the Army Medical Staff to the principal medical officership of the Myingian and Mandalay Districts is not acceptable by the medical department of the British forces. Formerly the Myingian and Mandalay Districts, commanded by different brigadiers-general, were administered by a brigadier-surgeon of the Indian Medical Service. This led to the unfortunate administrative medical officer receiving orders from two general officers working on different lines. Complications, of course, arose, and the subject was submitted to Surgeon-Major-General Sir James Hanbury, K.C.B., then Principal Medical Officer of the Madras Presidency, who, to overcome difficulties, suggested to the authorities the employment of two brigade-surgeons, one to the Myingian and the other to the Mandalay District, with to each the usual office allowances and extra remuneration for administrative duties. This suggestion has apparently not received the sanction of the Government, although it was the best that presented itself to the Principal Medical Officer of Madras.

The division of the principal medical officerships of the four Indian Army Corps between officers of the Army Medical Staff and Indian Medical Service is fair enough; but it is distinctly a hardship to the Army Medical Staff that the pay of the surgeon-major-generals of army corps should be reduced from Rs.2,500 to Rs.2,200. In short, the principal medical officers of the Army Corps will be surgeons-major-general in name and rank, but not in respect of pay.

The appointment of an Indian medical officer to the principal medical officership of the Punjab Corps is unfavourably criticised, as this corps is not only, as regards British and Indian forces, the largest force, numbering in all 70,000, but the European troops composing it are reckoned at 23,000. Indeed, if figures are to be considered, it is the most important corps of the four.

Besides this, the supersession of the Army Medical Staff officers of surgeon-colonel rank senior to the Indian Medical Service officer about to be promoted surgeon-major-general, and placed at the head of the medical department of the Punjab Corps, is keenly felt.

The net saving to the Government by the contemplated changes in the medical department is computed at Rs.10,000 a year, of course at the expense of medical officers. This is fast becoming a time-honoured custom.

A scheme well worth consideration is the amalgamation of the military branches of the Army Medical Staff and Indian Medical Service, and a separation from it of the Civil Medical Service, which should be open to all educated natives. The severing of the purely military and Civil branches of the Indian Medical Service is considered by many to be much needed.

ARMY MEDICAL OFFICERS AND SANITARY WORK.

Adverting to the comment on this subject in the British Medical Journal of April 21st, it is necessary to state that in former regulations for the Army Medical Department plans and sites for new barracks, or subsidiary buildings, were ordered to be submitted to the Director-General for remarks before action could be taken for their construction. This clause, however, has for some unaccountable reason, been expunged from the later Army Medical Regulations, and hence medical officers are not consulted on the sanitary precautions to be taken in planning barracks or other edifices. The question that now arises is this. Who is responsible for the omission from recent regulations of the part the proper sanitary adviser of the army should take if insanitary conditions are, though ignorance or carelessness, allowed to creep into designs for military buildings? That the original clause has designedly been erased cannot be doubted; if so, what are the considerations which led to it?

Duly weighing the fact that loss of health and life also has arisen through insanitary conditions in barracks, the point is to whom should responsibility be attached for this preventable injury to individuals serving the State? When alluding to the outlay of £1,800 to put the

drainage of the Belfast Barracks to rights, no allusion whatever was made to the fact that about a year ago a whole block of officers' quarters had to be evacuated owing to grave insanitary conditions causing an epidemic of sore throat among the occupants, who had, whilst defects were in course of remedy, to be lodged in various parts of the town, presumedly at Government expense. The uprooting and examining of drains at that times showed a gross ignorance of the elementary rules of hygiene on the part of someone. Who was it? What share in this state of affairs is to be allotted to the Royal Engineers, and how much responsibility to the Medical Department? These queries call for answers. Influential members of Parliament might profitably ask a few questions in the House on the subjects referred to in the foregoing remarks.

VENEREAL DISEASE IN THE ARMY.

MR. JEFFREYS'S question in the House of Commons, on April 20th, to the Secretary of State for War, on the increase of venereal disease in the army, may be summed up for all readers who have an innate dislike to statistics in the following figures: The average strength at home and abroad of the troops was, by a recent return submitted to the House, 196,334: the total admissions for venereal disease, 52,155; and the average number of men constantly sick with this disease, 4,190.71—say, roughly, four battalions at full strength.

MOBILISATION.

THE question put by Mr. Arnold-Foster to the Secretary of State for War, on April 16th, in the House of Commons, on the possibility of mobilising during the present year one or more companies of the Army Medical Staff Corps bearer companies attached to the 1st Army Corps is of vital importance to the medical department, for the total want of practice in bearer company and field hospital duties in peace has, by publicity, been repeatedly placed before the authorities. It is notorious that the officers of the Army Medical Staff and the non-commissioned officers and men of the Medical Staff Corps are (not through any fault on their part) unfamiliar with the working of the *personnel* and *matériel* of field hospitals and bearer companies. Considering that other branches of the service obtain practice in peace in the duties they would be called upon to perform in war, it is unfair to deny to the medical department the opportunity of rendering itself efficient and ready for emergencies. It would be to the advantage of the department if a field hospital and bearer company were located at each district head quarter at home and abroad, as is advocated in the *Broad Arrow*, so that the Army Medical Staff and the Medical Staff Corps in divisions and districts may familiarise themselves with their working.

PNEUMONIA AMONG THE TROOPS AT QUETTA.

IT is rumoured in India that the visit of Surgeon-Major-General Bradshaw, Principal Medical Officer, to Quetta, may be connected in some degree with the prevalence of pneumonia among the troops, several fatal cases having occurred. These cases it is reported may be attributable to the troops being taken out for parades at unnecessarily early hours. The climate of Quetta in winter is cold enough to permit of parades after sunrise, so that to expose men unnecessarily before that time is to cause chills and resulting chest diseases. If the rumours on this point be correct, it is hoped that the army medical officers will, by timely suggestion to the general officer commanding, avert preventable sickness and possible mortality from so grave a disease as pneumonia.

THE EGYPTIAN SANITARY DEPARTMENT.

SURGEON-MAJOR R. C. K. LAFFAN having lately obtained his promotion in the Army Medical Staff, is about to resign his appointment as Inspector in the Egyptian Sanitary Department and return to his military duties. Surgeon-Major Laffan entered the Egyptian civil service in August, 1887, and took an active part in the reorganisation of the State hospitals, which were only then commencing to emerge from their former deplorable condition. It was largely owing to his exertions that in 1891 Sir E. Baring, now Lord Cromer, was able to write as follows: "All this has now been changed. The hospitals, most of which I have myself visited, are clean, properly equipped with beds, bedding, and clothing, and supplied with medicines, appliances, and instruments. The out-patient department, which did not exist under the old *régime*, has now assumed large proportions.....Dispensaries, where the poor can obtain gratuitous treatment, have been opened in thirteen towns.....The lunatic asylum in its former condition was described by a competent observer as 'a den to shudder at, where the wretched inmates used to be chained to the walls, never leaving their cells till they were carried out dead.' It is now in perfect order, and is provided with padded rooms, workshops, and gardens." We understand that Surgeon-Captain W. P. G. Graham, A.M.S., who is now serving with the Egyptian army, has been selected for Surgeon-Major Laffan's appointment.

THE EXAMINATION OF SURGEON-CAPTAINS FOR PROMOTION.

BRIGADE-SURGEON-LIEUTENANT-COLONEL NOTTER, Professor of Military Hygiene, Netley, takes exception to some remarks in the BRITISH MEDICAL JOURNAL of April 7th on this examination, especially on a question referring to the potential energy of foods. In our remarks the term "foot tons" was introduced, which, although not in the question, is certainly implied, and a legitimate gloss on the query, "How much of these (milk, bread, butter) would supply the different proximate aliments in sufficient quantity for a standard diet in ordinary work."

SURGEON-COLONEL COLAHAN, who, on promotion, succeeds to the post of Principal Medical Officer in Ireland, *vice* Surgeon-Major-General Collis, retired, is expected to join in Dublin about the first week in May, having left the Cape on April 10th.

MEDICO-LEGAL AND MEDICO-ETHICAL.

ACTION BY A MEDICAL MAN AGAINST COLONIAL JUDGES.

ANDERSON *v.* GORRIE AND OTHERS.

IN this case the plaintiff, Dr. Richard Benjamin Anderson, F.R.C.S., sue Sir John Gorrie, formerly Chief Justice of Trinidad and Tobago, and who since the commencement of the action, had died, and Mr. John Cook and Mr. Charles Frederick Lumb, formerly Judges of the Supreme Court of Trinidad and Tobago, to recover damages for alleged false imprisonment and illegal and malicious prosecution. The plaintiff appeared in person; Mr. Bigham, Q.C., Mr. Joseph Walton, Q.C., and Mr. N. J. Synnott for Dr. Lumb; and Mr. Adam Walker and Mr. H. Hodge for Mr. Cook.

The plaintiff, in his statement of claim, set out that besides practising his profession in Tobago he was the owner of sugar and cocoa plantations there, and that in consequence of his sending a petition to Her Majesty, representing that a gentleman for whom he was acting under a power of attorney had suffered certain grievances, he was proceeded against in the Supreme Court of Trinidad for contempt of court, and that the rule issued against him was adjourned from time to time for some six months, and then discharged, without any provision being made for plaintiff's costs. His contention was that the prosecution was illegal, and further he complained that during an examination as to his ability to satisfy some judgments in regard to which had been improperly obtained, the defendant Cook ordered him, in default of his entering into a bond of one surety for £100, to be detained in custody. He alleged that the bail demanded was excessive, and he was detained for some days. He further contended that the defendants acted maliciously and without jurisdiction, and with a knowledge that they had no jurisdiction with regard to various proceedings.

The defendants, in their pleadings, denied plaintiff's allegations, and said the proceedings against him were regular and in due course of law, and were within their jurisdiction. They also relied upon the fact that they were judges, and acted within their judicial discretion.

The Plaintiff made a lengthy statement in opening his case, in which he complained of the action of Sir J. Gorrie when he came to Tobago on that island being annexed to Trinidad for administrative purposes. He said that the Chief Justice saw natives in his chambers, and, having investigated their claims, directed a large number of writs to issue *in formâ pauperis*, and then, as he contended, illegally dealt with those very same cases. Plaintiff sued in six of these actions, and complained of the way in which they were heard and in which he was treated. Judgment went against him, and he went to Trinidad to appeal, and also acted for other persons under the power of an attorney. When the proceedings for contempt were taken against him, and he was subjected to the other grievances of which he complained, he alleged that the judges acted together against him under the influence of the Chief Justice, and detailed a variety of proceedings and appeals in regard to which he alleged this was the case.

THE RIGHTS OF SANITARY AUTHORITIES.

HIS HONOUR JUDGE STEAVENSON was engaged on Thursday, April 19th, at the Penrith County Court, in hearing a case affecting the right of sanitary authorities to order the removal of infected persons to a public hospital under certain circumstances. The plaintiff, Henry G. Davis, photographer, Penrith, sued the Local Board of Health for £50 damages, alleging that Dr. Robertson, the medical officer of the Board, had committed a trespass by entering plaintiff's house on October 2nd, and had, without plaintiff's consent, illegally removed Randolph Davis, son of the plaintiff, to the Fair Hill Infectious Diseases Hospital while suffering from scarlet fever. The plaintiff alleged that in consequence of the forcible removal his wife, who was ill at the time, received a shock, which caused her death on January 12th. His Honour, giving judgment, sympathised with the plaintiff in the loss which he had sustained, but declined to consider that it was the result of the removal. There was no evidence before him that death was caused by the shock brought about by that removal; therefore, he did not see that the Local Board ought to be held responsible, either in law or equity, for the much-to-be-regretted loss which the plaintiff had suffered. He gave judgment for the Board of Health, but declined to say anything about costs.

HERBALISTS AND ABORTION.

ANNIE BLAKE, a bottler at Messrs. Barrett's, died a few weeks ago in St. Thomas's Hospital. At the opening of the inquest her mother stated that she was recently taken ill, and went to an herbalist and purchased some pennyroyal, which was weighed and put into a packet. The evidence of the senior obstetric house-physician showed that abortion had been procured. He had no reason to suspect that instruments had been used. Ann Amelia Bennett, wife of a retired chemist's traveller, stated at the resumed inquest recently that she carried on the business of a herbalist at Lambeth, having been there four years. She purchased her stock herself. She had turned away gold rather than do anything unjust. She was very particular. Medical evidence as to the nature of the infusion was then given, and the coroner, in summing up, characterised the case as a suspicious one from the outset. He said that if the jury were of opinion that Mrs. Blake, at the time she gave her daughter the infusion, knew of the girl's condition, then she would be amenable to the charge of murder or manslaughter; if so, then the same remark was applicable to Mrs. Bennett, the herbalist. The jury found that the death was accelerated by the administration of the herbal infusion, which, in their opinion, was not given with criminal intent. The coroner said the case should act as a warning to Mrs. Bennett and other herbalists. He disallowed the expenses of all the witnesses except the doctors.

A NEW DEFINITION OF "CONSULTANT."

THE reason assigned by Dr. H. S. for declining to meet Dr. T. in consultation on the case of Mr. T., namely, that he "never meets any but consultants, that is, men holding hospital or infirmary appointments,"

is a very exceptional and anomalous proceeding, and, in our opinion, wholly indefensible, wrongful to the patient, and opposed to the true interests of the profession and the public, and adverse, moreover, to himself.

At the meeting of the London and Counties Medical Protection Society, Limited, on April 29th, Dr. Cleveland, Maida Vale, was elected president in place of Dr. Sewell, resigned. The case of Dr. Anderson, of Tobago and Trinidad, was discussed, and it was resolved that the sympathies of the meeting were in accord with Lord Stamford's Committee, and that Dr. Bullock and Dr. Younger be added to the committee.

FEES IN MIDWIFERY CASES WHERE ATTENDANCE IS NOT REQUIRED.

J. D. writes: Some months ago Mrs. B. called upon me expressly for the purpose of engaging me for her confinement, which she expected about the end of December. I heard nothing from her until some time in January, when a lady friend of Mrs. B. told me that the latter had been delivered safely of a child, and that another medical man had been sent for. I immediately sent in my account to Mr. B. for my full fee of one guinea, followed a few days later, as no notice was taken of the account, by a sharp note to the effect that I was determined to enforce payment of my fee. Mr. B. thereupon called upon me, and as he seemed courteous and inclined to arrange the matter amicably I consented to do so upon payment of half a guinea. This took place on January 21st, and I considered the matter at an end, when I received a note from Mr. B. a few days ago enclosing a cutting, evidently from *Tit Bits*, demanding on the strength of the advice given by that journal the return of the half guinea he paid me, threatening legal proceedings if I refused to do so within twenty-four hours. I thereupon wrote back to him at once as follows: "In reply to your note I wish to say that I shall not only defend any action you may choose to take, but also counter-claim the 10s. 6d. which I deducted from the fee due to me as an act of courtesy, and in order to prevent litigation. Judges' verdicts are more valuable than cheap advice from *Tit Bits*.—Yours, etc." I don't know yet whether Mr. B. intends to carry out his threat, but I should think that the matter is now at an end; but as the subject is of great importance to the profession, and in view of the large circulation of *Tit Bits*, I thought it advisable to bring the matter before your notice, and at the same time ask whether the course I took was legal, and in accordance with the custom which we follow.

*** Whether or not our correspondent would have successfully brought an action in the first instance, we are of opinion that the payment and acceptance of the half fee was in the nature of a compromise of the claim, and that any action by Mr. B. to obtain repayment of it would be unsuccessful. With regard to the subject generally, it is difficult to lay down any rule of procedure in such cases. Each case would have to be considered on its merits, and from every point of view. We are of opinion, however, that any such action by a medical practitioner would take the form of an action for damages for breach of contract, not for payment of the fee as such where the services were not actually rendered. The contract and breach would have to be established, and the damages given might be nominal only.

THE ADMINISTRATION OF ANÆSTHETICS.

Practitioner desires to know if there is any law with regard to the administration of anæsthetics. Also whether dentists (registered *sine* diploma) are justified in administering nitrous oxide gas. The gas is administered by dentists who do not hold the L.D.S. diploma, and also by persons who are not even registered, and who evade the Dentists' Act by advertising themselves as "Mr. So-and-So, Artificial Teeth, Painless Extraction, etc."

*** We are not aware of any statute regulating the administration of anæsthetics. In case of injury resulting from any such administration by an unqualified person he would doubtless be held liable in damages or otherwise on proceedings being taken, if he were not able to establish the fact that he was possessed of, and exercised, competent skill.

A CONSULTANT (?).

A. G. S.—A., a consulting surgeon, sees a patient of B.'s at patient's house in consultation. Three weeks after B. sends patient with letter to A.'s house for a second consultation, when A. prescribes a certain course of treatment which he does not disclose to B., and requests the patient to consult him (A.) at his (A.'s) house once a week until further notice, and this, too, without A. communicating with B. in any way.

*** Assuming that the above statement fairly represents the facts, there can be no doubt in regard to the unprofessional course pursued by the consultant "A." in the case referred to, and which, if persisted in, cannot fail to sooner or later meet with a just requital in the loss of consultative practice.

AN ANXIOUS BROTHER.

A Member B.M.A. writes: I have lately had a patient under my care suffering with heart mischief and chronic Bright's disease. I have met the leading doctor from a neighbouring town in consultation on the case, and all seemed to be going well, when on going to see the patient recently I was informed that his brother had appeared from London, and had brought a physician friend, who had examined my patient and had promised to send medicines and pills from London, and to cure him of certain of his troubles in a very short time. No information had been given to me of the proposed visit, and I have not heard from him at all as to what remedies he intends to use, but the wife of the patient has asked me to continue my attendance. I have declined to do so, and shall be glad if you will give me your opinion if the "physician from London" has acted rightly in so interfering with my treatment, as far as I am informed not having been requested to do so by the patient. The physician in question is stated in the *Medical Directory* of this year to be a L.S.A. and a member of the British Medical Association. He may have been requested to visit and examine my patient by the brother of my patient, but nevertheless before doing so he should have acquainted me with the wishes of the brother. Has he been guilty of infamous conduct, and is there any remedy against such conduct being continued by men holding the L.S.A. and being members of the British Medical Association?

*** A careful consideration of the points involved in the above case leads us to the conclusion that to the injudicious meddling of the anxious brother of the patient (whom we feel impelled to exonerate from complicity therein) must be attributed the very unprofessional interference with our correspondent's treatment, in relation to which it is scarcely necessary to observe that no true consultant would have lent himself to so unethical a proceeding as that alleged against the brother's "physician friend," whom, on reference to the *Medical Register*, we find to be a comparatively young L.S.A. Though ethically indefensible as we hold his conduct to be, it does not constitute "infamous conduct" in the technical acceptation of the term. It may at the same time be well to note that, in our opinion, "A Member" would have acted wisely, and evinced a truer medico-ethical spirit towards the blameless patient, if, ere declining to continue his attendance, he had written to the L.S.A. in question and solicited an explanation of his alleged unethical procedure, and have been guided in his ultimate decision by the intervening practitioner's reply.

BUSINESS AND PLEASURE.

Perplexed writes: A. and B. are two practitioners in a town. A. is constantly absenting himself from home on pleasure. A message is sent to his house to attend a labour case; as usual, he is away. A. has been engaged for the case, but has never been in attendance. B. is requested by the annoyed husband to attend and take charge of the case. The case turns out to be a very difficult one, and B. has a lot of trouble with it. Is B. justified, at the particular request of the friends, in continuing his attendance on the case?

*** In the absence of any ethical rule, other than inferential, on the exceptional point submitted, we may note that when a practitioner neglects his professional duties in quest of pleasure and amusement, he is neither morally nor medico-ethically entitled to the exercise of the customary fraternal courtesy in officiating as his substitute at an accouchement under the circumstances related by "Perplexed;" nevertheless, we would not counsel our correspondent in the present instance to act otherwise than in accordance with the principle laid down in the following rule:

"When a practitioner is called in, or otherwise requested, to attend at an accouchement for another, and completes the delivery, or is detained for a considerable time, he is entitled by custom (except in the case of illness, etc., provided for by Rule 3), to one half of the fee, but on the completion of the delivery, or on the arrival of the pre-engaged accoucheur, he should resign the further management of the case. In a case, however, which gives rise to unusual fatigue, anxiety, and responsibility, it is right that the accoucheur in attendance should receive the entire fee. Note.—In either event, when the officiating accoucheur is a stranger, or a non-acquaintance of the family doctor, the full fee should be tendered to him."—*Code*, Chap. ii, sect. 5, rule 12.

MEDICO-PARLIAMENTARY.

[Specially Reported for the "British Medical Journal."]

HOUSE OF COMMONS.

Paraffin Lamps.—In reply to Mr. Paul, who put a question as to a fatal fire caused, as so often happens, by the upsetting of a paraffin lamp, Mr. Asquith said that he had no knowledge of the circumstances of the case, and therefore could not say what was the nature of the oil that had caused the disaster. No returns of petroleum accidents were made to the Home Office, and the local authority in the matter was the London County Council.

The Contagious Diseases Acts.—Mr. Jeffreys asked the Secretary of State for War whether he had noticed the increase of venereal diseases among the troops according to the return made to the House in January last; whether he was aware that the percentage of cases of the most severe form of the disease had been trebled during the last fourteen years at the military stations of Gibraltar, Malta, and South Africa; that the percentage had been raised by seven times in the West Indies, and that the increase in India was decimating our troops: and what steps he could take to check and remedy a disease which ruined so many of our soldiers.—Mr. Campbell-Bannerman replied that he had noticed the statistics in question, but they contained so many unaccountable fluctuations that it was difficult to deduce any conclusion from them. In the case of India the increase demanded serious attention, and the Secretary of State for India had under his consideration certain proposals of the Army Sanitary Committee which, it was hoped, would tend to improve the health of our troops without reviving in any way the measures to which the House had objected.—Replying on Monday to questions from Mr. Stansfeld and Sir R. Temple as to Indian cantonment

regulations, Mr. H. H. FOWLER said that the Secretary of State for India in Council—at that time Lord Kimberley—had on March 1st informed the Government of India that, in his opinion, the only effective method of preventing the recurrence of any practices inconsistent with their orders and with the resolutions passed by the House of Commons on June 5th, 1888, was to proceed by means of legislation. He requested them to undertake the necessary legislation as soon as possible, indicating the form in which this should be effected, and desiring them to issue a resolution explaining the policy of that legislation, and prohibiting all practices, as distinguished from rules and regulations, inconsistent with that policy.

First Aid to the Injured.—In answer to Sir J. LENG, who asked whether it would be practicable, in view of the number of accidents reported monthly from factories, mines, and workshops, to extend a knowledge of "first aid" among managers, superintendents, and foremen, Mr. G. W. RUSSELL said that much was already done by ambulance associations, and the Education Department approved of lectures on this subject in continuation schools; but he was not sure that it was possible to take further steps in the matter.

Deaths from Carbolic Acid.—Mr. ACLAND, in reply to Mr. MACDONA, said that the Registrar-General could not give the number of deaths from poisoning by carbolic acid; but since the beginning of the year forty-two deaths from that cause had been reported in the *Pharmaceutical Journal*. It was not expedient to place an article like carbolic acid, which was used for disinfecting and other purposes, under the restrictions of the Pharmacy Act, which would confine the sale exclusively to chemists and druggists; but the Government were considering whether an amendment of the law could not be made so that some precautionary regulations might be applied to the sale of carbolic and other poisons. He was afraid, however, that no law would restrain persons from committing suicide; but deaths from the accidental use of such compounds might probably be lessened by legislation.

Alleged Death from Vaccination.—Mr. HOPWOOD asked the Parliamentary Secretary to the Local Government Board whether his attention had been called to the death of a child named Simeon Dawson, who died on March 3rd, at Bury, after much suffering following on vaccination performed on January 13th; whether he was aware that the doctor who operated on and attended the child gave a certificate, which the registrar declined to receive, of death, primarily from vaccination, and secondarily from pyæmia; what communication had been made to the registrar; and whether information of the case had been sent to the Royal Commission on Vaccination.—Sir W. FOSTER said that all the information he had was that the cause of death was entered as "vaccination; pyæmia;" certified by J. Silverwood, L.R.C.P. The registrar did not decline to receive the certificate, but sent a certified copy to the Local Government Board on March 6th, on which day the particulars of the case were forwarded to the Royal Commission on Vaccination.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

EXAMINERS.—Mr. H. H. Clutton, M.B., F.R.C.S., and Dr. Laurence Humphry have, on account of the large number of candidates, been appointed additional Examiners in Surgery and Medicine respectively for the Third M.B. Examination.

EXAMINATION IN SANITARY SCIENCE.—The following candidates have satisfied the examiners in both parts of the examination for the diploma in Public Health: D. Arthur, M.B., M.C.Glasg.; J. E. Beggs, M.B., B.C.Camb.; B. M. Bond, M.R.C.S., L.R.C.P.; J. B. Byles, M.R.C.S., L.R.C.P.; F. G. Clemow, M.B., M.C.Edin.; H. Davis, M.R.C.S., L.R.C.P.; C. E. Douglas, M.B., M.C.Edin.; A. O. Evans; C. E. P. Fowler, F.R.C.S., L.R.C.P.; J. H. R. Garson, M.B., M.C.Edin.; S. A. Harriss, M.B., M.C.Edin.; S. Hassan; H. Hendley, M.R.C.S., L.S.A.; V. J. Hodgson, M.R.C.S., L.R.C.P.; B. H. F. Leumann, M.R.C.S., L.R.C.P.; E. P. Manby, M.D.Camb., M.R.C.S.; E. S. Peck, M.B., B.C.Camb.; J. W. W. Stephens, M.B., B.C.Camb.; J. T. Walker, M.B., B.C.R.U.I.; J. G. Wilson, M.R.C.S., L.S.A.

UNIVERSITY OF DURHAM.

EXAMINATION FOR DEGREES IN MEDICINE AND SURGERY: APRIL, 1894.—Second Examination for the degree of Bachelor in Medicine. The following candidates have satisfied the examiners:

First Class Honours.—H. L. Hatch, M.R.C.S., L.R.C.P., D.P.H., St. Mary's Hospital; J. Coltman, College of Medicine, Newcastle-upon-Tyne.

Second Class Honours.—A. G. W. Pearson, College of Medicine, Newcastle-upon-Tyne; H. D. Senior, Charing Cross Hospital; H. H. C. Dent, Mason College, Birmingham; A. M. Rygate, Guy's Hospital; E. F. Pratt, L.R.C.P.Lond., Mason College, Birmingham; E. H. Sutcliff, St. Thomas's Hospital; J. W. King, College of Medicine, Newcastle-upon-Tyne; P. Holgate, College of Medicine, Newcastle-upon-Tyne.

Pass List.—J. C. Anderson, College of Medicine, Newcastle-upon-Tyne; P. L. Armstrong, College of Medicine, Newcastle-upon-Tyne; A. Baker, St. Thomas's Hospital; M. F. Cahill, L.R.C.P., L.R.C.S.I., Medical School, Catholic University, Dublin; W. S. Carpenter, M.R.C.S., L.R.C.P., St. Mary's Hospital; R. A. Dunn, M.R.C.S., L.R.C.P., St. Bartholomew's Hospital; W. G. Fell, College of Medicine, Newcastle-upon-Tyne; J. J. Foster, Guy's Hospital; R. B. Greaves, Sheffield School of Medicine; J. B. Hughes, University College, Liverpool; L. W. Light, St. Thomas's Hospital; J. D. Shapland, B.A., University College, London; H. Simmons, M.R.C.S., L.R.C.P., L.S.A., Bristol Medical School; W. Simpson, College of Medicine, Newcastle-upon-Tyne; N. Sheridan, College of Medicine, Newcastle-upon-Tyne; A. E. Stevens, St. Thomas's Hospital; T. H. Urwin, College of Medicine, Newcastle-upon-Tyne; M. Varey, College of Medicine, Newcastle-upon-Tyne; R. A. Walter, M.R.C.S., L.R.C.P., St. Bartholomew's Hospital; A. Warner, St. Thomas's Hospital; J. Wreford, M.R.C.S., L.R.C.P., London Hospital.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

THE following gentlemen passed the First Examination of the Board under the "Five Years" Regulations in the subjects indicated:

Part I. Chemistry and Physics.—A. T. Abadjian, London Hospital; W. Andrus, London Hospital; A. G. H. Anthonisz, University College, London; F. Atthill, Charing Cross Hospital; E. C. Barnes, London Hospital; W. H. I. Bathurst, King's College, London; K. De R. Bell, King's College, London; E. F. B. Beyer, Owens College, Manchester; F. J. G. Blake, Yorkshire College, Leeds; E. K. Brown, London Hospital; J. W. Brown, Charing Cross Hospital; E. C. Clements, Middlesex Hospital; F. A. Coates, University College, Bristol; S. H. G. Cory, St. Mary's Hospital; L. S. Daly, Middlesex Hospital; E. I. Davis, Guy's Hospital; A. M. Dodd, University College, Liverpool; C. S. S. Dunlop, University College, London; J. E. Dupigny, Guy's Hospital; F. K. Etlinger, University College, London; F. C. Forster, St. Mary's Hospital; P. Foster, Charing Cross Hospital; H. W. Fox, Guy's Hospital; C. H. Francis-Williams, St. George's Hospital; W. H. Galloway, Yorkshire College, Leeds; P. Gardiner, Middlesex Hospital; S. Gaster, London Hospital; J. G. Glasgow, St. Thomas's Hospital; E. S. Graham, St. Mary's Hospital; S. Harrison, Guy's Hospital; T. Hoban, St. Thomas's Hospital; F. P. Hughes, The Clifton Laboratory, Bristol; A. W. D. Hunt, Middlesex Hospital; T. Jones, Middlesex Hospital; D. V. Lowndes, London Hospital; W. McIlroy, Guy's Hospital; G. D. Maynard, University of Geneva; W. Meade, St. George's Hospital; P. E. Middleton, Yorkshire College, Leeds; F. M. Morris, London Hospital; J. H. Mules, Guy's Hospital; A. H. Norris, Owens College, Manchester; A. W. Nourse, Guy's Hospital; S. G. Penny, St. George's and Westminster Hospitals; E. E. M. Price, Free Library Science School, Wolverhampton; S. E. Price, Mason College, Birmingham; H. S. Roch, King's College, London; N. J. Roche, Charing Cross Hospital; H. C. Ross, St. Thomas's Hospital; D. Samuel, St. Mary's Hospital; E. P. Smith, Middlesex Hospital; E. B. Stevenson, St. Bartholomew's Hospital; E. Symes, University College, Bristol; A. J. Tayler, King's College, London; A. M. Thomas, Guy's Hospital; E. J. Tongue, Guy's Hospital; J. F. Walker, London Hospital; T. M. Walker, Guy's Hospital; C. F. Watson, Guy's Hospital; F. E. Wayte, Owens College, Manchester; L. W. W. Weaver, The Clifton Laboratory, Bristol; G. H. R. Welsh, London Hospital; W. H. G. Wittuck, Merchant Venturers' School, Bristol; S. J. Willcox, Merchant Venturers' School, Bristol; E. D. Wortley, St. Bartholomew's Hospital; E. A. Wraith, Yorkshire College, Leeds.

Part II: Practical Pharmacy.—T. P. Berry, Guy's Hospital; T. T. Blythe, London Hospital; T. W. S. Brown, private study; C. W. Chaplin, London Hospital; C. L. G. Chapman, Guy's Hospital; F. N. Deakin, Mason College, Birmingham; J. E. Dupigny, Guy's Hospital; J. B. C. Francis, Westminster Hospital; J. H. Harrison, Firth College, Sheffield; T. W. H. Landon, Guy's Hospital; J. I. W. Morris, St. Mary's Hospital; W. Mussellwhite, Guy's Hospital; B. G. Patch, St. Thomas's Hospital; E. E. M. Price, Free Library Science School, Wolverhampton; C. H. Pring, University College, Bristol; S. A. Ruzzak, Guy's Hospital; S. J. Smith, private study; W. H. M. Telling, Guy's Hospital; A. M. Thomas, Guy's Hospital; D. J. Thomas, private study; F. E. Walker, Guy's Hospital; R. le G. Worsley, St. George's Hospital.

Part III: Elementary Biology.—R. B. Ainsworth, St. George's Hospital; F. B. Alderson, Firth College, Sheffield; T. P. Allen, St. Bartholomew's Hospital; H. Aspinall, University College, Liverpool; L. A. Baiss, St. Bartholomew's Hospital; W. L. Baker, Guy's Hospital; F. R. Barwell, University College, London; H. S. Barwell, St. George's Hospital; V. Bateson, Yorkshire College, Leeds; W. F. Bennett, St. Bartholomew's Hospital; V. T. C. Bent, Guy's Hospital; S. Bentley, Firth College, Sheffield; H. M. Berncastle, Guy's Hospital; F. L. Berry, St. Bartholomew's Hospital; E. N. Berryman, St. Bartholomew's Hospital; E. F. B. Beyer, Owens College, Manchester; H. H. Bignold, Guy's Hospital; I. McW. Bourke, St. George's Hospital; W. F. Boyle, Mason College, Birmingham; J. Bradley, Mason College, Birmingham; A. H. Brewer, St. Bartholomew's Hospital; F. R. Brooks, St. Bartholomew's Hospital; J. W. Brown, Charing Cross Hospital; J. Brownrigg, University College, Liverpool; C. P. Burd, St. Bartholomew's Hospital; P. C. Burgess, Middlesex Hospital; G. G. Campbell, St. Bartholomew's Hospital; C. G. Catterall, Yorkshire College, Leeds; C. L. G. Chapman, Guy's Hospital; G. B. F. Churchill, Guy's Hospital; G. G. Churton, University College, Liverpool; E. P. Court, St. Bartholomew's Hospital; V. J. Crawford, Guy's Hospital; A. J. McN. Cuddon-Fletcher, St. Bartholomew's Hospital; A. W. S. Curtis, Yorkshire College, Leeds; T. D. Dawson, St. Bartholomew's Hospital; J. T. De Coteau, Guy's Hospital; A. M. Dodd, University College, Liverpool; R. E. Drake-Brockman, St. George's Hospital; H. L. Driver, St. George's Hospital; C. S. S. Dunlop, University College, London; J. N. Dyson, Guy's Hospital; R. F. Ellery, St. Bartholomew's Hospital; H. H. Elworthy, Westminster Hospital; E. A. Evans, Guy's Hospital; E. P. Farmer, Mason College, Birmingham; T. B. Fawley, Yorkshire College, Leeds; J. K. S. Fleming, St. Bartholomew's Hospital; F. C. Forster, St. Mary's Hospital; A. E. Francis, University College, London; W. H. Galloway, Yorkshire College, Leeds; J. Gardner, Firth College, Sheffield; G. E. Gask, St. Bartholomew's Hospital; E. G. Goddard, Guy's Hospital; G. P. T. Groube, St. Mary's Hospital; H. V. Gwynn, St. Bartholomew's Hospital; R. C. B. Hall, Mason College, Birmingham; A. E. Hamerton, Yorkshire College, Leeds; C. A. Hammond, St. Mary's Hospital; J. H. Harrison, Firth College, Sheffield; W. A. Henshaw, Mason College, Birmingham; C. J. Hewlett, Guy's Hospital; A. G. Higgins, St. Bartholomew's Hospital; T. Hoban, St. Thomas's Hospital; F. Horridge, St. Bartholomew's Hospital; J. Howells, Guy's Hospital; L. Humphrey, Guy's Hospital; H. W. Illius, St. Bartholomew's Hospital; J. W. Illius, St. Bartholomew's Hospital; A. R. Kay, St. Bartholomew's Hospital; R. A. R. Lankester, University College, London; A. D. Lewis, Guy's Hospital; C. T. Lewis, King's College, London; H. P. Lobb, St. Bartholomew's

Hospital; W. C. Long, St. Bartholomew's Hospital; E. A. Longhurst, Guy's Hospital; L. H. McGavin, Guy's Hospital; W. McIlroy, Guy's Hospital; W. E. G. Maltby, St. Bartholomew's Hospital; F. J. H. Martin, Guy's Hospital; A. Martin-Leake, University College, London; S. Mason, St. Bartholomew's Hospital; C. J. Mayhew, King's College, London; R. Michell, Guy's Hospital; P. E. Middleton, Yorkshire College, Leeds; N. Milner, Firth College, Sheffield; R. Milnthorp, Yorkshire College, Leeds; R. F. Moorshead, University College, Bristol; W. Mussellwhite, Guy's Hospital; F. Noakes, Charing Cross Hospital; A. W. Nourse, Guy's Hospital; J. W. Nunn, St. Bartholomew's Hospital; J. A. O'Dowd, Mason College, Birmingham; H. J. Orford, Mason College, Birmingham; L. E. Orton, Mason College, Birmingham; T. D. Paddock, University College, Liverpool; A. R. C. Parsons, King's College, London; S. B. A. C. C. Pennington, Guy's Hospital; R. A. G. Penny, St. George's Hospital; A. R. G. Pocock, University College, London; F. Pope, Mason College, Birmingham; C. H. Pring, University College, Bristol; D. W. Purkis, St. Bartholomew's Hospital; R. Raines, St. Bartholomew's Hospital; A. Reid, Guy's Hospital; F. G. Richard, St. Bartholomew's Hospital; J. B. Richardson, Mason College, Birmingham; W. S. Richardson, Guy's Hospital; G. A. Roberts, King's College, London; J. H. Roberts, Guy's Hospital; W. E. B. Roberts, Mason College, Birmingham; H. H. Robinson, Owens College, Manchester; E. F. Rose, St. Bartholomew's Hospital; E. R. Row, Guy's Hospital; B. S. Sanders, University College of South Wales, Cardiff; L. D. Saunders, King's College, London; A. H. M. Sawart, Guy's Hospital; E. C. Sawdy, St. Mary's Hospital; C. B. Sells, Guy's Hospital; E. W. H. Shenton, Guy's Hospital; G. V. Smallwood, Mason College, Birmingham; W. C. B. Smith, St Bartholomew's Hospital; C. S. Stollerforth, University College, Liverpool; R Storrs, St. Bartholomew's Hospital; H. C. Sturdy, Guy's Hospital; J. A. Swindale, Mason College, Birmingham; T. H. Talbot, St. Bartholomew's Hospital; J. Taplin, Mason College, Birmingham; P. Tatchell, St. Bartholomew's Hospital; T. W. Tetley, Yorkshire College, Leeds; A. R. Thomas, Guy's Hospital; C. B. Thomson, Guy's Hospital; E. J. Tongue, Guy's Hospital; C. E. Turner, University College, London; H. S. Turner, Guy's Hospital; N. Unsworth, St. Thomas's Hospital; H. E. Utting, Mason College, Birmingham; T. M. Walker, Guy's Hospital; H. E. Waller, St. Bartholomew's Hospital; C. F. Watson, Guy's Hospital; R. Watts, Firth College, Sheffield; L. W. W. Weaver, University College, Bristol; H. G. Webster, University College, Liverpool; G. W. S. Williams, St. Bartholomew's Hospital; A. O. B. Wroughton, St. Bartholomew's Hospital; T. L. Wyndham, St. Bartholomew's Hospital.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH, ROYAL COLLEGE OF SURGEONS OF EDINBURGH, AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

The quarterly examinations for the Triple Qualification in Edinburgh took place in April with the following results:

First Examination.—Four Years' Course.—Of 15 candidates the following 11 passed:

J. C. Pemberton, C. Wakeham, E. V. Halliday, T. C. K. Kurup, J. H. O'Sullivan, C. E. Player, G. Singh, R. E. Russell, W. B. Grannum, S. W. Morton, and J. N. Keith.

One candidate entered for a division and failed.

Five Years' Course.—Of 17 candidates the following 14 passed: W. L. Cribb, Flora Rosina Cartwright Wood, G. J. Meikle, Harriet Amelia Scott Bird, R. W. Rees, W. Robertson, D. S. Taylor, Maud Varley Everett, R. J. Pearson, M. Rust, Edith Mary Paton, Gertrude Mary Hutton, Rosina Jane Gillam, and R. J. Isaac.

Of 13 candidates who entered for the respective divisions 9 passed.

Second Examination.—Four Years' Course.—Of 52 candidates the following 3 passed:

P. Wykesmith, H. J. D. Mackay, S. Johnson, G. P. Searle, M. F. Lyden, W. Craig, D. A. Chalmers, Agnes Irene Sinclair Coghill, W. C. E. Donoghue, P. B. Unwin, E. V. Halliday, H. B. Palmer, W. Squibbs, C. E. Player, J. Jeffares, W. C. Millea, Rose Govindu Rajulu, Isabella Aitken, A. J. Nevett, P. Power, W. Bratton, J. C. P. Reardon, A. Smith, Annie Caroline Smith, E. Wright, W. J. S. Clucas, Mary Finch Nannetti, Isabella Hardie Curr, Winifred Jane Pierce, W. J. Gething, H. H. Warren, J. N. Keith, and W. J. N. Davis.

Of 15 candidates who entered for the respective divisions 6 passed.

Five Years' Course.—The following eight candidates entered and passed: Ethel Louie Starmer (with distinction), Mildred Jane Wallace (with distinction), J. R. Morris, J. Cranke, J. Dodds, R. F. Flood, W. H. Cox (with distinction), and J. G. Murray.

Final Examination.—Of 77 candidates the following 48 passed and were admitted L.R.C.P.E., L.R.C.S.E., and L.F.P.and S.G.:

H. Downes, G. Prentice, H. W. Vaughan, J. J. Wallace, C. C. Piper, P. G. J. Kennedy, Florence Hope Dissent, Mary Barnard, R. E. Ingram-Johnson, W. Ranson, J. Garner, J. T. Woodhouse, T. E. Price, W. F. Stevenson, E. K. Johnstone, Catherine Mabel Blackwood, W. H. T. Vallange, H. P. Butterworth, F. C. Rundle, D. Stephenson, W. J. Gething, Elizabeth Marianne Erskine, W. A. Hardiker, C. W. Laver, J. Gorman, C. W. Lawson, R. A. McWilliam Robinson, J. Meade, S. Finkelstein, V. E. Chang, A. T. Anderson, J. I. Johnson, C. B. Roscrow, Grace Haxton Giffen, W. T. Wood, J. H. Ewart, C. G. Foggs, W. H. Barnby, H. J. Palmer, J. J. Fitzgerald, C. E. Conran, E. F. O'Ryan, F. W. Clark, J. H. E. Trout, W. O. Evans, A. B. Francis, E. H. Ohlmus, and J. B. O. Richards.

Of 20 candidates who entered for the respective divisions, 9 passed.

SOCIETY OF APOTHECARIES OF LONDON.

Pass List, April, 1894.—The following candidates passed in:

Surgery.—G. S. J. Boyd, London Hospital; C. E. R. Bucknill, St. Mary's Hospital; P. W. Campbell, St. Thomas's Hospital; M. A. Cooke, St. Bartholomew's Hospital; J. W. A. Cooper, King's College; F. R. S. Cosens, London Hospital; A. W. Hayles, King's College; K. M. Hunter, Royal Free Hospital; R. E. T. Ingram, Guy's Hospital; G. J. R. Lowe, St. Bartholomew's Hospital; W. Mansergh, Manchester; W. R. Meyer, King's College; R. D. Moore, St. Mary's Hospital; W. G. Noble, London Hospital; M. H. C. Palmer, London Hospital; J. H. R. Pigeon, Bristol; E. H. Read, London Hospital; T. E. Rice, King's College; W. H. Richards, London Hospital; A. R. P. Sanderson, St. Thomas's Hospital; J. D. Small, Bombay; J. F. Smart, St. Thomas's Hospital; J. B. D. St. Cyr, St. Bartholomew's Hospital; A. B. S. Stewart, Leeds; J. F. Stockwell, St. Mary's Hospital; W. H. Symons, St. Bartholomew's Hospital; W. P. Thomas, London Hospital; F. S. Tidcombe, St. George's Hospital.

Medicine, Forensic Medicine, and Midwifery.—V. J. Batteson, London Hospital; G. A. Jelly, Manchester; R. L. Jones, Middlesex Hospital; H. C. Renshaw, Manchester; J. P. Rerrie, Bellevue, New York; G. Schilling, St. Thomas's Hospital; P. M. Toms, Middlesex Hospital; R. A. Young, Middlesex Hospital.

Medicine and Forensic Medicine.—T. P. Stokes, Sheffield.

Medicine.—C. P. T. Edwards, University College; L. G. W. Tyndall, St. Mary's Hospital.

Forensic Medicine and Midwifery.—C. E. R. Bucknill, St. Mary's Hospital; R. D. Cox, St. Mary's Hospital; W. R. Fisher, London Hospital; F. H. H. Francis, Guy's Hospital; M. Umanski, Kharcoff.

Forensic Medicine.—J. K. Birdseye, St. Bartholomew's Hospital; J. H. R. Pigeon, Bristol; A. E. Pryse, University College; J. R. M. Richmond, King's College; J. F. Stockwell, St. Mary's Hospital; G. E. Williams, London Hospital.

Midwifery.—D. D. Brown, St. Bartholomew's Hospital; A. L. M. Churchill, Westminster Hospital.

To Messrs. Cosens, Edwards, Francis, Jones, Moore, Pryse, Renshaw, Richmond, Schilling, Small, Stewart, Stockwell, Toms, Sanderson, Symons, Young, and Miss Hunter was granted the diploma of the Society entitling them to practise Medicine, Surgery, and Midwifery.

OBITUARY.

CHARLES GIBSON, M.D. Dunelm. (Hon. Caus.), M.R.C.S.

We regret to have to report the death of Dr. Charles Gibson, of Newcastle, which took place on April 21st, at the age of 74 years. The deceased was born in the little village of Bell's Close, on the banks of the Tyne. Up to the age of 12 he was educated at a country school. He afterwards continued his scholastic education in Newcastle, and was in 1835 apprenticed to Mr. Carr, then a medical practitioner in Newcastle. Three years later he became attached as a student to the Newcastle Infirmary, and to the Newcastle School of Medicine and Surgery. In 1842 he took the diploma of M.R.C.S.Eng., and commenced practice. In 1851 he graduated M.D. at St. Andrews University. In the winter session of 1845-6, he became Lecturer in Anatomical Demonstrations and Dissections in the Newcastle School of Medicine, but resigned three years later. After the disruption, and on the formation of the new College of Medicine, he became lecturer on midwifery and diseases of children. In 1856 he was elected physician to the Newcastle Dispensary, and on resigning that post in 1873, he was elected consulting physician. In 1859 the degree of M.D. was conferred upon Dr. Gibson by the University of Durham in recognition of his services to the College of Medicine. Dr. Gibson took an active part at the recent meeting of the British Medical Association at Newcastle last year.

We regret to have to announce the death of Mr. Samuel Connor, L.R.C.S., L.M.Edin., L.A.H.Dub., of Newry, which took place on April 14th. The deceased was born at Stoneyford, county Antrim, in 1837, and took the qualifications of L.R.C.S.Edin. in 1858 and L.A.H.Dub. in 1861. He commenced practice in Belfast, and on the retirement from practice of his uncle in 1862 he went to Newry and took over the practice. Dr. Connor was appointed a justice of the peace in 1886. He leaves a widow and several children to mourn his loss.

Dr. Alexander Marshall, of Kilmarnock, died on April 16th, of heart disease after one hour's illness, aged 68. He graduated M.D. with honours at Glasgow University in 1851, and in 1852 became L.F.P.&S.Glasg. The deceased commenced practice in Kilmarnock forty-three years ago, and had a very extensive country practice. He was a man greatly devoted to his profession, a great friend of the poor, and had endeared himself to a large circle of friends by his kind, homely manner. As a token of respect, the magistrates gave him a public funeral. The coffin, of polished oak, was covered with wreaths sent by his patients and friends.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns, including London, 8,077 births and 3,854 deaths were registered during the week ending Saturday, April 21st. The annual rate of mortality in these towns, which had declined from 20.0 to 19.3 per 1,000 in the preceding three weeks, further fell to 18.2 last week. The rates in the several towns ranged from 11.9 in Portsmouth and 13.0 in Croydon to 22.9 in Preston and 26.4 in Wolverhampton. In the thirty-two provincial towns the mean death-rate was 18.3 per 1,000, and slightly exceeded the rate recorded in London, which was 18.1 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.6 per 1,000; in London the rate was equal to 3.3, while it averaged 2.1 per 1,000, in the thirty-two provincial towns, and was highest in Salford, Wolverhampton, and West Ham. Measles caused a death-rate of 2.6 in West Ham and 3.1 in Wolverhampton; scarlet fever of 1.1 in Swansea; and whooping-cough of 1.8 in Cardiff and in Salford. The mortality from "fever" showed no marked excess in any of the large towns. The 79 deaths from diphtheria in the thirty-three towns included 53 in London, 5 in West Ham, 5 in Cardiff, 4 in Birmingham, and 4 in Manchester. Four fatal cases of small-pox were registered in London, 3 in Birmingham, 2 in West Ham, and 1 in Manchester, but not one in any other of the thirty-three large towns. There were 148 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, April 21st, against 81, 95, and 102 at the end of the preceding three weeks; 59 new cases were admitted during the week, against 14, 26, and 31 in the preceding three weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,172, against 2,117, 2,109 and 2,128 at the end of the preceding three weeks; 260 new cases were admitted during the week, against 255 and 261 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday last, April 21st, 932 births and 499 deaths were registered in eight of the principal Scotch towns. The rate of mortality in these towns, which had been 21.2 and 19.7 per 1,000 in the preceding two weeks, further declined to 17.5 last week, and was 0.7 per 1,000 below the mean rate during the same period in the large English towns. Among these Scotch towns the death-rates ranged from 13.3 in Greenock to 23.8 in Leith. The zymotic death-rate in these towns averaged 1.6 per 1,000, the highest rates being recorded in Glasgow and Leith. The 244 deaths registered in Glasgow included 2 from small-pox, 12 from whooping-cough, and 5 from "fever." Two fatal cases of diphtheria were recorded in Leith.

SMALL-POX AND VACCINATION.

Dr. Gale, in his Report for 1893 as Rural Medical Officer of Health to the Ecclesall Board of Guardians, Sheffield, says that in the past year 222 cases of small-pox were notified; 130 were among vaccinated, 19 doubtful, and 73 in unvaccinated persons. Of this total 19 died; the ratio being: vaccinated, 0; doubtful, 3; unvaccinated, 16; the percentage being, vaccinated, 0 per cent.; doubtful, 15.6; and unvaccinated, 19.1 per cent. Dr. Gale points out that although numerically speaking more vaccinated were afflicted than unvaccinated, it must be remembered that even among the navvy class the latter were much less numerous than the former proportionately, and that the death-rate among them was much higher. As far as he could ascertain no person revaccinated successfully took the disorder. The greater number of cases occurred among the navvies—only 23 being among the native population.

VACCINATION.

Mr. C. J. Trimble, reporting to the Preston Rural Sanitary Authority, states that "the free hand given to medical men as a body has done much to discredit vaccination." Medical men have, indeed, not been taught sufficiently in their student days that the duration of the protection afforded by vaccination is dependent on the efficiency with which the operation is performed—that one or two insertions do not protect so long as a greater number. Comparatively very few members of the profession have any opportunity of learning this lesson from any actual experience of their own, such as connection with a small pox hospital affords, and hence, unless the lesson is taught by those who have this experience, it is too apt to be disregarded. Vaccination is judged by vaccination as practised in this country, and is apt to be discredited by the inferior protection afforded by an inefficient operation. This is one of the points to which the Royal Commission must give its attention, and upon which we hope it will have something to say when its final report is published.

THE HORNSEY BOARD AND SEWER GAS.

At a recent meeting of the Hornsey Local Board the annual report of the medical officer of health was under consideration. Exception appears to have been taken by certain members of the Board to the opinion expressed in the report to the effect that each house should be protected from sewer gas by a proper intercepting trap, and that no dwelling can be considered secure unless the sewer gases are completely severed from its drainage system. The Board did not content itself with an expression of opinion on the subject of intercepting traps, but appeared to think that it was within its province to suggest to the medical officer of health that he should modify his own opinion on the subject. As the Hornsey Board has hitherto enjoyed the character of leading the way in the matter of sanitary reform, their action in the present instance appears the more inexplicable.

WATER SUPPLY TO BATHS.

An important case has just been before Mr. Justice Chitty. The question under consideration was whether a fixed bath in a house was to be charged for separately by the Lambeth Waterworks Company at the rate of ten shillings per annum, or whether it should be included under "a domestic water supply." Mr. Justice Chitty has given his decision in favour of the former view, and in point of law we are satisfied that this decision is sound. But our sympathies are with the larger use of baths; and we recognise with satisfaction that the learned judge distinguished between fixed and movable baths. The water companies are entitled to be paid for the water they supply, and if the public are dissatisfied with the conditions under which water is now supplied, the remedy is to vest such supplies in a municipal authority.

SMALL-POX ITS OWN DEATH WARRANT.

Once again the folly of delay in the matter of vaccination, and especially of revaccination, is being illustrated at Birmingham. Quite a panic appears to have seized the populace, and the vaccination stations are being besieged by applicants for the benefits of the operation for themselves or their little ones. All this seems to have followed the posting of notices setting forth the advantages of vaccinated over unvaccinated cases during the prevailing small-pox epidemic in that city. If this be so, it points very forcibly to the view which we have long held, that it is only necessary to place in the way of people the true facts of the case as to the relative proneness to attack, and especially fatal attack, of different communities according as they are unvaccinated, vaccinated, and revaccinated, to lead to a much more general spontaneous desire to secure the means of protection gratuitously afforded by the Vaccination Acts. Just now it is not the guardians of Birmingham alone who are enforcing the law, but the persistent prevalence of small-pox itself, which is leading people to the surgeon's lancet for vaccination and revaccination, and in this way is tending to bring about its own extermination.

INSANITARY AREAS IN BIRMINGHAM.

From a report of the Improvement Committee of the City Council of Birmingham it appears that in September last representations under the Housing of the Working Classes Act were made by the medical officer of health, Dr. Hill, in respect of two areas. The first of these covers upwards of 6,000 square yards, and contains a public house, sixty-seven dwelling houses, and a number of small workshops; the second covers upwards of 4,000 square yards, and contains sixty-five dwelling houses and a few workshops. The Committee having inspected the two areas, now recommend the Council to declare them to be unhealthy areas, and to undertake improvement schemes under Part I of the Act. It is estimated that the cost of acquiring the property should not exceed £16,000, and the Committee express the opinion that it would be desirable to utilise the sites forthwith for the erection of workmen's dwellings, to be let at low rentals; 116 new houses could be erected on the two areas, at a cost of about £18,000. The Council is recommended to authorise the Finance Committee to borrow a sum not exceeding £34,000, for the purpose of carrying these schemes into execution.

OUTBREAK OF FEVER AT CASTLEISLAND.

Since April 21st three deaths from typhoid fever have occurred at Castleisland, and the medical reports show that the epidemic is increasing. The hospital at Castleisland is overcrowded with patients, and a very large number are treated at their own homes.

PAYMENT OF NOTIFICATION ACCOUNTS.

B. J. M.—A great deal of unnecessary friction seems to be created in regard to the requirement of quarterly and other accounts of notification fees claimed. Whilst the rendering of a formal account at quarterly or annual intervals is doubtless a convenience to sanitary bodies, we cannot find that it is called for by the Act. The forwarding of a notification certificate to the health officer is a definite statutory duty which entitles the sender to a certain statutory payment.

DISTRICT MEDICAL OFFICER'S SALARY.

A Member of the British Medical Association in Cornwall, who has charge of a parish with a population of 1,200, says he receives only £6 10s. per annum for this duty, which gives an average of 5d. a visit. He asks if this can be considered sufficient; if not how much in equity ought he to be paid?

*** Many parochial districts are paid even less than this, but we consider three times the amount would be bare remuneration.

DISTRICT MEDICAL OFFICERS AND POLICE CASES.

C. F. W., who is a district medical officer, writes to say he was called by the police in the evening to see a tramp suffering from angina. He applied for a fee of 7s. 6d., but was told he could not claim a fee because it was against police rules and not customary in the county. He asks for information on this subject.

*** Our correspondent does not say whether his attendance was required at the police station or elsewhere. If at the former we believe he is entitled to a fee, but if his attendance was given to the patient in the public street at the request of the police we fear he cannot claim one.

German Ophthalmological Society.—In view of the meeting of the International Ophthalmological Congress to be held at Edinburgh this summer there will be no meeting of the German Ophthalmological Society at Heidelberg in 1894.

The King of Italy has conferred on Professor Virchow the Grand Cross of the Order of SS. Maurice and Lazarus.

MEDICAL NEWS.

London Lock Hospital.—Lord Randolph Churchill, in the absence of the Duke of Connaught, presided at the annual dinner of this hospital, held on Saturday, April 21st, at the Hôtel Métropole.

Donations and Bequests.—The Rev. Francis Jacox has given 1,000 guineas to the Middlesex Hospital to endow in perpetuity a bed in the new female cancer wards, in memory of his sister, Mary Janet Jacox.

Reopening of the Palace Hotel, Hastings.—On April 21st this hotel, which has undergone various alterations and has been redecorated throughout, was opened under the management of Messrs. Spiers and Pond, and will doubtless form a useful addition to the accommodation provided for visitors to Hastings.

The Attorney-General has given his consent to the residue of the legacy of the late Mr. R. Berridge being handed over in trust to the British Institute of Preventive Medicine, for the endowment of a laboratory specially devoted to the bacteriological and chemical investigation of the water supply, and the best means of the disposal of sewage.

Stray Dogs in London.—According to statistics compiled in New Scotland Yard, it appears the police captured 2,161 stray dogs last month in the streets of the metropolis, 1,846 of which were afterwards conveyed to the Dogs' Home at Battersea. During the above period 148 persons, including one constable, were bitten in the streets, and the police killed 12 dogs, one of which was found to be suffering from rabies.

"Accidental Death" at Football.—During a football match at Helpringham, near Sleaford, on April 21st, the goalkeeper for the Sleaford Ramblers, running out to meet the ball, came into collision with one of the opposing team, and was picked up dead. The *East Anglian Daily Times* reports that evidence given at the inquest was to the effect that the *post-mortem* examination showed that the neck was dislocated in two places. A verdict of accidental death was returned by the jury.

Queen's College, Belfast.—Dr. Barrett, who has held the Lectureship in Pathology at the Queen's College, Belfast, for the past two years, has been obliged to resign his post on grounds of health. Dr. William Russell, of Edinburgh, well known for his researches in connection with the heart, has consented to deliver the usual course of lectures during the coming summer session. Dr. Victor Fielden has been appointed to give instruction in practical pharmacy at the College, under the direction of Professor Whitla.

The Welsh Divorce Case.—At a meeting of the Swansea Medical Society the following resolution was unanimously passed: "That this meeting desires to express its sincere sympathy with Dr. T. D. Griffiths in having to defend himself against the gross and slanderous charges brought against him in the recent divorce case; they further desire to convey to him their hearty congratulations on the successful issue of the trial and the ample exoneration he received at the hands of the jury, with the concurrence of the Lord Chief Justice in their verdict."

Asylum Attendants.—The *Globe*, in a recent article, gives the evidence that asylum attendants are being elevated, and just praise is given to the Medico-Psychological Association for the part it is taking in methodising the training and testing the fitness of attendants for their work. Handbooks are being issued, and regular lectures are being given at many asylums, thus providing work which may be done by assistant medical officers. The addition, too, of lady companions and gentlemen companions to the staffs of well-regulated asylums, both public and private, is a great gain; by this means the general supervision by the chief medical authority is extended, and if the right persons are selected great advantages may accrue. We do not believe that all cases of insanity are to be treated better by gentlemen and ladies than by ordinary trained attendants, but we do hope to see the mental nurse rise to a level of the best general nurse.

The Proposed Pasteur Institute.—A deputations of inhabitants at Chelsea waited on Mr. Asquith at the Home Office on April 24th, to protest against the proposed erection of a Pasteur Institute on the Chelsea Embankment. Mr. Whitmore, M.P., Mr. H. Paul, M.P., and Mr. Birrell, M.P., accompanied the deputation. Mr. Whitmore said the building which was sought to be erected by the British Institute of Preventive Medicine would depreciate the property in the neighbourhood, and would be a possible source of infection to the inhabitants. Mr. Asquith, in reply, said that by giving a certificate of registration to an institute of this kind, the Secretary of State did not in the least degree fetter his discretion as to the experiments he would license in it. Those licences were granted to individuals for particular classes of experiments after careful consideration. He had no power to prevent the erection of this building, and he understood the site had been conveyed to the Institute. If the question of registration of the building as a place for experiments on living animals came before him, he would give due weight to the considerations they had laid before him. The Secretary of State had an absolute power of veto and control over any class of experiments for which permission was sought, and it would be his duty, in considering any such application, to consider also whether the place in which these experiments would be made was a fitting one. As at present advised, he had no intention of granting licences for experiments in the inoculation of hydrophobia. The duty cast upon the Secretary of State under the Act was a very invidious one, and in the performance of it he ought to give due weight not only to considerations of humanity, but also to those of the public and local convenience. Mr. Whitmore having thanked the Home Secretary, the deputation withdrew.

MEDICAL VACANCIES.

The following vacancies are announced:

CARDIFF UNION.—Assistant Medical Officer for the Workhouse. Salary, £100 per annum, with rations, apartments, attendance, and washing. Applications to Arthur J. Harris, Clerk, Queen's Chambers, Cardiff, by May 10th.

CARDIFF UNION.—Medical Officer for the Gabalva District. Salary, £30 per annum. No extra fees except lunacy. Applications to Arthur J. Harris, Clerk, by May 10th.

CLOGHEEN UNION.—Medical Officer for the Workhouse. Salary, £130 per annum. Applications to Mr. Ross Lonergan, Clerk of the Union. Election on May 1st.

DENTAL HOSPITAL OF LONDON AND LONDON SCHOOL OF DENTAL SURGERY, Leicester Square. Demonstrator. Honorarium, £50 per annum. Applications to Morton Smale, Dean, by May 14th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Two Assistant Anæsthetists. Applications to J. Francis Pink, Secretary, by May 14th.

DEWSBURY AND DISTRICT GENERAL INFIRMARY.—House-Surgeon, doubly qualified. Salary, commencing at £80 per annum, with board and residence. Applications, endorsed "House-Surgeon," to the Chairman of House Committee, Infirmary, Dewsbury, by May 1st.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—House-Surgeon. Board and residence provided, no salary. Applications to Thomas Hayes, Secretary, by May 5th.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, £120 per annum, with furnished house, rent and taxes free; also coal, light, water, and cleaning, or, in lieu thereof, £20 per annum. Knowledge of Welsh desirable. Applications to W. T. Cole, Secretary, Board Room, Bagillt Street, Holywell, by May 15th.

GENERAL HOSPITAL, Birmingham.—Assistant House-Surgeon. Appointment for six months. Residence, board, and washing pro id d. No salary. Applications to the House-Governor by April 28th.

HAMPSTEAD HOSPITAL, Parliament Hill Road, N.W.—Dental Surgeon. Applications to the Secretary by May 7th.

HUDDERSFIELD INFIRMARY.—Senior House-Surgeon and Junior House-Surgeon. Salaries, £80 and £50 respectively, with board, lodging, and washing. Applications to the Secretary by May 7th.

LEWISHAM UNION.—Medical Superintendent of the Infirmary; doubly qualified. Salary, £275 per annum, with unfurnished house, coals, gas, water, and washing. He will ultimately be appointed Workhouse Medical Officer, at an additional salary of £75 per annum. Applications, on forms to be obtained at the Union Offices, to H. C. Mott, Clerk to the Guardians, Union Offices, 286, High Street, Lewisham, S.E., by May 10th.

LONDON HOSPITAL, Whitechapel, E.—Medical Registrar. Salary, £100 per annum. Applications to the House Governor by May 5th.

MANCHESTER ROYAL EYE HOSPITAL.—House-Surgeon. Salary, £70 per annum, with residence, board, and washing. Applications, endorsed "House-Surgeon," to the Chairman of the Board of Management by May 2nd.

NORTH STAFFORDSHIRE INFIRMARY AND EYE HOSPITAL, Hartshill, Stoke-upon-Trent. Assistant House-Surgeon. Board, apartments, and washing provided. Applications to the Secretary by May 1st.

PARISH OF ST. LEONARD, Shoreditch.—Second Assistant Medical Officer for the Infirmary, Hoxton Street; doubly qualified. Salary, £40 per annum, with rations, furnished apartments and washing in the Infirmary. Applications to the Medical Officer, 204, Hoxton Street, N.

ROYAL HOSPITAL FOR CHILDREN AND WOMEN, Waterloo Bridge Road.—Resident Medical Officer. Appointment for one year. Salary, £70 per annum, with furnished apartments and board. Applications to the Secretary by May 1st.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—Assistant House-Surgeon. Appointment for six months, at the end of which period a gratuity of £10 will be given if found satisfactory. Applications to T. A. Fisher Hall, Secretary, by May 4th.

ROYAL VICTORIA HOSPITAL, Bournemouth.—House-Surgeon and Secretary. Salary, £100 per annum, with board. Applications to the Chairman of Committee by May 1st.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck Street, Cavendish Square, W.—Honorary Physician. Applications to the Secretary by April 30th.

SALFORD ROYAL HOSPITAL.—Honorary Medical Officer for the Pendleton Branch Dispensary, doubly qualified. Applications to the Secretary by April 28th.

SWORDS DISPENSARY DISTRICT, Swords, Balrothery.—Medical Officer for the District. Salary, £120 per annum as medical officer, and £20 per annum as medical officer of health, together with usual registration and vaccination fees, amounting to about £15 or £20 per annum. Applications to Mr. Michael Long, North Street, Swords, by May 1st.

VESTRY OF ST. MARGARET AND ST. JOHN, Westminster.—Medical Officer; not less than 25, or more than 45, years of age. Salary, £250 per annum. Applications, marked on the envelope "Medical Officer," to be delivered at the Town Hall, Westminster, S.W., by May 21st.

WESTERN GENERAL DISPENSARY, Marylebone Road, N.W.—House Surgeon; unmarried. Salary, £50 per annum, with board and apartments. Applications to the Honorary Secretary by May 3rd.

WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.—Surgical Registrar. Must be F. or M.R.C.S.Eng. Appointment for twelve months. Salary, £40 per annum. Applications to Sidney M. Quennell, Secretary, by May 22nd.

MEDICAL APPOINTMENTS.

BARNES, Mr. R., appointed Deputy Medical Officer for Barton.

BEAMISH, Dr., appointed Medical Officer to the Newry Fever Hospital, *vice* B. S. Booth, L.R.C.P.I., M.R.C.S.Eng., resigned.

BERRY, F. May Dickinson, M.D.Lond., appointed Assistant Anæsthetist to the New Hospital for Women.

CARLYON, T. B., M.R.C.S.Eng., appointed Honorary Surgeon to the Tenbury Dispensary.

DAVIDSON, Hugh A. C., L.R.C.P., L.R.C.S.Edin., L.F.P.S.Glasg., appointed Medical Officer for Halkirk, Caithness.

DAVIES, Evan, L.R.C.P., L.R.C.S.Edin., appointed Medical Officer of Health to the Maesteg Local Board.

EDINGTON, George Henry, M.B.Glasg., appointed Resident Medical Officer to the Royal Hospital for Sick Children, Glasgow, *vice* Walter K. Hunter, M.B.Glasg., resigned.

ELDER, George, M.B., C.M., appointed Resident Physician to the Royal Hospital for Sick Children, Edinburgh.

GARLAND, Edward Charles, L.R.C.P.Edin., M.R.C.S.Eng., appointed Medical Officer of Health for Yeovil Borough.

HARMAN, Albert B., M.R.C.S., L.R.C.P., L.S.A., appointed House-Surgeon to the Royal Hants County Hospital, Winchester.

HARRIS, John Henry, M.R.C.S.Eng., appointed Public Vaccinator for the 1st and 2nd Districts of the Kingsbridge Union.

HERBERT, A. W. C., L.S.A., appointed Medical Officer of Health for Southwold, *vice* F. H. Vertue, M.R.C.S.Eng., deceased.

HUTCHINSON, Robert, M.B., C.M., appointed Resident Physician to the Royal Hospital for Sick Children, Edinburgh.

QUARRY, Mr. H. H., appointed Assistant Medical Officer to the Infirmary of the Lambeth Parish.

RYAN, John, B.A., M.D., B.Ch., B.A.O.Trin.Coll.Dub., appointed Medical Officer to the Hollywell District of the Shoreditch Union, *vice* C. J. Kerton, M.B.Lond., L.R.C.P., M.R.C.S., resigned.

WILKS, Mr. S. L. B., appointed Medical Officer for the Grassington District of the Skipton Union.

DIARY FOR NEXT WEEK.

MONDAY.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. Macready: An Apparatus for Use after Inguinal Colotomy. Mr. Battle: Operation for Traumatic Subcutaneous Rupture of the Intestine. Mr. H. Allingham: A Case of Intestinal Obstruction treated by Cæcotomy, Enterectomy, and Closure of the Anus Præternaturalis. Sequel.

PARKES MUSEUM, 74A, Margaret Street, W., 8.30 P.M.—Lectures on Meteorology in Relation to Hygiene. III. Barometric Conditions and Air Movements. By Mr. R. H. Scott.

TUESDAY.

THE CLINICAL MUSEUM, 211, Great Portland Street.—Open at 2, Lecture at 4.

PATHOLOGICAL SOCIETY OF LONDON, 8.30 P.M.—Dr. Norman Moore: Tuberculous Ulceration of Colon with Hydrothorax. Dr. Habershon: Tuberculous Disease of Ovaries and Tubes, with Sinuses Opening into the Intestine and Bladder. Dr. Rolleston: Carcinoma of Trachea. Dr. Tooth: Alcoholic Neuritis. Dr. Fyffe: Primary Cancer of the Lung. Mr. Cecil Beadles: Disease of Sweat Glands. Mr. Jaffé: Diaphragmatic Hernia. Card specimens will also be shown.

WEDNESDAY.

OBSTETRICAL SOCIETY OF LONDON, 8 P.M.—Specimens will be shown by Mr. Cutler, Dr. William Duncan, Dr. Remfry, and others. Dr. J. Braxton Hicks: Intermittent Contractions of Uterine Fibromata, and in Pregnancy in Relation to Diagnosis. Dr. Remfry: Ligature and Division of the Upper Part of Both Broad Ligaments, and the Result as Compared with that following Removal of the Uterine Appendages.

POST-GRADUATE LECTURES, Metropolitan Hospital, N.E., 5 P.M.—Mr. Goodsall: Diseases of the Rectum.

THURSDAY.

PARKES MUSEUM, 74A, Margaret Street, W., 8.30 P.M.—Lectures on Meteorology in Relation to Hygiene. IV. Moisture, its Determination and Measurement. By Mr. W. Marriott.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM, 8.30 P.M.—Living and card specimens at 8 P.M. Mr. Hartridge: A Case of Scrofulous Keratitis. Papers: Mr. Priestley Smith: On Periodical Testing of Eyesight in Schools. Dr. A. W. Sandford: (1) Notes on Three Cases of Tubercle of the Iris. (2) A Case of Double Optic Neuritis from Caries of the Sphenoidal Cells and Intracranial Abscess. Mr. John Griffith: A Rare Form of Intraocular Melanoma. Dr. James Taylor: Optic Neuritis in its Relation to Cerebral Tumour and Trephining. Mr. N. C. Ridley: Some Points in the Histology of Trachoma. Mr. Simeon Snell: (1) Cases of Congenital Serous Cyst of Eyelids with Anophthalmos of Microphthalmos. (2) Osteoma of Orbit.

FRIDAY.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY, West London Hospital, 8.30 P.M.—Mr. W. H. Battle: Two Cases of Traumatic Rupture of the Liver. Dr. H. Macnaughton Jones: Rest, Physiological and Therapeutical, in the Treatment of Eye Affections. Mr. G. Charles Wilkin: Case of Epithelioma of the Ear (with Specimen) Treated by Injections of Pyoktanin.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTHS.

D'ERF WHEELER.—At Jerusalem, on April 5th, 1894, the wife of Percy D'Erf Wheeler, M.D., F.R.C.S.E., of a son.

PAYNE.—At Selly Oak, near Birmingham, on April 24th, the wife of W. A. Payne, M.A., M.B., of a son.

WHITEHOUSE.—April 24th, at The Oaks, Sunderland, the wife of the late John Whitehouse, F.R.C.S.Eng., of a son.

MARRIAGES.

FULLER—PURVIS.—On 19th April, at St. Alphege Church, Greenwich, by the Rev. Brooke Lambert, M.A., B.C.L., assisted by the Rev. C. E. Escreet, M.A., Rector of St. Mary's, Woolwich, Courtenay James Fuller, M.R.C.S., L.R.C.P., of 37, Rectory Place, Woolwich, to Clara Cornwall, youngest daughter of Prior Purvis, M.D.Lond., of 5, Lansdowne Place, Blackheath. At home (Rectory Place) on each Monday after 1st June.

MATHESON—ADAMS.—At Old Greyfriars Church, Edinburgh, on 25th April, by the Rev. R. G. Balfour, Free New North Church, assisted by the Rev. John Glasse, M.A., Augustus Alexander Matheson, M.D., F.R.C.P.E., to Emily, youngest daughter of the late George Christison Adams, S.S.C.

PRICE—BALDING.—On April 24th, at St. Peter's Church, Upwell, Wisbech, Cambridge, by the Rev. I. B. Dalison, Thomas Ernest Price, L.R.C.P. and S.Edin., L.F.P. and S.Glasg., of Upwell, to Lucy, younger daughter of J. F. Balding, of Upwell.

DEATHS.

ALEXANDER.—At Sinclair Terrace, Wick, on 15th April, of typhus fever, Alexander Alexander, M.B., C.M.Edin., aged 45 years.

CONNOR.—April 14th, at his residence, Hill Street, Newry, Dr. Samuel Connor, J.P., aged 57 years.

EDDOWES.—On April 17th, at Pontesbury, Salop, William Eddowes, M.R.C.S.Eng., L.S.A., in his 83rd year.

LEWITT.—At Abbotsleigh, Belgrave Road, Leicester, on April 21st, Louise Blanche, the beloved wife of F. W. Lewitt, M.R.C.S., L.R.C.P.Lond., aged 21 years.

LITTLE.—On the 15th March, at Kwala Lumpor, Selangor, William Maxwell Little, M.D., of the Selangor Medical Service, aged 30, second son of the late Robert Little, M.D., Singapore.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

Communications for the Current Week's Journal should reach the Office not later than Midday Post on Wednesday. Telegrams can be Received on Thursday Morning.

Communications respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the Journal, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the Journal be addressed to the Editor at the Office of the Journal, and not to his private house.

Authors desiring reprints of their articles published in the British Medical Journal are requested to communicate beforehand with the Manager, 429, Strand, W.C.

Correspondents who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

Correspondents not answered are requested to look to the Notices to Correspondents of the following week.

Manuscripts forwarded to the Office of this Journal cannot under any circumstances be Returned.

Public Health Department.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* British Medical Journal *are devoted will be found under their respective headings.*

QUERIES.

Horse-Shoeing.

Juvenal writes: I should be glad if any of your readers could tell me how to shoe a horse which, with a fair amount of work, wears out its shoes in 14 to 17 days, and this notwithstanding the thickness of the shoe, which resembles a cart-horse shoe more than anything else. She wears pads on the front feet, but if the shoes are made the ordinary thickness they would be worn out in a week or ten days. The mare is 15 hands, light, and well bred—a perfect horse in every way.

Disinfectors.

A member wishes to know the names of some of the makers of disinfecting chambers, in which dry heat is employed to sterilise bedding, etc., and the firm most recommended.

⁂ "A Member" should make himself acquainted with the reasons for maintaining the superiority of steam over dry heat as a disinfecting agent, and with that idea in view should read Dr. Parsons's report on disinfection by heat in the Supplement to the Fourteenth Annual Report of the Local Government Board, containing the report of the Medical Officer.

Treatment of Delirium Tremens.

Enquirer writes: A man, aged 43, weighing 16 stone, had an attack of delirium tremens eighteen months ago which was amenable to ordinary doses of bromide of potassium and chloral. Last month he had another attack, and bromide and chloral were given as in the former illness, but medium doses did not take effect and larger doses he vomited. Seeing no good could be got by continuing such treatment, opium was tried both in liquid and pill form. During the space of seven hours 12 grains of opium were taken, but he seemed to be getting wakeful instead of sleepy under its influence. For a while nothing was done, and the chloral and bromide were again tried, and it was not till the sixth night after first trying these remedies that the patient got any sleep. In my long experience of twenty-four years I have not seen such another obstinate case. What I want to know is: What would be the right course to pursue if called to treat the same patient for a similar complaint? Is it true, as stated by an American author, that a third attack is fatal?

ANSWERS.

E. X. M.—1. Application should be made to the Registrar of the General Medical Council, 299, Oxford Street, London, W. 2. Our correspondent would do well to consult a physician in Rome as to Italian mineral springs.

X. Y.—A tenant of an insanitary unfurnished house cannot recover any compensation for this defect from his landlord, as there is no implied warranty by the latter that the house was fit for habitation, a doctrine which clearly indicates that the tenant is not entitled to such compensation.

Galactorrhœa.

Mr. Harris Philpots, M.B. (Birkenhead) writes: "M.B., M.A." should try the antilactiferous properties of mint. It has been discovered that fomentations of mint applied to the breast and an infusion taken internally are capable of suppressing the lacteal secretion, and also of preventing the usual accidents attending milk fever in puerperal women.

Intestinal Antisepsis.

Dr. J. M.—We would suggest to our correspondent to make a systematic trial of suitable antiseptic drugs in, say, the putrid mucous diarrhœa of infants and young children. He will probably find that the fœtor of the stools will very soon diminish, and with a suitable diet disappear altogether. He no doubt agrees with us that the final test of the value of a drug or system of treatment must be practice, not theory.

Treatment of Incontinence of Urine.

Dr. Henry E. Tuley (Louisville, Ky., U.S.A.) writes: In reply to query "Member B M.A.," in regard to the remedy likely to prove of benefit in enuresis, I would suggest the following (originally reported by Dr. William Perry Watson, of Jersey City, N.J., and successfully tried by the writer): Give a solution (aqueous) of atropia sulph. gr. j to 3j, one drop for each year of age, twice daily, at 4 and 7 P.M., and as an adjunct waking the child at 10 P.M. to void his urine.

Treatment of Pruritus Ani.

Dr. Edgar Duke (St. Leonard's-on-Sea) writes: "Anti-Scalptor" would find the following—Arg. nit., gr. x; sp. æth. nit., aq. destil, ää 3ij—used as a paint three or four times a week, or oftener, useful combined with cold sponging with carbolic water, and the use of carbolic acid ointment night and morning.

Dr. C. R. Illingworth (West Kensington) recommends a 1 in 1,000 solution of biniodide of mercury in iodide of potassium.

Continental Practice.

D. O. C. writes in reply to "Alex": In Italy any foreign diploma is sufficient to secure permission to practise amongst foreigners. The large cities are already overstocked, but a small practice might be secured in several small health resorts. In Switzerland the State examination must be passed, and the Swiss are such Chauvinists that they throw every obstacle in the way of a foreign practitioner, even when legally *diplômé*. The best foreign practices are to be found in France, for although well supplied with English medical men, the fees are higher than in Italy. The M.D. examination must be passed in a French faculty.

NOTES, LETTERS, Etc.

Female Dispensers.

Miss Gertrude A. Mannox has just passed the Minor Examination of the Pharmaceutical Society of Great Britain. She also holds the apothecaries' assistants certificate. Miss Mannox worked as a pupil and assistant for nearly two years in the dispensary of the Women's Hospital, Birmingham, and for the last three years has been dispenser at the Orthopædic Hospital, Birmingham. She has recently been appointed dispenser to the Warneford Hospital, Leamington.

Medical Certificates and School Attendance.

Dr. James Kerr (Medical Superintendent to the Bradford School Board) writes: I think in reference to the question raised by "X.Y.Z." that the proper course for a medical man is to refuse gratuitous certificates in school attendance cases. People who are unable to pay would never ask for such certificates if the School Board did not find it necessary to insist on their production. It is therefore the Board that requires the certificate and they ought to pay for it. Already several school boards retain the services of medical advisers. Your correspondent might point this out to the board in question; if they cannot afford such an officer they ought, nevertheless, to be able to pay half-a-crown to a medical man for filling up any certificate which in any particular case might be deemed requisite. On such grounds I strongly advise all medical men to refuse gratuitous certificates for attendance purposes: such services are not charitable, they simply mean a slight relief to the rates at the expense of the medical profession.

Habitual Drunkards and the Supply of Drink.

In an article on page 818, we quoted certain figures from the Liverpool Police Report for 1893. The words "total apprehensions" seem to have been omitted, and to have given rise to some misconception. We therefore give the table in full.

Apprehensions for Drunkenness, showing the Number of Times each Person was Apprehended during the Year.

Number of Times Apprehended.	Number of Persons.			Total Apprehensions.
	Males.	Females.	Total.	
Once	3,487	1,922	5,409	5,409
Twice	185	257	442	384
Thrice	43	82	125	375
Four	11	42	53	212
Five	5	21	26	130
Six	1	10	11	66
Seven	2	11	13	91
Eight	—	6	6	48
Nine	—	6	6	54
Ten	—	2	2	20
Eleven	—	3	3	33
Twelve	—	1	1	12
Thirteen	—	1	1	13
Fourteen	—	1	1	14
Fifteen	—	1	1	15
Nineteen	—	1	1	19
Twenty-four	—	1	1	24

"Particulars if Required."

A correspondent of the *Echo* gives an amusing account of his experiences upon his objecting to a doctor's bill in which only the sum total was stated with the offer of details if required:

"Sir,—A correspondent has objected to the sum total only of doctors' bills being delivered, unlike the bills of friendly lawyers. I had a feeling when my last account came in from our very gentlemanly general

practitioner with whom we have always been on very good terms that he never could have paid so many visits, and I ventured to ask for details. Dr. — politely replied, enclosing an account in detail, which must have taken some time for his clerk to draw out, if he keeps one, and with the same dreadful iteration as a solicitor's account, actually making out that he had not really charged all he was entitled to. He said he knew our bill last year was a heavy one and that he had heard we had some other expenses. He pleasantly admitted also that upon reflection he thought two of his visits had been unnecessary and that he had knocked them off. He had 'just been passing our way in his carriage and thought he would make up the price of a new textbook he had been rash enough to buy.' Anyhow the bill came to more than the original one. My wife felt rather vexed but we found that we could not question it. Just to take the first few items: 'Mr. P. debtor to Dr. S., for medical attendance on self, family, and servants for six months ending December 31st, 1893. July 5th. To calling, at some personal inconvenience at your house at the time appointed by Mrs. P., when I was told by the servant that she had gone out for the day; half an attendance (iter, I believe, is the term used among themselves). 3s. 9d. July 6th. To attendance on Mrs. P., when she told me with considerable detail that her liver must be out of order; advising accordingly with prescription, 7s. 6d. The same to "O, doctor, and as you pass the nursery door will you listen to Johnny's cough?" half an attendance, 3s. 9d. July 11th. Attending and perusing letter from Mrs. P. as to her own and Johnny's symptoms and replying to the same, half an attendance, 3s. 9d. July 11th. Attending and perusing letter from Mr. P., controverting statements in the letter of Mrs. P., and suggesting some new drug he had heard well spoken of, when I replied the new drug was decidedly inappropriate; as half a visit, 3s. 9d. July 20th. To attendance, when I met Mrs. P. in the street and she stopped me to describe certain symptoms which had recently appeared in one of her maidservants, when I told her I could not think so of Maria; half a visit, 3s. 9d.' The account so went on in the most provoking manner with many details we had forgotten. There is, however, a practical conclusion which works well for both sides, that the medical attendant should send in his account quarterly and not yearly. Things under the name of surgical operations go quite on a different scale. They are the plums.—Yours, etc., GIVE AND TAKE."

LONG RESIDENCE IN ASYLUMS.

DR. JOHN MOLONY (Medical Superintendent, St. Patrick's Hospital, Dublin) writes: On April 21st, W. R. (chronic dement) died in this hospital in the 87th year of his age. For sixty years, two months, and eleven days he had been an inmate of this institution. He was cleanly in his habits and tidy in person, and within a few days of death got in and out of bed without assistance. It would be interesting to know if there are many inmates at present in the asylums of the United Kingdom who have had longer experience of asylum life. A female patient in this hospital will within the next three weeks enter her sixtieth year of residence.

THE LAY OF THE "SCAVENGER CELL."

BARCELONA NUT writes: These cells "live, thrive, and multiply" in the brain, and in general paralysis they feed upon the nerve cells like "veritable phagocytes." (Bevan Lewis). They belong to the lymph connective system of the brain, and are classed by some authors (Lloyd Andriezen) as "protoplasmic glia cells."

The scavenger cell was dying,
The last of his "lymphatic" race,
With lessened energy flying,
Through the bare "perivascular" space.
No "blue-black" to mark his poor body,
Or follow his tentacles bare,
This "phagocytic" action was waning,
And his body would soon be "thin air."
A "motor" cell lay in his pathway,
"Aha! here's a carcass!" he cried;
Then he spread forth his arms like a spider,
And to engulph the poor nerve cell he tried.
But alas! he had reckoned too fondly,
His protoplasm ceased to flow,
The nerve cell he could not be eaten,
And the scavenger moaned soft and low
"I have thriven and flourished for ages,
On lymph and metabolic *débris*.
I have ended the delusions of sages,
Whose lives were too 'easy and free.'
"I have stirred the great brain of the G.P.,
And flourished for many a day,
But alas! my life force is ending,
In 'akinetic' decay."
And as his last words he uttered
The scavenger cell passed away.

LETTERS, COMMUNICATIONS, ETC., have been received from:
(**A**) Mr. J. R. Armstrong, London; Professor T. C. Allbutt, Cambridge; A. D. F.; A. G. S.; Arbitrator; Messrs. Arthur and Co., London; Mr. W. Allard, Tewkesbury. (**B**) Messrs. Burroughs, Wellcome, and Co.; London; Dr. R. Boxall, London; Dr. F. M. D. Berry, London; Dr. A. Bronner, Bradford; Dr. W. J. Branch, St. Kitts; Mr. W. S. Batten, Colne; Dr. J. Brown, Bacup; Berkshire: Dr. W. A. Bond, London; Lady Bloomfield, London; Dr. W. Brown, Stapleton; Mr. E. D. Bower, Gloucester; Mr. J. L. Balding, Wisbech. (**C**) Messrs. Curtis and Co., London; S. G. Connon, M.B., Newry; The Catley Abbey Co., Digby; Mr. E. G. Clayton, London; Dr. J. M. Caw, Cupar Fife; Dr. J. Chittenden, Port of Spain; C. F. W.; M. Craig, M.B., Wakefield; Mr. H. G. Cartwright, Narborough; Messrs. Thos. Christy and Co., London; Clark's Bread Co., West Brighton; Messrs. Crossley, Moir and Co., London; Messrs. T. Cook and Son, London; Mr. A. Cortis, Worthing; Dr. A. H. W. Clemow, London; Mr. C. G. Campbell, Saddleworth; Mr. T. B. Carlyon, Tenbury; Mr. J. Couch, Swansea. (**D**) Dr. G. F. Dilburton, Kingston, Jamaica; Dr. A. Duke, Cheltenham: Mr. H. Dickie, Morpeth; Dr. T. O. Dudfield, London. (**E**) The East London Hospital for Children, Secretary, London; R. A. S. Eden, M.B., Bingley; G. H. Edington, M.B., Glasgow; Mr. S. O. Eades, Ipswich; S. Elliot, M.B., Wick; Experientia Docet; Messrs. Eyre and Spottiswoode, London. (**F**) Mr. C. S. Flemming, Bath; W. H. S. Fosbery, M.B., Bournemouth. (**G**) Dr. M. Granville, London; Messrs. R. W. Greeff and Co., London; Mr. F. Gotch, Liverpool; Dr. H. R. Greene. Knaphill. (**H**) Mr. A. W. Harrison, London; Mr. A. Hill, London; Mr. A. B. Harman, Southampton; Mr. W. F. Haslam, Birmingham; Mr. H. N. Hardy, London; Mr. G. F. Hilliard, London; Mr. T. W. Hannaford, London; Mr. E. B. Holwell, Leeds; Mr. W. J. H. Haslett, Sunbury-on-Thames. (**J**) J. H.; Juvenal; Mr. F. B. Jessett, London; Mr. W. D. Jones, Glasgow. (**K**) Mr. R. G. Kestin, London; Dr. J. H. Keay, Colne. (**L**) Mr. C. Lunn, Edgbaston; Messrs. A. Leney and Co., Dover; Mr. C. H. Lect, Liverpool; Dr. T. M. Legge, Oxford. (**M**) Dr. W. Macleod, Shanghai; Messrs. Mayer and Meltzer, London; Dr. G. Mackay, Edinburgh; M.R.C.S.; Mr. W. Marriott, London; Mr. W. Matthews, Potter's Bar; Dr. J. Mackenzie, Burnley; Professor E. J. McWeeney, Dublin; J. D. Mackay, M.B., Knaresborough; Mr. J. Molony, Dublin; Mr. D. F. C. Mangan, Foynes. (**N**) Mr. J. H. Norman, London; Dr. L. Napier, London; Mr. F. Norton, London. (**O**) Dr. J. Oliver, London; O. W. S. E. (**P**) Dr. G. W. Potter, London; P.; Mr. H. Philpots, London; Mr. J. R. Philpots, Parkstone; Dr. J. Priestley, Leicester; Dr. S. T. Pruen, Cheltenham; Mr. H. J. Prangley, London; W. A. Payne, M.B., Birmingham. (**R**) Mr. J. Rankin, Kilmarnock; Royal College of Physicians of Edinburgh, Secretary; Royal Medical and Chirurgical Society, Secretary, London; Dr. R. R. Rentoul, Liverpool; Mr. F. Rouse, London; Dr. J. W. Russell, Birmingham; Mr. T. Readman, Hull. (**S**) Mr. R. S. Smith, Monifieth; Dr. E. Seaton, London; Messrs. F. Stearns and Co., London; Dr. J. E. Squire, London; Sapolio; S. G. S.; Mr. A. C. B. Smythe, London; Mr. J. E. Smith, London; Dr. S. A. K. Strahan, Northampton; Miss A. Scurfield, Sunderland. (**T**) A. Thomson, M.B., Wakefield; Dr. W. N. Thursfield, Shrewsbury; Dr. H. E. Tuley, Louisville; Mr. T. Taylor, Braintree; Mr. W. J. Tivy, Cliiton; Mr. B. Thompson, Birmingham: Mr. J. Taylor, Tanderagee; Mr. J. P. Topping, Twickenham. (**V**) Verax: Dr. C. B. Voisey, Liverpool; Mr. E. M. Vizetelly, London. (**W**) Dr. F. H. Walmsley, Dartford; Dr. H. Woods, London; Dr. F. J. Waldo, London; Mr. G. C. Wilkin, London; Mr. W. Whitworth, St. Agnes Scorrier; Dr. A. R. Waddell. Kidderminster; Mr. C. H. Whitcombe, Westerham; Dr. G. E. Williamson, Newcastle-on-Tyne. (**Z**) Zero; etc.

BOOKS, ETC., RECEIVED.

The Johns Hopkins Hospital Reports. Report on Typhoid Fever. Vol. IV, No. 1. Baltimore: The Johns Hopkins Press. 1894.

Myxœdème et Goitre Exophtalmique. Par Dr. C. Canter. Liége: Alfred Faust. 1894.

Difficult Labour; a Guide to its Management for Students and Practitioners. By G. E. Herman, M.B. London: Cassell and Co. 1894. 12s. 6d.

Lunatic Asylums; their Organisations and Management. By C. Mercier, M.B. London: Charles Griffin and Co. 1894. 16s.

Sewage Disposal Works; a Guide to the Construction of Works for the Prevention of the Pollution by Sewage of Rivers and Estuaries. By W. S. Crimp. 2nd edition. London: Charles Griffin and Co. 1894. 30s.

Uric Acid as a Factor in the Causation of Disease. By Dr. A. Haig. 2nd edition. London: J. and A. Churchill. 1894. 10s. 6d.

Outlines of Medical Treatment. By Dr. S. Fenwick and Dr. W. S. Fenwick. London: J. and A. Churchill. 1894. 10s.

The Eight Hours' Day in British Engineering Industries. By J. S. Jeans. London: Ballantyne, Hanson and Co. 1894.

Seborrhœa and its Consequences. By Dr. J. F. Payne. London: John Bale and Sons. 1894. 1s.

The Physician's Wife and the Things that Pertain to Her Life. By Ellen M. Firebaugh. London: F. J. Rebman. 1894. 6s. 6d.

An International System of Electro Therapeutics. By Dr. H. R. Bigelow and thirty-eight Associate Editors. London: F. J. Rebman. 1894. 34s.

Lectures on Auto-Intoxication in Disease, or Self-Poisoning of the Individual. By Dr. Ch. Bouchard. Translated by Dr. T. Oliver. London: F. J. Rebman. 1894. 10s.

Grundriss der Kinderheilkunde mit besonderer Berücksicktigung der Diätetik. Von Dr. O. Hauser. Berlin: H. Kornfeld. 1894. M. 7.

A Vindication of Phrenology. By W. Mattieu Williams, F.C.S., F.R.A.S. London: Chatto and Windus. 1894.

*** **In forwarding books the publishers are requested to state the selling prices.**

REMARKS
ON
THE NATURE, DIAGNOSIS, PROGNOSIS, AND TREATMENT OF AURAL VERTIGO,

WITH NOTES OF A CASE.

Read at a Meeting of the East Sussex Medico-Chirurgical Society.

BY STEPHEN MACKENZIE, M.D., F.R.C.P.,
Physician to, and Lecturer on Medicine at the, London Hospital.

I HAVE abstracted the following notes from the very careful and complete ones taken by Mr. W. F. Adams:

J. F., aged 50, dustman, comes of a healthy and long-lived family. His mother and three of his sisters suffered from headaches. Began life as a farm labourer in Suffolk, where he was born. When 18 he entered the army, and was for three years in the West Indies, where he had sunstroke. He says he has never felt exactly well in his head since then. Since leaving the army he has lived in London. For several years he worked in a gin distillery amidst very noisy machinery, the noise being so great that the workmen could scarcely hear each other, even when they shouted. There is a history of slight alcoholism. He contracted syphilis sixteen years ago. In June or July last he had an attack of noises in the ear, which he describes as being like a "flea in his ear." It was not accompanied by any other symptoms, and only lasted a few hours.

Present illness came on suddenly on December 1st, 1893. He went to work in the morning feeling quite well. He came home to dinner, having a cup of tea after it, and left still feeling quite well. Whilst engaged in his work sweeping a street, he was taken quite suddenly with a noise in his ear, which resembled, he says, the "singing of a water hammer," and for a second he appeared to lose his sight. The next thing he noticed was that he seemed to be whirling round, and all the objects around him moved with him. He had a feeling that he was about to fall forwards, and the only thing he could do was to squat down to prevent his falling. He then felt very sick, and vomited several times. He could not walk or stand, and had to be taken home in his cart, and on the way vomited several times. When he got home he vomited, and had diarrhœa; he felt very cold and had a rigor. He was not in the least deaf, and was able to talk to his wife. After being at home for about a quarter of an hour he went to bed, and as soon as he lay down on his back he felt quite well, except that the noises continued in his ears. On the fourth day from his seizure it was noticed he was getting deaf. It began in the right ear, and later in the left ear, which became the worse of the two; it progressed, and became so extreme as to render him practically all but completely deaf.

He came to the hospital on December 9th. At that time, when lying flat on his back, he looked and felt quite easy and comfortable, except for the noises in the ears, which he compares to the chirping of birds, and which he says have troubled him continuously from the first day of his illness.

When he sits up in bed he at once has a feeling of nausea, which is worst when he first sits up, but in a minute or two leaves him. Also at the same time the noises in his ears become worse, and he says he appears to whirl round, and all the objects around him do the same. This condition remains as long as he sits up, but as soon as he lies down on his back these feelings leave him. If got out of bed and told to walk he cannot do so unless supported. He then fixes his eyes on some object in front, takes very short steps, and gives an observer the impression that he does not know exactly where he is going to put his foot down. Sometimes he takes a sudden step forwards, and has a tendency to fall suddenly on his face; at others he takes a sudden step backwards, and has a tendency to fall on his back. As soon as he stands, he gets into exactly the same condition as when sitting, and is not relieved until he lies down on his back. He is almost stone-deaf, and it is only with the greatest difficulty that he can be made to hear by speaking slowly and with great distinctness close to his right ear.

He is a healthy-looking man, well nourished, and presents no physical signs of disease in the heart, lungs, or abdomen. The radial arteries are not thickened or tortuous. Pulse 72; urine 1026, acid, no albumen or sugar.

He appears an intelligent man. He complains of an occasional pain in the occipital region, shooting forward through the centre of the head to the forehead. His motor power is good in all the limbs, and there is no affection of sensibility at any part. The superficial and deep reflexes are normal. The pupils are unequal, the right being small, the left larger. There are no ophthalmoscopical changes. There is no inco-ordination of his hands or fingers with his eyes opened or closed, but he cannot write because when he attempts to do so the paper begins to appear to move round.

December 16th. Mr. Mark Hovell examined the patient to-day. He reports that both Eustachian tubes and the pharynx are congested quite enough to account for the obstruction. The membranæ tympani are normal in appearance, but each is somewhat retracted. The bone conduction is deficient, but the exact amount could not be determined. Mr. Hovell suggested inflation of the tympana by Politzer's bag daily. I had previously ordered potassium bromide gr. x three times a-day, and a morning draught of one drachm each of sulphate of magnesium and sulphate of sodium.

PROGRESS OF THE CASE.

Vertigo.—The vertigo has been steadily receding from the first. During the first fortnight he could not sit up to take his food, but it has been gradually diminishing, and now (February 2nd, 1894) only troubles him when he first sits up or attempts to walk.

Tinnitus.—This has also been steadily retrogressing, first ceasing in the right ear and then in the left, and has now practically subsided. It remained in the left ear after quite disappearing from the right. An interesting feature in the case is that as the tinnitus passed off, it would be absent each morning until he washed his face, at first in both ears, and later in the left only. As the tinnitus passed off, instead of resembling the sound of a bird the sound was like that of a beetle.

Deafness.—At first he could not hear a watch with either ear even on contact. By degrees he could hear a watch on contact with the right ear and later with the left; then he could hear a watch some inches from the right ear but only on contact with the left, and this condition persists up to the present time (February 2nd, 1894). The acuteness of hearing has varied somewhat day by day. Both aërial and osseal conduction diminished, but more on the left side than the right. At first he could not hear the tuning fork at all with the left ear, even on contact, and now can hear the tuning fork several inches away from the right ear, and 1 inch from the left ear.

Locomotor inco-ordination.—This also has been very slowly but progressively diminishing. For a long time he could only walk with someone supporting him. He required the full use of his eyes to enable him to do so. In walking down the ward he had to pass under an archway, where it was rather darker than in other parts. This always increased his vertigo, and made him stagger more. He remarked to me one day, "I have to keep my eyes in one place; if I take them off I stagger and roll about; when I go through the arch I feel as if it would fall down on me." He said also he walked better when the gas was alight. His gait has been a reeling one. He walked with his legs somewhat widely apart, and had a tendency to reel first to one side and then to the other, or to pitch forwards or backwards. It could not be said that there has been any constant tendency to fall in any one direction. There has been no throwing out of the legs or coming down on the heels, as is seen in tabes dorsalis; his knee-jerks have been present throughout; he can now walk with the aid of a stick. Mr. Hovell examined his ears a second time, and reported the condition was the same as on the first. The inequality of the pupils has persisted, but is less than at first. On December 30th the left was 4½ mm., the right 3 mm. His general health has been good throughout. He has lost all headache, but had a numb sensation at the back of the head for some time, it gradually passing away.

The case I have narrated is an extremely marked and severe case of aural vertigo, and will serve very well as the text for the consideration of the subject of aural vertigo.

For convenience I shall deal with it in the following: (1) The seat of the lesion: (2) its nature; (3) the mechanism by which the chief phenomena are brought about—(*a*) tinnitus, (*b*) deafness, (*c*) vertigo, (*d*) locomotor inco-ordination, (*e*) vital symptoms (faintness, perspirations, nausea, vomiting), (*f*) movements of the eyes: (4) the diagnosis; (5) the prognosis; and (6) the treatment of aural vertigo.

(1) THE SEAT OF THE LESION.

It is agreed by nearly all who have studied the subject of *vertigo ab aure læsa* that the initial cause of the symptoms which constitute aural vertigo is in the internal ear, and so generally has this view been adopted that one of its best known synonyms is "labyrinthine" vertigo. It is nevertheless the fact that the basis of this doctrine rests very much more on inference than upon actual demonstration. It will be necessary to discuss the grounds upon which the inference is based that the labyrinth is concerned in producing the symptoms. The internal ear, as is well known, contains the labyrinth, out of which open the semicircular canals with their ampullæ, containing the crista acustica with its auditory cells, and the cochlea with its spiral lamina, on which is distributed the organ of Corti. Vibrations reach the fluid of the labyrinth, either through the ossicles in the tympanum (columellæ cochleæ), the usual means of communicating, or by the bones of the head. It is not seriously doubted that the cochlea is the chief organ for the perception of sound; that destruction of the cochlea gives rise to deafness, and that disturbance of the nerve terminations in the cochlea gives rise to the perception of abnormal sounds, or, as they are called, tinnitus. It is maintained by some physiologists that the semicircular canals are concerned in the perception of the *direction* of sounds; and it is believed by most that they have to do with informing the brain of the position of the head, and thus subserve the maintenance of the equilibrium of the body. The three semicircular canals on each side are arranged so as to lie in the three directions of space, and the fibres of the auditory nerve distributed to the semicircular canals have been called by Cyon the "space nerve." The equipoise is maintained by a sensory motor process. The co-ordinating centre is the cerebellum. The afferent or sensory apparatus consists of visual, tactile, muscular, and labyrinthine impressions. The efferent or motor apparatus are the nerves and muscles, chiefly those of the head, neck, trunk, and lower extremities. The subject of the functions of the delicate and deep-seated nervous structures of the internal ear is extremely complex

and difficult alike in physiological explanation and experimental investigation. The careful observations and studies of Flourens, Cyon, Crum-Brown, and others have been generally accepted. Flourens asserted from experiments that injury to each of the semicircular canals is followed by definite locomotory disturbance, causing the body to fall or the head to fall in a definite direction. Doubts have recently been thrown on the experimental evidence that disturbed equilibration is due to injuries to the semicircular canals by Boetcher, Steiner, and Ewald, etc.; and the effects have been attributed to injuries to the brain produced in the experiments, whilst Schiff years ago contended against the theory of the semicircular canals being concerned in equilibration from the fact that section of the trunk of the auditory nerve did not cause any disturbance of equilibrium.[1] Politzer further has recorded a case in which there was congenital absence of all semicircular canals in which no disturbance of equilibration had taken place during life. It is very doubtful if negative evidence of this character has a strong value, as in the first place the semicircular canals are not alone in subserving equilibration, and some one or more of the other organs may have compensated for the defect; and in the next place it may be urged that when the auditory nerve is divided, whilst *no information* will be conveyed to the brain as to the position of the head *from the ear*, the other sources of information are not excluded; on the other hand, irritation of the canals or the labyrinthine nerves may be quite able to produce a commotion in the centres—co-ordinating and perceptive—to which they go. The fact that whilst injuries to the bony canals do not give rise to movements, injuries to the membranous canals do cause movements, is of much significance. Moreover, it is asserted that "if the horizontal canal is laid bare and the membranous canal opened so as to expose the endolymph, blowing gently over the opened canal with a fine glass cannula will produce a definite movement of the head, which is turned to the one side or to the other, according as the current of air drives the endolymph towards or away from the ampulla. From this it is inferred that a movement of the endolymph over, or an increased pressure of the endolymph on, the surroundings in the ampulla gives rise to afferent impulses which in some way determine the issue of efferent impulses leading to the movements of the head" (Michael Foster).

Moreover, in some cases of aural vertigo, the giddiness is much influenced by the position of the head, and it is only in certain positions this symptom is produced. This is readily accounted for on the supposition that the disease causing it is in the semicircular canals; as change of position must affect the pressure of the endolymph on the various ampullæ, resulting in adjustment of position when the co-ordinating centre or centres are in proper working order, but when these are deranged, leading to the consciousness of disordered equilibration, or, as we call it, vertigo. Further, the evidence supplied in a *post-mortem* examination of Ménière's, where hæmorrhagic inflammatory material was found in the semicircular canals without any disease of the brain, where during life there had been intense vertigo, proves by this "experiment of disease" that a lesion of the semicircular canals *per se* may give rise to vertigo. It is true that Lucae has recorded a case where the semicircular canals were found filled with blood clot, where during life there had been no corresponding disturbance of equilibration observed. But again, I must remark that in dealing with the nervous system positive must outweigh negative evidence.

Dr. Buzzard has recently done good service in suggesting that in some cases of aural vertigo the lesion, often a functional one, may be in the medulla oblongata, and pointing out that a lesion of the auditory nucleus would by the laws of peripheral perception be referred to the terminations of the nerve in the semicircular canals or cochlea, or in both. Sir William Dalby has also suggested a bulbar origin for some cases of aural vertigo.

[1] It is significant that in some cases of intractable aural vertigo the tinnitus and vertigo disappear when the patient becomes totally deaf, showing that, whilst irritative lesions may give rise to positive symptoms, total abeyance of function of the auditory nerve, probably atrophy—corresponding to Schiff's division of the nerve—is not accompanied by any positive symptoms of disease of the cochlear nerves (tinnitus) or disease of nerves to the semicircular canals (vertigo).

The following case appears at first sight to be one in which the origin of the vertigo was bulbar. The functional odynphagia of which the patient complained was possibly due to a lesion of the vagus nucleus in the medulla, and almost certainly to disease in the territory of the pneumogastric nerve. The subsequent occurrence of aural vertigo suggests that this may have been caused by extension of the irritation from the vagus to the auditory nerve, but the condition of the ear found on examination renders it more probably the association of symptoms was in a measure accidental.

C. B., aged 40, sent by the late Dr. Male to me at the London Hospital. For three years has had a difficulty in swallowing. It appeared to be chiefly on the left side, the food seeming to lodge low down. He had to force solid food by means of drinking fluids. This dysphagia, sometimes better, sometimes worse, has ever since continued. Three months before he came under my observation he began to have attacks of vertigo and perspirations, with vomiting. The order in events appears to be (1) giddiness; (2) coldness, followed by profuse perspirations; (3) vomiting. On inquiry it is elicited that he has had a noise, not quite constant, in the right ear for more than three months. It is sometimes like the singing of a kettle on the fire, sometimes like the steaming of an engine. He had been deaf in this ear for some time before the first vertiginous attack. He generally knows when he is going to have an attack by a feeling of wind rushing up the throat, and then going to the head. He said on one occasion that he had not noticed the noise was increased at the commencement of the attacks, but on a subsequent occasion he said it was. After the rushing up of the wind, whether sitting, standing, or walking, he has a feeling of forward propulsion, a feeling as if he would fall on his face if he did not walk quickly. He has, he says, walked an attack off. The attacks generally last an hour and a-half; the vomiting is sometimes distressing, and he appears very ill in them. The vertigo, and especially the vomiting, is relieved sooner by ice to the head. The attacks are accompanied by cephalalgia. There is great hyperæmia of the upper part of membrana tympani and of the attachment of the malleus of right ear; the left membrana tympani is concave. He can only hear a watch on contact with right, 2 feet with left. Both perosseal and aërial vibrations of tuning fork are very feeble in right ear.

Whilst, however, there is evidence that aural vertigo may, as Buzzard and Dalby suggest, be of bulbar origin in some cases, in the great majority of cases it is, I believe, of peripheral origin. I see a considerable number of cases of aural vertigo every year, and with scarcely an exception there is demonstrable evidence of ear disease.

(2) THE NATURE OF THE LESION.

I have already alluded to the *post-mortem* evidence in one case of Ménière's. This, however, is a very exceptional one, and it is only in a very few cases that coarse disease has actually been demonstrated in the semicircular canals.[2] There are a number of ways in which the nerve terminations in the ampullæ of the canals may be irritated *directly* by hæmorrhage, inflammation, syphilis, irregular blood supply, and by degeneration of the nerve itself; *indirectly* by disease of the middle ear, obstruction of the Eustachian tube, spasm of the tensor tympani or paralysis of the stapedius, irritation or obstruction of the external auditory meatus, and pressure on the membrana tympani, as by cerumen, foreign bodies in the ear, syringing the ear, etc. Of all causes disease of the tympanic cavity (otitis media) is the most common. This is usually of a chronic character, associated in many cases with Eustachian obstruction, in consequence of which the stapes is driven in upon the fenestra ovalis, producing increased labyrinthine pressure. It has been suggested by Spear that there is probably a condition of the labyrinth which is akin to that which causes glaucoma, namely, an affection of the absorbents which interferes with the proper transudation of the fluids, so that the internal pressure is too great to allow the normal nutritive processes to go on; whilst Knapp has suggested that Ménière's disease is "an idiopathic serous exudative otitis interna." That it is possibly due to a degenerative condition of the nerve endings in the labyrinth, to degenerative changes, or increased arterial tension in the local blood vessels, is suggested by the facts that, in the great majority of cases, aural vertigo occurs in the second half of life; and, in my experience, when it occurs in women, in whom it is less common than in men, it is usually at or after the menopause. My experience confirms Gowers's as to its association with gout, in which disease it may be due, as the latter suggests, to gouty affection of the labyrinthine membrane, of a similar nature to what is known to take place in other membranes connected with bone; or as is, in my opinion, more probable, to the condition of the local arterial supply which occurs in the gouty state.

[2] The term "Ménière's disease" should be limited to cases of hæmorrhage in the canals, or at least to apoplectiform attacks.

The determination of the exact nature of the pathological process is obviously of even greater practical importance than the localising of the lesion, for it must be our guide in the treatment.

In the case I have narrated I think the lesion is probably an inflammatory change in the labyrinth, secondary to the tympanic catarrh; and I think so from the *ingravescent* character of the symptoms, the deafness following the tinnitus and vertigo at an interval of four days, and from the amelioration of all the symptoms that has subsequently taken place. Though he had syphilis years ago, he has had no syphilitic symptoms elsewhere, and the subsidence of the symptoms is independent of antisyphilitic treatment.

(3) THE MECHANISM BY WHICH THE CHIEF PHENOMENA ARE BROUGHT ABOUT.

(*a*) *Tinnitus.*—The immediate cause of this symptom is some disturbance in the cochlea. This is caused in nearly all cases by increased labyrinthine pressure, which may be induced by pressure—for example, cerumen or a foreign body pressing on the membrana tympani, or by Eustachian obstruction causing retraction of the membrana tympani, in consequence of which the handle of the malleus is drawn inwards and the stapes is pressed in upon the fenestra ovalis. It is possible that minute degenerative changes may occur in the cochlear nerve, and that similar changes may occur in the cortical centres where sounds are perceived.

(*b*) *Deafness.*—This almost invariably is present in cases of aural vertigo, and, like noises, is due to some change in the cochlea. The fact that the deafness is nervous is proved by deficient bone conduction. In the great majority of cases nervous deafness precedes the occurrence of vertigo, but in some acute and apoplectiform cases it appears coincidently with the vertigo. Much more rarely, as in the case narrated, deafness follows the tinnitus and vertigo. In such cases it is improbable that the deafness is due simply to increased labyrinthine tension, as in these circumstances it would be expected to occur coincidently with the tinnitus and vertigo. Its subsequent occurrence points, I think, to an extension of the local disease to the labyrinth, and therefore is in favour, in cases such as the present, of a direct local morbid process in the labyrinth, whether primary or secondary to some disease in the middle ear.

(*c*) *Vertigo.*—Vertigo is the consciousness of disturbed equilibration, a rudimentary disorder of co-ordination of locomotive movements (Hughlings Jackson). In ordinary circumstances equilibration is maintained independently of consciousness, but when any disturbance of the mechanism which subserves equilibration takes place we become conscious of it, and this feeling we call vertigo. Vertigo may be caused by disturbance of, or interruption in, the other afferent paths of the mechanism, visual as in ocular paralysis; tactile or muscular impressions, as in tabes; in disease of the co-ordinating centre, as in tumours or insular sclerosis of the cerebellum; or in disturbances in the perceptive cortical centres in the temporal lobes, as in migraine. It is quite possible that structural and functional changes in the trunk or nucleus of the auditory nerve may give rise to vertigo, and that disturbance originating in the semicircular canals may give rise to an unstable condition, or to rhythmical disturbances in the cortical centres, which may persist after the primary cause is removed, as has been suggested to occur after sea sickness, where the sense of movement and a slight degree of vertigo persist for a time after landing. Vertigo may be of primary cerebral origin, as in migraine, but when cerebral we have no ground for calling it aural. The vertigo of aural origin may be of all degrees of severity—a mere sense of confusion in space, a feeling as if objects were revolving, the feeling as if the patient was revolving. In the worst cases the patient actually moves, or turns round, or falls to the ground. This falling is an effect of locomotor inco-ordination, and is only a more extreme degree of the equilibratory disturbance than the other degrees, which—taken with the fact that when a person who has a feeling as if he was turning or falling actually does turn or fall, it is always in the direction in which he has previously had sensations of movement—proves Dr. Hughlings Jackson's contention that vertigo is a rudimentary inco-ordination of locomotive movements. It is the association of vertigo with tinnitus and deafness that in aural vertigo render it so highly probable that the disease (or immediate cause of the symptoms, at least) is in the semicircular canals. It is possible, of course, that the lesion, functional or organic, may be in the trunk or in the nucleus of the auditory nerve, but the proved existence of disease in the middle ear renders it highly probable that it is a peripheral and not a central lesion in such cases.

(*d*) *Locomotor Inco-ordination: Reeling Gait.*—This in many cases is a reel or uncertainty of gait, a swaying walk with a tendency to go or fall to one or other side, often first to one side, and then by an attempt to recover the equipoise to go too much to the other. Sometimes the inclination to fall is very forcible, the patient saying the pavement came up and struck him on the head. One patient told me recently that it felt "as if his heels went up into the air." Patients have been known to fall with great force, and in doing so to fracture the bones of the nose. In most cases the tendency to fall is less powerful, and the patient is able to cling to some object or seat himself, and thus avoid a fall. My patient said he was "obliged to squat down," otherwise he would have fallen. The reeling gait reminds one of what is seen in disease of the cerebellum, and, like that due to cerebellar disease, is often misinterpreted by ignorant observers for alcoholic intoxication. It may in some cases be paralytic, due to abeyance of the cerebellar influence in maintaining locomotor co-ordination, but it may in some sudden and severe attacks be due to over-action of the cerebellum, so that the patient may be strictly right when he says he is "thrown to the ground." In one case, published by Dr. Hughlings Jackson, the patient, for years after the onset of aural vertigo, where the lesion was in the *right* ear, had a more or less constant tendency to walk to the *left*.

(*e*) *Vital Symptoms.*—In all severe or apoplectiform cases of aural vertigo the initial symptoms are rapidly followed by organic symptoms which Dr. Hughlings Jackson has appropriately called "vital," faintness with cold perspirations, feebleness and sometimes irregularity of the pulse, nausea, and vomiting. These may be due to the shock which such sudden commotion of the brain as occurs in severe vertigo gives rise to. It will be observed, however, that they are all phenomena which a sudden and severe affection of the vagus nucleus would be likely to occasion, and it is probable, I think, that the phenomena are caused by "overflow" of the irritation in the acoustic nucleus to the closely adjacent vagus nucleus in the medulla; the visceral disturbances in the heart, stomach, and intestines being due to irradiation to the vagus nucleus of the irritation started in the labyrinthine branches of the auditory nerve.[3] It is interesting to note that in the next case the patient obtained complete freedom from his vertigo and other distressing symptoms as soon as he lay down with the back of his head on the pillow. For weeks he could not raise his head without the vertigo being induced, and for the first fortnight he could not sit up to take his meals. Dr. J. A. Irwin has suggested an explanation of why this supine position should secure relief from vertigo: "Nature has made small provision for the equilibration of the body in the horizontal position, or in any position much behind the perpendicular; hence we find the ampullæ of all six canals are situated on their anterior extremities. In consequence of this construction, when the body is recumbent and the head thrown back, the endolymph and otoliths gravitate towards the least sensitive part, and disturbance of them will not have the same tendency to active pressure, or produce irritation within the ampullæ." Dr. Irwin made these remarks in connection with sea sickness, but points out the extraordinary similarity between the symptoms of sea sickness and those of labyrinthine vertigo.

(*e*) *Movements of the Eyes.*—As the patient was not seen early in the attack no movements of the eyeballs were observed, and I shall not, in the circumstances, discuss this heading. It is, however, one of the highest physiological importance and of great value in interpreting the nature of aural vertigo.

(4) THE DIAGNOSIS OF AURAL VERTIGO.

The diagnosis of aural vertigo presents little difficulty to anyone who has paid attention to the subject, at least the

[3] It is also possible that the "overflow" may be in the highest centres (cortex), where these important nerves are represented.

recognition of the disease; but true diagnosis, the distinguishing between the different conditions that may cause aural vertigo, is sometimes of extreme difficulty. Nevertheless, the correct nature of the disease is not infrequently overlooked. The aurist or anyone who has studied the disease goes straight to the ear, so to speak, and makes it the starting-point of his investigations. In many cases, however, which have come under my observation no attention has been paid to and no examination made of the ear, and the symptoms have been ascribed to cerebral disease. Occasionally the great prominence of gastric disturbance, especially when this has coincided with some irregularity or impropriety of diet, leads to the belief that the cerebral symptoms are due to indigestion or "the liver." It is now generally admitted that vertigo of gastric origin, the "*vertigo a stomacho læso*" of Trousseau, is a much more rare condition than the impressive writing of the great French clinician had led the profession to imagine. In the great majority of cases of so-called "gastric vertigo" there will be found some chronic aural disease. It is quite probable that in such cases gastric irritation may excite an attack of vertigo in a patient in whom the condition of the ear alone is not sufficient to induce an attack of vertigo, by a process of irradiation or overflow from the pneumogastric to the auditory nerve, the reverse of what occurs in true or primary aural vertigo. The occurrence of tinnitus, vertigo, nausea, and vomiting, especially when these symptoms occur in this order, should always excite suspicion of aural vertigo. In some cases the patient is unaware of any deafness, or is so accustomed to a slight degree of "hardness of hearing" that he does not connect this in any way with the alarming and novel experience of giddiness, and I often find patients very much surprised that the ear should be so carefully examined, and still more so to be told that their attacks of vertigo are caused by disease of the ear. In nearly all cases there will be found a certain degree of deafness in one or both ears, and examination with the tuning-fork will establish that this is associated with deficient bone conduction, indicating that it is of nervous origin. In the great majority of cases in my experience some disease is found in the middle ear. The examination of the ear, however, must be systematic and complete, for, as pointed out previously, the vertigo may be due to a variety of conditions connected with the ear. On the care with which the examination is made will depend in a great measure the power to foretell the probable course of the malady, and, to some extent, the power to benefit the condition by treatment.

(5) THE PROGNOSIS.

Unless due to some such cause as a foreign body in the ear, the probability is that a person who has had one attack of aural vertigo will have others. It is in most cases a paroxysmal disease. In many cases a considerable measure of success attends attempts to ward these off, but in some cases we seem powerless. The attacks of vertigo become more and more frequent, until the patient ultimately gets into a permanently vertiginous condition. In some of these sad cases relief is ultimately obtained by the supervention of deafness. It is well to give the patient some idea of the probable course of events. I generally tell patients who consult me that treatment is to some extent uncertain, that it is always protracted, but that if they will perseveringly assist in carrying it out, the probability is that they will be rewarded by lessened frequency or total cessation of the attacks of vertigo, but that in all probability the noises in the head and the deafness will persist. This is the outcome of my own experience. I have treated many cases where the aural vertigo has entirely ceased. Gowers speaks to the same effect.[4]

(6) THE TREATMENT.

We have seen that the immediate cause of the vertigo is the effect of irritation of the terminations of the vestibular nerve, which is conveyed to the co-ordinating centre (cerebellum), causing disturbed equilibration, and the perceptive centre in the first temporo-sphenoidal convolution, causing vertigo and tinnitus.

The treatment must vary according as we are called upon to treat an acute attack or paroxysm, or to ward off subsequent or threatened attacks.

A. *Treatment of an Acute Attack.*—If severe, the recumbent position will be assumed voluntarily by the patient and should of course be continued as long as the vertigo is induced or increased by assuming the erect posture. Time is a necessary factor in lessening or preventing peripheral irritation. Meanwhile the chief thing to be done is to subdue the excitability of the nervous centres. For this purpose no remedies are so efficient as bromides, and of the salts of bromine none have any advantage over bromide of potassium. It should be given in fair doses—10 to 20 grains three times a day. Gowers has suggested bromide of lithium, with or without citrate of lithium, in gouty cases. In the latter class of cases the salts of potash, colchicum, and salicylate of sodium are often of service, especially when preceded by a mercurial purge. Counter-irritation in the form of a small blister behind the ear is sometimes of benefit. At the same time the local condition of the ear should be attended to and appropriate treatment, which it would be here out of place to discuss, adopted. By these means, or independently of them, the acute and severe symptoms in the great majority of cases pass off. The patient is left generally with his deafness and tinnitus, and usually haunted by the dread of another attack.

B. *The Interparoxysmal Treatment.*—Can anything be done to avert further attacks? Several remedies have been suggested and tried with varying success, and it must be admitted that the treatment is uncertain and to some extent empirical. Of course, care must be taken to remedy any ascertained derangements of function in the various organs, to regulate the diet, and order the life of the patient for the best. Whilst we are doing this, or when it is accomplished, there may remain the liability to occasional attacks or paroxysms of vertigo. The pathological nature of the lesion giving rise to these has been already discussed, and shown to be somewhat conjectural. The remedy which I, following the suggestion of M. Charcot, have found most commonly useful is quinine in considerable doses, three or four grains three times a day, and in some cases double these doses have been taken by patients. I have never seen any harm, more than temporary discomfort, from quinine in such cases, and certainly many cases whilst taking quinine for this complaint have lost their attacks, and not suffered again upon discontinuing the drug. Salicylate of sodium appears to do good in a certain number of cases in warding off attacks. A good deal has been recently written about the use of pilocarpin in such cases. Originally employed by Politzer in the treatment of a case of syphilitic disease of the labyrinth with benefit, he later became dissatisfied with and discarded it. Sir William Dalby does not think at all favourably of it. Mr. Field, on the other hand, seems to have had a considerable measure of success with this drug. It is possible that the different results of observers depend upon the method and doses employed. The important points appear to be to give enough, to give it hypodermically, and to give it sufficiently frequently. Field begins with 3-minim doses of a 4 per cent. solution every day, and he increases the dose to one-tenth, one-fourth, or even one-third of a grain if suitably borne. Its assumed action is to increase the exudation of secretion in the labyrinth and middle ear, and thereby assist in the resolution of inflammatory changes. I think one of the most practical points in warding off attacks is to keep your finger on the pulse—if one may use the expression—that is, to watch and keep down arterial tension. It will be remembered that the great majority of cases occur in the later half or degenerative period of life, when the kidneys tend to become granular, the arterial tension to be increased, and cardio-vascular changes to occur. There is no remedy so useful in such cases to keep down arterial tension as mercury in some form. An occasional dose of blue pill should be given, say once or twice a week; and it is a good practice to prescribe powders containing 3 to 5 grains of calomel to be habitually carried in the pocket book, and order one to be taken when any premonitory symptoms, such as increased tinnitus, fulness in the head, or headache, occur. A dose of calomel, taken in such circumstances, patients have assured me, has averted attacks which they believe would otherwise have occurred.

[4] *Diseases of the Nervous System*, 2nd edition, vol. ii, p. 790.

OSSIFICATION OF THE SYNOVIAL MEMBRANE OF THE LEFT KNEE-JOINT IN A YOUNG MAN.

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AND
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True ossification of a synovial membrane is, so far as we can ascertain, very rare, if not unknown; for we can neither find any description of nor any reference to such a morbid change in these membranes. It is true that ossification frequently takes place in the "loose bodies" which arise as polypoid growths from the inner surfaces of the synovial membrane, especially from that of the knee; and it is not unreasonable to suppose that the cells composing the membrane have the power, given the necessary condition, to form bone. But whenever hard, bone-like plates have been found in synovial membrane, they have, we believe, without exception been found to be composed of calcified, altered and diseased tissues, there being no trace of bone structure in them.

In the pericardium, pleura and in the tunica vaginalis plates of calcareous material are not infrequently found, but in none of these membranes, so far as we are aware, does ossification ever occur. In the dura mater, however, either small pieces or very extensive plates of bone are found not infrequently. The formation of bone in this membrane is perhaps explained by the fact that the dura mater acts as a periosteum to the inner surfaces of the bones of the skull; and it is only after the cessation of the growth of these bones that the dura loses its firm and close attachment to them.

In the case which we shall presently describe, true ossification of the synovial membrane of the knee had taken place, and the condition is not only of pathological interest, and as it were a curiosity, but one that might give rise to difficulty in diagnosis and treatment, as in the instance before us.

The notes of the case are as follows:

E. H., aged 26 years, a shoemaker, was admitted into the Northampton General Infirmary on April 11th, 1893, with enlargement of the left knee. He was rather tall and thin, but a healthy-looking man. The left knee-joint was much swollen, especially above the patella, where there was to be felt a large mass of bony hardness. There was some fluid in the joint which was much hotter than that of the right limb. There was no undue thickening of the lower part of the femur which could be felt behind the mass. The movements of the joint were limited and there was much pain.

When 14 years old (1881) he fell over a tree and hurt his left knee, which swelled, and after a time got better without special treatment. Five years later (1886) he had rheumatic fever, but two months previous to this attack he noticed that the left knee was enlarged. The fever kept him laid up for four months. Afterwards the knee remained enlarged and stiff but not painful until the beginning of 1893, when he took to riding a bicycle. After the exertion of cycling the knee became very painful and he had to lay up. The swollen knee was painted with iodine; but, getting no better, he applied to the infirmary for admission. There is no tuberculous history in his family.

The limb was placed on a back splint and kept quiet for a month; but, as the knee remained swollen and painful, it was determined to explore, and if necessary excise the joint.

On May 23rd, 1893, while under the influence of ether, the joint was explored, the usual antiseptic precautions being observed, when it was found that the whole of the synovial pouch above the patella and in front of the lower end of the femur was transformed into a hard bone-like casing, enclosing a cavity containing slightly turbid fluid, and communicating with the synovial cavity; in short, a pouch of the synovial membrane. As this condition could not very well be dealt with in any other way, the joint was excised by R. A. M. according to the usual method. The patella and the bone-like case above it, together with the articular ends of the femur and tibia, were removed. At the back of the joint there was a good deal of pulpy material, which was carefully cut away. The femur and tibia were fixed together by means of two steel pins driven in across one another, and these kept the ends of the bones together in a very good position. The limb was fixed in a Howse's excision splint, and the wound was dressed with cyanide gauze. There was no rise of temperature, and the pins were taken out on the tenth day. Recovery was uninterrupted. He left the infirmary on August 4th, 1893, wearing a leather splint, the knee being firmly ankylosed, and capable of bearing his weight. In November, 1893, the limb was quite straight and firm, and he was doing his work, at which he stood most of the day.

The parts excised were as follows:

I. Attached to the patella, which was of natural size, was a large, thick-walled synovial pouch. This pouch measured about 3½ inches in length, 2½ in breadth, and 1½ in thickness, and was of a pyramidal shape with four sides, the base being near the patella. Some idea of both the shape and the size of this pouch may be gathered from the drawing (Fig. 1), which

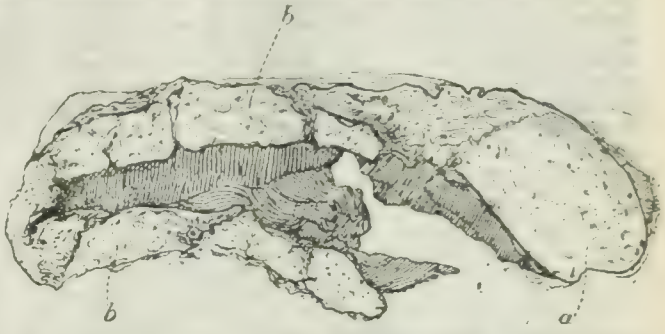


Fig. 1.—Mesial section of patella and suprapatellar synovial pouch. (*a*) Patella, (*b*) bony plates in thickened and altered synovial membrane. Natural size.

was taken from a mesial section through the pouch and patella. Each wall, which measured at least ¼ inch in thickness, was composed of a number of small, thick, flat pieces of bone, which varied from ¼ to ½ inch in thickness, and which were joined together by a thin layer of fibrous connective tissue. The exterior of the pouch was covered by a continuous layer of fibrous connective tissue, whereas the interior was smooth though uneven, the greater part of the pieces of bone being here covered by a layer of fibro-cartilage. The cavity, which was in free communication with that of the joint, contained slightly turbid and altered synovial fluid. The anterior wall of the pouch did not quite reach the patella by about half an inch, and it was connected with it by a thickish layer of synovial membrane, which presented on its inner surface innumerable slender and delicate polypi, such as are often seen in rheumatoid disease. The posterior wall terminated abruptly near to where the femur had been divided at the operation. The cartilage of the patella was somewhat frayed on the surface, but not otherwise altered. Under the microscope the bony plates were seen to be composed of cancellous bone, the trabeculæ being thick and the spaces large. In the trabeculæ the lamellæ were not very distinct, and the bone corpuscles were few in number and imperfectly formed. The spaces for the most part contained vascular adipose tissue, in which there were here and there small groups of small round cells. At the periphery the lamellæ of bone trabeculæ passed directly into the fibrous connective tissue which usually invests the synovial membrane in this situation, there being no intervening cartilage, and, indeed, no evidence anywhere of the formation of hyaline cartilage (see Fig. 2).



Fig. 2.—Section of one of the bony plates in the suprapatellar pouch. (*a*) Fibrous layer on outer surface; (*b*) trabeculæ of bone; (*c*) cancelli containing cellular connective tissue and fat cells. ×60.

II. In the lower end of the femur the margins of the condyles as well as those of the trochlear portion were lipped

and overhanging, as in rheumatoid disease; the articular cartilage was thin, frayed and in places, especially on the inner condyle, grooved antero-posteriorly, but the articular plate of bone was nowhere exposed; thus eburnation, so characteristic of rheumatoid disease, was absent. Further, the synovial membrane that covers the outer sides of the condyles for about half an inch from the articular margin was covered, just as that immediately above the patella, by innumerable slender and delicate polypi. The chief changes in the articular end of the femur are well shown in Fig. 3.



Fig. 3.—Lower end of femur, showing lipping of articular margins and grooving of articular cartilage. Natural size.

III. In the articular end of the tibia similar changes were observed, but there was in addition, in the middle of the upper surface of the inner tuberosity, a small, soft, or carious area of the bone, about the size of a pea, over which the cartilage had disappeared. This was the only spot in the bones where the hard tissue was replaced by soft. Under the microscope this soft area was seen to be composed of vascular and cellular connective tissue, resembling granulation tissue, the surrounding bone being in a state of rarefaction, the cancelli large, and occupied by small round cells. In the soft tissue there were no giant-cell systems nor any other indication of the tuberculous process, but where the bone was undergoing absorption the giant cells peculiar to bone, osteoclasts, were seen. The articular cartilage covering both tibia and femur showed the usual changes—namely, proliferation of cells with fibrillation of matrix, seen in rheumatoid disease.

To recapitulate: the formation of bony plates in the synovial pouch above the knee was found associated with (1) lipping of the articular margins; (2) fibrillation and thinning of the articular cartilage; (3) grooving of the same; (4) innumerable polypi on the inner surface of the synovial membrane; (5) a small area of softening, or caries in the inner tuberosity of the tibia; and (6) much pulpy substance at the back of the joint, removed at the operation, and unfortunately not kept for microscopic investigation.

The cause or causes which gave rise to this unique condition of the synovial membrane must at present remain unknown. Some of the changes, such as the lipping of the articular margins, fibrillation and grooving of the cartilage, favour the view that the condition is of the same nature as rheumatoid disease; but the age of the patient (26 years), the onset of the malady after injury when 14 years of age, the existence of a soft or carious area in the inner tuberosity of the tibia, and the presence of soft pulpy tissue at the back of the joint taken together make us incline to the view that the condition is of the nature of a chronic tuberculous disease; and that during the retrogression (return to quiescence) of the disease the connective tissue cells in the altered and thickened synovial membrane of the suprapatellar (subcrureal) pouch were induced from some cause or other to form bone.

The lipping of the articular margins, the formation of polypoid growths from the inner surface of the synovial membrane, fibrillation and grooving of the articular cartilage, and indeed even well marked eburnation of the articular ends are not unknown in chronic tuberculous disease of joints. One of us met with an example of lipping and eburnation a few years ago in a young woman, aged 28, who suffered from a chronic affection of the bones of the knee-joint. Excision was performed, and good recovery followed. Not many months after chronic tuberculous disease of the shaft of the femur began, and this has continued with more or less suppuration up to the present.

We, therefore, suppose that after the injury to the knee, at the age of 14 years, there developed the usual form of tuberculous disease of the synovial membrane, the bones becoming to some extent implicated. This was never very active, and, after a time, became quiescent, the swelling being present five years after (at 19 years), and noticed before the onset of the attack of rheumatic fever. It is probable that during these five years from the receipt of the injury, the thickened synovial membrane becoming less vascular, the connective tissue cells formed bone instead of the ordinary dense fibrous tissue. So long as the joint was kept fairly quiet it gave rise to no trouble, but when used vigorously, as must be the case in cycling, then the old inflammatory changes were set going, and the joint became painful.

Such a change in the connective tissue is comparable to the change that takes place when a tendon becomes transformed into bone, and also when the interstitial connective tissue of muscle becomes likewise converted into bone (myositis ossificans).

This case, then, is merely an example—a rare one, it is true—of the transformation of fibrous connective tissue into bone. The exact nature of the process which leads to the formation of the bone, as above stated, remains at present unknown.

THE COMPARATIVE SAFETY OF SUPRAPUBIC LITHOTOMY, OF LATERAL LITHOTOMY, AND OF LITHOLAPAXY IN YOUNG MALES.[1]

By GILBERT BARLING, B.S., F.R.C.S.,
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BRIGADE-SURGEON-LIEUTENANT-COLONEL KEEGAN has published a paper[2] on litholapaxy in male children, in which he makes some very objectionable remarks on the truthfulness of statistics by English surgeons. Whilst it is impossible here to discuss his insinuations, it is equally impossible to pass them over in silence, lest this might be construed as implying acquiescence in them. I simply content myself with saying that his attack was quite unjustifiable and uncalled for.

To return now to the main purpose of his paper, which was to show the safety of litholapaxy in young males. The statistics he presented showed that the litholapaxies performed by eight surgeons in various parts of India numbered 663, with a mortality of 2.71 per cent. The author asks, "Can the advocates of the suprapubic operation show such results as these?" and says rightly that it is incumbent on those who practise this as a routine operation in children to show that it is a procedure not more dangerous than lateral lithotomy or litholapaxy.

In the Cavendish Lecture by Mr. Henry Morris[3] on Diseases of the Urinary Organs, the surgery of the genito-urinary tract was reviewed. The part of this paper to which I now wish to refer is that which deals with the suprapubic operation for stone. Although I place a much higher value on the suprapubic operation for many purposes than Mr. Morris does—notably for removal of tumours, of stone in adults not suitable for crushing, and for prostatectomy—yet my inquiry goes far to prove that he is right when he says that lateral lithotomy in boys is a safer operation than the suprapubic.

The two papers to which I have referred induced me to look into the question of the relative safety of the various operations practised for vesical stone in children, and to gather statistics from the records of public institutions.

I do not propose to contrast the mortality of operations for

[1] Read at a meeting of the Birmingham and Midland Counties Branch of the British Medical Association on March 8th, 1894.
[2] *Lancet*, May 27th, 1893.
[3] *Ibid.*, July 17th, 1893.

stone in England with that obtained by surgeons practising in India. Their statistics show better results than ours, and for this there may be several reasons. Surgeons in India have such unusual opportunities of repeatedly operating for stone that they gain a facility both in cutting and crushing operations which very few surgeons in England can hope to emulate. Further, the races they operate on may bear operations on the genito-urinary tract better than English people do, the consistence of the stones may render them more suitable for crushing than is the case in England, and there may be less tendency to fibrosis of the kidneys in natives of India than is the case in English people owing to differences in diet and climate.

My chief purpose, then, is to bring forward statistics showing the mortality in English hospitals of the various operations performed for stone in young males.

To hold the balance fairly between the three operations it is essential that an inquiry shall not go back more than a few years, seeing that the suprapubic section, and especially litholapaxy in boys, have only been established as routine procedures for a comparatively short time. I therefore limited my inquiries to the five years 1888 to 1892 inclusive of both. Some hospitals do not publish statistics, others do so in such an incomplete manner that the figures are of no use for my purpose. The inquiry was therefore limited to six hospitals in London and six in the provinces, the majority being medical schools. The results are shown in the accompanying table.

TABLE.

Suprapubic Lithotomy (Males).

Under 10 Years.			10 to 20 Years.		
Total.	Recovered.	Died.	Total.	Recovered.	Died.
44	34	10	28	23	5

Total under 20 = 72 cases with 15 deaths. Deducting 3 deaths, this leaves 69 cases with 12 deaths, a mortality of 17.4 per cent. The reason for this deduction is given in the text.

Lateral Lithotomy.

Under 10 Years.			10 to 20 Years.		
Total.	Recovered.	Died.	Total.	Recovered.	Died.
39	37	2	20	20	0

Total under 20 = 59 cases with 2 deaths. Add 1 death from suprapubic operation after uncompleted lateral = 60 cases with 3 deaths, a mortality of 5 per cent.

Litholapaxy (Males).

Under 10 Years.			10 to 20 Years.		
Total.	Recovered.	Died.	Total.	Recovered.	Died.
43	42	1	16	16	0

Total under 20 = 59 cases with 1 death. Add 2 deaths from suprapubic operation after uncompleted litholapaxy = 61 cases with 3 deaths, a mortality of 5 per cent.

The number of cases is not as large as I could have wished, but it serves the main purpose I had in view in my inquiry, which was to show the relative risk of the three operations performed under similar conditions. I am bound to say it disappointed me that the high operation should show such a high rate of mortality as 17.4 per cent. This is after deducting 3 deaths, 2 of which were in patients subjected to litholapaxy, the suprapubic operation having been performed after crushing failed, so in the tables it will be seen that I have credited the crushing operation with these two deaths. Similarly the third was in a patient on whom lateral lithotomy was attempted but failed, owing to the size of the stone, and this I have placed to the discredit of the lateral operation. Even after this correction contrast the mortality of 17.4 per cent. with that after lateral lithotomy, which is 5 per cent., and for litholapaxy barely 5 per cent.

It is interesting to see what were the causes of death after the suprapubic operation to explain a mortality which, to me, is surprising. The list is as follows:—Four deaths were due to shock, 1 of the 4 being in a case of uncompleted lateral operation and 1 in an uncompleted litholapaxy. Two were due to infiltration around the bladder, but 1 of these followed an incomplete litholapaxy: 3 were due to various conditions in the kidney, pyonephrosis, hydronephrosis, and calculus. Two patients died from peritonitis, and 1 each from pyæmia, septicæmia, bronchitis, and pneumonia.

Not unfairly it may be suggested that patients with the largest calculi are submitted to the suprapubic operation, and in such the mortality is sure to be higher than in the case of small stones removed by the other methods. This argument must be allowed some weight, but there is nothing to show that the calculi removed were of excessive size in a large majority of the cases; and, by subtracting the deaths after incomplete litholapaxy and lateral lithotomy, I have to some extent made allowance for the cases of unusually large stone.

As confirming the figures which go to show that the mortality after the suprapubic operation in children is greater than after the lateral, I may quote the remarkable experience of one children's hospital. I have a record of the stone operations in this institution for a number of years. From 1870 to 1887, inclusive of both, all cases of stone were submitted to the lateral operation, and of 70 cases only 2 died, a mortality of 2.8 per cent. over the eighteen years. At the same hospital, from 1888 to 1893, inclusive of both, 22 cases were operated upon, 15 by the lateral and 7 by the high operation. All the lateral operations were followed by recovery, whilst four of the high operations ended fatally. One of these four followed an incomplete lateral operation, as previously mentioned. Allowing for this, though, the result is to give in the last six years 22 operations, with 4 deaths, against 70 operations with 2 deaths in the previous eighteen years, when wound treatment was not as satisfactory as it is now, and when the mortality after all operations was greater.

I do not pretend that the figures I have produced represent the absolute mortality which ought to follow either of the operations. On the contrary, I believe the mortality for the suprapubic operation is much too high, but they do show a relatively high mortality for the suprapubic operation difficult to explain away. This being so, it seems to me clear that the operation of election in young males is either the lateral or litholapaxy. Of the advantages of Cheselden's operation not a word need be said here. The position and advantages of litholapaxy in children is not so clear, but it must be conceded that the splendid results it has given in India strongly commend it to us here. Personally I have only thrice performed this operation on boys, all of them during last year. With suitable instruments, and with a pillow under the buttocks to throw the stone away from the trigone to the posterior part of the floor, nothing is easier than to pick up the stone time after time; the mere manipulation is easier than in the adult bladder. The instruments used are so fine, however, that the operation is a tedious one; and if the stone is of considerable size and hard, by the time it is pulverised—for this is the condition to which it has to be reduced—and the bladder is empty of fragments, the patient will have been anæsthetised a long time, and much instrumentation will have been performed, making the operation quite a formidable one. The patients in my cases were all under 10, in each the stone was small, and all recovered. In two the recovery was uneventful, but the third gave cause for much anxiety. The stone was of very hard uric acid. When the lithotrite first broke it I had to use much force to screw it home, and as the stone broke it produced a noise like a small pistol shot; so remarkable was it that I thought the blades of the lithotrite must have broken. This was disproved, however, by my being able to pick up and crush the fragments. When all appeared pulverised the lithotrite was withdrawn, and as soon as it engaged in the urethra it was evident that something was wrong with it. With some force it had to be pulled out, when it was found that the male blade, at its distal part, had bent away from

the female, and though the heel closed the beak would not. In the withdrawal the lithrotite must have lacerated the urethra all along. For a few days there was sharp constitutional disturbance, and on this subsiding the boy was sounded to see if any fragments remained. None were found, but the sounding, probably by tearing open the healing laceration of the urethra, set up a fresh feverish condition, from which the boy escaped by the skin of his teeth, and only after an abscess had formed over his sterno-clavicular joint. The boy is now well as the others are. Notwithstanding this *contretemps*, I regard litholapaxy for *small* stones in boys as a very facile and attractive operation. If time should show that there is no great tendency to recurrence of stone, after this operation, owing to fragments left unremoved, it will run the lateral operation hard as the routine operation for young males. The high operation will be reserved probably for large stones unsuitable for removal by the other methods.

My remarks have been confined to the treatment of stone in children. Later I hope to have extended statistics of recent operations at all ages, when I believe it will be found that the operation which gives the best results at one age does not necessarily do so at another, and that it is chiefly in elderly people that the suprapubic operation gives results superior to the lateral.

TOTAL SUPPRESSION OF URINE DUE TO IMPACTED CALCULUS, WITH ATROPHY OF THE OTHER KIDNEY FROM A PREVIOUS SIMILAR CONDITION.

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I WAS sent for on the afternoon of January 2nd, 1894, to see a gentleman who had been under my care for some years for chronic rheumatic arthritis and acute gout, but whose condition had so improved during the last twelve months that he had been able to take several long railway journeys and to attend regularly to his business. He told me that he had been to a neighbouring town on business and there had suddenly become unwell, with vague backache and a general feeling of *malaise*. I could, however, find no objective symptoms, and prescribed sinapisms and a diaphoretic, thinking that, although there was no rise of temperature, the symptoms might indicate a chill. About 9 P.M. he desired to pass water, and made a pint, during the passage of which a round, smooth, facetted uric acid calculus was passed. He then felt much relieved, and went to bed.

Next morning he expressed himself as better, but I learned that he had passed no water since the previous night. He said that he had a desire to do so, but was not able. I passed a catheter and found the bladder absolutely empty. I therefore diagnosed that one kidney was blocked by a calculus, and that probably this condition had occurred passively in the other some time previously, but beyond the fact that when asked as to the position of the uneasiness he seemed to favour the right side, there was no guide to a conclusion as to which was the kidney which was just freshly blocked. I ordered diuretics, hoping to increase urinary pressure, and on the night of January 3rd about 4 ounces of urine were voided. The bowels were kept active by enemata, and a light diet ordered.

On the third day I gave oleum terebinthinæ in ♏x doses in capsules, the late Dr. Moxon having met with success in a similar case, but nothing at all passed from the bladder except a little blood-stained mucus. Absolutely no other symptoms intervened for six days, when I expressed my opinion that it would be desirable to operate, and on January 9th called in Mr. Henry Morris, of London, and Mr. Spanton, of Hanley (the latter gentleman had seen the patient with me for two days previously), who agreed to the proposition, and the former expressed his opinion that there was a sensation of greater volume in the right kidney region than in the left. I then, the patient being anæsthetised by chloroform, cut down to the kidney by the usual incision in the loin, and freed it from its fat; the kidney was very large, and perfectly healthy. I was then able to feel in the top of the ureter some hard substance about the size of a small bean, on which I cut down, and removed a flattened calculus by manipulation between my thumb and finger, which had its smoothness eroded by contact with the mucous membrane. It weighed 6 grains, and measured half an inch across by one-sixteenth of an inch deep.

The stone was situated at the point where the dilated upper part of the ureter contracts to the normal calibre. Higher up in the pelvis of the kidney I felt a number of small stones, eight of which I passed down into the ureter, and removed them by the incision I had made for the impacted stone. Nothing more then could be felt in the pelvis of the kidney, and the wound became distinctly moist from the secretion of urine. Mr. Morris, however, who kindly gave me his valuable advice and assistance, advised that the kidney should be freed, brought into the wound, and incised. As I could not reach the upper end, and was not aware of the precise amount of force which might be used, he kindly brought the kidney into the wound. I then incised the convex border for one inch, and removed a triangular stone, weighing 36 grains, in which was an oval facet in which one of the other stones had lodged. There was little or no bleeding. The kidney was then returned, and the wound united for the greater part by superficial and deep sutures.

No sutures were used either for the incisions in the kidney or ureter. Before removal from the operating table a small amount of urine passed from the bladder, and the first act of the patient on recovering consciousness from the anæsthetic was to demand a urinal, but the water was passed into a napkin, and was very little stained with blood.

The patient rallied well, and passed urine freely from the wound and by the bladder; the precise amount by the latter could not be determined, owing to the fact that much was passed into a napkin.

Twenty-four hours after the operation there was not an unfavourable symptom. Some bromide of potassium had been given by the rectum to induce sleep. The temperature was 97°.

Forty-eight hours after operation the heart began to fail, the pulse becoming weak but not rapid. The temperature was subnormal. The flow of urine was very satisfactory, some collected was only slightly blood-stained, specific gravity 1016; albumen about $\frac{1}{3}$. The heart slowly got worse, and the patient sank in spite of the free exhibition of stimulants, 58 hours after the operation.

I was permitted to make a slight examination of the condition *post mortem*. I found that the kidney was becoming adherent to the perirenal fat by lymph. The incision in its free border was looking well, and commencing to heal. There was no peritonitis. The left kidney was represented by a mere shell, enclosing a mass of calculous deposit weighing 360 grains.

In addition to the fact that such a case as I have just recorded is very rare, there are several interesting facts which call for remark. In the first place the patient had been under constant medical supervision for the last twenty years for gouty conditions, with which were associated a tendency to bronchitis, and a weak, flabby heart; and during the whole of this period he had not had a symptom which had led any of the medical men he had consulted at various times to suspect renal calculus.

For the last three years I had at intervals of every few weeks examined his urine, always finding it loaded with uric acid crystals, and giving a trace of albumen, but I never on any occasion noticed any blood in it, nor did his attendants at home, who constantly watched the colour of the secretion.

So that here we have a case of advanced renal calculus without either of the clinical symptoms considered diagnostic even going on to the plugging of a ureter and complete atrophy of the left kidney without a single recognisable sign. To such an extent were we in the dark as to which side to attack first, that the question of a preliminary abdominal section was discussed, but negatived on account of the weak state of the patient's general health.

The rapidity with which the urinary secretion was estab-

lished after removal of the plugging stone was remarkable.

The absence of general symptoms is the usual course of events in the early days of mechanical suppression of the renal function. Cases have been reported that have lived for sixteen or twenty-two days before a fatal end. The symptoms described in these cases are contraction of the pupils, sleeplessness, and muscular twitching, none of which were observed in my case. It is quite possible that the impaction of a stone in the ureter of one side may cause reflex inhibition of secretion in the other kidney, and cases which seem to bear out this view have been noticed.

Another point of note is that notwithstanding the fairly active life of my patient, the mass of stone in the left kidney caused no irritation or suppuration.

An important question in such cases is, How long must operative treatment be delayed on the chance of permitting the stone to pass? I remember the late Dr. Moxon, in a clinical lecture on this subject, relating a case in which after fourteen days a calculus passed, and the urinary secretion became re-established; at the same time he threw out a hint that surgical proceedings might one day be taken for such a state of things.

In these cases the onset of dangerous symptoms, however long delayed, is nearly always sudden, and rapidly leads to a fatal termination.

There will probably be a greater tendency to postpone operative measures, if there are no clear indications as to which side should be the one attacked; but the amount of extra shock from operation on the wrong side may be neglected in many cases. It is of course difficult to determine accurately the absence of calculus far down the ureter without incising the ureter and passing down a probe, and this condition could be easily passed over on the supposition that the kidney first explored had its function reflexly inhibited. I do not know whether it would be easier to diagnose the presence and position of a stone in the middle and lower parts of the ureter from the abdomen, but some authors recommend this preliminary examination.

An operation has these advantages over expectant treatment, that the cause is removed, for the probability is that more than one stone will be present, and therefore a repetition of the trouble is prevented. Further, even if the block in the ureter be not removed, life may be preserved by the passage of the renal secretion of the wound.

Whether or no the delay of an operation as long as urgent symptoms are absent increases the mortality after operation must be left for the present undecided, as the cases on which to base an opinion are happily very rare, but it is certain that the retention of the products of urinary secretion in the blood cannot be without deleterious effect.

It is probable that the mortality after operation will always be high, because the condition is one which occurs in chronic gout, and therefore in debilitated subjects. Taking everything into consideration, I feel that the earlier after diagnosis an operation be performed, the better chance the patient will have of recovery.

DEMONSTRATION OF THE TYPHOID BACILLUS IN SUSPECTED DRINKING WATER BY PARIETTI'S METHOD.[1]

BY EDMOND J. McWEENEY, M.A., M.D. ROYAL UNIV.,
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ON March 30th I was asked by my friend and former hospital colleague, Dr. W. R. Morris, of Waterford, to undertake the examination of a sample of drinking water which he suspected of being concerned in a rather serious outbreak of enteric fever that had occurred in his practice. I sent him a sterilised bottle, and having received the sample, proceeded at once to make a series of plate cultures with quantities varying from 0.25 c.c. to 1 c.c. of the water, which looked pure, sparkling, and free from sediment. The nutrient substratum was the ordinary peptone gelatine, and the plates were kept at 22° C. Colonies developed with great rapidity, and proved to belong for the most part to rapidly liquefying putrefactive species. Amongst the non-liquefying colonies were several that presented a superficial resemblance to those of Eberth's bacillus, but microscopic examination failed to support their identity. Before it was possible to adequately examine the various slow-growing colonies, liquefaction had proceeded to such an extent as to destroy even the most dilute plates.

Under these circumstances recourse was had to the method proposed by Parietti.[2] Three tubes, each containing 10 c.c. of neutral broth, received respectively 3, 6, and 9 drops of Parietti's solution (5 g. phenol, 4 g. HCl, 100 c.c. aq. dest.) and 10 drops (a pipette delivering about 15 drops to the c.c. was used) of the water were introduced into each of the tubes which were set aside to develop at 37° C. The next day growth had occurred in the 3-drop and 6-drop tubes only, whilst the 9-drop tube remained clear. The two first-named were then plated out on gelatine at 22° C., and in forty-eight hours the "original" plates were thickly covered with uniform non-liquefying colonies, whilst the dilutions displayed most typical typhoid colonies, some of which gradually attained at 22° C. a diameter of 0.5 c.m. The wavy outline and translucent texture were very striking. A trace transferred to the hanging drop showed the organisms to be short thick bacilli with rounded ends and endowed with most remarkable powers of motility. With some difficulty I succeeded in getting the flagella stained, using the mordant prescribed by Loeffler,[3] and 1 c.c. of alkali. They were very numerous, and scattered over the whole surface of the bacilli, which they greatly exceeded in length. They were also much curved. Transplanted on to potato, a typical slimy quasi-invisible growth developed at 22°; at 37° C. the result was not "typical," as a dirty-white opaque streak made its appearance along the middle of the half cylinder of potato (Globig's method), which was much discoloured. The same result was obtained by Kamén,[4] and it is generally ascribed to the acid reaction of the potato. From my own experience in the present and other cases, I am inclined to think that culture at 37° C., by causing rapid discoloration of the potato, greatly predisposes to this atypical growth.

Finally, I applied the fermentation test as recommended by Theobald Smith, of Washington,[5] using Southall's ureometer tubes, and 1.5 per cent. solution of glucose and lactose in neutral broth. For comparison I employed a culture of bacillus coli isolated three months ago from the spleen and mesenteric glands of a case of atypical bowel infection indistinguishable clinically from typhoid. The result was peculiar. At the end of twenty-four hours the fluid had been replaced by gas for about an inch of the two coli tubes (glucose and lactose). No evolution of gas whatever had taken place in the glucose tube that had been inoculated with the water organism, but the lactose tube showed about a quarter of an inch of gas. How to read this result as yet I do not know, for Smith does not seem to regard it as possible that an organism which could not split glucose should yet be able to split lactose. In order to exclude the possibility of air having accidentally got into the tube, I allowed the gas to escape, and carefully replaced the tube in the incubator. Next day about the same amount had collected.

Summing up the results obtained, the balance of evidence would seem to be in favour of regarding this bacillus as that of Eberth. Motility, characters, and distribution of flagella, and growth on potato at 22° C., correspond with the classical characters of the typhoid bacillus. But even should the divergence appear to some sufficient to justify separation as a distinct variety in the biological sense, still it seems to me an important matter to demonstrate in drinking water an organism which if not the B. typhosus of Eberth is so closely related thereto that we may suppose it with much probability to have a similar origin. It might, perhaps, be regarded as either a colon-bacillus that has undergone extreme modification in the typhoid direction on the supposi-

[1] Read before the Section of State Medicine of the Royal Academy of Medicine in Ireland, April 20th, 1894.

[2] *Rivista d'Igiene e Sanità pubblica*, 1890, ref. by Kamén in *Centralbl. f. Bakt. u. Parasitenk.*, Bd. xi, 1892, p. 33.

[3] *Centralbl. f. Bakt. u. Parasitenk.*, Bd. vii, 1890, p. 625.

[4] *Loc. cit.*

[5] *Centralbl. f. Bakt. u. Parasitenk.*, vii, 1890, p. 502.

tion that the views of the Lyons school are correct, or as a typhoid bacillus *sensu stricto*, the characters of which have undergone alteration as the result of a changed environment. That environment can and does alter the biological characters of micro-organisms is indubitable, and this very case affords a striking example of the fact. It will have been noted that the 9-drop Parietti tube remained sterile, although inoculated with typhoid-containing water. A trace of the slightly turbid contents of the 6-drop tube was introduced, and the tube set aside for twenty-four hours at 37°. The next day it was found to be turbid throughout, and plating out yielded a result identical with that above described in the case of the other tubes. Organisms of the colon group are highly flexible in this way. In connection with other water analyses in which they were present, I have pushed the dosage of acid and phenol (as Parietti's solution) to more than 1 c.c. in 10 of the broth, and still obtained growth, but only by gradual acclimatisation. Other organisms may sometimes share in this tolerance; for example, a 15-drop Parietti tube inoculated with sewage proved after incubation at 37° to contain only an enormous coccus, the biology of which I followed no further. For the above reason the requirements of those who insist upon absolute biological and morphological coincidence between the typhoid bacillus of Eberth, described as it has been from the study of cultures made direct from the bodies of typhoid patients, and the typhoid bacillus after many generations spent in such widely different surroundings as the contents of the privy or water pipe, seem to me based upon fallacy.

Dr. Morris has been good enough to furnish me with the following details about the outbreak: "The village contains ten houses with a population of about fifty. The houses are surrounded in each case by farm out-offices, with the inevitable manure-heap in the yard. The pump is surrounded with manure-heaps on every side. During the autumn and early winter it was dry. At Christmas it began to work again, and in order to facilitate matters, it was the custom to procure a bucketful of slush from the nearest pool and pour it down the pump. The first cases occurred during the second week in January, and nearly simultaneously in three houses. There were 18 cases in all, 2 of which died. I had 12 in my practice without a death. My cases were all connected with two houses. In one the entire family—father, mother, son, three daughters were all attacked; in the other a man, his wife and sister, two old women (aged about 70), and a little girl who came to nurse. Eight cases I would count as mild, namely, the two old women and the six young people (aged from 10 to 20). The others I would class as fairly severe, and in each case the severity was due to pneumonia. The pneumonia was right-sided in each case and the lung was long in resolving. Typhoid spots in 9 cases; constipation in 4; no hæmorrhage. Violent early delirium in one case. The diarrhœa generally lasted ten days. Marked temporary deafness in 9 cases..... The two old women and the little girl referred to went to their homes in different villages. I have not heard of any case occurring since then in their locality. I wonder if the typhoid bacillus is contained in butter..... All these parties were making butter and using the water."

The reply to Dr. Morris's very natural question would appear on *a priori* grounds to be decidedly in the affirmative. An experimental investigation of the matter has been published by Laser,[6] who found that typhoid bacilli preserved their vitality in butter for six days.

In the above observations I have avoided, as far as possible, going into the extensive Continental literature of this subject. I have chiefly aimed at giving a narrative of facts, and have been prompted to do so by the important *rôle* which may, on the strength of such cases as this, be justly claimed for the bacteriological analysis of drinking water. The accumulation of such results may shortly begin to influence public opinion to so great an extent that chemical results will in no distant future be regarded by public boards as insufficient unless accompanied by the information obtained as the result of careful bacteriological analysis Every credit is due to practitioners who, alive like Dr. Morris to modern scientific acquisitions, are instrumental in calling attention to such cases as that which I have just reported.

[6] *Zeitschr. f. Hygiene*, Bd. x, 513.

THE EFFECTS OF COMPRESSION OF THE COMMON CAROTID ARTERY.

By LEONARD HILL, M.B.,
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AND
B. MOORE, M.A.,
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SCHIFF[1] recorded many years ago that the results of temporary occlusion of one common carotid artery were formication and tingling over the opposite side of the body, followed by anæsthesia if the compression was maintained for a longer time. The symptoms began with sensations in the face on the same side, and darkening of vision of the eye on the same side. From this observation, Schiff argued in favour of the crossing of the sensory tracts. In one experiment on himself, Schiff was seized with twitchings of the opposite hand; and in one other experiment in the presence of a doctor, he fell to the opposite anæsthetic side, and was seized with convulsions of the opposite extremities. Schiff notes that the sensations grew most intense in the opposite hand. He attempted to compress both carotids on himself, but his arms fell powerless. In some individuals no result was obtainable, and this was due to free anastomosis, as shown by the continuation of weak pulsation in the external maxillary artery aiter compression of the carotid.

Mr. Spencer and Professor Horsley,[2] in a recent most interesting research on the control of hæmorrhage from the middle cerebral artery by compression of the common carotid, found that, on applying the pressure in monkeys, "all pulsation of the middle cerebral immediately ceased." The cortex became paler, and the excitability to electrical stimulation of the so-called motor areas was lost. The compression had no effect in diminishing the blood supply of any other part of the cortex than that supplied by the middle cerebral. Two hours after ligature of the common carotid in the monkey, the excitability and the circulation were again fully established through the anastomosis of the circle of Willis. These results depended on the anatomical arrangement of the middle cerebral, which is a direct continuation of the line of the internal carotid.

Neither in these experiments nor in the surgical cases on record of ligature of the carotid artery has there been any manifestation of spasm or motor discharge resulting from the sudden cortical anæmia. It is very possible that this may be due to the lessened cortical excitability produced by the anæsthetics employed. Temporary paralysis[3] with aphonia and anæsthesia has been observed in surgical cases of ligature several times.

On coming across the observation of Schiff several months back, one of us (H.) tried the experiment of compressing the left common carotid, and at once obtained the sensations of formication and tingling spreading down the right side of the body and accompanied with feelings of vertigo. On January 5th, 1894, H. again tried the experiment, and was astounded by the immediate result of half a dozen clonic spasms of the right hand, which at the time lay upon the arm of a chair. The hand felt passively moved as if by some external agent, and consciousness of the spasms arose only from the peripheral sensations produced by the movement. The experiment was followed by vertigo and nausea lasting for some minutes.

On January 12th H. repeated the experiment with the purpose of observing the effects more closely. On compressing the left carotid against the spine, an undefinable sensation, which may be called numbness and pricking, arose in the left eye; this was followed by a distinct and rapid march of formication and numbness down the right arm, right leg, and then up the left leg. At this point the compression was withdrawn; the sensations, however, grew in intensity in the right hand, drew the attention to that

[1] Schiff, *Lehrbuch d. Physiol.*, 1858-59, p. 108.

[2] "The Control of Hæmorrhage from the Middle Cerebral Artery and its Branches by Compression of the Common Carotid," BRITISH MEDICAL JOURNAL, vol. i, 1889, p. 457.

[3] A complete history of these cases is to be found in the above paper of Spencer and Horsley.

part, and then the hand was felt to be passively twitched as by some external agent three or four times. Nausea and vertigo followed and lasted for some minutes, and an acute feeling of dread of touching the region of the carotid again lasted for some days.

On January 15th, M., while observed by H., attempted to occlude the right common carotid. M. experienced difficulty at first in compressing the artery, and the first symptom produced was a succession of inspiratory spasms, which very probably were caused by stimulation of the vagus. Sensations in the eye on the same side followed, and then three or four flexions of the left hand and fingers, which were lying at the time on M.'s knee. At the same time there were pallor and sweating of the face. M. felt the hand to be passively moved by some external agent, and consciousness of the movement arose entirely from peripheral sensations. Vertigo and nausea followed.

The interest of these observations, which are too unpleasant to be willingly repeated, lies, first, in the realisation of the intensely sensory side of consciousness. In all three experiments and in both observers consciousness of the movement arose entirely from the centripetal sensory impressions which had origin in the moving part. The central motor discharge was absolutely unaccompanied by any simultaneous consciousness of that discharge. The sensory part of the sensori-motor process was alone accompanied by consciousness. Consciousness of peripheral sensations arose first of all as an illusion from the central stimulation due to the sudden anæmia; and, secondly, from the real peripheral sensations due to the "passive movements" of the arm.

Secondly, the experiment impressed vividly upon the observers the sensori-motor functions of the regions supplied by the middle cerebral artery, and the justness of the views of Munk, and in this country of Mott, as to the nature of the results arising from ablation of this area.

Thirdly, the observers were enabled to feel the full force of the teachings, long ago formulated, of Hughlings Jackson as to the origin of spasm in man from pathological changes in this region of the cortex. For it can scarcely be urged with any probability that the above results, with the exception of the inspiratory spasm, could have been induced by any stimulation of the vagus or sympathetic nerves.

THE CASE OF THE "HUMAN OSTRICH."

By FREDERIC EVE, F.R.C.S.,
Surgeon to the London Hospital.

O.W., aged 43, general labourer, was sent from an infirmary to the London Hospital early on the morning of April 24th. He was suffering from peritonitis and intestinal obstruction. Although questioned closely he gave no clue to the cause of the obstruction; he stated that four days previously an attack of severe pain in the abdomen, referred to the umbilicus, came on, and from that time he had passed neither flatus nor fæces. Vomiting had only commenced on the previous evening, when he was admitted to the infirmary. I saw him at 9 A.M.; the abdomen was much distended and tympanitic; the respiration rapid and difficult; his pulse thready, rapid, and feeble. He had typical *facies abdominalis*; temperature 100°; the skin covered with cold perspiration. Peritonitis associated with some form of acute obstruction was diagnosed, and the patient was taken at once to the theatre. He seemed so exceedingly ill that I resolved to content myself with opening the abdomen and tapping and evacuating any distended coil of intestine which might present itself, after the method advocated by Mr. Greig Smith, and, as his respiration was extremely embarrassed and the heart action also failing, I resolved to employ cocaine as a local anæsthetic instead of ether or chloroform.

About 30 minims of a 2½ per cent. solution of cocaine were injected both superficially and deeply into the abdominal wall between the umbilicus and pubes. The patient experienced absolutely no pain during the incision through the parietes of the abdomen until the peritoneum was reached, when he gave slight evidences of discomfort. The abdomen contained a large quantity of fluid fæces, the intestines were deeply injected, and in places matted together with recent lymph. A coil of distended intestine was followed, and a perforation of the ileum containing a square piece of tin the size of a threepenny piece was soon found. Less than an inch beyond this was another perforation, each opening being the size of a halfpenny piece; protruding from the second perforation was a metal hook so bent upon itself as to clamp the intestinal wall; it could not be freed until bent open with a pair of pliers. Attached to this hook, and extending along the intestine in the direction of the ileo-cæcal valve was a narrow strip of leather; this was firmly pulled upon but could not be detached. Its opposite end was evidently firmly fixed in some portion of the bowel lower down.

Immediately below the point where the hook had penetrated the intestinal wall the bowel was folded or "concertined" together, and at one point an intussusception of about an inch to an inch and a-half in length had occurred, the proximal end of the intestine being invaginated, as usual, into the distal. The condition of this portion of the bowel was thought to have been brought about by the hook becoming attached to the intestinal wall, while the piece of leather had been driven onwards by the peristaltic action of the bowel; on freeing the hook, the folded intestine was easily drawn out, together with the intussusception. About two or three feet further down than the perforations, the gut was firmly attached in the right flank, and, on introducing the hand, a portion extending obliquely upwards in the direction of the liver was felt to be distended and closely packed with some hard substances, feeling like coins. The necessary manipulation in the abdomen and separation of adherent lymph or adherent coils had caused the patient considerable pain. His pulse and general condition became worse; his abdomen was therefore washed out with weak carbolic acid solution, the two neighbouring perforations were united by an incision, and the opening attached to the incision in the abdominal walls. In the meantime injections of brandy and of strychnine, gr. $\frac{1}{30}$, had been given subcutaneously. He rallied somewhat from the operation, and his pulse responded to injections of strychnine, but he finally died at 5 P.M. the same evening, having remained conscious to the last.

After the operation he was questioned closely as to his habits, and he confessed that to gain a livelihood he would swallow "penny pieces, halfpence, pieces of tin, paper, cork, swivels, watch chains, keys, tintacks, nails, pieces of india-rubber, and sovereign purses, etc.," but "scores came back," meaning *per rectum*. He was evidently under the impression that he had long since passed all of these articles.

At the *post-mortem* examination next day all the organs were practically healthy except the apex of one lung, in which there were some caseous nodules and also pleuritic adhesions. The stomach was empty, and the lining membrane healthy except at the cardiac end, where it was considerably ecchymosed, and at the pyloric end, where it was stained black, suggestive of considerable delay in the metals passing through the pylorus; the latter admitted two fingers. The stomach and œsophagus were not dilated. The upper end of the small intestine was much distended, and the whole ecchymosed. Toward the end of the ileum the bowel was coated with shreds of lymph, and the whole of the abdomen contained turbid yellowish fluid. The lymph on the intestine readily peeled off. Nothing except fluid appeared in the intestines till about five feet from the ileo-cæcal valve, where the artificial anus existed, and about a foot further on an ulcer with a tiny perforation was detected. For a distance of eighteen inches the bowel was completely blocked with foreign bodies. These were variously mixed with clogs of newspaper on which the print could still be detected, and consisted of the following remarkable collection:

Forty pieces of cork (cut bottle corks).
Thirty pieces of doubled tinfoil.
Nine pennies.
One iron ring (size of a penny).
Ten or twelve pieces of clay-pipe stems.
A leaden bullet.
A rubber ring from a lemonade bottle.
Three pieces of leather an inch square, string, cotton, newspaper.
A piece of leather, nine inches long, with a stout hook at each end (one of these hooks had been found in perforation).
A piece of string about a foot long, with tinfoil and corks attached.
A few other smaller things.

These extended to the valve, beyond which only one or two pieces of tin foil were found.

At the inquest it appeared from the evidence of the deputy of the lodging house where he had resided off and on for three years, that he was in the habit of wagering to eat the plate his food was on, and then proceed to do so. He was also said to have eaten bottles and other articles. He was not known to have done so recently.

REMARKS.—The obstruction appeared to have been determined by the string and cotton becoming entangled around the corks, which were closely wedged together, and close to them eight of the nine copper coins were piled one upon another. The lower of the hooks attached to the piece of leather was entangled in this mass, while the hook at its opposite end had perforated the wall of the bowel, the intervening portion of intestine being drawn together and intussuscepted in the manner described above. It may be noted that the foreign bodies were found at the point where impaction usually occurs—namely, just above the ileo-cæcal valve—and that the large intestine was free, indicating, of course, that a foreign body was voided if it has passed the valve.

Among the many remarkable and almost incredible instances of large foreign bodies which have been swallowed, and have safely traversed the stomach and some portion of the intestine, may be mentioned two, preserved in the Museum of the Royal College of Surgeons. One of these is a dessert spoon 7 inches in length, its bowl measuring 1½ inch across, which became fixed in the cæcum of a lunatic. No immediate ill-effects followed, but he ultimately died with ulceration of the cæcum and ascites. The other is a large earthenware egg cup, which was found impacted within the ileum of a man, aged 60, also of weak mind. For ten weeks before death he had suffered with what was regarded as dysentery, and was admitted to a workhouse for symptoms of obstruction. There was a large old inguinal hernia, which was almost completely reduced without relief to the symptoms. The man refused operation, and died. Two inches above the part of the intestines strangulated by the neck of the hernia was the egg cup with its broken stem projecting through the bowel.

One word, in conclusion, in regard to the use of cocaine anæsthesia for exploratory laparotomy in cases of intestinal obstruction in which the patient is *in extremis*. In the case above related anæsthesia was doubly contraindicated, ether on account of the great embarrassment to the respiration which existed, and chloroform on account of the pulse. I have on several occasions observed that when ether is administered, even in cases in which no respiratory difficulty exists, after a short time the patient becomes cyanosed, cold, and not infrequently the engorged and weakened right side of the heart never recovers itself. The amount of cocaine necessary to render the abdominal parietes completely anæsthetic is exceedingly small. In this case about one-half to three-quarters of a grain only was required for the first incision. The patient when admitted was evidently suffering from intense toxæmia, and the operation was only undertaken as a forlorn hope. From the condition of the abdomen I suspect that the perforation had occurred four days previously, at the time he was attacked with the severe abdominal pain.

I am indebted to the House-Surgeon, Mr. L. Hill, for the notes of the necropsy.

AN ANALYSIS OF TWENTY-FOUR CASES OF ENTERIC FEVER IN CHILDREN.

BY J. P. WIGHTMAN, M.R.C.S., L.R.C.P.LOND.,
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DURING the years 1892 and 1893 there have come under my notice twenty-four cases of enteric fever occurring in children under the age of 13 years. Of these cases, three terminated fatally; one from pyæmia, one from perforative peritonitis, and one from exhaustion.

Temperature.—In all cases there was elevation of temperature, but rarely as high as 104° F. There were no relapses. A not uncommon occurrence, after the temperature had become normal, was a slight rise for a day or two on first adding semi-solid food to the diet, but this subsided, and was not accompanied by any further cause for anxiety.

Spleen.—Enlargement of the spleen, discoverable by palpation, occurred in 8 cases.

Rash.—Typical typhoid (rose) spots were seen in 15 cases.

Bowels.—(*a*) Constipated, 10; (*b*) typical stools (that is, corresponding to the typhoid "pea-soup" motion of the adult) in 3 cases only; (*c*) apparently normal, 3; (*d*) loose and offensive but not typical of anything, 8. Enemata had to be given during the acute stage in 7 cases, and during convalescence in 7 cases also.

Cause of Death.—The causes of death in the three cases mentioned above were as follows:

Pyæmia (girl, aged 13 years) secondary to acute necrosis of the terminal phalanx of a finger; the form of pyæmia being innumerable superficial abscesses.

Perforative Peritonitis (boy, aged 12).—Symptoms coming on one hour after the administration of a glycerine enema, the child dying forty-eight hours afterwards. The *post-mortem* examination showing a small perforation at the base of a typhoid ulcer 2 inches above the cæcum; general acute peritonitis; the gut much thinned for some distance from the perforation; 10 or 12 ounces of sero-purulent fluid in the general peritoneal cavity.

Exhaustion (girl, aged 8).—The temperature kept high—104° F.—for about a fortnight, in spite of the usual antipyrexial treatment. The *post-mortem* examination showed many typhoid ulcers of the lower part of the ileum; some healing, some extending to the peritoneal covering, and some commencing.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

A SIMPLE MEANS OF PREVENTING THE ENTRANCE OF BLOOD INTO THE TRACHEA DURING OPERATIONS ABOUT THE MOUTH.

IN the BRITISH MEDICAL JOURNAL of March 24th are recorded the deaths of two children from the entrance of blood into the trachea while they were under chloroform, for, in one case, an operation for harelip, and, in the other case, for the removal of adenoid growths from the pharynx. To guard against such accidents in future I am anxious to draw attention to a very simple means by which they can be prevented. For many years back in such operations I have adopted the simple expedient of placing the patient's head over the end of the operating table, letting it fall below the level of his body. By this means it is impossible for the blood to enter



the trachea; and such operations as those for cleft palate, harelip, removal of tongue, jaw, tonsils, etc., can be readily done without the least risk of any blood entering the air

passages. Patients take chloroform well in this position, and, though owing to the dependent position of the head there may be a little extra hæmorrhage, this is of no consequence, as it flows out through the nostrils or mouth.

I got the idea years ago from my old teacher, the late Professor Trélat, of La Charité Hospital, Paris. The accompanying photograph illustrates the position in which the head should be placed.

Sunderland. JAMES MURPHY.

ADDISON'S DISEASE COMPLICATED WITH INFLUENZA.

J. C., aged 19, was taken ill on February 27th. He complained of severe headache and pain in the back and limbs; the pulse was feeble, 110; the temperature, 102°

I was struck at once by his complexion, but he seemed to make light of it, saying "he had been always dark," but I found that the colour had been increasing for the previous eighteen months, and also that during that time he had been feeling "easily tired" though he was able to attend to his duties as a clerk. In September, 1893, he went for his holiday, and at the end of it he was "feeling very weak." He had consulted a medical man, and since then had been much better, though for the previous fortnight there had been loss of appetite, and he had felt tired, and had thrown himself down on his bed at night after the exertion of going upstairs.

The lungs were healthy, the heart's action was decidedly feeble. The skin all over the body was bronzed, and there was marked pigmentation of the eyelids, nipples, axillæ, flexures of arms and legs, and also to a more intense degree of the penis and scrotum.

Being persuaded that he was suffering from Addison's disease as well as influenza, I gave a guarded prognosis. By March 2nd, the temperature was normal, but the pulse was still weak and rapid. His look was downcast and mournful, and there was great listlessness. He had not slept much and had taken little nourishment. On March 4th he was sick for the first time and still remained very weak. On March 5th he was a great deal worse, being much weaker and very breathless on the least exertion. The pulse was more rapid. On March 6th, the symptoms were all aggravated, he tossed about continually, and vomited at times. He got steadily weaker, and died on March 7th.

REMARKS.—The interest in this case lies in the fact of the rapid fatality of the Addison's disease, enhanced by the attack of influenza. No necropsy was obtained owing to his living at a place of business, but there was a well marked tuberculous history in the family, his mother and aunt having died of it.

Tiverton. C. E. LIESCHING, M.R.C.S., L.R.C.P.

SUDDEN DEATH DURING LABOUR.

MRS. C., aged 25, had had two previous confinements which were rapid and normal. There was a history of rheumatic fever when a girl. Cardiac disease (mitral stenosis) had resulted, but was not suspected till five months before her third confinement, when she suffered from acute bronchitis with hæmoptysis. There was some œdema at the latter end of pregnancy and for a week before labour. She was kept in bed; there was then no bronchitis.

Labour began on April 1st. The os was well dilated when the membranes ruptured, and a fourth facial presentation was made out. Progress was slow and pains severe and rapid before the face and cranium swept over the perineum, which remained intact. She rested some minutes after the expulsion of the child, and spoke about her labour being more severe and different from the others. Friction and gentle compression of the uterus was tried to expel the placenta; whilst doing so she began to cough, and suddenly threw back her head gasping for breath, with wild staring eyes. She rapidly became unconscious, and died in about two minutes. The heart continued beating for about half a minute after the beginning of the attack. The placenta was hurriedly expelled, and ether and artificial respiration tried, but without avail. There was no *post-partum* hæmorrhage. No *post-mortem* examination was allowed.

This was probably a case of pulmonary embolism occluding the main trunk, the blood clot forming in the right ventricle or auricle during the pains of labour, and getting dislodged by the coughing.

Dennistoun, Glasgow. JAMES DUNLOP, M.B., C.M.Glasg.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

STATION HOSPITAL, SECUNDERABAD, DECCAN, INDIA.

GUNSHOT INJURIES OF THE UPPER THIGH.

(By F. P. NICHOLS, B.A., M.B.Cantab., Surgeon-Major Army Medical Staff.)

ON August 22nd, 1892, Private H. was accidentally shot on the rifle range at Secunderabad from the 200 yards butt with a bullet from a Martini-Henry rifle. He was standing sideways to the target, and the bullet entered the outer side of the left thigh, dropping him at once. I saw the man immediately after the accident on the spot where it occurred. He was quite tranquil, and gave a collected account of the occurrence. On taking down his trousers a piece of the bullet, weighing 260 grains, was seen lying in his shirt close to the wound of exit in the left buttock. It was much scratched and contorted. The man was at once removed on a stretcher to the Station Hospital, and a thorough examination made under chloroform with clean fingers. The bullet had made a hole through the trouser leg, drawers, and shirt opposite the wound of entrance, which was a round, clean-punched hole, just admitting the tip of the little finger, situated three inches and a-half below the tip of the great trochanter. The wound of exit in the middle of the left gluteal fold was somewhat larger, easily admitting the forefinger, and with everted and somewhat ragged edges. No other holes than those mentioned could be found in the clothing. There was little bleeding. Movement of the limb produced crepitus. The wounds were then enlarged enough to admit the fingers, and the bone was found completely shattered. The passage from the wound of exit led into a cavity the size of a fist, in which the two broken ends of the femur could be felt amid a mass of blood clot and fragments of bone. No trace of the rest of the bullet could be found. A large drainage tube was passed through from side to side, and the leg placed on a McIntyre's splint. This was changed next day to a Liston's long splint, but finding it very difficult to syringe the wounds properly, I had a hole cut in the canvas of a War Office pattern stretcher just sufficient to enable me to get easily at the wounds when raised. On this stretcher the patient lived quite comfortably till December 25th. For dressing purposes it was lifted on the shoulders of four men, and was then replaced on a fracture bed with interrupted mattress, the wounds resting on a cushion of absorbent cotton, and the leg itself being steadied with simple extension by weight and pulley until, by the ninety-first day, bony union rendered it unnecessary.

From the first he complained of tenderness over the right trochanter—put down to bruising—and of inability to pass water, for which no reason could be found. The urine, alkaline and containing large quantities of earthy phosphates, was readily drawn off by catheter for a week, after which time there was no more trouble.

Fever, which never ran high, set in on the fifth day, and the wound of entrance became sloughy. Pieces of loose bone began to come away, by the aid of syringing and forceps, on the twelfth day, and continued till the twenty-sixth, when the two ends of the bone could be felt, with nothing loose between them. On the twenty-fifth day an abscess was found pointing on the inner side of the right upper thigh. It contained two ounces of very foul pus, and extended towards the perineum. Under simple treatment it readily healed.

At the same time a lump was noticed just below the right

trochanter, which, on being cut down upon, proved to be a piece of the bullet, weighing 105 grains, embedded in the muscles. The wound healed under the first dressing; 110 grains of lead still remain to be accounted for. The single drainage tube was removed, and cut in two on the sixth day, and the two pieces gradually shortened until removed on the one hundred and third day. Throughout irrigation or syringing with iodised and, later, boiled water was practised. A Thomas's splint was ordered on the one hundred and seventeenth day, and, after fitting it, he was able to get about on crutches, and improved rapidly in general health. The wound of entrance was quite closed on the one hundred and twenty-eighth day, and that of exit ten days later, at which time the bone appeared quite firmly united with 2-inch shortening, and he could lift the leg. He is now walking about with the help of a stick alone, and complains of nothing but "stiffness" of the thigh muscles. In a few days he will be on his way to England as an invalid—useless, indeed, for the service, but able, in favourable circumstances, to earn his living.

REMARKS.—The points to which I wish to draw attention are: (1) The slight amount of "shock;" (2) the course of the piece of bullet extracted from the opposite thigh; (3) the treatment on an ordinary stretcher; (4) The good result after only 117 days' treatment. As to the first and fourth of these points, I would draw attention to a very similar case reported by Surgeon-Major Hamilton, I.M.S., in the BRITISH MEDICAL JOURNAL of September 10th, 1892, page 578. The cases are remarkably analogous. A sepoy with a comminuted gunshot fracture of the left upper thigh made by a Martini-Henry bullet at 800 yards, was treated at once with permanent antiseptic dressings. The wounds healed in less than six weeks, and he was discharged to pension under six months with a good leg. In my case, the great comminution deterred me, rightly or wrongly, from attempting a permanent dressing. Regarding the portion of bullet cut out on the twenty-fifth day, it appears extraordinary that an irregular piece of lead 1 inch long by $\frac{1}{2}$ inch wide should thread it way through the perineum without damaging the delicate organs contained in it; yet such was the case, for by no other means could it have reached the great trochanter of the other leg. The inability (temporary) to pass water, and the abscess containing foul pus, which was directed towards the perineum, and probably originated from some urethral wound, were the only inconveniences connected with it. The treatment on a stretcher I found most convenient for both patient and surgeon. A hole 6 inches by 8 inches was cut in the tightly-stretched canvas of a W. O. stretcher (without rollers) from the pole towards the middle, just sufficient to allow both wounds to be easily got at, and to give room for defæcation. In future I should have the edges bound with leather to prevent the canvas splitting. For dressing purposes, the stretcher was raised on the shoulders of four men (four forked uprights would do as well), and after dressing, it was merely laid on a mattress with a large pad of absorbent wool beneath the wounds. The thick square poles of the stretcher, resting on the mattress, supported the canvas, and pressure was easily regulated by arranging pillows and blankets under or between the poles. A thick layer of straw on the bare ground would do quite as well except that extension could not be made by pulley and weight. Only twice during three months was the man raised from the stretcher, once to change it (the canvas having split) and once to give an extra cleaning. He was perfectly comfortable, and when first shifted on to a mattress asked to be replaced on his stretcher, as he found it more easy. Cases like these make one confidently hope that with surgical cleanliness combined, where possible, with permanent dry dressings and immobilisation by methods such as these, which should be available on every battlefield—a War Office pattern stretcher takes but little room—not to speak of the lessened chance of septicity in, and more favourable character of, wounds caused by smallbore weapons, the mortality of gunshot injuries of the thigh may in future be materially diminished.

ENGLISH PATIENT FOR M. PASTEUR.—Another Coatbridge patient left for the Pasteur Institute in Paris on Saturday, April 21st; this time a little girl, who was bitten by a dog affected with rabies.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

F. W. PAVY, M.D., F.R.S., President, in the Chair.

Tuesday, May 1st, 1894.

TUBERCULOUS ULCERATION OF THE LARGE INTESTINE.

DR. NORMAN MOORE exhibited a specimen of extreme ulceration confined to the large intestine, which microscopic examination showed to be tuberculous. The primary lesion was in the right lung. The patient was a soldier, aged 24, who developed cough and pleural effusion, for which last he was tapped a great many times, the fluid withdrawn being always non-purulent. Resection of rib was at length practised, and death ensued. There had been no diarrhœa at any time throughout his illness.

Dr. S. WEST referred to a case of tuberculous disease of the pleura where paracentesis had also been practised a large number of times, the fluid remaining serous. He considered it wisest not to adopt excision of rib in such tuberculous cases.

TUBERCULOSIS OF THE OVARIES AND FALLOPIAN TUBES.

Dr. HABERSHON recounted the case of a young unmarried woman suffering from tuberculous phthisis, abdominal pain and diarrhœa; the pain was intermittent and localised to the right iliac fossa. The patient died comatose from tuberculous meningitis. After death tuberculosis was found in the liver, kidneys, spleen, as well as in both lungs and the cerebral meninges; there were tuberculous ulcers of the small intestine, and stenosis of the ileo-cæcal valve, which was blocked by a cherrystone coated with fæcal matter as by a ball valve. The real interest lay, however, in the condition of the pelvic viscera. There was an abscess in each ovary communicating with the intestine, as well as a fistulous track leading from what was either a subperitoneal or intraperitoneal abscess by the side of the cervix uteri into the bladder. The right Fallopian tube communicated with the corresponding ovarian abscess; the closed end of the left was adherent to the rectum, into which it had once, possibly, discharged, as there was an old ulcer of the bowel at a corresponding point.

Dr. CULLINGWORTH observed that tuberculosis of the ovaries and tubes was not so rare as generally thought; the tendency was to lead to communications with the viscera, but the number of communications in the case reported was fortunately unusual. He knew from observation that a suppurating cavity in Douglas's pouch might communicate with the bladder, and the specimen showed how this took place—namely, by the side of the cervix uteri after perforation of the broad ligament.

Dr. K. FYFFE had, like Dr. Habershon, seen cases of tuberculosis of the tubes, in which no symptoms had been present during life, and which were unassociated with disease of the ovary or uterus.

CARCINOMA OF THE NECK.

Dr. ROLLESTON showed this specimen, of which the interest lay in the difficulty of accounting for its source. For the upper inch and a-half, the trachea and œsophagus were surrounded by a dense contracting growth which necessitated the performance of both tracheotomy and gastrostomy. The thyroid gland was involved. There was found, after death, no trace of any primary disease either in the œsophagus or trachea; nor did the author think that the disease arose in the thyroid gland; whether in a branchial cleft or an accessory thyroid, he could not say. He did not consider it was situated in the lymphatic glands.

Mr. A. BOWLBY knew of a very similar case in which tracheotomy had been necessary. The thyroid was extensively involved, and this was probably the source of the new formation.

Mr. EDGAR WILLETT also cited a case of carcinoma of the neck in which no primary growth was discoverable. The growth was in the lymphatic glands.

Mr. S. G. SHATTOCK was considerably interested in Mr. Willett's remark, as he had long thought it possible that, in some of these cases, the secondary disease arose without a proper primary lesion. He had examined a case of squamous-celled carcinoma of the neck, but here he could not discover any remains of lymphatic tissue, and the disease might have arisen in the residue of a branchial cleft. Such cases he compared to those of tuberculous infection of lymphatic glands, as the mesenteric, in which no primary lesion was present. Mr. Butlin had referred to this class of case as occurring in the glands of the groin in chimney sweepers without discoverable primary tumour, and had called the primary lesion abortive.

Mr. A. BOWLBY added that in the case he referred to there was no evidence that the disease was seated in lymphatic glands; but he had examined a case of squamous-celled carcinoma of the glands of the groin in which careful inspection of the pelvic viscera after death, and of the external soft parts, had failed to reveal the presence of any primary tumour.

ALCOHOLIC NEURITIS.

Dr. HOWARD TOOTH reported the case of a woman, aged 34, a heavy drinker, who, fourteen days before admission, began to suffer from "pins and needles" in the soles of the feet, and loss of power and formication in the hands. During the following fortnight that she was in the hospital she became progressively worse, the muscles undergoing rapid wasting; but there was little loss of sensation, although localisation of touch was erroneous. Death occurred suddenly whilst she was sitting up in bed. After death there was found extensive cirrhosis of the liver, spleen large and tough, kidneys granular. The spinal cord proved, on histological examination, to be normal, but all the peripheral nerves beyond the ganglia were degenerated without any evidence of inflammation; the condition was indistinguishable from that following upon section; the axis cylinder had disappeared, and the myelin was fragmented. Many normal fibres coexisted alongside of those degenerate. It was at present established that in this condition the spinal cord was healthy, as were also the nerve roots, whilst the peripheral nerves beyond the ganglia were diseased. A single patch of inflammation might account for all the changes found, but it would be extremely difficult to settle this, and such would account also for pain that was present. The involvement of the vagi was doubtless the cause of death in the case he

reported; he had seen almost fatal syncope in a similar case, followed later by sudden death.

Primary Carcinoma of Lung.

Dr. K. Fyffe showed a specimen of what he thought to be primary carcinoma. Both lungs were the seats of extensive disease; there were secondary growths in the kidneys and brain.

Disease of Sweat Gland.

Dr. Cecil F. Beadles showed a microscopic section of a squamous-celled carcinoma of the pinna in an old man. Beneath this lesion one of the sweat ducts presented an oval and solid enlargement, which the author thought suggested that rodent ulcer might arise in such a seat.

Congenital Diaphragmatic Hernia.

Mr. Jaffé observed that this specimen was rare in that there was no deficiency in the diaphragm, but a pouch involving the left half, and free of muscular fibres. The child lived forty-three hours. He had collected twelve similar cases from French, German, and English works; two of the latter were in the Society's *Transactions*. In cases where the patients were adults there were sometimes no symptoms; in others there was recurrent dyspnœa, vomiting, or constipation.

CLINICAL SOCIETY OF LONDON.

J. W. Hulke, F.R.C.S., F.R.S., President, in the Chair.

Friday, April 27th, 1894.

A Mode of Making Extension in Fractures of the Femur.

Mr. Richard Barwell explained that he had devised this method as far back as 1860 for use in hip disease. The apparatus consisted of an ordinary Liston or Dessault splint, long enough to reach from the axilla to 3 or 4 inches below the foot. To each prong of the fork at the lower end metal arms were screwed, so that these, coming together, supported below the centre of the sole a pulley half an inch in diameter at the flange. At the angle of the gap between the two prongs there was another pulley merely to prevent friction. Quite at the upper end, and projecting about an inch from the outer surface, of the splint was a third, rather larger, pulley. To use this apparatus a strap, 2 inches broad, of adhesive plaster on strong calico, was applied to the limb so that the ends were just below the knee on the inner and the outer side, while the centre formed a loop below the sole. A piece of strong catgut was attached to the centre of this loop, passing thence downwards under the first-named pulley, thence upwards over the pulley at the angle of the fork, and terminating short of the centre of the splint on its outer aspect. Turning to the upper end of the splint, a perineal band was applied, preferably to the sound side. This band included both limb and splint, its ends where stitched together being some little distance below the above-described third pulley. Here a piece of catgut was attached, which, passing at first upwards through the pulley, changed its direction, and ran thence downwards towards the catgut which was fastened to the foot. They both, however, stopped short of meeting, and to the upper piece a length of brass chain was fastened, and to the lower one an inch of rubber accumulator with a hook attached, which, being hitched into any one length of the chain, determined and preserved any degree of tension on the india rubber spring. The splint was now secured by a broad girth and a few laps of roller to the limb. The special value of the appliance lay in the constancy of the force and in the uniformity of direction.

In reply to some remarks by the President,

Mr. Barwell said he had invented this splint thirty-four years ago, so that he could not be accused of copying De Morgan's splint. Axial rotation was easily prevented by sandbags, which did not, in the case of this apparatus, interfere with the extending force.

Intestinal Obstruction due to Constriction of the Bowel after Appendicitis.

Mr. Cheyne read for himself and Dr. Lauder Brunton notes of the case of a man, aged 35, who had suffered from attacks of appendicitis for some years. Thirteen days before the operation described he was seized with sudden acute griping pain in the abdomen, the attack lasting about an hour and then passing off. Similar attacks occurred at varying but frequent intervals, the bowels being, however, open, though imperfectly. Thirty-six hours before the operation he took a dose of castor oil, which set up intense pain, and was followed by complete obstruction, and about twenty hours afterwards by extreme collapse. About thirty hours after the castor oil he had fæcal vomiting, and when put on the table he was practically moribund, and his pulse could not be felt. The diagnosis was a narrowing of the bowel from the gradual contraction of fibrous tissue resulting from the repeated inflammatory attacks, and this was found to be correct at the operation. The abdomen was opened, the appendix, which encircled the ileo-cæcal valve, removed, and the adhesions cut and torn through till the contents of the small intestine could be readily squeezed into the large. After the operation, during which ether was administered, the pulse could be felt. The patient lay in an almost pulseless condition for about thirty hours after the operation, without vomiting, however, and without any marked pain, and then he had two copious and very offensive stools. After that he was very collapsed, but soon recovered, and when seen thirty-six hours after the operation, his pulse had greatly improved. His subsequent recovery was uninterrupted, and he had since remained well. The chief difficulty in diagnosis was from internal strangulation, but the history of the case and the general symptoms seemed to point conclusively to constriction of the bowel, as was found on operation. The complete success following division of the adhesions was of great interest from the fact that this condition was generally irremediable after localised peritonitis, on account of its extent and the injury to the bowel wall which usually followed attempts at separation of these adhesions. The collapsed condition of the patient was clearly due to septic intoxication from absorption of poisonous materials from the intestine, and afforded strong evidence of the view held by some that a considerable amount of the trouble after strangulated hernia was often due to similar absorption.

Acute Intestinal Obstruction: Operation: Recovery.

Mr. A. Quarry Silcock related the case of a man, aged 26, admitted to St. Mary's Hospital on September 26th, 1893, suffering from acute intestinal obstruction and peritonitis. The intestines were greatly distended, the abdomen generally being tender, and the vomiting frequent, the ejecta having a fæcal odour. He was seen shortly after admission by Dr. Luff, who deemed an exploration necessary. On opening the abdomen in the middle line below the umbilicus a small quantity of turbid serum escaped. The vascularity precluded any search for the obstruction. The man's condition at this point became so alarming that the operation was abandoned, the wound being hastily stitched up and the man removed to the ward. The next morning he had recovered from the extreme collapse; and Mr. Silcock opened up the central part of the wound, and made a small incision into a prominent coil of small intestine, and through this incision he thrust the cannula of a suction trocar furnished with a long indiarubber tube leading to a basin below the bed. This was held in position for 41½ hours by relays of dressers, and a large quantity of fluid intestinal contents came away, to the evident relief of the patient. The vomiting and hiccough ceased, and the pain was reduced. After the withdrawal of the cannula the wound in the intestine was closed, but it subsequently reopened, emitting much fluid intestinal contents. From the character of the latter it was judged that the ileum had been tapped. On September 30th he passed a motion *per rectum*, and by October 9th the intestinal fistula had closed. He was discharged cured on November 8th. The cause of the peritonitis was unknown. The patient had had no trouble with his bowels since his discharge.

Dr. Brunton, in reply to Dr. Glover, said he thought the dose of nux vomica would be greater in the future than it had been in the past. This patient was evidently suffering from impending paralysis of the respiratory centre. He therefore injected strychnine solution drop by drop, until the condition of the patient began to improve. The patient's vomit was described as stercoraceous, but on examination no fæcal matter could be detected in it. As to the general condition, the patient appeared to be almost *in articulo mortis*.

Mr. Golding Bird recently had a patient, aged 30, who at times for fifteen years had had attacks of pain in the right groin associated with a recurrent swelling, which, after a discharge of pus *per rectum*, always diminished, as if it were due to appendicitis. It had not recently, however, quite disappeared, and Mr. Durham concluded that it was a neoplasm. Severe constipation ensuing, Mr. Golding Bird operated. He found a large lump of intestine matted around the appendix, with hour-glass contraction of the cæcum. He tore through and divided the adhesions as much as possible. Six weeks subsequently the patient was discharged. He had since remained quite well.

Mr. Eve remarked that cocaine might often be used instead of a general anæsthetic in these operations. He had injected 30 minims of a 2 per cent. solution in the line of incision and opened the abdomen without causing any pain to the patient.

Dr. Hale White recalled the case of a woman who was almost pulseless. Her chest was aspirated, and a large amount of pus drawn off. The patient was much relieved, and lived three days, apparently in consequence of the drawing off of the toxins.

Living Specimens.

Dr. Habershon showed a barmaid, aged 22, suffering from Amnesia with Right Hemiplegia, probably due to thrombosis, and complicated by functional manifestations.—Dr. Hale White showed a man, aged 22, with Muscular Dystrophy. He was suffering from atrophy of most muscles of the body. The bones had ceased to grow, probably in consequence of their lacking the "muscular stimulus" to development.—Dr. R. J. H. Scott showed a man, aged 35, who had had Popliteal Aneurysm and his femoral artery tied. Three years later, while running, he had a sudden pain in the calf of his leg, and, two days later, signs of gangrene manifested themselves in the foot, due to embolism from the aneurysm lodging in the posterior tibial artery. The aneurysm was cut down upon, the popliteal artery ligatured above and below, and the sac dissected out, Chopart's amputation being performed on the foot.—Dr. Rose Bradford showed a girl, aged 15, with Facial Hemiatrophy. There was doubtful optic neuritis. Sensation was not markedly interfered with, and there was no wasting of the tongue.—Dr. Walter Carr showed a lad, aged 11, suffering from Peripheral Neuritis (?). Paralysis of both hands and feet had supervened, complete and symmetrical. The diagnosis lay between peripheral neuritis and acute anterior poliomyelitis.—Dr. Cayley showed a lad, aged 12, who, after an attack of articular rheumatism, developed Multiple Fibrous Cutaneous Nodules. Microscopical examination of a nodule showed it to be composed of fibrous tissue.—Mr. F. Eve showed a case of "Black Tongue" in a man, aged 64. He alluded to Raynaud's view as to the fungoid nature of the affection, and added that experiments were in progress in this direction. Mr. Eve also showed a child, aged 3 months, with a Meningocele over the posterior fontanelle.

MEDICAL SOCIETY OF LONDON.

Sir William Dalby, M.B., F.R.C.S., President, in the Chair.

Monday, April 30th, 1894.

Traumatic Subcutaneous Rupture of Intestine.

Mr. Battle related the case of a man, aged 24, who was brought to St. Thomas's Hospital in a condition of profound collapse consequent on the receipt of a kick from a horse. There was a faint indication of a bruise below and to the left of the umbilicus. The abdomen was hard and somewhat distended, and did not move with respiration. Some dulness was made out over the front of the abdomen. Vomiting began soon after admission, and there was severe paroxysmal pain. The diagnosis was made of rupture of intestine with laceration of the mesentery or omentum. Five hours later, by which time he had rallied from the shock of the injury, Mr. Battle opened the abdomen, which contained a good deal of blood along with some partially digested beans and fluid. There was extensive laceration and contusion of the mesentery, with three ruptures of the small intestine, two of which were as complete as if cut with a knife; the third, however, did not extend to the mesenteric border. The ruptures first met with were about eight inches apart, but as the mesentery and intestine were contused beyond the point of section, he thought

it best to excise about thirteen inches, together with a large fan-shaped piece of mesentery. The ends were inclosed and united by lateral anastomosis. The other laceration was closed without resection by end to end apposition, using Senn's plates. The abdomen was washed out and a Keith's tube placed *in situ*. During the operation the patient became so collapsed that five pints of saline solution were injected with excellent effect. The operation took place on the 10th of the month. On the 12th the sickness returned, but was relieved on the 13th by a simple enema. The patient suffered much from thirst. For the next two or three days the patient did well, the abdomen becoming flaccid and moving with respiration, and he was enabled to converse cheerfully and in a firm voice. The temperature, however, remained about 100° F. At 6.30 on the 15th he was seized with sharp pain in the abdomen, followed by vomiting, rapidly passing on to collapse. Mr. Battle opened the abdomen again as promptly as possible, and found that peritonitis had set in, the end to end appositions having given way. An artificial anus was formed at once, but the patient died on the 16th. *Post mortem* the opening was found to have been only twenty inches from the pylorus. The pleurae were adherent and there had been hæmorrhages into the lungs. The hope of success in these operations lay in early intervention. Mr. Croft, in 1890, estimated the recoveries after operations of this kind as 1 in 14, but of the 15 cases recorded since that date (including his own case) there had been 7 recoveries, so that they were evidently improving.

Mr. CROFT pointed out that one of the elements of success in these operations was early intervention without unnecessary loss of time. He attributed his success in a particular case to the accidental fact that he was enabled to remedy the injury to the intestine without delay. He observed that there was no one symptom upon which the surgeon could rely in deciding whether or not to open the abdomen, and he thought it was best to do so even in this class of cases even at the risk of not finding any serious lesion of the intestine.

Mr. H. ALLINGHAM referred to the case of a child who had been run over by a cab in whom a foot or so of intestine had been torn from its mesentery. He sutured the torn mesentery, but the child died four days later, when the portion of intestine corresponding to the torn mesentery was found to be gangrenous.

Mr. BATTLE, in reply, said that he had evidently miscalculated the resistance of the damaged tissues, and in any future case he would certainly resect the damaged portions of bowel.

AN APPARATUS FOR USE AFTER INGUINAL COLOTOMY.

Mr. MACREADY showed an instrument devised by a patient of his for use after inguinal colotomy. It consisted essentially of a zylonite piece to which an india-rubber reservoir was attached. It was claimed for this simple and cleanly contrivance that it effectually prevented any leakage of the intestinal contents without discomfort to the patient, and was easily maintained in position.

INTESTINAL OBSTRUCTION TREATED BY CÆCOTOMY, ENTERECTOMY, AND CLOSURE OF THE ANUS PRÆTERNATURALIS.

Mr. HERBERT ALLINGHAM read notes of the following case. On January 9th, 1893, a man aged 30, was admitted, having suffered from constipation for two years, culminating in an attack of intestinal obstruction six months ago, which yielded to purgatives, etc. He was suffering from obstruction of ten days' duration. On the 11th he opened the abdomen, and found the cæcum and small intestine so stretched that he was afraid to make a very careful exploration for fear of rupturing the gut. He therefore drained the cæcum through the wound, evacuating two quarts of fluid intestinal contents, and suturing the cæcum to the abdominal wall. The patient passed a good night, and made an uninterrupted recovery, the bowels acting regularly by the artificial anus. He returned to his home at Southampton on May 24th in apparently good health. The constant discharge of liquid fæces from the wound, however, was a great trouble to him, and he returned later on, asking that something might be done. The nature of the operation and its risks were fully explained to him, and as he consented the abdomen was once more opened on the 31st by an incision five inches long through the left linea semilunaris. He introduced his hand into the cavity, and after exploring the sigmoid flexure in vain he alighted upon a tight, hard stricture at about the middle of the descending colon. This he excised, joining the cut ends by a Mayo Robson bobbin. Previously to the operation the artificial anus was well plugged with a sponge, and after the operation this was removed from time to time to allow of the escape of the fæces. On June 6th he complained of pain in the abdomen; but it yielded to an enema, when a small motion was passed *per rectum*. On the 13th the house-surgeon missed the sponge which blocked the artificial anus, and as it could not be found it was supposed that it must have been thrown away with the dressings. On the 15th he closed the opening into the cæcum. Three days later a good motion passed *vid* the rectum after an enema, and with it was passed the sponge which had been lost. This afforded good evidence of the permeability of the resected portion of bowel. The patient did well and returned home, and in August following he even rode on his cycle from Southampton to the Great Northern Hospital, a distance of some eighty miles, without distressing himself. On September 13th the pain returned and he was very sick. The abdomen became distended, and on the 24th Mr. Allingham found it necessary to explore the part he had resected. He found the peritoneum studded with hard nodules, and there were masses in the small intestine and in the mesentery. The resected part was perfect. It was obvious that nothing could be done, so he simply closed the wound. The patient returned home on October 13th and died on November 9th, nine months after the first operation. Dr. Rolleston, who had examined the strictured portion of bowel, reported that it was mainly fibrous, but in some places there were traces of spindle-shaped cells.

Mr. HARRISON CRIPPS advocated making the opening on the left side as for inguinal colotomy. If the obstruction was discovered it might, if simple, be dealt with at once, and, if extensive or malignant, the operation could be converted into a colotomy and temporary relief obtained. If the sigmoid flexure proved to be empty, the wound should be closed and an opening made into the cæcum. Later on suitable measures could be taken for the permanent relief of the obstruction when the artificial vent through the cæcum would act as a safety valve pending the consolidation of the junction after resection. Even if they succeeded at once in removing the obstruction relief might not follow in consequence of the overdistended bowels being unable to propel their contents. They could then select the time and conditions under which to perform the more radical operations.

Mr. SWINFORD EDWARDS agreed that it would be better to make the opening on the left side to begin with, though it would not have been successful in the author's case.

Mr. ALLINGHAM replied.

HUNTERIAN SOCIETY.

CLINICAL EVENING.

C. J. SYMONDS, M.S., F.R.C.S., President, in the Chair.

Wednesday, April 25th, 1894.

DIPHTHERIA.

DR. NEWTON PITT, in opening a discussion on diphtheria, said it might perhaps be defined to be an epidemic infective membranous form of sore throat often associated with nephritic changes, and followed by the development of peripheral neuritis. The question was, were the milder forms of sore throat ever followed by the characteristic neuritis? The question as to whether the slighter forms of sore throat which often prevailed during outbreaks of diphtheria were themselves diphtheritic must for the present remain open. The view that many of these slighter forms of sore throat were due to the action of a specific bacillus was steadily gaining ground. Many membranous throats, however, only yielded cultures of streptococci or staphylococci, while others, in the absence of any membranous formations, showed the bacillus. Dr. Thorne Thorne had pointed out the tendency of diphtheria to prevail in association with certain meteorological conditions, although it was pretty generally conceded that insanitary conditions *per se* were not sufficient to produce diphtheria.

Dr. GOODALL said diphtheria might be defined as an inflammatory disease primarily of the tonsils or fauces attended with the formation of some sort of deposit, and frequently, though not necessarily, associated with the formation of a special membrane due to the development of a micro-organism, and associated with certain secondary effects due to the absorption of toxins. He had repeatedly met with cases in which the usual secondary effects were observed without any trace of exudation. He had never come across a case in which the so-called diphtheritic paralysis followed in which the fauces were not previously affected. For practical purposes he was disposed to accept as diphtheria all cases of membranous sore throat, in the absence of some other cause, such as scarlet fever. If there were any local spread the disease was almost certainly diphtheria, and if it involved the larynx, then it was certainly diphtheria. Diphtheria sometimes seemed to occur as a complication of other acute diseases. Its occurrence in association with scarlet fever and measles was too frequent to be merely accidental; and it was often quite impossible to discover any history of possible communication. It was absolutely necessary to distinguish between diphtheria and a diphtheritic sore throat. A tough thick membrane was often seen in scarlet fever. Personally he was inclined to view this complication as a consequence of a very severe angina. First, the larynx was very rarely involved in this form. Out of 68 cases of scarlet fever with diphtheritic fauces in only 3 per cent. was the larynx affected, whereas in 1,071 cases of primary diphtheria croup was observed in 204 cases. Only 3 of the 63 cases developed paralytic symptoms, whereas 125 of the other series did so. Again, the membrane which formed in the course of an attack of scarlet fever did not recur when once it had disappeared. Lastly, these cases of scarlet fever with a diphtheritic throat did not give rise to other cases of diphtheria in the ward. When undoubted diphtheria did occur in scarlet fever patients it was much more fatal than primary diphtheria, and when it occurred in association with measles it was more fatal than when it complicated scarlet fever. Out of 15 cases of measles thus complicated 14 died. Cases of uncomplicated measles might give rise to cases complicated with diphtheria. Of 1,064 patients with scarlet fever 27 got post-scarlatinal diphtheria—1.5 per cent. Among his own cases 41 patients with primary measles, 6 were complicated with diphtheria. It was rare in diphtheria to get a history of a previous attack of sore throat. If the scarlet fever throat predisposed thereto diphtheria would be more frequent in this association than it was.

Dr. SIDNEY MARTIN said very little was known about the membranous forms of sore throat other than diphtheria. Much confusion had been caused by the use of the term "diphtheritic inflammation," which Virchow defined as "an inflammatory process characterised by an exudation of fibrin and by necrosis of the tissues." There were various causes of this form of inflammation, one of which was diphtheria. It would be best to discard this term, and to speak of membranous or fibrinous inflammation. The marked enlargement of the spleen observed in septic sore throats might perhaps enable us to distinguish between these cases and true diphtheria. At present we were compelled to rely for our diagnosis upon cultivations of the secretions. The membrane was the fount and origin of the disease, a thesis which, he thought, could not at present be seriously gainsaid. Diphtheria might be defined as a disease of insidious onset—though it did sometimes begin suddenly—which might or might not be associated with membranous formations in the throat, and accompanied by fever and bodily depression, with or without the presence of albumen in the urine. The tendency of the disease was to produce a cardiac affection showing itself either as fatal syncope or tachycardia, or by palsy due to nerve degeneration, sometimes small in extent, sometimes widespread. It was characterised also by a tendency to invade the larynx by specific bacilli, which cause a fibrinous exudation. This bacillus bred in the false membranes and produced poisons, transforming the proteids of the spleen into products which gave origin to the symptoms of the disease. In the case of a man who lived twenty-nine days, and died after developing paralysis of the palate on the ninth day, with loss of knee-jerk between the twelfth and fourteenth day, and followed by general paralysis, sections of the spinal cord showed an increase of augmentation in the cells of the motor area of the cord, and degeneration of the nerves leading to them. Rupture of the axis cylinder was a preliminary step to degeneration of the nerves towards the muscle. Ultimately only the primitive sheath remained

with masses of black here and there, which constituted the remains of the substance of Schwann. There was also an increase in the number of nuclei. In all cases of acute diphtheria which lasted more than ten days and died, it was possible to make out this nerve degeneration. The lesions resembled the fatty degeneration which followed the experimental injection of the poisons from diphtheritic secretions.

Dr. George Turner said that because sanitary defects did not appear to be directly responsible for outbreaks, it would be unwise to assume that it was absolutely without importance. It was astonishing what a large proportion of patients suffering from diphtheria gave a history of cold prior to the attack of diphtheria, and this he thought was because one of the commonest manifestations of "cold" was a sore throat. He had no doubt that a mistaken diagnosis was responsible for 99 per cent. of the cases certified as scarlet fever and diphtheria. Cultivation experiments were obviously out of the question in general practice. He supposed it was generally admitted at present that cows suffered from a disease which might communicate diphtheria. He had seen a form of sore throat among pigs which closely resembled the sore throat met with in human beings. Although he knew that it was against the weight of skilled opinion that the disease could be spread from fowls to human beings, he knew personally that fowls had suffered from a throat affection which was followed by paralysis, and that this disease in fowls often followed or preceded diphtheria among human beings.

The discussion was adjourned.

EPIDEMIOLOGICAL SOCIETY.

J. F. Payne, M.D., President, in the Chair.

Wednesday, April 18th, 1894.

Coexistence of Infectious Diseases.

Dr. Caiger read a paper on the coexistence or close succession of two or more infectious diseases in the same individual. His experience at Stockwell had satisfied him that suc concurrence of infections was as frequent as mere probabilities would explain, and that, so far from affording protection against other diseases, some certainly increased the susceptibility thereto. In the last four years he had seen 362 cases of two and 17 of three diseases running some part of their courses concurrently; in 200 of these the acute febrile stages of two or three coincided. The priority of the several diseases was calculated from their known incubation periods. The primary disease was scarlatina in 197 cases, which was complicated by diphtheria in 97, varicella in 43, measles in 31, whooping cough in 13, erysipelas in 10, enteric in 2, and typhus in 1. Scarlatina was a complication in no fewer than 88 among 97 in which the primary disease was diphtheria, in 20 among 23 of varicella, in 14 of 17 of whooping cough, in 6 of 9 of enteric, and 9 of 18 of measles, though here diphtheria accounted for another 7. Among the 17 triple attacks scarlatina was the primary disease in 9 and a complication in 4 only, diphtheria holding the highest place with 9. During the past six years 48,367 cases of scarlatina had been admitted into the hospitals of the Asylums Board; of these, 3,166, or 6.54 per cent., were complicated, 1,094 with diphtheria, 899 with varicella, 703 with measles, and 404 with whooping-cough, the relative numbers of diphtheria and whooping-cough being probably owing to the fact that many had already had whooping-cough in infancy, while diphtheria, though less frequent, might and often did recur: these four diseases accounted for 3,100, or all but 66. The questions suggested by these figures were (1) did any disease render the individual less or more susceptible to infection by another; (2) did the primary disease in any way influence the course or character of the secondary one as regards (*a*) incubation, eruption, etc., periods; (*b*) severity of the disease; (*c*) distribution of local phenomena; (*d*) liability to sequelæ and other complications. The conclusions at which he had arrived, after eliminating the influence of age incidence, seasonal prevalence, actual frequency, etc., were, first, that there was no such thing as antagonism between any, but rather the reverse, increased susceptibility being brought about generally or locally; that is, first, by the lessened power of resistance induced by a disease attended with grave constitutional disturbance; and, secondly, by the local inflammations, etc., facilitating the development of the contagia of diseases known to affect the mucous membranes or tissues in question. Thus an attack of varicella exerted no influence on any that might follow, but when scarlet fever was the primary disease, varicella, favoured also by the quasi-dermatitis left behind, might rival unmitigated small-pox in intensity of fever and extent of eruption. Scarlatina was frequent and dangerous after diphtheria, but diphtheria following scarlatina was still graver since the scarlatinal throat, teeming with staphylococci and streptococci, was a perfect soil for the bacillus of Loeffler. So too while the general phenomena of measles might be aggravated by previous diphtheria or scarlatina, and in the latter conjunction the rash would be intensified, an attack of diphtheria following on measles was even graver than the post-scarlatinal, since it inevitably attacked the larynx and trachea, and tracheotomy was very rarely of any avail. Measles and whooping-cough were known to follow one another or to coexist, mutually increasing the susceptibility of the individual. He had never found the incubation period of a disease affected, but the presence of scarlatina accelerated the appearance of the rash in measles by a couple of days. It was, however, necessary, especially in the diagnosis of scarlatina and diphtheria, to be on one's guard against certain errors. The rash of scarlatina might assume a morbilliform appearance, and there was occasionally in simple cases of scarlatina, at the height of the faucial inflammation, an exudation on the tonsils closely resembling that of diphtheria. It did not, however, tend to spread, like the diphtheritic, to the air passages; and, if it did not disappear shortly, might be followed, as Henoch first pointed out, by a superficial ulceration or even a deep sloughing, and Loeffler's bacillus was absent. Measles, when preceded by scarlatina, was very apt to be followed by pulmonary complications. An intercurrent attack of measles sometimes suspended for the time the paroxysms of whooping-cough, but this combination of diseases specially affecting the respiratory organs was frequently attended by broncho-pneumonia.

Dr. Copeman maintained that, with one possible exception among the lower animals, there was no bacteriological evidence that any disease conferred immunity against another. The part played by local conditions in favouring infection was well seen in the case of tetanus, for the successful inoculation of which certain inflammatory conditions were necessary.

Drs. Goodall, Parsons, Willoughby, Hopwood, and Bulstrode took part in the discussion; and the President showed a temperature chart of enteric with intercurrent scarlatina, the morning rise and sustained elevation of this temporarily obscuring the typical or normal curve of enteric.

MANCHESTER PATHOLOGICAL SOCIETY.

F. A. Southam, F.R.C.S., President, in the Chair.

Wednesday, April 11th, 1894.

Case of Phthisis in a Dog (Bull Terrier).

Mr. W. B. Pritchard reported this case. The animal weighed 25 lbs. In March, 1891 (at 5 years old), he had double pneumonia, but recovered. He had a relapse in August, 1891. The symptoms were difficulty of breathing and recession of chest walls on inspiration; cough but no expectoration; mucous *rdles* and dulness all over the chest. In September, 1894, he had an attack of pneumonia and dropped dead. On *post-mortem* examination, the pleural cavities were found filled with fluid; lungs shrunken and adherent. On section, a number of cavities filled with pus were found. The greater part showed greyness of chronic pneumonia; the upper lobes were in the first stage of acute lobar pneumonia. On microscopical examination, air cells filled with leucocytes were seen, with patches here and there, the centre breaking down; fibrous tissue and pigment abundant. No giant cells could be recognised.

The Collection and Preservation of Urinary Casts and other Organic Urinary Deposits.

Dr. T. Harris described a method of collecting and preserving urinary casts and other organic urinary deposits. The urine was allowed to sediment in the usual way in a urine glass for twelve hours, and the deposit was then drawn off by means of a pipette, and then placed in a preservative fluid in a glass tube drawn out to a point like a burette. The tube, 13 inches in length, was made of ordinary glass of about five-eighths of an inch in diameter, being drawn out to a point so that the lower opening was about one-sixteenth of an inch in diameter. The upper opening was closed by an india-rubber cork. The preservative fluid consisted of a solution of potassium acetate saturated with chloroform by shaking with an excess of the latter liquid (potassium acetate, 60 grammes; chloroform, 10 c.c.; distilled water, 1 litre). The glass tube was first nearly filled with the preservative fluid and then the urinary deposit placed at its upper part, and the whole corked up and allowed to stand in a burette holder for about twelve hours. At the end of that time the urinary sediment would be found to have passed through the preservative fluid to the lower narrower part of the tube. All that was then necessary was, by gentle pressure upon the india-rubber cork, to press out a few drops of the fluid with the deposit into a small cell on a microscope slide and to cover the same with a cover glass, and to seal it up hermetically with a reliable cement. Dr. Harris exhibited a number of preparations of urinary casts and other organic deposits, some of which had been put up over two years, and which retained the features presented at the time they were mounted. The method was applicable to organic deposits generally but not to inorganic deposits. Oxalate of lime crystals, however, could be so preserved, but the majority of crystalline sediments were dissolved by the acetate of potash solution.

Lymphadenoma.

Dr. Hutton and Dr. Wansbrough Jones described a case of lymphadenoma, and showed the specimens.

REVIEWS.

A Handbook of Ophthalmic Science and Practice. By Henry E. Juler. Second Edition. London: Smith, Elder, and Co. 1893. (Demy 8vo, pp. 528. Numerous illustrations. 21s.)

Nine years have elapsed since the first edition of Mr. Juler's book appeared. During that period ophthalmology has made steady progress, and when we remember that discoveries, such as the use of cocaine in ophthalmic surgery, are of more recent date we expect to find the second edition greatly changed. Mr. Juler has made extensive alterations and additions, the result of the latter being an increase of more than 100 pages in the size of the book.

The general plan adopted in the first edition remains almost unchanged, but chapters viii and ix have been transposed, and chapter xiv, on "Refraction," now contains a new section headed "Normal Refraction." In the first edition this chapter was written jointly by Mr. Adams Frost and Mr. Juler. Mr. Frost's place has now been taken by Mr. John Griffith. Mr. Frost is still responsible for a well written and concise chapter on "Colour Blindness," which has undergone but little alteration in the new edition beyond a brief account of the theory of colour vision recently propounded by Dr. Edridge-Green.

As in the previous edition a few paragraphs on the anatomy and physiology of the component parts of the eye precede the description of the diseases of each part. That at the be-

ginning of Chapter iii. on the Conjunctiva, did not appear in the first edition. Some difference of opinion exists as to the expediency of including these necessarily condensed descriptions in clinical textbooks, but if an author decides in favour of them he should take special care to avoid inaccuracies. Mr. Juler has allowed several to pass unnoticed.

The illustrations in this volume have been greatly altered, the chromolithographs being reduced in number by ten, and the woodcuts increased by more than seventy. All the full page coloured plates of histological appearances, of which the first edition contained eight, have been expunged. Replacing them to a certain extent we find a number of figures reproduced from photomicrographs. With a few exceptions these are of little, if any, value to the student. As examples we may mention Fig. 32, supposed to depict the microscopic appearances of interstitial keratitis, and Fig. 76, called retinitis pigmentosa.

The coloured ophthalmoscopic drawings represent most of the changes more commonly met with in the fundus oculi. Many of these plates are new and are printed in better colours than those in the previous edition. The drawing in several leaves much to be desired.

At the end of the book is an appendix containing a number of formulæ and examples of test types in ordinary use.

The present edition has been carefully revised, but chapters such as that on ocular paralysis are hardly as clear and precise as might be wished. The book is extremely well printed on good paper, and is furnished with a copious index, which Mr. Griffith has improved by the addition of the Greek and Latin derivations of many of the names of diseases, etc.

SURGICAL WARD WORK AND NURSING. By ALEXANDER MILES, M.D. London: The Scientific Press. 1894. (Pp. 197, with 199 illustrations. 3s. 6d.)

WE have much pleasure in expressing a very favourable opinion of Dr. MILES's handbook on *Surgical Ward Work and Nursing*. It is described as intended for the use of junior students and nurses, nor would the perusal of it be without advantage to many of those who are upon a higher grade of the medical profession. It is, perhaps, especially to be commended to the careful attention of those engaged in London hospitals, inasmuch as it presents a very clear and detailed exposition of antiseptic methods and *technique* as practised in the Royal Infirmary of Edinburgh. Many hints and suggestions may be gathered from the practice of the Edinburgh schools, which are so far unfamiliar in the south that house-surgeons and dressers will be glad to have an opportunity of acquainting themselves with them in the lucid pages of Dr. Miles's handbook.

The first section of the work is devoted to the general principles upon which antisepsis is based, followed by a description of the manner in which these principles are carried out. We have chapters on antiseptic lotions, antiseptic powders and unguents, materials for dressing, and appliances; on the management of surgical operations, the lotion table, dressings table, anæsthetics, preparation of the patient for operation, after-treatment, and the nursing of special cases after operation. This appears to be far the most valuable part of the book. It is followed by well-written chapters on plaster and starch cases, appliances for joint affections and fractures, bandaging, its principles and practice, surgical instruments and appliances. In these latter sections, however, the author travels over familiar ground, nor does one feel that he is either better or worse equipped for the journey than his predecessors.

When a second edition of his work is required, Dr. Miles should avoid the use of non-pharmacopœial drugs in prescriptions, or if he desire to introduce them, he should explain what they are, or where they are to be obtained. For instance, on p. 12 there is a formula for an unguent to contain vaselini, olei vaselini, āā ʒ ijss. Vaselinum is not a name recognised in the *B.P.*, but perhaps excusable on the ground of common usage. What, however, oleum vaselini may be neither the *B.P.* nor the *Extra Pharmacopœia* of Martindale and Westcott informs us. Again, as regards the preparations of the chief antiseptics, if it is desirable to state which are official and which non-official, the division should be made more clearly and completely. As an example, under corrosive sublimate (p. 8) we find: Preparations.—(1) corrosive sublimate lotion; (2) yellow wash; (3) corrosive wool (non-official); (4) wood wool (non-official). An unsuspecting reader might be led to infer from this that both yellow wash and the lotion were official, whereas, of course, the lotion is not in the *B.P.* So, again, under the preparations of boric acid we have boracic lotion, boracic ointment, boracic lint, boro-glyceride, boracic acid powder, and boracic acid powder with chalk; and there is not the least indication as to which of these is official, still less any hint that boro-glyceride is a patented article. These are, however, no great blemishes, and, taken as a whole, the book has our hearty commendation.

THE AFTER-TREATMENT OF CASES OF ABDOMINAL SECTION. By CHRISTOPHER MARTIN, M.B.Edin., F.R.C.S.Eng., Surgeon to the Birmingham and Midland Hospital for Women. London: Simpkin, Marshall, Hamilton, Kent, and Co., Limited. Birmingham: Cornish Brothers. 1894. (Demy 8vo, pp. 52. 2s.)

THIS work is specially addressed to those who, wanting experience, may have cases of this kind committed to their charge. Thus a general practitioner in a remote district may call in a surgeon to operate, and the patient may be left on his hands after the surgeon's departure. It is very important that he should know the meaning of pain, thirst, pulse, temperature, distension, and vomiting. The inexperienced often over-rate a symptom, and think themselves justified in taking steps which prove to be mischievous interference. The danger of under-rating symptoms is better known. Dr. MARTIN explains the various morbid phenomena which occur after abdominal section with great clearness. It is doubtful whether the neophyte can really profit from the best written description of the use and management of the drainage tube. The author lays down excellent rules to guide the surgeon in respect to the necessity of drainage in certain cases, but the manual is not specially designed for the operator. On the other hand, the rule for removing the tube, very essential according to the principles of this work, is not made so prominent. It is dismissed to the end of the paragraphs headed "The Character of the Discharge," and reads, correctly enough no doubt, "as soon as the discharge becomes serous and scanty, the tube may be removed altogether." On the other hand, the rule or "tip" for extracting the tube when incarceration of omentum has occurred, is rightly given, as such a complication is very troublesome. The paragraphs on peritonitis are excellent, and the author has done his best in giving directions concerning such terrible eventualities as hæmorrhage from slipping of the pedicle, and spontaneous opening of the abdominal wound after removal of the sutures.

We have dwelt at some length on a work of fifty-two pages mainly because its quality is far higher than its bulk. It is well suited, as we have shown, to the class for which it is designed, but the most experienced operator may read it with profit.

PROF. DR. CARL FRIEDLÄNDER'S MIKROSKOPISCHE TECHNIK ZUM GEBRAUCH BEI MEDICINISCHEN UND PATHOLOGISH-ANATOMISCHEN UNTERSUCHUNGEN. [Microscopical Technique for use in Clinical and Pathological Investigations.] Fifth enlarged and revised edition by Professor Dr. C. J. EBERTH, of Halle. Berlin: H. Kornfeld. 1894. (Roy. 8vo, pp. 336 and 86 figures. M. 9.)

THE present edition of this well-known work has been thoroughly revised by Dr. EBERTH—who, it will be remembered, also edited the fourth edition—in order to make it meet the requirements not only of the elementary student but also of those already skilled in carrying on investigations in pathological histology. In many ways the book may be said to have been rewritten. A very large number of new methods are given and special chapters are devoted to microphotography and the various methods of making and reproducing microscopical drawings.

The work is divided into three sections, the first dealing with the microscope and its accessories, the second with the

preparation of microscopical objects, and the third with special microscopical investigation. An idea of the work will best be gathered from the statement made in the first section, that in our microscopical investigation we do not act simply as observers but as experimenters, our results consequently being obtained from two sets of factors: (1) the preformed structures and (2) an interpretation of those factors introduced by ourselves in the course of experimentation.

The second part is divided into fourteen chapters dealing with the examination of fresh and living objects, isolation, maceration by mechanical and chemical agencies, fixation, hardening, decalcification, injection, and methods of embedding and cutting. In describing the various forms of microtome the Cambridge rocking microtome does not appear to be mentioned; whilst in the preparation of serial sections Obregia's modification of Weigert's method, published three years ago, is not considered. The chapter dealing with methods of staining and decolorisation is exceedingly full and comprehensive, though Heidenhain's iron hæmatoxylin method and benzo-purpurin as a contrast stain to hæmatoxylin are neither of them mentioned. Clearing, measuring, drawing, and methods of reproduction complete this part of the work.

The third or special section deals with the demonstration of structure in the cell nucleus, the investigation of inflamed and proliferating tissues, necrosis, atrophy, and degeneration, bacteria in fluids and in tissues, and the method of demonstration of these, which is given in each case in some detail. Investigation of animal parasites, of the skin, of muscles and tendons, of bones, of the central nervous system, a complete description of the pathological conditions in the blood, the respiratory apparatus (dealing specially with the examination of sputum), the examination of the various organs and the urine make up a work, which, for the ground it covers is certainly the best that has yet been published. The material in the book is rendered more accessible by the addition of an alphabetical index of contents and authors' names.

TEXTBOOK OF NORMAL HISTOLOGY. By GEORGE A. PIERSOL, M.D., Professor of Anatomy in the University of Pennsylvania. London: Baillière, Tindall, and Cox. 1894. (Demy 8vo, pp. 448, 409 illustrations. 15s.)

THIS is a comprehensive volume dealing with the histology of all the tissues and organs of the body. A short introductory chapter is devoted to the consideration of the cell as such, including a summary of our more recent knowledge of karyokinesis and other vital manifestations. Then follow chapters dealing with the epithelial and connective tissues, and then the other systems of the body are taken in order, and treated individually. The volume contains a vast amount of material and detailed description, and will be of great service to practitioners and others desiring to refer to any particular point; but as a volume for the use of students it is not so well suited. The statements are too dogmatic, and equal prominence is given to all points, whether important from any one point of view or not. The illustrations are, however, excellent; they are original, and have the great merit of being drawn from actual preparations. This is a point that teachers will appreciate, for while the illustrations are sufficiently diagrammatic to elucidate the text, yet they are adequate representations of the actual appearances presented in such preparations as are usually employed in demonstrating.

A feature of the work of great value is the frequent interpolation of short summaries of the developmental history of the organ or tissue under consideration; a thorough grasp of these processes elevates histology from a maze of barren detail to a study full of interest and suggestion. Such is the object of histological teaching, and its attainment is much facilitated by the introduction of such embryological sketches into the actual textbook used by the student, but some other help to reaching the same goal are not so well treated. Thus more space might profitably be devoted to the consideration of cytological processes, for it is along such lines that research is now proceeding. In an appendix a selection of the more important methods of preparation and histological research usually employed is given.

MARINESANITÄTS-ORDNUNG [Marine Sanitary Instructions. (M. S. O.) For the German Navy.] Berlin: Mettler and Son. 1893. (Band i, ii, and iii, demy 8vo, pp. 310, 464, 314. M. 10.75.)

THE German Imperial Naval Instructions were formerly in close accordance with the regulations for land forces, but the difference in the organisation of the army and the navy soon demanded special modifications in the system. After this the progress made in the science of hygiene necessitated still further change, and new instructions were issued by the Government on October 15th, 1893, in the form of three portable and neatly-printed volumes. The first of these deals with marine sanitation in general; the management of parties serving ashore, both in time of peace and in war; the application of hygienic principles to the treatment of the sick and wounded, and all particulars respecting the provision of necessary appliances, including bandages, splints surgical apparatus, and instruments.

The construction of sick quarters ashore is treated in a clear and practical way, with suitable illustrations supplied in the second volume, which is intended to form a supplement to the first, affording much additional information, and a large number of tables and formulæ for official reports, statistics, etc.

The third volume is devoted to marine sanitation in the more restricted sense, as applied to the service afloat. The organisation of the sick berth and the official attendants upon the sick, and the adoption of hygienic rules, including segregation, disinfection, and deodorisation, are efficiently treated.

To complete the general idea of this important work, it should be mentioned that the subject matter is elaborately, but at the same time very simply, classified, so as to be easily comprehended on looking over the table of contents in each volume. Moreover, by the aid of two comprehensive indices dealing respectively with the service ashore and the service afloat, the instructions may be consulted by the medical officer with great facility.

Though all sanitary principles and rules referring to our navy are included in the Queen's Regulations and Admiralty Instructions, a selected code is published in a separate form for the convenience of medical officers. Doubtless, on comparing this with the German Marine Sanitary Instructions at the present date, many important alterations and additions would be suggested.

Medicine and sanitary science are by no means fixed or stationary, but progressive in their nature; to keep in touch with progress the revision of all fixed rules in relation to them is sure to become necessary from time to time. To make even passing allusion to the numerous subjects in the work here so superficially reviewed would take up more space than we have at our disposal, but German naval officers may be congratulated on possessing so useful and practical a guide for the discharge of their official duties.

ÉTUDES ANATOMO-PATHOLOGIQUES: L'INFLAMMATION. Par MAURICE LETULLE. Paris: G. Masson. 1893. (Demy 4to, pp. 542. Twelve coloured plates and 21 woodcuts.)

THIS valuable and handsome work deserves a place in all medical libraries, and is worthy of careful study by all those who take interest in the important pathological problems of which it treats. It is written with the clearness that is so characteristic of the best French work, and we must congratulate Professor LETULLE on the successful accomplishment of his arduous task. The book is essentially a modern one; it begins the history of inflammation with the epoch-marking discoveries of Colnheim, and includes the researches of Ehrlich, Virchow, Ranvier, Metchnikoff, and others too numerous to mention. It discusses in order the inflammatory conditions in vascular and connective tissues, and in epithelium, which is curiously spoken of as the parasitic tissue; a condition analogous to symbiosis being present between epithelium cells and the vascular parts they cover. Various inflammatory degenerations are described, and specific inflammations are discussed with full details. We find an excellent account of the formation of exudations, membranous deposits, and pus. The phenomena of karyo-

kinesis, chemiotaxis, and phagocytosis, have due importance attributed to them, and the concluding chapter on methods, with the excellent plates that accompany it will be found most useful.

Professor Letulle is an original investigator in this field of research, and is well qualified to pronounce an opinion on many of the doubtful and difficult points that arise. His opinions will no doubt be questioned on certain subjects, and his data and deductions on the chemical aspect of the question which appears to be mainly derived from Gautier, require revision and renewed research. But under any circumstances this book will always remain a monument of industry, and one which will be always regarded with admiration, even when the theories he advocates are replaced by newer and better ones.

NOTES ON BOOKS.

The Use of Hypnotism to the First Degree as a Means of Modifying or of Completely Eliminating a Fixed Idea. By Dr. STURGIS, of Boston. (Boston: S. J. Parkhill and Co. 1894. Cr. 8vo, pp. 28.)—This small pamphlet is very interesting, as it contains an account of one of the many experiments which are being tried with the novel remedy in nerve and mental disorders. The author divides doctors into three classes in regard to hypnotism—those who look upon it as a method of playing on the credulity of patients; those who look upon it as a dangerous treatment which for the present had better be left alone; and, lastly, those who think there is something in it which, with proper precautions, may be used. Dr. Sturgis belongs to this last class. He points out how fixed ideas may arise from impressions which may have been planted in the subconscious stratum of the brain, and which he thinks may thence gradually grow into consciousness; other fixed ideas may arise in the conscious stratum by constant repetition; and, again, in some neurotic persons a combination of the two sets of impressions may give rise to the fixed ideas. He thinks that in certain persons these ideas may be controlled by putting the patients into the first, or lethargic state, and then impressing them with suitable counteracting ideas. He gives three cases, and refers to others, in which he has been able to cure patients who were miserable as the result of such ideas. He thinks that he will be able to go further, and even attack ideas of persecution; that, in fact, he will be able to implant notions which will replace the old ones. It will be admitted at once that every successful physician does influence his patients greatly by suggestion, and it may be that in the future more may be done by suggestion. We have on good authority heard of persons who have been weaned from alcoholism by this means, but when we come to the insane the experience, in England at least, has been that it is hard to hypnotise them, and so the experiment ends.

Catechism Series. Physiology, Part III—Blood Respiration. (Edinburgh: E. and S. Livingstone. 1894. Cr. 8vo, pp. 60. 1s.)—This pamphlet forms another contribution to a series that has been noticed from time to time in these columns. Glancing through its pages we see no reason to alter our opinion that such works are harmful; the reduction of such a science as physiology to a system of questions and answers is especially to be deprecated. No physiologist of repute would lend himself to the production of such a book, and the author has wisely decided to remain anonymous. Such books, bad though they are, will, however, generally find a sale, especially if they are cheap, and we therefore feel it our duty to point out to candidates for examinations that they will be relying on a broken reed if they trust to this particular one. The following selection from the numerous mistakes will be sufficient to convince even a student of this statement: We find hæmatin described as crystalline, and hæmin is said to contain no iron; we read that one way of preventing blood coagulation is to *saturate* it with magnesium sulphate or sodium chloride, and that in blood transfusion human blood only should be used, because other kinds break down, and the stroma (*sic*) of the corpuscles blocks up the liver capillaries, leading to embolism and death; that apnœa is produced by superoxygenation of the blood; that gas analysis is performed in a test tube, and that the carbonic acid of the blood is contained in the serum, though a few pages before it is pointed out that serum is a constituent of dead blood. The fact that the oxygen absorbed is greater in volume than the carbonic acid expired is explained by saying that about 1 per cent of the oxygen is "lost" or stowed away in the tissues. Why should one breathe through the nose? is answered Because in it is a special heating apparatus, the inferior turbinated bone. These samples will sufficiently reveal the character of the book.

The Pharmacopœia of the Evelina Hospital for Sick Children, Southwark. (Cr. 16mo, pp. 48. 1s.[1])—This little work is a collection of various formulæ employed in the Evelina Hospital. The prescriptions are written in English, and doses regulated for a child six months old. Possibly, owing to the fact that a large proportion of the medical staff of this institution are attached to Guy's Hospital, the formulæ are in many cases similar to those in use at Guy's. It appears somewhat curious to find in a pharmacopœia for children a formula for a pill. This prescription contains pilula hydrargyri, with digitalis, ipecacuanha, and squill. Surely, it would be better to give to young children a powder instead of a pill, and to substitute hydrargyrum c. cretâ for pilula hydrargyri. In the appendix are contained diet tables suitable for children, and also directions for the preparation of peptonised foods and nutrient enema. The nature of urinary deposits, and the methods of testing for albumen, sugar, etc., are simply and clearly explained, especially for the use of nurses.

Mental Nursing. By WILLIAM HARDING, M.D. (London: The Scientific Press. 1894. Second Edition. Demy 8vo., pp. 150. 2s. 6d.)—This small volume of 150 pages is one of the new class of literature which holds an intermediate position between the truly medical and the simply amateur medical books. Nurses are gradually being provided with suitable books to prepare them for their important work, and it is a good sign that even asylum nurses are being cared for. The Medico-Psychological Association has published a handbook for instruction of asylum nurses, and examinations are being regularly held to test the knowledge gained; all this is in the right direction, and the present volume gives evidence that at least some assistant medical officers to asylums find other things to do than lament that they are not superintendents. In a third edition we would suggest that a diagram showing the points on the limbs where pressure to arrest hæmorrhage should be made would be of great use, for mere description does not quite convey the instruction needed. Under venous hæmorrhage we did not notice any allusion to the bursting of varicose veins, and this we think should be referred to as sufficiently common and needing prompt action; nurses should also be instructed as to how to administer an enema and how to pass a female catheter. Our author on page 90 says: "No insane person was ever cured of a delusion by means of reasoning or argument." This is going distinctly too far, as several such instances have been recorded. The whole book is thoroughly practical and is full of good advice.

Illustrated Manual of Hand and Eye Training on Educational Principles. By Dr. WOLDEMAR GOETZE. (London: O. Newman and Co. Cr. 8vo, pp. 230. 4s.)—Manual training may undoubtedly be conducted on educational principles as a means of brain culture, and the work before us, which is well illustrated, will be found a useful practical guide. Such training is specially useful for some children with eye defects, as also for those of nervous temperament and weak mental power, who may be unfitted for a full curriculum in literary work; the child's time table of organised work may thus be filled up without causing mental fatigue. We should like to see the physiology of such processes of training better explained to teachers, and we cannot agree with the author that "physical training, unlike brain work," sets the muscles in action. The real value of manual training is in the culture it may give to the brain, and this should be its principal aim.

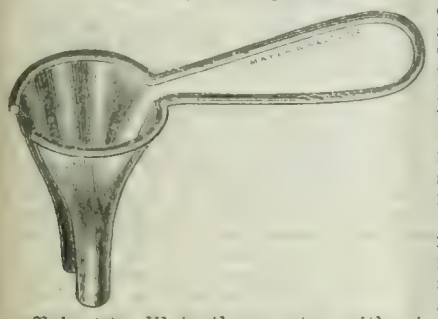
[1] Copies may be obtained from the Secretary or the Dispenser.

In speaking of training the eye, it would be well if special attention were drawn to the importance of training movements of the eyes towards objects, in place of moving the head towards the objects observed, a fault very common among children, and not mentioned in manuals on handicraft and physical training.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

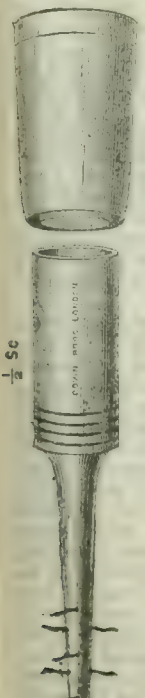
A SELF-RETAINING AURAL SPECULUM.

THE self-retaining aural speculum was made at the suggestion of Mr. W. R. Stewart, aural surgeon to the Great Northern Central Hospital, by Messrs. Weiss over twelve months ago. It consists of Kramer's blades much shortened and mounted in a spring-like Thudichum's nasal speculum. It is essential that the strength of the spring should be just sufficient to dilate the meatus without causing pain by undue pressure on the walls. Mr. Stewart finds it most useful.



RECTAL OINTMENT INTRODUCER.

THE accompanying sketch shows an appliance made by Messrs. Down Brothers, St. Thomas Street, London, S.E., to the design of Mr. Edward C. Ryall, House-Surgeon of St. Mark's Hospital for Diseases of the Rectum. The introduction of ointments into the rectum by the finger is a dirty and ineffectual method, as the finger is grasped by the sphincter, and most of the ointment drawn off, so that little actually reaches the mucous membrane of the rectum itself. In using this instrument the cap is removed, and the receptacle filled with the ointment. The cap is then replaced, and the pipe introduced through the sphincter into the rectum. The cap being then pressed firmly home the ointment exudes through the perforations, as shown in the sketch. The introducer can be used by the patient himself with one hand. The pipe is small, and its passage, it is stated, does not cause pain even in fissure.



NOVEL POISON BOTTLE.

AN ingenious contrivance for preventing mistakes of the kind which are so often attended with fatal consequences has been made the subject of a patent by Mr. Robert Fletcher, of Burslem. The surface of an ordinary medicine bottle is thickly covered with sharp-pointed pyramidal projections, except at one spot, where room is left for attaching the label. The slightest touch, even in the dark, would suffice to indicate danger, and the need for care in dealing with the contents of the bottle. The permanent character of the danger signal would require particular attention to the use of such bottles only for poisonous medicines, otherwise their utility would be very materially reduced. That is the case with the blue bottles commonly used for outward applications, in consequence of their being very often put to other purposes.

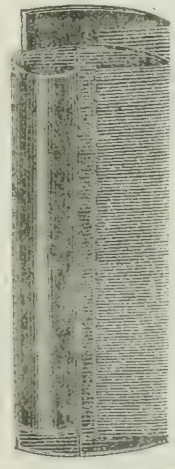
A NEW POCKET HYPODERMIC CASE.

MR. PAUL Q. KARKEEK, M.R.C.S., of Torquay, draws our attention to a new pocket hypodermic case which has been made at his suggestion by Messrs. Allen and Hanburys. It consists of a silver-plated metal box containing one of Allen and Hanburys' hypodermic syringes, two needles, and six tubes of hypoderms. It is so small that it can be carried with ease in the waistcoat pocket. The case is aseptic; it has no lining, the contents being held in position by little switches. The saving of space is effected chiefly because the pestle and mortar are dispensed with, as these hypoderms are readily soluble without the aid of heat or trituration. The case is very neat in appearance, and, although almost as small as a matchbox, holds an assortment of remedies quite sufficient for ordinary cases of emergency. The case used by Mr. Karkeek himself, for example, contains morphine, cocaine, apomorphine, atropine, ergotinin, and pilocarpin.



COMB FOR THE OVA OF PEDICULI.

DR. GEORGE B. BATTEN (Lordship Lane, S.E.), has devised a double comb to facilitate the removal of nits from the hair. Lotions, as he points out, may loosen the hold of the knit on the hair, but it then requires to be drawn off. As the nit has a conical form, it tends by a wedge action to force the teeth of a comb apart, and thus to slip through. Dr. Batten's invention consists of two small-toothed combs, each having a flat surface on one side; they are held together by a metal clip, in such a way that one comb can slide upon the other. The hair is first soaked in a lotion (carbolic lotion, 3 to 4 per cent.; or paraffin), and the tangles combed out with an ordinary comb. A lock of hair is then picked up and held in the left hand, while with the right the double comb is pressed into the hair; by a movement of the fingers and thumb the two combs are made to slide laterally on each other, and drawn down the lock. It will be seen that the hairs have to pass round two right angles, and the nits are too long to turn them both, and are thus drawn off. A concealed spring returns the combs to their first position ready for use on another lock of hair. The combs can be obtained from Messrs. F. Newbery and Sons, King Edward Street, London, E.C.



CLARK'S STARCHLESS BISCUITS, "NE FAR" BRAND.

THESE biscuits are of good flavour, free from grit, and they contain only a mere trace of starch. According to analysis by Jago they consist of:

	Per cent.
Moisture	6.16
Albuminoids	49.46
Fat	19.09
Mineral matter chiefly soluble phosphates	5.84
Finely divided cellulose	3.93
Extractives	14.51
Sugar	0.96

The essential properties of a biscuit free from starch have been secured with considerable improvement in the general characters of crispness and palatability as well as attractive appearance. We can therefore recommend these biscuits to the notice of medical men for the use of patients who require a diet free from starch. They are manufactured by Clark's Bread Company, of Fonthill Road, West Brighton.

PARLIAMENTARY BILLS COMMITTEE.

(Concluded from page 922.)

A MEETING of the Parliamentary Bills Committee was held at the office of the Association, 429, Strand, W.C., on Tuesday, April 10th, 1894,

Present:

Mr. ERNEST HART in the Chair.

Dr. WARD COUSINS, President of Council.

Dr. PHILIPSON, President.

Mr. BUTLIN, Treasurer.

Dr. AGAR (Henley in Arden).
Mr. D. B. BALDING (Royston).
Mr. WICKHAM BARNES (London).
Dr. J. W. BROWNE (London).
Dr. CAMERON (Leeds).
Dr. ESLER (London).
Mr. GALTON (London).
Dr. BRUCE GOFF (Bothwell).
Dr. WM. GORDON (Exeter).
Mr. HEMMING (Kimbolton).
Dr. HOLMAN (London).
Dr. ROBERT JONES (Claybury).
Dr. LOWE (Burton-on-Trent).
Mr. MACNAMARA (London).
Dr. MICKLE (London).
Dr. ISAMBARD OWEN (London).
Mr. NOBLE SMITH (London).
Dr. SOMERVILLE (Galashiels).
Dr. STRACHAN (Dollar).
Mr. STREET (Newton le Willows).
Dr. WINTERBOTHAM (Bridgwater).

THE SALE OF PROPRIETARY MEDICINES CONTAINING POISON.

The CHAIRMAN said that he was still pressing this matter very strongly and important progress was being made in restricting the sale of proprietary medicines containing poisons which must now be labelled. He wanted the authority of the Committee to have a Bill drafted dealing with the subject of the sale of poisons in proprietary medicines, and aiming especially at a provision such as existed in France, Germany, and several other countries, requiring that the composition of all proprietary medicines seeking the Government stamp should be stated. At present they were sold as "patent medicines," which was absolutely a misnomer. What was wanted was to prevent proprietary medicine dealers calling their medicines patent medicines, which they were not and yet keeping their composition secret.

It was proposed by Dr. PHILIPSON, seconded by Dr. HOLMAN, and resolved:

That the Chairman be empowered to have a draft Bill prepared dealing with the question of the sale of proprietary and secret medicines.

THE USE OF OPIUM IN INDIA.

The CHAIRMAN read the following resolution from the Burmah Branch of the British Medical Association which strongly opposed any interference with the use of opium in India.

"The members of the Burmah Branch of the British Medical Association being deeply interested in the questions now under investigation by the Opium Commission and having many opportunities of observing the effects of the use of opium in this country they desire to convey to them an expression of their opinion upon this subject affecting as it does the welfare and happiness of the people among whom the members of this Association follow their profession either in the Government service or as private practitioners. They hold that opium is not only the most valuable medicine which Providence has bestowed upon the human race, but that its use is especially beneficial in the treatment of many of the diseases peculiar to these climates and peoples, and that by its use a vast amount of suffering is relieved both by the hands of native practitioners as well as those who follow European methods of practice. While recognising the fact that the abuse of opium must be followed by injury they believe that in small quantities it may be used for long periods without serious effects upon the system, and they feel convinced that the accounts which have been circulated in England concerning the effects arising from its habitual abuse have been greatly exaggerated by those engaged in promoting the agitation for its prohibition. They believe that the increasing use of alcoholic liquors in this country is giving rise to far more disease and crime than the use of opium. The members of this Branch Association believe that the measures now adopted by the Government to regulate the traffic in and consumption of opium are in Burmah more than sufficiently stringent to meet the necessities of the case, and that any effort of Government to prohibit or even to further restrict its sale will only result in driving those who now use opium to take to much more harmful substitutes as alcoholic stimulants and hemp drugs."

INFANT MORTALITY IN RELATION TO FACTORY LABOUR.

The CHAIRMAN said that the Home Secretary was about to take steps in this matter, as was announced in the report of the Labour Commission, who had reported in the same sense as the Parliamentary Bills Committee that there ought to be some restriction on married women.

It was proposed by Dr. SPOTTISWOODE CAMERON, seconded by Dr. WARD COUSINS, and resolved:

That the special Committee appointed to take steps to bring the question of infant mortality in relation to factory labour before the responsible Government department, with the view of effecting certain remediable legislative enactments on the lines suggested in the last report to the Committee on the subject, be empowered to take the necessary steps to obtain an interview with the Home Secretary, with the view of advocating the recommendations contained in the report in question.

REGISTRATION OF MIDWIVES.

The CHAIRMAN read the following resolutions on the subject of the registration of midwives, which had been received from the Lancashire and Cheshire Branch of the British Medical Association.[1]

"That in view of the fact that a 'Midwives' Registration Association' has been formed—*ostensibly* for the purpose of promoting legislation for the registration of midwives, but in reality for the creation of an independent order of midwifery practitioners—this meeting, while anxious to improve the training of monthly nurses, and recognising that duly qualified medical *women* already exist—records its emphatic protest against any such proposed legislation, as such would—(*a*) endanger the lives of pregnant women and infants: (*b*) interfere with the training of medical students in practical midwifery; (*c*) repeal the educational sections of the Medical Act, 1886; and (*d*) prevent newly qualified practitioners from perfecting their knowledge of obstetrics and diseases of infants.

"That a copy of this resolution be sent by the Branch Secretary—(1) to the General Medical Council; (2) to our five direct representatives on the General Medical Council; (3) to our Branch representatives on the Council of the British Medical Association: (4) to the Council, and Parliamentary Bills Committee of our Association: (5) to each Branch of our Association; (6) to each medical society; (7) to the medical members of Parliament, and to the members of Parliament for the counties and boroughs of Lancashire and Cheshire, earnestly requesting them to consider, and strenuously oppose, such proposed legislation."

Mr. HEMMING said it was feared by some practitioners in the country that a body of registered midwives might take a certain part of the midwifery practice away from the medical profession.

Dr. WINTERBOTHAM stated that these resolutions had been submitted to the West Somerset Branch, which he represented, and that Branch differed from the views expressed in the resolutions, and had declined to act upon them, and had ordered them to lie upon the table. In that view, which he was there to express, he personally entirely concurred. No one could doubt the enormous amount of harm which was now being done by uneducated midwives, who, without any training and without any skill, practised midwifery to the great danger of women. It was sometimes stated that to have these women duly under control, so that no unfit person could undertake such duties, and to make a register of them, which would enable them to be kept under control, might take some money out of the pockets of medical practitioners. That was a very sordid view, and he believed a very unsound and unfounded view. At any rate, it was hardly a creditable one. So far as he was concerned, he was a doctor looking to the interests of doctors, but he was also a citizen having a duty to his fellow citizens, and he refused to sink the sense of his civic duties, or to fly in the face of them for any small supposed loss which might accrue to the professional body to which he belonged. He put his civic duties first, and if there should prove to be some slight loss (which might be doubted) from the creation of a well-fitted body of women in lieu of the present uneducated women who now practised without restraint these most im-

[1] BRITISH MEDICAL JOURNAL, March 17th, 1894, p. 602.

portant functions to the great danger of their fellow subjects, he should prefer even that to the existing state of things. Within the last few weeks he had heard of three cases in which the mothers' lives had been lost, owing to the bad treatment they had received at the hands of untrained midwives, and he thought it high time that midwives should not be allowed to practise without being certificated and registered, even though it might possibly entail the loss to the profession of a few pounds a year.

Mr. BALDING said it had fallen to his lot to supervise to a great extent the practice of midwifery among a class frequently attended to by women, and he could not recollect a case where he could say that such women died from want of attention or from inattention on the part of the midwife. In a great number of troublesome cases the less done the better. They did not want a highly trained or a scientific midwife to attend those cases. The ignorant woman was often much more ready to send for the doctor than a woman who had a better knowledge. The latter was more likely to do mischief. In simple cases of cross birth the ignorant woman sent for the doctor. There was a good deal to be said on both sides of the question. The totally inefficient women, in his experience, were very useful and very rarely did very much mischief, in fact, hardly did any at all. They were only too ready to have the assistance of the doctor.

A conversation followed in which a good deal of dissent was expressed from the opinion that untrained midwives did not cause a great deal of danger and loss, of which many members instanced examples within their knowledge.

The letters and the resolutions were ordered to be entered on the minutes.

THE NEW INTERNATIONAL CHOLERA CONVENTION.

Specially Translated from the Official French Text, for the BRITISH MEDICAL JOURNAL.

(Concluded from page 934.)

ANNEX II.

SANITARY SURVEILLANCE OF THE PILGRIMS IN THE RED SEA.

Sanitary Regimen applicable to Pilgrim Ships in the Sanitary Station (Reorganised) of Camaran.

THE pilgrim ships coming from the South and going to Hedjaz should first touch at the sanitary station of Camaran, and will be submitted to the following regimen:

The vessels recognised as uncontaminated after a medical visit shall have free pratique when the following operations are finished:

The pilgrims shall be landed; they shall take a douche bath or a sea bath; their dirty linen, their effects in use, and the luggage which may be suspected, according to the judgment of the sanitary authority, shall be disinfected; the length of these operations, comprising the time of landing and of embarking, shall not exceed forty-eight hours.

If no case of cholera, of diarrhœa, or of choleriform symptoms is reported during these proceedings, the pilgrims shall be immediately re-embarked, and the vessel would be directed towards Hedjaz.

The suspected vessels, that is to say, those on board of which there have been cases of cholera at the moment of departure, but on which no new case has occurred for seven days, shall be treated in the following manner: The pilgrims shall be landed; they shall take a douche bath or a sea bath; their soiled linen, the part of their effects in use, and their baggage, which may be suspected, according to the judgment of the sanitary authority, shall be disinfected. The length of these proceedings, comprising the landing and the embarking of the pilgrims, should not exceed forty-eight hours. If no case of cholera or of choleriform symptom is reported during these proceedings, the pilgrims shall be immediately re-embarked, and the vessel shall be directed towards Jeddah, where a second medical visit shall take place on board. If the result is favourable, and after the declaration written by the doctors on board certifying under oath that there has been no case occurring during the voyage, the pilgrims will be immediately disembarked.

If, on the contrary, cholera or choleriform symptoms have been reported during the voyage or on arrival the vessel will be sent back to Camaran, where it will undergo the regimen appointed for infected vessels.

Infected vessels, that is to say, those having on board cases of cholera or choleriform symptoms, or having presented such within seven days, shall undergo the following regimen: The persons attacked with cholera or with choleraic symptoms shall be disembarked and isolated at a hospital. Disinfection shall be carried out in a complete manner. The other passengers shall be disembarked and isolated in groups, as small as possible, in such a way that the whole of them shall not be jointly responsible for any one particular group should cholera happen to break out in it.

The soiled linen, the objects in general use, the clothes of the crew and of the passengers shall be disinfected as well as the ship.

The local sanitary authority shall decide if the unloading of the large baggage and of the cargo is necessary, if the entire vessel should be disinfected, or if one portion only of the vessel should undergo disinfection.

Passengers shall remain five days at the establishment of Camaran. When the cases of cholera are several days old the duration of isolation may be diminished. This duration may be varied according to the time of the appearance of the last case and according to the decision of the sanitary authority.

The vessel shall then be directed towards Jeddah, where a thorough medical examination shall take place on board. If the result be favourable the pilgrims shall be disembarked. If, on the other hand, cholera or choleraic symptoms have shown themselves on board during the voyage at the time of arrival the vessel shall be sent back to Camaran, where she shall again undergo the regimen laid down for infected vessels.

Improvements to be made in the Sanitary Station of Camaran.

A.—Complete evacuation of the island by its inhabitants.

B.—Means to be taken to assure the security and to facilitate the movements of vessels in the bay of the island of Camaran: (1) Installation of a sufficient number of buoys and beacons; (2) Construction of a jetty head or principal quay for disembarking passengers and luggage; (3) a different landing stage for embarking separately the pilgrims of each encampment; (4) a sufficient number of boats with one steam tug to assure the landing and embarking of the pilgrims. The landing of pilgrims from infected vessels shall be performed by the means they have on board the vessel.

C.—Installation of the sanitary station, which will comprise: (1) A system of railroads joining the landing stages to the places of administration and of disinfection as well as to the different encampments and offices; (2) places for the administration and for staff of the sanitary service and others, buildings for the disinfection and washing of objects not being worn and other objects; (4) buildings where the pilgrims shall undergo douche baths or sea baths whilst their wearing apparel is disinfected; (5) separate hospitals for both sexes, completely isolated: *(a)* for the observation of suspected cases; *(b)* for choleraic patients; *(c)* for patients suffering from other contagious affection; *(d)* for ordinary patients; (6) the encampments shall be separated from one another in an efficacious manner, and there should be the greatest possible distance between them; the lodgings for the pilgrims shall be constructed under the best hygienic conditions, and should contain no more than twenty-five persons; (7) a cemetery, well situated at a distance from all dwellings and without contact with a sheet of subsoil water, and drained at 0.50 m. below the level of the graves.

D.—Necessary sanitary plant and accessories: (1) A sufficient number of steam stoves, presenting every condition of security, efficiency, and rapidity; (2) pulverisers, disinfecting vats, and the necessary means for chemical disinfection, similar to those which were indicated by the Venice Sanitary Convention of January 30th, 1892; (3) distilling machines, apparatus for the sterilisation of water by heat, ice-making machines; for the distribution of drinking water, the construction of canals and closed reservoirs, air tight, and which can only be emptied by taps or pumps; (4) a bacteriological laboratory with the necessary staff; (5) installation of movable tubs for the reception of excrement which has been previously disinfected; the spreading of these substances over the surface of the island which is farthest from the encampments, and keeping account of the conditions necessary for the correct working of these fields from a hygienic point of view; (6) the dirty water shall be removed from the encampments without being allowed to stagnate or to serve for the purposes of alimentation. The water of the hospital drains shall be disinfected with lime water, according to the directions contained in the Venice Convention.

E.—The sanitary authority will guarantee the establishment of shops for the sale of food and fuel in each encampment. The tariff of the prices settled by the competent authority is posted up in several places of the encampment and in the principal languages of the countries inhabited by the pilgrims. The control of the quality of the food and of a sufficient supply of provisions is made each day by the doctor of the encampment. Water is furnished gratuitously. In everything that concerns the provisions and the water, the regulations adopted for Camaran under letter E are applicable to the encampments of Abou-Saad, Vasta, and Abou-Ali.

Improvements to be made in the Sanitary Stations of Abou-Saad, Vasta, and Abou-Ali, as well as of Jeddah and Yambo.

(1) The erection of two hospitals for male and female cholera patients at Abou-Ali; (2) erection of a hospital at Vasta for ordinary patients; (3) installation at Abou-Saad and at Vasta of stone buildings capable of containing 500 persons, that is to say, 25 persons to each building; (4) three disinfecting stoves situated at Abou-Saad, Vasta, and Abou-Ali, with laundries and accessories; (5) the establishment of douche baths at Abou-Saad and Vasta; (6) on each of the islands of Abou-Saad and Vasta distilling apparatus, capable of furnishing together fifteen tons of water a day; (7) with regard to cemeteries, excrement and dirty water, the regimen shall be according to the principles laid down for Camaran; a cemetery shall be established on each of the islands; (8) installation of stoves and other means of disinfection at Jeddah and at Yambo, for pilgrims leaving Hedjaz.

Reorganisation of the Sanitary Station of Djebel-Tor.

As far as concerns the reorganisation of the station of Djebel-Tor the high contracting parties, confirming the recommendations and wishes formulated by the Venice Convention relating to this station, leave to the maritime sanitary Consul of Alexandria the care of carrying out these improvements and recommend besides—(1) That it is equally necessary to have at the station machines for sterilisation by heat the water which is found there; (2) that it is important that all provisions which are brought by the pilgrims from Djeddah and Yambo, when cholera exists at Hedjaz, should be disinfected as suspected objects, or completely destroyed if they are found in a dangerous tainted condition; (3) that measures should be taken for preventing the pilgrims on leaving Djebel-Tor from carrying away leathern bottles, they should be replaced by earthenware vessels or metal cans; (4) that each section should be provided with a doctor; (5) that a port captain should be nominated at El Tor, to direct the landing and embarking of the pilgrims, and to see that the regulations are observed by the captains of the vessels and the samboukdji.

Sanitary Regimen to be followed by Vessels and Pilgrims coming from the North.

I. *The Voyage Out.*—I the presence of cholera is not proved to exist at

the port of departure or in its surroundings, and if no choleriform symptoms have shown themselves during the voyage, the vessel is immediately passed. If the presence of cholera is proved to exist at the port of departure or in its surroundings, or if any choleriform symptom has shown itself during the voyage, the vessel shall at Djebel Tor come under the regulations framed for vessels coming from the South which stop at Camaran.

II. *The Return Voyage.*—If the presence of cholera is not proved at Hedjaz, and has not been proved during the whole course of the pilgrimage, the vessels shall at Djebel-Tor come under the regulations instituted at Camaran for indemnified vessels. The pilgrims shall be landed; they shall take a douche bath or a sea bath; their dirty linen, their goods that are in use, and any luggage that may be under suspicion according to the judgment of the sanitary authority, shall be disinfected. The length of these proceedings, including the landing and embarking of the pilgrims, should not be more than forty-eight hours.

If the presence of cholera is proved to exist at Hedjaz, or to have existed during the course of the pilgrimage, the vessels shall at Djebel-Tor come under the regulations framed for infected vessels at Camaran. Those attacked with cholera or choleriform symptoms shall be landed and isolated at the hospital.

Disinfection shall be carried out in a complete manner. The other passengers shall be landed and isolated in groups, which shall be as small as possible, so that the whole shall not be liable for any one particular group, if cholera should show itself. The dirty linen, the objects in general use, the clothes of the crew and of the passengers shall be disinfected as well as the ship. The sanitary authority shall decide if the unloading of the larger luggage and of the cargo is necessary, if the entire ship should be disinfected, or if only one part of the vessel should undergo disinfection. All the pilgrims are to be under observation for fully seven days from the time when the disinfecting proceedings were finished. If a choleraic symptom show itself in one section, the period of seven days shall only commence for this section when the last case has been proved.

Sanitary Measures Relating to Pilgrims in the Ports of Hedjaz.

The measures to be adopted for the departure from Jeddah and Yambo of pilgrims who are going towards the South are the same as those laid down for the departure from ports situated beyond the Straits of Bab-el-Mandeb, as far as concerns the medical visit and disinfection, as follows: (1) Compulsory individual medical visit, made by day on land, at the moment of embarkation, during the necessary time, by doctors appointed by the sanitary authority, of every person taking passage on board a vessel. (2) Compulsory and thorough disinfection, made on land, under the surveillance of the doctor appointed by the public sanitary authority, of every contaminated or suspected object, in accordance with the conditions of Article 5 of the rule inserted in Annex IV of the Sanitary Convention of Venice. For pilgrims who are embarking upon vessels going North disinfection shall take place at Djebel-Tor, excepting when there is cholera at Hedjaz, in which case the above measures stated are applied also to those vessels at Jeddah and Yambo.

ANNEX III.

I.—SANITARY REGIMEN APPLICABLE TO SHIPPING IN THE PERSIAN GULF.

A vessel is to be regarded as infected which has cholera on board, or which has presented fresh cases of cholera within seven days.

A vessel is to be regarded as suspected which has had cases of cholera on board at the moment of departure or during the voyage, but which has had no fresh case within seven days.

A vessel is to be regarded as clean which, coming from a contaminated port, has had neither a death nor a case of cholera on board, either before departure, or during the voyage, or at the moment of arrival.

Infected vessels are subject to the following regimen: (1) Patients are immediately landed and isolated; (2) other persons should also, if possible, be landed and submitted to observation, the duration of which shall vary according to the sanitary state of the vessel, and according to the date of the last case, but shall not exceed five days; (3) the dirty linen, the things in general use, and the objects belonging to the crew and the passengers, which, in the opinion of the port sanitary authority, are considered as contaminated, shall be disinfected, as well as the vessel or the part only of the vessel which has been contaminated.

Suspected vessels are submitted to the following measures: (1) Medical visit; (2) disinfection; the dirty linen, the things in general use, and the effects of the crew and passengers, which, in the opinion of the local sanitary authority are considered as contaminated, shall be disinfected; (3) the emptying of the water from the hold after disinfection, and the substitution of good drinking water for that which is stored on board. It is recommended that the passengers and crew should undergo observation for five days counting from the date on which the vessel left the port of departure. It is also recommended that the crew should not be allowed to land except on duty.

Clean vessels are given immediate free *pratique*, whatever may be the nature of their bill of health. The only rule which may be enforced in regard to them by the authority of the port of arrival is that applicable to suspected vessels (medical visit, disinfection, the emptying of water from the hold, and the substitution of a good drinking water for that stored on board). It is recommended that the passengers and crew should be submitted to observation for five days, counting from the date when the vessel left the contaminated port. It is also recommended that the crew should not be allowed to land except on duty.

It is understood that the competent authority of the port of arrival may always demand a certificate testifying that there has been no case of cholera on board the vessel at the port of departure. The competent authority of the port for the enforcement of these measures shall see that there is a doctor and a disinfecting apparatus (stove) on board vessels in the three above-mentioned categories. Special measures may be prescribed with regard to loaded vessels, notably pilgrim vessels, or every vessel presenting bad conditions of hygiene. Goods arriving by sea cannot be treated differently to goods brought overland as regards disinfection, prohibited importations, transit, and quarantine (see Annexes of the Sanitary Convention of Dresden, Heading IV). Every vessel which is not willing to submit to the obligations imposed by the port authority shall be free to put again to sea. It may be authorised to land cargo after the necessary precautions have been taken, to wit: (1) Isolation of the vessel, the crew, and the passengers; (2) the emptying of the water from the hold after disinfection; (3) the substitution of good drinking water for that which is stored on board. In the same way it may be authorised to land those passengers who shall demand to be landed, on the condition that the latter submit to the measures prescribed by the local authority.

II. SANITARY STATIONS TO BE ESTABLISHED.

1. At Fao, or near this point, a large lazaretto upon dry ground with a complete sanitary staff, having under its direction the undermentioned sanitary posts of the Persian Gulf, below mentioned.
2. A small lazaretto on one of the two Ottoman islets, Selahiye or Yilaniye, situated near to Bassorah, for the surveillance of those individuals who have escaped the visit at Fao.
3. The maintenance of the sanitary station actually existing at Bassorah.
4. The installation of a sanitary station in the Bay of Koveit.
5. A sanitary station at Menama, principal town of the Islands of Bahrein.
6. A sanitary station at Bender-Abbas.
7. A sanitary station at Bender-Bouchir.
8. A sanitary station at Mohammerah.
9. A sanitary station at the port of Gwadar, Beluchistan.
10. A sanitary station on the port of Mascate, upon the Oman Coast.

ANNEX IV.

SURVEILLANCE AND ENFORCEMENT OF THE REGULATIONS.

1. The enforcement and the surveillance of the regulations with regard to the pilgrims stopped by the present Convention are entrusted within the area of the power of the Superior Council of Health of Constantinople to a Committee elected from this Council. This Committee is composed of three of the representatives of Turkey in this Council and of those other Powers who have adhered or will adhere to the Sanitary Conventions of Venice, Dresden, and Paris. The Presidency of the Committee is conferred upon one of the Ottoman members. In the case of a division the President to have a casting vote.

2. In order to assure the good working of the different sanitary establishments enumerated in the present Convention there shall be founded a corps of diplomaed and competent doctors, disinfectors, and expert engineers and sanitary guards recruited from persons who have served in the army as officers or non-commissioned officers.

3. With regard to the expenses resulting from the regimen established by the present Convention it is expedient to maintain the present state in order to divide the expenses between the Ottoman Government and the Superior Council of Health of Constantinople, a division which has been settled according to an understanding between the Ottoman Government and the Powers represented in this Council.

4. The sanitary authority of the Ottoman port of call or arrival who proves an infringement of the regulations shall draw up a report upon which the captain may inscribe his remarks. A certified copy of this report is forwarded to the port of call or arrival to the consular authority of the country whose flag the vessel carries. This authority guarantees the payment of the fine. In the absence of the consul the sanitary authority receives the deposit of the fine. The fine is not definitely in the possession of the Superior Council of Health of Constantinople until the Consular Commission indicated in the following article has given judgment as to the justice of the fine. A second copy of the certified report should be sent by the sanitary authority who has proved the offence to the President of the Constantinople Council of Health, who shall communicate with the Consular Commission. A note shall be made upon the bill of health by the consular or sanitary authority, indicating the offence and the deposit of the fine.

5. A consular commission shall be formed at Constantinople for the purpose of giving judgment upon the contradictory statements made by the sanitary officer and the captain charged. It shall be elected every year by the sanitary body. The sanitary administration may be represented by anyone occupying a public official position. The Consul of the nation interested shall always be summoned. He has the right to vote.

6. The money derived from the taxes and fines can in no case be otherwise used than for objects concerning the sanitary councils.

Certified in accordance with the original,

The President of the Conference, CAMILLE-BARRERE
Secretaries: J. DE CAZOTTE, COMTE H. LUTZOW, NERATOFF, PAUL KOUX.
Assistant Secretaries: DE SOUSSAY, MERIENNE LUCAS, AUGUST FROON EDLER VON KIRCHRATH.

METROPOLITAN HOSPITAL.—The festival dinner of this institution was held at the Whitehall Rooms, Hôtel Métropole, on April 30th, under the presidency of the Lord Mayor. The Chairman said the new buildings were opened in 1887, and by great exertion the Committee succeeded in opening 78 beds, but through want of funds they were compelled, at the end of 1892, to close 24, so that 54 beds were now only available, and, as a consequence, many urgent cases had to be constantly refused admission. Last year 758 in-patients and 73,283 out-patients were treated at the hospital. At the close of the dinner the Secretary announced subscriptions to the amount of £2,209, including £500 from Baron de Hirsch, and he also announced that the late Mr. H. Spicer had left the hospital a sum of money to be used for Samaritan purposes, and that Mr. Passmore Edwards had promised to supplement this by presenting them with a convalescent home in a suitable situation.

THE PRESENT STATE OF MEDICAL PRACTICE: A SUGGESTED REMEDY FOR EXISTING ABUSES.[1]

By A. G. WELSFORD, M.D., F.R.C.S.

Quacks and Quackery.—Public Ignorance and Popular Superstition.—Herbalists.—Prescribing Chemists and Unqualified Assistants.—The "Threepenny Doctor."—General Practitioners and Consultants.—The Lack of Unity and Fellowship.—The Abuse of Hospitals, Dispensaries, and Clubs.

At the present time the medical profession is confronted with an evil of which the growth during the latter half of this century has been phenomenal. We can no longer treat quackery with contempt, nor should we be doing our duty if we refrained from attempting to stamp out this evil, considering how great is the loss of life and health that is attendant upon the unrestricted liberty accorded to it. The sale of soothing syrups alone is responsible for the deaths of 15,000 children per annum, and the number whose lives and fortunes are ruined by the malpractices of the "nervous debility" quacks must be very large, seeing how numerous they are in all our big centres of industry.

Not only are the rich victimised by these birds of prey, but no one is too poor or too suffering to escape their rapacious maws. For the credit of the medical profession it is well that among the quacks there are but few medical men, and these few are rightly and deservedly despised and known at their true worth. England is the paradise of quacks, and in this partially enlightened 19th century there is an enormous number of so-called educated people who are so simple as to be readily taken in by every loud-voiced and brazen-faced impostor that comes to the front.

This is not to be wondered at, seeing that among all classes there exists the most dense ignorance of the commonest elements of scientific knowledge, and such mediæval ignorance demands some form of superstition. To such people rational medicine presents no charms; to them the body is a dark mystery, and disease some process not of Nature which must be exorcised. The sequence of cause and effect is not well defined in their minds and they demand the miraculous in medical science, which we are not able to offer. Therefore, when the charlatan arrives with his bag of tricks, making extravagant promises and assertions to which no one out of an imbecile ward could be expected to give credence, he finds willing listeners and easy victims.

From this form of quackery the medical profession does not lose to any very great extent, and our hostility to this method of swindling the public does not proceed from any necessity to defend our professional interests.

Herbalists and other unqualified persons do a roaring trade among the lower middle and lower classes. The law or our apathy seems to allow a complete licence to all and everyone to practise medicine and surgery without the necessity for a qualification of fitness. And although unqualified persons cannot call themselves doctors and labour under certain other slight disabilities, no check is placed upon them. The most serious diseases are treated by persons who are even ignorant of the names of the diseases, and the most disastrous results often follow. No punishment falls upon them, and beyond an occasional mild reproof from the coroner no notice is taken of their misdeeds. The poor are not a class to differentiate between the various kinds of doctors, especially as the herbalists now put M.B. after their names.

The law safeguards property far more carefully than the health and lives of the community, and exacts from the man who undertakes to navigate a ship a guarantee that he is competent to do so, and that he will not through ignorance endanger the property entrusted to him; while it is careless as to the competency of the man who undertakes to pilot a sick man through the shoals and dangers of disease. True, we are so reproductive that a life more or less makes no appreciable difference to the community, while a valuable ship and her cargo are not so easily replaced.

The third class of outside competition we have to deal with is that of the prescribing chemists. Although I am aware of the harm that they perhaps unwittingly do in blindly prescribing for ailments they do not understand, yet of the three classes of unqualified practice I have a little sympathy for the offenders in the third. The profits of the chemist are so cut by the unfair competition of grocers and stores that to many it is a difficulty to know how to make both ends meet, and the chemists can also retort upon us that in dispensing our medicines we trespass upon their domain. As the interests of both doctor and chemist are after all identical, in time I believe some understanding will be arrived at, and each will agree to keep his own business. In this way we shall be able to meet the public that wants so much and is willing to give so little.

That the man whose business it is to dispense drugs should be therefore considered competent to treat disease is a natural sequence of reasoning in the uneducated mind. Drugs and treatment have been so closely associated, that it requires a certain effort to separate them in thought, and the majority of persons are unequal to this effort. By the employment of unqualified assistants the medical profession has encouraged this belief in the competency of the prescribing chemist, for the employment of an unqualified person must imply either that the doctor employs him to treat his poorer patients, knowing him to be incompetent to treat disease, or that the doctor does not consider that a special training is necessary for the diagnosis and treatment of serious maladies. The public must conclude either that the employer is not acting justly to his poorer patients, or that at any rate for the slighter ailments it does not matter to whom they go for relief as long as some kind of medicine can be obtained. I am sure that the practice of employing unqualified assistants, now, fortunately for the good fame of the profession, rapidly dying out among respectable practitioners, has been responsible for diverting a great deal of practice from us to the chemists. No other profession is so myopic as our own. We seem absolutely blind to our own interests, and the temporary advantage gained to-day prevents us from realising the harm that will ensue at a subsequent period.

If the public see that the doctors make a trade of their profession, and are not in their practice superior to the chemist, they will go to the latter because his charges are lower; and although well-to-do persons seek advice from a chemist, yet his practice lies principally among the lower classes, and it is among this class that doctors have lost the position and influence they formerly held. This is also due to the fact that certain myopic persons have engaged in a suicidal warfare of underselling one another, so that the half-crown fees of a few years back have now sunk to a shilling, and in many places to sixpence. Even the sixpenny man is being cut out in some poor neighbourhoods by the threepenny doctor. Men who work for these fees cannot pretend to practice their profession, nor can they spend the time that is necessary for diagnosis. Such persons, whose sole treatment consists in giving the patient medicine out of the nearest bottle on the shelf, simply make a farce of practice, and seeing that the lives of sick persons are at stake too often, it is to be feared the farce becomes a tragedy.

The underselling which is now becoming so prevalent in the profession is causing grievous harm, and it is a two-edged weapon apt to recoil upon the head of the user, a fact he very frequently forgets. Not only among the humble ranks of the general practitioners, but even among the lofty circles of the "consultants," is this fierce struggle for existence going on. In consequence of low fees the "consultant" is in competition with the general practitioner, and the latter complains that the "consultant" sees his patients without communicating with him.

There is unfortunately a growing distrust of the consultant in the profession, and a reluctance among general practitioners to send up cases to London, for to-is they do, knowing often that they shall see the faces of their patients no more. Surely this is an unfortunate state of things and some understanding might be arrived at between the two branches of the profession, such as exists between barristers and solicitors. It is the unfortunate lack of unity and fellowship which weakens the medical profession. Of all professions we can least afford to be divided. No other profession is expected to do so much for so little, and because we are not

[1] A paper read at a meeting of the East Kent District of the South Eastern Branch of the British Medical Association, held at Ramsgate.

united we can make no stand against the exactions and impositions which are practised upon us on every side.

Hospital reform is urgently needed. The present system of hospital relief degrades and pauperises the public, and entails a loss of thousands a year to the medical profession; but because the members of the staffs of the various hospitals do not lose so much as the general practitioners do, they do not insist upon the gross abuse of hospital relief which is now going on being prevented, as it could easily be by proper management. Not only our hospitals, but also our clubs and dispensaries are largely taken advantage of by the fairly well-to-do, and the club doctor is powerless in the matter, for were he to object or threaten to resign his position, there are many others ready and willing to take his place. That it is possible to find a self-respecting qualified man willing to act as medical officer to a medical aid association shows to how low a depth the profession is descending. The General Medical Council refused, however, to take any action, even after this gross system of covering and sweating was explained to them. The apathy of the Council is responsible for the continuance of many of the evils which afflict our profession, and seeing that the Council are not representative of the general body of the profession, no hope can be entertained that salvation will come through them.

I have said enough to show that the question of reform is pressing, but nothing can be done until we are united. Combination must precede effective action. This union we all desire can be found in an association of medical men, numerous enough to influence the whole profession, which should be able to pass laws regulating medical practice, and in other ways to adjudicate upon the grievances which affect medical men. Such a medical parliament would be able effectively to put a stop to many regrettable practices which are harmful to the profession, and its decisions should be enforced by a social ostracism of the offenders. The council of this association should consist of representatives elected by the members, and thus every member would have his proper share in the making of these laws by which he would be bound. Who can doubt that were there such an association in existence the vexed questions of hospital reform, underselling, and the regulation of the relation of consultant to general practitioner would be speedily settled to the great advantage of all concerned? Such a body, representative of the whole profession, and strengthened by the moral and financial support of its members, would be in a position speedily to suppress irregular and fraudulent practice, and would be able to defend the profession from the evils which now press so hardly upon it. It is only through a powerful organisation of medical men in an association of this kind—call it a trades union, if you will—which shall be to medical men what the Incorporated Law Society is to the legal profession, that we shall be saved from the evils which oppress us.

In the British Medical Association we have a parliament ready made, and the development of the Association on the lines I have sketched out would be welcomed by all. Valuable as is the Association to us, it would be still more valuable if it came forward as a judicial and law-making body. Already its roll of membership includes more than half of the English medical profession, and the number of members would be largely increased by such a development, as it would be to the interest of all medical men to become members of a body exclusion from which would entail a certain stigma. If the Council of the British Medical Association possess no powers authorising them to act in such a manner, the constitution of the Association can be altered by the members so as to enable it to develop in the desired directions.

No body could enter on a campaign against quackery so successfully as the British Medical Association, and nothing would be more to the advantage of the profession than that the Council should be authorised by the members to devote some portion of the surplus funds to that object. The Medical Defence Union would be strengthened by co-operation with the Association, and with the united force of the profession supporting them the forces arrayed against them must be speedily driven off the field. We want unification, and until that idea is dominant in the profession we shall remain at the mercy of our enemies. Let us put shoulder to shoulder, and, instead of fighting the one against the other, let us unite for our mutual welfare in attacking the frauds and impositions practised upon us from all sides; and in fighting our own battle we are fighting for the public also, for, although it is not realised, yet it is none the less true that the public loses by a continuance of the present state of things, inasmuch as the efficiency of the medical profession is most seriously impaired.

I have brought this subject forward to-day for discussion believing it to be an important one. Whether you do or do not agree with me that the time has come when union in the profession is necessary to its welfare, in any case an interchange of views will be of value. If we are ready in the profession for a combined defensive movement our Branch, which is not one of the least in the Association, should be among the foremost in the work of reform.

I have, therefore, to propose the following resolution:

That the Council of the British Medical Association be invited to obtain the views of other Branches and Districts as to the necessity of suppressing fraudulent and irregular practice and of enforcing the law against quackery as it stands; also that if at the annual meeting of the Association a day were set apart for the consideration of the grievances affecting the medical profession much good would result.

Seconded by Dr. T. Whitehead Reid, of Canterbury. Carried unanimously.

NILE RESERVOIRS.

The International Commission and the Sanitary Questions.—The Wady Raiyan Scheme.—The Relative Advantages of the Various Schemes.—The Danger of Infiltration from a Wady Raiyan Reservoir.

THE International Commission on Nile Reservoirs has nearly finished its labours, and it is satisfactory to learn that the sanitary aspect of the question has received full consideration, as might have been expected from the three eminent engineers—Sir Benjamin Baker, Professor Torricelli, and M. Boulé—composing the Commission. The Egyptian Sanitary Department wisely waited for the publication of the official report on the various schemes, before considering them from the sanitary point of view, and the note submitted to the International Commission by Rogers Pasha, the Director-General of the department, was the subject of careful consideration of the Commission, which we learn fully endorsed the conclusions at which he arrived.

The question, after all, is primarily one of irrigation. The sanitary advantages of an inferior irrigation scheme must have been very special to ensure its adoption. Arguments have been used against reservoirs in the bed of the river, and the alternative Wady Raiyan scheme has been recommended on sanitary grounds alone. Horrible and exaggerated pictures have been drawn of a Nubian reservoir, a stagnant pond into which "would be delivered the putrescent drainage of equatorial swamps," and the sanitary difficulties have been represented as "insuperable" by those specially interested in the Wady Raiyan project.[1] We do not, however, remember to have seen anywhere distinctly laid down the special sanitary advantages of a Wady Raiyan reservoir. If the questions were one of a reservoir for the drinking water supply of Egypt, we imagine that proper filtration of Nile water would be preferable to either reservoir. Egyptian statistics are too inaccurate to justify wholesale condemnation of the Nile as a water supply. The water at low Nile, it is true, is relatively impure, but not so impure as to justify the sweeping charge that the entire mortality of the country is due to low Nile. The period of low Nile is also the period of maximum heat, while the sanitary surroundings of this population, excluding water supply and climatic conditions, are in themselves so bad as to account sufficiently for a high death-rate.

We understand the relative advantages of the alternative scheme to be as follows: The Nubian Reservoir would extend for about 115 miles south of the great dam. Owing to the geological features of the country at Assuan and South infiltration below the dam, an important point, would be impossible. The minimum daily discharge below the dam would be 50,000,000 cubic metres, a discharge in excess of the Rhone at Geneva, and the discharge would be by sluices at the base

[1] *Fortnightly Review*, November, 1893.

of the dam. The reservoir would commence to be filled on November 1st, and by January 31st the quantity of water required, 2,503,000,000 cubic metres, would be held up in the reservoir. During this period the Nile water has never been pronounced specially impure; on the contrary, in November it is nearly at its greatest purity. It is true that the daily discharge would be replaced by water of gradually decreasing purity coming in at the head of the reservoir, not considering that the source of pollution with decaying vegetable matter is at the Bahr Gazelle 1,700 miles above the head of the reservoir, considering the power of self-purification of a great river in such a distance, considering, too, the purifying influence of sunlight and the settlement of matters in suspension[2]. We need have little fear of such a reservoir degenerating into a stagnant pond swarming with bacterial life, such as its enemies have loved to describe it. Were it otherwise, Egypt with its one water supply, and that the main drains of the country, would be well nigh uninhabitable. More important still are the influences of such a reservoir on the river below the dam. It is an accepted fact that the period of greatest impurity of Nile water is at low Nile; the same amount of pollution is going on from Alexandria to Assuan, and in the many thousand miles beyond, and as the volume of water decreases the impurity increases. In future at Assuan, during low Nile, from May 5th to June 25th, a steady discharge of 620 cubic metres per second, over 50,000,000 cubic metres a day will be passing into the river instead of, as at present, in varying quantity of from 190 to 320 cubic metres per second. The water supply of the entire country from Assuan to the sea will therefore be considerably improved, while instead of the present barrage being practically hermetically closed from June 5th to July 15th, 2,500,000 cubic metres per day will be passing into the Damietta and Rosetta branches of the river during this period. The Wady Raiyan Reservoir leaves untouched the country south of Beni Suif: it confers equal benefits as a Nubian reservoir, from Beni Suif to the sea. Its being filled with the pure Abyssinian flood water, which, it must be remembered, is mixed with the water from the Equatorial Provinces before arriving in Egypt, seems doubtful. The official report alludes to its being filled from September to February; during low Niles, as in 1893, there would appear to be considerable difficulty in filling it at all. If this be so, it would only have the advantage of two months' impurity over a Nubian reservoir. It may, however, be accepted that the water at the outset would be purer. In a Nubian reservoir the out-take is from the bottom, in the Wady Raiyan from the top. That stagnation would be greater in the Wady Raiyan reservoir there can be no doubt. The water stored would be discharged back into the Nile at low Nile and serve to dilute the impure river water at low Nile.

The question of the water in a Wady Raiyan reservoir becoming salt cannot be put aside. Professor Schweinfurth has calculated that the water in such a reservoir would contain ½ per cent. of salt. This would hardly be specially selected as a potable water. The adjoining Karum Lake contains 306 grains of chloride of sodium per gallon, and 452 grains per gallon of total solids. The possibility of infiltration has also to be considered, and we have reason to believe that one of the members of the Commission is of opinion that a Wady Raiyan reservoir would seriously damage the adjoining province of Fayum by infiltration. The questions of salinity and infiltration can after all be actually decided only by experience. We feel sure that if a Commission composed of such eminent engineers has come to a conclusion in favour of a Nubian instead of a Wady Raiyan reservoir it has done so after full consideration of the sanitary as well as the economical and technical aspects of the question, and it must be a source of satisfaction to the Egyptian Government that the Commission and the Sanitary Department are so completely in accord.

[2] Report of the Royal Commission on the Water Supply of the Metropolis, 1893.

AN Institute of Hygiene has been established in the University of Helsingfors, of which Dr. Sucksdorff, Inspector of Public Health in Finland, has been appointed Director.

LITERARY NOTES.

A GERMAN translation of Dr. Burney Yeo's recently-published *Manual of Medical Treatment* is in preparation, under the direction of Professor Kast, the Director of the Medical Clinic of the University of Breslau.

A new medical journal, *La Flandre Médicale*, has recently appeared in Belgium. It is published at Ghent, and is edited by Drs. Claus, De Buck, Ch. Gevaert, Rogman, Vanderlinden, and P. Walton.

We have received Part I of the *Natural History of Plants*, from the German of Anton Kerner von Marilaun, Professor of Botany in the University of Vienna, by F. W. Oliver, M.A., D.Sc., Quain Professor of Botany in University College, London, with the assistance of Marian Busk, B.Sc., and Mary Ewart, B.Sc. The province of the work is the whole realm of plant life, and its purpose as conceived by the author is to provide "a book not only for specialists and scholars but also for the many." The work—which is to be completed in sixteen parts, imperial 8vo, published monthly—contains about 1,000 engravings on wood and 16 plates in colours, all executed under the author's own supervision. From the specimens given in the part of the work before us, we have no hesitation in saying that they are as remarkable for artistic beauty as for truth to Nature. We congratulate Messrs. Blackie and Son on the excellent appearance and "get up" of the book, which is issued on terms which place it within the reach of all.

The Report of the Twenty-third Meeting of the German Ophthalmological Society at Heidelberg, 1893, is published, as usual, as a supplement to the *Klinische Monatsblätter f. Augenheilkunde*, and is again edited, with their usual care, by Drs. W. Hess and Zehender. The volume contains some twenty papers communicated to the Society, besides descriptions of instruments, apparatus, and specimens, to the demonstration of which one of the meetings was devoted. Although no one of the papers is of transcendent merit, they are nearly all worth reading, and a few are of considerable interest and practical value.

The *Nineteenth Century* of this month presents to its readers an interesting review of the methods and results of modern surgery by Mr. H. P. Dunn. Most of the article is of course devoted to the revolution effected by asepticism and the application to practical surgery of the results of bacteriological research. It is shown that, together with greater confidence and heroic boldness in operating, there is also at the present time a constant endeavour to substitute "conservative" for "radical" treatment. Beyond the objects of saving life and relieving pain the modern surgeon aims at economy of time by restoring to society as soon as possible its breadwinners and useful members. Many of Mr. Dunn's readers, however, will be inclined to doubt, as some surgeons do, whether any of these objects are likely to be attained by the application of surgical treatment to one of the most distressing forms of mental infirmity.

In *Les Accouchements dans les Beaux Arts, dans la Littérature et au Théatre*, just published by G. Steintheil, Dr. G. J. Witkowski has collected a large variety of curious information relative to childbirth and its attendant rites, customs, and superstitions among different nations. In explanation of the uncomplimentary French proverb *bête comme un accoucheur*, he quotes the following frank expression of opinion of H.R.H. the Duchesse de Berry as to the obstetricians who had had the privilege of attending her: "It must be admitted that my poor Deneux will not give occasion for any change in the proverb. Evrat is not the kind of person to set the Thames on fire. They say that Baudelocque, apart from his speciality, is a very ordinary man. Old Dubois is an original, a 'crank.' I do not deny his ability as a surgeon, but take him on any other ground, and you will not get a word out of him. One might add to the collection, but it is really not worth while. For what they have to do, transcendent mental endowment is not needed. I believe, moreover, that the want of sleep makes them stupid. And then always to be doing the same thing, always to be hearing the same complaints, and to be occupied with trumpery details, wet nurses, monthly nurses, etc., it is enough to extinguish the sacred fire, and to make a man a mere machine." Dr. Witkowski also quotes Nélaton as saying, in discussing the

future of his infant son: "If he has plenty of brains I will make a physician of him; if he has a fair amount he will be a surgeon; if he is a noodle, an accoucheur." Nélaton had evidently a lower opinion of his own branch of the profession than a former surgeon to St. Thomas's, who, when asked by Akenside, author of *The Pleasures of the Imagination*, and physician to the same hospital, what he intended doing with his son, greatly ruffled the dignity of the poet by saying: "I wanted to make a surgeon of him, but he is such a fool that he is only fit to be a physician."

The publication of the *Deutsche Chirurgie*, founded by Billroth and Luecke, and now, as the title page informs us, edited by Professors E. von Bergmann, of Berlin, and P. Bruns, of Tübingen, drags its slow length along. Part I of the first half of Lieferung 45 c, which has just appeared, consists of an exhaustive monograph on the "Surgery of the Liver and Gall Bladder," by Professor C. Langenbuch.

Messrs. James Elliott and Co have issued the *Hermetic and Alchemical Writings of Paracelsus* in two volumes. This important work contains, entire and unabridged, the large body of literature attributed to Paracelsus, which treats directly of the transcendental doctoring and physics of the *Magnum Opus*, the whole Paracelsian literature of the Great Elixir and the Universal Medicine, and a collection of all the alchemical references scattered through the chirurgical writings of Paracelsus. The text which has been adopted for translation is the Geneva folio of 1658 in Latin. The works ascribed to Paracelsus which are not to be found in this edition have been rendered from other equally representative sources.

The *Revue de Chirurgie* for March contains a sketch of Paracelsus, more particularly from the surgical point of view. The "Surgery" of Paracelsus appeared in 1536, at a date when twenty-four editions of the great work of Guy de Chauliac had been printed. There was at that time no regular public instruction in surgery; the art, such as it was, was learnt by apprenticeship. Paracelsus condemned the use of sutures in wounds, which he said healed by means of a natural "balm" produced within the body. This balm must, he taught, be nourished by remedies placed on the wound; the latter extracted the material suited to it, the rest being thrown off as pus. Paracelsus might be claimed as an advocate of asepsis, for he says that in order that the natural balm may be free to act, the wound must be clean and free from putrefaction, "whence" he adds, "it appears how pernicious is the doctrine which teaches that suppuration must be excited in wounds." He speaks of traumatic fever, of hæmorrhage from wounds, and of the false membranes which cover them. Among poisoned wounds he includes not only those made by poisoned weapons, but those produced by instruments soiled with use. He lay great stress on surgical cleanliness. He was opposed to the use of the actual cautery which was one of the chief resources of the sixteenth-century surgeon. As a whole, however, the surgery of Paracelsus, like the rest of his medical teaching, was a mixture of mysticism and quackery, in which the general darkness is occasionally lit up by flashes of insight.

The April number of the *Journal of Anatomy and Physiology* contains an interesting paper by Professor Havelock Charles, of Lahore, in continuation of his study of the morphological peculiarities of the bones of the Panjabi. It is shown that some articular facets and certain other markings in the Panjabi differ from those found on the bones of the modern European, but agree with those of neolithic man. The modifications are such as render easy the adoption of the sartorial or squatting positions habitual with the Panjabi. The special interest of Professor Charles's present communication is that he shows that these peculiarities are not acquired, but inherited—that is, they are found in the skeleton of the fœtus and the young infant. Professor Charles concludes that "the markings are instances of the transmission of acquired characters, which heritage in the individual function subsequently develops." The author will have to settle his account with Professor Weismann, but at a first glance he certainly seems to have a stronger case for his other proposition that want of use, owing to the general abandonment of the sartorial and squatting attitudes by the European, has induced changes in form and size, small changes being gradually integrated till there has been total disappearance of the markings on the skeleton of the European, "as no advantage would accrue to him from the possession of facets on his bones fitting them for postures not practised by him."

In the *Dublin Journal of Medical Science* for March and April Dr. G. M. Cullen gives an interesting account of the career of the famous anatomist Andreas Vesalius. He describes vividly the activity in procuring "subjects," which was the result of the zeal for the practical study of anatomy which Vesalius inspired in his pupils at Padua. Medical men had previously taken such knowledge as they possessed as to the structure of the human body in blind faith from Galen, who had himself learnt what he knew from the dissection, not of the "human form divine," but of that of our Darwinian forbear, the ape. The meagre supply of bodies allowed by the town authorities was insufficient, and Vesalius had, like Molière in a different province, to take his property where he could find in it—in the churchyard or on the gallows. It would appear that the professor was often his own "resurrection man," and as soon as he had succeeded in "conveying" a corpse his first care was to make identification impossible by completely removing the skin. So abundant was sometimes the supply of material that he had occasionally to ask the authorities to put off the execution of a criminal till his hands were less full. Vesalius was far from being a mere anatomist. He was also professor of surgery, and he wrote on therapeutical subjects. He was a scholar to the extent of knowing Hebrew and Arabic, and he used his acquaintance with the latter of these languages to translate the whole ten books of Rhases. As an innovator and a reformer it was, of course, his fate to be calumniated and persecuted, but it is painful to know that such men as Eustachius and Sylvius (who had been his teacher) were among his detractors. Dr. Cullen's articles seem to be intended to form part of a complete life of Vesalius, of whom there is at present no adequate record in the English languaage.

The *Indian Medical Gazette* for April contains an interesting article by S. M. Das, M.B., entitled "The Ayur-Veda Sástrá on Opium." The two famous commentaries known respectively as "Charaka" and "Susruta," and believed by Indian tradition to have been written about the ninth century B.C. (but in all probability much later), and the "Nidána" of Mádhava Kara, show no trace of any knowledge of opium on the part of the ancient Hindus. The oldest work in which the drug is mentioned is "Rája-nirghanta" ("The King of Vocabularies") said to have originated from Dhanvantari, the "Surgeon of Heaven," but in reality compiled by Pandit Nara Simha, of Cashmere, about six centuries ago. He mentions opium under the synonymous terms of *aphen*, *khaskhasarasa*, *niphen*, and *ahiphen*. According to him "it cures concurrent derangements of the three humours, increases sexual and muscular powers, and produces stupefication of the brain." The next book in which allusion is made to the properties of opium is "Bhávaprakása," written some three hundred years ago by Bháva Misra, the celebrated physician of Benares. He says that opium is similar in its properties to poppy capsules. The properties of the latter are described as follows: "The capsules of the poppy are cooling, astringent, of a bitter and styptic taste, act (injuriously) on the nervous system (literally, on the airy humour), cure the phlegmatic humour and cough, are light (of digestion), dry up the elements, promoting talkativeness, are dry (that is not fatty), intoxicating, bring on loss of consciousness at intervals, increase the appetite, and, used as an article of diet, bring on impotence." Bháva Misra calls opium *vyaváyi*, *vikasi*, and *madakrit*. *Vyaváyi* is "that which first of all diffuses throughout the whole body and is afterwards absorbed, as bháng and opium." *Vikasi* (the paralyser) is "that which causes the joints to be relaxed and dries up the vital power of the elements." *Madakrit* or *madakári* is "that which destroys the intellect and induces vicious propensities." In later compilations opium is recommended as useful in diarrhœa, dysentery, anasarca, and diabetes, and as an aphrodisiac. There appears to be no mention of a divine origin of opium in the old Indian writers as is the case with regard to siddhi or Indian hemp.

THE Quekett Microscopical Club gives a *conversazione* this (Friday) evening at 8 P.M. at the Freemasons' Tavern.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

SUBSCRIPTIONS to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, MAY 5TH, 1894.

THE FIRST REPORT OF THE OPIUM COMMISSION.

THIS Blue Book contains the evidence of 39 witnesses who were examined by the Commission in London before it proceeded to India, together with reprints of some important papers on the subject matter of the Commission's inquiry, which are appended to the minutes of evidence. The witnesses may be classified as follows: 14 missionaries belonging to various denominations, most of whom had resided and worked in China; 3 gentlemen representing the views of the Society for the Suppression of Opium; 8 medical men who had served in India, China, and the Straits; 4 medical missionaries; 2 Indian officials; 4 Chinese officials; and 4 merchants and employers of labour in China.

Every phase of opinion, as held by Europeans regarding the opium traffic and the extent and consequences of opium consumption, is thus represented in these earlier or preliminary proceedings of the Commission. As these opinions and the facts on which they rest must necessarily depend largely for their truth, validity, and weight upon the subsequent investigations of the Commission, any elaborate analysis or lengthened representation of this instalment of its labours would be plainly improper and infructuous. Still there are a few considerations plainly deducible from the large mass of testimony presented in this Blue Book which may be briefly stated without prejudice to the further revelations or final conclusions of the Commission. The preponderance in bulk of the missionary and philanthropic contention, the unanimity and force with which this view of the opium question is stated, and the uncompromising manner in which certain propositions which constitute the creed of the anti-opium party are advanced are very striking. These propositions are summarised, with full use of the usual superlatives, by Mr. Benjamin Bromhall, General Secretary of the China Inland Mission, who, basing his conclusions on information supplied to him by missionaries—for he has never visited China himself—sums up the matter in these five propositions:—

(1) Opium smoking in its effects—physically, morally, and socially—is one of the most awful vices that ever afflicted the world. (2) Our encouragement of the opium trade has been in its results—commercially, politically, and morally—one of the greatest blunders and one of the greatest crimes ever committed by any nation. (3) The rapid extension in China during recent years of the growth of the poppy and of the habit of opium smoking threatens the very existence of the Empire. (4) There is absolutely no hope for any effective check to the rapid increase of opium smoking in China while the export of our Indian opium is continued; and (5) the habit of opium smoking is one of the greatest, if not the greatest, hindrance to the work of Christian missionaries in China.

These uncompromising statements represent summarily and clearly the extreme view of the philanthropists and missionaries. A brief examination of them successively will exhibit in general terms the effect of the testimony of the various classes of witnesses who were examined. The first proposition contains the essence of the whole question. If opium smoking is, in reality, "one of the most awful vices that ever afflicted the world," then any action—political, commercial, or social—that has in the past, or does in the present, tend to encourage or facilitate it must of necessity be reprehensible, and any effort to prohibit or suppress it in the future highly meritorious if not absolutely binding on individuals, communities, or nations. All witnesses agreed that opium may be and is smoked to excess in China, and that such excess entails injurious consequences to health and morals; but a large and important section of them testified that the moderate use of opium is harmless if not beneficial, and even some of the missionaries admitted that the wealthy and well-fed classes do not display the baneful physical and moral effects of the drug so plainly as the poor and starving, if at all. It is evident that it is with these lower classes that missionaries come most in contact, and their experience is apparently drawn from the street, the hospital, and the slum rather than from the office or home.

On every point the evidence is vague, and positive or statistical facts weak or wanting. The average proportion of moderate and excessive consumers is nowhere stated; though from the medical and general evidence tendered the former must largely preponderate. Opium is said to make men liars, thieves, sluggards, and debauchees; but, granting the existence of these vices among the lower classes in China, it nowhere appears to what extent they prevail independently of opium or in what measure they are generated or developed or intensified by opium.

Again, as to physical effects—emaciation, anæmia, debility, diarrhœa, impairment of vital power and resistance—no effort is made to discriminate between physical defects and disorders antecedent to, and independent of, opium, or for whose alleviation or cure opium eating or smoking is resorted to, and disturbances produced indisputably by opium; and, as regards these, no clear evidence is forthcoming regarding organic changes or permanent functional disablements. On the other hand, there is no lack of contradiction among witnesses. Some allege, for example, that opium stimulates lust and tends to debauchery, others that the drug allays or abolishes sexual desire; some declare that the use of opium is prophylactic or curative as regards fevers, bowel complaints, etc., others that it increases the liability to contract and succumb to these ailments. The fallacy of extreme instances obtains frequent illustration.

The power of opium is often exaggerated; the need of continually increasing the dose, the helpless thraldom of the victim, the impossibility of giving it up—all these things are insisted on by the missionaries, and each item of the charge is denied by most of the medical and general witnesses. We want more exact evidence on these points, and it is to be hoped that subsequent reports will supply it.

The second proposition is hardly consistent with historical fact, as expounded by Sir Thomas Wade and others. The picture of England forcing opium on China at the point of the bayonet is not a true one. The case is one of demand from China. It was this demand that formerly rendered smuggling even possible, and it is this demand that necessitates supply now under treaty engagements. It is quite certain that, if the demand ceased, supply would no longer be profitable and would also cease.

Two points are quite clear from the report, namely, that the Chinese did not derive their opium from us in the first instance, nor acquire their taste for it from any action or intervention of ours; and that the Indian Government, which inherited the trade from its predecessors, has throughout imposed difficulties upon, rather than offered encouragement to, the growth of the poppy and the manufacture of opium.

The third proposition is so extravagant and groundless that it does not merit serious discussion. The fourth is extremely improbable. The process of poppy cultivation and opium manufacture in China would be rather stimulated than repressed by deprivation of foreign supply. The most stringent orders and stern efforts on the part of Chinese rulers have utterly failed to stay the spread of the opium epidemic in the nineteenth century, just as in the seventeenth century similar means were equally unavailing to repress the tobacco habit. Opium reform in China must arise from within, and the only effect of stopping the importation of Indian opium into China, if that were possible, would be to stimulate the production and consumption of the inferior indigenous product.

On the last head of charge—namely, the impediment offered by opium to the success of missionaries in converting the Chinese to Christianity—we do not incline to comment at length. The Chinese are an astute race, and evidently know how to turn missionary abuse of opium and of England as an opium importer, against the missionaries themselves, whom they seem to hate as "foreign devils' of a specially noxious kind.

Some missionaries endeavour, by preaching and other means, such as detention and treatment in hospital, to rescue the victims of opium excess from their misery and thraldom. Others declare that spiritual influences are the most potent instrument of reformation. It appears to us that an attitude and efforts of this kind are more consistent with the profession of Christianity than the arrogant denial of Christian communion to the opium smoker, or his excommunication if he happen to contract that habit.

If what we have already stated is true—that the suppression of the opium vice must depend upon the Chinese themselves—and if Christian influences and efforts are capable of assisting them, it becomes the whole body of missionaries to imitate those medical missionaries who have sought to assuage the pangs of opium drunkards, and restore them to comfort, health, and respectability.

The proposed International Congress for 1896 is stated to be exciting considerable interest in Russia, and the sum of 50,000 roubles has been voted towards the expenses of the project. It is considered probable that Moscow will be decided on as the meeting place for the Congress, as the selection of that city is particularly favoured by the Government.

THE ARTERIOLES IN DISEASE.

The lecture by Sir George Johnson, published in the British Medical Journal of April 21st and April 28th, contains an interesting sketch of the history of the application of a physiological discovery to the explanation of pathological facts. Of the many brilliant observations made by Claude Bernard none was more striking, none was destined to have a wider influence on contemporary scientific thought than his demonstration of the action of the vasomotor nerves. Sir George Johnson was one of the first to grasp the full significance of the theory, and to apply it to the explanation of pathological and clinical problems. His conclusions did not meet at that time with general acceptance, but the progress of experimental pathology and physiology have shown that upon every point he was much nearer to the truth than any of his critics.

In his recent lecture he entered at some length into a discussion of the phenomena produced by deprivation of oxygen, and showed that in death brought about by this means there are two stages. In the first there is a rise of arterial pressure and a dilatation of the left cavities of the heart. This stage is of short duration, and is succeeded by a second, in which there is a rapid fall of arterial pressure, emptying of the left cavities, and distension of the right cavities of the heart. The contention is that this overdistension of the right side is due to the action of the vasoconstrictors of the pulmonary vessels which impedes the passage of the blood from the right ventricle. A paper, published by Mr. W. M. Bayliss and Dr. E. H. Starling, in the *Journal of Physiology* for April, on "Venous Pressures and their Relationship to Capillary Pressures," contains some interesting observations on this and on some other related points.

It may be well to follow the example of these physiologists, and to recall in the first place Weber's observations on the mean blood pressure. Even if the heart be not acting the blood is yet contained in the vascular system under a certain pressure. This pressure, which in dogs is equal to from 5 to 10 mm. of mercury, will be everywhere the same. If now the heart begins to act it cannot increase the mean pressure in the system, but it can give rise only to an unequal distribution of pressure "by diminishing the pressure in the veins by pumping fluid out of them, and increasing the pressure in the arteries to a corresponding extent by pumping the fluid into them." The mean pressure of the fluid can only be increased by the injection of more fluid into the system. Changes in the heart beat or in peripheral resistance will not increase or diminish the "mean pressure," but will cause only a variation in the distribution of the pressure. Now, increased peripheral resistance is brought about by contraction of the arterioles, and this contraction not only produces increased resistance, but actually diminis hes the capacity of the vascular system, and by so much produces a rise in the "mean pressure." Bayliss and Starling apply this reasoning to the explanation of the modification in blood pressure which occurs when respiration is suspended. There is first a stimulation of the vasomotor centre, which produces its greatest effect through the splanchnic area, causing constriction of arterioles and portal vein and a general rise of arterial and venous pressure. Then as the heart begins to fail and the circulation to be

slowed, the pressures in all parts of the circulation tend to approach more and more to the "mean pressure," that is, the pressure exerted by the blood on all parts of the blood vessels when the heart is at rest. In consequence, however, of the still active vasomotor centre, the total capacity of the system is diminished, and the amount of blood being constant, it follows that the mean pressure must be increased above normal. Hence it follows that the large rise in venous pressure is determined chiefly by vasomotor excitation. "Without this superadded constriction of the blood vessels, without this lowering of the capacity of the system, asphyxia gives rise to only trifling rise of venous pressure." The final gradual fall of venous pressures has probably two causes. One is the gradually increasing distension of the heart's cavities, which would tend to empty the vascular system; the other, which is more problematical, is the gradual giving way of the contracted vessels, as the vasomotor centre and nerves suffer in their turn from the continual asphyxia. The rise of venous pressure would tend to produce distension of the right side of the heart, and Sir George Johnson shows how this would be enormously increased by the action of the pulmonary vaso-constrictors. The right heart, in fact, has to contend against increase of pressure on both sides; in the vena cava, tending to overfill it, and in the pulmonary artery, preventing emptying. The contention that the determining cause of death is the embarrassment of the heart thus produced is probably correct.

The other illustrations of the action of the arterioles given by Sir George Johnson are of great interest, and the force of the arguments which he brings forward will be generally recognised. His explanation of the production of collapse in cholera has been much strengthened by recent pathological inquiries. The resemblance of the condition in certain important respects to that brought about by apnœa had already struck other physicians familiar with cholera, and it is probable that before long we shall have more precise information as to the physiological action of the poison of cholera, for there seems to be no doubt that the systemic symptoms of cholera are due to the absorption into the circulation of soluble toxins.

Sir George Johnson has rendered a great service to medicine by so persistently, and with so much ability, directing attention to the importance of the varying condition of contraction of the arterioles in the production of various symptoms and states of disease.

ABUSES IN MEDICAL PRACTICE.

In another column we publish a paper read by Dr. A. G. Welsford at a meeting of the East Kent District of the South-Eastern Branch of the British Medical Association held at Ramsgate. The paper treats in an able manner not only of the well known evils affecting the profession from without, such as quacks and quackery, prescribing chemists, and herbalists, but also of those arising from want of unity and dissensions within and the practice of underselling, the employment of unqualified assistants, the relations between the general practitioner and the consultant, and the abuse of hospitals, dispensaries, and clubs.

We are, of course, aware of the enormous increase in quackery of late years—Dr. Welsford refers to it as phenomenal and to England as the "Paradise of Quacks"—and the inroads made in the practice properly appertaining to the medical profession by prescribing chemists, herbalists, and others, and we have persistently advocated some amendment of the law to curtail this ever-growing evil, and the necessity of unity and combination among all classes of the medical profession for the common good.

Meanwhile the Association is not unmindful of the necessity for action, and the Chairman of the Parliamentary Bills Committee is at present engaged in drafting clauses for a new bill which will aim at bringing about an extension of the penal clauses of the Medical Act, 1858. But this is not all that is required; and although we have every confidence that the profession will preserve its true position, it behoves every member to inquire seriously into the questions raised by Dr. Welsford on the subject of the reform of hospitals, clubs, and dispensaries, and the no less important subjects dealing with the practice of underselling, the employment of unqualified assistants, and the relation of general practitioner and consultant.

The remedy suggested by Dr. Welsford for dealing with the various evils of which he treats affects the Association as a whole, and involves changes of too vast and complicated a nature to be discussed in a cursory notice. Briefly, it is proposed that the Association should add to its existing functions power to take legal proceedings for the suppression of quackery or other infringements of the law, and to establish disciplinary tribunals for deciding questions affecting members of the medical profession *inter se*; in fact, that the Association should effect the same objects, and have the same powers with regard to the medical profession and unqualified medical practice as the Incorporated Law Society with regard to solicitors and unqualified legal practice.

This, we need hardly point out, would necessitate a very considerable enlargement of the powers, and effect a large change in the objects, of the Association, which could not be acquired or effected without Parliamentary sanction, and requires very careful consideration. If it is to pass from the region of merely *obiter dicta* and to be taken into serious condition it should undergo careful consideration on the basis of practical resolutions duly submitted to and discussed by the Annual General Meeting and supported by reasoned argument. These, if passed, could then be forwarded to the Council of the Association, who would no doubt either put them into the hands of a special committee appointed *ad hoc* or refer them to the Parliamentary Bills Committee.

Surgeon-Major-General T. Pinkerton, retired list, has been appointed Honorary Physician to the Queen. He served in the Persian Campaign, 1856-7.

Dr. James Murphy on April 25th removed the spleen from a woman, aged 38, at the Sunderland Infirmary. The progress made by the patient was reported on May 3rd to be quite satisfactory.

The Queen has been graciously pleased, on the recommendation of the Secretary for Scotland, to appoint Sir Thomas David Gibson-Carmichael, Bart., of Castle Craig, Peebles, and Hailes House, Edinburgh, to be Chairman of the Board of Lunacy in Scotland.

AT a meeting of the Committee of University College, Liverpool, held on May 2nd, it was announced that Mr. Henry Tate had given books valued at over £5,000, and that Lord Derby had given £10,000 to endow a chair of Anatomy. Last month the Council received the offer of the sum of £10,000 from Mr. George Holt for the endowment of a chair of Pathology.

THE ORIGINATOR OF THE VOLUNTEER MOVEMENT.

THE *Devon and Exeter Gazette* understands that steps are being taken with the view of securing, if possible, some public recognition of the great service rendered the country by Dr. Bucknill, the founder of the volunteer movement. It was Dr. Bucknill who penned the communication to the Earl Fortescue, who was Lord-Lieutenant of Devon in 1852, which led the noble earl to communicate with the Government of the day, who thereupon expressed their readiness to accept the services of volunteers. Directly afterwards the Exeter and South Devon Corps was established. Dr. Bucknill was the author of the idea and the pioneer in the movement. He is now the only living member of the original Devonshire Committee.

THE POOR-LAW AND ITS ABUSES.

THE Conference on Poor-Law Reform convened by the London Reform Union last week was held at the Club Union Hall, Holborn, and was attended by representatives of 16 boards of guardians, 15 trades unions, and 103 political and social associations. Mr. Stansfeld opened the proceedings by declaring that a revision of the whole system of 1834 was now called for. Mr. Theodore Dodd then read a paper insisting upon the necessity of a general inquiry into the attitude and action of the Local Government Board, and in so doing he commented in the strongest terms upon the Forest Gate scandal. A number of resolutions were afterwards carried, including proposals for a revision of the Consolidated Order of 1847, a new model dietary, the transfer of pauper children to the public elementary schools and to the oversight of the Education Department, and as to old age pensions, out relief, etc. The conference was adjourned.

ST. THOMAS'S HOSPITAL MEDICAL SCHOOL.

THE recent additions to the Medical School of St. Thomas's Hospital will be formally opened by the President, H.R.H. the Duke of Connaught, K.G., on Saturday, June 9th, at 4 P.M. The new buildings consist of a students' club, large and small pathological laboratories, a class room for practical surgery, with special arrangements for operative surgery, a private room for the teacher of biology, accommodation for dissection by the biological class, and various offices. The addition of these buildings completes the pathological department, which now consists of the museum, large and small pathological laboratories, a bacteriological laboratory, and the *post-mortem* department. Beyond this, the removal of the club and the pathological and biological classes from the old buildings has provided increased space for the enlargement of the library and reading room, for the placing of the physical laboratory *en suite* with the chemical department, and the provision in the latter of a special laboratory for organic chemistry, and the conduct of the classes for the higher chemical examinations. The additions allow of excellent and distinct accommodation being given to each department.

THE LONDON POST-GRADUATE COURSE.

THE summer session of the London Post-Graduate course will begin on Monday next, May 7th. Courses of lectures and demonstrations will be given at the Hospital for Consumption, Brompton, on diseases of the chest; at the Hospital for Sick Children, Great Ormond Street, on diseases of children; at the National Hospital, Queen Square, on diseases of the nervous system; at the Hospital for Diseases of the Skin, Blackfriars, on dermatology; at the Royal London Ophthalmic Hospital, Moorfields, on diseases of the eye; at the London Throat Hospital, Great Portland Street, on laryngology; at Bethlem Hospital, on insanity; at the Cleveland Street Infirmary, on general medicine and surgery. The dates and hours are so arranged that all may be attended if desired, but entries may be made for half courses at as many of the hospitals as may be preferred, or for one or more weeks' work. Ample time is given for clinical attendance, and the needs of the general practitioner have been met by every means which experience suggests. The Secretary, Dr. Fletcher Little, 35, Harley Street, will supply any information required.

THE MARGARINE ACTS.

A DEPUTATION from the Associated Chambers of Agriculture waited on April 30th upon Mr. Shaw Lefevre, at the Local Government Board, to ask that a Departmental Committee be appointed to inquire into the working of the Margarine Acts, with a view to their amendment. Mr. Channing, M.P., in introducing the deputation, suggested that the scope of the inquiry might be extended so as to cover milk and other dairy produce. Mr. Plunket said that in Ireland they felt that they could not influence the local bodies in the matter. Mr. Kearley, M.P., pointed out that an enormous amount of adulteration took place. Mr. Shaw Lefevre, in reply, said that the facts laid before him seemed to point to some negligence on the part of officials of the Board of Trade in the carrying out of the Margarine Act. There seemed to be a general desire for an inquiry into the working of the Sale and Drugs Act and the Margarine Act (1887), and he thought a departmental inquiry would not meet the case so well as a Committee of the House of Commons. He would consult with his colleagues at the Board of Trade and the Agricultural Department as to which form of inquiry would be best.

MEDICAL PROVIDENCE.

WE have received recently the reports of two societies for the promotion of "medical providence" among the working classes. One, "The Leeds Workpeople's Hospital Fund," cannot but commend itself to the approbation of the public. It is but right that workmen who gain so many benefits from the hospitals should make such return in gifts as their means allow. If something of picnic and concert giving accompanies the collections this is no more than is the fashion in higher walks of life. The other, the East Dulwich Dispensary, is said to be "provident," but is not one of those affiliated to the Metropolitan association, and is, we presume, semiprovident, as "benefit members" are spoken of. It would be most desirable if all provident dispensaries would work together on uniform rules, which would ensure adequate payment to the medical officers and deliberate treatment to the subscribing members. Mere numbers of visits may imply the same haste and scramble as in hospital out-patient rooms.

THE ALEXANDER MEMORIAL FUND.

AT a meeting of the committee held on April 26th, the prize of £50 and gold medal of the value of £10 was awarded to Surgeon-Captain C. Birt, A.M.S., for the best essay on "The Treatment of Wounds and Injuries of the Abdominal Viscera, as likely to be met with in Military Practice." The essays of the unsuccessful competitors will be returned on application to the Honorary Secretary before December 31st, 1896. Those of the unsuccessful competitors on the former occasion have, in accordance with the rules, been destroyed. The subject for the next competition is "Micro-organisms as Factors in the Production of Phthisis; the Influence of Military Service upon the Disease, and Suggestions for its Prevention in the Army." Essays must reach the President of the committee on or before December 31st, 1896. Essays are to be legibly written, superscribed with a brief motto,

and accompanied by a sealed envelope similarly superscribed, containing the name and address of the author. No essay shall exceed in length fifty pages of ordinary printed octavo, which may be estimated as amounting to 20,000 words. This limit is inclusive of tables which may be added in the form of appendices. The competition is limited to executive officers of the Army Medical Staff on full pay; but professors and assistant professors at Netley are not allowed to compete while so employed.

THE EDUCATION OF WORKHOUSE CHILDREN.

WE publish in another column an interesting letter from Dr. Dolan, describing how Halifax deals with its workhouse children. It appears that they are sent to the ordinary elementary schools of the town, wearing ordinary dress with nothing distinctive about it, going and returning by themselves in groups of two or three, and in times when payment was made carrying their own school pence and handing it to the teacher the same as any other children. The aim has been to eradicate all distinctive marks which could separate them from the other children of the town, their fellow citizens of the future. The results seem to have been most satisfactory. No doubt it may be objected that the numbers dealt with were not large, but they represent the normal proportion to population, and the opinion of Dr. Dolan, who, besides being medical officer to the workhouse and its infirmary, is a member of the School Board, and has medical charge of a large industrial school, ought certainly to carry weight in a matter of this sort. The plan seems almost an ideal one. To let the children work and play with those among whom they will afterwards have to live, to place them under the same teachers and expose them to the same educational influences, would seem to be the best method not only for breaking down the class barriers of pauperism and destroying the hereditary pauper taint, but for the prevention of abuses during the time that the children are supported by the rates. A workhouse ceases to be a prison when children voluntarily return to it twice a day.

INTESTINAL TOXINS.

Two cases were related at the Clinical Society on April 27th, one by Dr. Lauder Brunton and Mr. Watson Cheyne, the other by Mr Silcock, which illustrate well the important *rôle* played by the toxins developed by decomposition of the intestinal contents in some cases of intestinal obstruction. The first was one in which, after repeated attacks of appendicitis, a somewhat gradual obstruction developed, without tenderness or local signs of recent inflammation. On laparotomy being performed, it was discovered that the cæcum was matted and tied down by general adhesions, but not strangulated by a band. After separating the adhesions it became possible to squeeze the contents of the small intestines into the colon, showing that the constriction was removed. Before the operation the patient had been in a state of the most absolute collapse; after it he improved somewhat for a time, but soon again relapsed, and seemed as bad as ever, until, after discharging a couple of very offensive motions, his condition rapidly improved, and he recovered without any further trouble. Mr. Silcock's case was apparently one of acute obstruction from, or at any rate accompanied by, peritonitis. Laparotomy was done, but from the matting of the intestines it was impossible to discover the exact cause, or in fact the position, of the obstruction. Ultimately, however, the distended small intestine was attached to the abdominal wall, and a large amount of offensive fæcal matter was drained away. In this case, also, the collapse was profound, so that during the operation he was thought to be dead; but after the discharge of the offensive intestinal accumulation rapid recovery took place, the natural action of the bowels was restored, and the wound healed, although apparently the only thing the operation did was to empty the bowels of their contents. These cases put in striking light the fact, which is perhaps not so constantly borne in mind as it might be, that the fatal results of intestinal obstruction are not entirely due to the local mischief at the seat of the block, the strangulation, the volvulus, or the intussusception, but depend largely upon the absorption by the intestines above it of the toxins produced by the decomposition of their contents. These symptoms of sapræmic intoxication are no doubt often absent, but where they exist, where with low temperature there is thready pulse and general failure, the emptying of the bowel may clearly be as important a means of saving life as the relief of the strangulation.

POISONING BY DOVER'S POWDER.

A case of poisoning reported in the *Sheffield Independent* of April 26th shows the danger of amateur medication, and the need for precautions in supplying even the milder preparations of opium. The parents of a child 4 months old administered to it, on the recommendation of a friend, half of a Dover's powder—about 7½ grains—with the result that the child became narcotised, and died a few days afterwards without having recovered consciousness. The powder was purchased of a chemist, but without any intimation that it was to be given to an infant, or any inquiry as to whether it might be safe to do so. The powder was not labelled, as a preparation of opium requires to be labelled, with the name of the article and the word "Poison," and by the neglect of this precautionary warning, the chemist who sold the powder incurred liability to a penalty under the 17th Section of the Pharmacy Act. Prosecution of offenders under this Section of the Act is not especially reserved to the Pharmaceutical Society, but may be instituted by anyone. Hitherto the Society has not often taken action under this section, but if neglect of its provisions is so common among chemists, as there seems to be some reason for believing, it would be a fitting and useful proceeding. The chemist who sold the powder in the case above referred to remarked that, though he had never labelled a Dover's powder, he would not sell one again without doing so, and having a medical man's order. It would be well if chemists generally appreciated the necessity of these precautions, without having to be taught by the fatal consequences of their neglect.

A MUNIFICENT OFFER.

AT the recent opening of the bazaar in aid of the Manchester Southern Hospital, in the new Medical School of Owens College, Mr. Duncan Matheson announced that the trustees of the David Lewis bequest had made them the magnificent offer of £70,000 under certain conditions of amalgamation between the Southern and St. Mary's Hospitals. Thanks to this, they would soon be in a position to build a maternity hospital and a general hospital for women and children second to none in England. The scientific and sanitary arrangements of the new hospital would be, according to modern lights, perfect. The arrangements for the treatment of suffering people would, of course, have the first care, and after that would be considered the facilities for medical education, the training of midwives and nurses, all of which would be in advance of anything heretofore attempted in the North of England.

DEATHS UNDER ANÆSTHESIA.

DR. ROGER P. WILSON, senior house-surgeon to the Liverpool Royal Infirmary, has favoured us with the following report of a case of death under chloroform which occurred recently there: "The patient, a strong looking well developed lad of 10 years, without any organic disease but with great deformity, was undergoing the operation of osteotomy of the femur for genu valgum. The femur was partially divided with a saw, and the remainder of it was suddenly snapped across; this appears to have caused syncope, from which he succumbed. I may state that just previous to the breaking

of the bone the lad had struggled slightly and had also been shouting. The respirations were shallow and somewhat gasping, the pulse was not to be felt at the wrist, neither was there any cardiac impulse; the face was pallid and the lips and ears were of a dusky blue. Everything possible was done immediately to resuscitate the lad, but all to no purpose—tracheotomy and inflation of lungs, artificial respiration, electric current over phrenic nerve and cardiac region, hypodermic injections of ether and brandy enemata. The anæsthetic was administered by Dr. Fingland, and consisted of three parts ether and one part chloroform." An inquest is reported in the *Birmingham Daily Post*, of April 26th, concerning the death of Agnes Dido Pugh, who died while under an anæsthetic, in the private hospital of Mr. Lawson Tait. The jury returned a verdict that "Death resulted from cerebral coma, due to the administration of an anæsthetic properly given for the performance of a needful surgical operation."

THE LEAVESDEN SCHOOL.

WE commented last week on an important report by Dr. Sykes, the Medical Officer of Health of St. Pancras, on the occurrence of an outbreak of diphtheria in the Leavesden School, which is under the management of the Guardians of St. Pancras. Dr. Sykes very properly called attention to the overcrowded condition of the school and discussed its relation to this condition. We recall to mind that the guardians were some years ago officially informed by Dr. Bridges that the infant school was overcrowded, and this question has been prominently kept before the board by Mr. Adams Clarke, the medical officer of the school. The advice of their own medical officer ought not to have been ignored; the presence of ophthalmia and the clearly-expressed view of Dr. Bridges that the overcrowding was an ample cause of this malady, ought to have made obvious to them the risks to which children are exposed who have not ample air space, and it ought not to have been possible for Dr. Sykes to have again to point out the evil effects of overcrowding in his recent report on diphtheria prevalence among the children. The guardians are fortunate in possessing as their medical officer a man whose opinion is of especial value in relation to the hygiene of schools, and it is necessary that they should heed his constantly expressed cautions without waiting for some calamity such as that which has just occurred to emphasise his teaching. The school is well known to be doing excellent work, but this will not protect it from the dangers to which the neglect of ordinary precautions must inevitably give rise. We trust we shall hear that the guardians have seriously taken this matter to heart and that the advice of Mr. Adams Clarke and of Dr. Sykes will be acted upon without delay.

THE BYWAYS OF INFECTION.

AMONG the difficulties which beset those who deal with so infectious a disease as small-pox by isolation and sanitary measures alone is the constantly-repeated proof that patients suffering from the disease, even in an acute form, may wander about the streets or continue at their work, both they and their fellow workmen being entirely ignorant of the fact that they are exposing all around them to infection. Two striking instances of this have lately happened in Birmingham. A reporter in the police court, observing a man who was giving evidence in the witness box, came to the conclusion from his appearance that he was suffering from small-pox. He immediately mentioned his suspicions to the chief inspector, who, on his leaving the court after his evidence was finished, stopped him and had him examined, when he was found to be badly affected, and was at once removed to hospital. The other case was that of a woman found in the street a fortnight ago by a police officer, who concluded she was drunk. When conveyed to the police station she appeared to be in a state of stupor, and there were evidences that she had had something to drink, but as she seemed really ill the officer in charge called in a surgeon, who certified that she was suffering from small-pox. By all means let us have such isolation as is possible, rapid removal of patients, and their treatment in properly-constructed hospitals, but it is hopeless to expect that every case can be picked out and isolated, and, that being so, the folly of refusing the protection of vaccination is obvious.

THE ACTION OF LIGHT ON BACTERIA.

THE Friday evening discourse at the Royal Institution last week was given by Professor Marshall Ward, who took as his subject the action of light on fungi and bacteria. He said it had long been known that bacteria did not flourish in sunlight as they did in the dark, and it had been proved that they were affected not by the heat, but by the light, rays of the sun. Professor Ward described some of the experiments he had made to determine which of the light rays were active in causing their death. Bacteria, screened from direct sunlight by a solution of bichromate of potassium (which cuts off the blue rays of the spectrum) developed as freely as in the dark. When they were exposed in glass for some hours to the light of the spectrum, it was found that in the red, orange, yellow, ultra-violet, and part of the violet regions they were unaffected, while in the blue they were killed. In further illustration of the effects of light upon them the lecturer exhibited a photograph taken by passing light through a negative superimposed upon a plate of bacteria; the dark parts consisted of living bacteria, while in the light parts they had been destroyed. In conclusion, Professor Ward described the methods he had employed in studying the rate of the growth of individual bacteria in different kinds of light. In the main, his results corroborated the wisdom of nations as to the hygienic effects of sunlight, but they could scarcely be regarded as conclusive for all varieties of microbe till further investigation had been carried out.

THE AIR OF SCHOOLS.

WHEN it is remembered that the children of the working classes and lower middle classes are by law compelled to attend school, unless under certain conditions, from their 6th to their 13th year, and that such schools are open for five or five and a-half hours daily, from Monday to Friday, from forty-four to forty-six weeks in the year, the duty of maintaining a reasonable standard of purity of the air is obvious. Since a renewal of the air oftener than four times in the hour would be intolerable in our climate through the greater part of the year, the question resolves itself into one of the allowance of cubic space per head. The government of Ontario, proceeding on the assumption of an elimination of 0.5 cubic foot per hour of organic CO_2, and a permissible impurity of 0.0005, with a renewal of the air every fifteen minutes, insists on 240 cubic feet as the minimum allowance consistent with health. Our Education Department permits one-third, and the London School Board requires one-half of this, or 80 and 130 feet respectively, with of course an atmosphere two or three times as foul. These estimates, moreover, take no account of the emanations from unwashed bodies and clothing, nor of the deterioration of the air by gaslight; but these calculations are made on the fallacious method of taking the average attendance and the total cubic space in the school—that is, the aggregate capacity of all the rooms in the building. As a matter of fact, the attendance varies greatly with the weather and the time of the year, so that the numbers on the books are always, and those actually present often, considerably in excess of the average attendance. Again, with the great increase in the size of the schools and in the teaching staff the head master or mistress assumes the character of director or superintendent, the assistants, like "form masters," instructing in separate classrooms, which may become dangerously overcrowded. At a recent meeting of the Church Teachers'

Benevolent Association, Mr. John stated that he had frequently found from 70 to 80 children habitually in attendance, and occasionally 110 to 120 present at one time in a room legally adequate to the accommodation of 40 to 45, and the thermometer in such a room registering 93° F. The cubic space per head was therefore from 36 to 40 cubic feet, or one-half to one-third of the space required by the Poor Law for workhouses and common lodginghouses. Much might be said also as to the deterioration of the health of the teachers, especially the female pupil teachers and the younger mistresses. A simple remedy proposed by Mr. John was approved unanimously, and will be, we hope, urged on the Education Department—namely, that in Section 10 of Form IX the manager, instead of stating the collective capacity of the school and the average attendance for the year, should be required to give for each classroom separately its cubic space, the average attendance for each week in the year, and the greatest number ever present in each week. It is in the smaller schools only that this would involve any material change in the registers, for in the large schools the system resembles that of the great public schools, and each class and classroom is under a separate and responsible teacher, who marks in his own register the attendance of his class.

INSANITARY BAKEHOUSES.

THE subject of the sanitary condition of bakehouses has been repeatedly commented upon of late, and the question appears to have been again under discussion at the recent meetings of the vestries of St. George Hanover Square, and St. George Southwark. In response to the attacks upon bakehouses, which have from time to time appeared, one of the bakers' trade journals has taken up the cudgels in defence of the baker. Our contemporary complains that evidence is taken at second hand, and that no trouble is incurred in inquiring whether the charges have any solid foundation. Several statements which have been made are taken exception to, and it is alleged that the baker is the best inspected man in the kingdom, and that to say "that bakehouses are generally dirty is only another way of saying that the authorities shirk their duties, for it must be remembered that the law provides plenty of penalties for any infraction of its provisions." It certainly cannot fail to be noted that many of the defects to which attention is directed are matters which could be dealt with under the existing law, and as we have repeatedly pointed out, new legislation cannot reasonably be asked for until it has been shown that the sanitary authorities have thoroughly put in force the powers they already possess, and have shown them to be ineffectual. The journal already quoted avers that the baking of bread to-day is far cleanlier than it ever was, and that bakehouses, being under strict supervision, are bound to be kept clean. The contention that the existence of a dirty bakehouse is a reproach to the sanitary authority as well as to the baker concerned certainly appears a reasonable one.

THE GERMAN SURGICAL CONGRESS.

THE Surgical Congress, which met in Berlin from April 18th to the 22nd inclusive, was not, our Berlin correspondent writes, so largely attended as its predecessors. Many surgeons just returned from Rome may doubtless have found it difficult to spare another four or five days from their work, or a certain "congress satiety" may have made itself felt; the fact is, at all events, that the proceedings were not of a character to awaken the usual intense interest. The meetings were largely taken up with accounts of "cases." On the last day of the Congress, Geheimrath Gurlt read the yearly report of the collective inquiry into the statistics of narcotisation. The report embraces 51,846 narcoses of the year 1893, of which 32,723 were produced by chloroform, 11,617 by ether, 3,896 by chloroform and ether, 750 by chloroform, ether, and alcohol (Billroth's mixture), and 2,769 by ethyl-bromide. A number of laughing gas narcotisations are added. These 51,846 surgical narcoses count 20 deaths, and of these, again, 17 are after chloroform. Thus the average proportion was 1 death to 2,587 narcoses, and 1 death to 1,924 chloroform narcoses. In the four years during which the inquiry has been carried on, only 1 death after ether has been noted, and accordingly the use of ether has increased from 6,200 cases in 1892 to 11,600 in 1893. The chloroform-ether mixture was used 1,200 times in 1892, and in 1893 3,800 times. Pictet's chloroform (purified by exposure to extremely low temperature) was used 3,182 times as against 708 in 1892. In spite, however, of this and other purified chloroforms at present in use, death during chloroform narcosis has not proved preventable, and the general opinion now is that it is not caused by the chemical impurities contained in ordinary chloroform.

CHEMISTS PRESCRIBING.

A CORONER'S inquest, held last week at Beverley upon a man who died after the administration of a hypodermic injection of morphine by a chemist, serves to illustrate, not only the danger attending such amateur medical practice, but also the very undesirable position in which it may place chemists who lend themselves to this practice. The deceased, who appears to have been suffering from incipient delirium tremens, though not under the immediate influence of alcohol, was partly under medical treatment, but, without the directions of his doctor, a hypodermic injection of morphine was administered by a chemist at the request of his wife, and the man died on the following morning. Medical evidence was given that the immediate cause of death was the injection of morphine, and the inquest has been adjourned to allow of a *post-mortem* examination and analysis of the contents of the stomach. In connection with this case a local medical man writes to say that there are a number of chemists in the neighbourhood who do a regular trade in prescribing, and that some of them treat almost as many patients as the ordinary doctors. There is every reason for believing such a practice is very general, and there can be no doubt that it is in many instances detrimental to the persons so treated as well as to the legitimate interests of medical men and chemists. The precise line of demarcation between what is unlawful and permissible in this respect is very difficult to define, but there should not be any difficulty on that point if due consideration is given to the relations which ought to exist between chemists and medical practitioners.

PREPARATIONS OF OPIUM AND OF MORPHINE AS POISONS.

AMONG the articles enumerated in the second part of the schedule to the Pharmacy Act are "preparations of opium" and "preparations of morphine." These articles are therefore poisons within the meaning of the Act, and they require to be labelled with their name and the word "Poison." Unfortunately, however, it has been a general practice to sell many preparations of this kind without complying with the requirements of the law. Many of the proprietary "nostrums" incorrectly termed "patent medicines" are compounds containing opium or morphine as ingredients. In regard to the Pharmacy Act they are essential preparations of morphine or of opium, and some progress has been made towards establishing the necessity for observing the provisions of the Act in their sale. But there appears to be some danger that this very desirable result may be interfered with by the new line of defence adopted for the purpose of justifying the sale of such articles contrary to the law. It is contended that these articles are not poisonous because the opium or morphine they contain is only a small ingredient. In a case before the Manchester County Court some months ago it was decided that for conviction under the Pharmacy Act evidence must be given to prove the presence of a substantial quantity of opium or morphine,

and that mere proof of the presence of morphine was not sufficient. Against this decision the Pharmaceutical Society appealed, but the judges dismissed the appeal on the ground that the presence of an undetermined quantity of morphine was not sufficient to constitute a breach of the Act. Since then another case has been tried at Derby, and a conviction obtained for the sale of a preparation containing in the fluid ounce one-tenth of a grain of morphine. The Patent Medicine Vendors' Association appealed against this decision, and the case came before Mr. Justice Charles and Mr. Justice Bruce last week. After a long argument by counsel for the appellants, the appeal was dismissed without the counsel for the respondents being called upon to address the Court. But in this case as well as in the others the decision that the preparation in question is a poison within the meaning of the Act was not arrived at because it contained morphine as an ingredient, but from the evidence given that the preparation might be fatal to an infant if not to an adult. This appears to be a lax interpretation of the Act, which fails to recognise the desirability of placing restrictions on the sale of all preparations of morphine or of opium. The poisonous effect which they may produce will no doubt be determined by circumstances, but that is a matter of which the Act does not take cognisance. The sale of such preparations is restricted because they may be poisonous, and as the conditions under which fatal effects may result are variable, it would be impossible to distinguish between preparations of this kind on the ground of the greater or less quantity of the poisonous ingredient. In the case of opiates this is especially true; and if it were necessary to prove the poisonous nature of such a preparation the only conclusive evidence would be of a *post-mortem* character in each case of prosecution. The intention of the Pharmacy Act, as we understand it, was to restrict the sale of all narcotic preparations, and hence they were declared to be poisons irrespective of the quantity of poisonous ingredient. It would be a very difficult matter for a court of law to decide when a point was reached at which the principle *de mininis non curat lex* could be applied with due regard for public safety.

POLLUTED WELLS.

AT a recent meeting of the Bodmin rural sanitary authority, reported in the *Western Morning News*, a not very edifying discussion took place with regard to the water supply of Port Isaac. There has been an epidemic of enteric fever in that village, and it seems that the principal water supply is derived from a well which the medical officer of health has more than once condemned. On the present occasion two reports were received from different analysts; one was to the effect that the water was quite unfit for use, and the other that it was a good water. It was explained that the two samples were taken at different times, one before and the other after the cleansing of the well. One member said that the water was good, and that more frequent cleansing was all that was required. It was resolved that yet another sample should be taken, and sent to a third analyst, and meanwhile the medical officer of health was censured for stating in a communication to the county council that the water was impure, and that the authority had declined to take any effective action. All this sounds very like waste of time. To begin with, there must surely be something wrong with a well which stands in need of frequent cleansing, a something which ought to be made impossible if the much-cleaned well is to be accepted as a reasonably safe supply. Repeated analysis will not mend matters. Intermittent pollutions are often the most dangerous of all, and if, as in the present instance, the water has been found on certain dates to be contaminated, no subsequent analysis can either alter its past record, or give assurance of future purity and safety, unless the source of pollution is discovered and removed. It is prevention that is wanted, not cure, and a mere cleansing of dirty wells is far from being in itself a satisfactory procedure, whether regarded from the theoretical or from the practical standpoint. The censure on the medical officer would appear to be curiously wanting in foundation, but perhaps it was an occult form of Cornish humour, not meant to be taken quite seriously.

NATIONAL HEALTH SOCIETY.

AT the annual meeting of the National Health Society, held on May 2nd, the Secretary read the annual report, which showed a great increase of work accomplished, nineteen counties having been visited by the Society's teachers at the request of the various councils. Mr. Ernest Hart spoke in high terms of the work done by women in connection with the Society. Dr. Schofield expounded a scheme which Lady Priestley had originated for the systematic teaching of domestic and personal hygiene and domestic economy in all private schools, as well as high schools, board schools, and all other public institutions all over the country.

THE ROYAL SOCIETY'S CONVERSAZIONE.

THE first *conversazione* of the season given by the Royal Society took place on May 2nd at Burlington House. There was a large assemblage present. The display of objects of scientific novelties was very interesting. In the earlier rooms visitors encountered General Pitt-Rivers's "bronze age" relics from Wiltshire, while by their side Professor H. G. Seeley added fresh valuable finds to those he had already exhibited in the world of extinct reptiles from South Africa. Professor Norman Lockyer explained some stellar photographs which throw new light on the process of sun formation. It is now quite clear that, while there are some youthful stars that are suns growing brighter and hotter, there are others, like our own, that have possibly passed their climax, and for the next few millions of years will be cooling. Electric apparatus were much to the fore, including a model of a new Atlantic cable, over which it is expected a speed of fifty words a minute will be reached. In the new realm of bacteriology, Professor Marshall Ward demonstrated the influence of sunlight as a germ destroyer and developer. By the aid of the microscope and a delicate scale it was possible to watch the minute organisms and measure their growth. A striking exhibit was shown by Professor Henri Moissan, of Paris, of an electric furnace, in whose fierce heat lime and magnesia have been fused and volatilised, and iron, manganese, and copper vaporised. Professor E. Waymouth Reid had many curious microscope slides to show the breaking up of the skin cells during the slimy secretion of the skin of a struggling eel. Akin to this, though of greater general interest, was the exhibit of Mr. W. B. Hardy and Dr. A. A. Kanthack, illustrating the phenomena of chemiotaxis in inflammation in the case of the fluid from blisters produced by vaccination and small-pox. Mr. Eric S. Bruce showed experiments in persistence of vision by aid of the improved aërial graphoscope. Professor Hunter Stewart and Mr. H. Cunyngham showed an apparatus for microphotography, which should prove valuable in depicting not only translucent but also opaque objects. Professor Poulton demonstrated some of his recent work on the influence of environment upon the colour of certain lepidopterous larvæ. Several rare animals, both living and extinct, were exhibited by various biologists. Mr. Theodore Bent exhibited an interesting collection of objects he has obtained in his recent expedition to the the Hydramoot, South Arabia. The entertainment was a most enjoyable one, and afforded to many workers in science an opportunity of meeting and conversing on subjects of common interest to them.

AN International Congress of Sea-bathing and Marine Hydrotherapeutics will be held in Boulogne on July 25th to 29th, under the patronage of Professor Verneuil and of Dr. Bergeron. Dr. Carr, 69, Rue Faidherbe, Boulogne-sur-Mer, will be glad to receive applications for membership.

SIR ANDREW CLARK MEMORIAL.

Speeches by the Duke of Cambridge, Mr. Gladstone, Cardinal Vaughan, Mr. Jonathan Hutchinson, Canon Wilberforce, Sir James Paget, Mr. J. H. Buxton, and Mr. Ernest Hart.

A PUBLIC meeting in support of the proposal to erect a memorial in connection with the London Hospital to commemorate the life and work of the late Sir Andrew Clark, Physician to the London Hospital and President of the Royal College of Physicians, was held at Princes' Hall on May 3rd.

H.R.H. the DUKE OF CAMBRIDGE took the chair.

Letters of regret for non-attendance were read from the Right Hon. T. H. Huxley, the Bishop of Ripon, the Earl of Meath, Lord Rothschild, Lord Tennyson, the Dean of Westminster, the Earl of Iddesleigh, the Marquis of Breadalbane, and others.

The DUKE OF CAMBRIDGE said that he took the chair as President of the London Hospital, and briefly sketched the initial steps which had been taken to promote a memorial to do honour to that great and honoured physician, Sir Andrew Clark.

Mr. GLADSTONE, who spoke sitting, said that if it were with some small effort that he had come to attend that meeting, to have failed to have been present to bear his testimony to the noble life of Sir Andrew Clark would have been a great grief to him. The occasion was one which associated itself with the medical profession at large. The death of Sir Andrew Clark had sent a thrill through the profession, and the profession had rightly resolved to commemorate his character. The position of that profession was continually advancing and continually enlarging. The other learned professions had had the advantage in time of the medical profession. While lawyers had occupied a large place in the public eye for four or five hundred years, the medical profession had more recently won its way to popular esteem. Its influence would go on increasing and extending. He was old enough to have observed a change in the members of the medical profession, an increase in their capacity and attainment to deal with the almost insoluble problems which presented themselves to the physician. But in a physician something more than knowledge and skill was required—devotion was required, and that quality Sir Andrew Clark pre-eminently possessed. Mr. Gladstone then related how on one occasion, as Sir Andrew Clark's summer holiday was drawing to an end, a friend had condoled with him on having to return to work, whereupon he had replied, "Sir, I *love* my profession." He loved his profession with a chivalrous devotion, and while such men remained it should not be said that the age of chivalry was passed. He gave himself not only to the acquisition of knowledge, but to the application of knowledge to the relief of suffering. He was indeed a typical man, representative of all that was best in the medical profession. Mr. Gladstone said that he would not venture to speak of Sir Andrew Clark's scientific attainments, but in every profession something more—something more important—than knowledge was required, and that was character. What an honour, benefit, and privilege it was to the young men in the medical profession to contemplate the career and character of such a man! Mr. Gladstone then touched briefly on the early life of Andrew Clark, and observed how all through he had found his delight and his recreation in turning himself naturally to the consideration of divine things. Speaking from his own experience of Sir Andrew Clark, Mr. Gladstone said that he desired to record his sense of the benefits he had derived from his care. He had attended the meeting actuated not only by sentiments of duty and respect but by gratitude and personal affection. He dwelt on Sir Andrew Clark's patience, his thoroughness, his absorption in the case of his patient as if that were the single subject of his thoughts, and in his own case to the warmth of friendship and the assiduous care with which he applied himself to the task of watching his patient. Though Sir Andrew Clark was a younger man, Mr. Gladstone said that he had followed him, and never more than in the last year of his life, with a paternal affection. It was, Mr. Gladstone continued, the happy lot of my wife to recognise what was in Sir Andrew Clark at an early date, and I remember well how she returned from her first visit to the London Hospital, now some thirty years ago, and told me of "that great Andrew Clark." In conclusion, Mr. Gladstone said that he trusted that the result of the meeting would be to show that Andrew Clark had not been forgotten, but that his work would be commemorated in the future, and that that noble profession of which the past advance had been great, and the future advance would in all probability be still greater, would contribute to make the memorial a worthy one, for it would ever be glad to have recorded on its annals such a name as the name of Sir Andrew Clark. Mr. Gladstone then formally moved:

> That in recognition of the great services rendered to the community by the late Sir Andrew Clark, Baronet, M.D., a memorial be established which shall perpetuate his name and his work.

CARDINAL VAUGHAN, in seconding the resolution, said that the audience had just contemplated a beautiful and touching sight—the venerated and venerable statesman bearing his testimony of esteem and personal affection and gratitude. Multitudes of poor priests, and nuns, and sisters of my creed, he said, have experienced the generosity with which Sir Andrew Clark gave his services, and I recall how on one occasion he said to me: "When it is the question of ministering to the medical needs of those who work for the poor there is no fee." Andrew Clark, he continued, was a religious man, and not only a great physician, and the memorial to him deserved the support not only of those who were interested directly in medicine, but also of those who set religious things higher than science.

Mr. JONATHAN HUTCHINSON, speaking as a colleague of the late Sir Andrew Clark, said that the movement had the full sympathy of the whole of the medical profession. He drew a parallel between the life of Dr. Mead and Sir Andrew Clark, pointing out in particular how both occupied positions of great influence owing to their intimacy with all the prominent and leading men of their day in every profession.

The resolution having been put by the DUKE OF CAMBRIDGE, and carried by acclamation, Canon WILBERFORCE bore testimony to the deep religious nature of Sir Andrew Clark, and to the readiness with which he gave his services to the "poor parson" as well as to the poor nun or the poor sister. He concluded by moving the following resolution:

> That steps be taken to raise a sum sufficient for the erection of a block of buildings at the London Hospital, to bear the name of Sir Andrew Clark, which will afford increased facilities for the relief of suffering and the advancement of medical science.

In seconding the resolution, Sir JAMES PAGET said that the terms of the resolution, "the relief of suffering and the advancement of medical science," were peculiarly appropriate to the life and aims of Sir Andrew Clark. In no way could suffering be alleviated and medical knowledge increased better than by extending and improving a great hospital, where the poor found relief and where young medical men were trained to carry their knowledge to the utmost corners of the world.

The resolution was then put, and carried unanimously.

Mr. J. H. BUXTON then moved a resolution of thanks to the Duke of Cambridge for presiding, and expressed the hope that the donations of the public would be sufficiently liberal to render the memorial worthy of Sir Andrew Clark.

Mr. ERNEST HART, in seconding the resolution, said that the meeting presided over by His Royal Highness and signalised by the praise of an eminent man by men so eminent, was in itself a memorial. He would say, he was there to say, that the profession which Sir Andrew Clark adorned and led associated itself in every part of the kingdom with this design to commemorate a name which they honoured, and a life which they desired to hold up as a conspicuous example of great abilities well applied, of unwearying devotion, of high courage, lofty purpose, and of great achievement.

The DUKE OF CAMBRIDGE briefly acknowledged the resolution, which was carried by acclamation.

THE draft of a law for the creation of special asylums for criminal lunatics in Spain has been laid before the Cortes by the Minister of Justice.

SMALL-POX AND VACCINATION IN LEICESTER.

LEICESTER, although the hot-bed of "antivaccinators," is fortunate in being the possessor of a health officer who has the courage of his experience. Last year Dr. Priestley published a special report on the small-pox prevalence of 1892 and early 1893 in the borough, and now in his report for 1893 he has embodied an exhaustive account of the epidemic of 1892-93, comprising 347 cases of small-pox, and he speaks in decisive language of the evidence afforded by the experience of Leicester in regard of the valuable influence of vaccination and revaccination in preventing and mitigating small-pox. We propose to state briefly some of the facts adduced.

Small-pox in 1892 is regarded as having been introduced to Leicester in the person of a tramp, followed by other eleven separate similar introductions. The total of cases to the end of last year was 347, made up of 178 primarily vaccinated cases, 14 revaccinated, 2 doubtful as to vaccination, and 153 unvaccinated cases. In regard of mortality the cases classify themselves thus:

Total ...	... cases, 347;	deaths, 21;	per case mortality,	6·05 per cent.
Vaccinated ...	„ 178;	„ 1;	„	0.56 „
Revaccinated	„ 14;	„ 0;	„	0.00 „
Doubtful ...	„ 2;	„ 1;	„	50.00 „
Unvaccinated	„ 153;	„ 19;	„	12.40 „

Classified in respect of age and mortality, per cent. of cases, the first and last sections show results as follows:

	Under 10 Years of Age.	*Over 10 Years of Age.*
Vaccinated cases	2; deaths, 0; = 0.0	cases, 176; deaths, 1; = 0.57
Unvaccinated „	105; „ 15; = 14.3	„ 48; „ 4; = 8.3

From the above we learn that for all ages the mortality among the unvaccinated was twenty-two times that of the vaccinated; that there was not one death among the vaccinated children under 10 years of age; while 1 in each 7 of the unvaccinated cases died; and at ages over 10 years the mortality was nearly 15 times greater in the unvaccinated than vaccinated cases.

Thus, for all ages, had the unvaccinated patients died only at the rate of those vaccinated, there would have been not the actual 19, but less than 1 death. And had the vaccinated cases died at the rate of the unvaccinated, there would have been not the actual solitary death, but as many as 22 deaths.

Moreover, on the Leicester figures, had all the children been vaccinated and the adult cases revaccinated, no deaths would have resulted.

In respect of severity of attack in one and another class, the facts shown are as follow:

Table showing the Nature, in Point of Severity, of the Cases of Small-pox in one and another Class, at Two Age-Periods, with the Percentage of Attacks in each Section to the Total of the Class (the abortive cases being given in brackets, with their percentage of each section).

		Very Mild.		Mild.		Severe.		Very Severe.	
		Cases.	Per Cent. of Cases.	Cases.	Per Cent. of Cases.	Cases.	Per Cent. of Cases.	Cases.	Per Cent. of Cases.
Under 10 yrs.	Vaccinated	2 [2=100]	100.0	—	—	—	—	—	—
	Unvaccinated	6 [5=87]	5.7	11 [4=36]	10.4	45 [0=0.0]	43.0	43 [0=0.0]	41.0
10 years and upwards.	Vaccinated	108 [100=94]	60.0	54 [40=74]	30.8	16 [0=0.0]	9.1	—	—
	Revaccinated	11 [11=100]	78.4	2 [2=100]	14.4	1 [1=100]	7.3	—	—
	Unvaccinated	2 [1=50]	4.1	2 [1=50]	4.1	22 [1=4.5]	45.9	22 [0=0.0]	45.9
	Doubtful	—	—	—	—	2 [0=0.0]	100.0	—	—
All ages	Vaccinated	108	60.8	54	30.4	16	9.0	—	—
	Unvaccinated	8	5.2	13	8.5	67	43.9	65	42.5

The figures in the foregoing table are deeply significant of the mitigation of small-pox by vaccination and revaccination. Thus, at all ages, 60.8 per cent. of the vaccinated attacks have been "very mild," against only 5.2 of the unvaccinated, the respective "severe" percentages being 9 and 43.9, and "very severe," *nil* and 42.5. At ages under 10 years the only two vaccinated cases were "very mild," against 5.7 per cent. of unvaccinated, the latter class having 43.0 "severe," and 41.0 "very severe." Of the revaccinated patients, 92 per cent. had "mild" or "very mild" attacks.

Then, again, as to abortive attacks, the facts are noteworthy, the data in each class being as follows:

10 years and upwards	Vaccinated cases, 176;	abortive, 140 = 79.5 per cent.	
	Revaccinated „ 14;	„ 14 = 100.0 „	
	Unvaccinated „ 48;	„ 3 = 6.3 „	
Children under 10 years	Vaccinated „ 2;	„ 2 = 100.0 „	
	Unvaccinated „ 105;	„ 9 = 8.6 „	

Thus, all the attacks in revaccinated adults proved abortive, as also in vaccinated children; the adult vaccinated cases having 79 per cent. in like case against 6 in unvaccinated attacks.

Coming now to the relationship between the number of scars and the nature of attack, we find facts as follow:

Vaccination Marks.	Very Mild.				Mild.				Severe.				Very Severe.			
	Discrete.	Coherent.	Confluent.	Per Cent. of Cases.	Discrete.	Coherent.	Confluent.	Per Cent. of Cases.	Discrete.	Coherent.	Confluent.	Per Cent. of Cases.	Discrete.	Coherent.	Confluent.	Per Cent. of Cases.
1	3	—	—	*37.5*	1	1	—	*25.0*	—	1	2	*37.5*	—	—	—	*0.0*
2	18	3	—	*44.0*	13	3	—	*33.5*	—	1	5	*12.6*	—	—	—	*0.0*
3	35	2	—	*59.6*	5	10	5	*32.3*	1	1	3	*8.1*	—	—	—	*0.0*
4	33	—	2	*81.4*	5	2	—	*16.3*	—	1	—	*2.3*	—	—	—	*0.0*
5	11	—	—	*65.0*	5	—	—	*29.4*	—	1	—	*5.9*	—	—	—	*0.0*
6	1	—	—	*25.0*	2	1	—	*75.0*	—	—	—	*0.0*	—	—	—	*0.0*
No marks	8	—	—	*5.2*	12	1	—	*8.4*	14	30	25	*44.0*	1	3	26	35 *42.5*

Here we see that some of the figures are very small; but, taking account of those cases having two, three, four, and no marks, we see that whilst the "very mild" attacks were only 5.2 per cent. of the unvaccinated, they ranged from 44.0 to 81.4 among those having two to four marks. The "very mild" and "mild" attacks in the various classes were severally 13.6 in the unvaccinated, and in the vaccinated 62.5, 77.5, 91.9, 97.7, 94.4, and 100 per cent., according as they had one or more marks.

Then again in the "severe" and "very severe" attacks, we find of those having 6 marks, *nil*; 5 marks, 5.9; 4 marks, 2.3; 3 marks, 8.1; 2 marks, 12.6; one mark, 37.5; and of the unvaccinated, 86.5 per cent., as many as 42.5 of the latter being "very severe," against *nil* in the vaccinated class, whilst 35 unvaccinated cases (nearly 23 per cent.) were of a malignant type.

There can be little question here of the benefits derivable from multiple scars, and the matter is further set forth if we have regard to the data concerning the revaccinated cases, from which we learn that of the 14 attacks in persons having three to ten marks, 11 were very mild discrete attacks, whilst all the 14 aborted.

Of the fever hospital staff, consisting of 40 officials, 34 were either revaccinated or had previously had small-pox, and not one of these contracted small-pox: whilst of 6 who had been vaccinated only in infancy, 5 were attacked and 1 died, the only one to escape being the matron, who was but little exposed to the contagium, she taking no part in the actual nursing of small-pox patients, only, indeed, entering the wards occasionally. No wonder that Dr. Priestley insists upon the revaccination of all whose duty lies in the wards.

Touching, lastly, in this section of our remarks the conditions which, in Dr. Priestley's opinion, led to spread of small-pox in Leicester, we find four, namely (1) mildness of attack with resulting absence of medical attendance, (2) errors of diagnosis, (3) proximity to small-pox hospital of (*a*) inmates of the wards for other diseases, and (*b*) more especially of residents in the adjacent locality; and (4) antipathy to vaccination and revaccination.

As to (2) the help of medical men in fulfilling Dr. Priestley's desire to have all suspicious cases (chicken-pox and the like) notified was of material aid, since of 416 doubtful cases recorded 81 proved to be small-pox; as to (4), primary vaccinations in Leicester have fallen in respect of infants from

1,842 in 1885 to 92 in 1891, and 249 in 1893. But Dr. Priestley estimates that in the three months of greatest epidemicity, there were some 2,000 to 3,000 vaccinations and revaccinations performed as the result of small-pox prevalence. So that for the whole period of sixteen months during which the disease has been present in the borough, "a quantity that cannot be neglected" has been done in the way of protection against small-pox.

It is greatly to Dr. Priestley's credit that in only 61 cases (17.5 per cent. of the whole) has he failed satisfactorily to trace the source of infection.

In regard of conditions that tended to check the course of the epidemic, Dr. Priestley says that prompt notification, strict isolation of cases, disinfection, quarantine, and vaccination and revaccination all played a part.

THE CHOLERA.

A MEETING of the Lisbon Medical Society was held on April 25th, to discuss the nature of the prevailing epidemic there, and to receive the report of the board of doctors which the Government appointed on April 21st. The following passage, extracted from the report, was unanimously approved:

"The epidemic actually raging in Lisbon is an epidemic of cholera morbus. Its present action is very slight, but threatens to become very serious in the future."

A Royal decree was issued on April 27th for the formation of a medical commission for the purpose of advising the Civil Governor of Lisbon.

The Board of Health at Gibraltar has imposed seven days' quarantine on arrivals from Lisbon, and, pending the adoption of definite measures by the Sanitary Commission, vessels arriving at Antwerp from Portugal will be subjected to quarantine.

A Reuter's telegram, dated April 26th, states that the Spanish Consul-General telegraphed to the Minister of the Interior at Madrid that, contrary to a statement published on April 25th by the Portuguese Government, the fresh cases in Lisbon during the previous twenty-four hours numbered 225.

On April 26th there were 87 fresh cases and 1 death at Lisbon, and on April 28th there were 70 new cases, while on April 29th the number of new cases fell to 45, and on May 1st there were only 26 fresh cases.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1894. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on July 11th and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, June 21st and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. FRANCIS FOWKE, *General Secretary.*

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the Office.

BRANCH MEETINGS TO BE HELD.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—The next meeting of this District will take place at Gravesend on Thursday, May 24th, at 4 P.M. Members desirous of reading papers or exhibiting specimens are requested to inform the Honorary Secretary, Dr. EDWARD GROUND, 1, Ashford Road, Maidstone.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.—The next meeting of this District will be held at the Greyhound Hotel, Croydon, on Thursday, May 10th, at 4 P.M., Mr. Henry Horsley, of Croydon, in the chair. Dinner at 6 P.M., charge 7s., exclusive of wine. All members of the South-Eastern Branch are entitled to attend, and to introduce professional friends. Agenda: (1) Minutes of Upper Norwood meeting. (2) To decide where the next meeting shall be held, and to nominate a member to take the chair thereat. The following papers, etc., have been promised: Dr. W. Hale White: The Dietetics of Chronic Bright's Disease. Dr. Clement Godson: The Best Means of Rendering Obstetric Instruments Aseptic. Mr. Herbert W. Allingham: Some Cases of Intestinal Surgery. Mr. A. Maude: Some Recent Researches into the Pathology of Graves's Disease. Members desirous of exhibiting or reading notes of cases are invited to communicate at once with the honorary secretary. The honorary secretary would be obliged if members would kindly inform him by postcard whether they intend, if possible, to be present at the meeting, and if likely to remain to dinner.—HENRY J. PRANGLEY, Honorary Secretary, Tudor House, Anerley, S.E.

LANCASHIRE AND CHESHIRE BRANCH.—A special meeting of the members of this Branch will be held at the Medical Institution, Liverpool, on Friday, May 11th, at 4.30 P.M., to consider the report of the committee appointed "to watch the progress of, and to oppose, any proposed legislation for the registration of midwives."—JAMES BARR, M.D., Honorary Secretary, Rodney Street, Liverpool.

SOUTHERN BRANCH: SOUTHAMPTON DISTRICT.—The next meeting of this District will be held at 33, Laura Place, Southampton, on May 8th, at 8 P.M. After the ordinary business, a paper will be read by Dr. Harris on Cholera, its Sources and Prevention.—T. W. TREND, M.D., Honorary Secretary.

DORSET AND WEST HANTS BRANCH.—The next meeting will be held at Wimborne, on Wednesday, May 9th. The business meeting will be held at the Board Room of the Union, by permission of the guardians, at 2.30 P.M. Agenda: Secretaries' accounts for 1893. Report of election of Branch Council. Election of a representative of the Branch on the Council of the Association. Election of a representative of the Branch on the Parliamentary Bills Committee. Election of new members of the Branch. Place of the summer meeting. Communication from the Lancashire and Cheshire Branch of the Association. Communication from the Secretaries of the Midwives' Registration Association. Discussion: Two Crises in Female Life—namely, the Advent and Cessation of the Catamenia—from the point of view of the General Practitioner. Address by the President. Communications:—Mr. Wyke Smith: The Principles, Methods, and Work of the Dorset Health Association. Dr. Lawrie: (1) A case of Hysterectomy for Fibroid Disease; (2) a case of Total Extirpation for Cancer of the Uterus; (3) Ovaries and Tubes from a case of Tuberculous Peritonitis. Dr. Batterbury: An Apparatus for Wry Neck. Mr. Charlton: Hysteria. Mr. Parkinson: On the desirability of appointing a Medical Officer to summarise the Reports of the Medical Officers of Health for the County. Dinner at the King's Head Hotel at 5 P.M.: charge 6s. each, without wine. Members intending to be present are requested to signify the same to Mr. Parkinson by Monday, May 7th. The members of the Branch resident in Wimborne will have much pleasure in providing luncheon at the King's Head Hotel for all visitors who give notice to Mr. Parkinson of their intention to partake of it not later than the day before the meeting.—WILLIAM YAWDREY LUSH, M.D. (Weymouth), C. H. WATTS PARKINSON (Wimborne), Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH.—A general meeting of this Branch will be held in the Medical Society's Rooms, 11, Chandos Street, Cavendish Square, on Wednesday, May 23rd, at 5 P.M., for the purpose of taking into consideration the question of proposing certain amendments to the Medical Acts, with a view to the better suppression of unqualified practice.—ANDREW CLARK, ISAMBARD OWEN, Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT.—Owing to the death of Dr. Laseron, the annual meeting at Tottenham Hospital has been postponed till Thursday, May 17th, at 4 P.M. The District Committee will meet at 3.45 P.M.—HUGH WOODS, Honorary Secretary.

SHROPSHIRE AND MID-WALES BRANCH.

THE spring meeting of this Branch was held at Shrewsbury on April 17th, Mr. H. NELSON EDWARDS, President, in the chair. Twenty-nine members were present.

New Members.—The following gentlemen were elected members of the Branch: Dr. C. W. Suckling, Birmingham: Dr. A. Howie, Westbury: Mr. H. P. Cuthbert, Clun; Dr. W. H. Wigham, Shrewsbury; Dr. R. J. Coulter, Shrewsbury.

Deceased Members.—The PRESIDENT alluded to the recent death of Mr. Henry Fenton, late of Shrewsbury, and of Mr. William Eddowes, late of Pontesbury, Salop, and expressed the deep regret felt by all those members of the Branch who had personally known these gentlemen, who were two of the oldest members of the Association in this part of the country.

Registration of Midwives.—A communication from the Lancashire and Cheshire Branch *re* the registration of midwives was read, and was referred to the annual meeting for further consideration, the Secretary being directed to send a copy to each member of the Branch.

Communications.—Dr. HYLA GREVES (Bournemouth) read a paper entitled Some points in the Prevention and Treatment of Phthisis from the Standpoint of Modern Pathology and Therapeutics, in which he strongly urged the importance of measures to prevent the infection of others, and the reinfection of the patient himself by the tuberculous sputum; and also dwelt upon the hopefulness of the treatment of the disease itself in its early stages.—Mr. T. LAW WEBB read a paper on the Protozoon of Carcinoma, illustrated by a series of microphotographs, shown by means of the projector lantern.

Dr. CANTON made a few remarks upon Professional Charges.—Mr. CÆSAR called the attention of the Branch to the recent institution of a Lodge for Female Oddfellows. Mr. MCCARTHY spoke upon the same subject, and specially animadverted on the practices of many medical aid societies.

Cases.—The following cases were shown: Myxœdema, by Dr. CHARNLEY; Malignant Disease of the Forehead, by Dr. CHARNLEY: Excision of Superior Maxilla, by Mr. A. JACKSON; Double Harelip and Cleft Palate, by Mr. PIGOTT; Psoriasis treated by Thyroid Extract, by Mr. PIGOTT. Also the following pathological specimens: Aneurysm of the Ascending Aorta, by Mr. MCCARTHY; Fœtal Malformation, by Dr. WHITWELL.

BATH AND BRISTOL BRANCH.

THE sixth ordinary meeting of the session was held at Bath on April 25th, Dr. SHINGLETON SMITH, President, in the chair. There were 31 members present.

New Members.—The following gentlemen were elected: A. A. Blakiston, M.R.C.S., L.S.A., Glastonbury; James Young, M.B., C.M., St. George; J. W. Taylor, M.R.C.S., L.R.C.P., Bristol.

Communications.—Dr. AUST LAWRENCE read a paper on Concealed *Post-partum* Hæmorrhage, and Dr. J. G. SWAYNE commented upon it.—Dr. AUST LAWRENCE also read a paper on Saline Transfusion in Hæmorrhage, which was discussed by Dr. J. G. SWAYNE, Dr. MICHELL CLARKE, Dr. SHINGLETON SMITH, Mr. HARSANT, Dr. MARKHAM SKERRITT, and Mr. T. P. LOWE.—Mr. R J. H. SCOTT read notes of a case of Colotomy, and showed the patient. In the discussion which ensued the following joined: Mr. T. PAGAN LOWE, Dr. SHINGLETON SMITH, Dr. AUST LAWRENCE, and Dr. MARKHAM SKERRITT.—Dr. WILSON SMITH related details of a case of Aortic Aneurysm, upon which remarks were made by Drs. MARKHAM SKERRITT, MICHELL CLARKE, SHINGLETON SMITH, and WATSON WILLIAMS.—Dr. PRESTON KING read notes of a case of Pneumonia. Drs. SHINGLETON SMITH and BONVILLE FOX joined in the discussion.

OXFORD AND DISTRICT BRANCH.

GENERAL meeting held at Oxford on April 27th, 1894. Dr. ILES, the President, in the chair. Twenty members and four guests were present.

Confirmation of Minutes.—The minutes were read and confirmed.

Registration of Midwives.—Communications from the Lancashire Branch and from the Midwives' Registration Association were considered.

New Members.—Mr. Saunders, of Deddington; Mr. Pembrey, of Oxford; and Mr. Boissier, of Banbury, were elected members of the Branch.

Communications.—Mr. SYMONDS read notes of five cases of Abdominal Hysterectomy, and showed the specimens. He also showed a case of Excision of Knee, performed ten years ago.—Dr. GRIFFIN showed a Stone removed by suprapubic lithotomy, and read notes of the case—Mr. W. L. MORGAN showed a Horn removed from the lip of an old man, and a Large Warty Growth removed from the skin of the chest of a girl.—Dr. COLLIER showed a Child with Enormously Enlarged Spleen.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE spring meeting of this Branch was held at Neath on April 26th, Mr. H. A. LATIMER (Swansea), President, in the chair. Twenty-five members were present.

New Members.—R. W. Haslett, M.B., Pontypool; E. J. Trevor Jones. M.R.C.S., L.R.C.P.Lond., Aberdare; H. B. Causley, M.B., Aberdare; and W. E. James, M.R.C.S., L.R.C.P.Lond., Abercarn, were elected members of the Association and Branch. Mr. E. T. Collins, Cardiff, was elected a member of the Branch.

Communications.—Mr. W. F. BROOK (Swansea) read a case of Cholecystotomy for Impacted Gall Stones.—Mr. G. H. HOPKINS (Swansea) read a case of Extrauterine Pregnancy, Operation, Recovery.—Dr. P. R. GRIFFITHS (Cardiff) read a case illustrating some Uncommon Trophic Changes in Skin and Mucous Membranes.—Dr. SHEEN (Cardiff) showed Mrs. Hunter's Automatic Grip Abdominal Belt.—Owing to want of time, a discussion on the Differential Diagnosis of Abdominal Tumours, to be opened by Mr. J. A. Rawlings, of Swansea, was postponed.

Midwives' Registration.—A resolution from the Lancashire and Cheshire Branch against any legislation was read.—Dr. BOXALL (London), one of the hon. secretaries of the Midwives' Registration Association, spoke at some length on the objects of this Association, and several members joined in the discussion which followed.—Ultimately the following resolution, proposed by Mr. J. A. RAWLINGS, and seconded by Dr. SHEEN, was carried *nem. con.*: "This meeting recognises the necessity, in the interest of the public, for legislation to secure the proper education, registration, and supervision of midwives, and upholds the principle advocated by the Midwives' Registration Association that the education and registration of midwives should be under medical control and supervision."

The Welsh Divorce Case.—The following resolution was proproposed by Mr. EBEN. DAVIES, seconded by Mr. J. G. HALL, and carried by acclamation: "That this meeting of the South Wales and Monmouthshire Branch of the British Medical Association desires to express its hearty sympathy with Dr. T. D. Griffiths in having to meet the scandalous charges brought against him in the recent divorce case, and their congratulations on his having obtained not only a verdict in his favour, but also a unanimous expression of the sympathy of the jury, with which the Lord Chief Justice of England concurred."

BERMUDA BRANCH.

THE annual general meeting of this Branch was held on March 4th, at the Town Hall, Hamilton; Dr. T. A. OUTERBRIDGE in the chair. Six members were present.

Election of Officers.—The following officers were elected: *President:* Dr. T. A. Outerbridge. *Vice-President:* Lieutenant-Colonel H. Comerford, M.D., Medical Staff. *Hon. Treasurer and Secretary:* Mr. Eldon Harvey.

Annual Report.—The annual report and accounts of the Branch were read and adopted.

Discussion.—The sanitary condition of the town of Hamilton and the islands generally was discussed. After much discussion it was decided to petition the Legislature to appoint a medical health officer for the colony.

The usual votes of thanks terminated the meeting.

JAMAICA BRANCH.

THE usual bimonthly meeting of this Branch was held at Kingston on March 28th; present: Drs. G. Cooke, Maunsell, H. F. Malabre, Strachan, Knox, Robinson, Williams, D. I. Bronstorph, Henderson, Grabham, Lockett, Allwood, and Da Costa.

Confirmation of Minutes.—The minutes of last meeting were read and confirmed.

The Mattei Treatment.—Dr. MAUNSELL moved, and Dr. HENDERSON seconded, the following resolution: "That this Branch of the British Medical Association has learnt, from the official *Gazette*, with surprise and regret, that one of its members has been constrained by the Superintending Medical Officer, at the direction of the Governor, to use a secret remedy, namely, Count Mattei's so-called electrical treatment, in the treatment of disease; and this Branch of the British Medical Association protests against any similar interference by the Government in future with the professional treatment of disease by the members of the Medical Department." The resolution was agreed to, Dr. G. Cooke and Dr. Strachan dissenting. The latter desired the fact to be recorded, because while he would naturally support the principle that no medical man should be coerced into using any

method of treatment which he could not honestly and conscientiously agree, he could not but regard this resolution as censuring, or at the least adversely criticising, the conduct of gentlemen, in their absence, whose motives and reasons had not been and could not be duly considered by the meeting; and, further, because he could not but conclude, after carefully reading the report in the official *Gazette* which formed the basis of the resolution, that it did not, *per se*, prove that the Medical Superintendent of the Lepers' Home had been coerced into using the so-called "treatment" of Count Mattei, or that he had done more than fairly test, as was his undoubted right, an alleged cure for a notoriously incurable disease, the result being of unquestionable value as an additional and authoritative proof of the worthlessness of this "treatment." Some members declined to vote.

Communications.—Dr. Knox showed a case of Tuberculous Ulcer of Palate.—Dr. Strachan described a case of Brain Lesion (Syphilitic Tumour).—Dr. Lockett read notes of a case of Inguinal Hernia in a Female.

BRITISH MEDICAL ASSOCIATION.

SIXTY-SECOND ANNUAL MEETING.

The sixty-second Annual Meeting of the British Medical Association will be held at Bristol on Tuesday, Wednesday, Thursday, and Friday, July 31st, August 1st, 2nd, and 3rd, 1894.

President: George Hare Philipson, M.D.Cantab., D.C.L., F.R.C.P., Professor of Medicine in the University of Durham.

President-Elect: E. Long Fox, M.D.Oxon., Consulting Physician to the Bristol Royal Infirmary.

President of the Council: J. Ward Cousins, M.D.Lond., F.R.C.S., Senior Surgeon to the Royal Portsmouth Hospital.

Treasurer: Henry Trentham Butlin, F.R.C.S., D.C.L., Surgeon to St. Bartholomew's Hospital, E.C.

An Address in Medicine will be delivered by Thomas Grainger Stewart, M.D.Edin., Professor of the Practice of Physic and Clinical Medicine in the University of Edinburgh.

An Address in Surgery will be delivered by James Greig Smith, M.B., F.R.S.E., Surgeon to the Bristol Royal Infirmary.

An Address in Public Medicine will be delivered by Sir Charles Cameron, Medical Officer of Health, Dublin.

A. Medicine.

Library of Medical School.

President: Frederick T. Roberts, M.D. *Vice-Presidents:* E. Markham Skerritt, M.D.; R. Shingleton Smith, M.D. *Honorary Secretaries:* W. T. Brooks, M.D., 32, Holywell, Oxford; J. Michell Clarke, M.D., 28, Pembroke Road, Clifton, Bristol.

B. Surgery.

Physical Science Lecture Room—University College.

President: W. Mitchell Banks, M.D. *Vice-Presidents:* Nelson C. Dobson, F.R.C.S.; Professor Victor Horsley, F.R.S. *Honorary Secretaries:* G. A. Wright, M.B., 8A, St. John Street, Manchester; James Swain, M.D., 14, Buckingham Place, Clifton, Bristol.

C. Obstetric Medicine and Gynæcology.

Lecture Room No. 2—University College.

President: Professor J. G. Swayne, M.D. *Vice-Presidents:* E. Malins, M.D.; A. E. Aust-Lawrence, M.D. *Honorary Secretaries:* R. Boxall, M.D., 29, Weymouth Street, London, W.; Walter C. Swayne, M.B., 3, Leicester Villas, St. Paul's Road, Clifton, Bristol.

D. Public Medicine.

Museum Theatre.

President: Professor W. H. Corfield, M.D. *Vice-Presidents:* J. Lane Notter, M.D.; D. S. Davies, M.D. *Honorary Secretaries:* B. H. Mumby, M.D., Town Hall, Portsmouth; J. C. Heaven, M.R.C.S., 2, Queen Square, Bristol.

E. Psychology.

Lecture Room No. 4—University College.

President: G. F. Blandford, M.D. *Vice-Presidents:* S. R. Philipps, M.D.; Fletcher Beach, M.D. *Honorary Secretaries:* C. S. W. Cobbold, M.D., Bailbrook House Asylum, Bath; R. S. Stewart, M.D., Glamorgan County Asylum, Bridgend.

F. Pathology.

Chemical Lecture Theatre—University College.

President: G. Sims Woodhead, M.D. *Vice-Presidents:* Joseph Frank Payne, M.D.; M. A. Ruffer, M.D. *Honorary Secretaries:* Norman Dalton, M.D., 4, Mansfield Street, London, W.; C. A. Morton, F.R.C.S., 24, St. Paul's Road, Clifton, Bristol.

G. Ophthalmology.

Medical Lecture Theatre, Medical School.

President: F. R. Cross, M.B. *Vice-Presidents:* H. E. Juler, F.R.C.S.; Simeon Snell, F.R.C.S. *Honorary Secretaries:* C. H. Walker, M.B., 3, Leicester Villas, St. Paul's Road, Clifton, Bristol; J. Tatham Thompson, M.B., 24, Windsor Place, Cardiff.

H. Laryngology and Otology.

Medical Lecture Theatre, Medical School.

President: P. McBride, M.D. *Vice-Presidents:* W. H. Harsant, F.R.C.S.; Barclay J. Baron, M.B. *Honorary Secretaries:* P. Watson Williams, M.D., 2, Lansdown Place, Victoria Square, Clifton, Bristol; W. Milligan, M.D., 28, St. John Street, Deansgate, Manchester.

I. Dermatology.

Lecture Room No. 3—University College.

President: A. J. Harrison, M.B. *Vice-Presidents:* Stephen Mackenzie, M.D.; H. Waldo, M.D. *Honorary Secretaries:* J. Hancocke Wathen, M.R.C.S., 16, York Place, Clifton, Bristol; H. Leslie Roberts, M.B., 46, Rodney Street, Liverpool.

J. Diseases of Children.

Lecture Room No. 5—University College.

President: W. Howship Dickinson, M.D. *Vice-Presidents:* John Edward Shaw, M.B.; Frederic S. Eve, F.R.C.S. *Honorary Secretaries:* R. W. Murray, F.R.C.S., 15, Rodney Street, Liverpool; Bertram M. H. Rogers, M.D., 11, York Place, Clifton, Bristol.

Programme of Proceedings.

Tuesday, July 31st.

9.30 A.M.—Meeting of 1893-94 Council.
11 A.M.—First General Meeting, Large Hall, Victoria Rooms. Report of Council. Reports of Committees and other business.
3 P.M.—Sermon.
8.30 P.M.—Adjourned General Meeting from 11 A.M. President's Address.

Wednesday, August 1st.

9.30 A.M.—Meeting of 1894-95 Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting, Large Hall, Victoria Rooms. Address in Medicine.

Thursday, August 2nd.

9.30 A.M.—Meeting of Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting, Room of Victoria Chapel (opposite Reception Room). Address in Surgery.
7 P.M.—Public Dinner of the Association.

Friday, August 3rd.

9.30 to 11 A.M. Sectional Meetings.
11 A.M.—Concluding General Meeting, Large Hall, Victoria Rooms. Address in Public Medicine.

Saturday, August 4th.

Excursions.

The Annual Museum.

The Annual Museum in connection with the sixty-second meeting of the British Medical Association will be arranged in the following sections:

Section A.—Food and Drugs, including Prepared Foods, Chemical and Pharmaceutical Preparations, etc. (Honorary Secretary, Dr. Parker, 14, Pembroke Road, Clifton.)

Section B.—Instruments, comprising Medical and Surgical Instruments and Appliances, Electrical Instruments, Micro-

scopes, etc. (Honorary Secretary, Mr. W. M. Barclay, Queen's Road, Clifton.)

Section C.—Books, including Diagrams, Charts, etc. (Honorary Secretary, Mr. H. F. Mole, 5, Meridian Place, Clifton.)

Section D.—Sanitary and Ambulance Appliances. (Honorary Secretary, Dr. Davies, 60, Oakfield Road, Clifton.)

An exceptionally fine and well-lighted hall will this year be utilised for the purposes of the Museum. This room is 150 feet in length and 90 feet in width, and immediately adjoins the University College, where the sectional meetings will be held.

Exhibitors (other than members of the medical profession) will be charged for table, floor, and wall space as follows: In Sections A, B, and C, table space from 3s. 6d. to 2s. 6d. per square foot, depending on the position of the table; tables 3 feet and 3 feet 6 inches wide being provided. In Section D, 6d. per square foot for floor space (all fittings to be provided by the exhibitor). Wall space (where available) will be charged for advertisements at 6d. per square foot.

Advertisements in Museum Catalogue.—A catalogue will be printed, and from 1,200 to 1,500 distributed gratis to members of the Association. Prepaid advertisements, to be sent before July 1st, will be inserted. Further particulars will be sent on application.

The plans of the hall and forms for application for space will be ready early in May.

Regulations.

1. All communications on general matters connected with the Museum, and all applications for space, should be addressed to Mr. John Dacre, 14, Eaton Crescent, Clifton, Bristol, before June 20th. N.B.—No space will be allotted before that date.

2. A brief description of each exhibit for insertion in the Museum Catalogue must be in the hands of the respective Secretaries before July 1st.

3. Space will, as far as possible, be allotted in the order of application and in proportion to the amount applied for, the Committee reserving power to give preference to *bonâ fide* inventions and improvements not previously exhibited, and also to refuse any exhibit they may consider unsuitable.

4. In the event of more space being applied for than is actually available, the allotment will be made at the discretion of the Committee.

5. The Committee reserve to themselves the power to utilise any of the floor space set apart for Section D (if it is not all required for sanitary exhibits) for the erection of additional tables or for any other purpose they may think fit.

6. All exhibits should be addressed to "The Secretaries of the Museum, British Medical Association, Drill Hall, Queen's Road, Clifton, Bristol," with the name of the Section for which they are intended. Packages should not be addressed to a firm's representative at the Museum.

7. All exhibits must be delivered between July 23rd and July 28th, and each package must bear a card showing the name and address of the exhibitor.

8. All exhibits must be placed in the allotted space by 2 P.M. on July 30th.

9. The Committee will exercise every care regarding the exhibits submitted to them, but all risks and expenses must be borne by the exhibitor.

10. No signs or placards will be allowed in the hall which may interfere with neighbouring exhibits. No exhibit or placard on the central tables must reach higher than 2 feet 6 inches from the table. The arrangement of signs, placards, exhibits, etc., will in every case be subject to the approval of the Committee.

11. Intimation of the space allotted to each exhibitor will be sent as promptly as possible after June 20th, marked upon a plan. On receipt of cheque for the cost of such space, a card for the admission of the exhibit will be sent.

12. All cheques to be made payable to Mr. John Dacre, 14, Eaton Crescent, Clifton.

13. No exhibits will be received except on the understanding that the above regulations are strictly complied with.

Mr. L. M. Griffiths, Chairman, 9, Gordon Road, Clifton,
Dr. J. E. Shaw, Vice-Chairman, Caledonia Place, Clifton,
Mr. John Dacre, Secretary, 14, Eaton Crescent, Clifton,
} Annual Museum Subcommittee.

SPECIAL CORRESPONDENCE.

PARIS.

Epidemics in France.—Dangerous Dwellings.—Proposed Abolition of the Assistance Publique.—An Elephant with Toothache.—General News.

At a recent meeting of the Academy of Medicine, M. Brouardel stated that beggars and vagabonds are spreading typhus all over France. A great many medical men fail to diagnose the disease. Two vagabonds under age are in the children's hospital, Rue de Sèvres, under treatment for typhus. M. Monod, at the last meeting of the Comité d'Hygiène Publique, stated that his reports had been interrupted by the meetings of the Sanitary Conference. The Prefect of Morbihan notified on April 20th that two cases of choleraic diarrhœa had taken place on March 28th and 30th in the village of Bornord, one ending fatally. Some cases of diphtheria had occurred in the Creuse and Loire departments, and an epidemic broke out at Chagny. Dr. Chantemesse visited the infected places, and instituted prophylactic measures; a disinfecting stove was sent. Statistics of deaths and cases have not yet been sent in, but it is certain that the epidemic was most violent in the schools, which ought to have been closed at the beginning of the epidemic. This fact was made known to the Prefect. The epidemic showed sign on April 11th of dying out, but isolated cases have occurred at Romenay, Pierre, Grury, and Crèches. The school holidays have been extended in consequence. At Maçon three cases have occurred but disinfection has been carefully practised and infection has been arrested. An epidemic of ringworm has broken out in the schools of Bapaume, Cantaleu, and Dieppe. Up to February 23rd 182 boys and 11 girls had been attacked. On March 17th the school inspector declared the epidemic to be at an end. M. Monod further stated that in the Paris hospitals on March 1st there were 301 typhoid fever patients: on the 31st, 633; afterwards there was a decrease, during the first fortnight in April the entries fell to 109. A report, drawn up by Dr. du Mesnil, was read setting forth the sanitary measures to be taken for supplying the Paris environs with pure drinking water. The Dean of the Paris Medical Faculty proposed an improved sanitation of the Vichy springs. In consequence of typhoid epidemic at Lure among the soldiers the barracks will be evacuated and the men lodged in the Belfort barracks.

By a ministerial decree the following localities are added to the list of dangerous dwellings: Creasote depôts containing more than 100 kilos in receptacles not hermetically closed; premises where old tin boxes and other such articles are burned; also those where raw celluloid is stored, or worked up celluloid containing more than from 300 to 800 kilos of the raw material or dissolved in alcohol or ether. A store of more than 20 litres of acetone or acetic ether places premises on the list of dangerous dwellings, likewise the preparation of hemp or flax by acid or hot water, manufacturing artificial silk with collodion, and potassium chlorate by electrolysis.

M. Albert Maréchaut is the author of a volume entitled *L'Assistance Publique, sa Suppression: Organisation de la Charité Publique.* M. Maréchaut objects to the word "charity," and considers it should be replaced by the word "mutual help," reciprocal support between citizens in the form of labour and pensions. The *Progrès Médical* declares that there is much to object to in the organisation of the Public Assistance, and sees no reason why it should not be suppressed, provided it is not replaced by a similar organisation, but by an equitable distribution of wealth. When that day arrives there will be universal contentment; for there will be no poor.

One of the Paris show elephants showing signs of pain in the jaw by rubbing it on the ground, a dentist was called in, who perceived that the root of one of the tusks was attacked with caries. The necessary precautions being taken to render the elephant harmless, the decayed root was several times treated. Now the animal is out of pain, and receives the dentist's visits without showing any signs of hostility.

Professor Cornil has been named Commander of the Order of the Roumanian Crown.

The Congress of the French Ophthalmological Society will begin on May 7th.

CORRESPONDENCE.

THE SCANDAL OF THE FOREST GATE SCHOOLS.

SIR,—It strikes an outside observer like myself as significant that ten months should have been allowed to elapse between the poisoning of children at Forest Gate School and the appearance of an article in any newspaper drawing public attention to the circumstances connected with that lamentable occurrence. Now, however, that the scandal has been exposed in your columns, it becomes the duty of all lovers of justice to see that the matter is not allowed to drop or to be hushed up, until the managers of the school have justified their conduct to an extent that, on your showing, seems hardly possible, or until the guardians of the Poplar and Whitechapel Unions have requested them to resign the trust to which they have proved so unfaithful. "An error in accounts," which consists in putting in a charge on a given day of 52 lbs. of meat which were neither used nor even, I suppose, delivered, ought to be punished in the past as well as made "practically impossible" in the future, the more so as it is not pretended that this was a solitary or infrequent instance of the kind. Even supposing that it is necessary to make allowances for exaggeration in the statements of an under officer and presumably an ignorant man, the merest justice demands that his summary dismissal should be followed by that of the superintendent, whose "errors" (how many sins are covered by that convenient euphemism!) have been shown to be so much more serious and so disastrous in their consequences.—I am, etc.,

April 25th. FAIR PLAY.

THE EDUCATION OF WORKHOUSE CHILDREN.

SIR,—For over ten years the Halifax Board of Guardians have availed themselves of the public elementary schools for the education of children under their care. The children are sent out in ordinary dress of children of the same class of life; there is no uniformity in the cut of dress or hat worn. The children run down without any attendant in twos or threes without supervision. They are trusted, and in the days when school pence had to be paid the money was given to the children to hand to the teacher with results the most satisfactory, for the children were found worthy of the trust reposed in them.

The Halifax system commends itself. The children have improved, and have lost the beaten look of the workhouse child; they can look you in the face and answer questions, and run about now and play as children should do. We have charge of only sixty-five children. I have had experience of large schools. I am convinced that the barrack system is a bad one; that cottage homes offer a better solution of the difficulty, and the children should mix with other children. A child ought not to be brought into a workhouse—that, to my mind, is an axiom. The Halifax guardians have recognised this, and are now waiting for an opportunity to build cottage homes, so that in the near future the Poor-law arrangements in Halifax will be as follows: (1) The workhouse proper, fulfilling the conditions for which a workhouse exists. The guardians intend, however, to classify the inmates. (2) Cottage homes for children. (3) An infirmary on separate ground and under proper hospital management.—I am, etc.,

Halifax, April 24th. TH. M. DOLAN, M.D., J.P.

MIDWIVES' REGISTRATION.

SIR,—In answer to your correspondent, Mr. Colin Campbell, who wrote under the above heading in the BRITISH MEDICAL JOURNAL of April 28th, we would point out that there are other Branches of the British Medical Association, and members even of the Lancashire and Cheshire Branch itself, who do not endorse the resolution moved by Dr. Rentoul at the last meeting of that most important Branch, who are not equally willing, with those who supported that resolution, to subordinate the interests of the community to problematical considerations affecting the medical profession, and who do not impute ulterior motives to a body of medical men who, as citizens, concede the necessity for legislation, and, as medical practitioners, are making an honest endeavour to safeguard the interests of their profession.

For instance, on Thursday last, at the meeting of the South Wales and Monmouthshire Branch, held at Neath, the following resolution was passed *nem. con.*:

That this meeting recognises the necessity, in the interests of the public, for legislation to secure the proper education, registration, and supervision of midwives, and upholds the principle advocated by the Midwives' Registration Association, that the education and registration of midwives should be under medical control and supervision.

As the Midwives' Registration Association never promoted any Bill in the House of Commons, and was not even in existence till long after the last Bill was introduced, your correspondent, in drawing his conclusions, has provided an additional example of unwarrantable disregard for fact on the part of the opponents of legislation.—We are, etc.,

ROBERT BOXALL, M.D.,
ROWLAND HUMPHREYS,
Honorary Secretaries, Midland Registration Association.

London, April 28th.

THE GENERAL INSPECTORS OF THE LOCAL GOVERNMENT BOARD.

SIR,—Your correspondent "F.R.C.P." while admitting his ignorance of the duties of the general inspectors of the Local Government Board, yet continues to cast unfair and grave reflections upon their work. His references to the gentleman who conducted the recent inquiry at Newton Abbot (still *sub judice*) are, to say the least, invidious and ill-advised.

"F.R.C.P." would do well to read your able annotation on "Cruelty to Paupers" (p. 929), and take a lesson from its fair and judicious tone.

He appears to forget that the advisability of having lady inspectors does not necessarily show the non-necessity for general (men) inspectors. The two medical inspectors he does not even mention, though doubtless their number ought to be increased. In my humble opinion the first and most urgent improvement required in the Poor-law establishments is the entire separation of the workhouse and hospital, and this has been found to answer well in those places in which it has already been effected.—I am, etc.,

May 1st. M.B., D.P.H.

ST. JACOB'S OIL.

SIR,—As inquiries are often addressed to you respecting the composition of proprietary medicines, I beg to send you the result of an analysis of St. Jacob's oil given in percentages:

Turpentine with traces of camphor	82.407
Ether...	10.000
Alcohol	5.000
Carbolic acid	2.018
Capsicum	0.400
Aconite	0.013

There is also a small quantity of origanum, probably employed for scenting purposes, but this has not been estimated.

St. Jacob's oil is sold in two sizes at 1s. 1½d. and 2s. 6d.

Messrs. Jabez Monro and Co., of 273, Regent Street, state that the cost of the ingredients of the 2s. 6d. bottle would be under 3d., and if the materials were bought in large quantities probably very little over 2d. They say from 2d. to 3d. for the 2s. 6d. bottle.—I am etc.,

Cavendish Square, W., April 14th. WILLIAM MURRELL.

TREATMENT OF OBLIQUE SIMPLE FRACTURE.

SIR,—The prominence given in the BRITISH MEDICAL JOURNAL of April 28th to the novel treatment of oblique simple fracture of the leg, as described by Mr. Arbuthnot Lane in a paper read before the Clinical Society on April 13th, will have surprised many surgeons. Before such a revolutionary suggestion is accepted by which, as you justly say, "one of the cherished maxims of the surgery of the past is threatened with extinction," it would seem desirable to have some more definite evidence than has yet been offered in support of the proposed operation. This at present depends on Mr. Lane's assertion that "the average financial depreciation of the labourer as a machine after such an injury amounts to nearly 70 per cent. of his original value," which is to me a most astounding statement and one which I feel sure will not bear investigation.

I venture to suggest that before the profession abandons its

cherished maxim of "non-interference" in favour of what appears to me to be an unnecessary if not an unjustifiable operation the statement of financial depreciation be tested in some practical way. This might be done by matching at a day's work, say digging, a team of sound individuals against a similar number who have had their skeletal mechanics interfered with.—I am, etc.,

Wellington College, April 30th. H. G. ARMSTRONG.

THE CHOICE OF AN ANÆSTHETIC IN OPERATIONS FOR THE REMOVAL OF POST-NASAL ADENOID GROWTHS.

SIR,—In the recent discussion at the Laryngological Society on the above subject I gather that in cases where enlarged tonsils coexist with post-nasal growths it is customary to remove the tonsils at the same time as the adenoids whilst the patient is under a general anæsthetic.

It seems to me that such a proceeding is not altogether free from objection, and the plan I have usually adopted in such cases is first of all to paint the tonsils with a 5 per cent. solution of cocaine, and then to remove them whilst the patient is sitting in a chair. The bleeding stops in three or four minutes, the patient is then placed in the recumbent position, chloroform is administered, and the adenoids are removed with a Gottstein's scraper and the fingernail as rapidly and thoroughly as possible. By this method the time during which the patient is kept under the anæsthetic is lessened, the same also applying to the dependent position of the head, where this mode of operating is adopted; the bleeding from the cut tonsils is arrested before the second part of the operation is commenced, and the space is cleared and made more accessible to the finger and other instruments required for removal of the adenoids.

With reference to the choice of a general anæsthetic I much prefer chloroform, and I always commence the operation the moment the ocular reflex is abolished, and complete it without any further administration of the anæsthetic. The objection to ether, as far as I have seen, is the greater amount of bleeding which generally takes place.

I have not so far met with a case in which complete anæsthesia appeared to be necessary, and, indeed, I should hesitate under any circumstances to induce such a condition in the removal of post-nasal growths.—I am, etc.,

E. DYKES BOWER,
Surgeon and Ophthalmic Surgeon to the Gloucester General Infirmary.

April 24th.

AN OPERATION FOR THE CURE OF CLEFT OF THE HARD AND SOFT PALATE.

SIR,—I shall be glad if you will allow me to correct an inaccurate statement which I made at the last meeting of the Royal Medical and Chirurgical Society. In speaking of my operation for uniting cleft of the hard palate, by carrying across the gap a triangular flap with a free anterior extremity, I said that I had operated on six cases between the ages of 1 and 2 years, and in all with success. On referring to my notes, I find that I have operated by this method on only three patients between the ages of 1 and 2. Of the rest of my early cases, two were between the ages of 2 and 3, and a sixth was 3 years and 3 months old. In each case the flap united well.—I am, etc.,

Harley Street, W., May 2nd. N. DAVIES-COLLEY.

AMENDMENT OF THE MEDICAL ACTS.

SIR,—In the BRITISH MEDICAL JOURNAL of April 28th a draft of clauses to amend the Medical Act of 1858 appeared. May I venture to suggest an amendment to Clause 2, namely, that after the word registered the words "as such" be inserted. So that the clause may read "registered as such under the Act."—I am, etc.,

April 30th. M.D.

CONGRESS OF THE FRENCH SURGICAL SOCIETY.—The French Surgical Society will hold its annual meeting this year at Lyons, probably in the early part of October. This is the first time the meeting will have been held outside Paris. The matter was decided by a *plébiscite*, and the result is regarded as a victory for the advocates of decentralisation.

NAVAL AND MILITARY MEDICAL SERVICES.

ARMY MEDICAL STAFF EXCHANGE.

The charge for inserting notices respecting Exchanges in the Army Medical Department is 3s. 6d., which should be forwarded in stamps or post office order with the notice. The first post on Thursday mornings is the latest by which these announcements can be received.

A SURGEON-CAPTAIN, whose position is probably good for four years at home, having only arrived by last trooper last season, will accept a good offer from any officer who has completed about half or more of foreign tour, either in India or Colonies. Apply, stating terms, to A. B. C., care of Sir C. McGrigor, Bart., and Co., 25, Charles Street, St. James's Square, London, S.W.

A Surgeon-Captain, on leave from the Punjab, India, till June 31st, wishes to exchange with one on the Home roster with at least two years to run before the next foreign tour. Tour in India will expire during trooping season 1896-97. Reply, stating terms and giving particulars, to X. Y. Z., care of Messrs. Holt and Co., 17, Whitehall Place, S.W.

THE NAVY.

THE following appointments have been made at the Admiralty: JOHN HUNTER, Staff-Surgeon, and T. H. A. CLAYTON, Surgeon, to the *Benbow*, May 23rd; ROBERT W. WILLIAMS, Fleet-Surgeon, to the *Devastation*, April 26th; GEORGE WILSON, Surgeon, to the *Racoon*, additional, April 28th; JAMES W. W. STANTON, Surgeon, to the *Vernon*, for the *Seagull*, April 28th; HERBERT P. SHUTTLEWORTH, to the *Acorn*, May 10th; CHARLES STRICKLAND, Surgeon, to the *Empress of India*, May 10th.

ARMY MEDICAL STAFF.

SURGEON-MAJOR GENERAL WILLIAM COLLIS is placed on retired pay, April 14th. He entered the service as Assistant-Surgeon, September 14th, 1855; became Surgeon, April 5th, 1871; Surgeon-Major, March 1st, 1873; Brigade-Surgeon, February 21st, 1882; Surgeon-Colonel, May 12th, 1886; and Surgeon-Major-General, April 5th, 1892. He served with the 98th Regiment in the Peshawur Expeditionary Force on the Euzofzie frontier under Sir Sydney Cotton in April and May, 1858, and at the affair with the Hindustani fanatics on the heights of Sittana on May 4th (medal with clasp); and was present at the operations in the Malay States under Brigadier-General Ross as principal medical officer from November 24th, 1875, to January 31st, 1876 (medal). He received the thanks of the Government of India and of the Commander-in-Chief in India for improvements effected in ambulance carriage.

Brigade-Surgeon-Lieutenant-Colonel FREDERICK FERGUSON, M.D., has also left the service on retired pay, May 2nd. He was appointed Assistant-Surgeon, April 14th, 1863; Surgeon, March 1st, 1873; Surgeon-Major, April 28th, 1876; attained the rank of Lieutenant-Colonel, April 14th, 1883; and was made Brigade-Surgeon-Lieutenant-Colonel, June 15th, 1885. He was with the Nile Expedition in 1885, and took part with mounted troops in the operations of the Desert Column, including the action at Abu Klea and the reconnaisance to Metammeh; he was mentioned in despatches, was promoted to be Brigade-Surgeon, and received the medal with two clasps and the Khedive's star.

Surgeon-Major THOMAS PARK, late of the Royal Artillery, died at Leamington on April 30th His commissions were dated as follow: Assistant-Surgeon, April 1st, 1850; Surgeon, December 21st, 1855; and Surgeon-Major, August 9th, 1870. He was placed on half-pay April 22nd, 1871. He served with the Royal Artillery in the Eastern campaign in 1854-55, and was present at the battle of Inkerman, at the siege and fall of Sebastopol, and the repulse of the sortie on October 26th, 1854 (medal with two clasps, Knight of the Legion of Honour, and Turkish medal).

INDIAN MEDICAL SERVICE.

SURGEON-LIEUTENANT-COLONEL R. CALDECOTT, Bombay Establishment, in medical charge of the Central India Horse, is appointed Residency Surgeon at Indore, Central India, in place of Brigade-Surgeon-Lieutenant-Colonel D. F. Keegan, retired. Surgeon-Captain C. M. MOORE, 3rd Bombay Cavalry, succeeds Surgeon-Lieutenant-Colonel Caldecott.

Brigade-Surgeon-Lieutenant Colonel A. CAMERON, M.D., Bengal Establishment, is granted the rank of Surgeon-Colonel from February 16th, while officiating as Inspector-General of Civil Hospitals, North West Provinces and Oude.

Surgeon-Major H. ARMSTRONG, Madras Establishment, officiating in medical charge of the Queen's Own Madras Sappers and Miners, is appointed officiating Residency Surgeon at Bangalore.

In our last week's issue, in the paragraph announcing the promotion of Surgeon-Captains to be Surgeon-Majors from April 1st, the name of Surgeon-Captain A. V. ANDERSON, of the Bombay Establishment, should have been included.

THE VOLUNTEERS.

SURGEON-LIEUTENANT ISAAC SCARTH, M.B., 2nd Middlesex Artillery, is promoted to be Surgeon-Captain, April 28th.

Mr. RICHARD HUMPHREYS, M.B., is appointed Surgeon-Lieutenant to the 6th Lancashire Artillery, April 28th.

Surgeon-Lieutenant L. G. DILLON, M.D., 2nd Durham Artillery (Western Division Royal Artillery), is promoted to be Surgeon-Captain, April 28th.

Surgeon-Lieutenant E. DENING, 2nd Volunteer Battalion the Gloucestershire Regiment (late the 2nd Gloucestershire), is appointed Lieutenant in the same corps. Lieutenant Dening joined as Surgeon-Lieutenant, September 20th, 1890.

Surgeon-Lieutenant E. D. WELLBURN, 1st Volunteer Battalion the Duke of Wellington's West Riding Regiment (late the 4th West Riding of Yorkshire), has resigned his commission, which bore date May 6th, 1893.

Mr. GEORGE RODWAY SWINHOE is appointed Surgeon-Lieutenant to the 2nd Volunteer Battalion the Duke of Edinburgh's Wiltshire Regiment (late the 2nd Wiltshire), April 28th.

INDIAN PENSIONS.

The following scale of invalid pensions for the Indian Medical Service has been published: An officer who has become incapacitated for further service in India, on account of unfitness caused by duty, may, after he has been two years on the temporary half-pay list, be granted an invalid pension according to the following scale; After twelve years' pensionable service, £192 per annum; after thirteen years, £212; after fourteen years, £232; after fifteen years, £252; and after sixteen years, £272 per annum.

VOLUNTEER MEDICAL STAFF CORPS.

The annual dinner of the Volunteer Medical Staff Corps will be held at the Café Royal on May 30th, at 7.30 P.M.

FAREWELL DINNER TO SURGEON-MAJOR-GENERAL W. COLLIS.

The retirement of this gentleman, under the age clause, while Principal Medical Officer in Ireland, was made the occasion of a farewell dinner in Dublin, given by the Medical Staff in Ireland, at which the distinguished heads of the medical profession in the Irish capital and a number of military officers were present. The banquet took place in the Antient Concert Rooms, and the band of the Royal Munster Fusiliers discoursed pleasant music during the evening.

The Chairman, Surgeon-Colonel Maunsell, Principal Medical Officer, Cork District, expressed the regret felt in losing their chief, who had shown him much personal kindness, and been unremitting in his efforts to render the necessities of military service as comfortable to all as compatible with the due performance of duty. It was with the greatest regret that the officers of his service bade him goodbye.

Surgeon-Major-General Collis made a long and very happy reply. His responsible position in Ireland had been much lightened by the faithful and willing co-operation of the officers and men serving under him, whom he thanked very heartily. His relation with his military chiefs had been most cordial, and from Lord Wolseley he had received much courtesy and kindness. The duties of an army medical officer in these days were of a most varied and responsible character. In order to fulfil these multifarious duties he indeed required to be a smart man. Unfortunately the shorthandedness of the medical department rendered leave for special duty nearly impossible; yet, in the ever-advancing tide of medical and surgical science, how could it in reason be expected that without the time and opportunity of special study an army medical officer should keep pace with it? He next referred to the Medical Staff Corps, and said the three years' system of enlistment operated very disastrously on the efficiency of the corps; the lowering of the standard had also been most prejudicial; taller and stronger men were required.

The health of the civilian visitors was responded to by Sir George Porter, and Drs. Kidd and Thornley Stoker; and of the military visitors by Colonels Lascelles and Dundas.

ARMY MEDICAL UNIFICATION *VERSUS* REGIMENTALISM.

Many may be inclined to exclaim, with some reason, "Surely this controversy has been threshed out long ago, and nothing more can now be said!" That is true in so far that few will dispute the absolute necessity in modern warfare of an organised and unified medical service. But, judging from correspondence which we observe from time to time in our service contemporaries, as well as from communications which reach us, the question remains unsolved in the minds of a certain number of medical officers, Would not a return to a modified regimentalism in peace be desirable and profitable both for the army and the department? The question need not be asked or answered in any reactionary spirit, but purely from the standpoint of expediency.

The old organic medical regimentalism prior to 1873 is a memory only to a rapidly-dwindling number of seniors, and a mere tradition to the vast majority on the active list, but it is a pleasant memory to many old retired medical officers. A certain number still serving will remember the modified regimentalism which existed for some years after general unification, and these men will be able to judge of the desirability or feasibility of a return to it, which, as we have said, we see occasionally advocated.

We doubt if a return to modified regimentalism is feasible on account of administrative and financial difficulties; but, apart from certain obstacles, the question may be reviewed on its merits. Both seniors and juniors will, on reflection, be ready to admit that the great unification departure of twenty-one years ago was neither unnecessarily nor recklessly undertaken; the experience of the American and Franco-German wars called for a reorganisation of our fighting machinery and for a more consolidated medical service. Unification, therefore, was but the first step in evolution towards the logical and practical consummation of a consolidated army medical corps; that such a corps must sooner or later be formed in spite of unreasonable and shortsighted military opposition no one doubts. Would, therefore, any return to partial regimentalism be inconsistent with a medical corps organisation? If such a return was to be made the handle or excuse for delaying or deferring medical consolidation, then we should meet it with a direct negative; if it were made concurrent with corps formation, then we would discuss the question on its merits.

That the attachment of medical officers to corps is not wholly incompatible with unification, is proved by the system followed between 1873 and 1879; and the great initiator of unification, Sir William Muir himself neither saw nor held any insuperable objection to modified regimentalism; which he was indeed quite prepared to carry out, provided sufficient establishments were kept up. This is where the financial difficulty comes in, the administrative of course lying in the manipulation of insufficient numbers. We think both these difficulties were probably exaggerated by those who were anxious for pure unification; but their existence cannot be denied; and it is for the advocates of modified regimentalism to show how they can be overcome without undue increase to the estimates. As for a possible military objection that might be raised, we can see no more incompatibility in attaching a member of a medical corps than of a medical department to a regiment.

The two points urged in favour of a modified regimentalism are: the benefit it would be to officers and men, and the bringing of the department into better touch with the army at large. Both points are so important as to deserve dispassionate consideration; and the balance of sentiment, if not of argument, may indeed well be in their favour. To the officers and families, especially, the constant change of medical officers, and the difficulty, if not impossibility, of confiding in a stranger, must be a constant source of annoyance. As for the men, we refuse to believe they are less carefully, scientifically, or sympathetically treated in a station inspection room, or hospital, than they were under the regimental system. As for benefit to the department itself, we have little doubt the recent much to be deplored estrangement between the executive military and medical officers would be largely removed by a return to modified regimentalism. The two classes are kept far too much apart at present. But we would warn all concerned that, so far as we can gather, the homely memories which many old regimental medical officers so warmly treasure would probably not now be revived or realised by a system of attachment.

The fact is, regimental life itself has greatly changed during the past quarter of a century; soldiering is much more a profession now than it was then; officers look for distinction and advancement much more in staff corps and other employ, rather than in individual regiments: all of which has weakened the solidarity of regimental life. On the question at large we would simply say that, whatever the drawbacks and difficulties, any measures which would bring the medical service and the army at large into closer union and sympathy, are well worthy of discussion and consideration.

MILITARY MEDICAL TITLES.

Surgeon-General-General writes: Judging from late correspondence in a service contemporary on the military titles of medical officers, it is but too apparent that military officers have forgotten none of their old prejudices, or learnt anything from recent events. The editor of the paper in question may rely that a continuance of abuse and obloquy of medical officers will only redouble their efforts to have real rank and titles in a medical corps.

*** We fear it is too true that many military officers, forgetting nothing, learning nothing, are perfect Bourbons towards medical officers. But as these royal personages had in the end to succumb, so will it be with such unreasoning and unreasonable prejudices.

MEDICO-LEGAL AND MEDICO-ETHICAL.

PREPARATIONS OF OPIUM AND OF MORPHINE AS POISONS.

Pharmaceutical Society v. Armson.

This case was heard in the Queen's Bench Division, before Mr. Justice Charles and Mr. Justice Bruce. It was an appeal by the defendant from the decision of the county court judge of Derby in an action brought by the Pharmaceutical Society to recover a penalty under 31 and 32 Vict., c. 121. The judge gave judgment for £5 penalty. Mr. Bonsey appeared for the appellant, a grocer at Melbourne, near Derby; Mr. Crump, Q.C., and Mr. T. R. Grey for the plaintiffs.

The action was one for a penalty alleged to have been incurred by the defendant for keeping open shop for the retailing, dispensing, or compounding of poisons—to wit, morphine (morphine being a preparation of opium), or a preparation of morphine, being a poison within the meaning of the Pharmacy Act, 1868, contained in a compound called "Powell's Balsam of Aniseed." On October 18th the defendant sold a bottle of this compound. The bottle contained nearly an ounce of liquid, and a label affixed prescribed a teaspoonful as a dose for an adult, 16 drops for a child of 4 years old, 20 drops for a child of 8, and 40 drops for one of 12. Upon analysis the contents of the bottle were found to consist, amongst other ingredients, of one-tenth of a grain of morphine, the chief medicinal principle of opium. Morphine in its pure state is a poison. The county court judge held that upon the evidence he would hesitate to find that the compound could be described as a poison if the type of life to which the compound must be fatal or dangerous, in order to give it the character of a poison, was that of an adult. It was said, however, that it might be fatal to an adult suffering from certain diseases, but not otherwise. In the case of children it was proved that the contents of a bottle such as this, taken at once, would be injurious, might be fatal to a child in ordinary health, and would probably be fatal to an infant. The medicine was intended for children. The county court judge held that a compound which might have the effect stated upon the life of a child might properly be described as a poisonous thing, although it might be comparatively innocuous to an adult in ordinary health. At any rate, it appeared to him impossible to apply the rule of the decision in the Pharmaceutical Society *v.* Piper (1893, 1 Q. B., 686). "*De minimis non curat lex.*" He therefore gave judgment for the plaintiffs for the £5 penalty.

Mr. Bonsey cited "The Pharmaceutical Society *v.* Piper" (1893, 1 Q. B., 686), "The Pharmaceutical Society *v.* Delve" (1893, 1 Q. B., 71). He urged it would be highly inconvenient if this was held to be a compound which came within the Act. Even chemists would be prevented from selling such remedies, for they could not know the ingredients of "secret nostrums." If this compound was taken in proper doses it could do no one any harm. The Court dismissed the appeal.

Mr. Justice Charles said that the view he took of this case depended on the two authorities cited. In Delve's case it was decided that when it was not enough to warrant a conviction simply to prove that a compound contained an infinitesimal quantity of one of the poisons mentioned in the Act. That was not enough. In Piper's case it was decided that a compound might be within the Pharmacy Act if it contained a poisonous ingredient and the compound itself was poisonous. The county court judge accurately apprehended the effect of this case. He said: "It appears to me, therefore, that this case does not decide in the plaintiffs' favour the proposition for which they contend, that it is sufficient to show that the compound contained as an ingredient a scheduled poison irrespective of the character of the composition as a whole. On the other hand, it precluded the defendant from successfully contending that a compound which, as a whole, does not fall within any of the descriptions in the

schedule is therefore not within the Act if it is shown to contain a scheduled poison, and to be 'in its entirety a poisonous thing.'' The question for the Court was whether there was any evidence to support the statement that this bottle of compound was "in its entirety a poisonous thing." The evidence, as the county court judge held, was that for an adult to take the whole at once might be dangerous. But on that point he found in favour of the defendant. He then went on to another finding, as to the case of children. The compound would be injurious and might be fatal to children, and in the case of infants would probably be fatal. On the bottle were directions for use, showing that the compound was intended for children. What, therefore, was the result of this? It was this, that if the whole of the bottle were taken by one of the class for whom it was intended it might be, or would probably be, fatal. It was impossible to say there was no evidence to justify the finding of the county court judge. The appeal must therefore be dismissed.

Mr. Justice Bruce concurred. It was only a question of fact for the county court judge. The argument as to the inconvenience to the public in not being able to procure patent medicine did not much impress the learned judge. He thought it was more important that unqualified persons should be restrained from selling poisonous compounds. It must not be assumed that directions for use were always read. Experience showed that this was frequently not the case; hence there was a danger when enough was sold to do harm to anyone.

QUEEN'S BENCH DIVISION.—April 30th, 1894.
(Before Mr. Justice MATHEW and a special jury.)
ANSELL *v.* TAIT.

THIS was an action brought by Mr. Mark Ansell, a coachman residing at Highbury, against Mr. Edward S. Tait, a medical man practising at Highbury, to recover damages for personal injuries caused through the alleged negligent treatment of the defendant. Defendant denied negligence and pleaded contributory negligence. Mr. Waddy, Q.C., and Mr. Day appeared for the plaintiff; while Mr. Murphy, Q.C., and Mr. L. Batten represented the defendant. The plaintiff was formerly a coachman in the employ of Mr. Griffiths, a gentleman residing at Highbury, and in the summer of 1891 he accompanied his employer to Cromer. In August the plaintiff was walking on the sands at Cromer, when he accidentally put his right foot into a hole and twisted his ankle. He returned to London in September, but it was not, he said, until the end of November that he consulted the defendant, who lanced and probed his foot and told him that he was suffering from a sprain. Defendant saw him from time to time, and in the following April Dr. Stokes, another medical man, examined him, and, on his advice, plaintiff went to a hospital, where it was found necessary to amputate the limb. Shortly afterwards the left ankle became affected, and the left foot was also amputated. Plaintiff's case was that at the time he consulted the defendant he was suffering from tuberculosis of the joint, and that the defendant was guilty of negligence in not making such a careful and sufficient diagnosis of the case as would have enabled him to detect the disease. Mr. Henry Fraser Stokes, Mr. Edward S. Tait (the defendant), Mr. Charles Barrett Lockwood, surgeon, who saw the plaintiff at the Great Northern Central Hospital, and Sir W. Savory having given evidence supporting the defendant's case, the jury intimated that they did not wish to hear any more evidence, and found a verdict for the defendant. Judgment was entered for the defendant accordingly.

QUEEN'S BENCH DIVISION.
(Before Mr. Justice HAWKINS and a special jury.)
ALABASTER AND ANOTHER *v.* HARNESS.

BEFORE Mr. Justice Hawkins and a special jury an action for maintenance brought by the proprietors of the *Electrical Review* against Mr. C. B. Harness, of the Medical Battery Company, for having unlawfully advised and instigated Dr. Tibbits to bring an action for libel against them ended, after two days' hearing, in the jury being discharged and the case being adjourned for further consideration by his lordship alone.

FEES FOR *POST-MORTEM* EXAMINATIONS.

MEMBER B.M.A.—The words of the Coroners' Act, 1887 are clear: "Any fee or remuneration shall *not* be paid.....for the performance of a *post-mortem* examination instituted without the *previous* direction of the coroner." This case affords another example of the inadvisability of volunteering to do work which has not been requested, and for which consequently no one has undertaken the responsibility of payment.

MEDICO-PARLIAMENTARY.

[SPECIALLY REPORTED FOR THE "BRITISH MEDICAL JOURNAL."]

HOUSE OF COMMONS.

The Opium Commission.—In answer to Mr. JOHN ELLIS, Mr. H. H. FOWLER stated that the Commission had now finished the work of taking evidence, but as the medical aspect of the question required to be very fully considered, he could not as yet name a day for the presentation of the report.

The Regulation of Factories and Workshops.—Mr. ASQUITH introduced a Bill to amend and extend the law relating to factories and workshops. He said it would provide that each man when at work should have an allowance of 250 cubic feet of air space in the day and 400 feet after 8 P.M. It would empower the courts to order the necessary structural alterations, and would prohibit the cleaning of machinery in motion by women and young persons, and not only by children as at present. Overtime, now permitted five days a week, was not to be allowed on more than three, and the taking of work home from the factory by women, children, and young persons employed in it was to be restricted. A child employed in the factory during the day would not be allowed to take work home at all. Women and young persons would not be permitted to do so if they worked in the factory both before and after dinner. Certain industries, not at present embraced by the law, would be taken within the scope of this Bill. In the first place, there were the laundries. Steam laundries were to be treated as factories, and other laundries as workshops. There were special provisions touching the ventilation of the former, and for keeping the floors and so on in a wholesome condition. But there were exceptions for domestic and institution laundries. As to docks, wharves, and places where buildings were being constructed, they were brought for the first time under those provisions of the Acts which dealt with inspection, fencing machinery, and notice accidents. In the case of tenement factories, very common in Sheffield and the district—factories of which parts were let to small occupiers—it was proposed to make the owner responsible for the sanitary condition, fencing of machinery, and other matters of that kind. With regard to unhealthy employment the Bill gave to the Secretary of State power to restrict the hours and altogether to forbid the employment of women, young persons, and children. Finally, it was proposed to substitute for the "particulars" clause of the Act of 1891 a new section, which would apply that enactment to all piece-workers in textile trades, and would require employers in those trades to furnish to their workpeople in a plain and definite form, and in writing, such particulars as would enable them to compute the wages payable in respect of each piece of work. Those were the main provisions of the Bill, which was complicated and full of details. He trusted the House would allow it to be introduced at once, on the understanding that ample time would be given before the second reading, and in the hope that it might be referred to the Standing Committee on Trade. Leave was given to bring in the Bill, which was read a first time without comment.

Alleged Inaccuracies in Death Certificates.—Mr. HOPWOOD asked a question with regard to the case of the death from small-pox at the Birmingham City Hospital of a man named William Wood Warner, wrongly certified by the medical officer not to have been vaccinated, and whether inquiries would be made into the subject of such inaccuracies.—Sir WALTER FOSTER said such information was forwarded to the Local Government Board on April 20th by a guardian of the King's Norton Union. But, on the other hand, the Board learned from the late chief officer of the hospital that William Warner on admission to the hospital had no small-pox eruption which could have masked the most trivial vaccination mark, and that he presented no mark which in the least resembled a vaccination scar. The patient himself had stated that he believed he had been vaccinated, but he was certain that no marks resulted from vaccination. As the result of much careful inquiry, it was decided that the case should be entered as not vaccinated. This statement was fully confirmed by the late medical superintendent of the hospital, who added that every possible precaution was taken to ensure correct entry of the facts. As the hon. member was aware, submission to the operation of vaccination did not necessarily imply successful vaccination. Beyond a few general statements by the same guardian, the Board had no information as to such complaints as those referred to in the second part of the question. The Board saw no reason for holding any inquiry in the matter.

West Riding Rivers Conservancy Bill.—The newly-formed Joint Committee for the rivers of the West Riding of Yorkshire are promoting a Bill which is threatened with considerable opposition. It is sought to obtain powers similar to those which the Irwell and Mersey Joint Committee secured two years ago, chief among them being the power of entry without notice upon sewage works and trade premises for the purpose of taking samples of the effluent. The county boroughs of Leeds, Bradford, Halifax, and Huddersfield, although identified with the promoters to the extent of nominating representatives to serve on the Joint Committee and bearing their quota of the expenses, are opposing the Bill. The principal ground of opposition seems to be the question of concurrent jurisdiction, it being claimed on the part of many of the local authorities that whatever new powers are granted to the Joint Committee ought to be conceded also to them. The Bill will very shortly come before a Committee of the House of Commons, of which Mr. Walter Long is chairman.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

THIRD EXAMINATION FOR M.B. AND B.C., Easter Term, 1894.—Part I *Surgery and Midwifery*: Examined and approved:

Bagshawe, Gonv. and Cai.; Barraclough, Joh.; J. E. Bates, Queens'; Bond, Non-Coll.; Borcherds, Gonv. and Cai.; Burrell, Gonv. and Cai.; Cotter, Trin.; Cowan, King's; E. C. Daniel, Emm.; H. J. Davis, Trin.; Gordon, King's; Grünbaum, Gonv. and Cai.; L. N. H. Harding, Selw.; Hedges, Sid. Suss.; T. P. King, Joh; Marks, Jes.; H. Marshall, Gonv. and Cai.; G. P. Mathew, Trin. H.; Milward, Cla.; Murphy, Gonv. and Cai.; Norris, Chr.; O. Paget, Gonv. and Cai.; Parry, Joh.; Ll. C. P. Phillips, Gonv. and Cai.; Ll. Powell, Trin.; A. S. Robinson, Emm.; W. S. Sheppard, Chr.; Stewart, Chr.; Taylor, Emm.; W. Thomas, Chr.; Walker, Pemb.; C. C. Webb, Cla.; Whichello, Sid. Suss.; White, Sid. Suss.; H. F. B. Williams, Gonv. and Cai.; Wingfield, Gonv. and Cai.; Wrangham, Emm.

DEGREE.—At a congregation on April 26th, the degree of Doctor of Medicine was conferred on Mr. W. S. Melsome, M.A., Fellow of Queens' College and Demonstrator of Anatomy in the University.

PHARMACOLOGY AND THE DOWNING PROFESSORSHIP OF MEDICINE.—Professor Bradbury has very generously offered to provide a stipend of £200 to £250 for an assistant who shall devote himself to research in pharmacology and to directing the special work of students in that subject. There is a laboratory in Downing College which the professor proposes to equip for the purpose, and thus initiate a school of scientific pharmacology. It was in a similar way that the departments of physiology and pathology had their rise, and the University is asked to second the professor's purpose only by giving a definite academic status to the assistant in pharmacology. Professor Bradbury himself will lecture on Therapeutics and the Practice of Medicine, will give clinical instruction at the hospital, and will arrange for the clinical examinations for medical degrees. This vigorous programme of work deserves grateful

recognition, for it implies that the chair is to be a considerable responsibility rather than a source of emolument to the Downing Professor. The Medical Board, in a report dated April 23rd, say that they "are of opinion that Professor Bradbury's proposals are worthy of acceptance by the University, and believe that if they be carried out they will prove of value in promoting within the University the development of a scientific and practical Department of Pharmacology and Therapeutics in connection with the Downing Professorship of Medicine. In particular the Board think that Professor Bradbury's liberal offer to provide an adequate stipend for an assistant, who should, under the professor, specially devote himself to research in pharmacology and to the training of students in this important branch of science, is highly opportune at the present time. The study of the physiological actions and therapeutic uses of remedies is required of candidates for the M.B. degree; but it has not hitherto been found practicable in Cambridge to give students more than an introduction to laboratory work in the subject, and no special facilities for pharmacological research have been provided in connection with the Medical School."

UNIVERSITY OF LONDON.

AT the ordinary annual meeting of Convocation, to be held on May 8th, the first business will be the reception of the report of the Annual Committee. With reference to the University library, it is announced that a second supplement to the catalogue will shortly be prepared, comprising the accessions made to the library since 1886, and in future years a list of all accessions will be printed at the end of each annual volume of the Minutes of the Senate.

At the B.Sc. Examination candidates for honours in Chemical, Physical, and Biological Science will be required to submit the record of their laboratory work, duly certified by the teacher, if any, whose course they may have attended, but so that neither the name of the candidate nor that of the teacher shall be made known to the examiners.

The vacancy in the Senate caused by the death of Lord Hannen will be filled up by a Crown appointment. The next vacancy that occurs will be filled up on the nomination of Convocation.

After the presentation of the above report, Dr. H. L. Snow will move a resolution in favour of an additional standing order limiting the time allotted to each speaker at the debates of Convocation.

Mr. Thiselton Dyer will move that Convocation expresses its general approval of the report of the Royal Commission. The expediency of passing such a resolution at the present time would appear to be more than doubtful, seeing that the whole question of the reconstitution of the University has been referred to a joint consultative committee of the Senate and Convocation.

Mr. B. Whitehead will move a resolution recognising the fact that the University of London ought to be a teaching University for London, on the lines of the Gresham Commissioners' report; but suggesting that, in justice to private students, a new University—to be called the University of England—should be established, which should continue the examining work hitherto performed by the existing University of London.

Mr. W. T. Lynn will move that the Government provide means for the appointment of a staff of professors and lecturers to give lectures on the higher subjects of study leading to original research, and providing for an observatory for instruction in astronomy, and suggesting that Chingford Obelisk, which is on the meridian of the Royal Observatory, Greenwich, would be a suitable site.

The extraordinary meeting, adjourned from Tuesday, April 10th, will take place at the close of the business of the ordinary general meeting. The business to be transacted includes all the resolutions which had not been discussed when the adjournment was adopted on April 10th.

UNIVERSITY OF EDINBURGH.

THE summer session in the University and Edinburgh Extra-academical Schools began on May 1st. On the same day the examinations in Clinical Medicine of the final for the Degrees of M.B. and C.M. began, while the Clinical Surgery examinations began on April 26th. The written examinations in Medicine, Surgery, Midwifery, Medical Jurisprudence, and Public Health take place on June 18th and 19th, while the *viva voce* examinations begin on June 20th.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

THE ordinary comitia of the College was held on Thursday, April 26th, at 5 o'clock, J. Russell Reynolds, M.D., F.R.S., President, in the chair.

The following gentlemen were admitted Members: Horatio George Adamson, M.D.; Edward Mansfield Brockbank, M.D.; Reginald Langdon Langdon-Down, M.B.; Charles Edwin Purslow, M.D.

Communications were received from the Home Office, the University of London, and the Royal College of Surgeons, relating to the report of the Commissioners on the new University.

A letter was read from a Member resigning his diploma, and reference was made to the circumstances under which this had been brought about.

A communication was received from the University of Virginia announcing that certain professorships were vacant, and giving details to render the posts especially attractive.

Upon the recommendation of the Examiners the Murchison Scholarships was awarded to Mr. G. F. Still, M.B.Camb., of Guy's Hospital.

The following Members, nominated by the Council, were elected to the Fellowship: Robert William Burnet, M.D.; Henry Davy, M.D.; Arthur Templer Davies, M.D.; Norman Dalton, M.D.; Henry Lewis Jones, M.D.; Judson Sykes Bury, M.D.; William Lee Dickinson, M.D.; John Wychenford Washbourn, M.D.; Herbert Pennell Hawkins, M.B.; Humphry Davy Rolleston, M.D.; Edwin Cooper Perry, M.D.

Reports were received from the Committee of Management, the Laboratories Committee, and the Library Committee; and quarterly reports from the Finance Committee and the Examiners for the Licence.

The thanks of the College were voted to the donors of books during the past quarter.

THE following gentlemen having conformed to the by-laws and regulations, and passed the required examinations, have been admitted Licentiates of the College:

Adams, E. G. B., St. Bartholomew's.
Addison, E. A., Middlesex.
Annis, E. G., St. Mary's and Guy's.
Armit, H. W., St. Bartholomew's.
Arnold, E. G. E., St. Thomas's.
Barker, T., St. Bartholomew's.
Barnes, A., Charing Cross.
Batchelor, E. H., Leeds.
Beachcroft, F. S., Cambridge and Middlesex.
*Benson, H. T., Guy's.
Buckley, W. H., Manchester.
Card, A. H., Guy's.
Coates, R., Leeds.
Collier, J. S., St. Mary's.
Collis, A. J., Camb. and Guy's.
Cookson, F. N., Middlesex.
Cooley, A. G., Sheffield, Newcastle, and Guy's.
Cowan, F., Guy's.
Davies, T. J., Liverpool.
De Kretser, E. W., Ceylon and Westminster.
Dick, J. L., Edinburgh.
Dick, M., University College.
Dickinson, R. L., London.
Du Heaume, H. T., St. Bartholomew's
Edmunds, P. J., University College.
Field, G. H., Cambridge and Guy's.
Firth, E. G., Leeds.
*Foulds, B. S., Westminster and Charing Cross.
Fox, G. R., St. Bartholomew's.
Fraser, F., St. Bartholomew's.
*Fry, J. M., Westminster and London.
Garrad, F. W., Camb. and St. Mary's.
Garrett, C. D., Westminster.
Giles, H. O'H., Adelaide and London.
Goldsmith, A. F., St. George's.
Goodhue, F. W. J., Cambridge and St. Thomas's.
Gordon, J. E., Glasgow and St. Bartholomew's.
Gordon, J., Melbourne and King's College.
Grace, J. J., St. Barth's. and Durham.
Grimsdale, H. B., Cambridge and St. George's.
Hardenberg, E. F. H., Guy's.
Hardman, R. S., Manchester.
*Hardy, H. L. P., London.
Harwood, F. F., University College.
Ince, A. G., Charing Cross.
Jones, E. B., Charing Cross.
Jones, F. S., London and Newcastle.
Kekewich, J., Middlesex.
Keller, H. L. A., St. Thomas's.
King, A. F. W., St. Thomas's.
Knapton, H. A. F., St. Mary's.
Larnder, H. G., St. Mary's.
Lee, W. E., St. Bartholomew's.
Lees, C. A., St. Mary's.
Legge, S. C., Birmingham.
Leonard, R. C., Bristol.
Llewellyn, T. R., University College.
Long, T. F., Middlesex.
McKay, J. G., Melbourne and King's College.
March, J. O., St. Bartholomew's.
Marris, W. A., Birmingham.
Marsh, E. H., Bristol.
Marshall, A., St. Thomas's.
Mathew, G. P., Camb. and St. Mary's.
Matthews, J. C. S., St. Mary's.
Miall, C. L'O., Bristol.
Miller, A., Guy's.
Miller, W. F., Guy's.
Mills, A. McF., Middlesex.
Mills, T. I., Guy's.
Miskin, L. J., St. Thomas's.
Morris, H., Westminster.
Morris, R. A., Durham.
Mould, G. E., St. Mary's.
Murphy, J. K., Camb. and St. Barth.'s.
Nariman, S. K., Bombay and Lond.
Nicholson, T. G., St. Thomas's.
Noble, J. W., Camb. & St. George's.
Parry, L. A., Guy's.
Paterson, M. S., St. Mary's.
Pead, J. H., Camb. and St. Barth.'s.
Phillips, R. E. G., Guy's.
Pinch, A. E. H., Bristol.
Poole, J. C., Birmingham.
Proctor, G. H., Univ. Col. and Bristl.
Pugh, W. T., Middlesex.
Reinhardt, A. H., London and Leeds.
Renshaw, H. C., Manchester.
Rigby, M. N. J., St. Bartholomew's.
Robertson, W. J., Charing Cross.
Roe, E. E. W., Guy's.
Romer, F., St. George's.
Rowbotham, E. J., Charing Cross.
Saunders, E. A., Oxford and St. Thomas's.
Simpson, F. C., London.
Slater, G. N. O., Sheffield and St. Bartholomew's.
Smith, R. L. B., Leeds.
Smith, T., London.
Spicer, H., Duhr. and St. Barth.'s
Sprawson, F. C., King's College.
Staniland, M. F., Bristol.
Starkey, T. A., University College.
Steele, W. K., Guy's.
Sterry, J., St. Bartholomew's.
Swenden, B. W., St. George's.
Tatham, A. L., Cambridge and St. George's.
Todd, C., Cambridge and St. Barth's.
*Tomlins, W. H., University College.
Tomlinson, G. H., Birmingham.
Tregaskis, E. P. R., London.
Underwood, F. L., University Coll.
Waithman, J. C., Cambridge and Middlesex.
Walker, F., Leeds.
Watts, A. M., University College.
White, C. P., Camb. and St. Barth.'s.
Wiggins, H., Charing Cross and London.
Wilmot, P. M. C., Guy's.
Woodhouse, W. M., St. George's.

* Candidates who have not presented themselves under the regulations of the Examining Board.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

THE following gentlemen passed the First Examination of the Board under the "Five Years" Regulations, namely:

Part IV. Elementary Anatomy.—H. C. Adams, Middlesex Hospital; J. Ainscow, Owens College, Manchester; R. B. Ainsworth, St. George's Hospital; K. B. Alexander, Guy's Hospital; R. H. Allport, St. Thomas's Hospital; G. W. Alltree, King's College, London; E. G. Andrew, Guy's Hospital; L. A. Baiss, St. Bartholomew's Hospital; W. L. Baker, Guy's Hospital; P. C. Barham, St. Bartholomew's Hospital; F. Barnes, Mason College, Birmingham; J. A. Barnes, St. Thomas's Hospital; E. H. Barrett, St. Mary's Hospital; R. M. Barron, Guy's Hospital; H. P. W. Barrow, Guy's Hospital; F. R. Barwell, University College, London; H. S. Barwell, St. George's Hospital; H. C. Batchelor, Guy's Hospital; F. Bawtree, St. Thomas's Hospital; F. S. G. Bayly, St. Thomas's Hospital; J. H. Beasley, Mason College, Birmingham; S. Beley, St. Thomas's Hospital; D. Belilious, St. Mary's Hospital; W. F. Bennett, St. Bartholomew's Hospital; V. C. Bensley, St. Mary's Hospital; V. T. C. Bent, Guy's Hospital; S. Bentley, Firth College, Sheffield; H. M. Berncastle, Guy's Hospital; F. L. Berry, St. Bartholomew's Hospital; T. P. Berry, Guy's Hospital; E. N. Berryman, St. Bartholomew's Hospital; E. F. B. Beyer, Owens College, Manchester; F. M. Bingham, St. Thomas's Hospital; S. O Bingham, St. Thomas's Hospital; I. McW. Bourke, St. George's Hospital; W. F. Boyle, Mason College, Birmingham; J. Bradley, Mason College, Birmingham; A. M. Brind, Mason College, Birmingham; J. C. Briscoe, King's College, London; F. R. Brooks, St. Bartholomew's Hospital;

C. H. S. Brown, St. Thomas's Hospital; E. K. Brown, London Hospital; E. W. Browne, St. Thomas's Hospital; J. Brownrigg, University College, Liverpool; R. Bryan-Haymes, St. Thomas's Hospital; C. P. Burd, St. Bartholomew's Hospital; M. C. Caley, St. Mary's Hospital; G. G. Campbell, St. Bartholomew's Hospital; A. E. Cardwell, London Hospital; A. H. B. Carr, Firth College, Sheffield; W. H. Cazaly, St. Bartholomew's Hospital; C. W. Chaplin, London Hospital; C. L. G. Chapman, Guy's Hospital; J. G. Churton, University College, Liverpool; G. H. Coltart, Westminster Hospital; W. H. Coltart, Mason College, Birmingham; S. W. R. Colyer, Charing Cross Hospital; E. P. Court, St. Bartholomew's Hospital; F. Cox, University College, Bristol; W. A. C. Cox, St. Mary's Hospital; V. J. Crawford, Guy's Hospital; A. J. McN. Cuddon-Fletcher, St. Bartholomew's Hospital; J. A. P. Cullen, London Hospital; R. I. Cuming, St. Thomas's Hospital; H. H. B. Cunningham, St. Mary's Hospital; A. W. S. Curtis, Yorkshire College, Leeds; J. Dalebrook, St. Bartholomew's Hospital; L. S. Daly, Middlesex Hospital; F. S. Dawe, St. Mary's Hospital; T. D. Dawson, St. Bartholomew's Hospital; F. N. Deakin, Mason College, Birmingham; L. J. E. De Pavillet, St. Mary's Hospital; G. Dewick, St. Thomas's Hospital; M. Dixon, University College, London; R. H. Dixon, St. Mary's Hospital; K. H. Douglas, London Hospital; R. E. Drake-Brockman, St. George's Hospital; L. C. Driscoll, Charing Cross Hospital; H. L. Driver, St. George's Hospital; E. P. H. Dudley, St. Bartholomew's Hospital; H. Durbridge, Guy's Hospital; J. E. Dupigny, Guy's Hospital; H. Dyer, Guy's Hospital; J. N. Dyson, Guy's Hospital; H. L. Eason, Guy's Hospital; G. M. Eastment, Middlesex Hospital; G. W. H. Edgelow, London Hospital; H. H. J. Edwards, St. Thomas's Hospital; R. F. Ellery, St. Bartholomew's Hospital; E. F. Ellis, University College, London; A. R. Evans, University College of South Wales, Cardiff; E. A. Evans, Guy's Hospital; H. D. Everington, St. Bartholomew's Hospital; H. A. T. Fairbank, Charing Cross Hospital; E. P. Farmer, Mason College, Birmingham; F. A. E. Fawcett, Yorkshire College, Leeds; F. R. Featherstone, Guy's Hospital; M. H. G. Fell, St. Bartholomew's Hospital; C. E. Fenn, King's College, London; W. Ferris, St. Mary's Hospital; H. W. Fisher, London Hospital; F. C. Forster, St. Mary's Hospital; W. C. Fowke, Guy's Hospital; H. E. C. Fox, Guy's Hospital; A. E Francis, University College, London; H. G. Franklin, London Hospital; L. O. Fuller, University College, London; W. H. Galloway, Yorkshire College, Leeds; A. S. Gardiner, St Mary's Hospital; J. Gardner, Firth College, Sheffield; G. E. Gask, St. Bartholomew's Hospital; E. A. Gates, St. Thomas's Hospital; H. B. Gibbins, St. Bartholomew's Hospital; E. G. Goddard, Guy's Hospital; C. M. Goodbody, St. Thomas's Hospital; A. G. Graham, St. Thomas's Hospital; E. S. Graham, St. Mary's Hospital; G. P. T. Groube, St. Mary's Hospital; H. V. Gwynn, St. Bartholomew's Hospital; F. A. Hadley, King's College, London; L. W. Hakensson, St. Mary's Hospital; R. C. B. Hall, Mason College, Birmingham; A. E. Hamerton, Yorkshire College, Leeds; G. H. L. Hammerton, Firth College, Sheffield; C. A. Hammond, St. Mary's Hospital; S. W. Hanbury, St. Thomas's Hospital; H. N. Harness, King's College, London; R. J. Harris, St. Thomas's Hospital; J. O. Harvey, Mason College, Birmingham; R. S. F. Hearn, St. Bartholomew's Hospital; W. F. Henshaw, Mason College, Birmingham; G. H. Herbert, London Hospital; C. J. Hewlett, Guy's Hospital; T. Hoban, St. Thomas's Hospital; W. G. Hopkins, St. Mary's Hospital; F. Horridge, St. Bartholomew's Hospital; J. Howells, Guy's Hospital; B. F. Howlett, St. Thomas's Hospital; G. A. Hutchinson, St. Mary's Hospital; H. W. Illius, St. Bartholomew's Hospital; J. W. Illius, St. Bartholomew's Hospital; W. Johnson, Guy's Hospital; T. Jones, Middlesex Hospital; W. E. Jones, Owens College, Manchester; A. R. Kay, St. Bartholomew's Hospital; E. B. Kirkconnel, Owens College, Manchester; A. H. B. Kirkman, Guy's Hospital; E. C. Lambert, Westminster Hospital; R. A. R. Lankester, University College, London; T. Leak, St. Mary's Hospital; R. C. Leaning, St. Mary's Hospital; C. Lee, Firth College, Sheffield; A. C. Lewis, Guy's Hospital; A. D. Lewis, Guy's Hospital; F. C. Lewis, St. Mary's Hospital; W. H. S. Liddell, St. Mary's Hospital; J. H. Lightfoot, St. Mary's Hospital. L. Lindop, St. Mary's Hospital; W. Lister, Yorkshire College, Leeds; H. E. D. Lloyd, St. George's Hospital; H. P. Lobb, St. Bartholomew's Hospital; W. C. Long, St. Bartholomew's Hospital; J. H. Longbotham, Yorkshire College, Leeds; E. A. Longhurst, Guy's Hospital; D. V. Lowndes, London Hospital; S. A. Lucas, St. Thomas's Hospital; J. F. M'Clean, St. Thomas's Hospital; L. H. M'Gavin, Guy's Hospital; A. M. Macintosh, St. Mary's Hospital; H. T. Mann, St. Mary's Hospital; O. Marriott, Guy's Hospital; F. J. H. Martin, Guy's Hospital; A. Martin-Leake, University College, London; S. Mason, St. Bartholomew's Hospital; C. J. Mayhew, King's College, London; R. Michell, Guy's Hospital; P. E. Middleton, Yorkshire College, Leeds; S. A. Millen, St. Bartholomew's Hospital; A. A. Miller, Guy's Hospital; N. Milner, Firth College, Sheffield; W. T. Milton, Guy's Hospital; R. F. Moorshead, University College, Bristol; F. M. Morris, London Hospital; I. L. Morris, St. Bartholomew's Hospital; I. J. W. Morris, St. Mary's Hospital; J. R. Morton, London Hospital; R. E. Mounsey, St. George's Hospital; R. R. Mowle, King's College, London; J. H. Mules, Guy's Hospital, W. Mussell-white, Guy's Hospital; H. B. G. Newham, St. Thomas's Hospital; C. H. Newton, St. Thomas's Hospital; E. E. Nicholl, St. Thomas's Hospital; R. Norman, London Hospital; H. L. Norris, St. Thomas's Hospital; A. W. Nourse, Guy's Hospital; J. A. O'Dowd, Mason College, Birmingham; L. E. Orton, Mason College, Birmingham; C. D. Outred, Guy's Hospital; R. F. N. Overton, St. Mary's Hospital; J. C. S. Oxley, St. Thomas's Hospital; T. D. Paddock, University College, Liverpool; H. R. Parkinson, Owens College, Manchester; A. R. C. Parsons, King's College, London; B. G. Patch, St. Thomas's Hospital; E. M. Pearse, University College, Bristol; R. W. Pearson, Owens College, Manchester; S. B. A. C. C. Peunington, Guy's Hospital; R. A. G. Penny, St. George's Hospital; N. Pern, St. Thomas's Hospital; J. Phillips, University College, Bristol; R. W. C. Pierce, St. Thomas's Hospital; A. R. G. Pocock, University College, London; F. Pope, Mason College, Birmingham; W. G. Porter, Charing Cross Hospital; J. E. Powell, Guy's Hospital; S. C. Pritchard, King's College, London; G. W. M. Pritchard, University College, London; D. W. Purkiss, St. Bartholomew's Hospital; R. Raines, St. Bartholomew's Hospital; A. Read, Guy's Hospital; A. Reid, Guy's Hospital; J. H Rhodes, St. Bartholomew's Hospital; T. B. Rhodes, Mason College, Birmingham; I. B. Richardson, Mason College, Birmingham; W. S. Richardson, Guy's Hospital; G. A. Roberts, King's College, London; W. E. B. Roberts, Mason College, Birmingham; E. F. Rose, St. Bartholomew's Hospital; C. M. Row, University College, London; E. R. Row, Guy's Hospital; W. T. Rowe, St. Bartholomew's Hospital; P. W. Rowland, St. Bartholomew's Hospital; S. A. Ruzzak, Guy's Hospital; D. Samuel, St. Mary's Hospital; B. S. Sanders, University College of South Wales, Cardiff; L. D. Saunders, King's College, London; A. H. M. Saward, Guy's Hospital; E. C. Sawdy, St. Mary's Hospital; H. H. Scott, St. Thomas's Hospital; W. S. Sheldon, University College, London; E. W. H. Shenton, Guy's Hospital; C. Shepherd, Guy's Hospital; E. F. W. Sheppard, St. Bartholomew's; L. S. Shoosmith, St. Mary's Hospital; H. D. Singer, St. Thomas's Hospital; G. V. Smallwood, Mason College, Birmingham; E. P. Smith, Middlesex Hospital; P. Southan, Mason College, Birmingham; G. H. Spencer, London Hospital; R. Storrs, St. Bartholomew's Hospital; C. H. Straton, St. Mary's Hospital; H. C. Sturdy, Guy's Hospital; J. A. Swindale, Mason College, Birmingham; P. Tatchell, St. Bartholomew's Hospital; J. G. C. Taunton, Mason College, Birmingham; G. P. Tayler, St. Bartholomew's Hospital; A. Tedman, University College, Bristol; W. H. M. Telling, Guy's Hospital; A. R. Thomas, Guy's Hospital; H. M. Thomas, University College, Bristol; C. B. Thomson, Guy's Hospital; J. H. Thursfield, St. Bartholomew's Hospital; B. H. H. Tripp, St. Mary's Hospital; W. J. P. Tripp, University College, Bristol; C. E. Turner, University College, London; P. Turner, Guy's Hospital; A. W. Tuxford, St. Mary's Hospital; H. E. Utting, Mason College, Birmingham; F. E. Walker, Guy's Hospital; T. M. Walker, Guy's Hospital; H. E Waller, St. Bartholomew's Hospital; A. J. Watson, St. Mary's Hospital; C. G. Watson, St. Bartholomew's Hospital; R. Watts, Firth College, Sheffield; H. G. Webster, University College, Liverpool; B. B. Westlake, Guy's Hospital; A. E. Whitehead, Firth College, Sheffield; G. W. S. Williams, St. Bartholomew's Hospital; P. G. S. Williams, University College, London; W. F. Willis, St. Mary's Hospital; A. H. Wilson, Mason College, Birmingham; G. D. Winston, St. Mary's Hospital; E. A. Wraith, Yorkshire College, Leeds; A. O. B. Wroughton, St. Bartholomew's Hospital; T. L. Wyndham, St. Bartholomew's Hospital; E. Young, London Hospital.

OBITUARY.

WILLIAM EDDOWES, M.R.C.S.Eng., L.S.A.

Last week we recorded the death of Mr. William Eddowes, which took place at his residence at Pontesbury on April 17th. The deceased gentleman was in his 83rd year, and had enjoyed unusually good health until about a week before the end, which was mercifully sudden, and shorn of all painful details.

Mr. Eddowes was educated at University College, London, obtained his diplomas in 1835, and commenced his career as surgeon at Pontesbury in 1837. He retired in 1877, after having practised nearly forty-one years, during which time he won the confidence and esteem of rich and poor alike by his unvarying kindness and devotion to his work. He was medical officer of the Pontesbury district of the Atcham Union from the time of its foundation until his retirement, and in September, 1877, the then Board of Guardians unanimously voted him a superannuation allowance "as a recognition of special efficiency, attention to the poor, and the lengthened service of forty-one years." Nor was this the only honour that fell to him, for in the same year a handsome testimonial was presented to him by his friends and neighbours as an indication of the uniform kindness and hospitality which he had exhibited during his residence among them. He was for many years coroner for the Ford District of Shropshire.

The funeral took place on April 20th at Little Drayton, Market Drayton, amidst many indications of sympathy.

The death is reported of Dr. Alexander, of Wick, Caithness, which took place on April 15th. Born in March, 1849, Dr. Alexander was the youngest son of the late Mr. W. Alexander, of Cromiequoy, Watten. He received his elementary education at the Watten Free School and the Watten Parish School. Proceeding to the Edinburgh University, he matriculated in 1871, and after the usual medical curriculum he graduated M.B. and C.M. in 1875. He took a distinguished place in the prize lists. The deceased had a large practice.

Dr. John Cowan, of Wishaw, was found dead in his bed on April 20th. For some time back he had been troubled with insomnia, and had frequently taken opiates to induce sleep. On retiring to rest about midnight on April 19th, he is supposed to have taken an overdose. The deceased took the M.B., C.M.Edin. degree in 1879.

M. Cusco, who died a few days ago, was one of the leading surgeons of Paris. He was born in 1819, became *interne* in 1843, and hospital surgeon in 1848. He organised courses of practical instruction in ophthalmology at the Salpêtrière in 1857, and it was to his initiative that the establishment of the Chair of Clinical Ophthalmology in the Paris Faculty was due. To his efforts was also largely due the foundation of the Chair of History of Medicine in the same Faculty. The endowment for the latter was supplied by his friend M. Salomon de Champotran, who was anxious to see M. Cusco appointed to it, but the latter declined in favour of Daremberg. M. Cusco displayed considerable ingenuity in the invention of surgical instruments; the best known of these is probably his speculum. He was the author of *Leçons sur le Syphilis professées en 1862 à l'Hôpital du Midi*, and of papers on lesions of the larynx in secondary syphilis, anteflexion and retroflexion of the uterus, etc. M. Cusco had a highly cultivated taste for art, and was the author of a comic opera, "Les Filles du Doge," which was played some twelve years ago at the Salle Dupré.

Dr. Allan Douglas, of Warrenpoint, well-known in the co. Down, died recently from inflammation of the lungs. The deceased was in his 60th year, and is sincerely regretted by a large circle of friends, who mourn his loss.

We regret to have to report the death of Mr. Robert Lunan, L.R.C.S.Edin., of Blairgowrie. The deceased was a son of the parish minister of Kinnettles, and took the diploma of L.R.C.S.Edin. in 1835. In 1891 he was presented with an illuminated address and costly dinner service at a cake and wine banquet held in the Queen's Hotel, Blairgowrie. The tureen of the dinner service bore the following inscription: "Presented to Dr. Robert Lunan, Blairgowrie, by the public as a token of the universal esteem in which he is held, and in grateful recognition of his valuable professional services to the poor during the last fifty-five years. Blairgowrie, 1891."

Deaths in the Profession Abroad.—Among the members of the medical profession in foreign countries who have recently passed away are Dr. José Marin Lopes Silva Leite, formerly Director of the Military Hospital at Lisbon; Dr. Lescarbault, a French physician, well known for his researches in astronomy, which were rewarded by the discovery of a planet in 1859, aged 79; Dr. Paul Labarthe, of Paris, a well-known medical journalist, and author of a biographical work entitled *Nos Médecins Contemporains*, and of a Dictionary of Popular Medicine, aged 48; Dr. Szilagyi, Professor of Ophthalmology in the University of Klausenburg; Professor Neelsen, Chief Physician to the Dresden Municipal Hospital, aged 40; Dr. Felipe Santiago Paz, of Cartagena, Republic of Colombia, South America, prominent both as a practitioner and as a politician; Dr. Vicente A. Garcia, Professor of Forensic Medicide in the University of Bolivar, President of the Society of Medicine and Natural Science of Bolivar, and first editor of the *Gaceta Medica* of Cartagena; Dr. Wenzel Steffal, Professor of Descriptive Anatomy in the Czech University of Prague, aged 53; Dr. Josef Szabó, Professor of Mineralogy and Geology in the University of Buda-Pesth; Dr. Corydon L. Ford, for forty years Professor of Anatomy and Physiology in the University of Michigan, aged 81; Dr. Felix Aramendia y Bolea, Professor of Clinical Medicine in the University of Madrid; Dr. Alexander Schmidt, for nearly thirty years Professor of Physiology in the University of Dorpat; Dr. Nilus Ssokoloff, Professor of Special Pathology and Therapeutics in the Military Medical Academy of St. Petersburg, and editor of the *Bolnitschnaia Gaseta*, aged 48; and Dr. Georg Joseph Agatz, author of the *Atlas of Surgery*, which forms part of Pitha and Bil'roth's well-known work.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE REGISTRAR-GENERAL'S QUARTERLY RETURN.

The Registrar-General has just issued his return relating to the births and deaths registered in England and Wales during the first or winter quarter of this year, and to the marriages during the three months ending December last. The marriage-rate was equal to 16.3 per 1,000 of the population, and was lower than in the corresponding period of any year on record.

The births registered in England and Wales during the three months ending March last numbered 228,808, equal to a proportion of 30.9 per 1,000 of the population, estimated by the Registrar-General to be rather more than thirty millions of persons. This rate was, with two exceptions, the lowest on record, and was 1.4 per 1,000 below the mean birth-rate in the corresponding quarters of the preceding ten years. The birth-rates in the several counties during the quarter under notice ranged from 25.5 in Sussex, 25.7 in Rutlandshire, and 25.8 in Oxfordshire to 34.3 in South Wales, 35.4 in Durham and in Monmouthshire, and 36.8 in Staffordshire. In thirty-three of the largest English towns the birth-rate last quarter averaged 32.0 per 1,000, and was 1.1 above the general English rate. In London the birth-rate was 31.4 per 1,000, while it averaged 32.4 in the thirty-two provincial towns, among which it ranged from 22.4 in Huddersfield, 24.4 in Halifax, and 25.3 in Brighton to 36.0 in Cardiff, 36.3 in West Ham, and 37.0 in Liverpool and in Sunderland.

The births registered in England and Wales during the quarter ending March last exceeded the deaths by 80,816; this represents the natural increase of the population during that period. It appears from returns issued by the Board of Trade that 32,168 emigrants embarked during last quarter from the various ports of the United Kingdom at which emigration officers are stationed. Of these, 17,426 were English, 2,183 Scotch, and 3,063 Irish. Compared with the mean proportions in the corresponding periods of recent years, the proportions of emigrants from each of the three divisions of the United Kingdom showed a very marked decline.

During the first quarter of this year the deaths of 147,992 persons were registered in England and Wales, equal to an annual rate of 20.0 per 1,000 of the estimated population, which was 1.7 per 1,000 below the mean rate in the corresponding periods of the preceding ten years. Among the urban population of the country, estimated at about twenty and a quarter millions of persons, the rate of mortality during the period under notice was 20.0 per 1,000; in the remaining and chiefly rural population of nearly ten millions it was 19.9 per 1,000. These rates were respectively 2.3 and 0.8 per 1,000 below the mean rates in the corresponding quarters of the preceding ten years. Among thirty-three of the largest English towns the mean death-rate was 21.0 per 1,000; in London the rate was 21.2 per 1,000, while it averaged 20.8 per 1,000 in the thirty-two provincial towns, and ranged from 16.1 in Croydon, 16.4 in Portsmouth, and 16.8 in Leicester to 23.5 in Salford, 25.9 in Norwich and in Liverpool, and 28.1 in Plymouth.

The 147,992 deaths registered in England and Wales during the three months ending March last included 4,100 which resulted from whooping-cough, 2,462 from diphtheria, 2,228 from measles, 1,417 from scarlet fever, 1,271 from "fever" (including typhus, enteric, and ill-defined forms of continued fever), 1,234 from diarrhœa, and 308 from small-pox. In all, 13,020 deaths resulted from these principal zymotic diseases, equal to an annual rate of 1.76 per 1,000, against an average rate of 1.83 in the corresponding quarters of the preceding ten years. The mortality from whooping-cough and diphtheria showed an excess, while that from each of the other principal zymotic diseases was below the average. Of the 308 fatal cases of small-pox 66 occurred in Birmingham, 22 in Bradford, 21 in West Ham, 19 in Oldham, 15 in Bristol, and 11 in London.

The rate of infant mortality, or the proportion of deaths under 1 year of age to registered births, was equal to 151 per 1,000, and slightly exceeded the mean rate in the corresponding periods of the preceding ten years. In London the rate of infant mortality was 145 per 1,000, while it averaged 161 in the thirty-two provincial towns, among which it ranged from 108 in Halifax, 125 in Portsmouth, and 128 in Bradford to 185 in Swansea, 193 in Bristol and in Burnley, and 235 in Plymouth.

The mean temperature of the air during last quarter at the Royal Observatory, Greenwich, was 41.4°, and was 2.5° above the average in the corresponding periods of 123 years; it was above the average during each month of the quarter—namely, to the extent of 1.5° in January, 2.7° in February, and 3.3° in March. The rainfall amounted to 5.40 inches, and was nearly half an inch above the average amount.

ZYMOTIC MORTALITY IN LONDON.

The accompanying diagram shows the prevalence of the principal zymotic diseases in London during each week of the first quarter of the current year. The fluctuations of each disease during the period under review, and its fatal prevalence as compared with that recorded in the corresponding weeks of recent years, can thus be readily seen.

Small-pox.—The deaths referred to small-pox, which had been 100, 49, and 19 in the preceding three quarters, further declined to 11 during the three months under notice, the average number in the corresponding periods of the preceding ten years, 1884-93, being 53. Of these 11 deaths, 7 were of persons belonging to London, of which 2 belonged to Lee, and 1 each to Paddington, Mile End Old Town, Poplar, Woolwich, and Plumstead sanitary districts. The number of small-pox patients under treatment in the Metropolitan Asylums Hospitals, which had been 71 and 52 at the end of the preceding two quarters, had declined to 56 at the end of March last; 169 new cases were admitted during last quarter, against 1,309, 377, and 289 in the preceding three quarters.

Measles.—The fatal cases of measles, which had been 349, 459, and 446 in the preceding three quarters, rose to 788 during the three months ending March last, and exceeded by 188 the corrected average number. Among the various sanitary districts of the metropolis the highest proportional

fatality of measles was recorded in Fulham, Westminster, Hackney, St. George-in-the-East, Limehouse, Mile End Old Town, St. Saviour Southwark, St. George Southwark, and Rotherhithe.

Scarlet Fever.—The deaths referred to this disease, which had increased from 335 to 467 in the preceding four quarters, declined to 276 during the three months under notice, but were 33 above the corrected average number in the corresponding periods of the preceding ten years. Among the various sanitary districts this disease showed the highest proportional fatality in London City, Limehouse, and Mile End Old Town. The number of scarlet fever patients in the Metropolitan Asylums Hospitals, which had been 2,653, 2,659, and 2,873 at the end of the preceding three quarters, had declined to 2,070 at the end of March. The number of cases admitted into these hospitals, which had increased from 2,725 to 4,308 in the preceding four quarters, declined to 2,800 during the three months ending March last.

Diphtheria.—The fatal cases of diphtheria in London, which had steadily increased from 328 to 1,089 in the preceding eight quarters, declined to 728 during the three months under notice, but were more than double the corrected average. Among the various sanitary districts diphtheria caused the highest proportional fatality in Fulham, Holborn, Bethnal Green, St. George-in-the-East, Mile End Old Town, Poplar, Greenwich, and Lee. The cases of diphtheria admitted into the Metropolitan Asylums Hospitals, which had been 1,841 and 821 in the preceding two quarters, rose again to 839 last quarter, and 307 remained under treatment at the end of March last.

Whooping Cough.—The deaths referred to this disease, which had been 619 and 588 in the preceding two quarters, rose again to 932 last quarter, but were 93 below the corrected average number. The highest proportional fatality of whooping-cough was recorded in Hammersmith, St. Giles, Strand, Shoreditch, Whitechapel, St. George-in-the-East, Newington, Bermondsey, Greenwich, and Plumstead sanitary areas.

Fever.—Under this heading are included deaths from typhus, enteric fever, and simple ill-defined forms of fever. The deaths referred to these different forms of "fever," which had increased from 105 to 273 in the preceding four quarters, declined to 145 during the three months under notice, and were 7 below the corrected average. Of these 145 deaths from "fever," 1 was certified as typhus, 139 as enteric fever, and 5 as simple and ill-defined fevers. There was no marked excess of "fever" mortality last quarter in any of the sanitary districts. The Metropolitan Asylums Hospitals contained 92 enteric fever patients at the end of March last, against 104 and 103 at the end of the preceding two quarters; the new cases admitted into these hospitals, which had been 230 in each of the preceding two quarters, declined to 169 during the three months ending March last.

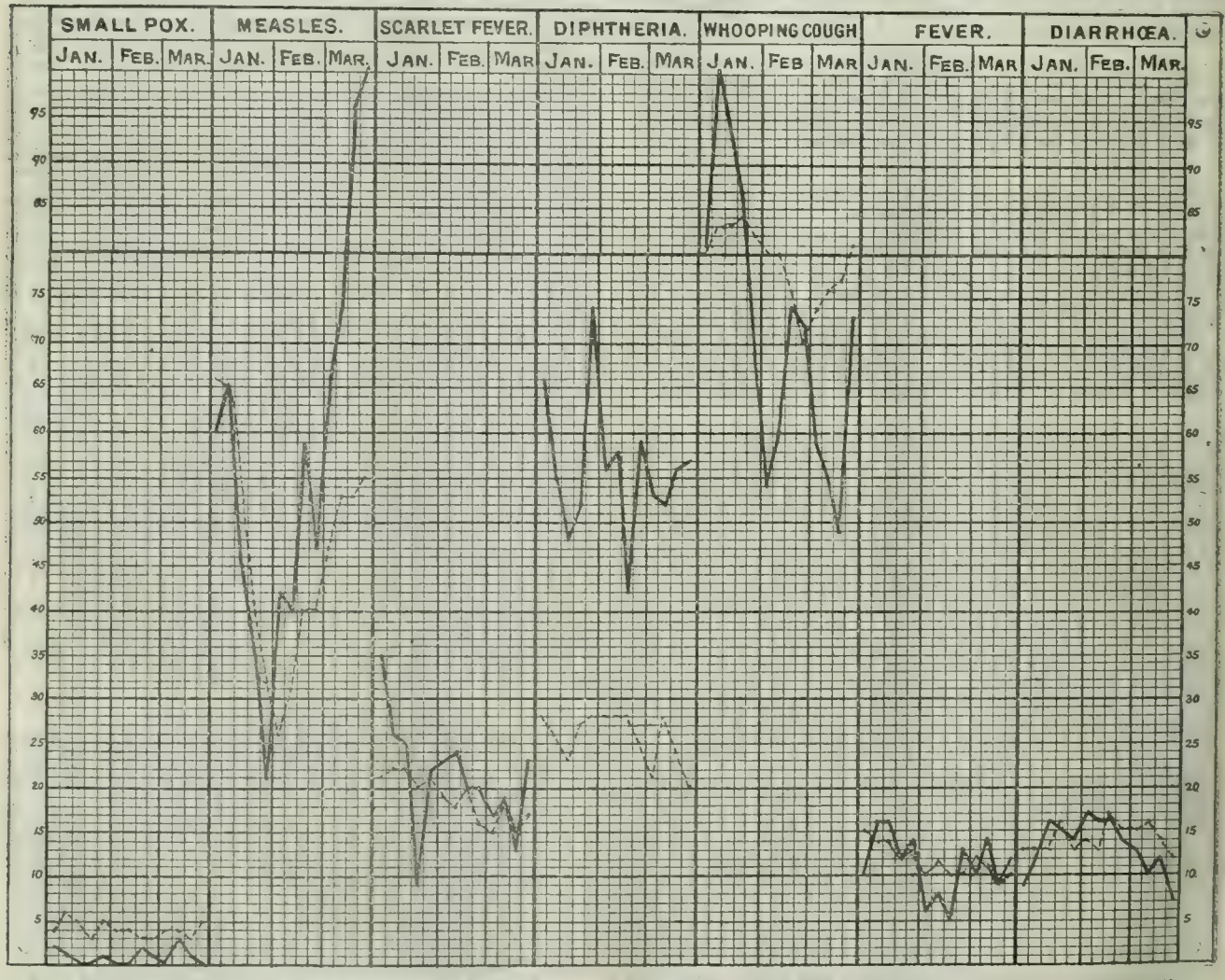
Diarrhœa.—The 171 fatal cases of diarrhœa recorded in London during last quarter were slightly below the corrected average number.

In conclusion it may be stated that the 3,051 deaths referred to the principal zymotic diseases in London during the first quarter of this year were 462, or nearly 18 per cent., above the corrected average number in the corresponding periods of the preceding ten years 1884-93; this excess was mainly due to the epidemic prevalence of diphtheria. Among the various sanitary districts the lowest zymotic death-rates were recorded in Chelsea, St. George Hanover Square, Hampstead, Stoke Newington, London City, Wandsworth, and Camberwell; the highest rates in Fulham, Strand, Bethnal Green, St. George-in-the-East, Limehouse, Mile End Old Town, Newington, and St. Olave Southwark.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns, including London, 6,085 births and 3,665 deaths were registered during the week ending Saturday, April 28th. The annual rate of mortality in these towns, which had declined from 20.0 to 18.2 per 1,000 in the preceding four weeks, rose again to 18.3 last week. The rates in the several towns ranged from 10.2

Deaths from Zymotic Diseases in London during the First Quarter of 1894.



Note.—The black lines show the *recorded* number of deaths from each disease during each week of the quarter. The dotted lines show the *average* number of deaths in the corresponding week of the preceding ten years 1884-93.

in Croydon and 11.0 in Portsmouth, to 25.1 in Wolverhampton, 25.6 in Liverpool, and 25.9 in Oldham. In the thirty-two provincial towns the mean death-rate was 18.1 per 1,000, and was 0.4 below the rate recorded in London, which was 18.5 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.8 per 1,000; in London the rate was equal to 3.8, while it averaged 2.0 per 1,000 in the thirty-two provincial towns, and was highest in Burnley, Birmingham, and Wolverhampton. Measles caused a death-rate of 1.6 in London, 2.2 in Birmingham, and 4.9 in Wolverhampton; scarlet fever of 2.2 in Burnley; and whooping-cough of 1.2 in Liverpool and in Sheffield. The 77 deaths from diphtheria included 63 in London, 3 in Birmingham, 2 in Burnley and 2 in Sheffield. Nine fatal cases of small-pox were registered in Birmingham, 6 in London, and 3 in Portsmouth, but not one in any other of the thirty-three large towns. There were 151 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, April 28th, against 95, 102, and 148 at the end of the preceding three weeks; 47 new cases were admitted during the week, against 26, 31, and 59 in the preceding three weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,258, against 2,109, 2,128, and 2,172 at the end of the preceding three weeks: 296 new cases were admitted during the week, against 261 and 260 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday last, April 28th, 930 births and 542 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had declined from 21.2 to 17.5 per 1,000 in the preceding three weeks, rose again to 19.0 last week, and exceeded by 0.7 per 1,000 the mean rate during the same period in the large English towns. Among these Scotch towns the death-rates ranged from 17.2 in Perth to 21.4 in Paisley. The zymotic death-rate in these towns averaged 2.6 per 1,000, the highest rates being recorded in Paisley and Aberdeen. The 245 deaths registered in Glasgow included 11 from whooping-cough, 10 from "fever," 6 from diphtheria, and 1 from small-pox. Five fatal cases of diphtheria were recorded in Edinburgh, and 2 of small-pox in Leith.

SMALL-POX AT WEST HAM.

THE management of infectious disease in the suburban districts is rapidly becoming a matter of great moment to the inhabitants of London. Every morning vast multitudes of people converge on London as a centre, streaming in by rail and tram from every quarter. During the working day they are crowded together in offices, warehouses, and factories, and in the evening return again to their suburban homes. As regards the dissemination of infection, then, many parts of the metropolis are much more intimately concerned with the health of districts outside its area than with that of others within its bounds.

During the past quarter eleven deaths from small-pox were reported in London, but during the same time there were 21 deaths from that cause in West Ham, where there is an enormous suburb containing a larger population than either Bristol, Newcastle, or Nottingham, lying closely attached to London, bound up with it in its daily life, and yet totally detached and isolated from it in its sanitary administration. Not only does it form a separate sanitary area, but that area is in a county outside the boundaries of the London County Council and the limits of the Metropolitan Asylums Board. Under these circumstances it becomes a matter of grave concern to London that in a district containing 238,000 inhabitants, which is geographically part of itself, and is only separated from it by that impalpable thing, a county boundary, small-pox should be thirty-six times more prevalent than it is in the metropolitan area. After the enormous pains London has taken to ensure the immediate removal of small-pox cases to a safe distance, it is most discouraging to find ourselves kept in perpetual danger by its uncontrolled prevalence in suburban districts. We are very glad to hear, however, that the town council of West Ham has now succeeded in making arrangements with the Asylums Board to have all cases removed to Long Reach, and treated there under contract at a fixed sum per head. This is what ought to be done by all the other districts in the suburban ring, for as regards infection, a town and its suburbs are one. London has already grown beyond the limits of its county, and is surrounded by towns which touch it on almost every side, and are in many cases scandalously deficient in hospital provision. If it is too large an undertaking to bring them into the county, they should at any rate be urged to unite with each other where necessary for hospital purposes, as regards diseases other than small-pox, and to avail themselves of the splendid provision made for that disease by the Asylums Board, so far as cases are removable.

IV.—SMALL-POX AND VACCINATION.

HALIFAX SMALL-POX HOSPITAL.

IN presenting his annual report for 1893 to the Halifax Town Council, Dr. Ainley contents himself with a very brief notice of the small-pox of that year as it affected the borough. His reason is, of course, that he has already made a full report on the epidemic, and deems it unnecessary to reproduce the facts thus laid before his authority. But one thing which he does say in reference to the epidemic is of great interest, namely, that in proportion to population the incidence of small-pox was much heavier on the ward containing the hospital than on any other. The data work out as follows:—For the whole borough the attack-rate was 38 per 10,000 of population, whilst in the Southowram Ward, which contains the hospital, the rate was 153 per 10,000; and in the rest of the borough only 28 per 10,000. This excess around the hospital will be attributed by some to the presence of the hospital." We expect that Dr. Coupland will have some very interesting statistics to present to the Royal Commission on Vaccination on this point in regard of Halifax.

SMALL-POX AND VACCINATION AT DARTFORD IN 1893.

DR. HAMILTON has some very interesting data in his annual report to the Dartford Local Board for 1893 concerning small-pox as it affected the district during the year. Thus he tells us that 165 deaths by the disease occurred on board the hospital ships at Long Reach in the year, these ships being in the Dartford district. The deaths arrange themselves as follows:

Good marks of vaccination	4 cases	...	2.4 per cent.
Vaccinated in infancy	14 ,,	...	8.5 ,,
Previous small-pox attack	1 ,,	...	0.6 ,,
Badly vaccinated	13 ,,	...	7.9 ,,
Not vaccinated	112 ,,	...	68.0 ,,
Vaccination not mentioned	21 ,,	...	12.8 ,,

The difference as between 68.0 in the unvaccinated and 2.4 in the well vaccinated is most striking, and needs no comment from us.

SMALL-POX NEAR KEIGHLEY.

UNVACCINATED Keighley is not yet free from danger of importation of small-pox. A number of cases have occurred in the suburb of Ingrow, which is practically part of Keighley although in a different sanitary district. Fortunately a suitable hospital is now available, and so far each case as it occurred has been removed to safe quarters. To that extent the Keighley antivaccination fanatics seem to have regained their common sense.

THAMES AMBULANCE STEAMBOAT.

A NEW paddle steamboat for the river ambulance service of the Metropolitan Asylums Board for the purpose of conveying patients from the metropolitan district to the hospital ships at Long Reach, was launched from the shipbuilding yard on April 21st. Immediately before the machinery, space isolation accommodation is provided for the conveyance of visitors to the convalescent patients at Long Reach.

RENEWED OUTBREAK OF SMALLPOX AT LEITH.

FIFTEEN new cases of smallpox were reported to the authorities last week, and as even yet no proper system of notification exists other cases may exist unreported. For a good many weeks previously not more than from 2 to 5 fresh cases were reported in any one week. During last week 2 deaths were reported from the same disease.

In Edinburgh 3 fresh cases were notified. The number of cases in hospital now number 19 as against 27 ten days ago. Only 5 deaths from small-pox have occurred in Edinburgh during the present year.

FEE FOR PAUPER LUNACY CERTIFICATES.

DR. T. P. BEDDOES (Aberystwith) writes: A "Member B.M.A." wrote on April 21st that he had not recovered a fee because twelve months had elapsed since the order was made. It is most questionable if lapse of time has anything to do with the matter. But the inquirer refers back to the BRITISH MEDICAL JOURNAL of November 18th, 1893, where he says "the magistrate had declined to make an order for payment." If the order for payment has been obtained a summons in the county court should be taken out. If this order has not been obtained one of the magistrates who have power to make an order should be asked to make one. If he refuses all the others should be asked in turn; if they refuse proceed to Quarter Sessions, and if an order is not then obtained go to the Court of Queen Bench. Should the Member care to communicate with me I shall be happy to give any further information.

HOSPITAL AND DISPENSARY MANAGEMENT.

PROVIDENT DISPENSARIES.

THE annual meeting of the Leicester Provident Dispensary is not perhaps an event to which we should be expected to refer. It is, however, one which is worthy of some attention, from the fact that this dispensary is looked on by many as an extremely well managed institution, and a type of the form of co-operation by which the working man of the future will have to supply himself with medical attendance, unless, indeed the advance of Socialism should in the meantime make all such petty providence unnecessary.

The first thing that strikes one is that out of a population of 184,000, including men, women, and children, Leicester should be able to produce 38,142 members of a provident dispensary. The next is the large amount of work which has been done. It is stated that 258,582 prescriptions were dispensed in the course of the year, and that during the time of certain epidemics as many as 1,500 prescriptions were dispensed in a single day. For the medical work, the visiting and consulting, implied by this enormous amount of physic, the medical staff divided among them £3,433 8s. 5d., in addition to £649 17s. 3d. for midwifery and dentistry; the amount received by the doctors per member per year being 1s. 9.6d. This does not on the face of it look like a fair remuneration, but in a working class community it may be all that can be obtained, and of course the doctors bear their share of the charity of the institution. The whole question which the success of this and similar dispensaries raises hinges on how far they confine their operations to the classes which, without them, would fall on the rates, throng the out-patient departments of the hospitals, or drift into the hands of chemists. So far as they are charities, organised to help poor people to help themselves, to save them from the Poor Law and from more open forms of eleemosynary help, they do a good work; directly they accept as members those who can afford proper fees, they do a bad one. The Leicester Dispensary, however little its well-to-do members may like the word, is clearly a charity, founded by subscriptions, partly maintained by them, and at its annual meeting publicly, by the voice of the chairman, asking for more. Does it then restrict its operations to those who are proper objects for the exercise of its charity? That is the whole question so far as ethics are concerned.

The Leamington Provident Dispensary, whose annual meeting is reported in the *Midland Daily Telegraph*, April 2nd, is still more largely a charity, for here the difference between the expenses and the donations of the governors is treated as a "deficiency to be met from the payments

of provident members." Such charities are perfectly defensible, and under strict regulations may do very good work. The difficulty is to maintain the due stringency in their rules, and still more in the application of those rules. The ideal of the provident dispensary movement is an institution supported solely by the contributions of the patients, and providing a "living wage" for the doctors.

HANWELL ASYLUM IMPROVEMENTS.

SOME £39,000 has to be spent on improving Hanwell Asylum, which, although it bears favourable comparison with its sister asylum as to death and recovery rates, is admittedly very defective in structural arrangements. Its ventilation and lighting are not good, and its basement dormitories undesirable. A large part of this institution has been in existence since 1831, but the improvements now contemplated will bring this old asylum well into line with those of more recent date, and will also increase the total accommodation for patients from 1,900 to 2,000 beds. This increase in beds, although important, having regard to the want of asylum accommodation in London, should be the last extension of accommodation at this asylum. The new scheme will abolish single rooms on one side of the wards where they now exist on both sides, and the space thus gained will be converted into day-room accommodation, at the same time improving the ventilation. Dormitories will be built off the day rooms for the patients so displaced, and wherever possible additional light will be afforded by removal of internal walls and substitution of glass and iron. Annexes to the day rooms will be built to contain the most modern sanitary lavatory and watercloset accommodation, and ward scullieries will also be provided. Extensions and additional floors will be built to accommodate the patients displaced by the abolition of the dormitories in the basement. The work will be carried out by the London County Council's own staff of workmen, under the direction of the asylum engineer.

EDINBURGH ROYAL INFIRMARY AND SMALL-POX, ETC.

THE Committee appointed to inquire into the circumstances connected with the case of a man from Leith, who came (suffering from small-pox) seeking admission to the Royal Infirmary, have handed in their report, which concludes with the following recommendations in dealing with cases of infectious diseases which may, in the future, present themselves at the infirmary. In the event of any case of small-pox, diphtheria, scarlatina, or measles coming to the infirmary for advice, the following shall be the order of procedure: (1) The medical officer shall at once report the case to the superintendent. (2) The medical officer shall, if the case be one of small-pox, immediately withdraw all the other patients from the waiting room. (3) The medical officer shall, if the case be one of the other infectious diseases mentioned, cause the patient to be removed to another room immediately after the diagnosis has been made. (4) The superintendent shall communicate with the proper sanitary authority, and request that the appropriate conveyance be forthwith sent to the infirmary for the patient. (5) The superintendent shall, so soon as the patient has been removed, cause the waiting room to be thoroughly disinfected and closed for twelve hours should the case be one of small-pox. (6) The superintendent shall, when the case is one of the other infectious diseases mentioned, cause all the doors and windows of the room to which the patient has been removed to be set open for twelve hours before it is again used, in order to secure thorough purification of the air.

The Public Health Committee of the Town Council have drawn the attention of the managers to certain ambiguities in the recommendations of this report, and *inter alia* suggest that the medical officer in charge of the waiting room should in all cases of infectious disease, without the intervention of the superintendent, at once telephone to the Public Health Department, Police Chambers, and request the removal of the patient. Further, they suggest that the term "proper" sanitary authority is misleading, since there is only one. After discussion the matter was again remitted to the Committee of Medical Managers to bring up a report.

THE LUNATIC ASYLUM FOR THE CITY AND COUNTY OF BRISTOL.

THE average number of patients resident in the asylum during the year 1893 was 270 males and 339 females—total, 609; and there remained on the books on December 31st 278 males and 338 females; total, 616. The total number of cases admitted was 98 males and 84 females—total, 182. There were 70 cases discharged recovered and 79 died, giving a recovery rate of 38·46; while the death-rate was 12·97 for both sexes. Among the male patients the mortality was very high, reaching 15.18 per cent., calculated upon the average number resident, but this is accounted for by the fact that no fewer than 20 of the male deaths, all of which were verified *post mortem*, were due to general paralysis. With regard to causation Dr. Benham states that of 30 general paralytics admitted there was in 11 cases a history of drink, sexual excess in 6, drink and sexual excess combined in 4, in 2 there was a distinct history of syphilis, and 1 had suffered from sunstroke. There was one case of enteric fever for which no cause could be discovered. The Commissioners in Lunacy comment favourably upon the fact that although there were 112 epileptics, 8 actively suicidal cases, and 21 general paralytics in the asylum, only 1 man and 3 women were in bed at the time of the inspection.

BARNWOOD HOUSE HOSPITAL FOR THE INSANE, GLOUCESTER.

THIS institution has a good record for the year 1893, and the committee report that it has continued full during the year. Numerous alterations and additions to the building are in progress which will materially improve the usefulness of the hospital, while the purchase of a house and six acres of ground adjoining the estate will add greatly to the existing accommodation. Sixty-seven patients have benefited during the year by the charity of the hospital, 11 being maintained gratuitously and the remainder at sums less than their cost to the institution. The committee estimate that a sum of about £3,000 has been thus expended. Too much publicity cannot be given to good work done in this way, and it is gratifying to find the finances of the hospital are in a thoroughly healthy condition. Dr. Soutar speaks hopefully of the prospect of ultimate recovery of the patients admitted, 20 out of 33 being looked upon as likely to recover; 9 of these curable cases were admitted at very low rates of payment. They are gentlefolks of slender means who, were it not for this and similar institutions, would be unable to obtain during their illness the comforts to which they have been accustomed in their homes. Among the discharges the recovery rate is high, namely, 48.4 per cent. upon the admissions. Special mention is made of one case, which, after an eleven years' residence in the hospital, was sent home recovered. The percentage of deaths was but 4.4 upon the average number of patients resident.

MEDICAL NEWS.

H.R.H. THE DUKE OF CAMBRIDGE has consented to preside at the triennial festival dinner of the Charing Cross Hospital to be held at the Hôtel Métropole on May 19th.

THE sixty-sixth Congress of German Scientists and Medical Men will take place this year at Vienna towards the nd of September.

HUNTERIAN SOCIETY.—The adjourned discussion at the Hunterian Society on Diphtheria will be resumed on Wednesday next, May 9th, at 8 P.M. Mr. George Turner, Dr. Washbourn, Mr. Shadwell, and, it is hoped, Dr. Seaton, Dr. Thorne Thorne and others will speak.

HIS Highness Sir Takhtsingjee Jasvatsingjee, G.C.S.I., Maharajah of Bhownugger, who is always foremost in every good cause, whether in relief of suffering or the enlightenment of his subjects, has contributed the sum of Rs. 5,000 towards a Pasteur Institute for India.

SANITARY INSTITUTE CONGRESS AT LIVERPOOL.—Dr. Thomas Stevenson, scientific analyst to the Home Office, has consented to act as President of Section III., Chemistry, Meteorology, and Geology; and Dr. Edward Klein, F.R.S., has consented to act as President of Section I., Sanitary Science and Preventive Medicine, at the Sanitary Institute Congress at Liverpool.

PREVENTIVE VACCINATION IN HUNGARY.—At a recent meeting of the Paris Academy of Medicine, M. Nocard, professor at the Alfort Veterinary School, drew the attention of the Academy to an important work of Professor Hutra, of Buda-Pesth, on the epizootic maladies prevalent in Hungary; it contains an important chapter on preventive vaccination for charbon. In 1892 3,838 horses, 54,633 oxen, 268,310 sheep, and 462,310 swine were vaccinated in Hungary.

TETANUS ANTITOXIN.—Messrs. Allen and Hanburys (Plough Court, Lombard Street) inform us that Professor Tizzoni, of Bologna, has forwarded to them a supply of the tetanus antitoxin which has been used by him in the treatment of tetanus with an amount of success which is at least encouraging. Messrs. Allen and Hanburys will in future be prepared to supply this new remedy to the medical profession in this country.

POST-GRADUATE LECTURES.—The first of the course of twelve post-graduate lectures to be given at the Metropolitan Hospital (Kingsland Road, N.E.) by the medical and surgical staff was delivered on Wednesday last by Mr. Goodsall, on diseases of the rectum. The remaining lectures will be given on subsequent Wednesdays during May, June, and July. The next lecture will be deliverd by Dr. Drysdale on phthisis pulmonalis a contagious and hereditary disease on May 9th. Full particulars can be obtained from Mr. Stephen Paget, F.R.C.S., 57, Wimpole Street. The fee for the course is one guinea.

SKILLED NURSING FOR THE POOR.—The eighteenth annual report of the Metropolitan and National Nursing Association was presented at the meeting held at Grosvenor House on April 28th. The report stated that the demand for trained district nursing has greatly increased of late years, but the supply of suitable candidates for training in district work did not keep pace with the demand. The number of cases nursed during last year shows a considerable increase on former years, being 1,389, as against 968 in 1892 and 761 in 1891. There were, in addition, 361 cases attended of children going to Board schools and suffering from sore eyes, burns, scalds, etc.

Resident Posts at the General Infirmary at Leeds.—The Resident Surgical Officer, Mr. W. H. Thompson, F.R.C.S., and the Resident Medical Officer, Mr. F. A. Roberts, M.B., have been reappointed to their posts, and the following new appointments have been made: Mr. E. S. Steward, M.R.C.S., L.R.C.P., House-Physician; and Mr. Douglas Seaton, M.B. Vict., and Mr. L. B. Todd, M.R.C.S., L.R.C.P., House-Surgeons. Mr. F. Walker Resident Medical Officer to the Ida Hospital. Mr. A. L. Whitehead, M.B.Lond., was re-elected as Resident Ophthalmic Officer.

Presentation.—On the occasion of his retirement from the post of medical officer of health for the borough of Eastbourne, Dr. Reginald Dudfield, the new Medical Officer of Health for Paddington, was presented by the Town Council with a handsomely illuminated address expressive of the regret with which the Council had received his resignation. The presentation, which was made by the Mayor, took place at the Town Hall. At the same time Dr. Dudfield was the recipient of a handsome polished oak and gilt mounted writing case, blotting pad, and paper knife, presented on behalf of the officers of the corporation by the Town Clerk.

The Wardroper Memorial.—The memorial which the governors of St. Thomas's Hospital and others have erected in memory of the late Mrs. Sarah Elizabeth Wardroper, for thirty-three years matron of St. Thomas's Hospital, who died in December, 1890, in the 80th year of her age, was unveiled at St. Thomas's Hospital chapel on April 30th by the Archbishop of Canterbury. The memorial has taken the form of a beautiful panel, modelled in terra cotta by Mr. Tinworth. The subject is the "Good Samaritan," at the moment when the innkeeper is receiving the Samaritan and the sick, the innkeeper being supposed to typify the hospital.

Michael Servetus.—The medical students of the University of Madrid are organising a memorial function in honour of Michael Servetus on the occasion of the 341st anniversary of his death, which falls on October 27th. The celebrated philosopher and anatomist, for whom the honour of having discovered the circulation of the blood has been claimed on somewhat insufficient grounds, was born at Saragossa in 1509, and burnt as a heretic at Geneva by Calvin in 1553. Señor Castelar and Professors Letamendi and Calleja, of the Medical Faculty of the University of Madrid, are expected to be among the speakers at the proposed memorial festival.

Zoological Society.—A course of five lectures will be delivered in the lecture room in the Zoological Society's Gardens, Regent's Park, on Saturday, at 4 p.m., commencing Saturday, May 19th, by Mr. F. E. Beddard, M.A., F.R.S., Prosector to the Society, subject: Sketches in Geographical Distribution. The lectures will be illustrated by diagrams. As far as possible the specimens selected to illustrate the course will be animals now living in the Society's gardens. Fee for the course, including admission to the Gardens on the days of lecture, 5s. The course will be free to all Fellows of the Society. Tickets for the course may be obtained from Mr. F. E. Beddard, Zoological Society's Gardens, Regent's Park, N.W.

MEDICAL VACANCIES.

The following vacancies are announced:

CARDIFF UNION.—Assistant Medical Officer for the Workhouse. Salary, £100 per annum, with rations, apartments, attendance, and washing. Applications to Arthur J. Harris, Clerk, Queen's Chambers, Cardiff, by May 10th.

CARDIFF UNION.—Medical Officer for the Gabalva District. Salary, £30 per annum. No extra fees except lunacy. Applications to Arthur J. Harris, Clerk, by May 10th.

CHESTERFIELD AND NORTH DERBYSHIRE HOSPITAL AND DISPENSARY, Chesterfield.—Resident Junior House-Surgeon and Dispenser. Salary, £50 per annum, with board, apartments, and laundress. Applications to the Secretary by May 17th.

CHURCH STRETTON UNION.—Medical Practitioner and Public Vaccinator to the Workhouse and Infirmary. Salary, £10 per annum, and half a guinea for each case of ordinary midwifery, and half a crown for each successful primary vaccination. Applications to Sam Harley Kough, Clerk, Union Offices, Church Stretton, by May 10th.

COURCIES DISPENSARY DISTRICT, Ballinspittle, Ireland. Medical Officer. Salary, £100 per annum as Medical Officer, and £15 per annum as Medical Officer of Health. Applications to Mr. Patrick O'Connell, Honorary Secretary, Old Head, Ballinspittle, by May 15th.

DENTAL HOSPITAL OF LONDON AND LONDON SCHOOL OF DENTAL SURGERY, Leicester Square. Demonstrator. Honorarium, £50 per annum. Applications to Morton Smale, Dean, by May 14th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Two Assistant Anæsthetists. Applications to J. Francis Pink, Secretary, by May 14th.

DERBY ASYLUM, Mickleover.—*Locum Tenens* for two months and a-half, qualified and registered. Terms, £2 2s. weekly, with board, etc., and travelling expenses to asylum. Applications to the Medical Superintendent.

DURHAM COUNTY HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board and lodging. Appointment for two years. Applications to V. K. Cooper, Honorary Secretary, 16, South Bailey, Durham, by June 1st.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—House-Surgeon. Board and residence provided, no salary. Applications to Thomas Hayes, Secretary, by May 5th.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, £120 per annum, with furnished house, rent and taxes free; also coal, light, water, and cleaning, or, in lieu thereof, £20 per annum. Knowledge of Welsh desirable. Applications to W. T. Cole, Secretary, Board Room, Bagillt Street, Holywell, by May 15th.

FISHERTON ASYLUM.—Assistant Medical Officer, not more than 30 years of age and single. Salary, £100 per annum, with board, lodging, and washing. Applications to Dr. Finch, Salisbury.

GENERAL INFIRMARY, Leeds.—Pathological Curator. Honorarium, 20 guineas per annum. Applications to Mr. Littlewood, Secretary, by May 14th.

GORDON HOSPITAL FOR FISTULA, 276, Vauxhall Bridge Road, S.W.—Two Honorary Surgeons, must be F.R.C.S.Eng. Applications to Mr. St. Leger Bunnett, Secretary, by May 21st.

HAMPSTEAD HOSPITAL, Parliament Hill Road, N.W.—Dental Surgeon. Applications to the Secretary by May 7th.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, Bloomsbury, W.C.—House-Physician and House-Surgeon, unmarried. Appointments for six months. Salary, in each case, £20, with board and residence in the hospital. Applications to the Secretary by May 25th.

HUDDERSFIELD INFIRMARY.—Senior House-Surgeon and Junior House-Surgeon. Salaries, £80 and £50 respectively, with board, lodging, and washing. Applications to the Secretary by May 7th.

KENT COUNTY ASYLUM, Chartham, near Canterbury.—Junior Assistant Medical Officer, unmarried. Salary, £125 per annum, with furnished apartments, board, and attendance. Applications to Allen Fielding, Clerk to the Committee of Visitors, Solicitor, by May 14th.

LEWISHAM UNION.—Medical Superintendent of the Infirmary; doubly qualified. Salary, £275 per annum, with unfurnished house, coals, gas, water, and washing. He will ultimately be appointed Workhouse Medical Officer, at an additional salary of £75 per annum. Applications, on forms to be obtained at the Union Offices, to H. C. Mott, Clerk to the Guardians, Union Offices, 286, High Street, Lewisham, S.E., by May 10th.

LONDON HOSPITAL, Whitechapel, E.—Medical Registrar. Salary, £100 per annum. Applications to the House Governor by May 5th.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT AND CHEST, Bowdon, Cheshire.—Resident Medical Officer. Salary, £60 per annum, with board, apartments, and washing. Applications to C. W. Hunt, Secretary, by May 15th.

NEWTON ABBOT UNION.—Medical Officer for the Workhouse. Salary, £50 per annum. Applications to John Alsop, clerk, Union Offices, East Street, Newton Abbot, by May 15th.

NOTTINGHAM BOROUGH ASYLUM.—Second Assistant Medical Officer unmarried. Salary, £100 per annum, with board, apartments and washing. Applications to the Medical Superintendent by May 21st.

PARISH OF STOKE-UPON-TRENT.—A Visiting Medical Officer and a Resident Medical Officer of the Workhouse. Salary for the first will be 50 guineas per annum, and for the latter £120 per annum, with board, washing, and furnished apartments in the hospital. The Visiting Officer will be required to reside within one mile of the Workhouse. Applications to C. Daniel, Clerk to the Guardians, Poor-law Offices, Stoke-upon-Trent, by May 11th.

VESTRY OF ST. MARGARET AND ST. JOHN, Westminster.—Medical Officer; not less than 25, or more than 45, years of age. Salary, £250 per annum. Applications, 'marked on the envelope "Medical Officer," to be delivered at the Town Hall, Westminster, S.W., by May 21st.

WANDSWORTH AND CLAPHAM UNION.—Medical Officer for No. 2 District of the Parish of Battersea. Salary, £100 per annum, with fees for surgical operations. The successful candidate will be appointed also Public Vaccinator. Applications, on forms to be obtained at the Clerk's office, to Alfred N. Henderson, Clerk to the Guardians, Union Offices, St. John's Hill, S.W., by May 9th.

WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.—Surgical Registrar. Must be F. or M.R.C.S.Eng. Appointment for twelve months. Salary, £40 per annum. Applications to Sidney M. Quennell, Secretary, by May 22nd.

YORK DISPENSARY.—Resident Medical Officer, unmarried. Salary, £150 per annum, with furnished apartments, coal, and gas. Applications to Mr. W. Draper, De Grey House, York, by May 15th.

MEDICAL APPOINTMENTS.

Beamish, Benjamin, L.R.C.I., L.K.Q.C.P.I., appointed Surgeon to the Newry Fever Hospital, *vice* B. S. Booth, M.R.C.S.

Beazeley, T. W., M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Surgeon to the Queen's Hospital, Birmingham.

Berlyn, J. A., M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Physician to the Queen's Hospital, Birmingham.

BLISS, Ernest William, M.R.C.S., L.R.C.P., appointed Resident Surgeon to the Birmingham General Dispensary.

BROWN, Robert C., M.B., appointed Medical Officer of the Wooldale District of the Huddersfield Union.

BRYETT, Lewis T. F., M.B., L.R.C.P.Lond., D.P.H., M.R.C.S., appointed Medical Officer of Health for the Parish of Shoreditch.

COOMBE, Russell, M.A.Camb., F.R.C.S.Eng., appointed Surgeon to the Exeter Dispensary, *vice* M. L. Brown, M.D.Edin.

DAVIDSON, Dr. Hugh, appointed Medical Officer for the Parish of Halkirk, Caithness-shire.

DYSON, John R. H., L.R.C.P., L.R.C.S.Edin., appointed Medical Officer of the Deanhouse Workhouse of the Huddersfield Union.

EDWARDS, Arnold, M.B.Viet., B.Ch., appointed Resident House-Surgeon to the Chorlton-upon-Medlock Dispensary, Manchester.

FIGGIS, S. B., M.B.Edin., appointed House-Surgeon to the York Dispensary, *vice* Mr. E. S. Goody, resigned.

FISHER, Frank D., M.B., C.M.Edin., appointed Junior House Surgeon to Ancoats Hospital, Manchester, *vice* Chas. A. Hogg, M.B., C.M.Edin., resigned.

GOODALL, Edwin, M.D.Lond., M.B., B.S., M.R.C.S.Eng., appointed Medical Superintendent of the Carmarthen Joint Counties Lunatic Asylum, *vice* George J. Hearder, M.D.St.And., deceased.

GRANDY, William E., M.B.Dub., L.R.C.S.I., appointed Medical Officer of the Third District of the Parish of St. George-in-the-East, *vice* M. J. McCoy, L.R.C.P., L.R.C.S.I., resigned.

JAMES, Philip, L.R.C.P.Lond., F.R.C.S.Eng., appointed Physician to the Wellington Hospital, New Zealand.

JAMES, R. B., M.R.C.S.Eng., L.R.C.P.Lond., appointed Ophthalmic and Obstetric House-Surgeon to the Queen's Hospital, Birmingham.

JONES, W. M., M.R.C.S.Eng., reappointed Medical Officer of Health to the Swinton Local Board.

LAMB, David, M.B., C.M.Glasg., appointed Assistant Medical Officer to the City of Glasgow Fever Hospital at Belvidere.

MACKAY, Fred. W., M.B., C.M.Edin., appointed Resident Physician to the City Hospital, Edinburgh.

MCLEAN, Charles J. R., M.D.Edin., M.Ch., D.P.H., reappointed Medical Officer of Health to the Yeadon Urban Sanitary District.

NICHOLLS, Sydney R., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer for the No. 1 Stratford District of the West Ham Union, *vice* W. W. Clegg, L.R.C.P., L.R.C.S.Edin., resigned.

PERCIVAL, Thomas, M.R.C.S.Eng., reappointed Medical Officer of Health to the Ponteiract Rural Sanitary District.

ROBERTS, F. A., M.B., reappointed Resident Medical Officer to the General Infirmary, Leeds.

SEATON, Douglas, M.B.Viet., appointed House-Surgeon to the General Infirmary, Leeds.

SMITH, Frederick M. G., L.R.C.P.Edin., M.R.C.S.Eng., appointed Medical Officer for the No. 4 District of the St. Albans Union.

STEWARD, E. S. S., M.R.C.S., L.R.C.P., appointed House-Physician to the General Infirmary, Leeds.

THOMAS, Ieuan G., M.B., C.M.Edin., appointed Medical Officer of the Penderyn District of the Merthyr Tydfil Union, *vice* D. J. Jones, M.B., C.M.Edin., resigned.

THOMPSON, W. H., F.R.C.S., reappointed Resident Surgical Officer to the General Infirmary, Leeds.

TODD, L. B., M.R.C.S., L.R.C.P., appointed House-Surgeon to the General Infirmary, Leeds.

WALKER, Mr. F., appointed Resident Medical Officer to the Ida Hospital of the General Infirmary, Leeds.

WHITEHEAD, A. L., M.B.Lond., reappointed Resident Ophthalmic Officer to the General Infirmary, Leeds.

WILKS, S. L. B., M.B., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer for the Grassington District of the Skipton Union, *vice* E. B. Granger, L.R.C.P.Lond., M.R.C.S.Eng., resigned.

WOOD, W. Dyson, L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health to the Thame Local Board.

DIARY FOR NEXT WEEK.

MONDAY.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN, 40, Leicester Square, W.C., 8 P.M.—Discussion on Methods of Retaining Dentures in Edentulous Lowers; and Casual Communications.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Dr. Walter Carr: On the Starting Points of Tuberculous Disease in Children. Mr. Percy Dean: On a Case of Chronic Ulcer of the Duodenum: perforation; acute general peritonitis; abdominal section; excision of the ulcer and suture of the duodenum; recovery.

PARKES MUSEUM, 74A, Margaret Street, W., 8.30 P.M.—Lectures on Meteorology in Relation to Hygiene. V. Climate in Relation to Health and Geographical Distribution of Disease. By Dr. C. Theodore Williams.

LONDON POST-GRADUATE COURSE, Royal London Ophthalmic Hospital, Moorfields, 1 P.M.—Mr. R. Marcus Gunn. Clinical Examination of the Eye. Bacteriological Laboratory, King's College, W.C., 3 to 5 P.M.—Lecture: The Microscope and Methods of Cultivation. Practical Work: Examination of Cultivations. London Throat Hospital, Great Portland Street, 8 P.M.—Mr. W. R. H. Stewart: Examination of the Ear.

TUESDAY.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M.—Mr. T. Bryant: A Case of Extreme Prolapse of the Female Urethra in a Child, aged 6; with remarks. Mr. Edward Cotterell: Two Cases of Uretero-lithotomy.

THE CLINICAL MUSEUM, 211, Great Portland Street.—Open at 2, Lecture at 4.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr. Percy Smith: Acute Delirious Mania; Hysterical Mania.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 1 P.M.—Dr. Payne: Psoriasis. Hospital for Consumption, Brompton, 4 P.M.—Dr. Sidney Martin: Modes of Infection in Tuberculosis. Royal London Ophthalmic Hospital, 8 P.M.—Mr. A. Quarry Silcock: Choroidal Affections, with Illustrative Cases.

LARYNGOLOGICAL SOCIETY OF LONDON, 20, Hanover Square, W., 5 P.M.—Dr. Dundas Grant: Case of Lupus of the Nose and Larynx. Mr. A. Lake: Case in which One Lobe of the Thyroid has been Removed for Graves's Disease. Dr. Felix Semon: (1) Two Cases of Malignant Disease of Larynx treated by Thyrotomy, and Radical Removal of New Growths. (2) A Case of Lupus of Pharynx and Larynx. (3) Sequel to Case of Obscure Pharyngeal Ulceration, shown at February meeting. Dr. Scanes Spicer: A Case of Fixation of Left Vocal Cord. Mr. W. R. H. Stewart: A Case of Unilateral Laryngitis for Diagnosis. Dr. Watson Williams: An Intralaryngeal Syringe for Submucous Injections.

POST-GRADUATE LECTURES, Metropolitan Hospital, N.E., 5 P.M.—Dr. Drysdale: Phthisis Pulmonalis a Contagious and Hereditary Disease.

HUNTERIAN SOCIETY, 8 P.M.—Adjourned Discussion on Diphtheria, in which Dr. Washbourn, Dr. George Turner, Mr. Shadwell, Dr. Thorne Thorne, Dr. E. Seaton, Dr. Hingston Fox, and other speakers, will take part, and Drs. Pitt and Goodall will reply.

THURSDAY.

BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M.—Adjourned discussion on Dr. Routh's paper on the Conservative Treatment of Diseases of the Uterine Appendages.

PARKES MUSEUM, 74A, Margaret Street, W., 8.30 P.M.—Lectures on Meteorology in Relation to Hygiene. VI. Fog, Clouds, and Sunshine. By Mr. F. Gaster.

NORTH LONDON MEDICAL AND CHIRURGICAL SOCIETY, Great Northern Central Hospital, N., 9 P.M.—Dr. Harry Campbell: On the Treatment of Chronic Heart Disease. Dr. Morison: On the Practical Bearing of the Aspirative Forces in the Circulation.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and Epileptic, Queen Square, 2 P.M.—Dr. Ormerod: Paraplegia. Hospital for Sick Children, Great Ormond Street, 3.30 P.M.—Dr. Octavius Sturges: Clinical Lecture. Central London Sick Asylum, Cleveland Street, W., 5 30 P.M.—Mr. John Hopkins: Cases in the Wards.

FRIDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. Sidney Martin: Cases of Phthisis.

CLINICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. J. R. Lunn and Dr. C. E. Beevor: A Case of Syringomyelia. Dr. Churton: A Case of Pancreatic Cyst, with Diabetes; incision of cyst; death a year afterwards; atrophy of pancreas. Dr. Vivian Poore: A Case of Enteric Fever occurring in a Diabetic Subject. Dr. Lee Dickinson: Hæmoglobinuria from Muscular Exertion. Mr. Martin Randell (introduced by Dr. Rose Bradford): A Case of Peliosis Rheumatica.

SATURDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M.—Dr. Hyslop: Acute Mania.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 8s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

MARRIAGES.

HARE—FELL.—On April 25th, at Saint Catherine's Church, Crook, by the Rev. J. King, M.A., rector, assisted by the Rev. G. W. Smith, M.A., vicar of Waterhouses, co. Durham, Frederick Hare, M.B., C.M., of Waterhouses, to Elizabeth Roxby, daughter of R. S. Fell, Esq., Woodfield House, Crook. No cards.

THIN—WRIGHT.—At 7, Claremont Park, Leith, on April 26th, by the Rev. Peter Wilson, M.A., Leith, assisted by the Rev. George F. James, Edinburgh, and the Rev. Alexander Scott, B.D., Musselburgh, Robert Thin, M.A., M.B., F.R.C.P.Edin., to May Glover, daughter of the late John Wright, of Messrs. Aitken and Wright, Leith. No cards. At home, 38, Albany Street, Edinburgh, June 4th, 5th, and 6th.

DEATHS.

LUNAN.—At Blairgowrie, N.B., on April 25th, Robert Lunan, L.R.C.S.Ed., in his 82nd year.

LUSH.—On April 28th, at Tyfield, Eastbourne, William John Henry Lush, F.R.C.P., M.R.C.S., aged 43 years.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

J. S. B. writes: Is there any London suburb, or locality within easy reach of the city for business man, which can with some confiddnce be recommended to a rheumatic subject for residence?

A MEMBER B.M.A would be obliged for any hints on abdominal belts or similar appliances for pendulous belly in little women. The patient has a very large belly, is stout, small, finds belts a terrible strain on the back, and is reduced to an invalid's life, unable to get exercise. Otherwise fairly well with no organic disease.

VILLAGE NURSES.

M.R.C.S. asks how to establish a village nurse in a colliery village where there is no resident doctor; also as to the probable expense.

SOUTH AFRICAN HEALTH RESORTS.

I. D. M., who has a patient, a young man aged 20, suffering from laryngeal ulceration who has been advised to reside in Natal for a few years, asks for information as to best time to go, best part to go to, etc.

*** *Brown's South Africa*, published by Sampson Low and Co., would give most of the information desired. Application might also be made to the Union or other shipping companies.

ANSWERS.

F. H. T.—This question must obviously depend on the rules of the particular club.

IN answer to our correspondent T. R., who consults us with regard to the amount of a fee, we can only say that the charge does not appear to us in any degree excessive, if any fee at all were to be charged.

BERKSHIRE might consult with advantage Erichsen and Beck's *Science and Art of Surgery*, 9th edition, 2 vols., and White and Keen's *Textbook of Surgery*, by American authors, 2 vols., both of which are practical textbooks.

ALLEGED COVERING.

E. C.—The best course will be to send a full statement of the case to Sir Richard Quain, Bart., President of the General Medical Council, 299, Oxford Street, London, W.

HORSE SHOEING.

MR. WM. BERRY (Wigan) writes: "Juvenal" should have his mare shod with Charlier shoes, or his ordinary smith might use or make him steel shoes, which would last longer. There is a great difference in the quality of iron used for making horseshoes. If "Juvenal" has got a mare "that is a perfect horse in every way," he need not complain of shoeing her every seventeen days if she does a fair amount of work on paved roads.

GLEET AND GONORRHŒAL INFECTION.

DR. R. MC. SERVICE (Glasgow) writes, in reply to "Surgeon-Captain's" letter: I had a patient who contracted gonorrhœa some years ago in India. All the symptoms mentioned showed themselves; yet he married, did not infect his wife, and has a family of three, all healthy. My patient is now in another city, but the last time I saw him he was still troubled with the flakes, etc., in the morning urine.

MR. EDW. B. HOLWELL (Hon. Surgeon to the Leeds Public Dispensary) writes: The necessity not only of not marrying with even the slightest trace of gleet, but the absolute danger to the wife's health, if not to her life, cannot be too strongly impressed upon a patient. A gleet even of the slightest kind, under the influence of certain exciting causes—drink, sexual excess, or even severe chills—is likely to burst forth again and again into virulent gonorrhœa.

INCOME TAX.

IT matters little what return "Sapolio" makes, as the assessor is pretty sure to assess him according to his own fancy—probably upon the amount that "Sapolio's" predecessor has paid in previous years. Perhaps the best plan would be to return no actual amount, but to enter on the form that, having just taken the practice, he is unable to say what the profits of the year may be. He might request the Income Tax Repayment Agency (25, Colville Terrace) to fill up the form for him.

TREATMENT OF DELIRIUM TREMENS.

MR. JOHN EWENS (Surgeon to the Bristol Hospital for Children and Women) writes: In reply to "Enquirer" I will detail my reminiscences of a somewhat similar case which occurred in my practice about thirty years since. A middle-aged man of drunken and dissolute habits during the third stage of double pneumonia got a severe attack of delirium tremens. All my efforts to procure sleep by means of mild sedatives followed by the exhibition of 1-grain doses of opium repeated eight times in about twelve hours failed to procure sleep. Fearing to press the opium further I tried the expectant treatment suggested, I think, by Dr. Graves, of Dublin, in the following manner: I made twelve bread pills and directed one to be taken every hour, enjoining on the patient the absolute necessity of being awake at the time of each dose. He took two pills only and was sound asleep before the third pill was due, the mental effort to keep awake apparently fixing the wandering efforts of the tired and jaded brain. He slept ten hours, awoke perfectly conscious, and made a rapid recovery, the pneumonia also subsiding and the lung clearing up in a most satisfactory manner. My subsequent experience of delirium tremens is that as a rule drugs of any kind, except an occasional dose of bromide of potash, should be avoided, alcohol in every form also being strictly forbidden, chloral is, as a rule, too depressing. Light and nutritious diet should be freely administered.

DR. T. CHURTON (Leeds) writes: Recently[1] I related a case of severe chorea treated by morphine subcutaneously, immediately followed by inhalation of chloroform. For several years past I have treated cases of violent delirium in the same way, and have recorded some of them. The advantage gained by the combination is that no time is lost; there is no waiting for the morphine to take effect, and the patient goes to sleep at once. In the toxæmic delirium of late renal disease it is not desirable to use morphine, but the method is applicable in all, or almost all, other cases.

C. W., aged 34, a mechanic, short in stature, but of fairly strong build, was admitted into the Leeds General Infirmary on April 20th, 1894, for jaundice and marked ascites. For twelve or fourteen years he had been drinking beer and whisky very freely, during the last two years much more freely, and in this latter period he had been several times distinctly jaundiced. Eighteen months ago the ascites began, and had in the last few weeks increased rapidly; nevertheless, he had continued drinking as usual up to the very day of admission. He was highly excitable and tremulous; his breath smelt strongly of acetone. In the evening of the next day (21st) he became actively delirious, shouting, struggling to get up, etc. The following hypodermic injections were given: At midnight, morphine acetate gr. ½; at 3 A.M., hyoscine hydrochlorate gr. $\frac{1}{150}$; at 9 A.M., morphine gr. ½; at 10.30 A.M., hyoscine gr. $\frac{1}{150}$. He did not sleep after any of these injections, and was struggling and noisy when I saw him soon after the last of them. Chloroform was then given (inhalation); in two or three minutes he was asleep, and remained so for four hours. As he again became noisy, morphine gr. ½ was injected at 3.30 P.M., followed by administration of chloroform as before; again gr. ½ at 7 P.M., with chloroform; and at 11.30 P.M., hyoscine gr. $\frac{1}{150}$ succeeded without chloroform. Next morning (23rd) he was quite calm and sensible, and remained so; and he insisted on going home upon the following day.

NOTES, LETTERS, Etc.

THE USE OF CARBOLIC ACID AND CHLOROFORM IN ENTERIC FEVER.

IN Surgeon-Lieutenant-Colonel Quill's paper on the above subject, which appeared on April 28th, in lines 11 and 12, "of these 18 cases, the last *two* were under my care from first to last;" the word two should have been *twelve*.

DEAF, DUMB, AND DEAD JURORS.

A DEAF and cynical juryman in a metropolitan coroner's court complained that deaf and dead men and workhouse inmates were being summoned on juries. The summoning of dead men will remind all acquainted with the South Wales Circuit of one of the many good stories associated with the late Mr. Tom Allen, deputy-clerk of arraigns. Mr. Allen was very punctilious of form in the empanelling of juries, and particularly resented any interference, whether by sheriff, deputy-sheriff, or anyone else, between himself and the man called "John Jones," followed by a flying leap at some unpronounceable Welsh place-name, would ring out the challenge. "He's dead, Sir," someone would reply; and then, with imperturbable *sang froid*, Mr. Allen would retort, "Let the gentleman speak for himself, please."

THE LEEDS PATENT GAS STOVE.

DR. PULLAR takes objection to our comment on page 386 regarding the Leeds stove, which runs as follows: "The great objection to the Leeds stove, as described in the papers enclosed in Dr. Pullar's letter, is that the products of combustion are poured into the room, and we do not feel justified in recommending any stove in which this is done." It will be observed that we spoke of the stove "as described in the papers, etc.," in one of which it was spoken of as being set without a flue of any sort, and in the other, being a reprint of a lecture on the subject, it was stated that the products of combustion passed upwards through the air of the room, and were removed by ventilation at the level of the ceiling. We, however, made the following offer: "If you will authorise us to state that in the Leeds stove, as ordinarily set, the products of combustion do not enter the room, we will gladly insert a paragraph to that effect." In answer to this we have received a communication from Dr. Pullar, containing the following paragraph, which we now publish, widely though it differs from the one we offered to insert: "I beg to acknowledge receipt of your letter of 12th inst., and, in reply, I now authorise the Editor to state that in the Leeds stove, fitted with exit pipe according to directions, the products of combustion are not allowed to escape into the room."

[1] BRITISH MEDICAL JOURNAL, March 24th, p. 585.

THE MEMBERSHIP OF THE ROYAL COLLEGE OF PHYSICIANS AND THE PRACTICE OF SURGERY.

A CORRESPONDENT writes to say: I have always understood that M.R.C.P.Lond. debarred the holder from practising surgery. I have of late noticed that several men who have written in your columns are M.R.C.P Lond. and also F.R.C.S.Eng. Can you explain this? I would have serious thoughts of trying for M.R.C.P. but for the circumstance that it debars one I believe from doing any surgery. Would a general practitioner doing some eye work in the provinces be on that account debarred from M.R.C.P.?

*** As this is a matter on which questions are raised from time to time, and as to which it is evident that there is a good deal of misapprehension, and many incorrect statements and assumptions are frequently made, it may be desirable to give what we believe to be a correct view of the matter to which this letter refers. The Royal College of Physicians of London has no laws, written or unwritten, restraining its Fellows or Members from practising surgery, nor is there to our knowledge any understanding that they shall not so practise. That this is so is confirmed by the consideration that both Fellows and Members of the College who are in obstetric practice perform a great variety of surgical operations, some of the highest importance. With regard to the last part of our correspondent's letter, we may say that the Membership is not, we believe, intended for general practitioners, those holding it being thereby debarred from practising in partnership, dispensing or supplying medicine to their patients, or making any arrangements with a chemist for supplying them. It is really a first selection for the Fellowship, and is intended for those who aspire to hospital appointments, and to consulting practice as physicians. The prevalent notion that the practice of surgery is barred to Fellows and Members of the College must be, we apprehend, a somewhat perverted tradition from the past. A long time ago a member of a corporation of surgeons had to resign his Membership before he could be admitted into the College of Physicians. This had probably little or nothing to do with the nature of his practice, but was to avoid the supposed dangers of a divided corporate allegiance and conflict of interests.

UNITED IN DEATH.

DR. D. CAMPBELL (Calne, Wilts) writes: Some year ago, or so, there was some correspondence in the BRITISH MEDICAL JOURNAL, anent aged married couples dying on the same day. Last Sunday, April 30th, G. S., aged 96, married forty-nine years, died at 10 A.M.: his wife, aged 80, died at 1 P.M., in the same bed. He was in bed some two years, she a few days only. He was in full possession of his mental faculties till within half an hour of his end; she, till within a few hours.

A VANISHING POPULATION.

AN example of the "fallacies of small statistics" has turned up in Cheshire, in connection with the parish council question. When the census was taken, Netherpool parish included a colony of navvies engaged upon the Manchester Ship Canal; and as the population in 1891 was over 300, there ought to be a parish council. But the canal is completed, and the navvies have migrated elsewhere, leaving one householder and his family to elect and be elected. Under the circumstances it would be prudent to ignore the census and join Netherpool with some neighbouring parish whose population is a little less mobile.

PROTECTION OF CHILDREN IN FRANCE.

A SOCIETY for the Protection of Children has been founded in France with the object of bringing about a reduction in the alarming rate of mortality of infants in that country. The society will aid in the establishment of *crèches*, and will carry on an active propaganda in favour of vaccination. It is intended, also, to establish a convalescent home in the neighbourhood of Paris for children who are anæmic or show signs of predisposition to tuberculosis. The President of the Society is Dr. Monin, and the Vice-President Madame Allart-Sain.

KICKED BY A DONKEY.

THE *Western Morning News* of April 24th contains the following amusing letter, dated Plymouth, April 23rd, and signed "Edinburgh": "Sir,—The name of Mudge has been so well known as doctors these past hundred years, and so highly respected, that one opens one's eyes in reading that Dr. Mudge has been censured by the Port Isaac sanitary authority. From your report it appears that the doctor was pretty warmly censuring the authority, and they hit back. It is a comfort to feel that doctors are not afraid to do their duty. The doctor may take comfort from the anecdote of the late Mr. William Hicks, of Bodmin, who was censured by the chairman of the county magistrates, and who, when called on for his defence, asked to be allowed to relate an anecdote. 'An anecdote from Hicks!' the board exclaimed, 'bravo!' and Hicks proceeded. 'I was coming along the road, and saw a boy who was crying and in great trouble because his front teeth were knocked out. I went up and tried to comfort him. The boy continued to cry badly, and said: "'Sir, it ain't because I've lost my teeth that I'm crying, but, dang me, because they were kicked out by a jackass!'" If it turns out that Dr. Mudge be doing his duty bravely in face of stolid and unfeeling guardians and authorities, he will have the sympathy and support of all honourable men."

LETTERS, COMMUNICATIONS, ETC., have been received from:

(A) J. R. Armstrong, M.B., St. Asaph; Dr. J. H. Anderson, Stonehaven; Messrs. Arthur and Co., London; Mr. H. G. Armstrong, Wellington College; Messrs. Atkinson and Conder, Knottingley. **(B)** Mr. W. Berry, Wigan; Mr. A. N. Bright, Bromley; Dr. R. Boxall, London; Mr. L. Bruck, Sydney; Mr. G. W. Bliss, Birmingham; Mr. T. W. Beazeley, Birmingham; Bergen; Dr. Bryce, Glasgow; Dr. E. Burd, Shrewsbury; Mr. J. M. Burton, Edgbaston; T. B. Beddoes, M.B., Aberystwith; Dr. R. L. Bowles, London; Mr. T. Blair, Leeds. **(C)** Dr. J. M. Caw, Cupar Fife; Mr. W. J Coryn, London; Dr. M. R. Cattell, Garrison-on-Hudson, U.S.A.; Dr. T. Churton, Leeds; Dr. A. E. Cordes, Geneva; A. F. G. Codd, M.B., Bromley; Mr. V. K. Cooper, London; Dr. D. Campbell, Calne; Dr. Ramon y Cajal, Madrid. **(D)** Mr. E. de Sinner, London. **(E)** A. Edwards, M.B., Leeds; Mr. J. Evans, Bristol; Mr. F. S. Eve, London. **(F)** Mr. A. Fournet, London; Mr. W. T. Freeman, Reading; Dr. R. H. Fox, London; Dr. F. Fergus, Glasgow. **(G)** Dr. H. W. Gardner, Shrewsbury; A. B. M. Gunn, M.B., Shapinshay; Dr. J. Galloway, London. **(H)** Mr. F. J. Hanbury, London; Mr. W. Hancock, Bradford; F. Hare, M.B., Crook; Mr. T. G. Horder, Cardiff; Mr. C. W. Hunt, Manchester. **(I)** Dr. J. Ince, Swanley; Insufflator. **(J)** Mr. P. James, Wellington, N.Z.; Mr. L. H. Jacobson, Oudtshoorn; Mr. H. Jackson, Manchester; J.S.B.; Mr. E. G. Johnstone, Gloucester. **(K)** Dr. J. Kertesz, Buda-Pesth; Mr. E. N. Knapp, Ross. **(L)** Dr. T. M. Legge, Oxford; Mr. C. E. Liesching, Tiverton. **(M)** F. W. Mackay, M.B., Edinburgh; Mr. G. H. Makins, London; Mr. H. C. Moore, Pontefract; Dr. T. C. Moore, Napier, N.Z.; Member, B.M.A.; Dr. R. Main, London; M.D.; M.R.C.S.; Dr. J. Mackenzie, Burnley; Mr. W. L. Morgan, Oxford; M.B., D.P.H. **(N)** Mr. J. T. Neech, Tyldesley; Northumbria. **(O)** Odontological Society of Great Britain, The Secretary of the, London. **(P)** Dr. C. J. Power, Nailsworth; Mr. P. Pirie, London; Dr. D. Paton, Carnoustie; Probatum Est. **(R)** Mr. H. Rix, London; Dr. R. R. Rentoul, Liverpool; Dr. E. S. Reynolds, Manchester. **(S)** R. McC. Service, M.B., Glasgow; Dr. T. Smith, Lancaster; Dr. A. J. Smith, Dublin; G. F. Still, M.B., London; Surgeon-Major A.M.S.; Mr. E. T. Stephenson, Lismore; Dr. F. F. Schacht, London; Dr. F. J. Smith, London; Suffering Member; Dr. A. Strange, Shrewsbury; Messrs Steel and Jones, London; W. S. Syme, M.B., Gamlingay; Mr. S. E. Sirkio, Nutford. **(T)** Mr. J. L. Taylor, Leyton; The Traveller; Dr. T. W. Trend, Southampton; S. J. Taylor, M.B., Norwich; Mr. C. B. Taylor, Great Grimsby; Tenax. **(U)** Mr. C. Umney, London. **(V)** Dr. C. B. Voisey, Liverpool. **(W)** Mr. E. G. R. Wood, Southport; Mr. A. R. M. Wood, Bury St. Edmunds; Mr. A. Wiglesworth, Liverpool; Mr. C. H. Whitcombe, Westerham; Mr. T. H. Willett, London. **(Y)** Y.F. **(Z)** Zoological Society of London, The Secretary of the, London; etc.

BOOKS, ETC., RECEIVED.

Wright's Prescription Book. Bristol: John Wright and Co. 1s.

The Natural History of Plants: their Forms, Growth, Reproduction, and Distribution. From the German of Anton Kerner von Marilaun. By F. W. Oliver, M.A., D.Sc. Part I. London: Blackie and Son. 2s. 6d.

Die durch eitrige Mittelohrentzündung verursachte Lateralsinus-Thrombose und deren operative Behandlung. Von Arthur Af Forselles. Kuopio: O. W. Backman. 1893.

Grundriss der klinischen Bakteriologie. Von Dr. Felix Klemperer und Dr. Ernst Levy. Berlin: August Hirschwald. 1894. M. 8.

Fallen Angels: a Disquisition upon Human Existence: an Attempt to Elucidate some of its Mysteries, especially those of Evil and of Suffering. By One of Them. London: Gay and Bird. 1894. 6s.

On the Care of the Dying: a Lecture to Nurses. By O. Browne, M.A., M.B. London: George Allen. 1894. 6d.

Bibliothèque d'Éducation Spéciale. II. Rapports et Mémoires sur le Sauvage de l'Aveyron, etc. Par J. M. G. Itard. Paris: Bureaux du *Progrès Médical* et Félix Alcan. 1894. Fr. 4.

Der Nystagmus der Bergmann. Von Dr. A. Nieden. Wiesbaden: J. F. Bergmann. 1894. M. 8.60.

Nature *versus* the Devil. By Edmund Knight. London: Simpkin, Marshall, Hamilton, Kent, and Co. 6d.

Ueber den Schmerz in physiologischer und klinischer Hinsicht. Von Dr. A. Goldscheider. Berlin: August Hirschwald. 1894. M. 1.60.

Erfahrungen über Nierenchirurgie. Von Dr. J. Israel. Berlin: August Hirschwald. 1894. M. 6.

Manual Instruction in Schools: its Object, Principles, and Educational Importance and Sloyd its most Adequate Form. Written and compiled for the information of school managers and teachers, etc. By Charles B. Shuttleworth. London: O. Newmann and Co. 1894.

Zur Behandlung der Lungentuberculose mittels Koch'scher Injectionen. Von Dr. E. Thorner. London: Williams and Norgate. 1894.

Die Behandlung der Leukæmie, kritische Studie. Von Dr. H. Vehsemeyen. London: Williams and Norgate. 1894.

Une Visite à l'Hôpital International précédée d'une lettre-préface de M. le Dr. Prosper de Pietra Santa. Paris: Aux Bureaux de la Société Française d'Hygiène. 1893.

Essentials of Practice of Pharmacy: arranged in the form of Questions and Answers. By Lucius E. Sayre, Ph.G. Philadelphia: W. B. Saunders. 1894. 1 dol.

***** In forwarding books the publishers are requested to state the selling prices.**

AN ADDRESS

ON THE

EARLY DIAGNOSIS OF CANCER OF THE CERVIX UTERI.

Delivered before the East Surrey District of the South-Eastern Branch of the British Medical Association.

BY G. ERNEST HERMAN, M.B.LOND., F.R.C.P.,
Obstetric Physician to the London Hospital; President of the Obstetrical Society of London.

THE early diagnosis of uterine cancer is important for this reason: Secondary growths, either in lymphatic glands or in other parts of the body, occur later and more seldom with cancer of the uterus than with cancer of any other part of the body. There is, therefore, a better prospect, if cancer of the uterus be removed, of freedom from recurrence than in any other form of cancer. Further, modern improvements in operative *technique* have made it possible to remove cancer of any part of the uterus, so long as it is limited to this organ, with little risk. The essential for successful treatment is that the cancer must be limited to the uterus. The obstacle to extensive success in the treatment of cancer is that in most cases the disease is not diagnosed, either because the patient does not seek advice or is not examined—perhaps does not permit examination—until the disease has extended beyond the uterus.

The diagnosis of early cancer is difficult. In the present communication I shall attempt to explain the points which should guide us to the early recognition of cancer.

There are three parts of the uterus in which cancer may begin, and, according to the part in which the growth begins, three forms of cancer. These are:

1. Cancer of the vaginal portion, that is, cancer beginning between the external os and the junction of the uterus and vagina.
2. Cancer of the cervix, that is, cancer beginning between the os externum and the os internum.
3. Cancer of the body, that is, cancer beginning above the os internum.

The clinical differences between these three forms of cancer are these:

Cancer of the vaginal portion begins in a part that can be felt and seen. It can be diagnosed earlier than any other form and therefore ought to be more successfully treated.

Cancer of the body cannot be diagnosed so early as cancer of the vaginal portion, but it remains limited to the uterus longer and therefore is longer amenable to treatment.

Cancer of the cervix, if it begins low down and the os externum has been enlarged by childbirth, can be diagnosed early. But if the os uteri has not been enlarged by childbirth and the disease begins high up in the cervical canal the cancer is seldom recognised early. Cancer of the cervix more rapidly spreads beyond the uterus than either of the other forms, and for these two reasons is less amenable to treatment.

RELATION TO AGE.

Cancer of the uterus occurs chiefly towards the end of the child-bearing period but it has been seen in childhood and in extreme old age. I mention this because I find the patient's age sometimes taken into account as if it were a factor in diagnosis. The patient's age ought not to influence opinion in the slightest degree. It does not follow because the patient is at the age at which cancer is common that therefore her disease is cancer. Nor should one think because the patient has not reached or has passed that age that therefore the disease cannot be cancer.

FAMILY HISTORY.

A tendency to cancer is sometimes inherited. This is known to the public. I have known the family history given as a reason for or against the view that a disease was cancer. It ought not to have the slightest weight. Only a small proportion of cancer patients inherit the disease, and many persons whose relations have had cancer die at a great age of something else.

SYMPTOMS.

No form of cancer of the uterus can be detected without local examination. The patient allows examination because she has symptoms.

The first symptoms of cancer are usually hæmorrhage and leucorrhœa. Pain and wasting come later. The early diagnosis of cancer is of such importance that I do not hesitate to say that any unusual hæmorrhage or discharge in a woman who has had children is a reason for vaginal examination, for it may be the first symptom of cancer.

Cancer of the vaginal portion and cancer of the cervix are common in women who have had children, less common in sterile married women, rare in the virgin. Therefore I only urge local examination for hæmorrhage or leucorrhœa in the case of married women. The examination by the vagina of every virgin with a little leucorrhœa or hæmorrhage would be a number of wounds to female delicacy, so rarely atoned for by the discovery of cancer of the vaginal portion in a curable stage, that I think it is wiser, unless for some other reason vaginal examination is called for, to spare the patient's modesty, and let her run the very slight risk that cancer of the vaginal portion may be left too long untreated. Cancer of the body attacks virgins as often (in proportion to their number) as married or parous women; but this disease remains amenable to treatment for so long that, if it be present, we shall not do harm by postponing examination until the existence of serious local disease is clear to the patient.

Sometimes hæmorrhage is first, sometimes leucorrhœa. The hæmorrhage caused by commencing cancer has about it nothing distinctive, either as to time, duration, or quantity. The leucorrhœal discharge has no definite character that is useful in diagnosis. It is more watery than ordinary leucorrhœa. But we are dependent upon the patient for information upon its characters; it is not wise to rely upon the indefinite data that she can furnish. The leucorrhœa does not become offensive until the cancer has begun to break down and fragments of decomposing dead tissue are contained in the discharge. Pain is of no importance as an indication of commencing cancer. Some cases of cancer run their whole course without any pain. Pelvic pain is a symptom common to many diseases, and there is nothing peculiar about the pain of cancer.

Cancer causes wasting. This is not important for early diagnosis. To do good in cancer we must recognise the disease before it has lasted long enough to produce great wasting. Slight loss of flesh may come from many causes other than cancer. Sometimes during the progress of cancer patients for a time gain weight. Hence in doubtful cancer nothing is gained by postponing treatment in order to ascertain whether the patient's weight is altering.

In brief, therefore, hæmorrhage and leucorrhœa are the symptoms which in cancer first denote the presence of local disease, but the nature of this disease cannot be determined without local examination.

LOCAL CHANGES PRODUCED BY CANCER.

Before considering the local signs, remember the features which distinguish cancer in any part of the body from benign growths. Cancer, wherever it occurs, displays the following broad features:

1. It is a new growth, therefore the part it attacks is swollen. The degree of enlargement varies, and in the later stages the destruction effected by cancer may make the part smaller, but in the beginning there is always enlargement of the part attacked.
2. It is a new growth which breaks down. This always happens sooner or later.
3. The new growth affects all tissues: so does the breaking down. It is never limited by any anatomical boundary, nor has it any sharp and clear limit.

Apply these general statements to the uterus. Consider first the case of cancer so advanced that there can be no question about the diagnosis—a period at which unfortu-

nately there is also no doubt of the uselessness of treatment:

1. The cervix is enlarged from the new growth. If the body of the uterus is affected it is enlarged.

2. It is ulcerated because the growth breaks down. The ulceration differs from that caused by a wound or a slough in this: the ulceration which follows an injury is a reparative process: it tends to fill up breaches of surface; at its edge granulation cells are being organised into fibrous tissue, which contracts and tends to pull the edge down to the level of the surface. That of cancer is caused by breaking down of tissue, and the edge of the ulcer is the place at which the breaking down is going on. Hence its edge is everted, often undermined.

3. The cervix is fixed because the growth invades all tissues.

These are the signs of cancer beyond the reach of treatment. We have to apply the first two of these criteria before the third has had time to develop. A new growth on the vaginal portion which tends spontaneously to break down is cancer. The problem is to identify these features as early as possible.

The Characters of the Healthy Cervix.

In the healthy multipara the cervix is obtusely conical, the thickest part being at the attachment of the vagina. In parous women it has generally been torn, so that the external os is enlarged, the conical shape of the cervix less distinct, and it may be split into two or more lobes. These lobes are often everted by the pressure of the vagina. If the cervix is healthy they are not swollen, so that when they are pressed together the cervix is little if at all larger than the virgin cervix. The mucous membrane is everywhere smooth, and pale pink in colour. When the cervix is split so that the lower part of the cervical canal is everted, the epithelium of this part becomes changed into pavement epithelium like that covering the vaginal portion, so that it becomes smooth and pale in colour, like the vaginal portion. If these characters are present there is no cancer of the vaginal portion.

Cancer of the Vaginal Portion: I.—Outgrowth from the Surface.

When cancer begins as an outgrowth from the surface it may look like a growth of warts, or papillæ or granulations, on the vaginal portion. The surface is not smooth; it feels uneven, or even rough.

Diagnosis from "Granular Erosion."

Adenoma.—The only other new growth that is seen on the surface of the vaginal portion of the cervix is the so-called "granular erosion." The adjective in this name is good, because the erosion is granular: but the word "erosion" is a relic from a time when this condition had not been examined microscopically, and it was supposed that the epithelium was absent. The condition really is a flat adenomatous growth. This may quite surround the os externum, covering a space the size of a florin. It may be smaller than this, and may be limited to one lip of the os uteri. Its edge is not sharp. There is no abrupt change in the level of the surface. A line defining the edge of the growth would have to be wavy, and interrupted in places, for within the scarlet new growth we find islets of healthy mucous membrane, and we find dots of scarlet new growth outside the main patch. An erosion is deep scarlet in colour, and its whole surface is of the same colour. An erosion is soft, and easily made to bleed, either by the contact of the finger on digital examination, by the friction of the end of the speculum against it in bringing it into view, or by rubbing it with wool to clean it. Where it bleeds it only shows a broken surface; there is no ecchymosis, no excavation, no sign of sloughing.

The warty growth of commencing cancer is harder than the soft velvety erosion, and has a sharper edge. It soon begins to show signs of breaking down. The granulations of an erosion are separated from one another by sulci uniform in disposition; and it never presents any appearance suggestive of sloughing. When a cancerous growth is beginning to break down it looks as if it had been scratched, perforated, or worm-eaten. It is not uniform in colour, for there are ecchymoses here and there; and if there are parts at which breaking down is rapidly going on, small spots of greyish slough will be seen.

An erosion forms a swelling which is most raised close to the os uteri, and slopes off gradually into healthy tissue. Cancer beginning as a flat growth, such as may be taken for an erosion, is more abruptly defined, raised and warty at the edges, and breaking down in the centre.

"Cauliflower Excrescence."

If the cancer has so advanced as to form a growth comparable to a mushroom or a cauliflower, the diagnosis can scarcely be doubtful. No innocent growth from the vaginal portion in the least resembles either of these vegetables. But if we are to treat cancer effectively, we must recognise it before it has grown to dimensions which make such comparisons appropriate.

II.—Ingrowth Below the Surface.

Cancer may begin as an ingrowth below the surface. The first evidence of its presence which the senses can detect is an angry livid red spot, the surface of this spot being at first quite smooth.[1] The angry livid colour depends upon the vascularity caused by the new growth, and upon its tendency to break down, which leads to minute hæmorrhages into the growth before the breaking down is extensive enough to make a breach of the surface. When the smooth livid surface of the cancer spot is rubbed it bleeds. A smooth dark red spot, bleeding on contact, is very suspicious of cancer. This is the earliest stage of cancer that has been observed. If there is not merely a patch of altered colour, but a nodule that can be felt, the suspicion is still stronger.

Differential Diagnoses.

There are conditions which are not cancer, but may be suspected of being cancer.

Red Patches on the Cervix.—Sometimes the mucous membrane over a defined area round the os externum is of a darker red than the rest, but is smooth and glistening, not granular, and does not bleed when it is rubbed. My guess is that these red smooth patches in the vaginal portion are the remains of erosions which, unassisted by treatment, have slowly got well; so that their colour remains, although the granular surface has disappeared. When an erosion is cured by treatment it is replaced by a smooth surface differing little in colour from the rest of the vaginal portion. I cannot from the nature of the case offer evidence that this guess is correct, but I have examined such patches, and found that they were covered with pavement epithelium, and that beneath this epithelium were remains of glands such as are seen in granular erosions. These red patches, unlike early cancer, are red only, not livid; and do not bleed on contact.

Shotty Follicles in Cervix.—When the cervix has been split into lobes during labour, is also swollen by chronic inflammation, and has on it stopped up follicles filled with retained secretion, and feeling like shot imbedded in the surface, we have a condition that I have known to be taken for cancer. A lobe swollen by chronic inflammation may be thought to be enlarged by new growth, and the shot-like retention cysts may be suspected of being nodules of cancer. But these blocked up follicles, when looked at through the speculum, are, if their contents are unaltered, pearly grey in colour. If the retained secretion is inspissated they are yellow. The only elevations they form are slight smooth convexities. There is no warty growth, no lividity, and not the slightest appearance of any breaking down. The mucous surface around them is not altered in colour.

Fibroid.—A small fibroid of the cervix might, perhaps, be taken for cancer. When a large fibroid of the cervix is present, it will at once strike the observer as inconsistent with cancer that so large a growth should be present without fixation, breaking down, or wasting of the body. But a doubt is conceivable when the tumour is small. A fibroid is distinguished by its smoothness, its hardness, its rounded outline, its circumscription, and by the fact that it does not break down, nor bleed on contact. It does not, like cancer, invade all tissues, but has its own circumscribed capsule. It may be congested, livid, and mottled, showing visible vessels

[1] Williams, *Cancer of Uterus*, p. 9.

on its surface; but there is no breaking down, no excavating ulceration or warty outgrowth.

"*Herpetic Erosion.*"—There is a morbid change sometimes seen on a thickened cervix called the "herpetic erosion"—namely, little vesicles, like miliaria, which leave red spots when the raised dome of epithelium is wiped away with a piece of wool. These vesicles may be taken for commencing new growth, but they do not denote any such thing. I have never seen them except on a thickened cervix. I agree with Scanzoni, that they have nothing to do with herpes, and, therefore, the name "herpetic erosion" is a bad one. They are quite unimportant.

Spiegelberg's Sign.—There is a tactile sign which Spiegelberg pointed out. It is that the growth of cancer beneath the mucous membrane alters the consistence of the tissues, and makes them less pliable, so that when the finger is pressed on and moved along the affected part, the superficial tissues follow the movement imparted to them less easily than in the normal condition. Hence the feel of the cervix is peculiar; it has been compared to that of passing the finger over wet india rubber. This simile is the best that I know of. This peculiar feeling is not present in every case, nor present throughout the whole course of each case; and, therefore, its absence is no proof that the disease is not cancer; but, when present, it should cause suspicion of cancer.

Dilatation by Tents.—A test of cancer has often been quoted in textbooks on the authority of Spiegelberg,[2] which consists in the different behaviour of cancer and of a healthy cervix under the expanding force of a tent. He said that a healthy cervix would always yield, while a cancerous cervix would not. I am sure this is wrong, and in saying so I am in agreement with Winckel and Olshausen. I have often found a cancerous cervix dilate easily, and a non-cancerous cervix so resist even a laminaria tent, that the tent was removed with difficulty, and, after removal, showed a groove where the internal os had prevented its expansion.

Lacerations.—Another sign that has been pointed out as a distinction between cancer and a cervix split into lobes by lacerations during labour is that the fissures from tears during labour run from the canal outwards; while the fissures between the nodules of a cancerous growth are irregular in their course. This is quite true, but of little use for early diagnosis, for when a cancer of the cervix is so big as to consist of nodules separated by fissures there will be other evidence putting the diagnosis beyond doubt.

CANCER OF THE CERVICAL CANAL.

Cancer may begin in the cervical canal. If it begin high up and the os externum is not much enlarged it cannot be recognised early unless the cervix is artificially dilated. If it begin low down and the external os has been so enlarged by tearing during labour that the lower part of the arbor vitæ uterina is visible, then cancer can be recognised here as early as when it begins on the vaginal portion. The condition which here causes difficulty in diagnosis is that in which the cervix presents the dense fibrous rounded elevations to which Dr. R. Barnes has given the name of "hypertrophic polypi"[3]—a condition of the lower part of the cervical canal which Matthews Duncan described in the words "hardness with big-grained roughness." In this condition we have red nodular growths at the lower part of the cervical canal; and if, in addition, the patient has symptoms which go with cancer—hæmorrhage, leucorrhœa, pain, wasting—the diagnosis of cancer may suggest itself. The macroscopical differences of this condition from cancer are: That a simple hypertrophic polypus does not bleed on contact; that it does not show any tendency to break down; there is no ulceration, no points of sloughing anywhere; and that this condition of "hardness with big-grained roughness" extends over an area of the cervix so considerable that cancer, if advanced enough to occupy such an extent, would certainly have begun to break down.

THE MICROSCOPE IN DIAGNOSIS.

I have not yet spoken of the microscopical diagnosis of cancer. I have postponed this part of the subject because I think the value of the microscope in the clinical diagnosis of cancer has been overestimated. The only use of the microscope is to confirm suspicion aroused by the evidence of the unaided senses of sight and touch. A diagnosis based on the microscopical examination of sections of tissue must be accepted with great reserve, for the following reasons.

First, only an expert familiar with the microscopic appearances of the different parts of the uterus both in health and in disease can form an opinion on the question at all. The opinion of one not accustomed to microscopic work, or not acquainted with the normal and also the morbid microscopical examination of the uterus, is valueless. Secondly, the judgment even of an expert on a scraping, or a broken-off bit, is of no value unless it be decisively in the affirmative. Cancer may be present, and yet a bit scraped or broken off may not be cancerous. Before we can be sure that a diseased part is not cancer, sections from every part of it must be examined. Now if we have to remove a large piece of a cervix in order to see whether there be cancer present in it or not, I think it is better to go further, and remove the suspicious part altogether. There is little, if any, greater danger in removing the whole disease with a margin of healthy tissue beyond it, than in removing a part only. Thirdly, there are growths occasionally met with in the uterus, called malignant adenomata, which resemble cancer as to their clinical history, but which microscopically present none of the characters of cancer. Further, in simple erosions in women, and in erosions on the cervix uteri in monkeys, Bland Sutton and Gordon Brodie have found structures exactly like those regarded as characteristic of cancer.

In short, to rely upon the microscope in the diagnosis of cancer is to open the door for many mistakes. The microscope may now and then reveal cancer in a doubtful case, but negative microscopical evidence should never be trusted. The naked-eye characters and the behaviour of the growth should always be taken into account as well as its histology, and if the two conflict the behaviour of the growth is the more trustworthy.

EFFECT OF TREATMENT.

In case of doubt, the behaviour of the suspicious part under treatment is the best test. Erosions and chronic inflammation of the cervix are local diseases very amenable to treatment. An erosion or a thick inflamed cervix may bleed on contact; but if one of these conditions is the only morbid change present, one or two applications of strong carbolic acid will so far improve the local condition that the diseased part will cease to bleed on contact. If the disease be cancer these applications will only stimulate its growth, and the local changes will be more pronounced after such treatment than before it.

CANCER HIGH UP IN THE CERVICAL CANAL.

In this situation the beginnings of cancer often cannot be seen or felt, and therefore it is sometimes impossible to diagnose it early. It may begin in two places at once; there may be commencing cancer at the upper part of the cervical canal and œdematous growth lower down. Cancer beginning high up in the cervical canal may assume various forms; it may be a papillary growth protruding into the cervical canal and through the os externum; it may form a solid mass, which presents at the os externum like a polypus; it may begin in a mucous polypus; it may thicken the cervix, and then break down and excavate it, so that the whole thickness of the cervix may be eaten away, while there is very little disease discoverable by the vagina. I have seen the cervix so broken down that it tore in half when it was pulled upon for the purpose of removal, and yet the slight ulceration visible at the os externum could be covered by a threepenny bit. It may extend superficially upwards and downwards, and break down quickly, so that it forms a conical ulcer, which enlarges the external os, and extends up to or beyond the internal os. When it presents these forms the diagnosis is clear, but then, unfortunately, the disease is by this time usually beyond the reach of treatment.

I once saw a case with Dr. Power, of Poplar, which much resembled cancer: a fibroid protruding far enough into the cervical canal to expand the cervix, but not coming down low enough for the finger to get round it, so that the finger entered a cavity with uneven walls (the cervical canal) with a rounded outgrowth projecting into it at the top. The patient

[2] *Arch. für Gyn.*, Bd. iii, S. 233.
[3] *St. Thomas's Hospital Reports*, 1872.

complained of hæmorrhage and leucorrhœa. When the cervix had been dilated and the polypus removed, the nature of the case was clear.

If cancer beginning within a cervical canal the lower end of which is not open enough to admit the finger is to be diagnosed early, this can only be done by dilating the cervix. If the symptoms suggest cancer, and nothing is perceived by finger and speculum to account for them, the suspicion can be confirmed or verified only by dilatation of the cervix. This done, the finger in the cervix will either feel the firm, smooth ridges of the arbor vitæ, or there will be at some part of the canal a nodule, a warty growth, or a ragged ulcer.

The remarks I have made as to the liability to error of conclusions based on the microscopical examination of broken off bits apply to this form of cancer more strongly than to cancer of the vaginal portion. If we scrape off bits it is not possible to be sure where they come from. There may be cancer at one part of the canal, and a villous erosion, or an ordinary mucous polypus at another. But this form of cancer advances so fast, and its initial symptoms are so slight, that it is seldom we have the opportunity of diagnosing and treating it early.

A NOTE ON AUDITORY VERTIGO.

By Sir WILLIAM B. DALBY, M.B., F.R.C.S.,
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If I venture to say that Dr. Stephen Mackenzie's paper on "Aural Vertigo" in the British Medical Journal of May 5th covers the whole area (so far as it has been usefully occupied) of previous observers, whilst it gives his own valuable suggestions, I am sure that he will acquit me of any attempt to pay him a compliment. Both he and the readers of the Journal will perhaps, in consideration of the interest which I take in the subject, permit me to offer a few remarks upon his arrangement of the subject and upon some of his observations.

In studying this subject, what we all want and what we must have, if our knowledge of it is to advance or become in any sense accurate, is a determined line of division in these cases. On one side of this line must be placed those cases in which the external and middle ear are healthy. On the other side of the line those cases in which one or both of these two divisions of the ear are unhealthy. Until this is done there will remain, as there now is, endless confusion. The next point is that the term "Ménière's disease" must either be dismissed (it always was indefinite), or, if it is to be retained, it must be clearly understood that it can be only applied to those cases in which there is no disease of the conducting media, and then only used to express a certain train of symptoms, which, beginning by vertigo, nausea, sweating, perhaps vomiting, tinnitus, and deafness on one side, continues by permanent deafness, a long, lasting, and varying tinnitus, a gradual subsidence in frequency, and severity of vertigo and unsteadiness of gait. The very words of Dr. Mackenzie—"In the great majority of cases, in my experience, some disease is found in the middle ear"—show the necessity of this division and exclusion. My own experience not only accords with his remark, but it has become to me an ordinary and daily matter to regard in middle-ear disease vertigo as so common a symptom that it ranks amongst other symptoms, such as pain, deafness, and tinnitus, although it is not so prominent. It is also true that at one time it is of no great importance, whilst at another it is a symptom of the gravest significance. Thus, when it accompanies long-continued and profuse discharge from a perforate membrane, it often marks the advent of cerebral complications. In the course of many affections of the middle ear it is not of great consequence.

Let, then, all cases where the external and middle ear are involved be put on one side in considering the pathology and treatment of aural vertigo. Also let some others be put aside, such as those where the intelligence of the physician at once detects the state of affairs, as when Dr. Mackenzie writes: "I think one of the most practical points in warding off attacks is to keep your finger on the pulse—if one may use the expression—that is, to watch and keep down arterial tension. A dose of calomel, taken in such circumstances, patients have assured me, has averted attacks which they believe would otherwise have occurred." I shrewdly suspect that Dr. Mackenzie has occasionally, with a very full knowledge of the possible danger, averted an attack of apoplexy. I am reminded at the moment of a man, aged about 60, who, having no disease of his external or middle ear, used to become at times almost completely deaf, with furious tinnitus and considerable vertigo. By my advice he took a strong purge in the shape of calomel and colocynth pills when he had such attacks, and twenty-four hours after always recovered his hearing. The order of events—deafness, pills, and recovery—occurred six or seven times a year for three years, and after then no recovery. I can recall many instances resembling this. The number of persons with obvious arterial tension, consequent vertigo, tinnitus, and deafness that I have placed under physicians is very large indeed. They have not only been relieved by treatment and diet, but, later on, I have known several to illustrate the cause of these symptoms by dying of apoplexy. It is, therefore, also necessary to severely put aside these cases of arterial tension and atheroma as well as the middle-ear cases if we are to get at the root of true auditory vertigo—the vertigo which does not shorten life by a day. We shall then, so to speak, start fair. Persons who suffer from vertigo arising from all sorts of causes are very naturally alarmed, and at the present time they seem to find consolation in the term "Ménière's disease," which they glibly announce they suffer from, so that I cannot but think that this state of things must arise from a somewhat too loose application of a term which, I submit, so far as its accurate pathology is concerned, is almost meaningless.

Under these circumstances, I think the most we can do for it, and possibly the least, will be by common consent to insist upon its being confined to the class of cases I have indicated. All the theories which have been held by various observers at various times have been enumerated by Dr. Mackenzie, and the very variety of theories shows how uncertain is the exact state of the lesion. My own views are referred to by Dr. Mackenzie, so I need not repeat them.

ON CROUPOUS PNEUMONIA IN LONDON DURING 1893.

By W. P. HERRINGHAM, M.D., F.R.C.P.,
Medical Registrar to St. Bartholomew's Hospital; Physician to the Children's Hospital, Paddington Green.

The past year, 1893, was remarkable for the very large number of cases of croupous pneumonia. Wishing to see whether any explanation could be found for this, I tabulated the cases admitted at St. Bartholomew's. The results were so striking that I thought it worth while to test them by larger numbers. I therefore applied to the physicians of Guy's, of the London, and of St. Thomas's Hospitals, who were kind enough to allow me to use their records to the extent required for my purpose. To them, to the physicians of St. Bartholomew's, and to the Registrars, Dr. Box, of St. Thomas's, Dr. Bryant, of Guy's, and Dr. Schorstein, of the London, who have been most courteous in assisting me, I am glad to return my hearty thanks.

I need not discuss in detail the etiology of croupous pneumonia. My purpose was to discover whether its prevalence varied with atmospheric conditions; but whether these are predisposing or exciting causes, and whether they act by weakening men, or by strengthening microbes, are questions beyond the scope of my inquiry.

I will first explain my tables, and then point out what they prove.

I have taken all cases of acute croupous pneumonia admitted during 1893 to the above four great hospitals, except inpatients under 5 years of age. These I have omitted owing to the great difficulty of diagnosis at that age between croupous and catarrhal pneumonia. The cases so obtained, 922 in number, I have divided into fortnightly periods, according to the date of admission. The numbers are not large enough to allow of weekly periods, for such statistics as these are but rough guides after all, and if numbers are small, are not only useless but misleading. The date of onset would have been better than the date of admission, but I could not,

for various reasons, obtain this in every case, and preferred to make the tables uniform rather than select. The disease is so short that the fallacy of this method is not great.

I have copied the atmospheric conditions from the weekly returns of the Registrar-General. I have chosen the temperature of the air, the weekly mean of its highest and of its lowest points, and of the range between the two, the relative humidity (relative, that is, to the temperature), and the direction and strength of the wind as the conditions most likely to have an influence upon the prevalence of pneumonia. The almost uninterrupted sunshine, and the extremely small rainfall from the middle of March until August, which rendered last year so exceptional will be in the memory of all.

I have not appended the mortality rate of these cases; the numbers are too small to be of any value.

The tables show that the year may be roughly divided into four periods. The first, from January 1st to March 25th, during which the average number of pneumonia cases was just over 30 in the fortnight; the second, which I will call the pneumonia season, comprising April, May, and June, during which the average was 62; the third from July 1st to October 21st, during which it was 27½; and the remaining ten weeks, during which it was 16.

I had better at once point out that these proportions do not agree with the Registrar-General's tables of mortality for London. This is partly due to the inclusion of bronchopneumonia in these tables. But if all the cases under 5 years old be subtracted, which eliminates nearly all the bronchopneumonia, the numbers are still not parallel. The mortality tables show the "pneumonia season" quite distinctly, but the deaths in January, November, and December are very much higher than in February and March, or than in the period from July to October. This may perhaps be due to the fact that the hospitals treat the poor only, and that cold weather affects the rich, whose houses are hotter, more than the poor. But the term pneumonia covers a multitude of diseases, and I think this is the chief cause of the discrepancy. Hospital cases are very much more accurately diagnosed and named than others, and I have no hesitation in saying that when their records and those of the Registrar-General conflict, the latter are wrong.

The great feature in the table printed with this paper is the "pneumonia season" from the end of March to the end of June. What changes in the atmosphere coincide with it? It has evidently nothing to do with the highest points, for these rise steadily from the very beginning of the year to August, and the pneumonia season is neither at the one end of the scale nor at the other. The same may be said of the lowest points. These rise almost as steadily, and though there is a drop for the last week of March and the first in April, this is not continued through the pneumonia season. But if we look at the next column showing the daily range of temperature, a very marked difference is seen to occur just when the pneumonia season begins, and to continue throughout it. Up to March 18th there is not a single week in which the average daily range is as much as 20° F. The average is 11.1° F. From March 25th to July 8th there is not a single week in which the range is not over 20° F. The average is 23.4° F. During the next four weeks the range is never over 20° F., and the average is 17.1° F. Thus the pneumonia season is seen to be just within a period during which there is a far higher range of daily temperature than the periods on either side of it can show, a period, in other words, of much greater exposure to sudden variations of heat and cold than can be found, except for a week or two at a time, throughout the whole of the rest of the year. I shall refer to the two exceptions—in August and September—further on. Moreover this increase of daily range begins and ends as abruptly as the pneumonia season itself.

Next it will be seen that this was a time of low relative humidity. There was very little dampness in the air. The change does not begin so suddenly as the range of temperature, but it ends as abruptly, and is quite as marked. The average degree of humidity up to March 18th was 85, the average from then till July 8th was only 66, the average for the next four weeks was 75. When it is considered how very slight the variations of humidity are, for the extremes are only 34 degrees of the scale apart (91 for the last week in January, and 57 for the second in May), the dryness of the pneumonia season appears a very remarkable thing.

Next the pneumonia season is almost exactly coincident with the east winds. Up to March 18th the wind was in the east once only, from then to July 8th there was east wind every single week except three, and in one of these the wind was north, which is next door. During the whole of the rest of the year there are only four weeks in which the wind was easterly. But the east winds were not strong. The horizontal movement, deduced from Robinson's anemometer, shows the very reverse, a sudden transition from the rather windy weather which had prevailed up to March 18th to a period of light breeze. The sunshine and the drought were almost unprecedented.

Three conditions, then, coincide with the pneumonia season, a wide range of daily temperature, a dry air, and easterly wind. But "coincide" is not quite right, for they overlap the pneumonia season by a week at each end. If they cause pneumonia it is of course natural that they should precede it. But I see no explanation for their lasting beyond it. I daresay that if I were to divide up the fortnight ending July 15th into its two weeks, I might find a greater incidence of pneumonia during the first week when these three conditions were present than during the second when they were absent; but I should not believe the results if I did, and I therefore refrain. The broad facts are too striking not to have a meaning; the pneumonia season must have been connected with the atmospheric conditions which I have mentioned, and this apparent difficulty is not great enough to overthrow the conclusion.

I do not think that any further inferences can safely be drawn. The little prevalence of pneumonia during November and December is indeed coincident with a very low daily range (the average from October 22nd to December 30th is only 14° F., the pneumonia incidence 16 per fortnight), but the range was lower still in the first eleven weeks of the year when the pneumonia rate was nearly double. It is, however, allowable to point out that two other periods of wide daily range of temperature, August 6th to 26th (average 24.2° F.) and September 3rd to 16th (average 23.1° F.) do not, at any rate disprove the conclusion drawn from the much longer period, for each of these short times is accompanied by a pneumonia rate slightly, yet distinctly, above that of the neighbouring weeks. Neither east wind nor dryness of the air seems to have had anything to do with these times of slight increase.

Of these three conditions it seems reasonable to suppose that the wide daily range, the "hectic" temperature (I have not the gift of tongues, the scientific idioglossia, or I would invent a much longer word for the occasion) was the most effectual. Very likely dryness of the air, by aiding evaporation, increased the influence of the first. Probably the influence of the wind, apart from any great horizontal movement, can be resolved into these two.

Lastly, it remains to compare these statistics with others. There are many tables extant embracing periods of several years in various parts of Europe. References will be found to most of them in Sturges and Coupland's exhaustive work on *Pneumonia*. Almost all the compilers come to the conclusion that the spring months are those in which there is most pneumonia. Thus Brunner,[1] whom I quote as a type, finds that most cases occur from March to May; that next in order comes the quarter December to February; and that the smallest number occur from September to November. My tables are therefore supported by many previous statistics.

The inferences which I have drawn are also supported by many previous opinions. Sturges and Coupland themselves came to the same conclusion; they quote others to the same effect, and Osler, writing since the publication of their book, says the same thing: "It seems that the sudden changes characteristic of March, April, and May are the important climatic factors which predispose to pneumonia."[2]

But these general averages taken from several years are necessarily inaccurate. The month of June in one year is probably very different from the next June or the preceding. Therefore no satisfactory conclusions as to weather influence can be drawn from them. It is only by collecting a large

[1] *D. Archiv. f. klin. Med.*, xlviii, 1891.
[2] *Princ. and Pract. of Med.*, p. 512.

number of cases within a limited time in a small area that the influence of weather can be tested. This is what I have done. So far as I know, it is the first attempt of the kind in Europe.

In New York, Seibert, by means of a collective investigation, has carried out a similar inquiry. He took the year March, 1884, to March, 1885, and collected over 700 cases. He found February and March to be the most pneumonic months in the year, and concluded that the three chief climatic factors were (*a*) a low and sinking temperature, (*b*) a high and rising humidity, (*c*) a strong wind, and brings pneumonia into line with bronchitis. None of these conclusions are borne out by my tables: they certainly do not harmonise with European statistics and opinions, and, judging from Osler's sentence above quoted, they do not agree much better with those of America. The tables are not given in detail, so that it is impossible to compare them with my own.

Of course I do not suppose that in atmospheric conditions we shall find all the factors that cause pneumonia. Even leaving aside the pneumococcus, the weather does not explain epidemics, and it probably does not act similarly in all climates. Still, it is undoubtedly the general opinion that it has a considerable influence, and it will therefore be useful to have shown with some accuracy the conditions which last year in London varied with the prevalence of the disease.

For the Week ending	Temperature of Air. Mean of Highest Points.	Mean of Lowest Points.	Mean of Daily Range.	Degree of Humidity (Saturation = 100).	Wind. Direction.	Horizontal Movement: No. of Miles.	No. of Cases of Pneumonia admitted into the four Hospitals.
Jan. 7	29.6	20.2	9.4	85	Variable	1,266	26
,, 14	37.3	32.6	4.7	88	N.E.	1,891	
,, 21	39.7	30.0	9.8	86	Variable	1,932	33
,, 28	45.2	37.1	8.1	91	Variable	2,009	
Feb. 4	49.2	39.9	9.3	88	S.W.	2,506	33
,, 11	47.7	33.2	14.6	86	S.W.	2,904	
,, 18	49.9	37.2	12.7	87	S.S.W.	2,849	32
,, 25	44 3	35.7	8.6	86	Variable	2,146	
March 4	50.7	38.2	12.4	86	Variable	2,489	29
,, 11	55.6	38.0	17.6	83	S.W. and N.W.	1,888	
,, 18	53.9	38.3	15.6	75	S.W. and N.W.	2,630	32
,, 25	57.8	30.8	26.9	72	E.	838	
April 1	63.5	33.9	29.6	60	N.E., E., and S.W.	1,281	62
,, 8	60.1	38.9	21.2	78	E. and N.E.	1,690	
,, 15	56.8	35.1	21.7	70	N.E. and E.	1,889	68
,, 22	68.8	42.3	26.5	63	E.	1,414	
,, 29	70.6	42 4	28.3	61	N.E. and E.	1,414	73
May 6	68.5	43.3	25.2	64	Variable	1,763	
,, 13	72.8	43.0	29.8	57	N.E.	2,137	61
,, 20	72 1	49.1	22.9	76	E., N.E., and S.S.W.	1,674	
,, 27	69.4	48.9	20.5	65	S.W. and N.W.	1,583	59
June 3	68.0	43.1	24.9	67	N.	1,101	
,, 10	74.5	50.1	24.4	66	N.E. and E.	1,494	52
,, 17	80.6	52.8	27.8	58	N.E.	1,375	
,, 24	74.4	50.4	24.0	66	N.E. and S.W.	1,788	60
July 1	75.2	51.7	23.5	71	S.S.W. and E.	1,967	
,, 8	83 6	55.5	28.1	62	E.N.E.	1,419	30
,, 15	69.5	53.8	15.8	78	Variable	1,268	
,, 22	71 5	54.9	16.7	76	S.W.	1,956	29
,, 29	73.2	54.3	18.9	70	S.W.	1,832	
August 5	70.5	53 2	17.3	76	N.W., W., and S.W.	2,200	22
,, 12	80.8	57 2	23.6	73	S.W.	1,420	
,, 19	88.8	59.8	29.0	58	S.W.	1,313	34
,, 26	73.8	53 8	20.0	71	S.W.	2,285	
Sept. 2	69.8	51.1	18.7	76	N.N.W., N., and N.N.E.	1,095	20
,, 9	73.9	50.9	23.0	68	Variable	1,674	
,, 16	70.0	46.7	23.3	71	N.E. and S.W.	1,480	32
,, 23	62.5	47.1	15.5	76	S.W.	1,963	
,, 30	64.0	46 3	17.7	80	S.W.	2,243	28
Oct. 7	62 4	45.0	17.4	76	S.W. and S.	1,782	
,, 14	61 5	45.3	16.2	84	S.W.	1,800	25
,, 21	62.1	48 9	13.1	86	S W.	1,772	
,, 28	55.6	42.7	12 8	78	S.W.	2,146	15
Nov. 4	52.2	37.6	14.6	83	S.W.	1,957	
,, 11	45.1	35.1	10.0	80	N E.	2,279	17
,, 18	46.5	35.4	11.1	88	Variable	1,949	
,, 25	43.9	34.4	9.6	82	N., N.N.W., and S.W.	3,168	25
Dec. 2	47.0	35.8	11.2	83	S.W. and N.	2,458	
,, 9	46 0	34.4	11.5	83	S.W.	2,204	12
,, 16	49.7	35.0	14.7	84	S. and S.W.	2.750	
,, 23	46.6	36 4	10 3	89	S.W.	2,536	13
,, 30	44.6	35.6	9.0	90	S.W., S.E., and N.E.	1,390	

A CASE OF PERFORATION OF A CHRONIC ULCER OF THE DUODENUM SUCCESSFULLY TREATED BY EXCISION.

DEATH TWO MONTHS LATER FROM ACUTE INTESTINAL OBSTRUCTION BY A BAND.[1]

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E. F., a married woman, aged 27 years, was admitted into one of the surgical wards of the London Hospital on the evening of February 17th, 1894. She was seen by me about 1.30 A.M. on the following morning, that is, a few hours after her admission, and I found her in the following condition:

Intense pain was complained of over the whole of the abdomen, perhaps slightly more marked in the epigastric regions. The patient felt very ill, and her expression was exceedingly anxious. Vomiting occurred every few minutes, and much exhausted the patient. The pulse was 120, feeble and regular. The respirations were rapid and irregular both in force and rhythm. The tongue was slightly furred, and very dry. There was uniform tenderness over the whole abdomen, the distension was moderate in degree, and the resonance of the percussion note was markedly increased. The temperature was 100·6°.

On questioning the patient it was found that for about a fortnight she had suffered from pain in the chest and pit of stomach, and that her doctor had been treating her for indigestion. The patient had been sick several times during the week previous to her admission, and her bowels had not been opened for seven or eight days. About twenty-four hours before admission to the hospital the patient suddenly became much worse, feeling a severe pain in the pit of the stomach, and a sensation of intense weakness. This was soon followed by vomiting, repeated at frequent intervals.

It seemed to me pretty evident that the patient was suffering from acute general peritonitis. The possibility of perforation of the stomach or duodenum was considered, but on the whole I was rather inclined to think that it was a case of mechanical obstruction with general peritonitis. It was decided to operate at once. The patient was taken to the operating theatre, anæsthetised with chloroform, and an incision about 3 inches long was made immediately below the umbilicus. On opening the peritoneal cavity a quantity of purulent fluid escaped, and coils of intestine, somewhat distended, intensely congested, and covered in places with flakes of lymph, protruded through the wound. No evidence of any mechanical obstruction could be obtained, so I increased the incision upwards to the ensiform cartilage, and in a few minutes I found some flakes of lymph in the region of the gall bladder. In the centre of one of these flakes I noticed some gas bubbles, forming a kind of froth. On inserting a probe into the froth I found that it passed into a cavity, which on further examination was found to be the duodenum, the perforation being situated on the anterior aspect about $\frac{3}{4}$ inch beyond the pylorus. Around the perforation a distinct induration could be felt. By means of scissors this indurated area was excised. The portion removed was elliptical in shape, measuring $1\frac{1}{4}$ inch in its long axis, which was parallel with the transverse axis of the gut. The portion excised was found to include the ulcer and a margin of healthy mucous membrane. In the centre of the ulcer was a perforation about 2 mm. in diameter. The floor of the ulcer was white, and the edge of the ulcer was bounded by apparently healthy mucous membrane. The elliptical opening thus made into the duodenum was sewn up by silk sutures according to Lembert's method. The peritoneal cavity was washed out with warm weak boracic lotion, well sponged, and the wound sewn up by stitches passing through the whole thickness of the abdominal wound. The operation lasted fifty minutes.

After the operation the patient was allowed nothing by the mouth. She was fed solely *per rectum* by nutrient enemata and suppositories for seventeen days. To allay thirst, 2 ounces of warm water were occasionally injected into the

[1] Read before the Medical Society of London.

rectum. The patient rapidly improved, was given liquid food by the mouth on the eighteenth day, and solid food on the twenty-eighth day. The abdominal wound healed by first intention, and on March 19th, that is, thirty days after the operation, the patient was walking about the ward, going into the garden, and eating ordinary food.

It was decided to send the patient into the country, and so she was kept in the hospital until a vacancy in a convalescent home occurred. Three days before the date on which it was arranged that she should leave the hospital, that is, on the evening of April 13th, the patient complained of some pain in the abdomen, and was sick. The pain continued on Saturday morning, and she was sick again. I saw the patient in the afternoon of Saturday, and found her complaining of a colicky pain in the abdomen. Her general condition was good. I ordered an enema to be given, and all food by the mouth to be stopped. Having arranged to leave London on that day for a short holiday, I asked the house-surgeon to call in one of my colleagues, if the patient's condition did not rapidly improve. No result followed the enema, so the house-surgeon ordered doses of mag. sulph. (℥j) to be given every hour. Four of these doses were given, and on Sunday morning the patient was so much worse that Mr. Eve was asked to see the patient. Mr. Eve considered that she was suffering from intestinal obstruction, probably caused by a band, and proceeded to perform abdominal section. Ether was administered, and an incision was made through that part of the scar of the former incision that was below the umbilicus. The great omentum was found adherent to the wound, and at the lower part of the scar a band could be traced to a coil of intestine, and this band had caused a kink in the gut sufficient to produce complete obstruction. The band was attached to the gut about 6 inches above its entrance into the cæcum. The coils of intestine on the proximal side of the band were greatly distended and very congested. On the distal side of the band the intestine was collapsed. The band was removed, and immediately afterwards the collapsed coils became distended, showing that the obstruction had been relieved. The peritoneal cavity, which contained some blood-stained fluid, was washed out with warm boracic lotion, and the wound sewn up by silkworm-gut stitches. The operation lasted 45 minutes.

The patient recovered to a slight extent from the shock of the operation, but never thoroughly rallied. She gradually became weaker, and died about thirty-six hours after the operation.

Post-mortem Examination.—On opening the abdomen a considerable amount of lymph was found upon the intestines, and the peritoneal cavity contained a quantity of turbid fluid. About 3 inches above the attachment of the band to the small intestine was a perforation from which the intestinal contents escaped. A little higher up was another perforation. On opening the intestine it was found that each perforation was in the centre of a small ulcer. The ulcers were evidently of very acute and recent formation, as the whole thickness of the intestinal wall at these spots was necrosed. There were several other necrotic patches within 18 inches of the obstructed point. For about half an inch from the pylorus the duodenum was thinner than normal, and the peritoneum over it was puckered. The duodenum was quite healthy, and presented no traces of past or recent ulceration.

Remarks.—This case is of interest from two distinct points of view. First, the successful treatment of the duodenal ulcer; secondly, the unfortunate sequela of strangulation by a band. More especially is the case of interest from the first point of view, because, so far as I have been able to ascertain, no successful result of excision of a perforated duodenal ulcer has yet been recorded. Not long ago Mr. Lockwood read a paper before this Society on two cases of perforation of duodenal ulcers, and in each of which he failed to find the perforation. In his cases the perforation was on the posterior wall of the duodenum, and almost impossible to expose. In my case, on the other hand, the perforation was situated in the most convenient spot that could be desired—namely, on its anterior aspect, and the difficulties to be overcome in excising the ulcer and suturing the duodenum were but slight.

As regards the unfortunate result, it is impossible, so far as I can see, to prevent the formation of a band after abdominal section for acute peritonitis, especially acute purulent peritonitis. In these purulent cases, at any rate, I do not think that stitching up the peritoneum by itself, before suture of the abdominal wall, could lessen in any way the tendency to the formation of adhesions between the inflamed, lymph-covered intestines and the abdominal wall.

One is rather inclined to conclude with this statement—that if after abdominal section an attack of acute abdominal pain and intestinal obstruction supervene, an exploratory operation should be performed as soon as possible, even if the general condition of the patient would, under ordinary circumstances, scarcely be considered grave enough for immediate surgical interference.

I wish to express my thanks and indebtedness to my colleague, Mr. Eve, for his kindness in taking charge of the patient during my absence.

HALLUCINATIONS IN THE SANE, ASSOCIATED WITH LOCAL ORGANIC DISEASE OF THE SENSORY ORGANS, ETC.

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The following paper deals with cases which have come under observation during the last six years at the National Hospital for the Paralysed and Epileptic, and I am indebted to the physicians under whose care they were for permission to make use of the notes.

Inasmuch as there was a definite peripheral cause for the hallucinations, the more restricted term "illusion" might have been more accurate, but as this would lead to confusion in the cases where local ear disease led to hallucinations of vision as well as hearing, the more general term "hallucination" has been employed throughout, it being now pretty generally recognised that there is no essential difference in the nature of illusions and hallucinations.

Hallucinations due to drugs (alcohol, opium, haschish), to toxic substances circulating in the blood (as in fevers, etc.), those associated with thoracic or abdominal visceral disease, and those occurring as an aura in rare cases of idiopathic epilepsy are purposely omitted. Attention is confined to those cases in which there was demonstrable local disease of the eye, ear, etc., or of sensory regions of the brain.

It will be noticed that the hallucinations were mostly temporary, associated with some general bodily disturbance, and passed off with the return of the general health to normal. So, too, the whole brain seems to have been disturbed, and we find hallucinations excited of other senses than the one whose organs are affected.

Hallucinations due to Local Diseases of the Eye.

These are far from infrequent. They are usually extremely definite, so that the patient can give an extremely vivid and detailed account of them. Unless he is much out of health, he rarely believes in their reality, in marked contrast to the condition in toxic cases (alcohol, etc.).

They occur frequently from opacities in the media, and occasionally in glaucoma seem to represent the flashes of light which are so often experienced in that disease. They are common in cases of optic atrophy, but I have not at present met with them associated with optic neuritis.

Case I. *Old Choroiditis, and Floating Bodies in Field of Vision: Fresh Inflammation of Eye: Temporary Hallucinations of Vision.*—Miss C., aged 38 (under the care of Dr. Ferrier), had had choroiditis and floating bodies in the vitreous for some years. She had not been taking alcohol or narcotics. Coincidently with some acute inflammation of the eyes, which depressed her very much, she developed hallucinations of vision. She complained that numerous beetles like ordinary cockroaches with red eyes kept swarming over the bed and on the ceiling. Two days later she complained in addition that "a woman in red, all on fire,' kept coming to her bedside, and annoying her (one of the nurses in ordinary uniform). For a day or two she believed in the reality of these appearances, but as her general condition improved, she ceased to mind them. When they disappeared, the field again became full of ordinary muscæ volitantes.

Case II. *Syphilitic Retinitis: Numerous Floating Bodies in Field: Temporary Hallucinations of Vision.*—W. E., aged 50. The retinitis noted above was of long standing, and had been quiescent for some years, but had recently become troublesome, and for some months he had had numerous

floating bodies in his field of vision. During the last few weeks these objects had taken the form of faces, including, he says, "everyone he has seen in his life." He never sees any part of the body beyond the face. He quite recognised that they were illusions, and they caused him no annoyance.

CASE III. *Illusion due to a Retinal Hæmorrhage.*—Mrs. R., aged 50 (under the care of Dr. Hughlings Jackson) suffered from pernicious anæmia. A few days before death she had a crop of retinal hæmorrhages, one of which was near the yellow spot. During the next few days she complained of a blackbird which would remain perched on her bed, and refused to fly away.

Raggi[1] and Griesinger[2] each quote cases in which the development of hallucinations in persons otherwise sane was associated with the formation of a cataract.

HALLUCINATIONS DUE TO LOCAL AFFECTIONS OF THE EAR.

External Ear.—Mabille[3] describes an interesting case of unilateral hallucinations of hearing which ceased when a grain of wheat covered with wax was removed from the external auditory meatus. Wigan[4] in this connection relates an interesting personal experience: "I remember hearing in Italy a bell with a very peculiar sound at a time when I was in the midst of a long train of painful emotions. I never heard the sound again, but in passing Mount Cenis.....I felt that I had taken cold in my ears, which began to get somewhat painful, and suddenly I heard the peculiar sound of the bell of Mola di Gaeta. I was entirely convinced that I heard a bell, and looked round in vain for a campanella. All the way from there to Beauvoisin the same sound continued in my ears, renewing all the painful associations associated with my first hearing it." It did not disappear until he reached an hotel some hours later, and had his ears syringed with hot water. A case has been recorded by Max Buch[5] in which there were severe hallucinations of hearing accompanied by otitis media, which ceased when the otitis was relieved.

Labyrinth.—Much more frequent are hallucinations associated with disease of the labyrinth. The local disease causes noises of an indefinite character—roaring, humming, buzzing, whizzing, etc. Not infrequently there is a sense of rotation round a vertical or transverse axis, "auditory vertigo"—that is, an illusion of the sense of equilibration. When a patient suffering in this way gets below par, the noises may take a more definite form such as voices, and not infrequently hallucinations of other senses are superadded.

CASE IV. *Auditory Vertigo: Hallucinations of Hearing and of Vision.*—Mrs. M., aged 61, had had deafness with absent bone conduction, constant noises in head, with occasional vertigo for eight years. Recently she had hallucinations (*a*) of hearing. Frequently at breakfast she heard a strange voice saying imperiously, "M., go to bed"; "M., you are dirty, go and wash," and so on; (*b*) of vision. She occasionally saw figures. Usually "an Indian woman appeared with a shawl thrown over her face," but sometimes she saw a bishop in full canonicals. She did not believe in the reality of these appearances, but was anxious lest they should lead to permanent mental trouble. They entirely disappeared after two months' treatment with bromide and quinine.

CASE V. *Auditory Vertigo: Visual and Olfactory Hallucinations only: Violet Vision during the Attacks.*—Mrs. C., aged 55 (under the care of Dr. Buzzard), had suffered from vertigo and deafness, with loss of bone conduction, for some years. The vertigo consists of a sense of rotation around a vertical axis. At the close of the attack she has hallucinations of vision, usually faces of a man, woman, or crying infant. The whole room and everything about her seem violet. Some time ago she had olfactory hallucinations, consisting of a smell of putrid fish, lasting five minutes. There have been constant noises in the ear but no definite hallucinations of hearing.

CASE VI. *Labyrinthine Deafness: Hallucinations of Hearing, etc.*—Mrs. F., aged 54 (under the care of Dr. Buzzard), suffering from labyrinthine deafness (Mr. Cumberbatch), and frequent noises in head. Some months ago, while in bad general health, she heard a peal of bells several times, and on another occasion she heard the roar of Niagara (near which she formerly lived) with such distinctness that she was hardly to be persuaded that she was not in her old home in Canada.

Dr. Ormerod[6] records a case of well-marked auditory vertigo with increasing tinnitus. After some years the patient began to hear not only noises, but words, names of streets, songs, etc. She subsequently developed hallucinations of smell and vision, but remained perfectly sane.

In connection with the "violet vision" mentioned in Case V, a similar occurrence in a case of auditory vertigo published by Hughlings Jackson[7] may be quoted: A surgeon who had formerly been completely deaf from the report of a gun, and had had frequent attacks of vertigo, was driving on a cold day when he felt pain above his right ear. Suddenly all objects became of a brilliant scarlet colour. This passed off abruptly after an hour or two, but the pain and vertigo persisted, with intermissions, for some days.

HALLUCINATIONS DUE TO LOCAL DISEASE OF THE BRAIN.

CASE VII. *Tumour involving Left Temporo-sphenoidal Lobe: Hallucinations of Hearing in Right Ear.*—W. P., aged 38, under the care of Dr. Buzzard, suffering from epileptiform fits, beginning in the right hand, and double optic neuritis. A few weeks before death he complained repeatedly of a noise of the ringing of bells in his right ear. Subsequently he complained that the musical box in the ward was allowed to play in the night—which was not the case—and for the last ten days of his life, when he had become very drowsy and dull in answering questions, he would lie on his back with a pleased smile on his face, keeping time with one hand to imaginary music. At the necropsy a sarcomatous tumour was found involving the lower end of the ascending frontal and parietal convolutions, extending across the fissure of Sylvius, and involving the superior temporo-sphenoidal convolution.

Tomaschewsky and Ssimonowitsch[8] report a case in which there were unilateral hallucinations of hearing and vision, and in which *post mortem* the dura mater was found to be thickened and adherent to the superior temporo-sphenoidal convolution and to the angular gyrus, but not elsewhere.

More common are hallucinations of vision associated with hemianopia from lesions of the cuneus, or paths leading to it.

CASE VIII. *Left Hemianopia, with Hemianæsthesia and Hemiplegia: Hallucinations in the Blind Field.*—Mrs. A., aged 45 (under the care of Dr. Ferrier), suffering from hemianopia, hemiplegia, and hemianæsthesia, probably due to a lesion at the posterior part of the right internal capsule. For three weeks after the onset she saw numerous faces of men, women, and children. The faces were unfamiliar and were not unpleasant, and she quite recognised that they were unreal. They always appeared on her left side—that is, in the blind field. They entirely passed off, the hemianopia persisting.

An exactly similar case of transitory visual hallucinations in the blind field (dogs, children, etc.), associated with hemianopia, is recorded by Peterson[9], and Henschen[10] has reported four cases in which the localisation of the disease in the cerebral cortex was confirmed by a necropsy.

CASE IX. *Tumour Pressing on Middle Lobe and Peduncles of Cerebellum: Hallucinations of Sense of Position followed by Hallucinations of Vision, etc., derived from these.*—J. S., aged 39 (under the care of Dr. Ferrier, notes by Dr. Head), suffering from occipital pain, failing sight, unsteadiness of gait, and marked loss of muscular sense. A necropsy made in March, 1894, showed a tumour of the pons and medulla pressing on the middle lobe of the cerebellum and on the peduncles. In July, 1893, he had frequent hallucinations of sense of position. When lying on his back he would insist that he was lying on his face, and would request to be turned over. One day he had an attack of vertigo while lying in bed. There was no movement, but he declared that his head and neck went up, and that at last he stood erect on his feet. This hallucination was very definite to him, and as by this time he had become blind, he could not check his false belief by looking round him. A little later these hallucinations became more complex, and hallucinations of vision and common sensation were added (*a*) hallucinations as to position: he thinks he is in the erect position (he is in bed), and being pushed forwards as he walks with a load of heavy boards on his back; then he tries to avoid a pit which lies at his feet, into which he fears to fall, owing to the weight on his shoulders; (*b*) visual hallucinations; he sees men digging a canal close to him; they nearly all have loads on their shoulders; he sees rats, butterflies, and bats, but they do not excite repulsion, and he is pleased, as he thinks his vision is returning; (*c*) of common sensation; he says his hands are "pulpy," owing to his having picked up maggots; he is constantly wiping them on an imaginary towel after washing them free from maggots; there were no hallucinations of hearing or taste. The hallucinations of vision only lasted for a few days, but there were hallucinations of position from time to time until his death six months later. Beyond the increasing dulness due to increased intracranial pressure from dilatation of the ventricles, there was no further mental change.

GENERAL REMARKS.

It is not my purpose to discuss in this paper the nature of hallucinations in general. It may be noted, however, that the hallucinations in these conditions, as in those of night terrors, are mostly of a simple character. The visual hallucinations were either "faces," the part to which our attention is habitually directed, and of which we retain the most distinct image in our memory, or objects, such as rats and beetles, which from early childhood have been associated with painful emotion and alarm.

The frequency with which the colour "red" appears in connection with them is of interest. In Case I for instance, the beetles had red eyes, and the nurse appeared to be in red flames. Red is also a common colour in connection with visual aurae in epilepsy. The patient, W. E. (Case No. 2) suffered from epileptic fits, and before each fit he always saw an old woman dressed in red. It is also commoner than other colours, so far as my observation goes, in hallucinations in cases of mental excitement. Two epileptic patients, in whom there was some temporary mental excitement, have imagined they visited Heaven. I carefully listened to their remarks, and questioned them about the robes worn, the flowers, etc., and red was the predominant colour with each of them. Blue was much less common, and it was difficult

to get any account of anything green. The hallucinations of hearing were also simple, consisting of bells, rushing water, etc., and when voices were heard the words used were not arranged in complex sentences, but in what may be termed "interjectional" form.

The degrees of depth of "mental dissolution" were well illustrated in many of the cases, in which first of all floating bodies were seen as specks, but recognised to be part of the individual. Later they took the form of faces, animals, but were for a time recognised as existing only in the patient's own sensations without external warrant, and later on he fails to recognise that they have anything to do with himself, and refers them to the world outside him, and believes in their existence apart from himself.

Such cases as these have been sometimes claimed as evidence of the peripheral character of hallucinations, that is, that there is not merely a strong revival of the mental idea, but that there is the same actual excitation and chemical change produced in the peripheral organ, such as the retina, as would have been produced had an image of the real object fallen on it. To controvert this theory now would be superfluous, as it has been very completely refuted by Hack Tuke[11] and others. It is evident, too, from what has gone before, that we have to do with a condition of the perceptive centres, and not merely with one of the peripheral organs. There is not merely "imperception," failure to perceive the nature of the stimuli, but also a positive factor, the invention, so to speak, of mental images for which the sensory impressions give no warrant, as when Miss C. (Case 1) saw large beetles with bright red eyes instead of ill-defined floating bodies. In the development of illusions in a healthy person, two factors are requisite (*a*) indefiniteness of the sensory impression; (*b*) a state of tension of the nervous system, a condition of expectant attention, which may arise from fear, hope, or merely curiosity. It is notorious that the commonest illusions are those met with in a dim light, at a time when one is hoping or fearing to see some object. How often does the belated tourist, walking at night along a tedious road, think that he sees before him the inn where he intends to rest, which resolves itself as he approaches into a clump of trees, and still more often has an inanimate white post alarmed some timorous passer-by, and formed the foundation for a local ghost story which may take years to subside.

> Or, in the night, imagining some fear,
> How easy is a bush supposed a bear.
> *Midsummer Night's Dream*, Act. v, Sc. 1.

With many children, too, it is a favourite amusement to press their faces into a pillow or cushion, and voluntarily throwing their minds into a condition of expectant attention to construct from the phosphenes excited by pressure on the eyeballs visions as evanescent, varying, detailed and picturesque as their dreams: and the practice of many imaginative people to construct faces out of the flames or glowing embers of a fire will occur to everyone.

In the cases which form the subject of this paper also the impressions which formed the basis of the hallucinations were indefinite. The floating bodies in the vitreous are faint and the shadows they throw on the retina ill defined. If there are illusions due to optic atrophy or cataract the dim illumination caused by the affection favours their occurrence. The auditory sounds, buzzing, hissing, etc., are usually also most indefinite, and patients find it difficult to give an exact description of them.

In almost all the cases, too, the other factor, the alteration in the general mental condition, could be observed, the hallucinations passing off with improvement of the general health.

The prognosis is fairly good except in cases where there has been a previous mental break-down, in which case it should be extremely guarded. It should in all cases be treated as a danger signal, and the patient put in as favourable circumstances as possible for securing mental tranquillity.

As regards treatment, the first thing is to endeavour to remove the cause by treatment directed to the organ which is at fault. It has been seen that frequently improvement of the general health is accompanied by the disappearance of the hallucinations, and, to this end, tonics, liberal diet, and, in many cases, change of air and scene may be recommended. It is very important to see that sleep is not interfered with, and, if this cannot be obtained by natural means, such as inducing fatigue by a sharp walk before bedtime, sleeping draughts may be necessary, and the least harmful in such cases is sulphonal, given in 15-grain doses, given with soup or beef-tea two or three hours before bedtime.

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PRELIMINARY REPORT ON THE SUPRARENAL GLAND, AND THE CAUSATION OF ADDISON'S DISEASE.

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[FROM THE WESTERN INFIRMARY LABORATORY.]

THE function of the suprarenal body or gland is a subject of great obscurity, and any observation which may throw any light on the matter will no doubt be made welcome. It is evident that a correct knowledge of this function will go far to unravel the mystery in which Addison's disease is still enveloped. In the present communication I wish to put on record one or two facts observed in the course of an investigation of the subject, reserving the full account and discussion of the same for future publication.

On making a fresh section of the adrenal body, the extremely vascular character of the inner cortical layer becomes at once apparent. It contrasts strongly with the delicate pearly-looking tissue of the medulla on the one side, and the opaque yellowish external portion of the cortex on the other. The blood seems almost entirely collected in this zone, and that the intravascular pressure is considerable is apparent from the welling forth of the fluid which occurs after section. Further examination reveals that the cells composing this layer are more or less pigmented, highly so in some cases, and but faintly so in others.

The existence of the pigmented cells has long been recognised, but their significance has not, so far as I am aware, been hitherto apprehended. My sections reveal the fact that large numbers of red blood corpuscles make their way into these cells, and are to be found (by suitable methods of staining) in their interior in all stages of regressive metamorphosis, from the completely-formed cell downwards. This is so far seen in the accompanying photograph. The en-

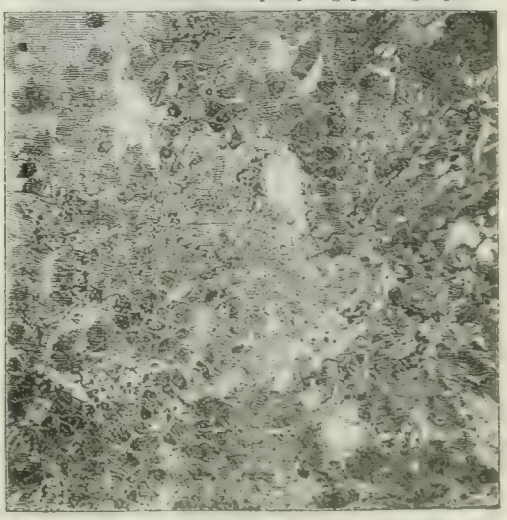


Fig 1.—120 diams. From the suprarenal of a young man. In he glandular cells numbers of small dark bodies are seen, sometimes to the number of five or six: these are red blood corpuscles. For comparison a small bloodvessel is seen containing red corpuscles near right hand corner. The nuclei of the gland cells are obscured by the deposit of pigment.

globed corpuscles are probably best seen by Biondi's reagent (after suitable hardening). Apparently by a chemiotactic action, certain of the red corpuscles are selected and attracted within the phagocyte cells (for such they may be called). They can be seen passing inwards and at first cannot be distinguished in any respect whatever from those in the vessels outside. Gradually they assume a greenish-brown coloration, and thereafter begin to break up into larger and smaller particles. The nucleus of the phagocyte is usually much obscured by the pigment particles, but it is large, and together with the protoplasm may show signs of formative activity.

I have no hesitation, therefore, in formulating the opinion that *one at least of the functions of the suprarenal gland is the destruction of a certain class of effete red blood corpuscles.* It is seen that not only do these cells separate pigment, but they absorb and destroy the stromata as well. In all probability this is effected by means of a ferment.

The part played by the medulla is of great importance, but I am unable to enter at length on it here. Three kinds of cells may be made out: namely, glandular columnar or polyhedral cells, faintly eosinophilous, and with frequent very large round or oblong nuclei; these are regularly arranged in the meshes of the reticular network; secondly, a highly-branched corpuscle, with peculiar staining reactions and absolutely non-eosinophilous; these seem to be modified nerve cells; and, lastly, ganglion cells proper, which both cluster round large nerves which pass straight through the cortex and likewise exist in isolated fashion in the reticular meshes. It is no doubt an office of the medulla to test the quality of the blood, which, so far purified by filtration in the pigmented zone, passes through it ere it enters the circulation, and certain appearances have led me to suspect that it is concerned in the further reduction of effete substances. The blood, after passing through the medulla, has the characters of arterial oxygenated blood, as an examination of the contents of the adrenal veins shows.

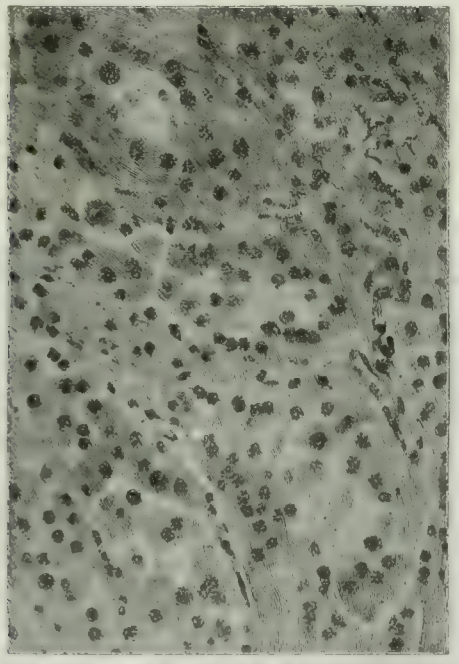


Fig. 2.—250 diams. Three acini are seen in the diagonal from the lower right hand corner. They are lined with semicolumnar cells and contain a fluid mingled with a few desquamated cells.

Being, therefore, in part at least, an *excretory* or *depurative* organ, the symptoms of blood poisoning which characterise Addison's disease become at once intelligible, whilst the pigmentation of skin, etc., is due to the circulation of certain decomposition products of hæmoglobin. In a future paper I hope to make clear this sequence, and likewise to explain the apparent anomaly of the occasional absence of pigmentation in certain cases of destruction of the adrenal bodies.

A brief reference may be here made also to the outer cortical zone (zona glomerulosa of authors). Its cells are but moderately eosinophilous—in this respect contrasting with those of the columns of the middle zone—and their nuclei readily absorb logwood. Although the acini are usually entirely filled with cells, I have seen under favourable circumstances a considerable central lumen filled with secretion. The appearance much resembles that found in the anterior lobe of the pituitary body. This secretion is carried away by lymphatics to minister to certain needs of the organism.

[I must express my great indebtedness to Dr. Thomas Reid, surgeon to the Eye Infirmary, to whose kindness and skill the original photographs are due.]

A CASE OF CONGENITAL HYDROCELE OF THE NECK: CURED BY DRAINAGE AND COMPRESSION.

By GEORGE DICKINSON, M.R.C.S.Eng., L.R.C.P.Lond.,
Leamington.

C. I., aged 3, was a healthy, intelligent-looking male child, living in the country. Dr. Davis, of West Hartlepool (in whose practice the case occurred) attended the mother at the birth of this child, and then noticed a swelling about the size of a walnut in the lower part of the neck, in a vertical line with the ear. The mother reported that the swelling



Fig. 1.

had gradually and uniformly increased in size to the present time, and that she had never been able to let the child run about with the other children for fear of injuring the tumour. These other children were all healthy and free from deformity.

When first seen by me, in November, 1892 (three months before the operation) the cyst had become inflamed after a slight blow, and threatened to suppurate; this inflammation, however, subsided under hot applications.

On February 22nd, 1893, the cyst appeared as a soft, white, fluctuating swelling (Fig. 1), translucent and pearly owing to the thinness of its walls over the posterior half, having no veins apparent running over it, and becoming alternately tense and soft during crying or coughing. It extended from the sternal end of the left clavicle in front to the middle line behind, and quite filled up the sulcus between the neck and the shoulder, looking like a swimming collar, and overhanging the clavicle in front.

Having carefully cleansed the scalp and surrounding parts, and the child having been chloroformed, a trocar carrying a cannula was put in at the posterior and thinner part. About 8 ounces of dark, greenish-brown, highly albuminous fluid, looking like bile-stained urine, escaped, with little or no force, the child breathing tranquilly at the time.

A small incision, sufficient to allow entrance to the little finger, was made in the position of puncture, and through this the cavity was explored. The sterno-mastoid muscle in the front wall of the cyst felt thin and atrophied; the carotid artery lying by the trachea, and the subclavian passing over the soft lung, were felt quite hard and clear, and apparently having no covering, but lying free in the cyst. No constriction or obstacle was felt to prevent the finger following the arteries downwards behind the sternum to the arch of the aorta, which was felt pulsating vigorously, and, as far as one could tell by the feel, quite bare. At this stage the child showed signs of shock, turning pale, and respiration ceasing. After two efforts at artificial respiration, natural breathing was resumed. No further attempt at exploration was made, but a second small incision in the cyst wall, about 2 inches in front of the former one and 1 inch behind the posterior border of the sterno-mastoid, was made.

A piece of thin drainage tubing, passed in at one hole and out at the other, was found to be too rigid, crumpling up the thin wall between. A seton consisting of five or six strands of fishing gut was therefore put in, and the ends tied together. A good pad of absorbent gauze was bandaged firmly over the site of the collapsed cyst. The wound was dressed on alternate days up to March 7th (thirteen days after the operation). At the earlier dressings a considerable quantity of blood-stained serum escaped and soaked the dressings, but the openings drained well, and not more than three-quarters of an ounce was ever found pent up. At the later dressings the character of the discharge became altered to a muco-purulent fluid, owing, no doubt, to sepsis, and from March 7th the temperature began running up at night, and the child suffered somewhat in general health. The seton cut out, and the wound continued to discharge more or less freely till March 29th (five weeks after operation), when it had healed, and there was no appearance of any swelling or recurrence. The child rapidly regained its health.

INTRA- AND EXTRAUTERINE FŒTATION AT FULL TERM: CÆSAREAN SECTION (PORRO).

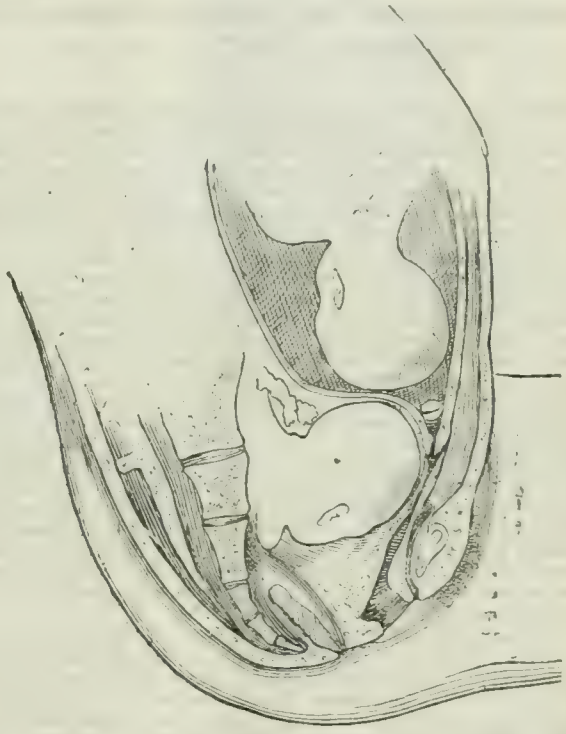
By GEORGE C. FRANKLIN, F.R.C.S.,
Leicester.

On June 21st, 1893, I was sent for by Dr. Hanly, of Desford, Leicestershire, to see Mrs. C., who was in labour (at full time), and had apparently some obstruction at the pelvic brim. I arrived about 9 P.M. with my friend, Mr. P. Paget, who was then house-physician at the Leicester Infirmary, and whose help was most valuable.

Mrs. C., aged 33, had had five children, and always lingering labours; on this occasion she had been in labour eighteen hours. She was found in a small room on the first floor of a cottage, lighted by a small lamp and candles. She was very ill, collapsed, with pale and sunken face and anxious aspect. The pulse was 100, and fairly good. The abdomen was very prominent, especially above the umbilicus, and tense; there was dulness on percussion in both flanks; palpation gave no information. On vaginal examination, the os uteri could not be felt either by the finger or hand. The vaginal wall was swollen and œdematous.

A hard mass, about the size of a cocoanut, could be felt exactly above, apparently pushing over the posterior vaginal wall so as almost to give the impression that it was the anterior wall. This mass was evidently between the finger and the os uteri, and had lifted the cervix beyond reach. It was slightly movable and elastic, and gave the impression of being a large sarcomatous growth filling up the pelvis. Rectal examination gave no additional information. The bowels had been freely open; there had been trouble for some time in micturition.

It was decided after consultation to open the abdomen immediately. Chloroform was administered by Dr. Hanly, as, at Dr. Hanly's suggestion, everything requisite had been brought. An incision 6 inches in length, commencing half an inch below the umbilicus, was made through the abdominal wall, which was as thin as parchment. The second incision completely opened the cavity; about 2 ounces of blood escaped at once from the peritoneal cavity. The uterus presented, and it was noticed that the placental attachment was in the anterior wall, exactly where the incision should be made. The india-rubber ligature was now slipped over the fundus and brought gradually into the pelvis below the uterus and appendages.



An incision about 6 inches in length was made in the uterine wall; a rush of blood followed. A full-term, living, male child was easily extracted together with the placenta. The ligature being now tightened the hæmorrhage at once ceased. A stout wire *écraseur* was substituted for the india-rubber ligature, and during its application there was some more bleeding. The uterus and appendages were now removed. For safety a stout silk ligature was also passed round the stump in case the *écraseur* should slip. So far the condition of the patient was no worse than at the beginning of the operation, and she took the chloroform well.

Having now secured the uterine stump attention was directed to the pelvis, out of which rose a huge swelling, and from which hæmorrhage was rather free.

On manipulation the tightened capsule of this supposed growth ruptured, and a dead full-term fœtus was liberated, the vertex being in Douglas's pouch behind the uterine stump. The fœtus was rapidly removed, and this was fol-

lowed by terrific and uncontrollable hæmorrhage from the regions of Douglas's pouch, cæcum, and intestines. This hæmorrhage came from tufts of placenta which were attached to those regions, nor did this hæmorrhage cease until every vestige of placenta was removed.

The condition of our patient was now beyond hope. A rapid toilet of the peritoneum was made, the silk ligature round the stump tightened, and the *écraseur* removed. The abdominal wall was sewn up. The patient lived about half an hour. Transfusion was tried without success.

Remarks.—The woodcut, from a drawing by Mr. P. Paget, will serve some idea of the relative positions of both the intra- and extrauterine fœtus. There can be no doubt that the supposed sarcomatous mass felt by the vagina was the vertex of the extrauterine fœtus, and a portion of the placenta belonging to it. Hæmorrhage from the placenta probably began before the operation; it would be due to either the examination or to the uterine contractions, possibly both. I may say that I have failed to find on record any such case as this, and it certainly seems that such a one should not pass without notice. I should also venture to state that one could hardly look for recovery under such terrible conditions, but that the right course was taken there can be no manner of doubt.

PERSISTENCE OF THE THYREO-GLOSSAL DUCT.

By CHARLES A. MORTON, F.R.C.S.,
Surgeon to the Bristol General Infirmary.

The evening after the meeting of the Royal Medical and Chirurgical Society on April 10th I reported the following case to the Bristol Medico-Chirurgical Society, which may be of interest in connection with those reported at the London meeting.[1]

A young man, aged 19, consulted Dr. Baron in January last for a swelling over the larynx and some slight expectoration of mucus, which was thought to be connected with it. Dr. Baron examined his throat and larynx, and, finding nothing abnormal, sent him to me for the external swelling. This first appeared when he was 3 years old, and was then "lanced," and glairy fluid evacuated. It had closed and then been "lanced" repeatedly. During the last two years it had been closed, but for three weeks a swelling had been forming, and the skin had become red and thin over it. There was a round, fluctuating soft swelling, the size of a walnut, just above the pomum Adami in the middle line, with a small scar in the skin over it. It moved freely with the larynx on swallowing. I regarded the cyst as a tubulo-dermoid formed in connection with a persistent thyreoglossal duct, and proposed to remove it, but would not promise complete extirpation of the disease, as I thought it might be impossible to dissect out any deeply lying portion of the duct extending upwards through the tongue, especially as I was told that on one occasion a medical man had passed a probe for 1 or 2 inches towards the pharynx.

The next day (January 10th) I dissected out the cyst. It lay over the thyro-hyoid membrane and hyoid bone, and contained a clear jelly with streaks of pus in it. The next day a drachm of jelly came away from the wound. It then quickly healed, but broke down at one corner and again discharged jelly, but only for a few days, and now for the last two months it has been healed. When I found the contents jelly I was inclined to regard my diagnosis as an error, forgetting that these cysts are unlike lingual dermoids arising in the lingual part of the duct, which contain sebaceous material. Although no cord was found at the time of removal extending upwards, the history of the case and the discharge of jelly after the removal of the cyst—no part of the wall of which was left behind—I think, make the diagnosis certain. Probably there was a duct extending some little distance upwards not seen at the operation, which discharged for a short time after, and has now been obliterated by cicatricial contraction.

The history of my case was almost exactly the same as that of the patient, aged 20, referred to by Mr. Durham in a clinical lecture published in the *Clinical Journal* of January, 1894, and very like the first of Mr. Raymond Johnson's cases in the *Transactions of the Pathological Society*.

[1] See "British Medical Journal" April 14th, p. 801.

REPORTS
ON
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

INFIRMARY FOR CHILDREN, LIVERPOOL.

ON EMPYEMA IN CHILDHOOD.

(By J. P. Wightman, M.R.C.S., L.R.C.P.Lond., late Senior House-Surgeon to the Infirmary.)

As interesting statistics on the above subject may be obtained from the records kept at a children's hospital, I have thought it worth while to bring forward a few points collected from the notes and records kept for the past ten years at the Infirmary for Children, Liverpool. For permission to make use of the above notes I am indebted to the kindness of Drs. P. Davidson and N. P. Marsh, Honorary Physicians, and Mr. R. W. Murray, Honorary Surgeon to the infirmary.

During the ten years 1884-1893 there were admitted to the institution 145 cases of empyema occurring in children from the age of 12 years down to infancy. Of these, 124 cases remained as in-patients until the termination of their illness; 35 were over and 89 under 6 years; 77 cases are marked as cured, 18 relieved, and there were 29 deaths.

Mortality.

The death-rate from infancy to the age of 3 years is a very high one, and averages about 50 per cent. From 3 years old to the age of 7 the death-rate diminishes markedly, being 15 to 16 per cent. There were no fatal terminations in the 20 cases occurring in children from the age of 7 to 12. A point to be remembered in looking at the number of deaths is the unfortunate frequency with which cases of empyema are brought to a children's hospital, and that then, and not till then, a correct diagnosis is made, the probable reason being that the physical signs have not been properly investigated previously.

Age.	Cured.	Relieved.	Died.	Total.
Under 12 months	1	—	2	3
Between 1 and 2 years...	7	1	7	15
" 2 " 3 " ...	8	1	9	18
" 3 " 4 " ...	13	2	3	18
" 4 " 5 " ...	12	3	3	18
" 5 " 6 " ...	11	3	3	17
" 6 " 7 " ...	10	3	2	15
" 7 " 8 " ...	3	1	—	4
" 8 " 9 " ...	5	—	—	5
" 9 " 10 " ...	1	1	—	2
" 10 " 11 " ...	4	1	—	5
" 11 " 12 " ...	2	2	—	4
	77	18	29	124
7 cases contracted scarlet fever...				7
14 cases taken out by parents or result uncertain...				14
Total				145

The complications of empyema were usually acute inflammations of adjoining serous membranes, for example, pleurisy, pericarditis, peritonitis, this inflammation being almost always suppurative.

On going through the notes and *post-mortem* books with reference to the 29 cases of death, it was found that there were 6 cases of double empyema; 9 cases in which suppurative pericarditis, and 4 in which suppurative peritonitis occurred; 2 in which an empyema ruptured into the lung. Out of the 29 cases of death, fatal syncope occurred 4 times, 3 of these having as complication suppurative pericarditis. There are notes of one case of double empyema and one of empyema complicated by suppurative pericarditis, both of which recovered.

THE DURATION OF ILLNESS.

This point, as regards hospital practice, has usually to be taken from the history of onset of acute symptoms, to the time when the patient is discharged as cured. Of 75 cases analysed, the duration was 8.8 weeks.

TREATMENT.

The diagnosis being made and confirmed at the time of operation, an incision was made through an interspace where indicated, and a large drainage tube inserted. A portion of rib was removed only if there was no room for drainage in this manner. Antiseptic dressings were used. Treatment by long tubes and valves was not found successful, the ordinary method having almost invariably to be substituted for the latter. As regards the administration of chloroform, though this has almost invariably been given, there is only one case recorded of death during operation. Careful nursing, easily digestible food, a moderate amount of stimulants have always been valuable aids towards rapid convalescence.

REMARKS.—The family history might be an interesting subject to investigate, though the question of tuberculous diseases is open to so much misinterpretation by relatives of hospital patients that the value of the results would be very much diminished. The term "relieved" as applied to cases given in the table is equivalent to leaving the hospital with a short sinus at the site of operation, from which there was some discharge of pus, but not enough to necessitate the use of a tube; these sinuses, as a rule, closing up when the patient was enabled to get about in the fresh air.

In the administration of chloroform, it is not necessary in children to push it beyond the second stage. Its advantages are that the child's alarms are allayed, it is kept quiet, and the operation can be done with more rapidity, cleanliness, and safety.

Ten to twelve cases were in 1893 treated in the first instance by Williams's tube and valve. With the exception of two cases the ordinary method had to be substituted in a few days. In this method of treatment one is kept too much in the dark as regards the actual state of affairs; there is more risk of decomposition occurring, and the most that can be done is to live in hope from day to day.

A point of interest in the after-treatment is the rapid increase of weight of patients convalescing from empyema, some of them, in fact, getting too fat.

ROYAL ISLE OF WIGHT INFIRMARY, RYDE.

A CASE OF OBSTRUCTED LABOUR FROM MALIGNANT DISEASE OF THE CERVIX UTERI: CÆSAREAN SECTION: RECOVERY.

(By J. DAVID DAVIES, Surgeon to the Royal Isle of Wight Infirmary and County Hospital, Ryde.)

[Reported by J. S. STUCK, House-Surgeon.]

ON January 1st, about 8 P.M., I was asked to see, in consultation with Dr. Pletts, a case of obstructed labour. The patient was a thin haggard-looking woman, aged about 36, in a very exhausted condition, having been in labour since the evening of December 29th.

The head was found presenting, and, although the patient had been in labour for four days, the os was scarcely dilated enough to allow the passage of one finger. In the posterior part of the cervix was a deep irregular cavity, the walls of which bled fairly freely on digital examination. The tissues round the cervix were infiltrated, forming a firm mass, which extended down the posterior wall of the vagina for some distance. The labour pains kept coming and going, but the os remained the same size. I suggested the patient's removal to the hospital, which was done about 9.30 P.M. A consultation of the medical staff was called for 10.30, and it was then decided that Cæsarean section was the only chance left to the patient. The patient was removed at once to the operating theatre and anæsthetised.

Operation.—The bladder having been emptied, an incision of about nine inches was made in the median line, starting about two inches above the umbilicus. This was afterwards increased a little. The uterus was turned out through the wound, and sponges packed round to protect the peritoneal cavity. An incision was made the entire length of the uterus, and the child and placenta removed. The uterus was grasped and compressed firmly by an assistant. It contracted down very well, bleeding being very slight. Six deep and nine superficial sutures (silk) were used to unite the uterine wall. The uterus was replaced in the abdomen, and the abdominal wound closed with silk sutures passed through the whole thickness of the wall. The wound was dressed with double cyanide gauze, and pads supported by broad strips of strapping, over which was placed a thick layer of absorbent wool and a flannel binder. An injection of morphine, gr.$\frac{1}{3}$, was given at 1.30 A.M., and patient passed a quiet night, being slightly sick once.

January 2nd. The urine was drawn off with the catheter. The temperature was normal through the day, 99.4° F. in the evening. The pulse was good. She complained of slight pain in the stomach. A douche of iodine used twice during day. An injection of morphine, gr.$\frac{1}{4}$, and a morphine suppository, gr.$\frac{1}{4}$, were given.

January 3rd, at 3 A.M., the patient complained of severe pains in the abdomen, as if the bandages were too tight. Pil. opii. gr. j, and morphine suppository, gr. $\frac{1}{4}$, were ordered; the temperature was 99.6°, and the pulse 104. At 6 P.M. the temperature was 100.2°. At 8 P.M. she complained again of severe pain. The urine was drawn off, and a rectal tube passed, but no gas escaped. A warm-water enema was given, and a rectal tube again passed, when a great deal of flatus was passed. A morphine suppository, gr. $\frac{1}{4}$, was given. There was a good deal of discharge mixed with the clots. A douche of iodine was given. The patient was taking Brand's essence, ℥j, every four hours: port wine, ℥ij. every two hours.

January 4th. The patient passed a good night, and had no pain. At 10 A.M. the temperature was normal, and the pulse 90. The urine was drawn off, and a douche given. At 8 P.M. she complained of pain in the abdomen. The urine was drawn off, and a rectal tube passed, but very little flatus escaped. A warm-water enema was given, which acted well. A morphine suppository, gr. $\frac{1}{4}$, was given.

January 5th. She still complained of severe pain in the abdomen. The urine was drawn off, and a douche given; the rectal tube was passed: a large quantity of gas escaped, and she was very much relieved. The temperature was 97.2°, and the pulse 68. Brand's essence, ℥j, was now given every three hours, and port wine, ℥ij, every two hours. At 8 P.M. a warm-water enema was given, and a morphine suppository, gr. $\frac{1}{4}$.

January 6th. The urine drawn off was very thick. She complained of pain in the lower part of the abdomen, and on January 7th the pain was worse. The catheter was passed, but the urine was so thick that it would scarcely run though the catheter. The bladder was washed out with a weak iodoform emulsion. At 7 P.M. the urine was running away. The bladder was washed with iodoform emulsion. The stitches were taken out. The wound, which looked very healthy, was dressed in the same way again. On January 8th she was very much improved. The urine was much clearer. The bladder was washed out with iodoform emulsion.

March 7th. The patient has made an uninterrupted recovery. There seems to be little, if any, alteration in the condition of the growth. The patient got up five weeks after the operation, and is now ready to be discharged from the hospital.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

JONATHAN HUTCHINSON, F.R.S., in the Chair.

Tuesday, May 8th, 1894.

CASE OF EXTREME PROLAPSE OF THE FEMALE URETHRA IN A CHILD. MR. T. BRYANT, who read this paper, said that the case was that of a female child, aged 6, whom he had seen with Dr. Atkinson, of Wood Green, on June 14th, 1893. The child for three years, at intervals of many months, had on four occasions suffered from genital irritation, with discharge from the vulva of blood-stained mucus; but, as these symptoms passed off after the lapse of a few days, no professional advice was sought. The present attack came on five days before Mr. Bryant saw her, with local genital irritation and straining, which, being supposed by the mother to be connected with the bowel, was treated by home remedies. On the third day, as the symptoms had steadily increased in severity, and the discharge of blood-stained mucus had become more copious, Dr. Atkinson was called in. On the fifth day Mr. Bryant saw the case with Dr. Atkinson. At that time, on making a local examination, the genital

organs were bathed with blood-stained mucus, and between the labia was a cherry red, blood-oozing, projecting mass, about three-quarters of an inch in diameter, and of the same elevation, with a more or less central orifice surrounded by folds of congested mucous membrane, through which a catheter was readily passed into the bladder. [A drawing was handed round illustrating this condition.] It thus became clear that this protruding mass was an everted urethra. On the day following this examination, with the child under the influence of chloroform, the urethra was dilated, and the bladder explored by the finger, but with a negative result, and during this operation the prolapsed urethra was reduced. The case subsequently did well. Mr. Bryant brought this case before the Society as he had never seen another like it, and on searching into the literature of the subject such cases were evidently very rare. He then gave an epitome of what had been written upon the subject.

Mr. CROFT referred to an allied case, which he had fully described in the *St. Thomas's Hospital Reports* for 1870. In an infant of 14 months of age he had found a red vascular pear-shaped tumour, which when seen was stated by the mother to have been down for four hours, and that the same thing had occurred some days previously. Mr. Croft had just inserted his finger into the anus in order to examine the tumour, when it burst, and some clear fluid escaped. This, on examination, was apparently a clear non-albuminous serous fluid, and not urine. After the escape of this fluid the tumour partially collapsed, but slowly began to refill again. The patient was then put under chloroform and the tumour reduced by finger and probe. It was undoubtedly the bladder which had prolapsed through the female urethra. Complete recovery resulted. He was unable to suggest a cause for these cases of collapse. The fluid which escaped was probably peritoneal.

Mr. REGINALD HARRISON referred to a case which had been related to him by a surgical friend—which had at first been taken to be a polypus, but fortunately his friend had discovered his mistake in time. As to causation, it was probably similar to that which produced other hernial protrusions.

Mr. GODLEE related the case of a little child who had had two protrusions covered by pale mucous membrane; these he cut off after having watched the child for some time, and no serious result followed. He had never been able to ascertain what was the exact condition.

Mr. BRYANT, in reply, said that he had seen at least two cases similar to Mr. Croft's. He thought that Mr. Godlee's case might be one of polypi of the female urethra. Polypi of the bladder and urethra certainly occurred, though they were not very common. Occasionally they were of large size and dendritic. It was, he thought, remarkable that so little was known of these conditions in this country.

TWO CASES OF URETERO-LITHOTOMY.

Mr. E. COTTERELL related the following two cases: (1) Female, aged 61. Nephrolithotomy on March 13th, 1893, with removal of several calculi; wound healed. About five weeks afterwards she had severe renal colic, lasting at intervals for twelve days. The kidney and upper 4 inches of ureter were explored on April 27th with negative result. The ureter was explored on August 3rd by incision, similar to that described for tying the common iliac. A calculus was found impacted just below the brim of the pelvis; the ureter was not sutured. (2) Female, aged 44. The patient had symptoms of stone or foreign body in the bladder. Exploration of bladder *per urethram* detected two calculi lodged in the lower end of the right ureter, not projecting into the bladder. They were removed by incising the ureter through the vault of the vagina. A table of twelve cases of uretero-lithotomy was given, and a short analysis of this table was made. After detailing the prominent symptoms, the operative treatment to be pursued was discussed when the stone was impacted—(*a*) within three inches of kidney; (*b*) below this point, to within about 2 inches of the lower end; (*c*) the lower end in women; (*d*) the lower end in men. Suturing the wound of the ureter was considered unnecessary.

The PRESIDENT congratulated Mr. Cotterell on his success in the cases mentioned in the paper.

Mr. GODLEE mentioned the following cases: One which had been under Sir Joseph Lister, who had removed a stone from the kidney and after enlarging the wound had removed through it a stone which was impacted in the ureter three inches below the kidney. The second case had been referred to by Mr. Cotterell, in which both ureters were blocked by impacted calculi. One was removed from the ureter and an endeavour was made to remove the stone from the other ureter, but it was found that it had escaped into the bladder. In the third case the patient had myxœdema. The stone was protruding through the lower end of the left ureter into the bladder. By placing one finger in the vagina he was able to push the stone towards the urethra and so to extract it. In the fourth case suppression of urine came on shortly after an attack of renal colic. The right kidney was found greatly hypertrophied so that it was only just possible to reach the pelvis of the ureter with the finger and the stone could not be felt. He left a drainage tube in the wound and on the following day had a small œsophageal bougie passed through the drainage tube down the ureter by which the stone was probably pushed into the bladder, as the patient made a satisfactory recovery.

Mr. REGINALD HARRISON referred to a case of a boy in which it was possible to feel the calculus (impacted in the lower part of the ureter) through the rectum.

Mr. HENRY MORRIS referred to a paper which he had published in the *American Journal of Medical Science*, October, 1884, on the case of a lady in whom he had been able to feel a stone in the lower end of the ureter. He had been unable to remove it with the appliances he had with him. He described a knife with a long handle and short cutting blade which he had devised for incising the lower end of the ureter in such cases. He thought that in cases of impacted calculus with damaged kidneys the proper procedure was to excise the kidney leaving the stone to settle down, and referred to a case of this description which had been under the care of Mr. Knowsley Thornton, all symptoms being relieved after the removal of the kidney.

The PRESIDENT mentioned the case of an old gentleman in whom there had been suppression of urine for five days. After death a large kidney with a small calculus impacted in the ureter was found, on the right side there was no kidney at all. In another case he had removed a large cystic kidney and the patient recovered.

Mr. COTTERELL, in reply, said that he thought Mr. Godlee's plan of pushing a stone down into the bladder would only succeed with small stones, and that there might be some danger of perforating the ureter. It was stated in the textbooks that when a calculus was impacted in one ureter suppression of secretion of urine by the other kidney was liable to occur. He thought a more reasonable explanation was that the kidney on the side of the impaction was in such cases the only working kidney, the opposite being diseased and functionless.

MEDICAL SOCIETY OF LONDON.

Sir WILLIAM DALBY, M.B., F.R.C.S., President, in the Chair.

Monday, May 7th, 1894.

THE STARTING POINTS OF TUBERCULOUS DISEASE IN CHILDREN.

DR. J. WALTER CARR read a paper based on 120 necropsies upon children suffering from tuberculous disease, and he drew the following conclusions: (1) Tuberculous disease commences usually in the glands, the liability being at its maximum during infancy and early childhood, and rapidly decreasing in later childhood. But, of the 120 cases, the disease had almost certainly commenced in the glands in 70, or 58.3 per cent. (including 13 in which glands only were involved), and in 17 more, or 14.2 per cent., there was considerable probability at least that the glands were the primary focus. Including the doubtful cases, the glands formed the primary focus in 64.5 per cent. of those under 5, and in only 37 per cent. of those above that age. (2) Tuberculous lesions in the cervical glands, as in the joints, may arise by infection through the blood stream, but caseation of the bronchial and mesenteric glands, when primary, is usually, if not always, due to direct infection from the organ with which they are connected, it having been shown that bacilli may pass through the lungs or the intestinal walls without producing any recognisable lesion, and that they then enter the lymphatic channels and not the blood vessels. (3) Tuberculous disease starts much more frequently in the thorax than in the abdomen, and certainly far more often in the thoracic than in the mesenteric glands. Of the 120 cases, in 79 the disease probably started in the thorax (in 54 certainly and in 12 possibly in the bronchial glands), in 20 in the abdomen (in 12 certainly, and in 2 possibly, in the mesenteric glands), and in 6 in either one or the other cavity. In only two cases were the cervical glands the probable primary focus. The conclusion is that though infection undoubtedly does occur through the intestines, and especially (as experiments on animals have shown) through milk, yet infection through air is by far the more frequent and important. The disease is so commonly generalised in children, that figures merely giving the frequency with which different parts are affected are of little value, the important point being to ascertain where the disease is most advanced—that is, where it probably commenced. (4) Caseation of internal glands, from the frequency with which it is found after death, must often exist alone and quite unsuspected, being doubtless in many cases quite impossible of diagnosis, and it is very necessary to realise its frequency and importance when dealing with obscure febrile conditions in children. (5) In regard to treatment, prophylaxis is by far the most important; and as it is probably impossible to prevent bacilli from obtaining access, we must try to increase the resistive powers of the system to their entry, above all by keeping the mucous membranes healthy, by dealing promptly with, and if possibly preventing, rickets—the great cause of catarrh in early childhood—and by taking especial care of children during convalescence from acute specific fevers, which so depress the vitality of the body generally, and the resistant power of the mucous membranes, as well as the filtering power of the glands in particular.

After some remarks by the PRESIDENT,

Dr. SIDNEY MARTIN questioned the accuracy of the author's figures in so far as they bore on the proportion of cases in which infection took place through the intestine. The difficulty of establishing *post mortem* where infection had originally taken place was one that forced itself on the attention of all investigators. The author seemed to take as proved a good deal in respect of the infectivity of food which was far from certain. He divided cases of tuberculous infection, whether experimental or clinical, into three classes: (1) Those in which there was a definite lesion at the seat of infection; (2) those in which there was no local lesion at the seat of infection; and (3) those in which the local lesion was slight or healed, and in which the constitutional infection took place later on. He pointed out that the puzzling cases of so-called primary tuberculosis in the meninges, joints, or glands were often dependent on the previous existence of infected, and for a time quiescent, glands in the mesentery or elsewhere. He explained that when the dose was small there might be no local lesion, only the glands being infected. If the dose were large enough, however, it would produce tuberculosis with a local primary lesion, however introduced. The production or not of a local primary lesion was merely a question of dose.

Dr. ROUTH suggested that the irritation of the neighbouring lymphatic glands was an effort on the part of Nature to resist the invasion of the organism.

Dr. CARR briefly replied.

OPERATION FOR PERFORATED ULCER OF THE DUODENUM.

Mr. DEAN read a paper, which is published at page 1014.

Mr. LOCKWOOD commented on the fact that surgeons were still liable to errors of diagnosis in obstruction from inflammation as distinguished from obstruction due to a mechanical cause. He suggested that in the author's case the fact that the abdomen was universally painful and distended might have given rise to the suspicion of the obstruction being due to peritonitis. He referred to two cases of perforating ulcer of the duodenum which he himself had brought before the Society not long since, in one of which, if he had only been able to find the perforation for which he searched in vain, the patient might, he thought, have been saved. Such cases, indeed, were otherwise very favourable for operation, the perforation being small and the neighbouring tissue generally healthy and capable of holding sutures. When the source of a septic peritonitis could not be discovered in the lower part of the abdomen, it

was necessary to look for it higher up. It was only recently that surgeons had come to recognise that perforation of the duodenum was one of the conditions with which they might have to cope.

After some remarks by Dr. HOLMAN, Mr. PERCY DEAN, in reply, said he had diagnosed general peritonitis, but at the time he thought this might be accounted for by mechanical obstruction. He had thought of the possibility of there being perforation of a duodenal ulcer, but the patient did not seem collapsed enough for that. He admitted, however, that on looking over the literature of the subject the patients had not been as collapsed as one might have anticipated.

OBSTETRICAL SOCIETY OF LONDON.

G. E. HERMAN, M.B.Lond., F.R.C.P., President, in the Chair.

Wednesday, May 2nd, 1894.

SPECIMENS.

DRS. GILES and PROBYN-WILLIAMS, Exomphalic Fœtus; Mr. L. CUTLER, Kidneys from a case of Eclampsia; Dr. DUNCAN, Uterus with Gangrenous Fibroid; Dr. REMFRY, Cirrhotic Ovaries, with microscopic sections; Dr. HORROCKS, Unusually Large Fallopian Tube in a case of Ovarian Tumour; Dr. HAYES, Tubal Hæmatoma.

ACARDIAC FŒTUS.

The report of the subcommittee on Mr. Grogono's acardiac fœtus was read.

INTERMITTENT CONTRACTIONS OF UTERINE FIBROMATA AND IN PREGNANCY, IN RELATION TO DIAGNOSIS.

DR. BRAXTON HICKS read this paper. He referred to previous papers by himself on uterine contractions during pregnancy, and on their value in the diagnosis of pregnancy and other tumours complicating it and independent of it. He alluded to criticisms on the value of this sign, related a case where he observed contractions in a fibroid tumour of the uterus, and then considered the bearing of this occasional character of fibroids on diagnosis in the small percentage of cases where unusual symptoms caused doubt as to the existence of pregnancy. He called attention to the difference in sensation given by a fibroid, which still appeared solid on relaxation, from that of a relaxed pregnant uterus, in which the fœtal parts might be felt. He also mentioned the differential diagnosis in the case of vesicular moles, and of hydramnios, and considered that the greatest difficulty might occur when there was a carneous mole, as the physical signs and the symptoms might all resemble those of fibroids. He showed how a normal pregnancy, when the uterus was constantly and firmly contracted, might be mistaken for a fibroid even after repeated examinations. He then discussed the diagnosis in cases of fibromata complicating pregnancy; between an ovarian and a uterine tumour; hydronephrosis and a uterine tumour; in extrauterine gestation. He concluded that the sign might be used in a large majority of cases either as distinct proof, or as corroboration of other signs, or in the differential diagnosis of abdominal tumours.

Dr. PETER HORROCKS said that contraction and relaxation could be demonstrated as early as the fourth month. He believed that they occurred also in the unimpregnated uterus. He had shown that it was a law of muscular fibre generally when healthy to contract and relax all through life. Hence it was more than probable that myomata did so too, although he had seldom or never satisfied himself clinically that this was so. When a muscle contracted it tended to become more or less spherical, and this held good of the uterus in the painless contractions of pregnancy. When the uterus relaxed, it fell by its own weight into its former flatter and softer state. He considered the alteration in shape by far the most important point in the diagnosis between a pregnant uterus and a fibroid tumour, so far as related to muscular contraction. The former altered in shape, the latter did not to any appreciable extent.

Dr. CULLINGWORTH had seldom satisfied himself of the existence of contractions in myomata, and they must be rare. Dr. Braxton Hicks had mentioned that the sign was of value in extrauterine gestation "in order to distinguish between the uterus and the gestation sac." Did he mean that the phenomenon was observed in the uterus and not in the sac, or in the sac and not in the uterus? Dr. Cullingworth had brought before the Society (April, 1893) a case of extrauterine gestation in which, after cessation of fœtal movement at the end of the eighth month the empty and slightly enlarged uterus lying in front of the sac and forming a distinct prominence beneath the abdominal wall was the seat of contractions and relaxations perceptible not only to the touch but also to the eye.

The PRESIDENT agreed with Dr. Braxton Hicks that intermittent contractions in a tumour proved conclusively that it was uterine. It might be a fibroid or pregnancy. In the former case the sign was only felt when the tumour was soft and surrounded by uterine muscle; not when the growth was subperitoneal. There was another sign, namely, the variations in loudness of the uterine *souffle*. This became louder while the uterus was contracting, softer when the contraction was at its height, louder again as the contraction was passing off, and softer when relaxation was complete. This condition was only found in connection with the enlarged uterus.

Remarks were also made by Dr. FENTON and Dr. HAYES.

Dr. BRAXTON HICKS, in reply, said that he intended it to be understood the diagnosis was to be made by the aid of intermittent contractions between intra- and extrauterine fœtation. Where a single girl complained of amenorrhœa and there was a suggestion of pregnancy the point could be cleared up without raising suspicion by placing the hand on the abdomen and feeling a tumour with the characteristic contraction and relaxation. In the case of fibroid of the wall of the pregnant uterus the uterus was made out to be hard and firm on one side and soft on the other during relaxation, but when contraction occurred the whole became firm, showing that the tumour was uterine. Also when there were twins and the uterus was of irregular form and like two tumours, a contraction made the uterus globular and it was seen that the apparently two were really one. He had said in his first paper that he had no information as to whether the bladder in retention could be noticed to contract intermittently; he thought it a point worthy of observation.

THE OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

D. ARGYLL ROBERTSON, M.D., F.R.S.E., President, in the Chair.

Thursday, May 3rd, 1894.

ON PERIODICAL TESTING OF EYESIGHT IN SCHOOLS.

MR. PRIESTLEY SMITH read a paper on this subject. Authorities were agreed that advantage would accrue from an annual testing of the eyesight of school children, and several Commissions had spoken to this effect, and formulated definite proposals. Hitherto no considerable advance had been made towards this end, for the proposals usually put forward had been that the refraction of every scholar should be ascertained once a year by the school doctor. It would be a long time before every school had its school doctor and every school doctor was an efficient oculist. The necessities of the case could be met more easily, and would, he hoped, be so met in a large number of schools throughout the country before long. The governors of King Edward VI's schools in Birmingham, which comprised about 2,200 boys and girls aged from 8 to 19, had established three years ago a periodical physical examination of the scholars in regard to height, weight, chest measurement, eyesight, and hearing. The eyesight test was carried out by certain teachers appointed for the purpose. It made no pretence of being a scientific proceeding; there was no attempt to estimate refraction or diagnose disease. Any such attempt was worse than useless unless the examiner were an ophthalmic expert. In every case in which the vision in either eye was less than 6-18ths, an intimation of the fact was sent to the parent, and with him rested the responsibility of obtaining the necessary advice and choosing the adviser. The Anthropometric Committee appointed at the last meeting of the British Association for the Advancement of Science, having Professor Cleland and Professor Windle for its Chairman and Secretary, had lately issued an inquiry to a large number of schools as to whether, and to what extent, periodic physical examination of the scholars was in force. From the replies received, it appeared that the eyesight was tested in 8 out of 483 boys' schools, in England, Scotland, and Ireland (Whitaker's list); and in 6 of 129 girls' schools in England; while colour vision was tested in 3 only of the whole number. Many of the principals, however, expressed willingness to take up anthropometric work on receiving directions for carrying it out. The speaker laid before the meeting the printed directions which had been drawn up, and which were to be sent, in the first instance, to about 200 schools. The eyesight test included in this scheme was practically the same as already in operation in the King Edward's schools in Birmingham. It involved practically no expense and very little trouble to the school authorities, and it interested at least one teacher in every school in the eyesight of the scholars. In advocating this system, the speaker did not in the least undervalue the importance of a thorough medical examination of schools, and he knew that many schools already had duly appointed medical officers competent to deal with errors of refraction, but these were exceptions. By making this simple eyesight test a part of the anthropometric scheme now being so energetically pushed by the Committee of the British Association they would, he was confident, attain the desired end in a large number of schools where it could hardly be attained in any other way.

The PRESIDENT thought that the proposed scheme might be of great value in throwing light upon the refractive changes going on in the eye in school life. In addition to the proposed examination, he thought it necessary to test the near point of vision for the detection of hypermetropia and defective convergenee.

Mr. HOLMES SPICER said that in one school of 500 pupils that he had examined in the East End of London, he had found 40 per cent. of the children whose acuteness of vision was less than one half of the normal; the defects were now being treated, but such a systematic examination took a considerable amount of time.

Mr. DOYNE dwelt upon the great difficulty of obtaining the near point of vision in children.

Mr. SIMEON SNELL spoke of the difficulty in obtaining a systematic examination in schools owing to the want of appreciation of the teachers. This appeared to him greater in schools of a higher grade than in elementary ones.

Mr. PRIESTLEY SMITH, in reply, deprecated incomplete technical examination by the ordinary medical attendant, and thought the simple scheme of allowing the teachers to separate the cases of defective vision for further investigation most useful, as it was most likely to be carried out.

TUBERCLE OF THE IRIS.

Dr. ARTHUR SANDFORD read notes of three cases. The first two were examples of iritic tuberculous deposits coincident with fresh lung trouble of a similar nature. In one case the latter was a first attack, and in the second it was a renewal of tuberculous activity in an old dried-up cavity. The third case was one of primary iritic tuberculosis, the ciliary region, suspensory ligament, and apparently the lens itself being infiltrated by the tuberculous elements. The case occurred in a child, aged 5 years, of tuberculous parentage on both sides, whose only brother died of tuberculous meningitis. There was no evidence of tuberculous mischief in any other organ. The globe was therefore excised and sections made. The tuberculous mass half filled the anterior chamber. The patient improved greatly in health, and had been under observation ever since (8 years). At present she was a fragile, delicate-looking girl, but free from any special ailment.

INTRACRANIAL ABSCESS ARISING FROM CARIES OF THE SPHENOIDAL CELLS.

Notes of this case were read by Dr. A. SANDFORD. The abscess caused double optic neuritis and subsequent post-neuritic atrophy, with complete blindness, about twenty-seven years before the patient's death, which took place in the Cork District Lunatic Asylum at the age of 78 years. The left half of the skull was exhibited, showing the situation of the abscess, which had penetrated the left orbit, causing proptosis, and also the outer wall of the skull by erosion of the bone. Internally the tumour had raised up and stretched the optic nerves and commissure.

Mr. JOHNSON TAYLOR was of opinion that in all cases of primary

tubercle of the iris the eye should be excised; in secondary tubercle—that is, where other organs were involved—nothing should be done.

Dr. HILL GRIFFITH said it had been shown that practically all cases of intraocular tubercle were secondary. It was not possible in any given case to say whether the affection in the eye was primary or not: he did not think such eyes should be excised always, as in many instances slowly-growing tuberculous formations in the iris yielded to treatment and left an eye with useful vision.

A RARE FORM OF INTRAOCULAR MELANOMA.

Mr. JOHN GRIFFITH read this paper. After giving a short clinical history of the case, he described in detail its microscopic appearances. He considered the tumour to be epithelial, starting in the tapetum nigrum of the retina, the cells having nothing in common with those of sarcoma. The ciliary body was not invaded, but merely displaced inwards by the tumour, which had pushed its way inwards to the lymph space outside the ciliary muscle. Mr. Griffith did not believe that the growth had started from the ciliary gland, but thought it an instance of a melanoma starting in the retina, and as it was malignant in nature and epithelial in structure, it conformed rather to the type of carcinoma, although it possessed many features unlike that class of growth. He saw no reason why epithelial melanomata should not start primarily in either the retina, the ciliary body, or the iris.

CARD SPECIMENS.

The following were the card specimens:—Mr. HARTRIDGE: A Case of Strumous Keratitis.—Mr. J. A. WARNER: Two Cases of Ectopia Pupillæ.—Dr. ARGYLL ROBERTSON: A Case of Trichosis Bulbi.—Mr. ROCKLIFFE: A Case of Diabetic Retinitis.—Mr. SIMEON SNELL: Spectacles for Entropion.—Mr. MACKINLAY: Cyst of Iris.—Mr. DONALD GUNN: Growth at Yellow Spot.

HARVEIAN SOCIETY OF LONDON.

GEORGE EASTES, M.B., F.R.C.S., President, in the Chair.

Thursday, May 3rd, 1894.

HABITUAL ABORTION.

DR. BOXALL showed the product of a miscarriage at four months and a-half from a patient, aged 43, who might be said to suffer from "habitual abortion." She had been pregnant six times. The first pregnancy terminated prematurely at seven months and a-half, the child being born alive, the others all at four or five months. Every cotyledon of the placenta contained effused blood, the outcome of pre-existing disease of the uterine mucous membrane, which had indeed been found and treated by curetting, with only temporary benefit. There was no syphilitic history. To attribute abortion to syphilis in so many cases, as was usually done, was most unwarrantable. He was not able to say yet what did constitute a syphilitic placenta.

CANCER OF THE COLON AND ITS TREATMENT.

Mr. BLAND SUTTON read a paper on this subject. He said there were clinically two kinds of colic cancer, (1) one in which the mucous and submucous coats of the bowel became infiltrated with the malignant growth, leading to a constriction of the gut, as if a tape had been tied round it; this was less malignant, and occurred later in life than the next variety; (2) the "tuberous" form in which a definite tumour was found, and in which the growth infiltrated all the coats of the bowel and then blocked up the lumen of the gut; this form occurred usually between the ages of 30 and 40. Both kinds were histologically the same, but this clinical distinction between the varieties was very important. Mr. Sutton then described the symptoms of the disease, and explained the "spurious diarrhœa." The gut above the stricture became greatly dilated, and the fluid portions of its contents trickled through until a more solid piece of fæcal matter suddenly blocked up the orifice, then frequently a part of the growth sloughed away, and a very copious evacuation took place. The temporary blocking of the orifice explained the apparent constipation which so often alternated with the diarrhœa. The curious lethargic condition of the patient, with fœtid breath and deranged mental condition during this constipation was due to the stored-up fæces. The causes of death in colic cancer were three: (1) From poisoning from the contents of the bowel; (2) from perforation, either above the stricture or in the cæcum, leading to the escape of the contents of the bowel into the peritoneal cavity; (3) from perforation into the intermuscular planes of the abdominal walls, perhaps though the mesocolon, leading to extensive suppuration and sloughing. The disease never betrayed itself until obstruction occurred, hence the whole clinical aspect of the disease was conjectural; in some cases it might be possible to feel a tumour through the rectum, vagina, or abdominal walls. As regards treatment, the anæsthesia should at first be not deep, then an exploratory incision in the middle line of the abdomen was made, and the cavity of the abdomen explored with the finger until the seat of disease was found; this could be done by following up the empty gut, beginning at the sigmoid flexure. In this way it could be ascertained where the colotomy should be done—that is, in which portion of the colon. The preliminary incision was then closed, and the operation of colotomy was done. He believed that the lumbar operation (after the preliminary operation referred to above) was the operation of the future. He deprecated so-called "chance" colotomy, that was, colotomy done without being certain where the disease actually was situated. Mr. Sutton quoted cases which showed the importance of this preliminary exploration, and mentioned the following advantages of his method: (1) It prevented an unnecessary colotomy; (2) It eliminated the presence of a pelvic tumour which might be causing the obstruction; (3) it made certain the fact that one was dealing with a case of colic cancer.

The PRESIDENT attributed the peculiar mental condition of many of these patients to the absorption of these substances through the ulcerations found in the distended bowel above the cancerous disease. In cases of distended stomach and of vomiting he advised the emptying and washing out of the stomach by a long tube before giving the anæsthetic for abdominal exploration. Ether by inhalation was safer than hypodermic injection of cocaine locally.

Dr. ALEXANDER MORISON believed that in a certain number of cases the mental phenomena observed in cases of intestinal obstruction were exaggerated by the cumulative effect of belladonna given alone or in conjunction with opium.

Dr. BOXALL had often had the opportunity of observing in lying-in women the peculiar fact that fæcal accumulations, as long as they were left undisturbed, were comparatively innocuous, but as soon as a successful attempt was made to dislodge scybala from the bowel, unpleasant symptoms, often accompanied by fever, and not infrequently by urticarious eruptions, were apt to ensue.

Mr. BEALE thought that the symptoms following fæcal accumulations were due to absorption into the blood of albumoses produced during the life of micro-organisms. There was, in all probability, an extensive, though not deep, ulceration of the mucous membrane of the bowel, which was round the scybala, and thus the poisonous material easily entered the blood stream.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

DONALD HOOD, M.D., F.R.C.P., President, in the Chair.

Saturday, May 5th, 1894.

RUPTURE OF THE LIVER.

MR. W. H. BATTLE read a paper on two cases of traumatic rupture of the liver without external wound. In the first the patient recovered without operation, shock being extremely severe and prolonged. The right kidney was injured; and later pleurisy set in, the pleura was aspirated, and contained blood and bile, the fractured ribs having injured the diaphragm and liver substance. In the second place the abdominal cavity was evidently full of blood, so abdominal section was performed, and the liver and spleen examined with a negative result, and the blood washed out. The patient died two days later. At the necropsy no blood was found in the peritoneal sac, but a large posterior rupture of the liver was found.

Mr. ECCLES made some remarks.

REST IN EYE AFFECTIONS.

Dr. H. MACNAUGHTON JONES read a paper on rest, physiological and therapeutical, in the treatment of eye affections. The various reflexes and their courses, the vascular supply and its connections, with allusion to nasal, ophthalmic, uterine, and other special reflexes, were discussed. Various methods of treatment were discussed.

Mr. DUNN and Drs. EDDOWES and LYNCH took part in the discussion.

PYOKTANIN IN EPITHELIOMA.

Dr G. C. WILKIN read a paper on an epithelioma of the ear treated with injections of pyoktanin. The patient, whose left pinna was very prominent, had a large swelling in front of the ear, and the skin over the mastoid was adherent and discoloured. Pyoktanin injections, 1 in 500, were used, and were changed first to 1 in 300, and then to 1 in 100. The growth hardened and became more defined after two injections, and the pain was immediately relieved. Death took place sixty-five days after the first injection, and at the *post-mortem* examination no epithelioma was found in the tissues in front of the pinna.

Dr. HAGGETT read the *post-mortem* examination notes.

Mr. ECCLES and Drs. POPE and EDDOWES discussed the paper.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

T. S. CLOUSTON, M.D., President, in the Chair.

Wednesday, May 2nd, 1894.

CASES.

MR. CAIRD showed two children after recovery from Tracheotomy for Diphtheria.—Dr. NORMAN WALKER showed five patients illustrating the different forms of Lupus.—Dr. A. G. MILLER showed a patient on whom forty-eight different operations of Scraping for Lupus of the Face and Neck had been done, with excellent results.—Dr. GRAHAM showed a patient with Fracture of the Superior Maxillary Bone immediately under the Orbit.

PATHOLOGICAL SPECIMENS.

Mr. CAIRD showed three preparations showing (1) Diphtheritic Membrane *in situ* (tracheotomy had been done); (2) an almost imperceptible Scar after Tracheotomy; (3) A Larynx with Carcinoma, on which tracheotomy had been done.—Dr. A. BRUCE showed a series of microscopical preparations illustrating his paper on Nodose Periarteritis of Syphilitic Origin.—Dr. NORMAN WALKER showed several microscopic preparations illustrative of the varieties of Lupus Vulgaris.

THE COMMONER VARIETIES OF LUPUS VULGARIS AND THEIR TREATMENT.

Dr. NORMAN WALKER read a paper on this subject. The disease was common in this country. It occurred in both sexes, but was more common in women. It was not essentially a disease of the young. He indicated three varieties; (1) The common form, with destruction of tissue; (2) the nodular form, which might be described as a proliferating tubercle of the skin, and where the skin was unbroken; (3) lupus fibrosus which, in his experience, occurred mainly on the limbs, where there were single patches, red, often scaly, a great increase of the fibrous tissue of the chorion, and little tendency to ulceration. He believed the subdividing further of this group into varieties was due entirely to secondary changes. As regards treatment, excision where possible would be the best, but it must be excision wide of the diseased tissue. Cod-liver oil was the only helpful internal remedy; local treatment was essential. One must be guided by the evidence of the presence of the tubercle bacillus. Scraping was good only for loose tissue. For the fibroid form repeated blistering brought the nodules into view; after that the cautery (he preferred the galvanic form) was the best form of treatment. In brief, perseverance was the great remedy for lupus.

Mr. A. G. MILLER was not inclined to set scraping so far on one side as

Dr. Norman Walker. He used Squire's spoon, a very small one, and got very good results.

Dr. W. ALLAN JAMIESON pointed out that there was no very great difference between Dr. Norman Walker's second and third varieties. He thought Dr. Walker had made too much of the fibrous form occurring mainly on the limbs.

Remarks were also made by Drs. JOSEPH BELL, ALEXIS THOMSON, and CATHCART; and Dr. WALKER replied.

TWO CASES OF NODOSE PERIARTERITIS OF SYPHILITIC ORIGIN.

Dr. A. BRUCE read this paper. The first case was that of a man, aged 37, who had been ill for two years, and in whom the tertiary symptoms appeared after eighteen months. In the end there was diplopia, paralysis, dilatation and fixation of the left pupils, convulsions, and death in six hours. There was fluid in the subarachnoid space, no thickening of the pia mater; there were clumps on the basilar, posterior communicating, and vertebral arteries in the form of fusiform swellings; the pons was softened here and there; there was marked periarteritis and foci of softening; there was little affection of the inner coat of the arteries, and there was no meningitis. The second case was that of a woman who, on admission, was all but paralysed in both upper and lower limbs, the tongue could only be protruded as far as the lips; there were a few spots on the legs, the temperature rose to 104.2° and the pulse was 142, and she died of paralysis of the neck and tongue. She had been infected in the discharge of her duties in Soho Hospital. She was in St. Thomas's Hospital from December to October with skin affections and paresis of the face, etc. There was optic neuritis. Later paralysis of the limbs set in, and this lasted six weeks. Then she improved, and ultimately was discharged. She came to Edinburgh, and was very well till two days before admission to the Royal Infirmary. On *post-mortem* examination there was lepto-meningitis, the basilar and cerebral arteries were in the same state as in the first case, there were several areas of congestion and softening in the pons, there were changes in the outer but no change in the inner coat of the vessels, there was great thickening of veins (a periphlebitis), the brain substance under the membranes was softened, and nearly all the vessels contained a thrombus, and some of these had begun to organise. Only some six or eight cases of this condition had been described. Probably the first description of syphilitic periarteritis was given by Dr. Batty Tuke in the *Journal of Medical Science* for 1874. True gummatous formation on the outer coat was the third stage of this periarteritis. In the more acute forms there was simply the cellular infiltration. In the less acute forms there was a tendency to the formation of gummata. The longer the condition lasted, the more likely were gummata to form. The conclusion one must come to from a study of these two cases Dr. Bruce held was that there was a perfectly distinct syphilitic affection which attacked the outer coat of the arteries.

ACTION OF IODINE.

Dr. DAWSON TURNER read a note on the action of iodine.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF PATHOLOGY.

Professor J. ALFRED SCOTT, M.D., President, in the Chair.

Friday, April 27th, 1894.

SPECIMENS.

DR. W. H. THOMPSON exhibited a fresh fœtus with Malformation of the posterior part of the Head and of the Neck. Remarks were made by Dr. STORY and Dr. NIXON, and Dr. THOMPSON replied.—Dr. NORMAN showed microscopic preparations from a case of Sarcoma of the Kidney.

HEAD INJURY.

Mr. F. ALCOCK NIXON read notes of a case of head injury, illustrating some points in cerebral topography. The patient suffered from concussion and compression of the brain. There was inflammation of the membranes at the base, implicating the seventh, eighth, and ninth nerves. Blood clots occupied the auditory and speech centres. The difficulty of an accurate diagnosis arose from the coexistence of inflammation and pressure symptoms, the latter predominating, and to a great extent obliterating many of the symptoms which would have been present in a case of pure meningitis and cerebritis.

Dr. NIXON, in reply to Dr. STORY, said that he could not find any external sign of injury. On cutting into the scalp, *post mortem*, he found a clot in the occipital region corresponding to the internal injury.

TERTIARY SYPHILIS OF THE LARYNX.

Dr. R. H. WOODS exhibited this specimen. The patient contracted venereal disease at the age of 20, and a year later was tracheotomised in the Richmond Hospital for stenosis of the larynx, caused by gummatous infiltration of the false cords. After some weeks' treatment and rest the swelling subsided, the tube was removed, and the patient discharged. He drank heavily, and exposed himself by sleeping out of doors, with the result that a few weeks later he was brought to hospital almost asphyxiated. Tracheotomy was again performed, and the tube left permanently in. Twelve months later he died of acute pneumonia. The larynx at its junction with the trachea was so stenosed as scarcely to admit the passage of a goose quill. There was no ulceration.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.

JOHN APPLEYARD, F.R.C.S., President, in the Chair.

Tuesday, May 1st, 1894.

CASES AND SPECIMENS.

MR. HUGHES showed a child, aged 7. During the past eighteen months his gait had altered, and the muscles became weakened; the pupils were widely dilated, knee-jerks gone, mental condition somewhat impaired, and memory nearly lost. The infraspinati were possibly thickened, and it was probably an atypical case of pseudo-hypertrophic paralysis.—Dr. SAM. LODGE showed specimens and preparations from Growths removed by intralaryngeal operation, in two cases papillomata giving rise to dyspnœa after seventeen and twenty-five years' symptoms respectively, and in another case a rapidly growing mixed-cell sarcoma.—Dr. ADOLPH BRONNER showed three cases of mastoid disease and operation in adults. There was a history in each case of discharge from the ear, followed by severe pain in the mastoid region. In two cases there was no visible swelling over the mastoid, and in one case only slight swelling; in none was there any marked rise of temperature, and in all the periosteum and external layers of bone were apparently healthy. It was only after chiselling to the depth of six to ten millimetres that pus or granulation tissue was found. The cases were of great practical importance, and showed how extensive disease might be present in the mastoid process without external swelling or pain on pressure. Whenever pain was present the surgeon should cut down on the mastoid antrum or cells, where in most cases extensive disease would be found.—Mr. BAKER showed a case for diagnosis, a young girl with a copious Purpuric Rash.

TETANY.

Mr. HEBBLETHWAITE read notes of a severe case of tetany, beginning with pains, tingling, and sensation of breaking muscles in the arms, then flexion of the thumbs across the hands, and movements which persisted even during sleep. The patient was a stout woman aged 46, who had been nursing a child through an attack of typhoid fever, and who had just previously had a sharp attack of diarrhœa in the eighth month of her sixth pregnancy. The attacks were worst some hours after her labour, a very easy one, violent general spasms involving trunk and legs, and even muscles of speech and deglutition, very painful, and without loss of consciousness. Chloral and bromides were freely used. In the following pregnancy, at the seventh month, similar attacks began, and were controlled by sedatives; during labour the attacks were again so severe that dyspnœa was feared. The urine was normal throughout.

PITFALLS IN THE DIAGNOSIS OF PNEUMONIA.

Dr. MAJOR read a paper on this subject. He said variations in the localisation of early pain might suggest peritonitis or typhlitis, and lumbar pain, with fever, small-pox. Violent early delirium, if fever was not made out, was indistinguishable from acute mania. The Skodaic percussion note might cause trouble, so too "silent" pneumonia, unless it were noted that the heart apex was not displaced. Large consonating *râles* might occur during resolution, and in a thin or wasted patient might lead to the diagnosis of advanced phthisis.

OPHTHALMOMETER.

Dr. ADOLPH BRONNER demonstrated a modified Javal's ophthalmometer for the direct estimation of corneal astigmatism.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

RICHARD FAVELL, M.R.C.S., President, in the Chair.

Thursday, April 12th, 1894.

CASES AND SPECIMENS.

MR. EDWARD BARBER showed a case of Habit Spasm which he had cured by bromide of potassium and arsenic.—Dr. WALFORD (Alfreton) introduced a carpenter with a large Aneurysm of the Thoracic Aorta.—Mr. PYE-SMITH showed a Brain with Purulent Meningitis resulting from suppurative otitis.—Mr. SNELL demonstrated about a hundred lantern slides to illustrate clinical and operation cases of Eye Disease.

REVIEWS.

INJURIES AND DISEASES OF THE JAWS. By CHRISTOPHER HEATH, F.R.C.S., Holme Professor of Clinical Surgery in University College, London. Fourth edition, with numerous wood engravings. Edited by HENRY PERCY DEAN, M.S., F.R.C.S., Assistant Surgeon to the London Hospital. London: J. and A. Churchill, 11, New Burlington Street. 1894. (Demy 8vo, pp. 420. 14s.)

THE fourth edition of Mr. HEATH'S well-known work is much more than a mere reissue. With the aid of a former distinguished pupil, who has acted as editor, and by general supervision on his own part, the author has brought out a new edition so much revised and improved as to constitute almost a new book. Much new matter has been added, and much old matter that in the course of the past twenty-five years has done good service is now excluded as being well-known, or perhaps obsolete. The present edition, though so much altered and improved, is somewhat smaller than the preceding one. Both author and editor have worked well together, so that the book remains a very readable one, and shows no trace of patchwork. Mr. Heath has added much of clinical value, while Mr. DEAN has aimed to bring it into correct relation with modern pathology.

The chapter on necrosis of the jaws has been carefully revised, and the varieties of this morbid condition are now arranged and distinguished according to their causes. Some alteration has also been made in the chapter on diseases of the antrum. Owing to the more accurate study of antral abscess, it has been found necessary to modify the former description of the symptoms of the disease. Reference is made to catheterism and illumination of the antra as methods

of determining the presence of pus. In the operative treatment of empyema of the antrum Mr. Heath still prefers the oral to the nasal route. In this chapter there is a good review of the different forms of antral tumour.

The portions of this edition which deal with the subjects of cysts of the jaws and odontomata are introduced by a full and clear description of the development of the teeth. Mr. Dean, who is, we assume, responsible for these chapters, has succeeded in throwing some light on this obscure subject; and, whilst recognising fully the work of Broca and other French pathologists, he shows that much has lately been done in this respect by English observers. It is satisfactory to learn that the views of Mr. Eve, which were described in the third edition of this work, have stood the test of time, and and that now "the consensus of opinion is certainly in favour of the conclusion that multilocular cysts are neoplasms of an epitheliomatous nature." Many additions have been made to the chapter on tumours of the palate, and an entirely new chapter has been inserted on parasitic diseases of the jaws.

Former students of Mr. Heath's treatise will be pleased to find that but few of the wood engravings have been removed, and that the book still possesses amongst other great merits that of being an admirably-illustrated monograph.

ATLAS DER PATHOLOGISCHEN HISTOLOGIE DES NERVENSYSTEMS. [Atlas of Pathological Anatomy of the Nervous System.] Redigirt von Professor V. BABES und P. BLOCQ. II Lieferung. Régénération des Nerfs. Degeneration und Entzündung der Nerven. Mit 9 lithographischen Tafeln. Berlin: August Hirschwald. 1894. (Imp. 8vo, pp. 52, M. 18.)

THIS, the second fasciculus of the *Atlas*, the first number of which appeared in 1892,[1] is concerned with the subjects of regeneration, degeneration, and inflammation of nerve. That first mentioned is dealt with by Professor Vanlair. It occupies more than one-half the number, and is illustrated by three plates. For the purposes of this study the sciatic nerve in the dog was employed. As a rule, only the fibres going to form the internal popliteal were divided (transversely), those passing to the external popliteal being kept intact, and employed as controls. The portion of nerve involved was extirpated for examination at periods varying in duration from eight months to several years. The pieces were generally placed, stretched, in a modification of Flemming's fluid, and stained subsequently by prolonged immersion in picro and borax carmine. They were then cut in paraffin. Occasionally staining and hardening were performed simultaneously, a mixture of osmic acid, bichromate, and eosin being employed.

Plate I shows a series of figures drawn under low magnification from sections, at different levels, of the central and peripheral portions and of the intervening segment of the affected nerve. A control section of the external popliteal appears in each figure.

Plates II and III show portions of the same sections more highly magnified. The details of nerve regeneration are well pourtrayed in these plates, and find a full description in the text.

Plate IV illustrates a short account by Homen of the morbid changes in the peripheral nerves and posterior nerve roots, after amputation of limbs, in the dog. The nerves were examined at periods varing from a few days to several years after amputation. The methods employed were fixation in osmic acid, with subsequent teasing in picrocarmine, and Weigert's process. Sections from just below the ganglion of the nerve root showed that the degenerative changes were much more marked in the sensory than in the motor portion of the nerve. The changes undergone by the nerves amount to simple atrophy, combined with gradual destruction of myelin and axis cylinder.

Plates V and VI show degenerative changes in the roots of the spinal nerves in acute and chronic myelitis, and in alcoholic neuritis. This contribution is by Babes. As regards *technique*, the author—while employing also the chrome hardening methods—agrees with most workers in giving the preference to dissociation processes, as being best suited to the demonstration of fine changes. The extraordinary tortuosity and thickening of the axis cylinder, especially in the more chronic conditions, is the most striking alteration exhibited by the nerves.

Plates VII, VIII, and IX illustrate different forms of nerve degeneration and regeneration, and nerve inflammation—subjects dealt with by Babes and Marinesco. The sections were mostly hardened in chrome, and subsequently stained in various ways, as by anilin and safranin, osmic acid, and Weigert's method. One interesting figure (Plate VII) shows a condition hitherto undescribed, namely, inflammation, attended with (fibrinous) exudation, of the anterior roots of the spinal nerves in a case of tabes with double arthropathy of the knee-joints. Briefly, this consists in œdema of the connective tissue with disappearance of nerve fibres, the cross section of the nerve showing, in the most degenerate parts, merely a fibrous reticulum.

Another figure (Plate VII) shows a section of a posterior root of the lumbar cord in a case of Landry's paralysis. The nerve is in a state of acute interstitial inflammation, the fibres being separated by vascular granulation tissue. Plate VIII shows, amongst other figures, sections of a peripheral nerve supplying one of the atrophied muscles in a case of Erb's myopathy. The chief feature is the marked degeneration of the axis cylinder. Other figures illustrate the state of the peripheral nerves in acute infective hæmorrhagic polyneuritis (vascular engorgement, hæmorrhages, destruction of nerve fibres). Plate IX figures chronic nerve degeneration in atrophic paralysis of the limbs after typhoid, changes in nerves in syphilitic neuritis, and in leprosy. As might be expected, the chief morbid change in these various conditions is an overgrowth of interstitial tissue, with consequent degeneration of nerve elements.

The descriptions of the various illustrations are clear and full. The tedium of reading would be lessened by a concise statement of the main facts brought out; thus, at the close of each description a summary of its chief points might be given. The same care has been bestowed upon this fasciculus as upon the first, although the subjects dealt with are scarcely, perhaps, of such interest and originality. The lithographs are excellent.

[1] BRITISH MEDICAL JOURNAL, September 24th, 1892.

ATLAS OF CLINICAL MEDICINE. By BYROM BRAMWELL, M.D. Volume II, Part III. Edinburgh: T. and A. Constable. 1893. (Folio, pp. 91 to 127, 11 plates.)

THE new instalment of Dr. BRAMWELL'S work fully maintains the high standard of the previous parts. The subjects treated of are exophthalmic goître, acromegaly, general exfoliative epidemic dermatitis, and unilateral hypertrophy of the face. All these are illustrated by good plates, and there is one additional plate without a description, but, as it is only a Denner-like portrait of an old woman to illustrate "Old Age," perhaps it is thought hardly to require special description. The article on exophthalmic goître is very complete, and illustrated by two good portraits of men affected with the disease. Greater importance will, however, attach to the account of acromegaly. After reference to the work of Marie and his followers, Dr. Bramwell gives a full discussion of the disease, illustrated by descriptions of two very well-marked cases under his own care. One of these cases was that of a "giantess," a woman 6 feet 2 inches in height (notwithstanding a spinal curvature), and weighing 24 stone. The occurrence of this individual in a family not remarkable for great stature and the other features of the case confirm the views of those who look upon "gigantism" as in many cases a pathological process allied to that of true hypertrophy of separate organs. Arguing from the known affection of the pituitary body in acromegaly, Dr. Bramwell was led to try the effect of feeding with an extract prepared from the pituitary gland of the sheep, and experiments were also made with thyroid feeding. In one case pituitary feeding seemed to do harm and the thyroid extract to do good; while in the other the exact converse resulted, the thyroid extract doing harm and the pituitary doing good. The account of the epidemic dermatitis is based upon the epidemic which occurred in 1891 in two infirmaries in the north of London and elsewhere, and is

an abstract of Dr. T. D. Savill's monograph on that subject, published in the *British Journal of Dermatology*, and also separately. It is characteristic of Dr. Bramwell's energy that he sent his artist to make very good coloured portraits of two cases, which are here reproduced.

INVESTIGATIONS ON MICROSCOPIC FOAMS AND ON PROTOPLASM: Experiments and Observations directed towards a Solution of the Question of the Physical Conditions of the Phenomena of Life. By Professor O. BÜTSCHLI. Authorised translation by E. A. MINCHIN, B.A., Fellow of Merton College, Oxford. London: Adam and Charles Black. 1894. (Demy 8vo, pp. 379, 12 plates, and 23 figures in text. 18s.)

PROFESSOR BÜTSCHLI'S observations and theories have from the first attracted the attention of biologists, and now that an authorised translation of his work has appeared many more than those engaged in the pursuit of biology proper will have an opportunity of obtaining ready access to his views. It is hardly necessary to say that a perusal of the work will amply repay all those interested in the problems of vital action.

The title indicates that the author seeks to explain life, or, at any rate, the movements of living things, on a purely physical basis, and the following extract from the translator's preface indicates the general tenor of his idea: "Protoplasm is conceived of in this work as having the structure of a froth or foam in which minute droplets of a watery liquid take the place of air in the bubbles of an ordinary foam. Such a structure is termed by the author honeycomb structure—the separate vesicles, the cells of the honeycomb. The most superficial layer of radially-directed cells or alveoli, which gives the appearance of a striated border, has been termed the 'alveolar layer' *par excellence*."

The froths were made with infinite patience by mixing together various oils and aqueous solutions, and the final successful results present, no one can deny, a very similar appearance to masses of protoplasm. The most remarkable fact of all is that in such artificial protoplasm, movements occur similar in all appearance to those streaming movements which are termed amœboid in the naked animal cell, and rotation as seen within the cell walls of vegetable organisms.

From this the author proceeds to argue that as the movements in his foams are explicable on a simple physical basis in which diffusion and surface tension play their part, so the movements of natural protoplasm will admit of a similar simple physical explanation.

In order to convince the reader that his theories are correct, the author has first to prove that his doctrine of the structure of protoplasm is right. This he does in a masterly manner, and his histological observations on the structure of animal and vegetable cells, though no doubt they will not be accepted universally, form, in our opinion, a more valuable contribution to science than his theories. In the second place, he has as a necessary corollary to prove that everybody else's views on the structure of protoplasm are wrong. Here he has a more arduous task, and though the translator has wisely relegated to small print some of the endless discussions on points of detail, the reader will find plenty of argumentation in the large type, and where arguments fail their lack is supplied by the use of strong adjectives.

We must confess we feel considerable scepticism as to the correctness of Bütschli's views. While willing to admit that the theory of the foam-like structure of protoplasm is very possibly correct, and that physical processes will explain much that is called vital, yet though there may be close similarities between artificial protoplasm made of oil, and natural protoplasm made of protoplasm, we are not prepared to conclude that the causes of movement in the one are the same as the causes of movement in the other. We should as soon think of admitting that because the movements of a marionette are strikingly similar to those of a man, the cause of human motions is to be sought in the pulling of strings; or because the movements of pictures of animals in the well-known toy called the "wheel of life" are optical illusions, so also the natural movements of animals are after all merely illusions of the mind. One of Bütschli's most severe critics is Künstler, who says among other things that the comparison of artificial froths to protoplasm is just as useless as that of a Medusa to an umbrella. Bütschli is very sore about this; he devotes many pages to answering Künstler's objections, saying that the illustration is not conceived in the best taste, and then administers a *quid pro quo* by stating that a Medusa has no more internal resemblance to an umbrella than a professor of Bordeaux to a statue. "Here," Bütschli concludes, "Protoplasm from Nature's workshop is essentially of exactly the same structure as the artificial protoplasm from Bütschli's workshop, *only the former enjoys the agreeable advantage that the substance of its framework is not olive oil, but the peculiar substance of protoplasm, and its enchylema also contains many substances which the latter does not possess.*" The italics are our own, and the important exception in this case certainly does not prove the rule.

We need hardly point out that artificial protoplasm possesses no power of assimilation, growth, or multiplication, but sticking to the question of movement alone, we take some extracts from Bunge's lectures on physiological chemistry.

"The *Vampyrella* is a minute red-tinged cell devoid of limiting membrane, and apparently quite structureless. Cienkowski could find no nucleus in it. This minute mass of protoplasm will take but one form of food, a particular variety of alga, the spirogyra. It sends out pseudopodia, and creeps along till it meets with a spirogyra, to which it affixes itself, dissolves the cell wall, and sucks in the contents of the cell. Other forms of food placed before it are rejected. Another monad, the *Colpodella*, feeds exclusively on chlamydomonas. The behaviour of these monads in their search after food, and their method of absorbing it, is so remarkable, that one can hardly avoid the conclusion that the acts are those of conscious beings." Bunge proceeds to compare this to the selective action of the epithelium of our own intestine. Later on he gives the still more remarkable case of the arcellæ. Whenever an attempt is made to place them in an inconvenient position, they are always able, by the development of gas bubbles of appropriate size and at the proper spot, to right themselves, so that they acquire a position suitable for locomotion; and the attainment of this object is always followed by the disappearance of the bubbles. "It cannot be denied," says Engelmann, "that these facts point to psychical processes in the protoplasm."

We need make no more quotations: the gist of Bunge's argument being that vital manifestations cannot at present be explained by any known physical or chemical forces. We take Bunge as an example of the new school of vitalists; and to read him will form a useful corrective after a course of Bütschlism. Bütschli will have to show us that the action of his oil froth is purposive and selective before he can expect to convert the unbelievers to his way of thinking. Bütschli has certainly succeeded better than his predecessors in making something like protoplasm; but there is nothing new under the sun. George Rainey in 1858 published a classical memoir in which he showed that certain crystalline materials, when deposited in viscous solutions, assume globular and cell-like forms. Harting, of Utrecht, and Dr. Ord followed up the matter, but even more striking were the experiments of Montgomery,[1] who obtained movements in a kind of artificial protoplasm made by mixing myelin with water. He obtained forms, moreover, simulating organic fibres, varicose nerve fibres, the broken-down matter of brain and spinal cord, and even cells. We should have expected to find some reference to these researches in the present volume, but, like so many Germans, Professor Bütschli apparently only recognises the prophets of his own country.

One word in conclusion as to the translation. Mr. MINCHIN has done his work admirably, and the text is only marred by one error in literary taste; and that is the constant use of formulæ instead of the names of chemical reagents. Even in a work on chemistry this would be unusual; still more odd does it look in a work on biology to see water almost invariably designated H_2O.

[1] *On the Formation of so-called Cells*, London, 1857.

SURGEON-MAJOR-GENERAL JOHN PINKERTON, M.D., Bombay, retired, has been gazetted to be an Honorary Physician to the Queen.

THE SOIL IN RELATION TO HEALTH. By H. A. MIERS, M.A., F.G.S., F.C.S., and R. CROSSKEY, M.A., D.P.H. London: Macmillan and Co. 1893. (Cr. 8vo, pp. 150. 3s. 6d.)

THIS little book is likely to be useful. As the authors explain in the preface, there was room for a concise account of the manifest and important bearings of geology and telluric conditions generally upon health and disease. An introductory chapter deals very briefly with geology and mineralogy. The next describes the composition of the surface soil, and here it would have been well to infuse a stronger shade of doubt into the mention of "humic" and "ulmic" acids as definite bodies having precise, though unwieldy, formulæ. After this comes a good account of the microbes, pathogenic, nitrifying, and others, found in soil, and the relation of certain specific diseases to these telluric germs.

The third chapter treats of water in the soil, and explains the relation observed between dampness and phthisis and rheumatism, and between the movements of subsoil water and the incidence of enteric fever and cholera. Diphtheria should have been referred to in this connection, its relation to damp being tolerably well established.

The fourth chapter has to do with the origin and significance of the various substances—saline, gaseous, and microbial—found in water derived from the soil, and their influence upon health. Next follows an account of the ground air and its movements, and of the temperature of the soil and its variations.

The sixth and last chapter is devoted to the geological distribution of disease, and includes a somewhat detailed criticism of Mr. Haviland's views with regard to cancer.

Messrs. MIERS and CROSSKEY have produced a pleasantly-written, well-arranged, and instructive little work, which may be studied with profit by those preparing for public health examinations, and others.

ILLUSTRATIONS OF PATHOLOGICAL ANATOMY WITH DESCRIPTIVE TEXT. By Professor A. KAST, of Breslau, and Dr. TH. RUMPEL, of Hamburg. English edition by Dr. ARMAND RUFFER. Part VI. London: Baillière, Tindall and Cox. (Folio. £2 8s., for the complete work with 48 plates.)

THIS atlas is confined to morbid anatomy, and consists of figures painted from nature and reproduced in "chromographed" plates by the Kunst-Anstalt, Wandsbek-Hamburg.

These plates are produced by a very elaborate process in fifteen colours, and have the advantage therefore of giving a great variety of tint, and reproducing the texture of the morbid structures with great fidelity. The drawing is also very careful and minute. Whether these plates are, as the publishers claim for them, "the most perfect specimens of art work ever produced in connection with medicine," we will leave to artists to decide. We may, however, venture to remark that the great mixture of colours sometimes results in an opaque muddy appearance which is not altogether like the bright semitransparent look of fresh specimens such as are here represented. We say this fully recognising the enormous difficulty of reproducing these effects in colour printing, and acknowledging the remarkable technical skill of the German colour printers.

For practical utility these plates deserve the highest praise, and can hardly be surpassed. The complete atlas will be a most valuable possession to morbid anatomists for comparison with rare specimens, and to students for instruction, so far as pictures can supply the place of objects. The advantages which good coloured drawings possess over decolorised specimens in museums need hardly be dwelt upon; they will always have an independent value. The great fidelity and moderate price of this atlas ought to secure for it a wide circulation.

HANDBOOK FOR ATTENDANTS ON THE INSANE. Second edition. London: Baillière, Tindall, and Cox. (Cr. 8vo, pp. 122. 2s.)

THIS is the second edition of the Handbook and is issued by the authority of the Medico-Psychological Association of Great Britain and Ireland. It will meet a growing want for a textbook among the large body of asylum attendants and others who require a thoroughly reliable and practical work to guide them in their studies and in their laborious and trying duties. It will also be the standard work used by them as candidates for the certificate of the Association. The book is well arranged and is admirably fitted to give its readers a general idea of the structure of the human body and its functions in health and disease.

The first part, dealing with elementary anatomy and physiology, is illustrated by numerous well-executed woodcuts, and concludes, as does each succeeding chapter, with a series of questions upon the text such as candidates might expect to meet at their examination.

In Part II Chapter I the symptoms of the diseases and disorders of the materials of the body, of the circulatory, respiratory, alimentary, excretory, and nervous systems are dealt with.

Chapter II is devoted to mind and its disorders and is divided into sections upon depression of mind, exaltation of mind, enfeeblement of mind, and perversion of mind, condition of the will, changes in feelings and instincts, and insane habits and peculiarities.

Chapter III is condensed but clearly written and is an excellent practical guide to sick nursing as required among insane people. Chapter IV contains an outline of the nursing and care of the insane. And the fifth and concluding chapter gives a summary of the general duties of attendants.

Altogether it is an excellent piece of work and reflects great credit upon Dr. Hayes Newington (the chairman) and his colleagues who formed the committee of revisers.

LA MOELLE ÉPINIÈRE ET L'ENCÉPHALE (avec Applications Physiologiques et Medico-Chirurgicales, etc.) Par CH. DEBIERRE, Professeur d'Anatomie à la Faculté de Médecine de Lille. Paris: Félix Alcan. 1894. (Imp. 8vo, pp. 460. Fr. 12.)

IN this volume an attempt is made to place the anatomy of the central nervous system in a complete form before the student. Beginning with the structure of nerve cells, the difference between axis-cylinder and protoplasmic processes is pointed out, the structure of the cell body and nucleus detailed, and a short summary given of the views of Golgi, Ramon y Cajal, Nansen, His, and others on the constitution of nerve elements. It is shown that the old plexus of Gerlach does not exist.

A description of the meninges follows: here the unfortunate and antique views of the arachnoid as (1) a serous membrane, and as (2) composed of a parietal and a visceral layer reflected over the encephalon, are reproduced—a serious histological and embryological error in the light of recent neurological researches. The lymph cisterns in the pia-arachnoid meshes, and the relations of these to the brain and spinal cord, are well described, and a short account of the development of the meninges given.

The anatomy of the spinal cord and bulb, and the relations and connections of the tracts are next described, abundantly illustrated with diagrams, some coloured; and a physiological summary of the chief centre in the bulbo-spinal system, and an account of the pathological appearances in the various types of bulbo-spinal disease concisely given. Then follows a description of the pons, mesencephalon, and cerebellum, and the intracerebral course of the cranial nerves (also profusely illustrated with diagrams). The cerebrum is next studied in detail, the weights and volumes in different races carefully tabulated, the morphology of the lobes discussed, account being taken of the recent researches of Eberstaller, Cunningham, and others, and illustrative photographic reproductions given.

The comparative morphology of the encephalon (in mammalia) is then dealt with, and the problem of the surface extent of the grey cortex considered—on the whole an admirable chapter. The histology of the cortex, based mainly on Meynert, and only with incidental references to recent workers, is much behind the times. The deeper tracts and grey masses are next described and abundantly illustrated with diagrams and illustrations, some of the latter, however, being reproduced after the speculative manner of Meynert and Luys to illustrate hypothetical structures and connec-

tions. The vascular supply and its distribution in the brain finishes the anatomical section.

This is followed by an account of the discoveries in cerebral localisation, beginning with the researches of Fritsch and Hitzig in 1870, and illustrated by the further researches of Ferrier, Schäfer and Horsley, Munk, and others; immediately following this is a chapter on cranio-cerebral topography in relation especially to surgery. The illustrations here are fairly accurate.

Finally, the embryology of the spinal cord and brain are dealt with in some detail; the concluding portion contains a general discussion of the functions of the central nervous system; followed by a chapter dealing shortly with psychology, mental evolution, the evolutionary grades of the nervous system, and experimental psychology.

OPHTHALMIC NURSING. By SYDNEY STEPHENSON, M.B. F.R.C.S.Edin. London: The Scientific Press Limited. 1894. (Crown 8vo, pp. 214, illustrations 62. 3s. 6d.).

IF we wished to write a purely commendatory notice of this small book we should omit the beginning and the end. When instructing nurses in practical points connected with nursing, for example, the use of action of remedies, methods for their application, how to prepare patients for operation, etc., the author is evidently at home, and writes in a way which must be intelligible to every nurse. This cannot be said, however, when, as in the first chapter, he writes about the anatomy and physiology of the eye, or, as in Appendix 3, he gives the meanings of terms, medical and otherwise.

The book, which is extremely well printed, contains fourteen chapters and three appendices. Chapter I, on "The Human Eye: its Structure and Action," is, as we have indicated, faulty. It contains numerous small errors, which need not be specified; the knowledge of the structure and "action," to use the author's curious term, of the eye, which a nurse would gain from its perusal, would, we think, be unsatisfactory and not wholly correct.

Chapter II gives a brief outline of the germ theory of disease, which the more intelligent nurse will be glad to have. Chapter III, on "Contagion and Infection," is very good, and in it instructions for the avoidance of contagion by nurses and others are clearly laid down. In Chapters IV and and V the remedies in common use, and methods for their application, are carefully and explicitly described. Passing over two short chapters on "Anæsthetics" and "The Commoner Operations upon the Eye," we come to the most valuable part of the book for nurses—upon "Arrangements for Operations," "Dressings and Bandages," and "Nursing of the Different Operations." These chapters are excellent. The remaining chapters deal with "Diseases of the Eye," "Shades, Artificial Eyes, and Spectacles," "Examination of Children, and the Taking of Temperatures," and "Dark Rooms and Disinfection."

Then follow three appendices. No. 1, "Lists of Instruments required for Different Operations;" and No. 2, "Illustrations of Instruments." Appendix 3, referred to previously, is a "Glossary" extending to nearly 11 pages, which is very amusing to the ordinary medical man. We have no doubt that a nurse will find therein the meanings of many terms which she might not understand without some explanation, but we think the author would have done better to have made this glossary more strictly technical, more correct, and shorter. It would, then, however, have been much less entertaining to the reviewer.

ETUDES DE CHIRURGIE MÉDULLAIRE (Historique, Chirurgie Opératoire, Traitement). By A. CHIPAULT. Paris: Félix Alcan. 1894. (Octavo, with 66 figures and two plates, pp. 400. 15 francs.)

THIS volume is the first of a series dealing with the surgery of the spine and spinal cord, and comprises three chapters treating respectively of the history of the subject, the operative procedures involved, and the conditions justifying operation. Vol. ii is to be concerned with the diagnosis of spinal lesions. In addition, a third volume, and possibly a fourth, published.

The historical survey is brief, but accompanied by a number of references, of which many more are given in the course of the work. The author observes that in the case of Pott's disease, and especially in that of tumours of the vertebræ, the results of operation have been far from satisfactory. With meningeal tumours it is otherwise, for in such cases some brilliant successes have been achieved. A careful description of laminectomy is given; the methods of various operators are contrasted and criticised. The author is amongst those who favour free resection of the laminæ, and is therefore led to consider the various methods proposed for the restoration of the posterior wall of the spinal canal. He gives the preference to that which aims at conservation of the periosteum, a method which appears to have been employed with much success in young animals and children.

In forming a decision as to the propriety of incising the dura mater the author carefully notes the state of the dura as regards pulsation. If pulsation is absent over a certain area or below a certain level, the existence of a subdural lesion, interfering with the circulation of the cerebro-spinal fluid, may be inferred; incision of the membrane is then advisable. In cases of simple extra-meningeal compression pulsation may also be absent when first the parts are exposed, but it recurs on removal of the compressing agent. It is recommended that the opening in the dura be closed in all cases. If, in traumatic cases, the nerves of the cauda equina, or even other spinal nerves, have been torn, suturing is indicated. A method of suturing the ends of a spinal cord recently severed is here described, as practised by the author on the cadaver; its practical utility may well be doubted.

Two methods of exposing the anterior aspect are described: (*a*) preliminary laminectomy, followed by gentle lateral displacement of the cord, which permits exploration of its anterior aspect, and (*b*) passage through the antero-lateral aspect of the vertebral body. Under (*b*) Treves's operation is described and recommended for the lumbar, that of Vincent (pre- and transvertebral drainage) for the dorsal region. As regards the cervical region, the author discards the buccal operation, because, amongst other reasons, the spinal surface accessible is very limited. The latero-cervical (especially the retro-mastoid variety) is recommended.

To sum up, laminectomy and the operations of Treves and Vincent are regarded as the main resources of spinal surgery, but certain rarer procedures are not forgotten; thus, we find various methods for the remedy of displacement, and methods for draining the subarachnoid space. This section is particularly valuable by reason of the author's great practical operative experience, supported by numerous anatomical researches.

The third chapter comprises by far the greater portion of the work, more than 300 pages being devoted to a consideration of the conditions in which the operations described may be employed. These include injuries to the spine (ordinary and gunshot), Pott's disease, tumours, certain lesions of the vertebræ and meninges, and certain neuralgiæ. For the condition last named, division of the posterior nerve roots is approved. The respective merits of the various operations in the conditions mentioned are discussed. Elaborate statistical tables are given upon the subjects of laminectomy for fractures, surgical intervention in gunshot injuries of the spine, in Pott's disease, in tumours of the spine, meninges, and cord. Detailed accounts of cases and the tables form a most useful record of experience, in convenient form for reference. Throughout the work there is evidence of the author's acquaintance with the literature of his subject, yet it is much more than a compilation; the record of personal experience is considerable, and the work of others is subjected to sound criticism.

CORONER BURNT TO DEATH.—We are deeply pained to learn that Dr. Callan, the Coroner for County Louth, died at Dundalk on Monday last from the effect of severe burns received the night before. He had been suffering from insomnia, and was reading in bed with a view to secure sleep. In some unexplained way the bed ignited, and the unfortunate gentleman was fatally injured.

NOTES ON BOOKS.

The Proposed Formation of an Inferior Order of Midwifery Practitioners, etc. By ROBERT REID RENTOUL. (Liverpool: E. and J. Gibbons. 1894. Cr. 8vo, pp. 78. 1s. net.)—This is the brief containing the case of those who are opposed to the legislative proposals for the registration of midwives, and as such will be studied with interest by both parties in the controversy. Dr. Rentoul has collected together with much industry a considerable mass of information, and has printed copies of most of the certificates issued to midwives by various bodies, and also those of certain institutions for training so-called "medical missionaries." The bulk of the pamphlet consists of a long statement embodying the arguments against the registration of midwives, and some observations upon the further matter of the giving to religious missionaries a smattering of medical knowledge. The pamphlet also contains a lengthy petition "against the Proposed Formation of an Inferior Order of Midwifery Practitioners; or the so-called Registration of Midwives," addressed to the President and Members of the General Medical Council.

Beiträge zur Lehre vom Stoffwechsel des gesunden und kranken Menschen. (Contributions to the Knowledge of Metabolism in Health and Disease.) Von Professor Dr. CARL VON NOORDEN. Heft II. (Berlin: A. Hirschfeld. 1894. Demy 8vo, pp. 154. M. 4.)—Professor von Noorden is already well known as the author of a valuable textbook on the *Pathology of Metabolism*, and in the present volume he appears as the editor of a series of nine original contributions to that subject. The researches have been carried out by his pupils, and relate to such important subjects as the relation of non-nitrogenous to nitrogenous foods, to the excretion of uric acid, to glycosuria, gout, and leukæmia, and to the processes of metabolism during menstruation. The work done appears to be of a very high order, and should be carefully studied by those engaged in pathological investigations.

Bradshaw's Dictionary of Bathing Places and Climatic Health Resorts. (London: Kegan Paul, Trench, Trübner, and Co. 1894. Crown 8vo, pp. 496. 2s. 6d.)—This useful little reference handbook again appears, with some additions and alterations. A little further careful editing is, however, needed in the interests of accuracy. For instance, at p. xv, in the Hints to Visitors to Watering Places, it is stated that "Sir Henry Thompson, of London, sends calculous cases to Marienbad, Pullna, and Vals," while under "Pullna," at p. 261, it is correctly stated that "there are no bathing establishments at Pullna. Treatment is not carried out at Pullna itself." How, then, can Sir H. Thompson send cases there? Physicians are also quoted as living who have long been dead. There is also an objectionable addition in the form of a list of "specialists" at the end of the volume which had much better be omitted; it is simply a very narrow, and not even accurate, selection of names affording an advertisement of certain practitioners—in some cases, no doubt, without their knowledge or consent.

Cimiez: its Health and Climate. By H. EVELYN CROOK, M.D., B.S.Lond. (London: McCorquodale and Co., Limited. 1894. Cr. 8vo, pp. 30.)—This is a little booklet in praise of Cimiez, that part of Nice which is most remote from the sea and slightly elevated above it. No doubt it is the most desirable situation for invalid visitors to Nice to settle in. Its distance from the sea is certainly an advantage, as it avoids that glare reflected from the sea when the sun is shining full upon it, which is so distressing to many; and it is more sedative for those who find the climate of the Western Riviera irritating to the nervous system. Asthmatic cases often do exceptionally well there, although this fact is not mentioned by Dr. Crook. Many admirable accounts of the general climate of the Riviera have been written; Bennet, Sparks, Hassall, Burney Yeo, de Valcourt, and others would seem to have pretty well exhausted this subject, yet nearly every medical visitor to this beautiful region seems to yield to the temptation to repeat these generalities, and Dr. Crook has not escaped; he, however, falls into an errror in describing the Western Riviera as extending from Toulon to Spezia—it ends at Genoa.

Growing Children and Awkward Walking. By THOMAS WILLIAM NUNN, F.R.C.S.Eng. (London: Kegan Paul, Trench, Trübner, and Co. 1894. 8vo, pp. 118. 2s.)—How far the interest just now so commonly expressed in physical education is genuine it would be hard to say, but it is certain that many who talk about it are very ignorant of the fundamentals of the subject. Mr. Nunn has written a readable little book, which deals pleasantly enough with one aspect of the subject, the anatomical basis of ungainly movements. He insists upon the importance in all such cases, and in all instances of ugly tricks of movement, of searching for some structural anomaly, whether congenital or acquired, of bone or nerve supply. To a chapter on "correction and prevention" Mr. John Holm has contributed descriptions of a long series of useful exercises directed to bring into action, which may be used in succession or separately, for the correction of some particular defect. Granting that the publication of such a work was desirable for the information of the general public, Mr. Nunn has discharged the duty well.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

EFFERVESCING WINE SUGAR FREE.

A GOOD deal of interest is taken just now among medical men as to the relative freedom from sugar of effervescing and other wines. Champagne and other effervescing wines have a peculiarly stimulating effect, shared in a less degree by other forms of alcohol, and in the modern theory of dietetics there are a great many conditions both of diabetes and of other classes of digestive disorders and malassimilation, for example, gout, obesity, etc., in which the use is desirable of champagnes which are practically sugar free. Since the subject has been under discussion we have had many inquiries as to how far such wines are obtainable. We have compared a variety of champagnes of high repute, and have selected some of those which have the greatest reputation for dryness for the purpose. Four samples of the dryest champagne which were obtained for comparative analysis give the following results:

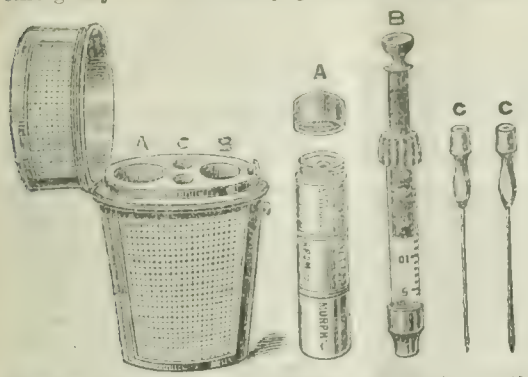
	Extract per cent.	Sugar per cent.
1 Brut Champagne (Laurent-Perrier) ...	... 2.0 ...	0.19
2 " "	... —— ...	1.60
3 Dry Champagne	... 3.81 ...	1.20
4 " "	... 4.02 ...	1.50

The sample No. 1 of champagne (Grand Vin, sans sucre) received from Messrs. Hertz and Collingwood contained 2 per cent. total solids, and of this quantity the sugar does not amount to more than 0.2, so that it may be said that the wine is practically free from sugar, and it certainly has not had any sugar added to it, as is usually the case with champagne.

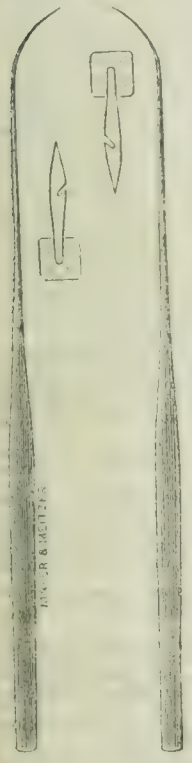
AN ASEPTIC PORTABLE HYPODERMIC CASE.

THE accompanying illustration shows a very compact and portable hypodermic case, which contains an aseptic syringe, two needles, and a case of eight cells for hypodermic tabloids, cocaine, atropine, pilocarpine, morphine, and atropine, apomorphine, strychnine, agotine, with one cell for lamellæ of cocaine, which latter are very useful when a medical man is suddenly called upon to extract a piece of grit from a person's eye; the tabloid case is composed of three pieces which screw together, each piece when unscrewed has a revolving lid to prevent the escape of the tabloids from the three cells into which each piece of the case is divided. This tabloid case, measuring 2¼ inches in length with a diameter of half an inch, fits into a receptacle into the hypodermic case. The whole can be made in silver, white metal, plated, or nickled, or in aluminium. The hypodermic case measures 3 by 2 by 1 inches. Its chief features are that it can be kept aseptic, is very compact and portable in the waistcoat pocket, and it

contains all the tabloids that are likely to be required in an emergency or in ordinary practice. The case is made by Messrs. Reynolds and Branson, of Leeds, to the design and at the suggestion of Mr. John W. Walker, of Wakefield.



NEEDLES FOR CLEFT PALATE.



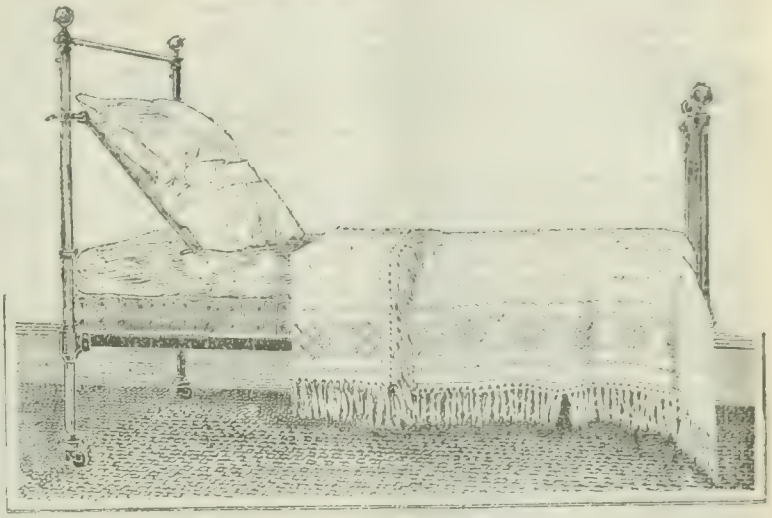
The accompanying figure shows the needles which Mr. Fitzgerald, of the Melbourne Hospital, uses when operating for cleft palate. It is universally acknowledged that the introduction of the sutures is the most troublesome part of this operation. However, by the use of these needles, this difficulty is to a great extent overcome. They are thus employed: The thread is inserted into the slot, which is cut into the upper side of the needle thus armed: its point is introduced in the ordinary manner through the palate on the child's right, that is, with the surgeon's left hand. The needle, which is slotted on the lower edge, is entered on the opposite side, and when behind the cleft is partly rotated in such a way as to catch and hold the thread from the other needle. These needles require to be very carefully made, the notch being deep and yet only just wide enough to admit fine plaited silk. This, of course, may be used to afterwards draw through any suture material desired. In most of the earlier operations Mr. Fitzgerald used plaited silk or fine wire, but in the more recent cases silkworm gut has been found to answer admirably.

PURE GELATINE.

The various kinds of gelatine, bleached and unbleached, and concentrated table jelly manufactured by Messrs. Astley Cooper and Co., of the Oatlands Chemical Works, Leeds, are guaranteed to be made from English calves, the table jelly from the heel, the material employed being selected with great care. The gelatines are of excellent quality, and do not contain either borax or salicylic acid, the water solution is very faintly alkaline, and the amount of ash is from 1.4 to 1.8 per cent. They are very well adapted for bacteriological work, in which good gelatine is of importance. The table jelly prepared from the heel of the calf only is in every respect very superior to the articles made from bone, etc., and is in a convenient and highly agreeable form for domestic use.

THE "CAMBRIDGE" BEDSTEAD.

The "Cambridge" bedstead is intended to add to the advantages of the ordinary bedstead a secure and effectual bed-rest, easily adjustable at any angle by the occupant or the nurse, thus providing great additional comfort for chronic or occasional invalids, as well as for those who breakfast or read in bed. To sufferers from heart disease, asthma, and the constantly-recurring malady of influenza, it will be found invaluable. Forming, as it does, an integral portion of the bedstead, the rest thus provided has the following advantages: (1) It is always at hand and ready for use; (2) it occupies no additional space when not required; (3) it is secure, and not liable to be shifted by movements of the patient; (4) it is adjustable by the person in bed, and is easily lowered or raised at will. It is exceedingly simple in its working, and there are no parts to get out of order. The hospital bedstead is made without the tie-rod shown in the drawing, and as the back rest can, when required, be lowered behind the pillows, a free space is left for administering anæsthetics when necessary to operate in the wards. It is made by the Patent Cambridge Bedstead Co., 5, Free School Lane, Cambridge.



GRANTS FOR SCIENTIFIC RESEARCH.

The Council of the British Medical Association desire to remind members of the profession engaged in researches for the advancement of medicine and the allied sciences that they are prepared to receive applications for grants in aid of such research. Applications for sums to be granted at the next annual meeting must be made on or before June 15th in writing addressed to the General Secretary, at the office of the Association, 429, Strand, W.C. Applications must include details of the precise character and objects of the research which is proposed.

Reports of work done by the assistance of Association grants belong to the Association.

Instruments purchased by means of grants must be returned to the General Secretary on the conclusion of the research in furtherance of which the grant was made.

Research Scholarships.

The Council of the British Medical Association are prepared to receive applications for one of the three Research Scholarships which is vacant, of the value of £150 per annum, tenable for one year, and subject to renewal by the Council for another year.

Applications to be sent in writing addressed to the General Secretary on or before June 15th, stating the particulars of the intended research, qualifications, and work done.

Francis Fowke, *General Secretary.*

429, Strand, London, May 8th, 1894.

Of the 147,922 deaths in England and Wales last quarter, the causes of 135,188, or 91.3 per cent., were duly certified by registered medical practitioners, and the causes of 8,839, or 6 per cent., by coroners after inquest; while the causes of the remaining 3,695, or 2.7 per cent., were not certified.

THE CASE OF DR. ANDERSON.

The action of Anderson *v.* Gorrie and others came on for trial before the Lord Chief Justice and a special jury.

Dr. Anderson appeared in person, and Mr. Bigham, Q.C., Mr. Joseph Walton, Q.C., and Mr. Sinnott for the defendant Lumb, Mr. Adam Walker and Mr. Harold Hodge for the defendant Cook. The defendant Sir John Gorrie has died since commencement of action. The heads of the plaintiff's claim will appear from his opening statement. The defendants pleaded that they had absolute judicial jurisdiction and discretion, and that they acted in due course of law, and that they did not act in concert.

The plaintiff stated his case to the jury, and commented in the first place upon the alleged unfair and oppressive action of Sir John Gorrie in Tobago and Trinidad in promoting suits *in formâ pauperis* against various persons, six of which were against the plaintiff. In these six cases judgments were given against him, the Chief Justice having refused to allow him to be sworn and give evidence on his own behalf. Maintaining that the judicial conduct of Sir John Gorrie in these cases was an abuse of his position, the plaintiff petitioned the Queen for redress. Thereupon Dr. Anderson was lectured by Sir John Gorrie and the two other judges Lumb and Cook (who are defendants in the present action), on the ground that to petition the Queen was a contempt of court; and he was soon afterwards served with notice of proceedings to commit him for contempt, which were brought on in June, 1890, but which came to nothing because there was no evidence even of his signature of the petition.

The Lord Chief Justice intimated that if all this was a misapprehension on the part of the judges, then, however outrageous it might appear, he was of opinion that it would not maintain an action. But if the Bench of Judges conspired together to oppress the party by a misuse of the process of their Court, that would be evidence of malice. And if the jury should find that there was malice, he would leave it to the Court to say whether judges thus guilty of abusing their powers were liable to an action.

The plaintiff thanked his lordship, and proceeded to state his case on the second point, which arose out of the proceedings as to his medical fees. The main issues in these proceedings are now under appeal to the Privy Council, but the plaintiff claimed damages on the ground that after a judgment had been entered against him for £42, he was examined before Mr. Justice Cook as to his means of payment, was held to bail for £500, and forthwith sent to prison in default. The plaintiff stated that his friends offered the excessive bail but it was refused, and he was further imprisoned. He brought appeals before all three judges, and applied for a writ of *habeas corpus*; but all redress was refused. Ultimately Dr. de Verteuil, the senior unofficial member of the Legislative Council of the Colony, was accepted as his bail. Dr. Anderson then appealed against these orders and proceedings to the Full Court, consisting of the same judges, who deferred their decision for four months and a-half, and then stopped the proceedings without his obtaining any redress. The plaintiff therefore claimed in the present action damages for the malicious demand of excessive bail, and for false and malicious imprisonment, as well as for refusal of the writ of *habeas corpus* and general denial of justice. The plaintiff at this point mentioned that the defendants alleged in their defence that the Bill of Rights was not in force in the Colony, and he proceeded to argue the point.

The Lord Chief Justice said he had better reserve his argument until the point was raised, as he could not imagine that an English lawyer would contend that the great constitutional statutes were not in force in the British colonies.

The plaintiff called Lord Knutsford (who was Colonial Secretary at the time) through whom various official documents were produced, in concert with Mr. Oliver, who attended from the Colonial Office for that purpose.

In reply to the plaintiff, Lord Knutsford said that he thought that Sir John Gorrie was animated by a desire to do justice, but he thought he had used intemperate language, and that his conduct in advising pauper actions was reprehensible. He also gave evidence as to various petitions forwarded from the colony complaining of Sir John Gorrie's proceedings.

In answer to Mr. J. Walton, Lord Knutsford said the Commissioners, who were appointed by the Crown to report upon the general difficulties which had arisen after Sir John Gorrie's appointment, reported that the administration of justice in Trinidad was unsatisfactory, and, as a result, Sir J. Gorrie and Mr. Cook were suspended. During the suspension Sir J. Gorrie died, but Mr. Cook was eventually removed from his position as a puisne judge. The other defendant (Mr. Lumb) was, however, continued in office, became senior judge, and was afterwards promoted to Jamaica.

After further examination on the general question, the jury, interposing, said they were satisfied as to the maladministration of justice in the colony under Sir John Gorrie.

Lord Coleridge said the plaintiff had better confine himself to the question of malice.

Dr. Anderson then went into the witness box and gave on oath and in detail the evidence indicated in his opening statement. He said that besides irregularly promoting actions against him *in formâ pauperis*, Sir John Gorrie actually refused to hear his evidence and then decided against him. In the case as to medical attendance, he said that the Chief Justice likewise refused to hear his own evidence, altered the whole cause of action, and then gave judgment against him. He appealed to the Full Court, but they upheld the Chief Justice. He then described his petition to the Queen, and the proceedings for contempt, taken by the Full Court, of its own motion.

The Lord Chief Justice said the plaintiff's petition was a perfectly proper one, and it would be for the judges to show how they came to treat it as a contempt.

The plaintiff then said that he was summoned to Trinidad to give evidence as to his ability to satisfy judgments for £42 given against him in the pauper actions, and examined by Mr. Justice Cook, who, notwithstanding his evidence, ordered him arbitrarily to find bail for £500, and had him arrested at once. A friend then offered bail, but he protested against the illegality and refused the offer, applying at once for a writ of *habeas corpus*, which the Court refused to issue. He then tendered bail, but the judge refused to decide, and sent him back to prison. Finally, Dr. de Verteuil was accepted. He appealed against the bail proceedings, but the Full Court upheld them. The plaintiff then described an action by him for libel against Sir John Gorrie, in which Mr. Lumb had struck out the chief part.

The Lord Chief Justice said from the papers before him it appeared that the material passages were struck out by Mr. Justice Lumb, and then there was a demurrer on the ground that the remainder was not libellous, and that was allowed by Mr. Justice Lumb. It certainly had a strange aspect.

The plaintiff, when under cross-examination, was rebuked by the Lord Chief Justice, for using warm language, and apologised. In his cross-examination by counsel for Mr. Justice Cook as to the order for excessive bail, the Lord Chief Justice asked if anyone ever knew such a thing done before by an English judge? The plaintiff's attorney gave evidence in corroboration, and produced among other documents the affidavit of sufficient means, which Mr. Justice Cook had before him, and in spite of which he made the order for bail.

On Thursday afternoon, after the plaintiff had closed his case, Mr. Bigham asked the Lord Chief Justice to state what questions he proposed to leave to the jury.

Lord Coleridge said he proposed to ask them in each case whether the respective defendants wilfully perverted the course of justice for the purpose of oppressing the plaintiff.

Mr. Bigham then proceeded to address the jury on behalf of Mr. Lumb. He was an old member of his circuit and of honourable antecedents, and he asked the jury whether they could believe that such a man could be guilty of the dreadful offence charged against him—that from some evil and sinister motive he had chosen to degrade his high office to inflict injury on a litigant before him. The plaintiff's complaints against Mr. Lumb resolved themselves into two: (1) That he had concurred in a proceeding against the plaintiff for contempt of court merely because the plaintiff had petitioned the Queen against the judges for their conduct in certain actions then pending; (2) that he had concurred in holding the plaintiff to bail in £500 for a debt of £42. Mr. Lumb had nothing to do with the actions complained of, but it was true that he had unfortunately concurred with the Chief Justice in the course taken as to the contempt. Counsel admitted that this was oppressive: but a judge was not liable to an action for a mere mistake or error in judgment, and he submitted that there was no evidence of bad motive. Then as to the holding the plaintiff to bail: Mr. Lumb was not the judge who made the order, and he said he should not himself have made such an order; but he did not see his way to interfere with the exercise of judicial discretion by a colleague. There was a third charge, which seemed inconceivable—namely, that in an action commenced by the plaintiff against Sir John Gorrie for libel Mr. Lumb had struck out the material passages in the plaintiff's claim and afterwards decided that the claim was bad for the want of them. The action was for a letter written by the Chief Justice in his office, and Mr. Lumb held that it was privileged.

Mr. Lumb then went into the box and bore out the statements made by his counsel on his behalf. He dissociated himself altogether from Sir John Gorrie and declared that he had himself frequently found in favour of the plaintiff, and that he had, in fact, sympathised with the plaintiff on many points although on others he had formed an honest opinion at the time against him on various points of law.

He was then cross-examined at great length by Dr. Anderson, who was frequently warned by the Lord Chief Justice that he was wandering from his case.

The jury afterwards handed up a paper to the Lord Chief Justice to the effect that "the jury desire to say that they are satisfied with Mr. Lumb's action in the matter of the rule for contempt and that they thought that his conduct therein showed sympathy rather than malice towards the plaintiff." But the plaintiff still went on cross-examining on the point.

The Lord Chief Justice said that the jury had plainly expressed their opinion, but the plaintiff could go on. He (the Judge) and the jury were bound to listen, but, so far, he agreed with the jury.

After further cross-examination Mr. Bigham submitted that the plaintiff was wasting the time of the Court and asked that Mr. Lumb should be discharged, and shortly afterwards Dr. Anderson sat down, and Mr. Bigham asked that the verdict of the jury should be taken at once as against Mr. Justice Lumb.

The Lord Chief Justice assented and put to the jury the question whether Mr. Lumb had acted with a design to prevent justice.

The jury, after consultation, handed up a paper in which they found that "there was no evidence against Mr. Lumb of judicial misconduct or perversion of justice or malice or any improper motive in relation to the proceedings in which the plaintiff was concerned."

The Judge thereupon entered judgment for Mr. Lumb, and the case as against Mr. Justice Cook was adjourned for a week.

The trial was resumed on May 3rd as between Dr. Anderson and Mr. Cook alone, on whose behalf Mr. Walker addressed the jury. Without defending the action of Mr. Cook in concurring with Sir John Gorrie as to the rule for contempt of court, or in fixing the amount of bail at £500, counsel contended that there was no personal malice or ill will and that the misuse of a judge's discretion was not actionable.

Mr. Cook then gave evidence and admitted his removal from office by the Commissioners, which was ascribed to other misconduct not connected with the present matter.

The Lord Chief Justice, interposing, said that although many irrelevant matters had been gone into there was a case to be answered. Sir J. Gorrie and Mr. Cook took a strong view as to Dr. Anderson's conduct and position as to the native population, the Chief Justice describing him as a pestilent person, and when they had him in their clutches they dealt with him as they would not have dealt with others. Now within certain limits this might not be sufficient to sustain an action against them for their acts as judges. But the question is whether, taking all the facts, their acts were judicial and whether they can, in the widest possible

scope of language, be considered as judicial acts. No doubt they were acts of persons who were judges, but whether they were really judicial acts is the question to be tried.

Mr. Cook swore that at that time he had never tried a case of Dr. Anderson's and had no ill-feeling against him. He was a perfect stranger to him and whatever he had done he had done in the honest belief that he was acting within his judicial power.

The Lord Chief Justice said that was not the question.

Mr. Cook went on to allege that Sir John Gorrie had in the matter for the rule for contempt practically overridden himself and Mr. Justice Lumb. Mr. Cook said he disapproved of the Chief Justice's action and took no part in it.

The Lord Chief Justice said that Sir John Gorrie had no right to issue a rule if the majority of the court were against him, and that the other judges would be very wrong in acquiescing.

Mr. Cook then gave evidence as to the matter of excessive bail, and alleged that Dr. Anderson's answers were unsatisfactory, and he considered that he had power, without regard to the amount of the debt, to fix any bail he thought fit in order to secure his appearance upon the adjournment. Mr. Cook then endeavoured to explain his further adjournment of the case on various grounds, as to which the Lord Chief Justice frequently intimated that they were not satisfactory.

After a cross-examination by Dr. Anderson, Mr. Walker again addressed the jury, and Dr. Anderson replied, stating that he relied upon malice in the legal sense, which was defined to include any corrupt motive or wilful departure from duty.

The Lord Chief Justice proceeded to sum up the case on Friday. He said that the conduct of the judicature in these distant colonies was a matter of the greatest importance, especially on account of the difference of races. Judges might unconsciously be biassed in favour of one class against the other, and the question was whether the defendants had allowed themselves to be induced to do injustice to one side. It was important to maintain the absolute independence of the judges. It might seem strange that actions should not be maintained against judges for acts done as judges within their jurisdiction; but it did not follow that there was not a speedy and effectual remedy. As Lord Knutsford had stated, the Governor could at once suspend a Colonial judge, and the Secretary of State could remove him. And in this very case the Governor had suspended a judge, and after an admirable inquiry two judges were removed. His lordship then proceeded to review the authorities bearing on the question as to whether the defendant was liable, if in what he did he acted perversely and for the purpose of oppression. There was no direct decision on the point, and his own opinion was that the action would not lie even in such a case. It might seem monstrous that a judge might abuse his judicial office to the oppression of a suitor and yet not be liable to an action. But, on the other hand, this could not be known without trial, and malice and oppression might always be alleged. The mere allegations would make the judges liable to actions, and the whole object of the rule of law would be defeated. The question, therefore, was not one to be easily decided, and was one, if it arose, for the Court. As to Mr. Cook, the question was now to be dealt with. The plaintiff had certainly sustained injuries. The proceedings for contempt of court taken against the plaintiff for having petitioned the Queen were, in his lordship's opinion, quite unjustifiable. Then judgments having been obtained against Dr. Anderson for £42, Mr. Justice Cook held him to bail for £500. He confessed he could not understand how an English judge could have so acted. These were the matters now in question. Now, the jury had yesterday handed him a paper, in which they stated that "the defendant acted oppressively, and either maliciously, or unaccountably under the influence of drink, overstrained his judicial powers to the prejudice of the plaintiff and for the perversion of justice."

The jury said they were still of that opinion.

Lord Coleridge said nothing remained for the jury but the amount of damages, which was a question emphatically for them.

A juror asked whether they might give exemplary damages, even though the defendant was unable to pay them.

Lord Coleridge said he could not fetter the right of the jury to give such damages.

The jury, after deliberation, gave their verdict for the plaintiff for £500.

Lord Coleridge suggested to the jury that they should substitute "and" for "or" in their finding, before the clause with reference to the influence of drink.

The jury said that they had been discussing it, and intended to ask to be allowed to strike out that clause altogether.

Lord Coleridge assented to this course. He then said that it was with no disrespect to the finding of the jury that he must direct judgment to be entered for the defendant; but he was bound by authority. The plaintiff could move to have it entered for himself for the amount of the damages awarded.

The case then closed.

Medical Students in France.—Statistics prepared for the Budget Committee of 1894 show that the total number of students of medicine in France on January 1st, 1893, was 6,470. Of these 3,634 were registered in the Paris faculty and 2,836 in the various provincial faculties. The "free" provincial faculties showed a total of 139 students. The figures show that there was an increase in the number of students in the State faculties and a decrease in the "free" faculties.

Donations and Bequests.—The late Mr. Thomas Meadows, of Aylestone, Hereford, has by his will bequeathed £250 each to the Northern General Hospital and the Southern General Hospital at Liverpool, £200 to the Hereford Dispensary, £500 to the Hereford General Infirmary, and £500 to the Victoria Eye and Ear Hospital at Hereford.

NOTES ON GIBRALTAR: ITS SANITARY ADMINISTRATION AND ITS HOSPITALS.

Gibraltar as a Health Resort.

The journey to Gibraltar, where Hercules ordained the boundaries not to be overstepped by man, is worth taking, even by those who have only a fortnight, still more by those who have three weeks to spare at Christmas or Easter. For those who sicken at sea there is the railway route, of which I shall shortly speak *apropos* of a three days' land trip which I made from Gibraltar by the Algeciras Railway through Bobadilla, across the plains of Andalusia and the mountain passes of the sierra, to a new health resort, Roman Ronda, and the Alhambra of Granada. But more refreshment, more absolute repose, a finer air, and more complete detachment from current cares are the privileges of those who go down cheerily by sea to Gibraltar sound "the strait pass" of Shakespeare. The Peninsular and Oriental Steamship Company's steamers make the journey in three days and a-half. That gives at the least a week at Gibraltar, and brings you back within a fortnight. An extra week spent on the opposite coast of either Tangier or Southern Spain supplies scenery and sights which are a lasting heritage through life. Such rapid runs make a purple patch in the monotony of city life highly to be appreciated. Of this my experience supplies many examples. A few years since, having a fortnight to spare between December 14th and 28th, and looking, on the morning of the 13th, idly through the newspaper to get a hint for a holiday, my wife's eye lighted on the sailing days of the Cape mail steamers for Madeira. One was announced for the next morning. A telephonic message to the Secretary of the Union Steamship Company secured a couple of luxurious cabins, one serving as a writing room. The house was full that night with guests; next morning we were on our way. In three days we were at Funchal, where we idled for twenty-four hours; on the fifth we were mounted on Spanish jenets making a tour round the back of the island along almost inaccessible paths, and across narrow mountain tracks with hammock-bearers for hours of lassitude and luxury. Madeira is an assemblage of closely-packed steep volcanic peaks, with deep, richly-flowered valleys intervening, skirted by mule tracks, overhanging the sea. From fertile valleys with the sugar cane and the banana, from houses full of pine-apples, we rode through tall hedgerows of geranium and rose bushes to ragged heights, crowned by the jil tree and the pine, and so down and up again, the vegetation ever varying with the altitude, a small Eden or a minor paradise. The twenty-eighth of the month saw us back "at home" to another party of friends, none of whom knew of the fairy scenes and rich recollections with which the intervening fortnight had been stored. I made no notes, but memory loves to linger among the hills, the valleys, and the mountain *cols* traversed with such ease. It was less commonplace than a parade on the pier at Brighton, more refreshing than a run to the Riviera. Gibraltar may be reached as readily at less cost, and has much to recommend it.

It is not strictly a health resort in the sense of the Riviera or Tangier, but it offers a halfway house for invalids from India and Australia, a warm and pleasant resting-place on British soil for those seeking a short winter holiday at sea. In February the Alameda, the public garden, was fragrant with tall bushes of heliotrope and scented geranium, the acacia tree was aglow with golden bunches of bloom, the aloes were flowering in the open air, and the white caps of the calla lilies abound; the loquat, the lemon, the almond, the olive, and the pomegranate thriving alongside; the oranges are ripe, sweet-scented violets carpet the shady nooks. That characterises the climate as well, perhaps, as a meteorological table; but in this month the frequent Levanter—the sirocco of Gibraltar—brings frequent damp and darkness.

Historical.

No sanitation of any importance was systematically attempted in Gibraltar until the year 1865. Before that date there was a board of highway commissioners, who attended

to the scavenging and lighting of the place, but the systems of drainage and water supply were as bad as can well be imagined. Waste and soil from houses were conducted to the sea in square brickwork channels without any systematic means of cleansing or flushing. The water supply of the town was from surface wells, conducted to public fountains by open aqueducts, or from private wells and tanks.

No wonder that the Rock had an evil reputation and suffered severely from one epidemic of cholera or yellow fever after another.

Death Registration.

Death registration did not become compulsory till 1869, but the records in the Official Gazette give a mean annual death-rate amongst the civil population of 29.25 per 1,000 for the period 1851 to 1866.

Sanitary Order in Council.

In 1865 the present Sanitary Order in Council was promulgated and a Board of Sanitary Commissioners formed. In the same year the present system of drainage was commenced and completed. Wells were sunk in the isthmus, or neutral ground, where fresh water was found and the water from them pumped to tanks at higher levels in the town or laid on to the houses by gravitation. The pumping soon exhausted these walls, which have since supplied brackish water only.

Effect of Sanitary Improvements.

The death-rate fell, subsequently to these changes, to 24.61 for the period 1867-70, to 23.88 during 1871-75, and remained practically at that figure till 1885, when a medical ordinance, including a clause making notification of infectious or contagious diseases compulsory upon medical practitioners, came into operation. During the succeeding quinquennial period the death-rate fell to 22.44 per 1,000. In 1891, 1892, and 1893 there has been a still further and important reduction in the death-rate, the average for these years being 19.47 per 1,000. During these years sanitary measures have been more vigorously pushed than formerly, and a persistent attempt has been made to rouse amongst the people themselves some demand for improved sanitation in or around their dwellings.

Zymotic Mortality.

The zymotic death-rate averaged during the decennial period 1881-90 4.88 per 1,000, in 1891 it was 3.03 per 1,000 in 1892, 3.14 per 1,000, and in 1893, 2.46 per 1,000. Continued and enteric fever and diphtheria have had high mortalities, but continued fever is now of rare occurrence amongst the civil population, and has enormously decreased amongst the soldiers. Enteric mortality has fallen from 0.45 per 1,000 in 1881-90 to 0.1 per 1,000 in 1893. Diphtheria mortality was 0.95 per 1,000 in 1881-90. In 1893 it had fallen to 0.42 per 1,000.

Tuberculous Diseases.

Tuberculous diseases, including phthisis, are very common. Overcrowding is excessive, and intermarriages are the rule. The average mortality from tuberculous diseases was 3.39 during 1881-90. It has fallen slightly in later years owing to improvements in the ventilation of living rooms and in the general sanitation of premises. In 1891 it was 2.77, in 1892 3.29, and in 1893 2.56.

Cholera.

There has been no cholera epidemic since the sanitary improvements commenced in 1865. In 1885 the neighbouring town of Linea (two miles distant) suffered severely from cholera. In a population of 11,000 there were 381 reported cases and 194 deaths between August 14th and October 17th. There was constant communication all the time between Linea and Gibraltar, but only 32 cases and 20 deaths were reported in the latter in a densely packed civil population of 18,669.

Death-rates of Neighbouring Towns.

The neighbouring Mediterranean towns of Cadiz and Malaga have an average annual death-rate of approximately 40 per 1,000.

Causes of Higher Standard of Public Health in Gibraltar.

The chief causes that have brought out the higher standard of public health in Gibraltar are the construction of a modern sewerage system, with laid-on system of flushing and sanitary water-closet arrangements; rigid sanitary scrutiny of plans of new buildings, condemning or improving old insanitary blocks, systematic supervision of tanks and collecting areas of water supply, improved scavenging and disinfectant flushing of main sewers during summer months, notification and isolation of cases of infectious diseases.

Vaccination and Small-pox.

Primary vaccination is carried out very completely and thoroughly by public vaccinators under the supervision of the medical officer of health. Small-pox is endemic in the neighbouring territory of Morocco, and in 1893 was raging in the immediate Spanish towns. In Gibraltar, however, there have been only 11 fatal cases since 1885.

Isolation or Disinfection.

There is an isolation hospital (Genester Herrscher's) with a modern steam disinfecting apparatus which is invaluable. An Ashford litter has recently been introduced into the town for removing infectious cases, and after use it is disinfected bodily on the steam disinfector—a great improvement on the older methods of removal.

Sanitary By-laws.

Last year by-laws on the lines of the model by-laws of the Local Government Board were issued, and are now in force.

Milk Supply.

The milk supply has also been improved by the recent issue of by-laws to prevent adulteration and improve the condition of goatsheds and dairies. Old and insanitary goatsheds have nearly all been done away with, and model sheds constructed according to requirements of sanitation as represented by the present medical officer of health, who has taken special pains to obtain the introduction of by-laws on the subject. Much, however, has still to be accomplished.

Public Opinion on Sanitation.

But though sanitation on modern lines is being persistently and actively pushed, public opinion has been loudly opposed to any sanitary measures, which throw expenditure on houseowners, and all such measures have been decried and ridiculed in the local press. The reason of this is not far to seek. House accommodation is so limited and in so great demand that any tenant making the most trivial complaint receives notice to quit, and is put to great straits to find accommodation elsewhere; while to meet the expense of sanitary works, which they are compelled to carry out, landlords are in a position to raise the rents without losing the tenant. Fortunately both owners and tenants are just beginning to find sanitation the cheapest in the long run, and the opposition is not so great as formerly—is, in fact, dying away.

Chief Public Health Problems in Gibraltar.

The most difficult problems that have yet to be solved are the improvement of the present drainage system and water supply, the removal of old insanitary blocks, and the mitigation and control of overcrowding.

Facility for applying "Hermite" System of Sewerage.

No town is so favourably situated as Gibraltar for the application of the "Hermite" system of sewerage. Sea or brackish water is already laid on for flushing to every house in the place, and every house is now practically supplied with separate flush-out systems of waterclosets. The main sewers are further flushed with the same water from automatic flushing tanks. All this has been represented to the local government, but the possible advantages of the system of supplying electrolysed sea water in Gibraltar has not yet been realised.

Present Water Supply.

The water supply for drinking purposes is rain water collected on roofs and stored in masonry tanks under the houses. There is no filtration or other method of purifying. Most of these tanks were kept in a filthy condition, and no attempt made to prevent their pollution from surface

washings. Terraces used for all kinds of domestic purposes, and as flower gardens, and even as the sites of water-closets, formed part of the collecting area. These and other grave defects are being steadily removed by systematic house-to-house inspections. Tanks are also systematically cleansed, as they become empty before the commencement of the rainy season. A public supply of fresh water is stored in two large tanks, one in the north and the other in the south. The water is surface rain water collected from prepared areas on the face of the rock above the town. There is no filtration, the only attempt at purification being settling tanks for the removal of suspended matter. The water is carried by gravitation to one or two fountains in the town, and from them supplied on purchase to the public. Nearly all the soda water manufactories obtain their water from these fountains. This water is also hawked about the town in small wooden barrels, over the cleanliness of which there is no control. In time of drought condensed sea water is pumped into the tanks to supply the public, but the condensers are not sufficient to meet the requirements of a water famine. There is only about a gallon of fresh water per head of population available daily throughout the year. For flushing and domestic purposes, other than drinking and cooking, the law compels houseowners to take at least 10 gallons per head daily of the laid-on brackish water. The law on this subject is constantly broken, and much of the time of sanitary inspectors is taken up in detecting infringements of the order.

Wells.

Many houses have wells, but there is not a single well in Gibraltar that is not more or less brackish. The geological formation is chiefly stratified limestone covered, in the western portion, where the town is situated, with a red absorbent earth. The limestone is intersected, especially in the southern part of the rock, with one or two faults of sandstone grit. In the line of the faults there are wells, high above sea level, but all of them containing a very large amount of mineral salts, chiefly chlorides, varying from 200 to 400 grains per gallon.

Overcrowding.

Overcrowding is an evil that is on the increase. The high rents compel large numbers of families to live in one-room tenement dwellings, and there are some blocks of houses containing each from 40 to 50 families. Diseases, such as measles, spread among them like wildfire, and it is very difficult, if not impossible, to control them. In October, 1892, there were 3,115 families in the town districts alone, forming an aggregate of 14,363 persons, occupying 699 houses. There were consequently over 20 persons to each house on an average, with 4.6 in each family. The percentage of the families living in one-room tenements was 47.1; in two-room tenements, 21.9; in three-room tenements, 8.7; and in more than three-room tenements, 22.3; 482 families in the south districts gave a very similar result. The twenty-seven town districts covered an area of about one-eighth of a square mile, excluding barracks and other military buildings. The density of population in these districts varied from 114 to 436 per acre, the average for all districts being 263.

Efforts to Counteract Effects of Overcrowding.

Such conditions require strenuous efforts on the part of the sanitary authorities to combat causes of epidemics. A system of "ticketing houses," similar to that adopted by the Glasgow municipal board, is contemplated to prevent overcrowding; but more will have to be done to deal with density of population. A natural check has already occurred in consequence of high rents and lack of house accommodation. Many of the poorer classes have migrated to the neighbouring Spanish town, and come in daily to their work. As the fortress gates are closed from sunset to sunrise, only the dire necessities of the case would induce this form of migration. There are many other points of intense interest from a sanitary point of view, but they cannot be properly appreciated without entering into more detail.

Sanitary Staff.

Sanitation is carried out by a staff consisting of a medical officer of health (army medical officer and D.P.H.Camb.), Dr. Macpherson, with a public analyst (member of the Society of Public Analysts and F.C.S.), and two more or less trained sanitary inspectors and one untrained assistant sanitary inspector. The civil population is 19,100 resident, but about 3,000 to 4,000 come in daily from the Spanish lines. The Board of Sanitary Commissioners consists of five official members, representing the navy, military, and colonial services, and four non-official members selected by the Governor from the grand jurors. The Principal Medical Officer of the army is *ex-officio* one of the official members, and the naval representative is usually the Senior Naval Medical Officer.

Ernest Hart.

(To be continued).

MEDICAL DEFENCE UNION.

A special general meeting of the Medical Defence Union, which was largely attended, was held on May 8th at the rooms of the Royal Medical and Chirurgical Society, Hanover Square, the chair being taken by Professor Victor Horsley, President of the Union. The meeting had been called in response to a requisition, and was for the purpose of considering (*a*) the recent action of the Council in connection with the litigation between Drs. Collie and Bloxham; and (*b*) to consider and, if thought fit, amend the articles of association of the Union, with the object of preventing the governing body from intervening in disputes of a purely private or domestic nature between members, or between a member and any other member of the medical profession not being a member of the Union.

The Chairman said that, from the number of withdrawals of signatures received by Dr. Norman Kerr and himself, it was plain that many had signed the requisition under misconception. Further, that, inasmuch as Mr. Bloxham had made a fresh attack upon the Union by issuing a writ against it on the charge of maintenance, the meeting was rendered thereby ineffective owing to the fact that obviously points might be raised in discussion which might be made use of by Mr. Bloxham against the Union. It would be, however, perfectly in order for members to ask the Council questions explanatory of their modes of procedure in taking up such actions and to discuss the second paragraph of the requisition. With regard to the latter, he pointed out that the Council never had taken up or contemplated defending actions arising out of disputes of a purely private or domestic nature, as stated in the requisition. As considerable misconception had also risen regarding the actual state of affairs as regards the Bloxham *v.* Collie case, he thought it well to explain the position of the Union in this matter. Mr. Bloxham applied to the Union in August, 1893, to be assisted in his action against Dr. Collie, but withdrew his application subsequently. Later on, in October, 1893, Dr. Collie applied in the same way, and his defence was taken up by the Council. At the annual general meeting on February 7th, 1894, when this was reported by the Council to the meeting, a vote of censure and want of confidence in the Council was moved and lost by a large majority, the report being adopted. With this the responsibility of the Council ceased and the action of the Union. Mr. Bloxham issued a writ against the Union, alleging that the Council had acted *ultra vires*. This case was heard in full before Mr. Justice Chitty, and a strong judgment expressed in support of the action of the Council. The case was then taken to the judges of appeal, who held that the Council ought to have written to Mr. Bloxham before proceeding with Dr. Collie's case. Upon this point the Union accepted judgment, though instructions in the direction indicated by the judges nowhere appear in the memorandum or articles of association.

The President's statement was interrupted by a motion by Dr. Walsh that the reporters should be excluded, but the President pointed out that the Council and Union having been attacked publicly, it was only reasonable that their defence should be equally public, and the motion was lost by a large majority.

Dr. Chaldicott asked what was the financial position of the Union in regard to the legal proceedings?

The President said the bill of costs had not been delivered

but he did not think the guarantee fund would be called upon.

Dr. Bousfield complained that in his opinion the resolution of the Council, and which had been proposed by Dr. Leslie Phillips, namely, that they would not take up action between medical men except under exceptional circumstances, was a contravention of the resolution passed by the annual meeting of 1893.

A question was asked by a member whether the Council had suggested arbitration to Mr. Bloxham at any period in the case.

The President replied that the Council were informed that when Dr. Collie successfully obtained an *interim* injunction against Mr. Bloxham, Mr. Justice Wright suggested a compromise, but arbitration was refused by Mr. Bloxham.

Mr. Bloxham, who was present, denied that arbitration had ever been offered to him personally.

The President stated that the Council were informed that negotiations upon the suggestion of the judge were carried on by the solicitors.

Dr. Benham asked whether the Council under Article 39 could not insist upon arbitration.

The President stated that it had been ruled that they should not insist on arbitration, and as had been repeatedly shown when the Council offered arbitration one of the parties refused it, there was no course open to them but either to drop the case or defend their member.

Dr. Clark asked why the Council had employed London solicitors instead of Messrs. Johnston and Co., of Birmingham?

Dr. Marsden stated the circumstances under which it was decided not to employ the services of Messrs. Johnston and Co., and read a letter from Dr. Leslie Phillips strongly adverse to the latter firm being employed.

The President explained that the Council for a year past had felt strongly the necessity of economy in the legal expenditure, and were determined where possible to employ local solicitors so as to avoid the charges for agency.

A discussion arose on the action for maintenance that Mr. Bloxham was bringing against the Union; but Dr. Norman Kerr stated that he had just been informed by Mr. Bloxham that he had no intention of dropping the action, and the President ruled that under the circumstances the discussion was out of order for the reasons above stated.

Mr. Brown asked whether the Union was taking any action against any party, and was informed that the only action in the matter the Union was now concerned in was that of defence of itself against Mr. Bloxham. A suggestion was made that a committee should be appointed to inquire into the matter. The President said that the Council desired the fullest investigation, and that the only difficulty appeared to him to be the impossibility of disclosing material facts if use could be made of them against the Union so as to prejudice its defence on the charge of maintenance.

Dr. Johnston asked whether Dr. Phillips had sat at the Council without disclosing the fact that an application had been made to him by Mr. Bloxham, and was informed that Dr. Phillips had attended three Councils under these circumstances, and that the fact of Mr. Bloxham having applied did not come to the knowledge of the Council until after they had taken up Dr. Collie's defence.

Dr. Phillips made a personal explanation regarding the correspondence which had been published between Dr. Norman Kerr and the President, and explained that he did not inform Dr. Kerr that litigation was at an end.

No other motion being brought forward, or further question asked respecting Paragraph A of the requisition, and as no motion respecting the alteration of the articles of association was brought forward by those signing the requisition, Dr. Bennett moved that the meeting do adjourn *sine die*. This was carried *nem. con.*

The vote of thanks was moved to the President by Dr. Norman Kerr, and carried with acclamation.

We are informed that a few hours before the meeting Mr. Bloxham served on the President a writ for libel and slander.

ANSELL v. TAIT.

We have received from Dr. Alex. Reid the following communication with regard to the above case, which has excited great interest and sympathy with Dr. Tait in the whole of the north of London and elsewhere. A large meeting at a very short notice was held on Friday last at 25, Highbury Place, N., when the following resolutions were unanimously passed:

(1) That this meeting of Dr. Tait's professional friends and neighbours desires to express its sincere sympathy with Dr. Edward Sabine Tait in respect of the long time of anxiety he has had to pass through, and likewise to convey its hearty congratulations on the complete breakdown of the plaintiff's case in the action brought against him. The meeting recognises that Dr. Tait, in defending the action, has fought the battle of the profession as well as his own, and offers him its best thanks.

(2) That the following gentlemen, with power to add to their number, be a committee to take means to elicit the sympathy of the profession generally, to collect subscriptions towards the payment of Dr. Tait's expenses, and to take any further steps that may be necessary: Drs. H. J. Stokes, J. G. Glover, John Williams, A. Reid, A. Morison, J. Galloway, T. Hamilton, G. Wight Woodroffe, and Messrs. C. King, G. T. Keele, H. F. Stokes, and C. B. Lockwood. Treasurer: Mr. G. T. Keele, 81, St. Paul's Road, Highbury, N. Hon. Secretary: Dr. A. Reid, 29, Canonbury Park North, N.

The following subscriptions have been promised:

	£	s.	d.		£	s.	d.
Dr. John Williams	5	5	0	Dr. C. T. Savory	1	1	0
Dr. J. G. Glover	5	5	0	Dr. T. A. Cambridge... ...	1	1	0
Dr. H. J. Stokes	5	0	0	Dr. George Wight	1	1	0
Mr. C. B. Lockwood	2	2	0	Dr. J. Smith	1	1	0
Mr. H. Fraser Stokes ...	2	2	0	Dr. T. Hamilton	1	1	0
Mr. Frank Godfrey	2	2	0	Dr. Alex. Reid... ...	1	1	0
Mr. Geo. T. Keele	2	2	0	Dr. C. S. Paterson	1	1	0
Mr. Thos. Jago	1	1	0	Dr. Jas. Galloway	1	1	0
Mr. Chas. King	1	1	0	Dr. E. A. White	1	1	0
Mr. G. J. Stevens	1	1	0	Dr. Cyril Mack...	1	1	0
Mr. A. O. Wickham	1	1	0	Mr. F. Spicer	0	10	6
Dr. C. F. Bailey	1	1	0				

THE CHOLERA.

Reuter's telegrams from Lisbon state that on May 4th 32 fresh cases of cholera occurred there, on May 5th 24, May 6th 17, and on May 7th 16 fresh cases, with no deaths. In a further report which Dr. Pestana and Dr. Bettencourt presented to the Government on May 7th, they declared that the bacillus which they discovered in the discharges of the patients and that found in the Lisbon drinking water were identical; but this bacillus, they said, was not that which Dr. Koch and other bacteriologists described as that of Asiatic cholera. They attributed the epidemic in Lisbon to the bacillus which they had discovered.

The statement that cholera has broken out at Villa Real is officially denied. The steamer *Bellver* arrived at Cagliari on May 2nd, and before communicating with the shore she was compelled to undergo a thorough fumigation under the direction of the port sanitary authorities.

THE MEDICAL BATTERY COMPANY.

Mr. Justice Vaughan Williams had before him on May 8th an application for permission to continue the business of the Medical Battery Company for a period beyond that already granted. Mr Justice North made an order on October 30th, 1893, that Mr. Davis, debenture holders' receiver, should realise the assets, which were valued at £500 breaking-up price, but which stock cost £6,058. Since February last the Receiver had realised £2,330, and still has on hand about £3,500 of the £6,058 stock. About 86,000 appliances had been sold since the business was established. His lordship granted a continuance of Mr. Justice North's order to carry on the business for two months longer, in order to realise the assets.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

SUBSCRIPTIONS to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, MAY 12TH, 1894.

LESSONS OF THE ANDREW CLARK MEMORIAL.

IT has been said repeatedly of late, during the prevalent discussion of educational and technical questions, that our countrymen value character more than intellect and learning. This is undoubtedly true, and not true only but a truth which is acceptable. For after all if the "end of labour be conversation," we must take conversation, in its stricter and yet wider sense, to mean the common life of action between man and man. How far "character" enters into the great achievements of genius were an interesting inquiry which we must at present postpone; there can, however, be no doubt that without certain qualities of character—without ardour, practical ability, and that perception of the relative proportions of things which we call "common sense"—much learning may be gathered in vain.

The mutual relation of help and affection in which Mr. Gladstone and Sir Andrew Clark stood together had not only its private side but also its public interest for us all.

The political leader and the late head of our profession had in common the features of character to which we have referred. Both leaders of unquenchable fire and of great and varied attainments, they were also endowed with an industry, an insight into affairs, a practical ability, and an ascendency over men no less extraordinary. And, perhaps, above all, in its influence upon the nation, as we happily still have witness in the survivor of them, there were an inflexible integrity and a lofty ethical purpose, which command our loyalty and admiration, and which inspired to the highest ends those powers which they have exercised in their respective spheres. Technical training and accumulated learning, these are every day more and more necessary, but day by day also we see more and more clearly that the English people are right in remembering that without the qualities of character which we have observed in these great men of our time all other gifts may be unavailing or even mischievous.

Mr. Gladstone's speech, at the meeting so generously and so ably presided over by the Duke of Cambridge, was far more than a graceful tribute to a distinguished public man and personal friend. In its subdued passion, its stateliness, and its breadth and force of thought, it was rather a funeral oration. With masterly skill Mr. Gladstone set the great departed physician, as it were monumentally, before us, upon the eminence of the profession which he represented and adorned. It is not for us at this time to take too complacently to ourselves the generous words in which Mr. Gladstone described the profession of medicine, words which the press has with no less generosity repeated and reinforced; nor, on the other hand, shall we at such a time make any protestations of unworthiness. We are proud and thankful to know that the late leader of our profession was of our house and of our kin; that he was not placed over us from without, but rose from our ranks; that he was moulded by the pressure of our ethical traditions and of our modern activities; that for good or evil he partook of our nature and was inspired by our life. Mr. Gladstone told us that "the position of our profession at the present day has become one of vital and commanding interest to the whole of society." Lord Salisbury recently took occasion to say like things of us; let us remember that if we accept the tribute we must take the responsibility likewise, and in looking upon this image of our lost leader endeavour to live up to the standard which he upheld and, "qui, quasi cursores, vitaï lampada tradunt, to hand on to our successors with radiance undimmed the lamp which has fallen from the grasp of him who has gone before.

A GREAT WRONG: ARE JUDGES ABOVE THE LAW?

So far as substantial redress is concerned, the case of Dr. Anderson against Sir John Gorrie and others is like the conclusion of Rasselas—"in which nothing was concluded." It will be seen by the full report of the proceedings, which we give elsewhere, that the jury, after a long hearing, have found the essential fact in Dr. Anderson's favour by their verdict that Mr. Justice Cook, acting with his deceased chief, had perverted the course of justice for the purpose of oppressing Dr. Anderson. They have found that he did so with perverse and wilful intent, amounting to what the law calls malice. Some question arose, at an earlier stage of the inquiry, as to whether the true explanation of Mr. Cook's conduct was not to be found in the fact that he was given to drink. This failing was one of the principal grounds upon which he was in fact dismissed from his office, as a result of the Commission of Inquiry.

Lord Coleridge, however, finally took the verdict of the jury in a form which excludes from consideration any theory of intoxication, and it must now be taken as decided, with the full approval of the Lord Chief Justice himself, that Dr. Anderson was in fact the victim of malicious judicial oppression. The oppression is all the more serious because it took the form, on the one hand, of proceedings for contempt of court, and, on the other hand, of a pretended exercise of an ordinary judicial discretion, either of which methods offer unlimited opportunities to unscrupulous judges if they desire to ruin their enemies upon a plausible pretence.

The reasons of the hostility entertained by Sir John Gorrie as against the suitor who had the misfortune to appear before him are not material to the present question, though from another point of view they are interesting enough. It is quite obvious that the whole matter arose out of an intemperate attempt by the Chief Justice of the Colony to set himself up as the champion of the native population against his fellow countrymen.

Dr. Anderson had the misfortune to own a plantation. There is no suggestion now that he acted otherwise than fairly and humanely in his relations with the natives. But

Sir John Gorrie, assuming that everyone who made a complaint against a planter must be in the right, fomented a series of pauper actions in the first place, tried them, and found in favour of the claimants at the next stage of the proceedings, then overruled the Court of Appeal in order to support his high-handed acts, and finally, when Dr. Anderson exercised his undoubted right to petition the Crown, the Chief Justice put in force against him—notwithstanding the qualms of conscience of the inferior judges—the terrible machinery of "contempt."

Sir John Gorrie has died in disgrace. Mr. Justice Lumb, whose action, although it was open to serious criticism in some points, was thought to be in the main not hostile, has been acquitted upon the issues of fact. The vital question now remains whether an English citizen of good repute and high standing is or is not entitled to seek redress in the courts of law against such judgments as those of Mr. Justice Cook?

Our readers and most other persons who do not happen to be lawyers will be somewhat amazed to learn that notwithstanding the verdict of the jury, and notwithstanding his own strong declarations as to the cruel injustice which had in fact been done, Lord Coleridge declined to give Dr. Anderson the benefit of the damages awarded and gave judgment for the defendant. There is, it appears, a point of law by which a judge is held to be vested with something dangerously like infallibility. That he was protected in his official acts against any right of action unless express malice was alleged against him, we have long understood. It would be clearly against the public policy that the acts of a judge when he is within his jurisdiction should be liable to be questioned by civil actions against him whenever a suitor chooses to allege that he has committed an error of judgment. But the case is very different where it is alleged and proved that he has prostituted his official power for the gratification of personal animosity or the unlawful attainment of any other personal end. In such a case he cannot, as Lord Coleridge at one period of this case admitted, be said to have, properly speaking, acted as a judge at all. Even to the mind of a lawyer, there is nothing extraordinary in the statement that a man may sit on the judicial bench, clad in the judicial ermine, and utter words which appear to be a judgment, and which are, nevertheless, to be treated merely as the remarks of a private individual. If, for example, he chances to deal with some matter, by his mistake or otherwise, which is not in truth within his jurisdiction, then the proceedings are held to be, as the law has it, *coram non judice*. In other words, the judge for that occasion ceases to be a judge, and is a private citizen like the rest of us. If under these circumstances his acts create a private wrong, he is liable to a civil action. Dr. Anderson's contention, as we understand it, was that the same principle must apply where a judge, for any private motive, maliciously does an act, ostensibly within his power, but which he really does, not as administering justice, but to produce oppression. No decision in the recorded cases goes so far as to deny the redress of such a grievance. To say that some judges, though not all, might be dismissed by the Executive as a punitive act, is no reply whatever to the particular citizen who has suffered a cruel and, it may be, a disastrous injury.

It has been held in certain cases that the casual words of a judge engaged in the exercise of a judicial function are not actionable in the way of slander, even though there may be private spite. This is pretty strong doctrine, but it is a very different thing from saying that a direct exercise of judicial power, say, by committing a person to prison for contempt of court, will be upheld against all redress, even if it were clearly shown to be an act of personal revenge and indefensible in law. Lord Chief Justice Cockburn emphatically refused, in Churton's case, to assent to any such proposition. Lord Coleridge himself did not venture affirm it to absolutely, though he chose to consider himself bound by the decisions which tended in that direction. His decision in refusing the verdict of the jury when the most that he could say was that the law was far from certain, appears to us, we confess, to add another to the hardships already inflicted upon Dr. Anderson. The result of it is that he will not only fail to recover his damages but be mulcted in heavy costs, unless he proceeds to incur the further responsibility of an appeal. This, we are glad to know, will be entered at once; and until the result is known, we decline to believe that the British constitution will be declared, at this time of day, to place its judges above the law.

THE LOCAL GOVERNMENT (SCOTLAND) BILL.

On the whole, the Bill introduced by Sir George Trevelyan fairly meets the expectations which were formed of it. Its errors are those of omission rather than of commission, and sins of omission are remediable in Committee. It is evident that the intention of its promoters has been to abolish as far as possible the anomalies and disabilities attaching to the existing system of local government in rural districts in Scotland while introducing a minimum of contentious matter, and thus disarming opposition. In this purpose the Government has been tolerably successful—too successful, possibly, in the eyes of ardent reformers—the only matter which is likely to give rise to any serious opposition being the proposal for the abolition of the Standing Joint Committee, which at present has control of the police, and possesses a veto in connection with matters involving capital expenditure in counties.

The provisions of the Bill may be rapidly sketched. It proposes to abolish the Board of Supervision, the existing central authority in public health and Poor law matters, on the anomalous constitution of which we have had frequent occasion to advert. In place of this consultative board, it is proposed to erect, under the style of "The Local Government Board for Scotland," a department moulded, generally, upon the lines of the Irish Local Government Board, represented in London by the Secretary for Scotland, the Under-Secretary, and the Solicitor-General; its executive in Edinburgh consisting of three paid members, a vice-president and chairman, a legal member who is to be a sheriff, and a medical member, who is—somewhat superfluously—required to hold a diploma in public health. The existing officers of the Board of Supervision are to be retained, with such redistribution of duties as may be considered necessary.

Parochial boards are to be abolished, and their place is to be taken by elective parish councils. Burghal parish councils are to continue to exercise the powers of parochial boards as at present constituted; in parishes which are partly burghal, partly rural, an autonomous rural (or *land*

ward) committee alone is to be invested with the powers which it proposed to confer upon rural parish councils. These powers include the provision or acquisition of buildings for offices, meetings, etc.; the provision of recreation grounds, subject to the consent of the district committee; the protection or acquisition of rights of way; power to hold property for the benefit of the parish; power to acquire land under certain conditions; power to lease land for allotments. It was feared that, in deference to an imaginary democratic sentiment, the Bill might endow the parish council with executive public health functions, which, in view of the failure of parochial boards as sanitary authorities, would, it was felt, have been disastrous. The Bill, however, does nothing of the sort; it simply empowers the parish council to make representations to the district committee, the county council, and the Local Government Board, "with a view to the due enforcement of the provisions of the Public Health Acts."

The Bill confers various additional powers upon county councils with respect to the compulsory purchase of land for certain specified purposes, including the purposes of the Public Health Act, borrowing of money, etc. It abolishes the dual appeal to the sheriff and the county council in the case of the formation of special drainage and water districts, which has been found to lend itself to obstructive purposes, and constitutes the county council the final court of appeal. This, in endowing the county council with judicial functions, is a new departure, which, however, will probably be justified by the results, although the experiment is not without hazard in some of the less advanced counties. The most important part of the Bill, so far as rural sanitary authorities are concerned, is that which authorises the formation of special districts upon the lines of the existing water and drainage (village) districts, for (1) scavenging and cleansing purposes, (2) public lighting, (3) the provision of public baths and washhouses. These provisions imply a complete revolution in the conditions of village life, and will be most heartily welcomed in the rural districts. The absence of any provision for the scavenging of rural districts has been an enormous hindrance to the improvement of the sanitary condition of villages. But the beneficent effect of these provisions will be largely nullified by the absence of any attempt in the Bill to reform the existing system of rating in rural districts. The subject is a complex one, and the omission is due, doubtless, to a desire to avoid questions of a contentious character. At present the maximum public health rate, including the water-rate, is nominally half-a-crown in the pound, but this rate, in virtue of a complicated system of "deductions" and "classifications," varying with different classes of property and in different parishes, is illusory, and yields a considerably smaller return than its nominal value would indicate. In very many cases the larger proportion of this rate, not infrequently the whole of it, has already been absorbed in the provision of a water supply, and there remains available for the purposes above referred to but a slender margin, or no margin at all. Regarded from this point of view, it appears unfortunate that effect has not been given in the Bill to the proposal of the County Councils Conference that the public health rate should be levied upon the gross valuation. Assuming, however, that it is considered impracticable to raise this general question, a solution of the difficulty may be found in another direction. Putting it upon the ground that the water rate differs from the public health rate generally in that it may be regarded as devoted to the purchase of a commodity, of an article of consumption, it would appear legitimate that the water rate should be separately assessed, with a separate maximum of its own, a maximum being also fixed for a rate which should be available for the ordinary purposes of the Public Health Act, and the special purposes of this Bill. No large questions of a contentious character would be raised in connection with the introduction of such a clause. The section embodying the above provisions is badly drafted, and will require considerable revision. The succeeding section provides that where the services of the county health officers are not "reasonably available" in burghs which contribute to their salaries, the Board may relieve such burghs of liability.

The powers asked for by the unanimous vote of the Conference of County Councils, and not included in the Bill, may be taken as indicating the points in which the Bill sins in the way of omission. These, incomprehensibly, include the proposal that district committees (the rural sanitary authorities) shall have power to control the erection of new buildings so far as sanitary arrangements are concerned, presumably under a code of by-laws sanctioned by the central authority. The desired powers for securing the proper construction of footpaths in villages might conveniently be associated with the provision establishing scavenging and cleansing districts. There should be no difficulty in giving effect to the eminently reasonable proposal of the Conference that the powers of parochial boards under the Burial Grounds and Vaccination Acts shall be transferred to the district committees, together with the appointment of registrars of births, deaths, and marriages. These omissions can easily be supplied in Committee. The Bill contains possibilities of great utility, and it is to be hoped that, amended and strengthened where necessary, it may find a speedy deliverance out of those dangers which beset the best-intentioned legislative efforts nowadays.

THE Epidemiological Society will hold its annual general meeting at 11, Chandos Street, Cavendish Square, on Wednesday, May 16th, at 8 P.M. Dr. Franklin Parsons will read a paper "On the Distribution of the Several Influenza Epidemics of Recent Years in England and Wales."

THE patient, upon whom, as mentioned last week, Dr. James Murphy, of Sunderland, performed splenectomy on April 25th, has continued to make satisfactory progress. The wound is now healed, and the patient (whose age should have been given as 45), appears to be now out of danger. The operation was undertaken for abscess and hypertrophy.

THE next half-yearly dinner of the Aberdeen University Club, London, will be held at the Holborn Restaurant on Wednesday, May 16th, at 7.30 P.M. Sir Robert G. C. Hamilton, K.C.B., M.A., LL.D.Aberd., a vice-president of the club, will take the chair. The annual business meeting will be held at 7 P.M. Dr. R. W. Burnet is the honorary secretary.

SCARLET FEVER AT BLACKHEATH.

IN connection with the extensive outbreak of scarlet fever at Blackheath, to which we recently referred, where the disease has been attributed to the distribution of milk from a dairy farm on which two recently purchased cows, having

at the time a common eruption on the teats, had been introduced previous to the outbreak, a preliminary inquiry has been made by Professor Wortley Axe on behalf of the British Dairy Farmers' Association. As a result Professor Axe has been requested to continue his inquiries, and he is now proceeding to make a full investigation into all the circumstances surrounding the case.

MR. GLADSTONE.

Mr. Gladstone continues to make satisfactory progress. The date of the operation for cataract will depend partly on his condition and partly on his own personal wishes. It has not yet been definitely fixed, but it will not, we understand, be long delayed.

SIR WILLIAM HARCOURT.

There is no ground for the reports which have been circulated with regard to Sir William Harcourt's health. He was naturally tired by the labour involved in the preparation and introduction of the Budget. The state of his eyesight is better than it has been for the last seven years.

NOTIFICATION BY MEDICAL OFFICERS OF HEALTH.

What is the duty of the medical officer of health with regard to notifiable cases occurring in his private practice? Nothing could be clearer than the intention of the Notification Act: he must notify in the usual way, and "where a medical practitioner attending on a patient is himself the medical officer of health of the district, he shall be entitled to the fee to which he would be entitled if he were not such medical officer." The appointment does not carry with it any relaxation of the duty of notification, or any loss of right to the usual fee. Some local authorities, knowing strangely little of the Act which they have themselves brought into operation, have demurred to the payment of notification fees to their medical officer of health. In face of the words quoted above, their position is untenable, and the claim should be insisted upon.

SMALL-POX NURSES AND VACCINATION.

Statements are being circulated by Mr. Collinson and others in the press that during the Leicester small-pox outbreak of 1892 5 nurses and attendants at the small-pox hospital were attacked by small-pox, 4 being vaccinated, and 1 "successfully revaccinated." The truth is, however, that 6 nurses, etc., had been vaccinated only in infancy, and all refused revaccination; 5 took small-pox, and 1 died, the only one to escape attack being the matron, who did no nursing. As regards Mr. Collinson's statement that "there are hundreds of hospital nurses to-day who have never been revaccinated, and they enjoy a perfect immunity from the disease," we will only draw attention to two sets of hospital experiences. First, at the Sheffield small-pox hospitals, of 62 nurses once vaccinated, 6 were attacked; of 81 revaccinated attendants, not one took small-pox. Secondly, Metropolitan Asylums Board data show that of 655 nurses and attendants on small-pox patients, 645 had been revaccinated, not one taking small-pox; whilst of the remaining 10 every one was attacked by the disease. These are by no means isolated instances, but only samples of the many.

THE HEMP DRUGS COMMISSION.

While a Royal Commission is actively engaged in investigating and considering the prevalence and effects of the use of opium in India and China, a less ambitious inquiry is being conducted in India by a Commission composed of civil and medical officials, regarding the extent and consequences of the consumption of various preparations of hemp (cannabis Indica). The reports which from time to time reach us indicate that this inquiry is of a very searching character, and is likely, when completed, to result in important information, and lead to valuable conclusions. The questions dealt with are very similar to those which have arrested the attention of the Opium Commission. They are mainly these: The cultivation of the plant, and preparations of its products; the extent to which they are used in moderation or excess; the physiological and physical effects of their consumption; the influence on mind, disposition, habits, and morals of hemp smoking and drinking; the production of insanity and crime by these practices; the facilities for obtaining and consuming hemp drugs; and the regulations and taxes which have been imposed on manufacturers and vendors of such articles. Evidence has been sought from officials, medical men, and intelligent representatives of various classes of the native community, and a large mass of information is being accumulated, which will probably modify existing notions regarding hemp, etc., products to a very considerable extent. The report of the Commission will be, no doubt, a very voluminous and elaborate production, and comment upon the imperfect and, perhaps, inaccurate records of evidence which have appeared in Indian newspapers, would probably lead to partial and misleading views. Suffice it to say that a very important work is in process of detailed and thorough execution, which will throw light upon the large question of the consumption of neurotics, and the influence which this particular neurotic exercises on the health—mental and physical—of the individual, and on his behaviour as a member of society.

FROG-MARCHING.

The death of a drunken gunner at Colchester who was carried to the guard room face downward in what is known as frog-march, and shortly afterwards died from alcoholic coma, has formed the subject of an inquest and of unfavourable comment by the coroner's jury and the press. This method of carrying drunken and incapable prisoners has been followed in the army, and, we believe, also in civil life, for many years, and as far as we know has very seldom been followed by unfortunate results as in this case. The face downward method of carrying has always been believed to be the best position for preventing the drunken person from choking during vomiting or from dangerous struggling, and provided the body and head are maintained at a level we fail to see how it can be attended with greater, even if as much, risk as when the person is carried face upwards or sideways. Before jumping to the conclusion that frog-marching is necessarily dangerous, from an isolated mishap, it would be well for those who condemn it to suggest a better mode for the removal by hand of drunken and often violent prisoners.

LORD ROSEBERY ON QUACK ADVERTISEMENTS.

The best things in life are often the most unexpected, and we may be sure that in going to the Royal Academy banquet the very last thing in the world which the guests expected was the brilliant attack made by Lord Rosebery on quack advertisements. It is, in truth, high time that someone in authority took up the matter. Bad enough it is, no doubt, that the newspapers and the penny post should be prostituted to the advocacy of imposture and the dissemination of falsehood, but it is even worse, in an æsthetic sense, that every rural landscape through which we endeavour to escape to brighter scenes should be made hideous by advertisements and appeals to the public to save their constitutions by recourse to a particular sort of pill. "What," said Lord Rosebery, "is to become of our English landscape if it is to be simply a sanitary or advertising appliance? Think of the feelings of the illustrious Turner if he returned to life to see the luggers and the coasting ships which he made so glorious in his paintings converted into a simple vehicle for the advertisement of a quack medicine." But there stands the fact. The beautiful expressions of English art exhibited in an academy are but a poor compensation for the growing hideousness of the surroundings of our daily

life, and we must accept with much scepticism the many pleasant things we hear concerning the spread of culture and artistic sense among the people so long as their representatives allow the fairest spots in England to be defiled by advertisements which not only are galling to the eyes by reason of their crude ugliness, but are suggestive of all that is most nasty and abominable.

THE ALLEGED LUNACY CASE AT LEWISHAM.

AT a recent meeting of the Lewisham Union Guardians a copy of statement of claim in the Queen's Bench action between Mr. J. Mariano Williams and Drs. Duke and Beaumont was received from Mr. Savage, solicitor. Mr. Williams claims damages of £1,000 from Dr. Duke, and £1,500 from Dr. Beaumont, alleging as ground for action that by order of these medical gentlemen he was detained in the Canehill Lunatic Asylum from October 18th to November 20th last, when he was discharged as not insane, and further alleges that whilst at Lewisham Workhouse, Dr. Beaumont, the Resident Medical Officer, neglected him, and he did not receive proper care and attention. Drs. Duke and Beaumont have asked the guardians to be responsible for costs in the action, stating that they were professionally in the service of the board at the time the certificate was signed, and that the Local Government Board, after a protracted inquiry into the case, had by their report approved their conduct. The subject will be discussed at the next meeting of the Board.

THE BRITISH MEDICAL ASSOCIATION IN SOUTH AFRICA.

A BANQUET given at Grahamstown by the President and members of the Eastern Provinces (S. A.) Branch of the British Medical Association on April 6th was attended by the Solicitor-General, the Mayor the Dean, and other distinguished residents. The Solicitor-General, in proposing the toast of "The British Medical Association," observed that it had an immense influence in promoting good fellowship and a good understanding among members of the medical profession. The toast was acknowledged in suitable terms by Dr. Saunders; and the Mayor then gave the toast of "The Eastern Provinces Branch," which was acknowledged by Dr. Begg-Robertson, Secretary of the Branch. Subsequently the President, the Hon. Dr. W. G. Atherstone, proposed the toast of "The Government Medical Departments," and, in doing so, referred to projected legislation requiring municipalities to enforce stringent sanitary and hygienic regulations. The report of a recent Commission had shown that through a single preventable disease Cape Colony had for years been sustaining a loss of at least half a million sterling. Dr. Edington, in reply, referred to the Public Health Bill recently drawn up by the Health Department, which would, he hoped, prove of great value to the Colony, but could only do so through the co-operation of the members of the medical profession.

SCANDALS AND SALARIES IN WORKHOUSES.

THE *Western Morning News*, which has all along done such good service in exposing the bad management of the Newton Abbot workhouse, now very properly draws attention to the salary offered to its medical officer, pointing out that it is quite unlikely that the necessary services will be cordially rendered for the small remuneration which is given. If the death-rate is at all to be taken as indicating the number and severity of the cases under treatment, the position is certainly no sinecure, for one must bear in mind that the medical charge of a workhouse demands a great deal of professional work besides that involved in the mere visiting of the sick. If a hospital is to be really a place for the cure of the sick the whole sanitation of the institution—baths, closets, washhouses, tramps' rooms, whitewashing, ventilation, etc.—must be subject to the inspection and advice of the medical officer, who must, in short, be a sanitary inspector as well as a physician and surgeon. All this involves time and labour, and yet only £50 a year is offered for it, which, the *Western Morning News* says, is not a penny per case per visit; out of which the doctor also has to provide the medicine. Of course this is absurd; yet we fear it is but a type of what is happening at many other places. Nothing could better show what a poor conception Poor-law guardians have of their proper functions than to see them occupying the position of managers of great public hospitals, which surely are medical institutions, and yet offering to their medical officers such miserable stipends. When the public deigns to think seriously of these matters they will find it hard to believe that guardians really mean this sort of remuneration to pay for good and careful medical attendance, and the conclusion will almost surely be arrived at, and not very wrongly either, that in many cases the arrangement is an immoral contract, forced upon local medical men by fear of bringing in outsiders, and that behind it there is a tacit understanding that Poor-law work need not be good and thorough and conscientious: that the guardians, in fact, will not be too particular so long as the doctor will play the scapegoat if things come before the coroner. Country doctors often find it difficult to refuse these appointments, accepting them for reasons of general policy rather than from any expectation of decent remuneration, intending to do the work honestly even at a loss, and only drifting into Poor-law ways by prolonged contact with Poor-law officials. It is the people who offer these salaries who are to blame, knowing, as they must do, that these penny consultations, with the medicine thrown in, are a fraud either on the doctor or the poor—perhaps on both.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

A COPY of the *Cambridge Review* of March 3rd has been forwarded to us, from which we are happy to learn that the noble institution which forms the backbone of the flourishing school of medicine at Cambridge is doing good work, and is proving the excellence of its administration by its results both in economy and efficiency. This, like so many other hospitals, has to regret a loss of income resulting from the conversion of consols; but we cannot doubt that as soon as that fact becomes known, the charity of the numerous and wealthy residents whom the Cambridge of the present day contains will speedily make good the loss. No provincial hospital with which we are acquainted is more thoroughly deserving of support.

"A PENNY WASH."

IN his recently published book on *Baths and Washhouses*, Mr. Owen Allsop not only gives many interesting architectural details, but propounds an idea. He is strongly impressed with the fact that however good swimming may be as an athletic exercise, and however luxurious it may be to soak in a warm slipper bath, the real object of public baths is to place cleanliness within the reach of the people, and that in this object they fail, partly because of their cost, and partly because—at any rate so far as slipper baths are concerned—their arrangements are such that there is always danger of catching a chill after them in cold weather. His idea is to offer facilities for obtaining a complete wash at the cost of one penny. Instead of slipper baths, which occupy a large space, use at least fifty gallons of warm water, and, being generally unprovided with a shower bath, leave the skin lax and liable to chill, he would provide a series of small lavatory closets, constructed preferably of slate, and having their floors hollowed out so as to serve as foot baths. Each lavatory would be furnished with a seat, a basin, hot and cold water, and a cold shower. He thinks that this would require less than twenty gallons of water, and could be supplied for a penny; and that if the bathing places were thoroughly warmed, a large number of working people would gladly avail themselves of the opportunity of obtaining a thorough cleansing amid comfortable surroundings at so small

a cost. There can be no doubt that a leisurely scrub in a warm atmosphere, ending with a cold shower, would not only be more effectual as a cleansing process, but much pleasanter and more free from risk in cold weather, than the ordinary slipper bath as commonly supplied. The suggestion of a penny wash is well worth the consideration of those who are engaged in providing baths for the poor.

SANITARY CERTIFICATES FOR NEWLY-BUILT HOUSES.

This subject has recently attracted some attention. An architect writes to a London paper stating that he knows "suburban districts which have sprung up within the last ten years in which few houses would pass the inspection of a properly-qualified sanitary surveyor." He adds that it is a "mistake to suppose that the Public Health (London) Act, 1891, will be sufficient to make new London a sanitary city," and that the control of the County Council and of local sanitary authorities should be of "such an efficient character that the fact of a house being declared to be fit for occupation should be in itself a sufficient certificate." The issue of a certificate of fitness appears to be contemplated by the writer (though he is not quite clear on this point), and such a procedure would certainly offer some advantages, and would tend to prevent the evils alluded to.

PURITY OF MINERAL WATERS: REPORT OF THE FRENCH ACADEMY OF MEDICINE.

The enormous frequency with which drinking water has been recognised as a means of spreading disease has become so much a part of everyday knowledge, and the difficulty of determining even by chemical analysis the immunity of ordinary potable waters from contamination has been so largely recognised, that bacteriological investigations and microscopical tests have come into general use in determining the reliable quality of potable water. It followed, as a matter of course, that mineral waters had their claims to absolute purity tested in turn by this new and more exacting method. The artificial effervescing waters so largely in use on the Continent have, as a rule, come very badly out of the trial, and the results of a series of examinations of the *siphons* of Paris have so seriously impeached their reliability that they may be left out of question. An elaborate investigation of the natural mineral waters most in use in Germany has been conducted by Dr. Reinl, of Franzensbad; and an elaborate report has been presented to the Académie de Médecine, and is published in its *Bulletin* of March, on a variety of table waters most favoured for table use. The reporters are Drs. Moissan and Gimbert, their object being specially to discover whether these waters contain any pathogenic micro-organisms capable of giving rise to disease. They adopted the exact methods of Roman and Colin. The bacilli for which they especially examined were the typhoid bacillus and the bacillus coli communis, the presence of which would indicate sewage filtration. They examined bacteriologically four samples of seltzer water, six samples of aërated waters of Chantilly, Atlas, and twenty-two samples of natural mineral waters. The report enumerates the name of the waters, the sources of the springs, the places at which the supplies were obtained, and give the total number of liquefying colonies of pathogenic bacilli, with other particulars. The whole paper is very detailed and interesting. The worst of the waters examined are the natural water of Couzan, one sample of which contained as many as 200 liquefying colonies; St. Galmier, a number of specimens of which contained colonies varying in number from 1,000 up to 10,000 per cubic centimetre; Vichy, of which three out of four specimens contained colonies varying from 500 up to 7,000 liquefying colonies; Vals water contained a heavy proportion of ordinary bacteria and some mould fungi. Apollinaris water came very triumphantly out of the test, showing under every test the highest degree of purity, being absolutely free from pathogenic germs, showing no liquefying colonies of bacilli whatever, and being wholly free from pathogenic bacilli, thus vindicating its character under these severe tests for absolute purity. As to the sources of contamination of the various mineral waters examined, MM. Moissan and Gimbert report that the process of taking these natural mineral waters of France from the spring, and the bottling, leave much to be desired. In most cases the regard to cleanliness is anything but satisfactory. The bottles are probably washed in dirty and contaminated water. The best proof of that is the presence of the bacillus coli communis in so many of the natural mineral waters, a bacillus which, if found in ordinary water, is, according to French regulations, sufficient to make the water unfit for drinking. During the discussion which followed the report of M. Moissan, Dr. Albert Robin remarked that the French Commission on Mineral Waters had pointed out in their reports that the water of the Grand-Grille Vichy did not contain any microbes at the spring itself, but was contaminated during the careless process of bottling. He likewise drew attention to the investigations of Dr. Minger[1] who had examined 19 samples of American mineral waters, and had found that they all contained microbes in varying quantities: Imperial water contained 6 to 9,689 germs in 1 cubic centimetre; Excelsior, 15 to 50,660 germs in 1 cubic centimetre; Blue Lick, 488 to 4,088 germs in 1 cubic centimetre; Calfax, 142 to 100,000 germs in 1 cubic centimetre. Dr. Robin insisted upon the State having the waters of a spring examined not only in a chemical but also in a bacteriological respect before giving the authorisation for its sale.

THE TENURE OF SANITARY APPOINTMENTS.

When the Guildford Rural Sanitary Authority was about to appoint a medical officer of health some twelve months ago, we called attention to the inadequate remuneration offered, and the unsatisfactory nature of the provision by which the appointment was to be made for one year only. There was, however, no lack of qualified candidates for the post, but the gentleman who was then appointed soon realised the onerous nature of the conditions. He has now addressed a letter to the authority pointing out that the rate of pay has actually worked out at something less than a shilling an hour. Absurdly small as this remuneration is, considering the public importance of the services required, it is still further diminished by necessary expenses out of pocket for travelling, water analyses, etc. The present incumbent has discharged his duties with zeal and ability, and he has a good record to show in the diminution of the number of cases of infectious disease, but in the long run it cannot be to the advantage of the public service that the administrative officers should be paid on a scale which is altogether inadequate. The principle of yearly appointments is, as we have frequently pointed out, utterly wrong, and strikes at the root of efficient service, and it is to be hoped therefore that the Guildford Authority will see the advisability of paying a reasonable salary, and making the appointment *ad vitam aut culpam*.

THE OLD AND THE NEW UNIVERSITY OF LONDON.

The result of the ballot for the members of the Annual Committee of Convocation of the University of London shows a very remarkable movement on the part of the graduates of the existing University towards accepting the scheme of reorganisation. The bias of the committee as constituted previously to the meeting was distinctly against the scheme of the Royal Commission. As will be seen from the report of the meeting published on another page, this has now been completely altered, and the committee now contains twenty-nine members favourable to

[1] Examination of Nineteen American Mineral Waters in Bottled State *Journal of the American Medical Association*, 1889, xiii, 691-695.

reorganisation out of a total of thirty-two. The committee shortly before going out of office nominated as representatives to meet representatives of the Senate on a consultative Committee a majority understood to be opposed to the Royal Commission's scheme; but as they now find themselves to be out of harmony with the wishes of Convocation, it is to be assumed that they will withdraw from their position of opposition. It was unfortunate that the chairman ruled out of order any discussion of the merits of the question: but the opinion of the majority of the graduates present was sufficiently shown by the resolution adopted unanimously at an informal meeting held under the presidency of Sir Henry Roscoe during the adjournment, and by the fact that over six hundred signatures have alreaded been appended to the memorial to the Senate in support of the scheme of the Royal Commission. It would appear, therefore, that the opposition of Convocation which has heretofore been a serious obstacle to reform, is melting away rapidly.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

The new Court of Examiners will be elected at a meeting of the Royal College of Surgeons in Ireland, on May 17th. Mr. W. Thomson will retire, and Mr. T. Myles leaves the Council to become a candidate. Mr. Arthur Chance will also seek election. On June 4th the annual general meeting of the Fellows will be held to receive the report, and on June 4th the election of President, Vice-President, and Council will take place. Mr. Thornley Stoker, Vice-President, will take the place vacated by Mr. Edward Hamilton, who closes a second period of office in the chair, and Mr. W. Thomson will be the Vice-President. Candidates for the Council have not yet declared themselves.

REGISTRATION OF DEATH WITHOUT MEDICAL CERTIFICATE.

The loose way in which certificates of death are sometimes obtained comes out very prominently in the report of an inquest on the infant child of a woman named Grove, at Blackheath, near Birmingham. A midwife deposed that she took the child to a chemist in the neighbourhood, who, after examining it, gave her a box of ointment to be applied to its back, for which he charged a shilling. The gravest part of her testimony is that she then asked the chemist if he would give a certificate of death, that he promised he would, and that it was in consequence of this promise that she did not trouble to seek for medical advice or assistance. The chemist denied that he had promised a certificate of death, but admitted that he had charged a shilling for prescribing, and undertaken, if the child grew worse, to attend at the house. It would appear that the certificate was nevertheless given, and even accepted by the registrar; for, according to the report, the coroner, after giving warning that if "any other person" was buried on such a certificate, he "would order the body to be exhumed," went on to say that he would also require to know whether the registrar, on any other occasions, had accepted certificates under like circumstances.

ALLEGED ABUSES IN HOSPITALS.

An amusing but incomplete correspondence from the *Echo* has been forwarded to us, treating of the eternal subject of alleged abuses in hospitals. The correspondence appears to have commenced with a complaint (which is not contained in the letters we have received) from "An Indignant Husband" that his wife was improperly exposed before a crowd of students, at some hospital not named. If there was any truth in this, the husband ought to have written, not to a newspaper, which could not investigate the charge, but to the governing body of the hospital, which both could and would have done so. The probability is that no more would have been heard of the matter. As it is, however, it has given a welcome opportunity to all sorts of people for seeing themselves in print. One gentleman draws the sagacious inference that all women ought to be attended by women doctors, another thinks that hospitals are a sphere of "rampant officialism," but leaves us to guess what he means, another says that his wife when she took his "little ones" to a hospital has been "insulted and treated like a beggar,' another considers that "experimental surgical carpentry" goes on at hospitals, etc. Amidst all this stuff we can see little of solid matter to select for comment; and we must say that we think it a pity that the pages of so respectable a journal as the *Echo* should be open to correspondents so very ill instructed in the matter they deal with. As far as our experience of hospitals extends (and it is a tolerably wide and protracted one) women are treated in English hospitals with an amount of consideration and decency which leaves nothing to be desired, and which is in gratifying contrast to the habits of some Continental countries. To publish, and by publishing to seem to adopt, the unsupported statements of anonymous correspondents, who think that they or their wives have been treated with less politeness than is their due, and to allow on such flimsy grounds general charges to be founded against our hospital system, is surely neither just nor creditable to a public newspaper.

ECHOES OF THE INTERNATIONAL MEDICAL CONGRESS.

It is interesting to observe that in all the utterances on the eleventh International Medical Congress which have been made in various countries by delegates returned from Rome, the dominant note has been admiration of the great advances made during the last ten or twenty years in all matters connected with the art and science of medicine and in hospital administration. Thus Professor Gairdner, in the opening lecture of his summer course at the University of Glasgow, said that in medical matters Italy is striving hard to resume, if possible, the place which for so many ages she occupied in the vanguard of European thought and intellectual progress. In material appliances Italy, he observed, has made great strides, and in all matters of hospital and clinical arrangements, present and prospective, Rome, Genoa, and Turin are ahead of us in Glasgow. The present advanced position is all the more remarkable when the condition of medical affairs in Italy a generation ago is remembered, when the opinion of Europe was shocked by the strange survival of old-fashioned methods and theories revealed by the circumstance attending the death of Cavour. The new medicine might be said to have had its birth in Italy with the times of her political regeneration. "We can only hope," Professor Gairdner concluded, "that she will go on prospering and to prosper, and thus recover in the twentieth century all her former lustre."

A CIRCUMCISION "SPECIALIST."

The trials of paternity are evidently increased in no small degree by announcing the important event in the papers. Some men receive the congratulations of their friends in a meek and subdued spirit, appreciating full well the gravity of the occasion and the responsibilities thereof. Others seem to revel in the proud position, rushing quickly to the newspapers to announce the glad news—and they have their reward; specimens of soaps, night lights, and puff powders, with circulars advertising basinettes, dressing gowns, perambulators, and every possible description of condensed milk and rickets-producing food are poured upon him by the dozen. Among the advertisers of the less pleasant sort who play upon the anxieties of the new-made parent is the "specialist operator" for circumcision! We have received the circular of one of these gentlemen which straightway

followed an announcement of the birth of a son, in which the advertiser —although greatly hampered by bad grammar —endeavours to show the importance of the youngster being circumcised without delay, and offers to do the operation within half a minute in an ordinary case and within a minute even in the most difficult. Among the moral and physical reasons for its performance, he somewhat obscurely says that "Every Circumcised person have always been so hardy and thereby escaping obscure nervous disorders, the facts of which are acknowledged by highest medical authorities." Possibly he hopes that the father also may like to be performed upon, as he goes on to say: "Every invalid or victim of some obscure nervous disorder should not neglect this, as it will materially assist in restoring him to health." Perhaps, however, the attraction may not prove irresistible after all, for, with better grip of grammar but less idea of sense, he continues: "What are the benefits derived therefrom? Predisposition to and Exemption and Immunity from disease"—which seem somewhat mixed advantages. It certainly is not likely to add to the peace of mind of the proud father to be pestered at his solitary breakfast by pamphlets of this description. Of course the proper thing for him to do is to appeal at once to his doctor; but people unfortunately often hug their doubts instead of making full confession. It is well, perhaps, to suggest that the medical man, when so appealed to, should treat the inquiry with all seriousness. Men have sometimes had little difficulties of their own, or they have heard of such, and become extraordinarily anxious on the matter, and any suspicion that the doctor has answered offhand on general principles without complete investigation of the individual case is the most likely thing of all to play into the hands of the quacks. It should not be forgotten that wherever circumcision is really necessary it is a great advantage that it be done early, before adhesions have taken place between the prepuce and the glans; a careful investigation then may not only save the infant from the hands of the quack "specialist," but from much misery as well.

THE BEGINNINGS OF MEDICINE.

THE history of the beginnings of medicine has still to be written. Folk medicine has always been predominant, and is still in many parts of the country the true medicine of the people. The success of faith-healers, white witches, pillmongers, and electric belt manufacturers proves how deeply ingrained is a belief in the cure of disease by thoroughly inefficacious and unscientific methods. It is a relic of barbarous modes of thought in an otherwise highly civilised race. It is an instance, too, of the atavism which clings to the most important functions of life; for, just as in plants and animals the reproductive system upon which the continuance of the species depends shows the least variation from the original type, so in matters of healing upon which the life of the individual often depends there is still in the mass of mankind the least departure from ancestral ideas. The history of folk medicine, since it is so intimately bound up with the life of the people, is not difficult to write; poets and chroniclers alike afford material for it, and it is only necessary to look around to obtain abundant evidence of its continued existence. It is far otherwise with the beginnings of scientific medicine, and the field is at present open to any medical man who has the ability and the leisure to till it. The harvest would be a rich one, and would well repay the toil expended in garnering it. We published last year[1] a series of articles upon Ancient Egyptian medicine, and showed our readers how much has still to be done before we can acquire even a rudimentary knowledge of it. The little already known points to a dominating influence exercised by the ancient Egyptians upon the Hippocratic school, which in turn materially influenced the Arabian and so to a certain extent the mediæval treatment of disease. Mr. Griffith says that ancient Egyptian pharmacy had two foundations: empiricism and superstition—the latter valueless, at least when faith in the superstition has passed away; while the empirical knowledge, when duly sifted, may leave a very precious residuum. He further points out that the collections of the British Museum contain an immense store of medical texts in the cuneiform script of Assyria, probably copied from Babylonian originals. These medical texts are as yet untouched, but it is to be hoped that they will soon be thoroughly overhauled, and that the history of medicine will thus be carried another step backwards towards its beginning.

[1] BRITISH MEDICAL JOURNAL, vol. i, 1893, pp. 748, 1014, 1061, 1172; vol. ii, p. 477.

FACIAL FIGURE AND EXPRESSION.

WE have heard a great deal lately about animals transmitting to their offspring peculiarities acquired during their life, some holding that the acquirement of a bad habit is a wrong to posterity, others that it does not matter in the slightest, and that man's one duty to the unborn ages is fulfilled by the choice of an appropriate wife. These, however, are questions for humanity and the evolutionist; what is more interesting to the individual is the consideration of how peculiarities may arise, in regard to which it is not without importance to remember how large a part is played by imitation. The frame is constructed of bones and muscles, but the figure and expression depend upon the manner in which these muscles are used and these bones held. A family likeness hinges as much on family tricks as on mere shape of body. It is often almost ludicrous to see a tribe of sons and daughters, of many sizes, all having the same movements of their limbs, the same grimaces, and the same laugh. These, no doubt, are partly due to hereditary tendencies to certain forms of muscular reaction, but they are also largely due to imitation. The language of expression is learned just the same as the language of words. It is purely the result of imitation that we shake the head to express dissent, and the shrugs of the shoulder, the play of the hands, and other movements by which speech is emphasised, all have the same origin. Much as it is forgotten at the present day, one of the most important things in the education of youth is the provision of proper models for imitation. The absence of such mimetic teaching, the attempt to reduce everything to words and maxims before it is planted in the child's brain, is one weak spot in the system of elementary education now in vogue; the presence of it is the key to the differences between the products of the different public schools. Not only do likenesses run in families, but in forms of speech, in tricks of manner, in modes of response to the same stimuli, one public school differs from another. It is not difficult to tell an Eton boy, and, wide as may be the recruiting grounds both of Oxford and of Cambridge, each university imprints a stamp of its own upon its students. Dr. Louis Robinson, in an article on this subject in *Blackwood*, shows that both figure and facial expression depend on the repeated production of certain reflex actions, and that this is the result of unconscious imitation of one's companions. The bearing of this on the bringing up of youth is obvious. We all know that the young lad allowed to spend too much time in the stable will learn to express his thoughts in stable language, but he will also acquire the stable figure and the stable tricks; the girl brought up by and made the companion of a woman of good figure and responsive face, who moves gracefully and with ease, is more likely herself to be graceful and interesting in conversation than one who has been brought up by a clumsy woman and taught from books. Education by imitation was the root of the old system of apprenticeship, a system the loss of which has not been fully replaced, and it is also no doubt the root and origin not only of manners but of style and figure, which are often erroneously attributed to breeding.

UNIVERSITY OF LONDON.

Members of the Consultative Committee.—Suggestion for "Closure" Regulations Rejected.—Discussion on Gresham Scheme Ruled Out of Order.—Protests.—Adjournment of House.—Election of New Annual Committee Favourable to the Gresham Scheme.—Resolutions Adopted by Meeting of Graduates Held during the Interval.

THE annual meeting of Convocation was held at the University building on May 8th. Mr. E. H. BUSK, Chairman of Convocation, occupied the chair. There was a large attendance of graduates.

Mr. H. E. Allen was re-elected Clerk of Convocation.

Mr. W. G. LEMON, LL.B., presented the report of the Annual Committee and moved its reception. A summary of this report was published in the BRITISH MEDICAL JOURNAL of May 5th, p. 999.

Mr. J. W. BONE, B.A., seconded the resolution, which was adopted.

The CHAIRMAN announced the names of the members appointed to serve on the Joint Consultative Committee of the Senate and Convocation as recommended by Convocation at its meeting on April 10th, and stated that it had been considered desirable that the name of the Chancellor should appear on both lists. The following had been nominated by the Senate: The Chancellor (Lord Herschell), Vice-Chancellor (Sir James Paget), Mr. Anstie, Dr. Collins, Mr. Fitch, Professor Carey Foster, Sir John Lubbock, M.P., Sir Albert Rollit, M.P., Sir Henry Roscoe, M.P., Professor Rücker, and Sir William Savory. The following were chosen by the Annual Committee to represent Convocation: The Chancellor, the Chairman of Convocation (Mr. E. H. Busk), Dr. M. Baines, Professor A. Cave, Mr. W. G. Lemon, Dr. T. B. Napier, Mr. H. A. Nesbitt, Dr. A. E. Sansom, Mr. W. J. Spratling, Mr. R. M. Stephenson, and Dr. Silvanus P. Thompson.

Dr. H. L. SNOW moved a resolution:

> That, in view of the inordinate length to which the debates of Convocation now extend, the Annual Committee be instructed to draw up an additional standing order or orders limiting the time allotted to each speaker, and otherwise tending to abridge the ordinary procedure, so far as may be found compatible with reasonable freedom of discussion.

Dr. DUNN seconded the resolution, which was supported by a considerable number, but was declared to be lost.

The next resolution, to be proposed by Mr. THISELTON-DYER, was as follows:

> That Convocation, while reserving its right to represent its views before the proposed Statutory Commission, hereby expresses its general approval of the report of the Royal Commission.

Mr. BOURNE BENSON objected to the resolution as out of order, on the ground that the whole question had been at the last meeting referred to a joint Committee of the Senate and of Convocation.

Mr. THISELTON-DYER disclaimed any desire to annul the conclusions reached at the previous meeting.

The CHAIRMAN said that he felt obliged regretfully to rule the motion out of order.

A resolution standing in the name of Mr. B. Whitehead, and having for its object, if a teaching university for London were formed on the lines of the Gresham Commissioners' report, the establishment of a new examining university on the lines of the existing University of London, was postponed on the same ground as that taken for the postponement of the previous resolution.

Another resolution, standing in the name of Mr. W. T. Lynn, urging the provision of a staff of professors and lecturers on the higher objects of study leading to original research, also stood over.

Dr. SILVANUS THOMPSON, amid cheers and counter cheers, moved the adjournment of the House. Members had come to debate the attitude of the University towards the Gresham scheme. Many of them had come to support Mr. Thiselton-Dyer's motion, and others to amend it, but the Chairman's ruling had prevented discussion of the proposition. He had at the meeting of the Annual Committee of the previous Friday, put it to the Chairman whether Mr. Thiselton-Dyer's motion was in order, and had been answered in the affirmative. He therefore thought the House had not been fairly treated. It was perfectly competent for the House to move instructions to guide the conduct of its members on the Consultative Committee.

Dr. W. J. COLLINS seconded the adjournment, as that seemed the best course to pursue under the circumstances. The House had shown a consistent policy since 1885, when it expressed itself in favour of teaching as well as of examining functions. He trusted it might continue on the old lines, and hoped these protracted labours would soon reach a successful issue.

An amendment that the House adjourn until 7 o'clock (it was then 5.45) was accepted. The object of the reassembling was to hear the result of the voting for the Annual Committee. For this election two parties had separate lists, one party desiring to leave the question of the Gresham scheme in the hands of the Joint Committee of the Senate and Convocation, whilst the other party was much more distinctly in favour of the scheme.

The House reassembled at 7, but the examination of the ballot papers was not concluded until 8.15, when the Chairman announced the results of the election.

In the Faculties of Medicine and Science, the following were chosen: T. H. Beare, B.Sc.; A. W. Bennett, M.A.; J. S. N. Boyd, M.B., B.S.; J. Rose Bradford, M.D., D.Sc.; V. A. H. Horsley, M.B., B.S.; H. G. Howse, M.S., M.B.; H. M. Murray, M.D.; F. W. Oliver, D.Sc.; W. S. Ridewood, B.A., B.Sc.; A. E. Sansom, M.D.; T. W. Shore, M.D., B.Sc.; W. G. Spencer, M.S., M.B.; F. Taylor, M.D.; S. P. Thompson, D.Sc., B.A.; H. J. Waring, M.S., B.Sc.; and W. P. Wynne, D.Sc.

In the Faculties of Arts and Laws the following were elected: W. C. Braithwaite, LL.B., B.A.; H. C. H. Candy, B.A., B.Sc.; A. Cave, B.A.; T. Ely, M.A.; T. G. Foster, B.A.; H. J. Harris, B.A.; H. F. Heath, B.A.; A. B. Hopkins, M.A.; A. Hopkinson, B.A.; Alice E. Lee, B.A., B.Sc.; T. L. Mears, LL.D., M.A.; H. F. Morley, D.Sc., M.A.; A. L. Morris, LL.B., B.A.; G. A. Smith, M.A.; H. Spicer, B.A.; and J. Sully, M.A.

The result was received with much cheering. The list of graduates favouring the Gresham scheme was carried in its entirety.

The CHAIRMAN, after reading the list of names, announced that the adjourned extraordinary meeting fixed for that evening would be again adjourned. The meeting then terminated.

During the adjournment of the House in the earlier part of the evening a body of about 230 graduates met in the Graduates' Room. Sir HENRY ROSCOE, M.P., presided. Mr. THISELTON-DYER moved:

> That this meeting of graduates, while reserving its right to represent its views before the proposed Statutory Commission, hereby expresses its general approval of the report of the Royal Commission.

Mr. J. ANSTIE, Q.C., seconded the resolution, and condemned the action of the Annual Committee in placing upon the Joint Committee a large majority of members representing one party only in Convocation.

The resolution was carried without a dissentient.

Dr. SILVANUS THOMPSON proposed a resolution which, after slight amendment, ran as follows:

> That this meeting of graduates regrets that Convocation has been again prevented from discussing the report of the Gresham Commission on the motion of Mr. Thiselton-Dyer, and from moving instructions to the Committee now sitting.

He said that the discussion on the subject had been burked on the technicalities of the Chairman's ruling.

Dr. W. H. ALLCHIN seconded the resolution, which was opposed by Sir PHILIP MAGNUS, but was carried almost unanimously, only 6 voting against it.

Dr. R. D. ROBERTS proposed:

That the Honorary Secretaries of this—Mr. Cozens Hardy's—Committee of Convocation prepare minutes of this meeting, and forward them to the Senate and to the press.

This was seconded by Professor CAVE, and carried unanimously.

A vote of thanks to Sir Henry Roscoe, M.P., for presiding, was carried with acclamation.

Lord HERSCHELL, the Chancellor, presided on Presentation Day, May 9th. The theatre of the University was crowded with graduates and their friends. As usual, a considerable proportion of the successful candidates in the various examinations of the year had been ladies, some of whom had gained high distinctions. Only in the Faculty of Law did no ladies' names appear. Of 156 Bachelors of Arts, 32 were ladies; of 26 Masters of Arts, 6; of 65 B.Sc.'s, 13 were ladies; and of 8 D.Sc.'s, 1 was a lady. In the Faculty of Medicine, of 162 graduates, only 5 were ladies; 2 became M.B., 1 B.Sc., and 2 graduated as M.D. In the examination in the Art, Theory, and History of Teaching, 7 of a total of 10 who passed were ladies.

The CHANCELLOR said that it was generally felt that an institution which should co-ordinate the different educational forces of the metropolis would be of immense public benefit; the demand for it, in fact, had become so great that it could no longer be ignored. If it were possible without detriment to the existing work of the present University, it would be far better that the work should be done by it than that there should be two universities. But no enlargement of its sphere by the addition of teaching functions should be allowed to impair the high standard which it had hitherto exacted. The best solution of the problem would lie in the submission in the last resort of all differences to an independent body which shall look at the matter from an educational standard only, and shall consist of men deeply interested in the cause and spread of education. Before transmitting the matter to such a body, however, differences might be narrowed down to the smallest point, which should be ultimately determined by an impartial body, whose decision should be final and conclusive.

Sir JOHN LUBBOCK, M.P., expressed the hope the Senate and Convocation might act together for the benefit of their University. It seemed to him very misleading to speak of the proposal of the Gresham Commissioners as establishing a teaching university. The education was given in colleges, and would be so still. There was not any proposal to establish an institution in rivalry with University College, or King's, or other London Colleges. What was desirable was to bring the government of the University into closer relations with those institutions.

JOINT MEETING OF THE SENATE AND ANNUAL COMMITTEE.

THE Committee of the Senate on the Report of the Royal Commission recently received the "Annual Committee" of Convocation with a desire to ascertain their views on the subject of the report. Twenty-six members of the Annual Committee were present, of whom several addressed the Committee of the Senate. At the close of the conference the Chancellor (Lord Herschell), addressing the members of the Annual Committee present, observed that without entering into matters of controversy, public opinion had expressed itself strongly in favour of the establishment of a teaching University, but at the same time against the creation of a second university, and that this was a feeling that must be reckoned with. If the proposals of the Commissioners were generally considered to be for the public good and a reasonable solution of the problem that had been referred to them, it would scarcely rest with this University, either through the Senate or through Convocation, to veto the plan, nor should the remodelling of the constitution of a public body with a view to its further efficiency be regarded as a penal abrogation of its charter. No scheme, as was clear from the variety of opinion which had been expressed, would meet with universal assent: but the scheme of the Commissioners was the outcome of large and varied experience, and as such would be likely to carry weight. In their opinion, also, it would be carried out without prejudicing the general work of the existing University. If, as might properly be suggested, the powers of the proposed statutory Commission were framed with a little less rigidity and a little more elasticity than appeared to be contemplated, opportunity, assuming the general attitude of the University to be friendly, might no doubt be given to it for making such suggestions as to the matters of detail which had been touched upon by the Annual Committee as might, after fuller consideration of the report, appear desirable.

SMALL-POX AND VACCINATION.

WALSALL, 1893.

DR. SCOTT WILSON, in his annual report for the past year, gives material for some very interesting data as to the effect of vaccination in mitigating small-pox. He first of all, however, shows what a little flame can make a large conflagration, since the contraction of infection in the person of a child in Birmingham led to no fewer than 778 cases of the disease in Walsall. Through carelessness, the infection spread to neighbours, and later to more distant relatives; and by reason of gross and culpable negligence, by delay of notification, by wholesale evasion of the Vaccination Acts during many years, by reason of overcrowding, etc., a mild epidemic, which in five months had numbered only 40 cases, was converted into a huge general prevalence. Of the total cases, 582 were treated in hospital, and of these 56 died, or 9.6 per cent.; and 196 were treated at home, 15 of these dying, or 7.6 per cent.

The following table sets forth the facts of the epidemic in its relation to vaccination, and embodies all the data which Dr. Wilson supplies:

Ages.	All Classes.			Vaccinated.			Doubtful.			Unvaccinated.		
	Cases.	Deaths.	Mortality Per Cent. of Cases.	Cases.	Deaths.	Mortality Per Cent. of Cases.	Cases.	Deaths.	Mortality Per Cent. of Cases.	Cases.	Deaths.	Mortality Per Cent. of Cases.
Under 1 year ...	32	14	43.7	3	—	0.0	—	—	—	29	14	48.3
1 to 5 years	80	24	30.0	22	2*	9.1	1	1	100.0	57	21	36.8
Under 5 years...	112	38	33.9	25	2*	8.0	1	1	100.0	86	35	40.7
5 to 15 ,, ...	156	8	5.1	98	—	0.0	3	2	66.7	55	6	10.9
15 to 25 ,, ...	292	10	3 4	259	2	0.77	2	—	0.0	31	8	25.8
25 to 65 ,, ...	218	15	6.9	172	2	1.2	11	1	9.1	35	12	34.3
All ages.....	778	71	9.1	554	6*	1.1	17	4	23.5	207	61	29.5

* One of these deaths was from pneumonia, reducing the three percentages influenced thereby to 4.15, 4.0, and 0.9 respectively.

From this table we learn that vaccination has exerted a wonderful influence in lessening the mortality. Thus:

All classes,	778 cases;	71 deaths;	9.1 per cent.
Vaccinated,	554 ,,	6 ,,	1.1 ,,
Unvaccinated,	207 ,,	61 ,,	29.5 ,,
Doubtful,	17 ,,	4 ,,	23.5 ,,

Here we find that the mortality among the unvaccinated was nearly 27 times that of the vaccinated. And we gather the instructive data that if the unvaccinated cases had died only at the rate of the vaccinated, there would have been not 61, but less than 3 deaths. And, again, if the vaccinated cases had died at the rate of the unvaccinated, there would have been not the actual 6 deaths, but as many as 163 deaths. Surely these facts are convincing. Had all the cases been vaccinated, there would have been a saving of 63 lives, as only 8 persons would have died. Of infants under 1 year of age, nearly half of those not vaccinated died, whilst none of the vaccinated cases (only 3) ended fatally. In the next four years the respective rates of mortality were as 1 to 4; from 1 to 5 years as 1 to 5; from 5 to 15 years as *nil* to 10.9; from 15 to 25 years as 1 to 33; from 25 to 65 years as 1 to 29: and at all ages as 1 to 27 (nearly).

We sincerely trust that Dr. Wilson will see his way to the issue of a report dealing specially with the long-continued prevalence of small-pox in Walsall, in its various aspects, as regards one and another of the numerous points which are of interest when this disease is in question.

SMALL-POX QUARANTINE AND ISOLATION AT LEICESTER IN 1892—93.

II.

DR. PRIESTLEY, in his report on small-pox in Leicester in 1892-93, gives some very interesting statistics concerning the value of quarantine in the face of a prevalence of small-pox. He has come to the conclusion that quarantine in hospital cannot be maintained in the presence of an epidemic, and so he continued the plan of sending the members of infected families thither only until the epidemic began to make itself felt. Hereupon he deemed it necessary to quarantine the remaining members in their homes only. Thus the experience of Leicester has demonstrated in large measure the impossibility of a hospital quarantine in a town where small-pox is prevailing to any extent.

Of a total of 235 persons quarantined in hospital, 16 cases sickened, and of these 11 were vaccinated out of 164, whilst 5 sickened out of 71 unvaccinated, the respective percentages being 6.7 and 7. Of a total of 1,261 persons quarantined in both hospital and home, 969 were protected and 60 sickened, being 6.2 per cent.; whilst 292 were unprotected and 63 sickened, or 21.5 per cent. Of this same total of 1,261 persons who came more or less in contact with small-pox in infected houses, 899 were 10 years and over, and of these 69 sickened: whilst of 347 cases of small-pox 240 sickened in the same age period. This shows, Dr. Priestley thinks, that the disease has broken out chiefly among the adult semi-protected population. Under 10 years of age 107 children have suffered, and the limitation of the spread of disease in the older persons is ascribed to their being in great degree protected by primary vaccination. Of 362 children passing through quarantine, 91 were vaccinated and 2 sickened; whilst of 271 unvaccinated 52 sickened, the latter being equal to 19.2 per cent.

As illustrative of the need of quarantine, Dr. Priestley tells us that 185 cases of small-pox occurred among persons thus undergoing quarantine, this being equal to over 53 per cent. of the whole. Dr. Priestley avers that if he had been able to secure the vaccination of these persons—as might have been done had they all assented—within forty-eight or thirty-six hours, some 75, or at least 50, per cent. would doubtless have been saved from the disease. Thus we learn that of 39 children vaccinated during quarantine, 3 sickened, 7.6 per cent.; whilst of 231 unvaccinated 49 sickened, or 21.2 per cent. Again, of 87 persons already revaccinated in quarantine 2 sickened, or 2.3 per cent.: whilst of 72 persons revaccinated in quarantine 3 sickened, or 4.2 per cent.

These data seem to us to furnish material whereon to affirm without question that quarantine, when properly carried out, as has been done at Leicester in the past experience of small-pox, has much force as a factor in the suppression of a small-pox epidemic; and Dr. Priestley is to be congratulated on the admirable manner in which he has combated the recent outbreak of the disease.

In the matter of cost of the quarantine system, Dr. Priestley tells us that the total expenses connected with the quarantine of the 1,261 persons were £666 15s. 2d. This amount includes just over £100 spent on alterations to the quarantine wards.

Amid much that has been said and written lately on the subject of small-pox hospitals and their effect on the surrounding neighbourhood, few clearer statements have been made than that by Dr. Priestley in his recent report on the small-pox epidemic in Leicester. Briefly stated, the story is as follows. In the district of Newfoundpool there is living a population of 3,000 persons in 600 houses, the nearest houses being 620 feet, and the farthest 1,750 feet from the hospital. Thus a radius of 2,000 feet would take in all these houses. Now, out of the 347 cases of small-pox that have occurred in Leicester during the recent epidemic, no fewer than 55 have been from this circle of 2,000 feet, giving an incidence of 18.3 cases per 1,000 of population, as compared with 1.6 per 1,000 in the rest of the borough. Of these 55 cases it is only fair to add that 20 may be attributed to previous cases, leaving 35 cases traceable to hospital influence only. Treating the rest of the town in the same way, Dr. Priestley finds that in the special hospital district there were 15 cases to every 1 in the rest of the town.

This is sufficiently strong evidence of the potency of the hospital for harm, but Dr. Priestley has gone on to show that in regard of the time of year at which the district in question was most heavily hit there were atmospheric conditions which accounted for such spread as took place. We are told that in February, when there were on an average 54 cases in the hospital, no spread took place in the special circle; whereas in June, when the weekly average was only 34 cases, there was great proportionate spread in the locality. Why this difference? The answer is that in the earlier month the conditions outside the hospital were not in any way those obtaining during June. In February the wind was blowing right away from Newfoundpool, whilst in June it was blowing right *over* the district. And in other ways the meteorological conditions were favourable in June as compared with the earlier period.

Not content with these facts Dr. Priestley set himself the task of finding out if possibly there could be a way by which conditions other than that of hospital aërial agency could be made responsible for the disproportionate incidence of small-pox on the Newfoundpool district. To this end he made endeavour to ascertain if by chance dissemination of small-pox could have taken place by means of personal contact. In this he failed, and thereupon turned to the matter of the insanitary condition of houses in the specially affected districts. Here he found himself met by the fact that the sanitary condition of the houses was in no whit inferior to that of the rest of the borough. He says: "A word or two as to the sanitary and general condition of the houses where small-pox broke out. All the houses have been visited by me, and I am able to state that, with very few exceptions, they were found to be in good condition." Incidentally Dr. Priestley makes mention of the possible agency of flies and rodents in spreading small-pox.

Including cases of other diseases which contracted small-pox whilst under isolation near the small-pox wards, Dr. Priestley finds a total of 85 cases which he regards as possibly due to hospital influence, that is, 24.4 per cent. of the total of 347 cases. If we deduct from these the 20 cases that Dr. Priestley states he traced to previous cases, we have 65 left, or 18.7 per cent., as almost unquestionably due to the direct agency of the hospital. But even this is not all, for if we take the population of those four wards nearest to the hospital, and accord the enumeration of the last census, and also the remaining wards of the borough, we see that on the four wards which are wholly or in part within one mile of the hospital, the incidence of attack per 1,000 of population was 4.3, whilst on the rest of the borough the rate was only 1.16, or not much more than a fourth. Again, if we have regard to the inmates of houses at the scale obtaining at the last census, we find the incidence of invaded houses per 1,000 of total houses in the four wards touched by the mile circle to be 12.2, against 3.1 in the rest of the borough. These rates are in excess of those in the case of the Fulham hospital, for there the incidence per 1,000 houses was in 1884-5, in the special area, 1.770, and in the rest of the three parishes 0.840. In the 6 years of hospital operations from 1877-85, the respective rates were 10.2 and 3.1.

Thus we see that whether we judge of a special area in Leicester or of the borough as a whole, there has been in the vicinity of the hospital a decided grouping of small-pox in proportion to population, and we can therefore well estimate Dr. Priestley's concern for the future of Leicester in the matter of small-pox isolation, seeing that the present arrangement is to place small-pox patients on the same site as other diseases, with only some 700 feet between the separate wards. It is satisfactory to learn that the present plan is "only a temporary one."

DONATIONS AND BEQUESTS.—The late Mrs. Amelia Cator, of Carshalton and Brighton, who died in March last, has by her will bequeathed £500 to the Royal Hospital for Consumption, Brompton.

FEVER AND SMALL-POX IN LONDON.

Statistical Anomalies.—Diphtheria complicating Scarlet Fever.—Mistaken Diagnoses.—Varicella and Small-pox.—Enteric Fever and Pneumonia, Diphtheria, Scarlet Fever, and Tonsillitis.

The reports of the Statistical Committee of the Metropolitan Asylums Board for the year 1893 contain much that is interesting, and we may congratulate the officials of the Asylums Board on the evidence which they display of much greater care and uniformity in their tabulation than has been the case in former years, although there still are evidences that the personal factor is an important determining influence in the construction of the statistical returns from the different hospitals. Take, for example, the occurrence of albuminuria as a complication of scarlet fever; it surely will strike everyone as strange that in the same epidemic 18.4 per cent. of the cases at the Western Hospital should be so affected, while at the North Western only 3 per cent. were attacked, and at the Fountain only 0.4.

In regard to the Fountain Hospital, of course the difference is partly explicable from the fact that it was only opened in October, but that this complication should be six times as common at the Western as it is at the North-Western is certainly curious. While again at the Western, albuminuria is more than four times as frequent as nephritis, the relative positions of these two conditions are reversed at the Eastern and North-Eastern Hospitals, at both of which nephritis is more common than albuminuria.

The occurrence of diphtheria as a complication of scarlet fever is a point to which considerable attention is directed in all the hospital reports. It must, however, strike one as strange that at one hospital this complication should exist on admission more than three times as often as it develops afterwards, while in others exactly the reverse holds good, and the cases in which it develops in the hospital far outnumber those in which it exists on admission.

We cannot help wondering whether superintendents at these various hospitals are in complete agreement as to what they mean by the term diphtheria as a complication of scarlet fever. The same thing crops up in the tables of mistaken diagnoses. The Western Hospital only treated 277 cases of diphtheria, yet 79 cases of tonsillitis were sent in wrongly diagnosed as examples of that disease. The North-Western, however, which treated 1,325 cases of diphtheria, only received 20 cases of tonsillitis diagnosed as diphtheria. Either, then, the general practitioners in the North-Western districts show much more acumen in their diagnosis than their brethren in the Western districts, or, which is much more probable, there is a want of unanimity among the superintendents as to what is diphtheria and what is tonsillitis. The influence of this on the death-rates of these diseases at the different hospitals must not be overlooked.

Among the statistical tables, perhaps the most interesting to the practitioner are those showing the mistakes of diagnosis, pointing out, as they do, the errors most to be guarded against.

Far away the most frequent cause of difficulty in regard to small-pox is varicella, 147 cases of which were turned back at the wharves. Syphilis was the next in frequency, and measles the next.

Perhaps it may soothe the self-love of the general practitioner to learn that after all the careful observation at the wharves 73 patients got through and were admitted to the ships, although not suffering from small-pox. Among these, again, varicella heads the list, and syphilis comes next.

The nature of the disease was so doubtful also in 32 cases, that they were detained at the wharves for observation; of these only 7 turned out to be small-pox, the most frequent counterfeits being chicken-pox, syphilis, measles, and erythema. In regard to chicken-pox it has to be noted that it is not very uncommon for it to exist in the same house alongside with cases of small-pox, which greatly adds to the difficulties of diagnosis.

In the diagnosis of enteric fever the greatest stumbling block seems to be between it and pneumonia, 50 cases of which, together with 6 cases of lobar pneumonia, were certified as enteric. Tuberculosis does not appear in the list as often as we should have expected, there being only 6 cases of that disease and 4 of tuberculous meningitis in the tale of errors.

Curiously enough, among the cases certified as enteric were 6 of "morbus cordis," not apparently ulcerative endocarditis, which has a separate heading, under which one case occurs.

The errors in regard to diphtheria appear to have been chiefly in the direction of mistaking tonsillitis and pharyngitis for the more serious disease, an error easily to be forgiven but for the danger of exposure to infection on removal to a fever hospital.

Scarlet fever again seems often to be simulated by tonsillitis and pharyngitis. Erythema is also responsible for a good many mistakes, and eczema for a few. A fair number of cases of measles and of pneumonia were mistaken for scarlet fever, and 58 cases were sent in which were suffering from no obvious disease. Considering, however, the enormous number of cases of scarlet fever, the errors in its diagnosis were comparatively few.

There is much in these reports which is very interesting in regard to vaccination, the connection between small-pox and vagrancy, and many other matters of importance bearing on public health. The spot maps showing the localities affected by the principal notifiable diseases are especially worthy of note.

THE FOREST GATE SCANDAL.

On May 3rd Dr. Farquharson asked the President of the Local Government Board whether his attention had been called to the fact that an official inquiry, held at the Forest Gate Schools in September, 1893, into the circumstances connected with the death of certain children there by ptomaine poisoning, disclosed grave irregularities in the accounts and in the prescribed dietary; and whether steps would be taken to prevent the possibility of such occurrences in the future, and to protect the children and public by placing some effective check on the control of the superintendent.

The answer of the President of the Local Government Board was that the irregularities, though grave, were not fraudulent. The views of the Local Government Board had been communicated to the managers, who, in the opinion of the department, might be relied on to prevent irregularities in the future.

The answer of the President of the Local Government Board to this question and to that of Mr. A. Grove also, which we report elsewhere, is distinctly unsatisfactory. As we have pointed out from the first, the disclosures which have come about by reason of the deliverance of the Local Government Board itself are of the utmost gravity, simply because they prove that there is no effective check whatever upon the serving out of the children's food in these enormous establishments. It is idle for Mr. Shaw Lefevre to say that the occurrences at Forest Gate do not prove that children in the Poor-law schools generally are not provided with a proper supply of food. What we and others have insisted on is that they prove conclusively that there is no guarantee whatever that they are.

To talk of "visiting committees" in this connection is, with all respect to the President, begging the whole question, and there is no difficulty in inventing a method by which superintendents will not be solely charged with the supervision of their own honesty or accuracy. What is wanted is a change in the temper of the officers of the Local Government Board and of the Board itself which will assure the public that when delinquencies of this kind are discovered in the official books, some officials besides the official who brought about the disclosure will be punished. Above all, what is wanted is security that the officers' waste meat shall not be served up to the children instead of fresh food, under circumstances where, to put it mildly, it may not always be good.

To these vital questions Mr. Shaw Lefevre made no reference. The only ray of hope in this thoroughly official answer, of which he made himself the mouthpiece, is his concluding remark that it was the desire of the Board in the case of all new schools to avoid, as far as possible, the aggregation of a large number of children in one building. We are

glad that the Board has at last arrived at this point. It remains to be seen how long it will take them to go a point further, and insist that such highly unsuitable barracks as, for example, the Forest Gate and Hackney Schools, shall be replaced by more modern establishments, built on the cottage plan, outside the overcrowded area of the metropolis.

ASSOCIATION INTELLIGENCE.

BRANCH MEETINGS TO BE HELD.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—A meeting of the District will be held at the Hospital, Gravesend, on Thursday, May 24th, at 4.30 P.M., C. Firth, M.D., in the chair. The following communications will be made:—Mr. Hugh Smith: Three Cases of Brain Syphilis. Dr. V. Harris: On the Question of Heredity in Phthisis and its Influence on Treatment. Mr. Keetley: The Treatment of Club-foot and of Flat-foot. Mr. R. J. Bryden: Delirium Tremens and its Treatment. The dinner will take place at the New Falcon Hotel, at 6.30 P.M.; charge, 6s. 6d., exclusive of wine. To facilitate the arrangements gentlemen who intend to dine are particularly requested to signify their intention to the chairman, C. Firth, M.D., 196, Parrock Street, Gravesend, not later than Tuesday, May 22nd. All members of the South-Eastern Branch are entitled to attend this meeting and to introduce professional friends.—E. GROUND, Honorary Secretary of the District, 1, Ashford Road, Maidstone.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The annual meeting of this Branch will be held at the Kent and Canterbury Hospital on Thursday, May 24th, at 2.45 P.M., Dr. Parsons in the chair. The annual dinner will take place at the Fountain Hotel at 6 o'clock. Charge, exclusive of wine, 6s. 6d.; an extra charge of 2s. is made to those who take no wine. It is hoped that the dinner will be well attended, and members intending to dine are particularly requested to communicate with the Honorary Secretary by May 22nd so that adequate arrangements may be made. Agenda:—The usual business of the annual meeting. Mr. Brian Rigden: Notes of Two Abnormal Children. Dr. Bowles: On the Connection of Pyelitis with Renal Abscess. Dr. White: Tracheotomy in Diphtheria. All members of the South-Eastern Branch are entitled to attend these meetings and to introduce professional friends.—THOS. F. RAVEN, Honorary District Secretary, Barfield House, Broadstairs.

METROPOLITAN COUNTIES BRANCH.—A general meeting of this Branch will be held in the Medical Society's Rooms, 11, Chandos Street, Cavendish Square, on Wednesday, May 23rd, at 5 P.M., for the purpose of taking into consideration the question of proposing certain amendments to the Medical Acts, with a view to the better suppression of unqualified practice.—ANDREW CLARK, ISAMBARD OWEN, Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT.—Owing to the death of Dr. Laseron, the annual meeting at Tottenham Hospital has been postponed till Thursday, May 17th, at 4 P.M. The District Committee will meet at 3.45 P.M.—HUGH WOODS, Honorary Secretary.

NORTH OF ENGLAND BRANCH.

THE spring meeting of this Branch was held at Morpeth on May 3rd.

Communications.—The following papers were read:—Dr. SKRIMSHIRE: A Case of Spinal Caries.—Dr. MURPHY: Atresia Hymenalis, Atresia of the Os Uteri, Hæmatometra, Hysterectomy on a Patient aged 42. Recovery.—Dr. GOWANS: Parts after Operation for Septic Thrombosis of Lateral Sinus and Deep Jugular Vein.—Mr. RUTHERFORD MORISON: The Use of the Tampon and Temporary Suture in Abdominal Surgery.—Dr. BLAIR showed a Case of Alopecia Areata.

Dinner.—The dinner after the meeting took place at the Queen's Head Hotel, the President of the Association in the chair, in the absence of the President of the Branch.

SOUTH-EASTERN BRANCH: EAST AND WEST SUSSEX DISTRICTS.

A CONJOINT meeting of these Districts was held on April 12th at the Worthing Infirmary, Dr. EWART (Brighton) in the chair. Nineteen members and visitors were present.

Confirmation of Minutes.—The minutes of the last meeting were read and confirmed.

Election of Honorary Secretary.—Dr. Frank Hinds (Worthing) was elected honorary secretary in place of Dr. Van Buren, deceased.

Typhoid Fever at Worthing.—Dr. KELLY, medical officer of health, read a paper on the epidemic of typhoid fever at Worthing in 1893, in which he briefly sketched the course of the outbreak, the causes which led to it, and the measures taken to deal with it. His paper was of great interest, and was illustrated by numerous plans and diagrams.—In the discussion which ensued Drs. EWART, NEWSHOLME, WHITTLE, MACKEY, and Mr. G. B. COLLET took part.

Vote of Thanks.—A vote of thanks to the Chairman concluded the meeting.

Dinner.—The members and friends, numbering twenty-seven, dined together at the Royal Hotel.

SPECIAL CORRESPONDENCE.

PARIS.

Appointment of Examining Juries.—Cemeteries from a Sanitary Point of View.—The Sanitation of the Seine.—Medical Syndicates.—Post-mortem Examination of an Anarchist.

AT the last hospital "concours" for hospital appointments, a new method of forming the examining jury was adopted. The evening before the day, the names of the examiners are to be drawn from the balloting box, two delegates from the candidates—the oldest and youngest among them—write the names of the professors that can be drawn on separate slips of paper. Each name is written twice by both delegates, and placed in a separate envelope. An envelope of each delegate are placed together in a third envelope. The names thus enclosed are drawn out unopened by the Director of Public Assistance: the examiners are then named. It is hoped that these precautions will ensure fair play.

According to M. Rochard, the belief that bad smells emanate from cemeteries is unfounded. In well-kept cemeteries there is an absence of noxious gases. Complaints were made about the Mont Parnasse and Montmartre cemeteries. Inquiry proved that the smells complained of proceeded from a house near the cemetery where hospital refuse was burned. M. Rochard, on the other hand, states that water filtered through the soil of cemeteries is polluted. Belgrand believed that the water filtrating through the Mont Parnasse and Père Lachaise cemeteries contaminated the neighbouring wells. He ascertained this fact during the carrying out of certain excavations. Wells near cemeteries ought to be condemned: the distance of 100 metres fixed by law is not a sufficient guarantee against danger. With regard to the theory of germs being stored up in cemeteries, and later spread about resulting in epidemics, he believes that it is not impossible that when graves are dug microbes rise to the surface and mix among the surrounding atmosphere, but no fact has as yet demonstrated that this possibility has been realised.

The Chamber of Deputies has passed the Seine Sanitation Bill, and it will be sent up to the Senate. The deputies of the Seine and Oise department energetically opposed the Bill, not wishing to see the charming environs of Paris transformed into manure dépots. Some of the most competent sanitarians declare that Seine water should never be used for drinking purposes: instead of diverting water from that river its volume should be increased in order to quicken its current. The Prefect of the Seine, at a recent meeting of the Municipal Council, declared that the Anderson method of purifying water is eminently satisfactory and is adopted by the water company. Analyses show that water thus purified is equal to spring water.

There are twenty-five syndicates composed of duly qualified medical men distributed among the following departments. Ardennes, Calvados, Charente Inférieure, Cher, Corrèze, Côtes du Nord, Drôme, Eure et Loire, Finistère, Gironde, Indre et Loire, Seine et Marne, Seine et Oise, Deux Sèvres, Var, and Vendée.

The dead body of Pauwels, the Anarchist who placed a bomb on the Madeleine Church and fell a victim to his intended crime, was placed immediately after death in the freezing machine of the "Morgue." Dr. Tocquel, an expert in medical jurisprudence, has made a necropsy: the vertebral column was fractured, likewise the pelvic bones, and the peritoneum was injured.

DR. LUIGI CONCETTI has been appointed *Libero Docente* in the University of Rome, to give pathological and clinical instruction in the diseases of children. Heretofore no systematic instruction in this department in medicine has been given in the University of Rome.

CORRESPONDENCE.

GENERAL INSPECTORS OF THE LOCAL GOVERNMENT BOARD.

SIR,—I must beg leave to trespass on your space once more in order to notice very briefly the further letter which appears under the above heading on the BRITISH MEDICAL JOURNAL of May 5th.

The writer cannot have read my letters of April 7th and 21st carefully, or else he is designedly raising another question in order to divert attention from a subject of great public importance. It may be seen by those who care to refer to my letters that I have endeavoured to guard myself from misconstruction by distinguishing the departments of workhouse and infirmary supervision in which technical or expert knowledge may be said to be essential. Whether it is desirable or not to increase the number of medical inspectors in the Poor-law Department, acting independently of, and sometimes even in opposition to, the Medical Department of Her Majesty's Local Government Board, is another matter. Such a question involves weighty considerations, but I must decline altogether to be led aside into their discussion at present.

What I have asked in plain language your correspondent still does not attempt to answer. I disclaim any intention of reflecting on individuals. It is the system to which I am directing attention. It may be that this is based on essentially wrong principles, while, at the same time, it is carried out by excellent officials.

One thing is quite clear. No plan for the improvement of our system of workhouse and infirmary supervision can be thoroughly discussed until we know how far the public, and the Poor-law authorities who represent them, can rely on the Local Government Board system.—I am, etc.,

May 6th. F.R.C.P.

THE EDUCATION OF WORKHOUSE CHILDREN.

SIR,—I was pleased to learn from the letter of my friend Dr. Dolan, in the BRITISH MEDICAL JOURNAL of May 5th, that the Halifax Board of Guardians have had such a favourable experience from sending out their pauper children to the public elementary schools of the town. I can also subscribe to his axiom that "a child ought not to be brought into a workhouse" if it were possible to carry it out. It is not always easy to find foster parents, nor for small unions to build cottage homes. Several adjoining unions might, however, do this, but the boarding-out system is decidedly the best, because even cottage homes must be tinged with Poor-law workhouse regulations.

Some nine years ago, owing to the difficulties of getting suitable officers, the Wigan Board of Guardians adopted the plan followed in Halifax, more or less, except that the children were sent out with attendants to the allotted schools, and fetched back at noon and night. At first the plan appeared to work admirably, but in course of time these children, instead of improving and losing their lost, beaten look, put on a long, woful face, and, if out of school before the attendant turned up, proceeded to beg from the houses near the school and *en route* to the workhouse. Now and again one or more would escape the vigilance of the attendant, and get into all sorts of neighbourhoods, remaining out as long as they could amongst their quondam friends. Again, their cousins and their aunts, and others would load these youngsters with bread, bread and meat, sweets, and currant bread, no doubt thinking they were doing a kindly act to the children; but, instead, the officials had extra work in getting their pockets disgorged, and the medical officer had periodically to be called to some of them for gastric troubles.

Then, again, relatives, and even parents of the children, were indifferent as to whether these children were in the workhouse or not, so long as they could see them coming backwards and forwards from school. Children have been allowed to go till they could work half time, and then taken by relatives without going through the routine of proper application for their custody; in fact, the system became so intolerable, and the children got more unmanageable, that the guardians some two years ago were glad to make arrangements with the Manchester Board to take them into their schools at Swinton. When the arrangements had been made the governor put up a notice on the door of the workhouse stating the fact of the removal of the children, and before the time for their departure some half-dozen or so were taken out of the house. The plan in Wigan might be termed a total failure, although it was the wish of the guardians, master, and matron to keep to this plan. Already I am told there is a marked improvement in the children that have been sent to Swinton schools.

The Halifax guardians are apparently in advance of their time, but it would be a good thing if all boards of guardians could carry out the plan of Poor-law arrangements mentioned in Dr. Dolan's letter under the three several heads.—I am, etc.,

Wigan, May 8th. WM. BERRY, J.P., F.R.C.S.I.

SIR,—Reading the admirable letter of Dr. Th. W. Dolan *re* the education of workhouse children it occurred to me that it would be a good idea if the medical officers of the different workhouses would suggest to their guardians the advisability of imitating the example of the Halifax Board of Guardians and allowing the children to attend the public elementary schools. I was for some years a guardian of the poor, and could advance many reasons to commend the practice, and I sincerely hope the idea will not be lost sight of, and that the medical officers, who by their position must have considerable influence with the guardians, will exert their power on behalf of the poor children.—I am, etc.,

E. MAGENNIS, M.D., J.P.

Lurgan, co. Down, May 6th.

NEPHROTOMY AND NEPHROLITHOTOMY FOR SUPPRESSION OF URINE.

SIR,—The case reported in the BRITISH MEDICAL JOURNAL of May 5th, p. 960, in which Mr. Wheelton Hind operated in a case of total suppression of urine and removed several calculi from the kidney and upper end of the ureter will, I trust, be a means of drawing the attention of the profession, and especially of physicians, to the necessity of seeking operative treatment in cases of calculous suppression, and that, too, before the patients pass into an extreme condition.

Though cases have been related in which recovery has taken place after the passage of a calculus *per vias naturales* which has caused suppression of urine for as long as fourteen days, yet there is much need for impressing the fact that, in the majority of cases, if the calculus does not pass in the course of two or three days after suppression has set in, the patients will die within a period more or less than a week.

As long ago as October, 1884, I wrote: "In cases of sudden or rapid suppression of urine, or anuria occurring after symptoms which have given rise to a suspicion of stone in one or other or both kidneys, death must ensue if the obstruction is not removed or overcome. A kidney which has undergone compensatory hypertrophy may become blocked by a calculus which has been forced by the superimposed urine to the lower end of the ureter, and which cannot pass the vesical orifice of the ureter. Such a kidney may be, and probably is, the only one the patient has to depend upon. In such cases life may be saved by giving a vent to pent-up urine by lumbar nephrotomy." Very little progress has, however, been made towards the proper recognition and thorough establishment of this mode of treatment.

The medical mind is slow to accept and recommend surgical operations in doubtful cases as long as there is a gleam of hope that drugs may do good. Thus it is still with calculous suppression of urine, as it used to be, and still too often is, with intestinal obstruction, that no operation is permitted at all, or, most probably, no operation is suggested until the patient's condition is extreme or hopeless.

I have been called to see some few such cases, but never till five or six days or more after the suppression has become complete. In some of these cases operation has not been allowed, in some the suggestion of operation was not even entertained, in others the operation has been performed, the re-establishment of the secretion of urine has followed the nephrotomy,

but all too late to save the patient, who had been worn out by vomiting and restlessness, weakened by remedies and exhausted by want of sleep, or poisoned by the retention of the elements which the kidney had ceased to eliminate from the system.

In one case in which I advised an operation I was told by the medical attendant that the patient had been seen the day before by a physician who had stated that no surgeon in his senses would propose any operation in the case. Yet a few days later I was suddenly summoned to operate upon this patient immediately after he had been seen for the first time by Dr. Dickinson, who had at once pronounced that nephrotomy gave the only chance. It was, however, too late; the patient died before I reached him.

In another case the patient had been daily seen by a physician and a surgeon, and day after day the calculus was waited for till it should reach the bladder, where it was to have been crushed and removed. The calculus, however, did not behave as it was expected to do, so on the sixth day I opened an enormously hypertrophied and congested kidney, and the operation was immediately followed by a very abundant excretion of urine, which continued till the patient died from the exhaustion of his illness, thirty-six hours after the operation.

There is every reason to believe that if in these cases the kidney was opened on the second or third day after suppression began, a large number of lives would be saved; and it is therefore to be hoped that after attention has been again and again called to this matter the profession will at length recognise the desirableness of early surgical treatment.

There will, of course, often be difficulty in deciding on which side to operate, but after a full consideration of the history of the case this doubt will generally be rightly settled; and even if the difficulty be very considerable, it will be much better to operate upon one side after the other than to allow the patient to die from want of relief to the kidney and outlet for the urine.—I am, etc.,

Cavendish Square, W., May 5th. HENRY MORRIS.

THE OPERATION FOR TOTAL SUPPRESSION OF URINE.

SIR,—In publishing the interesting case of calculous suppression of urine in the BRITISH MEDICAL JOURNAL of May 5th, Dr. Wheelton Hind appears to be unaware that I successfully carried out the operation of relieving a plugged single kidney of its obstructing stone as far back as 1885. One kidney I had previously removed on account of its complete destruction by some 21 ounces of stone, and it is preserved in the Guy's Hospital Museum. Thanks to the interest taken in the case by Mr. F. D. Atkins, of Sutton, when total suppression occurred from a stone plugging the orifice of the other kidney, I again had an opportunity of operating. I operated on the fifth day of total suppression, and removed the obstructing calculus from the remaining kidney. The patient made a rapid recovery, and I was able to show her in perfect health six years later before the Royal Medical and Chirurgical Society, and the case is published in the *Transactions* for 1891. I hear from Mr. Atkins that she remains in good health at the present time, now nine years since the operation.

Dr. Hind comments on the indefinite symptoms present in his case, though one kidney was destroyed and the other plugged by calculi. There was, however, a very strongly marked arthritic diathesis, and nothing is more variable than pain as a symptom of renal calculus. I remember a case being shown at the Hunterian Society, where both kidneys and the gall bladder were choked with stones, yet the patient (who died of sarcoma of the heart) had never complained of pains or symptoms indicative of these conditions. In other cases the pain may be intense, and the only symptom suggestive of operation. One constantly hears of persons of arthritic diathesis being ill with so-called "gout in the stomach," and I am convinced that a large number of such attacks are referable to renal disturbance, with which the stomach so readily sympathises.—I am, etc.,

R. CLEMENT LUCAS, B.S.LOND., F.R.C.S.,

May 5th. Surgeon to Guy's Hospital.

ASSISTANT MEDICAL OFFICERS IN ASYLUMS.

SIR,—There appears to be a general consensus of opinion that the status of these officers should be discussed before the British Medical Association, and at the same time an unwillingness of individuals to come forward and open the discussion. In these circumstances, and as I have paid a good deal of attention to the matter, I shall have much pleasure in starting a discussion, and I shall be obliged if any person interested who is unable to attend the meeting at Bristol will forward to me any information or suggestion that may usefully be brought before it.—I am, etc.,

Catford, April 27th. CHAS. MERCIER.

A LUNACY STATE MEDICAL SERVICE.

SIR,—I notice from time to time in the BRITISH MEDICAL JOURNAL letters of complaints from medical officers of lunatic asylums as to their duties and rights. I also notice in the lay press complaints as to the quality and character of the male and female subordinate attendants in such asylums. I would like to ask (1) why a real organic change should not be made in the organisation of this highly important branch of the public service?

2. Why are not the lunatic asylums of the country, now supported out of municipal and county rates, centralised and made a national charge, and so relieve to a certain extent local taxation?

3. It seems to me impossible for an asylum superintendent to run his asylum and at the same time be worried with choosing his officers and his male and female subordinate staff. A single asylum cannot provide sufficient choice in either officers or subordinates to develop a really efficient corps.

4. What seems needed would be as follows:

(*a*) The centralisation of lunatic asylums under the Lunacy Commissioners as an administrative body and a director-general as an executive head.

(*b*) The charges for upkeep of fabric and staff to be a national charge and no longer a local charge.

(*c*) All existing lunacy medical officers to be placed on a graded list exactly as we are in the army. Entrance to be by public competition. Pay to rise in graded steps from surgeon to director-general.

(*d*) A probationary period of study and instruction at a central asylum, with special lectures and practical demonstrations to be passed before assignment to an appointment.

(*e*) A corps of male attendants, like the Medical Staff Corps, to be specially recruited like the police, sent to a central dépot to be trained, and graded into ranks like police or prison warders; promotion to go on through the corps, and examinations to be passed for each grade.

(*f*) A corps of female attendants, to be likewise trained and organised.

(*g*) Visiting committees of the county councils to remain as visitors of the State asylums.

(*h*) Leave, retirement rules, pension regulations, general internal discipline, and organisation to be on the lines of the Army Medical Service.

From the central training school officers and attendants would be sent out to stations just as the medical officers and their corps are sent. Emergencies caused by illness, leave, or pressure of work would be met out of the central reserve of medical officers at the training school. I think economy would result in this system, as men will come into a State service with assured status and salary more readily than into any local appointment.

To my mind the medical profession is to-day absolutely unorganised. Organisation must begin by detail, and the time for dealing with lunacy specialists seems to have drawn very near.

The sphere of county or borough appointments should be limited to such appointment as a county or burgh can supply. No county can guarantee to meet the demands of supplying efficient lunacy doctors. The appeal should be to a larger body—namely, the nation. I maintain that just as the Army Medical Service is slowly working out its evolution as a State medical service, so for good or ill the civil profession in special sections of its employment is bound to follow.

As there is much difficulty and danger to purely private physicians certifying in lunacy cases, why should not a cer-

tain number of specialists in lunacy be attached to certain district lunatic asylums in addition to the ordinary visiting staff, and be available for consultation and certification in case of supposed lunacy? They might also visit lunatics who are in Poor-law charge.

GEORGE EVATT, M.D.,
Woolwich, May 7th. Surgeon-Lieutenant-Colonel.

THE RECENT SOUTH WALES DIVORCE SUIT: THE GRIFFITHS FUND.

SIR,—On Monday, May 7th, a representative meeting of the medical profession in Swansea and the neighbourhood, under the chairmanship of Mr. Jabez Thomas, consulting surgeon to the hospital, was held in order to emphasise in some practical manner the vote of sympathy with Dr. Griffiths passed at the Neath meeting of the South Wales Branch of the British Medical Association on April 26th. It was agreed unanimously that such a step was called for, both on account of the great anxiety and pecuniary loss which Dr. Griffiths had suffered through having to meet the unfounded charges brought against him in the recent divorce suit, Gwynne-Vaughan *v.* Gwynne-Vaughan and Griffiths, and also as a protest on the part of the medical profession against the reckless fabrication of such accusations against its members.

It was also felt that the profession as a whole is indebted to Dr. Griffiths for the plucky manner in which he insisted, at whatever cost to himself, in meeting and disproving these charges in open court, thereby rendering less likely the repetition of similar attempts at blackmail to which medical men are but too often exposed.

Although Dr. Griffiths had his costs in the action awarded him, nevertheless, even should his taxed costs be eventually paid (which seems doubtful), he will still be the loser of a sum amounting to £1,000 or more, apart from the loss in practice which he must have sustained during the fourteen months the trial was pending.

At the above mentioned meeting it was unanimously resolved to invite the assistance of the profession towards recouping him for these heavy losses, and to request you to kindly allow us to acknowledge subscriptions through the BRITISH MEDICAL JOURNAL.

Contributions may be forwarded to either of the honorary secretaries.

Appended is a list of the subscriptions already received or promised.—We are, etc.,

E. LE CRONIER LANCASTER, Winchester House, Swansea.
W. F. BROOK, Northampton Terrace, Swansea. } Honorary Secretaries.

P.S.—Subsequently to this movement among the medical profession in South Wales a letter appeared in the South Wales newspapers signed by the following: William Pike (Mayor); Morgan B. Williams (High Sheriff), Cawdor, Dynevor, Swansea; J. T. D. Llewelyn, Bart.; J. Coke Fowler (Stipendiary Magistrate), inviting the friends and patients of Dr. Griffiths to contribute towards a testimonial fund. Any medical man who may already have sent their subscriptions to the public fund are requested to forward their names to us in order that the amounts may be acknowledged in these columns.

Swansea, May 8th.

THE GRIFFITHS FUND.

	£	s.	d.		£	s.	d.
J. H. Wattsen, Clifton ...	25	0	0	John Evans, Swansea ...	1	1	0
Sir Geo. Edwards, per J. H. Wattsen	25	0	0	J. Soden, ,, ...	1	1	0
D. Hovell Thomas, Swansea	10	10	0	R. Nelson Jones, ,, ...	1	1	0
Evan Jones, Aberdare ...	3	3	0	H. E. Charles, ,, ...	1	1	0
Jabez Thomas, Swansea ...	1	1	0	J. Bevan, ,, ...	1	1	0
W. C. Humphreys, ,, ...	1	1	0	Joseph Davies, ,, ...	1	1	0
R. C. Elsworth, ,, ...	1	1	0	J. M. J. Powell, ,, ...	1	1	0
E. Forsyth, ,, ...	1	1	0	E. le C. Lancaster, ,, ...	1	1	0
A. Lucas Morgan, ,, ...	1	1	0	W. F. Brook, ,, ...	1	1	0
A. D. Davidson ,, ...	1	1	0	Arnault Jones, Aberavon	1	1	0
				C. L. Worrall, Swansea ...	0	10	6

MIDWIVES' REGISTRATION.

SIR,—The "answer" of your correspondents Drs. Boxall and Humphreys contains no answer to the questions I asked in my letter in the BRITISH MEDICAL JOURNAL of April 28th.

They assert, however, that I am incorrect in associating the "Midwives' Registration Association" with the previous abortive attempts that have been made to legalise practice by midwives; and that it is their new association that is about to try its 'prentice hand in the art of legislation. It is a matter of little importance.

Their statement that the majority of the Lancashire and Cheshire Branch is willing "to subordinate the interests of the community to problematical considerations affecting the medical profession" is false, and a gross impertinence as well.

The resolution passed by the South Wales Branch is truly refreshing in its *naïveté*, for while the "Midwives' Registration Association" "has still under consideration the principles upon which future legislation might be based,"[1] this Branch at its meeting five days later "upholds the principles (?) advocated by the Midwives' Registration Society."

Surely there is some confusion of ideas in the South Wales Branch.—I am, etc.,

COLIN CAMPBELL,
Hon. Sec. Lancashire and Cheshire Branch Committee.
Saddleworth, May 5th.

SIR,—I beg to enclose a resolution passed at a special meeting of the undermentioned Society, and shall be glad if you will insert it in your next issue.—I am, etc.,

Manchester, May 5th. ARCHIBALD DONALD.

At a special general meeting of the North of England Obstetrical and Gynæcological Society, called to consider the policy of the Society in regard to the midwives question, the following resolution was carried unanimously:

> That this meeting is of opinion that it would be for the advantage of the public and of the medical profession if midwives were better educated, and also controlled in their practice.

CASTRATION IN ENLARGEMENT OF THE PROSTATE.

SIR,—In reference to a letter published on the above subject in the BRITISH MEDICAL JOURNAL of September 30th, 1893, I now beg to draw attention to the particulars of two cases published by Ramm (wrongly spelt Rocum), of Christiania, in the *Cent. für Chir.*, No. 17, April 28th, 1894 (see also No. 35, 1893), in which he performed bilateral castration in old men suffering from enlargement of the prostate. The particulars of the cases are as follows: (1) Man, aged 73 years, who suffered from retention of urine in the early part of 1893, had difficulty in making water for the previous fifteen years. During the last year he passed water almost hourly. The prostate, as felt *per rectum*, was about the size of a medium-sized orange. On April 3rd, 1893, bilateral castration was performed. Twelve days after he was shown before the Medical Society at Christiania. Three days after operation the prostate was distinctly smaller, and it has since steadily diminished, being now a flat mass. After the operation and during the first two months the catheter was passed three or four times to relieve temporary retention. Now he passes water as well as he ever used to, and has only to empty his bladder twice during the night. (2) Man, aged 67½ years, who, six years ago (1886) had retention, had suffered for fourteen years from difficulty in making water. A year ago (1892) he again suffered from retention, and the bladder was punctured above the pubes; cystitis occurred, and soon became chronic. On April 17th, 1893, the prostate was very large, and its upper border could only just be reached by the finger in the rectum; the bladder was distended, reaching near to the umbilicus. After much trouble the urine was withdrawn by a catheter. On April 25th, 1893, bilateral castration was performed. During the night following the operation he passed a good stream of urine; and on May 6th (eleven days after the castration) the prostate was distinctly diminished. About the end of May—that is to say, six weeks after the operation—he could stand up and pass a good stream of urine. At the present time the prostate, which was so large, is a small flat mass with a median ridge in the position of the urethra. He now passes water four to five times only during the day and once only at

[1] See BRITISH MEDICAL JOURNAL, April 21st, 1894.

night, all the difficulty in making water and the cystitis having completely disappeared.

Ramm concludes with the following remarks: (1) The prostate is one of the genital glands; (2) it attains its full size after or during the acquirement of the sexual function: (3) in failure of development of the genital organs (testes) it remains small, as it does after castration before the onset of puberty; (4) castration (bilateral) causes in the adult atrophy or shrinking of the gland; (5) the hypertrophied prostate shrinks after bilateral castration; some days after castration there occurs some diminution in the size of the gland, and this goes on steadily for some time; (6) this diminution of the enlarged prostate after castration can be made use of in the treatment of difficulty in making water resulting from mechanical interference with the urethra from the simple enlargement of the gland.—I am, etc.,

Cambridge, May 4th. JOSEPH GRIFFITHS, M.D., F.R.C.S.

ARE MINISTERS OF RELIGION RIGHTLY ENTITLED TO THE GRATUITOUS SERVICES OF THE MEDICAL PROFESSION?

SIR,—As I see no notice has been taken in the BRITISH MEDICAL JOURNAL of March 17th of the article under the above heading in the JOURNAL of March 10th, p. 546, may I request you will kindly permit me to say a few words on the other side of the question?

First, I may state I am the son of a clergyman "who pays his doctor;" secondly, I am and have been a member of the medical profession now for some years, and as such, I think, I can safely affirm that there is not an indiscriminate gratuitous attendance on ministers of religion and their families, any more than there is an indiscriminate gratuitous attendance by dentists on members of the medical profession and their families. The fees may not be so large to ministers as to laymen, but that they are charged by very many medical men, and willingly paid by many ministers, is, I feel sure, the case, just as there are many ministers and their families who receive gratuitous advice from medical men as willingly as it is offered. Under these circumstances it seems to me the writer of the article has gone somewhat out of his way to cast a slur (quite unintentional, let us hope), both on ministers of religion and on ourselves.

Paragraph 1 implies that "the popular doctor," tired and weary, would turn out and render his services willingly if he was paid for them, but if the minister was not going to pay him he would refuse to do so. It also implies that the minister that pays may be peremptory in his demand, and use language which he could not or would not use if he did not pay. The next sentence implies that the paying minister can enjoin prompt attention, but not the unpaying minister. Does the profession generally agree to these sentiments? I trow not. I hope we are as careful with our non-paying patients, *cæteris paribus*, as we are with those who pay us.

I fail entirely to see how the minister that courteously accepts the service we render to him gratuitously becomes a "clerical mendicant" any more than the medical man becomes a medical mendicant when accepting gratuitous advice from another doctor or of some popular minister towards whose stipend he has not contributed a brass farthing. With the first half of his next sentence I fully agree, but I would ask how many ministers receive an adequate stipend, and have we not now the means of helping them under the present circumstances which we should not have if the old order should change?

In conclusion, it appears to me Sir Thomas Watson's advice, quoted at the end of the article, puts the matter in a nutshell, and appears to let each one do as he is disposed in his heart. By all means let the well-paid minister be charged as he is now, but do not force your neighbour to charge a poor curate, and let us always remember an archbishop may die and leave his family almost penniless, without, as far as we can know, any fault of his own.

The clergy have great expenses, much is expected of them, and the hard times have hit them harder than most people: let us rejoice a custom exists which enables us, if we wish it, to lend them a helping hand in the time of their dire necessity without in any way pauperising them or causing them to consider that they incur to a greater or less extent a loss of the respect due to them from the community.—I am, etc.,

Meiktila, Upper Burmah, April 12th. G. F. POYNDER, Surgeon-Major, Army Medical Staff.

DEATH UNDER CHLOROFORM.

SIR,—The record of five deaths from anæsthetics in the BRITISH MEDICAL JOURNAL of May 5th brings this question again painfully to the front.

"A London Anæsthetist" says: "The practice of England and Scotland has become one. The rule of watching the respiration under chloroform has become universal." This may be so, but there remains a difference between the teaching of Syme and Simpson on the one hand and that of Dr. Snow and the London Committee on the other which the writer has not even noticed. The former recommended the induction of deep anæsthesia, and "as speedily as possible;" the latter taught the very opposite. What Syme taught he invariably practised, and such a case as that of the boy at Liverpool, who was struggling and shouting immediately before syncope occurred, could never have happened in his theatre. Now, the practice of Syme in this respect, so far from having extended to England, has not become universal, even in Scotland, and therefore I demur to the conclusion of the writer above mentioned that Syme's rules have not secured safety under chloroform. The most important of them all has never been universally tested. There is still, as the same writer says, much room for disputation. I think I have shown satisfactory evidence, as far as it goes, in favour of the view that primary syncope is due to the reaction which ensues when the vapour escapes from the lungs at an early stage. The symptoms attending this reaction can be determined with great certainty in the cat, and all that seems wanting to complete the evidence is that tracings of the blood pressure should be taken.—I am, etc.,

Glasgow, May 7th. ROBERT KIRK, M.D.

MEDICO-LEGAL AND MEDICO-ETHICAL.

MEDICAL CLUBS AND THE TRUCK ACT.

THE House of Lords has affirmed the decision of the Court of Appeal and of the Queen's Bench in regard to the legality of deductions from weekly wages for the payment of subscriptions to sick clubs. The importance of this decision is very obvious. In many cases if the wages were first paid in full and the club money then collected back again, the expenses of management would run away with a large proportion of the subscriptions; and there can be little doubt that if the power of withholding the money at the pay desk were withdrawn, the very useful sick clubs connected with many large industrial establishments would quickly cease to exist. Not only would there be the constant difficulty and expense of collection, but it would be impossible for a firm to enforce the essential rule that all its employees should become members.

FEES TO MEDICAL WITNESSES AT INQUESTS.

MEMBER asks: Is not a coroner legally bound to pay a medical witness the fee immediately after the inquest? And, Can a medical man refuse to give evidence if the fee is not prepaid?

*** Our correspondent must remember that in a coroner's court he is a witness on behalf of the Crown, and that as such he is bound on summons to attend and give evidence, fee or no fee; and that in default he is liable to fine or commitment for contempt of court. With regard to payment of fees, the coroner, by Act of Parliament (see Coroners Act), is bound to advance and pay the fees of all witnesses immediately on the termination of the inquest, and for neglect to do so he is liable to severe reprimand from the Lord Chancellor.

THE CORONER'S COURT.

"ANXIOUS" sends us the report of an inquest, from which it appears the nurse of a cottage hospital is called to give evidence, and informs the jury that the deceased was admitted with a fractured leg, that amputation ultimately was performed, and that some weeks after death occurred from Bright's disease. No medical evidence was called, and the jury returned their verdict as to the cause of death, relying on the statements made by the nurse. Our correspondent inquires "whether the coroner was exceeding his duty in admitting the evidence of the nurse (as medical) without calling for the evidence of one of the several medical men who attended the deceased?"

*** It is usual, but optional, on the part of the coroner to summon a medical man to give evidence at the first sitting of the inquest, but if the jury are not satisfied then with the evidence of the witnesses present, as to the cause of death, they can adjourn and request the

coroner to summon a medical witness, whom they have the privilege of naming. In the present case, we can only presume that the coroner and jury were satisfied with the testimony of the witnesses, including that of the nurse, upon which no doubt the verdict as to the cause of the death was based. We do not approve of this method of holding inquests, as we consider that in every case the testimony only of a duly qualified medical man should be received as evidence of the cause of death. No other court or judge would be satisfied with less than this, and all deaths registered without it are classified by the Registrar-General as "uncertified." Coroners, whether legal or medical, should not forget that although their court in cases which terminate in criminal proceedings may be only a court of first instance, yet in ninety-nine out of every hundred cases the verdict of the jury is final, and, therefore, as a court of inquiry and a court of record, all its investigations should be conducted in a strictly legal manner, and the best and most reliable evidence should always be obtained. It is painful to contemplate the laxity in the proceedings of a court which is satisfied with hearsay evidence only and testimony of little value, when it h d immediately at its command the direct evidence of skilled witnesses.

MIDWIFERY FEES.

H. W. B.—If our correspondent will refer to the *Medico-Chirurgical Tariffs* (or the *Manchester Medical Tariffs*), he will find, under the heading of "Explanatory Notes. No. 11, Midwifery," that he is justly entitled to his very moderate charges for the attendance and medicine; and, in response to his further question, we would remark that if the husband of the deceased lady still declines to pay, we would counsel him to consult his solicitor, rather than personally refer the matter to the decision of the county court judge. The rule in question is to the following effect: "The obstetric tariff necessarily admits of considerable latitude in regard to the fee, consequent on the oft prolonged and harassing attendance in cases of difficult labour, and the varying pecuniary position of the several classes of society. The fee, moreover, from long-established custom is generally understood to include a visit or two during the week after delivery, if within the prescribed distance of an ordinary visit; but for any indisposition in the mother or child subsequent to the seventh day, or when any serious ailment occurs to either within that period, a charge should be made for each visit and detention as in ordinary cases of disease."

A SUMMARY MEDICAL OFFICER.

O. R. M. W. writes: I was called up early yesterday morning to see B., in a parish 1½ mile off, he having cut his throat. I went at once, attended to the man, stopped the hæmorrhage, dressed the wound, etc. B. was suffering from shock, and I told the friends to nurse him at home, as he was not in a fit state to be moved seven miles to a hospital, and that I would call in the afternoon and see him again. In the forenoon, B.'s wife obtains a parish medical order and takes it to Mr. S., he attends, and without any examination or without listening to what I had told the friends, orders the man off to the hospital. I was just starting to see B., in the afternoon, when a policeman calls to tell me of Mr. S.'s attendance, and of the removal of B. Mr. S. made no communication to me. Would it not have been etiquette for him to have communicated with me first before taking steps as he did?

*** If, as we assume, the above narration of the case conveys a fair summary of the facts, the parochial medical officer on seeing, as he could not fail to do, the dressed wound of the poor would-be suicide, should not only have calmly listened to the friends' proffered information as to the instructions given by the attendant practitioner, but have subsequently communicated to the latter, in person or by note, his reasons for disregarding them, and ordering the immediate removal of the patient to the hospital; and in omitting so to do, the medical officer undoubtedly failed in his medico-ethical duty to a professional brother. Our correspondent's allegation, moreover, leads to the inference that the medical officer must either have regarded the surroundings of the patient as calculated to imperil his recovery, or that he himself was averse to be troubled with the tragical case, as it was not unlikely to necessitate one or more daily journeys.

CONTRACTS IN RESTRAINT OF PRACTICE.

J. H. K.—We fear we are unable to offer any useful suggestion on the special case referred to in our correspondent's letter. We gather that the contract for sale and purchase of the practice was held to be complete without the restrictive condition as to user of the residence, and that the latter condition, although contained in an agreement prepared by the solicitor of the parties, was unsigned by the vendor. In order to support such a condition, it would probably be essential to show that it was a part of the consideration, and was agreed to in writing. The counsel engaged in the case on behalf of our correspondent doubtless did all that was possible in the interest of our correspondent, and he will be well advised to act on their opinion.

ALLOWANCE FOR SICKNESS BETWEEN PARTNERS.

Arbitrator writes: A sold his practice to B., giving him a two years' introduction. About half the purchase money was paid down, and the rest was to be handed over at the end of period. B. was to reside with A., paying a fixed sum weekly for board, etc. The expenses purely in connection with the practice were to be deducted from total receipts, and the net amount equally divided. There was no clause in the agreement relating to illness. After one year of the introduction had passed B., the purchaser, was taken ill, and had to go to his parents. He has now returned after six months' absence, the practice in the meantime having been carried on by A. alone. What would be a fair arrangement between the two regarding the six months?

*** We are not aware of any settled rule governing the case referred to by our correspondent, and any suggestion made on the subject would be open to criticism. It would not however, we think, be an unreasonable arrangement for A. to take the profits and bear the losses for the six months, paying B. a sum equivalent to interest at 5 per cent. on the purchase money he has actually paid, the latter not paying anything in respect of apartments.

AN UNGENEROUS RIVAL.

Member B. M. A. writes: I was lately called in to see a patient who was said to have fallen down in a fit and broken her leg. On examination I found a dislocation, which I reduced and temporarily applied a cold-water bandage to. As the patient was frequently subject to epileptic fits, and her guardian (A.) was unable to give her case the necessary attention at home, he applied to the relieving officer to have her removed to the workhouse infirmary. This officer being away from home at the time, A. was directed to B., who is the medical officer to the board of guardians. A. explained the case to B., who sent him to his partner, C. C. thereupon visited the patient, and although he was told that I had already visited and treated the case, examined the limb, ordered hot fomentations to be applied, and promised to call next morning and bandage it. I was informed of this at my next visit to the patient, and at once wrote to C., asking him if he was aware that the patient was already under my treatment, but have had no reply from him yet, although it is over a week since he received my letter. I may also mention that C. did, after the receipt of my letter, visit the patient again the next morning, and, in the course of conversation, not only criticised my treatment, but gave A. to understand that I was not a registered practitioner.

*** Assuming that the above statement fairly represents the facts, there can be no reasonable doubt that the course of action pursued by C, was, medico-ethically, indefensible and calculated, moreover, to produce an unjust imputation on the professional position of our correspondent; thereby he not only exposed himself to severe medical criticism, but, if unretracted, probably to legal conviction for defamation.

NAVAL AND MILITARY MEDICAL SERVICES.

MEDICAL OFFICERS IN WEST AFRICA.

Major Fairtlough, in his official report of the West African expedition against the Sofas, speaks of Surgeon-Major A. H. Morgan as especially active in the arrangement of his particular department, and, with Surgeon-Captain C. L. Josling, as having done good service in the field.

Admiral Bedford calls attention "to the services of Fleet-Surgeon W. R. White, who, although wounded himself, has been unremitting in his attention to the wounded; also Surgeon F. W. Collingwood, lent from the *Widgeon*, who has had care under the Fleet-Surgeon of the patients remaining on board. The speedy recovery of many men in hospital I ascribe to the care and attention given by Surgeon C. J. Fyfe, whom I placed in charge of the sick quarters, where some of the most critical cases were treated."

The Lords Commissioners of the Admiralty, in acknowledging the receipt of Admiral Bedford's despatch, endorse the recommendations made by that officer, and express their commendation.

Of Surgeon W. Bowden, his superior officer Colonel A. D. Corbet, Royal Marines, writes: "I beg to bring to notice the meritorious services rendered by Surgeon W. Bowden, R.N., in medical charge of the column under my command lately operating in British and Foreign Combo. Cool under fire, this officer's services were especially useful during the action at Sabbajee, where, owing to various circumstances, there was but one combatant officer besides myself present.....In this officer's care I placed the reserve ammunition, and charged him with the duty of issuing it as required. To his practical care I attribute the fact that during the operations, extending over about fourteen days, no man was incapacitated from marching, through sore and blistered feet—a detail of no small importance.....Surgeon Bowden was, on one occasion, somewhat severely scorched."

THE NAVY.

Deputy-Inspector-General Henry Hadlow has been placed on the retired list, at his own request, with permission to assume the rank of Inspector-General of Hospitals and Fleets, May 7th. Appointed Surgeon, July 22nd, 1859, he was made Staff-Surgeon, December 8th, 1868; Fleet-Surgeon, September 20th, 1880; and Deputy Inspector-General, May 3rd, 1889. He was Assistant-Surgeon of the *Conqueror* at the attack on the

batteries in the Straits of Simonosaki, Japan, from September 5th to 8th, 1864. He has received Sir Gilbert Blane's gold medal.

Surgeon B. S. MENDS has been allowed to withdraw from Her Majesty's Naval Service with a gratuity. His commission was dated February 26th, 1883.

The following appointments have been made at the Admiralty: EDWARD J. BIDEN, Staff-Surgeon, to the *Melita*, May 5th; W. J. COLBORNE, Surgeon, to the *Ruby*, May 5th; O. W. ANDREWS, Surgeon, to Haslar Hospital, May 5th; HENRY L. CROCKER, Staff-Surgeon, and EDWARD B. PICKTHORN, Surgeon, to the *Rodney*, May 30th; ALEXANDER L. CHRISTIE, Staff-Surgeon, to the Portland Sick Quarters, May 30th.

ARMY MEDICAL STAFF.

SURGEON-MAJOR OSWALD G. WOOD, M.D., is promoted to be Surgeon-Lieutenant-Colonel, March 30th. He was appointed Surgeon, September 30th, 1883; and Surgeon-Major, March 30th, 1886. He was in the Egyptian war of 1882, and was present at the battle of Tel-el-Kebir, receiving the medal with clasp and the Khedive's bronze star.

Surgeon-Majors L. B. WARD, W. B. MILLER, M.D., JOHN MARTIN, J. J. GREENE, M.B., NATHANIEL MCCREERY, and J. A. GORMLEY, M.D., who entered as Surgeons, March 31st, 1874, and were made Surgeon-Majors twelve years therefrom, are promoted to be Surgeon-Lieutenant-Colonels from March 31st. All these officers have seen war service: Surgeon-Major Ward in the Afghan war in 1878-79, and present at the attack and capture of Ali Musjid (medal with clasp). Surgeon-Major Miller in the Egyptian war of 1882, and present at the action at Kassasin on August 28th (mentioned in despatches, medal, and Khedive's Star). Surgeon-Major John Martin in the Egyptian war of 1882 (medal, and Khedive's Star); and with the Burmese Expedition in 1886-87, as personal assistant to the Surgeon-General (medal with clasp). Surgeon-Major Greene in the Afghan war of 1878-80 (medal); with the Nile Expedition in 1884-85 (medal with clasp, and Khedive's Star); and in the operations of the Soudan Frontier Field Force in 1885-86. Surgeon-Major M'Creery with the Nile Expedition in 1884-85 (medal with clasp, and Khedive's Star); with the Soudan Frontier Field Force in 1885-86; and in the operations near Suakin in December, 1888, including the engagement at Gemaizah (mentioned in despatches, 3rd Class of the Medjidie, clasp). Surgeon-Major Gormley during the operations in the Malay Peninsula in 1875-76 (medal with clasp); in the Afghan war of 1878-80 in medical charge of the 51st Light Infantry, taking part with the expeditions against the Mohmunds and into the Hissarik Valley (medal); in the Boer war of 1881; and with the Nile Expedition in 1884-85 (medal with clasp, and Khedive's Star).

Surgeon-Captain H. C. DENT, who was placed on half pay on account of ill-health, March 31st, 1889, is now placed on retired pay from March 31st last. He entered the service August 1st, 1885.

INDIAN MEDICAL SERVICE.

SURGEON-CAPTAIN THOMAS HOWARD GRIFFITH, 19th Bombay Infantry, died at Mhow, Central India, aged 33. He was a son of Sir W. Brandford Griffith, Governor of the Gold Coast Colony, West Africa. His commission was dated October 1st, 1887.

Brigade-Surgeon-Lieutenant-Colonel J. F. KEITH, M.D., Bombay Establishment, is permitted to retire from the service from April 1st. He entered the service as Assistant-Surgeon, September 30th, 1857; attained the rank of Surgeon-Lieutenant-Colonel, September 30th, 1887; and became Brigade-Surgeon-Lieutenant-Colonel, September 15th, 1892. He served in the Abyssinian war in 1868 as Assistant-Surgeon, attached to the General Hospital at Zoulla (medal); in the Afghan war in 1880, being present at the battle of Candahar (medal with clasp); and with the Burmese expedition in 1886-88 (medal with two clasps).

Surgeon-Colonel JOHN RICHARDSON, M.B., Bengal Establishment, has also retired from the service. He was appointed Assistant Surgeon, July 27th, 1859, and rose to be Surgeon-Colonel, April 19th, 1889. He was with the Bhootan expedition in 1864-66, was present at the storming of the Bala stockade, and received the Frontier medal with clasp.

THE VOLUNTEERS.

MR. AUGUSTUS WILLIAM DALBY is appointed Surgeon-Lieutenant to the 3rd Volunteer Battalion the Prince Albert's Somerset Light Infantry (late 3rd Somerset), May 5th.

SELECTION IN THE ADMINISTRATIVE RANKS.

THE exceeding and increasing difficulties which beset administration of the Medical Staff in the administrative ranks themselves have of late become more and more complicated, until for their cure a service contemporary suggests promotion by selection. This kind of promotion indeed exists theoretically, and to a certain extent practically, in all the ranks of the Medical Staff, and is carried out in the lower by examination. Such a test, however, has been very wisely abandoned in the higher ranks, because the competence or otherwise of an officer who has served and been steadily reported on for twenty years must, or ought to be, sufficiently known at headquarters. But to brigade and the two purely administrative ranks promotion of late has been by mere seniority, untempered by selection, unless in two or three exceptional cases. The seniors in these ranks, indeed, look for and receive promotion as a matter of course, the broad result being that promotion to surgeon-colonel is delayed until the majority are well over fifty years of age, and have only six or eight years to run until compulsorily retired at sixty. The situation is also aggravated by the three years in a rank rule for pension, by three years to run before appointment to India, and eighteen months to other foreign stations. As a matter of fact, many surgeon-major-generals have not three years to run in the rank altogether. The difficulties in administration, therefore, are such that nothing but constant shuffling and continual movement in the ranks can keep matters going at all; and this can only be done at great loss to the officers themselves and grave detriment to the army at large. It is not possible for an administrative medical officer to take any proper interest in his local duties when he is conscious that an accident to one or two men above him may suddenly send him to the other end of the earth. It is no wonder that "general officers in command naturally feel aggrieved when such frequent transfers take from them their trusted advisers." Sometimes, indeed, we hear of injudicious moves and transfers, but the fault lies in the system, and not with those who have the thankless duty of carrying out the impracticable. If the remedy really lies in selection for promotion there is probably no good reason why it should not be carried out in the medical as in the other administrative and command ranks in the army. It is pointed out "no hesitation is felt in selecting officers for divisional, brigade, and regimental commands;" it is also carried out in the Army Pay Department and largely in the Indian Medical Service. Selection is always a delicate and sometimes an invidious duty, but it must be faced if shown to be desirable or necessary. Of course, in the medical as in other branches of the army selection would have to be combined with limitation of tenure in appointments, with reversion to half pay until final retirement; otherwise the selected men would have a most unfair advantage. The question is no doubt beset with very considerable difficulties, but they cannot be insuperable if overcome in other branches of the service.

MOBILISATION OF THE MEDICAL STAFF CORPS.

THE *Broad Arrow* has the following remarks on the mobilisation of the Medical Staff Corps at Aldershot, as indicated by the Secretary of State for War in reply to Mr. Arnold-Forster in the House of Commons on April 23rd: "The mobilisation of the Medical Staff Corps at Aldershot promises to be as complete as it is possible to make it. It is understood that the War Office has made a liberal grant of funds for special expenses, and the work will be carried out with considerable detail. With four field hospitals and four bearer companies, which form the intended units for exercise at Aldershot, some most useful work can be done and experience gained. At the Curragh one field hospital and one bearer company will be mobilised, so that on the whole we can be thankful for even these small mercies, and hope that they may be but the precursors of an extended programme for annual practice. The field units will go out for field training at Aldershot as follows: Nos. 4 and 13 Field Hospitals, and Nos. 3 and 8 Bearer Companies, May 15th to 29th; Nos. 10 and 12 Field Hospitals and Nos. 1 and 4 Bearer Companies, June 4th to 18th; No. 1 Bearer Company will be detailed as for home defence, the remainder as for the field force (service abroad)."

THE AMERICAN ARMY MEDICAL CORPS.

IT is not only the Medical Corps of our army that is subjected to the whittling process. We now learn from the American medical journals that the American Congress is engaged in reducing the medical staff of their army. The Act of June 26th, 1876, it is stated, reduced the number of assistant-surgeons from 150 to 125. Now a further reduction to 90 is urged by the Military Committee of the House. This action is based on the decrease in the number of stations which has occurred during the last decade. In medical circles the opinion is that if the proposed Bill should pass two most important measures for the good of the army and the Medical Corps, both instituted by the new Surgeon-General, must fall to the ground: First the establishment of the Army Medical School, and secondly the privilege of a year's tour in the larger medical centres, extended to a few of the senior assistant-surgeons, solely for the purpose of professional improvement. The Commanding General of the United States Army (General J. M. Schofield) has expressed his views on the proposed scheme in a letter to the Secretary for War in the following terms: That the Bill will be "seriously injurious to the military service," and further that "the Medical Corps of the army is none too large for the necessities of the service." In America, as in England and India, efficiency stands a chance of being sacrificed to economy. The American Medical Corps consists of 193 members attending to hospital work, drilling the hospital corps detachments in field and other duties, and ministering to the needs of 28,000 soldiers constituting the present United States Army, and also attending their wives and families. A total of soldiers and adult male civilians at United States army posts being 43,431. The 193 medical officers are scattered over an area greater than all Europe and divided among 120 military posts.

THE TOWER CHARGE OF THE ARMY MEDICAL DEPARTMENT.

THE Tower charge, which has for some years been held by a medical officer on the retired list, has now passed to an officer on full pay; and it is understood that the recruiting billets at St George's Barracks, also held by retired officers, may soon pass in the same way to medical officers on the full-pay list.

ARMY MEDICAL OFFICERS AND SANITARY WORK.

WE are now able to give the precise wording of the clause of the Medical Regulations, which, until expunged, assigned to the Director-General his proper sanitary function as Chief Sanitary Adviser to the Army.

The Regulations for Army Medical Services, 1890, Part I, Section I, Paragraph 5, ran as follows:

> Before any new barrack or hospital is erected the *plans and site* will be submitted to the Director-General for approval in so far as regards the healthiness of the buildings.

Had such a precaution been continued we should probably not have heard the complaints from the army medical officers which have found expression in our columns.

ARMY MEDICAL RESERVE OF OFFICERS.

IN answer to "A Member B. M. Association," the Warrant creating the Reserve was issued in February, 1888; it is open to medical officers of Militia, Yeomanry, and Volunteers, and he can only enter it through these corps, and having passed the prescribed efficiency examinations. There is no pay or any allowances attached to the Reserve unless actually embodied for service.

OBITUARY.

EDWARD HART VINEN, M.D., F.L.S.

WE regret to record the death of Dr. Vinen. The deceased gentleman received his medical education at University College Hospital; became L.S.A. in 1842, M.R.C.S. in 1844, and M.D.Aberd. in 1851. He settled in Bayswater when the neighbourhood was being developed, and practised there for many years, but retired about six years ago. Since then he had suffered from chronic bronchitis, and ultimately dilatation of the heart. He spent two winters at Bournemouth, and subsequently settled at Ealing, where he eventually died of pleurisy in addition to his other ailments, at the age of 79. He was twice married, and was assiduously nursed by his second wife throughout his long illness.

In a character presenting so many sides as did that of Dr. Vinen—and each side in its turn seeming, from its earnestness, to be the representative of the whole man—it is difficult to know which of his qualities should first be referred to. As regards every other subject to which he paid attention, so, with respect to his profession, he strove to be earnest and thorough, to get at the truth of every case, and his care in diagnosis was only excelled by his anxiety about every detail in the treatment. Emphatically, he looked upon each case as a deep responsibility, and he watched it and tended it with a care and solicitude as if it were the most important one of his life. Being, moreover, of a genial sympathetic disposition, it was no wonder that he was so affectionately esteemed by all who came under his care. He was engaged in general practice, and did not hold any important hospital or other appointment, nor did he publish much, but his merits were well recognised by his contemporaries, and he was about twenty years ago elected President of the Harveian Society, while he was one of the founders of the West London Medico-Chirurgical Society, and was elected its first President. He also took an active part in the management of the Metropolitan Counties Branch of the British Medical Association, and was until his health gave way an active member of many committees of the Association.

Dr. Vinen was deeply learned as a botanist, and even more so as a geologist. He was a Fellow of the Linnean Society, and his enthusiasm over any new specimen throwing a light on hidden truths or mysterious facts was such as will never be forgotten by those who witnessed it; while the clear and lucid expositions of his views on difficult questions connected with geology showed how well he had mastered its many details.

He had also an intense love of art, and particularly delighted in the portrait engravings of the great masters of line engraving and of mezzotint of the last century and of the earlier part of the present one. Of these works he possessed a by no means unimportant collection. Without the slightest ostentation, he possessed a knowledge of Latin which placed him in the first rank as a Latin scholar, and often has he told the writer of the way in which a Jesuit priest ingrained the language into him until it became almost like his mother tongue. He could not only write it with facility, but he could, and often did, make Latin puns: and not a few of his professional brethren have been delighted at and surprised by the charming and witty Latin *menus* which he was not infrequently asked to write for the festive gathering of some learned medical or other society or association. The head master of one of the great public schools was present at a dinner for which Dr. Vinen had provided one of these *menus*, and after reading it said: "Why, I have been teaching Latin for these twenty years past, but I could not write such a paper to save my headmastership or to save my life."

We regret to have to report the death of Mr. HENRY FENTON, M.R.C.S.Eng., of Shrewsbury. The deceased, whose age was 72 years, was the son of the late Mr. Perrot Fenton, of Doctors' Commons, London. He took the diplomas of M.R.C.S.Eng. and L.S.A. in 1844, and practised as a surgeon for some years in Shrewsbury. On resigning the appointment of surgeon to the Shrewsbury Dispensary he was presented with a microscope and a purse containing £100 as a mark of the esteem in which he was held. In 1869 he was elected Mayor of the Borough of Shrewsbury. Up to the time of his death Mr. Fenton was a governor of St. Bartholomew's Hospital.

DR. JOSEPH WORKMAN, for a quarter of a century medical superintendent of the Toronto Asylum for the Insane, died at Toronto on April 15th aged 89. His early career was somewhat curious. He was born in the county of Antrim, Ireland, in 1805, and when 21 years of age he was employed in an ordnance survey of the British Isles. Proceeding to Canada he studied medicine at Montreal, and graduated in 1835. He went to Toronto in 1836, and there for four years he carried on a hardware business. He then turned his attention to the practice of medicine, and seems to have almost immediately blossomed into a Professor of Obstetrics and Therapeutics in the Toronto School of Medicine. This position he continued to hold till 1853, when he was appointed Superintendent of the Asylum for the Insane at Toronto. He resigned this post at the age of 73, but continued to take the keenest interest in the progress of medical science. He contributed many original articles to various American, British, and other journals, and supplied numerous translations from foreign periodicals, especially Italian. He did all in his power to aid in building up various medical societies. Dr. Workman was President of the Canadian Medical Association in 1878; first President of the Toronto Medical Society in 1878; and first President of the Ontario Medical Association in 1881. He was a man of great knowledge and of the highest personal worth, and extremely popular with his professional brethren.

DEATHS IN THE PROFESSION ABROAD.—Among the members of the medical profession in foreign countries who have recently passed away are Dr. Landowski, of Paris, who took part in the last Polish rising, and was sent to Siberia, from which he escaped, taking four years to reach France; Dr. Glénard, Professor in the Lyons Medical Faculty, and a member of the Academies of Medicine and Science, aged 74; Dr. David Crary, of Hartford, Connecticut, who had practised there for more than fifty years, and who was present at the first administration of ether by Horace Wells, and who was the first who performed tracheotomy in Hartford, aged 98; Dr. Eugenio Sarzana, of Ceccano, a distinguished Italian physician, who took an active part in the revolutionary movement of 1848-49, aged 69; Dr. Isoard, of Marseilles, formerly a member of the French Chamber of Deputies; Dr. W. V. Keating, some time Professor of Obstetrics in Jefferson Medical College, New York, and American Editor of Ramsbotham's *Midwifery*, and Churchill's *Diseases of Women*, aged 71; and Dr. Léon Labbé, a prominent surgeon in Paris.

MEDICO-PARLIAMENTARY.

[SPECIALLY REPORTED FOR THE "BRITISH MEDICAL JOURNAL."]

HOUSE OF COMMONS.

Insanity in England and Wales.—Mr. HAYDEN asked the Secretary for the Home Department with regard to the fact that the number of insane persons under official cognisance in England and Wales had increased from 41,120 in 1862 to 89,822 in 1892: whether there were any grounds for holding that the continuous increase shown by the statistics was only an apparent one; and whether he had called, or intended to call, for a special report on the subject, similar to that just laid upon the table in relation to Ireland.—Mr. ASQUITH said the figures quoted gave the increase in the number of persons officially known to be lunatics. The Lunacy Commissioners believed that the increase was not due to any general increase of insanity greater than that of the population, but to the larger proportion of cases now brought under official cognisance, and retained under care and treatment. No special report on the subject appeared necessary. It would be referred to in the forthcoming annual report of the Commissioners in Lunacy.

Tea Drinking and Insanity.—Mr. J. MORLEY, in reply to Mr. M'CARTAN, said it was the case that, in the reports of several medical superintendents of asylums in Ireland, tea was mentioned as one of the sources of the causation of insanity, but the deleterious influence was attributed, not to the quality of the tea, but the method of preparation. In the case of tea being sold which was simply a decoction of tannin, the purchaser or the local authority might prosecute, but, as a rule, the poorer classes in Ireland purchased teas which were comparatively of a high price, but strong.—Mr. T. RUSSELL asked to what extent lunacy in Ireland was attributed to bad whisky.—Mr. MORLEY replied it would be difficult to ascertain the comparative deleterious effects of tea and whisky.

Forest Gate Schools.—Mr. ARCHIBALD GROVE asked the President of the Local Government Board whether, in view of the recent disclosures at Forest Gate Schools, any steps were being taken to secure an official in-

spection of such schools and to provide that pauper children received a proper supply of wholesome and nutritious food, and whether he was prepared to consider a general extension of the boarding-out system in lieu of the system which now extensively prevailed of herding together the children of the indigent poor in such numbers that they were deprived of the benefit of home influences and of due supervision and protection.—Mr. SHAW LEFEVRE, in reply, said the attack of illness which occurred at the Forest Gate Schools and which it was supposed may have resulted from the food supplied to certain children on a particular day could not be regarded as affording any evidence that the children in this school or in other Poor-law schools of the metropolis generally were not provided with the proper supply of wholesome and nutritious food. The question as to the food provided in the schools was one which continually received the attention of the visiting committees. Whilst the Local Government Board concurred in the view that the boarding out of pauper children when there was a proper selection of the homes and a careful supervision of the children boarded out had many advantages it was quite clear that the boarding-out system could not be adopted generally as a substitute for Poor-law schools. It was, however, the desire of the Board in the case of all new schools to avoid as far as possible the aggregation of a large number of children in one building, and this was a point which it was their practice to press upon boards of guardians.

The Guards' Hospital.—Mr. CAMPBELL-BANNERMAN, in answer to Mr. HANBURY, said that the Guards' Hospital in Rochester Row had not sufficient accommodation for the sick of the brigade, and a site had been secured at Millbank for the erection of a hospital to accommodate all the sick of the garrison of London. At present it was necessary to send some of the sick to hospitals outside London, and 109 were at that time so provided for, of whom about 80 per cent. were in the Herbert Hospital at Woolwich. No patient suffering from an infectious disease was sent by train to any destination.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

HONORARY DEGREE.—The degree of LL.D. *honoris causâ* was on May 10th conferred on Professor von Inama-Sternegg, President of the Austro-Hungarian Statistical Commission, and President of the Section of Demography in the International Congress of Hygiene held in London in 1891. Professor von Inama-Sternegg was unable to be present when the Congress visited Cambridge on that occasion.

APPOINTMENTS.—Dr. L. E. Shore has been appointed a Syndic of the Museums and Laboratories, and Mr. Pattison-Muir an Examiner in Pharmaceutical Chemistry.

THIRD EXAMINATION FOR MEDICAL AND SURGICAL DEGREES, Easter Term, 1894.—Part II *Medicine, etc.*: The following candidates have been examined and approved:

Beedham, Chr.; Blandford, Pemb.; Bowes, Gonv. and Cai.; J. A. Cameron, Joh.; Collis, H. Selw.; F. N. Day, Gonv. and Cai.; Floyd, Cla.; W. J. Harris, Gonv. and Cai.; Herbert, Gonv. and Cai.; H. B. Hewitt, Cla.; C. L. Hopkins, Gonv. and Cai.; A. L. Jackson, Cla.; Kirby, Trin.; G. J. K. Martyn, Gonv. and Cai.; Michell, Gonv. and Cai.; Noble, Gonv. and Cai.; Peck, Trin.; Peters, Gonv. and Cai.; Sell, Gonv. and Cai.; Sparks, Gonv. and Cai.; H. M. Tickell, Trin.; C. Todd, Cla.; C. C. Webb, Cla.; A. H. Wilson, Chr.; Woodrooffe, Gonv. and Cai.

LIVERPOOL UNIVERSITY COLLEGE.

THE NEW ENDOWED PROFESSORSHIPS.

IN the BRITISH MEDICAL JOURNAL of May 5th we briefly announced the endowment of Chairs in Anatomy and Pathology at Liverpool University College, and the gift of a valuable collection of books to the library. Lord Derby, whose installation as President of the College we recorded in February, has signalised his first year of office by giving £10,000 to endow the Chair of Anatomy, and Mr. George Holt, who has for many years been a generous benefactor of the College, and who, three years ago, gave £15,000 for the endowment and equipment of the Professorship of Physiology, has given £10,000 to endow the Chair of Pathology. The foundation of these professorships will ensure that the training in the more strictly scientific parts of medical study will be in no way less complete in Liverpool than in other centres of medical education, and will augment the high reputation the school already enjoys as a field for clinical and other practical work.

The enterprise and munificence of the wealthy citizens of Liverpool have been in nothing more conspicuous than in the rapid growth and development of University College during the last few years, and the present liberal donations may be taken as an indication that the medical faculty—the oldest member of the College—will not be allowed for lack of judicious support to be less efficient than the other departments of the institution. That the present buildings of the medical school, which were last enlarged and altered to what is practically their present state in 1872, are obsolete and inadequate to the needs of students and teachers has for some time been growing clearly apparent, and they will doubtless be found yet more so in the immediate future.

The necessity for a new block of buildings to replace those now in use is no less urgent than was the need for endowed chairs, now happily supplied; but the experience of the other departments of the College confirms the wisdom of the council in postponing a formal public appeal for a new building until the endowment for the chairs was forthcoming. At the first inception of the college professorships in the arts and sciences were founded, and suitable premises were subsequently provided in due course; and we confidently trust that means will be found to prevent the worthy aims of the generous founders of these professorships from being thwarted by want of space and suitable accommodation. It is not too much to hope that the high example set by Lord Derby and Mr. Holt will be emulated by many of the wealthy citizens of Liverpool, and that it will not be long before the medical faculty will be located in a building provided with all the requirements of modern scientific methods, and with ample space for the increasing work that may be looked for in years to come.

A world of acknowledgment is due to Mr. W. Mitchell Banks, who, in spite of the many calls upon his time and energy, has filled the post of Professor of Anatomy for many years. He will be the first to rejoice that he has been released from a post that his sense of loyalty to the school hitherto forbade him to resign.

ROYAL UNIVERSITY OF IRELAND.

SECOND EXAMINATION IN MEDICINE. Spring, 1894.—The Examiners have recommended that the undermentioned candidates be adjudged to have passed the examination.

Upper Pass Division.—*G. K. Finlay, Catholic University School of Medicine; *T. Finucane, Queen's College, Cork; *A. Magner, Catholic University School of Medicine; A. W. Montgomery, Queen's College, Galway; *J. P. J. Murphy, Queen's College, Cork; *R. J. Murray, Catholic University School of Medicine; *T. P. O'Carroll, Catholic University School of Medicine; J. Shinkwin, Queen's College, Cork; W. White, Queen's College, Cork.

Candidates marked thus * may present themselves for the further examination for honours.

Pass Division.—W. Calwell, Queen's College, Belfast; E. O'B. Carbery, Queen's College, Galway; J. G. Corry, Queen's College, Galway; J. Crean, Catholic University School of Medicine; R. S. A. Drought, B.A., Queen's College, Cork; F. Fulton, Queen's College, Belfast; T. H. Gloster, B.A., Queen's College, Cork; J. Johnston, Queen's College, Belfast; R. J. Johnstone, Queen's College, Belfast; J. F. Keenan, B.A., Queen's College, Galway; T. A. Kelleher, Queen's College, Cork; R. G. Kelly, Queen's College, Belfast; E. A. Kirkwood, Queen's College, Belfast; W. H. W. Mewhirter, Queen's College, Belfast; B. Moore, M.A., B.E., University College, London, and Queen's College, Belfast; M. R. Morrissey, Catholic University School of Medicine; R. Morrow, Queen's College, Belfast; E. F. O'Sullivan, Catholic University School of Medicine; R. S. Ryce, B.A., Queen's College, Cork; W. J. Shannon, B.A., Queen's College, Belfast; W. S. Shaw, Queen's College, Cork; J. R. Sinton, Catholic University School of Medicine, Royal College of Surgeons, and School of Physics, T.C.D.; J. V. G. Tighe, Catholic University School of Medicine; W. J. Wilson, Queen's College, Belfast.

THIRD EXAMINATION IN MEDICINE.—The examiners have recommended that the following be adjudged to have passed the examination.

Upper Pass Division.—S. T. Beggs, Queen's College, Belfast; J. A. Roughan, B.A., Catholic University Medical School.

The above candidates may present themselves for the further examination for honours.

Pass Division.—J. McA. Boyd, B.A. Queen's Colleges, Cork and Belfast; A. Burns, Queen's College, Belfast; W. S. Carroll, Queen's Colleges, Galway and Cork; R. A. Cunningham, Queen's College, Belfast; R. E. Devitt, Catholic University Medical School; S. F. Floyd, Queen's College, Belfast; F. T. Heron, Queen's College, Belfast; W. A. McWilliam, Queen's College, Belfast; J. Matson, Queen's College, Belfast; J. C. Nixon, B.A., Queen's College, Galway; W. B. Norcott, Queen's College, Cork; D. J. O'Connor, M.A., Queen's College, Cork; W. S. Smyth, Queen's College, Belfast; W. Speller, M.A., Queen's College, Belfast; W. J. Stitt, Queen's College, Belfast; A. Trimble, Queen's College, Belfast; R. T. Young, Queen's College, Cork.

M.D. DEGREE EXAMINATION.—The examiners have recommended that the following be adjudged to have passed the examination:

I. Banks, M.B., Queen's College, Cork; J. McNamara, M.B.; E. J. Walker, B.A., M.B.

EXAMINATION FOR THE M.B., B.CH., AND B.A.O. DEGREES.—The Examiners have recommended that the following be adjudged to have passed the examination:

Upper Pass Division.—F. Gallagher, Catholic University School of Medicine; *W. J. Maguire, B.A., Queen's College, Belfast; J. Reid, B.A., Queen's College, Cork; J. D. Rice, Queen's College, Belfast; *W. D. T. Thompson, Queen's College, Belfast.

Candidates marked thus * may present themselves for the further examination for honours.

Pass Division.—J. E. Adams, Queen's College, Belfast; W. J. J. Arnold, B.A., Queen's College, Belfast; J. M. Browne, Catholic University School of Medicine; W. Farrington, Queen's Colleges, Galway and Belfast; P. Gerety, Catholic University School of Medicine; T. T. M'Kendry, B.A., Queen's College, Belfast; S. M. M'Gowan, Queen's College, Belfast; J. Morrow, Queen's College, Belfast; Harriette R. Neill, Queen's College, Belfast; A. Park, Queen's College, Belfast; J. Rusk, B.A., Queen's College, Belfast; J. J. Wallace, Queen's College, Belfast.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH, AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

AT the April sittings of the Conjoint Examining Board held in Glasgow, the following candidates passed the respective examinations:

First Examination.—Five Years' Course.—D. Campbell, W. Hibbert, J. T. O'Connor, W. Mason, J. G. Parker. In Division II (Chemistry) only.—S. V. Robinson, J. Durrans.

First Examination.—Four Years' Course.—*C. W. Davidson: W. H. Brooks, A. G. Johnson, G. C. Beamish, H. T. Davies, J. Sanderson, G. J. Goldie, C. J. Sutton, T. Homer, A. C. Campbell, W. Beck, M. M'Manus, S. M'L. Gibson. In Division I (Chemistry) only—H. A. Lakhani.

Second Examination.—Five Years' Course.—Mary B. Wilson, A. Ross, D. M'Gregor.

Second Examination.—Four Years' Course.—A. C. Adderley, G. M. Speers, H. M'Kay, J. S. Gill, J. A. M'Ilroy, T. C. K. Kurup, J. T. Hancock, E. Barker, R. J. Owen, E. Blair, A. Kennedy, W. Watson, J. M. Ramsay, W. A. Pope, M. M'Manus, D. S. Henderson, J. C. Glen, G. H. Pearce, E. B. H. Hughes, J. H. Waddington, B. B. Vora. In Division I (Anatomy)—W. G. Pritchard, T. W. Mason. In Division II

(Physiology)—. E. Blades. In Divisions I and II—Emily Frances FitzSimmons, J. L. Brownridge.

Final Examination.—W. J. D. Preston, H. Bateson, J. M'Lean, Rev. J. Fenwick, E. Denison, J. Rutherford, S. T. Brooks, Minnie Ethel Bowlby, E. V. Halliday, H. J. Heginbotham, W. D. Jones, Stella Irene Flora Greaves, J. A. Dyson, R. W. West, T. French. In Division III (Midwifery, etc.)—S. S. Siddall, Jeanie G. R. Duggan, and J. S. Montgomery. In Divisions I and III (Medicine, Midwifery, etc.)—D. W. Jones. In Divisions II and III (Surgery, Midwifery, etc.)—J. Thorney.

* Passed with distinction.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE GERMAN HOSPITAL, DALSTON.

A SPECIAL general court of the German Hospital was held on May 8th, at Cannon Street Hotel, to protest against a resolution passed by the Committee of Management on March 8th, alleged to be to the effect that the hospital is a Protestant institution. The treasurer of the hospital, Baron Schröder, presided, and there was a crowded attendance.

The Rev. Dr. Verres (Roman Catholic) said all that those who were acting with him asked for was a guarantee that no one in the hospital should have his religious creed interfered with. He did not object to the nursing being in the hands of Protestant deaconesses, but he maintained that the hospital should be conducted on unsectarian lines. In conclusion, he moved the following resolution:

> The committee of the German Hospital having confirmed at their meeting held on March 8th, 1894, a resolution to the effect that the German Hospital is a Protestant institution, it is hereby resolved by this special general court that this resolution of the committee is: (*a*) Not in accordance with the idea which led to the founding of the German Hospital; (*b*) Not in accordance with the opinion of the majority of the subscribers to the funds of the German Hospital; (*c*) contrary to the rules and regulations of the German Hospital. That the German Hospital is and shall remain a national German institution, and shall be conducted on unsectarian lines and strictly according to provision of Rule XXVI. That in accordance with the previous resolution, religious services, instructions, or scripture readings shall not be publicly held within the wards.

Mr. Kleimenhagen, in seconding the resolution, objected to services being held in the wards.

After a good deal of discussion, Mr. W. J. Thompson said that while the hospital was conceived on Protestant lines it was open to all speaking the German language, without reference to creed. He moved the following amendment, which was seconded by Mr. A. J. Allen:

> That the German Hospital is, and shall remain, a national German institution to all sick poor speaking the German language, without distinction of nationality or creed, and furthermore, that the committee be requested to conduct the internal management of the hospital as they have hitherto done.

The amendment, on being put to the meeting, was declared carried. A division was asked for, which the chairman declined to permit, he offering to take a poll if the necessary requisition was handed in.

The meeting eventually broke up in confusion.

COUNTY AND CITY OF CORK HOSPITAL FOR WOMEN AND CHILDREN.

DURING last year the income from patients' payments, probationers' fees, and extern nursing, amounted in the aggregate to £1,202 3s. 2d., or just two-thirds of the total of what may be called the regular income of the hospital. The new wing, built mainly with the money supplied through the representatives of the late Mr. S. Crawford, is now nearly completed. The board intend to commemorate the generous donor by naming the new wing the "Sharman Crawford" wing. It will take fully £300 more to equip properly the operation room, and finish the entire of the new buildings.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

MEDICINES, ETC., FOR WORKHOUSE PROVIDED BY GUARDIANS.

WE see by the *Workington News* that at a recent meeting of the Cockermouth Board of Guardians, it was proposed in an able speech by the Rev. J. T. Pollock that the board should supply all medicines and surgical appliances required in the workhouse, and that the salary of the medical officer, as hitherto paid, should so remain. Considerable discussion ensued on this subject, and, although there was some marked opposition to the motion, yet, when the question was put to the vote, the proposition was carried by a considerable majority. This is evidently a step in the right direction, and we are glad to see that the Cockermouth Guardians have come to this very rational decision. The term "salary" is a misnomer when medicines and expensive appliances have to be provided out of it. We venture to hope that at no distant time it will be incumbent on all boards of guardians to adopt the system of payment now brought into operation in the Cockermouth Union.

CHOLERA AT ROTHERHAM IN 1893: POLLUTED WATER SUPPLY.

Official Report.

DR. THEODORE THOMSON has presented a capital report to the Local Government Board on cholera in Rotherham in 1893, in which he sets out the facts learned at his visits to the town in connection with the choleraic outbreak last year. The first case, a fatal one, occurred on September 5th, followed by a second fatal case on September 11th, and a non fatal attack on October 18th. In the latter half of September there were 11 cases, and in the first three weeks of October 7 cases of "choleraic diarrhœa," examination of two of these showing them to be indistinguishable from true cholera. These were the only two cases bacteriosocopically examined. Only one death resulted: the ages of the persons attacked being in 15 cases between 15 and 60 years. They were scattered all over the town. From September 10th to September 20th, as many as half the cases of choleraic diarrhœa were notified, and 211 cases of diarrhœa out of 402 notified up to October 31st. As to fatal diarrhœa, there were 85 deaths in the second and third quarters of 1893, giving a rate of 1.94 per 1,000 living, whereas the average for the preceding ten years was 0.88 per 1,000, and the nearest to last year, 1.62, in 1889. In the third quarter the rate was nearly twice that of the large towns of England and Wales. Deaths by the disease were more numerous in July and August than in September, and it may be, Dr. Thomson thinks, that attacks were also more numerous in those months; at any rate, the incidence of known attacks of diarrhœa in Rotherham was, as elsewhere, mainly on the very young, the age distribution not being other than that usually observed in this country. Such enteric fever as occurred in the town last year was in the main coincident in time with the major incidence of choleraic disease.

On the subject of the causation of the choleraic outbreak, Dr. Thomson has some very hard things to say of Rotherham, and especially on the score of water supply. Evidence was negative as to personal communication having originated or kept going the disease. But Rotherham is a town situate on soil exceptionally liable to fouling, due to soakage from privy middens. Sewerage and drainage are, for the most part, satisfactory, but the prevailing method of excrement and refuse disposal is one permitting gross pollution of the ground around the middens, and such as, if the contents of the receptacles became specifically infected by cholera excreta, would transmit this contagium to the surrounding soil, where it might multiply and be spread. As to water supply, we feel that we cannot do other than quote the concluding sentences of Dr. Thomson's report, where he says, in reference to the present supply, "that this supply should be in part derived from gathering grounds of which the conditions are such as to render possible dangerous pollution of the water thence collected is a matter of great gravity. But that a supplementary source of this supply should be a spring which rises in the very centre of the town and therefore emerges through a soil polluted by the contents of privy middens, is a condition of distinctly perilous sort. Rotherham had in 1891 actual experience of loss of life and health from fever due to specific pollution of the public water supply, but the sanitary authority do not appear to have profited by the lesson. In 1893 cholera made its appearance in the district but fortunately did not, as was formerly the case with enteric fever, obtain intimate relation with the public water supply. In this there was for the sanitary authority matter of congratulation, but there should also be food for reflection. Let them consider seriously the responsibility for lives lost and health destroyed that will be theirs should the lesson of 1891 be repeated in 1894 with cholera in place of enteric fever as the polluting agent of the public water supply of the district confided to their charge."

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns, including London, 6,209 births and 3,446 deaths were registered during the week ending Saturday, May 5th. The annual rate of mortality in these towns, which had been 18.2 and 18.3 per 1,000 in the preceding two weeks, declined again to 17.2 last week. The rates in the several towns ranged from 11.0 in Bolton and 11.1 in Derby to 21.3 in Liverpool, 22.8 in Salford, and 31.3 in Wolverhampton. In the thirty-two provincial towns the mean death-rate was 17.2 per 1,000, and corresponded with the rate recorded in London. The zymotic death-rate in the thirty-three towns averaged 2.7 per 1,000; in London the rate was equal to 3.6 per 1,000, while it averaged only 2.1 per 1,000 in the thirty-two provincial towns, and was highest in Birmingham, Salford, and Wolverhampton. Measles caused a death-rate of 2.0 in West Ham, 2.2 in Leicester, and 2.5 in Birmingham; scarlet fever of 1.1 in Swansea and 1.8 in Wolverhampton; and whooping-cough of 2.2 in Swansea and 3.1 in Wolverhampton. The 80 deaths from diphtheria in the thirty-three towns included 58 in London, 5 in Salford, and 3 in Cardiff. Six fatal cases of small-pox, all of persons belonging to West Ham, were recorded in the Metropolitan Asylums Hospitals, and 1 death each in Wolverhampton, Birmingham, and Nottingham, but not one in any other of the thirty-three large towns. There were 191 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, May 5th, against 102, 148, and 151 at the end of the preceding three weeks; 64 new cases were admitted during the week, against 31, 59, and 47 in the preceding three weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last, May 5th, was 2,293, against 2,128, 2,172, and 2,258 at the end of the preceding three weeks; 268 new cases were admitted during the week, against 260 and 296 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday last, May 5th, 1009 births and 573 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had been 17.5 and 19.0 per 1,000 in the preceding two weeks, further rose to 20.1 last week, and was

2.9 per 1,000 above the mean rate during the same period in the large English towns. Among these Scotch towns the death-rates ranged from 16.6 in Aberdeen and in Leith to, 22.0 in Glasgow. The zymotic death-rate in these towns averaged 2.7 per 1,000, the highest rates being recorded in Leith and Greenock. The 290 deaths registered in Glasgow included 26 from whooping-cough, and 6 from diphtheria. Two fatal cases of small-pox were recorded in Edinburgh and 1 in Leith.

PENRITH WATER SUPPLY: WATER BORNE TYPHOID.

IMPORTANT OFFICIAL REPORT.

A REPORT has quite recently been presented to the Local Government Board by Dr. Bruce Low on the water supply of Penrith, which will have a painful interest for the residents of that place. It cannot be considered other than distasteful to be told that the drinking water on one's table is a diluted form of the excremental matters which are the product of one's town; yet such in brief is the lesson which is to be learned from Dr. Low's very lucid statements. The inquiry was brought about by the action of upwards of 200 ratepayers, who signed a memorial to the Local Government Board as to the defective state of the water supply. The thanks of the town are due to these spirited ratepayers for the step taken, as we shall hope briefly to show.

The supply is taken from the river Eamont, about three-quarters of a mile from the town, and within the borough itself. It is pumped without filtration to the town, first passing down the village street to the pumping station in pipes through the village, laid in duplicate, and extremely defective and leaky; having in their near neighbourhood eleven midden privies, slop water pipes, dung heaps, etc., the subsoil, moreover, being of a porous gravelly nature. And we read that when the intake pipe is closed there can still be pumped a considerable quantity of water, pointing to insuction of the contaminated subsoil water. The river itself is subjected to many and gross pollutions in its course, of five miles, from the lake of Ullswater; for we read of the discharge of crude sewage from the villages of Pooley Bridge, Yanwath, Dacre, Stainton, and others; whilst scattered houses and heavily manured fields add their quota. But perhaps the most revolting instance is that of a farm on the fields of which is spread at times the sludge from the settling tanks of the Penrith sewage outfall works. This sludge consists largely of human excrement, which in times of flood or heavy thaw can be washed into the drinking water, and thus furnish an instance of the economy of Nature which the people of Penrith never, we are sure, had in contemplation. It seems scarcely credible that after ten years of warning the sanitary authority should have in view the "patching up" of this supply, yet such seems to be the case to judge from the report before us. The question of cost is again to the front, for instead of expending some £16,000 on a scheme that would enable them to obtain water from pure sources, they have it in view to still take water from the river, at a cost of £3,000.

That they will seriously think of going on with this patchwork we cannot imagine, in the face of Dr. Low's report. The town has too much at stake to let the money question defeat the proposal of the minority of the sanitary body who wisely wish for a larger and safer scheme. And further, the water would seem not to have been free from harm in the past, since Mr. Thompson, another of the Local Government Board inspectors, has traced an outbreak of enteric fever in 1891, and affecting both the urban and rural districts, to the agency of this water supply. He says that a theory of specific contamination of the river, and so of the water supply, by an early case of fever would best meet the facts adduced by the local health officer. Apparently the patients in the two districts involved had nothing in common other than the water supply. "It need hardly be pointed out," says Dr. Low, that if typhoid fever (or cholera) discharges pass into the Penrith sewers and thence to the settling tanks at the outfall works the sludge must needs contain the specific poison of the disease, and that such sludge spread upon land abutting on the stream only a mile above the Penrith water intake involves danger of wholesale poisoning of the Penrith people by specific pollution of the water service." We sincerely trust that with cholera threatening England this year the sanitary body will take Dr. Low's advice and beget themselves a water service above suspicion. It is a duty owing to their constituents and to the country at large.

THE BATTLE OF THE ISOLATION HOSPITALS.

A THING much to be desired is that local boards would learn a little elementary Christianity, and try to do to others as they would be done by. Driven by the silly and unfounded supposition that the presence of an isolation hospital is a nuisance and an injury to a district, every little local board tries its best to plant its fever cases on its neighbour's land, or as near the edge of its own district as in decency it can do. The little dispute between Walthamstow and Chingford is but another illustration of what has happened in other places. Of course the very basis of the dislike to these institutions is an error; instead of their being looked on as an injury the provision of good hospital facilities for the isolation of infectious disease should be considered a distinct attraction to any district as a place of residence. If, however, the local magnates in these outlying parts persist in regarding hospitals as nuisances, all the more should they be prevented from palming them off upon their neighbours. Recent developments of this question only point the more in the direction of concerted action by the various county councils for the systematic drawing up of proper schemes for hospital accommodation within their respective areas under the provision of the Isolation Hospitals Act of last year, a plan which we have urged again and again.

SMALL-POX IN LEITH AND EDINBURGH.

TWO new cases of small-pox occurred in Edinburgh last week, and two deaths were due to this cause. In Leith it is reported that "four new cases of small-pox were notified," and that one death was caused by that disease.

NEGLECT OF VACCINATION IN CORK.

THE Local Government Board for Ireland have forwarded the Cork guardians a report from their inspector, Dr. J. Browne, on the neglect of vaccination in the city of Cork. It appears that 2,441 children born in the nine subdistricts comprising the Cork City Dispensary District since January 1st, 1890, have not been vaccinated. This, to a large extent, was due to the fact that the relieving officers, when serving notices on the vaccination defaulters had, in nearly half the cases returned by the medical officers, failed, owing to change of residence, to trace the defaulters. Dr. Browne advised that a special officer should be appointed by the guardians to look after the vaccination defaulters. He considered that if defaulters' lists were sent in promptly, and in all cases of failure, after notice to comply with the law, prosecutions were instituted, he had no doubt the number of defaulters would speedily diminish, and compliance with the Compulsory Vaccination Acts become more generally observed in the city of Cork.

SANITATION AND THE LABOUR COMMISSION.

THE Labour Commission's report deals with sanitation in the following paragraph:

INDUSTRIES DANGEROUS TO HEALTH.

Under Section 8 of the Factory and Workshop Act, 1891, the Secretary of State has power to establish special rules for the conduct of manufacturing processes which he may certify to be, in his opinion, dangerous or injurious to health. It seems to be the fact that physical exhaustion increases the risk of accident or the susceptibility to disease in some occupations, and we think the powers of the Secretary of State under this section should be expressly extended so as to include the regulation of hours in certified industries. When the administrative orders made in these cases deal with the employment of women and young persons they might be final, but when they directly relate to the hours of adult workmen they should, we think, be laid for a certain period before both Houses of Parliament before becoming law. The evidence we have received brings us to the conclusion that some modification should be made in these provisions of Section 53 of the Factory and Workshop Act, 1878, which permit women and young persons to work overtime for forty-eight days in the year in various specified occupations, including dressmaking. The number of days in which such overtime is allowed might, in our opinion, be reduced with advantage, and we think that in the case of young persons no overtime at all should be permitted under this section. We are of opinion that, so far as relates to the hours of young persons and to all sanitary matters, the provisions of the Factory and Workshops Act should be made to extend to laundries.

SANITARY EVILS.

Many of those evils would be obviated if it were possible to carry out thoroughly the provisions of the Factory and Workshop Acts and of the Public Health Acts. They were of opinion that some strong measures should be taken with a view either to the improvement or gradual extinction of the lowest class of workplaces in which the "sweated" industries are carried on. Legislation is desirable so that all occupiers of workshops (exclusive of domestic workshops), and perhaps also of factories, shall be required under penalties to obtain a certificate from a competent public authority to the effect that the premises used by them are in all respects in a sufficiently sanitary condition, and contain sufficient cubic space for the number of persons employed in them, and that all contractors and shopkeepers in these industries who employ outworkers should be responsible, if done in workshops, only done in those which had a proper certificate. Regulations of this kind appear to the Commissioners to be urgently required in the case of the manufacture of articles of clothing (including boots and shoes) and cheap furniture. They think that the proposed regulations should also extend to bakehouses and laundries. As to the agricultural labourers, the chief evil to which it appears possible that legislative or administrative remedies may be applied is the defective structure and sanitary condition of the houses of agricultural labourers in many districts in all parts of the country.

MICROBES OF SEWER AIR.

A REPORT of an investigation of the composition of the air in the sewers of Sydney, with special reference to the presence of germs, by Mr. J. J. McGarrie Smith, was presented recently to the Chairman of the Sydney Metropolitan Board of Water Supply and Sewerage. It deals with the results of the bacteriological examination of thirty-two samples of air obtained during some twenty visits underground. It is prefaced by some general remarks and an account of the methods employed. It is unfortunate that in the majority of instances no corresponding examinations of fresh air should have been made at the times when the samples of sewer air were taken. This was done, however, in the later experiments. The inquiry was limited, for the most part, to estimating the number of germs present, and no attempt at an exhaustive determination of the species of the several organisms was made. Special attention was directed to the effect produced on the germs in sewer air by being passed through a cremating shaft which has been constructed with a view to destroying micro-organisms. The experiments show that this shaft "failed to destroy the germs in the air which passed through it, the loss sustained being often less than one-third." The report is interesting, and embodies the results of a considerable amount of work.

INSANITY OF DISTRICT MEDICAL OFFICER.

Y. F. writes as follows: If a district medical officer become insane and is formally certified to be so, does not his tenure of office legally cease then and there? If he has been nine months in an asylum and an unfavourable prognosis has been given, are the guardians acting legally in continuing to accept the services of a deputy without throwing the appointment open?

*** This appears to be a hypothetical case, and the questions put are consequently not very easily answered. We are not, however, of opinion that there is any illegality in the line of action taken by the guardians, and we consider that in any such case as the one described the Board would be only showing kind consideration for an unfortunate official in allowing his duties to be performed by a deputy for a period of twelve months or even longer.

INDIA AND THE COLONIES.

INDIA.

The epidemic of influenza has once more visited Calcutta. It generally breaks out in this season of the year. In several cases it has culminated in pneumonia, which has ended fatally.

The Punjab Government has under consideration a scheme for the formation of a class of female medical practitioners, somewhat on the lines of the present grades of male assistant surgeons and hospital assistants. Local bodies and the Punjab branch of the Dufferin Fund, which at present grant stipends and scholarships to female medical students of the various descriptions, will now pay their contributions into one amalgamated fund, for allotment by the Medical Department of the Province, which course will resulted in concentrated control instead of the existing mixed arrangement. Pupils while under instruction, and those who subsequently qualify as assistant surgeons or hospital assistants will be under the order and control of the Inspector-General of Civil Hospitals; in fact, there will thus be gradually constituted a female subordinate Medical Service.

Indian Quackery.—One cannot help wishing, as far as quacks are concerned, says the *Times of India*, that the good folks of this country would bear those ills they have rather than fly to others they know not of. There seems to be an unfortunate tendency in their character to adopt as remedies for disease those that are the most eccentric and the farthest removed from plain common sense. It is said that bygone ages possessed an elaborate system of medical treatment—a *vaidya-shastra*—which is not much studied now, and it is a fact that here and there an old-fashioned *vaidya* is found, who, from a careful study of the properties of herbs and from a long acquaintance with the diseases and the habits of his own people, deserves a better name than that of "quack," although he may not possess a medical degree. But it is not too much to declare that if the majority of the *vaidya-lok* practising in India were to be transported to an island and there be allowed to physic each other the general health of the rest of the people would be improved and their lives prolonged. These men, and women too, get their living by sitting at the corners of the streets with a few bundles of herbs and dried powders. Not only do they give these to their gullible patients, but they supply advice on every imaginable complaint—from the manner in which to brand children who have fits up to the best plan of expelling a *bhut*, or demon, from a "possessed" person. Of the quack *genus*, though differing from him in being better educated, are men who do their work, not by sitting on the roadside, but by advertising in the native papers, by issuing cheap leaflets, and by selling their medicine through the post. It is a progressive age, and the transition from rank quackery to advanced scientific methods may involve the existence of such medium characters. Let us be charitable and hope they do some good, though whether they do so or not, it is an undoubted fact that their ideas are distinctly Eastern and fabulous. For example, it is not given to everyone to know that there is an easy method of treating complaints with "Ayurvedic medicines," nor is it given to all to know "that the Ayurveda will at last, by virtue of its perfection and superiority, claim for itself its proper place amongst the civilised nations of the earth." Not with any idea of giving it publicity, but as an illustration of the medical notions floating about this complex over-diseased country, one or two opinions, claimed by the gentleman who expounds the above system, may be given. Among some remarkable information on the subject of food is this sentence: "Death is certain if the flesh of peacock be taken prepared with castor oil." The Ayurvedic system demonstrates also the folly of taking clarified butter and honey together; they "act as poison.' So, too, "if soup is prepared of fish, and in that soup peepul is decocted and taken, the result is death." This system does not apparently require belief in the germ theory or in microbes or any of those intangible mysterious bacilli that scientists are so fond of counting and classifying. The writer referred to says: "I have not up to the present moment been able to conceive what is meant by germ of cholera." It is needless to add that all the advice given is but a prelude to an exhaustive list of medicines, including manna pills and hair dye. The object of the information so ingenuously supplied is doubtless to effect a sale of 8-anna phials or of 1-rupee boxes of pills. In a vast country like this, where thousands of villages are not only beyond the reach of the more inquisitive laws, but are quite outside the sphere of public opinion, there is not much hope of being able to check these medical dabblers. Their dupes too often approve of what they do; indeed, the more extraordinary the remedy, the more it is believed in. Violent measures, even in cases of the most delicate nature, are resorted to, and are accepted as necessary, but the amount of suffering thereby unnecessarily engendered is too terrible to describe.

NEW SOUTH WALES.

The Board of Health have decided not to recommend the Government of New South Wales to become a party to the Dresden Sanitary Convention of 1893, as these colonies have hitherto been, and are now, entirely free from cholera, and as they all adhere to strict quarantine regulations, which have been given up by the principal European countries in consequence of their geographical position.

Deaths under Chloroform.—The *Australasian Medical Gazette* states that two deaths under chloroform occurred in Sydney on February 26th, one at the Prince Alfred Hospital, the other in a dentist's operating room. In both cases a verdict of "death while under the influence of chloroform which was properly administered" was returned.

The annual festival dinner of King's College Hospital was held on May 2nd in the Hall of Lincoln's Inn. Lord Justice Davey presided. The number of in-patients treated last year was 2,372, and about 24,000 persons had been treated as out-patients. Donations and subscriptions amounting to £2,200 were announced in the course of the evening.

MEDICAL NEWS.

The Gaskell Prize.—The examination for the Gaskell prize of the Medico-Psychological Association, open to all who possess the certificates of the Association, will be held in London in July. Further particulars can be obtained by application to Dr. Spence, Burntwood Asylum, Lichfield, who will also supply information as to the examination for the Certificate in Psychological Medicine, which will also be held in July.

Training Speech and Voice.—There is distinctly a need for more scientific attention to training of voice and speech, both for the young and for adults. Not only is speech an important mental expression, but the training of good speech in children is a most important mode of mental culture. The subject is well worthy of greater scientific care than has usually been bestowed upon it. We are glad to hear that lectures upon speech training are being given to ladies at the Ladies' Department, King's College, Kensington Square, by Miss D'Orsey.

Sheffield Medico-Chirurgical Society.—At the annual meeting held on April 26th, the following officers were elected: *President:* Mr. Makeig Jones (Wath-upon-Dearne). *Vice-President:* Mr. Richard Favell. *Treasurer:* Mr. Simeon Snell. *Secretary:* Dr. Burgess. *Committee:* Mr. Pye-Smith, Mr. Dale-James, Mr. W. F. Favell, Mr. Arthur Jackson, Dr. Porter, Dr. Cocking, Mr. Edward Barber, Dr. Wearne Clarke (Chesterfield), Dr. Alfred Robinson (Rotherham); Mr. West Jones (Eckington). *Pathological Committee:* Dr. Arthur Hall, Dr. Runton, Dr. Rhodes, and Dr. Wilkinson.

Leeds and West Riding Medico-Chirurgical Society.—At the annual meeting of the above Society, held on May 4th, the following officers were appointed:—*President:* Dr. West Symes, Halifax. *Vice-Presidents:* Mr. Mayo Robson, Leeds; and Mr. J. W. Teale, Scarborough. *Hon. Secretaries:* Mr. Littlewood and Dr. T. W. Griffith. *Librarian:* Dr. Barrs. *Auditor:* Dr. Braithwaite. *Committee:* Dr. Herman Bronner, Bradford; Mr. W. H. Brown; Dr. T. Kilner Clarke, Huddersfield; Mr. E. O. Croft, Mr. W. Hall, Dr. Hellier, Dr. L. J. Hobson, Harrogate; Dr. Mantle, Halifax; Mr. G. Stamp Taylor, Dr. Trevelyan, Dr. Whitelegge, Wakefield; Mr. Secker Walker, Mr. F. Wood, Wakefield; and Dr. Wylie, Skifton.

Shadwell Children's Hospital.—A festival dinner, in aid of the funds of the East London Hospital for Children, Shadwell, was held in the Whitehall Rooms of the Hôtel Métropole on May 7th, under the presidency of the Marquis of Zetland, who spoke warmly of the excellent work done by the hospital, and pointed out that its position in the centre of an extremely poor neighbourhood, though it was an immense advantage to the poor who availed themselves of the advantage it offered, yet withdrew it from the observation of the wealthy. Mr. Tresider, the Chairman of the Board of Management, stated that funds had been accumulated sufficient for the erection of a seaside convalescent home. Mr. H. C. Burdett, in proposing the toast of the Board of Management, commended highly the administration of the hospital, which, he said, was both economical and efficient.

Pathological Society of London.—The following is the list of officers and council of the Pathological Society of London proposed by the outgoing council for election at the annual general meeting on May 15th. Names marked with an asterisk have not served a similar office in previous years:—*President:* Frederick William Pavy, M.D., F.R.S. *Vice-Presidents:* *Thomas Barlow, M.D.; *William Selby Church, M.D.; William Smith Greenfield, M.D.; William Miller Ord, M.D.; *Alban H. G. Doran; *Cuthbert H. Golding-Bird; William Harrison Cripps; Rickman John Godlee. *Treasurer:* *Sidney Coupland, M.D. *Honorary Secretaries:* Anthony A. Bowlby; *G. Newton Pitt, M.D. *Council:* Theodore Dyke Acland, M.D.; Thomas Colcott Fox, M.D.; *Wilmot Parker Herringham, M.B.; *A. A. Kanthack, M.B.; Sidney Martin, M.D.; William Pasteur, M.D.; *H. D. Rolleston, M.D.; *Charles Scott Sherrington, M.B., F.R.S.; Howard Henry Tooth, M.D.; Dawson Williams, M.D.; *Gilbert Barling, M.B.; Stanley Boyd; W. Bruce

Clarke; Walter Edmunds, M.C.; *E. Hurry Fenwick; C. B. Lockwood; *Stephen Paget, Samuel G. Shattock; Charles Stonham; *James Henry Targett, M.S.

THE MEDICAL PROFESSION AND FREEMASONRY.—Dr. Balfour Cockburn has been elected to the Provincial Grand Mastership of Guernsey and Alderney. Medical men are to be found as foreign or colonial district grand masters but never before, as far as we are aware, has a member of the profession attained to so high a rank in the Masonic hierarchy as that achieved by Dr. Balfour Cockburn, who is to be warmly congratulated on the receipt of this mark of favour from the most worshipful the Grand Master His Royal Highness the Prince of Wales. There has always been a strong bond of alliance between the profession and the craft. Portraits of many distinguished physicians are to be found on the walls of the Freemasons' Hall in Great Queen Street, and it should be remembered that these worthies were distinguished and leading Masons long before a grand lodge was ever thought of. One of the best conducted and most successful of the benevolent institutions of the craft—the Girls' School—was originated and founded by Dr. Ruspini in the days of the Georges. Dr. Balfour Cockburn, now Provincial Grand Master of Guernsey and Alderney, is a retired army surgeon, who served throughout the Crimean campaign and was for many years in the Royal Horse Artillery and Royal Engineers, retiring as a brigade-surgeon in 1881.

AMERICAN JOTTINGS.—There are now eighteen incorporated cremation societies in the United States, and during the last ten years about 3,000 cremations have taken place.—The following advertisement recently appeared in an American newspaper: "Wanted.—Healthy left male arm from shoulder down; subject must be white and between 25 and 35 years old; arm to be amputated two inches below shoulder-joint and grafted on another man's body. Will pay handsome price. Apply to the surgeon, Dr. ——, —— Street, Birmingham, Ala." Probably the "business part" of this announcement is that containing the name and address of the advertiser.—A Bill has been introduced into the New York Senate providing for a further inquiry into the prevalence of tuberculosis among cattle. In 1893 the inspectors of the State Board of Health killed over 20,000 head of cattle suffering from the disease. The Bill provides for the appointment of a Commission to have all the power now granted to the State Board of Health to examine the cattle of the State for tuberculosis, and to examine into that disease, its existence, and any other facts concerning it that may now or hereafter be brought forth, and report the same to the Senate by January 15th, 1895. A sum of fifteen thousand dollars is appropriated for the expenses of the Commission.—It is proposed to erect a large building in the central part of New York, to be used exclusively as professional offices by medical practitioners. No office is to be rented to any tenant whose standing in the profession is not entirely satisfactory. The building is to be fitted with every necessary convenience in the shape of telephones, a telegraph office, a district messenger service, an agency for trained nurses, mail chutes, pneumatic tubes, steam heat, electric light, electric-motor power. Wheeled chairs will be provided for the conveyance of invalids from their carriages to the elevator and thence to an office in any part of the building.—The statistics of attendance in the American medical colleges show a considerable increase in the last eight years. In 1885 the total attendance was 10,891, including 9,245 regular, 1,032 homœopathic, and 614 "eclectic" students, while in 1893 the total attendance was 18,910, comprising 16,759 regular, 1,410 homœopathic, and 741 "eclectic." These figures show gains in eight years of 73.6 per cent. in the total attendance, 81.0 per cent. for students of the "regular" category, 30.6 per cent. for the homœopathic, and 20.6 per cent. for the eclectic. The average annual increase during the period referred to was thus 9.2 per cent. The average increase of population during the same period was 2.5 per cent. There is (says the *Journal of the American Medical Association*) an average increment of nearly 6,000 new home-made medical practitioners every year, and, while the population of the United States increased 248 per cent. during the decade 1881-90, the number of newly-graduated doctors increased over 50 per cent. in the same period.

MEDICAL VACANCIES.

The following vacancies are announced:

BALROTHERY UNION, Swords Dispensary.—Medical Officer. Salary, £125 per annum, with £20 16s. 8d. as Medical Officer of Health, together with registration and vaccination fees. Applications to Mr. Michael Long, Honorary Secretary. Election will take place on May 15th.

BLACKBURN AND EAST LANCASHIRE INFIRMARY.—Junior House-Surgeon; doubly qualified. Salary, £50 per annum, with board, washing, and lodging. Applications to Nathan A. Smith, Secretary, 15, Richmond Terrace, Blackburn, by May 24th.

CHESTERFIELD AND NORTH DERBYSHIRE HOSPITAL AND DISPENSARY, Chesterfield.—Resident Junior House-Surgeon and Dispenser. Salary, £50 per annum, with board, apartments, and laundress. Applications to the Secretary by May 17th.

COURCIES DISPENSARY DISTRICT, Ballinspittle, Ireland. Medical Officer. Salary, £100 per annum as Medical Officer, and £15 per annum as Medical Officer of Health. Applications to Mr. Patrick O'Connell, Honorary Secretary, Old Head, Ballinspittle, by May 15th.

DENTAL HOSPITAL OF LONDON AND LONDON SCHOOL OF DENTAL SURGERY, Leicester Square. Demonstrator. Honorarium, £50 per annum. Applications to Morton Smale, Dean, by May 14th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Two Assistant Anæsthetists. Applications to J. Francis Pink, Secretary, by May 14th.

DOWNPATRICK UNION.—Medical Officer for the Killough Dispensary District. Salary, £120 per annum as Medical Officer to the District and £15 as Medical Officer of Health, together with registration and vaccination fees. Applications to Mr. Robert Woods, Honorary Secretary, Ballycom, Killough, by May 18th.

DURHAM COUNTY HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board and lodging. Appointment for two years. Applications to V. K. Cooper, Honorary Secretary, 16, South Bailey, Durham, by June 1st.

EVANGELICAL PROTESTANT DEACONESSES INSTITUTE AND HOSPITAL, Tottenham.—Junior House-Surgeon. Salary, £10 per annum, with board. Applications to the Secretary.

FLINTSHIRE DISPENSARY.—House-Surgeon. Salary, £120 per annum, with furnished house, rent and taxes free; also coal, light, water, and cleaning, or, in lieu thereof, £20 per annum. Knowledge of Welsh desirable. Applications to W. T. Cole, Secretary, Board Room, Bagillt Street, Holywell, by May 15th.

GENERAL HOSPITAL, Birmingham.—Assistant House-Surgeon. Board, residence, and washing provided. No salary. Applications to the House-Governor by May 26th.

GENERAL HOSPITAL, Nottingham.—Assistant House-Surgeon. Appointment for six months. Board, lodging, and washing provided. Applications to E. M. Keely, Secretary, by May 26th.

GENERAL INFIRMARY, Leeds.—Pathological Curator. Honorarium, 20 guineas per annum. Applications to Mr. Littlewood, Secretary, by May 14th.

GLASGOW MATERNITY HOSPITAL, 146, Buchanan Street, Glasgow.—Indoor and Outdoor Surgeons. Applications to Arthur Forbes, Secretary, by June 9th.

GORDON HOSPITAL FOR FISTULA, 276, Vauxhall Bridge Road, S.W.—Two Honorary Surgeons, must be F.R.C.S.Eng. Applications to Mr. St. Leger Bunnett, Secretary, by May 21st.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway Road, N.—Junior House-Surgeon. No salary; board, apartments, and laundry provided. Applications to the Secretary by May 28th.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, Bloomsbury, W.C.—House-Physician and House-Surgeon, unmarried. Appointments for six months. Salary, in each case, £20, with board and residence in the hospital. Applications to the Secretary by May 25th.

KENT COUNTY ASYLUM, Chartham, near Canterbury.—Junior Assistant Medical Officer, unmarried. Salary, £125 per annum, with furnished apartments, board, and attendance. Applications to Allen Fielding, Clerk to the Committee of Visitors, Solicitor, by May 14th.

LANCASTER INFIRMARY AND DISPENSARY.—House-Surgeon; unmarried; doubly qualified. Salary, £80 per annum, with residence, board, attendance, and washing. Applications, on forms to be obtained of the Secretary, to the Secretary by May 23rd.

LONDON COUNTY COUNCIL.—Coroner for the North-Eastern District of London; not under 35 nor more than 50 years of age. Salary, £1,150 per annum. Applications, marked outside "Coroner for N.E. District," to the Clerk of the Council, Spring Gardens, S.W., by May 21st.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT AND CHEST, Bowdon, Cheshire.—Resident Medical Officer. Salary, £60 per annum, with board, apartments, and washing. Applications to C. W. Hunt, Secretary, by May 15th.

NATIONAL HOSPITAL FOR DISEASES OF THE HEART AND PARALYSIS, 32, Soho Square, W.—Physician. Applications to the Secretary.

NEW HOSPITAL FOR WOMEN, 144, Euston Road.—Female Resident Medical Officer and Female Clinical Assistant for Out-patient Department. Applications to the Secretary by May 26th.

NEWTON ABBOT UNION.—Medical Officer for the Workhouse. Salary, £50 per annum. Applications to John Alsop, clerk, Union Offices, East Street, Newton Abbot, by May 15th.

NORTH DEVON INFIRMARY, Barnstaple.—Two additional Honorary Surgeons; must reside within two miles of the Infirmary. Applications to the House Committee, under cover to the Secretary, before May 19th.

NOTTINGHAM BOROUGH ASYLUM.—Second Assistant Medical Officer unmarried. Salary, £100 per annum, with board, apartments and washing. Applications to the Medical Superintendent by May 21st.

PARISH OF ST. LEONARD, Shoreditch.—Second Assistant Medical Officer for the Infirmary, Hoxton Street, N. Salary, £40 per annum, with rations, furnished apartments, and washing in the Infirmary. Applications to the Medical Officer, 204, Hoxton Street, N.

ROYAL CORNWALL INFIRMARY, Truro.—House-Surgeon: doubly qualified. Salary, £120 per annum increasing £10 yearly to £150, with furnished apartments, fire, light, and attendance. Applications to the Secretary by May 21st.

ST. LUKE'S HOSPITAL.—Two Clinical Assistants. Appointment for six months. Board and residence provided. Applications to Percy De Bathe, M.A., Secretary, by May 22nd.

ST. THOMAS'S HOSPITAL.—Resident Assistant Surgeon; must be F.R.C.S.Eng. Applications to Mr. E. H. Hardy, Treasurer's Clerk, by May 19th.

STAMFORD, RUTLAND, AND GENERAL INFIRMARY.—House-Surgeon; unmarried; doubly qualified. Salary, £100 per annum, with board, lodging, and washing. Applications to the Chairman of the Special Committee by May 25th.

UNIVERSITY COLLEGE, Liverpool.—George Holt Chair of Pathology and Derby Chair of Anatomy. Endowment, £375 per annum each, with share of fees. Applications to the Registrar by June 2nd.

VESTRY OF ST. MARGARET AND ST. JOHN, Westminster.—Medical Officer; not less than 25, or more than 45, years of age. Salary, £250 per annum. Applications, marked on the envelope "Medical Officer," to be delivered at the Town Hall, Westminster, S.W., by May 21st.

WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.—Surgical Registrar. Must be F. or M.R.C.S.Eng. Appointment for twelve months. Salary, £40 per annum. Applications to Sidney M. Quennell, Secretary, by May 22nd.

YORK DISPENSARY.—Resident Medical Officer, unmarried. Salary, £150 per annum, with furnished apartments, coal, and gas. Applications to Mr. W. Draper, De Grey House, York, by May 15th.

MEDICAL APPOINTMENTS.

ANDREW, James Grant, M.B., C.M.Glasg., appointed Surgeon to the Victoria Infirmary, Glasgow.

BRYETT, W. R., B.A.Lond., L.R.C.P., M.R.C.S.Eng., appointed House-Physician to King's College Hospital.

CLARK, Eugene, L.D.S.R.C.S.I., appointed Honorary Dentist to the Carnarvonshire and Anglesey Infirmary.

DIXON, H. L., M.A., M.B., B.C., D.P.H.Camb., appointed Junior Assistant Medical Officer to St. Andrews Hospital, Northampton.

FEARNLEY, Jonathan, M.R.C.S., L.R.C.P.Lond., appointed Medical Officer of the Barrow District of the Glanford Brigg Union.

GOLDSMITH, G. H., M.B., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Bedford General Infirmary.

GREY-EDWARDS, Henry, B.A.Dub., M.B., appointed Honorary Physician to the Carnarvonshire and Anglesey Infirmary.

GROSS, C. F., L.S.A., appointed House-Accoucheur at King's College Hospital.

HAMILTON, James, M.B., C.M.Glasg., appointed Physician to the Victoria Infirmary, Glasgow.

HARPER, Joseph, L.R.C.P.Lond., M.R.C.S.Eng., appointed Consulting Surgeon to the North Devon Infirmary.

HARTIGAN, Thomas J. P., L.R.C.P., L.R.C.S.Edin., appointed Medical Officer of the Workhouse of the East Grinstead Union.

JOHNSTONE, George William, L.R.C.P.Edin., L.R.C.S.Edin., L.F.P.S.Glasg., appointed Medical Officer for the West Coast District of the Government of British North Borneo.

JONES, W. Black, M.B., B.S.Lond., appointed House-Physician to the Great Northern Central Hospital, Holloway.

LESLIE, Robert M., M.A., M.B.Edin., appointed House-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

LONGTON, G. Harold, L.R.C.P., M.R.C.S.Eng., appointed Clinical Ophthalmic Assistant at King's College Hospital.

LYLE, H. Willoughby, L.R.C.P., M.R.C.S.Eng., appointed House-Surgeon at King's College Hospital.

MORRISON, Alexander, M.D., F.R.C.P.Edin., M.R.C.P.Lond., appointed Honorary Physician to the St. Marylebone General Dispensary, Welbeck Street, W., *vice* W. A. Wills, M.D.Lond., resigned.

MORTIMER, J. D., M.B., F.R.C.S., appointed Medical Officer to the Earlswood Hospital for Infectious Disease, *vice* H. W. Ewen, M.R.C.S.Eng., resigned.

POLLOCK, E. C., M.B., appointed Medical Officer for the Poughill, Puddington, and Woolfardisworthy District of the Crediton Union.

POWNE, Leslie, M.R.C.S.Eng., appointed Medical Officer for the Cheriton Fitzpaine and Stockleigh English District of the Crediton Union.

RANDOLPH, Charles, L.R.C.P.Edin., M.R.C.S.Eng., reappointed Medical Officer of Health to the Wellington Rural Sanitary District.

ROBINSON, Frank, M.B., appointed Resident Medical Officer at the Liverpool City Hospital, Parkhill.

SANDFORD, G. C., M.B., C.M.Edin., appointed House-Surgeon to the Royal Maternity and Simpson Memorial Hospital, Edinburgh.

SHANN, Henry C., L.R.C.P.Edin., M.R.C.S.Eng., appointed Medical Officer of the Workhouse of the York Union.

SLANE, H. J., M.B.Edin., appointed Medical Officer of the Nafferton District of the Driffield Union.

STEEGMAN, Edward J., M.B., B.S., M.R.C.S., L.R.C.P., appointed House-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

TINDAL, Andrew Stewart, M.D., appointed Physician to the Tradeston Dispensary of the Victoria Infirmary, Glasgow.

TURNER, William, L.R.C.P., M.R.C.S.Eng., L.S.A., appointed House-Surgeon at King's College Hospital.

WACE, Cyril, L.R.C.P., M.R.C.S.Eng., appointed Assistant House-Physician at King's College Hospital.

WALKER, H. R., L.S.A., appointed House-Surgeon at King's College Hospital.

WEBB, J. Curtis, B.A.Cantab., L.R.C.P., M.R.C.S.Eng., appointed Assistant House-Accoucheur at King's College Hospital.

WILLIAMS, Alfred J., M.R.C.S., L.R.C.P.Lond., appointed Medical Officer for the Wandsworth District of the Wandsworth and Clapham Union.

WILLOUGHBY, W. G., M.D., L.R.C.P.Lond., D.P.H.Camb., appointed Medical Officer of Health for Eastbourne, *vice* Reginald Dudfield, M.A., M.B. Camb., resigned.

DIARY FOR NEXT WEEK.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr. Corner: Hypochondriasis.

THE CLINICAL MUSEUM, 211, Great Portland Street.—Open at 2, Lecture at 4.

PATHOLOGICAL SOCIETY OF LONDON, 8.30 P.M.—Mr. Jackson Clarke: Myxosarcoma of the Uterus. Dr. Habershon: Tuberculous Ulcer of Stomach and Duodenum. Dr. Lee Dickinson: Two Specimens of Ruptured Abdominal Aneurysms. Mr. Berry: Multiple Loose Cartilages from the Knee. Dr. C. Ogle: Carcinoma of the Bronchus. Dr. Rolleston: Papilloma of the Bile Duct. Dr. W. A. Wilson: Pachymeningitis Hæmorrhagica. Card Specimens by Dr. Hebb, Mr. Shattock, Dr. Newton Pitt, and Dr. Lee Dickinson.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 1 P.M.—Dr. Payne: The Diseases called Lichen. Hospital for Consumption, Brompton, 4 P.M.—Dr. J. Mitchell Bruce: Cases in the Wards. Royal London Ophthalmic Hospital, 8 P.M.—Mr. A. Stanford Morton: Retinal Affections.

POST-GRADUATE LECTURES, Metropolitan Hospital, N.E., 5 P.M.—Mr. Paget: Otorrhœa and its Dangers.

ROYAL MICROSCOPICAL SOCIETY, 20, Hanover Square, 8 P.M.

EPIDEMIOLOGICAL SOCIETY OF LONDON, 8 P.M.—Annual General Meeting. Dr. Franklin Parsons: On the Distribution of the several Influenza Epidemics of Recent Years in England and Wales.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and Epileptic, Queen Square, 2 P.M.—Dr. Tooth: Cranial Nerves. Hospital for Sick Children, Great Ormond Street, 3.30 P.M.—Mr. Edmund Owen: Acute Ostitis in Children. Central London Sick Asylum, Cleveland Street, W., 5.30 P.M.—Dr. Ord: Cases in the Wards.

METROPOLITAN COUNTIES BRANCH: NORTH LONDON DISTRICT, Tottenham Hospital, 4 P.M.

HARVEIAN SOCIETY, 8.30 P.M.—Clinical evening.

FRIDAY.

LONDON POST-GRADUATE COURSE, Hospital for Consumption, Brompton, 4 P.M.—Dr. J. Mitchell Bruce: Cases in the Wards.

SATURDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M.—Dr. Percy Smith: Melancholia.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTH.

COWAN.—On April 28th, at 23, Standishgate, Wigan, the wife of Mr Richard Hamilton Cowan, M.R.C.S., L.S.A., of a daughter.

MARRIAGE.

MCALLUM—WYMAN.—At Christchurch, Morningside, Edinburgh, on May 8th, by the Rev. R. A. Wyman, brother of the bride, assisted by the Rev. C. M. Black, M.A., Rector, Stuart Gerald McAllum, M.D. Edin., younger son of the late Donald Coleman McAllum, M.D., Brigade-Surgeon H.M. Indian Medical Service, to Edith Geraldine, youngest daughter of the late Frederick Frank Wyman, Esq., H.M. B.C. and J.P., formerly of the East India Company's service, and late proprietor and editor of the *Indian Tea Gazette*. No cards.

DEATHS.

MORE.—On April 26th, at Northwell, Kettering, Northampton, Lionel Campbell, fifth son of Dr. James More, aged 19 years.

PROFFITT.—On May 3rd, at Cornhill, Banbury, Arthur Henry Proffitt, M.R.C.S.Eng., etc., in his 37th year.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

MEMBER asks where a man suffering from nervous debility—consequent on an attack of influenza four years ago—could be received gratis, or for a small weekly sum; Scotland preferred.

TREATMENT OF LYMPHADENOMA.

T. D. COOK (Glendon, Torquay) writes: The above being an affection of the lymphatic glands, it will be interesting to know if any attempt has been made to treat it by means of extract from lymphatic glands. Brady and Martin, of Newcastle, mention a case improved by splenic extract.

TREATMENT OF SUPPURATING GLANDS IN GROIN.

COUNTY SURGEON asks advice in treatment of boy, aged 9 years, with enlarged and slowly discharging glands in the groin, produced seven months ago apparently by a thorn in sole of foot. Besides a bunch of suppurating glands below Poupart's ligament, there is a chain of enlarged glands above the centre of the ligament in the false pelvis.

THE LIGHTING AND VENTILATION OF SCHOOLS.

M.D. asks: Are there any treatises on the lighting, ventilation, etc., of schoolrooms, and, if so, which would you say treated the subject most generally?

*** We know of no special treatise on the lighting, ventilation, etc., of schoolrooms; fairly full information on these subjects is, however, given in the *Code of Regulations for Day Schools, 1894*, of the Education Department, published by Messrs. Eyre and Spottiswoode for 5½d.; the subject is also dealt with in such works as *Health at Schools*, by Dr. Clement Dukes.

"IS POST-SCARLATINAL ALBUMINURIA INFECTIOUS?"

MR. W. T. FREEMAN, F.R.C.S. (Reading) writes: I should be glad to hear opinions as to the possible infectiveness of the urine while albumen is discoverable in it after scarlet fever. If the urine be infectious under any conditions whatever, for how long does it remain so? Albuminuria may, of course, exist for very many months, or even a year or two, after an attack of scarlet fever. I am inclined to think myself that for the first few months of such altered kidney function it would be wiser to forbid boys to return to school. I am not thinking so much of cases associated with anasarca as of those slight cases with albuminuria and perhaps a little *malaise* the only symptoms. The question of the likelihood of an outbreak of scarlet fever in a school or on board ship being started thus is certainly a very important one. My own observation is negative.

LITERATURE OF INFECTIOUS HOSPITALS.

J.D.M. asks for information (1) as to recent literature dealing with the management of infectious diseases hospitals; (2) as to the precautions which may be adopted by medical officers to avoid personal contamination.

*** Our correspondent should consult *Cottage Hospitals*, Burdett, (Churchill); *Hospital Construction and Management*, Mouat and Snell (Churchill); or Dr. Thorne Thorne's Report on Infectious Hospitals, in the *Tenth Annual Report of the Medical Officer of the Local Government Board*.

ESTIMATE OF INCOME FOR TAXATION.

TENAX writes: Can you tell me whether there is any obligation upon a resident medical officer to estimate the value of the rooms occupied by him, and include their value in the return of income for the assessment of income tax? Also, whether the value of rations should be stated (approximately) in rendering said return?

*** We referred the matter to the Income Tax Repayment Agency, who quote the following from their manual on the *Assessment of Income Tax*: "The advantages of board and lodging are not to be reckoned in the income." On page 29 of the same book is a section respecting the assessment of medical men, showing deductions which should be made from gross profits.

ANSWERS.

NORTHUMBRIA.—Information as to the conditions on which the diploma of D.P.H. can be obtained will be found in the Educational Number of the BRITISH MEDICAL JOURNAL, published on September 3rd, 1893.

CANDIDATE.—We are unable to state when a new edition of Erichsen's *Surgery* will appear.

MEDICAL PRACTICE IN SWITZERLAND.

M.B.—The prohibition of the practice of medicine in Switzerland by persons not possessing a Swiss licence is so strict as to extend, at least in theory, to the case of an English practitioner who should presume to prescribe for his own wife during a temporary sojourn in the "Playground of Europe."

VILLAGE NURSES.

A MEMBER writes: In reply to "M.R.C.S." who asks for information concerning the above, if he will turn to the BRITISH MEDICAL JOURNAL of February 10th, 1894, p. 338, he will find an answer to his query.

PRURITUS ANI.

DEPUTY-SURGEON-GENERAL C. B. MOSSE (Bedford) writes: I can strongly recommend a saturated solution of boracic acid to be applied at bedtime and on rising in the morning, and whenever irritation is troublesome.

DR. W. J. CORYN (Brixton) writes to recommend in this affection the treatment given in Dr. Whitla's *Dictionary of Treatment*: R Cocainæ purif. gr.iv; hyd. amm. chlor. gr.xv; zinci oxid. 3j; vaselini albi 3x. Ft. unguentum.]

GALACTORRHŒA.

DR. JAS. T. NEECH (Tyldesley) writes: I would recommend your correspondent "M.B., M.A." to try the effect of pressure upon the breasts with an elastic bandage or belt, as I think he would find it an effectual method of arresting the secretion of milk.

NOTES, LETTERS, Etc.

TYPE-WRITTEN GREEK.

WE are asked to state that Mrs. Marian Marshall's Type Writing Office, 33, Trinity Street, Cambridge, can now undertake type writing in Greek. The specimen forwarded to us is extremely elegant.

"THAT GREAT ANDREW CLARK"

SENEX writes: Having read the noble testimony of Mr. Gladstone and others to "the noble life of Sir Andrew Clark," and to the "noble profession, of which he was so great an ornament," one cannot help wondering why it is that in this enlightened country such a man was not thought worthy of "noble rank," which is open to all who have served their country or achieved success in any honest profession, trade, or occupation except the members of "the noble profession of medicine, devoted to the relief of suffering humanity."

EPIDEMIC JAUNDICE.

DR. WM. WHITWORTH (St. Agnes, Cornwall) writes: Dr. Calvert believes that, "apart from influenza, there is no such thing as epidemic jaundice," and the purport of his letters appears to be to the effect that epidemic jaundice is a new and recent morbid development. I would remind him that epidemic jaundice is mentioned in some of the older textbooks,[1] hence it cannot be a new disease. Moreover, having experienced two epidemics prior to the influenza of 1889 to '90, and, never having noticed a single case of jaundice as a sequel of influenza, I am little inclined to agree with him in associating the two. Epidemic jaundice is no doubt an independent disease, the etiology of which has perhaps yet to be discovered.

TEA IN THIBET.

THE system for preparing the tea for drinking in Thibet is thus described by the late British Commissioner for the Sikkim-Thibet Convention: Take a handful of brick tea, rub it between the hands until it is well loosened, then put it in an open vessel with a little water and alum or wood ashes; keep on boiling the decoction (adding a little water from time to time to counterbalance the loss by evaporation) until the infusion is black as ink; then pour into a "choonga" or long churn, filling up with boiling water, and two or three chittacks of butter and salt to taste, and churn with a wooden whisk until the mixture becomes like a rich brown greasy soup. It looks nasty, but one can get used to it, and it is sustaining.

THE PREVALENCE OF ASCARIS LUMBRICOIDES.

THE *Vratch*, the leading medical journal in Russia, referring to Dr. Beaven Rake's paper on the prevalence of ascaris lumbricoides in the West Indies, published in the BRITISH MEDICAL JOURNAL of February 10th, says: Dr. Beaven Rake would do a good service to science if he would take the lead in promoting a local statistical census of all cases of ascaris, similar to that made in Russia in recent years. His example would not fail to be an incentive for similar investigations in the West (Europe), and possibly he would find followers first of all amongst the members of the British Medical Association, of whose Branch at Trinidad and Tobago he has just been elected President.

[1] Tanner, 6th ed., vol. ii, p. 144.

THE FINGERNAIL IN THE REMOVAL OF ADENOIDS.

MR. GRIFFITH CHARLES WILKIN (Weymouth Street, W.) writes: Allow me to enter my protest against the use of the fingernail for the removal of adenoid growths. In the first place a strong and sufficiently advanced nail is, most fortunately, given to only very few men. In the second place, after the finger has been moving rapidly about in the post-nasal space for a very short time, the sense of touch becomes largely impaired, and the finger generally fatigued and less efficient. In the third place, the fingernail is by Nature so constructed as with difficulty to be kept reasonably clean; I believe it to be an absolute impossibility to make it really antiseptic. Its use for operative interference breeds slovenly and careless habits, and I regret to see a F.R.C.S. recommending its use. All that can be done by the fingernail can be better done by Gottstein's knife, which can be kept perfectly clean and aseptic.

THE HEALTH OF SOUTHEND-ON-SEA.

MR. R A. JONES, President, and Mr. E. Hancock, Hon. Secretary, of the Southend-on-Sea Tradesmen's Association, write: We venture to address you upon certain untruthful reports which have been freely circulated in London and elsewhere concerning the sanitary condition of our borough. We are pleased to be able to inform the public, on the authority of Mr. G. F. Jones, the medical officer, that "the health of the district is in a highly satisfactory condition." The death-rate for the quarter ending March 31st last was equal to an annual rate of only 11.34 per 1,000. This not only compares most favourably with the death-rate of other watering places, but is very greatly below the mean mortality of England and Wales. The borough is almost entirely free from enteric fever. There were no notifications during the month of March, and only two (one being imported) during the past three weeks. We trust you will be good enough to give publicity to these facts, simple in themselves, but most important to us as a town, and thus remove any erroneous impressions which may have been created by the circulation of false reports, which might otherwise have a very injurious effect upon Southend as a seaside resort.

STRIKE OF WET NURSES.

AUSTRIA, writes the Vienna correspondent of the *Daily Telegraph*, which is behind the age in so much else, bids fair to become the classic land of labour strikes. The most extraordinary strike of all—which, fortunately for the coming generation, has as yet not advanced beyond the preliminary stage of organisation—is that of Austrian wet nurses. The danger has been threatening ever since last February, but it is only three or four days since it assumed such a definite form as to attract the notice of the press. The grievances of Austrian wet nurses are numerous. Only the more radical among them insist on an eight-hours labour day; many consider themselves entitled to keep the Sabbath as a day of rest from all work; and all of them *nem. con.* ask for wages not less than 30s. a month and exemption from all kinds of work which lie outside the functions of wet nurses. But their main grievance, which is also the origin of the present agitation, is that they are systematically fleeced by professional agents who scour the country in search of wet nurses, receive a large premium on each from those who need her services—sometimes £5 or £6, besides a percentage from the woman herself—and then send her to a family where she will be wretchedly paid, compelled to work like a black, and obliged to drink flat beer instead of the foaming, sparkling Pilsener. It appears that these agents, who wander about the country from village to village, earn as much as £30 a month merely by sending wet nurses to Vienna and other large cities of Austria, whereas the nurse herself seldom scrapes together more than £18 in the course of the whole year. It is against the wet nurse syndicate and their illegitimate aggrandisement that the efforts of the intending strikers will be mainly directed.

A MICROSCOPE MATTER.

DR. WM. HARDMAN (Blackpool) writes: Allow me to lodge a protest in reference to a matter of small importance, but of considerable interest to many of your readers. I protest politely, but most emphatically, against the much too common practice of labelling microscopical drawings, as is done in the otherwise most admirable monograph upon "Heart Inflammation in Children," published in the BRITISH MEDICAL JOURNAL of March 10th, 1894.

These beautiful drawings are described as having been made with "Zeiss D, ocular No. 2." How many of your readers know what Zeiss D refers to? I know because I have Baker's catalogue, and by referring to that, find that Zeiss D is an objective of about ⅛ focal length, and that with ocular No. 2 it gives an amplification of about 600 diameters. How much better to label drawings by the number of diameters instead of by excerpts from various opticians' catalogues.

THE PASSAGE OF A SPOON THROUGH THE ALIMENTARY TRACT.

DR. W. J. H. HASLETT (Sunbury-on-Thames) writes: Following Mr. Eve's account of the "Human Ostrich," it may be of interest to add an instance of a comparatively large spoon passing safely through the alimentary canal.

A gentleman suffering from melancholic stupor was eating his breakfast, and using an electro-plated spoon, measuring 5 inches in length and 1 inch across the bowl. The attendant who waited on him turned for an instant to help another patient, and on looking round again noticed the spoon had disappeared. Thinking the patient had dropped it he gave him another, which he at once attempted to swallow. The attendant removed it with his fingers and sent for me. As the first spoon could not be found, the obvious conclusion was that it had been swallowed. I examined the patient's pharynx and œsophagus, but could find no trace of the spoon, nor was its passage marked by any blood or abrasions. I put the patient to bed for some days and watched him very carefully, but as no symptoms of any sort appeared, I let him get up and go about as usual.

On the thirteenth day the spoon passed *per rectum* quite easily. The fact which struck me most was the corroded and blackened condition of the spoon, which looked as if it had been in a strong fire, which had destroyed the electroplating. Presumably this condition was produced by the acids of the gastro-intestinal tract, and proves, I think, that the spoon must have remained a long time in the stomach, as the acids in the lower part of the tract are trifling. Although insane for years, the patient had never attempted anything of the kind before.

LETTERS, COMMUNICATIONS, ETC., have been received from:

(**A**) Professor T. Clifford Allbutt, Cambridge; W. Auld, M.B., Wimborne; Messrs. Atkinson and Conder, Knottingley; Mr. A. Abercromby, Bromley. (**B**) Dr. R. W. Burnet, London; R. D. Booth, M.B., Beverley; J. W. Batterham, M.B., Worthing; Mr. T. Blair, Leeds; Dr. J. D. Buck, Philadelphia; Mr. W. Berry, Wigan; Mr. A. S. Barling, Lancaster. (**C**) Mr. C. Campbell, Saddleworth; Candidate; Mr. A. Corbes, London; Mr. R. Coombe, Exeter; Dr. D. Campbell, Calne; Sir Thomas Crawford, London; T. D. Cook, M.B., Torquay; Miss E. G. Clarke, Walton; Mr. G. H. Carrington, Robin Hood's Bay; Mr. W. M. Courtney, Dublin; Mr. J. K. Coutts, Manchester. (**D**) Mr. J. Davies, Bath; H. L. Dixon, M.B., Lancaster; Sir W. B. Dalby, London; Dr. A. Donald, Manchester; L. Drage, M.B., Hatfield; Deputy-Surgeon-General; N. Davies-Colley, M.B, London; Dr. J. Dreschfeld, Manchester. (**E**) Epidemiological Society of London, The Secretary of the, London. (**F**) Mr. E. H. Fenwick, London; F. W.; F.R.C.P.; Mr. A. C. Foster, Bradford; F.R.C.; Mr. G. J. Fogerty, Liverpool; Mr. G. B. Fraser, Manchester; Mr. J. Franks, London. (**G**) Dr. G. H. Goldsmith, Bedford; Dr. A. Gaster, London; Dr. J. J. Gorham, Garstang; Mr. F. Greaves, London; Dr. J. Griffiths, Cambridge; Mr. G. S. George, Lisburn. (**H**) J. M. Hermon, M.B., Wakefield; Dr. G. F. Helm, Marazion; Mr. W. J. H. Haslett, Sunbury-on-Thames; H. W. B., M.D.; W. Hardman, M.B., Blackpool; Dr. S. Haynes, Malvern; Dr. Holzschneider, Cronenberg; Mr. J. Hepworth, Manchester; Dr. P. Hicks, Leamington. (**I**) Inquirer. (**J**) Mr. R. A. Jones, Southend-on-Sea; W. B. Jones, M.B., London; Mr. G. W. Johnstone, Sandakan, North Borneo. (**K**) Dr. R. Kirk, Glasgow; Mr. H. Kornfeld, Berlin; Dr. J. Kerr, Bradford. (**L**) Lancashire; Mr. R. C. Lucas, London; Dr. H. G. Lys, Bournemouth; M. Leclere, Paris; Mr. R. Lake, London; Messrs. T. H. Lloyd and Co., Leicester; Mr. R. M. Leslie, London. (**M**) Mr. T. L. Macartney, Tattenhall; Dr. E. Magennis, Lurgan; Dr. C. H. Milburn, Hull; Member; M.R.C.S.; J. D. Mortimer, M.B., Horley; Dr. A. Miles, Edinburgh; Dr. J. Murphy, Sunderland. (**N**) Dr. D. Newman, Glasgow. (**P**) Mr. G. F. Poynder, Meiktila, Upper Burmah. (**R**) Mr. C. S. Redmond, Gateshead; Dr. W. Rankin, Churchtown; Royal Microscopical Society, Secretary of, London; Mr. T. F. Raven, Broadstairs; Dr. A. Reid, London. (**S**) Mr. W. J. Smith, Southport; Mr. A. W. Senior, Levenshulme; Dr. J. B. Spence, Burntwood; Sheffield Medico-Chirurgical Society, The Secretary of the, Sheffield; Senex; Mr. E. F. Stephenson, Lismore; Dr. W. R. Smith, London; Mr. F. Stokes, London; J. W. Somerville, M.B., Galashiels; Mr. G. C. Sandford, London; Dr. E. Seaton, London; Scotus; G. F. Still, M.B., London; Mr. E. J. Steegmann, London. (**T**) Tact; Dr. D. Turner, Edinburgh; Mr. C. B. Turner, Grimsby; Mr. W. R. Tuckett, Woodhouse Eaves; Mrs. Turner, London. (**V**) Vindex. (**W**) Messrs. John Weiss and Son, London; Dr. G. E. Williamson, Newcastle-on-Tyne; Dr. A. Welsford, Dover; Mr. G. C. Wilkin, London; Dr. S. Woodcock, Wigan; Mr. C. F. Williamson, Horley; Dr. F. H. Walmsley, Darenth; Mr. G. M. D. Willett, Keynsham; etc.

BOOKS, ETC., RECEIVED.

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Materials for the Study of Variation treated with especial Regard to Discontinuity in the Origin of Species. By William Bateson, M.A. London: Macmillan and Co. 1894.

Formulaire des Eaux Minérales de la Balnéothérapie et de l'Hydrothérapie. Par Dr. De la Harpe. Paris: J. B. Baillière et Fils. 1894. Fr. 3.

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The Proclivity of Civilised Woman to Uterine Displacements: the Antidote. Also other Contributions to Gynæcological Surgery. By M. U O'Sullivan. Melbourne: Stillwell and Co. 1894.

The Etiology of Osseous Deformities of the Head, Face, Jaws, and Teeth. By E. S. Talbot, M.D. Third edition. Chicago: W. T. Keener and Co. 1894.

***** In forwarding books the publishers are requested to state selling prices.**

THE MORTON LECTURE
ON
CANCER AND CANCEROUS DISEASES.

Delivered before the Royal College of Surgeons of England.

BY SAMUEL G. SHATTOCK, F.R.C.S.,
Curator of the Museum of St. Thomas's Hospital.

[ABSTRACT.]

IF cancer was a microparasitic disease, it should be capable of experimental transmission. Mr. Ballance and the lecturer had carried out a series of experiments in which they had inserted portions of freshly removed carcinoma of the breast into the abdominal cavity, the subcutaneous tissue, the muscles, and the anterior chamber of the eye, of various animals. The result was in all cases negative; the portions so inserted underwent coagulation, necrosis, and were either absorbed or became encapsuled.

At the present time there was no authentic case on record in which human carcinoma had been transferred to any of the lower animals. Success, however, had followed in certain cases when the transplantations had been made from one animal to another of the same species. And in this the results followed the laws of grafting rather than those of ordinary infection; they showed that a portion of a growing carcinoma, if so transferred, would grow in a second individual as it would have done in the first; but they did not really show that carcinoma was infective. A graft from one species of animal never formed an integral and permanent part of another of a different species; he referred to Hunter's grafting of human teeth to the combs of cocks, as showing only that the "graft" in certain of these experiments remained aseptic, and, like any aseptic dead substance, it contracted vascular adhesions with the surrounding tissues.

To prove that cancer was infective, it would be necessary either to isolate the infective agent and produce the disease with this, or adopt the less difficult method of using the tissue for purposes of infection after sufficient time had elapsed to ensure that the proper tissue cells were dead. There were two considerations, however, before concluding a negative. It might be that a preparatory inflammation was necessary. It was in this direction that Mr. D'Arcy Power was carrying out excellent work. Or it might be, and it was to this that Mr. Ballance and he inclined, that the phase of the hypothetical infective agent was not such in the tumour as would set up the disease by direct transference.

Although there were such strong clinical reasons for regarding cancer to be an infective disease, it was only lately that methods had been devised of cultivating a contagium vivum. After the rise of bacteriology it was natural to attempt the growth of a specific microphyte from carcinoma. In this country Mr. Ballance and he had made a long series of experiments in this direction, and with a negative result; and he might state that up to the present time no specific microphyte—bacterium, micrococcus, or other—had been cultivated from carcinomatous tumours. This led him to discuss, next, the microzoic theory, which attributed the growth of carcinoma to the action of a specific protozoon. Such a protozoon would induce the new formations, not by its mechanical presence, but, as in the case of bacteria, by the chemical changes incited by it.

An excellent historical summary of the histological appearances held by different observers to indicate the presence of such a body was given by Noegerrath up to the close of 1891. Since then Soudakewitch, in Russia, and L. Pfeiffer, in Germany, had, amongst others, published observations; but if he must select one it would be Dr. Ruffer, who had approached the subject with an intimate knowledge of histology and a commendable spirit of criticism, and the value of whose work had been enhanced by Dr. Galloway's corroboration. He referred to Dr. Ruffer's latest description of the only body in carcinoma that could be claimed with any probability as a protozoon, and then discussed what could be stated as to its life-history, that is, especially as to its method of reproduction.

In the case of the best known parasitic protozoa in vertebrata and invertebrata there was a distinct life-history, a portion of which was in some cases passed outside the body of the host. And there was highly interesting evidence pointing to the probability that this was so in the case of carcinoma, namely, its endemic character in particular districts. Dr. Haviland's conclusions, drawn from his collection of statistics in England and Wales, were that cancer was most prevalent along the courses of rivers which seasonally flood their banks, and especially where, from the flatness of the country, the floods were retained.

The districts about the Thames, Severn, Mid-Devon and Yorkshire rivers were especially noteworthy. But there were lesser areas where the endemic character was still more highly pronounced. The best of such instances was that described by Mr. Law Webb—a small village in a certain part of Shropshire. In this, in a small group of cottages there were nine houses in which one, two, or more cases of cancer had occurred during the last twenty-five years. A little further off were two houses under one roof, which might be called A. and B. In house A. a man died of cancer of the rectum; the next occupiers were a man and his wife, the former of whom died of cancer of the stomach, the latter of cancer of the rectum. In house B. a woman died with carcinoma of the breast. House A. was then taken by three spinsters, one of whom died of cancer of the uterus, another of cancer of the stomach.

The coccidium of the rabbit offered one of the best known illustrations of the process in which a certain phase was passed outside the host, and this had been fully referred to by Dr. Galloway in the Morton Lecture of last year. In other cases the entire series of phases were passed through within the host. The parasite which J. Steinhaus had named karyophagus salamandræ was an illustration. This passed its life entirely within the cells of the intestinal epithelium of the salamander, and though in certain phases its nature might admit of doubt, the proof of its being parasitic was obvious in the formation of sickle-shaped spores. This led him to point out that this pathognomonic sign of a parasitic element, though it had been alleged to occur in cancer, was not yet forthcoming. The so-called sickle-shaped bodies described and figured by Soudakewitch and others had been discountenanced by Metchnikoff; they had not the regularity of true sickles, and in their forms and staining reactions they were represented by chromatic degenerations of cell nuclei. He referred to an instructive series of forms similar to such, which were figured by Demarbaix[1] in the small lymphoid cells of the bone marrow of the rat examined several hours after death, and one might see the same in dying leucocytes in inflammatory foci; the nuclear chromatin became ring-shaped, or parted into sickles or less regularly shapen elements, and finally became fragmented into lesser portions and distributed through the cell; in polynucleated cells the different nuclei, or parts of the nucleus, might undergo like cadaveric alterations.

In cancer cells such false sickles might arise from changes occurring in included leucocytes, or the smaller lymphocytes, or possibly in portions of the cell nucleus divided off from the rest, or in the residues of chromatin resulting from irregular mitosis.

As to the method of multiplication of the alleged parasite in carcinoma, this had been described by Dr. Ruffer as occurring only by binary division; or, as a modified process, the nucleus might divide into parts which would become arranged peripherally, after which the protoplasm and capsule followed suit in the subdivision.

In a recent number of the *Journal of Pathology and Bacteriology*, Dr. Cattle, of Nottingham, had figured what might be a spore cyst within a cancer cell. So important did this observation seem that he (the lecturer) wrote to Dr. Cattle, who kindly forwarded the specimen in question; but, after careful study, he had formed a definite opinion that this body was only a cell invagination, in which the cell protoplasm of the included cell was highly vacuolated and the cell membrane well marked; there were in other parts of the section epithelial cells, of which the protoplasm presented precisely

[1] *La Cellule*, Tome v.

similar appearances. At present there was no unimpeachable observation to the effect that a spore cyst was produced in carcinoma. He had limited his remarks to carcinoma of the breast, because in squamous-celled carcinomata the complications arising from horny change were introduced, and certain appearances, due to this, had been taken by L. Pfeiffer and others as parasitic: the cell body became homogeneous, and the nucleus ceased to stain; in other cases invaginations of keratinising prickle cells were encountered, and these, too, had been mistaken for parasites; J. Steinhaus had particularly drawn attention to such semblances.

In these carcinomata, also, exposed, as they were, to the causes of common inflammation, collections of leucocytes had been taken for spore cysts holding nucleated spores, some such might be sections of vessels, but others lay in the epithelium; their nature, however, was obvious, from the fact that leucocytes could be seen in various numbers between the cells, and precisely similar collections had been described and figured by Mr. D'Arcy Power in the epithelium of the rabbit's vagina after the repeated application of linimentum iodi: a collection of polynucleated leucocytes so closely packed that the outlines of the individual cells were not recognisable was at first sight, nevertheless, a striking object.

As to the particular body figured by Nils Sjöbring, Soudakewitch and Ruffer, it ran perilously close, as usually displayed by the triple stain, to certain results of hyaline degeneration; yet when similar bodies, provided with exquisitely-arranged peripheral bars or granules, were encountered, one's trust revived, for the only thing to which these were comparable were certain forms of such a protozoon as the coccidium oviforme of the rabbit's liver.

One test, certainly, the body stood well, and that was the test of constancy. It was present in all carcinomata; and no precisely similar body had been produced in epithelium by common irritation, though Mr. D'Arcy Power had produced not a few other forms alleged in certain quarters to be parasitic.

Dr. Richard Hebb had figured the particular body in question in a case of what he designated peritoneal fibrosis, but he (the lecturer) thought that most who read the report—in the Pathological Society's *Transactions*—would come to the conclusion that this case was really one of malignant disease and confirmed rather than threw doubt on the contention put forward.

As still related to Koch's first postulate, he next drew attention to certain chemical questions.

Three years ago, for certain chemical reasons, Mr. Ballance and he had been led to test the effect of aqueous or 50 per cent. glycerine extract of minced carcinoma and sarcoma, to which thymol or a small proportion of carbolic acid had been added for preservative purposes. The extracts were filtered and kept in sterilised test tubes in a refrigerator. Such extracts had no local or general effect upon rabbits when used subcutaneously.

Two cases he might notice, in passing, out of several that were treated by the subcutaneous injection of 20 minims daily, as showing that no local reaction occurred, such as happened in tuberculous lesions from the injection of tuberculin, and that no curative or preventive property could be assigned to such extracts. One concerned a lady under the care of Sir William Mac Cormac, who had been subjected to four operations for scirrhus in six months. A few weeks after the fourth operation the injections were used—forty in all. Recurrence took place during the course, and death ultimately from intrathoracic disease. The other case was one of recurrent sarcoma. Treatment was adopted a few days after a second operation. Recurrence took place, however, as in the other instance, whilst treatment was proceeding.

Speaking generally, the pathogenic action of bacteria arose from the specific albumoses and alkaloids which they elaborated. Could any such substances be extracted from carcinoma? If an aqueous extract of minced carcinoma were boiled and filtered, the filtrate would give evidence of containing proteid, but this was due to the presence of acid or alkali albumen, according to the reaction of the tumour, which was uncoagulated by boiling. If the fluid were first acidulated with acetic acid, or, better still, boiled with an equal bulk of 10 per cent. trichloracetic acid, all the common proteids were precipitated; the filtrate was quite clear, and the test with dilute cupric sulphate solution, or with concentrated hydric nitrate, gave no trace of precipitate, proving the complete absence of albumose. As to alkaloids he could say, from the results obtained by Mr. Edmund White, that these were equally absent.

Albumose, however, might possibly be obtained from carcinoma under two circumstances, though in neither would it be of a specific or pathogenic kind. If putrefaction was allowed to ensue, such a substance might be found. Many years ago Mr. John Marshall had made the observation that the reaction of a scirrhus of the breast was acid. He (the lecturer) had often found this in the tumours of which the unfailing kindness of Mr. Edgar Willett had supplied so many; and he had found the same in sarcomata. But this acid reaction arose only a certain number of hours after removal. As Mr. D'Arcy Power had shown, the reaction of a scirrhus immediately after its excision was alkaline or neutral. In fact all, or nearly all, tissues became acid after death; this fact was well known in the case of muscle; and from the latter albumose was derivable owing to the action of the pepsin, of which a certain amount was in the general circulation: and so it might happen in carcinoma were the examination long delayed. There was another chemical question of much interest. The capsule of encysted protozoa consisted of cellulose, or of what was, in other cases, assumed to be chitin. Was either such demonstrable in carcinoma? These substances were not present in the tissues of vertebrates. Professor Halliburton kindly undertook to test this possibility, and the investigation was most carefully carried out in the physiological laboratory of King's College by Dr. Gregor Brodie. At first the results were encouraging, but as Dr. Brodie perfected his method they became less so, and ended in a complete negative. The principle of the method was as follows: The tumours were minced and boiled in 20 per cent. caustic soda, and filtered hot through asbestos. A small residue of fats in excess was left upon the filter, and in this residue there would have been any cellulose or chitin, which were insoluble in boiling caustic soda or potash. The residue, after being washed with boiling caustic potash solution, then boiling distilled water, and then with weak hydric sulphate to neutralise the alkali, etc., was treated with concentrated hydric sulphate. Cellulose was soluble in hydric sulphate, chitin insoluble in this, but soluble in hydric chloride. The acid drawn through the asbestos by means of a pump was diluted and boiled. Had cellulose been present it would thus have been converted into dextrose or grape sugar, and the presence of this would be easily recognisable by means of Fehling's solution. No such reducing substance was formed. The asbestos was next treated with concentrated hydrochloric acid. The filtrate was quite clear, and gave no precipitate on dilution, as it would have done had chitin been in solution; nor was a reducing substance obtained by boiling the hydrochloric acid after dilution.

He next proceeded to consider the second postulate of Koch, namely, the cultivation of a micro-organism alleged to be in the tissues, outside the body. It was with this that Mr. Ballance and he had been for some time occupied. They had used test tubes of milk, with 5 per cent. glycerine, dilute broth and other fluid media; into these, portions of the growing edge of carcinomata of the breast had been placed, and examined by means of sections at different dates. They had, however, given up such methods as not sufficiently natural, or like the conditions a parasite would meet with in its natural history outside the body.

They had found that psorospermial material from the rabbit's liver placed in broth or even in sterilised rabbit serum underwent practically no further change; the conditions were not sufficiently natural. He then described and showed the method they had now adopted of using sterilised sand in Petri capsules or deeper ones, kept between double dishes, and the whole beneath a shade, on a sheet of glass. Specially distilled water was used, and this was boiled four hours in a sterilised flask before use. Into such capsules pieces of the growing edge of mammary carcinomata were placed. And now he came to a result which, if confirmed, would fully repay for the negative character of the rest.

In no fewer than six capsules, five of which were infected from different tumours, they had obtained actively moving amœbæ. Some of the earlier of these experiments were not conducted with all the precautions desirable, and they hoped in a few weeks to satisfy themselves on this question, as they had a new series of such experiments almost mature for examination, together with many check experiments made with the muscle, pancreas, spleen, mamma, etc., of the human subject, as well as of dogs. In check experiments made with sterilised sand and distilled water, or tap water, to which a small quantity of broth or blood plasma had been added, they had obtained no similar results.

There was one body that for a while diverted attention. This was a flattened circular or oval structure, radially striated in its periphery, and corresponding in size with the element met with in carcinoma. It occurred in all the samples of silver sand examined, as well as in sea sand, and its general look suggested a skeletal nature. It was unaffected by baking; on the addition of hydrochloric acid it rapidly parted into radial segments, and then utterly vanished. Professor Dallinger had not been as yet able to name it, but it was probably a segment of some foraminiferous protozoon. Were the amœbæ leucocytes? Professor Sherrington had made the interesting observation that in the blood drawn from the dog and prevented from coagulating by the intravenous injection during life of oxalate of potassium the white corpuscles will exhibit movement for as long as three weeks; in the frog, observation had also shown that the leucocytes will remain alive six weeks after the blood is drawn. That the bodies in question, however, were not surviving leucocytes was proved by their living in water, the action of which was lethal in the case of the mammalian corpuscle; and it was evident, from the great numbers found in the larger capsules, that a process of multiplication was concerned. But what completely disproved this possibility was that there were other phases met with in the sand of the capsules: encapsulation and sporulation.

One of the tumours used was a sarcoma. And, should the results be true, it was not a little curious that the same microzoon occurred in carcinoma and sarcoma. In sarcoma Dr. Ruffer had not yet described such a body as that present in carcinoma.

He concluded, however, with an analogy. One of the most remarkable modern discoveries in connection with vegetable galls was Professor Adler's, that what were once taken to be two distinct gall-making insects are but different phases or alternating generations of a single one: and there were many such instances. And the interesting point was that the galls produced by the same insect in its alternating phases were markedly different. One of the commonest kinds was one of the best illustrations. The common spangle on the under side of the oak leaf was the produce of one phase of a gall-making insect, the currant gall on the male flower was the produce of the other phase of the same.

So it might be in carcinoma and sarcoma.

THE MAMMALIAN HAND.—At the meeting of the Zoological Society of London, held recently, Professor Karl von Bardeleben, of Jena, read a paper on "Bones and Muscles of the Mammalian Hand and Foot," in which he explained his views on the rudiments of the sixth and seventh digits or rays. These rudiments, as he showed, are situated both on the inner and the outer borders of the hand and foot: they are present in nearly all the orders of mammals, especially in the lower forms, and are always provided with special muscles.

ROYAL SOCIETY OF EDINBURGH.—At the meeting of this Society on May 7th Dr. Robert Munro, at the request of the Council, read a communication on the Rise and Progress of Anthropology. He held that the coalescence of the power of deciphering unwritten records, with the almost coincident teaching of Darwin, first enabled the antiquary to look beyond the horizon of mere historic vision, and to gather the materials for a science of anthropology. Dr. Munro held that the chief materials in attaining this science were (1) ethnology, (2) language, (3) the structure of man, (4) fossil man, (5) the handicraft products of man, (6) the bearing of geology on the prehistoric remains of man.

AN ADDRESS
ON
THE ETHICS AND PROSPECTS OF THE PROFESSION IN NEW SOUTH WALES.

Being the Presidential Address delivered before the Sydney and New South Wales Branch of the British Medical Association, March 2nd, 1894.

BY RALPH WORRALL, M.D., M.CH.

GENTLEMEN,—First let me again express my grateful acknowledgment of the high compliment paid me in electing me to be President of the Sydney and New South Wales Branch of the British Medical Association for the year which has just closed. No one can be more conscious than myself of my many shortcomings in filling this high position; but I am solaced by the thought that failure, more or less, is the common lot of humanity, and that I have striven, as far as in me lay, to uphold the dignity of the office and the interests of the profession. I thank you for the indulgence and courtesy which you have always extended to me, and I would express my special indebtedness to my brother officers in the Council and to our Assistant Secretary, Mr. Green, for the valuable help so often given.

THE PAST AND FUTURE OF THE BRANCH.

The past year has been one of unexampled prosperity for our Branch. Nineteen new members have joined, making our total strength 192. We have a credit balance of £331 5s. 2d., and this after paying £32 14s., in accordance with a vote of the Branch, to Dr. Martin to aid his experiments in snake poison. We have to deplore the loss of two valuable members, Dr. Geo. Bennet and Dr. W. Spencer.

There have been 12 Council meetings, and 10 general meetings, at which 23 papers were read and 12 exhibits shown. The whole of these contributions were made by 20 members; that is, out of a total of 192 members, many of whom have great opportunities for scientific and clinical researches, only 20 took the trouble to lay before their brethren any result of their observations and experience. This is surely an undesirable state of things. Those who have opportunities should make use of them in the interests of science and humanity; in omitting to do so they neglect a powerful means of self-culture, for the preparation of a paper entails much healthy exercise of the judgment and reasoning faculties in addition to materially adding to an accurate knowledge of the subject treated. I trust that in the ensuing session members will rouse themselves, and that we shall have such a plethora of papers that the Council will be called upon to make a selection of the most valuable for presentation at our meetings.

The average attendance at our general meetings has been greater than in any previous session, yet we have to regret that many of the senior members are conspicuous by their absence. These gentlemen owe everything to the profession. Surely it should not be too much to expect that in return they would make the small sacrifice involved in attending once a month and endeavouring as far as they could to aid the success of these meetings, which help so greatly to bind together the profession and add to its sense of knowledge. In Liverpool, throughout the session, meetings were held fortnightly, and notwithstanding this tax on their time, the leading medical men were characterised by the punctuality and constancy of their attendance. They recognised that the man who lives self-centred, with no regard for the commonweal and no object but his own narrow personal interests, misses much unalloyed pleasure and cuts himself off from valuable sources of instruction and self improvement.

The discussions have not shown as much advancement as the increased attendances would warrant us expecting. Some members are too proud—because they do not speak as well as others they refrain altogether—others are too diffident. Both

might remember that good speaking depends largely upon practice and knowledge, and if when notices of meetings are received they would take the trouble to read up and reflect upon their own experience in the matters which are to be debated they would acquire that confidence which mastery of the subject rarely fails to give, and the interest and value of the discussions would be greatly increased.

Another great hindrance to discussion is the fear of giving offence. In former years we were called a mutual admiration society, and while at the present time this cannot be truthfully said of us, yet I do think many members by their silence tacitly consent to what they believe to be error rather than risk offending a *confrère*. This is a shrinking from duty which I trust will have no place amongst us in the future. To be of any value discussion must be fearless and outspoken; so long as it is couched in courteous terms adverse criticism, however strong, will alienate no friendship worth retaining.

As I said before, there are at the present time the large number of 192 members comprising the Branch. Yet compared with the total number of practitioners in the colony we are in a sad minority. The proportions must be reversed, we must include in our ranks all reputable practitioners if we are to exercise that power and influence which is so necessary for the welfare of the profession.

When we shall be able to say without fear of challenge that the Branch is practically the medical profession of this colony, and that those outside are an insignificant minority, there are many points of medical policy which we shall be able to direct and many questions we shall be able to decide in the interests of the whole profession which at present it is impossible we can adequately control. Let me instance one or two. It will be admitted that the stamp of man, in addition to his technical knowledge, which the medical faculty of a university turns out, is a matter of vital concern to us all. Now we all know men are made by their teachers; "from them their form and tone is ta'en; and what they make them they remain" is very largely true. If, therefore, the profession as a whole can directly influence the appointment of the very best men only on the university staff, it will have secured the most powerful aid in maintaining unimpaired its status and dignity in these colonies. In the eloquent words of a great American surgeon: "Teachers should not be appointed for their connections, pedigree, or wealth, but for their high character, knowledge of the subject, and love for teaching. There should be no small men morally or mentally in the faculties of our universities." The authorities of the university, therefore, have a great responsibility, greater perhaps than is recognised by some. Upon the conscientious and wise exercise of their high trust depends the health, honour, and happiness in more ways than one of the whole community, rich and poor alike.

The Ethical Functions of the Branch.

Another subject of even greater importance is that of ethics, which has been only too prominently before us during the year. It has been asserted by some that this lies entirely outside the scope of the society, and that our interference in the matters referred to was therefore unjustifiable. To show how contrary to fact is such a view I will read the following extract from the original prospectus drawn up on the formation of the parent Association in 1832 to indicate its objects and purposes:

"Fifth object: Maintenance of the honour and respectability of the profession generally by promoting friendly intercourse and free communication of its members, and by establishing among them the harmony and good feeling which ought ever to characterise a liberal profession."

The by-laws of our own Branch say that its objects shall be, amongst others: "To advance the general and social interests of the profession. To promote fair and honourable practice, and to decide upon questions of professional usage and courtesy. To consider any question of medical polity."

Such, then, being the fundamental objects of the Association, it was not merely justifiable, but would have been neglect of duty for the Council—the Executive of the Branch—to fail to interfere in a matter which admittedly concerns very closely the best interests of the profession.

As competition deepens there is an increasing tendency for those of weaker moral fibre to fall away from the honourable traditions of the profession which, in joining it, they accepted, and to resort to advertisement of one kind or another, in order to bring themselves under public notice. In this they have the support of the lay press of Sydney, the directors of which have apparently been unable to divest themselves of unconscious bias in favour of a practice so calculated to increase their receipts. It is much to be regretted that these gentlemen, who to a considerable extent help to mould public opinion, are unable to take a broader view of matters which concern the public even more than the profession. A daily paper, in a leading article on Mr. Ernest Hart's address on Medical Ethics before the American Congress, asks, Why should not doctors advertise? Why should not one who knows he can heal and relieve to a greater extent than his colleagues, tell the public so? The answer is, if he can do so, he does not need to proclaim it, nor is it becoming he should. Nothing is more certain than that the public will gradually make the discovery for itself, and that the gratitude of those whom he has benefited and the generosity of his brother practitioners, which in such a case they have never been slow to evince, will bring him opportunity and fame in a much more satisfactory and gratifying manner than if he were to sing his own praises in the public press or elsewhere. It is of absolutely no value to the public to hear how a medical man estimates himself, but of the greatest value for it to hear from others in what estimation he is held by them, to have the private opinion of those qualified to judge. Again, if self-advertisement were to prevail as a general practice, the public would be at a greater loss than ever to discover where real merit lay. If all were to insert simply announcements of their merits in the public press, obscurity would come again, and to make themselves distinctive and notable some would find it necessary to resort to such expedients as sea serpents in the window or balloons in the air. Can anyone doubt the degradation which would follow? Our social status and professional dignity gone, we should be on no higher level than that of small tradesfolk. I shall conclude the question of self-advertisement in its various forms by quoting Mr. Ernest Hart to the effect that it is the keynote of the quack, and that Dr. Johnson's definition of a quack is "one who proclaims his own medical abilities in public places"—that is, the lay press.

The question which I believe is next in importance, and which has already wrecked a society which promised to do much for the profession, is that of consultation with homœopaths. Mr. Ernest Hart has dealt with this subject in such a manner as to convince anyone, not blinded by prejudice or self-interest, that to meet those who profess to be guided by the principles commonly supposed to be associated with the term homœopathy is unworthy of members of an honourable profession. To quote from an able editorial on "Medical Ethics and the Lay Press," in the *Australasian Medical Gazette* of January 15th: ".....We meet him (homœopath) not, as he is deceiving the public and practising what he knows to be false." That is the case exactly. It is useless disguising facts. If we consult with homœopaths we connive at fraud.

Regular practitioners do not dub themselves allopaths, or assume any other catchword implying that they possess a superior system of cure in order thereby to attract patients. They are guided in the treatment of disease not by "a rule of thumb," but by the results of accumulated experience and scientific research. Apart, therefore, from ethical considerations there is no common ground upon which they can meet a homœopath with any advantage to the patient.

Medical Ethics.

Another question of public medical ethics is concealing remedies and modes of treatment. About this I do not consider it necessary to make any remarks, because the members of the profession in these colonies are, as a rule, most generous in spreading a knowledge of the best they possess among their brother practitioners. While private medical ethics are scarcely less important than public ethics, we cannot hope to guide and control them by means of our Branch in the same way as the latter; this must be left to the private judgment and conscience of each individual member. I will only say in the words of Professor Drummond, that when a man acts unselfishly, and does as he would be done by, he

erects a landmark upon which he will after look back with far more satisfaction than he could view any advantage he might derive from having acted otherwise. One question of private ethics I may, perhaps, be allowed to touch upon, and that is, Should the consultant take up a case which he has seen in consultation during that or any subsequent illness? In my opinion to do so is prejudicial to the best interests of all concerned, and is only justifiable when in the meantime the case has been placed in the charge of a third practitioner.

Clubs.

No presidential address would appear to be complete without a reference to the old grievance regarding clubs. I am inclined to believe that the only solution of this difficulty lies in the suggestion made by Dr. Huxtable when the matter was under consideration some two years ago, that the Council of this Branch, the majority of whom have no clubs, and therefore may be said to be impartial, should meet in conference the chief men in the various orders, and place the case of the lodge doctors before them with the force that disinterested advocacy cannot fail to give. Conference is acknowledged to be the remedy for all grievances of this kind nowadays; it may do good and cannot do harm, and I therefore commend the idea as worthy of consideration to the lodge doctors and the Council of the Branch for the ensuing year.

I may add that I think there are two questions in connection with lodge practice demanding immediate attention:—

1. The amalgamation of lodges into institutes in which the medical officer is paid a fixed and totally inadequate salary irrespective of the number of members, and in which he is obliged by the amount of work to treat patients *en masse*. It is thus impossible that there can be that mutual esteem which is very general under the old system of each lodge choosing its own medical officer. In adopting such a scheme, therefore, the lodges have acted in a way which is diametrically opposed to their own interest, and demoralising to the practitioner who has been induced to accept the position.

2. The formation of proprietary lodges in which the principle of mutual benefit is non-existent, the medical officer being paid an insignificant and decreasing proportion of the receipts, the remainder going to the proprietor, who is thus stimulated to resort to all kinds of unjustifiable canvassing, and frequently lures into his net the patients of other medical men and those well able to pay ordinary fees. This is a system which has been condemned in the strongest terms by the parent Association and the General Medical Council. To check it the latter is now considering the advisability of striking off the *Register* all who degrade themselves and their profession by participating in it. The instances in which the medical officer is also the proprietor are still more reprehensible.

Competition and Overcrowding.

The evils which I have thus traced have undoubtedly as their exciting cause the excessive competition to which members of the medical profession are now subjected, and it cannot be too widely known that the days are for ever past in which a practitioner could hope to come out to these colonies and return to England in a few years having acquired a moderate competency. Those, therefore, who purpose emigrating would do well to pause and consider whether little more than bare living is sufficient compensation for expatriation from country, friends, and all the pleasures and advantages of the highest social and professional intercourse, and so likewise parents and guardians would do wisely to reflect whether the same amount of time, money, and energy thrown into some other sphere would not give a richer material return for those whom they wish to make a good start in life. If, on the other hand, a young man feels that the acquisition of wealth is but a small part of the physician's reward, and that in absorbing interest the medical profession is equalled by no other, he may enter it in the full assurance that he will not be disappointed.

Remedies.

Having pointed out the ills already in existence and those showing themselves above the horizon, it is meet that I should make suggestions as to the means by which they may best be encountered and overcome. Of these, none to my mind equals in importance the inclusion of the whole profession in our Branch. The Council are fully alive to this, and have caused a circular to be sent to each practitioner not already a member, inviting him to join, but it is incumbent upon each of us individually to spare no effort to induce our friends to become members. Then we must have our own medical journal, managed and controlled by ourselves, and if the other colonies will only co-operate there is no reason why we should not accomplish this during the present year by buying the *Australasian Medical Gazette*, which has already a very high reputation and a large number of subscribers.

The library which has just been formed should and will be extended, to which end the Council have written, soliciting the help of the parent Association. Then if some one of our many rich men would build for us a medical institute, with meeting room, library, etc., we should have all the factors which go to make a strong, united, progressive profession exercising a weighty and benign influence upon the welfare of the community. I cannot conceive of any way more calculated to give present satisfaction and future honour, in which superfluous wealth might be expended, than thus to increase the usefulness of a profession whose mission is to mitigate suffering and prolong life.

Having rendered membership in our Branch attractive and valuable in these and other ways, such as affording prompt and unstinted aid to any member who might find himself in a difficulty—from whatever cause arising—and having made it clear "that if a man should not do what is right and honest, other men," in the words of Sir Edward Clarke, quoted by Mr. Ernest Hart, "will have nothing to do with him." We may feel that we have done all that lay in our power to raise our profession, and make easier the path of those who come after us. We may not have accomplished all that is desirable, we may have failed to reach the goal of all our ambition, but at least we can say, like "the hunter" in the *Story of an African Farm*: "By the steps we have cut others will climb. By the stairs we have built they will mount, ... and no man liveth to himself, and no man dieth to himself."

REMARKS ON SENILE EPILEPSY.

By E. MANSEL SYMPSON, M.D., B.C.Cantab., M.R.C.S.,
Surgeon to the Lincoln County Hospital.

Senile epilepsy, though only a small portion of a great subject, is interesting because it is not very uncommon, and on account of its relations to other nervous affections with which old age is apt to be afflicted. By "epilepsy" in this paper is meant idiopathic epilepsy only, as distinct from traumatic or Jacksonian epilepsy, and wherein *post mortem* no gross lesion of the brain would be found.

Three chief seasons in the life of man seem most liable to the invasion of epilepsy: the time of teething, the first few years of life; the time of puberty, from 10 to 20; and old age—that is, from 60 years of age and upwards. It is true that some authorities, such as Dr. Russell Reynolds,[1] give another season—at or about 40—as the period when a good number of persons are first seized and in this he is supported by the late Dr. Hilton Fagge,[2] who says, "first attacks often occur in persons about 40." But, putting this season aside, it will be observed that the two first-mentioned—those of teething and puberty—are the times when the nervous system is rapidly developing and hence is likely to be unstable; this again is shown by the tendency to meningitis at those times. In the last one, old age points more to the decay of the nervous system—a second childhood.

As to the frequency of senile epilepsy, there seems to be a little difference of testimony. Fagge[3] again says, "Exceptional instances are recorded in which epilepsy has begun at an advanced age: one, for example, by Trousseau, which began at about 69." In Dr. Reynolds's series of 172 cases there were only 2 whose commencement dated after 45 years

[1] Reynolds's *System*, vol. ii, p. 254.
[2] Vol. i, p. 690. 1st Edit., 1886.
[3] *Loc. cit.*

of age. In Hasse's[1] series only 4 out of 995 began between 60 and 70.

"About 70 the disposition to epilepsy," says Dr. Maclagan, in his book on the *Diseases of Advanced Life*, "again increases in frequency;" and among various quotations of much interest, he says: "Within the short space of three years I had under my care no fewer than 10 cases, all occurring in men above 65 years of age, in a population of 500, and in an institution from which epilepties are excluded when the disease is known prior to admission." Almost certainly senile epilepsy is not hereditary, or the attacks would have come on earlier in life, before the 20th year. There have been cases wherein epileptic seizures have come on in infancy or childhood, have ceased, and recommenced at an advanced age, but these must be very few and far between.

In Dr. Work Dodd's[2] series of 100 cases of epilepsy there were only 2 commencing in advanced life—that is, one at 57 and the second at 62; in neither was there any history of family predisposition. The nature of the seizures is precisely similar to those of earlier life; the two forms, the major and minor, occur, though the latter is probably the more frequent. The semi-comatose state after a fit of convulsions is frequently long, and sometimes deepens into the coma of death. Epilepsy, generally speaking, is not a fatal disease, except as just mentioned, when it comes on late on life, though even these persons do not die in the fits but in the after-state—the post-epileptic coma.

The diagnosis is easy after one attack of convulsions, though hysteria in women may simulate the complaint. The convulsions which are met with in the course of general paralysis of the insane might indeed cause some confusion, but the age of the patient, and the absence of any of the grand and vague imaginings and of any paralysis will sufficiently settle the question. Eclampsia or uræmic convulsions are more likely to be mistaken for epileptic seizures, but the character of the urine and the absence of symptoms of kidney disease will distinguish the cases. In all probability, cases of senile epilepsy have been mistaken for apoplexy. The suddenness of attack, the convulsions, and the after semi-comatose state might suggest the latter, but the absence of paralysis negatives it entirely.

Pathologically, there are several conditions such as cerebral hæmorrhage, thrombosis, embolism, and atheroma, which cause acute softening of the brain, but in all there will be paralysis. Again, in chronic progressive softening of the brain, which is most frequent between 60 and 80, hemiplegia is constant and convulsions are very rare.

In epileptic children, especially where the brain lesion has been large, causing paralysis, the mental state may be actually that of an idiot. In adult epilepsy, sometimes not much mental failure is noted, though some impairment of memory is frequent. In the epilepsy of advanced life, the brain suffers very markedly after each fit of convulsions; the intellect may be perceptibly clouded, the semi-comatose state is less easily recovered from, more or less entire forgetfulness of the immediate past may come on, and the patient may live again in a world of forty years ago. The temper too often becomes feverish and irritable. In one of the cases, which will be given directly in some detail, the mental condition was fair till within a few weeks of his death; in the second case the mental condition has been much as I have just described.

Cerebral and cerebellar tumours again are frequently attended by fits of convulsions, but the vomiting, optic neuritis, and headache, as well as, frequently, paralysis, will prevent these cases being taken for epilepsy. Weakness in the legs indeed I have seen in epileptic cases almost approaching paralysis, but it soon went away when the bromide treatment was diminished.

As to the pathology of senile epilepsy little can be said, seeing that so little is certain about the pathology of idiopathic epilepsy. Convulsions are most frequently caused by cortical lesions as in those occurring in cerebral tumour, etc., but then there is almost always some paralysis consequent on the brain lesion. Also in this senile epilepsy we have to consider the gradual failure of the mind which depends so largely on the exhaustion of the brain cells after each fit, whether major or minor.

Whether *post-mortem* investigation will reveal anything definite in these cases has yet to be seen. The treatment is the bromides of potassium and ammonium for the major attacks, and one or other of the salts of zinc for the minor ones. I also in both cases add some tincture of digitalis to the mixtures. The feeding and state of the bowels are carefully attended to.

Case I. K. T. was 73 years old when he had his first attack of convulsions, followed by coma for some hours. During this period, in which I saw him, it had much the appearance of apoplexy or uræmia. He thoroughly recovered, however, and had no more attacks for six years, on April 17th, 1892. The next seizure was in July and August of that year; he was again seized on April 19th, 1893, became occasionally delirious, and finally sank in May of that year. His attacks were well-marked major fits, and his mental state continued fairly good till he died at the respectable age of 78.

Case II. A. B. had never had any symptoms of epilepsy till February 7th, 1893, when she fell and cut herself on the scalp, and was unconscious for several hours. She had a few fits of convulsions thereafter, and her mental state perceptibly was weaker than before the fits. On May 12th she had another severe seizure; again on October 28th, and on February 16th, this year I found her, at 12 midnight, insensible on the floor, having fallen down in her bedroom. She sank into a comatose state and died on March 1st.

She was aged 73 also when the first fit occurred. I may mention that in neither case was there any ophthalmic change, the eyes indeed became weaker, as did all the other senses. In neither was there any paralysis. They presented typical examples, I think, of epilepsy occurring for the first time in old people, and for that reason they seemed to be worth while recording and criticising.

[1] *Quain's Dict.*, Epilepsy.
[2] *Brain*, 1893.

A CASE OF SUBCLAVIAN ANEURYSM:

CIRCULATION CONTROLLED IN THE SAC BY DIGITAL PRESSURE ON THE FIRST PART OF THE VESSEL; MACEWEN'S OPERATION; AMPUTATION AT THE SHOULDER-JOINT.[1]

By CHARLES A. MORTON, F.R.C.S.,
Surgeon to the Bristol General Hospital; Demonstrator of Anatomy in University College, Bristol.

Sir W. Fergusson proposed amputation at the shoulder-joint as a method of treating subclavian aneurysm, in the place of distal ligature alone, which was found unsatisfactory because branches came from the axillary artery between the ligature and the sac, which enlarged to supply collateral circulation to the upper limb. Fergusson therefore proposed to remove the upper limb, and thus do away with the tendency for these branches to enlarge. The first case so treated was Spence's celebrated case in 1864. The aneurysm diminished to one-third its former size, and the patient lived four years. In 1877 Mr. Holden[2] amputated at the shoulder-joint for subclavian aneurysm, first tying the axillary artery nearer to the sac. At first the case promised well, but soon the aneurysm increased, and the man died. In 1880 Mr. Heath, at University College Hospital, treated a subclavian aneurysm in the same way[3] and without benefit, the aneurysm finally consolidating from the introduction of needles, but the patient died of intercurrent disease. In Mr. Holden's case the aneurysm followed a strain to the shoulder in lifting a heavy weight, and in Mr. Heath's it was noticed a few weeks after a fracture of the clavicle and first rib.

My case is, I believe, the fourth on record. The patient was in a desperate condition, large doses of morphine failed to relieve him, his mind was giving way, and he begged to have his arm off because of the great pain in it. Proximal digital pressure, direct pressure on the sac, and Macewen's method had all failed. He was greatly relieved of his pain after the amputation, probably by diminution of the tension on the cords of the brachial plexus, but the aneurysm increased in size, and he died in five weeks.

History before Admission.

J. S., aged 38, came to the Bristol General Hospital in March, 1893. He had been suffering pain in the left arm and above the left clavicle since the previous November, and Dr.

[1] Read before the Bath and Bristol Branch of the British Medical Association, March, 1894.
[2] *St. Bartholomew's Hospital Reports*, 1877.
[3] British Medical Journal, 1880, vol. i, p. 205.

Parker detected a supraclavicular swelling. He remained under Dr. Parker's care as an out-patient until May 17th, when he was admitted under Dr. Skerritt, who transferred him to me on May 28th. During the eleven days he was in the medical ward he took 5 grains of iodide of potassium three times a day. During the time he was attending as a medical out-patient Dr. Parker did not think the aneurysm had been increasing in size, though the pain in his arm was getting worse. With rest in bed in the medical ward this decreased.

He was a strong muscular man, and had been a carrier of deal planks on the back of his left shoulder, where he had the subcutaneous thickening known as a "deal runner's pad." But for the last five years he had not been carrying deal planks, but heavy baskets of metal, which came down with a run on to his shoulder, and he often lifted these baskets with his left arm, so that there might have been considerable strain on the subclavian artery.

Condition of Aneurysm and Upper Limb.

In the left supraclavicular region was a typical aneurysmal swelling, with loud rasping *bruit* and thrill. It was well defined, and about the size of a half section of a large orange. It extended outwards just to the anterior edge of the trapezius, internally to within an inch of the sternal end of the clavicle, downwards slightly under the clavicle but not into into the axilla. Digital pressure behind the innermost inch of the clavicle almost stopped the pulsation in the aneurysm, and did not give decided pain. When the left arm lay in contact with the side there was no radial pulse, but it reappeared when the arm was abducted. The pain in the limb was most marked in the thumb and the radial side of the forearm just above it, and was accompanied by a numb feeling. He described the pain as like "burning fluid in the arm." There was no absolute anæsthesia anywhere, but sensibility was impaired over the inner and anterior part of the upper arm, the flexor surface of the forearm, and in all the fingers and thumb on both surfaces, but only beyond the joints between the first and second phalanges. The muscular grip of the hand was weak.

Digital Pressure on the First Part of the Subclavian.

On May 29th digital pressure was begun on this part of the artery with a 7 lbs. weight resting on the thumb. The arm was kept in the position in which the pulse was usually obliterated. Pressure was kept up for forty-eight hours, so as to completely control the pulsation in the aneurysm; it did not cause much pain. No consolidation of the aneurysm took place.

Use of Chloride of Calcium.

During the last twenty-four hours of this digital pressure ℥vj of calcium chloride were given (15 grs. every hour), and again ℥vj during the next twenty four hours. After this he had some smarting along the urethra and frequency of micturition, with alkaline urine and a little muco-pus, and the calcium chloride was stopped.

Macewen's Treatment.

The aneurysm extended steadily and rapidly downwards below the clavicle, and the pain in the arm became very severe. The cords of the plexus could be felt stretched over it. He required frequent injections of morphine. On June 11th a long, slender needle was inserted through the most prominent part of the aneurysm below the clavicle, and with it the opposite wall was repeatedly scratched at various spots. The needle became buried to the extent of 5 inches, 4 inches certainly lying between the anterior and posterior walls of the sac. The same needle was reinserted in two other places on the surface of the aneurysm below the clavicle, so as to scratch other areas of the posterior wall. It was impossible to reach the inside of the anterior wall, where the aneurysm was so rapidly extending, as the needle could not be manipulated above the clavicle. The needles were in the sac for an hour and a-half, and were constantly moved from from one area to another. No pain was caused. During nearly the whole time digital pressure was kept up on the first part of the vessel. There was only oozing of a drop of blood as the needle was withdrawn, but this stopped at once with slight pressure. The needle and skin were, of course, thoroughly carbolised. The pulsation in the aneurysm seemed decidedly to lessen during the treatment, and at one time seemed almost to have ceased—more so than when the treatment was discontinued.

On June 12th there was decidedly less pulsation than before the needling, and it was hardly expansile at all. Above the clavicle very little pulsation of any kind could be felt. He required less morphine, and could use the hand and arm better, and it felt less numb. On June 13th the condition was the same, except that just below the clavicle, above where the needle was inserted, the aneurysm was getting more prominent, and pulsated strongly with distinct expansile pulsation. After June 13th it continued to increase in this area, and our hopes of success from the needling were disappointed. By June 18th it was extending considerably towards the sternum, and presented high up in the axilla, and another needling was tried. This time the needle was inserted through the part of the aneurysm presenting high up in the axilla, and made to scratch the part rapidly extending below the clavicle. With the fingers on the outside I could feel the needle scratch it in various places about a dozen times. Once or twice it evidently stuck into it. It did not go easily through the wall in the axilla, seeming to indicate clotting here. Whilst needling pulsation most distinctly diminished in the part scratched, which before was the part in which it was most marked.

Direct Pressure on the Sac.

This was commenced directly after the second needling, by means of a 4lbs. weight over a wool pad. For the first day it was kept on for five and a-half hours continuously, on the following day for two and a-half hours, and for two hours on the third day. After that he refused to continue the treatment longer, as it increased the pain in his arm. At an earlier period in the case it was not possible to try direct pressure on the sac, as the clavicle just bridged across it; it was only on the extension below the clavicle that direct pressure could be applied.

The pulsation in the aneurysm remained much less than before the second needling, but the *bruit* was louder and harsher, and the pain and œdema (which had by this time come on) greater, the pain requiring hypodermic injections of morphine every few hours.

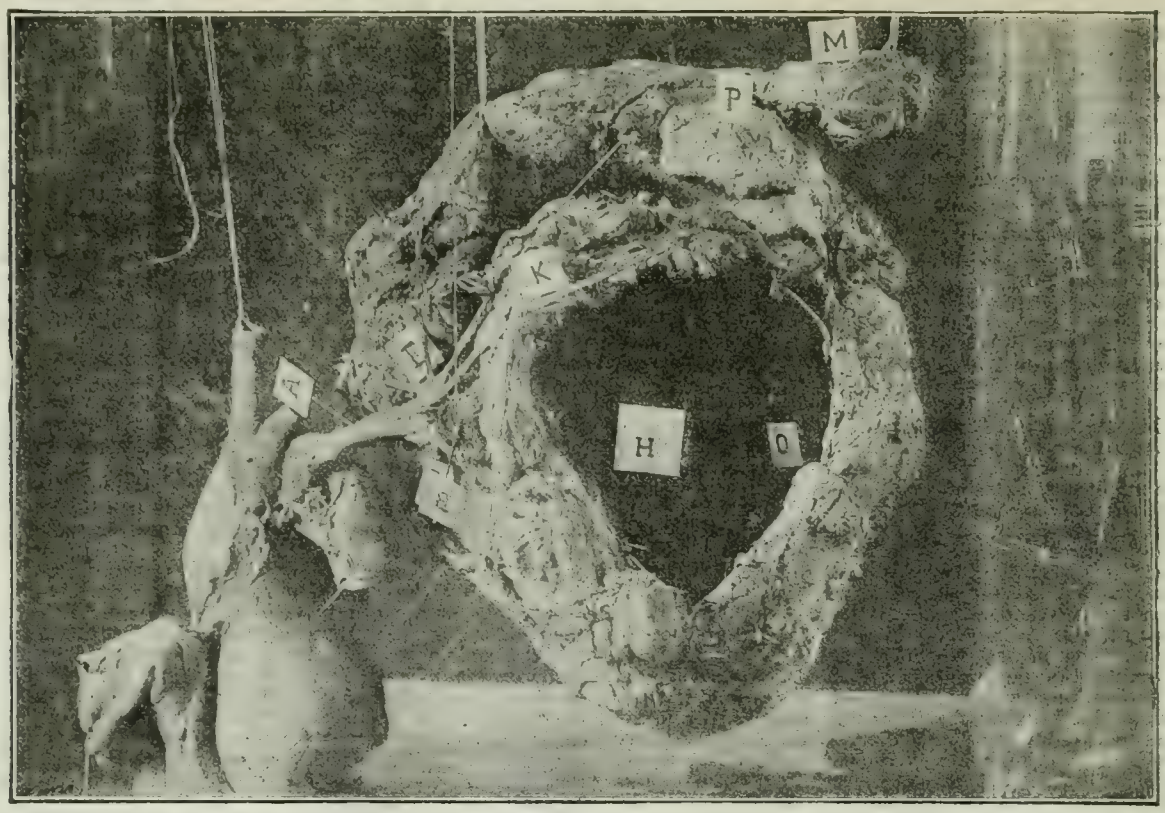
On June 26th the axillary part of the aneurysm (which was the only part which pulsated as much as before the last needling) was scratched, and eight long slender needles were crossed in the sac for half an hour, as in Heath's case. The patient would not tolerate them for longer. No change took place in the aneurysm. The pain was extreme, even ½gr. injections of morphine gave him little relief, and his mind seemed giving way.

Amputation at Shoulder-Joint.

On June 27th I amputated at the shoulder-joint by Larrey's method. Digital pressure was made on the first part of the subclavian, and the axillary artery was followed by the fingers of my assistant, as the operation was completed, and compressed in the stump. It was partially obliterated. The pulsation in the aneurysm was absent for two days, perhaps because he remained considerably shocked after the operation. The pain was very greatly relieved. The aneurysm was much more prominent and extended nearer the sternum. This was probably due to its release from the upper limb, and the great relief from pain was probably due to diminished tension on the cords of the brachial plexus. By July 10th the wound was healed, but the aneurysm was getting larger; however, the pain was not nearly so severe as before the amputation. After that date the pain became more severe again, and the aneurysm continued to increase. On July 25th and 26th he had a rushing feeling in the scapular region, and the temperature rose to 103°, and ecchymosis appeared where the posterior axillary fold had been; and on August 4th he died exhausted.

Post-Mortem Examination.

The third part of the subclavian artery was lost in the aneurysm, which extended under the first and second parts of the vessel, pushing them up. The second part was adherent to the upper surface of the sac. The portion of the



The aneurysm occupies the hollow of the scapula. M the acromion. P the coracoid process. A is the first part of the subclavian; to the left of it are seen the carotid and innominate arteries, the carotid just below A. E is the thyroid axis, and K the greatly elongated suprascapular artery. The pin on which the letter B is fixed is placed in the insertion of the scalenus anticus muscle, which is drawn upwards by a cord. The part of the artery beyond is lost in the aneurysm, but H is hung on a rod projecting from the opening of the artery into the aneurysm. This rod can only indistinctly be seen. O is placed on some laminated clot in the aneurysm. Behind the letter B is the smooth surface of the pleura and covering the first and second ribs.

aneurysm which extended upwards beneath the brachial plexus was about the size of a small orange. It contained laminated clot, half an inch thick, but mainly soft black clot. The cords of the plexus were slightly stretched over it, like the strings of a violin. The suprascapular artery was much elongated, but not obviously dilated. The first part of the subclavian artery was normal. The subclavian vein was obliterated about an inch before its termination, where it was adherent to the aneurysm. The phrenic nerve, vagus, carotid, and internal jugular were normal.

Below the clavicle the aneurysm was as large as an adult head, In what remained of the axilla, where the skin had become ecchymosed, the sac was formed by little else than skin, the discoloration being due to the blood in the sac soaking through. More posteriorly the collection of blood seemed like a secondary aneurysm communicating with the parent sac. The only part of the wall which resembled the interior of an artery was the anterior wall of the sac just below the opening of the artery into it, for a circular area of about 1½ inch in diameter. This closely resembled a thickened arterial wall with a smooth lining. There was no laminated clot on it, though it had been scratched by the needle inserted from the axilla. The continuation of the artery emerged from the upper surface of the aneurysm, a few inches from the opening of the second part of the vessel into it, so that the aneurysm extending downwards and backwards must soon have been formed only by the condensed surrounding tissues in this direction. The lateral branches of the intercostal nerves were found running through the more solid part of the clot. The great cavity of the aneurysm was filled with 3 lbs. of black soft clot, with layers of white clot here and there, but at the posterior aspect, where the aneurysm occupied the hollow of the scapula, there was a considerable thickness of laminated, partly white, but not very firm, clot. The first rib lay bare in the sac, and was much eroded; the second rib was also eroded, and the aneurysm extended into the chest between them, but the parietal pleura was not perforated. The lung was slightly adherent at the margin of this area of bulging pleura, and between the two surfaces was a collection of slightly blood-stained serum, which was thus shut off from the general pleural cavity, but caused considerable collapse of the upper lobe of the lung. There was no laminated clot formed on the eroded first rib. The heart and other organs were normal.

How Digital Pressure became Possible on the Proximal Side.

This case is, I imagine, probably the only one on record where it has been possible to apply digital pressure to the first part of the subclavian artery. It has been possible to do so in the case of an unusually high third part for aneurysm of the same part beyond, but probably never before to the first part. So extraordinary did it seem to me that we could actually press on the first part so as to control the circulation in the aneurysm that I thought it possible that the growing aneurysm had displaced the third part of the artery inwards and we really pressed on this, but I found that the pressure which controlled the circulation in the aneurysm could be applied as far inwards as the sternal attachment of the clavicle, and could not therefore be a displaced third part, and the *post-mortem* examination showed conclusively that it was the first portion of the artery pushed upwards by the aneurysm beneath, so that we really compressed the artery against the aneurysm.

Question of Proximal Ligature.

The question may be asked why did I not tie the artery on the proximal side of the aneurysm? Ligature of the first part of the right subclavian has been done fourteen times,

and all the patients died of secondary hæmorrhage with the exception of two, who died before the usual period when this came on. So many branches come off from this part of the vessel that no satisfactory clot is formed. On the left side Sir Astley Cooper failed to secure the vessel, and is said to have wounded the thoracic duct. This deterred me from attempting ligature even with our modern absorbable ligatures on the method which aims at the non-division of the inner and middle coats.

Remarks on Macewen's Method.

With regard to Macewen's treatment of aneurysm, I need only refer to his papers in the British Medical Journal for 1890,[5] and to two cases since published.[6] His success, especially in one case of subclavian aneurysm, encouraged me to try it; and there is no doubt it considerably lessened the pulsation over the greater extent of the aneurysm, and promised well for a short time; but the rapidity with which the effect was produced seemed rather to indicate that the needles had simply acted as foreign bodies and produced some soft clot.

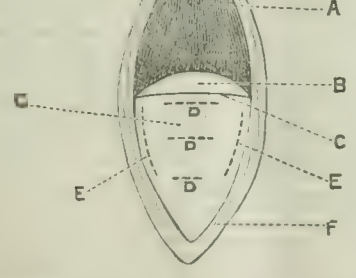
In connection with this method of treatment the following questions seem to me to arise. In an aneurysm of any size is not the wall always rough enough to start the formation of laminated clot without scratching? Is the exudation of leucocytes from the injury to the wall and their conversion into fibrin likely to produce more laminated clot than the deposition of leucocytes on the rough wall of the aneurysm? In Macewen's own cases the good result seems to have been far too gradual to have been due to clotting from the presence of the needles acting as foreign bodies, but it is well to remember that there is always that element present in the treatment as well as the injury to the aneurysmal wall.

ON THE MODE OF PERFORMING THE OPERATION OF VENTRO-FIXATION OF THE UTERUS, OR HYSTEROPEXY, IN CASES OF INTRACTABLE RETROFLEXION.

By JAMES BRAITHWAITE, M.D.Lond.,
Obstetric Physician and Surgeon to the Leeds General Infirmary.

As, in consequence of the interesting paper which was read by Drs. Leith Napier and F. F. Schacht at the Newcastle meeting of the British Medical Association[1] upon the subject which forms the title of this short paper, it is probable that the operation will be more extensively and more successfully performed than it had previously been, I venture to bring forward what is, I think, a further improvement in its mode of performance.

Dr. Napier's improvement was to pass several sutures, about four on an average, as low down on the anterior surface of the uterus as possible, so as to get the greater portion of it adherent to the abdominal wall. This makes the union firm and permanent, and renders it applicable to cases of intractable prolapse as well as simply to retroflexion, which is a very important point. It also does away with the objection of Dr. Howard H. Kelly, of Baltimore, U.S., whose important article on the subject appears in the *Johns Hopkins Hospital Reports* published recently, that the adhesion produced elongates, so that soon the uterus is merely suspended by a band.



A, Interior of peritoneum; B, fundus uteri; C, edge of uncut peritoneum; D, D, D, transverse sutures; E, E, longitudinal sutures; F, abdominal wall wound; G, unopened portion of peritoneum seen from its outer surface.

I have, since Dr. Napier's paper was read, done ten of these operations, with the following divergence from his plan. The central incision in the abdominal wall is made as usual low down, and with its lower end not more than an inch, or even less, above the pubes; but I have only cut through the peritoneum itself in the upper half of the incision: in the lower half it is left intact, with as much fascia and cellular tissue as possible, the muscles however being drawn aside. Two fingers of the left hand are then passed in, and the uterus pulled up to, and held firmly in contact with, the uncut peritoneum exposed in the lower half of the wound. The fundus is then just visible above the edge of the peritoneum. The anterior surface of the uterus is now fastened to the peritoneum by silkworm gut sutures nearly as done by Drs. Napier and Schacht.

This plan of operating seems to me to have several advantages. Two sutures can be placed from above downwards at the extreme edges of the anterior surface of the uterus, in addition to the usual transverse ones. This ensures a more complete and extensive coaptation of the peritoneum.

It must also, I think, be admitted that it is better to make a small opening into the peritoneum if it will do as well as a larger one, as the risk is thereby diminished, and that there is some risk is seen by Dr. Napier's cases.

The operation also as described is easier and more quickly done, in fact it only takes a few minutes to place the sutures when once the uterus is held up to the peritoneum, the proceedings being much simplified. It is also unnecessary to pass a temporary suture through the fundus, as recommended by Dr. Napier, in order to drag upwards and maintain in position the uterus whilst the permanent sutures are placed.

Lastly, I may ask what is the use of dividing, and so to a certain extent mutilating, the very part to which you are going to fix the uterus? There is no object gained by it.

My cases have done extremely well, but the success of the operation has been thoroughly established by Drs. Napier and Schacht.

A CASE OF CHLOROSIS AND AMENORRHŒA WITH SYMPTOMS OF BRAIN DISEASE.

By G. CRAWFORD THOMSON, M.B., M.R.C.S.,
London.

Cases of double optic neuritis with general brain symptoms and diplopia, ending in complete recovery without anti-syphilitic treatment, are of sufficiently rare occurrence to justify the publication of the following instance:

Miss ——, aged 23, school teacher, was first seen by me on March 13th, 1892. She was a total abstainer. No history of previous disease, especially with regard to acquired or hereditary syphilis or tuberculous disease, in herself or family. Her mother and mother's sister died of cancer. Menstruation commenced at the age of 16½, and was regular to 20; since then up to the day I saw her it had been very irregular and scanty, sometimes stopping for as long as three months. She dates back her present illness to July, 1891, when she began to complain of general weakness, loss of appetite, headaches, giddiness, attacks of vomiting, and drowsiness. The headaches came on especially after moving, for instance after going upstairs, and sometimes kept her in bed all day, also at times preventing sleep at night. They were frequently accompanied by severe vomiting, which was independent of meals, and most often in the morning. Attacks of faintness and giddiness were exceedingly frequent, so that the patient had to leave the class she was teaching on their account, seizing hold of anything within reach to prevent her falling; they even came on in bed when turning from one side to the other, and mostly ended in vomiting. Besides, she noticed that her sleep was more heavy and disturbed by bad dreams. On October 28th, 1891, coming home for a walk, everything appeared double—for instance, on holding up one hand she saw two. The diplopia lasted with more or less severity for about four weeks.

Her eyes were first examined on November 25th, 1891, by Dr. Julius Jacobson, to whom I am indebted for the following notes: Extreme pallor of face, especially of conjunctivæ and lips. Right eye vision ⅔, left

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[5] Vol. ii, pp. 1107 and 1164.

[6] British Medical Journal, 1893, vol. i, p. 117; and *Glasgow Med. Journ.*, 1891.

[1] British Medical Journal, vol. ii, 1893.

eye vision ⅓ to ⅔. No error of refraction. No muscular derangement. Fields and colour perception normal. Things seen by the left eye appeared smaller than by right (micropsia). In both eyes optic neuritis presenting the typical "choked disc." The difference in refraction measured by the ophthalmoscope between retina and top of swollen disc equal to 4 D. Hæmorrhage near disc in left eye. Macula lutea normal.

On December 7th, 1891, she was admitted to St. Mary's Hospital under the care of Mr. Critchett; and on December 10th she was also examined by Dr. (now Sir William) Broadbent. She left the hospital on December 22nd. There was a constant improvement in her sight and general health until the beginning of February, 1892. During the whole time the treatment consisted of iron, strychnine, and simple aperients, as she had been suffering continually with constipation. Neither mercury nor iodide of potassium had been given. She came to see me because some of the old symptoms, especially the headaches, had reappeared, when she presented the typical appearance of a patient suffering from chlorosis. She was put by me on iron and arsenic, from which time she made an uninterrupted and complete recovery, which has lasted now without any relapse for more than twelve months. Menstruation became normal at the beginning of 1893, and has remained so since; she has now the appearance of a perfectly healthy girl, in good spirits and able to fulfil all her duties with energy and pleasure. Her vision in both eyes is normal, both discs have cleared completely without showing any trace of former mischief.

It is apparent that the combination of symptoms which the case presented from November, 1891, was one pointing to brain disease, and although the treatment which was suggested by the accompanying evidence of extreme chlorosis proved successful, I still feel inclined to take this view of the cause of the double optic neuritis; looking upon it as brought on by some basilar meningeal disease of probably inflammatory character. Leber[1] was the first to regard this class of cases as "latent meningitis," and this view has been taken up and strengthened by Haab.[2] Although in this way the appearance of the optic neuritis becomes explainable as caused by central mischief, the connection between the latter, chlorosis, and irregular menstruation still remains obscure. It seems to me an unwarranted scepticism to look upon the combination of symptoms as a mere coincidence as some do. From a clinical point of view, a disease which appears during well pronounced chlorosis, uncomplicated with any other mischief, and which disappears together with the chlorosis after treatment directed against the latter, may rightly be looked upon as either due to the anæmia or to the irregularity of menstruation; but as for the explanation of this connection, we may still say what Foerster[3] said in 1876, that as far as the connection between optic neuritis and disorder of menstruation is concerned, we only know that it exists. In my case the differential diagnosis[4] between brain tumour and transitory brain mischief was difficult for three reasons: (1) The general brain symptoms were most in evidence; (2) the optic nerve presented the typical "choked disc," which at one time was considered pathognomonic of brain tumour; and (3) the diplopia. Cases of the same kind with the diplopia have been published by Oursel[5] and Ray,[6] while the appearance of neuritis with more or less severe brain symptoms without diplopia in disorders of the menstruation are of more frequent occurrence.

[1] *Die Krankheiten der Netzhaut und des Sehnerven*, 1877.

[2] Heinrich Wunderli, Klinische Beiträge zur Ætiologie und Heilung der Sehnervenentzündung. Thesis, Zürich, 1890.

[3] *Beziehungen der Allgemein- Leiden und Organ- Erkrankungen zu Veränderungen und Krankheiten des Sehorgans*, 1876.

[4] I may here mention a case exactly like the above with the exception that up to three weeks before death, when the last examination was made, no trace of optic neuritis could be found, although frequently looked for. She was seen by some of the most eminent neurologists, who considered the disease functional. She died suddenly during sleep. The *post-mortem* examination revealed a large tumour of the cerebellum.

[5] Contribution à l'étude des affections oculaires dans les troubles de la menstruation. Thèse de Paris, 1885.

[6] Eye Diseases from Suppression of Menses. *American Journal of Medical Science*, 1882, p. 383.

CARDIAC FAILURE IN INFLUENZA.

By J. MATTHEW CAW, M.D.,
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THE extreme nervous prostration and vascular congestion of tissues which obtain in severe cases of influenza conduce to the gravest feature of the disease—failure of the action of the heart. The congestion, however, is really the result of the nerve affection, for the sympathetic system being as much involved in the prostration wave as the cerebro-spinal, there is to a greater or less extent paralysis of the vaso-constrictor fibres which maintain the tonicity of the arterioles: and undue dilatation of vessels, as a matter of course, means vascular congestion of tissues. For this reason, hæmorrhage from various mucous membranes, effusions into serous cavities, sudden and profuse diarrhœa, apoplexy or meningitis, congestion passing into inflammation of organs, may occur during the course of the disease; while the ordinary symptoms of uncomplicated attacks, sweating, pink eye, headache, etc., may also be traced to the same cause. That cardiac failure and sometimes fatal syncope, sudden or gradual, should tend to occur under such conditions is not to be wondered at. Manifestly this failure may arise from two causes, which may operate separately or in combination. The heart itself may be the prime factor at fault. Its own muscle, its ganglia, or its vagal centres may so suffer from the wave of nerve prostration as to cause impairment of its function. Or, secondly, the unusual fall in the blood pressure which is the necessary result of the general vascular dilatation, the great loss of weight of the column of blood against which the systole of the heart is directed, may be such that the heart, accustomed as it is to feel a given resistance to its energy, relieved of this sense, runs riot, beats against insufficient resistance, exhausts itself, and tends to stop in diastole. The following are cases illustrative of the heart failure to which I refer.

CASE I.—J. S., shepherd, aged 35, strong, healthy man, while engaged watching his sheep in the winter time, suddenly became unconscious; he remembered nothing till he found himself lying on the snow and his dog licking his face; he had been insensible for at least twenty minutes. When I saw him an hour later he was suffering from all the symptoms of the onset of influenza. After a severe illness, complicated by pneumonia, he eventually recovered.

CASE II.—R. B., gasfitter, aged 26, married, a healthy young man and a good athlete, with no constitutional weakness, early one winter's morning rose to go to his work. A short time afterwards he was found insensible, lying over a low stone "dyke" at the side of the road. An uncomplicated attack of influenza followed, characterised by excessive prostration.

CASE III.—M. R., healthy young woman, aged 18, after returning from a horseback ride, influenza being epidemic in the district, was suddenly seized with faintness and prostration. The heart and pulse gradually failed, coma ensued as if from cerebral effusion, and death took place ten hours after the onset of the seizure. The failure of the heart was only explicable on the hypothesis that it was the result of a wave of intense prostration, such as sometimes ushers in an attack of influenza.

CASE IV.—Mrs. W., healthy married woman, aged 39, the mother of a healthy family, in the course of asthenic influenzal inflammation of right lung, was attacked by palpitation and heart weakness. Failure of the heart set in, and death ensued three weeks after the onset of the illness.

CASE V.—W. G., gentleman's servant, aged 54, on reaching home after a long drive on an excessively cold night, fell heavily on the floor, was helped to bed, and for the next few days was the subject of extreme prostration. Heart failure then set in, accompanied by drowsiness, which developed into coma, such as might arise from serous effusion into the ventricles, and death took place four days after the onset of symptoms.

CASE VI.—Mrs. R., aged 52, mother of healthy family and a woman of strong constitution, was seized at bedtime with intense pain in the lumbar region. For the two following days she was unable to draw up her legs in bed. Gradually the pain left the back, and the symptoms of a severe attack of influenza followed. Pulmonary congestion developed into pneumonic consolidation at the bases of both lungs. The heart became weak and irregular; at one time she was pulseless and collapsed; under treatment, however, she rallied, and in a month's time was able to seek a change of air. This last case is interesting in reference to treatment. When pneumonia set in, one or two small poultices with mustard were applied, but soon discontinued for a wet cold pad between the lower angles of the scapulæ posteriorly. As there was evident danger of heart failure, although the tincture of digitalis had been given regularly, two granules of Nativelle's digitalin, $\frac{1}{70}$ grain in each, dissolved in water, were administered by the stomach. Twenty minutes afterwards, the patient appeared to be sinking rapidly; the pulse at the wrist could hardly be felt; it was small, weak, and fluttering; the features, hitherto suffused, were blanched and drawn; the temperature in the axilla, taken with two different thermometers, registered only 95°; the intellect was dull; the breathing short and superficial; only one sign was wanting to make one believe the patient moribund; there was no cyanosis. Under appropriate restorative treatment the signs of collapse abated; half an hour later, the heart and pulse were firmer than before the administration of digitalin. The blanching of the face, the loss of the pulse, and the fall in the surface heat (95°) were certainly the result of the digitalin by causing vasomotor constriction. The dose, $\frac{1}{70}$ grain, was not large, only moderate; given as it was, its action was certainly in this case much too sudden on the vaso-constrictor mechanism. The action of the drug on the heart, which was apparently manifested after the symptoms of collapse had passed, could not be said to counterbalance the serious primary symptoms which followed its administration.

Digitalis and its active principles must be used with caution. The sudden increase of blood pressure caused by vaso-constriction would in many cases of inherent heart weakness be certainly fraught with danger to the individual.

But the important question arises as to whether the action of digitalis upon the heart is not the mere consequence of

the increased blood pressure against which its work is directed. It is a well-known physiological fact that in cases of syncope due to loss of blood, the injection of a neutral fluid into the main arterial system will cause the flaccid heart to recommence its pulsations, simply mechanically, by giving the heart a heavier column to beat against.

The experiments of Brunton and of Schmiedeberg show that digitalin tends to paralyse voluntary muscle. Be that as it may, its primary action on the unstriped muscular fibres concerned in vaso-constriction is certainly of anything but a paralysing nature. Its action on the heart muscle, which can neither be considered voluntary nor involuntary, is another matter. Further, my contention is borne out by the very precautions given as to the use of digitalis: "its administration is to be stopped on the appearance of a tendency to faint, and the patient must not be permitted to rise, especially not to rise to make water, lest fatal syncope occur."[1] Such advice would be unnecessary if the heart muscle were really strengthened; if, however, the increased blood pressure caused by the action of digitalis on the arterioles be the true cause of the heart's efforts, any increase of this, such as would occur on the individual suddenly assuming the upright posture, would be liable to throw too great a strain upon the heart, and result in syncope, in cases where there was some inherent weakness of that organ.

Certainly digitalis is a most valuable remedy in the conditions which obtain in influenza; given in the stage where there is much vascular congestion of tissues, it must of necessity help to ward off further complications by its action on the vaso-constrictor mechanism; but, at the same time, it must be remembered that, in so doing, there is increased strain thrown upon the heart, and the patient must be kept as quiet as possible and in the recumbent posture, the more so if there be reason to suspect that there be inherent heart weakness.

Where there are signs of heart failure, it must be given with caution; it is good, inasmuch as it causes vaso-constriction and by the rise in the blood pressure steadies the action of the heart; it is bad, inasmuch as it tends to throw too much strain upon it and renders the patient liable to the occurrence of syncope.

VACUOLATION OF THE NUCLEI OF NERVE CELLS IN THE CORTEX.

By FRED. M. T. SKAE, M.B.,

Assistant Physician and Pathologist, Stirling District Asylum, Larbert.

SINCE this morbid change was described by Bevan Lewis in connection with epileptic insanity, there has been considerable difference of opinion among various writers as to its cause and significance and the forms of insanity in which it occurs, and it is with the object of throwing some light on these points that this paper is written. My conclusions are based on the examination of seventy brains, taken indiscriminately. Fresh aniline blue-black sections were examined in every case under powers of × 450 and × 950.

The process, which has been frequently described, consists evidently first in a fatty degeneration of the nucleus, probably beginning in the nucleolus. The fatty matter is discharged into the cell protoplasm, and the nucleus retains its contour, but shrinks from within, leaving a vacuole.

Different opinions have been expressed as to what cells are most liable to the change. Bevan Lewis[1] found it "peculiarly common to the smaller cells of the upper layers, in fact, often limited to the second layer"; while Dr. Whitwell[2] states that it is most common in the deeper cells, and in this he is corroborated by Drs. Middlemass[3] and Macpherson in cases reported by them. I find it most common in the second and third layers, while the granule cells of the fourth layer in the sensory cortex are much less liable to it than any others, and frequently escape entirely when vacuolation is common and advanced elsewhere. Drs. Whitwell and Macpherson[4] found the fronto-parietal region specially subject to the change, the latter stating that in one of his cases it was only faintly apparent in the occipital lobe. The whole frontal lobe, however, usually suffers severely, especially its orbital surface.

In the earlier stages the nuclear change may be the only morbid appearance, and, but for this, many of my cases might have passed for typically healthy brain. Later, however, other degenerations usually make their appearance. Vacuolation of the cell protoplasm has usually been described as part of the same process, but it appears to me to be, in the majority of cases at any rate, secondary to the change in the nuclei. It is rarely, if ever, present in brains which do not show vacuolation of the nuclei, while in many cases where large numbers of nuclei are in the early stages, the cell protoplasm is invariably healthy looking. Where the two coexist, it is usually the cells whose nuclei are most degenerated that show vacuolation. It is invariably accompanied by granular degeneration, with disintegration of the processes. I am inclined to regard it as part of a general break down of the cell due to disease of the nucleus and consequent impairment of the nutritive influence which Bevan Lewis suggests is normally exercised by the latter over the cell. In many of my cases, excluding those of general paralysis, the spider cells were increased in number and size, and stained fairly well with aniline blue black. Many of these contained oil globules. Dr. Campbell[5] mentions fatty degeneration of the muscular coat of the smaller arteries as a constant accompaniment.

Bevan Lewis attributes nuclear vacuolation in epilepsy to "an intrinsic morbid factor in the cell itself." Dr. Middlemass has reported a case of phosphorus poisoning in which it was found with fatty degeneration of other organs. Drs. Miles[6] and Macpherson have found it in several cases as a result of blows on the head. Recently Dr. Campbell has attempted to show that it is due in all cases to toxæmic conditions. The forms of insanity in which it occurs are so various, and in all except epilepsy it is so inconstant, that it is impossible to believe that the mental symptoms have any direct connection with it. I have found it in mania (acute, recurrent, and chronic), melancholia, dementia, paralytic, alcoholic, and senile insanities, and general paralysis. Dr. Campbell expresses some doubt as to its occurrence in dementia uncomplicated by toxic conditions, but I have found it advanced in three cases of dementia, dying of cerebral atrophy, in which the only other morbid appearance was marked atheroma of the arteries. With regard to Dr. Campbell's view, it must be admitted that the presence of toxins in the blood in his cases, and in many of my own was highly probable, but this does not prove them to be the cause of the lesion, and it seems hardly probable that so many different poisons should produce exactly the same appearance. Among my cases are three in which death resulted from syncope, due in two to valvular disease of the heart, and in one to fatty heart without any valvular lesion. In the latter, especially in those dying from cerebral atrophy and senile decay, and in those reported by Drs. Miles and Macpherson, in persons dying from the effects of blows on the head, it is difficult to see how a toxic element could exist. Again, in several cases in which vacuolation was well marked in the cortex I could find no trace of it in the cord, which would be equally exposed to toxic influences.

My opportunities of examining normal brains have been small, but I think it may be assumed that if vacuolation occurred without disordered functions, it would have been described before now. Taking for granted that it is necessarily associated with disordered action of the nerve cells, we have to consider whether it is a cause or effect of this disordered action, or whether the two together are produced by a third factor.

That it is the cause is rendered improbable by the fact that it is not constant in cases presenting as nearly as possible exactly the same mental symptoms; by the various and almost antagonistic character of the symptoms in different cases—exaltation, depression, convulsions, and unconsciousness; and by its occurrence as a result of blows on the head, where the interference with the functions, as shown by unconsciousness, was instantaneous.

That it is the effect of disordered action alone is contra-indicated by its occasional absence even in cases of great severity and long duration. Given, however, an additional factor in the shape of interference with the blood supply, I

[1] Dr. Lauder Brunton's *Pharmacology and Therapeutics.*

think we have sufficient to account for the change. Disordered action, such as occurs in insanity, is—in the vast majority of cases, at all events—excessive action, and this means the necessity for increased oxidation and an increased blood supply, and if this is not forthcoming the necessary result is the formation of fat.[7]

Now, in all my cases, excluding general paralysis and epilepsy, there was, from diseased conditions of the heart, lungs, blood vessels, or the blood itself, some obstacle to the proper supply of blood to the brain. In epilepsy the sudden and excessive expenditure of nerve force is probably greater than can be compensated by any amount of dilatation of the blood vessels, even assuming, what is very doubtful, that extreme engorgement of the vessels encroaching on the perivascular lymph spaces favours an increased supply of oxygen to the cells. In general paralysis, though the blood supply to the cortex is evidently increased, the obvious interference with the lymphatic circulation must more than counterbalance any advantage gained by the mere passage of blood through the vessels. In concussion, the great disturbances of cerebral circulation, which, as Dr. Miles[8] has shown, take place in that condition, appear quite sufficient for my theory. The influence of prolonged pyrexia, septicæmia, cancer, and exhaustion from acute mania in deteriorating the oxidising power of the blood are also necessary to account for some of my cases, and these, I think, will be admitted.

The exemption of the granular layer seems to me to favour the idea that defective oxidation is responsible for the change. These are comparatively small cells, situated at a depth in the cortex particularly rich in capillaries, and frequently escaping when all the other layers are extensively diseased. Their small size one would naturally suppose to render oxidation easier. The small cells of the first layer, on the other hand, are very liable to vacuolation, but these are in a region comparatively poorly supplied with blood.

My conclusions, then, are that the lesion is due to a disproportion between the blood supply and the activity of the vital processes going on in the cells, from increased action in the cells and interference with the circulation, or probably from either of these alone if extreme.

As to the frequency of the lesion, I can find no statement by any former writer on the subject. Of my 70 cases, it occurred to a greater or less extent in 56, or exactly 80 per cent., and this, I believe, shows it to be much more common than is generally supposed.

The early appearance of the lesion, and the large number of cells affected in acute cases, its occurrence in a case of typhoid reported by Dr. Campbell, and another in this asylum, in which no true insanity existed, and Dr. Miles's concussion cases, the subjects of which were not insane, all point to the possibility of a return to the normal condition from the early stages, as it seems hardly likely that a brain in which a large proportion of the nuclei are diseased can return to a normal performance of its functions without repair of the lesion. The discharge of oil from the nuclei, and its presence in spider cells if the theory of their depurative function be correct, are obviously an attempt at repair.

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AN OUTBREAK OF SMALL-POX: VACCINATION AND REVACCINATION.

BY SIDNEY H. SNELL, M.D. AND B.S.LOND.,
Medical Officer of Health for Grays, Essex.

DURING the year 1893 we had a series of some thirty cases of small-pox in Grays. As medical officer of health I saw all these cases, and as some twenty of them occurred in the private practice of myself and my partner, I gathered a few notes on the disease, and especially in its relation to vaccination. The outbreak was introduced by an unvaccinated child, the source of whose infection I could never discover. The disease in this child and also in a brother was strikingly mild, being, in fact, exactly like a case of small-pox modified by vaccination. The disease was not recognised, and the children were allowed about, when a neighbour, a woman aged 40, took the disease, and had a very severe attack. Of all the people in contact with the children this was the only unvaccinated person.

Of the six children who during the year suffered from the disease, four were unvaccinated. The other two children were aged 9 years and 13 years respectively. The one at 9 years showed very slight marks, and in her the disease was well marked. But the other, four years older, had four large marks, and the disease was limited to four vesicles on the face. There was no case of the disease occurring in any revaccinated person, although several such were closely and continuously exposed to the infection; but, on the other hand, of the twenty-four adult patients attacked, all except the one spoken of above were vaccinated in infancy, and many bore very good marks.

We had two deaths from the disease; one occurred in a woman aged 30, from confluent small-pox, and she had four distinct marks about the size of sixpences from infantile vaccination. The other death occurred in a woman aged 70. Two of the cases, men aged 35 and 29 respectively, had hæmorrhagic rashes preceding the proper eruption. In each case the rash occurred over both sides of the chest and abdomen, extending down to the thigh, but not over Scarpa's triangle, as usually taught. Both cases were extremely severe, with marked delirium, etc., though both eventually recovered. Infantile vaccination marks in each case were good. Three of the cases were second attacks, two in women above 60 who had their first attacks in childhood, and one in a girl aged 17 who had, or was supposed to have had, a former attack at the age of 7.

Practical acquaintance with this series of cases has altered somewhat my opinions on the relation of vaccination to the disease. In the first place, it seems a logical conclusion that infantile vaccination, efficiently performed, may not protect the individual after the age, say, of about 20 years, even from the severest type of the disease; but that vaccination and revaccination are a better protection than even an attack of small-pox itself.

I may mention two interesting points from the clinical side. The first is in the matter of diagnosis. Our first cases occurred towards the end of the influenza outbreak, which had been general. The pains in the back, the headache, and general *malaise*, especially the first of these symptoms, were strikingly similar, and I was surprised, on reading a very able little article last year in the BRITISH MEDICAL JOURNAL on the diagnosis of influenza, not to find this disease mentioned as one with which it might be confounded in the early stage. We found this at times a real difficulty.

The following case presents some interesting points. A woman, aged 24, about eight months pregnant, sent for me one night in the belief that her confinement was at hand, mistaking the very severe back pain for labour pain. She went well through a fairly bad attack, showed no symptom of abortion, and was confined in the ordinary way about five weeks afterwards. The baby showed no marks, but fifteen days after birth came out in a vesicular rash, the contents of the vesicles later becoming purulent. I presume this was an attack of small-pox, but the case certainly presents some deviations from what is usually taught.

I remember seeing some time ago, when resident obstetric assistant in University College Hospital, a case of small-pox in a woman pregnant about eight months and a-half. She did well, the child was born about the eighth day of the disease, and exactly six days after came out in a vesicular rash, obviously variola. In this case half the incubation period was *in utero* and half after birth. The former case would tend to show that the disease had occurred in the mother without rendering the child immune.

THE Medical Faculty of the University of Innsbrück has conferred the honorary degree of Doctor of General Medicine on the Austrian Minister of Education, Freiherr von Gautsch.

EPIDEMIC MEASLES AT SAMOA.

BY SAMUEL H. DAVIES, L.R.C.P., L.R.C.S.EDIN., L.F.P.S.GLASG.,
Savaii, Samoa, S. Pacific.

UNTIL a few months ago measles had not entered this group. It was conveyed to Tonga, 500 miles south of us, by the New Zealand steamer *Upolu* in June last, and from accounts we have received it nearly decimated that group. The same steamer brought the contagium to our group nearly three months afterwards. Here, as in Tonga, the epidemic was at first mild. Comparatively few died in Samoa during the period of the fever and rash. The sequelæ and complications have caused the mortality. I have not been able to obtain accurate statistics of the deaths from this recent epidemic throughout Samoa, as the ten inhabited islands of this tropical and volcanic group lie between five parallels of longitude, or, with the intervening straits, cover nearly 270 miles; but, judging from the accurate returns obtained here, including a fifth of Samoa, and also from reports obtained from missionaries and others, no fewer than 1,000 of the entire population of 34,500 died from measles up to the end of December, 1893, and nearly half of these adults. Since then there have probably been a few hundreds more.

The epidemic was not malignant. Our mortality has arisen principally from gastritis, enteritis, diarrhœa, and dysentery. A few died from suppressed measles. The craving the natives manifest for raw fish, unripe or over-ripe fruit, and especially half-cooked fresh pork, became morbid during the period of convalescence. Many, lest they should be told to avoid these, abstained from procuring foreign medicine. Nine-tenths of the deaths could have been prevented by care in diet. The worst cases of diarrhœa and dysentery brought to me yielded to treatment. Cases under one's own personal supervision, and where instructions were followed, recovered. With the common strumous diathesis it has excited no surprise to see so many adults as well as children suffering from enlarged suppurating glands in cervical and submaxillary regions, and in groin, etc.; not a few had parotid abscess with suppuration. Numerous abortions and cases of premature labour occurred, but none died with ordinary treatment. Single and multiple abscesses are an every-day occurrence here, but these have multiplied nearly tenfold since the advent of measles. Before the rash had disappeared a large number of adults passed intestinal worms by the mouth.

Now that two months have elapsed since the last cases of fever and rash, a mild but persistent form of remittent fever is prevailing. This, with glandular and respiratory affections, are the most common ailments at this season. In the mission dispensary I am daily seeing cases of sickness the starting point of which was measles. The two epidemics of influenza at the end of 1891 and January, 1893, increased the tendency of the Samoans to chest affections. Measles will be found to have still further intensified their susceptibility to respiratory diseases; and the frequent deaths, as well as the many debilitated natives one daily meets with, give evidence that we have not yet reached the end of the measles epidemic—an epidemic which will long be remembered, as not one of the entire population seems to have escaped.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

A CASE OF ECTOPIA VESICÆ, WITH OPERATION.

IN the year 1887 I had under my care in Professor Rômniceano's surgical department of the Children's Hospital at Bucharest a case of ectopia vesicæ, the record of which can be summed up as follows:

The patient was a male child, aged 7 years. In the hypogastric region was an oval raw-looking surface, occupying the position of the bladder, firmly adherent to the abdominal walls and forming a part of it. No hernia was present. The pubic bones were separated, and the condition of the pubovesical muscles so ably described by Mr. Shattock at the meeting of the Pathological Society on April 17th could also be seen. On the raw surface, which was the posterior wall of the bladder, two apertures—the orifices of the ureter—were perceived, from which a continuous watery discharge (urine) issued and kept the surface in a permanent condition of irritation and moisture. The trigone and the open neck of the bladder were seen in the space behind the separated pubic bones. The urethra, after a tortuous course, rose above the corpora cavernosa, which were developed. The urethra becoming thus anterior and in epispadias throughout the whole length formed an open canal wedged between the corpora cavernosa. The penis was not very much reduced in size.

The ectopia was operated upon by Professor Rômniceano. He dissected the edges of the bladder, making a bleeding surface; then he cut two lateral flaps. He turned the left flap over the bladder skin inwards, and stitched the edges of the flap to the bleeding edges of the bladder. On this flap he applied the second flap, which was cut a little more obliquely from the right side in order to twist it so that the skin came upwards, and the raw bleeding surface was turned backwards toward the raw surface of the first flap. Both were fixed together by several sutures. The gap between the pubic bones was left untouched, as an opening for the flow of the urine. Nothing could be done to the epispadias on account of poorness of tissues and the curious disposition of the urethra.

The course of the case was at first only partially satisfactory. The edges of the upper flap sloughed a little, and some phosphatic concretions accumulated in the catheter which was left in the bladder. But, after a good deal of trouble and time, we succeeded in forming a small cavity as a bladder, scar tissue hiding entirely from view the raw surface of the ectopia. The patient left the hospital wearing a urinal especially made for him.[1]

Belsize Road, N.W. A. GASTER, M.D., M.R.C.P.

TRAUMATIC RUPTURE OF THE JEJUNUM WITHOUT EXTERNAL INJURY.

FOR permission to publish the following case I am indebted to Drs. Renton and Smith, of Chester-le-Street.

A miner, aged 17, was first seen at 8.45 A.M. on May 12th, after being crushed in the pit. He was in a very collapsed condition, the pulse at the wrist being almost imperceptible. He lay on the bed with his knees drawn up and complained of severe abdominal pain. The abdomen was rigid and board-like, but presented no bruise. The tenderness and rigidity were most marked in the left umbilical and lumbar regions. There was no abdominal respiration and no dulness could be discovered.

On returning two hours later with a catheter he was found to have passed spontaneously a quantity of clear urine; he also had slept for an hour, morphine and strychnine having been administered subcutaneously. There was still no dulness to be detected and the normal liver dulness was absent. The abdomen was distended and very tender.

Collapse increased during the remainder of the day and early in the afternoon vomiting set in, at first gastric then bilious but never bloody nor fæcal. The next morning, at 9.45, he passed a normal stool and died immediately afterwards, twenty-eight hours after the injury. The extreme collapse rendered operation from the first almost hopeless, and the sanitary surroundings finally decided against that measure.

Post-mortem Examination.—No evidence whatever of external injury was discoverable. On opening the abdomen the intestines were found covered with a fibrinous exudation, on removal of which the vessels were seen to be much injected. Just to the left of the spine the small intestine was ruptured about the middle of the jejunum. The rupture was transverse and involved the whole of its circumference with the exception of about one-eighth of an inch at the attachment of the mesentery, which latter was slightly bruised. The bowel itself was only crushed for a distance of about a quarter of an inch on each side of the rent, the edges of which were thickened and œdematous. Only about ʒj of blood had

[1] The full record of this case, with illustrations, was published by a colleague of mine, Dr. Marinesco, in the *Journal Spitalul* of the same year.

escaped, but the contents of the intestine were extravasated. Other organs were healthy with the exception of some enlargement of all the mesenteric glands and some old pleuritic adhesions.

The evidence at the inquest showed that the lad had been crushed between a wagon and a prop in such a way that a broad flat surface was applied dorsally and a moderately sharp ledge anteriorly. The rupture probably occurred from compression of a moderately full coil of intestine between the ledge and the spine.

The chief features of the case seem to be: 1. The gravity of the internal lesion as compared with the complete absence of external sign. 2. The situation of the rupture in the middle of the jejunum instead of at its commencement or in the duodenum, as usually occurs. 3. The singleness of the injury which would probably have rendered an operation undertaken before his long journey and its consequent collapse successful. 4. The absence of blood in the vomit and fæces, the presence of which has been recorded in previous cases. 5. The early obliteration of liver dulness, pointing to gas free in the abdominal cavity.

Newcastle-on-Tyne. J. A. HENTON WHITE, M.R.C.S.Eng.

NASAL FEEDING IN CASES OF PAINFUL DEGLUTITION.

MR. BUTLIN, in his Clinical Lecture recently reported, suggests the use of a No. 9 black bulbous catheter for feeding immediately after excision of the tongue, passing the catheter by the mouth. This prompts me to ask for a consideration of nasal feeding in all painful affections of the mouth and palate.

By this method, in cases of acute tonsillitis, in a few seconds half a pint of strained egg, milk, or other strained liquid food can be given without any effort of the patient; a soft, oiled "silk" gum elastic No. 6 catheter (a Belfast linen acts admirably) is pushed gently along the floor of the nose and down the pharynx. A funnel is then fixed to the end of the tube, and the fluid food poured into it, passes behind the painful parts without causing any distress.

I have often adopted this method with the best results in children and adults. May it not be equally useful after excision of the tongue?

Sale. HERBERT SMITH RENSHAW, M.D.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

BIRKENHEAD BOROUGH HOSPITAL.

INTESTINAL OBSTRUCTION DUE TO BAND.

(By A. HERBERT BUTCHER, Honorary Surgeon to the Hospital.)

THE following case of intestinal obstruction from band evinced symptoms not quite consistent with those usually described:

History.—R. S., aged 48, a ship painter, had previously enjoyed the best of health. On November 5th, 1893, he partook of a good dinner with haricot beans. On November 6th he complained a good deal of being "full of wind," his bowels were moved about noon, and on the evening of the same day at 5 P.M., when leaving off work he jumped from a plank 3 feet or 4 feet from the ground. At about 7 P.M. that evening he experienced pain in the abdomen, which continued all night, and on the next day (November 7th) he had an attack of vomiting and sent for a local practitioner. On November 9th a rectal injection was administered which removed a small quantity of fæcal matter but brought on no proper evacuation. The vomiting continued each day. On November 11th another injection was administered, but with no result. He was admitted on November 11th, 1893, at 3.30 P.M. The tongue was dry and furred and he complained much of thirst; there was nothing remarkable about the expression of the face. He vomited twice in 24 hours; the vomit was of a light greenish colour and not profuse. There was no marked pain on palpation of the abdomen, which was slightly tympanitic. He was ordered pil. opii gr. j. every four hours. He remained under its influence for the next three days. He was given ice to suck and milk diet with beef tea in small quantities. He slept well and said that he had passed flatus two or three times by the rectum, and altogether appeared fairly comfortable; the vomiting only occurred once or twice a day.

This state of things lasted until November 14th, when vomiting became more frequent, slightly offensive in odour, and brownish in colour. On November 15th the patient vomited in the morning a large quantity of stercoraceous matter; his face had assumed the typical abdominal character; the abdomen was markedly tympanitic, with slight tenderness and resistance on palpation to the left of the umbilicus. The patient's condition was now such that nothing but disaster would have been expected from any further delay, so I decided to operate at once.

Operation.—The patient was placed on the table at 1 P.M. on November 15th, and directly he was completely under the anæsthetic the abdomen was thoroughly asepticised, the urine drawn off, and an incision 2½ inches in length was made in the linea alba, midway between the umbilicus and pubes. Two fingers were inserted, and the cæcum was found to be collapsed. The gut was then traced upwards, and when about 1½ foot from the ileo-cæcal valve, the ileum was found constricted by a band which, on examination, was found to be a Meckel's diverticulum. There was a good deal of peritonitis, the gut being much congested, especially the imprisoned loop; the diverticulum was perfectly patent, about the width of one's finger, and was treated thus:—A stout silk ligature, which had been previously boiled in perchloride of mercury solution (1 to 2 000), and immersed in carbolic oil, was placed round the constricting diverticulum, and a second similar ligature was placed about half-an-inch from the first, and the band was divided between these two ligatures, the proximal end of which was prevented from disappearing by being held by one of my colleagues; the peritoneum was then stitched over the stump, which was permitted to fall into the abdominal cavity. The bowel was examined, and being found intact and of good colour, was also allowed to disappear. A damp antiseptic sponge was now pushed into the cavity so as completely to absorb any moisture or fluid that might have entered. The peritoneum was now approximated by fine chromicised gut; the abdominal wound was closed by a couple of deep silver sutures, and the skin afterwards drawn into complete apposition by fine chromicised gut. A drainage of gut was placed in the external wound, but no drainage whatever was put into the abdominal cavity. The time occupied by the operation was forty-five minutes.

After-History.—After the operation the patient seemed very comfortable, and free from pain, but at 4.15 P.M. he vomited; nothing was administered by the mouth for the first twenty-four hours, with the exception of a little ice; after this he was allowed a little iced milk with lime water, and also beef tea; at 5.45 on November 15th he passed a fluid motion, and again at 6 P.M. on the same day, this being the first motion which he had passed since November 6th. On November 18th, three days after operation, the stools were somewhat formed; on November 19th quite formed, and natural in colour. The wound healed by first intention, with the exception of the aperture through which the drain protruded, but this drain being withdrawn about 36 hours after the operation, the wound soon closed, and the temperature continued very satisfactory. The man was up in a week, and was discharged cured on December 11th, 1893.

REMARKS.—The satisfactory termination of the case seems to prove without doubt that no arbitrary symptoms can be laid down as pathognomonic of certain kinds of internal strangulation, for here was a portion of the ileum constricted by a band, and no acute symptoms were present; the patient never complained of severe pain, but only of a certain amount of discomfort, which he attributed to wind. There was no pain, but merely slight tenderness on palpation, no external signs of peritonitis, the pulse on admission was very regular, and not much accelerated (80). There was no uneasy or anxious expression of countenance. Under these circum-

stances an expectant method of treatment was adopted, until the vomiting became stercoraceous, and then an operation was decided upon, and carried out without delay.

With the remembrance of this operation in my mind, I read with much interest the report of the lecture delivered by Mr. Dent at St. George's Hospital on Intestinal Obstruction with Band, in which he states that "an operation, if it consists only in division of the constricting band, will generally be too late when the vomit has become at all foul, and distension has commenced." In this case the vomit was stercoraceous and the distension marked, and yet the patient made a rapid and complete recovery. Mr. Dent further remarks: "The abdominal face is prone to come on only at a stage when the chances of recovery are practically hopeless;" whereas in the case under discussion the pinched and haggard expression was very marked on the day of operation, but, nevertheless, the man recovered.

The temperature was subnormal, and remained so, more or less, until November 15th—the day of operation—when it gradually rose, and, on November 17th, reached 100° F. The silver wire deep sutures were then removed, and the wound was not dressed until November 20th, when the temperature showed a gradual decline, with slight variations; the highest ever reached was 101° F., after which it gradually dropped, until the man was discharged from the hospital cured.

Table of Temperatures.

Nov. 11th, at 3.30 P.M., 97° F.	Nov. 25th, M., 98°; E., 98°
,, 12th, M., 99.2° F; E., 98.2° F.	,, 26th, M., 99°; E., 99°
,, 13th, M., 97.2°; E., 98.4°	,, 27th, M., 96.4°; E., 97°
,, 14th, M., 97.2°; E., 98°	,, 28th, M., 98°; E., 97.4°
,, 15th, M., 97° (operation); E., 3 P.M. 98°, 7 P.M. 98.4°, 11 P.M., 98.6°	,, 29th, M., 98°; E., 97°
	,, 30th, M., 97.6°; E., 98.8°
	Dec. 1st, M. 99.8°; E., 101°
,, 16th, M., 3 A.M. 97.4°, 7 A.M. 98°, 8 A.M. 98.6°; E. 99.8°	,, 2nd, M., 98°; E., 97.4°
	,, 3rd, M., 97.4°; E., 97.6°
,, 17th, M., 100°; E., 99.2°	,, 4th, M., 97.2°; E., 98.4°
,, 18th, M., 98.4°; E., 98.4°	,, 5th, M., 99.4°; E., 97.4°
,, 19th, M., 98.4°; E. 99.4°	,, 6th, M., 97°; E., 97°
,, 20th, M., 99°; E., 100°	,, 7th, M., 98.6°; E., 98.6°
,, 21st, M., 98°; E., 98.6°	,, 8th, M., 97.6°; E., 98°
,, 22nd, M., 99°; E., 97.2°	,, 9th, M., 98°; E., 95.4°
,, 23rd, M., 98°; E., 97.8°	,, 10th, M., 99.6°; E., 97.6°
,, 24th, M., 98°; E., 97.8°	,, 11th, M., 98.4°*

* Discharged cured.

HALIFAX INFIRMARY.

PRIMARY EPITHELIOMA OF THE CLITORIS.

(By PRIESTLEY LEECH, M.D., B.S.Lond., F.R.C.S.Eng., Honorary Surgeon to the Infirmary.)

A MARRIED woman, aged 29, was sent by Dr. Thompson, of Mytholmroyd, to the Halifax Infirmary on March 29th, 1890. On examination, the clitoris was found to be the size of a pigeon's egg, with an irregularly bossed surface, of a dark red colour. The urethra fortunately was not involved in the new growth, but the inguinal glands of the right side were enlarged. Four days later the clitoris was removed by the knife, together with the enlarged glands in the right groin; the glands were broken down in the centre. The wounds healed well, and she was discharged on April 6th.

She came again in June, 1891, when it was found that the original seat of the primary growth was free from recurrence; but there was a mass of enlarged and hardened glands the size of a hen's egg in the right groin, and on the right labium there was a spot of new growth the size of a split pea. On June 26th this small piece was removed by scissors. A transverse incision was then made above the mass of enlarged glands, and joining this at right angles a vertical incision was made along the inner border. The triangular flap thus formed was dissected backwards and the new growth was freed from its connections except posteriorly. In this dissection the femoral artery and vein were laid bare. The only connection the new growth now had with the thigh was a narrow strip of tissue a quarter of an inch in length, which seemed to be free from the vein; but on severing it with the knife the vein was opened. The distal portion of the vein was easily tied, but, in spite of several attempts to tie the proximal portion, the ligatures would not hold, the walls of the vein appearing to be quite soft and rotten. The hæmorrhage was finally arrested with a pair of Spencer Wells's pressure forceps. The wound was dressed with iodoform and wood-wool pads; the leg became œdematous, and later small vesicles containing a clear fluid lymph appeared on the lower part of the abdomen and groin of the right side. The forceps were removed on the fifth day. The patient was discharged on July 16th, but died some months later from hæmorrhage due to recurrence and ulceration of the disease in the groin.

REMARKS.—The interesting points in this case are: (1) The comparatively early age of the patient. (2) The primary seat of the new growth. Carcinoma of the vulva is rare in comparison to that of the uterus, but it is still rarer as a primary growth of the clitoris. Simmons, in a paper (quoted by Hart and Barbour, 4th ed., p. 549), could only find records of six cases of primary epithelioma of the clitoris. (3) The length of time which elapsed between the first and second operation. (4) Non-recurrence of the disease at its original site. This shows the necessity in malignant disease of extirpating the glands to which lymph from the diseased part is carried. (5) The use of the galvano-cautery has been recommended for removing these growths on account of the hæmorrhage which might occur. In this case, at any rate, the hæmorrhage was easily controlled by the application of forceps and subsequent ligature. (6) The occurrence of gangrene was never threatened, although the common femoral vein was tied. In the EPITOME of the BRITISH MEDICAL JOURNAL of January 13th, 1894, par. 30, an abstract of a paper by Niebergall appears on the treatment of the wound of this vessel, and this is another case of wound of this vessel in removing new growths where the artery was not tied, and gangrene did not occur.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

J. W. HULKE, F.R.C.S., F.R.S., President, in the Chair.

Friday, May 11th, 1894.

SYRINGOMYELIA.

MR. J. R. LUNN read a report of this case, which was shown by him in 1883, as one of a peculiar deformity of hands and shoulders. It was recorded in Vols. xvi and xvii of the *Clinical Society's Transactions*: and a Special Committee thought the various lesions were the result of a central nervous affection akin to "Charcot's disease." The patient remained under the care of Mr. Lunn till his death, in March, 1893. In November, 1889, he began to suffer from girding pains and attacks of nausea. In January, 1891, he had several attacks of pemphigus on the hands, generally preceded by slight rises of temperature. In October, 1891, wasting of the right finger nails had increased, with wasting of the terminal phalanges. The patellar reflexes were increased with ankle-clonus on the right side, and there were several attacks of pemphigus in October, 1892. While tactile sensibility was normal, sensibility to heat, cold, and pain was impaired, and almost absent over a considerable area of arms, head, and chest. There was slight spastic paraplegia with increased knee-jerks and some ankle-clonus. Sensation in the legs was unaffected, though there was some ataxy. On March 5th, 1893, the patient had a short fainting fit, and next day great difficulty in speaking, his tongue protruded towards the right side, and the lower half of his face seemed paralysed. The right arm and leg were weak, and the head was turned a little to the left. Although he appeared to understand what was said to him, and to want to reply, he was unable to do so, his power of articulation being confined to simple words, such as "yes," "no," "one," "two." The knee-jerks were increased on both sides, and the plantar reflexes slightly so. There was no ankle-clonus. On March 7th the patient had difficulty in swallowing, his pupils remained dilated, but acted to light, the legs were in a state of extensor spasm, and could be flexed only with difficulty. On March 10th the right arm and leg had lost all power, the patient was semi-comatosed and began to suffer from hypostatic pneumonia and bronchitis. He could not swallow, and it was impossible to rouse him. In this state he died on March 12th, a week after his seizure. *Post mortem*, old dislocations of both wrists, left shoulder, right thumb, and outer end of right clavicle were found. There were bullæ on several fingers; some finger nails were wasted, others absent. There was hypostatic pneumonia. The right lobe of the cerebellum was smaller than the left. The lateral ventricles were dilated. The left middle cerebral artery was thrombosed, and the cortex to which it went was softened. The central canal of the spinal cord was dilated in the cervical and upper dorsal regions. The dislocated joints were typical examples of osteo-arthritis, and were so described by Mr. Targett, who had examined them.

Dr. BEEVOR, who had examined the spinal cord, reported that dilatation of the central canal of the cord had destroyed the ganglion cells in the anterior cornua, thus producing trophic changes and consequent deformities, especially in the arms.

Dr. ORMEROD said that he had only come across syringomyelia *post mortem* in two cases; the one, a lunatic, who presented no clinical symptoms, the other a boy, who presented the general symptoms of cerebral tumour complicated by acute paraplegia. Dilatation of the cerebral ventricles and of the central canal of the cord was found, but the Sylvian aqueduct was not dilated. Clinical examples of the disease were now accumulating; he had recently had 2 cases under his own observation. All cases of chronic muscular atrophy affecting the hands

(particularly if associated with a spastic or ataxic condition of the legs) should be examined to see whether they presented the peculiar sensory symptoms characteristic of syringomyelia.

Dr. FREDERICK TAYLOR referred to two cases of syringomyelia which he had shown before the Pathological Society some years ago, and before the recognition of the peculiar modification of the sensory functions as a characteristic of the disease. One case was that of a child about 2 years of age, in which also there was dilatation of the cerebral ventricles; the other was a woman, and the syringomyelia was associated with a gumma of the spinal meninges and pachymeningitis. In this case there was unequal paralysis and rigidity of the lower extremities, but nothing unusual was noted about the sensory symptoms. In both cases the position of the cavity was similar to that shown by Dr. Lunn, and seen in other cases—namely, in the posterior part of the cord.

Dr. COUPLAND referred to a case brought before the Society in 1872 by the late Dr. Greenhow. The case was regarded as one of progressive muscular atrophy, but the cord showed a remarkable dilatation of the central canal. In the light of subsequent knowledge this case might, perhaps, be considered one of syringomyelia, to which the amyotrophy was secondary.

ENTERIC FEVER IN A DIABETIC SUBJECT.

Dr. POORE read this paper. A man, aged 35, was admitted to University College Hospital, on October 5th, suffering from diabetes of moderate severity, and remained under observation for 114 days, during which 105 separate estimations of the daily output of sugar or urea in the urine were made. The special interest of the case lay in the fact that while he was thus under close observation he developed (on November 16th) enteric fever, which persisted for six weeks. This attack of fever was without diarrhœa or other serious complications, and might almost be regarded as "simple continued fever." Opportunity was thus offered for observing the effect of the febrile condition on the urinary excreta. During the first week of his stay in hospital, during which the patient was on ordinary full diet, but was taking opium by the mouth, the urine amounted (for the week) to 1,218 fluid ounces, and contained 7,900 grains of urea, and 22,218 grains of sugar. During the next five weeks the patient remained in his normal (diabetic) condition, and consumed a rigid diabetic diet. For these five weeks the weekly average of urine was 673 ounces, containing 6,118 grains of urea, and 3,781 grains of sugar. Then followed the period of fever, which lasted for six weeks, and during this period (the average temperature for the whole period being 2.2° F. above the normal), the weekly average of urine amounted to 491 ounces, containing 4,263 grains of urea and, 1,214 grains of sugar. The febrile period was followed by a fortnight during which the temperature was subnormal, and it was found that the weekly average of urine was 644 ounces, containing 3,577 grains of urea, and 989 grains of sugar. During the last fortnight of his stay in hospital the temperature was normal, and the weekly average of urine was 537 ounces, containing 6,105 grains of urea, and 7,511 grains of sugar. These figures showed that although the urinary excreta were diminished during the fever, the period of their greatest diminution was that of subnormal temperature which followed the fever. This case lent no support to the commonly-accepted statement that during fever the output of urea was increased. Complete disappearance of sugar from the urine occurred on the fifth, sixth, and seventh days after complete cessation of the fever, when the patient's temperature averaged 97.1°. On these three days the urine amounted to 294 ounces, and contained 1,088 grains of urea and no sugar. The numbers seemed to show that the greater freedom from glycosuria occurred at a time when the needs of the body were great and the patient was rapidly increasing in weight to replace the 24 lbs. of body weight which, partly from actual weighing and partly from estimate, it was assumed that he had lost during his six weeks of fever. Dr. Poore drew attention to the fact that there was a certain parallelism in this case between the output of sugar and the pulse respiration ratio, and that as the value of $\frac{P}{R}$ declined so did the output of sugar. One might from this assume that as the output of carbon by the lungs increased the output of carbon by the urine diminished. In conclusion, Dr. Poore gave reasons for thinking that the condition of the parotid glands in diabetes had not, perhaps, received sufficient attention either at the bedside or in the *post-mortem* room.

Mr. EASTES remarked that the week of subnormal temperature and absence of glycosuria in January last was that in which the external temperature was abnormally low. He inquired if Dr. Poore thought this might in any degree have accounted for the temporary improved condition of the patient.

Dr. COUPLAND believed that when a diabetic had typhoid fever the temperature generally had a low range.

Dr. S. PHILLIPS narrated a case of acute glycosuria, in which the patient a week before death had acute parotitis, first on one side then on the other.

Dr. POORE, in reply, hardly thought the external temperature could have had anything to do with the patient's condition in January, as the temperature of the ward was kept up by artificial means and the patient was in bed. The temperatures given in the tables appended to the case were the averages of each week, and he observed that the average temperature of the fourth week of the illness, which was 100.8° F., was undoubtedly high when it was remembered that it was the average for the week.

HÆMOGLOBINURIA FROM MUSCULAR EXERTION.

Dr. LEE DICKINSON narrated three cases of transient hæmoglobinuria from muscular exertion without serious symptoms. The subjects were healthy young men. In two of the cases the cause was a foot race of three miles and one mile, undertaken in an untrained condition; in the third the attack appeared after a game of lawn tennis. Reference was made to cases in which hæmoglobinuria had occurred repeatedly in the same subject from the strain of military marching or ordinary walking, such cases being probably allied to "functional" albuminuria, and associated with abnormal delicacy of the red corpuscles. On the other hand, in the class of cases brought forward, the blood was healthy, but the corpuscles were destroyed by some product of the unusual muscular exertion, probably carbonic acid.

PELIOSIS RHEUMATICA.

Mr. MARTIN RANDALL reported the case of a married woman, aged 41, without rheumatic history, but much addicted to alcohol. She was taken ill on September 2nd with pains and swellings of the joints, accompanied by a rash consisting of papules, some pale, most hæmorrhagic, varying in size from a split pea to a five-shilling piece, and some raised fully an eighth of an inch. There was slight fever, about 100° on most days. Severe vomiting and diarrhœa set in about a week later, the motions containing much altered blood, but the vomit being free from blood throughout. The rash continued till death, the old patches fading and new ones reappearing. There was œdema at times, confined to the region of the joints affected. About a fortnight after the commencement some of the papules sloughed, leaving foul ulcers. She died exhausted on September 21st. The urine contained a microscopic amount of blood. *Post mortem* petechiæ were found on the serous membrane. The intestines showed very many ulcers, commencing in the duodenum and extending to the end of the ileum, but not to the large bowel. The liver was very fatty, weighing 103 ounces. Several joints were opened and found to be healthy.

Dr. ROSE BRADFORD observed that all the symptoms of peliosis rheumatica except submucous hæmorrhage were present, but possibly the gastric and intestinal ulcerations were due to submucous hæmorrhage, and subsequent sloughing of the undermined mucous membrane.

PATHOLOGICAL SOCIETY OF LONDON.

WILLIAM PAVY, M.D., President, in the Chair.

Tuesday, May 15th, 1894.

REPORT ON MORBID GROWTHS.

A REPORT by the Morbid Growths Committee on Mr. Jackson Clarke's two specimens of carcinoma was read by the SENIOR SECRETARY. In the first, the author described a parasitic spore-cyst lying in the epithelium of a squamous-celled carcinoma of the nasal septum. This the Committee reported to be a collection of migrated leucocytes, such as had been figured by Mr. D'Arcy Power[1] in the rabbit's vaginal epithelium after prolonged irritation. As to the second specimen, the Committee confirmed the author's description of intracellular bodies having peripheral bars or granules. Those it considered of the same kind as what were figured, amongst others, by Soudakewitch and Ruffer, but it did not confirm the author's statement that certain groups of such were in a capsule within the cell. The Committee reported that the bodies lay in the cell-protoplasm, and not in a cyst.

MYXO-SARCOMA OF THE UTERUS.

Mr. JACKSON CLARKE placed before the Society a section of a myxo-sarcoma of the uterus removed by Dr. M. Handfield-Jones. The section showed a large cell divided by irregular mitosis. Certain irregular forms of nuclear division formed the subject of two papers by Hansemann,[2] who contended that a form of nucleus which contained a countable number of chromosomes (hypochromatic) was peculiar to cancer. Hansemann had framed and supported the hypothesis that a form of asymmetry of mitosis met with in cancer was a step towards the loss of differentiation and the greater independence of the cancer cell. A similar view was once held by Weismann[3] with regard to the first direction body extruded by the ovum cell; but Weismann had since found that the number of chromosomes in the direction body was the same as that of the nucleus of the ovum cell after the extrusion of the direction body, and therefore that the latter was the result of a symmetrical mitosis. Hansemann, though recognising that the parallel no longer held good, still maintained his thesis with regard to cancer. Among others, Strœbe[4] had criticised Hansemann's work. Strœbe had found irregular mitoses in healing wounds of the cornea, and came to the conclusion that wherever mitoses were abundant some of them were asymmetrical. Moreover, the hypochromatic nucleus was not peculiar to cancer, but occurred also in sarcomata. The latter fact Mr. Clarke had been able to observe in the study of the growths on which his view of the nature of cancer was based. Strœbe further observed that if sporozoa were present in cancer some of them might exhibit irregular mitoses. It would be remembered that Max Wolters[5] had described the formation of direction bodies in gregarinæ, and Mr. Clarke had figured the same condition in a syzygium in a tumour of a cat's lip. Moreover, in the squamous epithelioma of the columna nasi, and the round-celled sarcoma of the testis described to the Society last session, the author had shown that irregular mitoses were abundant, and that practically all of them occurred in the bodies he regarded as parasites. The occurrence in sarcoma of bodies identical with those described as parasites in cancer by Soudakewitch and others, remarked on by the author elsewhere,[6] had been confirmed by Lindsay Steven,[7] and the author's view of the nature of certain bodies met with in squamous epithelioma, cancer of the breast, and elsewhere, had been adopted by Korotneff[8] and Kurloff.[9] Moreover Schrön[10] appeared to have come to the same conclusion as the author with regard to the existence of free parasites in cancer of the breast. Those who were deterred from the study of squamous epithelioma on account of the complexity of cell forms there present would find equivalents of all the bodies described by Mr. Clarke in certain cancers of the uterine cervix where there was no question of "keratinosed epithelium." W. Miller[11] had recently confirmed the author's description of free and un-

[1] BRITISH MEDICAL JOURNAL, vol. ii, 1893, p. 830, Fig. 9.
[2] *Virch. Arch.*, 1890, p. 299, and 1891, p. 356.
[3] *Ueber die Zahl der Richtungskörperchen*, 1887.
[4] *Beiträge zur path. Anat.*, 1893, p. 154.
[5] Max Wolters, *Archiv für mikroskop. Anat.*, 1891.
[6] Jackson Clarke, *Morbid Growths and Sporozoa*, Fig. 34.
[7] Lindsay Steven and Brown, *Journ. of Pathol.*, October, 1893.
[8] Korotneff, *Centralbl. für Bakt.*, March, 1893.
[9] *Ibid.*
[10] Report of Internat. Cong., Rome, 1894; BRITISH MEDICAL JOURNAL, April 7th.
[11] W. Miller, Notice of Congress of Physicians at St. Petersburg, *Centralbl. für Bakt.*, April 7th, 1894.

mistakable sporozoa in cancers of the cervix uteri. In this form of cancer Mr. Clarke had met with bodies having all the morphological characters of sickle-shaped swarm spores. The author repeated as one of his reasons for regarding as living organisms the bodies looked on by others in this country to be the presence of irregular mitotic figures such as were under consideration. He placed before the Society a large irregular parasite isolated by teasing, and containing a cluster of granular spheres which presented no differentiation with nucleus and cell protoplasm, and which he regarded as spores—one of the terminations of the irregular mitotic processes referred to. Through the kindness of Mr. C. A. Ballance, the author had had an opportunity of examining a section of an incubated cancer containing bodies which had been described by Shattock and Ballance.[12] Some of these bodies presented besides a segmented nucleus a halo of protoplasm, and had all the characters of the most familiar kind of leucocyte; they had nothing in common with the granular spores described by Mr. Clarke. As he had elsewhere stated, some of the granular spores described by the author were (with our present knowledge) only to be distinguished from leucocytes by tracing their origin. Mr. Clarke, on the strength of a comparison of the bodies undergoing irregular mitosis in the sarcoma of the uterus with others in the sarcoma of the testis, thought it quite possible that they might also be regarded as parasitic. In view of the difficulty of infecting animals with cancer, it was important to study variola and vaccinia, with the view of obtaining a side-light on the matter. The work of Van der Loeff, L. Pfeiffer, and Guarnieri had gone far to establish these affections as a mode of sporozoal infection. Mr. Clarke had successfully repeated the inoculation experiments of Guarnieri and Pfeiffer, using calf-lymph on rabbit's cornea.

Tuberculous Ulcer of the Stomach.

Dr. HABERSHON exhibited a specimen of tuberculous ulcer of the stomach associated with tuberculous pericarditis and tuberculous disease of the brain. The patient was a woman aged 35, suffering from pleurisy and pulmonary tuberculosis. After death acute peritonitis was found arising from the perforation of a tuberculous ulcer of the ileum. In the posterior wall of the stomach was a shallow ulcer, the size of a threepenny piece, coverglass preparations of the caseous material in the floor of which showed the presence of tubercle bacilli. There was a single tuberculous ulcer in the ileum and several in the rectum. In the brain there were tuberculous formations in the left quadrate lobe, in the right occipital lobe, and in the left corpus striatum. A case of tuberculous ulceration of the stomach had been reported by Dr. Barlow in the Society's *Transactions*, but no proof of it was therein given. Dr. Newton Pitt had described a case in which a caseous gland had suppurated and led to perforation of the gastric wall, and in which there were several submucous tubercles. Sir Dyce Duckworth had also recorded a case of tuberculous disease of the stomach in a child.

Ruptured Aneurysm.

Dr. LEE DICKINSON recounted two cases of congenital thinness of arterial wall associated with the formation of aneurysm without the occurrence of secondary disease. The first concerned a man, aged 29. The aorta was throughout abnormally thin, but especially its abdominal portion, which was the seat of an aneurysm that ruptured into the peritoneal cavity and led to death. In the second case, that of a woman, aged 29, the whole aorta was also markedly thin. There were four aneurysms in different arteries, one of which, in the common iliac, ruptured with a fatal result. The patient was the subject of capillary hæmorrhages from the thorax, but there was no history of hæmophilia. In some cases of hæmophilia an abnormal congenital thinness of arteries had been described.

Dr. MORLEY FLETCHER inquired whether the exhibitor had examined the walls of the arteries microscopically. In some cases of congenital thinness the defect lay in the media; in others, as Eppinger had described, it was in the fenestrated membrane of Herle.

Dr. LEE DICKINSON could only reply that the arteries appeared natural except that the inner and middle coats were thin.

Multiple Loose Bodies from the Knee-Joint.

Mr. JAMES BERRY showed 1,047 loose cartilages which he had removed from the knee-joint of a man aged 22. A smaller number had been removed from the same joint four years previously, and had been shown to the Society then.[13] After the first operation the patient had remained well for more than three years, and then began to complain of weakness and swelling of the knee. The cartilages were removed by direct incision, and the wound healed without any complication. The loose bodies varied in diameter from $\frac{5}{8}$ inch down to less than $\frac{1}{8}$ inch. They were of a pearly white colour, with a smooth glistening surface. The smaller ones were composed of pure hyaline cartilage, the larger ones of similar nodules of cartilage united by loose fibrous tissue. None of them were pedunculated or attached in any way to the synovial membrane.

Carcinoma of the Bronchus.

Dr. C. OGLE showed this specimen. There was a polypoid growth almost blocking both bronchi, but no tumours elsewhere. The bronchi contained non offensive purulent fluid. Histologically the cells of the growth were remarkably large. He thought the source of the new formation to be, probably, the mucous glands of the bronchus.

Mr. ANTHONY A. BOWLBY regarded the specimen as a carcinoma, but did not think its origin clear; he suggested the possibility of its having arisen in an epithelial inclusion in the bronchial lymphatic glands, as the growth did not appear to have been specially connected with the bronchus.

Papilloma of the Common Bile Duct.

Dr. H. D. ROLLESTON showed this specimen. In performing cholecystotomy, Mr. Bennett, after removing an impacted gall stone, had encountered a new growth at the site of impaction; this was removed, and proved, on histological examination, to be a simple papilloma, which had arisen from the wall of the duct. The patient was a woman, aged 58; the impaction had persisted for two months, and was associated with jaundice.

Pachymeningitis Hæmorrhagica.

Dr. WILSON showed a specimen of the condition from a case of phthisis. The inner surface of the dura mater was invested with reddish-brown clot. There was no histological evidence of inflammation in the dura mater. He assumed that the lesion arose as a simple effusion of blood in the subdural space. Certain irregular thickenings it presented indicated the occurrence of secondary hæmorrhage from newly-formed vessels. The specimen was obtained from a young woman suffering from phthisis and marked cough. There were no special symptoms such as had been described in connection with pachymeningitis hæmorrhagica. The age of the patient (21) was unusual; 87 per cent. of such cases occurred above the age of 30; 51 years was the average age at which death took place. The condition, however, was known at all periods, from birth upwards. The lesion might be ranged under four categories: 1. General paralysis and chronic alcoholism. In these cases there was possibly an atrophic state of the brain leading to loss of support in the cerebral vessels. 2. Injuries to the head. 3. Pachymeningitis hæmorrhagica. 4. Congestion of cerebral veins, as from chronic disease of the heart or of the lungs (as in the instance reported). He considered that the term hæmatoma of the dura mater was preferable to that of pachymeningitis hæmorrhagica.

Meningo-myelocele with Persistence of Pretubular Condition of the Cord.

Mr. S. G. SHATTOCK showed an early specimen of spina bifida in which the summit of the sac was formed solely by the flattened substance of the spinal cord; this was invested superficially with long columnar epithelium, the primitive epiblast. The nerve roots arose as usual from the portion of the cord involved in the posterior wall of the sac. In the nervous substance forming the summit there were groups of large typical motor nerve cells. He thought that dropsy was necessary for the formation of a sac, as he knew of cases where there was as marked deficiency in development without protrusion.

Cyst in the Post-anal Gut in an Infant.

Mr. D'ARCY POWER showed the above specimen from a case in which he had performed laparotomy. The cyst lay behind the rectum, and was filled with a clear mucoid fluid; inferiorly it terminated in a slender cord, which passed downwards towards the coccyx. There was slight hydronephrosis, probably resulting from compression of the ureters.

Card Specimens.

Dr. R. HEBB: Meningitis due to Streptococcus.—Dr. NEWTON PITT: (1) Renal Calculus in a Child; (2) Acute Nephritis in a Child.—Dr. LEE DICKINSON: Cystic Kidney with Sarcomatous Adrenal.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

W. HUNTER, M.D., President, in the Chair.

Wednesday, May 2nd, 1894.

Cases.

MR. CHICKEN showed (1) an elderly man who had suffered for some time from pain in the right thumb, and peculiar sensations there, but whose symptoms were entirely removed by trephining over the thumb area, where the bone was found much thickened. He had used for the operation a V-shaped chisel. (2) An old man who had had an epithelial ulcer of the ear and adjacent skin. The growth had completely disappeared, and the ulcer healed under the influence of calomel and iodoform dressings. (Dr. CATTLE exhibited a microscopical specimen of a portion of this growth which he had prepared, and which had been removed by Mr. Chicken for this purpose.) (3) A healed compound fracture of the arm and forearm in a young man. The injury was caused by a tramcar accident. The humerus had been broken in two places, and the bones of the forearm also in two places, with much skin laceration. (4) A case of lupus erythematosus in an elderly woman which was almost completely cured by painting the part with solutions, first of permanganate of potash, then hyposulphite of soda; and, lastly, with dilute hypochloric acid. Mr. Chicken thought the beneficial effects accrued from the action of nascent sulphur, which was by this means generated in the tissues. Messrs. ANDERSON, BURNIE, CATTLE, and HUNTER spoke on these cases.

Specimens.

Mr. CHICKEN showed a pathological specimen of an intussusception which he had removed by enterectomy.—Dr. WATSON showed a dermoid cyst of the ovary and a Fallopian tube with double abdominal ostium.

The Radical Cure of Hernia.

Mr. CHICKEN read a paper on this subject. He advocated strongly the period of infancy as the most suitable time for the successful performance of the operation. He deprecated the use of pressure and trusses in congenital hernia. The union was insecure, and the cure apparent only and fallacious. Ligatures and sutures should be boiled in carbolic solution and allowed to cool in the solution, thus drawing the sterilising medium into the remotest fibres of the material. He thought flax preferable to silk. No old ligatures or lengths brought from one operation should go to another, but the reels should be emptied previous to each operation, and the new ones freshly sterilised immediately previous to the operation.

THE memorial to the late Dr. D. Hayes Agnew is to take the form of an addition to the University Hospital, Philadelphia. The committee has received sufficient promises of support to insure the success of the undertaking. The new wing, which is to bear the name Dr. Agnew, is to be designed and fitted in the most approved modern fashion, and will contain a children's ward, an amphitheatre and class rooms, and wards for men and women.

[12] Shattock and Ballance, Report of proceedings of Pathological Society, BRITISH MEDICAL JOURNAL, 1893.

[13] BRITISH MEDICAL JOURNAL, 1890, vol. ii, p. 958.

REVIEWS.

Tumours, Innocent and Malignant; their Clinical Features and Appropriate Treatment. By J. Bland Sutton. London: Cassell and Co. 1893. (Demy 8vo., pp. 527. 21s.

In this volume are included the author's valuable contributions to the morbid anatomy of certain forms of tumours, such as dermoid growths, cysts, odontomata, etc., which are already well known, together with somewhat meagre descriptions of other kinds of new growths. The accounts of the different tumours are of unequal merit, but taken as a whole the book is worthy of high praise because of the ingenuity of many of the suggestions offered in explanation of difficult problems in this branch of pathology, as well as for the excellence of the numerous illustrations with which it is supplied.

The plan of the work laid down in the preface is that the clinical and pathological features of the tumours should be equally considered, but except in a few instances this is imperfectly carried out on the clinical side, even where such features are sufficiently characteristic. Indeed to have done so would have implied the introduction of much matter from the ordinary textbooks of surgery and greatly increased the number of pages. In respect of treatment, too, the principles only which guide the surgeon are indicated, that is to say, briefly, early and complete removal.

The mode of classification adopted is that of the biologist. After excluding those new formations known to be due to a specific cause, the remaining growths are arranged in four groups—connective tissue tumours, epithelial tumours, dermoids, and cysts. Each group is divided into genera and species, and of each species there may be one or more varieties. The mode of determining the species is not the same for each class. Thus, there are eight species of the genus lipoma, the names of which are derived from the anatomical situations in which the neoplasm arises—for example, subcutaneous, subserous, intermuscular. On the other hand, the six species of the genus sarcoma are arranged according to the shape and disposition of the cells, which would seem to be the only reasonable method. Seven chapters are devoted to the consideration of the sarcomata, and in them the chief features of the several species are briefly given, as well as a short review of the parts most liable to be affected. The want of drawings to illustrate the histological appearances of some of the species and varieties of sarcoma mentioned in the text is seriously felt by the reader. This is especially the case with regard to the species called alveolar sarcoma, which Mr. Sutton would distinguish from carcinoma mainly by certain minute histological characteristics. Allusion is made to the occurrence of myophan striation in the spindle cells of some of the sarcomata affecting the kidney, testis, and periosteum; and Mr. Sutton has done good service in bringing together the various organs in which such growths have been described. He has thus endeavoured to dispose of the notion advanced by Cohnheim that such striped cells have arisen from detached portions of mesoblastic somites, and has offered the far more probable suggestion that they are due to changes similar to those which give rise to hyaline cartilage in sarcomata.

In dealing with the group of epithelial tumours four genera are described, namely, papilloma, epithelioma, adenoma, and carcinoma; the last two are taken together with the view of emphasising the relation that exists between them, and of showing that while the adenoma mimics the gland in connection with which it grows, the carcinoma of the same organ mimics the adenoma. The method is happily conceived and well carried out; but, of course, it has its limitations. In the list of adenomata those occurring in the suprarenal body are omitted, though they are by no means uncommon; and under the heading of adenomata of the rectum no distinction is drawn between the fibrous and glandular types. Those anomalous tumours called psammomata, the classification of which has always been doubtful, are here included with the papillomata, and not with the sarcomata, as is usual. There can be very little doubt that more than one kind of neoplasm has received this denomination. The author states that they are confined exclusively to the pia mater of the brain and spinal cord, and are found most frequently in connection with the velum interpositum and prolongations of the choroid plexus, from the villi of which they arise. But large tumours of this class, attached to the falx cerebri or parts of the dura mater removed from the base of the brain, are on record, and must have had a different origin. The subject is well worthy of further investigation, and now that Mr. Sutton has drawn attention to it we may expect that these difficulties will soon be solved. Indeed, it is this suggestiveness and the novel light in which old things are viewed which constitute the value of this book, and will make it appreciated by the student and worker.

To what is really the best part of the volume, the sections on dermoids and cysts, it is only necessary to make a passing reference, for Mr. Sutton's work in this direction is already well known from his previous publications, and has received its meed of praise. Pathologists are deeply indebted to him for reducing a chaotic subject to something like scientific order.

In conclusion, the cause of tumours and their zoological distribution are briefly considered. These two chapters might with advantage be expanded in view of the interest which is now felt in the investigation of the origin of cancer. Besides the well-drawn figures which illustrate and explain the text, the usefulness of the book is further enhanced by two special indices, one showing the tumours to which an organ is liable, and the other indicating the distribution of tumours among the various organs.

Klinische und anatomische Studien über die Pellagra [Clinical and Pathological Studies of Pellagra]. Von Dr. Franz Tuczek. Berlin: H. Kornfeld. 1893. (Demy 8vo, pp. 118, 9 plates. M. 6).

This monograph is the result of a journey undertaken for the purpose of studying pellagra in those parts of Italy in which it prevails. Dr. Tuczek has had the opportunity of studying a large number of cases clinically. Eight necropsies have provided him with material for some valuable histological observations.

The author fully endorses the theory that pellagra is due to the use of diseased maize, and he brings forward most conclusive evidence in support of this view. The references he makes to the somewhat similar toxic phenomena of ergotism and lathyrism are of interest on account of the parallelism exhibited in the clinical features of diseases produced by poisons of allied characters.

Dr. Tuczek divides the clinical history of pellagra into three stages. The first, or period of onset, is characterised by disordered digestion, muscular weakness, and diminished mental activity. In the second these symptoms become more marked, and there develops, in addition, the characteristic affection of the skin from which the disease receives its name. Peculiar psychical disturbances are also noticeable, and other phenomena indicating commencing organic nerve disease. The third stage is that in which the typical pellagrous cachexia appears. Paralysis of the extremities increases, and the heart's action gradually becoming weaker, œdema, etc., sets in, and gradually leads up to the fatal result. Occasionally there is observed in this stage the febrile condition named by Italian observers "typhus pellagrosus."

A description of the morbid anatomy of the disease is given. The most important part is that relating to the spinal cord. This part of Dr. Tuczek's work is well illustrated by plates. The lesions, which are of the character of slowly advancing sclerosis, are most apparent usually in the posterior and lateral columns. At first they appear to be slight, but they advance slowly under the influence of repeated doses of the toxic material. Ultimately the whole length of the cord becomes involved. It is to this portion of the monograph that we would particularly direct attention. The author has added considerably in other respects to our knowledge of this comparatively little known disease, but he is specially to be thanked for the contribution he has made to our knowledge of the morbid changes brought about in the nervous system by poisons of which as yet we know very little.

Personal and Domestic Hygiene for the School and Home. By Mrs. Harold Hendley, Medallist, National Health Society, England. Calcutta: Thacker, Spink, and Co. 1893. (Pp. 209.)

This book will serve an exceedingly useful purpose, containing an excellent introductory section on elementary physiology, and a section on accidents and emergencies.

The sections on hygiene and nursing seem likely to be especially useful, addressed as they are, by one who evidently knows her work, to Anglo-Indians and other dwellers in the East.

A perusal of this book shows at once how different are the problems of sanitation in India and in this country, and how helpless one with only European experience might feel in face of the conditions found there. People in England are apt to look upon drains as the proper receptacles for whatever can be made to go into them, but the new arrival in India is told that dirty water from the house or the cook house must never be thrown into a drain near the house, but be put into a *gurra* and taken away by the *mehter*.

The great difference between hygienic problems as looked at from an Indian or an English point of view is well shown in the chapter on water. Where drinking water is got from tanks it is doubly necessary for all the people around to be clean in their habits. "People use the banks as latrines, quite forgetting that all the foul matter from their bodies will soak through the ground and be washed into the water they drink; others wash all the dirt and perspiration of their bodies, brush their teeth, rinse their mouths and spit into the tanks; others, again, scrub their dirty, greasy, cooking pots, or wash and water their cattle, while others again wash the grain and fruit they are about to sell or eat, and the filthy clothes they have just taken off their dirty bodies, and which simply stink with the dirt of weeks or months." After all this, we are somewhat surprised to find that while both boiling and filtering are recommended, it is advised that the filtering process should follow the boiling. We think there can be no doubt that the less water is manipulated after it is boiled the better. The book, however, is full of useful hints, and is likely to be of great service to those who are called upon to run the risks which a tropical climate and the bad habits of centuries impose on dwellers in India. Its main object, however, would seem to be to serve as a school manual for use in the Anglo-vernacular and mission schools, and for this purpose it appears admirably suited.

Der Morbus Gravesii. Gekrönte Preisschrift. Mit 2 Tafeln [Graves's Disease. Prize Essay. With 2 plates.] Von Dr. P. Mannheim. Berlin: A. Hirschwald. 1894. (Demy 8vo, pp. 162. M.4.)

Any thoughtful contribution to the subject of Graves's disease such as the one now before us is almost certain of a favourable reception considering the number of points which are still obscure. It is gratifying to see that the author adopts the name of Graves instead of Basedow on the ground that priority belongs to the late distinguished Dublin physician. The essay itself, dedicated to Professor Mendel, is based on (1) the observation of some 47 cases, almost exclusively from the extensive clinic of this well-known neurologist, and (2) a thorough investigation of the literature of the subject, some 150 papers having been consulted in the original. Although it does not profess to deal exhaustively with all aspects of the disease, the pathology strictly so-called, symptoms, and treatment are very fully discussed.

It must suffice here to select a few points in the disease which are either comparatively less well known, or still under discussion at the present moment. As to causation, the author decidedly inclines to the view that the lesion is in the central nervous system, and in addition to other cases he refers to one published by Mendel (Epitome, March 5th, 1892, par. 200), in which the solitary bundle in the restiform body was diseased. He endeavours to show that the symptoms are compatible with the idea of a central lesion. Moebius's theory, which would assign Graves's disease to a lesion in the thyroid body itself, is discussed at some length, and rightly rejected as not satisfying the conditions observed. Under the eye symptoms ocular paralyses are mentioned, and among the author's cases two instances were noted. The mental and nervous symptoms seen in Graves's disease are particularly dwelt upon, and the complications with other nervous diseases such as tabes dorsalis, myxœdema (Epitome, February 13th, 1892, par. 136) emphasised. The undeveloped forms (*formes frustes*) must, according to Dr. Mannheim, be diagnosed with caution, and cases of goitre with pressure on nerves and vessels in the neck do not belong to this category. As to prognosis, the author observes that the course is slow, often extending over years; that the acute cases often occur in men; that improvement, at times very considerable, is not infrequent; but that the question of any large number of complete recoveries cannot be established.

The treatment is discussed under the following heads: (1) medicinal, (2) electrical, (3) hydrotherapeutic, and (4) operative. The author thinks that the treatment should be of a dietetic, hygienic character, physical and mental rest being particularly looked to; that remedies having a sedative action are especially indicated: and that electricity is of service. The question of operative treatment is subjected to a searching though not unfriendly criticism, short notes of over forty cases thus treated being appended. Dr. Mannheim endeavours to show by a strict analysis of these cases that many were not examples of true Graves's disease, but of goitre, producing by pressure on nerves and vessels in the neck some of the symptoms of Graves's disease. He concludes that operative treatment must be limited to cases in which suffocative symptoms arise, or the goitre exerts such pressure as to interfere with the nutrition of the patient. If it were not for suggestions occasionally made to the contrary, it would seem to be a mere platitude to say that physicians, including neurologists, welcome any means, operative or other, which gives any reasonable hope of relieving or curing disease, and that the modern physician is always on the look out for advances that make surgical help available in the so-called internal diseases, and should be and is acquainted with the indications for it.

We may certainly venture to say that this essay will be read with more than usual interest. Much judgment is displayed in arriving at conclusions, and the industry shown in analysing the views of the various authorities is striking. The list of contributions to the subject given at the end of the book will considerably lighten the task of subsequent investigators.

The Care of the Sick. By the late Dr. Th. Billroth. Translated by J. Bentall Endean. London: Sampson Low, Marston, and Co. 1894. (Crown 8vo., pp. 337. 6s.)

This is by no means exclusively a book for professional nurses, being quite as much intended for the home as for the hospital. It is, however, one of the best which can be put in the hands of a probationer, giving as it does with careful thoroughness full details as to most of the duties which she will have to perform. It is distinguished from many other books of the same class as much by the minuteness with which the technical operations of nursing are described as by the comparatively slight stress which is laid on mere anatomy and physiology. In fact the chapter on the structure and functions of the body, which forms so large a portion of so many nurses' manuals, is relegated to an appendix inserted only in later editions.

Very full directions are given as to the management of the sick room and the fulfilment of medical orders. The author truly says that nothing is more wearying to the doctor than to be compelled repeatedly to explain in detail how his orders are to be falfilled. Careful directions are therefore given as to the exact methods to be employed in administering medicines, inhalations, enemata, applying compresses, poultices, massage, electricity, leeches, etc., and in the use of baths and of heat and cold. There are also good chapters on the nursing of operation cases, on dealing with fever patients, on nursing in epidemics, and on the care of nervous patients and those who are mentally diseased.

The translator has succeeded in expressing the author's meaning in good readable English, and the volume is one

which not only is, as the title expresses it, a handbook for families and nurses but will well repay perusal by junior practitioners who, even after a complete hospital curriculum, often find themselves more or less at sea in regard to many little details in the management of patients which the very perfection of the hospital nursing to which they have been accustomed has hidden from them.

An Introduction to Practical Bacteriology, for Physicians, Chemists, and Students (Introductory Science Textbook Series). By Dr. W. Migula. Translated by M. Campbell and edited by H. J. Campbell, M.D., M.R.C.P. London: Swan Sonnenschein and Co. 1893. (Cr. 8vo, pp. 255. 6s.)

It is often objected that the works to which the students of bacteriology have access are too voluminous and enter too much into detail and arguments with which it is inadvisable for any beginner to cumber his mind, whilst the so-called popular lectures on bacteria are only too frequently mere hashes of those larger works with all the practical part omitted.

Dr. Migula, in his little work, has managed to steer clear of both these extremes, and in the form now placed before English readers by Dr. H. J. Campbell his book offers in succinct but singularly useful form much of the information that a beginner requires. It is evident that the work before us is an expansion of the notes used in actual class work, and that these notes have been corrected and rendered more practical from time to time as the difficulties met with by the student have arisen in individual cases, with the result that anyone referring to this book for information when he is in difficulty will usually find described the sources of error and the cause of non-success—a feature of the book which distinguishes it in a very marked manner from many of the so-called practical textbooks with which we are sometimes favoured. Of course the author does not pretend that his work contains everything that is known on the question of which he treats, but he does maintain—and in this we agree with him—that it contains all that is necessary for the acquisition by a moderately intelligent student of a very sound knowledge of the methods used in bacteriology.

In the introduction we have a description of the necessary apparatus, and a list of the dealers from whom these may be obtained. Then follow chapters on the examination of living bacteria, their structure and form, and how to obtain material for examination; this, of course, does not vary much from similar chapters in other books. The really practical part is taken up with the preparation of nutrient media: the special methods of cultivation on plates and in Esmarch's tubes; stroke and puncture cultivations, and cultivations in the hanging drop on the slide; the cultivation of anaërobic bacteria, and the growth of bacteria at higher temperatures. Then come chapters on the staining of cover-glass preparations; of bacteria in tissues; special methods of staining, especially of spores and flagella. The methods of making permanent preparations, and the bacteriological examination of water, complete what may be looked upon as the first part of the work which every student should in the first instance master.

The following chapters deal with special organisms, especially those found in suppuration, splenic fever, malignant œdema, and tetanus, typhoid fever, tuberculosis, cholera, pneumonia, and diphtheria; whilst a special chapter is devoted to the pathogenic organisms found in animals. This latter part of the book is necessarily somewhat sketchy, but the facts put down are the most important of those that should be mastered by the beginner. A few drawings from photographs are given in a couple of plates at the end of the work.

Taking it altogether the book is an exceedingly useful one, especially in that it is handy and accurate. One wishes that the translators had used a little more freedom in turning the German into English, for although the translation is accurate enough, it very frequently has a foreign flavour, especially in that it is somewhat involved and sometimes very redundant. It is true that it is difficult to avoid this when the exact meaning is to be rendered, but when it is not avoided, the pleasure with which such a work is read is greatly lessened.

A Theory of Development and Heredity. By Henry B. Orr, Ph.D., Professor at the Tulane University of Louisiana. London and New York: Macmillan and Co. 1893. (Demy 8vo, pp. 253. 6s.)

Of making theories of heredity there seems to be no end, but it may be said of this, the latest, that it presents a contrast to the recent elaborations of Weismann and others by reason of its extreme simplicity. This quality alone would seem to make it worth perusal. Here we have an attempt to explain the phenomena of growth and development by the more logical, and therefore more probable, action of direct cause and effect. Briefly, the author's views are as follows: The first protoplasm was matter of such a nature as to react to the stimulus of its environment in such a way that its continuance was assumed, or, in other words, living matter became evolved. As it grew it increased not only in size, but also in complexity, owing to the more extensive needs of the larger mass. As its constitution becomes different it reacts differently to the stimuli of its environment. Alteration in the environment would also cause varying reaction, and consequently varying nature, on the part of the organism. It acquires nervous co-ordination, which influences its activity and growth; and as it divides and redivides it adds continually new combinations to those already acquired. As the same forces act on each generation, and form a series of stimuli which are similar for each generation, so each generation repeats in its life the course of development followed by all its ancestors. In this way a species is maintained and in such action and reaction the author finds explanation of growth development and inheritance. An epitome of the theory in all its applications would occupy several pages, but enough has been said to give an idea of the nature of the explanations which the author advances as a theory. Whatever may be its imperfections it certainly seems to be a step in the right direction towards bringing living matter under the influence of known chemical and physical agencies.

The dominant idea of the author seems to be that living matter is matter which always reacts to stimuli in a way favourable to its own continuance, and in the varying reaction consequent either on change in environment or increase in internal complexity he finds the explanation of variation.

Whether to prove the truth of this theory or not it seems certain that research must in future be largely devoted to the determination of the precise reaction of living matter to physical and chemical agencies. Even if in pursuing this line of investigation it be found that Dr. Orr's theory be insufficient, yet our knowledge of the constitution of protoplasm as a chemical body cannot but be increased. In like manner the causes of variation surely deserve closer study than they have hitherto received.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

PROTECTION AGAINST POISONING BY LINIMENTS, ETC.

A most ingenious device for preventing mistakes in taking a wrong medicine has been contrived by Mr. R. Watson Councell. These accidents generally occur with medicinal preparations contained in bottles, as, for instance, by the taking of a poisonous liniment instead of a mixture. To obviate this, Mr. Councell proposes to adapt the cork of a bottle containing liniment or other poisonous preparation, so that on proceeding to take the cork out a warning is given as to the contents of the bottle. For that purpose the cork is cut in two, horizontally, the two portions being then threaded along the vertical axis upon a piece of string, the lower end

of which is knotted so that it cannot be drawn through the cork, while the upper end has a piece of paper attached bearing the word "poison." The two portions of the cork when threaded upon the string can be put into the neck of the bottle as well as if the cork had not been divided horizontally; but, on proceeding to take out the cork in the ordinary way, only the upper half of it will be removed, and the neck of the bottle will still remain closed by the lower half of the cork, so that the contents of the bottle cannot be poured out. In that way the possibility of unconsciously swallowing a poisonous liniment by mistake would be prevented, and the person endeavouring to take out the cork would be informed, even in the dark, of the fact that the wrong bottle had been taken up. The simplicity of this contrivance is a great recommendation, and it has the further important advantage that it is applicable to any bottle without being a permanent distinction after the use of a bottle for a poisonous article is at an end.

MEAT JUICE.

THIS preparation is recommended as being made from the finest English beef. For invalids, a teaspoonful diluted with twice its volume of cold or slightly warm water may be taken as required. The preparation is freely miscible with water, and when heated to the boiling temperature, a copious separation of coagulated albumen takes place, showing that it has not been subjected to heat in its manufacture. The amount of albumen is stated to be 2.3 per cent., and that of extractives insoluble in alcohol 4.5 per cent., together with proportionate amounts of the soluble alkaline phosphates and other saline constituents of flesh juice. Analysis of a sample of the preparation fairly corroborates these statements, and shows that it is one of the best articles of the kind in the market. It is to be obtained of Messrs. Curtis, 48, Baker Street, W.

BYRRH TONIC WINE.

THIS article belongs to the class of prepared vinous appetisers commonly used on the Continent. It appears to be a vinous infusion of a bitter drug, probably cinchona bark, but it does not contain any sensible amount of quinine, and like the vermouth so used in Italy it is most probably made with cinchona bark containing little or no alkaloids. In other respects the wine is free from objectionable characters: it contains 13 per cent. extractive, and has an alcoholic strength equal to 32 per cent. proof spirit by volume. Byrrh is manufactured by Messrs. Violet Frères, of Thuir (Pyrénées Orientales), their London agent being A. Descroix, 68, Cheapside.

STEAM DISINFECTOR.

ALTHOUGH the superiority of steam disinfection over every other method is no longer questioned, the fact remains that not a few towns, and almost all rural districts in this country are absolutely without any provision in this matter. No doubt the heavy initial expense required to purchase a good steam disinfector has hitherto had much to do with this, and therefore one would welcome the introduction of any such apparatus which, while it guarantees the essentials of disinfection, is yet moderate in price. These conditions seem to be fulfilled by the disinfector of A. B. Reck, of Copenhagen, who has patented his invention in this country.

What has been done in the matter of steam disinfection in France by Geneste and Herscher, in Germany by Schimmel, Henneberg and others, in England by Washington Lyons, has been carried out in Scandinavia and Denmark by Reck. In these countries he has erected, since 1885, some two hundred of his disinfectors.

The principle of the apparatus is similar to that of Schimmel's, in use at the public disinfecting station at Berlin, namely, steam under a slight constant pressure of about 1½ lb. to the square inch in contact with the goods for thirty minutes. A unique feature about it is the method adopted to prevent the wetting of the goods by the condensation of the steam upon them.

After the disinfection has been completed and the steam shut off a stream of cold water from a cistern placed a few feet above the apparatus is allowed to flow into the interior. Here the water at once impinges upon a metal plate stretching right across the width of the chamber, and is thereby directed to the sides of the apparatus, down which it runs, to be carried away by an outlet below. During the three minutes that this cold stream flows the steam is rapidly condensed, and to take its place and prevent a vacuum being formed air is drawn in through a valve in one of the doors. The door is then opened and the goods are removed from the cradle with only a very slight amount of moisture in them.

The management of the apparatus is simple in the extreme, and when once fitted up it would certainly not require any specially-skilled attendance. The disinfector is made of various sizes and shapes. The most frequently used is one 3 feet by 3 feet by 7 feet. The price of this, with boiler and fittings, is £68. A smaller oval one can be had for £50, but the prices range from this to £200.

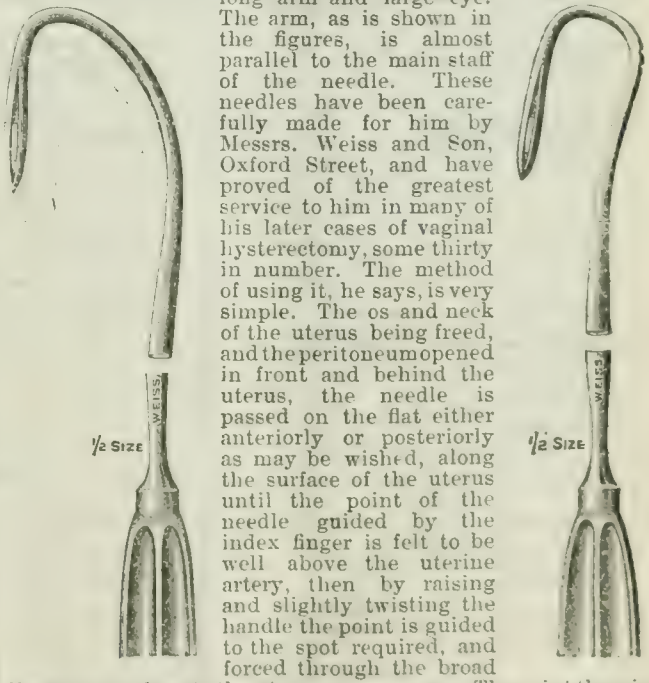
Dr. von Ermengem, Professor of Hygiene at Ghent, states that in experiments with this apparatus he found that anthrax spores which had resisted a 5 per cent. solution of carbolic acid for four to six days were killed after half an hour in the disinfector, even though placed in the centre of a mattress which was rolled up in blankets.

A disadvantage of the machine is that it can never be used as a hot-air chamber, and, consequently, leather and fur articles cannot be disinfected by it.

We recently had an opportunity of seeing one of these disinfectors in operation at the works of the Blackmann Ventilator Company (63, Fore Street, E.C.), who are acting for A. B. Reck, and satisfied ourselves as to the ease with which it did its work.

NEEDLE FOR LIGATURING THE BROAD LIGAMENTS IN VAGINAL HYSTERECTOMY.

MR. F. BOWREMAN JESSETT writes that those surgeons who are in the habit of performing vaginal hysterectomy must, like himself, have often been struck by the difficulty of ligaturing the broad ligament by means of the ordinary aneurysm needles, or sharp needles in handles, the curve being too short, necessitating in those cases in which the uterus cannot be well drawn down through the vulva, the use of great force to turn the point of the needle down so as to secure the ligature and draw it through. To overcome this difficulty he has devised some needles (see Figs.) with a very long arm and large eye.



The arm, as is shown in the figures, is almost parallel to the main staff of the needle. These needles have been carefully made for him by Messrs. Weiss and Son, Oxford Street, and have proved of the greatest service to him in many of his later cases of vaginal hysterectomy, some thirty in number. The method of using it, he says, is very simple. The os and neck of the uterus being freed, and the peritoneum opened in front and behind the uterus, the needle is passed on the flat either anteriorly or posteriorly as may be wished, along the surface of the uterus until the point of the needle guided by the index finger is felt to be well above the uterine artery, then by raising and slightly twisting the handle the point is guided to the spot required, and forced through the broad ligament as close to the uterus as necessary. The point then is brought out of the opposite side, and through the opening in

the roof of the vagina, when, from its length, it projects well through the vulva, and is easily threaded and withdrawn. The same manœuvre is then carried out on the opposite side, and the uterine arteries secured. The tissues are then divided between the ligature and the uterus, and another piece of the broad ligament tied in the same way. Those surgeons, who like himself prefer ligaturing the broad ligaments in preference to the use of the clamp, will, he feels convinced, readily appreciate the value of these needles.

DUAL NOTIFICATION AND THE DEATH-RATE.

MR. D. BIDDLE, M.R.C.S., F.S.S., has once again essayed publicly to prove that the dual system of compulsory notification has exerted a baneful influence upon the death-rate, his letter appearing in the columns of the *Times* of April 16th. His method of procedure is as follows: For the purposes of his theory, the 28 great towns of the Registrar-General have been selected, and the necessary data extracted for a period of 12 years, 1882-93. These years have been divided into three sub-periods, each of four years, and the towns into three groups, consisting of

(1) London and 10 provincial towns, having no system of compulsory notification until 1890;

(2) Three towns (Bradford, Norwich, Nottingham) having the single or householder system of notification up to 1890; and

(3) Fourteen towns having a partial and increasing dual system up to 1886, and being wholly under that system thenceforward;

All the 28 towns (save Leeds—Group I—and Nottingham—Group II) having the dual system of compulsory notification during the last four-year period, 1890-93.

Having set forth the foregoing plan, Mr. Biddle proceeds by a long array of figures, heaped line upon line, to state the facts relating to the death-rate from "all causes" in the towns as a whole, and in their several groupings, during each of the three periods of time; and later he treats of the death-rates from the total zymotic and the notifiable diseases in the same perplexing manner.

Finding it somewhat difficult to follow Mr. Biddle's reasoning save by the aid of a tabular statement, we have drawn up the following tables (A, B, and C) with a view to having before us at a glance the facts from which he seeks to deduce the startling theory which he propounds concerning the "retrogressive" measure of dual notification.

We have here given the full facts for the several groups and sub-groups for each of the periods, and have shown the differing conditions of each group at one and another time as regards its system of notification.

Now, of the data as to "all causes" Mr. Biddle remarks: "These figures are far from dry, and would afford material for a brilliant statistical lecture if handled by a Galton or Booth. It is part of the case of the opponents of the dual system of notification that it places a barrier between the public and the profession, causing parents and others to delay calling in medical assistance, even where the case proves after all to be non-notifiable and even non-infectious, so that the general death-rate is affected by it to a considerable degree beyond what is due to zymotic diseases. But in towns under the system a contest of influences is continually being waged, for not only is there the baneful effect produced by making the medical man responsible for a duty which does not rightfully devolve upon him, but there is also in operation the beneficial effect of what may be called sanitation proper, which received such a tremendous impulse forward in 1875 under

Tables A, B, and C, showing for the 28 Great Towns of the Registrar General the Death-rates per 1,000 living from "All Causes," "Total Zymotic Diseases," and "Notifiable Diseases," in four Groupings of the Towns, and under differing circumstances as to Notification.

A.—*All Causes.*

Groups.	1882-85.		Groups.	1886-89.		Groups.	1890-93.	
28 Towns.		21.93	28 Towns.		20.85	28 Towns.		21.92
I.—No notification system	Lond. 20.8 Provl. 22.75	21.54	I.—No notification system	Lond. 19.7 Provl. 21.45	20.26	I.—Dual system (except Leeds)	Lond. 21.1 Provl. 22.57	21.64
II.—Single system of notification		21.59	II.—Single system of notification; becoming wholly under		20.48	II.—Dual system (except Nottingham)		20.03
III.—Partly under dual system of notification		23.35	III.—Dual system of notification		22.89	III.—Dual system		23.04

B.—*Total Zymotic Diseases.*

Groups.	1882-85.		Groups.	1886-89.		Groups.	1890-93.	
28 Towns.		3.227	28 Towns.		2.918	28 Towns.		2.793
I.—(London and 10 provincial towns)	Lond. 3.14 Provl. 3.440	3.251	I.	Lond. 2.73 Provl. 3.009	2.826	I.	Lond. 2.76 Provl. 2.765	2.768
II.—(3 towns)		2.718	II.		2.694	II.		2.380
III.—(14 towns)		3.297	III.		3.280	III.		2.968

C.—*Notifiable Diseases.*

Groups.	1882-85.		Groups.	1886-89.		Groups.	1890-93.	
28 Towns.		1.036	28 Towns.		0.775	28 Towns		0.772
I.	Lond. 1.03 Provl. 1.153	1.087	I.	Lond. 8.71 Provl. 0.825	0.751	I.	Lond. 0.86 Provl. 0.661	0.791
II.		0.761	II.		0.583	II.		0.630
III.		0.934	III.		0.906	III.		0.753

Lord Basing, then Mr. Sclater-Booth. All that we can well profess to show, therefore, is that the dual system checks the decline in the death-rates that would otherwise go on until some unknown limit was reached."

It will be observed that to Mr. Biddle's mind there are but two influences at work in these twenty-eight towns that can affect the general death-rate; one is an influence for good, to wit, the progress of sanitation; the other is an influence for evil, namely, the enforcement of a single statute, and that statute one which has for its object the prompt discovery, isolation, and repression of disease. "To use Mr. Biddle's own words, written in other sense, "if it were not for the grim nature of the subject, there would be abundant food for mirth here, and one could laugh one's loudest."

At this point we would refer to the fact that Mr. Biddle is content to deal with very limited periods of time, the figures issuing from the adoption of any such comprehensive measure as notification during four years being by no means such as statisticians would as a rule care to base any definite conclusions upon. The presence of a malady like influenza must during the last period treated have had a great effect upon the general death-rate, and there have been epidemic waves of other disease (measles, scarlet fever, small-pox, and diphtheria—three of them generally notifiable) which claim their share in raising the rate of mortality. It is no discredit to notification to state the fact that certain diseases tend to become epidemic in cycles, and we have shown elsewhere that the public are still far from having been educated to the point of aiding health officers to the full in their efforts to cope with prevalence of infectious sickness. Moreover, Mr. Biddle lays great stress upon the data of a single year, 1893, as furthering his argument that the death-rates are being hindered from showing that decrease which, in the absence of dual notification, would be observable. We really must decline to deal with the death-rates of a single year, and that, moreover, a year of epidemics of a kind not easily repressed by notification, but it is instructive to examine the facts for the longer, albeit too short, periods of four years each.

Briefly stated, then, Mr. Biddle's argument is to the effect that whether in regard of all causes, of total zymotic diseases, or of notifiable diseases, the data which we have tabulated show either infinitesimal progress in the lowering of the rates of mortality or show indeed actual retrogression due to dual notification. In fine, he would have us believe that the progress of sanitary science is powerless in the face of the Infectious Disease (Notification) Act of 1889 to effect improvement in the death-rate. How does Mr. Biddle seek to demonstrate the truth of his assertion? By pointing to the fact that, generally speaking, it is true of the three classes of diseases in the towns as a whole and in the several groupings that the saving of life in the second period 1886-89 over the first period 1882-85 is not sustained, is even lost, in the third period 1890-93.

Is this contention true? Most assuredly not in the manner stated by Mr. Biddle, who would seem to have had no regard for the due proportion which different sets of figures bear one to another. In order that our readers may the more readily grasp our meaning we have summarised the data in the foregoing tables and set them out in the following Table D, wherein are shown the relative values of the death-rates from the several classes of disease in the last period 1890-93 as compared with the rates in the earlier period 1882-85. It will be noticed from Table A that the years 1886-89 formed a transition period, a period in which whilst fourteen of the twenty-eight towns remained as before the other fourteen towns were passing from their partial dual system into the full and complete adoption of that system. Hence we leave that period and proceed to discuss the relation borne by the last to the first period, and would here note that whilst the three groups of towns were in 1882-85 under as many different conditions in regard of notification or its absence they were all (save two towns) under identical conditions (the dual system) in 1890-93.

This comparison results in a startling refutation of Mr. Biddle's theory. Looking always upon the rates obtaining in 1882-85 as represented by 100, we show in Table D the figures in 1890-93, the four years of general dual notification.

D.—*Table showing the Relation which the Death-rates in Tables A, B, and C, during the Four-year Period 1890-93, bear to the Period 1882-85, the rates of this earlier period being in all instances represented by 100.*

Death-rates from	Group I. 28 Towns.	Group I. London.	Group I. 10 Provincial Towns.	Group I. Whole Group.	Group II. (3 Towns.)	Group III. (14 Towns.)
All causes	99.9	105.0	99.0	100.5	92.8	98.7
Total zymotic diseases...	86.6	88.0	80.4	85.1	87.6	90.6
Notifiable diseases ...	71.5	83.5	55.9	72.8	82.8	80.6

The table is no riddle. It demonstrates the fact that for all causes together, for the total zymotic class, and for the notifiable diseases the death-rate in 1890-93 shows an ever-decreasing proportion of that in 1882-85 the nearer we approach the full effect of the Notification Act. Even the heavy visitation of influenza, with its attendant mortality, has not been able to increase the "all causes" death-rate in the twenty-eight towns. Why? Because the zymotic class, and especially the notifiable diseases, have yielded such abundant evidence of decline. In London alone (this affecting Group I) is increase in "all causes" shown, and how small is this increase in the face of the recent influenza prevalence; and how splendid are the compensating results achieved under the two remaining disease headings. Really, after study of Table D, one is tempted to believe in Mr. Biddle's hypothesis of two influences at work, and only two, and to rejoice that they labour so harmoniously for the benefit of mankind. The above table, then, points to the fact that a rate of 100 obtaining in 1882-85 as regards "all causes" fell in the four years 1890-93 to 99.9 for the twenty-eight towns, rose slightly in Group I, and fell in Groups II and III. But for the total zymotic diseases, which to some extent feel the influence of notification, the fall was large throughout—13 in the twenty-eight towns, 12 in London, 15 in Group I, 12 in Group II (three towns), and nearly 10 in Group III.

We come, lastly, to meet Mr. Biddle on his strongest ground. He says, "But after all, the crucial test is in the effect produced upon the death-rate from notifiable diseases. Notification has no *raison d'être* unless it helps to stamp out these." Then, after setting out the figures here collated in Table C, he adds, "If it were not for the grim nature of the subject there would be abundant food for mirth here, and one could laugh one's loudest, for, only to take the effect on the death-rate from notifiable diseases of the twenty-eight towns as a whole, what do we behold, during the last four years, as the result of all the labour and expenditure (not only in notification, but in still more costly isolation), and as compensating the community for all the irksomeness attending on the system? A saving of three lives per million per annum on the average, ending, however, with a dead loss of 248 per million in 1893! Contrast this with the grand saving of 261 per million per annum which had been effected before Group I succumbed to the Act, and this in regard to diseases which are now notifiable alone."

Now what can be Mr. Biddle's motive in thus stating the case? There was but one group—namely, III—consisting of half the total number of towns, which had dual notification partly in 1882-85, almost wholly in 1886-89, and completely in 1890-93. What do the figures disclose? Most striking facts, as follow:

The "all causes" death-rate being taken as 100 in 1882-85 (this, be it remembered, for the class least affected by notification), fell to 98 in the next period, but rose to 98.7 in the last.

The "total zymotic diseases" death-rate being taken as 100 in 1882-85 (this for a class to some appreciable extent influenced by notification), fell in 1886-89 to 99 only; but it fell to as low a figure as 90.6 in 1890-93.

The "notifiable diseases" death-rate being taken as 100 in 1882-85 (this being the class entirely comprised in the notifi

cation system), fell to 97 only in 1886-89; but actually another 16 per cent. (80.6) in the succeeding four years.

Surely such facts need little comment.

If we take the last line of figures in Table D, that pertaining to the notifiable diseases in the towns generally and the two remaining groups, the figures are even more striking. Representing the rate in 1882-85 by 100, Group II (three towns, one not under the system) fell to 82.8, and Group I to 72.8, 10 per cent lower still, whilst the ten provincial towns of the group fell to 55.9. The whole of the towns together showed upwards of 25 per cent. decrease.

We claim then to have demonstrated three important facts, namely:

1. Generally speaking there has been a very small proportionate decrease in the "all causes" death-rate in the third period as compared with the first, this being the rate least influenced by notification.

2. There has been a very perceptible proportionate decrease in regard of the total zymotic death-rate in the third period this being a class of disease largely comprised under the notification system.

3. There has been an enormous proportionate decrease in the death-rate of the notifiable class of diseases in the third period; the decrease, moreover, in this period, as regards Group III, being startlingly large as compared with that shown in the second period.

Thus we think we may reasonably claim to have refuted Mr. Biddle's theory, and to have shown that sanitation and notification are working hand-in-hand.

EXPERIENCES OF THE PROVIDENT DISPENSARY SYSTEM.[1]

Inadequate Remuneration of the Medical Officers.—Its Causes.—A Proposed Remedy.—A Possible Alternative.

UNDER this title Dr. Alexander Stewart has published a very interesting paper read by him before the Manchester Medico-Ethical Association on February 23rd, and printed by the request of, and for, that Association. Dr. Stewart informs us that he intends to follow it up by a more exhaustive paper. Meanwhile we gladly avail ourselves of the opportunity he has given us to notice his important contribution to the discussion of the question of provident dispensaries. That question is of such interest both for the profession and the public, that a paper like this, giving the result of actual experience of the system since the year 1880 by a medical man who was prepossessed in its favour and worked it conscientiously, cannot fail strongly to impress all who are connected in any way with provident dispensaries.

Let us in the first place pay our meed of acknowledgment to the eminently fair and candid spirit which pervades Dr. Stewart's pamphlet. His general conclusion is not in favour of the present working of the system; in fact he pronounces that it has failed in his own district, and speaks of his long experience of it as a disappointment. Yet he has no hostility to the system itself, and recognises the justice of its principle and the many practical advantages of its application. But he regretfully concludes that as at present administered in that district it fails in the essential feature of providing a livelihood for the medical officers, and he says that, so far from being a self-supporting system, it is really a charity kept up by the unrequited services of the medical men. This latter conclusion rests on a calculation of the actual receipts per visit from a provident dispensary, compared with what Dr. Stewart assumes to be a fair remuneration.

Such a method of computation of course leaves the matter in the end one of opinion or assumption, and is no strict proof. Yet Dr. Stewart's assumption (p. 10), that something between 9d. and 10d. a visit is "a modest figure," may surely be granted, especially as he tells us that most of the members of the provident dispensary are artisans in the receipt of comfortable wages. As the receipts of the doctors for the year 1887, of which he is there speaking, being something over £2,200, give an average of less than 5d. a visit, he reckons that they contributed, over and above what they received, services of the money value of about the same sum. A different arrangement in subsequent years somewhat increased the remuneration in the dispensary with which he is himself connected, leaving it, however, still below 6½d., while in others, he says, the medical officers have ascertained that the average was only a fraction over 3d. The causes for this are, according to him, chiefly (1) that injudicious and unnecessary expenses are incurred for management; (2) that a large proportion of the members are elderly persons and chronic invalids; and (3) that there are a large number of children below the paying age, who are taken gratuitously. We must refer to Dr. Stewart's pamphlet, or to the more exhaustive one which he promises to publish, for more details, and for the history of the various attempts made during this long period to amend these defects. They have not been successful (though, as we have said, the remuneration in Dr. Stewart's own district has been somewhat increased by diminishing the management expenses, and paying them partly out of an increased charge for medicine), and Dr. Stewart thinks they never will be successful so long as the management of the dispensaries is in the hands of lay committees. He says, and with a large amount of truth: "The medical profession gives so much of its service free to charitable institutions and otherwise, that the public have got in their heads the idea that they have a claim on the services of the doctors, and that it is no degradation to them, but a right they have acquired, to receive these services for the smallest possible pecuniary return, or even for nothing at all" (p. 16).

Allowing then, as we think we are bound to allow, that in Dr. Stewart's district the medical officers did not receive a fair remuneration; allowing that the management of these dispensaries by a lay committee favours the free admission of unsuitable applicants, and renders it difficult, if not impossible, to secure fair treatment for the medical men, what remedy does Dr. Stewart propose? He says that the obvious remedy—namely, to resign an appointment which is unremunerative—was "not a hopeful proceeding," for there had been numerous resignations in time past, but "the places left vacant were immediately filled up, and the causes of grievance in no whit removed" (p. 11). Dr. Stewart seems to see that the cause of the failure lies in the want of support given by medical men to each other, and accordingly he would substitute for the present system a "medical guild," which would really be a sort of trade union of the practitioners of the neighbourhood, the objects of which should be "to promote the general well-being of the profession, and to provide mutual counsel and support by regular meeting and other means" (p. 19). This guild is to organise the medical attendance on the working classes, and, if it adopts the provident dispensary system, it alone is to say who are to be eligible for membership and who not (p. 21), and is to fix the fees according to the patient's power to pay, and manage the whole concern. The guild would also, if we understand aright, regulate the cognate question of the out-patient departments. We shall be anxious to see what judgment, if any, the Manchester Medico-Ethical Association formed on this proposal.

It is to be feared that this scheme errs as much one way as the present system probably does the other. It is likely enough that the medical men have too little to do with the management, at any rate in some provident dispensaries. But to give no share whatever to the lay members seems to us neither possible nor fair; and we do not believe that provident dispensaries could be organised on any such terms. As to any guild making rules for minimum fees which would be really observed by all the practitioners in the district, Dr. Stewart's own experience of the ease with which resignations were followed by fresh appointments is enough to show its impracticability. We believe that fair prices could be got for provident dispensaries provided that (1) the out-patient departments were properly organised, (2) that all the regular practitioners who chose were allowed to join the dispensary, and (3) that the managing committee was equally composed of lay and medical men, and that the latter would attend and defend their own interests. But if medical men will not look after their own affairs, we fear it is in vain to expect that any institution will do so. If the profession were unanimous, or even nearly unanimous, and would act

[1] *Experiences of the Provident Dispensary System*, By Alex. Stewart, M.D. Printed for private circulation. Pp 24.

on their opinion, the out-patient abuse would soon be abated; and when this has once been accomplished a fairer and more rational plan for attendance on the working classes would not be so difficult to devise.

SANITATION IN EGYPT.

Lord Cromer's Annual Report.—Infectious Hospitals.—The Poverty of the Sanitary Department.—The Sanitation of Mosques.—Municipal Commissions.—The Drainage of Cairo.—Future Work.

LORD CROMER'S annual report on Egypt has recently been presented to Parliament. From his remarks on the sanitary department we are glad to notice that some advance has been made.

Cairo has at last been provided with an infectious disease hospital and a public disinfecting station. A pavilion for infectious diseases has been added to the hospital at Alexandria, while various useful alterations and repairs have been carried out in provincial hospitals, three of which are to be completely rebuilt this year.

The sum of £E14,000 allotted to the Sanitary Department in the Public Works Budget would hardly appear to be adequate; more especially as we understand of this sum £E2,500 is pledged to be spent on mosques, and £E4,400 on paying off the repairs to Kasr-el-Aini Hospital, leaving only £E7,100 for all new constructions and repairs throughout the country.

It is satisfactory to note that the Mosque Decree passed in December, 1892, and very properly characterised by Lord Cromer as "a very important and useful law," appears to work smoothly. During the year under review 31 mosques, in provincial towns, were put in a satisfactory sanitary condition, while this valuable work will be continued until all the towns to which the law applies will have been dealt with.

The proposal to create municipalities having been rejected by certain Powers for political reasons, the Government has apparently fallen back on what are described as Municipal Commissions, which have a certain proportion of the local taxation handed over to them for local purposes. The amounts, £E17,150 between nine towns, are so small that no serious sanitary work can be undertaken; the step, however, is one in the right direction.

£E5,000 is also to be devoted to the construction of abattoirs in towns where the Government levied a slaughter tax but did not provide an abattoir. This is a distinct sanitary advance, as formerly, we understand, the slaughter places were often on the banks of the Nile or canals, and contaminated the water supply.

The drainage of Cairo has not been commenced. The final estimate amounts to £E1,010,000. If a great Oriental city can be satisfactorily drained for this sum it cannot be pronounced excessive, more especially as, we believe, the estimate includes the opening of new streets for the ventilation of the city, and the paving of all streets.

As to the general sanitation of the country, little or no progress is reported. "Undrained towns and impure water supplies remain the sanitary characteristics of the country."

We do not see how any reformation is to be effected without expenditure. The financial condition of the country is prosperous—how prosperous Lord Cromer's figures show—but every spare penny seems to be devoted to the remission of taxation. We conclude a day will come when further remission will be unnecessary, and when the sanitary needs of the country will meet with due consideration.

It is all important that the financial authorities should grasp the relations between the material prosperity of a country and its standard of public health; they will then realise the weight of the responsibility with which they are charged. England—the first sanitary nation in the world—has heavy sanitary responsibilities in Egypt which she cannot lightly put aside.

In sanitary legislation and expenditure the solution of the sanitary question will alone be found. As regards the former, we observe some progress has been recently made. Mosques and cemeteries, the plague spots of the country, have been dealt with, but reading between the lines of Rogers Pasha's report as quoted by Lord Cromer, the Sanitary Department would appear to have suffered, as all Egypt has suffered this last year, from the policy of obstruction to English work and influence which has so ably been described in the recent letters of the *Times* correspondent, and which has been the programme of the so-called "patriotic" party.

On the whole, considering the difficulties financial as well as political, a certain amount of steady progress has been made, but we trust to see more when these difficulties are removed, as we hope they will be, in the immediate future.

NOTES ON GIBRALTAR: ITS SANITARY ADMINISTRATION AND ITS HOSPITALS.

(Continued from page 1035.)

THE COLONIAL HOSPITAL.

THE Colonial Hospital occupies the site of the previous Civil Hospital, and is situated near the centre of the upper part of the town. The Civil Hospital was founded in the year 1815 by General Sir George Don. It consisted of a number of detached buildings not originally designed as hospital buildings, and enclosed within a retaining wall.

In 1880 Lord Napier of Magdala, recognising the need for a more modern establishment, and himself a great enthusiast in hospital construction, decided that the buildings should be gradually demolished, and new buildings erected on modern principles. The model which he took for this purpose I believe to have been the Royal Infirmary of Edinburgh, the plans of which he had obtained, and, in conjunction with his colonial engineer, he designed a hospital of 120 beds, possessing many features of the Edinburgh Infirmary. There are five blocks of buildings in all arranged on the pavilion system. Block No. 1 contains two large male wards, medical and surgical, and attached to each ward in front is an open balcony, giving a beautiful view of the Bay and country and Spanish territory opposite. Attached to each ward behind are a nurse's room, scullery, side rooms, etc. The latrines, lavatories, etc., are attached to a side of the block, but are entirely in a separate wing, and complete cross ventilation separates them from the ward.

Block No. 2 is called the Administration Block, and is separated from Block No. 1 by a spacious yard or portico. It contains the out-patient department, the surgery, the dispensary, dispenser's stores, board room, secretary's room on the ground floor, and on the upper floor are the operating room, lavatory, and four private wards for accommodation of patients of a better class.

Block No. 3 is the female block, and is separated from Block No. 2 by a garden and Badminton court. Although the actual walls are not new, the block has been so far remodelled to be in keeping with the other blocks.

Block No. 4 contains on the ground floor a male venereal ward. The upper floor is used as a home for the nursing staff.

These four blocks are connected behind by open corridors.

Block No. 5 is known as the Segregation Block. It is intended for the reception of all forms of epidemic contagious disease with the exception of small-pox (a small branch hospital of ten beds for the reception of small-pox cases has been built outside the fortress, on the ground known as the Inundation). This fifth block is entirely isolated from the other parts of the hospital, and has special equipment for meeting epidemics of cholera. A disinfecting house has been erected in its immediate vicinity, containing one of the patent disinfectors of Geneste and Herscher, of Paris, where clothing is treated by exposure to steam under pressure, the chamber discharging the clothing into the general washhouse adjoining.

A similar apparatus has been placed in the ground of the small-pox hospital at the Inundation. In former times the hospital was managed by a board of deputy governors, the Governor of Gibraltar being the president of that board. One deputy-governor represented the Roman Catholic community, and was selected from amongst their number, the second was selected from the Protestant community, and the third from the Hebrew community. The principal medical officer of the troops also had a seat at this board, and

generally acted in the capacity of consulting surgeon to the hospital.

After the completion of the new buildings it was found advisable to increase the number of members of the board, by adding a few members from among the Colonial officials.

The hospital was maintained partly by funds derived from charitable bequests, voluntary subscriptions, and from a grant derived from the port of Gibraltar.

In 1889 it was considered advisable to alter the constitution of the hospital, and to place it entirely in the hands of the Colonial Government, and this arrangement was carried out and a board was formed composed for the most part of colonial officials, two representatives of the civil community only being retained. The name of the hospital was at that time altered from Civil Hospital to Colonial Hospital, and now constitutes one of the colonial departments, for the maintenance of which the local treasury is responsible.

In later years the fees of patients both "in" and "out" have constituted a large part of the hospital income, it having been decided that all patients in a position to contribute towards their maintenance and treatment should do so. These payments, however, are made into the colonial treasury, and not directly into the funds of the hospital.

The annual cost of maintaining the hospital is between £4,000 and £5,000. The staff of the hospital consists of a surgeon, assistant surgeon, visiting surgeon for the small-pox branch hospital, secretary, clerk, dispenser, assistant dispenser, a nursing staff of six English trained sisters supplied by the London Hospital, and subordinate nurses, male and female, from the native population.

The number of patients annually treated in the hospital ranges from 500 to 800, the number of out-patients from 15,000 to 20 000. As to the character of the cases treated in the hospital, they are similar to those treated at any general hospital. A large number of the cases are admitted from the shipping, and patients of every nationality and language have to be received. At certain seasons of the year, when rough weather is experienced, accidents from the shipping are plentiful. Occasionally sailing ships arrive with scurvy on board, sometimes as many as 10 or 12 cases may be admitted from one ship.

Fevers and Other Diseases Prevalent in Gibraltar.

Fevers of every variety from the Black Sea, from the Gulf of Mexico, and, indeed, from all parts of the world, are common in the summer time. The local fever is most prevalent in the autumn, but of recent years the number of cases has enormously diminished. Malarial fever is very prevalent in the neighbouring country in Spain; but is almost, if not altogether, absent from the Rock itself. The cases of malarial fever coming from Spain are attended to in the out-patient department, and are seldom admitted to the hospital wards.

Small-pox is not infrequently admitted to the branch hospital from the shipping, but the cases are landed near the branch hospital itself, and have not to pass through the town on their way to this hospital.

Venereal diseases are rife, and have markedly increased since the suspension of the Contagious Diseases Act.

Medical Practitioners in Gibraltar.

With reference to the medical practitioners in Gibraltar. There all in all fifteen members of the Army Medical Staff, three naval surgeons, six practitioners holding British diplomas, and eight practitioners holding foreign diplomas. All these civil practitioners require before commencing practice in Gibraltar to have their diplomas endorsed by His Excellency the Governor.

There are eight appointments in Gibraltar which may be held by medical men, namely, (1) Surgeon to the Colonial Hospital: (2) Surgeon to the Civil Prison; (3) Surgeon to the Lunatic Asylum; (4) Assistant Surgeon to the Colonial Hospital; (5) Surgeon to the Port: (6) Surgeon to the Police; (7) Surgeon to the East Telegraph Company; (8) Medical Officer of Health. As a matter of complaint among civil practitioners the first three appointments are held by one gentleman, Dr. Turner, Nos. 4 to 7 by another gentleman, Dr. Ker, and No. 8 by Surgeon-Captain Macpherson. These gentlemen are all allowed to compete in private practice with the civil practitioners.

Some of the foreign practitioners have obtained permission to reside and practise in Gibraltar in deference to the wishes of a portion of the civil community who speak the Spanish language and are of Spanish extraction. Three practitioners holding British diplomas are appointed by the Government as district medical officers, and give their services free of charge to the indigent, and also practise vaccination. The notification of infectious disease is carried out under the direction of the Sanitary Board.

The Naval Hospital.

The Naval Hospital has 114 beds and the Army Hospital 190 beds. The navy have sufficient room, but the army not. They have the westerly winds from the Atlantic, but are sheltered from the east. The roof of the Naval Hospital is of glazed tiles, which prevent the growth of vegetable matter on them. This is important to places who have to depend on the rain collected on these roofs for their water supply. The walls are extremely thick, and built for coolness—practically on the lines of the Moors. Money has been voted for re-flooring, the present pine boards having been down since the building of the hospital.

The authorities try to give patients about 1,500 cubic feet. As a rule this can be done, but if the 114 beds are all full they cannot. They had to build entirely new waterclosets and bath rooms for each ward.

The hospital is built around a spacious courtyard two storeys high, with a verandah in front of the wards.

A large majority of cases are either bad venereal cases or typhoid, coming from various parts—many from England.

In the officers' quarters the windows are too high and want cutting down, which would make it cooler in the summer and much more cheerful. The officer patients in bed with long illnesses cannot see out of the windows. Staff-Surgeon May has already suggested the cutting down of the windows and opening on to a verandah, which would be a great improvement.

The rule is to ask the Home Government for small sums at a time, and gradually do the hospital up. Staff-Surgeon May has advocated ever since he went to Gibraltar the establishment of infectious wards. Finally, the Government were stirred to approve of the spending of £400 or £500 by the arrival of seven cases of scarlet fever from the *Howe*. They have also sanctioned the purchase of a disinfector.

The Service Afloat Stores have until recently been in a primitive state, with all the stores in boxes. Now they are fitted up conveniently on shelves and racks, and all stores so arranged that they can be immediately brought into use. The stores contain at the present moment sufficient to supply 1,000 men, and have room for another 2,000. They can fit, in fact, a supply for a thousand men in two hours. In making all these arrangements, great facilities have been derived by the co-operation of the senior naval officer, Captain Lake. Since the taking over from the military authorities, the drainage has been entirely renewed, the whole of the wards re-roofed and painted internally with special non-absorbent paint in lieu of the whitewash, and all wood work, partitions, etc., removed, to keep down as much as possible the bugs which previously infested the wards.

Ernest Hart.

The following fifteen candidates were selected on Friday, May 11th, by the Council of the Royal Society, to be recommended for election into the Society: Mr. W. Bateson, Mr. G. A. Boulenger, Dr. J. R. Bradford, Mr. H. L. Callendar, Professor W. W. Cheyne, Mr. R. E. Froude, Professor M. J. M. Hill, Professor J. V. Jones, Mr. A. E. H. Love, Mr. R. Lydekker, Mr. F. C. Penrose, Dr. D. H. Scott, Rev. F. J. Smith, Mr. J. W. Swan, and Mr. V. H. Veley.

Rabies and Hydrophobia.—Jane Watkinson, the little girl who was bitten by a rabid dog at Tarleton a few days ago, left Preston on May 11th for the Pasteur Institute at Paris.—George Blease, a farmer, of Station Road, Penketh, died last week at the Warrington Infirmary, where he was removed suffering from hydrophobia. About three weeks ago the deceased, who was 47 years of age, was bitten on the right hand by a dog, which was afterwards shot.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

SUBSCRIPTIONS to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, MAY 19TH, 1894.

LESSONS FROM LEICESTER SMALL-POX EPIDEMIC.

IT is seldom that we have been enabled to quote a more excellent report on the subject of small-pox and vaccination than that which Dr. Priestley has made on the recent epidemic at Leicester. Coming, as it does, from the very heart of the antivaccination camp, it possesses even more than ordinary interest for us. We have in our issues of May 5th and 12th given a brief summary of the report under three headings, namely: Small-pox in relation to (1) vaccination and revaccination; (2) quarantine; and (3) isolation arrangements. The lessons to be learnt from the facts recorded are many and of great import, as we trust we have made plain. We shall now briefly summarise the chief points to which Dr. Priestley refers.

He demonstrates the significant fact that only 2 children under 10 years contracted small-pox, and that both had abortive attacks; whilst of unvaccinated children of like ages there were no fewer than 105 attacked, and of these 15, or 1 in every 7, died of the disease. Dr. Priestley says: "This unvaccinated element under 10 years is, in my opinion, Leicester's weak point, and certainly has proved so during our late epidemic." Taking all ages together, we find that the mortality among the unvaccinated was twenty-two times that of the vaccinated: whilst, of revaccinated sufferers, not one died, but, on the other hand, all the 14 attacks aborted. In further reference to abortive attacks, we notice that whereas in unvaccinated children and adults the respective percentages were 8.6 and 6.2, the rates in the vaccinated were 100 and 79.5 respectively. And again, on the subject of mitigation of small-pox by vaccination and revaccination, we find of the unvaccinated only 5.2 against rates ranging from 37.5 to 81.4 of the vaccinated in the "very mild" class. On the other hand, we find not one of the vaccinated in the "very severe" class, whilst of the unvaccinated we find 42.0 per cent. Moreover, nearly 23 per cent. of these latter cases were of a malignant type. Then, again, the experience of the hospital staff is worthy of note, seeing that of 40 persons at work in the buildings, 5 out of 6 inefficiently protected persons (and they alone) caught small-pox, and 1 died. The one to escape did no nursing of patients. No vaccinated person contracted the disease.

In relation to the subject of quarantine, we observe that despite the failure of hospital quarantine to stand the strain of an epidemic, the trial of "home" quarantine proved a distinct success. Thus, as many as 53 per cent. of the total cases were of persons in quarantine. Not only so, but the efficacy of the vaccination and revaccination of these quarantined individuals was amply demonstrated by the facts that of unvaccinated children in quarantine 21.2 sickened, whereas of the same class not left unprotected, but vaccinated at once, only 7.6 per cent sickened. In the case of persons revaccinated in quarantine, 4.2 per cent sickened. As to the value of prompt notification of small-pox, Dr. Priestley feels confident that if all the persons in quarantine had at once submitted themselves to the requisite vaccination or revaccination, there would have been from 50 to 75 per cent. fewer cases than actually occurred among them. And this ability of persons to secure protection even at the eleventh hour is not by any means to be despised in such an abode of antivaccinators as is Leicester.

Turning next to the matter of the potency for harm of the Leicester small-pox hospital, Dr. Priestley has some very startling data to present to us. He has in Leicester a district called Newfoundpool, with a population of some 3,000 persons within it, the houses being situate between 620 and 1,750 feet from the hospital. After deducting from the cases occurring in this special district all the attacks which could be traced to infection from previous cases, Dr. Priestley has the enormous proportion of 15 to 1 in this locality as compared with the rest of the borough, having treated the whole in a similar fashion as regards exclusion of all attacks traceable to previous cases. It has been only after a very careful and exhaustive inquiry that Dr. Priestley has stated his belief that the hospital is the chief factor in this large incidence of small-pox on the Newfoundpool district. Sanitation had nothing to do with the disease, since the houses invaded had no conditions special to themselves, and we are distinctly told that "in this respect Leicester has not experienced what has been sometimes stated, namely, that small-pox is generally found associated with dirt and overcrowding in filthy houses or courts." We have ourselves taken out the percentages for the four wards that are touched by a one mile circle round the hospital, and by giving to houses the number of inmates as at the last census we find that, as compared with the rest of the borough, these four wards had an incidence on invaded houses nearly three times greater. With such facts as these before them it behoves the Town Council to set about securing a site for a small-pox hospital fulfilling the requirement of isolation.

In whatever light Dr. Priestley's report be looked at, only one conclusion can be arrived at, namely, that in Leicester vaccination, revaccination, and quarantine have one and all had much influence in staying the spread of small-pox and that the very purpose which the hospital was to have served has been, in a large degree, frustrated by its potency to disseminate that very infection which it professed to "isolate."

We most earnestly hope that the attention of the Royal Commission on Vaccination will be directed to Dr. Priestley's admirable and very important contribution to the literature of the day on these matters.

THE Earl of Dudley, presiding at the annual meeting of the Queen's Hospital, Birmingham, promised to double his subscription and give a donation of £350, the sum required for improving the operating theatre.

EXPERIMENTS ON LIVING ANIMALS.

The Inspectors' official return for the year 1893 has just been issued by the Home Office. From this it appears that there were 184 licensees, of whom 49 performed no experiments, and that there were 56 licensed places in 37 different institutions, two licensed places having been added to and seven removed from the *Register* during the year. The total number of experiments performed during 1893 was 4,046. Of these were performed:

Under Licence alone	1,061
Under Certificate A.	2,183
Under Certificate A. + E.	67
Under Certificate B.	317
Under Certificate B. + EE...	274
Under Certificate C.	140
Under Certificate F. + A.	4
Total	4,046

In further explanation of this table the inspector goes on to state:

In experiments performed under the licence alone, or under Certificate C., of which the combined total for the year is 1,201, the animal suffers no pain, because complete anæsthesia is maintained from before the commencement of the experiment until the animal is killed.

In experiments conducted under Certificate A. (or E. or F. linked with A.), of which the combined total for the year is 2,254, the pain of the operation (which is practically always of the nature of hypodermic injection or inoculation) is trivial; and it is always made a condition of this certificate that "if severe pain has been induced in an animal after any of the said experiments has been performed under the said certificate, and if the main result of the experiment has been attained, it is a condition of this licence that the animal be immediately killed under anæsthetics."

In experiments performed under Certificate B (or E, EE, or F linked with B), of which the combined total for the year is 591, the animal is anæsthetised during the operation, but is allowed to recover. These operations, in order to ensure success, are necessarily done with as much care as are similar operations upon the human subject, and the wounds being dressed antiseptically no pain results during the healing process.

In contrast with the official statement, it is interesting to compare the somewhat disingenuous abstract thereof which has appeared in various newspapers, and which we give verbatim in so far as it refers to England and Wales.

"The official return of the Government inspectors under the Vivisection Act was issued by the Home Office yesterday. This shows that in 1893 the total number of experimenters licensed in England and Scotland was 184, an increase of 4 over the previous year. There were 56 licensed places in 37 different institutions, such as laboratories attached to hospitals, medical schools, universities, etc., in all parts of the country. The total number of experiments on living animals recorded by the operators was 4,046, or nearly 100 more than in the previous year; of these, 2,254 were performed under Certificate A without the use of chloroform or any other anæsthetic to lull the pain."

In the above abstract it will be noticed that no allusion is made to the decrease in the number of "licensed places," and that the perfectly gratuitous and untrue statement is made that these experiments are carried on in "laboratories attached to hospitals"—a statement which is evidently meant as a hint to the "anti's" to boycott certain institutions. It is well, perhaps, to state that the medical schools which are often associated with certain hospitals are in all cases absolutely distinct and are under separate control and in no degree supported by the funds of the charity with which they may be associated. The statement that 2,254 experiments were performed without the use of any anæsthetic "to lull the pain," and without any allusion to the fact that the pain in these cases was practically *nil*, is quite characteristic of the tactics of those who are opposed to experimental investigation. But as it is to the ultimate interest of those engaged in experimental work that their opponents should say and do false and silly things, we note the fact without comment.

NOTIFICATION QUESTIONS.

The Notification Act has furnished material for many a wordy battle of late in the small minority of towns in which it is still in abeyance. In Leeds, the only non-notification town of first rank, the question having again been raised, this time by the medical profession, at a meeting convened by Mr. Pridgin Teale and other local leaders of the profession, a resolution was unanimously passed in favour of compulsory notification. Without doubt this went far to convert the obstructionists in the Town Council to the views which had been vainly urged upon them more than once by the Health Committee, and the question has now been set at rest, the new order of things having come into force on May 1st. At Leith, the struggle is still going on, although the ultimate issue can scarcely be doubtful. The opponents of the Act have discovered an argument against it in the statement of Dr. Russell that something like 8 per cent. of the cases admitted into the Glasgow isolation hospital were wrongly diagnosed—an argument which as applied to such a purpose is singularly irrelevant, notwithstanding its value and cogency as bearing upon the necessity of training medical students in the diagnosis and treatment of infectious diseases, or upon the importance of care in verifying the diagnosis of cases removed to hospital. At Newhaven, hard by, it seems that the fishermen are in favour of notification, for the very practical reason that their trade has been injured by a report that small-pox was prevalent among them, and they wish to be in a position to have it denied authoritatively if false. Herein lies a moral for watering-places, whose dominant interest is dependent upon public confidence in their sanitary well-being. Questions of a different character have arisen in districts where the Act has been adopted. Not rarely a correspondent writes to ask if the medical officer of health is called upon or entitled to visit the cases notified, with the view of verifying the diagnosis. Over and over again it has been answered that it is no part of his ordinary duty to do so, although he has, of course, to see that reasonable precautions are being observed for the protection of the public. Sometimes, as in the recent Clerkenwell case, the sanitary authority inadvisedly seek to withhold payment of the notification fee, alleging that the diagnosis was wrong, a matter which is usually difficult of proof, and which if proved does not necessarily advance matters much, for the meaning of the Act seems to be that the duty of notification (and therefore, presumably, the right to the fee for notifying) is dependent upon the belief of the practitioner that the case is one of notifiable disease. The same question in another form has

been encountered in the Farnham rural district, where the medical officer of health reported that a number of cases notified as scarlet fever were cases of influenza. The matter was referred to the Local Government Board; but it is very difficult to see what could come of State interference in such a matter of local dispute after the events had happened some time. It is a thousand pities that the *bona fides* of notifying practitioners should be held in question. At Kidderminster two medical men have been summoned for undue delay in reporting a slight case of small-pox, which they had regarded as acne until other persons took the infection. When the case came on for hearing, an explanation satisfactory to the prosecuting authority was given, and the summonses were withdrawn, regret being expressed on all sides that the defendants had not accepted the invitation conveyed to them before proceedings were commenced—namely, that they should explain to the sanitary authority the reasons for failing to comply with the Act. Yet another bone of contention is the schedule of diseases. Many sanitary authorities, and many medical officers of health, object to the inclusion of erysipelas among the diseases to be notified, and are not satisfied with the usual replies that erysipelas affords a clue to puerperal fever, and is important also in connection with vaccination. Mr. May, medical officer of health for Aston Manor, not long ago raised this question at a meeting of the Midland Branch of the Society of Medical Officers of Health. From other quarters comes a demand that the list should be extended so as to include measles, if not whooping-cough and German measles. The experience of the towns which have made measles notifiable is still inconclusive, if we may judge from the reports which reach us, but Dr. Campbell Munro and Dr. Armstrong have made it clear that if sanitary authorities are prepared to grapple seriously with the question, notification ought to enable them to materially lessen the ravages of measles. On the other hand, Dr. Weir has arrived at the conclusion that in Jarrow the notification of the disease has had little effect in staying its epidemic prevalence; whilst Dr. Cogan, of Northampton, after passing through a sharp outbreak without notification deems the cost of scheduling the disease unjustifiable so long as proper isolation establishments are wanting.

Lastly, there are legal points which the Act leaves in obscurity, and which have given rise to much divergence of opinion; for example, the doubtful duty of the medical officer of health to notify to himself unreported cases with which he meets in the course of his official visits, and the responsibility of consultants to notify when they are aware that the case has already been notified by the medical man first in attendance. The conspicuous success of the Act, in spite of the difficulties which attend its operation, is a striking proof of its reasonableness and value. We would, however, much desire to see the Local Government Board issue a circular embodying their numerous rulings on points arising out of local questions as to the law of compulsory notification. For the rest, it remains for Mr. Shaw Lefevre to carry out Mr. Ritchie's promise by making the Act operative in the small minority of districts which still reject it. Of the amendments required to make the Act perfect, we have already spoken.

INDIAN MEDICAL CONGRESS.

The Earl of Elgin has consented to become Patron, and Sir Charles Elliott Vice-Patron, of the first Indian Medical Congress, which meets in Calcutta in December next. Surgeon-Colonel Harvey, Inspector of Civil Hospitals, Bengal, is to be President of the Congress. Great interest is being taken in the Congress throughout India.

ANDREW CLARK MEMORIAL FUND.

This fund is, we hear, not progressing so satisfactorily as might be desired. The total is still short of £2,000, and to carry out the work which was suggested at the meeting, £10,000 is at least required. Of the amount already subscribed, £155 comes from the Gladstone family; Mr. Gladstone having contributed £100, Mr. Herbert Gladstone £30, and Mrs. Drew £25.

VISIT OF THE DUKE AND DUCHESS OF YORK TO LEEDS.

The Duke and Duchess of York have consented to open formally the new buildings of the Medical Department of the Yorkshire College, and also the new College Library and Hall. The date of their visit is not yet fixed, but in all probability it will be paid in the last week in September.

PREVENTION OF CHOLERA IN INDIA.

To avoid the spread of cholera at the ensuing Hardwar Fair the Government has constructed a permanent platform on the banks of the river about a mile and a-half in length, and has made other arrangements to prevent the bathers from polluting the water. Strict sanitary rules have also been imposed upon the people, and a European medical officer, with an efficient native staff, has been appointed to look after the sanitation of the holy city. The cost of the permanent platform, completed a short time ago, is said to be about three lakhs, which the natives believe has been spent by the Government to compensate for the loss which the Hardwar priests suffered by their fair being broken up abruptly two years ago.

SEAMEN'S FOOD.

A recent report to the Board of Trade by Dr. Spooner, the medical officer at Liverpool, deals with the food of seamen, and states that a reduction may safely be made in the quantity of salt beef and pork provided by the 1885 scale, with the substitution of a smaller quantity of preserved meat, together with increased vegetable diet, in accordance with the best existing practice of long-voyage shipowners. Dr. Spooner is further strengthened in the view by the fact that the navy scale provides a much smaller quantity both of salt and fresh meat than the 1885 scale, and without butter or preserve being added, as in the merchant service.

SOUTH AFRICAN HEALTH RESORTS.

The South African uplands are coming more and more into notice as permanent or temporary health resorts for persons unable to stand the rigours and uncertainties of our British climate, and we see with satisfaction that it is in contemplation to establish high-class and well-fitted hotels in some of the most favourable localities not yet well equipped in this respect. Meantime, a journey to the Cape and a short residence in South Africa are becomingly increasingly common as means of rest and restoration to health: and the improvements in the great steamships which effect the transit are rendering this journey increasingly rapid, agreeable, and healthful. One of the latest ships upon this berth is the *Moor*, already favourably known to South African travellers, but which has been recently fitted with machinery which give her a speed, as was thus obtained on her recent

trial trip, of upwards of sixteen knots an hour, a speed which would mean about sixteen days' passage to the Cape. The passenger accommodation has been much augmented and improved by smoking room and drawing room, and deck cabins have been added, which is likely to make her one of the most popular vessels on the South African line. Much attention has been given to the passenger ventilation throughout the ship, and the Union Steamship Company may be congratulated upon the latest improved addition to their well-fitted line of steamers which conduct the Cape of Good Hope, Natal, and East African Royal mail service.

THE HEALTH OF FLORENCE.

The preference which the Queen has shown for Florence as a place of spring residence, and the benefit which Her Majesty is understood to have derived from her sojourns there, will serve to increase the popularity of the beautiful Tuscan city, with the large and growing class who follow the wise custom of taking an early spring holiday. The sanitary deficiencies of most Italian cities are well known, and are freely admitted by those Italians who have given special attention to the study of hygiene; much has been done to improve them, and in Florence itself the municipality has shown a good deal of activity. At the same time much remains to be done, especially in the direction of better domestic sanitary appliances. The drainage and internal fittings of even the best houses, hotels, and villas, are not such as would be sanctioned in this country. So much is this the case that we understand that when the Queen decided to go to Florence this year, no house was available of sufficient size and where the sanitary arrangements were satisfactory. The Villa Fabbricotti was selected on account of its situation and capacity; and Her Majesty's advisers—in opposition to local advice—found the drainage on such an antiquated and dangerous system (although the villa is comparatively modern) that they felt bound to recommend that it should be completely renewed. This was carried out under the inspection of the firm of English sanitary engineers who have supervised, with such satisfactory results, the drainage of Cannes. From the official *Bolletino di Statistica*, of the city of Florence, for the year 1893, it appears that the death-rate was 24.3 per mille, or excluding stillborn, 23.2 per mille. The population of the city is given as 186,015 at the end of 1892; the number of deaths from typhoid fever was 88, and from diphtheria and croup 129.

LIFE ASSURANCE AND SUICIDE.

The question as to whether the suicide clause, which almost invariably occurs in a life policy, should be maintained, has recently been reopened for discussion. The discussion arose from the circumstance that an assurance company has issued a free suicide policy, that is, a policy in which the risk of suicide is covered by an extra £1 per mille. In these days of competition and advertisements, assurance offices, like other kinds of businesses, are on the look out for means of increasing their connection, but we regret that any office should take a step which is contrary to public morality, and which tends to invalidate the "canon 'gainst self-slaughter." Holding the views that "this life's a fort committed to my trust, which I must not yield up till it be forced," we are of opinion that anything which diminishes the safeguards against suicide is greatly to be deprecated. Now, there cannot be a more powerful restraining cause than the consciousness that those dependent on the would-be suicide would suffer from the loss of the bread winner. It can readily be imagined that a proud, sensititive spirit, goaded on by real or apparent wrongs, would be prepared to lay down his life could he only feel sure that those dear to him would be provided for. To such a man a life policy without any suicide clause may come as the very suggestion of the Evil One, and lead to the irrevocable step being taken. That this is likely to be the case is shown by what came out at a recent inquest. A member of the Stock Exchange, who had been unsuccessful in his speculations, shot himself, and in a letter he left behind him he said that the step he was taking would enable the money that he had lost to be recovered from the policy on his life. If surrendering the suicide clause is opposed to the public welfare, still more so is the deliberate acceptance of the life with an extra for a "free suicide policy." There can be no sort of doubt that brooding over any one idea causes the mind to receive a warp, and that which at first was repelled with horror becomes a cherished thought, and finally blossoms into action. A man who is morbid enough to stipulate for a "free suicide policy" is just the stamp of man who would, under stress of circumstances, yield himself up to the temptation. While advocating the retention of the suicide clause under ordinary circumstances, we are of opinion that assurance offices have exercised a wise discretion in the past in paying claims in which it has been shown that the policy had been assigned as security some considerable time before the commission of the fatal act, and we think that they may be trusted to take a liberal view of this question, as it does not pay a company to resist a claim unless there are very strong grounds for so doing.

THE GENERAL MEDICAL COUNCIL.

Several matters of very considerable professional importance will come under consideration at the meeting of the General Medical Council, which begins on Tuesday next. In the first place, the successful result of the prosecution undertaken by the Council against Joseph Steel, who had assumed the title of M.D.(Bc.) on the strength of a so-called diploma granted to him by the "General Council of Safe Medicine," will be reported. As will be seen by a report in another column, the appeal made by Steel from the decision of the magistrates convicting him of the unlawful assumption of the title of M.D. has been dismissed by the Court of Queen's Bench. It is to be hoped that the matter will not be allowed to stop here, but that the General Medical Council will proceed to take action against the company which is issuing these sham diplomas, for the ignorant men who purchase them are perhaps as much sinned against as sinners. The question of the status of the medical officers of medical aid associations will, we understand, be raised by a series of resolutions of which Mr. Bryant has given notice, and it is possible that the Council will be asked to pronounce the conduct of registered medical men who accept appointments as medical officers to these associations to be "infamous in a professional respect." The question of the amendment of the penal clauses of the Medical Act will be raised by a letter and a series of draft amendments forwarded by Mr. Ernest Hart, as Chairman of the Parliamentary Bills Committee of the British Medical Association, and it may be hoped that the matter will receive the serious consideration which its importance deserves. The Education Committee, we learn, has prepared a long series of reports on subjects referred to it, among others, the Examination in Arts of the Apothecaries' Society of London, the final examinations of the Irish Corporations, and a memorial from the Royal College of Physicians of Ireland with regard to the Royal College of Surgeons and the Apothecaries' Hall in Ireland. In addition a considerable number of penal cases will come up for consideration.

MEDICAL CLUB RATES.

A meeting of medical men in Southampton and neighbourhood was held on April 28th, to consider the question of the rates made by workmen's clubs to their medical officers. The chair was taken by Sir Dyce Duckworth, who delivered an address, in which he referred to the many abuses which exist in connection with such clubs, and expressed the opinion that the evil could only be remedied by means of

honourable co-operation among medical men. A Committee was appointed to meet representatives of the various clubs, and point out to them the mutual advantages that would follow an increase in the rates of club pay. This Committee drew up a memorandum, which was considered at a meeting with representatives of the clubs last week. After considerable discussion, this meeting adjourned to allow opportunity for a fuller consideration of the points raised in the memorandum. The further progress of this movement will be watched with great interest, and we hope to recur to the subject on a future occasion.

MEDICAL ETHICS AT THE ANTIPODES.

The colonial Branches of the British Medical Association are doing good service in endeavouring to maintain a higher standard of professional ethics in the distant lands where they are placed. The peculiar surroundings of colonial life, where old and good traditions so commonly lose their force, and where there is little in outside public opinion to keep men within the bounds of professional propriety, create special difficulties and dangers. In the presidential address by Dr. Worrall delivered before the New South Wales Branch, which is published in another column, much helpful advice is given to the members, and we cannot but hope that the establishment of such Branches in the various distant parts of the world will be found not only to help in the spread of knowledge and the interchange of experience, but will assist materially to maintain a high standard of medical ethics.

THEOPHRASTE RENAUDOT.

On May 14th M. Spuller unveiled a statue at Loudun of Renaudot, who in 1631 founded the *Gazette de France*. The house in which Renaudot was born, in 1586, is still standing, and a tablet has been placed on it. Renaudot was originally a Protestant, but before starting his newspaper had embraced Catholicism. Mr. Spuller, as an ex-journalist, had a congenial theme in eulogising the father of French journalism. The pedestal of the statue bears this inscription: "Théophraste Renaudot, Conseiller, Médecin Ordinaire, Historiographe de Louis XIII, Ministre de la Charité Publique; né à Loudun en 1586. La France lui doit le journal, l'Office de Publicité et de Renseignements, le Bureau de Placement, le Mont de Piété, l'Hôtel des Ventes, et, sous le nom de consultations charitables pour les malades, ce que nous appelons aujourd'hui un dispensaire, auquel il consacra toute sa fortune."

THE LIMITS OF PROFESSIONAL DUTY.

A medical man often finds it difficult to keep his relations with his patients within the strict limits of professional duty. From courtesy and kindly feeling doctors are apt to do many things which have but small connection with the treatment of disease; and it must be confessed that people often show their appreciation of their doctors by trying to use them as handy men for all sorts of strange purposes. Without the exercise of most careful discrimination nurses are exposed to the same temptation and the same difficulty, and this in an even aggravated form, for whereas a doctor is his own master, and can withdraw if he sees danger, a nurse is often the servant of an institution, and may be placed in a very awkward position if sent to undertake duties which are not truly professional. This was well illustrated by a case which occurred at the North London Police-court. A man was summoned for assaulting his wife, and it appeared that among other causes of difference between them was the continued presence of a certain young man in the house. This said young man turned out to be an attendant sent by a nursing institution, the defendant being a dipsomaniac. It was alleged, however, that this "respectably dressed young man" was not sent to look after the patient, but to protect the wife (?), an arrangement which did not have a soothing influence on the dipsomaniac. The magistrate thought this about the coolest arrangement he had ever heard of. Here, he said, was an institution that sent young gentlemen to look after wives—quite sufficient justification for all that happened; and probably most people will agree that the work given him lay somewhat outside the scope of ordinary professional duty, even for a male nurse.

ACCIDENTS TO MEDICAL MEN.

An investigation has just been made at the instance of the Chairman, Mr. Ernest Hart, into the claims for sickness benefit which have arisen in the Medical Assurance Society during the last ten years in consequence of accidents, which this Society includes without any extra payment under the general head of sickness. Medical men are, of course, specially liable to certain kinds of accidents — those, for instance, which happen at operations and *post mortem* examinations, but the experience of the Medical Assurance Society shows that they are still more liable to accidents not directly connected with professional work. Thus, out of 175 different accidents recorded in the Society's claim registers, only 19 can be directly traced to what we may call a professional cause. Nearly all these were in the form of blood poisoning, poisoned finger, etc., and they produced in all 110 weeks' sickness, or an average of about 6 weeks per claim. The most severe accidents are those which happen in riding and driving. Of these, 46 have so far been registered, and have produced a total aggregate incapacity of 494 weeks, or an average of 11 weeks per claim. Accidents of this kind seem to be rather more frequent than formerly. Several very serious cases are now on the books, and only last week an old member of the Society was killed by his horse bolting and overturning the trap in which he was driving. Medical practitioners in the rural districts are specially liable to accidents of this kind. One hundred and eight accident claims have arisen from sprains and other small injuries, producing in all 261 weeks' illness, or an average of 2½ weeks per claim. In many of these cases the circumstances under which the sprain or other injury was produced have not been recorded, and probably some of them belong to the class of accidents happening during professional occupations. Two accidents are recorded which are difficult to classify; in each case the cause registered is "bite of dog." The two bites produced 5 weeks' illness: fortunately in neither case was there any suspicion of hydrophobia. The summary of the accident claims shows that during its ten years' operations the Medical Assurance Society has paid to its members nearly £3,000 as compensation for incapacity caused by accidents, and the correspondence in these cases shows clearly that the aid of the Society is never more welcome than when it is required through an accident.

DINNER TO DR. WARD COUSINS.

Dr. Ward Cousins recently received a most gratifying mark of the esteem in which he is held in his own county. For over twenty years he held the office of Honorary Secretary of the South-East Hants District of the Southern Branch of the British Medical Association. He relinquished the office on his appointment last year as President of the Council of the Association, and the members of the District took the occasion to entertain him at a banquet at Southsea. The chair was taken by Mr. F. W. Way, and Dr. W. H. Axford, in proposing the toast of the evening, referred to the part which Dr. Cousins had taken in founding the District, the cordial relations he had always maintained with his professional brethren, and the readiness with which he had always given his help in any time of need. He had worked his way up to a position of great professional eminence, and had been honoured by being chosen to preside over the Council of the British Medical Association, which exerted a powerful influence in binding the profession together, in promoting medical science, and in influencing the delibera-

tions of Parliament. The members of the South-East Hants District owed a special debt of gratitude to Dr. Cousins for his zeal and energy in the office of Honorary Secretary. Dr. Ward Cousins, in reply, expressed his thanks for the honour thus done him by his colleagues. It was not only an indication of the kind sentiments with which he was regarded, but a proof of enthusiasm for the welfare of the British Medical Association. He alluded to the circumstances attending the formation of the Southern Branch, and mentioned that he had only recently discovered that the present was not the first Southern Branch. One had been formed at Southampton in 1836, but did not long survive. Since the present one was started in 1873, the Association had grown from 5,000 to 16,000 members, and the JOURNAL was now eight times as large as in 1866. The Association was extending rapidly in all parts of the world, but it must be expected that the rapid rate of increase would not continue at home, since the Association was fast absorbing all the practitioners of the United Kingdom.

"DRAWING AND HEALING PLASTERS."

AN account is forwarded to us, from the *Liverpool Daily Courier* of May 9th, of a case in which a labouring man, suffering (as well as we can make out) from whitlow in the thumb, was advised by a friend to go to a quack who makes his living by the sale of plasters, which "have both drawing and healing powers." He remained under the care of this sagacious person for less than a week, during which grave symptoms must have supervened, but were, of course, unnoticed, until death occurred, probably from pyæmia—at any rate, the case is reported as one of "blood poisoning." A coroner's jury investigated the case, and one juryman said that "he had used these plasters himself, and could testify to their being good ones, and he thought no blame attached to" the quack. We agree with this worthy so far as to hold that the quack committed no legal offence; there are many difficulties in the way of any attempt to make quackery penal, for many reasons, which are too familiar and obvious to be here set forth. But though the plasters may be very good plasters in their way, can a man be acquitted of the severest moral blame who dispenses them to all and sundry, when he does not know the elements of medicine or surgery, and cannot tell whether a man is in danger of his life or no? So long as patients are credulous and ignorant, so long will quacks flourish; and all attempts to restrain them by law are likely to fail. But it ought to be recognised by the public press as a plain duty to impress upon their readers the danger of dealing with quacks, and to hold up the profession of quackery (whether in the naked form of our plaster-monger, or under the disguise of pseudo-science) to public reprobation and contempt.

ALLEGED ABUSES IN HOSPITALS.

THE *Echo* seems inclined to pursue its campaign against the hospitals. This time, however, the story on which we have to comment is at least not anonymous. A certain Mr. Warren writes to the *Echo* of May 5th saying that his brother was resident surgeon at Steevens's Hospital, Dublin, some twenty-five years ago, and so he himself was enabled to be present at an operation for strangulated hernia. The proceeding is thus described: "Dr. W. C——s, the operating surgeon, took the knife in his right hand, keeping his left hand carelessly in his trousers pocket. After a few cuts a small jet of yellowish fluid spurted from the wound. Dr. C. threw down the knife and said, 'Take him away.' In an hour the patient was dead." Mr. Warren roundly charges the surgeon with having killed his patient, who was a friendless pauper, because they wanted a subject for the dissecting room. Can ignorance and malice go further? The narrator evidently believes that the "jet of yellowish fluid," that is, the escape of the serum, so commonly associated with gangrenous changes in the hernial sac, was a proof that some fatal mischief had been done by the surgeon's knife. The man, no doubt, was in a dying condition when the operation was done, and if it was not completed—a point which this silly narrative leaves unsettled—it was because the surgeon thought it useless or believed the man to be dead. We need hardly say, except for the benefit of non-professional readers, that no operative mischance possible in an operation for hernia, except the opening of a large artery (which is here out of the question), could cause immediate death. We must repeat that such unfounded attacks on hospitals as these do no credit to the newspaper in which they appear. Another form in which the hospitals are made to subserve the needs of the daily press, and furnish copy, is illustrated by a comic sketch of "The Hospital Casualty-Room, by a Grateful Patient," in the *Globe* of May 7th. All the ordinary conventional elements of such sketches are trotted out: the head-surgeon hurrying round with his train of students, the eager dressers with their stethoscopes and their investigation, the rough house-surgeon, the gentle nurse, the drunken woman with her police attendants, the squalling babies, the roughs with their black eyes, and all the rest of it. All this is silly enough, but we do not know that it does any particular harm, such as the malignant or ignorant imputation of malpractices, on no better ground than the representations of ill-informed and mostly anonymous correspondents, certainly does.

A CHEMIST'S DUTIES.

OUR attention has been called to the report of an inquiry into the circumstances attending the death of Nora Collins, an infant of 1 year and 9 months of age, who it appeared had been prescribed for by a chemist, who treated the case as one of bronchitis. The medical evidence before the coroner was to the effect that the death was due to pneumonia, and the jury returned a verdict accordingly, and added that, in their opinion, a doctor should have been called in earlier, and that the chemist had exceeded his duty. It would seem that in this case there has been a distinct infringement of the law, and the attention of the Society of Apothecaries will doubtless be drawn to the fact.

THE GROWTH OF AN AMERICAN UNIVERSITY.

AT the present moment, when there are not wanting prophets of evil who insist upon the difficulties of bringing about a hearty co-operation among the various institutions in London for higher education, it is interesting to note the complete success of a somewhat similar experiment commenced little more than thirteen years ago in Philadelphia. From a group of disconnected schools has been gradually organised a great academic body, complete and united, but yet instinct with varied harmonious activities—a true university. Dr. William Pepper, in resigning recently the office of Provost of the University of Pennsylvania, has addressed a letter to the trustees, in which he sketches the development of the University during the thirteen years for which he has occupied the post. The number of teachers has increased from 88 to 268, and of students from 981 to 2,180. The University now owns a continuous tract of land, solely for educational purposes, of not less than 52 acres. The Medical School is large and well equipped, and will shortly be enlarged and perfected. The Law School has a high reputation. The department of Philosophy is attracting many students, and the Dental and Veterinary departments are flourishing. Extension Lectures, the first in America, have been established; the Wistar Institute of Anatomy and Biology is a magnificent memorial to the founder of American anatomy; the University Hospital is a great institution which commands the support of the public, and the department of Archæology and Palæontology is developing rapidly a museum of high rank. All this has been done in so short a time through mutual confidence and support. "The University is truly the voluntary association of all persons and of all agencies

who wish to unite in work for the elevation of society by the pursuit and diffusion of knowledge and truth." Thus, by means of a system "strong enough for effective central control, yet so flexible as to admit affiliation with many separate organisations," a scheme which a few years ago seemed to many an impossible dream has been realised. Important support was received from the municipality in early days, and more recently the University has begun to receive large legacies which are forming the nucleus of an endowment fund.

THE NEW HOME FOR INCURABLES AT STREATHAM.

THE Princess of Wales will open the new Home for Incurables at Streatham, on the afternoon of Monday, July 2nd next, on which occasion Her Royal Highness will be accompanied by the Prince of Wales, and probably by other members of the Royal Family. An appeal for £5,000 is being made, so that the board may report on that occasion that the home has been opened free of debt.

THE DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND.

AT a Congress inaugurating the new Dermatological Society of Great Britain and Ireland, to be held at the rooms of the Royal Medical and Chirurgical Congress on May 30th and 31st, an opening address will be delivered by the President, Dr. Pye-Smith. Dr. Byrom Bramwell will introduce a discussion on "The Treatment of Skin Diseases by Thyroid Extract," and other important communications are promised. It is expected that the Congress will be of special interest not only to dermatologists but to all practitioners of medicine. We are requested to state that the gentlemen who are desirous of joining the above Society, subject to the approval of and nomination by the Council, may apply for copy of laws, list of original members, and proposal form, to the Honorary Secretaries, J. Herbert Stowers, M.D., 41, Finsbury Square, E.C., and A. Marmaduke Sheild, M.B., F.R.C.S., 20, Stratford Place, W. The annual subscription is £1 1s., but the entrance fee, for the present, is suspended.

WATERBORNE TYPHOID AT THE ANTIPODES.

THE relation between enteric fever and impure water is forcing itself on the attention of the dwellers in Australia just as strongly as on people in other more thickly inhabited portions of the globe. From Melbourne, from Sydney, and from South Australia the tale is the same; a number of instances are given in the *Melbourne Leader* of March 31st. Foul water, fæcally polluted soil, and typhoid fever form a triad of conditions which are found hand in hand in every quarter of the globe alike. It is all very well to say, as some lighthearted sanitarians do, that all will be well if we do but boil our water and cook our food. One might as well say that mosquitoes do no hurt, seeing that one can always sleep in curtains. To have to go through life armed *cap-à-pie* against our enemy the microbe is not the most enviable form of existence, and is as typical in its way of an imperfect civilisation as was the custom of engaging a bodyguard when traversing Hounslow Heath. That co-operative life we call civilisation must be a very poor thing indeed if it cannot provide so simple a necessity as pure water.

FLAXWORKERS' PHTHISIS.

SOME remarkable evidence is contained in a report issued on May 8th, by Mr. E. H. Osborn, one of Her Majesty's Inspectors of Factories, on the conditions of work which prevail in flax mills and linen factories. Phthisis, contracted in the hot and dusty atmosphere of certain departments of these mills, appears to be alarmingly common. In Belfast, for example, it accounted in 1891 for 241 out of 528 deaths which took place among the artisans of all trades; and if other diseases of the respiratory organs be taken into the account, only 173 deaths remain attributable to other causes. Partly the fault lies with the operatives, who do not wear flannel, though they have to work in heat and steam, and for the rest it is due to the imperfection of present methods for arresting the flight of dust. "In the scutch mills the hacklers," says Dr. D'Evelyn, of Ballymena, "all die young from chronic diseases of the lungs." Mr. Osborn has suggested better conditions of working, but of the adoption of his suggestions by the workers he has little hope. They not only dress foolishly, but refuse to wear respirators. The case might, he thinks, "fairly engage the efforts of local ladyhood."

THOMAS MADDEN STONE.

WE regret to learn that this amiable gentleman, so well known to several generations of candidates at the College of Surgeons Examinations before the days of the Conjoint Board, died on Monday last, May 14th, aged 84. In 1832 he was appointed Assistant Librarian to the College of Surgeons, and, in 1853, Clerk, an important office which he held for thirty years, fulfilling its duties with great devotion. He retired with a pension in 1883, and his popularity was shown by the presentation to him of a testimonial in June of that year by Sir Spencer Wells and a body of distinguished members of the profession. It consisted of a purse of money and an album containing an illuminated address. The success of this graceful transaction was largely owing to the exertions of the late Mr. James Shuter. Mr. Stone was twice married, and leaves a son, Dr. Domett Stone. Throughout his fifty years of service to the College he was distinguished for extreme geniality. Members of the Council and candidates loved him for his kindly bearing. He was also a man of very picturesque appearance; his high forehead and well-kept white beard making him a conspicuous person amongst his well-known fellow officers. He contributed largely to our own and probably other medical papers, and was a reliable authority on the history of distinguished surgeons. He collected a valuable series of portraits of eminent medical men, which he recently presented to the library of the College he loved so well and served so faithfully.

THE COMPOSITION OF SECRET REMEDIES.

IT has been repeatedly pointed out in the BRITISH MEDICAL JOURNAL, that articles recommended as medicines for the cure or relief of disease by persons who are neither qualified to practise medicine nor authorised to dispense, should in all instances have their nature disclosed and their composition plainly stated upon the label of each package, though, unhappily, the law does not require this condition to be observed. The sale of such articles is purely a matter of trade, and in many instances the use of them is attended with danger, and, as a consequence, the trade in secret nostrums and specifics has been mischievously developed by the aid of puffing advertisements. Many of these preparations, however, contain ingredients of a poisonous nature, and being, therefore, in fact, poisons within the meaning of the Pharmacy Act, their sale is subject to the provisions of that Act; they must be labelled with the word "Poison," as well as the name of the poison, and they can only be sold under certain restrictions, by duly registered chemists. For many years the requirements of the law in this respect were disregarded, and it is only in consequence of the attention drawn to the danger of that unlawful practice by the Parliamentary Bills Committee of the British Medical Association that any steps have been taken to enforce the law in regard to secret preparations. Notwithstanding strenuous opposition on the part of proprietors and vendors of these articles, the necessity of complying with the law has been established in several cases, and practically recognised. We find, however, that in the case of certain narcotic preparations the statements put forward as to their strength do not agree with

the results of analysis, and, what is still more important, that there is in some cases a great variation in the amount of poisonous ingredient. Thus, for instance, in the case of one preparation of this kind the amount of morphine has been found to vary from half a grain to one-tenth of a grain in the fluid ounce, and in another it has varied from rather less than one-tenth of a grain to three-hundredths of a grain, and sometimes as little as half of this smaller amount. Such variation in the strength of opiate preparations is obviously calculated to be dangerous, even when the directions as to dose are attended to, and especially if the medicines are administered to young children, as is too frequently the case. If a prescribed dose may contain at one time five or six times as much morphine as it does at another the consequences may be very serious, if not fatal. This is a matter of quite as much importance as the proper labelling of such preparations and the restricting of their sale to the hands of persons competent to deal in poison. It appears, moreover, that even the legally qualified vendors of these preparations should, for their own protection as well as for the safety of the public, insist upon being furnished with a guarantee as to their uniformity of composition, and their correspondence with the statements published respecting them.

RECKLESS ATTACKS ON HOSPITALS.

The medical profession is well accustomed to hear abuse of all kinds poured upon it collectively. The public seems to like it, as it likes all scandalous and scurrilous abuse of person or profession. When politics pall such matter gives a new sensation. It is never wise to make too much of silly cries: at the same time, shouting is such a potent factor in the moulding of public opinion that it may be well not to be altogether unobservant of the wicked nonsense which is just now the staple of some newspaper correspondents. The accusation that operations are performed for the benefit of the surgeon rather than that of the patient—"for experience" as the term goes—is no new one. It has been heard at every time and every country, whenever the scientific spirit has attempted to break through old routine and to utilise recent knowledge for the benefit of mankind. Pioneers have always been abused by laggards, which is not unnatural. What is odd is that journals which in politics rank themselves as progressives should in all that pertains to knowledge side with what is mediæval and old-fashioned, and that newspapers which profess the deepest sympathy with the working classes should do their best to injure the hospitals—institutions which, above all others, devote themselves to the benefit of those classes in particular. For this is what it comes to: partly from dread of the law of libel, partly from the knowledge that if specific charges were once formulated they would be utterly and immediately disproved, these scribes devote themselves to attacking institutions rather than individuals, and by the dissemination of slanderous articles doing the best they can to injure the poor by diverting subscriptions from the hospitals.

TITHINGS OF OUR WASTRELS.

Few sights can be more sad than that of the mass of mental wreckage—imbeciles, idiots, and epileptics—which this metropolis produces, and hands over to the Asylums Board to deal with as best it may. In the schools and pavilions at Darenth, as we learn from the annual report, out of a population of 950 there are 512 totally helpless, that is, who can neither wash, dress, nor feed themselves, 200 of them are crippled, and there are 360 epileptics requiring constant care and continuous supervision both by night and day. Mental defect is only part of the difficulty; bodily deficiencies are quite as prominent. Rickets appears on every side, as do the signs of scrofula, enlarged and suppurating glands, skin eruptions, eye defects, ear troubles, ulcers and abscesses; while others are crippled, paralysed, deformed, or cretinous. Imperfect nervous development is, however, the prominent characteristic; these idiots and imbeciles see badly, hear badly, feel badly; their perceptions are dulled, and in many cases they are hardly capable of attention. Taking speech as a gauge of their mental condition we find that out of the 950 patients only 360 articulate distinctly, and 300 cannot articulate at all. Such is the character of this residuum, this mass of utter failures in procreation which London throws on the public charity, as disbursed by the Asylums Board, to nurse, to keep, and, as far as may be possible, to educate. It is a tiresome and thankless task which is thrown upon this colony of doctors, nurses, and instructors, which exists all to itself within twenty miles of town, an isolated and, we fear, often forgotten department of our social economy; but it is one for the due performance of which London should be grateful.

LEPERS IN GERMANY.

According to the investigations of the Imperial Board of Health, whose attention was directed to the fact by a physician, there are at present ten lepers in the district of Memel, Eastern Prussia. Eight other lepers died in 1877. Six of these eighteen cases were single persons, the other twelve extended over five families. Of those who died two suffered from the disease eight years, others thirteen, ten, nine, seven, and one year. The first case occurred, as far as can be found out, twenty years ago. Only one of the eighteen had ever left home, so that the origin of the disease cannot be discovered.

THE DIAGNOSIS OF BOVINE TUBERCULOSIS.

A somewhat extensive series of experiments has during the past year been undertaken at the Central Experimental Farm at Ottawa, Canada, with a view to discover how far it may be possible to diagnose early tuberculosis in cattle by the injection of tuberculin. Without entering into details of individual animals it may be stated that in all cases in which the characteristic rise in temperature took place after injection, the animal when slaughtered was demonstrated to be a victim of tuberculosis, the seat of the disease being usually the lungs, but occasionally other parts of the body. From November, 1892, to the present time, fifty-four animals have been tested, of which twenty-six have given the reaction indicative of the presence of the disease. From this it would appear that tuberculosis is no less rife amongst American cattle than in the older herds of Europe. We understand that in New York State veterinary inspectors are appointed, whose duty it is to examine the herds in each county and kill infected cattle. A physical examination is first made, and if the existence of tuberculosis is suspected tuberculin is injected, when in case the temperature reaction takes place the animal is killed, a partial compensation being given to the owners by the State. It is reported that during 1893 about 20,000 animals were examined by the inspectors, and that of this number 686 were found infected, and were killed. It was observed that tuberculin rarely caused so strong a reaction after a second injection as after a first, even when several months had been allowed to intervene; moreover, when a second injection was made shortly after the first the reaction was usually very slight, or absent, although the animal might be badly diseased; from which it is clear that it would be possible for a dishonest farmer very much to puzzle an inspector by means of a few preliminary injections. Interesting as these investigations are in regard to the utility of tuberculin as an empirical method of diagnosis, we fear they contain nothing to indicate any new line of therapeutic usefulness.

Dr. Herman, the President of the Obstetrical Society, will open a discussion on the Etiology of Puerperal Fever, at the meeting of the Society of Medical Officers of Health on Monday next.

SMALL-POX AND VACCINATION IN 1893.

V.—BRADFORD.

WE have received from Dr. A. E. Foster, the Resident Medical Superintendent of the Bradford Fever Hospital, some very full and interesting data concerning the admitted cases of small-pox treated in that institution in 1893. We would here express our indebtedness to Dr. Foster for the statistics so kindly forwarded. We shall hope to demonstrate from the Bradford figures the value of vaccination in that borough, as in other places, as mitigating the severity of, and the liability to, attack.

Dr. Foster tells us that the total number of cases admitted during the year was 935, and that in respect of 17 of these he is unable to give the area of vaccination scars, whilst 2 patients had previously suffered from small-pox. These cases we have accordingly omitted from our calculations except where otherwise mentioned.

Of the total 935 cases dealt with, exactly 100 proved fatal. The several classes of persons arrange themselves as follows in regard of vaccination and non-vaccination:

All cases	935;	100 deaths;	10.7 per cent.
Vaccinated cases ...	704;	36 ,,	5.1 ,,
Doubtful ,, ...	31;	9 ,,	26.5 ,,
Unvaccinated ,, ...	195;	55 ,,	28.2 ,,

Here we see that the mortality amongst the unvaccinated was 5.5 times that of the vaccinated; and from the above rates we may deduce the following facts, namely:

1. Had the unvaccinated suffered death only at the rate of those vaccinated there would have occurred not the actual 55 deaths, but only 10 deaths.
2. Had the vaccinated died at the rate of those unvaccinated there would have been not the actual 36 deaths, but as many as 193 deaths.
3. Had all the patients been vaccinated there would have been not the actual 100 deaths, but only 48 deaths.
4. Had all the patients been unvaccinated there would have been, not the actual 100 deaths, but as many as 264 deaths.

Thus does Bradford afford indication of the benefits conferred by primary vaccination when compared with the data shown in respect of unvaccinated sufferers.

The figures given by Dr. Foster are arranged in the accompanying Table I. It will be seen on reference to this table how full are the facts which have been supplied to us. It contains information as to age-periods, vaccination, non-vaccination, doubtful cases, number of scars, area of scarring, foveation, non-foveation, nature of attack in the vaccinated, and the number of deaths in several classes.

Passing to a consideration of the differing rates of mortality in the vaccinated and unvaccinated at one and another age-period, we would draw attention to the summarised data in Table II. The columns disclose the interesting fact that

TABLE II.

Age-Periods.	Vaccinated. Cases.	Deaths.	Mortality per Cent. of Cases.	Unvaccinated. Cases.	Deaths.	Mortality per Cent. of Cases.
0-5 ...	2	0	0.0	55	21	38.2
5-10 ...	15	0	0.0	32	8	25.0
10-15 ...	33	0	0.0	35	5	14.3
15-20 ...	83	2	2.4	20	1	5.0
20-30 ...	242	7	2.9	33	11	33.3
30-40 ...	183	13	7.1	10	4	40.0
40+ ...	129	14	10.9	10	5	50.0

whereas there was total immunity from death in the first fifteen years of life in the vaccinated patients, there was very heavy mortality in the section of children and young persons without the benefits of vaccination. The rates for the three quinquennia are given; that for the fifteen years as a whole is as high as 27.8 per cent. Thereafter there is death in small amount, but ever increasing with age in the vaccinated, though in much smaller degree than in the other class. It will be seen that except for the second quinquennium there is progressive increase in the rate of mortality of

TABLE I.—*Bradford Fever Hospital Records as to Small-pox Patients, 1893.*

Age-Periods.	Not Vaccinated. Cases.	Not Vaccinated. Deaths.	Vaccination Doubtful (no Scars Visible). Cases.	Vaccination Doubtful (no Scars Visible). Deaths.	Area of Scars.	One Scar. Foveated. Nat. of Attack. Discrete.	Confluent.	Hemorrhagic.	Deaths.	One Scar. Unfoveated. Nat. of Attack. Discrete.	Confluent.	Hemorrhagic.	Deaths.	Two Scars. Foveated. Nat. of Attack. Discrete.	Confluent.	Hemorrhagic.	Deaths.	Two Scars. Unfoveated. Nat. of Attack. Discrete.	Confluent.	Hemorrhagic.	Deaths.	Three Scars. Foveated. Nat., etc. Discrete.	Confluent.	Hemorrhagic.	Deaths.	Three Scars. Unfoveatd. Nat., etc. Discrete.	Confluent.	Deaths.	Four or More Scars. Foveated. Nat., etc., Discrete.	Confluent.	Unfoveated. Nat., etc. Discrete.
0-5	55	21	—	—	¼ to ½ sq. in.	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
					Over ½ sq. in.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—
					Under ¼ sq. in.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5-10	32	8	—	—	¼ to ½ ,, ,,	1	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—
					Over ½ ,, ,,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	—	—	—	3	—	—
					Under ¼ ,, ,,	1	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	3	—	1
10-15	35	5	4	1	¼ to ½ ,, ,,	2	—	—	—	—	—	—	—	3	2	—	—	—	—	—	—	3	—	—	—	—	—	—	—	10	—	—
					Over ½ ,, ,,	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	4	—	—	—	—	—	—	—	—	—	—	—
					Under ¼ ,, ,,	2	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15-20	20	1	2	—	¼ to ½ ,, ,,	5	1	—	—	—	—	—	—	5	1	1	1	1	1	—	1	9	—	—	—	1	—	—	—	12	—	—
					Over ½ ,, ,,	—	—	—	—	1	—	—	—	7	—	—	—	—	—	—	—	33	1	—	—	—	—	—	—	—	—	—	—
					Under ¼ ,, ,,	3	2	—	1	6	5	—	3	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20-30	33	11	5	1	¼ to ½ ,, ,,	17	7	—	1	4	1	—	—	34	7	—	—	6	2	—	1	10	3	—	—	2	1	—	1	—	—	1
					Over ½ ,, ,,	3	—	—	—	—	—	—	—	35	3	1	1	—	—	—	—	55	6	—	—	—	—	—	16	—	—	2
					Under ¼ ,, ,,	1	3	—	2	6	1	—	—	—	1	—	1	2	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
30-40	10	4	10	3	¼ to ½ ,, ,,	10	5	—	2	5	2	—	1	40	19	1	2	9	3	1	3	12	1	1	1	3	2	1	3	—	—	2
					Over ½ ,, ,,	2	—	—	—	—	—	—	—	20	4	—	—	—	—	—	—	13	—	—	—	—	—	—	8	2	—	—	—
					Under ¼ ,, ,,	4	3	1	2	10	5	—	3	—	—	—	—	3	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—
40+	10	5	13	4	¼ to ½ ,, ,,	9	5	—	1	6	1	1	1	27	9	—	3	11	5	—	2	4	—	—	—	3	—	—	3	—	—	1
					Over ½ ,, ,,	—	—	—	—	—	—	—	—	3	1	—	—	—	—	—	—	4	1	—	1	1	—	—	5	1	1	—	—	—
	195	55	34	9		61	26	1	9	38	17	1	8	180	47	3	8	36	12	1	8	152	12	1	2	19	3	1	68	8	8	
						88				56				230				19				165				22			69			

the unvaccinated section; but it is true that some of the numbers are trivial. But there is undoubted gain to the vaccinated patients in the matter of mortality rates in each and every age-period; and the lesson is taught afresh that primary vaccination is not sufficient of itself to protect beyond the first ten or fifteen years of life. And here we think we may leave the comparison of vaccinated and unvaccinated and pass on to discuss the differing circumstances of the first class.

As to the nature of attack, then, we have facts as set out in Table III. Small as are the figures for the first three age-

TABLE III.

Age-Periods.	Nature of Attacks.			Percentage at each Age-Period.		
	Discrete.	Confluent.	Hæmorrhagic.	Discrete.	Confluent.	Hæmorrhagic.
0-5 ...	2	—	—	100.0	—	—
5-10 ...	15	—	—	100.0	—	—
10-15 ...	30	3	—	91.0	9.0	—
15-20 ...	77	5	1	93.0	6.0	1.0
20-30 ...	204	37	1	84.3	15.3	0.4
30-40 ...	137	43	3	74.9	23.5	1.6
40+ ...	95	32	2	73.6	24.8	1.6
All ages	560	120	7	81.4	17.4	1.2

periods, they are none the less significant, showing as they do a record almost unbroken of mild attacks. And, indeed, the great preponderance of discrete attacks is strikingly displayed. Taking all ages together we see that the discrete forms of the disease are nearly five times as frequent of occurrence as confluent attacks.

We have further analysed this matter of the nature of attack in Table IV. By division of the cases into four classes

TABLE IV.

Age Periods.	One Scar.		Two Scars.		Three Scars.		Four Scars.	
	Discrete.	Confluent.	Discrete.	Confluent.	Discrete.	Confluent	Discrete.	Confluent.
0-5	—	—	1 (100)	—	1 (100)	—	—	—
5-10	2 (100)	—	3 (100)	—	5 (100)	—	5 (100)	—
10-15	3 (75)	1 (25)	6 (75)	2 (25)	7 (100)	—	14 (100)	—
15-20	8 (80)	2 (20)	14 (87)	2 (13)	43 (98)	1 (2)	12 (100)	—
20-30	33 (69)	15 (31)	77 (87)	12 (13)	74 (88)	10 (12)	20 (100)	—
30-40	24 (69)	11 (31)	71 (72)	27 (28)	29 (90)	3 (10)	13 (87)	2 (13)
40+	29 (67)	14 (33)	44 (73)	16 (27)	12 (92)	1 (8)	10 (91)	1 (9)
All Ages	99 (70)	43 (30)	216 (78)	59 (22)	171 (92)	15 (8)	74 (96)	3 (4)

according to the quantity of scars, and these again into two classes of small-pox attack, we see that scarring is a very important factor in determining the nature of attack to be suffered. The figures in brackets represent the rates per cent. of the total cases at each age-period in each of the four divisions. The figures are such as to leave no doubt concerning the value of quantity of scars, apart altogether from the area or character of the scars. And generally the table shows that the preponderance of discrete attacks is greater the greater the number of scars. Especially is this so at all ages; the 70 per cent. of one scar giving place to 78 per cent. in two scars; this in turn giving way to 92 per cent. in three scars; and four scars taking the palm with 96 discrete attacks out of each 100 four-scarred patients.

If we now turn to the figures as to quantity of scars in connection with both foveation of scars and non-foveation of scars, we shall find that foveation in the Bradford data held no important place in relation to the character of attack, the facts appearing in Table V. We have drawn a line below the age-period 10-15, as the figures above it are so small as to serve no useful purpose, the rates in the first age-period, for example, being each based on single cases. The figures throughout the table are rates per cent. of attacks, and when fairly large numbers are in question, as in the case below the line, it is seen that there is little to choose in the Bradford data between foveated scars and unfoveated scars. In order to see what effect foveation had in Bradford in the whole

TABLE V.

Age-Periods.	One Scar.				Two Scars.				Three Scars.				Four Scars.			
	Foveated.		Unfoveated.		Foveated.		Unfoveated.		Foveated.		Unfoveated.		Foveated.		Unfoveated.	
	Discrete.	Confluent.	Discrete.	Confluent.	Discrete.	Confluent.	Discrete.	Confluent.	Discrete.	Confluent.	Discrete.	Confluent.	Discrete.	Confluent.	Discrete.	Confluent.
0-5 ...	—	—	—	—	100	—	—	—	100	—	—	—	—	—	—	—
5-10 ...	100	—	—	—	100	—	—	—	100	—	100	—	100	—	—	—
10-15 ...	100	—	—	100	72	28	100	—	100	—	—	—	100	—	100	—
15-20 ...	88	12	50	50	92	8	67	33	98	2	100	—	100	—	—	—
20-30 ...	72	28	63	37	87	13	80	20	88	12	90	10	100	—	100	—
30-40 ...	62	38	79	21	71	29	79	21	96	4	67	33	85	15	100	—
40+ ...	62	38	73	27	75	25	70	30	89	11	100	—	89	11	100	—

course of the 1893 outbreak, we have lumped the figures together in Table VI. The numbers with which we are

TABLE VI.

Scarring.	Foveated Cases in each Class.		Unfoveated Cases in each Class.		Foveated Percentage of each Class.		Unfoveated Percentage of each Class.	
	Discrete.	Confluent.	Discrete.	Confluent.	Discrete.	Confluent.	Discrete.	Confluent.
One scar	61	26	38	17	70	30	69	31
Two scars	180	47	36	12	79	21	75	25
Three scars ...	152	12	19	3	93	7	86	14
Four scars ...	66	3	8	—	96	4	100	—
Totals, etc. ...	459	88	101	32	84	16	76	24

here dealing are given in the four left-hand columns, and the percentages to the right of these. Although the difference between the two classes of resulting scars is not very great, still the advantage is with foveation. And a very useful lesson derivable from the table is that as we secure more than two scars whether or without foveation, so we secure also a percentage of mild attacks above the average of the rate on all cases taken collectively without regard for quantity of scars. But if nature of attack in Bradford was but little influenced by foveation, far otherwise was it with fatality of the disease. To show this we have given the facts set out in Table VII.

TABLE VII.

Scarring.	Foveated.			Unfoveated.			Mortality of Unfoveated Cases (Foveation being regarded as Unity).
	Cases.	Deaths.	Mortality per Cent. of Cases.	Cases.	Deaths.	Mortality per Cent. of Cases.	
One scar ...	88	9	10.2	56	8	14.3	1.4
Two scars ...	230	8	3.5	49	8	16.3	4.7
Three scars ...	165	2	1.2	22	1	4.5	3.7
Four scars ...	69	—	0.0	8	—	0.0	—
Totals, etc. ...	552	19	3.4	135	17	5.2	1.5

We learn from this table that of all quantities of scarring those patients having foveated cicatrices died at the rate of 34 per 1,000, whilst the remaining section died at the rate of

52 per 1,000. Where large figures are in question, as in the case of two and three scars, the difference in the rates is very marked. The last column shows the rates for the several classes of unfoveated scarrings, when the respective rates of mortality among the foveated classes have been taken as unity.

Coming to a consideration of the effect on the nature of attack, of a combination of quantity of scarring, quality of scarring, and area of scars, we find again, from the data of Bradford, that there is but little difference between foveation and non-foveation. The facts are set out in Table VIII.

TABLE VIII.

Quantity of Scarring.	Nature of Scars.				Percentage of Each Class.			
	Foveated.		Unfoveated.		Foveated.		Unfoveated.	
	Discrete.	Confluent.	Discrete.	Confluent.	Discrete.	Confluent.	Discrete.	Confluent.
Under ¼ sq. in.	12	9	33	14	57	43	70	30
¼ to ½ „ „	207	60	63	18	77	23	77	23
Over ½ „ „	240	16	5	—	93	7	100	—
Totals, etc.....	459	87	101	32	84	16	76	24

But the need for area of scarring is seen when we observe that as the area increases so the percentage of discrete attacks increases. Thus, with an area of over half a square inch, the percentage is greatly above the general average of mild attacks, and is vastly superior to the rates for smaller areas. We do not wish to be thought of as dogmatising on these data, for of course the figures are too small to think of basing any serious conclusions upon; we simply give them for what they are worth.

The facts as to small-pox in revaccinated persons are set out in Table IX, and need but little comment.

TABLE IX.—*Particulars of all Cases of Small-pox in Revaccinated Persons.*

Ages.	Sex.	No. and Character of Primary Scars.	No. and Character of Secondary Scars.	Age when Revaccinated.	Character of Small-pox Attack.	Result of Attack	
						Recovery.	Death.
60	M.	1 faint	—	—	Modified	R.	—
39	M.	2 fair	2 faint	—	Modified	R.	—
40	M.	1 fair	2 faint	30	Semi-Conflt.	R.	—
40	M.	2 fair	faint	14	Discrete	R.	—
40	M.	2 good	—	13	Semi-Conflt.	R.	—
27	F.	4 fair	1 faint	5	Discrete	R.	—
37	M.	2 faint	—	12	Confluent	R.	—

The youngest person attacked was 27 years of age, and the least interval of time between revaccination and attack was 10 years, and the next 26 years, whilst not one case proved fatal.

The hospital staff of nurses, etc., consisted of 36 persons, 3 who had previously had small-pox, and 33 revaccinated individuals. Not one of these contracted the disease during the year.

We would only add our desire to become possessed of like data to those of Bradford (the data of Table I) in respect of other places heavily invaded in 1893-94, as, for example, West Ham, Walsall, Birmingham, Aston Manor, Bristol. A combination of the several experiences would lend itself to detailed analytical treatment, with some ground of assurance that the several results would be of a sort to be regarded as expressive of the truth.

DR. DONALDSON SMITH, a young physician of Philadelphia, who has just arrived in England after a journey to a point some 200 miles into the interior of Somaliland, is about to start on an important expedition to Lake Rudolph, conducted at his own expense.

THE CHOLERA.

THE official statistics of the cholera in Russian Poland from April 28th to May 6th, are as follows:

There were 28 attacks and 6 deaths reported in the district of Plock; 70 attacks and 25 deaths in that of Radom, and 4 cases in the city of Warsaw. The Russian authorities have, it is stated, considerably extended their precautions this year, and especially increased the number of doctors in the threatened districts. The cholera has disappeared at Constantinople, and the quarantine to which vessels arriving at Athens from Constantinople have hitherto been subject has now been abolished.

The *Daily News* Odessa correspondent, telegraphing on May 11th, states that the cholera is spreading alarmingly in the governments of Warsaw, Kovno, Plotzk, Radom, Podolia, and Kieff. It is generally feared that the visitation will not be less serious this year than it was last.

A telegram from Madrid, under date of May 10th, states that Dr. Montaldo, the naval doctor sent to Lisbon to investigate the epidemic of that city, has made some startling statements respecting the neglect of the Portuguese authorities, and in regard to the origin of the disease. During the whole of last summer a serious cholerine epidemic spread all over the Portuguese colony of St. Vincent, Cape de Verd Islands. The epidemic finally became one of true Asiatic cholera of the most serious character, and caused numerous deaths. But the Portuguese Government—so severe with foreign countries that it established quarantine against Spanish arrivals, because there were suspicious cases in France last year—took no sanitary precaution whatsoever against arrivals from St. Vincent. All vessels from that colony were freely admitted at Lisbon by superior orders, including even the *Santa Tome*, a vessel which had cases of undoubted cholera on board. Naturally the disease took hold on Lisbon, and spread quickly. It was fortunately of a mild type, and although thousands of people were attacked only six actually died, but there is said to be serious ground for fear that, as at St. Vincent, an epidemic of true cholera will follow the present comparatively harmless outbreak. Even the present epidemic has been concealed by the Portuguese Government for several months: the first case occurred in December last. The Spanish authorities are much irritated at the conduct of the Portuguese Government, and there is a talk of keeping a permanent health delegate at Lisbon. A curious feature of the epidemic is that it attacks very suddenly.

LITERARY NOTES.

PROFESSOR JODL, of the University of Prague, is engaged in the preparation of a *Lehrbuch der Psychologie*, which is to appear in 1895.

Professor Giuseppe Sergi, of the University of Rome, has in the press a work on *Pain and Pleasure*, which is the first part of a systematic treatise on psychology.

M. Binet announces the appearance next year of a new *Année Psychologique*, which will contain summaries of psychological literature appearing in all countries during the year.

A new "journal of practical ophthalmology," bearing the title of *The Refractionist*, has recently begun to appear in Boston, U.S., under the editorship of Dr. Francis F. Whither, in association with Drs. R. J. Phillips, W. F. Southard, M. F. Coomes, D. E. Baxter, J. W. Park, and E. M. Marbourg. The new journal takes a firm stand against the glass-prescribing optician, and announces that its advertisement columns will not be open to such poachers on ophthalmological preserves.

The Royal Library of Berlin has come into possession of an interesting medical manuscript, a French treatise on fevers, written about the beginning of the fourteenth century, and in Hebrew characters. It is a compilation, made by a Jewish doctor, whose scientific reading embraced Dioscorides, Galenus, Johannes Damascenus, Avicenna, etc., and which treats of fevers of every description, of the pest, and of purulent diseases.

A "General Register" to the *Archiv für Dermatologie and Syphilis*, vols. i to xxv, 1869-83, has just been issued. The first part is a subject-index and the second an author's index. Like most German indices this latter does not

give the title of the paper under the author's name—a fact which detracts much from its utility. Anyone wishing to find a paper by Fournier will, on turning to that author's name, find himself confronted with 98 references. Unless the searcher is sure of the title, and so can find the reference by the Sach-Register, this array of figures is somewhat startling. Dr. Grünfeld, the compiler of the index, has numbered all the entries in the Sach-Register, and reference is made to these numbers under the author's name. This is an improvement on the general method of referring to pages only.

A *Handbuch der praktischen Gewerbehygiene* is about to be published by Robert Oppenheim, of Berlin. The work, which according to the prospectus is intended to be a complete treatise on the diseases caused by occupations, and on the principles of industrial hygiene, will bear on the title page the names of Dr. H. Albrecht (Chief Editor), Professor Hartmann, Dr. Villaret, Dr. Oppler, Herr Clausen, Herr Oppermann, Herr Platz, and Herr Specht.

In an elaborate essay on the "Origin of Neoplasms in General, and of Cancer in Particular," now in course of publication in the *Progrès Médical*, M. A. Wassilieff formulates the following "general law": "Living matter reproduces itself more readily the more inferior it is, other things being equal." In this formula, we are assured, is contained the general theory of the development of all new growths. But the "law," according to our author, has a much wider application than this. It explains, among other things, the depopulation of France, which is causing some alarm to French statesmen. M. Wassilieff's view is that "what is erroneously called 'the depopulation of France,'" is, in fact, a conclusive proof of the innate superiority of that nation to all others. While inferior countries like England and Germany are increasing and multiplying like the lowly-organised bodies they are, the French race is dying of its own greatness. Whether the French people will find consolation for their approaching absorption into the infinite in the consciousness of their superiority may be open to doubt. We venture to offer a suggestion which may do something to delay, if not to arrest, the process of gradual extinction, which M. Wassilieff holds to be "natural and inevitable." Let France attenuate her superiority by an infusion of fresh blood from some inferior race; this object would supply a definite aim, and a good excuse for her colonial enterprise. By this means, and the assiduous study of *décadent* poetry and realistic novels, she might in time reach a degree of inferiority compatible with vitality.

A HOSPITAL AT HOME.

If a few architects would bestir themselves to provide for the requirements of modern life, they might easily set a fashion which would not only be of much benefit to many ailing people, but would certainly lead to such an amount of altering of older houses as would be of no small advantage in a pecuniary sense to the architectural profession. While little people are content, and even glad, to go to hospital when ill, people of larger means are irritated in no small degree to find that, for all their fine houses and high rents, they cannot, if illness comes upon them, either isolate the patient from the noises and racket of the house, or isolate the house from the infection of the patient. Obviously, however perfect a house may be in other respects, it cannot be considered complete so long as it contains no special provision for that average of sickness which comes upon the healthiest. A sick room should be arranged for in every dwelling, a room preferably on an upper storey, separated if possible from other bedrooms by a passage having windows in it, and within easy reach of a water-closet and lavatory, which could be devoted entirely to the service of the sick room if required. Too often the "spare room" is the only one available for use in illness, which is neither kind to one's guests nor beneficial to one's invalids. Feather beds and gorgeous curtains are out of place in such a room. Everything should be simple and capable of being washed, and if the heating arrangements should include a "Calorigen," as well as an open fireplace, it would be an advantage.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1894. ELECTION OF MEMBERS.

MEETINGS of the Council will be held on July 11th and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, June 21st and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. FRANCIS FOWKE, *General Secretary*.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to hem at the Office.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH.—A general meeting of this Branch will be held in the Medical Society's Rooms, 11, Chandos Street, Cavendish Square, on Wednesday, May 23rd, at 5 P.M., for the purpose of taking into consideration the question of proposing certain amendments to the Medical Acts, with a view to the better suppression of unqualified practice.—ANDREW CLARK, ISAMBARD OWEN, Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The annual meeting for the election of officers will be held on Thursday, June 7th, at the Royal Forest Hotel, Chingford, at 6 P.M. At 6.15 the members and their friends will dine together; Mr. Henry Power, President of the Branch, will preside. Tickets 7s. 6d. each, exclusive of wine; morning dress. Anyone intending to be present is requested to communicate with the Honorary Secretary as early as possible, but not later than June 4th.—H. E. POWELL, Honorary Secretary, Glenarm House, Upper Clapton, N.E.

MIDLAND BRANCH.—The annual meeting will be held at Lincoln on Thursday, June 14th. Members desirous of reading papers or exhibiting cases are requested to communicate with, before May 28th, W. A. CARLINE, M.D., Honorary Secretary and Treasurer.

STAFFORDSHIRE BRANCH.—The third general meeting of the present session will be held at the Bell Medical Library, Cleveland Road, Wolverhampton, on Thursday, May 31st. The President, Mr. H. M. Morgan, will take the chair at 3.30 P.M.—GEO. REID, Honorary Secretary.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The annual meeting of this Branch will be held at the Birmingham Medical Institute on Thursday, June 14th, at 3.30 P.M., when, after the ordinary business has been disposed of, an address will be delivered by the President-Elect, Mr. H. Langley Browne. The annual dinner will take place the same evening at 6.30 at the Grand Hotel. Members of Branch intending to be present should intimate this to the Honorary Secretary, Mr. GILBERT BARLING, 85, Edmund Street, Birmingham.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.—The next meeting will be held at the Hospital, Hastings, on Thursday, May 31st: Dr. Bagshawe will preside. Meeting at 3.30 P.M.; dinner at the Grand Hotel, 5.30 P.M.; charge 6s., exclusive of wine. The following communications are promised:—Dr. Sidney Phillips (London): On Syphilitic Heart Affections; with notes of a fatal case with Angina Pectoris. Dr. Wills: Notes of a case of Gastrostomy. Dr. Batterham and Mr. W. J. Harris will show patients. A communication will be received from the Midwives Registration Association, also from Dr. Rentoul.—J. W. BATTERHAM, Honorary District Secretary, Bank House, Grand Parade, St. Leonards.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.—A meeting of the District will be held at the Hospital, Gravesend, on Thursday, May 24th, at 4.30 P.M., C. Firth, M.D., in the chair. The following communications will be made:—Mr. Hugh Smith: Three Cases of Brain Syphilis. Dr. V. Harris: On the Question of Heredity in Phthisis and its Influence on Treatment. Mr. Keetley: The Treatment of Club-foot and of Flat-foot. Mr. R. J. Bryden: Delirium Tremens and its Treatment. The dinner will take place at the New Falcon Hotel, at 6.30 P.M.; charge, 6s. 6d., exclusive of wine. To facilitate the arrangements gentlemen who intend

to dine are particularly requested to signify their intention to the chairman, C. Firth, M.D., 196, Parrock Street, Gravesend, not later than Tuesday, May 22nd. All members of the South-Eastern Branch are entitled to attend this meeting and to introduce professional friends.—E. GROUND, Honorary Secretary of the District, 1, Ashford Road, Maidstone.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.—The annual meeting of this Branch will be held at the Kent and Canterbury Hospital on Thursday, May 24th, at 2.45 P.M., Dr. Parsons in the chair. The annual dinner will take place at the Fountain Hotel at 6 o'clock. Charge, exclusive of wine, 8s. 6d.; an extra charge of 2s. is made to those who take no wine. It is hoped that the dinner will be well attended, and members intending to dine are particularly requested to communicate with the Honorary Secretary by May 22nd so that adequate arrangements may be made. Agenda:—The usual business of the annual meeting. Mr. Brian Rigden: Notes of Two Abnormal Children. Dr. Bowles: On the Connection of Pyelitis with Renal Abscess. Dr. White: Tracheotomy in Diphtheria. All members of the South-Eastern Branch are entitled to attend these meetings and to introduce professional friends.—THOS. F. RAVEN, Honorary District Secretary, Barfield House, Broadstairs.

LANCASHIRE AND CHESHIRE BRANCH.

A SPECIAL meeting of the members of this Branch was held at Liverpool, on May 11th, to consider the report of the committee appointed "to watch the progress of, and to oppose, any proposed legislation for the registration of midwives." The President, Mr. JAMES TAYLOR (Chester) occupied the chair, and there were 180 members of the Branch present.

Confirmation of Minutes.—The SECRETARY, Mr. James Barr, read the notice convening the meeting and the minutes of the last meeting, which were approved and adopted.

Replies to Communications from the Branch.—Replies to the former communications of the Branch were received from the Right Hon. A. J. Balfour, M.P.; Mr. Ralph Neville, M.P.; the Secretary, General Medical Council; the Birmingham and Midland Counties Branch; the South-Eastern Branch; the Metropolitan Counties Branch; South Midland Branch; the Londonderry Branch; Liverpool Medical Institution; the London and Counties Medical Protection Society; the Association of Certifying Surgeons; the Incorporated Medical Practitioners' Association; the Midwives' Registration Association.

Report of the Committee.—The PRESIDENT having settled the order of procedure, the SECRETARY read the report of the committee.—Messrs. COLIN CAMPBELL and W. H. BARR moved and seconded the adoption of the report.—Drs. W. CARTER and A. WIGLESWORTH moved and seconded an amendment that the report be not adopted, and that the committee be discharged.—In the discussion which followed the following gentlemen took part: Drs. and Messrs. HOLDEN, DUNN, FORBES-ROSS, WOODCOCK, WALLACE, J. BRASSEY BRIERLEY, W. H. IRVINE SELLERS, SINCLAIR, and H. H. PRESTON.—On the amendment being put to the meeting, 71 voted for and 87 against. The original motion was then submitted, and carried by 83 against 65. The report was then proposed from the chair paragraph by paragraph.—Various amendments were proposed by Drs. HARRIS, MORGAN, MACFIE CAMPBELL, SINCLAIR, ARCHER, STOOKES, BRADSHAW, and WHITFORD.—Dr. MACFIE CAMPBELL entered a protest against the reception of the votes of the members of the committee, as they were pecuniarily interested in the passing of the report.—Eventually the whole report was adopted, and when the last resolution was put from the chair there were 55 members present. The report, as adopted by the Branch, stands as follows:

Report of the Branch Committee appointed at a special general meeting of the Lancashire and Cheshire Branch of the British Medical Association, held at Manchester on March 9th, 1894, "to watch the progress of, to and oppose, any proposed legislation for the registration of midwives."

To the President and members of the Branch:

Your Committee has met on three occasions to consider the objects for which you appointed it and begs to present its report to a special general meeting of your Branch for your consideration and adoption.

That inasmuch as those persons interested in the proposed formation of a new order of midwifery practitioners are making very strong efforts to push their scheme, and have secured a large fund, and a report from a Select Committee of the House of Commons, your Branch Committee recommends that immediate and vigorous action be taken by your Committee to oppose any proposed legislation for the creation of such new order of midwifery practitioners.

The British Medical Association, according to its memorandum, is formed to promote "the maintenance of the honour and interests of the medical profession," and its funds, and those of your Branch are available for such objects. In no way can these objects be better carried out than by opposing a scheme which would, if adopted:

1. Impose upon the public a number of partially educated persons as duly authorised to practise one of the most important branches of medicine, namely, midwifery; and this without any demand from the public; for we are aware that if any demand exist for such proposed legislation, it is from those who, we contend, are interested in lecturing, or granting these certificates or diplomas in midwifery.

In this connection it is constantly asserted that the number of practitioners in this country is insufficient to attend all confinements. This is inaccurate. During the year before the passing of the Medical Act, 1858, which abolished the single qualification in medicine, in surgery, and in midwifery, the proportion of practitioners to confinements was as 1 to 54.7; now, owing to the increase of medical men and women, and the marked decrease in the general birth rate, it is as low as 44.4 confinements.

2. Diminish the security of life among pregnant and puerperal women and infants, by legally placing them in charge of partially educated persons, who—as a statutory penalty has not been provided—might attempt to perform the most difficult and dangerous operations in midwifery.

3. Degrade and demoralise the profession of medicine by placing it in contact with, and also on a quasi-equality with, an inferior order of midwifery practitioners, and in direct competition with it.

Therefore your Branch Committee asks the Branch to place at the disposal of the Committee a sum of money not exceeding £250, to be taken out of the reserve fund of this Branch (which on December 31st, 1893, amounted to £546), so as to enable your Committee

A. To defray the present and future expenses incurred by your Committee in opposing any proposed legislation for the registration of midwives; such money to be advanced by the Honorary Treasurer of this Branch, on the written request being made to him signed by the Chairman, Honorary Secretary, and four members of the Branch Committee.

B. To diffuse knowledge on this proposed legislation among the profession, including our Branches, medical societies, and corporations.

C. To circulate information among members of both Houses of Parliament, by deputation, petition, or otherwise, and other public representative bodies, such as county councils, etc.

D. And that this Branch, through your Committee, petition the General Medical Council and the medical authorities under the Medical Acts to make a rule to the effect that any medical practitioner (unless such as now possess statutory powers to confer registrable medical qualifications) who, after the making of such rule, grants any certificate, diploma, or authority to any person which in any way professes to empower the holder of such certificate, diploma, or authority to practise any branch or part of midwifery, or of medicine, or of surgery, shall be held by the General Medical Council, or medical authorities under the Medical Acts, to be guilty of "infamous conduct in a professional respect," and that the name of any practioner so offending shall, on due proof being given to the satisfaction of the General Medical Council or medical authorities, be removed from the *Medical Register* and the roll of the medical authority, and that such petition be signed, on behalf of this Branch, by the President and Honorary Secretary of this Branch and the Chairman and the Honorary Secretary of your Committee.

E. That a copy of your Committee's report be forwarded forthwith by the Honorary Secretary of this Branch to the Council and the Parliamentary Bills Committee of our Association, to each of our home Branches, and to each medical society, asking each of the Branches and societies to appoint a committee, and to vote a sum of money, so that each committee may oppose any proposed legislation for the so-called registration of midwives.

Vote of Thanks.—A vote of thanks to the President terminated the proceedings of the meeting.

DORSET AND WEST HANTS BRANCH.

THE spring meeting of this Branch was held at Wimborne on May 9th, Mr. WALTER WYKE SMITH, President, in the chair. Thirty-one members and visitors were present.

Vote of Thanks to Retiring President.—A vote of thanks was accorded to Dr. F. C. G. Griffin for his services during his year of office.

Council and Representatives.—Dr. G. H. Batterbury (Wimborne), Dr. C. Childs (Weymouth), Mr. G. W. Daniell (Blandford), Dr. J. Davison (Bournemouth), Dr. A. McLean (Weymouth), and Dr. W. V. Snow (Bournemouth), were re-elected members of the Branch Council for the ensuing year: Mr. C. H. W. Parkinson (Wimborne) was re-elected representative on the Council of the Association and on the Parliamentary Bills Committee.

New Members.—The following gentlemen were elected: Dr. George Herbert Staines Daniell (Blandford), Dr. William Davidson (Bournemouth), and Mr. George Burton Robinson (Forston Asylum).

Next Meeting.—It was decided to hold the summer meeting at Bournemouth on July 4th.

Midwives' Registration Association.—Communications were read from the Lancashire and Cheshire Branch, with resolutions against the registration of midwives, and from the Secretary of the Midwives' Registration Association, and it was resolved that this meeting approves of the resolutions passed by the Lancashire and Cheshire Branch, and instructs the representative of the Dorset and West Hants Branch to

lay the views of the Branch before the Parliamentary Bills Committee.

Amendment of the Penal Clauses of the Medical Acts.—A communication was received from the Chairman of the Parliamentary Bills Committee, and it was resolved that this meeting approves generally of the draft amending clauses.

Discussion.—A discussion on the advent and cessation of the catamenia was opened by the PRESIDENT, and taken part in by Dr. MOORHEAD, Mr. GRAHAM, Mr. MARSH, Dr. SNOW, Mr. CURME, Dr. LAWRIE, Dr. MACDONALD, Dr. BATTERBURY, Dr. BACON, Mr. MAHOMED, and Mr. PARKINSON.

Communications.—Dr. CHILDS explained the principles, methods, and work of the Dorset Health Association, and a resolution approving of the same was adopted.—Dr. BATTERBURY exhibited an apparatus for Wry Neck.—Dr. MACDONALD exhibited the Brain of an Idiot Boy, aged 11, showing pathological changes met with in general paralytics, and suggested that the case might be one of congenital general paralysis.

Dinner.—The members dined together at the King's Head Hotel.

SOUTHERN BRANCH: ISLE OF WIGHT DISTRICT.

THE annual meeting of this District was held at the Royal Pier Hotel, Sandown, I.W., on April 26th; Dr. J. L. WHITEHEAD, President, in the chair.

Election of Officers.—After briefly reviewing the work of the year, Dr. Whitehead vacated the chair for the new President, Mr. C. Meeres, of Sandown. The following officers were elected:—*President-Elect:* Undecided. *Vice-President:* Dr. J. L. Whitehead. *Secretary and Treasurer:* Dr. Robertson (re-elected). *Representative to the Branch Council:* Dr. Groves.

President's Address.—Mr. MEERES then gave an address on Glances Back through Fifty Years of Medical Practice. He dwelt upon the many changes in medical theories and practice which has taken place since his own entrance into the profession, and also to some revivals under new names of forgotten or exploded systems. He instanced the recent development of hypnotism, as a resuscitation of the mesmerism of his youth, and also alluded to the deceptions practised on Elliotson at University College Hospital. He referred, also, to the discussions upon opium eating, stimulants, and infectiousness of cholera, all of which were but repetitions of those of his youth; he then noticed the almost universal practice of blood-letting then contrasted with almost total abandonment now. In allusion to the advance of hygienic science, he maintained that the enormous expense of isolation hospitals for small-pox might well be saved by a rigid enforcement of vaccination (and revaccination where necessary), and said that he himself had never during fifty years, when called to small-pox cases, adopted any other precaution against its spread than vaccinating or revaccinating the other members of the household. As a result he had never but once had two cases in the same family—the one second case being that of a man whom he did not vaccinate because he had had variola already. He then proceeded to defend the use of river water from his own experience of the diminution—almost extermination—of typhoid fever from Sandown since the introduction of the present Isle of Wight Waterworks Company's supply. He concluded by regretting that the preliminary education of medical students had not kept pace with the great advance in the more purely professional branches of education.

Case of Viper Bite.—Mr. W. E. GREEN (Sandown) read notes of this case, which will be published in a subsequent number.

The meeting then terminated.

NORTH OF IRELAND BRANCH.

THE spring meeting of this Branch was held at Belfast on April 26th; Dr. J. CAMPBELL HALL, President, in the chair. There were forty-one members present.

Confirmation of Minutes.—The minutes of last meeting were read and confirmed.

New Members.—Dr. Thomas Bowen Pedlow (Lurgan), Dr. N. O. M'Connell (Killyleagh), Dr. M. J. Nolan (Downpatrick), and Dr. Elias B. Purdon (Belfast) were elected members of the Branch.

Midwives' Registration Association.—A communication from the Secretaries of this Association was considered and marked "read."

Communications.—Dr. DONNAN (in the absence of Professor SINCLAIR) showed a patient who had recently undergone Excision of the Head of the Humerus for Recurrent Dislocation of the Shoulder.—Dr. ST. GEORGE (Lisburn) read a paper on Croupous Pneumonia, its Symptomatology and Pathology. Drs. SMILEY, J. A. LINDSAY, and CALWELL discussed some of the points raised; and Dr. ST. GEORGE replied.—Dr. W. G. MACKENZIE showed two cases of Excision of the Elbow; two cases of Excision of the Knee of four and five years' standing; and a case of Re-excision of the Knee. Dr. O'NEILL and the PRESIDENT congratulated Dr. Mackenzie on the results of his operations.—Dr. ST. CLAIR BOYD read notes of a case of Cæsarean Section performed by him, and showed the Child.—Dr. CALWELL read notes of a case of "Erythème Induré des Scrofuleux de Bazin," with complications.—Dr. JOHN CAMPBELL showed Champetier de Ribes's Bag for Inducing Premature Labour, and Ellis's modification of the same.

GRANTS FOR SCIENTIFIC RESEARCH.

THE Council of the British Medical Association desire to remind members of the profession engaged in researches for the advancement of medicine and the allied sciences that they are prepared to receive applications for grants in aid of such research. Applications for sums to be granted at the next annual meeting must be made on or before June 15th in writing addressed to the General Secretary, at the office of the Association, 429, Strand, W.C. Applications must include details of the precise character and objects of the research which is proposed.

Reports of work done by the assistance of Association grants belong to the Association.

Instruments purchased by means of grants must be returned to the General Secretary on the conclusion of the research in furtherance of which the grant was made.

RESEARCH SCHOLARSHIPS.

The Council of the British Medical Association are prepared to receive applications for one of the three Research Scholarships which is vacant, of the value of £150 per annum, tenable for one year, and subject to renewal by the Council for another year.

Applications to be sent in writing addressed to the General Secretary on or before June 15th, stating the particulars of the intended research, qualifications, and work done.

FRANCIS FOWKE, *General Secretary.*

429, Strand, London, May 8th, 1894.

SPECIAL CORRESPONDENCE.

PARIS.

Typhoid Epidemics and Polluted Water.—Enteritis and Unboiled Milk.—The Medical Staff of the Bureaux de Bienfaisance.—The Society for the Assistance of the Blind.—General News.

DR. LANCEREAUX, in a paper read before the Paris Academy of Medicine, on the Typhoid Fever Epidemics since 1876, showed that they were due to the use of impure drinking water. In 1880 he pointed out the important part played by drinking water in these epidemics, thus furnishing fresh proof confirming Mr. Ernest Hart's views concerning water as a vehicle of disease.

The *International Review* reports three cases of enteritis resulting from drinking unboiled milk. The cow which had given the milk was suffering from hæmorrhagic enteritis. Cultivations made from the excreta of the cow and those of the patients furnished the same bacillus, but the milk and blood of the animal did not contain this bacillus; therefore it is concluded that the milk was contaminated by contact with the animal's excreta.

At a municipal council meeting M. Weber asked why the doctors of the *bureaux de bienfaisance* kept the patients waiting so long for their visit, and demanded that these medical officers should be called upon to live in the same district as their patients. The Prefect of the Seine answered that the

mayors of these *arrondissements* are directed to keep a watchful eye on the visits of the medical staff of the *bureaux de bienfaisance*.

M. Spuller, the Minister of Public Instruction, attended the general meeting of the Society for Helping the Blind. Dr. Laborde, the Treasurer, stated that the last year's sale of the work done by the blind realised a larger sum than in preceding years. The moral condition of the blind under the protection of the Society is excellent.

Dr. Deperris has bequeathed £1,600 to the Paris Academy of Medicine. The interest is to be used to found a prize which every ten years is to be given to the authors of the best work on anæsthetics and diseases of the urinary organs.

A subscription is organised to find funds necessary to complete the hospital at Auteuil built by the Association des Dames Française. A sum of 9,000 francs is required. Female ambulance pupils will receive their instruction at this hospital.

BERLIN.

Jubilee of the Berlin Obstetrical and Gynæcological Society.—Jubilee of Professor Hermann Munk.—A Dietetic Experiment.

IT is fifty years since the Berlin Society for Gynæcology and Obstetrics was founded, and its jubilee was celebrated on May 9th by the present members. The proceedings consisted of what in Germany is called a "Fest-sitzung" or festival meeting of the society, the hall of the Langenbeck House being decorated with plants in the midst of which stood the bust of Carl Mayer, the founder of the Society, flanked by busts of Carl Schroeder and Eduard Martin, two of the most distinguished among the deceased members. The opening address of the Honorary President (Professor Gusserow) had for its subject the history and development of gynæcology. This academical address was not without its personal note, as towards the close the speaker gave his recollections of Mayer, Martin, and Schroeder. A list of newly-elected honorary members read out contained the names of Mr. Lawson Tait (Birmingham), Professor Pasquali (Rome), Dr. M. Pozzi (Paris), Dr. Slavianski (St. Petersburg), and Professors Chrobak (Vienna), Winkel (Munich), and Fritsch (Bonn). Papers were read by August Martin and J. Veit on subjects appropriate to the occasion, and the proceedings terminated with a great number of congratulatory speeches by delegates of the medical faculty of the University and many medical societies. Among the speakers were Virchow, v. Bergmann, v. Bardeleben, Waldeyer, Lawson Tait, Rohé (Eatonsville, America), Slavianski, and others.

Another jubilee celebrated in the Berlin faculty this month was that of the twenty-fifth anniversary of Professor Hermann Munk's installation in the professorial chair. Professor Munk is celebrated chiefly for his researches on localisation in the brain. We owe to him the knowledge of the centre for hearing, for smelling, and for the sensation of sound. He is a member of the Academy (which answers about to F.R.S. in England), and, with du Bois Reymond, presides over the Berlin Physiological Society.

The medical department of one of the infantry regiments of the Guards stationed in Berlin is engaged in carrying on gastronomic experiments, not on the usual patient laboratory animals but on medical students (candidates for the army surgeon examination) who volunteer to serve as subjects of experiment. These young martyrs to science undertake to eat and drink nothing beyond the regimental rations during the period of observation, which lasts from a fortnight to four weeks. Daily they may be seen in full equipment marching out with the regiment sharing its fatigues to the full. Immediately on their return to barracks every day they turn into the Charité Hospital, where their temperature is taken—pulse, body weight, amount of perspiration, etc., registered, and even the stomach pump used on some of the most devoted. These experiments, which are carried out with true German thoroughness, are to furnish data for further improvement in the nutritive value of food supplied to soldiers on the march.

THE late Professor Albert Luecke has left his valuable collection of surgical instruments and the sum of 10 000 marks to the Medical Faculty of the University of Strassburg.

CORRESPONDENCE.

THE "CHEAP" DOCTOR: A WORD IN DEFENCE.

SIR,—Dr. Welsford, in his article in the BRITISH MEDICAL JOURNAL of May 5th, adverting on the "cheap" doctor, states that at such a low fee as 6d. the doctor cannot pretend to practise his profession, nor can he spend time necessary for diagnosis. Now, whatever line of practice and treatment some cheap doctors may pursue, there is no doubt that many can and do give as much time and careful attention to their 6d. cases as is given by practitioners working in better neighbourhoods at higher fees. It is quite possible to examine a patient thoroughly, prescribe and dispense a suitable medicine for the case, charge 6d., and yet pay one's expenses and live in a poor neighbourhood. The lower fee, or, as Dr. Welsford says, "the threepenny practice," is, of course, not feasible, or could only be carried out as a charitable institution, supported by contributions, or by the doctor's private means.

Before proceeding to defend the "cheap" doctor let us look at the subject from the view of the poor patient. Let us take the case of any workman earning 25s. a week. He is suffering, for example, from bronchitis, and wishes to seek advice. He has two courses open to him—either to attend a hospital or see the "cheap" doctor. He chooses the former, absents himself from his work, and presents himself at the out-patient department: possibly he has mistaken the day, and finds women alone can be seen. Here is half a day lost. The next day, after waiting, it may be, two or three hours, he is seen by the visiting physician, after which, to use his own words, he is "mauled about by a lot of boys" (this is verbatim from one of our patients), is prescribed for, and ultimately, after waiting his turn, receives his medicine and goes. He has thus certainly lost one half day, possibly two, and is out of pocket 2s. at least. Working men and their wives, on whom devolves the care of family and home, cannot afford to lose this time. Many of them, after one visit to a hospital, recognise this fact—that it does not pay them to become out-patients unless recommended so to do by a doctor, or in cases requiring surgical aid.

And so they leave the hospital waiting rooms to the undisturbed possession of those who can afford to waste a half day, and to the general domestic staff of wealthy people, who on the strength of a minimum subscription paid to a hospital send their ailing servants (and *employées*) for treatment. The other course open to the poor patient is to go to the "cheap" doctor.

Let us now see how the "cheap" doctor can treat his cases at 6d. fees. The following are a few cases taken haphazard from our case book.

1. A. B. (marble polisher). Phthisis, pleurisy, and aphonia. *Treatment.*—Mist. begbii ℥vi. Cost 3½d. Ordered sinapism. *Note.*—He has ol. morrhuæ at home. Seen again three days later. Chest re-examined, and laryngoscopic examination. Rep. mist. Tr. benzoini co. ℥j. Sig. ℥j to hot water Oj, and inhale. Charged: first visit, 6d.; second, 1s.

2. C. D. Biliousness. Pil. hydrarg. R gr. vj. Seidlitz powder *B.P.* Charged 6d.

3. E. F. Congenital syphilis. Infant. R Hydrarg. c. cret. gr. xij. Sig. gr. ss., night and morning. Cost ½d. Charged 6d.

4. G. H. Follicular tonsillitis. R Liq. ferri perchlor. ℥j; pot. chlor. ℥ss; ac. hydrochlor. dil. ℥ij; glyc. et ac. rosæ ad ℥vj. Cost 1½d. Sig. ¼ part to be gargled and swallowed in equal part water. R Sol. mag. sulph. 1 in 2, mitt. ℥vj. Sig. ¼ part in hot water every morning. Cost ½d. Charged 6d.

5. X. Y. Morbus cordis. R Tr. ferri perchlor.; tr. digitalis āā ℥j; sp. æth. nit. ℥ij; aq. ad ℥vj. Cost under 1d. Sig. ¼ part t. rice daily. Charged 6d.

The cost of these preparations can be verified by any of your readers who will take the trouble to work out from their own prescription books any combination of drugs prescribed by them at the current prices quoted by any wholesale chemist.

This does not include the cost of bottles, etc.

So much for the cost of the drugs, which will show that the value of the medicines generally prescribed for ordinary ailments met with in general practice is so purely nomina

that the question of what a "cheap" doctor can afford to give his patients need hardly be considered. In fact he gives the poorer patients these medicaments, and charges only for his advice and time.

Now as to the time he can afford for each case.

His surgery hours are, we will say, from 9.30 A.M. to 1 P.M., and 6 P.M. to 9.30 P.M. Seven hours daily. Let us assume that he sees during that time forty patients; he can thus give a good ten minutes to each case, which at our initial low fee gives him £1 per diem. His afternoon is free to him to visit any cases that require to be seen at home, for which the "cheap" doctor charges as a rule from 5s. a week, according to the gravity of the case. (Purely surgical cases, other than quite minor ones, as a rule go of their own accord to hospital, as they are unable to pay even the bare cost of dressings, etc., or if seen by the doctor are advised to go there.)

In the *Lancet* of May 5th a senior physician to a public charitable institution, defending himself and colleagues from a charge of "rapid disposal of patients," states that he devotes two and a-half or three hours to some sixty patients; this shows an average of some three minutes given to each patient. Surely then the cheap doctor can see six or seven per hour, and give them more time than they get in an out-patient department.

In almost all cheap practices there is a fair percentage of patients who can afford and do pay higher fees than the working man. The practitioner makes few bad debts, his rent and expenses are low, he has no expensive establishment to keep up, and markets are cheap, so that an income of only £300 per annum would enable a single man, at all events, to live and enjoy such leisure time and holidays as he may get, with less regard to cost than his more aristocratic *confrère*, who can show on his books twice that income in the West End or a favourite residential suburb. He who practises in a poor neighbourhood has many opportunities of performing small acts of kindness and true charity, which has always been upheld as the first duty, and it should be pleasure, of him who enters the profession of medicine. If his work be done conscientiously and to the best of his ability he will command as much respect from the class amongst which he works, and will feel that he is doing his duty to his fellow man, quite as fully as he who works for higher fees amongst the wealthier classes.

In conclusion, we would ask, Are there none of our West End physicians carrying on cheap practices for cash in the East End and other poor neighbourhoods of London?—We are, etc.,

F. W. TOMS.
H. ATHILL CRUTTWELL.

Lever Street, E.C., May 9th.

MIDWIVES' REGISTRATION.

SIR,—I cannot assent to the comments of Dr. Colin Campbell on the resolution we unanimously passed on this question at our meeting on April 26th. The principles advocated by the Midwives' Registration Association are clearly these: That there should be registration, and that the education and registration of midwives should be under medical control and supervision. Surely nothing can be clearer than this. How can these principles be best carried out, so as to safeguard the interests of the profession and the public? I think we may be perfectly certain of this, that after the report of the Select Committee of the House of Commons legislation must come; and if we as a profession do not initiate such legislation, others who know much less about the matter will do it for us. Do not let us repeat the errors of the past, and give another illustration of the "political powerlessness of the profession."

Briefly, our suggestion to the Midwives' Registration Association was this: Draft a Bill, however roughly, put it before every Branch of the Association in the kingdom for their consideration, on their reports base an amended Bill, put it before the General Medical Council, and get it presented in Parliament. Surely this is beginning "at the right end of the stick."

Further, the discussion of any subject is not facilitated by such expressions as "false" and "gross impertinence."—I am, etc.,

A. SHEEN, M.D.,
Honorary Secretary to the South Wales and Monmouthshire Branch.

Cardiff, May 12th.

THE HYDERABAD CHLOROFORM INQUIRY.

SIR,—Will you kindly published the enclosed correspondence in your next issue.—I am, etc.,

EDWARD LAWRIE.

Hyderabad.

CHLOROFORM.—HYDERABAD STATE.

COPY NO. I.
No. 44 F. of 1894.

From the Residency Surgeon, Hyderabad.
To the Private Secretary to H. E. the Minister, Hyderabad.

Dated Hyderabad Residency, April 23rd, 1894.

SIR,—I have the honour to inform you that I have received a letter from Dr. Gaskell,* in which he intimates that he and Dr. Shore are ready to do some chloroform experiments in June, and that Professor Foster will place the physiological laboratory at Cambridge at our disposal if we wish to do experiments on our own account. Dr. Gaskell rightly presumes that the results of the conjoint experiments will be published together. I have also received a letter from Dr. Dudley Buxton,* in which he requests me to give demonstrations of the Hyderabad methods of chloroform administration at the University College Hospital, London.

2. Will you therefore be good enough to obtain the sanction of H. H. the Nizam's Government for two of the recently passed men, who are good average chloroformists, and as students assisted me in the Hyderabad cross-circulation experiments, to accompany me to England when I proceed on leave next month? The idea of performing experiments on my own account at Cambridge could not for obvious reasons be entertained; but I propose, with the Minister's position, to write to Dr. Gaskell and thank Professor Foster for his offer, and at the same time state that if Drs. Gaskell and Shore will repeat their cross-circulation experiments, His Highness's Government will be satisfied if they will allow us to give chloroform for them. With regard to Dr. Dudley Buxton's request, I will reply that I shall be happy to demonstrate the Hyderabad method of chloroform administration at University College Hospital; but I shall at the same time lay before Dr. Dudley Buxton the advisability of placing a certain number of cases and students at our disposal, in order that I may perform the necessary surgical operations while my own assistants give the chloroform, and thus, carry out in London precisely the methods which are followed here.—I have the honour to be, Sir, your most obedient servant,

(Sd.) EDWARD LAWRIE, M.B.,
Surgeon-Lieut.-Colonel, Residency Surgeon.

* Copies enclosed.

COPY NO. II.
No. 2,149 of 1894.

From Faridoonji Jamshedji, Esqr., Private Secretary to the Prime Minister, Hyderabad.
To Surgeon-Lieut.-Colonel E. Lawrie, M.B., Residency Surgeon, Hyderabad.

Dated Hyderabad, April 26th, 1894.

SIR,—I have the honour to acknowledge your letter No. 44 F., dated April 23rd, 1894, enclosing copies of Dr. Gaskell's and Dr. Dudley Buxton's letters inviting you to perform experiments at Cambridge, and to demonstrate your method of chloroform administration at University College Hospital, London.

2. The Minister has already issued orders for two of the recently passed men to accompany you to England, and His Excellency fully approves of the way in which you propose, in reply to Drs. Gaskell and Dudley Buxton, to demonstrate the Hyderabad method of giving chloroform in the laboratory at Cambridge, and in the operating theatre at University College Hospital.

3. The Minister has observed in the Hyderabad Commission's Report that you are "prepared to produce uniform effects with chloroform in any laboratory or operating theatre in the world." An opportunity is now afforded you of making good your declaration, and it only remains for His Excellency to add that the Nizam's Government will await the result with confidence and interest.—I have the honour to be, Sir, your most obedient servant,

(Signed) FARIDOONJI JAMSHEDJI,
Private Secretary to the Prime Minister.

*** With regard to the proposal in the last paragraph of Surgeon-Lieutenant-Colonel Lawrie's letter, we have received a communication from Dr. Dudley Buxton to the effect that he will lay the request before the proper authorities, but that it does not meet the desired conditions.

THE RECENT ELECTION TO THE ANNUAL COMMITTEE OF CONVOCATION OF THE UNIVERSITY OF LONDON.

SIR,—It has been claimed that the result of the recent election to the Annual Committee of the University of London was a victory for the party in Convocation in favour of the scheme of the Gresham Commissioners, and no doubt this was the case. It was, however, in addition a proof, if proof were wanted, that this annual election is capable of being greatly influenced by any body of graduates of sufficient reputation which may take the trouble to issue a list of selected candidates and to ask those members of Convocation of a certain way of thinking to vote for the selected names. In my personal experience this was done for the first time upon the present occasion. I have myself been a member of Convocation for some years, and have, with more or less benefit, attended many meetings of that body. I have, however, seldom taken the trouble to vote for the election of the

Annual Committee for three reasons: first, I have never been advised by circular or otherwise for whom to vote; secondly, as a rule the names of the candidates are to a great extent unfamiliar to me; and, thirdly, because I have been unable to understand the functions of the Annual Committee when elected. At the present election, however, I voted with much pleasure, first, because I was asked to vote; and, secondly, because to my mind the list contained more fairly representative names. For example, I noticed that my own school of St. Bartholomew's, which hitherto has been hardly represented upon this Committee, had the chance of securing several to represent the large number of London graduates educated there.

I, as an individual, therefore did not vote for the successful candidates because I like the scheme of the Gresham Commissioners in its entirety. I voted rather as one who, recognising the very great ability with which the report has been drawn up, am wishful to see the suggestions of the scheme modified in several directions, so that a *via media* may be found generally acceptable to the present members of the University of London as to other bodies. In the negotiations necessary for this purpose a representative Annual Committee is more likely to be useful than one elected "anyhow."—I am, etc.,

Wimpole Street, W., May 15th. V. D. HARRIS, M.D.

ARE JUDGES ABOVE THE LAW?

SIR,—I beg to offer you my very sincere acknowledgments for your kind article explanatory of my position in Anderson *v.* Gorrie and Others.

It will, I am sure, be satisfactory to all who have taken so very kind an interest in the case to learn that my solicitor has given notice of appeal against the judgment, and that the question with which your article is headed will now, in the course of two or three weeks, be brought to a decision under circumstances that show the doctrine of the immunity of judges, as it has come to be understood, in certainly as little favourable an aspect as those most opposed to it could desire.

The precise terms of the verdict taken from the certificate of trial are: "The jury find that the defendant Cook oppressively and with malice overstrained his judicial powers to the prejudice of the plaintiff and the wilful perversion of justice, and found a verdict for the plaintiff for £500."

I have not as yet found any case which extends the doctrine of judicial immunity to such circumstances, although I am bound to admit that the *obiter dicta* in some cases, and the opinions of some high authorities upon them countenance, for what they may be worth, so extreme an inference.

It would be out of place now that the matter is *sub judice* for me to enter into it from my own point of view, yet it was very clearly shown by counsel in the proceedings against the Dean of St. Asaph (State Trials) that no such consideration can be held to prevent Englishmen from discussing and maintaining the laws of their constitution or instructing their fellow subjects in them, as your leading article upon this subject in the BRITISH MEDICAL JOURNAL of May 12th must tend to do. I wish, however, to explain that this verdict and the judgment, should I be successful in obtaining a reversal of Lord Coleridge's decision, in no way affect or relieve me from the judgments of the Supreme Court of Trinidad and Tobago, which, unless I can obtain their reversal by appeal from that Court to the Judicial Committee of the Privy Council, remain in force against me with all their various consequences and humiliating records.

These cases in which my friends are endeavouring to help me, and which our Association has so warmly taken up, are in no respect *sub judice*, and of these and their present position full particulars will in due course be furnished by the Committee which, under the Presidency of the Earl of Stamford, has been formed to deal with them.—I am, etc.,

R. B. ANDERSON, F.R.C.S.Eng.

Mecklenburg Street, W.C., May 16th.

THE CHOICE OF AN ANÆSTHETIC IN OPERATIONS UPON ADENOID VEGETATIONS.

SIR,—I think it important that when, as is so often the case, enlarged tonsils have to be dealt with as well as post-nasal growths, the operation should be divided into two stages, the tonsils should be removed first, and the adenoids two or three weeks later. I have never yet removed tonsils and adenoids at one and the same sitting.

We have heard recently of several deaths—apparently from the anæsthetic—during the performance of this operation, and, doubtless, the locality has a good deal to say to it; in this respect much may be done by the very careful administration of the anæsthetic, and, above all, by the services of an experienced assistant in rapidly and efficiently sponging out the blood from the back of the pharynx, and preventing its entrance into the larynx. I do not think, however, sufficient stress has been laid upon the increasing frequency of the operation; many hundreds of cases must be dealt with yearly in this country, and the more numerous the cases the more chance of an untoward result.

I always use chloroform, and am happy in being able to obtain the services of one or two surgeons specially skilful in its administration. I have never used nitrous oxide gas, and, though I believe I am not generally considered a slow operator, I question very much if I could efficiently clear out a naso-pharynx full of adenoids in the brief period it allows. Neither do I use one instrument only, and am I convinced that with no one instrument can the growths be removed thoroughly. I first rapidly tear away with the post-nasal forceps all the larger masses that are readily seized, then I give a thorough scraping with the curette, and finish up with my finger-nail, which I wear specially long on purpose; the result being that I remove the growths very thoroughly, and that patients practically never return with symptoms of recurrence.—I am, etc.,

Norwich, April 30th. S. JOHNSON TAYLOR, M.B.

CHILDREN'S EYESIGHT.

SIR,—An error occurs in your report of my remarks at the last meeting of the Ophthalmological Society in the BRITISH MEDICAL JOURNAL of May 12th. I did not speak of the difficulty of obtaining examinations in schools owing to the want of appreciation on the part of the teachers, but, on the other hand, I referred to the increasing interest which teachers displayed, in my experience, in the question of the children's eyesight.

I shall be obliged if you will kindly insert this correction.—I am, etc., SIMEON SNELL.

Sheffield, May 14th.

THE EDUCATION OF WORKHOUSE CHILDREN.

SIR,—It may be of interest to record that the Halifax Board of Guardians do not stand alone in the education of their workhouse children, for the children of the Rugby Union for the last two or three years have been educated in a similar manner by being sent to the nearest parish schools (we have no Board schools in Rugby), dressed in similar clothes to the other scholars, so that none of the other children know from whence they come. The system works admirably.—I am, etc.,

CLEMENT DUKES, M.D.Lond.,
Justice of the Peace for the County of Warwick.

TREATMENT OF DIPHTHERIA IN BABIES.

SIR,—The BRITISH MEDICAL JOURNAL of April 21st publishes, on p. 852, an abstract of my address delivered before the eleventh International Medical Congress. In it I meet with the following sentence: "Interference by tracheotomy in diphtheria is pernicious, except in the case of children of a certain age and of a submissive disposition."

This statement, Mr. Editor, is based on a misapprehension, which I trust you will correct by admitting this brief note. What I objected to in my address was the forcible opening of the mouth, for the purpose of brushing, swabbing, and cauterising the throats of frightened, crying, resisting, struggling babies, who exhaust what is left of former strength, and have been known to die while fighting against violence and brutal force.—I am, etc.,

New York, May 2nd. A. JACOBI, M.D.

ASSISTANT MEDICAL OFFICERS IN ASYLUMS.

SIR,—The scheme proposed by Surgeon-Lieutenant-Colonel Evatt in the BRITISH MEDICAL JOURNAL of May 12th would

no doubt be the proper remedy for the grievances of which the junior officers in asylums complain. The proposal forms an appropriate appendix to that I have developed in two papers contributed to a contemporary, wherein is sketched forth the creation and working of a civil and colonial medical service. This subject, which has already received the approval of some of our senior members, I hope to introduce by resolution at the next meeting of the Association. The pamphlet—called "The State and the Doctor"—is now on sale. I should be pleased to hear from any members who are anxious to expedite the formation of such a service, particularly from such as could influence politicians.—I am, etc.,

Bournemouth, May 15th. A. G. S. Mahomed.

MEDICO-LEGAL AND MEDICO-ETHICAL.

QUEEN'S BENCH DIVISION.

(Before Mr. Justice Wright and Mr. Justice Collins.)

Steel *v.* Ormsby.

This case raised a question of considerable importance as to the right of persons not medical men to assume the title of "M.D.," the usual description of a doctor of medicine or physician in this country. It was an appeal against a conviction by magistrates, at Houghton-le-Spring, Durham, under the Medical Act, 1858 (21 and 22 Vict., c. 90, s. 40), for unlawfully assuming the title of "M.D." The enactment is that any person who shall wilfully and falsely pretend to be, or take the name or title of, a physician or doctor of medicine, etc., or any title implying that he is recognised by law as a physician or practitioner in medicine shall, upon summary conviction for any such offence, pay a sum not exceeding £20. The defendant resided at Hetton-le-Hole, and was a working coalminer, and he had resided there, and had, when requested, visited sick persons and supplied them with medicines. He was charged under the above enactment with having wilfully and falsely taken the title of M.D., thereby implying that he was registered under the Medical Act of 1858. The defendant had signed certificates of death and other medical certificates, adding the letters "M.D." and "B.C.," although his name does not appear in any register showing that he is registered under the Medical Acts, and he did not hold any diploma entitling him to be so registered. It was proved on his behalf, however, that he held a certificate which had been given to him by a joint stock company, duly incorporated and registered under the Companies Act of 1882, called the General Council of Safe Medicine. The certificate was in these terms: "The General Council of Safe Medicine, incorporated 1893, Dr. Younger, M.D., (U.S.), President, etc. The Magnetic and Botanic School of Safe Medicine is incorporated to train and educate its members in medical botany, organic magnetism, etc. We having satisfied ourselves that Joseph Steel, of Hetton-le-Hole, Durham, sustains a good moral character, and he having exhibited satisfactory evidence of his qualifications in the various branches of practical, magnetic and botanic safe medicine, therefore we do hereby certify that the degree of M.D. (B.C.) is awarded to Joseph Steel, who is hereby admitted to the Fellowship of Doctor of Botanic Medicine, 15th August, 1893." It was also proved that the defendant had on his door plate the words "Joseph Steel, M.D., B.C., Botanic Physician," that is, "M.D. of the Botanic College," and that he had stated that he was not registered. His solicitor cited "Ellis *v.* Kelly (30 *L. J.*, 35), and contended that there was no evidence that he had infringed the Act: but the magistrates, having their attention directed to the "Queen *v.* Baker" (56 Justice of the Peace, 407, and 60 *Law Times*), found as a fact that the defendant had wilfully and falsely taken the title of Doctor of Medicine, thereby implying that he was registered under the Act; and they, accordingly, convicted him, but stated a case, on which he appealed. Mr. Crump, Q.C. (with Mr. W. M. Thompson), argued on his behalf, and contended that he was entitled to assume any description or title, provided he did not assume to be registered under the Act. He cited "Andrews *v.* Styrop" (26 *Law Times Reports*) and "The Queen *v.* Baker" (17 *Cox's Criminal Cases*), and contended that the statement of the defendant here was true for he had a diploma, and he in no way represented that he was registered under the Medical Act. (Mr. Justice Wright pointed out that the magistrates had expressly found out that the defendant had falsely represented that he was an M.D. (a Doctor of Medicine), implying that he was registered under the Act, adding that there was abundant evidence of it.)

Mr. Muir Mackenzie, who appeared for the prosecutor, pointed out that the certificates given by the defendant were such as could only be given by duly qualified medical practitioners, and signed himself in one of them "M.D.London," which meant a Doctor of Medicine under the diploma of the London College of Physicians, or a regular medical practitioner. This case was quite different from "Ellis *v.* Kelly," where the man had a medical diploma; it was really governed by Andrews *v.* Styrop (26 *Law Times Reports*), in which the judges rather retracted their former opinion, the foreign body referred to as having given the diploma not having really authority to confer it. So here there was a mere certificate of a joint stock company, without any pretence or medical qualification, or any examination to test it. The Queen *v.* Baker is in point.

Mr. Justice Collins: There the man put "registered."

Mr. Muir Mackenzie: It did not turn on that, for he was registered.

Mr. Justice Collins: Not as M.D., and the court thought that he represented that he was so.

Mr. Muir Mackenzie: It was not a question of registration but qualification; they are different. It is a question of fact, not of law.

Mr. Crump, in reply: It is a question of the construction of the statute. What is the meaning of "wilfully and falsely"? The defendant truly described himself on his brass plate as "botanic physician" and M.D. of the Botanic College, which is all true. There is nothing false in his description, and he did not assume to be registered. The court, however, upheld the conviction.

Mr. Justice Wright said he was unable to see any ground for any doubt or difficulty whatever. The section, no doubt, required a statement to be made by the defendant false in fact and known by him to be so. The magistrates had found as a fact that the defendant had wilfully and falsely described himself as M.D., or a Doctor of Medicine. The evidence was that the defendant, a collier, had got a certificate from a bogus institution which pretended to give diplomas, thereby defrauding the public, and thus had set up in business as a doctor, giving certificates such as could only be properly given by regular medical practitioners, and signing them as M.D., adding B.C. If he had described himself in terms as "botanical physician," or "doctor of a botanical college," it might have been otherwise, but there were only the letters B.C. following the M.D. On the whole he thought there was evidence that the man had wilfully and falsely described himself as M.D., and thought the conviction must be upheld.

Mr. Justice Collins concurred, observing that some doubt raised by expressions of Mr. Baron Bramwell in Ellis *v.* Kelly had been removed by later cases; it was a question of fact. He thought that it was quite impossible to hold that there was no evidence on which the magistrates might not find, as they had done in a case in which the defendant had signed medical certificates which could only lawfully be given by regular medical practitioners, signing himself "M.D.," and having no diploma or degree, but only some certificate given by some bogus institution.

Appeal accordingly dismissed.

WHOLESALE DENTISTRY.

A curious glimpse into a certain—it may be hoped very rare—class of dental practice was afforded by an action recently brought by a servant for damages. She desired to consult a Mr. Parkinson, whose name is on the *Dentists' Register* as in practice before the passing of the Dentists Act, but was in fact seen by a Mr. Ernest Harrison, whose name does not appear on the *Dentists' Register*. She desired to have certain decayed teeth out, at most it would seem two or three, but Mr. Harrison having administered ether or chloroform (he is reported to have stated in evidence that he had forgotten which), removed all the teeth she had to the number of twenty. The jury awarded her damages to the amount of £150, and this sum, together with the publicity given to his very drastic methods, may probably have the effect of diminishing considerably the number of cases in which he will have the opportunity of following it in the future. Mr. Parkinson failed to see the patient himself, it was stated, because he was ill, but the circumstances disclose a method of practice which appears to come very near "covering," and the case is one into which the General Medical Council ought to make inquiry. Another point in the case calls for some comment. It is surprising to find a member of the medical profession giving testimony in favour of an unregistered practitioner of dentistry who practises so far in independence of his alleged principle as to undertake an operation so serious as the removal of all the teeth from the jaws of a young woman without consultation. The dentists are making great efforts to rid themselves of unqualified practitioners, and in this enterprise deserve all the support which the members of the medical profession can give.

NEW METHODS OF TREATMENT AND THE LAW.

The advocates of the Cour de Paris, at a recent conference, debated the following question: Can the medical practitioner who, wishing to try a new method of treatment without his patient's knowledge, has caused the death of the latter be prosecuted for homicide *par imprudence?* The meeting decided in the negative.

A "DOCTOR" CHARGED WITH FRAUD.

At the Bow Street police station, John Henry Nicholson, described as a medical man, was brought up recently for extradition charged with obtaining money by false pretences within the jurisdiction of the Belgian Government. The prisoner was arrested on May 10th at 4, Adelaide Place, by Sergeant Williamson, of Scotland Yard. He there went in the name of Dr. Hale, and he had a room at Rathbone Place, where he was known as Dr. Nicholson. He advertised electric belts and eardrums, received letters from all parts of the kingdom. He lives at Ealing, and until recently had a farm at Beckenham. The prisoner was remanded. We do not find the name of this person on the *Medical Register* for 1894.

CONSULTATIONS AND THE SUBSEQUENT CARE OF PATIENTS.

W. J. S. and W. R. H.—A dispassionate consideration of the statement of case and lengthy correspondence which has passed between B. and A. in relation to C. leaves no reasonable doubt upon our mind that, however unwittingly, the consultant in question (A.), in accepting charge of the patient (C.), contravened the true principle of medical ethics as laid down in the following "N.B." appended to Rule 12, cap. II, sect. 4, of the ethical *Code*:

"Should the practitioner who has been called in consultation be subsequently requested to take sole charge of the patient, he should courteously but firmly decline."

INTRODUCTION OF PARTNER.

F. W.—The most unexceptionable mode of announcing the introduction and residence of a partner is to transmit an autograph letter or a *fac simile* thereof on notepaper to the *bonâ-fide* patients of the transmitter; and further, our inquirer will act judiciously in personally introducing him to the local faculty.

NAVAL AND MILITARY MEDICAL SERVICES.

ARMY MEDICAL STAFF EXCHANGE.

The charge for inserting notices respecting Exchanges in the Army Medical Department is 3s. 6d., which should be forwarded in stamps or post office order with the notice. The first post on Thursday mornings is the latest by which these announcements can be received.

A SURGEON-MAJOR in a good station in Bombay Presidency wishes exchange for full or part "home" tour. Apply M. P. C., BRITISH MEDICAL JOURNAL Office, Strand, London.

THE ARMY HOSPITAL CORPS IN INDIA.

THE Indian Government, owing to financial difficulties, cannot budget this year for increased pay to the Native Army Hospital Corps. This is much to be regretted, as for many years past the inadequate pay of the men of this corps has been brought to the notice of the authorities. Moreover, the proper stamp of recruits is not obtained, and hence inefficiency, no small number of desertions, and the difficulty of maintaining discipline among the men. It has long been advocated that the medical staff corps should be available in India so as to provide permanent orderlies for bad cases, they would then come in between the Army Hospital Native Corps and the nursing sisters. Chance orderlies from corps for nursing the sick are for many reasons undesirable.

A scheme well worth considering is that of sending say four companies of the Medical Staff Corps to India, and distributing one to each of the army corps to be formed. A company might be located respectively at Rawal Pindi, Poonah, Bangalore, and Lucknow. This proposal, if carried out, would keep the Army Medical Staff officers in touch with the men of the Medical Staff Corps abroad as well as at home, and would supply a permanent staff of orderlies for hospitals of British troops.

THE NAVY.

THE following appointments have been made at the Admiralty: WILLIAM D. WODSWORTH and WILLIAM H. STEWART, M.D., Fleet Surgeons, to the *Royal Sovereign*, May 8th; JOHN TYNDALL, Fleet Surgeon, to the *Empress of India*, May 9th; JONATHAN SHAND, M.B., Surgeon, to Chatham Hospital, May 11th; ALEXANDER J. J. JOHNSTON, Staff Surgeon, and FREDERICK J. A. DALTON, Surgeon, to the *Blenheim*, May 26th; GEORGE LEY, Surgeon, to the *Active*, May 11th; and EVAN ST. M. NEPEAN, Surgeon, to the *Volage*, May 26th.

ARMY MEDICAL STAFF.

SURGEON-CAPTAIN H. P. G. ELKINGTON has been appointed Medical Officer at the Tower of London and has assumed his duties there. This appointment, hitherto held by a retired officer, will in future be held by an officer on the active list.

Brigade-Surgeon-Lieutenant-Colonel G. J. H. EVATT has, we understand, been appointed Registrar and Secretary to the Principal Medical Officer at Netley.

Surgeon-Lieutenant-Colonel J. FRASER, M.D., is promoted to be Brigade-Surgeon-Lieutenant-Colonel, *vice* W. A. Catherwood, M.D. Brigade-Surgeon-Lieutenant-Colonel Fraser's prior commissions are thus dated: Assistant-Surgeon, March 31st, 1868; Surgeon, March 1st, 1873; Surgeon-Major, March 31st, 1880; and Surgeon-Lieutenant-Colonel, March 31st, 1888. He was engaged in the Zulu war in 1879, and in the subsequent operations against Sekukuni, including the capture of the stronghold (medal and clasp), and in the Boer war of 1880-81, when he had medical charge of the fort at Standerton during its investment.

Brigade-Surgeon WILLIAM ROBERTSON, M.B., died at Darle, Dale, Matlock, on April 3rd. He was appointed Assistant-Surgeon, March 31st, 1865; Surgeon, March 1, 1873; Surgeon-Major, March 31st, 1877; and Honorary Brigade-Surgeon, on retirement, March 27, 1886.

The death is also announced of Deputy-Surgeon-General ST. JOHN STANLEY, which event took place on May 4th at Wrexham. His commissions were as follow: Assistant-Surgeon, February 24th, 1854; Surgeon, August 5th, 1864; Surgeon-Major, March 1st, 1873; Brigade-Surgeon, March 23rd, 1881; and Honorary Deputy-Surgeon-General, on retirement, February 21st, 1882. He served in the Eastern campaign in 1854-55, and was at the battles of Alma and Inkerman and at the siege and fall of Sebastopol, receiving the medal and three clasps and the Turkish medal.

Surgeon-Colonel A. C. GAYE died at Bangalore, Madras, on April 20th, at the age of 59. He entered the service as Assistant-Surgeon, October 11th, 1859; became Surgeon, March 1, 1873; Surgeon-Major, February 12th, 1875; attained the rank of Lieutenant-Colonel October 11th, 1879; was made Brigade-Surgeon, November 14th, 1885; and Surgeon-Colonel, September 16th, 1891. He served with the force under Major-General Colborne against the Malays in Perate in 1875-76, and was present at the capture of Kinta (mentioned in despatches, medal with clasp). He was also with the Southern Afghanistan Field Force under Major-General Phayre in 1880, and received the Afghan medal. He went to India in December, 1891, and after serving some time at Sirhind was made Principal Medical Officer there, and was soon after transferred to the charge of the Belgaum and Bangalore Districts, Madras, which post he occupied till his decease.

Deputy-Inspector-General HENRY DOWNES died at Tiverton on April 28th, aged 74. He was appointed Assistant-Surgeon November 1st, 1839; Surgeon, January 19th, 1849; Surgeon-Major, September 7th, 1855; and Honorary Deputy-Inspector-General, on retirement on half pay, August 7th, 1866. He served in the Crimea from November 20th, 1854, including the siege and fall of Sebastopol, and received the medal with clasp, the Turkish medal, and the fifth class of the order of the Medjidie.

Assistant-Surgeon T. H. PICKERING died at Monte Carlo, February 12th last. His commission was dated March 31st, 1865; and he was placed on half pay May 29th, 1869.

Surgeon-Colonel J. COLAHAN, M.D., is promoted to be Surgeon-Major-General, *vice* W. Collis, retired. Surgeon-Major-General Colahan entered the service as Assistant-Surgeon, May 25th, 1858; became Surgeon, March 1st, 1873; Surgeon-Major, April 1st, 1873; Brigade-Surgeon, July 16th, 1881; and Surgeon-Colonel, October 16th, 1889. He has no war record in the Army Lists.

Brigade-Surgeon-Lieutenant-Colonel C. F. CHURCHILL, M.B., is promoted to be Surgeon-Colonel, *vice* J. Colahan, M.D. Surgeon Colonel Churchill's previous commissions are dated as follow: Assistant-Surgeon, March 31st, 1864; Surgeon, March 1st, 1873; Surgeon-Major, April 28th, 1876; and Brigade-Surgeon-Lieutenant-Colonel, February 6th, 1889. He also has no war record.

Brigade-Surgeon-Lieutenant Colonel W. A. CATHERWOOD, M.D., is promoted to be Surgeon-Colonel, *vice* A. C. Gaye, deceased. Appointed Assistant-Surgeon, October 2nd, 1865, he became Surgeon, March 1st, 1873; Surgeon-Major, October 2nd, 1877; and Brigade-Surgeon-Lieutenant-Colonel, April 7th, 1889. He was in the Ashanti war in 1873-74 (medal with clasp), and in the Soudan expedition in 1884 under Sir Gerald Graham as Principal Medical Officer at the base (promoted to be Surgeon-Major with relative rank of Lieutenant-Colonel, mentioned in despatches, medal, and Khedive's star).

Surgeon-Lieutenant-Colonel A. ANDERSON is promoted to be Brigade-Surgeon-Lieutenant-Colonel, *vice* C. F. CHURCHILL, M.B. Brigade-Surgeon-Lieutenant-Colonel Anderson dates as Assistant-Surgeon from October 1st, 1867; as Surgeon from March 1st, 1873; as Surgeon-Major from October 1st, 1879; and as Surgeon-Lieutenant-Colonel from October 1st, 1887. He served with an expeditionary field force under Colonel J. R. Mackenzie in Arabia from October 27th to December 20th, 1873, including the investment, surrender, occupation, and destruction of the Fort at Al-Hota, and subsequent march to Zaida in pursuit of Ally Bin Mana, the chief of Houshabi. He was also in the Afghan war in 1878-79 (medal).

THE INDIAN MEDICAL SERVICE.

SURGEON-CAPTAIN J. R. ROBERTS, Bengal Establishment, is appointed Agency-Surgeon at Gilgit, *vice* Surgeon-Major G. S. Robertson, who has been appointed British Agent.

Surgeon-Colonel W. P. WARBURTON, Bengal Establishment, is confirmed in his appointment as Principal Medical Officer, Assam District. Brigade-Surgeon-Lieutenant-Colonel A. STEPHEN will officiate for him during his absence in civil employ.

Brigade-Surgeon-Lieutenant-Colonel D. O'C. RAYE, M.D., is promoted to be Surgeon-Colonel from April 2nd. Dr. Raye entered the service as Assistant-Surgeon, March 31st, 1866, and became Brigade-Surgeon-Lieutenant-Colonel from September 26th, 1890. He is an Honorary-Surgeon to the Governor-General.

ARCHIBALD GRAHAM, M.D., H.E.F.C.S., late Deputy-Inspector-General of Hospitals, Bombay Army, died at Edinburgh on May 12th, at the age of 94.

The death is announced of Brigade-Surgeon BENJAMIN THOMAS SUFFREIN, as having occurred in February last. He was appointed Assistant-Surgeon, Madras Medical Department, July 27th, 1859; became Brigade-Surgeon, December 31st, 1885; and retired from the service, October 12th, 1890. He served with the Burmese Expedition in 1886-7, was mentioned in despatches, and received the Frontier medal with clasp.

The death is also announced of Surgeon ALOYS SPRENGER, M.D., Retired Bengal Establishment, at having happened in December last.

ARMY MEDICAL RESERVE.

SURGEON-LIEUTENANT E. A. HUGHES is promoted to be Surgeon-Captain.

THE YEOMANRY AND RIFLE VOLUNTEERS.

SURGEON-CAPTAIN J. F. D. WILLOUGHBY, South Nottinghamshire Yeomanry, is appointed Captain in the same corps, May 12th. Captain Willoughby joined the regiment as Surgeon December 22nd, 1888.

Surgeon-Lieutenant R. DENMAN, 1st Dorset Artillery (Southern Division Royal Artillery), has resigned his commission, May 12th.

Surgeon-Captain A. A. HOGARTH, M.B., 2nd Volunteer Battalion the Gloucestershire Regiment (late the 2nd Gloucester) has also resigned his commission from the same date.

Surgeon-Lieutenant J. A. JONES, 2nd Volunteer Battalion the Welsh Regiment (late the 1st Glamorganshire), is promoted to be Surgeon-Captain, May 12th.

THE HONG KONG MESS.

THE late President thereof writes: In some comments you stated the above mess had "collapsed" and "failed," and I fear these terms might be construed to mean that the mess broke down from debt, which was not the case, and might deter from the future institutions of medical messes. The mess was in the best part of Hong Kong, maintained entirely by its members in shares of 100 dollars each. It existed for four years without any official recognition, and was then voluntarily closed, and when wound up not only realised the capital

expenditure, but an excess of 10 dollars each to members over the entrance fees. The moral of the whole is that medical messes can be started and handsomely fitted up, and still pay their way; but the absence of official recognition and support detracts from their otherwise great social value.

*** We are very glad to hear the Hong Kong mess did not collapse but was voluntarily wound up. At the same time the absence of official recognition was undoubtedly the main reason for its disappearance. Until that is given medical messes cannot, of course, enjoy the *prestige* of military messes to whom official recognition is accorded. Of course it is an indefensible and invidious injustice that medical messes do not receive the same official support as accorded to the messes of small bodies of Royal Artillery and Engineers.

THE ADMINISTRATIVE DEADLOCK.

A CORRESPONDENT writes: Why should Surgeon-Major-Generals be retired at 60, while combatant officers of the same grade serve till 62? Their duties are not more onerous than those of the latter, while they enter the service at a greater age. He proposes optional retirement at present age rules, but an extension to 57 years for executive, and 62 for the administrative ranks. The extension to the latter age has been granted to officers serving in the Indian climate—why not elsewhere? Mr. Hanbury declares that for every four officers on the effective there are three on the non-effective list. Mr. Bentley declares the non-effective has grown from 57 to 88 per cent. of the effective vote, and regards that as a scandal.

*** According to actuarial calculations the medical non-effective vote has, we believe, passed its maximum and is already declining. The explanation of its size was the increase of establishments during the Crimean and Mutiny wars. The same thing happened in the decades following the Peninsular war, and will always happen unless acting commissions are given in war time. We fear both Mr. Hanbury and Mr. Bartley, in their criticisms on the dimensions of the medical non-effective vote have always ignored the medical reserve embraced within it, in the shape of those liable to recall to service, and thus discount in advance the value of their opinions and threats. The proposed extension of age suggested by our correspondent would no doubt ease off administrative difficulties for a time, but would further retard promotion, already seriously delayed. The parallel between the age retirement of combatant and medical officers will only be complete when the latter have limited tenure of appointment in the grades of Surgeon-Colonel and Surgeon-Major-General. The full solution of the present administrative deadlock would no doubt involve very considerable changes.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.

Sanitary Condition of Highland Railway Stations and Steamboats.—Mr. WEIR asked the President of the Board of Trade whether his attention had been drawn to the statements made in the report of the medical officer of health for Ross-shire as to the insanitary condition of stations on the Highland Railway, and a lack of a sufficient supply of water at these stations for flushing and drinking purposes, and whether steps would be taken to require the Highland Railway Company to make satisfactory provision for the travelling public and the *employés* of the company.—Mr. MUNDELLA said the general manager of the railway telegraphed the Board of Trade that he had not seen the report of the medical officer referred to, but that the engineer of the line was engaged in improving the sanitary condition of the stations in Ross-shire. In reply to a further question by Mr. Weir as to the want of proper sanitary arrangements on board steamboats in the Highlands of Scotland, Mr. Mundella said he had communicated with the principal officers of the Board of Trade on the east and west coasts of Scotland, and was told that no complaints in regard to sanitary arrangements on board Highland steamers had been made to them. He had also obtained through the courtesy of the county clerk the report of the medical officer of health for Ross-shire, and the only reference to the subject he could find was "Another matter requiring attention and improvement is the condition of the sanitary arrangements, etc. on board steamboats." If any definite complaints were made to the Board of Trade they should be at once attended to.

Bovine Tuberculosis.—Mr. FIELD asked the President of the Local Government Board whether the report of the Commission on Bovine Tuberculosis was ready for publication, or when its issue might be expected.—Mr. SHAW LEFEVRE said he was informed by the Commissioners that satisfactory progress was being made with the report, which might shortly be expected.—Mr. FIELD said could the right hon. gentlemen fix a date, because he had been asking questions about this subject ever since he had been in the House.—Mr. SHAW LEFEVRE said he could not add to the answer he had given.

Field Hospital Training in India.—Mr. H. FOWLER, in reply to Mr. BYLES, said that in accordance with the reply given on December 2nd last, a copy of the scheme for the field hospital training to be given at Aldershot had been sent for the consideration of the Government of India.

Viewing the Body.—A Bill has been introduced by Captain Grise-Hutchinson and other members, which proposes to do away with the duty, at present incumbent on a jury, of viewing a body prior to an inquest. Safeguards are, however, included in the Bill to ensure identification either by persons acquainted with the deceased or by a medical officer.

The New Factory and Workshops Bill.—The Factories and Workshops Bill, introduced by the Home Secretary, provides that a factory shall be deemed to be so overcrowded as to be dangerous or injurious to the health of the persons employed therein if the amount of space to each person is less than 250 cubic feet before 8 P.M., or less than 400 cubic feet between 8 and 10 P.M.; the number of persons being reckoned as if there were added to those actually employed one person for every three lighted gas burners. In regard to particular manufacturing processes or handicrafts, it is proposed that the Secretary of State shall have power to make an order substituting still higher figures. The measure also enables a court of summary jurisdiction to prohibit the use of dangerous factories or workshops, extends to all factories and workshops Section 7 of the Act of 1891 (provision against fire); imposes further restrictions upon the employment of young persons, women and children; specifies the days which are to be observed as holidays in England and Wales; applies the Factory Acts to laundries, and certain provisions of the Factory Acts to docks, etc.; substitutes the owner of a tenement factory for the occupier for certain purposes; brings bakehouses within the purview of the Factory Acts; and formulates special restrictions in regard to iron enamelling and other dangerous employments.

CORONERS ACT (1887) AMENDMENT BILL.

Memorandum.—The object of the Bill is to do away with the duty at present incumbent on a jury of viewing a body prior to an inquest. Ample safeguards are provided to ensure identification, either by persons acquainted with the deceased or by a medical officer.

A Bill to Amend the Coroners Act, 1887.

Be it enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

1. Notwithstanding anything contained in the Coroners Act, 1887, it shall not be obligatory upon the coroner and jury to view a dead body at any inquest except in cases where the coroner shall deem a view necessary.

2. There shall, in all cases where possible, be an identification of the dead body by a competent person or persons.

3. Any person or persons identifying a dead body shall do so prior to the inquest in the presence of the coroner's officer or a police constable, and such coroner's officer or police constable shall give evidence upon oath before the coroner that such identification has taken place.

4. In all cases where a view of the dead body has been dispensed with, it shall be obligatory on the coroner to order a medical man to examine it, with or without a *post-mortem* examination, and give evidence thereon at the inquest.

5. This Act may be cited as the Coroners Act Amendment, 1894, and shall not apply to Scotland or Ireland.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

ANATOMICAL DEPARTMENT.—The following appointments have been made by Professor Macalister, with the consent of the Vice-Chancellor: W. S. Melsome, M.A., M.D., Fellow of Queens' College, to be Senior Demonstrator of Anatomy; H. Higgins, B.A., of King's College, to be Second Junior Demonstrator. The appointment in each instance is for three years from July 1st, 1894. Professor Macalister announces a special course of three lectures in Physical Anthropology for May 16th to 21st. The subjects are Methods of Anthropometry, The Races of Ancient Egypt (in connection with this lecture a mummy will be unwrapped and examined), and The Races of Western Europe.

ZOOLOGICAL STATIONS.—There are vacancies at the University's tables in Dr. Dohrn's Laboratory at Naples and at the Plymouth Marine Biological Laboratory. Applications for permission to use these are to be made to Professor Newton by May 24th.

DEGREES.—At the Congregation on May 10th the following degrees in Medicine and Surgery were conferred: *M.B. and B.C.*: W. A. Lauder Smith, B.A., Trinity College; R. E. Nix, B.A., Gonville and Caius College; N. L. Hood, B.A., Downing College.

In presenting Dr. Charles Theodore von Inama-Sternegg (President of the Section of Demography in the London International Congress of Hygiene) for the honorary degree of LL.D. the Public Orator (Dr. Sandys, of St. John's) recalled the services to statistical and economic science which the recipient of the honour had rendered by his work in connection with the Austrian census, by his erudite book on the economic history of Germany, and his numerous other valuable writings, the important part taken by him in discussions on matters intimately connected with the welfare of nations at Congresses in Vienna, Rome, and London, and finally introduced him to the Chancellor as one of the most brilliant luminaries of the Austrian empire.

UNIVERSITY OF DURHAM.

A CONVOCATION of the University of Durham was held on May 12th, at noon in the Castle Hall, Durham. The Sub-Warden (the Rev. Dr. Pearce) presided. The following were among the degrees conferred:

M.D. (Practitioners).—F. H. Carter, H. B. Carter, G. R. Chadwick, E. T. Chamberlain, W. G. Kemp, L. Lewis, and D. McC. Ross.

M.D.—C. Averill, D. J. Caddy, H. C. Halstead, E. Mitchell, I. G. Modlin, H. Smith, E. S. Sugden, L. G. C. Vintris, A. E. L. Wear, E. C. Willcox.

M.B.—T. C. Barkas, E. Bromley, L. C. E. Calthorp, T. M. Clayton, W. Forrest, F. H. Hake-Francis, R. J. Hughes, F. S. Jones, R. C. Leanard, E. A. Lermitte, W. F. Miller, R. W. Morgan, H. B. Morison, G. E. Pearcey, M. Prior, W. E. Rielly, G. B. Robinson, W. Smith, E. J. Steegman, F. W. Stokes, H. E. Wells, F. J. Worth, and F. Lumbado.

B.S.—T. C. Barkas, E. Bromley, T. M. Clayton, W. Forrest, F. H. Hake-Francis, R. J. Hughes, F. S. Jones, E. A. Lermitte, W. F. Miller, R. W. Morgan, G. E. Pearcey, M. Prior, W. E. Rielly, W. Smith, E. J. Steegman, F. W. Stokes, H. E. Wells, F. J. Worth, and F. Lumbado.

ST. ANDREWS UNIVERSITY AND THE LONDON SCHOOL OF MEDICINE FOR WOMEN.

Students of the London School of Medicine for Women who intend to proceed to the medical degrees of the University of St. Andrews will in future have the privilege of passing the Preliminary Examination in Latin, English, Greek, or German, French, and Mathematics required before registration as a medical student in London. The first examination will begin on September 29th next at the London School of Medicine for Women. Further particulars can be obtained from Mrs. Thorne, Hon. Secretary of the School, 30, Handel Street, Brunswick Square, W.C.

RESEARCH FELLOWSHIPS IN THE SCOTTISH UNIVERSITIES.

The Scottish Universities Commissioners have issued a draft ordinance containing regulations for the encouragement of special study in research, for the institution of research fellowships, and giving additional regulations for the degree of D.Sc.

ROYAL COLLEGE OF PHYSICIANS.

An extraordinary comitia was held on Thursday, May 10th, at 5 P.M.; Dr. J. Russell Reynolds, F.R.S., President, in the chair.

The newly-elected Fellows were admitted.

A letter was read from a Member resigning his diploma, and the resignation was accepted.

A communication was received from the Association for Promoting the Opening of Museums, etc., on Sundays, asking for the co-operation of the College. On the motion of Sir Henry Pitman, seconded by Dr. C. T. Williams, it was decided to send a reply to the effect that the College in its corporate capacity was not in a position to co-operate with the Association.

A communication was received from the Sanitary Institute inviting the College to send delegates to the forthcoming Congress to be held at Liverpool in September, and, on the proposal of the Treasurer, Drs. T. R. Glynn and Caton were nominated to represent the College.

A communication was received from Professor Ramsay asking the College to appoint delegates to join similar delegates from other institutions which have expressed a general approval of the recommendations of the Gresham University Commission with a view to impress on the Government the importance of giving effect to those recommendations. Dr. Norman Moore proposed, and Dr. Tooth seconded, that the College should accede to the request provided that the Royal College of Surgeons did the same, and that the President should nominate the delegates. Sir William Priestley thought that the hands of the Government were very fully occupied, and moved, as an amendment, to postpone the subject. This was seconded by Dr. Isambard Owen, mainly on the ground that some consideration of the details of the scheme should be made before urging the Government to press it forward. Drs. S. Mackenzie and Pye-Smith supported the resolution, which, after some discussion on the part taken by the medical schools and their delegates in relation to this question between Drs. Moore, Curnow, Coupland, Payne, and Owen, was agreed to, the amendment having been previously negatived.

Dr. Moore then proposed that, to testify to the interest taken by the College in the subject, the Fellows should offer to allow the first meeting of the delegates to take place in the College. This was seconded by Dr. Mackenzie and agreed to.

A report from the Committee of Management recommending the recognition of Bethlem Royal Hospital as a lunatic asylum for the purposes of clinical instruction was received and adopted on the proposal of Dr. Hack Tuke, seconded by Dr. Percy Smith.

The Registrar brought forward a confidential report from the Visitor and the Inspector of the General Medical Council on the Final Examination of the Conjoint Board, and moved that it be referred to the Committee of Management, together with the comments on it which the College examiners had been invited to make. This was seconded by Dr. J. S. Pollock, and, after some remarks from the Treasurer, as representative of the College on the General Medical Council, agreed to.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The following gentlemen passed the First Professional Examination, in Anatomy and Physiology, for the Diploma of Fellow, at a meeting of the Board of Examiners, on Monday, May 14th:

C. G. Spencer, M.R.C.S.Eng., L.R.C.P.Lond., of University College, London; A. H. Lister, of Aberdeen and Cambridge Universities and King's College, London; and F. C. Moore, of Owens College, Manchester.

Seventeen candidates were referred back to their professional studies for six months.

Passed on Tuesday, May 15th:

A. Heath and J. A. O. Briggs, of St. Bartholomew's Hospital; H. H. Greenwood, of Yorkshire College, Leeds; E. A. Smith, of Yorkshire College, Leeds and University College, Liverpool; G. G. Hamilton, M.B.Edin., of University College, Liverpool and Edinburgh University; C. Planck, M.R.C.S.Eng., L.R.C.P.Lond., of St. Thomas's Hospital; G. W. S. Farmer, M.R.C.S.Eng., L.R.C.P.Lond., of Oxford University and London Hospital; T. G. Stevens, M.D.Lond., M.R.C.S.Eng., L.R.C.P.Lond., of Guy's Hospital; and H. D. Senior, M.R.C.S.Eng., L.R.C.P.Lond., of Charing Cross Hospital and Durham University.

Eleven candidates were referred back to their professional studies for six months.

Passed on Wednesday, May 16th:

A. Shillitoe, M.R.C.S.Eng., L.R.C.P.Lond., of Cambridge University and Guy's Hospital; A. H. Leete, M.R.C.S.Eng., L.R.C.P.Lond., of Guy's Hospital; W. W. Linington, M.R.C.S.Eng., L.R.C.P.Lond., of St. Mary's Hospital; J. Hussey and A. B. Tucker, of St. Bartholomew's Hospital.

Eleven candidates were referred back to their professional studies for six months.

The following are the arrangements for the Final Examination for the Diploma of Fellow for which 61 candidates have entered their names:

Monday, 21st, Written Examination at Examination Hall, 1.30 to 5.30 P.M.

Tuesday, 22nd, Clinical Examination at Examination Hall, written and *viva voce*, 2.30 to about 7.45 P.M.

Wednesday, 23rd, Operations Examination at Examination Hall, 1.30 to about 7.45 P.M.

Thursday, 24th, Surgical Anatomy Examination at Examination Hall, 2 to 5 P.M.

Friday, 25th, Pathology, *viva voce* at Royal College of Surgeons, 5 to 9 P.M.

Saturday, 26th, Pathology; *viva voce* at Royal College of Surgeons, 4 to 6 P.M.

All candidates will be required to attend on Monday, Tuesday, Wednesday and Thursday, and on Friday or Saturday.

OBITUARY.

HENRY ALEXANDER BRUCE, M.D.,

Late Principal Inspector-General of H.M. Forces.

Dr. Henry Alexander Bruce, late Principal Inspector-General of H.M. Forces, died at his residence, Colmswell House, Burntisland, Fifeshire, on May 8th, at the age of 86. He began his medical course at St. Andrews in 1823, and subsequently studied at Edinburgh University; in 1828 he received the diploma of the Royal College of Surgeons, and in 1829 the degree of M.D. In the following year he was appointed to the Bengal Medical Service, and, after much and varied active service, he rose to be its head in 1864. He retired in 1866 after 35 years' service, with an interruption of only 20 months. He was with his regiment in its long and trying march to Cabul, he crossed the Hindoo Koosh in charge of Brigadier Dennie's force in September, 1840, and was present at the battle of Bamien, which was supposed to have finally crushed Dost Mahomed. In 1841 he was surgeon to the envoy at Herat; in 1857 he held a staff appointment at Cawnpore. He twice escaped death most narrowly, inasmuch as a fresh appointment called him to leave Cabul shortly before the massacre of our troops there, and in the mutiny it is believed he was the last officer to leave Cawnpore alive, having been ordered home on account of failing health.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

SMALL-POX, VACCINATION, AND THE DEATH-RATE.

A letter from a Mr. James R. Williamson has lately been going the round of the press, to the effect that the differing rates of mortality in vaccinated and unvaccinated children cannot be compared because the vaccinated children refuse to fall victims to the disease which so fatally attacks their less fortunate fellows. This, at least, seems to be the logical deduction from Mr. Williamson's argument. He seems to fancy that he has a grievance because the figures in the recent Warrington small-pox epidemic reveal the fact that a large proportion of the unvaccinated children were mere infants. We do not think that vaccination ought to be twitted because it cannot lend itself to a similar array of figures. If Mr. Williamson will study the report of Dr. Priestley, just issued, on the small-pox epidemic of 1892-3 at Leicester, he will see that there were only two children under 10 years of age who, having been vaccinated, contracted small-pox. And he will also find that there were no fewer than 105 children under 10 years of age who, not having been vaccinated, contracted the disease. Of these as many as 15 died, and the ages of these 15 were respectively 8 months, 9 months, 16 months, and 2, 3, 3, 3, 4, 4, 5, 5, 7, 7, 7, and 9 years. Are not these data sufficient to make Mr. Williamson consider his thesis afresh? And this is but a sample, the latest to hand, from much accumulated data of a like sort.

As to Mr. Williamson's long quotation from Dr. J. Garth Wilkinson where he says, *inter alia*, "But it is demonstrable that vaccination has no influence whatever over the small-pox death-rate," let it suffice if we state that whereas in pre-vaccination days the small-pox mortality-rate was at least 2,000 per million living, it has dropped under obligatory vaccination to 89 for the 20 years 1872-91. At ages 0-5 years, it was in 1847-53, under optional vaccination, 1,617; and had fallen at these same ages, in 1872-91, to 177. But on the general question of the mitigation of small-pox attack and fatality, we deem it well to reproduce a table from Dr. Barry's Sheffield report, which admirably sums up the matter as it affected that borough in 1887-88. The table shows the composition, *qua* vaccination, of the total population, and of persons living in invaded houses, at various age-periods. Also the rates of attack and death per cent. of each class at each age period, both as regards the total population and the residents in invaded houses.

This table is at present hidden in a Blue-book, but it is a very important statistical study, and we commend it to Mr. Williamson's careful perusal. We will content ourselves with drawing attention to the following facts shown on the first line, those, namely, which have to do with ages 0.5 years. Here, if the rates of attack and death among the vaccinated be always regarded as unity, then the rates among the unvaccinated become in the total population 18 and 1,100; and in those

Age Periods.	Of Total Census Population.								Of Dwellers in Invaded Houses.							
	Each 100 made up of		Rate of Small-Pox Attacks Among			Rate of Small-Pox Deaths Among			Each 100 made up of		Rate of Small-Pox Attacks Among			Rate of Small-Pox Deaths Among		
	Vaccinated.	Not Vaced.	V. and N.V.	Vaccinated.	Not Vaced.	V. and N. V.	Vaccinated.	Not Vaced.	Vaccinated.	Not Vaced.	V. and N. V.	Vaccinated.	Not Vaced.	V. and N. V.	Vaccinated.	Not Vaced.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Under 5 years	94.4	5.6	0.7	0.36	6.5	0.19	0.003	3.3	93.3	6.7	10.8	5.6	83.0	2.9	0.05	42.9
5 to 10 ,, ...	99.2	0.8	0.9	0.67	36.0	0.11	0.014	12.2	95.6	4.4	13.6	9.9	91.8	1.6	0.21	31.2
10 to 15 ,, ...	99.3	0.7	2.1	1.9	38.7	0.13	0.03	13.6	96.4	3.6	27.8	25.2	98.0	1.7	0.44	34.4
15 to 20 ,, ...	99.0	1.0	3.9	3.6	29.8	0.26	0.07	18.8	96 0	4.0	43.1	41.3	85.8	2.9	0.8	54.1
20 to 30 ,, ...	98.1	1.9	3.0	2.8	10.6	0 28	0.15	6.9	96.4	3.6	40.1	38.7	79.1	3.2	2.1	49.2
30 ,, ...	97.6	2.4	1.0	0.97	2.4	0.11	0.10	1.4	97.2	2.8	17.4	17.0	31.8	2.3	1.8	18.2
All Ages	97.9	2.1	1.7	1.55	9.7	0.17	0.07	4.8	96.1	3.9	25.1	23.0	75.0	2.5	1.8	37.2

living in invaded houses nearly 15 and 858 respectively. Can it be said of these data that they savour of the non-mitigation of small-pox by vaccination?

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns, including London, 6,231 births and 3,649 deaths were registered during the week ending Saturday, May 12th. The annual rate of mortality in these towns, which had been 18.3 and 17.2 per 1,000 in the preceding two weeks, rose again to 18.2 last week. The rates in the several towns ranged from 9.5 in Derby and 10.3 in Burnley, to 23.3 in Salford, 23.8 in Liverpool, and 25.2 in Birkenhead. In the thirty-two provincial towns the mean death-rate was 18.1 per 1,000, and was slightly below the rate recorded in London, which was 18.4 per 1000. The zymotic death-rate in the thirty-three towns averaged 2.9 per 1,000; in London the rate was equal to 3.7 per 1,000, while it averaged only 2.3 per 1,000 in the thirty-two provincial towns, and was highest in Salford, Birmingham, and West Ham. Measles caused a death-rate of 1.8 in London, 1.9 in Birmingham, and 3.9 in West Ham; scarlet fever of 1.3 in Salford; and whooping-cough of 1.6 in Bristol, 1.9 in Croydon, and 2.5 in Cardiff. The 73 deaths from diphtheria in the thirty-three towns included 55 in London, 2 in West Ham, and 2 in Birkenhead. Six fatal cases of small-pox were registered in Birmingham, 4 in London, 2 in Bradford, 1 in Manchester, and 1 in Oldham, but not one in any other of the thirty-three large towns. There were 210 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, May 12th, against 148, 151, and 191 at the end of the preceding three weeks; 71 new cases were admitted during the week, against 59, 47, and 54 in the preceding three weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last, May 12th, was 2,298, against 2,172, 2,258 and 2,293 at the end of the preceding three weeks; 262 new cases were admitted during the week, against 296 and 268 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday last, May 12th, 877 births and 566 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had increased from 17.5 to 20.1 per 1,000 in the preceding three weeks, declined again to 19.8 last week, but was 1.6 per 1,000 above the mean rate during the same period in the large English towns. Among these Scotch towns the death-rates ranged from 16.6 in Leith to 22.4 in Perth. The zymotic death-rate in these towns averaged 2.9 per 1,000, the highest rates being recorded in Edinburgh and Perth. The 283 deaths registered in Glasgow included 21 from whooping-cough, 5 from diphtheria, and 4 from scarlet fever. Eleven fatal cases of whooping-cough and 2 of diphtheria were recorded in Edinburgh.

INTERCEPTING TRAPS.

The question which has arisen at Hornsey between the Local Board and their medical officer is one which is sure to crop up in other places, and sanitary authorities might well endeavour to arrive at some uniform conclusion in regard to it. So long as by-laws exist, of course they ought to be enforced, and we cannot admit for a moment that Dr. Clothier exceeded his duty in drawing the attention of his authority to the considerable incidence of diphtheria on houses with untrapped drains. At the same time there is another side to the question. Only a few days ago a fatal accident to sewer men, arising from poisonous gases, was reported, and it is notorious that sanitary authorities are driven to their wits' end by the difficulty of ventilating the sewers under their control. The device, so largely adopted at present for this purpose, of providing openings at the street level, is confessedly but a clumsy make-shift, and, according to many, is fraught with much danger to the frequenters of the streets. The paper read before the Public Health Section at Newcastle by Dr. Sidney Davies, of Plumstead, drew attention most strongly to the dangers of these grid ventilators. Yet the sewers must be ventilated somehow; and while it may be a comparatively easy matter to do this by means of special chimneys in regard to certain sections, not only would the expense be great, but it would probably be quite impossible to ensure a circulation of air through every portion of the system.

It is then perhaps not to be wondered at that sanitary authorities should cast their eyes enviously upon the soil pipes as a means of ventilation. This, however, is contrary to the model by-laws, which order an intercepting trap cutting off the whole system of house drainage from the sewer. So far as the individual is concerned, everyone will admit the great advantage of so doing, but if this is to involve either not ventilating the sewers, or leaving long ends, *cul-de-sacs*, running up to the house traps entirely devoid of ventilation, the question as regards the public may demand reconsideration. No system which leaves the air stagnant in the sewers and leaves each house dependent entirely upon the perfection of its traps can be considered safe. The question, then, is well worthy of discussion and decision, whether or not the soil pipe should be systematically used as a ventilator to the sewer. It must be borne in mind, however, that we would not be party to any suggestion to do away with the intercepting trap between the sewer and the general drainage of the house, the gullies, rain-water pipes, etc. The question entirely relates to the soil pipe, or some equivalent ventilator. This already must be carried of full diameter well above the roof, and if it were taken direct to the sewer, without passing through the intercepting trap, it is hoped by the advocates of this method that the ventilation of the main channel would be so complete that no stagnant air would be left in any portion of the sewers. The drains of the house would still be cut off, not only from the sewer, but from its own soil drain as well. The question is evidently a very important one, and one on which an authoritative decision should be arrived at, for drainage once put in is not easily altered. The difficulties of such a change are doubtless great, both as to the expense of the alteration and as to the responsibilties relating to the ventilating pipes, which would then fall upon the public; but it is obviously as much the duty of the sanitary authority to ventilate its own sewers as it is of the individual to protect himself from them, and something certainly should be done to prevent the air within them from ever becoming stagnant.

DIPHTHERIA IN LONDON.

Dr. A. Wynter Blyth, medical officer of health for Marylebone, in his monthly report issued on May 15th, comments upon the "disquieting intelligence" received from the clerk to the Sick Asylums Board, that "only 252 beds are set apart for diphtheria, and that these are all occupied." Dr. Blyth finds that the number of cases of diphtheria notified in the whole metropolis is about 200 a week, quite half of which it seemed highly desirable to isolate in hospital. He adds: "Considering the large one-roomed population of the parish of Marylebone, it is a most serious thing to contemplate the possibility of so infectious and fatal a malady as diphtheria occurring under conditions which of necessity favour its spread. It must never be lost sight of that the hospital accommodation for infectious cases in the metropolis is the direct consequence of high rents and the restricted accommodation that high rents entail; and as no practical scheme is likely to be suggested by which, for the same rent, the families that now live in one or two rooms can get four, it is obvious that additional accommodation must be provided."

SMALL-POX IN EDINBURGH AND LEITH.

Thirteen fresh cases of small-pox were reported in Edinburgh last week, and twelve in Leith. In the latter town there was one death. A brother and sister, residing in a populous part of Edinburgh, were last week convicted of having exposed themselves out of doors while suffering from small-pox, without taking proper precautions against spreading the disease. They were each fined £3, payable by instalments of 10s. per month.

TYPHOID FEVER AND MILK AND WATER.

Typhoid fever, it is reported, has assumed the proportions of an epidemic at Brixton. Dr. Verdon, the vigilant medical officer of health, and his assistants have been puzzled to find the causes of the outbreak. Last week, however, they made the discovery that the source of infection was in one of the country farms of a large local firm of milk distributors. It was ascertained here that cows were being partially fed on grass cut from the fields of a sewage farm, and that water from a brook running through the same land, and presumably contaminated, had been allowed to adulterate the milk. The outbreak has affected sixty persons, and up to the present there have been ten deaths.

MEDICAL NEWS.

The Queen has sent a donation of £100 to the Hospital for Sick Children, Great Ormond Street.

The Salters' Company have recently permanently endowed five beds in Guy's Hospital, at a cost of £250 per annum.

Suppression of Unlicensed Practice in America.—A "Dr." Helen Ashley Keene has been fined 100 dollars and costs for practising without a licence in Waterbury, Connecticut. This is stated to be the first conviction under the Medical Practice Act recently passed.

Another Gift for Paisley. — The announcement of another magnificent gift for Paisley has just been made. Accommodation is to be provided for thirty nurses. Mr. Peter Coats, jun., is the donor of the home. The cost is not stated, but it is understood to be about £10,000.

At an ordinary meeting of the Royal Microscopical Society, held on April 18th, Professor F. J. Bell read a letter from Mr. C. J. Pound describing the laboratories of the Stock Institute of Queensland, which had recently been instituted for the purpose of investigating the nature and causes of animal diseases in that colony.

The value has been sworn at £15,398 of the personal estate of Dr. Roderick Macdonald, coroner for the North-eastern Division of Middlesex, who died on March 9th last. Among other bequests, he leaves to the Scottish Corporation £1,000, to the Royal Caledonian Asylum £1,000, and his residuary estate in trust for the Glasgow Royal Infirmary and six hospitals in the city and county of London.

Patients for Pasteur.—A new dog-muzzling order issued in Glasgow on May 2nd has been prompted partly by the fact that, on the recommendation of Professor M'Call, a constable named Alexander Murray, and a boy, John Wood (13), residing in Abington Street, Glasgow, were despatched to the Pasteur Institute Paris, on May 1st, the day after the old order had been withdrawn.

The Duke of York presided on May 5th over the annual festival dinner in aid of the funds of the Hospital for Sick Children, Great Ormond Street; and in proposing success to the institution, set forth its claim to public support, and urged the need of liberal contributions to its finances, which had been severely taxed by the recent enlargement. During the evening contributions amounting to £10,066 was announced.

The Sheffield Public Hospital and Dispensary.—The Duke of Norfolk, President, has just made a generous contribution towards the rebuilding fund of this hospital and dispensary. The first portion of the scheme is now in progress. An appeal will shortly be made to the public for funds to complete the other two blocks of the building, and the Duke of Norfolk has promised to contribute £1,000 a year for five years.

The University of Vienna.—The Professorial College of the Medical Faculty of the University of Vienna recommended Professor Czerny, of Heidelberg, in the first place; Professor Gussenbauer, of Prague, in the second; and Professor Mikulicz, of Breslau, in the third place for the chair of Surgery left vacant by the death of Professor Billroth. All three are pupils of the departed surgeon. Professor Czerny has been elected. For the chair of Ophthalmology, left vacant by the death of Professor von Stellwag-Carion, Professor Schnabel, of Prague, and Professor Borysiekiewicz, of Graz, have been recommended.

Society of Fellows of the Royal College of Surgeons of England.—A meeting of local Fellows of the Royal College of Surgeons was held on May 10th in Manchester, Mr. Thomas Jones in the chair, when the following resolution, proposed by Mr. F. A. Southam and seconded by Mr. A. H. Young, was carried unanimously: "That a branch executive council in connection with the Society of Fellows of the Royal College of Surgeons of England be formed in Manchester." The following Fellows were elected to form such branch executive council: Mr. James Hardie (Chairman), Mr. T. Jones, Mr. H. W. Pomfret (Honorary Secretary), Mr. C. Richmond, Mr. F. A. Southam, Mr. W. Thorburn, Mr. G. A. Wright, and Mr. A. H. Young.

The Anatomical Society of Great Britain.—A general meeting of this Society will take place on Monday, May 21st, at 4.30 p.m., at the Middlesex Hospital Medical School, when Professor Cunningham and Dr. Telford Smith will show the Brain of a Microcephalic Idiot, aged 32, and the following notes and papers will be read: Are the Terms "Flexion" and "Extension" Correctly Applied in the Case of the Ankle-joint? by Professor Sir G. M. Humphry; A Point in Anatomical Nomenclature, by Professor Macalister; A Groove on the Spine of the Sphenoid for the Chorda Tympani Nerve, by Mr. Clement Lucas; A Method of Microscopic Reconstruction, by Mr. Dixon; A Note on the Fifth Carpo-metacarpal Joint, by Mr. W. Anderson; The Morphology of the Tendo Achillis, by Mr. F. G. Parsons; and A Divided Internal Cuneiform Bone, by Mr. Black. The Committee have decided to issue complete copies of the Society's *Proceedings* to members at a cost of 2s. 6d. Members wishing to have them are requested to apply to the Honorary Secretary for England.

MEDICAL VACANCIES.

The following vacancies are announced:

BLACKBURN AND EAST LANCASHIRE INFIRMARY.—Junior House-Surgeon; doubly qualified. Salary, £50 per annum, with board, washing, and lodging. Applications to Nathan A. Smith, Secretary, 15, Richmond Terrace, Blackburn, by May 21th.

BRIDGWATER INFIRMARY.—House-Surgeon. Salary, £70 per annum, with board and residence. Applications to Mr. John Coombs, Honorary Secretary, by June 15th.

DURHAM COUNTY HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board and lodging. Appointment for two years. Applications to V. K. Cooper, Honorary Secretary, 16, South Bailey, Durham, by June 1st.

FLINTSHIRE DISPENSARY.—Resident House-Surgeon. Salary, £120 per annum, with furnished house (rent and taxes free), and coal, light, water, and cleaning, or in lieu thereof £20 per annum; knowledge of Welsh desirable. Applications to W. T. Cole, Secretary, Board Room, Bangillt Street, Holywell, by June 5th.

GENERAL HOSPITAL, Birmingham.—Assistant House-Surgeon. Board, residence, and washing provided. No salary. Applications to the House-Governor by May 26th.

GENERAL HOSPITAL, Nottingham.—Assistant House-Surgeon. Appointment for six months. Board, lodging, and washing provided. Applications to E. M. Keely, Secretary, by May 19th.

GLASGOW MATERNITY HOSPITAL, 146, Buchanan Street, Glasgow.—Indoor and Outdoor Surgeons. Applications to Arthur Forbes, Secretary, by June 9th.

GORDON HOSPITAL FOR FISTULA, 276, Vauxhall Bridge Road, S.W.—Two Honorary Surgeons, must be F.R.C.S.Eng. Applications to Mr. St. Leger Bunnett, Secretary, by May 21st.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway Road, N.—Junior House-Surgeon. No salary; board, apartments, and laundry provided. Applications to the Secretary by May 28th.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway Road, N.—Casualty Officer; must reside in the immediate neighbourhood of the hospital. Honorarium at the rate of 50 guineas per annum. Applications to William T. Grant, Secretary, by May 28th.

GROSVENOR HOSPITAL FOR WOMEN AND CHILDREN, Vincent Square, Westminster.—Anæsthetist. Applications to the Secretary by June 1st.

HOSPITAL FOR EPILEPSY AND PARALYSIS AND OTHER DISEASE OF THE NERVOUS SYSTEM, 32, Portland Terrace, Regent's Park, N.W. Physician to Out-patients. Applications to the Secretary by June 8th.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, Bloomsbury, W.C.—House Physician and House-Surgeon, unmarried. Appointments for six months. Salary, in each case, £20, with board and residence in the hospital. Applications to the Secretary by May 25th.

HOSPITAL FOR SICK CHIDDREN, 18, Royal Arcade, Newcastle-on-Tyne.—Resident Medical Officer; doubly qualified. Salary, £60 per annum, with board, lodging, and laundry. Applications to Robert J. Gibson, Secretary, by May 31st.

JAFFRAY SUBURBAN BRANCH OF THE GENERAL HOSPITAL, Gravelly Hill, near Birmingham.—Resident Medical and Surgical Officer; doubly qualified. Salary, £150 per annum, with board, residence, and washing. Applications to the House-Governor, General Hospital, Birmingham, by May 29th.

LANCASTER INFIRMARY AND DISPENSARY.—House Surgeon; unmarried; doubly qualified. Salary, £80 per annum, with residence, board, attendance, and washing. Applications, on forms to be obtained of the Secretary, to the Secretary by May 23rd.

LONDON COUNTY COUNCIL.—Coroner for the North-Eastern District of London; not under 35 nor more than 50 years of age. Salary, £1,150 per annum. Applications, marked outside "Coroner for N.E. District," to the Clerk of the Council, Spring Gardens, S.W., by May 21st.

NEW HOSPITAL FOR WOMEN, 144, Euston Road.—Female Resident Medical Officer and Female Clinical Assistant for Out-patient Department. Applications to the Secretary by May 26th.

NORTH DEVON INFIRMARY, Barnstaple.—Two additional Honorary Surgeons; must reside within two miles of the Infirmary. Applications to the House Committee, under cover to the Secretary, before May 19th.

NORTH STAFFORDSHIRE INFIRMARY AND EYE HOSPITAL, Hartshill, Stoke-upon-Trent.—Honorary Assistant House-Surgeon. Applications to the Secretary by June 5th.

NOTTINGHAM BOROUGH ASYLUM.—Second Assistant Medical Officer unmarried. Salary, £100 per annum, with board, apartments and washing. Applications to the Medical Superintendent by May 21st.

ROYAL CORNWALL INFIRMARY, Truro.—House-Surgeon; doubly qualified. Salary, £120 per annum increasing £10 yearly to £150, with furnished apartments, fire, light, and attendance. Applications to the Secretary by May 21st.

ROYAL FREE HOSPITAL, Gray's Inn Road, W.C.—Two Resident Medical Officers; doubly qualified; no salary; board, lodging, and washing provided. Applications to the Secretary by June 2nd.

ROYAL SOUTH LONDON DISPENSARY, St. George's Cross, S.E.—House-Surgeon, non-resident. Salary, £60 per annum. Applications to the Committee of Management by May 28th.

ST. LUKE'S HOSPITAL.—Two Clinical Assistants. Appointment for six months. Board and residence provided. Applications to Percy De Bathe, M.A., Secretary, by May 22nd.

ST. THOMAS'S HOSPITAL.—Resident Assistant Surgeon; must be F.R.C.S.Eng. Applications to Mr. E. H. Hardy, Treasurer's Clerk, by May 19th.

STAMFORD, RUTLAND, AND GENERAL INFIRMARY.—House-Surgeon; unmarried; doubly qualified. Salary, £100 per annum, with board, lodging, and washing. Applications to the Chairman of the Special Committee by May 25th.

UNIVERSITY COLLEGE, Liverpool.—George Holt Chair of Pathology and Derby Chair of Anatomy. Endowment, £375 per annum each, with share of fees. Applications to the Registrar by June 2nd.

VESTRY OF ST. MARGARET AND ST. JOHN, Westminster.—Medical Officer; not less than 25, or more than 45, years of age. Salary, £250 per annum. Applications, 'marked on the envelope "Medical Officer," to be delivered at the Town Hall, Westminster, S.W., by May 21st.

WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.—Surgical Registrar. Must be F. or M.R.C.S.Eng. Appointment for twelve months. Salary, £40 per annum. Applications to Sidney M. Quennell, Secretary, by May 22nd.

ERRATUM.—Applications for the post of Assistant House-Surgeon to the General Hospital, Nottingham, should be sent in by May 19th and not May 26th, as stated last week.

MEDICAL APPOINTMENTS.

ARTHUR, John, L.R.C.P., L.R.C.S.Edin., appointed Medical Officer for the Gabalfa District of the Cardiff Union.

BALDWIN, Aslett, L.R.C.P.Lond., M.R.C.S.Eng., appointed House-Surgeon to the Middlesex Hospital.

BEGGS, James E., B.A., M.B., B.C.Camb., D.P.H., appointed Assistant Medical Officer at the North-Eastern Hospital, Tottenham.

BELL, Theodore, M.D.Dub., appointed Medical Officer for the Warrenpoint Dispensary District.

CHALMERS, Dr., appointed Medical Officer for the Infectious Diseases Hospital at Bannockburn.

CULROSS, James, M.A., M.B., C.M.Glasg., appointed Medical Officer to the Workhouse of the Newton Abbot Union, *vice* Dr. Haydon, resigned.

DAWSON, Bertrand, M.D., B.Sc., M.R.C.P.Lond., appointed Medical Registrar to the London Hospital.

EMERSON, Mr., appointed AssistantHouse-Surgeon to the Guest Hospital, Dudley.

FISHER, John Bell, M.B., C.M.Edin., reappointed Medical Officer of Health for the Whitehaven Rural Sanitary District.

FOSTER, Mr. J. R., appointed Resident Medical Officer to the Cardiff Union.

GROVE, William Richard, M.D.St. And., M.R.C.S.Eng., reappointed Medical Officer of Health for St. Ives.

HAYNES, Sydney W., M.B., appointed Honorary Anæsthetist to the Birmingham and Midland Eye Hospital.

HEYWOOD, Charles Christopher, M.A., M.B., B.C.Cantab., M.R.C.S., L.R.C.P., appointed Honorary Medical Officer to the Pendleton Branch Dispensary of the Salford Royal Hospital, *vice* Philip Worley, M.R.C.S., L.R.C.P.Lond., resigned.

LEATHAM, Robert R., B.A., M.B., B.Ch., R.U.I., appointed Assistant Resident MedicalOfficer to the North-West London Hospital.

MUDGE, James, L.R.C.P.Edin., M.R.C.S.Eng., reappointed Medical Officer of Health to the Penzance Rural Sanitary Authority.

PALMER, Harold Lewis, M.R.C.S.Eng., reappointed Medical Officer of Health for the Newtown Urban Sanitary District.

PENNY, Edmund John, M.D.Brux., M.R.C.S.Eng., appointed Medical Officer and Public Vaccinator for the First District of the Tonbridge Union, *vice* E. A. Starling, M.B., resigned.

POWELL, Dr., appointed Medical Officer and Public Vaccinator for Sedgley No. 1 District of the Dudley Union.

ROBINSON, Edward Stanley, M.R.C.S., L.R.C.P.Lond., reappointed Medical Officer of Health for Stourport.

SARJEANT, John F., M.R.C.S.Eng., L.R.C.P.Lond., appointed Resident Medical Officer to the North-West London Hospital.

SAYRES, A. W. F., M.R.C.S.Eng., L.R.C.P.Lond., appointed Medical Officer to the Wincanton Union Workhouse and District, and Public Vaccinator, *vice* H. A. H. McDougall, M.R.C.S., L.R.C.P., resigned.

SHORTRIDGE, Thos. Wood, M.D.Brux., L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health for Honiton.

STRICKLAND, Charles Edward, L.R.C.P.I., M.R.C.S.Eng., appointed Medical Officer for the Park District of the Sheffield Union, *vice* J. A. Manton, L.R.C.P.Lond., M.R.C.S.Eng., resigned.

SYMES, W. S., L.R.C.P., L.R.C.S.I., reappointed Medical Officer of Health for the Newbold Urban Sanitary Dispensary.

THOMPSON, W. H., M.D.Durh., L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health for the Quarry Bank Urban Sanitary District.

TUCKETT, W. Reginald, M.R.C.S.Eng., appointed Medical Officer to the Charnwood Forest Convalescent Home.

TURNER, J. A., M.B., C.M.Edin., appointed Public Analyst to the Blaby Rural Sanitary Authority, *vice* Dr. Emerson, resigned.

WATSON, John, M.D., F.R.C.S.E., D.P.H., etc., appointed Honorary Medical Officer to the Speen Cottage Hospital, Newbury; also Honorary Physician to the St. Nicholas Training Home for Servants, Newbury.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Bacteriological Laboratory, King's College, W.C., 3 to 5 P.M.—Lecture: Examination of Air, Soil, and Water. Practical Work: Plate Cultivations. London Throat Hospital, Great Portland Street, 8 P.M.—Dr. Edward Law: Examination of the Throat and Nose.

MEDICAL SOCIETY OF LONDON, 8.30 P.M.—Annual Conversazione. Dr William M. Ord: A Doctor's Holiday.

SOCIETY OF MEDICAL OFFICERS OF HEALTH, 20, Hanover Square, W., 8 P.M.—Discussion on the Etiology of Puerperal Fever. The subject will be introduced by Dr. Herman, President of the Obstetrical Society.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr. Hyslop: Stupor; Catalepsy; Katatonia; Dementia.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M.—Dr. Mitchell Bruce (for Dr. Dempster, from Professor McFadyen's Laboratory, British Institute of Preventive Medicine): Relations between Kinds and Conditions of Soils and the Life of the Cholera and Typhoid Bacilli.

THE CLINICAL MUSEUM, 211, Great Portland Street.—Open at 2, Lecture at 4.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 1 P.M.—Dr. Payne: Herpes; its Varieties. Metropolitan Hospital, N.E., 5 P.M.—Dr. Davies: The Thyroid Treatment of Myxœdema and Certain Skin Diseases.

METROPOLITAN COUNTIES BRANCH, 11, Chandos Street, W., 5 P.M.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and Epileptic, Queen Square. 2 P.M.—Dr. Buzzard: Cases in the Hospital. Hospital for Sick Children, Great Ormond Street, 3.30 P.M.—Mr. John H. Morgan: Clinical Lecture. Central London Sick Asylum, Cleveland Street, W., 5.30 P.M.—Mr. Jonathan Hutchinson: Cases in the Wards.

FRIDAY.

CLINICAL SOCIETY OF LONDON, 8.30 P.M.—Annual General Meeting. Agenda: Report of Council: Election of Officers. Papers:—Dr. Churton: A Case of Pancreatic Cyst with Diabetes; Incision of Cyst; Death a Year Afterwards; Atrophy of Pancreas. Dr. Rose Bradford: A Case of Intracranial Aneurysm. Dr. Hale White: Two Cases of Intracranial Aneurysm. Dr. Diver: On the Use of Chlorine Gas in the Treatment of Chronic Ulcers of the Leg. Dr. Sansom: A Case of Purpura Hæmorrhagica probably due to Influenza.

SATURDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M.—Dr. Corner: Delusional Insanity; Paranoia.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTH.

KEYT.—At Punta Gorda, British Honduras, on April 15th, the wife of Dr. Keyt, District Commissioner, of a son.

DEATHS.

RENDALL.—On May 8th, at Aix-les-Bains, after a short illness, Horatio Stanley Rendall, infant son of Stanley Rendall, M.D., aged 7 months.

SMITH.—On May 10th, at Winnipeg, Manitoba, of scarlet fever, Walter Heywood, eldest son of Heywood Smith, M.D., of Harley Street.

TWINING.—On May 7th, at the South Devon and East Cornwall Hospital, Plymouth, from the effects of an accident, Alfred Hughes Twining, M.D. of Salcombe, aged 41.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

VOICE TRAINING AND ARTICULATE SPEECH.

APHONIA writes: In the BRITISH MEDICAL JOURNAL of May 12th, p. 1060, there is a paragraph *re* training speech and voice, that mentions ladies' classes for the same; can you inform me of any similar institution for men? Attendance at medical meetings painfully impresses upon me the necessity for training—at any rate in the case of medical men. The distressing manner in which many of us attempt to express our thoughts must be very trying to the would-be audiences.

ANSWERS.

G. F. H.—We do not find the name of Dr. Mary J. Hall Williams on the *Medical Register*.

L.R.C.P.—The information desired will be found in the Educational Number of the BRITISH MEDICAL JOURNAL, published on September 2nd, 1893.

M. C.—We know of no English work treating of morphinomania except Norman Kerr's *Inebriety: its Etiology, Pathology, Treatment, and Jurisprudence* (H. K. Lewis, 136, Gower Street), the third edition of which, to be published at 21s., will be out in a few weeks.

INQUIRER will find an excellent digest of the various statutes relating to public health in *Hygiene and Public Health*, by B. A. Whitelegge (Cassell and Co., London), price 7s. 6d. Practical microscopic work is included in the examination for the diploma in State Medicine of the Conjoint Examining Board of the R.C.P. and S. Ireland. Schedules of the subjects can be obtained from the Secretary, 47, Dawson Street, Dublin.

MEMBER B. M. ASSOCIATION.—It would appear that the person to whom our correspondent refers would be liable to proceedings under Section 40 of the Medical Act, 1858, for the unqualified assumption of a medical title. Having regard to the fact that he describes himself as "M.D. Lond.," it would be desirable in the first instance to communicate with the university authorities, enclosing the letter which our correspondent has received.

ASPARAGUS.

W. D. H. writes: Nencki has found (*Arch. f. exp. Path.*, Bd. 28, Heft. 314) that the odoriferous body in urine after eating asparagus is methyl mercaptan.

POST-GRADUATE CLASSES IN EDINBURGH.

J. G.—We are informed that there is no formal organisation of post-graduate classes in Edinburgh, and therefore no secretary. No plans have yet been formulated for next autumn. Practically all the information now available will be found on page 538 of the Educational Number of the BRITISH MEDICAL JOURNAL, published on September 2nd, 1893. Information will be given by the various gentlemen there named.

KAPUTINE.

W. H.—Kaputine consists of acetanilide (antifebrin) coloured. It is an article which ought not to be used by persons unacquainted with its properties and the probable effects it may produce. Like several other of the new synthetic remedies, it should be added to the poison schedule, and its sale placed under proper regulation in the hands of competent persons. It appears highly improper and dangerous that such an article should be puffed and supplied as a quack nostrum without any label indicative of its nature to warn persons who might be injuriously affected by its administration.

THE CONTAGIOUS DISEASES ACTS.

F. S.—These Acts came into force early in 1870, but from the first were very strenuously opposed by the party of which Mr. Stansfield, M.P., was the chief spokesman. They were only applied to certain specified garrison towns and camps, and were administered by representatives from the Metropolitan Police. Immediately after their enforcement such was the strength of the opposition to them that Parliamentary Committees were appointed to investigate the whole subject, and very voluminous Blue Books, dating about 1872-3, were the result. In 1873 venereal disease in the army was, as it was then termed, "penalised," by the soldier so affected suffering the loss of his entire pay while in hospital. This step led to an apparent great diminution of venereal cases, but this was entirely due to concealment, with disastrous effect, both as regards the moral and physical wellbeing of the soldier, and was therefore abandoned in 1879. Meanwhile the compulsory examination of women, which was violently opposed by many, went on until 1883, and was then abandoned for voluntary examination at the lock hospitals established for the purpose. Finally, the Acts were suspended in 1886, and things are now as before the Acts were passed. The literature on this subject —say 1868 and 1886—is immense, and by no means savoury. It is chiefly contained in Blue Books, which can always be obtained from Her Majesty's printers—say Eyre and Spottiswoode; also the books of the opponents of the Acts—largely in a periodical called the *Sentinel*.

REGULATION OF THE SALE OF POISONS.

DR. O. T. OSBORNE (New Haven, Conn., U.S.A.).—The Pharmacy Act, 1868, relates to the retailing, dispensing, and compounding of certain specified articles which are declared to be poison within the meaning of the Act. Section 17 provides that it is "unlawful to sell any poison either by wholesale or retail" unless "distinctly labelled with the name of the article and the word Poison, and with the name and address of the seller." Further precautions are to be observed in the case of the more dangerous poisons, and exempting provisions are made in reference to the supply, by duly qualified persons, of medicines containing any of the poisons to which the Act applies, and it is only such qualified persons who can lawfully sell them or keep open shop for that purpose. To a great extent this statute has been rendered ineffectual, and practically evaded by the sale of what are incorrectly termed "patent medicines." These articles are not patented, but secret, preparations, and though in many instances they are compounds containing as ingredients one or other of the poisons to which the Pharmacy Act applies, they have been sold without declaration of that fact or the poison label which the Act requires. In that way the law has been evaded, and the useful operation of the Pharmacy Act for protection of the public counteracted. It is only within the last two years that Mr. Ernest Hart has succeeded in bringing the Government and the Pharmaceutical Society to take cognisance of these facts, and in stimulating the administrators of the Act to enforce observance of the salutary provisions which have been for so many years in abeyance, to the great detriment of the public. The action taken with that object has already been partially successful, and there is reason to believe that before long it will be fully supported by authoritative judicial decisions.

NOTES, LETTERS, Etc.

THE GRIFFITHS FUND.

DR. E. LE CRONIER LANCASTER (Winchester House, Swansea) and Dr. W. F. BROOK, Hon. Secretaries, write: Will you kindly acknowledge the enclosed list of subscriptions to the above fund which have been received by us since your last issue?

	£	s.	d.
Amount already acknowledged	80	19	6
H. Charlton Bastian, London...	2	2	0
W. Morgan, Public Analyst, Swansea (per Hon. Secs.)	2	2	0
E. B. Evans, Swansea	1	1	0
E. Rice Morgan, Swansea	1	1	0
M. O'Sullivan, Swansea	1	1	0
J. and J. K. Couch, Swansea	1	1	0
N. M. Grose, Pharmaceutist, Swansea (per Hon. Secs.)	1	1	0
J. T. Davies, Pharmaceutist, Swansea (per Hon. Secs.)	1	1	0
William Morgan, Swansea	1	1	0
F. G. Southern, Llandibie	1	1	0
David Davies, Aberdare	1	1	0

Errata in subscription list of BRITISH MEDICAL JOURNAL of May 12th: for J. H. Wattsen, £25, read J. Hancocke Wathen, £25; for D. Hovell Thomas, £10 10s., read D. Howell Thomas, £10 10s.

TAIT FUND.

DR. G. T. KEELE, Treasurer (81, St. Paul's Road, Highbury, N.) writes: The Committee of the above fund thank you much for the prominent notice you have given of the above fund.

The following subscriptions have been received since our last list was announced:—

	£	s.	d.		£	s.	d.
J. F. Goodhart, M.D. ...	5	5	0	James Jackson, M.R.C.S. ...	1	1	0
A. Chune Fletcher, M.R.C.S.	3	3	0	J. B. Lawford, M.D.	1	1	0
Sir James Paget, F.R.C.S....	2	2	0	Leonard Mark, L.R.C.P. ...	1	1	0
Robert Boxall, M.D.... ...	2	2	0	John Matheson, M.D. ...	1	1	0
J. T. Jackson, M.R.C.S. ...	2	2	0	George Mickley, M.B. ...	1	1	0
Allen Dingley, F.R.C.S. ...	1	1	0	David Keele, M.R.C.S. ...	0	10	6
Samuel Gee, M.D.	1	1	0				

TEUCRIUM IN CHRONIC NASAL CATARRH.

DR. A. C. DUTT (Whitby) writes: A tincture made of the entire fresh herb of Teucrium marum verum (cat thyme) I have found most useful in relieving the distressing symptoms of chronic rhinitis, due to the presence in the nose of myxomatous polypi. The patients (six in number) declined operation. Drop doses of the tincture were given three times a day, and the nasal cavities were pencilled with the undiluted tincture night and morning. In less than a week the tumefaction of the mucous membrane had disappeared, and the patients expressed themselves as "quite well." The polypi had shrunk in size, and nasal breathing was partially restored.

The German Hospital.

Baron Schröder, the *Jewish Chronicle* observes, certainly did not endeavour to serve the charity, of which he is treasurer, by assuming a conciliatory method at the general meeting of the supporters of the German Hospital on the 8th instant. It is much to be regretted that an uncompromising attitude was adopted by the management of the hospital on the question submitted to the meeting. There are some victories which are dearly bought, and some which are even more inglorious than a defeat. Tuesday's vote was peculiarly of this character. The managers of the German Hospital cannot afford to ignore, still less to ride rough-shod over, the feelings entertained by a considerable proportion of its supporters, upon the question of the sectarian character of the hospital generally, and of the religious services in the wards particularly. We lament the continuance of the struggle only because of the injury which is likely to ensue to the institution. The Protestant services in the wards will be continued, but at the heavy cost of alienating the support of all those who wish the hospital to be conducted strictly upon an unsectarian basis, and not unduly in the interests of the Lutheran sect.

Symptoms resembling Cerebellar Paralysis Cured after Expulsion of Ascarides.

Dr. M. P. Duke (Montserrat, W.I.) writes: Last February B. F., a boy, aged 7, was brought to me with a small scalp wound said to have been inflicted by a blow from a common penny stone jar of ink. The wound was slight, and required but a simple dressing. About ten days subsequently I was called to see the same lad. His mother told me that he had been to school the previous day, when he received a severe flogging, the marks of which were still on his shoulders, etc., and that shortly before I saw him he was sent home on account of his condition. It was as follows: He was unable to sit or stand without support, being like a drunken person, or top-heavy. In walking, when held up, his gait was extremely ataxic, or I think it would be more correctly described as the cerebellar reel. He could not walk three steps alone. He complained of headache and great tenderness down the neck and spine. Hyperæsthesia along each side of the vertebral column was extreme. The patellar reflex was diminished. When lying down there were general muscular twitchings like commencing convulsions. The intellect was unimpaired, and sight and hearing were normal. The excretory functions were undisturbed. The temperature was slightly raised. Thinking I had to deal with a grave cerebellar lesion (probably an abscess from the blow on the head), I asked my friend, Dr. W. R. Branch, to see the case with me, and we were both perplexed at the condition. However, we ordered ice to head, a blister along the spine, and bromide of potassium internally. This treatment had no effect. The boy remained for a few days in the same state, not worse, not better. A few grains of santonin and calomel were given, and the boy voided seventeen ascarides, and all the above mentioned symptoms disappeared. He is now quite well, except for some spinal tenderness, which is gradually getting less. My reason for reporting this case is its medico-legal interest, for, first, the man who threw the ink jar and cut the lad's head might have got blamed for his condition; and, secondly, legal steps were threatened against the schoolmistress who flogged the boy.

The Early Diagnosis of Cancer of the Uterus.

F.R.C.S. writes: I venture to think that the value of Dr. Herman's very interesting paper on the early diagnosis of cancer of the uterus would have been greatly increased had he told us something about the means of distinguishing between a syphilitic chancre of the cervix and carcinoma. It appears to me, and so one has usually been taught, that some of these cases present far greater difficulties in their correct recognition than the diagnosis between cancer and shotty follicles, herpetic erosions, or fibroids of the cervix can ever present. I wish also to strongly protest against the use of the term "adenoma" for the diffuse glandular hypertrophy following chronic inflammation of the cervix. Surely there is already sufficient confusion about the nomenclature of tumours in the minds of students without our increasing it by applying the term adenoma, on the one hand, to a definite new formation such as an adenoma of the breast; and, on the other hand, to a condition resulting purely from chronic inflammation. What confusion already exists is well illustrated in the very same number of the British Medical Journal. On page 1,010 we find Dr. Herman pointing out the distinctive features between adenoma and cancer. On page 74 of the Epitome, in the abstract of a paper by Dr. Skene, we find the term adenoma used as synonymous with cancer of the body of the uterus. When one authority calls a diffuse glandular hypertrophy, the result of chronic inflammation, an adenoma, another applies the term to a definitely encapsuled benign tumour of the breast, and yet a third to a glandular carcinoma, there is little wonder that the average student is hopelessly muddled in his conception of what an adenoma really is.

Relapse or Recurrence?

H. W. S. writes: In March A. B. was suffering from varicella; seven days afterwards his sister, who had been exposed to contagion, had a temperature of 100° F., and next day exhibited a few spots. Fourteen days after this, her temperature again rose to 100° F., followed next day by a typical varicellar rash. Authorities give four to seventeen days, some dogmatically seven, some fourteen days, as the period of incubation. I have usually found the latter to be correct. This case was, I think, a very mild attack on the seventh day, with recurrence at the end of convalescence—the usual time.

Is Post-Scarlatinal Albuminuria Infectious?

Dr. Jas. T. Neech (Medical Officer of Health for Atherton) writes: Your correspondent, Mr. W. T. Freeman, has, I think, raised an interesting and important question in the above. The urine in scarlet fever is undoubtedly infectious, and I am of opinion that the infectiousness thereof ceases:

1. In cases where nephritis does not occur, with the general cessation of infectiousness in such cases.
2. In cases where acute nephritis supervenes it would be wise to regard the urine infectious until the tubules, etc., regain their normal structure.
3. In cases were acute nephritis passes into the chronic form, I should think that the infectiousness of the urine ceases after that acute condition has definitely assumed a chronic state.

LETTERS, COMMUNICATIONS, Etc., have been received from:

(**A**) Mr. B. Allsopp, Shirley; Mr. G. W. Adams, Birmingham; Aphonia. (**B**) Mr. W. A. Blount, London; Mr. W. F. Brook, Swansea; British Gospel Book Association, The Secretary of the, London; British Medical Temperance Association, The Secretary of the, London; Dr. H. C. Bristowe, Bath; Mr. J. E. Beggs, Walton; Dr. J. H. Bartlet, Ipswich; Dr. J. M. Barnett, Belfast; J. W. Batterham, M.B., St. Leonards; Dr. J. Barr, Liverpool. (**C**) Mr. A. W. Cowan, Wigan; Mr. F. Carre, Letterkenny; Dr. C. C. Claremont, Southsea; Mr. W. J. Coombs, Bridgwater; Mr. M. Colmache, London; Dr. W. A. Carline, Lincoln; Mr. J. D. Campbell, London; J. Carroll, M.B., Ilkeston; Dr. W. M. Campbell, Liverpool; Mr. W. T. Cole, Holywell. (**D**) Mr. J. Dacre, Clifton; W. Dudley, M.B., Birmingham; Dr. T. Dutton, London; Mr. L. F. Dod, London; Miss C. M. A. D'Orsey, Teddington; Mr. J. L. B. Dixon, London; A. C. Dutt, M.B., Whitby; Dr. C. Dukes, Rugby. (**E**) Enquirer. (**F**) Mr. C. N. Foley, London; Mr. W. C. Finch, Salisbury; Father; H. Finley, M.B., Carlisle; F.R.C.S.; Dr. B. B. Fox, Bristol. (**G**) Sir Douglas Galton, London; P. R. Griffiths, M.B., Cardiff; Mr. H. H. Graham, London; Mr. L. P. Gibson, Cowes. (**H**) essrs. C. R. Harker, Stagg, and Morgan, London; Mr. W. F. Henley, Banbury; Dr. L. Henry, Melbourne; Mr. T. F. Hanly, Desford; Dr. V. D. Harris, London; J. H. Horsburgh, M.B., Edinburgh. (**J**) Dr. A. Jacobi, New York; J. B. S.; Dr. E. Jepson, Durham; Mr. S. A. Jolly, London. (**K**) Dr. R. Kirk, Glasgow; Mr. G. T. Keele, London; Dr. J. H. Keay, Colne; Mr. E. M. Keely, Nottingham. (**L**) Mr. V. E. H. Lindesay, Accrington; R. H. Lucy, M.B., Plymouth; L.R.C.P.; Messrs. Lorimer and Co., London. (**M**) C. H. Milburn, M.B., Hull; M.B., M.A.; Mr. M. Marshall, Cambridge; Dr. R. Maclaren, Carlisle; Meg.; Medicus; Dr. A. G. S. Mahomed, Bournemouth. (**N**) Dr. T. W. A. Napier, Liverpool; Mr. G. Neasham, Durham; Mr. J. T. Neech, Atherton. (**O**) Dr. Oswald, London; Observer. (**P**) Mr. W. Planner, London; Dr. A. Parkin, Hull; Mr. H. E. Powell, London. (**R**) Mr. G. Q. Roberts, London; Mr. J. M. Richards, London; Dr. A. Robinson, Rotherham; Mr. T. W. Reid, Canterbury; Mr. C. S. Redmond, Gateshead. (**S**) Mr. A. W. Sayres, Wincanton; Mr. R. S. Smith, Monifieth; Mr. J. L. Stretton, Kidderminster; Dr. A. Sheen, Cardiff; St. John Ambulance Association, The Secretary of the, London; Dr. A. Strange, Shrewsbury; Mr. G. L. St. George, Lisburn. (**T**) A. Thomson, M.B., Maidenhead; Messrs. Toms and Cruttwell, London; Mrs. Thorne, London; Mr. W. J. Tivy, Bristol; Dr. J. C. Thresh, Chelmsford. (**V**) Mr. A. H. Vernon, Boscombe. (**W**) E. E. Waters, M.B, Sheffield; Mr. J. A. H. White, Newcastle; W. L. Woollcombe, M.B., Plymouth; G. H. Wickham, M.B., Bournemouth; Dr. W. M. Whistler, London; Dr. A. W. H. Walker, Harrogate; Dr. J. Watson, Newbury. (**Y**) Mr. P. M. Yearsley, London; etc.

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***** In forwarding books the publishers are requested to state the selling prices.**

"A DOCTOR'S HOLIDAY."[1]

Being the Oration delivered before the Medical Society of London, 1894.

BY WILLIAM MILLER ORD, M.D., F.R.C.P.,
Physician and Lecturer on Medicine at St. Thomas's Hospital.

MR. PRESIDENT AND GENTLEMEN,—*Neque semper arcum tendit Apollo.* All men, whatever their occupation, need periods of relaxation from work. These may come in short intervals of the days of work, and are, by common consent, at certain times of the year, more extended. Men take their rest in various ways. It is possible for some entirely to forget that to which their lives are in the main devoted, and to plunge abruptly into pursuits of altogether different kind. Neither idleness, the *strenua inertia* of the poet, nor distraction, seem to me to be for the physician the most appropriate form of recreation or diversion, if we regard the question from the highest, and, as I think, the most practical point of view. It seems to me that we, who are for the most part of the twelvemonth in close contact with humanity, are studying human beings, and looking on all sides for help in that study, may often find benefit, and always certainly pleasure, when we take leisure in the library, or pleasure afield, to find the truest rest in the riding of some hobby, which gallops one way or the other from man to the Nature around him. We can see instances of the usefulness of such extensions of professional occupation into regions of pleasant diversion in such works as that of the late Dr. Paris, entitled *Philosophy in Sport made Science in Earnest;* in Sir Thomas Browne, in Sir Henry Holland, and in Professor Gairdner's *Physician as a Naturalist.* The last orator of this Society pictured in an eloquent way the help given by literary study to the healer.

I propose to-night to ask you to follow me in a ramble among subjects more or less cognate to our own profession and its studies, in fact, I am going to ask you to go out with me on my autumn holiday. In the autumn of the year before last I was staying for a few days at the Land's End. It happened one day that I had engaged a boatman to take me out a-fishing in Whitsand Bay, a mile or so to the north-east of the point. When I arrived after a pleasant walk I found that fishing was impossible by reason of a great swell coming in from the Atlantic. Yet the bay itself was free from wind, and the sky was clear, so that the sun struck unhindered through the big green rollers as they broke upon the rocks in the mouth of the bay. The bay is formed by a break in the massive cliffs of this iron-bound coast, and is, on the land aspect, a wide expanse of yellow sand, sloping upward to a considerable height. To sit upon some rocks emerging from the sand and to watch the sunrays turned into the most brilliant green as the rollers swept onward was for a time a slothful pleasure. Presently, satiated with this, one began to look about and take in more of the surroundings. On the dry sand above high water mark there first claimed attention a broad band of pale green colour, suggesting the idea of a delicate green veil cast across the bosom of the yellow sand. On investigation this turned out to be a bed of the wave-leaved stock (*Matthiola sinuata*). The sea stock is not in itself a very beautiful plant. Its foliage is coarse, thick, and entirely devoid of symmetry or elegance. It looks like a plant which might have been beautiful, but, like some old statue, has had its fine lines worn away by wind and weather. Its flower is dingy and unattractive, yet its colour, as its leafage was scattered not too closely over the sand, made a beautiful harmony. It had for me, however, a more than redeeming quality. I knew it to be one of those plants which give forth scent at night. Such plants are mostly, in plain terms, ugly. Some of them have a faint scent during the day, increasing through the twilight to the darkness. It was a great delight to me as a boy to go into a little greenhouse containing several specimens of the night-scented stock, well named Matthiola, or *Hesperis tristis*, and to enjoy the lively perfume of their flowers, richer and more delicate than the perfume of any day stock. By day the plants were apparently but half alive, and the petals of the flower hung down, shapeless, dingy purple, and, as I may perhaps best express it, unkempt. With night the plant took on a new light, and exhaled its exquisite odour. I wondered then, as I wonder still, what might be the meaning of this nocturnal activity of a plant. It is certain that, in the daytime, plants break up carbon dioxide, retain the carbon, and set free the oxygen. It is, probably, also true that when the sun's influence is absent they absorb oxygen. How much of this is done by the foliage, and how much by the flowers, I do not know, but these plants have almost always made me think that under a process of oxidation odours were produced which could not be evolved when the growing life of the plant was in progress. I suppose that it is certain that this perfume has for its real object the attraction of moths, for the purpose of fertilisation. The cruciferæ generally are, no doubt, capable of self-fertilisation, but, in the interest of plants, cross-fertilisation is necessary. And so these plants, so unattractive in every way by day, appeal to the sense of smell of vespertinal insects. The whole aspect of flowers which are closed or unattractive by day, and open in the evening or at night, has been suggestively treated by Sir John Lubbock in *The British Wild Flowers in Relation to Insects.*

The belt of sea stock was, as one moved on shoreward, encircled by a crescent of very different colour, a belt of sea holly. As it breaks from the surface of the sand the sea holly (*Eryngium maritimum*) has marked attractions. The form of its leaves is, indeed, very much like the leaves of the holly. Their colour is very noteworthy. It is the glaucous colour which belongs to so many seaside plants. The word "glaucous" may be taken to mean a green colour overlaid with grey, or with blue, or with a film of white. Probably it has its origin from the Sea God (Glaucus), and its meaning is clearly "green, such as of the sea."

The Eringo flower consists of compound heads of considerable size, and rich blue lustre. The blue is not of the violet nor of the cornflower, but rather a rich turquoise. I will give you the description of it by the old naturalist, Gerarde: "It breaketh forth on the top into prickly or round heads or knops, of the bignesse of a walnut, held in for the most part by six prickely leaves, compassing the top of the stalk round about, which leaves as well as the heads are of a glistring blew; the floures forth of the head are likewise blew, with white threads in the midst." To find a plant of such great beauty springing from the sand, without association of other herbage, creates an impression of strangeness and great contrast. All botanists, however, know that this contrast is not by any means uncommon. On the sandy dunes of our coast there springs from the sand a convolvulus (*soldanella*) surpassing the convolvuli of the inland in size, in form, and in delicacy of colour, having in addition a corolla of porcelain-like texture. And botanists will also remember the little glaux maritima, with its thickly-crowded branches of small, short, closely appressed, and pointed leaves, and its small, solid, pink flowers. Beautiful as the sea holly is above the sand, it has an interest below the surface. It has a root altogether excessive in proportion to the size of the plant as seen on the shore. This root is of about the size of the stem of the laminaria, the oarweed of our shores. To quote Gerarde: "The root is of the bignesse of a man's finger, very long, and so long as that it cannot be all plucked up, unlesse very seldom: set here and there with knots, and of a taste sweete and pleasant."

For at least 300 years, and, I believe, up to the present time, there have been attributed to this root properties of a cordial and restorative nature—nay, more, aphrodisiac. Before Gerarde wrote about it, the aphrodisiac uses in particular must have been generally known. It appears to have been chiefly candied for use, and was at one time produced in large quantities in the South of England, particularly about Colchester.

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It is clear that the aphrodisiac qualities attributed by Gerarde and others to the candied eringo were matters of

[1] We are compelled by pressure on space to omit some passages of this interesting address.

belief and practical use in former times. The pages of the Elizabethan dramatists teem with allusions to this quality. In the *Merry Wives of Windsor*, Falstaff (Act v, sc. v), in need of such help, says as follows: "Let the sky rain potatoes; let it thunder to the tune of 'Green sleeves,' hail kissing comfits, and snow eringoes."

Elsewhere a potato pie has the same function allotted to it. Now it appears that at the time at which we are speaking the word "potato" was applied to several roots or tubers, namely, to a kind of yam, to the root of a plant belonging to the order Convolvulaceæ, and to the potato as we know it. The first two appear to have been dealt with in common more frequently under the name of "batata" than potato. Both of them were sweet roots, and lent themselves to the preparation of conserves. Neither of them could be cultivated in this country.

In the period of which I have been speaking, and still more in earlier days, the population at large was not very well fed. To a considerable extent fresh meat was a luxury; salted meat and dried or salted fish were the main animal foods of the common people, stock fish, salted and dried cod being very commonly referred to by the comic poets. On the other hand, the use of vegetables seems to have been neglected to a large extent, and there is very little evidence of much systematic cultivation of them. Here and there a cabbage may be referred to, generally in terms of depreciation. Probably the cabbages of that date more resembled the cabbage of our cliffs than the great globes which nowadays are carried in hundreds of thousands to Covent Garden. That the need, however, of the use of vegetable food in some form or other was felt is to be seen in the fact that a great many weeds of the present day were used as, or in, "sallets." In fact, the notoriously great prevalence of scurvy in those days marks the effect of a diet in two ways defective, and the instinctive search for vegetable foods extended far beyond the limits of the garden. That the need was in considerable excess of the supply is indicated here and there by the apparently unattractive qualities of many of the plants used. One can understand that wood sorrel, for instance, would make a very tolerable salad, and still more may it be said of the "lamb's lettuce" or "corn salad," which, though it rarely appears now at our tables in England, is still in common use on the Continent.

But when we come to such a thing as "salad burnet" we find a plant with less pleasant qualities much esteemed. It certainly has a flavour of its own, which may be attractive to some palates, but anyone who has chewed it would, I think, only regard it as food suitable for the lower animals. Indeed, I should be inclined to think that it was mainly used as a flavouring in a general way. It appears to have been frequently infused in wine, to which it was said to give an agreeable flavour, and, as Gerarde puts it, a "grace in the drynkynge."

If one walks along the shore one finds in many places the scurvy grass *(cochlearia)*. I suppose that very few people nowadays use this plant. Yet its leaves are succulent, and have a slightly pungent flavour. One may see it in enormous quantities at Lymington, on low banks almost dipping into the sea, and can well understand how scurvy-stricken sailors would be eager to avail themselves of its, to them, restorative qualities. It appears to have been largely used formerly, sometimes in the form of the expressed juice put into beer, or in the form of decoction flavoured with pepper, aniseed, etc., or boiled in milk or wine.

Now I venture to suggest that the potato, so easily grown and so large in its yield, offered, even while in process of acclimatisation, remarkable satisfaction to the craving for carbohydrates and vegetable juices, and that in doing so it restored the vital activities of the people who could make large use of it. In other words, that it was not in itself an aphrodisiac, but that it became so incidentally by helping to bring up men to the condition of health in which their natural instincts would assert themselves. It is, moreover, worthy of remark that in many parts of Ireland the potato is still regarded as conducing to fertility.

It has been particularly interesting to me to consider what kind of edible plants the scurvy-worn sailor would find at hand on coming to shore. The umbelliferæ, to which family the eringo, as you know, belongs, are singularly fond of the sea shore. They are, for the most part, rather aromatic than succulent, yet the samphire of our cliffs has doubtless formed many a refreshing dish for the mariner. For a moment let us try and enumerate a few of the umbelliferæ which are found by the sea. Everywhere one finds the carrot, with its slightly hollowed disc of sterile white flowers, and its central velvety brown-purple fertile floret. Under the hot sun its foliage assumes rich colours, beautiful to the eye, but not tempting to the palate. Without cultivation its root is of no use. In the same way we may speak of the celery, the parsnip, and perhaps even the fennel, which grows so luxuriantly in the bogs of our Cornish and Devonshire coasts. But besides the cabbage, the kales, and the sea beet, there are other plants that may have come in half in a medical, half in a dietetic way. Such are the goose-foots, the orach es, and many kinds of cress. We may be helped in understanding the old conditions by seeing what holds now in Arctic regions, where the inhabitants find a difficulty in obtaining sufficient vegetable food. The great Polar explorer, Nansen, gives some curious information as to the food of the Eskimo. His list of their vegetable foods is very limited. He states that the old Greenlanders used to eat a number of plants, among which were angelica, dandelion, sorrels, crowberries, whortleberries, and divers kind of seaweed. The angelica was apparently eaten raw. It is one of the many umbelliferæ that grow in vast numbers in damp places, and in wonderful luxuriance, on our coasts. Possibly if it were blanched like celery it might be crisp, as well, as it undoubtedly is, of rich aromatic flavour. It is, as you possibly know, very pleasant when candied, and lends its flavour to the liqueur Chartreuse. The Eskimo eats it as a kind of salad, well anointed with the oil from blubber.

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Scanty as are their vegetable resources, these people do not appear to suffer from scurvy. This is probably due to the fact that they eat largely of animal food, mostly raw, rarely cooked, and, as far as I can find out, never salted. They eat their fish very often frozen, and they are particularly fond of the skin of various species of whale, which is taken off the animal together with the upper layer of fat, and eaten raw. Nansen says that its flavour seems to him to suggest a blending of filberts and oysters. We may suppose that a diet of this kind may, besides being rich in fats, offer some association of carbohydrates. Our imagination may carry us from the smaller animals feeding on vegetable matter, in the sea and on its floor, next devoured by various kinds of fish and crustacea, which in turn may be supposed to be the prey of larger animals, until we come to the cetacea. So far as I know, these take no vegetable food directly. They feed only on other animals, and I presume, from their habitat, they have no fresh water to drink. Yet they do not have scurvy. Their teeth, when they possess them, are healthy, and their skin delicate. The contrast between this food of the Greenlander and the salted and dried fish of our forefather is well worth remarking in relation to scurvy. We may remember, also, how the Gauchos of South America live almost entirely on animal food in the form of strips of dried meat, not salted, but eaten in very large quantities, as the meat is in Greenland.

In what we may call the ascending food series, from the small animals living on the bottom of the sea or scattered through it to the great pelagic forms, one may certainly recognise the fact that the muscular tissues are particularly rich in a carbohydrate allied to sugar. This may be noticed in the scallop, in the crustacea.

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There is a certain old town on the coast of Dorset which has afforded me numberless, and yet inexhaustible, rambles. It lies at the mouth of a great valley, between broad chalk downs on the north east and a great mass of oolite on the south west. The floor of the valley belongs to the Wealden, and beyond the downs a tertiary moorland extends for miles into the interior of the country, dotted with large lake-like expansions of a small river, reminding one of the Highlands. Within the compass of a few miles there lies before the rambler a remarkable variety of flora and of animal life, from an abundance of land and fresh-water mollusca up to the blackcock. There one may find on the oolite the spider orchis, and the "flos Adonis" in the spring. There we may find in the

valley the early purple orchis and the meadow orchis in such profusion as can hardly be matched elsewhere, mingled with cowslip and oxlip, sufficiently present to temper with their pale yellow the rich rosiness of their companions, and I have never seen the adder's tongue fern so densely massed elsewhere as in some of the meadows near the sea. There in summer, on the downs, the bee orchis and the scorched orchis abound, and, later on, in the moorland we find patches of the "gentiana pneumonanthe," of what is there called the Cornish heath, of the rare bog orchis, malaxis paludosa, and the bladder wort. On the sandy shore there emerges from the seemingly barren surface the beautiful "convolvulus soldanella," with its scanty foliage and its large thick cup, streaked with delicate pink, and looking almost like a choice piece of porcelain emerging from the sand. There also is the "sheep's scabious," exiguous in its proportions, but retaining its rich blue; and there again the small modest clumps of the radiola millegrana. All these are bosomed in the stiff prickly bent, which, rising everywhere, is striving to turn the shifting sandhills into some sort of solid opposition to the inroads of the sea.

There again, as the sand has risen in embankments, little fresh water pools have been formed, with boggy surroundings. These are the home of the buck bean, or bog bean, *menianthes trifoliata*, a plant which always seems to me to have something tropical about its character, in its large, thick, tritoliate leaves, and its spikes of dainty pink flowerets, with their finely-divided fringe of still paler colour. It is well worth plunging knee deep into the boggy margin to obtain a few specimens of this exquisite flower. I, at least, have often done so. In the soft earth around one finds the tender bog pimpernel, contrasting strangely with the "devil's bit" scabious, the asphodel, beautiful alike in flower and fruit, the sundew, glittering and carnivorous, of which all species can be gathered, and the lesser butterwort, *pinguicula Lusitanica*, also probably carnivorous. Before the time of the incursion of a railway into this favourite haunt of mine, I took a well-remembered walk with a companion to the nearest station, about eleven miles distant, avoiding roads, and even paths, so as to explore the country in its original state. I well remember how, coming to a dip in the land traversed by a streamlet, I felt a great throb of pleasure on discovering a sort of hedge of the great yellow loose-strife. Now this plant, which rises to a height of three or four feet, with a pyramid of glorious yellow flowers, is called the Lysimachia vulgaris. It is not, in fact, a very common flower, although I have met with it in Dorset, at one end, and in the Cheviots, at the other end, of England. I can hardly understand why it is not more common, seeing that it is easily cultivated in gardens. When we met with it the time was come when we might fairly take a short rest midway on what was a very tough walk, and think about it. The word "vulgaris," as applied to a plant, does not by any means means indicate that it is a very common thing. The term rather recognises essentially the plant to which it is applied as the best known of its kind, mostly by reason of one or other quality attracting notice. The term has really the same sort of value as the term "officinarum" or "officinalis" bears in relation to medicinal plants. There are other lysimachiæ far more widely spread, such as, for instance, the *Lysimachia nemorum*, which can be found in almost any wood in the South of England; and, on the other hand, there is one which is very much rarer, the *Lysimachia thyrsiflora*, a most graceful plant, growing chiefly in moist places in Ireland. The generic name of the plant had its interest for us as we conversed about. The word "loose-strife" is, of course, a very fair translation of "Lysimachia," "the stayer of battle," yet the name is supposed to be derived from some Græco-Sicilian potentate, Lysimachus. This is not the only plant which bears the name of "loose-strife" in village botany. The richly-coloured spikes of the lythrum salicaria enjoy the title of purple loose-strife. These, as you know, form in summer no small part of the glory of the banks of Thames, and we were met by them later on in a walk where it took us through a flat country traversed by numerous little dykes. Whether to either of these plants has been attributed the property of stilling strife it is hard to say. While in modern botany these two plants find their place in widely separated genera the older herbalists group them together under the head of "lysimachia," apparently because of the willow-like character of their herbage. Moreover, the œnothera was included in the same group. They seem in old times to have been gathered together around the "vulgaris" type, and the willow-like form of their leaves seem chiefly to have guided the classification. As far as I can make out, their properties were limited to quieting the excitement of oxen. Gerarde writes: "Lysimachia, as Dioscorides and Pliny wrote, tooke his name of a specialle vertue that it hath in appeasing the strife and unrulinesse which falleth out amonge oxen at the plow, if it be put about their yoke." If it be true that Lysimachus, the son of Agathocles, was the first finder out of the nature and virtues of this herb, it is probable that the meaning of his name found ultimately its translation into an attribution of new powers.

As an illustration of the changes which London has undergone I find Gerarde saying that the "yellow lysimachia groweth plentifullie in moist meadowes, especially as you go along the meadowes from Lambeth to Battersey;" and of the lythrum he says: "it groweth under the Bishope's housewall at Lambeth, near the water of Thames." In fact when I am in the museum of St. Thomas's I often think of the purple loose strife that might have shown its virtues there now, but for the intrusion of great buildings into its lowly bed.

I have sometimes thought that these two plants, more or less resembling the willow, or perhaps better, the sallow, in their foliage might have drawn their supposed peace-making qualities from their likeness to the shrub, which has been in this country for years the emblem of peace and repentance at Eastertide.

Then the walk goes on. We chat on some of the many ways in which the naming of plants has been brought about. To revert to our first excursion, how came a "stock" to be called "Matthiola"? It appears to have been called after an Italian physician, Matthiolus, who lived in the 16th century, and was of great authority as a botanist. Now about Eryngium. Eryngium has a much older origin, being according to Liddell and Scott a diminutive of ἤρυγγος. Dioscorides has discussed the virtue of this plant, without, however, indicating the source of the name. The sources of the names of plants are very numerous. Some have been given from their forms and colours, some from their uses, culinary, medical, or poisonous; a good many from supposed likenesses in them to part of the human body, in diseases of which parts they were supposed to have a special healing value, "in respect of their signatures"; certain plants, flowering at particular periods of the year, have come under the dominion of the astrologer; others partly from their time of flowering, from their colour, and the shape of their flowers or leaves, have been associated with the Christian religion. And many other names have come down from classic times, or have their origin lost in the unwritten lore of the country people. It is worthy of remark that in many cases plants which seem to have no botanical affinity are woven together in their naming. For instance, in our chalky districts we find very commonly the long golden spikes of the agrimony, with its beautifully fretted leaves at the base. This is called *agrimonia eupatoria*, and is much used in rustic medicine. You may often see bundles of it hanging inside the doors of cottages. There is another plant, the *Eupatorium cannabinum*, and "hemp agrimony," growing to a height of from 3 to 6 feet on the margins of brooks. This plant belongs to the "Compositæ," and has apparently very little in common with the other agrimony, except in the name "Eupatorium." Here "Eupatorium" comes in as the generic name in one plant, and the specific name in the other. The link cannot depend upon appearance. Both plants have been used medicinally, and both for the relief of affections of the liver. It is most probable that "Eupatorium" means "Hepatorium," although Pliny refers the name of "Eupatorium" to Eupator, King of Pontus. As a further alliance, both have had repute in the cure of snake bite.

This subject of the naming of plants offers a tempting line to follow, but time intervenes. I will only say that I have lately read a very charming book called *Tongues in Trees and Sermons in Stones*, by the Rev. W. Tuckwell, which has much bearing on this subject, and which I may commend to you as a pleasant companion on a holiday.

The walk of which I have spoken was, as I have said, taken before direct railway communication was established between my pleasant little town and the main line. A few years later I found myself approaching it by train. As, travelling through the tertiary formation, we approached the girdle of chalk down, we passed through a cutting in which was exposed a bed of white clay, topped by a stratum of mould, with a surface of grass. Between the mould and the clay was a thin white layer which looked like chalk. There was evidently something unusual here, inasmuch as the chalk should have been below, instead of above, the clay. The contrast, also, between the layer of mould, at least a foot to 18 inches in length, attracted my notice, as I had just been reading Darwin's book on *Earth Worms*. My first excursion, therefore, after the day of my arrival, a pleasant walk of six miles, was made to this cutting. I soon found that the chalk was roughly broken, not rounded, as it might have been in some cataclysm from the adjoining hills, but apparently placed by human agency in a bed above the clay. Among the chalk, and in the lower part of the mould above, was everywhere abundance of broken pottery, of ancient type. Further exploration brought out the fact that the beds of clay were still being worked for use in pottery, the clay being shipped in large quantity to Staffordshire. My discovery was only a discovery for myself. I soon learned that in the workings clear evidence had been for some years obtained of the existence of a very large Roman pottery around the cutting I have mentioned. Many perfect jugs and vases had been disinterred, and the remains of old sheds and grinding stones had been exposed. On my walk back I saw in a window in the village adjoining a small Roman vase doing duty as a flower pot. It seemed to me, from the condition of the surface of the clay that all the growth of mould had taken place since the Roman labourer had bared it and formed his platform of chalk. So that here one had a sort of measure in from 8 to 18 inches of thickness of the slow up-building of a new stratum by the agency of the earth worm. Each inch must have taken one or two centuries. I hardly think that I should have been attracted as I was had it not been for the recent reading of the splendid work to which I refer.

And now, Mr. President and Gentlemen, our ramble must come to an end. In this holiday we have been, I hope, enjoying Nature and books, things which, I maintain, are cognate to the genius of our profession, but in its shorter and greater leisure. The pleasure which I have drawn from both in many a holiday time will, I trust, justify me before you in the choice of my subject. And, as for books, Horace has been greatly honoured of late by a great statesman. He (Horace) is a great friend of mine. I began this oration with him, and I will end with him, but not in the "amatory way" of the great statesman. I am not original in choosing this quotation. Sterne, in his immortal *Tristram Shandy*, pleads in these words for forgiveness for having taken the more cheerful view of the lives of men:

> Dixero si quid forte jocosius, hoc mihi juris
> Cum venia dabis.

ON VAGINAL HYSTERECTOMY.[1]

By LOMBE ATTHILL, M.D.,
Ex-Master of the Rotunda Hospital, Dublin.

Malignant disease of the uterus has, till within the last few years, been invariably fatal. To diagnose it correctly was, in fact, in all cases synonymous with pronouncing sentence of death, and that, too, by a slow, painful, and irksome process. The patient died worn out by pain, exhausted by frequently-recurring hæmorrhages, or of septicæmia. Seldom does any disinfectant suffice to remove the fœtor of the discharges in the advanced stages of cancer. No wonder that the dread of the loathsome disease is present to the mind of nearly every woman who may suffer from any form of chronic uterine trouble. No wonder that vigorous efforts have been made by many surgeons to arrest its progress, and possibly to cure these sufferers, by means of the actual cautery, by the free application of powerful caustics, by amputating the lower segment of the uterus when the seat of malignant disease, by curetting the cavity when it was primarily affected, or, as advocated by the late Dr. Marion Sims, by dissecting off with knives specially made for the purpose the whole of the intrauterine surface, and then filling the cavity with cotton saturated with a strong solution of chloride of zinc.

All these proceedings are vain: I have tried them all myself, and have seen them tried over and over again, and in no one case of any form of true cancer did anything more than temporary benefit follow. Now hysterectomy is an accepted operation, the mortality following its performance is small, and, if cases be properly selected, the prospect of the recurrence of the disease is certainly less than when other organs are attacked by cancer. That this should be so is easily understood, for the uterus is not alone not essential to life, but is as it were isolated from the general system. Of this I am satisfied that malignant disease of the uterus is in general, and when the cavity of the uterus is the primary seat of disease, always in the first instance a pure local affection, and that it is not till it has reached a comparatively advanced stage that the system becomes infected.

I shall relate three cases in which hysterectomy was performed on patients under my care, and then shall endeavour to point out the lessons to be deduced from them.

Case I.—Miss ——, aged 42, came under my care in February, 1890. She had been always healthy, and had lived an active life. Menstruation had been normal till about a year ago, when she first noticed it to be profuse, then that the flow recurred at shorter intervals. She began to lose flesh, and suffered from pains in the lower third of the back. In December, 1889, she had an alarming attack of hæmorrhage, which compelled her to seek medical advice. Since then had seldom been free from a watery hæmorrhagic discharge. A digital examination proved the vaginal portion of the uterus to be healthy. The fundus was very large, but quite movable; the os patulous and the introduction of the sound was followed by hæmorrhage. I diagnosed epithelioma of the cavity. I did not at the time inform the patient of my opinion, but advised that the uterus should be dilated and its cavity explored. I made this suggestion more with the view of verifying my diagnosis than with the hope of effecting much good. Accordingly, a few days later, this was done, and I removed with the curette a large quantity of soft growth, which was plainly cancerous. I then injected tincture of iodine, and on three or four occasions subsequently 15 minims of iodised phenol. At the time of the operation I suggested to her medical attendant the advisability of performing hysterectomy, but he thought the risk to life too great.

The patient improved greatly after this, and there was no return of the hæmorrhage or of the pain for nearly two months, but at the expiration of that time she came to me and stated that she had become as bad as ever. I then told her that her only hope lay in the removal of the whole organ. She at once consented to undergo the operation, which I performed on May 1st, 1890. During the four years which have since elapsed I have had this lady under my observation, and am happy to say that she is in the enjoyment of most excellent health. The uterus was examined by Dr. Bewley, whose report I append.

"Length of uterus, 4½ inches; length of cavity, 3¾ inches; weight, 5½ ozs. The uterine tissue felt firm and healthy externally. On opening the organ the cavity was found to be large. The mucous membrane at the os and for half an inch up from it was healthy; then for 1½ inch the surface was irregular and ulcerated, and covered with soft polypoid growths. The ulceration had in one place—on the anterior aspect—extended to the surface of the uterus, but perforation had not occurred. The upper 1½ inch of the intrauterine mucous membrane was quite healthy. The uterine wall in the central ulcerated region was more transparent than elsewhere; it was fairly hard, though not as tough as normal uterine tissue. This part of the uterine wall showed cancerous infiltration—that is, polygonal epithelial cells were growing between the muscular bundles, either in the form of irregular masses or of large irregular-shaped tubular glands. The tissues cut through at the operation seemed healthy, although the cancerous cells had extended so as to be very near the surface indeed."

Case II.—Miss ——, aged 57, consulted me in February, 1893. She had ceased to menstruate at about the age of 30. This she believed to have been the result of a lengthened residence in Switzerland, but her health in no way suffered, and she did not observe anything wrong till about eighteen months previously, when a colourless watery vaginal discharge occasionally appeared; this by degrees became more profuse and deeper coloured, till of late it was continuous and sanguineous. The fundus of the uterus, though large, was quite free, and the cervix healthy. The introduction of the sound was followed by sharp bleeding. In this case I merely dilated the cervix sufficiently to enable me to remove with a small curette a portion of the intrauterine surface for examination, which verified the opinion previously formed as to the nature of the case, and a few weeks later the patient submitted to hysterectomy, which, on account of her means being very limited, was performed in the Rotunda Hospital by Dr. W. Smyly. This patient is still under my observation, and there is no reason to doubt that she is perfectly cured.

Case III. On August 4th last Mrs. —— was sent to me by Dr. Britton, of Strabane. She had been a widow for twenty years, and had given birth to five children. She was in her 58th year. Menstruation did not cease till she was 52, and for the three following years her health had been fairly good, though she never was strong. In the autumn of 1891 she observed a red sanguineous discharge to recur at irregular intervals, and about two months before she came to me she had an attack of regular hæmorrhage, which weakened her greatly, but she did not suffer any

[1] Read before the Gynæcological Section of the Royal Academy of Medicine in Ireland.

pain. As in the two preceding cases, the uterus was large, but freely movable and not indurated. The cervix was shortened and healthy, in this case, too, I dilated the os just sufficiently to permit the passage of a small curette. The portions removed by it were evidently parts of a malignant growth. I performed vaginal hysterectomy a few days subsequently. She made a rapid recovery, the temperature never rising above 100°; nor did she suffer any pain or even feel sick. The following is Dr. Bewley's report of the result of his examination of the uterus: "The organ is somewhat enlarged, being 3½ inches in length. When cut open the lining membrane instead of being smooth is rough and irregular in an extreme degree. The cavity is bounded on all sides by masses of soft semi-gelatinous tissues which can be scraped away, leaving holes and fissures behind it in the uterine wall. No part of the lining membrane of the uterus is healthy, though the disease is much more marked in some parts than in others. Sections show masses of cells growing between the muscle bands in the uterine wall. I have no doubt that the disease is cancerous. The cut surfaces all appear healthy."

These three cases were very similar, and are typical of the class in which hysterectomy should be performed, and they all tend to establish three facts:

1. That the operation of vaginal hysterectomy, if carefully performed in suitable cases, is a safe one.

2. That malignant disease, when originating in the cavity of the uterus, is at first a local disease, and that, if the organ be extirpated at an early period, it can be eradicated perfectly. This may be considered as proved in the case of the first patient operated on, four years having since then elapsed; the others are too recent for this to be said of them with confidence, though I believe it to be so.

3. These cases also tend to show that the constitution does not become infected till the cancerous growths either perforate the uterine walls, or, extending downwards, engage the vaginal aspect of the cervix; they show, too, that uterine walls are capable of resisting for a considerable time the progress of the disease. In none of the foregoing cases could it have existed for less than a year prior to the operation being performed; indeed, in the last of the three narrated, it must have been, judging from the date at which the sanguineous discharge was first noticed, in progress for over two years; this fact, however, does not in any way modify the rule that the operation should be performed the moment the true nature of the disease has been recognised.

The great value of the operation of hysterectomy is now so universally recognised that it seems to me there are only two points connected with it open to discussion; one—and the most important one—the stage at which its performance is justified, or, to be more accurate, what are the conditions which should decide us against advising its performance, for it is almost impossible to operate at too early a date if once satisfied that the organ is the seat of any form of cancerous disease. But it is necessary that this be ascertained, for cases have occurred in which the diagnosis of malignant disease has been falsified by an examination of the organ after its removal. I think, therefore, it should be an established rule in all cases in which the disease attacks primarily the interior of the womb, that a portion of the intrauterine tissue be first removed and examined. I am well aware that pathologists cannot always say definitely that a given specimen contains true cancer cells, but where the result of examination is so doubtful that no definite opinion can be given, I think it is wiser to be guided by the symptoms, and if hæmorrhagic, alternating with watery discharges, and of frequent occurrence, and if pain be present, I should in doubtful cases be disposed, other conditions being favourable, to operate. In the great majority of such cases the disease progresses, and, when too late, will prove to be malignant. I should regret much less to have to think I had possibly performed an unnecessary operation than to see a patient whose life I might have saved die a lingering and painful death.

But it is important and far more difficult to decide whether it be too late to attempt to operate. I have from time to time been asked to advise in these doubtful cases; in the great majority of them I have been obliged to say that any operation would be inadvisable; in some the attempt to remove the whole of the disease was, nevertheless, attempted with most unsatisfactory results. Either the patient died rapidly from the effects of the operation, or recovered from it, to die ere long of the same disease which rapidly developed in the adjacent parts. In my opinion if the cervix be engaged to anything but a very limited extent, any operation is useless. If the cervix be healthy but the organ fixed, the prognosis as to the result of an operation is equally, or possibly more, unfavourable; and, of course, if both the cervix be engaged and uterus fixed, it becomes still more so.

Another matter I lay stress on is the condition of the bladder. It is at the junction of the uterus and bladder that in cases in which the cavity is primarily engaged cancerous infiltration and ulceration is most likely to occur. This was exemplified in Case No. 1. In a very brief period that patient's condition would have been hopeless. She had been urged by her friends to go to London, to have my opinion confirmed, or the converse, before submitting to an operation. Had she adopted that course I believe her doom would have been sealed by the mere loss of time. She had no symptom of vesical irritation. Other patients sometimes have. In brief, so long as I am satisfied that neither the cervix or any adjacent organ is implicated, I urge the removal of the uterus. If the cervix be implicated, or if the uterus be not freely movable, and the bladder causing trouble, I consider it, as a rule, inadvisable.

It is to be borne in mind that I am speaking of cases in which the disease originates in some part of the interior of the uterus; the portion just above the os internum seems a favourite position for it to commence, though no doubt the cavity, also, is in many cases primarily attacked. Of one thing I am certain, that, contrary to the statements so commonly made in books, cancer primarily attacks the body of the uterus much more frequently than is supposed.

In the cases I have detailed the uterus was removed *per vaginam*, and I believe it to be the best and safest operation, unless the fundus be too large to be without difficulty pulled through the pelvis. It is doubtless a troublesome one, and, indeed, I may say irksome. The steps of it are so well known as to render any special reference to details unnecessary: thorough disinfecting of the vagina and adjacent parts prior to commencing the operation is, of course, indispensable, as well as strictly antiseptic precautions subsequently. After the first incision across the anterior surface of the cervix, the finger, far more than knife or scissors, should be used to separate the uterus from its connections with the bladder till the finger reaches the top of the fundus, and the cavity of the peritoneum is entered; this and the next step—that of opening into Douglas's pouch—is the easiest part of the operation; the real difficulty consists in safely dividing the broad ligaments, so as to avoid injuring the ureters, and effectively securing the blood vessels. This is never an easy task, and is specially difficult when operating, as was the case in two out of the three cases narrated, on nulliparous women of middle age, in whom the vagina was narrow and indisposed to stretch.

In order to get at the broad ligaments more easily, and so to facilitate the securing of the uterine and ovarian arteries, it has been proposed to retrovert the uterus and pull the fundus through the wound in the posterior wall of the vagina. This I did in the first of the cases related. I do not intend to do it again. The fundus was very large, the difficulty of effecting the version very great, and the time occupied in doing so considerable, and no commensurate advantage was obtained. It is far better to drag down the uterus as low in the pelvis as possible, leaving it, however, in other respects in its normal position, and then to divide the broad ligament and secure the blood vessels.

It is the practice with some surgeons to seek for and remove the ovaries, and if they can be easily reached I do think it desirable, specially in the case of women who have not passed the climacteric period, for if left behind they may give rise to periodic attacks of pain and discomfort. In Case 1 one ovary was within reach, and was removed, the other could not have been removed without much trouble, and as the operation was a prolonged one I left it behind, and it has been a source of some discomfort: indeed, under any circumstances the removal of the ovaries gives additional security against a recurrence of the disease.

The only other question to be considered is whether the flaps of the divided vaginal wall should be approximated by the insertion of sutures, or that they be left alone. I think the latter course, in general, the best. The parts shrink and contract rapidly; union soon takes place, and the cavity closes, while silk sutures, which are generally employed, sometimes give rise to irritation. Packing the vagina with

antiseptic gauze is quite sufficient to prevent any prolapse, while it secures drainage, even if a drainage tube be not used, and this sometimes, at least, can be dispensed with.

A troublesome accident happened in the first of the cases I have related, which I am unable to account for. The catheter was passed every eight or ten hours for some days. After the operation the patient was allowed to use the bedpan, and she was able to empty the bladder without trouble, but on the tenth day after the operation urine was observed to escape *per vaginam*, and continued to do so for several weeks, when it ceased to flow. What was the cause of this? The bladder could not have been wounded during the operation, or urine would have escaped sooner. As the wound was a very large one three or four sutures had been placed in the flaps to cause them to approximate. Could the needle have penetrated the wall of the bladder while one of these was being inserted? I cannot say. I state the facts of the case.

I do not like to close this paper without alluding to those cases in which the cervix is the primary seat of cancer, and the advisability or otherwise of performing hysterectomy in such.

Pathologists are not agreed as to the direction in which in such cases the disease progresses. Dr. Cullingworth seems to believe that it spreads upwards. Dr. Williams, discussing the cases shown by Dr. Cullingworth, contended that the specimens exhibited showed that the tendency was for it to grow outwards, and to invade the parametritic tissues,[2] and stated that his experience convinced him that where amputation of the cervix had been practised the disease, if it recurred, was found to have invaded the adjacent cellular tissue and not the stump. This tallies with my own experience, and was well marked in the case of a patient on whom I performed supravaginal amputation of the cervix for cancer. The patient appeared at first to have been cured, but after an interval of a year or more came again under my observation, and died in hospital; and a *post-mortem* examination proved the uterus to be healthy, but all the adjacent parts were extensively infiltrated with cancer cells.

Inclining as I do to the views expressed by Dr. Williams, I have the greatest disinclination to recommend any surgical treatment in the majority of these cases. Amputation of the cervix I deem, except as a palliative, to be useless, and unless the case be seen at a very early stage indeed, hysterectomy I consider inadvisable.

I have deemed it best to confine this paper to the consideration of cases in which malignant disease attacks the uterus. To enter into a discussion of the question of hysterectomy in connection with myomata would be to extend it unduly; but it is not to be supposed that I do not recognise its value in such cases, only I fear that there is a tendency to have recourse to the operation nowadays somewhat too frequently. Nor do I ignore the fact that it seems to me that as our confidence in the safety of the operation extends, so will the frequency of its employment also extend. Thus there are certain forms of prolapsus uteri in which I am of opinion it should without hesitation be practised. Take those extreme cases, not so infrequently met with amongst the poor, in which nearly the whole of the uterus lies outside of the pelvis and the organ hangs down between the thighs, no plastic operation can be relied on in such cases, and no instrument will retain the organ with comfort *in situ*. These cases, too, are most favourable for vaginal hysterectomy because the organ is so accessible, and I believe that in such it will by and-bye be not infrequently performed.

[2] BRITISH MEDICAL JOURNAL, April 19th, 1890, p. 900.

UNIVERSITY OF PENNSYLVANIA.—Professor Pepper, who has resigned the office of Provost of the University of Pennsylvania, will continue to hold the Professorship of Medicine. During the thirteen years of his administration the teaching staff of the University of Pennsylvania has increased from 88 to 238, and the number of students from 981 to 2,180. About four million dollars have been added to the value of the lands, buildings, and endowments. Professor Pepper's own gifts to all departments of the University have been many and generous. On resigning the Provostship he made a contribution of 50,000 dollars, which will be applied to the extension of the hospital buildings.

EPIDEMIC JAUNDICE.[1]

BY WILLIAM RANKIN, M.D.GLASG.,
Churchtown, Londonderry.

A CORRESPONDENCE on the subject of epidemic jaundice has been going on for some time back in the columns of the BRITISH MEDICAL JOURNAL, and as a number of cases of an epidemic nature have come under my own notice within the past twelve months, a few observations on the subject may not be without interest.

Early in July, 1893, a lad aged 11 years, came to me complaining of feeling generally out of sorts. He had been troubled with headache, sick stomach, vomiting, and no desire for food for about a week previously. He had not kept to bed, and had walked over a mile to see me that morning. The tongue was furred, and the skin and conjunctivæ tinged yellow. Looking upon the case as one of jaundice due to ordinary gastro-duodenal catarrh, I treated it as such, and thought no more about it.

On that day fortnight two other members of the same family—one a girl aged 13, the other a boy aged 10—appeared, complaining of a precisely similar train of symptoms. There were the three young members of this family, and they were the only persons in the house affected. These two received the same simple treatment, and they also quickly recovered. I may mention here that my whole medicinal treatment consisted in two sharp calomel purges at an interval of three days, and a mixture of nitro-muriatic acid and nux vomica given for a week or ten days.

At that time I had a number of cases of a similar nature, and they all yielded rapidly to these simple remedies. During the months of July and August I saw eleven cases of jaundice in young persons, and all within a limited area—I should say not more than a mile long and half a mile wide—and I am quite sure there were other cases in the same locality at the time which did not come under my observation. When one case occurred in a house, as a rule other members of the family became affected, but in no instance did I see jaundice in an adult at this time, and occasionally—as in the three cases first referred to—all the children in the house suffered. They all occurred in the low-lying part of my district.

The disease seemed to have exhausted itself during the months of July and August. It was evidently of an epidemic nature, but as regards the precise cause I could not then satisfy myself. I may mention, and I have since seen the theory advanced, that it occurred to me at the time that it might have been a sequela of influenza. Influenza, however, at least influenza in epidemic form, was certainly not in the neighbourhood at the time.

During March and April, 1894, an almost similar series of cases have cropped up in the high-lying part of the district. The first case I saw, early in March, was a boy aged 10 years, one of a family of six children, who came to me suffering markedly from jaundice. In this family the whole six children, one after another, became affected, and other cases occurred in the immediate neighbourhood, all within a radius of half a mile. The last two cases were in children of different families, but neighbours. Both these cases I saw on the same day, April 7th. At the time these different cases occurred I was not aware of the existence of what is generally recognised as influenza in the district, nor have I since seen any cases of influenza.

In almost every instance the friends had been able to satisfy themselves quite readily as regards causation. One had seen some repulsive sight, while another had been where there was a bad smell, as they said, and yet another had taken a drink out of a dirty pool; some had eaten too heartily and some had eaten something which had "gone against them," and one at least had got a fright. The two cases which I saw on April 7th, occurring in different families, were both ascribed to the patient having eaten eggs on Easter Sunday. In regard to treatment, the popular notion was quite in keeping with the views of the majority in regard to causation, some going so far even as to apologise for seeking medical aid at all, saying they understood the affection

[1] Read before the Londonderry and North-West of Ireland Branch of the British Medical Association.

was either incurable, or at most yielded only to some magic "charm" or "cure," the secret of which was known but to a few—mostly old women.

In almost all the cases the stools had been observed to be pale and clay-coloured, and generally of stiff consistence. In some, however, there was diarrhœa, and in these the appearance would be deceptive. The colour of the urine had also been noted in most cases. Suffice it to say that these were cases of jaundice, and jaundice in a comparatively simple form.

I kept the patients on milk diet. The medicinal treatment I have already indicated. In no case did I find it necessary to confine them to bed. There was seldom any rise of temperature or quickening of the pulse. They were generally out of sorts for a week or ten days, but recovery was rapid and complete. Whether the treatment adopted had much to do with the cure I am not at all certain, but of this I am satisfied—that other cases which received no treatment, or at most a dose of senna or castor oil, also recovered, and recovered rapidly.

Here are a series of cases in regard to which one cannot say they belong wholly to either the obstructive or the non-obstructive form. If to the obstructive, they must have been cases of gastro-duodenal catarrh, starting probably as a primary catarrh of the stomach, which extended to the duodenum and thence to the gall duct, which became blocked with exudation. The only admissible causes in these cases would be "errors in diet" or "catching cold." Possibly they may have been due to errors in diet; possibly they may have been due to catching cold, but if so, to me it seems very remarkable that so many cases should have occurred within a comparatively short time, and that they should have been limited to a comparatively small area. If, on the other hand, these cases belong to the non-obstructive form, they must come under the division "Poisons in the blood interfering with the normal metamorphosis of bile," and under the subdivision "Poisons of a specific nature."

Now these cases all occurred in young people (eldest 13 years). Sometimes all the children in the house became affected but in no case an adult. They occurred in a particular district of country limited in area, but not having a common water supply, and they occurred, as far as I can make out, when there was no influenza, or, at least, not what is commonly recognised as influenza. Influenza, however, assumes so many different forms, that it is quite possible to have it attacking chiefly the gastro-intestinal tract instead of the bronchial or nervous, as under ordinary circumstances. We might thus have jaundice due to a specific poison and yet of the obstructive form. But, it may be said, is it at all likely that you can have jaundice due to the poison of a specific fever and yet unaccompanied by fever? In all the cases which I saw the jaundice had already developed when I was called in, and it is quite possible that, even had there been a premonitory febrile stage, it had passed off, for, as a rule, when jaundice develops, the temperature and pulse fall. I am forced to the conclusion that, like influenza, we have here to deal with an affection of a distinct specific nature, fortunately of a mild type, and not attended with the many and serious consequences so often met with in influenza. As regards the exact nature of the poison, I am unable to form any definite opinion. Whether it is the influenza poison or whether the affection is a sequela of some obscure form of influenza or whether due to a poison of its own are questions on which I am still undecided, but that the disease is due to a poison of some kind is, I think, beyond doubt.

[Since writing this paper four fresh cases have come under my notice, all in the same district of country as those before referred to, now making a total of 23 since the beginning of March last.]

PRESENTATION.—Dr. James Skeen, who has acted for four years as junior assistant physician in the Stirling District Asylum, has been presented with a gold hunting watch, together with albert and pencil case, on the occasion of his leaving the Asylum for Bothwell, having received the appointment of medical superintendent of Kirkland's Asylum here.

INTESTINAL OBSTRUCTION DUE TO OCCLUSION OF THE ILEUM BY PRESSURE BAND: OPERATION: RECOVERY.

By ROBERT JONES, F.R.C.S.E.,
Honorary Surgeon, Royal Southern Hospital, Liverpool.

ON Tuesday, December 19th, 1893, I was asked by Dr. Hugh Shaw to examine a case of intestinal obstruction. The patient was H. A. S., a milliner's apprentice, aged 14. On December 7th, whilst at her work, she was suddenly seized with violent pains shooting across the abdomen in the line of the umbilicus. She vomited several times on her way home, and, on her arrival, went to bed. A little later her bowels were freely moved. This attack was not regarded seriously by her family, and as the acute symptoms seemed to abate domestic antidotes were relied on. For two or three days she remained in considerable pain, with occasional sickness, when her mother administered a copious soap and water enema. This gave temporary relief by emptying the large bowel of gas, but the pain and vomiting returned with severity, and on December 13th Dr. Shaw was sent for. He found the patient in great pain, with moderate distension, good pulse, moist tongue, and normal temperature, and, thinking it best to act conservatively, he gave appropriate directions with a view to lessening intra-abdominal pressure and to relieving pain. All the symptoms, however, increased, the pain becoming intense, and the vomiting more and more frequent, while the temperature remained at about 102° F. On December 15th the vomiting became fæculent, and from that time until December 19th, when I first saw the patient, nothing was retained. She then presented symptoms of impending collapse—a small quick pulse, dry tongue, a haggard look, listless demeanour, and rapid shallow respirations. The abdomen was distended and tympanitic, especially round the middle line. Fæculent material was being vomited every few minutes, thirst was intense, and there was pain on pressure over the right side of the abdomen. The patient, despite all this, was mentally alert, and took an intelligent interest in her affairs.

I was told she had been a well-developed girl, and well nourished, and had never needed a doctor in her life. For the last four years, however, she had been subject to what were called bilious attacks, the prominent symptom of which was vomiting, which lasted for one or two days, and was often accompanied by pain and sometimes by diarrhœa. For twelve months she had had considerable pain in the epigastrium, which came on directly after food, and often resulted in sickness. About two years back she suffered great pain in the right side on exertion, more particularly if she attempted to walk quickly or to run.

We decided, in view of the previous history and the patient's condition, that laparotomy should be performed without delay. That evening a median incision 3 or 4 inches long was made below the umbilicus, and the cavity of the abdomen exposed. Distended gut, pinkish in colour and dotted with flaky lymph, presented. On introducing my finger, the coils of intestine were sufficiently adherent to each other to require care in separating them. I was able quite easily to recognise the cæcum, and found it collapsed. There were also in the pelvis a few coils of empty small intestine. By very gently following this without exposing bowel, I felt a distended loop of intestine, which was carefully brought towards the wound. Immediately below I found a band about half an inch broad, which obviously compressed the intestine. I did not feel justified in accurately defining its limits, but it stretched transversely across the gut from the direction of the right kidney. The bowel was not kinked, but was sufficiently pressed upon to be quite occluded. Ligatures were applied and the strand severed. The wound was adjusted, and the patient placed in bed. Here a somewhat dramatic incident occurred. It was found that owing to a blunder a sponge was short. After a brief and fruitless hunt in basins, pails, and *débris*, I decided to reopen the abdomen. Luckily this was done, and the sponge recovered from within.

It is needless to report the subsequent events at length. The operation, which only lasted twenty minutes, had but a

very slightly depressing action on the patient. The vomiting once and for all completely ceased. The temperature was normal next morning, and only once again, on the third day and for a few hours, rose to 101°. On the second day (December 21st) there was a suspicion of the passage of flatus; on December 22nd, a certainty of it; on December 24th, the tongue became moist, and the bowels were opened at 3 P.M. and 4 P.M. The first motion, about 4 ounces, was similar to the vomit, the second consisted of mucus. Shortly following the evacuation there were sharp abdominal pains, and the tongue became a little dry. From this time on the bowels were frequently opened, and the patient rapidly got well.

There are a few points of interest to which I would wish to allude. 1. The operation was performed on the twelfth day of obstruction and during considerable abdominal distension. I have often expressed an opinion that it is useless and dangerous to hunt for obstruction while peritonitis and distended gut are present, and that the indications are best met by a carefully performed enterostomy; opening of course a distended coil. The empty condition of the cæcum, however, together with the collapsed small intestine, pointed to obstruction high up—a condition ill-suited for enterostomy. Again, although the obstruction was high up, fæcal vomiting did not appear for eight days, and this suggested that probably the obstruction, very incomplete at first, became more complete by distension from above, and that had care been exercised early the symptoms might have continued, as they had begun, to abate.

This opinion is fortified by the fact that the pain she complained of during exercise and hurry was over the neighbourhood of the band, and that probably her frequent so-called bilious attacks emanated from the same source. Amongst the causes which deprive an early obstruction of a fair chance, next to cathartics, should be placed enemata, which, as Niemeyer pointed out years ago, induce peristalsis above as well as below the seat of obstruction.

There was another symptom in this case which interested me, and that was the sharp abdominal pain which followed shortly after the anal evacuation. I have frequently observed this before. In one case, which was being treated expectantly, the patient died on the twentieth day, four hours after the relief of obstruction, having endured sharp abdominal twinges. In another case after the relief of a very simple hernia, an evacuation of bowel took place, followed by collapse and death.

FORMIC ALDEHYDE AS A RAPID HARDENING REAGENT FOR ANIMAL TISSUES.

By W. McADAM ECCLES, M.B., B.S., F.R.C.S.,
Assistant Surgeon to the West London Hospital.

In the busy life of the present day the saving of time in all parts of medical work is of the utmost importance, and this is especially so in regard to microscopic pathology. Too often a portion of tissue, removed either for diagnosis or in the way of treatment, is never thoroughly examined on account of the inordinate length of time which the processes of hardening, cutting, staining, and mounting will require. Fresh sections of tissues are difficult to prepare, and often decidedly unsatisfactory. Of the various fluids in use for hardening animal tissues before section, two are commonly employed—namely, alcohol and chromic acid. Absolute alcohol hardens most tissues in some four or five days, but has the great disadvantage of being apt to render them brittle, or to harden them very unequally. Methylated spirit will take a fortnight or more to produce a satisfactory result. Chromic acid is generally used as potassium bichromate in solution, with some sodium sulphate in the well known Müller's fluid. Wherever the sulphate penetrates—and it has great power in this direction—the chromic salt will follow, and harden the tissue extremely well; but the process requires an inconvenient length of time—in fact, often as long as six weeks, and with many renewals of the reagents. Pure chromic acid, or chromic acid with spirit, hardens in about a week, but again is liable to make the tissue brittle. Perchloride of mercury interferes much with staining, though it hardens rapidly. Thus any reagent which tends to shorten this period of time, and yet produce satisfactory results, is to be welcomed.

Experimenting in some other ways with formic aldehyde, I was much struck by its extremely powerful and rapid hardening effect. I therefore determined to test its action upon tissues, especially very soft varieties of normal and pathological structures, just indeed those most difficult to prepare for section. Normal cerebellum, testis, lung, thymus gland, and ciliated epithelium of the trachea all hardened well in three days when immersed in a 20 per cent. solution of the aldehyde, though for the testis and lung a 40 per cent. strength is the better. None of the tissues became brittle, but all were easily cut after soaking in gum with an ether-freezing microtome, and all stained well with logwood, and some with logwood and eosine. None of the cells of the various specimens were altered in shape or character.

Of pathological tissues, a very soft round-celled sarcoma from the head, an adenoma of the thyroid gland, and some emphysematous lung were treated with a 40 per cent. solution, and all were sufficiently firm in forty-eight hours for cutting; and again all the sections took the ordinary stains well. The lung tissue was, however, somewhat brittle. Compact growths, such as scirrhus or renal tissue, require only a 10 per cent. solution for twenty-four hours.

I am thus led to think formic aldehyde in 40 per cent. solution for very soft tissues, in 20 per cent. for firmer, and 10 per cent. for quite firm material, acts as a most rapid and satisfactory hardening reagent. It does not render any tissue brittle in the way spirit does, and in no way prevents a stain acting well on the sections. It is therefore a useful adjunct in pathological and histological work.

A CASE OF HYDATIDS OF FEMUR IN THE SITE OF FRACTURE:

WITH REMARKS ON THE METHOD OF AMPUTATION THROUGH THE HIP-JOINT.

By M. EUSTACE, M.D., B.Ch.Dubl., L.R.C.P.I.,
Surgeon, Church Missionary Society's Hospital, Quetta, Baluchistan.

Previous History.—A. B., a Pathan, male, aged 25, was admitted to the Mission Hospital, Quetta, in March, 1893, suffering from a fracture of the shaft of the right femur at the junction of the upper with the middle thirds of the bone. The history he gave was that a year before his admission to hospital he was knocked down by a horse, and had his right thigh fractured. He was laid up with this for six months, but after this time was able to get about again. Four months before coming to hospital the thigh fractured spontaneously at the same place, and a swelling began to form at the site of fracture.

Condition on Admission.—The patient was very emaciated and weak, the very slightest movement causing him severe agony. A round fluctuating tumour separated the ends of the fractured bone. The hypodermic syringe gave only negative evidence. The patient was suffering from hectic, and could only take fluid nourishment.

Exploratory Operation.—Two days after admission a small incision was made into the tumour, which revealed the presence of hydatids, and by slightly increasing this a large number of daughter cysts were evacuated. On further examination of the fractured ends it was found that the whole shaft of the femur was involved by these organisms, and it was proved beyond all doubt that the only thing that could save the patient would be amputation through the hip-joint. Although this operation was so slight, yet owing to the weak condition of the patient he nearly died on the table. After six weeks' careful nursing and feeding, I thought that the condition of the patient had so far improved that amputation might be performed without serious risk. However, the next day he was not so well, and I concluded that death on the table could only follow.

Amputation through the Hip-joint.—A few days after this I undertook to operate at the patient's earnest request, adopting the following precautions, which I think will be of interest to many. The use of skewers in amputation through the hip-

joint has been already practised by Dr. Myles, of Dublin, Dr. Wyeth, and others; but as my method of using them differs from theirs, and gave me every satisfaction, I think I do well in describing it. The wound which had been made for exploring the ends of the fractured bone had never closed, and though it had never suppurated, a continual discharge of daughter cysts took place through it. This wound was thoroughly washed out and dusted with iodoform; the patient was then put under ether instead of chloroform, a catheter was placed in the rectum connected by a tubing with a vessel containing warm 1 per cent. salt solution, and the whole body was well covered with blankets. The limb to be amputated was then raised by an assistant and the first skewer inserted. The point of the skewer was entered 1 inch behind and below the anterior superior spine of the ilium, crossing in front of the shaft of the femur nearly parallel to Poupart's ligament, and coming out 2 inches in front of the tuberosity of the ischium. A second was entered just above and behind the great trochanter, coming out at the same point. By manipulating the limb no difficulty was experienced in doing this. Two pieces of elastic tubing were then twisted in figure-of-eight form over each of these skewers. A modified circular amputation was then performed, the skewers preventing all hæmorrhage. The circular cut was so made as to leave ample room for a good anterior skin flap and a posterior combined flap of about one-half its size. The vessels of the anterior flap were first dealt with and then those of the posterior. The outer end of the incision was then prolonged over the joint and the head of the bone removed. No difficulty was experienced during the operation; there was no bleeding to speak of, and the condition of the patient was excellent.

Result.—Though this patient died suddenly the next day, I do not think that his death was directly due to the operation, but to its having been performed too late. It was done as a last resource at his earnest request.

Remarks.—1. The pulse improved during the operation, and kept good up till just before his death. I put this down to the use of ether in the first place, but am led to believe that it was much more due to the constant use of the saline solution during the course of the operation.

2. The disease involved the whole length of the bone, but not the acetabulum nor pelvis. No thorough *post-mortem* examination was allowed.

3. It seems to me that in this case the first fracture was an ordinary one, and that the second was caused by the hydatids making a choice of the inflamed fracture area for development.

4. During the operation three pints of the saline solution were injected into the rectum, showing the large amount which can be absorbed. This fluid was all retained.

SARCOMA GROWING AT THE SEAT OF A RECENT FRACTURE.

By P. RHYS GRIFFITHS, M.B., B.S.Lond.,
Medical Officer to Out-patients, The Infirmary, Cardiff.

C. T., aged 21, a wood turner, whilst skating on January 19th, 1891, fell upon the ice, and twisted his leg under him. He was taken to the infirmary, where it was found that he had sustained a simple fracture of the left thigh at the junction of the middle and lower thirds. He remained in the infirmary for five weeks; the limb was then put up in plaster-of-Paris, and the patient sent home. At the end of a fortnight he returned to the infirmary, where the plaster case was removed, and a linen bandage put on, the fracture apparently having done well. Three weeks after this—ten weeks after the accident—a swelling was first observed where the bone had been fractured. This rapidly increased in size. The patient was readmitted into the infirmary, but, declining to undergo operation, he was discharged at the end of a week.

I saw the patient in consultation on June 7th, 1891. He was then pale and emaciated, his face showing evidence of considerable suffering. The left thigh was enormously enlarged, the skin tightly stretched, the superficial veins coursing in the form of broad dark bands, and the whole surface intersected with silvery streaks; the leg and foot very markedly œdematous. The circumference of the thigh just above the knee was 19½ inches, in the thickest part 20¼. The length of the tumour was 13 inches. On July 21st the circumference was 25¾ inches in the thickest part, and the length of the tumour 15½ inches. On September 28th the circumference was 28 inches, and the length about the same as before.

The patient gradually became thinner and weaker, and he died on September 28th, having persistently refused any operative interference. Very considerable difficulty was experienced in keeping the skin of the under surface of the thigh from sloughing on account of the patient's reluctance to be moved. About fourteen days before death a large sloughy ulcer developed in this situation, and a considerable area of skin became dark coloured and boggy. There was no history of a swelling or pain prior to the accident, nor of any family predisposition to malignant disease.

The *post-mortem* examination was made on September 29th. On removing the skin the deep fascia was found tightly stretched over the tumour. The muscles around the tumour were converted into broad, very pale, and ribbon-like structures. The growth was surrounded by a thin fibrous sheath. On section it presented a pinkish-grey appearance. In some places there were masses of firm white fibrous tissue, especially marked along the outer border of the tumour. The whole of the growth was traversed by bands of fibrous tissue. The shaft of the femur had disappeared, except for two small pieces of necrosed bone about an inch in length, forming the anterior wall at the lower end, and a piece about 4 inches long and 1 inch in width at the upper end. The upper articular end and the great trochanter were redder than normal, but otherwise not affected. It appeared probable to me, from the appearance of the upper end, that the growth had started in the periosteum. At the lower end the cartilages covering the condyles of the femur and the semilunar cartilages of the knee-joint were untouched. The growth had extended downwards into the cancellous tissue of the condyles, into the suprapatellar pouch, and had eroded the upper part of the cartilage of the patella. Small cysts were scattered here and there, and also extravasations of blood. To the touch the growth was in parts firm and unresisting; in others it was elastic. The femoral artery was compressed by the growth. The tumour weighed nearly 25 lbs. On microscopic examination it was found to be a small spindle-celled sarcoma.

The condition appears to be a very rare one, if we may judge by the very small number of recorded cases. Fracture of bones in which central sarcomata are growing is not rare. In this case there was no evidence to suggest the presence of a growth at the time of the accident.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

SEQUEL OF A CASE OF GENERAL PARALYSIS OF THE INSANE AT PUBERTY.

In the British Medical Journal of November 18th, 1893, I was permitted, by Dr. Wade, to publish a case of General Paralysis of the Insane at the time of Puberty, which was then in the Somerset Bath County Asylum. At that time the patient was alive, and I had every reason to believe that, in the event of death, no *post-mortem* examination would be allowed. Since then the boy, B. L. P., has died, and a *post-mortem* examination was permitted. As the case is incomplete without an account of it, I hasten to give the particulars, which fully confirm the diagnosis made during life.

Examination 72 hours after Death.—Temperature 32° F.; body much emaciated, and limbs contracted. Calvaria comparatively dense; no sign of old or recent injury to head could be detected; membranes thickened and slightly milky, very adherent to brain substance, and striped removing considerable portions of it; no tubercle. Ventricles dilated, and contained excess of fluid, but their floors were quite smooth; no sign of any gross lesion; weight of brain 40 ounces. With the exception of one or two small nodules

of tubercle in the right lung, the other organs were quite healthy.

The brain was examined microscopically by the fresh method: General congestion of brain; in the outer layer of nerve cells but few "scavenger cells" could be seen, but in the deeper layers they were very numerous; the nerve cells showed various degrees of degeneration, from slight vacuolation, to complete disorganisation of the cell and its nucleus. The cord also was carefully examined: In the cervical region the posterior and lateral columns were exceedingly well mapped out, and appeared to contain excess of fibrous tissue; but in the dorsal and lumbar regions no sign of any degeneration could be detected. The central canal was patent in its whole length. The anterior tibial nerve was examined, and found to be healthy.

Wells. HUBERT C. BRISTOWE, M.D.Lond.

PULMONARY EMBOLISM.

A FATALITY under the unusual circumstances I am about to relate is so sad, that I think it merits record for the sake of its warning. I was called to a patient, aged 34, advanced six months in her first pregnancy. I found slight phlebitis of the left saphena, from the knee to the groin. No varicosity of the veins had been noticed by the patient previously. There was no fulness of the veins of the leg or foot. The thrombosed saphena felt but a thin cord knotted in a place or two. There was no swelling of the foot, only trifling tenderness, and nothing to suggest thrombus in the larger, deeper veins. Absolute rest and poppy fomentations were ordered, and when visited four days later all tenderness had disappeared, very little thickening was to be felt, and there was no swelling of the foot. She was allowed to get up on the following day.

Two days later, while at stool, she was seized with dyspnœa and anginal symptoms, and died within fifteen minutes. She had been up and about the previous day, and felt in perfect health.

The questions I would ask are, how comes it that a saphena not largely dilated can yield a large enough thrombus to plug the pulmonary artery? How can such a calamity be foreseen, and more effectually guarded against?

Bournemouth. H. GRABHAM LYS, M.D.Lond.

THE PERCHLORIDES OF MERCURY AND IRON IN TYPHOID FEVER.

ON theoretical grounds it has appeared to me that the indications in typhoid fever may be met and the disease combated by internal administration of some astringent preparation of iron combined with small and continued doses of perchloride of mercury. During the past two years I have treated twenty-one consecutive cases by giving ♏xx doses of tinctura ferri perchloridi with liquor hydrargyri perchloridi ʒss every four hours. The result of this treatment in my hands has so far exceeded my expectations that I wish to draw attention to this method.

In reviewing the cases the following points seem worthy of record:

1. All the cases recovered.

2. In no instance did the temperature rise above 104°; in the majority of cases the highest temperature recorded was 103°.

3. Diarrhœa was slight compared with my experience of this symptom in typhoid treated in the routine manner. In none of the cases did the stools exceed eight in twenty-four hours, whilst in most of them five evacuations in twenty-four hours was the highest number noted during the continuance of diarrhœa.

4. Hæmorrhage from the bowel was conspicuous by its absence in every case. Epistaxis occurred in four cases.

5. In none of the twenty-one cases were there any complications.

6. In no case did the fever continue beyond the third week; in five cases it terminated between the fourteenth and eighteenth days.

7. In each instance convalescence was rapid and satisfactory, there being no relapses or sequelæ.

The ordinary fluid (milk) diet was adopted throughout the fever. In no case was it necessary to discontinue the perchloride of mercury, and although this drug was given every four hours throughout the continuance of fever no symptom of mercurialisation was noted in any case.

W. B. WEDGWOOD, L.R.C.P.Lond., M.R.C.S.Eng.

King's Lynn.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

JONATHAN HUTCHINSON, F.R.S., President, in the Chair.

Tuesday, May 22nd, 1894.

THE INFLUENCE OF DIFFERENT KINDS OF SOIL ON THE COMMA AND TYPHOID ORGANISMS.

THIS paper, by R. DEMPSTER, M.B., was communicated by Dr. MITCHELL BRUCE. The research was undertaken with a view of answering the following question: Has the soil in itself any action favorable or injurious to the life of the comma bacillus of cholera Asiatica and the bacillus of typhoid fever, or does the length of life of these organisms in soil simply depend upon the amount of moisture that may be present? The action of the saprophytic bacteria present in the soil was left out of consideration. Sterilised soils alone were used. The experiments were carried out with white crystal sand, yellow sand, garden earth, and peat. These soils were sterilised by means of moist heat. It was found that small quantities of the soils were rendered sterile when steamed for one hour on each of three successive days. The first series of experiments were carried out with the comma bacillus of cholera Asiatica, an organism most sensitive to external influences. Fresh agar cultures of the comma bacilli were used, and from these emulsions of the bacteria were made in 0.75 per cent. salt solution or in distilled water. Measured quantities of the emulsions (not exceeding 1 c.c.) were added to the various soils. The tubes with a few exceptions were kept at room temperature, or at 22° C. Cultures were made from the tubes at intervals, in order to determine the presence or absence of living bacteria. (1) Experiments were made with a dry soil without anything being done to prevent loss of moisture. The results were as follows:

In white crystal sand comma bacilli alive on	3rd	but dead on	4th day.
In yellow sand "	"	3rd "	4th "
In garden earth "	"	3rd "	4th "

The comma bacilli must have died, therefore, between the third and the fourth day. (2) Experiments were next made with a moist soil, which, however, contained no excess of moisture. In this case also nothing was done to prevent loss of water by evaporation. The results obtained were the following:

Moist white crystal sand—comma bacilli alive on the			7th day.
Moist yellow sand	"	"	33rd "
Moist garden earth	"	"	33rd "

(3) Experiments made to find the length of time comma bacilli would live in a soil when any excess of moisture was allowed to pass through the soil, but where little or no loss of moisture took place from the surface of the soil. Under such conditions it was found that the bacilli were alive in white crystal sand on the twenty-eighth day; in yellow sand on the sixty-eighth day, and in garden earth on the sixty-eighth day. (4) Experiments made with a soil which had been deprived of its moisture. In this case it was found that the comma bacilli did not live longer than one or two days. (5) Experiments made to find relative length of life of comma bacilli on soils in which moisture was allowed to escape, and on soils in which evaporation of moisture was prevented. The experiments that were made with white silver sand showed that when moisture was allowed to escape the bacilli were alive on the third day, but were dead on the eighth day. On the other hand, when the evaporation of water was prevented the comma bacilli were still alive on the forty-seventh day. (6) Experiments made to find rate at which the soils lose their natural moisture by evaporation. The amount of water in each of the soils used varied greatly. From the above experiments it might be expected that on the soil containing the least moisture, or on that which could part with its moisture in the shortest time (by drainage or evaporation), the life of the organisms would be shortest. Parallel experiments were made with soils containing a relatively small amount of moisture. It was found that garden earth became dry in seven days, yellow sand in four days, and white crystal sand in a few hours. These results, however, were due to the varying amounts of moisture present in the soils experimented with, garden earth containing more moisture than the sand. Under equal conditions of temperature, the rate of evaporation was about the same in the three soils. But in nature, owing to local and seasonal conditions, the rate of loss would not be the same; thus good drainage would carry off the moisture more quickly, and one soil would drain more quickly and thoroughly than another. (7) Experiments made to find the relation between the amount of moisture in the soil and the length of life of the comma bacilli. To quote an illustrative experiment. In white crystal sand, where evaporation was allowed to take place, the bacilli were still alive on the twenty-seventh day with 1.57 per cent. of moisture in the sand. The bacilli were dead on the thirtieth day with 0.66 per cent. of moisture in the sand. When evaporation was prevented the bacilli were alive on the 174th day, and the sand still contained 7.1 per cent. of moisture. This experiment illustrates the close relation existing between the amount of moisture in the soil and the length of life of the organisms. With regard to peat, it was found that the comma bacilli were invariably dead in twenty-four to twenty-six hours, independently of the amount of moisture that might be present. In sterilised 0.75 per cent. salt solution the bacilli were still alive on the 174th day. In sterilised urine the bacilli lived at blood heat for fourteen days, and at 22° C. for twenty-nine days. Experiments with the bacillus of typhoid fever: On a dry soil, where evaporation was allowed to take place, the following results were obtained:—In white crystal sand the bacilli were found up to the ninth day, in yellow sand up to the eighteenth day, and in garden earth up to the fourteenth day. On the moist soils, on the other hand, the following were the results:—In moist

white crystal sand the typhoid bacilli were alive on the twenty-third day, in yellow sand and on garden earth on the forty-second day. On soils which had been deprived of their moisture the bacilli were only found up to the seventh day. Experiments made with peat showed that on this soil the bacilli did not survive longer than twenty-four hours. Similar results were obtained with the comma bacilli. Peat was the only one of the four soils used which exercised a distinct destructive action on the organisms independent of the amount of moisture present. Experiments were finally made to test the filtering capacity of the soils. With a filter 6 inches thick the results were as follows:—

White crystal sand held back	99.6	per cent.	comma bacilli
Yellow sand	,,	99.9	,,	,,
Garden earth	,,	89 0	,,	,,
Peat	,,	100.0	,,	,,

On the other hand a current of water could carry the comma organisms through two feet and a-half of porous soil. The following are the conclusions arrived at by the author:—White crystal sand, yellow sand, and garden earth have no marked favourable or injurious action on the life of the organisms. The length of life of the organisms in the soil depends chiefly on the amount of moisture present. Peat, on the contrary, is very deadly to both the comma bacillus and the typhoid bacillus. The soil acts as a good filter, holding back most of the organisms, but it is possible for these organisms to be carried through two feet and a-half of porous soil by a current of water.

The PRESIDENT announced that the author was unfortunately unable to be present, through illness, but that Professor Macfadyen had kindly undertaken to reply on his behalf.

Brigade-Surgeon SCRIVEN, from his experience in the Punjab during twenty years, had learnt from his own experience that some soils were hostile to the life of the bacillus of the Asiatic cholera. For instance, Multan, in the Punjab, was outside the cholera area, whereas the neighbouring district of Lahore was occasionally decimated by the disease. He remembered that on one occasion, when cholera was raging at Lahore, a traveller had passed through to Multan, where he died of cholera, yet his case remained the only one in the district. So far as he knew, there was no peat in the soil of the central plains of India, but it was quite possible for other soils to have disinfectant powers. In Southern Bengal, where cholera was endemic, the soil was damp, and in such soil the bacilli could live long. This would explain the *de novo* production of sporadic cases; and if, as the author's facts showed, the bacilli could live in a damp soil for so long as 174 days, it was easy to see the impossibility of connecting one case with another. He then contrasted the dry soil of the Punjab with the moist soil of Calcutta. In the Punjab the cholera only throve when the soil had been moistened by the rains, and there were no sporadic cases. It came with the rains in August, and died away with their cessation in September. That was at any rate true of Lahore. The rains were never so heavy in the Punjab as in Calcutta. If there was a very heavy rainfall, it would sometimes check an epidemic, and, as it were, wash it away. So that in Bengal cholera ceased during the rainy season. The facts in the author's paper might explain this paradox—that the rains favoured cholera in Lahore and stayed it in Bengal.

Dr. WASHBOURN referred to the immense labour necessary for the production of such a paper as the author's. He thought that the author was justified in his conclusions, which confirmed the observations of previous workers. He then gave a summary of the work already done in the same direction. Koch was the first to determine the effect of moisture on the vitality of cultivations of the comma bacillus. He had found that cultivations dried on sterilised cover glasses died in three hours. Kitasato had found that cultivations in gelatine films on cover glasses retained their vitality for as long as three days; this being probably due to the dry surface of the film preventing the moisture from escaping from the deepest layers of the film. Uffelman had found that when earth was dried the bacilli lived usually not more than one day, though rarely they did not die for three days. In other experiments cholera bacilli actually increased in moist soil for about eight days, but after twenty days they began to die out. In nature saprophytic bacilli doubtless played a very important part. Cholera bacilli when cultivated in unsterilised earth showed no multiplication in twenty-four hours, and shortly after they began to die out. When cholera bacilli had been added to fæces it was found that they had retained their vitality for only two or three days. Typhoid bacilli showed a much greater power of resistance. Dried on cover glasses they would live for eight to ten weeks; if kept moist, for as long as eighteen months. Uffelman had found that in garden earth typhoid bacilli remained alive for ten to twenty-one days, in white sand for seventy days. Grancher and Deschamps had been able to keep them alive in moist soil for three months and a-half. In unsterilised soil typhoid bacilli died fairly early; when cultivated in putrid fæces Uffelman and Karlinski had found that they remained alive for as long as three months. He was not aware of any previous experiments with peat, and would ask Dr. Macfadyen to what its disinfectant power was due. He did not know what the reaction of peat was, what salts were present, or the quantity of saprophytic bacteria as compared with other kinds of earth.

Dr. WARD HUMPHREYS, of Cheltenham, said that the town council of that city were about to obtain an extra water supply from the Severn, and asked if the peat in the water of that river could be considered as disinfectant towards typhoid and other pathogenic bacilli.

Dr. KENNETH MCLEOD referred to experiments conducted in Calcutta by Douglas Cunningham, in which it had been found that cholera bacilli did not develop readily in unsterilised milk, though when sterilised it was a very favourable medium for their existence and increase. The effect of moisture was the point of the paper. There were, however, many other factors to be considered, and the presence of filth was of the first importance. Although the comma bacillus, as the *causa causans* of Asiatic cholera, was a very good working hypothesis, he could not allow that it was an absolutely demonstrated fact. Temperature was a great factor as well as moisture in reference to cholera. A dry atmosphere was inimical to the development of cholera; moist air and soil were favourable. At the height of the rains, when the soil was absolutely saturated, the cholera disappeared. Again, when the temperature exceeded or fell below certain limits cholera did not flourish.

Dr. CAYLEY referred to typhoid fever in tropical and subtropical countries, and showed that in some cases its spread could not be due to the contamination of milk or water. It was, he said, in the opinion of those best qualified to judge possibly distributed by dust. This was an important point, as, if true, it would point to the inadvisability of the dry earth closet system in hot countries. Such closets were largely in use in India, and might be the way in which typhoid was spread there.

Dr. THIN congratulated the author on the results of his patient investigations, which he rejoiced to see came from the laboratory of the British Institution of Preventive Medicine, and he thought that special thanks were due to Mr. Cobb for his munificence in having founded a scholarship for the purposes of this research.

Dr. ALLAN MACFADYEN, in reply, said that the author was aware at the time that he started his investigations that the path he was taking was not a novel one, but the importance of the subject had led him to pursue it again. He himself was of opinion that the truth lay between the view of Pettenkofer and that of Koch. Experiments conducted upon the surface soil were most important, because the surface soil was most likely to be contaminated by pathogenic organisms from man, etc., and acting, as it did, as an efficient filter, it retained a large number of such organisms in its upper layers. The deeper layers of the surface soil did not possess a suitable temperature for the continued life of pathogenic bacteria, and again the influence of saprophytic bacteria was only exerted in the uppermost layers of the soil. For practical purposes the surface soil could be regarded as consisting of three layers: (1) the extreme superficial layer which was usually either very dry or very moist: (2) an intermediate layer which was always damp, and which did not admit of evaporation; and (3) a deeper layer lying immediately above the subsoil, which was kept wet by capillarity from the subsoil. The three factors to be considered in studing the questions raised in the paper were the subsoil, the water, and the action of other bacteria. The paper itself dealt with the first two of these, and with regard to the third, a later communication would be made, but they had ascertained already that cholera organisms would live in soil a long time side by side with saprophytic organisms. The author's experiments differed a little from Uffelman's, but these differences might depend upon the number of bacteria used and the varying resisting power of different samples of micro-organisms. Peat contained a large number of spores of bacteria, and a point for their future investigation would be to compare the number of bacteria present in peat with those in other soils. The peat was acid in reaction, and some complex soil acids were present. At present no direct experiments had been made with peat in solution. They were now engaged in working out the effect of the presence of filth on the growth of the micro-organisms. There was evidence to show that temperature also played an important part. The presence of a summer heat and of a salt solution lengthened the life of a comma bacillus. In conclusion, he bore testimony to the patience with which Dr. Dempster had conducted these experiments, and he wished also to express his gratitude to Mr. Cobb, the founder of the scholarship, who had so generously defrayed the expenses of this important research.

HUNTERIAN SOCIETY.

C. J. SYMONDS, M.S., F.R.C.S., President, in the Chair.

Wednesday, May 9th, 1894.

DIPHTHERIA.

MR. ST. CLAIR B. SHADWELL, resuming the adjourned discussion on diphtheria, said that he was medical officer of health to one of the eastern suburbs, divided from London by the river Lee. The annual number of deaths from diphtheria had been few, and in 1870 and 1872 there had been no such deaths at all. Between 1873 and 1879 the number amounted to about three annually. From 1880 to 1886 (1880 being a memorable year in the history of the district, inasmuch as it was then that the present system of drainage was entered upon) the annual number of deaths averaged ten. In 1887 there was a sudden rise, equal to a death-rate of 1.5 per 1,000, and in 1888 of 1.7. Since that date the rate had gone down, and for some years it had been 0.8 per 1,000. The medical officer of health for Plumstead held very strongly that the great cause of the spread was the ventilation of the sewers into the road. The speaker thought it was quite possible that water might sometimes serve as a vehicle. The only domestic animal that appeared to him to have any share in disseminating the disease was the cat, and a few instances of this had come to his notice. Skilled opinion at present tended to regard bad smells as not having much to do with the causation of the disease. He showed on the screen a rough plan of the district, pointing out how the disease had occurred in a particular street, and it looked really as if the system of drainage had something to do with its spread. In other parts of the district it had spread in the neighbourhood of certain schools, having been conveyed thither by one of the patients from the infected street. If anything was to be done to check the spread of the disease, there must be a definite understanding between the school and the sanitary authorities. Diphtheria might be conveyed a considerable distance, and he instanced a case in which it could be clearly traced from New York to Liverpool and further into the country.

Dr. WASHBOURN had never had the slightest difficulty in demonstrating the presence of the bacillus, and this in large numbers, in all recognised cases of diphtheria. The bacillus was only found in the membrane; it was, therefore, a local disease, for the bacillus never grew in the tissues or fluids of the body. The membrane which formed in the fauces was very different in appearance from that which formed in the trachea, and as it spread into the smaller bronchi it gradually changed into a thick exudation. He described the method of making cultivations of the bacillus from the membrane. A patch of membrane was washed with sterilised water, and then a piece was hooked off with sterilised platinum wire, and sown on the surface of some blood serum. The tube was put in an incubator, and within twelve hours a diagnosis could most certainly be made. If the case were one of diphtheria, there developed on the surface of the serum a number of large white colonies of the diphtheria bacillus; when a little of the culture was spread on a cover glass, dried, and stained with methyl blue, the bacillus could be seen with high power. It consisted of rods, clubbed at the ends and taking the stain irregularly.

It had been assumed that the "pseudo-diphtheria bacillus" was only a modification of the ordinary diphtheria bacillus. In favour of this view was the fact that the ordinary virulent bacillus could be rendered non-virulent by certain methods of cultivation. In forty-five children suffering from various diseases of the throat other than diphtheria the pseudo-bacillus had been identified in fifteen, and the examination of the fauces of forty-nine healthy children showed it to be present in twenty-six. It had been suggested that the non-virulent bacillus might undergo an increase of virulence in the presence of a certain inflammation, and this view would explain the occurrence of many outbreaks of the disease. Membranous exudations often occurred in scarlet fever, but this was not diphtheria, for the bacillus could not be found, and clinically this exudation differed also, and was not followed by paralysis. Another class of cases were those of real diphtheria without membrane. He referred to the case of three brothers in the same house, all of whom were attacked with sore throat. The first two had simple redness of the fauces, but showed the diphtheria bacillus, and the third shortly afterwards had a typical attack of membranous diphtheria. As to the duration of infection, fourteen days after the disappearance of the membrane virulent bacilli had been found on the tonsils. One might get a membranous exudation in the throat of pigeons, which though contagious was not diphtheria.

Dr. HINGSTON FOX showed diagrams to illustrate the mortality from diphtheria during the past thirty-five years in London as recorded by the Registrar-General. Starting with a death-rate of 284 per million in 1859 and subsequent years, a long period of quiescence followed between 1864 and 1882 (only 80 per million in 1872), since which there had been a rise, considerable in 1888 and 1889, and still more in 1892 and 1893, until last year the mortality reached 750 per million inhabitants. If diphtheria had an epidemic cycle, it must be one of long period. The mortality from scarlatina was altogether on a larger scale, attaining in epidemic years (as in 1870) even 1,875 deaths per million. It bore no relation to the diphtheria death-rate, and had been low of recent years. Measles also bore no such relation; this disease showed a curious tendency to be prevalent in alternate years. Enteric fever was the only specific disease bearing an apparent relation to diphtheria, and this was one of inverse prevalence; during the recent epidemic the enteric curve had been depressed. The inverse relationship in geographical occurrence of these two diseases had been clearly shown. A second diagram displayed the seasonal prevalence of diphtheria, which was like scarlatina, increasing in the autumn and declining in January, only to a less marked extent. On the third chart the distribution of cases over different ages and sexes was marked out, showing of course the selection mainly of the early years of life and the slightly greater liability of females to be fatally affected. The gradual change in the disease, leading it to become more prevalent in towns and less exclusively in the country, its great variability, and association with apparently simple tonsillitis, and its having no constant skin rash, suggested that it was yet unstable, and had not developed to the stable position of other specific fevers.

Dr. GLOVER LYON said that at one of the fever hospitals all cases of sore throat among the nurses or staff had been treated early by local applications during thirty-five years without one death. The mere number of deaths, to the extent of double that in former epidemics, did not prove that we were in a very much worse state, because the improved diagnosis must be taken into account. With regard to typhoid fever, it did not seem probable that there was any connection between the two. The extra exactness of diagnosis in typhoid fever and the care in its treatment had reduced its mortality.

Dr. F. J. SMITH referred to three cases. He treated each with a different local application, and all had recovered.

Mr. THORP had long used a combination of phenol, turpentine, and strong liquor ferri perchloridi, locally.

Dr. WALTER CARR asked whether a membrane in the throat proved not to be diphtheritic could be pronounced not infectious, and therefore in no need of isolation.

Dr. H. J. SEQUEIRA said he had had experience at a fever hospital of 300 or 400 cases. The mortality with or without treatment was between 30 and 35 per cent. The use of local treatment or not did not seem to make any difference.

Dr. ARTHUR DAVIES observed that the empirical method of treatment by attacking the membranes had a solid scientific basis, the bacillus being in the superficial part of the membrane.

Dr. NEWTON PITT, in reply, referred to the energetic steps taken in New York, where an official doctor examined free of charge membrane from any patient, sending down two sterilised tubes to receive the specimen; within twelve or fifteen hours a message was sent to the medical man whether or not it was a case of diphtheria. In two out of three cases of membrane no bacillus was found. In Paris, if the bacillus were not found the children were sent back to their homes.

Dr. GOODALL said that if the larynx was implicated the case was one of diphtheria. It was good treatment to get rid of the membranes as fast as they could, applying the spray—or, better, washing out the mouth with a Higginson's syringe. He had never sent a child out under six weeks—after a bad attack much longer. He had never had a case sent back from the same house, though this was tolerably frequent in scarlet fever. Adults might go out at the end of a month, but should be warned against kissing their children.

Dr. WASHBOURN said the bacillus was present not only in the membrane, but also in the adjacent parts, and this would explain how it was that the membrane returned after removal.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF PATHOLOGY.

Professor ALFRED SCOTT, M.D., President, in the Chair.

Friday, March 16th, 1894.

RENAL TUBERCULOSIS.

Dr. MYLES showed the kidneys and intestines of a boy who had been under his care at the Richmond Hospital, who complained of pain over the pubes and incontinence of urine. His urine was normal in quantity specific gravity 1012, and contained pus. He was suspected to be suffering from stone in the bladder, but examination by the sound was postponed owing to his debility. He died suddenly four days after admission. On *post-mortem* examination the right kidney was greatly enlarged, and the cortex subdivided into cavities of about an inch in diameter, filled with putty-like *débris*. The right ureter exhibited small tuberculous ulcers along its entire length. The left kidney was only slightly enlarged, but was in a more advanced stage of tuberculous degeneration, being converted into a mass of caseous material, calcifying in parts. The left ureter was occluded, apparently from cicatricial contraction. The mucous membrane of the bladder showed acute tuberculous infection, being studded with millet-seed tubercles. The small intestine similarly was acutely infected, most marked in the upper parts. The lungs were quite free from tubercles.

Dr. BENNETT asked if the urine had been examined for tubercle bacilli.

Dr. MYLES replied that it had not, but that after death he had taken some of the *débris* from one of the cavities in the kidney, and examined it. He found, however, only a few bacilli in it.

TUBERCULOUS PERICARDITIS.

Dr. LITTLE showed a specimen of pericarditis which had occurred in a woman who had, four months previously, suffered from typhoid fever, and who showed several caseating masses in the lungs, but who did not suffer either from rheumatic fever or renal disease.

Dr. BEWLEY described a section which he had made through one of the small nodules growing on the peritoneal surface of the intestine, at a place corresponding to the Peyer's patch. The floor of the patch, which was devoid of mucous membrane, was formed of rather dense granulation tissue, and the little nodule attached to it was composed of fibrous tissue with a small mass of caseous material, and in addition some giant cells. On account of these he thought the nodule was probably tuberculous. He regarded the case as one of double infection, both typhoid and tuberculosis.

After remarks from Dr. SMITH, Dr. BENNETT, and Dr. BOYD,

Dr. J. W. MOORE advanced the theory that the case might have been one of pyæmia following typhoid fever. He said the mass in the lung might possibly be due to an embolus of a septic nature.

Dr. JAMES LITTLE, in replying, stated that as yet no microscopic examination had been made of the pericardium, but he hoped to have it done. The mass in the lungs resembled in all respects to the naked eye a caseous mass, and not a portion of lung affected with embolus. There was also a caseous gland in the mediastinum.

SPLENO-MEDULLARY LEUKÆMIA.

Dr. M'WEENEY read a paper on this case, which was that of a man, aged 50, admitted for obscure symptoms into the Mater Misericordiæ Hospital, under the care of Dr. Boyd. On admission the red discs were 67 per cent. of normal, and were to the leucocytes in the proportion of 8.8 to 1. During the patient's stay in hospital the red sank to 44 per cent., whilst the white corpuscles also showed a marked diminution, the proportion being now 1 to 35. Large myelocytes, often with eosinophile granulations, were very frequent, and the number of eosinophile cells of all kinds was much above normal. The mast cells were numerous, but he could not with certainty confirm Ehrlich's description of the distribution of neutrophile granules. Nucleated red blood corpuscles, both normoblasts and megaloblasts, were very numerous, especially the former, and the nuclei of the former were frequently found lying free, with circumstances that seemed to point to their extrusion from the cell. Their recognition was greatly facilitated by the marked metachromatism (with Ehrlich's acid, hæmatoxylin and eosin) which they showed when compared with the nuclei. Many of the nuclei of the nucleated red corpuscles presented so regularly lobulated an appearance as strongly to suggest a somewhat obscured mitotic process in the rosette stage.

Dr. BOYD gave a short account of the clinical symptoms of the case on whom Dr. M'Weeney's observations had been made. The patient complained of breathlessness on exertion and feverishness, and of being unable to do his work. There was nothing abnormal about the heart, or lungs, or the alimentary canal. The patient had an enlarged spleen, a slightly enlarged liver, and was slightly anæmic. He lived in a marshy district, but never had any sort of malarial fever. The pains in his bones were very transient indeed. He considered the case might be one of leukæmia, and was greatly interested when it was found to be of the spleno-medullary variety. The patient was treated with arsenic, and improved under it.

In reply to Dr. M'ARDLE, Dr. M'WEENEY stated that he had not examined the blood of patients with sarcomata, but that the next time he got an opportunity of doing so he would.

PERFORATING WOUND OF PHARYNX.

Dr. M'ARDLE reported a case of perforating wound of pharynx, causing mediastinitis.

Dr. MYLES remembered a somewhat similar case in which the fatal symptoms likewise took some days to develop. A man came to hospital stating that he had swallowed a fish bone. He was able to swallow fluids but not solids; no probang was passed. Five or six days afterwards he became feverish, and shortly died. A small fish bone was found to have perforated the pharynx and also the trachea. A mediastinal abscess had formed, and the patient had, in addition, purulent pneumonia.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

T. S. CLOUSTON, M.D., President, in the Chair.

Wednesday, May 16th, 1894.

MASSAGE.

DR. HALLIDAY CROOM opened a discussion on massage as an adjuvant to medical, surgical, and gynæcological practice. He discussed its value in relation to constipation, "neurasthenia," and gynæcology. The method had not, in his hands, produced brilliant results, but he said

probably that might be his fault. He could only remember two cases of what was called "neurasthenia" that were distinctly improved by massage. He would like to know something of the failures of those who paraded the marvellous successes that were heard of from time to time. In constipation there were cases undoubtedly in which massage was helpful, and probably also gynæcological cases, though he had not met with many that seemed to him pre-eminently suitable for such treatment.

Dr. A. J. KEILLER discussed the *technique* of massage in various conditions and circumstances, and cited some cases that had derived benefit from the treatment.

Dr. J. H. A. LAING discussed massage specially in relation to sprains, and spoke of the great benefit to be had from early treatment on such lines. Instead of weeks, sprains were recovered from in days. In regard to constipation, massage was not the only proper part of the method; active movements ought also to be carried out, movements of the body in various directions, in order to bring fully into play the abdominal muscles. He was not so much of a sceptic in regard to gynæcological cases as Dr. Halliday Croom. He believed that massage on the anterior abdominal wall was certainly helpful.

Dr. W. ALLAN JAMIESON referred to massage as an adjuvant in the treatment of skin disease, referring specially to cases of premature alopecia and sclerodermia.

Dr. JOSEPH BELL believed that Colles's fracture might be treated solely by massage, without splints. He agreed with Dr. Laing that average sprains could by massage be got well in a much shorter time than by old treatment. This only applied to moderate sprains. "White swelling" of the knee was sometimes helped by massage. Women who persistently over-ate were naturally helped by massage. In all such cases he was a firm believer in the personal equation of the nurse—especially in "nervous" cases.

Professor JOHN. CHIENE thought that massage, or rubbing as he preferred to call it, was of the greatest value in preventing adhesions after fractures or dislocations, and he believed that early rubbing after sprains was almost always to be recommended. He was not prepared to follow Dr Bell in treating Colles's fracture solely by rubbing; he always put on splints in addition. In early tuberculosis of joints the question was, Is the joint to be left at rest? Or, in the light of the researches of Metchnikoff, ought we to recommend early rubbing?

Dr. P. A. YOUNG spoke highly of massage and of the Weir-Mitchell methods. He had seen excellent results in vomiting of purely nervous origin, and in constipation also. In these cases, of course, one ought to raise the state of general nutrition by all available means. In old people with weak digestion massage was valuable, and, indeed, all round it was an invaluable aid to the physician, the surgeon, and the gynæcologist.

Mr CATHCART thought that certainly the mechanical stimulus of massage led to absorption of adventitious products, as in stiff joints. He was not inclined to advise the movement of tuberculous joints.

A GENTLEMAN in practice in Glasgow, who had just returned from Norway, being invited by the President to speak, urged the necessity of greater knowledge of methods, etc., on the part of physicians, and thought they should prescribe the kind and strength of massage. It was also important to combine gymnastics with massage, and in neurasthenia massage and exercise.

Dr. JAMES RITCHIE was a great believer in dry massage, but there was no hard-and-fast rule. There was no doubt that oil was a great help in some cases; it increased weight, promoted absorption, etc.

Dr. JAMES CARMICHAEL thought that great harm was being done to the cause of massage by those who practised the method acting alone, without the aid and advice of a physician. Bonesetters and rubbers were as old as the hills, and in these days there was again a tendency to charlatanism, humbug, and quackery, which ought to be guarded against.

Dr. AFFLECK believed in the great value of massage in cases of peripheral neuritis of alcoholic origin, as well as in cases of insomnia. In cases of so-called neurasthenia he was less enthusiastic, inasmuch as there seemed so large an element of quackery in that association. It was a pity that massage was, thus far, only within the range of the rich.

Dr. HUNTER, Dr. JOHN PLAYFAIR, and others spoke; and Dr. HALLIDAY CROOM replied.

KIDDERMINSTER MEDICAL SOCIETY.

DAVID CORBET, M.R.C.S., Vice-President, in the Chair.

Friday, April 27th, 1894.

EXTRAUTERINE FŒTATION.

Mr. J. LIONEL STRETTON read notes of a case of extrauterine fœtation. The patient, aged 27, had been married seven years, and had four children; no miscarriages. Last menstruation a week before Christmas. On February 11th she felt a sudden pain in the lower part of the bowels, and fainted. Dr. Robinson saw her, and advised her removal to the hospital. On admission at 1 P.M. she was deadly pale, extremities cold, pulse almost imperceptible. She complained of pain in the lower part of the abdomen, where a distinct fulness was felt, which in places appeared nodulated, the right side being fuller and more tender. Ether was administered, and the abdomen opened by an incision 3 inches long in the middle line. About three quarts of blood and clots were cleared out. The hæmorrhage was found to come from a small pin-hole rent in an extrauterine pregnancy of the right Fallopian tube close to the uterus. This was ligatured and removed, together with the ovary. During the operation three pints of saline solution were injected into the left median basilic vein, with marked benefit. The operation was rapidly performed, and the patient returned to bed. She rallied for a time, but never fully recovered from the shock of the primary rupture, and died forty hours after the operation. *Post mortem* 6½ hours after death. No signs of peritonitis; the uterus was enlarged, and contained a decidua. The specimen removed at the operation was shown, the ovary exhibiting a well-marked Graafian follicle.

COMPOUND FRACTURE OF FOREARM.

Mr. W. HODGSON MOORE showed a case in which a compound fracture both bones of the forearm had occurred in a boy, aged 6 years; it was not seen until eight days after the accident, when there was a considerable amount of suppuration, and a large surface of both bones was found to be bare. Free incisions were made, and the arm put up in splints. There was very little deformity, and the bones have united firmly, allowing free movements.

TUBERCULOUS DISEASE OF ANKLE.

Mr. J. L. STRETTON showed an ankle joint removed that afternoon. There was erosion of the cartilages, a large patch of caries on the upper surface of the astragalus, a smaller one on the posterior surface of the tibia, and thickening of the synovial membrane, due to tuberculous disease. This had existed several months, and previous incisions had been made, but thorough examinations failed to discover destructive changes in the joint, which were only detected by laying it freely open prior to amputation, and even then the carious patch on the tibia was not apparent. Mr. Stretton emphasised the point that in many cases it was impossible to discover dead bone without very free exploratory operations, which should always be undertaken in suspected cases.

TUBERCULOUS PERITONITIS.

Dr. EVANS read this paper. He sketched the history of this disease from 1763, and contrasted the theories of its etiology and pathology of that date with those of to-day. He described in detail its symptoms and physical signs, mentioned the various methods of treatment which had been from time to time adopted, and advocated a more frequent recourse to early abdominal section, especially when the abdomen contained fluid, while maintaining that some cases, particularly those of a plastic nature, were curable by medicinal treatment.

An interesting discussion followed.

REVIEWS.

CANCER AND ITS COMPLICATIONS. By CHARLES EGERTON JENNINGS, M.D., M.S., F.R.C.S.Eng. Second edition. London: Baillière, Tindall, and Cox. 1893. (Demy 8vo., pp. 160. 3s. 6d.).

THE second edition of Dr. JENNINGS's work on cancer, in all essential respects except that it is brought out in cheaper form, appears to be identical with the first, which was the work of a careful and accurate observer trained in a good school. The greatest compliment that can be paid to it is that what he then upheld as novel, or, at any rate, as not being generally accepted by the profession, though it undoubtedly was by a large number of those whose experience was greatest, and whose methods of investigation had been most reliable and accurate, is now almost universally accepted, except in those cases where old opinions are too firmly rooted to be eradicated by anything but the most revolutionary processes.

The main interest of the work centres in the evidence brought forward to prove that cancer is a local disease, and, that such being the case, it is imperative that not only those tissues which are seen to be subjected to cancerous infiltration, but some of the surrounding tissues and the neighbouring lymphatic glands should be taken away by means of the knife at as early a date as possible. The amount of personal observation given in support of this method of treatment is not very great, but the careful analysis of the work and opinions of others, and the comparison of the methods of termination of the disease under different methods of treatment amply warrant Dr. Jennings in drawing very wide and general conclusions. The remainder of the work deals with cancer in different positions. This part, though interesting enough from a statistical point of view, can scarcely be considered as forming anything but a very minor portion of the work, a remark which applies also to the classification, in which are included most forms of malignant tumour. Thus, under the heading "Varieties of Cancer," are included the various sarcomas, lymphomas, and psammoma. Of course Dr. Jennings is writing from the clinical point of view, but even so, a more careful pathological and histological discrimination than such an arrangement denotes is desirable; and even from the etiological point of view, the indiscriminate classification of carcinomas and sarcomas has been, and will continue for some time to be, a great hindrance to the advance of our knowledge of the life-history of these various forms of malignant tumour. The life-history of a tumour can scarcely be said to commence when it makes its appearance as a pathological growth, and until its relationship to the development of the tissues through embryonic life up to adult form can be more fully made out than at present, we must accept the fact that little further advance can be made. Even should we be able to trace these pathological factors,

our knowledge of the growth of the tumour can only become complete through an accurate study of the actions and interactions between the exciting cause of the disease and the special tissues, whether predisposed or not, acted upon by this exciting agent.

MANUAL OF BACTERIOLOGY FOR PRACTITIONERS AND STUDENTS, WITH ESPECIAL REFERENCE TO PRACTICAL METHODS. By Dr. S. L. SCHENK, Professor Extraordinary in the University of Vienna. Translated from the German, with an Appendix by W. R. DAWSON, B.A., M.D. (Dub.). With 100 Illustrations, partly coloured. London and New York: Longmans, Green, and Co.; 1893. (Demy 8vo., pp. 324. 10s.)

THOSE who are familiar with Professor SCHENK'S *Grundriss der Bakteriologie*, will be glad to welcome it in its English dress as presented by Dr. DAWSON; especially will this be the case with those who have not the opportunity of studying bacteriology in a laboratory already well equipped with the material and apparatus required for carrying on bacteriological investigation and teaching. Here are given not only the various methods of carrying on bacteriological investigation, but the necessary apparatus is described in considerable detail—far greater detail than is necessary for the ordinary student, a disadvantage however which is counterbalanced by the additional information that is given to those who are fitting up apparatus for themselves, and who if they are not able to obtain or manufacture one form may have by them the necessary material or skill for the manufacture of others. This scarcely applies to the methods of preparing media and staining fluids, and staining tissues, where only the best and well tried methods, evidently those in use in the author's laboratories, are given for general use.

Following the general chapters, the author describes special methods of investigation of air, water, earth, and putrefying substances generally, in articles of diet, in pus, in the organs and contents of the cavities of the body and the blood, describing under each heading the special method required for carrying on the investigation, and detailing and illustrating somewhat fully the different forms and species of organisms that are met with in these several positions, so that anyone who has mastered the general methods can at once proceed to the special investigations he wishes to undertake, and by following accurately the instructions here given can be sure of obtaining a certain measure of success in a comparatively short time. It is for this reason that this work will recommend itself particularly to those practitioners who are so engaged that they are not able to attend special courses on the subject, although they wish to make themselves masters of modern methods of research, or to take up some special line of investigation.

Dr. Dawson has not been content with merely translating the original work; with Professor Schenk's assistance he has brought the work thoroughly up to date, whilst in the appendix he gives a short sketch of Haffkine's system of inoculation against Asiatic cholera, and of the parasitic protozoa, especially those associated with dysentery and carcinoma. The action of light upon micro-organisms, and a number of new methods and formulæ, which appear to Dr. Dawson to be specially useful in investigations are described.

It is not claimed for the work that it is complete in any sense of the term, but as an introduction to the study of any special bacteriological work we can strongly recommend it, especially, as already said, to those who are working independently, and who cannot obtain access to the larger systematic works.

MEDICATED BATHS IN THE TREATMENT OF SKIN DISEASES. By LESLIE PHILLIPS, M.D. London: H. K. Lewis. Birmingham: Cornish Brothers, New Street. 1893. (Cr 8vo., pp. 103. 4s. 6d.)

THIS little work is compiled from various sources, and gives a succinct account of the action and composition of medicated baths and the indications for their use in diseases of the skin. The subject of spas is not touched upon. The book is conveniently arranged for reference, in three parts. Part I is devoted to a general consideration of the subject. Part II includes the formulæ for the various kinds of baths, and Part III gives the diseases of the skin in which baths may be employed with good results.

The book is written in a practical spirit, the remarks of the author appear to us to be sound, and the information he gives is trustworthy. A few omissions may be noticed, but they are for the most part unimportant.

TRAITEMENT CHIRURGICAL DES ABCÈS DU FOIE DES PAYS CHAUDS. [Surgical Treatment of Tropical Abscess of the Liver.] Par G. ZANCAROL. Paris: G. Steinheil. 1893. (Roy. 8vo, pp. 84. Fr. 6.)

M. ZANCAROL, of the Greek Hospital, Alexandria, has had a unique experience in the treatment of liver abscess. Since 1865 no fewer than 562 cases have passed through his hands. On 316 of these he has operated. He very properly points out that in estimating the value of any method of operating for liver abscess regard must be had to the fact that a certain mortality is inevitable, for in any considerable series a proportion must be cases of multiple abscess, a condition which, practically, may be regarded as fatal. He shows that the proportions of multiple and of single liver abscesses are 39.81 per cent. and 60.19 per cent. respectively, and that, therefore, in any given operation, a mortality of less than 39.81 per cent., or of cures in excess of 60.19 per cent., must be regarded either with suspicion, or as the result of selection of cases, or of happy accident; and, on the other hand, that the nearer the death and recovery rates approximate to these figures the better is the operation. In attempting to arrive at a just appreciation of the values of the different modes of operating he has practised, M. Zancarol, allowing for the inevitable mortality from multiple liver abscess, estimates the mortality in his own practice in single liver abscess operations as follows:

120 cases operated on by trocar, mortality 72 per cent., *post*-operation fistulæ, 19 per cent.

41 cases operated on by knife, drainage, and antiseptics, mortality, 62 per cent.; 17 per cent. *post*-operation fistulæ.

157 cases operated on by the method to be described, mortality 29 per cent.; no *post*-operation fistulæ.

The operation from which M. Zancarol obtained the favourable results last mentioned is briefly as follows: For abscess of the left lobe, in which there is little risk of serious hæmorrhage, he uses the knife; in operating on abscess of the right lobe, in which the risk of hæmorrhage is considerable, he uses the thermo-cautery. In the latter case, after ascertaining by means of the aspirator needle or exploring trocar, the situation, and, as far as possible, the size of the abscess, he divides the integuments at a point corresponding to what he supposes to be the bottom of the upper third of the abscess. The line of incision is made parallel to the ribs and to an extent corresponding to the assumed breadth of the abscess. A portion of the rib is then excised to the full length of the incision, and the surface of the liver exposed. The abscess is opened by a small incision, the needle of the aspirator being used as guide. A finger passed into the cavity plugs the wound, hooks the liver against the wall of the chest, and serves as a guide for the two retractors, which are then inserted and committed to an assistant, with instructions to keep the liver fixed and in close apposition to the chest wall, so as to prevent escape of pus into the serous cavities. The abscess is now emptied, and the incision in the liver extended so as to correspond with the incision in the skin. The cavity is flushed with warm solution of salicylic acid (1 to 1000); then the walls are wiped clean with mounted sponges or cotton, the wound being held widely open to permit inspection. This cleansing is carried so far as to remove all sloughs and broken-down tissue, and expose sound tissue; anything like scraping or violence is avoided. The cavity is stuffed with iodoform gauze, and an antiseptic dressing is applied. The second dressing is usually made on the third or fourth day, or earlier according to indications.

M. Zancarol's monograph will well repay perusal by those interested in hepatic surgery. The statistics, applying as they do to a very large number of cases, and being those of one surgeon, are particularly valuable.

DR. W. G. WILLOUGHBY, of Plymouth, has been elected by the Eastbourne Town Council, from among eighty-two candidates, to be Medical Officer of Health for Eastbourne.

OUTLINES OF GYNÆCOLOGICAL DIAGNOSIS: for the Use of Students and Practitioners in Making Examinations. By N. T. BREWIS, M.B., C.M., F.R.C.P.Edin., Lecturer on Gynæcology, Edinburgh School of Medicine, etc. With 20 illustrations. Edinburgh: W. F. Clay. 1894. (Cr. 8vo, pp. 68. 2s.)

THIS manual is more likely to prove of use to the gynæcologist than to the student. The elements of the difficult art of pelvic exploration are fairly explained. Like most other Scotch writers, Dr. BREWIS lays great stress on bimanual palpation. A book of this class cannot teach more than elements, yet the author speaks of the detection of the ovarian ligaments by palpation and of catheterisation of the ureters. The former feat can be accomplished only by experts; the latter is a dangerous practice, and the responsibility of teaching it is considerable. In fact, Dr. Brewis's work is not strictly an outline of gynæcological diagnosis, but rather a complete summary of every method, ordinary and exceptional, used for the investigation of morbid conditions in the female organs.

In a literary sense the book is an excellent and succinct abstract, no doubt, but as a guide to the student and practitioner it is not sufficiently elementary. At least the more usual, safe, easy, and necessary methods and manipulations should have been clearly described and distinguished from complicated manœuvres only justifiable, if justifiable at all, when undertaken by men of long experience.

DIE KRANKHEITEN DER NASE, IHRER NEBENHÖHLEN UND DES NASENRACHENRAUMES MIT BESONDERER BERÜCKSICHTIGUNG DER RHINOLOGISCHEN PROPAEDEUTIK FÜR PRAKTISCHE AERZTE UND STUDIRENDE. [The Diseases of the Nose, its Accessory Cavities and the Nasopharynx, with special reference to the Principles of Rhinology, for Practitioners and Students.] Von Dr. ZARNIKO, Hals Nasen-und Ohren-Arzt in Hamburg, fr. I Assistenten des Herrn San. R. Dr. A. Hartmann in Berlin. Berlin: Karger. London: Williams and Norgate. 1894. (Demy 8vo, pp. 313; 132 illustrations. 6s.)

THIS book commences with as full a description of the anatomy of the nose as the practitioner requires. Special attention is drawn to the features of the outer wall of the middle meatus. The physiological section is ample and interesting, embracing even the influence of the sense of smell on our "Seelenleben." Attention is called to Schadewaldt's observation that when the posterior part of the nose or naso-pharynx is irritated the sensation is localised as in the region of the larynx. The injurious effects of partial or complete nasal obstruction are fully and reasonably set forth. The discussion of the various defects of speech (lalopathies) and that of the various nasal reflexes are carried out in a broad-minded way, due importance being attributed to the necessary intermediate factor, the constitutional nervousness of the patient. The chapters on the examination of the patient are full of details, and contain numerous practical hints on which some writers lay too little stress; for instance, the importance of carefully inspecting the vestibule of the nose before introducing a speculum, the blades of which may entirely conceal the presence of rhagades and other local affections.

Dr. ZARNIKO holds moderate views with regard to the nasal douche and the palate hook, and attaches very limited value to transillumination, holding that translucency is not incompatible with the presence of a small quantity of pus. While in operations any particular endeavour at antisepsis or asepsis is unavailing as regards the interior of the nose, sterilisation of instruments is indispensable.

The sections on the special diseases are full and clear. The operation of partial resection in "physiological" deviations of the septum, and that of chiselling in outgrowths from that part, are recommended and admirably described. The saw receives scant notice, and the trephine is not even mentioned. In the discussion of fibrinous rhinitis, the distinction between it and diphtherial rhinitis is dwelt on, and its non-contagious character is pointed out, but the difficulty of diagnosis is minimised. The fact of limitation to one nostril and absence of severe constitutional disturbance may be quite compatible with diphtherial rhinitis. A lucid account of ozæna contains an impartial statement of the various views. The writer, in his summing up, attaches most importance to the metaplasia of the epithelium (conversion of cylinder into pavement epithelium), but feels a difficulty in accounting for this, unless by trophoneurotic changes. He postulates, also, the presence of a specific bacterium. Tuberculous disease of the nose—affecting chiefly the cartilaginous part of the septum as distinguished from syphilis, which selects rather the osseous portion—is well described.

The classification of new growths is carried out in accordance with modern oncological views, and nasal "polypi" are described as simple œdematous fibroma, œdematous adenofibroma, cystic adenomatous fibroma, etc. Nasal neuroses and nasal reflexes are handled with great judgment, Hack's views receiving due attention, and, where too extreme, ample critical refutation.[1]

The author holds stronger views on the importance of disease of the accessory cavities as a factor in the production and perpetuation of purulent rhinitis, with headache and other distressing symptoms.

Adenoid vegetations are fully discussed, and an unusual amount of attention is given to the description of the appearances to be recognised by anterior rhinoscopy in cases in which these growths are present. He considers it unnecessary to remove the smallest remaining scrap of adenoid tissue. He urges the performance of the operation before the commencement of the second dentition, so as to allow of proper expansion of the dental arch—a shrewd and valuable suggestion. The work as a whole may be accurately described as an exhaustive and well-reasoned account of the present state of rhinology. The references to the very extensive literature of the subject, chiefly that of German origin, cannot fail to be of the utmost value to British students.

INDUCTION COILS AND COIL MAKING. By F. C. ALLSOP. London: E. and F. N. Spon. 1894. (Cr. 8vo, pp. 162, 118 figures. 3s. 6d.)

THIS little book contains detailed instructions on the methods of making induction coils, and as the sections dealing with medical coils are fully and carefully written, the book is likely to be of use to any medical man interested in this subject or desirous of making his own apparatus. The various modes of graduating the strength of shock in coils is carefully explained by the aid of some useful diagrams. Of all the methods of graduation, the sledge or sliding secondary is in our opinion the best. The use of a sliding core or of a sliding brass tube over the core are wasteful of current and tend quickly to exhaust the battery. For this and other reasons we do not agree with the author's recommendation to wind a medical coil with two to four layers of primary and fifteen layers of secondary. Four, or better six, layers of primary and six or eight of secondary make a more useful coil for general medical purposes. We have seen very good coils with six layers of primary and only six of secondary giving an electromotive force ample for purposes of diagnosis and treatment.

Under the heading of Bath Coils, we note the somewhat vague statement that a "powerful" coil is needed for the electric bath. It is better to say that a coil for this purpose should have a secondary of few windings and fairly thick wire, to suit the conditions of low resistance and of diffusion of current in the water of the bath. The author very properly insists on the importance of a good contact-breaker for giving smooth and even effects. Many of the medical coils now sold are defective in this respect. The ideal contact-breaker should vibrate quite regularly; for this a light and

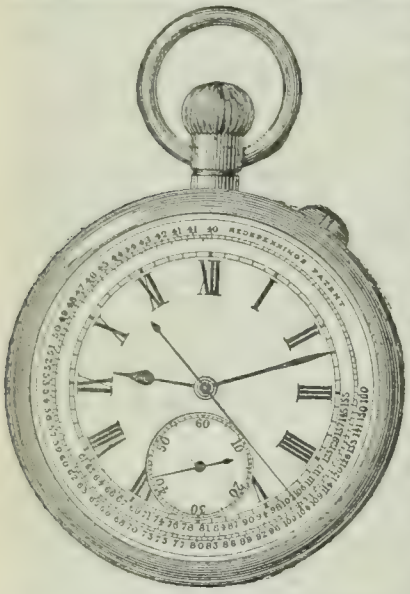
[1] For the diagnosis of "nasal reflex neurosis" Zarniko requires (1) that every other possible explanation should be eliminated; (2) that there should be present some local reflex symptoms (for example, fits of sneezing), such as are known by experience to be frequently associated with remote nasal reflex neuroses; (3) that the inspection of the nose should reveal such changes as frequently set up reflex disturbances; (4) that artificial irritation (probing) of some area in the nose should excite the reflex symptoms; and (5) that anæsthetisation of that area should put an end to them. In some cases he considers the last two points sufficient ground for the diagnosis.

yielding spring is best, and the contact points should be fixed about halfway along its length. Rigid springs and contacts placed near the free end of the spring tend to give irregular and unpleasant shocks.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

THE PULSIMETER WATCH.

The Pulsimeter watch, which is the invention of Mr. Bernhard Redepenning, of 11, North Crescent, Bedford Square, W.C., is a keyless stop watch, which records the pulse-rate per minute in from 10 to 15 seconds. The chronograph hand occupies 30 seconds in one revolution; the ordinary second hand 60 seconds in one revolution. By pressing the keyless button the chronograph is started; at the same time the practitioner should begin to count the pulse beats up to 20, when on again pressing the button the rate of pulsation per minute will be indicated by the figure on the margin of the dial opposite which the hand stops. The advantages claimed for the "Pulsimeter" watch are economy of time, accuracy of record, and the possibility of taking the pulse in the dark without any inconvenience to the patient. The watches can be made of different sizes and of any kind of metal. We can testify to the accuracy as a pulse-recorder and as a time-keeper of the specimen submitted to us. The Pulsimeter watch can be obtained of any first-class watchmaker or of the inventor.



The Medico-Psychological Association of Great Britain and Ireland.—The fifty-third annual meeting of the Medico-Psychological Association of Great Britain and Ireland will be held on Tuesday, June 12th, 1894, and three following days, at the Royal College of Physicians of Ireland, Kildare Street, Dublin, under the presidency of Conolly Norman, F.R.C.P.I. At the general meeting, after the election of officers and Council, receipt of reports, and general business, the treasurer will present his report, and Dr. Ernest White will move the following resolution: "That the Council be instructed to prepare a scheme for the formation of colonial divisions upon lines similar to those obtaining for the Colonial Branches of the British Medical Association, having in view three objects: (1) the election of members, subject to confirmation by the annual meeting; (2) the reading and discussion of papers; and (3) the promotion of good fellowship amongst members." The Presidential address will be given at 4 P.M., by Dr. Conolly Norman. The annual dinner will be held at the Royal College of Physicians, Kildare Street, at 7.30 P.M., on Wednesday, June 13th. Tickets 15s. each, without wine. On Wednesday, June 13th, and the two following days, discussions will be opened on various subjects, and papers will be read; there will also be demonstrations of the normal and abnormal brain, and exhibits of objects connected with insanity. The demonstrations will be held in the afternoons at 4 o'clock, at the Anatomical Department, School of Physic, Dublin University.

NOTES ON GIBRALTAR: ITS SANITARY ADMINISTRATION AND ITS HOSPITALS.

(Continued from page 1090.)

The Military Hospital, Gibraltar.

Until January 1st, 1891, the military sick were treated in the station hospital (commonly called the Royal Naval Hospital); also such sick of the navy as were landed for hospital treatment, were admitted under the professional care of the army medical officers. The number of beds available was 365.

On the date above mentioned, the naval authorities took over about half the hospital accommodation, also the quarters of the medical officers and the quartermaster who lived in the hospital up to that time. A small medical staff mess had also to be broken up. This change left 190 beds altogether at the disposal of the medical staff and quarters for four nursing sisters.

Consequent on this tightening up of the accommodation on the military side of the hospital, non-dieted hospitals had to be organised for the reception of such sick as could not be provided for in the station hospital; this was done to the extent of provision for about sixty-three beds to begin with; and at the same time, owing to the pressure, some of the naval wards recently handed back were still allowed to be utilised for military sick.

The next step was the withdrawal of the remaining military sick from the naval side, and a further increase in the non-dieted hospitals to 127 beds, the military and naval portions of the hospital divided by partitions, railings, etc.; loss of two wards for sick military officers, and also of the orderly medical officer's room, who remains in the hospital during his tour of duty (twenty-four hours). To compensate for the loss of these three rooms, one room hitherto held by the navy, and situated on the military side, was handed back, and is now used by the orderly medical officer.

Within the last few months, owing to military requirements, the two non-dieted hospitals in the south end of the Rock were given back to the military, and in their place the barracks in the town range, recently occupied by a battalion of infantry—which left the fortress and was not replaced—was handed over to the medical staff to form one large non-dieted hospital.

The hospital accommodation now consists as follows:

Station hospital	...	...	...	190 beds
Town range, non-dieted	...	...	...	130 ,,
North front ,,	...	...	...	13 ,,
Total	...	...	...	333 ,,

The Station Hospital is an old building, badly placed, situated in a *cul-de-sac*, and receives into its subsoil to a large extent the surface drainage from the higher grounds and from the Buena Vista Barracks occupied by an infantry battalion immediately above; the soil must be much contaminated, and the drainage is doubtful. The frontage of the hospital is good and affords a pleasant promenade for the patients, and receives the breeze from the south and west. During hostilities the Red Cross flags could scarcely be seen from the sea owing to the low level. Shell fire would render the site untenable. In regard to the accommodation, the hospital is deficient in all the requirements of a modern hospital. Everything has to give way to the necessity of providing for the lodgment of the sick without encroaching on the regulation 1,200 cubic feet per patient.

There is one small day room for nurses. There is no room attached to each ward, and no little kitchen for comforts. There is no hot water laid on. The baths are of old pattern. The four nurses have to use a very little room for themselves. They have a good deal of running about, as their work is scattered all over the place. The day room for the nurses has the floor covered with oilcloth, bare rafters showing, and tempered red walls, and all the fixtures of the roughest kind. The paint in the hospital is dirty, the woodwork rotten, and the whole place bears an aspect of bareness and neglect such as would not be tolerated in any London workhouse.

The patients, when well enough, can go out on the terrace, where a band plays twice a week. The windows should be cut down to enable patients while in bed to see out. There

are no officers' quarters. When an officer is ill a room has to be borrowed from the navy. Rooms are badly required for all the different officers on duty.

The Town Range Hospital is an old infantry barrack temporarily utilised as a non-dieted hospital. Some years ago the building was condemned, and it was also proposed to demolish it and open up a square to improve the ventilation in that part of the town. The position of this non-dieted hospital is bad and the building unsuitable and much closed in by other buildings and walls. It is believed the occupation of this building is but a temporary makeshift; it is used as an overflow to the station hospital. Venereal diseases that do not require dieting are transferred to it, also slight injuries and diseases that do not require nursing. The patients get their barrack rations, namely, 1 lb. meat, 1 lb. bread, and grocery allowance; the patients are supplied with hospital clothing.

The North Front Hospital is a hutment raised on piles, and very suitable for the purpose. It is chiefly intended for reception of accidents occurring at North Front, which is over two miles distant from the Station Hospital.

What is required is a large dieted hospital to accommodate the total sick of the garrison—300 beds—on a good site, or 6 per cent. of the strength of the troops, which, I believe, is the percentage laid down in the Royal Engineer Synopsis for temperate climates. The hospital should be built on modern lines, with sufficient office and store-room accommodation, and barracks for the Medical Staff Corps close at hand; quarters for the medical officers, quartermaster, and nursing sisters; wards for sick officers, etc.

In a hospital of the size proposed, with a strength of nearly 5,000 troops, and many married soldiers and their families scattered through the town on the lodging list, a steam disinfecting engine with separate receiving chambers for contaminated and purified clothing is a necessity. Gibraltar is overcrowded, and infectious diseases are of common occurrence. The means should be at hand to limit the spread of such by a rigid system of disinfection. There is a disinfecting apparatus in the Colonial Civil Hospital.

Venereal diseases and simple continued fevers increased considerably in 1893, namely, total admission of all classes of venereal diseases 1,454, giving an average constantly sick of 131.75, this being an increase over 1892 of 126 admissions and 24.00 average constantly sick. The inefficiency from this cause in 1893 amounted to about 52 per cent. of the total average constantly sick from all causes. In former years inspection of prostitutes and expulsion of those found diseased was, I believe, carried out.

SIMPLE CONTINUED FEVER.

An increase took place in 1893. The predisposing causes

	Strength, 4,736. 1888.		4,761. 1889.		4,659. 1890.	
	Admissions.	Percentage.	Admissions.	Percentage.	Admissions.	Percentage.
Simple continued fever ...	131	= 2.76	137	= 2.88	142	= 3.05
Enteric fever	73	= 1.54	43	= 0.90	26	= 0.55
Total ...	204	= 4.30	180	= 3.78	168	= 3.60
	Strength, 4,682. 1891.		4,936. 1892.		4,743. 1893.	
Simple continued fever ...	103	= 2.20	78	= 1.58	132	= 2.78
Enteric fever	11	= 0.23	25	= 0.50	17	= 0.36
Total ...	114	= 2.43	103	= 2.08	149	= 3.14

appear to be (1) youth; (2) recent arrival; and (3) exposure to chills. About half the cases (three weeks' duration and upwards) may be termed typical cases of Rock fever, that is, fever due to faulty sanitation, drain effluvia. Yet the sanitation of Gibraltar is steadily improving year by year, and there is a corresponding improvement in the general health of the community. The milder cases must be attributed to "chills" from incautious exposure and sudden changes of temperature in the hot months, and in former years would have been termed cases of "febricula." During the year referred to, two new regiments, all young soldiers, were of recent arrival in the command; the corps newly arrived always give the largest number of cases during the summer months.

ERNEST HART.

THE MECCA PILGRIMS.

BY THE MOULVIE RAFIUDDIN AHMAD.

"There is due to God from man a pilgrimage unto the House for whosoever is able to find his way there."—AL QURAN, SURA AL IMRAN.

To be asked to give one's views on a burning question, in these columns, is an honour of which any person will feel proud. In this instance, however, duty and honour are happily combined, because I think it a duty, especially when the time of Al Haj, or the annual pilgrimage to Mecca, has drawn so very close, to bring the question of the misery and hardships annually undergone by Moslem pilgrims to the notice of the British and Turkish authorities so far as they are respectively responsible for the protection of life and property and due supervision of the health and comforts of the unfortunate pilgrims.

DISEASE AND DEATH AMONG THE PILGRIMS.

Last year, as in other previous years, the civilised world, during the period of the pilgrimage, were kept duly informed by Reuter's telegrams of the daily loss of thousands of precious and pious lives owing to the outbreak of cholera and other diseases not altogether beyond the reach of the healing hand of science and the parental care of wise administration. Last year, too, a British sailor, one of the surviving crew of a British vessel carrying pilgrims from Morocco to Jedda, told us a horrible tale of mortality on board his vessel engendered by overcrowding and want of due care on the part of the naval authorities. Not only a very large number of the pilgrim passengers, but also the entire crew, had succumbed to the outbreak of disease. The sailor added that his ship was only one of many others of the kind that meet with a similar fate almost every year, and piteously appealed to the Board of Trade for strict inquiries into this disgraceful state of affairs. About 20,000 lives were lost, chiefly from cholera, last year in the course of a single month. The unfortunate victims, it must be remembered, were the cream of Moslem orthodoxy and piety from different parts of the world.

THE PILGRIMAGE AT PRESENT AN INTERNATIONAL DANGER.

This enormous annual loss of most virtuous and highly precious blood, sustained by Islam, must necessarily weaken and prostrate her already exhausted body, and cannot be looked upon otherwise than with intense grief and horror by the entire number of her children—nay, by all religious denominations of the world. Because however much Christians and other non-Moslem bodies might differ from us in dogmas, they are bound to admire the strength of conviction, loyalty to principle, and the spirit of self-sacrifice displayed by the Hadjees in such adverse and critical circumstances. But experience has taught us that appeals made merely on moral basis in Europe find responsive sympathy in few breasts only, and that masses in general are spurred to action only by the expectation of sordid gain, or by fear of immediate harm. I must, therefore, remind my readers that people of all shades of religious or irreligious beliefs, in all countries, stand exposed to serious dangers of death and disease owing to the annual recurrence of cholera among the Meccan pilgrims. The havoc caused by the plague in France, Germany, and Russia in 1892 has taught a lesson to European nations which they are not likely to forget. Of course, I am principally concerned with the well-being of my own co-religionists, and should not have troubled the British press with my remarks at all did it not occur to me that the realisation of my object, as well as theirs, depends in this case on co-operation. As far as their own interests are concerned, the Europeans seldom stand in need of the neighbourly advice of an Asiatic—they are quite able to take care of themselves; but this question is one which tends to prove the interdependence of different nationalities and creeds.

The immediate scene of action lies under the sovereignty of a powerful Moslem prince, who will naturally be much better influenced by the public opinion of the people of his own persuasion than by the advice of aliens, which has not infrequently proved fatal to his country. Non-Mohammedan efforts towards the right solution of this question are not a little, therefore, dependent upon Moslem co-operation. On the other hand, a very large number of the pilgrims is drawn from Moslems under non-Mohammedan governance, and is conveyed to Arabia by Christian shipowners, principally Englishmen, the great carriers of the world. The grievances of the Hadjees, as passengers, for instance, the overcrowding of the vessels and neglect of sanitary measures on board such vessels, can chiefly be redressed by the British Government, which has control over a very large number of pilgrim vessels. Here the followers of the Prophet are dependent for relief on the support of the British public and the help of other non-Moslem benefactors of humanity.

Public Opinion, Mohammedan and English.

During the last four years this question has been discussed with much zeal and ability in the Mohammedan press. In India, my friend Mr. Mohammad Shahdin, an influential Mohammedan barrister in Lahore, issued an appeal to the Moslems of India, in the columns of the *Mohammedan Observer* of Calcutta in the year 1891. All enlightened Moslems sympathised heartily with the objects of the eloquent appeal. In Egypt the *El Moiyad* opened its columns for the discussion of the subject. Anglo-Indian papers of influence called the attention of the Government of India to the grievances of the pilgrims, by means of powerful leading articles. In France, M. Pasteur has been writing in favour of the pilgrims. In England their cause has been ably advocated by Mr. Ernest Hart, the British Medical Journal and several of the English newspapers. Since three years I have been doing what little I can to bring the grievances of the pilgrims to the notice of the responsible authorities.

In November, 1891, the *Daily Chronicle* published a letter of mine on the subject, and supported the same by extremely sympathetic editorial remarks. The result of this correspondence did some good. The then Viceroy, Lord Lansdowne, happening to be in Bombay, personally inspected a pilgrim vessel. But I have not yet learnt what salutary result followed this Viceregal inspection. I have received a number of complaints and petitions from the Hadjees begging me to do something for them. I drew the attention of Mr. Gladstone some time ago to their grievances, and received a letter of sympathy from him in which the right honourable gentleman expressed a strong hope that the Sultan would do his best for the pilgrims.

During my recent visit to Constantinople and her ruler, I placed the complaints of the pilgrims before Ahmad Jalaluddin Pasha, the Sultan's Aide-de-camp, who promised to submit the same to His Majesty, and let me know His Majesty's reply. I have lately succeeded in forming a committee of enlightened Indian Moslems who have promised me their full co-operation in bringing relief to the suffering pilgrims.

Responsibility of the British Government.

The British Government is responsible for the redress of the following grievances:—Overcrowding of pilgrim vessels; neglect of sanitary measures on the part of the authorities on board the ship; absence of wholesome food and insufficiency of fresh water supplied to the pilgrim passenger; absence of suitable medical aid (Mohammedan lady patients can only be treated by female doctors, therefore every pilgrim ship must have one male and one female doctor, both understanding at least two Mohammedan languages of the East); absence of suitable lodgings and competent doctors at quarantine stations.

The Koran and the Pilgrimage.

It has been argued that one of the great difficulties in the way of effecting any improvement in the present system of a voyage to Mecca is the extreme poverty of the pilgrims. It is also said that Islam enjoins every one of her children, be he rich or poor, to repair on a pilgrimage to Mecca. I must, therefore, give here the provisions of the Islamic law upon the subject. The Koran says:—

"There is due to God from man a pilgrimage to the House for *whosoever is able to find his way there.*"

According to Sharah Wikayah (a book much valued by all Sünnis), pilgrimage to Mecca is only incumbent upon every Moslem "free, healthy, adult, possessing means of subsistence and conveyance, a little more than what is essentially necessary for the maintenance of himself and his family till his return from the pilgrimage. It is also necessary that the way or journey should be free from dangers to life and property."

What the Sultan should do.

In the opinion of those who have studied the subject, the right solution of this all-absorbing question consists in the appointment of a Commission by H.M. the Sultan, to inquire into and report upon the grievances of the pilgrims. The Commission should essentially be non-political. It should consist of the educated and enlightened representatives of Turkish Moslems as well as a few Moslems belonging to other parts of the Mohammedan world, but acknowledging the caliphate of Abdul Hamid.

Inter alia, the Commission should inquire into the following: The principal sources of cholera in the Holy Land; the burial of the flesh and blood of animals sacrificed during the Hadj; the condition of latrines and drainage in general; the purity and sufficiency of water supplied to the pilgrims; the poverty of the pilgrims; the hardship imposed upon pilgrims by enforced quarantine; causes of sickness among pilgrim vessels; the condition of houses occupied by the Hadjees; cases of extortion and official despotism; the best means of protecting the property of the Hadjees; prevention of dangers to the life and limb of the Hadjees; how to secure safe and comfortable journey to the pilgrims.

But, in order practically to carry out this suggestion, two things are necessary—the consent of His Majesty the Sultan and a sum of money sufficient to defray the expenses of the Commission and to execute its recommendations. The Porte is already beset with a great many pecuniary difficulties, and is hardly in a position to undertake any pecuniary risk. The amount, therefore, must come from those merely interested in the sanitary improvement of Mecca and those interested in the Holy City, historically and religiously.

As a humble admirer of the present Sultan, I may venture to suggest—indeed, if suggestion be necessary to so enlightened a rule—that His Majesty's influence among his spiritual followers beyond his own dominions is pre-eminently a moral one. Anything that tends to diminish this influence among the Moslems necessarily weakens the bond of affection that binds them to his august person. Unfortunately, there are some Mohammedans who dispute the title of the Sultan to the caliphate and watch every opportunity to make His Majesty unpopular by inventing false stories about his indifference to the needs of his spiritual followers. The advisers of the Caliph cannot do better than nail the lies of these malcontents to the counter without delay.

The principal fact that elevates his position and strengthens the Sultan's claim to the Caliphate is His Majesty's guardianship of the holy shrines. The average Moslem outside Turkey knows very little about the Caliph. He judges the power and the prestige of the Sultan from what he sees of his administration in Mecca and Medina. It is to the interests of the Sultan, therefore, to offer every possible comfort to the Meccan pilgrim.

The Consequences of a "Laissez Aller" Policy.

If the present unsatisfactory state of person and property continues in the Holy City for any length of time, the following evils, among others, will surely arise:

The recurrence of the plague in Mecca will diminish the number of the Hadjees. Thousands of persons, otherwise qualified to visit the House of God, will be, in the nature of things, prevented from visiting. The Prophet has forbidden his followers to visit a place infested with cholera (Waba), or to leave a place similarly situated. These people will not only be deprived of the high spiritual blessing, but also of the great temporal advantage which the Hadj indirectly bestows upon the faithful, namely, mutual knowledge, esteem, and affection engendered by personal intercourse. It will diminish commerce and deprive many of the Sultan's

Arabian subjects dependent upon the pilgrims, of their livelihood. It means also the loss of great moral influence to the Sultan; for the pilgrims, many of whom are men of high character and education, cannot but mark the difference between the system of administration in the dominions of the Sultan and that of the country they come from. The contrast, even after making due allowance for all circumstances, must tell unfavourably against the prestige of the greatest Moslem monarch upon earth. The thinking Moslem who visits Arabia, the fountain-head of true religion and the birthplace of the greatest moral teacher of the world, is moved to tears at its present condition. It is in the interests of humanity and Islam, no less than in those of Turkey and her ruler, that the insanitary condition of the Moslem holy places, and the hardships which the pilgrims have at present to undergo, should be at once removed. The pilgrims ask nothing but the barest necessaries of human existence and the most essential rights of citizenship, namely, pure air, pure water, and security of life and property. Shall they ask for them in vain?

THE POWERS OF SANITARY AUTHORITIES AS TO ISOLATION AND QUARANTINE.

THE Wolverhampton board of guardians have recently censured the Willenhall local board in respect of the non-provision of means for the isolation of cases of infectious disease arising in their district. The statement was made at the meeting that as a result of the absence of an isolation hospital, sufferers from small-pox had had to be treated at home, with need as a further consequence for money payments by the guardians to the relatives of the patients, since all the inmates of the infected houses had been prevented by the sanitary authority from earning their living. Unless the compensation thus paid was on account of actual destitution following on the action of the ocal authority in placing the healthy inmates in "quarantine," we fail to see under what legal power the payments were made. Moreover, if the local board have been thus quarantining healthy persons, under what authority has the course been taken? The facts before us do not make these points clear.

But on the main question at issue we are entirely at one with the Wolverhampton guardians, namely, the duty of the local board to have been in readiness to secure the prompt isolation of all cases of infectious disease occurring within their district. If, as the facts seem to indicate, the inaction of the local board has in the present instance had the misfortune to pauperise persons by reason of the sanitary authority's insistance on their remaining idle during the progress of treatment at their houses of small-pox cases, then the matter assumes an even more serious aspect.

On the other hand, the powers of local sanitary authorities in respect of hospital provision are ample and full. Under Section 131 of the Public Health Act, 1875, a local authority can provide, either by itself or in combination with one or more adjacent authorities, a hospital for the isolation of cases of infectious disease. Sanitary authorities can also, and preferably, form united districts under Section 279 of the same Act. In many ways the constitution of a joint board under the last-named section is a plan which should commend itself to such local bodies as are desirous of making hospital provision in the best possible manner and in the most economical way. Authorities have an absolute discretion in the matter of the description of hospital to be erected, but they will be well advised if they proceed to the business in a manner calculated to spare overburdening the local rates, and to this end to secure the ready help of the Local Government Board in relation to sanction to a loan for the amount necessary to defray the cost of site and hospital buildings. Willingness to provide a hospital on the lines of the model plans set out in their official memorandum on "Isolation Hospital Provision," at the rate of one bed for each 1,000 of population on a well-chosen site, or at least some smaller beginning, with an administrative building sufficiently large to adapt itself to a hospital afterwards to be extended to such dimensions, will be the truest measure of economy, and by securing the distribution of the cost over a number of years make the burden but little felt. All experience is to the effect that when once a permanent hospital has been erected there is but little, and ever-decreasing, difficulty in leading people to seek the benefit of its use. Especially is this the case when, as we would desire to see universal, the institution is free of charge to all comers, who, as matter of fact, are isolated quite as much for the public good as for their own benefit.

In the matter of what we may term "domestic quarantine" we can find no legal power conferring upon a local authority the right to compel healthy persons to submit to the ordeal, nor can we discover the power which permits local bodies to compensate individuals for loss sustained by reason of this quarantine. What we have found, however, is that a Statute of George I. 1721, enacted that in case an infected person quarantined in the pest house "shall actually escape out of such . . . house, lazaret, or other place where he or she shall be so placed for performance of quarantine before he or she shall have fully performed the same he or she shall be adjudged guilty of felony and shall suffer death as a felon without benefit of clergy." This statute was repealed by the Statute Revision Act of 1867. There is, however, no question that sanitary authorities, particularly those having jurisdiction in boroughs, have largely availed themselves of a knowledge of the fact people will ofttimes submit to that for which there is no legal necessity. This method of treatment has, however, no legal standing, and can only be defended on the ground of the end held in view and justified by the docility of the population thus dealt with.

A local board, proceeding on the "Leicester system," would doubtless place itself in a position of difficulty by reason of the absence of power to make money payments to persons who, in response to its request, had voluntarily gone into temporary durance, because of infection of one or more members of their family.

So, too, in the matter of nursing, sanitary authorities often seek to employ trained nurses, in the absence of hospital accommodation, at the homes of the infected sick, only to find that they have exceeded their powers, as, although they can provide nurses and all necessaries in a hospital, they are precluded from doing so outside such an institution. To rely upon the Poor-law authorities for aid in the matter of compensation involves the pauperisation of the working classes; something that should be altogether below the thought of those responsible for the public health. The power of guardians in the matter seems to be limited to cases of destitution, unless the money granted be in the nature of a loan.

One power which sanitary authorities are possessed of is that of providing shelters for households which have to leave their homes on account of necessary disinfection; and, indeed, the provision of such shelters is obligatory when the Infectious Disease (Prevention) Act of 1890 has been adopted. Another very useful power is that of erecting, in connection with the hospital, one or more "quarantine" or observation wards, where cases of doubtful nature can be kept under special notice until the character of the illness is certain. Such a measure of precaution will not infrequently be productive of good, not only to the individual in question, but also to the inmates of the ward to which he would otherwise have to be relegated.

We have refrained from touching on the much vexed question of small-pox isolation, since the difficulties inherent to the safe isolation of this disease have never yet been satisfactorily overcome, and the malady is one calling not only for strict isolation of site, but also for sole use for small-pox of the hospital buildings at a time when that disease is making calls upon the hospital.

A MEETING is to take place at Salcombe to consider the proposal to erect a memorial to the late Dr. Alfred H. Twining.

THE Medical Faculty of the Catholic University, Dublin, have nominated Professors Roch and M'Weeney as their delegates to the International Sanitary Congress at Buda-Pesth.

MEDICAL MAGISTRATES.—Dr. J. J. Hopkins has been appointed a J.P. for co. Galway; Dr. Wm. Delaney and Dr. P. F. Colgan each a J.P. for co. Carlow; Dr. C. J. O. L. Maguire a J.P. for co. Mayo; and Dr. J. Harrington for co. Kerry.

THE NEW FACTORY ACT.

The views of the public with regard to factory legislation develop so rapidly that, as in the case of a vigorously growing child, the clothes with which a paternal Government invests them, in the shape of Acts of Parliament, are rapidly outgrown, and need frequent amendments, and ever and anon a new outfit.

We have now before us proposals for a fresh "Factories and Workshops" Act, issued by the energetic Home Secretary, Mr. Asquith, who has identified himself so closely with all that relates to the physical well-being of working men. We may assume that the Bill presented contains some suggestions originating out of the report of the large Labour Commission which has but recently concluded its protracted labours, and which may be said to be an example of "much cry and little wool," though of most weighty cost. The characteristic of the Bill is the progressively increasing recognition of the importance of industrial sanitation, and of the duty of the State to extend and enforce it.

From the tentative provisions of the early Factory Acts to secure some attention to the health and education of children in one branch of manufacture, legislation has now brought within its range almost every form of industry, as well in workshops as in factories, together with the workers; and it now ventures to encroach upon the liberty of adult men, and to prescribe to them conditions of working which till lately would have been resented.

The individualism of the past is merging into a healthy communism, aiming to secure the common welfare, and to abolish selfishness and self-pleasing. The extension of factory legislation to sanitation in all its branches renders it a subject of primary importance to medical men. In the past they have had small scope for action, and the most valuable sanitary aims of the Factory Act have been overborne by its legal and general provisions. However, judging by the current of opinion at the present day, there seem to be good reasons for anticipating an advance in the medical organisation and administration of the measure, and a more thorough grasp of the requirements of factory law, as a special department of the Government.

The Act of 1878 represented an effort to consolidate and materially extend all previous factory legislation; that of 1891 went still further in enforcing sanitation; and the bill now produced proceeds in the same direction and brings all industrial occupations under the supervision and control of the Factory Office.

The Act of 1891 placed great powers in the hands of the Home Secretary by the eighth section, which permitted him to supplement at his discretion the hygienic rules specified by that measure by special rules which in his opinion might be necessary to protect the health of workmen. This power is by the present Bill enlarged, and it only remains for him to certify that any particular occupation is dangerous to life or health and thereupon to make special rules for the conduct of that occupation or to limit the duration of employment. In preceding Acts ventilation was prescribed and overcrowding declared illegal, but what constituted ventilation and what overcrowding was left quite indefinite.

The latter question is now determined by a special clause, and the efficiency of ventilation sought by various provisions. A very important section is added to former regulations to meet the peculiarities of the Sheffield trades existing in connection with the places of work, the position of the artisans, and the processes of labour pursued. This section, headed "Tenement Factories," throws responsibility for the hygienic condition of the workshops on the owner in place of the occupier of the premises in which work is carried on.

Other clauses further restrict the labour of children, young persons, and women, and regulate work pursued outside manufactories, with the view to prevent overtime, and to thwart the ingenuity of the "sweater." Another aims at suppressing the use of lead and arsenic in the processes of tinning or enamelling iron hollow ware cooking utensils.

Omitting several provisions of a general and administrative character, there remains one having an important bearing on the medical profession, contained in Section 19, on Special Provisions for Health.

The amount of sickness and misery brought upon workers in trades, where poisonous matters are present, has evidently strongly impressed the Home Secretary. Under the enabling section of the Act of 1891, he last year took decided action, by the appointment of Special Commissions, to obtain the fullest information and unprejudiced opinion upon a series of occupations which he regarded on adequate grounds to be dangerous to health and life. These Commissions duly reported, and their reports were laid before Parliament and ordered to be printed.

In each instance special rules were proposed, and after conference with both employers and employed, amended and adopted. But, over and above these rules, Mr. Asquith has felt the necessity for getting statutory authority for the special provisions his Bill contains to protect workpeople from the evils of "lead, phosphorus, arsenical poisoning, or anthrax contracted in any factory or workshop."

To carry out his benevolent object he enlists the aid of medical men, whom he calls upon to send notices of any cases which they happen to attend to the Chief Inspector of Factories, noting the name, address, and the special disease which the patient suffers. For this service the reporter is to receive a fee of 2s. 6d., along with the liability to a fine if he fail to send the required notice.

From a medical point of view this is a new departure, but we regard the plan as of doubtful efficacy to obviate the evils attendant upon poisonous occupations. Prevention is better than cure, and it seems to us that it would be a far more philosophical and promising proceeding to perfect arrangements to prevent the occurrence of poisoning at its source in the workshops; or, if this be not always possible, to detect and arrest it there. The official certifying surgeons should be placed in a position to discover the first signs of injury among the workpeople, and should have power to put a stop at once to their work.

A collection of reports sent to the central offices would accumulate in the pigeon holes of the office, and, even if rescued from oblivion, would prove of small utility. They would convey bare numerical facts, confirm an already well-known fact as to the poisonous character of the materials, and throw no valuable light upon the mode of their introduction into the system of the sufferers, nor on the details of processes chargeable with the ill-results. Moreover, the office would frequently get duplicate reports from different practitioners and charitable institutions, owing to patients passing from one to another. Rather let the object be to substitute materials and processes devoid of poisons, or otherwise such compounds as shall be almost, if not wholly, devoid of poisonous qualities. In the case of hollow iron cooking utensils this end has been attained, and justifies the enactment of Section 17 of the Bill under notice, imperatively forbidding the use of lead and arsenic in the composition of the enamel, and likewise encourages the hope that equal success will attend other efforts to make the disuse of those poisons possible in the case of other articles.

Lastly, it is to be noted that laundries (not being those of private dwellings), possessing machinery to carry out the work, are to be placed under the like sanitary conditions as obtain in factories.

A critical examination of each clause of this new Bill cannot just now be undertaken, but all persons interested in the health of the manufacturing classes will feel grateful to Mr. Asquith for this fresh attempt on his part to forward the progress of industrial sanitation as a State matter.

The fourteenth volume of the *Index Catalogue of the Library of the Surgeon-General's Office, United States Army* (Washington, Government Printing Office, 1893, royal 4to, pp. 1,018) contains 10 124 author titles, representing 6,424 volumes and 8 850 pamphlets. It also includes 9 867 subject-titles of separate books and pamphlets, and 38,461 titles of articles in periodicals. It covers all titles between "sutures" and "universally," and occupies 1,016 double column large folio pages. These figures will give some idea of the vast amount of labour which is successfully devoted to this monumental work.

GENERAL COUNCIL
OF
MEDICAL EDUCATION AND REGISTRATION.

SUMMER SESSION, 1894.

SIR RICHARD QUAIN, Bart., President, in the Chair.

THE General Medical Council commenced its ordinary summer Session on Tuesday, May 22nd.

PRESIDENT'S ADDRESS.

In his opening address the PRESIDENT stated that there was a considerable amount of business awaiting the consideration of the Council. Since the last meeting they had been twice involved in legal proceedings, In the case of Mr. T. R. Allinson, whose name was erased from the *Medical Register* in 1892, an appeal had been heard against the decision of the Court of Queen's Bench, refusing to grant him a mandamus compelling the restoration of his name, and had been dismissed with costs. In the case of Joseph Steel, proceedings taken for using the title of M.D. (Bc.), granted by the "General Council of Safe Medicine, Limited," resulted in his being convicted and fined. He appealed, but his appeal was dismissed with costs. The decision was of considerable importance, as showing how the public could be protected against persons using colourable imitations of registrable medical qualifications. The President also referred to the remarkable success with which the Council had been able to maintain its position in reference to medical practitioners when challenged in courts of law. In the last five years there had been six such cases, in all of which the decisions had been in favour of the Council. During the present session several penal cases would be brought before the Council, embracing charges of unprofessional advertising, false certificate giving, and covering. Various communications had been received with regard to the practice of midwifery by unqualified persons. Looking at the strong opinion previously expressed by the Council as to the necessity of some measure for the education and registration of midwives, and also to the fact that there already existed a committee of the Council to consider the provisions of any Bill for the registration of midwives, its duty would seem to be clearly indicated in the matter. A communication had also been received addressed by Mr. Ernest Hart, Chairman of the Parliamentary Bills Committee of the British Medical Association, representing the importance of an amendment of the penal clauses of the Medical Acts. The form which these amendments should take was submitted, and would no doubt receive the consideration of the Council. In continuation of the scheme for the visitation and inspection of the final examinations of the several licensing authorities, arrangements had been made for the visitation during 1894 of the English corporations and Scotch universities. Reports would be submitted to the Council by the Education Committee, dealing with the recognition of various Indian, colonial, and foreign examining bodies, and also on deficiencies in preliminary education. These were matters demanding careful consideration. There was some risk that with the increased attention now given to the extension of scientific and purely professional education, the general culture of the student might suffer; and it was well that the Council should cause it to be known that, in their just regard for professional attainments, they did not lose sight of the need for a sufficient standard of general knowledge. The present might be regarded as a favourable opportunity for expressing an opinion on the subject, seeing that the entrance examination of the new University proposed by Lord Cowper's Committee was left extremely vague and undefined; and it might be the duty of the Council to take some steps in the matter whenever it assumed a definite shape. After referring to certain dental business, the President stated that a memorial had been received from the British Dental Association, suggesting the advantages which would ensue from a dentist familiar with the necessities of his profession being a member of the Council.

The Business Committee was appointed, comprising Mr. Wheelhouse, Sir Wm. Turner, Mr. Bryant, and Dr. Moore.

On the motion of Mr. BRUDENELL CARTER it was resolved to sanction the scheme of the Society of Apothecaries providing that the assistant examiners in surgery appointed by the Council should retire in rotation, and should not be eligible for reappointment until after the lapse of two years. In accordance with this Mr. Walsham retires, and Mr. Bernard Pitts, F.R.C.S., etc., is appointed as an assistant examiner in surgery for five years.

MEDICAL AID ASSOCIATIONS.

Mr. BRYANT brought forward a motion asking the Council, in view of the rapid increase in number of the medical aid associations conducted by laymen for profit, and the injurious influence such associations have upon public as well as upon professional interests, to refer the matter to its legal advisers to consider whether these medical aid associations were rightly registered under the Friendly Societies Act of 1875. He urged that in the report of the Council issued in May last it was conclusively demonstrated that in a professional point of view these associations were injurious, as tending to degrade the professional man to the position of a paid servant of a trading company; as rendering it obligatory on the medical officers to attend persons who had no claim to be medically treated on charitable or inadequate terms; also by depreciating or degrading the high character of medical science as represented by the officers of these associations, working under conditions which were not only humiliating, but which made it most difficult for such officers to do their duty.

Sir DYCE DUCKWORTH seconded.

Dr. MACVAIL thought the question whether these medical aid associations were rightly registered was not a question for the Council to deal with; their duty was simply to protect the public against incompetent medical men.

Sir WALTER FOSTER agreed that the legality of the acts of friendly societies was not a matter for the Council; it was clearly one for the public to take up. All that the Council could do was to deal with the conduct of members of their own profession. He was one of the large minority of the Council who thought that medical men who accepted such appointments were guilty of infamous conduct in a professional respect, and if the Council was willing to reopen the subject, the proper plan would be to reappoint Dr. Glover's Committee, and to ask them to bring up some resolution which could be dealt with by the Council. At present it would be premature to come to any such resolution.

Dr. GLOVER suggested that if that course were adopted Mr. Bryant and Sir Dyce Duckworth should be added to the Committee.

Dr. MACALISTER, as one of the Committee, asked that his name might be omitted. He said that the Committee, after a hard year's work, had brought before the Council its conclusions, and the Council had rejected them. He did not know of any new facts which could be ascertained by such a Committee sitting over again, and until such new facts were apparent the Council would not be justified in sending the matter back again. It would do the Council great harm to turn round and, without further evidence or fresh facts, to undo what was done a year ago. If the Council was to change its mind it must be by a study of the report which had been already presented. The mover and seconder of this resolution had themselves voted against the adoption of the report.

Dr. LEECH, as a member of the Committee, said after hearing the evidence given, he certainly came to the conclusion that it would be a mistake for the Council to pronounce the taking office under these associations infamous conduct. He thought it would be a mistake to go back upon their decision of last year.

Mr. BRYANT said during the last year much additional evidence had come before the public as to the injurious tendency of these Associations. He himself considered the conduct of persons taking employment under them as "infamous in a professional respect," and had at first intended to ask the Council to express its opinion on that point. He had, however, withdrawn that part of the resolution as at first drafted.

Dr. Wilks regarded the whole resolution as *ultra vires*. It was a subject the Council had nothing at all to do with. The question was one of competition amongst certain medical men of a particular town. If medical men wished this question dealt with they should unite together for the purpose, or it might be taken up by the British Medical Association. The Medical Council did not sit in the interests of the profession as such. It was a Government institution to guard the *Register*, to take care that proper men were put on and improper men were taken off. The only thing he could find in the report of the Committee was that certain gentlemen had undertaken too much work, and were not competent, therefore, to perform it. No doubt the question was an important one, but it must be dealt with by medical men themselves and not by the Council.

Mr. Wheelhouse said the Committee had before it a printed opinion from Mr. Muir Mackenzie that these associations were rightly registered.

After some further discussion Mr. Bryant withdrew his motion.

Sham Degrees.

The Solicitor reported that in pursuance of a resolution of the Council proceedings had been taken against Joseph Steel at the Houghton-le-Spring Petty Sessions for using the title M.D. (Bc.) conferred on him by the General Council of Safe Medicine, and he was, on February 1st last, convicted and fined £10 and costs. Steel appealed, but his appeal was dismissed. The solicitor advised that the Council should consider whether any further steps should be taken either to prosecute the manager of the association granting these sham degrees or to bring an action in the name of the Attorney-General.

On the motion of Mr. Wheelhouse, seconded by Dr. Glover, it was resolved:

> That the President take such steps as may be thought advisable to put an end to the granting of so-called degrees by the General Council of Safe Medicine.

Certificates to Midwives.

Various communications with regard to midwives were received.

Mr. Wheelhouse moved:

> That after January 1, 1895, the Council will consider any registered medical practitioner who shall sanction the issue to any midwife or other person who has not passed a qualifying examination in medicine, surgery, and midwifery, as provided by the Medical Act (1886), of a certificate or diploma which shall imply a qualification to practise midwifery, as guilty of infamous conduct in a professional aspect.

He referred to the previous action of the Council in the matter, which he said had been strongly criticised by the profession. According to the Medical Act of 1886 great care had been taken that no one should be permitted to register who was not qualified to practise either medicine, surgery, or midwifery. An attempt was made to evade those conditions, and to institute an entirely new class of practitioners, who were only to be partially educated, and in midwifery only. It was said that the documents referred to in the motion were not diplomas but only certificates such as anybody might give. He exhibited a number of copies of such certificates, collected by the secretaries of the Lancashire and Cheshire Branch of the British Medical Association, and pointed out how difficult it was for ordinary people to distinguish between such certificates and ordinary diplomas. He asked the Council to come to some definite conclusion in the matter, so as to show these various institutions that they were in earnest about the matter, and were determined that those who were authorised to practise midwifery should be fully qualified.

Sir Dyce Duckworth seconded the resolution.

Dr. MacAlister said the Council had no power to prevent persons practising without a diploma, and it was preposterous that they should be asked to say that any person giving a testimonial to another person was guilty of infamous conduct. Such certificates gave no legal qualification to practise, and it was never intended that they should; they were simple testimonials that in the opinion of certain gentlemen such a person was qualified to do a certain thing. He had constantly given testimonials to his pupils that in his opinion they were qualified to act as house-surgeons or house-physicians, but should be very sorry, indeed, to be charged with infamous conduct for so certifying to his personal knowledge. These certificates were of the same nature. What they were really asked to do was to say that no woman should help any other woman in her labour unless she had a licence to practise. That mere statement was sufficient to show that the whole agitation was preposterous. There were between 10,000 and 15,000 midwives at this moment, and they could practise whatever the General Medical Council or the Obstetrical Society might do to prevent them. Was it better or worse that these women should have absolutely no education or that some of them should be educated? To prevent any examination or testing of their somewhat imperfect education was to stop that education altogether. The resolution as proposed was itself an illegality, and it would not be sustained in the law courts. The Council could, after due inquiry, pronounce a given man guilty of infamous conduct, but they dare not pronounce a general anathema against a whole class, untried and unheard.

Dr. Atthill thought the resolution should be modified. What they should aim at was the medical man who gave a certificate which was as illegal as the M.D.(Bc.) referred to in the President's address. He wished to see these women educated, but protested against anything implying their registration.

Sir Walter Foster said they could not prevent women acting as midwives, but if they could do away with the granting of certificates such as those exhibited, which on the face of them appeared to be diplomas, good would be done. He thought the profession should be warned that they must be very careful what kind of documents were allowed to be issued from institutions officered by medical men.

The President said the Council had already emphatically declared itself in favour of the education of midwives. He suggested that the better plan would be to summon one or two of the officers of these institutions to appear before the Council in November next, and to try them on the charge of infamous conduct. General declarations were useless.

Mr. Brudenell Carter moved as an amendment:

> That in the opinion of this Council the issue to women of any certificate of competency or other document so framed as to bear colourable resemblance either in appearance or phraseology to a diploma conveying a right to be registered as a medical practitioner is a proceeding in direct contravention of the spirit of the Medical Act of 1886, and one which will be liable to be visited with the condemnation of the Council. The President is therefore requested to repeat a warning already given to certain institutions, and to urge the registered practitioners connected with institutions granting these certificates to nurse-midwives to reconsider the terms in which they are framed, and to bring them into harmony with this resolution.

Sir William Turner seconded the amendment, which, after debate, was carried *nem. con.*

Amendment of the Penal Clauses.

A communication from the Parliamentary Bills Committee of the British Medical Association, enclosing a report by Mr. Ernest Hart on the proposed amendment of the penal clauses of the Medical Acts, was received and entered on the minutes.

[The report is printed in the British Medical Journal for April 28th.]

Restoration of Name.

The name and qualification of Mr. E. B. de B. Robertson—removed from the *Medical Register* on May 26th, 1892—were, after discussion *in camerâ*, and in accordance with the report of the Executive Committee, restored to the *Register*.

The Council then adjourned.

Wednesday, May 23rd.

Sir R. QUAIN, Bart., President, in the Chair.

Before the day's proceedings were entered on, the PRESIDENT said that as that was the golden wedding day of Sir James and Lady Paget, it had been suggested that it would be a graceful act were the Council to pass some resolution of congratulation with them.

The following resolution was then carried by acclamation, and directed to be forwarded to Sir James and Lady Paget:

That the General Medical Council desire to express their most hearty congratulations on the auspicious occasion of the golden wedding of Sir James and Lady Paget.

ALLEGED COVERING.

The first business was the consideration of the case of George Davidson (registered as M.B., Mast.Surg., 1866, Univ. Glasgow), who appeared before the Council to answer the following charge, as formulated by the Council's solicitor:

"That, being a registered practitioner, he lent or afforded his presence, advice, and assistance, and the aid of his professional qualifications, to an unqualified person named Mylan, residing and carrying on a medical practice at 129, Carlisle Road, Sheffield, and thereby enabled the said unqualified person to attend and administer medical aid and medicines to patients, and to recover charges therefor, and to carry on a medical practice as if he were duly qualified, thus acting as cover to Mylan."

This case was adjourned from the November session. The complaint was laid by the Medical Defence Union, and Mr. Bateman appeared in support of the charge. Mr. Muir Mackenzie appeared as legal assessor to the Council.

Dr. BATEMAN opened the case and read the affidavits in support. One was from Albert Battie, of Sheffield, who deposed to a visit to 129, Carlisle Road, Sheffield, in June of last year, when he was attended and medicine given him by Mylan, who was a coloured man. The name of Mylan was on a brass plate on the door. An affidavit made by Walter Alcock, deposed to a visit to 129, Carlisle Road, when both a white man and a coloured man were present. His case was attended to and medicine given by the coloured man, Mylan. Dr. Davidson was the white man present, and he took no part in dealing with his case.

Other affidavits were also read.

A written defence by Dr. Davidson was read in which he generally traversed the statements made in the above affidavits. All the persons who had made affidavits were either examined personally by him or under his direct supervision. Mylan had acted as his assistant and had given him the use of his rooms, his (Mylan's) remuneration to be dependent upon the receipts. Their connection was that of principal and assistant.

In answer to Dr. BATEMAN, Dr. Davidson said that he acted as *locum tenens* for Dr. Younan, who was principal to Mylan. When he found that Dr. Younan did not return, he engaged Mylan as his assistant. Mylan had been assistant to Dr. Younan during Dr. Younan's absence. His (Dr. Davidson's) salary was paid by Mylan. Dr. Younan never claimed any compensation from him.

By Dr. HERON WATSON: There was never any certificate given by Mylan in his name, or any irregularity in regard to the signing of certificates. His attention had not been drawn to the cautionary advertisements as to covering unqualified assistants which had appeared in the chief medical journals.

By Dr. MCVAIL: Mylan brought him in contact with Dr. Younan through an advertisement in the BRITISH MEDICAL JOURNAL. Mylan was commissioned by Dr. Younan to get a *locum tenens*. He received his salary from Mylan on behalf of Dr. Younan.

By Mr. TEALE: Dr. Younan had been in practice some eighteen months. Mylan had previously to that been an assistant to Dr. Mason.

By Dr. ATTHILL: He had now left the neighbourhood.

The Council room was then cleared, and on the readmission of the parties,

The PRESIDENT said that the Council were of opinion that Dr. Davidson had committed the offence of covering an unqualified person, that his conduct was infamous in a professional respect, and the Registrar was therefore directed to erase his name from the *Medical Register*.

ALLEGED "COVERING" OF QUACK REMEDY VENDORS.

The next case considered was that of John Melvin Campbell (registered as L.S.A.Lond., 1878), who was summoned, but did not appear to answer to the charge that, being a registered medical practitioner, he is, or was at the time the complaint was made, associated with, or one of a body of, persons carrying on business at Queensland under the name of "The Progressive Remedy Institute," and that he lends his professional qualifications and name to further and aid the sale to the public of the quack remedies and cures publicly advertised by this body of persons, and to enable them to carry on in the colony a medical practice which is objectionable and dangerous to the public.

The complaint was laid by the Queensland Medical Board.

Mr. MUIR MACKENZIE produced the evidence in support of the charge, which consisted of affidavits and certain advertisements emanating from the Progressive Remedy Institute, of which body Dr. Campbell was "medical referee."

A defence was sent in by Dr. Campbell, which was also read. In it Dr. Campbell asserted that he had ceased to be connected with the Institute since February 28th, 1893. The Progressive Remedy Institute did not consist of a number of unqualified persons who carried on a medical practice, but was solely managed, owned, and conducted by one Howard Freeman, on strictly legal and legitimate principles. He denied having given any authorisation to the advertisements which were issued by the Institute. He was still on the *Medical Register* as a duly qualified medical practitioner of Queensland.

After considering the case *in camerâ*, it was announced that the Council were of opinion that Dr. Campbell had committed the offence charged against him, and the Registrar was directed to erase his name from the *Register*.

A CASE OF ADVERTISING.

The Council next proceeded to consider the case of Eliza Foster MacDonagh Frickhart — registered as M.D.Univ. Zurich, 1877—who was summoned to appear before the Council to answer to a charge of violating the undertaking subscribed by her before being admitted as a Licentiate of the King and Queen's College of Physicians of Ireland—now the Royal College of Physicians of Ireland—by which she engaged not to endeavour to obtain practice or to attract public notice by any unworthy means, and not to permit or sanction the use of her name for such purposes nor in connection with any secret remedy. It was also charged against her that she systematically seeks to attract practice by a system of public advertisements, such advertisements being of a character discreditable to a registered medical practitioner.

The complaint was laid by the Royal College of Physicians of Ireland.

Mrs. Frickhart did not appear in answer to the charge.

Mr. MUIR MACKENZIE read the evidence in support of the charge, including the advertisements complained of, which had appeared in papers in Victoria, Australia, in one of which it was stated that Mrs. Frickhart was the only duly qualified lady specialist advertising in Australasia.

Dr. ATTHILL said that at the last meeting of the Council the qualification of Licentiate of the Royal College of Physicians Ireland had been erased from the *Register*. The only qualification the Council was now dealing with was that of Zürich.

Mr. MUIR MACKENZIE said that the question now was whether her name should be removed from the *Register* entirely.

There was no defence, and after a short deliberation in private, the President announced that the Council were of opinion that Mrs. Frickhart had committed the offence charged against her, and the Registrar had been directed to erase her name from the *Register*.

ALLEGED COVERING.

The next case dealt with, that of Denis Collins (registered as M.R.C.S.Eng., 1863), who had been summoned to ap-

pear to answer to the following charges: that he, being a registered medical practitioner, did cover and assist an unqualified person, named Francis McConville, in whose employment he was, in carrying on at 14, Brunswick Road, and 9, Erskine Street, Liverpool, and elsewhere in Liverpool, a system of advertising, selling, and administering quack remedies and cures and medicines, to the detriment of credulous and ignorant persons; and that he had himself, and in his own name, been carrying on a system of advertising so-called remedies and cures, and seeking to attract medical practice and induce foolish and credulous persons to consult him by circulating improper and discreditable advertisements and pamphlets.

Mr. Collins did not appear in answer to his summons, and the case was undefended.

Mr. Muir Mackenzie, in stating the case to the Council, said that he was not at all surprised that Mr. Collins had put in no appearance. This was one of the worst cases that had ever been brought before the Council. Francis McConville, with whom Collins had been associated, had recently been sentenced at the Liverpool assizes by Mr. Justice Day to five years' penal servitude for shocking frauds upon credulous persons. The chief affidavit was that of Inspector Robertson, of the Liverpool constabulary, who had been concerned in investigating the case, and bringing McConville to justice. It was proved that Dennis Collins had been for some time in the pay of this man McConville at this business at 14, Brunswick Street and 9, Erskine Street, Liverpool.

After a short deliberation in private it was announced that the Council considered the charge proved, and the Registrar was directed to remove the name of Dennis Collins from the *Register*.

Case of Alleged Covering.

The next case considered was that of Neville Holland (registered as Lic. Soc. Apoth., London, 1869, M.R.C.S.Eng., 1870), who was summoned to answer the following charges:

1. That he, on October 9th, 1893, at Bethnal Green, in the county of London, and in the Metropolitan Police district, did unlawfully and wilfully make and issue a false certificate concerning the death of one Emily Hewitt, for the purposes of the Births and Deaths Registration Act; and

2. That he acted as cover to an unqualified practitioner, named Davies, permitting and enabling him to practise as if he were duly qualified, and in the course of acting as such cover had signed and given medical certificates in cases attended by the said Davies and not by him.

The complainants were the London and Counties Medical Protection Society, for whom the Honorary Secretary, Dr. Hugh Woods appeared, and Mr. Neville Holland appeared in person to answer the charges.

Mr. Muir Mackenzie produced the evidence in support of the charges, which included a copy of a conviction against Mr. Holland accompanied by a fine, with regard to the certificate in the case of Emily Hewitt.

Dr. Hugh Woods briefly stated the case with regard to the covering. The house in which the practice was carried on was rated in the name of Davies.

Mr. Neville Holland addressed the Council in his own defence. He was solely responsible for the practice. He saw all the patients who were in any sense in a dangerous condition or who required more aid than his unqualified assistant could give. He felt perfectly satisfied that he had discharged his obligation to the medical profession in a strictly professional sense, with the exception of having signed this certificate.

After Mr. Holland had been questioned by several members of the Council as to signing the certificate in the case of Hewitt when his unqualified assistant attended to the case and also as to the practice carried on in Green Street, Bethnal Green, the Council deliberated for a short time in private.

On the readmission of strangers, the President announced that the Council considered the case proved, and that the Registrar had been directed to erase the name of Mr. Holland from the *Medical Register*.

After some formal business had been transacted the Council adjourned.

Thursday, May 24th.

Sir R. Quain, Bart., President, in the Chair.

Alleged Advertising.

The Council proceeded to consider the case of Stephen Berry Niblett (registered as L.S.A.Lond., 1858; L.R.C.P.Ed., 1860; L.F.P.S.Glas., 1861), complained of by Mr. W. H. Murray, of Adlington, Lancashire. The charge, as formulated by the Council's solicitor, was as follows:

"That, being a registered medical practitioner and licentiate of the Royal College of Physicians of Edinburgh, he seeks to attract practice by a method of publicly advertising his name, address, and qualification, thereby inviting and suggesting to persons to consult him, and to purchase from him cures, remedies, and medicines, which he publicly advertises; and, further, that the forms and methods by which he so advertises himself and his cures, remedies, and medicines to the public are in themselves professionally discreditable."

Mr. Niblett appeared, and the Council, after hearing his defence and fully considering his case, decided that he was guilty of the offence charged, and removed his name from the *Register*.

Alleged Covering.

The charge against Alexander Nairne (registered as L.R.C.P.Ed., 1874) was as follows:

"(*a*) That, being a registered medical practitioner, he joined with an unqualified person of the name of A. I. Currie, who professes to practise on patients a so-called drink cure; and, in conjunction with the said A. I. Currie, opened and carries on an establishment called the Metabolic Institute, 237, George Street, Glasgow, where the said drink cure is practised.

"(*b*) That he lends himself as cover to enable the said A. I. Currie to practise and treat patients as if he were a qualified person; and that he lends himself and his professional qualifications to practices in connection with the said drink cure which are professionally discreditable."

Mr. Nairne appeared in person, and after hearing his statement that he had ceased all connection with the Institute, and fully considering the case, the President said the Council had come to the conclusion that Mr. Nairne had been guilty of a serious indiscretion in allying himself with an unqualified practitioner, and cautioned him as to his conduct in the future. They had not, however, adjudged him to be guilty of infamous conduct in a professional sense.

[The further proceedings will be published in our next number.]

THE CHOLERA.

Alleged Outbreak in Prussia and France.

It is reported that a case of sickness resembling cholera has occurred in the village of Waldeck in West Prussia, and experts have accordingly been sent there to make inquiries and experiments. The Spanish Government has declared Saint Nazaire to be an infected port, some suspicious cases of illness resembling cholera having been announced there. All arrivals from the ports in question will be placed in quarantine.

Cholera and Soil Moisture.

The research which has been conducted by Dr. Dempster in the laboratory of the British Institute of Preventive Medicine, the results of which were communicated at a meeting of the Royal Medical and Chirurgical Society on Tuesday, May 22nd, constitutes an important contribution to our knowledge of the natural history of the cholera and typhoid bacilli. The abstract which appears on page 1126 gives a clear view of the object, methods, and conclusions of the inquiry.

The cholera bacillus is unable to retain its vitality in a dry soil, but survives for a prolonged period in a soil the moisture of which is retained. The typhoid bacillus displayed a greater tenacity of life; but desiccation of soil proved fatal to it also, and retention of the soil moisture was favourable to continued vitality. The soils employed for these experiments were white sand, grey sand, garden mould, and peat. Peat proved rapidly poisonous to both

organisms, but as regards the other three it appeared that the vitality of the bacilli did not depend on the nature of the soil, but solely on its moisture. It is important to observe that throughout the research the soils were thoroughly sterilised. The influence of other organisms in the struggle for existence which takes place in decaying organic material was thus eliminated. No doubt the simplification of conditions and issues is very desirable in experiments of this nature, but cultures of the cholera bacilli in unsterilised soil, in fæces, and in unsterilised milk indicate that in this struggle these are very prone to succumb, and that other organisms soon gain the mastery and cause the extinction of the comma bacilli. The "soil" in which this organism seems to revel—namely, an alkaline emulsion of intestinal mucus—is very different from any sandy or humous material which can be found in Nature or prepared in the laboratory; and test tube experiments are a very remote imitation of what may happen on or in the ground under varying climatic and other conditions. One glaring defect in the research was that no analysis appears to have been made of the soils which were employed, more especially of the amount and kind of the organic material contained in them. No explanation was forthcoming regarding the lethal influence which peat exercised on these organisms. The fact seems beyond question, and it is a speculation of no slight interest and importance whether other soils or ingredients contained in them possess a similar power of killing or hindering the development of these and other pathogenic organisms. Notwithstanding these and many other considerations which might be adduced, we are by no means sure that Dr. Dempster did not exercise a wise discretion in limiting his research in the first instance to the simple question of moisture, and the results obtained are in harmony with experience of cholera prevalence in India. Dr. Scriven, from the knowledge gained during twenty years' service at Lahore, was able to inform the meeting that a hot air and dry soil with subsidence of soil water, were conditions inconsistent with cholera prevalence in the Punjab, and that the disease flourished there during the rains, when atmosphere and soil became moderately, and not excessively, moist. Dr. MacLeod, who drew his experience from twenty-six years' service in Lower Bengal, pointed out that while in the Punjab desiccation of soil and the fierce heat of summer were inconsistent with the prevalence of cholera, which disappeared or remained altogether in abeyance during the hot and dry season, it was only exceptionally that these conditions prevailed in Bengal to such a degree as to cause a fall or decline in the intensity of the disease, which was preeminently present in the delta. Excess of moisture, causing saturation of soil and rise of soil water to or above the ground level, was a much more potent cause of cholera suppression than heat and desiccation. But other conditions, more especially the temperature of the air and soil, had a marked effect on cholera prevalence, so that there seemed to be a range of temperature and soil moisture within which cholera was prone to flourish, while an elevation or decline of either factor, above or below this range, appeared to exert an inhibitive influence. The coexistence or otherwise of these two conditions, as had been shown by a detailed inquiry conducted by Drs. Lewis and Cunningham, appeared to account for the seasonal rhythm of cholera in Lower Bengal, which presented two periods of aggravation, and two periods of mitigation, especially in large cities, such as Calcutta and Dacca, from which cholera is never absent.

While, therefore, we welcome Dr. Dempster's research as an interesting and useful contribution to the great question of cholera causation, it is important to bear in mind that this question is an exceedingly complex one, and that many factors must be taken into account in our endeavour to solve it.

Several parts of the human body are already thought worthy of a journal all to themselves. As specialisation increases, perhaps each disease will require its own organ. Dr. Valenzuela, of Madrid, has set the example by starting a journal devoted to phthisis. It is to be entitled *Revista de Yisiologia*, and is to appear quarterly—on January 1st, April 1st, July 1st, and October 1st.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

THE members of Council who have served eight years, and therefore retire in July, are Mr. Lund, Mr. Reginald Harrison, and Mr. Marsh, who was elected in 1892 as substitute member filling the vacancy caused by the death of Mr. Berkeley Hill, elected in 1886.

The following are the twenty-four members of Council, three of whom retire yearly:

President.—Mr. Hulke; *Council* (1) 1881, (2) 1889, *President*, 1893.
Vice-Presidents.—Sir W. Mac Cormac; C. (1) 1883, (2) 1891. Mr. Macnamara; C. (1) 1885, (2) 1893.
Other Members of Council.—Sir T. Spencer Wells; C, (1) 1871, (2) 1879, (3) 1887; P, 1882.
Mr. Lund; C, (1) 1878, (2) 1886.
Mr. J. Hutchinson; C, (1) 1879, (2) 1887; P, 1889.
Mr. Cadge; C, (1) 1880, (2) 1888.
Mr. Bryant; C, (1) 1880, (2) 1888; P, 1890-92.
Mr. Thomas Smith; C, (1) 1880 (substitute), (2) 1884, (3) 1892.
Mr. Christopher Heath; C, (1) 1881, (2) 1889.
Mr. Durham; C, (1) 1884, (2) 1892.
Mr. Pemberton; C, (1) 1885, (2) 1893.
Mr. Reginald Harrison; C, 1886.
Mr. Willett; C, 1887.
Mr. Pick; C, 1888.
Mr. Howse; C, 1889.
Mr. Langton; C, 1890.
Mr. Mitchell Banks; C, 1890.
Mr. Rivington; C, 1891.
Mr. Jessop; C, 1891.
Mr. Howard Marsh; C, 1892 (substitute, see above).
Mr. Tweedy; C, 1892.
Mr. Mayo Robson; C, 1893.
Mr. Henry Morris; C, 1893 (substitute for Mr. Marcus Beck, elected 1890.

We understand that of the outgoing candidates Mr. Harrison and Mr. Marsh will seek re-election, but that Mr. Lund will not. Mr. Norton (St. Mary's) will, we learn, offer himself for election.

The members may be classified thus:

1. Members of Council attached to medical schools in London:	
St. Bartholomew's	4
Guy's	3
St Thomas's	1
University College	2
Middlesex	2
St. George's...	1
Westminster	1
London	2
Total number attached to London schools ...	16
2. Members attached to special hospitals in London ...	2
3. Provincial members	6
Total	24

ARCHÆOLOGICA MEDICA.

VIII.—JOHN OF VIGO: HIS ENGLISH TRANSLATOR AND BOOKSELLER.

FEW books on surgery have a greater interest for the student of English history than the first edition of Vigo's works in English, which appeared in the year 1543. Few works, however, have fallen into more complete oblivion; it escaped the notice of so great an antiquary as Anthony Wood 200 years ago, it was unknown to Johnson the typographical historian. Gurlt and Hirsch do not mention it in their *Biographical Lexicon*. Copies of it, however, exist in the library of Royal College ofSurgeons of England, and in a neglected condition in the library of Royal Medical and Chirurgical Society, and it is to be seen from time to time at exorbitant prices in the catalogues of second-hand booksellers. The work is of interest on account of the author and his subject matter, because of the translator and his fate, and lastly because of the bookseller by whom it was issued.

The main details of the life of Giovanni de Vigo are well known. Born at Rapallo about 1460 his skill in surgery was first recognised during the siege of Saluzzo in 1485 and 1486. Cardinal Giuliano della Rovere, afterwards Pope Julius II, attached him as chief surgeon to his train, thereby affording him that insight into Italian life which enabled him to write his masterly account of the new disease known asthe French pox. His fame was established by the publication at Rome in 1514 of his *Practica in Arte Chirurgica Copiosa Continens Novem Libros*, a work which ran through many editions, and

was translated into French, Spanish, Italian, English, German, within a few years of its first issue and into Portuguese many years later.[1] The date of Vigo's death is unknown, but he was alive in 1517.

The English translation was undertaken by Bartholomew Traheron or Treherne, who dedicated it to "Master Rycharde Tracie, the ernest favourer of al good and godly lernyng," whom he calls his father-in-law. Traheron appears to have been born in Cornwall, and was early left an orphan. He was educated about 1527, either in Exeter College or Hart Hall, Oxford, where he attained to some eminence in the Latin and Greek tongues, and was persecuted for religion's sake by Dr. John London, the Warden of New College. He therefore migrated to Cambridge, and proceeded B.D. in 1533, being then a friar minorite. He was maintained at the Universities by the liberality of his patron Rich. Tracy of Toddington, co. Gloucester, himself admitted B.A. at Oxford on June 27th, 1515, who, after studying at the Inner Temple, became M.P. for Wootton Bassett 1529-36, and was obliged to flee the country on account of his religion during the reign of Queen Mary. Traheron, moved thereto by Tracy, "forsook the puddels of sophisters to fetch water from the pure fountains of the scripture," and travelled through Germany into Italy, where he doubtless became acquainted with Vigo's work. In 1537 he was at Zurich, and in the year following he was living in Strassburg. He had by this time become a convert to the new religion, for he entered holy orders, and in March, 1538, he was in London in the service of Lord Cromwell. He retired from the court in May, 1542, with the avowed purpose of marrying the wealthy daughter of a country gentleman who favoured godly doctrine, and of keeping a school for little boys in a small town. King Edward VI appointed him keeper of his library at Westminster, with the annual stipend of 20 marks, upon December 14th, 1549, and about the same time he was elected a burgess in Parliament, where he made strenuous efforts to prevent ambiguity about the Lord's supper in the Liturgy then established. He was living in Oxford in 1550, when he was appointed tutor to the young Duke of Suffolk. King Edward, however, finding him to be a person of merit, caused him to be elected Dean of Chichester, but the Royal mandate was only obeyed after much delay and difficulty on January 8th, 1551-2, and he resigned his deanery about December, 1552. In September, 1552, he received the grant of a canonry at Windsor, and a similar grant was made to him in the following year. The accession of Queen Mary caused him to relinquish all his preferments, for he was an intemperate writer, and like Knox and Goodman he regarded government by women as monstrous. He went as a voluntary exile into Germany, and was acting as divinity reader to his fellow exiles at Frankfort in 1555. Holingshed's chronicle says that he died in exile in the latter end of Queen Mary's reign, but Wood believes that he lived for some years longer. During his exile he occasionally assumed the name of Pilkington.

The publisher of this edition of Vigo is a person of no less interest than the translator. Edward Whitchurch, in conjunction with his partner Richard Grafton, was the printer and publisher of Matthew's Bible and the Great Bible. Soon after the execution of Thomas Cromwell, Earl of Essex, which took place on July 28th, 1540, Grafton was imprisoned for six weeks in the Fleet for printing these bibles without notes. After this period each partner printed for himself, though they were still connected by some exclusive privileges, and the first edition of Guido in English appears to be one of the earliest of Whitchurch's separate productions. Whitchurch, like Grafton, was brought up a merchant, and was a citizen of London. After the martyrdom of Archbishop Cranmer, he married Ann, his widow and second wife. The residence of Whitchurch was first at the sign of the Wheel and Two Buckets in St. Martin's-le-Grand; secondly, on the south side of Aldermary Church Yard; and lastly at the Sun, in Fleet Street, over against the conduit; perhaps the dwelling of Wynkyn de Worde.

[1] His English translator says: "I thynke that nothyng can better testifie and proove the connynge of this man than that he continued so long with so greate prayse, practysynge at Rome, in suche a multitude of pockye curtisanes, neyther priestes, bysshoppes, nor cardinalles excepted, as it playnlye appeareth in his booke. For where suche carions ben, the best Aegles wyll resorte."

The editions of Vigo in English, which are all printed in black letter, are:

1. The most excellent workes of Chirurgerye, made and set forth by Maister John Vigon, heed Chirurgié of our tyme in Italie, translated into english. Whereunto is added an exposition of straunge termes and unknowen symples, belongyng to the arte. Imprynted by Edwarde Whytchurch, wyth the kynges moste gratious priuelege for seuen yeares. Cum privilegio. Ad imprimendum solum. 1543. Folio, consisting of an engraved title page, an Epystole, The Table of the Booke, Fol. i—cclxx, and an "Interpretation of Straunge wordes" of fifteen unpaged folios.

2. In 1550, when the seven years privilege had expired, a reprint was issued by Whitchurch. The pagination is the same as in the first edition, but the type is different.

3. A third edition was issued in a quarto of 455 pages, corrected by George Baker gent: who notices in the preface that the previous issues were very incorrect, especially in putting ounces for drachms in the prescriptions. It was reissued several times by Thomas East between 1580 and 1586, and is often found bound up with some of Gale's works and of his translations of Galen.

LITERARY NOTES.

In his *Essai sur l'Histoire de la Rage avant le XIX Siècle*, Jouve, Paris, 1893, M. Michel de Tornéry gives an account of the theories as to rabies which were current in antiquity and in the Middle Ages. Five principal theories seem to have been current among the Greek and Roman physicians; according to one of these the seat of disease was the meninges, according to another the œsophagus and the cardiac orifice of the stomach; a third placed it in the diaphragm; a fourth attributed it to small white worms under the tongue; and a fifth, like the author of the celebrated essay on "Chinese Metaphysics," "combined the information" in a "mixed" theory. According to Pliny a cure for rabies was the eating of the liver of a rabid dog, a method of treatment which may almost be regarded as a dim foreshadowing of latter-day therapeutics. Democritus (not the laughing philosopher but a medical writer) held that rabies was a conflagration of the nervous. Themison (whose influence on the death-rate of Rome is sarcastically alluded to by Juvenal), professed to be able to cure rabies, but unfortunately carried the secret to the grave with him. Columella recommended cutting off the tails of puppies on the fortieth day after birth as a preventive measure. M. de Tornéry has found nothing about rabies in the Byzantine writers. Among the Arabian writers, Rhases recommends garlic and onion as a remedy, and Avicenna maintained, in opposition to the Greek and Roman writers, that the disease was more common in spring and autumn than in summer. In the Middle Ages Gordon and Guy de Chauliac, among other writers, treat of rabies. Unfortunate sufferers were bound and isolated; the treatment seems to have been largely of a "faith-healing" nature, one method much in vogue being a frontal incision into which a small piece of the stole of St. Hubert, patron of the chase, and therefore presumably specially interested in dogs, was introduced. Fracastorius denies that rabies can develop spontaneously, and throws out the hypothesis of a specific virus. In the eighteenth century Hunault, believing in the efficacy of "resolute government," recommended that the unhappy patient should be tied to a post stark naked, and should then have fifty buckets of cold water thrown over him. Morgagni devotes a special letter to rabies, but confesses that he had never examined a case after death.

In an erudite paper published in the *Medical Magazine* for May, Dr. J. Keser discusses the pathological nature of the great plague of Athens so vividly described by Thucydides, and concludes as follows: "We can, I think, eliminate variola, scarlatina, and even typhus, and say that the plague of Athens was probably a variety of the true Oriental plague, characterised chiefly by a varioliform exanthem with redness and lividity of the skin, by ulcers and by the absence or rarity of buboes. As to the connecting links between this form of plague and the typical *pestis inguinaria*, they must, for the present at least, remain a matter of conjecture."

Another instalment of the *Deutsche Chirurgie* has just been issued; it is numbered Lieferung 29 b, and consists of an elaborate monograph on Researches of Bones and Joints by Professor Hermann Lossen, of Heidelberg. The work contains a bibliography of the subject, which extends to forty closely printed pages.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1894.

SUBSCRIPTIONS to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, MAY 26TH, 1894.

THE *DAILY CHRONICLE* ON "HUMAN VIVISECTION."

WE have recently had occasion to complain of the unjustifiable attacks made on hospitals in the columns of the *Echo*. A much more scandalous article was published in the *Daily Chronicle* of May 15th, under the heading "Human Vivisection." The article is a very long one, and its form is not very intelligible. It commences like the letter of an irresponsible correspondent, but ends more like a leading article; so that we are justified in regarding it as a deliberate charge made by the authorities of the journal in question upon our hospital system generally. We shall merely quote the concluding words, in order to enable our readers to judge of its spirit and meaning. "We shall never have our hospitals thoroughly entitled to public confidence until the older members of the medical profession openly take up arms against the younger members, who are converting houses of charity into butchers' shops." The writer believes that a system prevails in "our hospitals" (chiefly in women's hospitals, but he does not restrict himself to them) of performing unnecessary and fatal operations for experimental purposes, and these operations are chiefly performed by young surgeons, house surgeons, and others. Of course all this is connected with the antivivisection craze; and equally of course the chorus of correspondents which it evokes is headed by Mr. Berdoe, who takes it all for gospel, and thinks that this "bold and outspoken protest" lays the community under a deep debt of gratitude. Persons whose minds are less easily made up will inquire on what evidence so gross and cruel a charge is made. What are the institutions in which the operations take place? What are the operations themselves, and who are the operators? *Nil horum*. The only foundation for this sweeping accusation is that Dr. Louis Parkes, medical officer of health for Chelsea, has written a letter to the board of "a certain hospital for women with reference to the alleged inordinate number of fatal operations in that hospital." He is said to have suggested that coroners' inquests might be held in cases where operations are undertaken not to save life, but "to remove deformities or mitigate pain and suffering in more or less chronic ailments"—in other words, operations of relief, a class of operations which, as Dr. Parkes says, "are of course undertaken." But all th far too tame for our contemporary. He immediately begins "reading between the lines," and so finding out that Dr. Parkes meant that the performance of such operations is unjustifiable; he assumes that the "alleged" inordinate number of deaths is real, and due to gross malpractice; and then he goes on to inform a horrified public that "the medical profession is at the present moment divided into two schools, which may be designated the old school and the new school." The first are practical men, of mature age, who look on their patients as human beings, and look on the new school as enthusiasts. The description of the new school can only be given in the writer's own words:

> The new school consists of the afore-mentioned enthusiasts who have only just passed from the stage at which young men go forth from the hospitals on football or boat-race nights to parade the West End in gangs, knock foot passengers off the pavement, and then, in the interests of what they call sport, destroy the glasses of some more or less innocent proprietor of a West End drinking-bar; and, having returned to their Bayswater or Bloomsbury lodging in the early morning and tried to sleep off the effects of bad whisky and worse cigars, go forth to gloat over men older than themselves destroying human lives in the interests of science.

We are unable to believe that such contemptible rubbish as this was written by any self-respecting journalist; but we must say that our contemporary treats his readers with scant respect in allowing it to be laid before them. The question is a very old one. Ever since we can recollect, and no doubt long before, attempts have been made to persuade the poor not to go into hospitals because they would be "experimented on." As intelligence and publicity have advanced, as the enormous saving of life, pain, disability, and deformity, due to recent advances in surgery, have become known, the prejudices so aroused have become weaker, and now hardly exist among the more intelligent classes, and we think it will require a more formidable attack than this to revive them. Whatever may have been the case in the earlier stages of progress, it is absolutely untrue that there is at present any definite division of medical opinion into a new and an old school. There was once such a division on the subject of ovariotomy, but the beneficent triumph of the progressives was too striking and is too recent to need recapitulation. Since the introduction of ovariotomy, the other forms of abdominal section have been so strikingly successful in saving life, that all surgeons, young or old, are enabled now to operate in many cases, with brilliant and life-saving results, where a few years since it would have been judged unjustifiable to do so. Yet Mr. Berdoe is not ashamed to instance abdominal sections as examples of "operative atrocities"!

With respect to the hospital on which Dr. Louis Parkes commented, the charge is now being investigated thoroughly by a committee of the highest authority, and we hasten to assure the *Daily Chronicle* that there is no school, new or old, which would have the least wish to burk such an inquiry. The idea that "science" can have any "interest in destroying human lives" could only occur to the most ignorant and the most thoughtlesss even of so-called "antivivisectionists"—and to found general charges on general and unproved allegations is a course which cannot in the end promote the interests or raise the character of the press. Science is interested in preserving life, not in destroying it. Journalism ought to be equally

interested in maintaining not in destroying the character of our great charitable institutions. We are glad to see that this duty has not been overlooked by some of those who have joined in this correspondence. An admirable letter will be found from Dr. Harrison, of Croydon, in the *Chronicle* of May 18th, and a very sensible refutation of the charges against our hospitals in the number for May 21st, otherwise the letters are painful reading, as displaying an amount of ignorance and imbecility for which we were hardly prepared. One closing quotation, from a letter signed "Humanitas" (on May 21st) will show whether we speak too strongly:

One has only to watch the relentless, cold, glassy eye of the modern hospital vivisectionist surgeon—it would be useful knowledge to learn how many of our surgeons of to-day are not bitten with the fatal mania, vivisection—to come to the conclusion that you have not opened your columns to this discussion one moment too soon.

The surgical profession requires no telling from my poor pen that scores of utterly uncalled-for operations are performed upon poverty-stricken humanity every day in our great hospitals, in order that surgical fads may be satisfied.

We appeal to the sense of honour and responsibility of the Editor of the *Daily Chronicle* whether it is justifiable for a journal of standing to attack the most beneficent of our public institutions, and not the least honourable or merciful of our professions, by publishing such stuff without calling for verification of the charges—names, dates, and places.

BARRACK SCHOOLS.

What to do with children is a problem difficult enough of solution, even when the numbers are small and the money is plentiful, and we need not be surprised at guardians of the poor, who are also guardians of the rates, finding it very difficult to educate and start in life the crowd of children who are every year thrown upon their hands. Boys who go to public schools are to a larger extent a selected class, yet it is well known how considerable a proportion fall out of their course from ill-health, idleness, or incapacity, and this notwithstanding the long holidays, the plentiful dietary, the large amount of outdoor liberty, and the influences of home life.

Poor-law children, however, cannot fall out. Whether strong or feeble, sharp or dull, good or vicious, they remain on the guardians' hands, and hence their schools become museums of failure rather than nurseries of success. When we hear of a bad tone prevailing in the great pauper schools, and of strict discipline being necessary, or when we are asked to compare the products of these schools with those of other educational establishments, we must not forget the difficulties under which the managers labour, and must especially bear in mind that the wastrels who in other schools are got rid of by the removal of the less fit, or by the sterner process of expulsion, remain permanently on the hands of the guardians, a constant drag upon the school managers, and a constant source of evil to the other children.

Just so far, however, as this is an excuse for the schoolmaster, it is a condemnation of the system; and with the opportunities for elementary education which now exist in every part of the country, it becomes a serious question whether it is right either to the children or the ratepayers that the present system of separate and district pauper schools should be continued. A special educational machinery will always be required for the numerous children of abnormal type in body, mind, and morals, for whose instructions the guardians are responsible; but normal children, children who equally with non-paupers will have to make their own way in the world, should partake of the normal elementary education of the country.

In 377 unions in England and Wales this is already done; there is in addition a very considerable number in which a portion only of the children are so dealt with, but there still remains a daily average of 24,341 children directly educated under the Poor Law, 17,405 in workhouse and separate schools, and 6,936 in district schools, and of these the children attending the "large" separate or district schools considerably outnumber those in the schools attached to workhouses. It is doubtless a gain that the workhouse school, in the old sense of the word, is becoming a vanishing quantity, but with the suppression of old evils new ones arise, and it is against these "barrack" schools as places of education for normal children that a protest must be raised.

They may offer certain facilities so far as mere teaching and maintenance of discipline are concerned, but, on the other hand, they are distinctly deficient as places of education. Not only are they apt to turn out young people totally unfitted to hold their own in the world, but they have again and again shown themselves liable to become hotbeds of infectious disease, even elevating into virulence maladies which hardly affect other classes of the community, as has been most markedly shown in the disastrous experience of former years in regard to ophthalmia.

Nor are they less exposed to moral infection—a few bad children sowing a seed by which the career of hundreds may be ruined. Beyond all this they offer both temptation and opportunity for abuses on the part of the staff. No one reading the report of the Forest Gate scandal, published in the British Medical Journal of April 21st, can believe for a moment that the matters brought to light by the Local Government Board inquiry were accidental and unprecedented abuses. What was accidental was the discovery of the evil. The Report of the Royal Commission on Poor-law Relief in 1888 gave ample evidence of the educational failure of the district school.

The report says: "There are serious disadvantages . . . . . which are inseparable from any system under which a number of children are brought up together without any home influence or any contact with the outer world, but we cannot doubt that they are much aggravated by the overgrown size of the metropolitan district schools."

The evidence of one witness contained the following: "I find that the children turned out of the schools are for the most part wanting in intelligence. . . . . They have no practical knowledge whatever of life; they are brought up together in large masses, and they have no practical training, ... and are not fitted to battle with the outside world at all." Another said: "I notice a very large number of the children who come out of these schools, principally the girls, appear just like a deer let out of a cart before the hunt, looking about vacantly in every direction; they appear to know nothing at all."

A former chaplain to a large prison said: "A girl who has been brought up in the semi-conventual life of a district school, where we have 600 girls massed together and known only by their numbers, does not know what the temptations are, or how to meet them, and she more readily falls." A great many such girls had come under his notice as prisoners. "They are a class by themselves; they have the same characteristics, and are turned out of the same mould." "They are not more vicious than others, but more incapable of virtue; passive, sluggish, backboneless."

In regard to expense, the evidence was no less striking. Figures were given showing that at the Ashford schools, where there was an average of 650 children, the annual cost per child was £31 1s. 4d., or 12s. a week, more than double the 5s. a week which is the amount allowed for boarding out, including the allowance for clothes and medical attendance. It was also stated that where children were boarded out with widows who also were receiving relief, the children in many cases cost only 2s. 6d. each, whereas there was a pauper family which alone was costing £176 2s. 6d. a year at these schools.

What we want, then, is to break up these great barracks, to board out the children who are thrown permanently on the care of the guardians, and for the "ins-and-outs" and those children who come on the rates at a more advanced age to establish small cottage homes in which they may live while partaking of the public elementary education, while they are working as "half-timers," and perhaps in first years of their apprenticeship. The exceptional children—the delicate and deformed, the idle, the mentally defective, and the vicious, would need to be classified and dealt with specially on the basis recommended by Dr. Warner's Committee. In every system there will be occasional defects and abuses, but in the case of cottage homes and boarded-out children they can at worst only affect a few, whereas in the barracks they may do injury to hundreds.

THE NEW LOCAL GOVERNMENT BOARD FOR SCOTLAND.

THE truth of the observation we had occasion to make in the course of a former article on the subject, that while the Board of Supervision, as a national public health department for Scotland, was an anachronism, it was difficult to suggest what should come in its place, has received illustration in the divergent nature of the criticisms with which the constitution of the new board, as sketched in Sir George Trevelyan's Bill, has been received. The Secretary for Scotland's idea has evidently been to constitute a working board in Scotland upon the general lines of the Irish Local Government Board, having Parliamentary representation, and with its titular head in London. Most of the critics of the proposal have evidently been unable to grasp the idea of a non-corporate or skeleton board, such as receives its best illustration in the case of the Local Government Board for England; and much ingenuity has been shown in the attempt to invent an actual deliberative board, to have its headquarters in Edinburgh. The most promising of these suggestions is one which proposes that the Crown should nominate a certain number of representatives from county councils and town councils, who, with a salaried chairman and secretary, should meet regularly in Edinburgh for the decision of matters within the domain of a national board of health. Assuming that such a representative board was constituted, it is suggested that the medical man whom the Local Government Bill proposes to make a member of the board, would occupy a position of much greater influence as their official adviser than as a member who would count as only one vote on a division. If such a board can be constituted there is no doubt that it will be generally acceptable in the country, and that health officers would be quite satisfied with an arrangement which gave the Board an official adviser in the shape of a medical officer. But the question arises, Is this practicable? In the light of past experience it is difficult to answer this question in the affirmative. There are at present two Crown nominees representing two of the most important county councils in Scotland, and town councils have their official representatives in the persons of the Lords Provost of Edinburgh and Glasgow. Yet this is the Board which has admittedly failed to satisfy the requirements of the case; the fact being that the attendance of these gentlemen at the Board office has been of the most desultory character, and that the business of the Board has really been carried on by the chairman and secretary for the time being, with the assistance of one or more of the sheriffs who are upon the Board, and whose residence in Edinburgh has facilitated thei attendance at board meetings. If no scheme can be pro pounded by which the management of the public health affairs of the country shall really lie in the hands of men versed and practised in Local Government administration; if the routine administrative work of the Board is after all to be left practically in the hands of the chairman, a sheriff, and a secretary, the medical officer will be without influence in deciding the policy of the Board. This would be but a sorry result of many years' agitation for reform. If, as appears probable, it is found impracticable to constitute a representative deliberative board, there must be a medical or public health member to neutralise, by his practical experience, the theoretical official red-tapism of a Government department. To meet the unanimous public sentiment of the country there must be a real, and not merely a nominal, reform of the central authority.

The sixth section of the Bill provides for the appointment of "such inspectors, clerks, and other officers as the Board may, with the sanction of the Treasury, determine." The Treasury has shown little liberality in the past in dealing with Scottish Departments, and it may be necessary to make this clause more specific, so as to secure that the new Board shall be supplied with a sufficient scientific equipment. Scotland has contributed little to the sum of human knowledge in the department of sanitary science, and this is largely due to the lack of a well-equipped central authority. The necessary "inspectors" will probably be vouchsafed, but it would appear advisable that the words "a chemist and bacteriologist" should be introduced before the words "such inspectors," so that the Treasury will be unable to refuse the necessary funds for the remuneration of these officers. A retainer of say £200 a year in each case, with fees according to scale, would probably meet the requirements of the case.

The Bill passes into Committee this week, and it is to be hoped that the medical representatives in Parliament will

take the opportunity of securing for Scotland a national health department worthy of the name, upon which there will be no paralysing legal preponderance, and upon which medical opinion will receive adequate representation.

SURGEON-COLONEL J. B. HAMILTON has been elected Vice-President of the South African Branch of the British Medical Association.

THE majority of the scholars will return to Christ's Hospital on June 4th, the reconstruction of part of the sanitary arrangements of the institution having been completed at a cost of several thousand pounds.

ON Hospital Sunday, June 10th, the Lord Mayor and the Sheriffs will attend in state at the morning service at St. Paul's Cathedral, and the afternoon service at Westminster Abbey.

THE annual dinner of the London and Counties Medical Protection Society will be held at Frascati's Restaurant on Tuesday, June 19th, at 7 P.M. Prior to the dinner the statutory meeting will be held.

AT a Council meeting of the Irish Medical Schools and Graduates' Association on May 16th, Sir Thomas Crawford, K.C.B., late Director-General Army Medical Department, was unanimously elected Chairman of Council for the usual period of three years.

THE presentation to Dr. W. H. Dickinson of his portrait, painted by the Hon. John Collier, a service of plate, and an address will be made on June 8th at noon by the Duke of Cambridge. The proceedings will, by permission of the Duke of Westminster, a Vice-President of St. George's Hospital, take place at Grosvenor House.

THE Erasmus Wilson Lectures at the Royal College of Surgeons of England will be given by Mr. J. H. Targett, Curator of the Pathological Museum, on Monday, Wednesday, and Friday next. The first and second lecture will deal with Hydatids in Bone, and the third with Tumours connected with the Kidney in Children. Each lecture will be illustrated by lantern plates.

IT is announced that the Queen has offered a knighthood to Dr. J. C. Bucknill, F.R.S., of Bournemouth, in recognition of his services in the volunteer movement, Dr. Bucknill being regarded as the originator of it in this country. He is in his 78th year, but enjoys excellent health. Dr. Bucknill has other more scientific, if not higher, claims which might gracefully have been recognised long since.

WE understand that considerable discussion awaits the Army Estimates in the House of Commons, and also the vote for the Army Medical Department. Several members of Parliament are thoroughly informed of the needs of the soldier, and the Medical Department has to thank Mr. Arnold-Forster and Captain Norton for giving prominence to subjects which are being widely and seriously discussed among army surgeons.

SIR JAMES AND LADY PAGET celebrated their golden wedding on May 23rd. The occasion, which was celebrated by a quiet family gathering, found both Sir James and Lady Paget very well and happy. During the day they received a quantity of beautiful gifts and flowers from old friends, and many congratulatory telegrams and letters from all parts of the country. In these congratulations and good wishes we feel authorised to say that the whole medical profession unanimously join. There is no man more universally and affectionately esteemed as a leader, and respected for his character and capacity, than this eminent veteran of surgery.

THE list of candidates for the appointment of coroner for North-Eastern district of London closed with a very formidable number of names, which will have to be carefully reviewed by the London County Council, with whom the patronage rests, in due course. The delay which has arisen in the appointment is, as the *Star* observes, due to the fact that only very recently has a settlement been arranged of the boundaries of the North-Eastern, Eastern, and Central Districts. The new coroner is to receive £1,150 for the ensuing five years, and he will be required to provide an office, a clerk, and stationery and other incidental expenses.

We deeply regret to have to announce the sudden death from apoplexy, at the early age of 45, of Professor Romanes, F.R.S. Mr. Romanes was among the earliest and ablest of the new school of biologists; he was closely associated with the discussion and development of Darwinism. He was Croonian lecturer at the Royal Society in 1875, and although claiming to be a loyal Darwinian, he introduced some novel theories of physiological selection which are not yet generally accepted. He founded a lectureship at Oxford, of which the first was delivered by Mr. Gladstone, the second by Mr. Huxley, and the most recent by Professor Weismann. He was a ready and voluminous writer, and did much to popularise the philosophic study of biological science.

CARDIFF UNIVERSITY COLLEGE.

THE Lord President of the Council, in pursuance of the powers conferred upon him by the charter of the University College of South Wales and Monmouthshire, has nominated Dr. Isambard Owen, London, to be a member of the Council of that College in place of the late Rev. William Bruce.

CIVIC LIBERALITY.

AT the last meeting of the Commissioners of Sewers for the City of London, it was resolved to increase the salary of the medical officer of health for the City from £1,100 to £1,500 per annum, and to increase his salary as Public Analyst from £100 to £200 per annum. This is, we believe, the highest salary earned by any Medical Officer of Health.

ROYAL COLLEGE OF SURGEONS, IRELAND.

MR. EDWARD HAMILTON, the outgoing president, and Dr. Kidd will not present themselves for election to the Council; there will be therefore two vacancies. The new candidates are Dr. Auchinlech, Dr. Cranny, Mr. Chance, Dr. Jacob, Dr. Thompson (Omagh), Dr. Purefoy, Dr. Harrison Scott, Dr. Sherlock; and Mr. Thornley Stoker and Mr. W. Thomson become president and vice-president respectively.

THE COUNCIL OF THE COLLEGE OF SURGEONS.

WE give in another column the composition of the Council and the names of the retiring members. The election will take place on Thursday, July 5th, at 1 30 P.M.; the usual notices will be issued to Fellows on Friday, June 1st. The voting papers will be sent by post to the Fellows, who have already applied for them, on Friday, June 22nd; and no application for a voting paper which has not been received by

the Secretary before 1.30 P.M. on Monday, June 25th, will be valid. The Secretary will, on application, supply requisite forms to candidates, which must be returned not later than Monday, June 11th.

OPERATION ON MR. GLADSTONE.

WE are informed that Mr. Gladstone's right eye was operated upon for cataract quite successfully on Thursday morning at half-past nine. The operation was performed by Mr. E. Nettleship, who was assisted in the operation by Mr. J. B. Lawford. Mr. E. Nettleship and Dr. S. H. Habershon state that Mr. Gladstone's health is well maintained.

THE ARMY MEDICAL SCHOOL AT NETLEY.

THE Commander-in-Chief has decided that the professors of the Army Medical School who are on the active list shall be considered as extra-regimental officers under Para. 55 (1) Pay Warrant. The Brigade-Surgeon-Lieutenant-Colonel in charge has therefore handed over charge of the surgical division of the Royal Victoria Hospital to the Assistant Professor, Surgeon-Captain H. Whitehead, F.R.C.S.

PROFESSOR MORLEY.

"THE first publications of the late Professor Henry Morley, juvenile excepted," writes an old pupil, "were contributed to Dr. Sutherland's short-lived *Journal of Public Health* in 1847, and a series of articles called 'How to Make Home Unhealthy,' begun in that journal and continued in John Forster's *Examiner*, drew Dickens's attention to the young doctor, and the consequence was an offer to join in conducting *Household Words*. This was the final temptation to a literary life, and a working alliance with Dickens began which lasted for fifteen years. The voluminous productions of a long and laborious literary activity, however, are not Professor Morley's strongest claim to remembrance. His best work was the influence he had with the numbers of young people to whom he lectured at University College or elsewhere. His pupils were attached, not only by his love of literature but by his manly and conscientious habit of mind. As a teacher he was extremely popular, and many of his pupils enjoyed the privilege of his personal friendship, his house at Hampstead being always open to them on Sunday evenings. By many of them he will be long remembered."

THE SALTERS' COMPANY AND SCIENTIFIC RESEARCH

THE Salters' Company have recently decided to render an important service to medical science. They have established in connection with the medical school of St. Thomas's Hospital a Research Fellowship in Experimental Pharmacology of the annual value of £100. The Fellow elected, who may hold the office for three years, will be required to devote himself to the study of the physiological action of drugs. The Salters' Company have also endowed a similar Research Fellowship in Chemistry in connection with the research laboratory of the Pharmaceutical Society, in order to provide for investigations on the chemical side of pharmacology. Of the various departments of medical science pharmacology is perhaps that which has been most neglected in this country, and it has long stood in need of encouragement. The Salters' Company are to be congratulated on the very satisfactory manner in which they have chosen to aid the advancement of medical knowledge.

DEFECTIVE EYESIGHT OF BOARD SCHOOL CHILDREN.

WE are glad to see that this very important subject has been brought up again, in a report to the School Board, by the representative managers of the London Board Schools, on defective eyesight among Board School children. In this report the managers point out the necessity for some action being taken in reference to the detection of defective sight in the children attending these schools, and some of the means which might be adopted to make things easier for the weaksighted children. They draw attention to the fact that the gaslight in many class rooms is manifestly insufficient, and that the position of the black boards in relation to the light is often faulty. Such structural defects might and ought to be remedied. With regard to the "detection of those scholars who need glasses," the report makes several suggestions, and the managers think that "much good might be done if the Board would carry out its resolution based upon the excellent eyesight chart prepared by Mr. Priestley Smith for the Birmingham School Board." This resolution is "that the chart be supplied to the schools of the Board." As is well known, the chart referred to contains qualitative tests for the detection of defective sight, with simple and explicit directions for their use, so that any intelligent teacher may discover those among the scholars who should be sent for expert advice, not only as to the wearing of glasses, but also as to the amount of bookwork which the eyes may safely tolerate. The whole question raised by this report is of national importance, and one which the medical profession should very anxiously consider, for upon the members of it rests the onus of bringing home to parents and teachers the extreme importance of the care of weakly eyes in young people.

THE POSTAL MONEY ORDER OFFICE.

A SHORT discussion took place in the House of Commons on going into Committee of Supply last Monday as to the sanitary state of the Cold Bath Fields Chapel, in which the Money Order Department of the Post Office is now being carried on. The undue amount of sickness in the department was attributed by the Postmaster-General to the prevalence of influenza; but, as the results of an inspection made by our representative over a year ago showed, there are serious defects in the method of warming and ventilation. Mr. A. Morley said that a small commission, with Lord Playfair at its head, had been appointed to examine the building. The report has not been received, although on May 13th, 1893, the defects and their remedies were clearly pointed out in these columns. The method of investigation by Committee is a most ponderous piece of machinery to set in motion for such a purpose, and the suggestion that this building, as well as all other post office buildings, should be placed under the supervision of the ordinary sanitary authorities, which was made in the course of the discussion by Mr. Burns, is one which commends itself to common sense. We are glad to note that the Postmaster-General is prepared to entertain it. The principle might well be extended to other departments of the public service.

OUT-PATIENTS AT BIRMINGHAM.

THE Birmingham papers (*Gazette* and *Daily Post*) of May 12th give accounts of the annual meeting of the governors of the Queen's Hospital. The report speaks in the terms now so common in hospital reports, of increased work and diminished receipts, and when we examine what is meant by increased work we find that it means more out-patients—the number of in-patients having somewhat diminished. This is peculiarly unsatisfactory, since the number of out-patients had previously been complained of, and a scheme was noticed in the BRITISH MEDICAL JOURNAL for February 3rd, by which it was intended to reduce the excess. We hailed that scheme at the time, not as assenting to its details, but as approving of any honest effort by which so great an abuse may be mitigated. The present report speaks of changes which have been made in the casualty department, but they seem to have been nugatory, "for they only resulted in producing £66, and had had no effect in reducing the number of casualty cases," though it is asserted in general terms that they had weeded out cases not entitled to receive

treatment. How they did this and yet left the number as great as before is not explained. There is only one way, as far as we know, of reforming the casualty departments; but that is an exceedingly simple way, namely, to make them in reality what they are in name—places for the reception of street accidents and sudden illness occurring in the streets and of nothing else. There is no reason whatever why every day indisposition (coughs and colds, diarrhœa, etc.) should be treated at a hospital, and there is neither sense nor honesty in calling such ailments casualties; yet these cases form a large proportion of the casualty departments. Till these and other abuses are reformed we need not wonder at hearing that subscriptions fall off as the out patient departments increase.

MILK TYPHOID IN SOUTH LAMBETH.

So many and such varying statements have been made concerning the recent outbreak of milk typhoid in South Lambeth, that it seems well to place on record the true facts of the case. So far, then, as we can learn, 59 attacks were recorded between mid-March and the end of April, 46 being of residents in the parish, and the remainder in adjoining parishes; the deaths numbering 10. Early in the outbreak the incidence on the customers of one particular dairy led to a very detailed investigation of the various sources of milk supply to that dairy. The task was no easy one, as the dairy is one having a register bearing the names of several thousand customers. By a process of exclusion, Dr. Verdon was in the end able to satisfy himself that the milk arriving at the distributing depôt was not infective, since the districts served by one and another source of supply both inside and outside Lambeth showed no special incidence of fever on the houses so served. But as demonstrating that it was the suspected dairy that was the medium of spread of the fever, we need only say that all but four of the total patients were consumers of milk from the implicated dairy. In these circumstances the inquiry was narrowed down to the depôt whence the milk was distributed. In the yard of the storehouse was situate a large tank with concrete sides, and next to this tank, and entering into the formation of one of its sides, was a caldron used for boiling water for washing purposes. The water of the tank was much polluted by the dipping into it of pails from stables and cowhouses, besides the brushes used for the washing of wheel spokes, etc. When emptied the tank contained a foul deposit of four inches of offensive matter. The orifice of a yard drain was not many feet away from the base of this tank. Milk stored overnight in the depôt was found not to be at fault, above any other, since districts served by the stored milk did not suffer fever to any greater extent than those having other milk. Thus absorption could not be thought of as a means of infection of milk. But here was a polluted water in close proximity to the churns used in the dairy business. Did the tank water contain the typhoid bacillus? And, if so, did the water have opportunity of entry in an unboiled state into the churns? The pity is that these important questions are not answered, so far as we can discover.

THE SANITARY INSTITUTE.

THE preliminary programme of the Fourteenth Congress, to be held in Liverpool in September, has now been issued. The meetings of the Congress will consist of three general addresses and lectures. Three Sectional meetings will be held, dealing with (1) Sanitary Science and Preventive Medicine, (2) Engineering and Architecture, (3) Chemistry, Meteorology, and Geology, presided over by E. Klein, M.D., F.R.S.; G. F. Deacon, M.Inst.C.E.; and Thomas Stevenson, M.D., F.R.C.P. Five special conferences will be given: The Sanitation of the Passenger and Mercantile Marine Service, presided over by Sir W. Bower Forwood, J.P.; Medical Officers of Health, presided over by Charles E. Paget, M.R.C.S., D.P.H.; Municipal and County Engineers, presided over by A. M. Fowler, M.Inst.C.E.; Sanitary Inspectors, presided over by Francis Vacher, F.R.C.S., D.P.H.; and Domestic Hygiene, presided over by the Lady Mayoress of Liverpool. In connection with the Congress an exhibition of sanitary apparatus and appliances and articles of domestic use and economy will be held. Excursions to places of interest in connection with sanitation will be arranged for those attending the Congress. The local arrangements are in the hands of an influential local Committee, presided over by the Lord Mayor of Liverpool, with the city engineer (Mr. H. Percy Boulnois, M.Inst.C.E.) and the medical officer of health (E. W. Hope, M.D.) as honorary secretaries. It appears from the programme that over 100 sanitary authorities, including several county councils, have already appointed delegates to the Congress, and, as there are 1,500 Members and Associates in the Institute, there will probably be a large attendance in addition to the local members of the Congress.

THE METROPOLITAN PROVIDENT MEDICAL ASSOCIATION.

OUR number for May 19th contained a review of an important paper on the working of the provident dispensary system in Manchester, a paper showing how many difficulties surround the attempt to combine the thrift by which the working classes may secure medical attendance for themselves with proper remuneration for the medical man, and the exclusion of persons unable to pay at a higher rate. A letter in the *Times* of May 15th, from Mr. Bousfield and other officials of the Metropolitan Provident Medical Association, sets forth the difficulties which beset the still more arduous attempt to solve the same problem in London, and at the same time we are glad to see, is able to record the very considerable progress which, under his able guidance and that of the late Sir Charles Trevelyan, the Association has already made towards its solution. The Association "has in the metropolitan district 18 provident dispensaries or organisations, having over 10,000 cards of membership, and about 30,000 persons entitled to treatment from their own payments. The majority of the Branches are self supporting." No doubt the ideal state of the Association would be one in which no outside support is needed, and to this the Association originally aspired. But it was found necessary to provide, from sources independent of the members' contributions, the funds for forming new branches and supporting them till they obtain a sufficiency of members to be self-supporting; and for those funds the Association has to appeal to the public from time to time. We hope the present appeal will be successful, for the Association is, we believe, doing a very good work. We could, indeed, wish that the remuneration of its medical officers were more adequate, and that the means of excluding undeserving persons were more efficient; but these ends cannot be secured without more unanimity among the medical men themselves, and some reform of the out-patient system. In the belief that the Association is doing the best which the present condition of the metropolis admits, we recommend it to the support of our readers.

KING'S COLLEGE HOSPITAL.

WE notice in the *Echo* of May 15th a sympathetic account of the difficulties with which this admirable hospital has still to struggle. "The climax of these difficulties," says our contemporary, "was reached last year, when it was apprehended that the whole of the in-patient department must be closed." Though this catastrophe was happily averted for the time, yet the hospital, with an annual expenditure of £19,000 and an assured income from realised funds of only £1,000, is in constant pecuniary straits, as the subscriptions amount on an average to only £2,000 and the donations to £4,500, so that, including the grants from the Saturday and Sunday Funds, the total income cannot be reckoned at more than £9,000. This is surely a state of

things which the charitable world ought not to allow to continue, and, unhappily, it is one which is not peculiar to this hospital. In fact, the only general hospital which is in a thoroughly satisfactory pecuniary position is, we believe, St. Bartholomew's. By "thoroughly satisfactory," we mean the same in the case of these great public institutions as we should in using the same words of a private person, that is, the position of being able to meet the ordinary expenses out of the ordinary income in the course of the year. The deficit on the total of our hospitals is so enormous that it is hopeless to attempt to obliterate it all at once. But surely some effort is worth making to organise a plan for doing this gradually, either by a common fund to be invested in the name of some public body—such as the Charity Commissioners—the interest of which should be applied to the relief of such hospitals as are in most need, or by encouraging and promoting in all possible ways the giving and bequeathing of sums of money to individual hospitals as endowment funds, or by whatever other means the ingenuity of men of business could suggest. The matter should be seriously taken in hand by a body like the Hospital Sunday Fund. It is, in fact, hardly honest to carry on great businesses like our hospitals on insufficient capital; and the present financial position brings ever nearer and nearer the great danger always overhanging our hospitals—namely, that of falling under State control, as they will inevitably do if they are obliged to apply for assistance from the public funds. And how can such an application be avoided, in some time of financial depression, if the hospitals have no adequate reserve to meet the deficiency of yearly income sure under such circumstances to occur? We earnestly appeal to our readers, whether medical or lay, to dismiss from their minds the utterly foolish notion that chronic bankruptcy is good for these great charities and to labour to rescue them from the gulf of insolvency into which our present voluntary system may be plunged if early and efficient action be not taken.

DISCUSSION ON MASSAGE.

Our Edinburgh Correspondent writes: The discussion on massage at the Edinburgh Medico-Chirurgical Society last week was disappointing. It never rose to a high level and it almost died out early in the evening. There were some few enthusiasts, but most speakers were cautious, and some few were sceptical. One would have liked to hear greater precision as to the aims, the possibilities, and the limits of the method. It has not yet become the panacea for all the ills that flesh is heir to, though some would have us believe so. There are some conditions in which it is useless, if not indeed positively baneful. But which? And under what circumstances? In what surroundings? Some speakers did well to call attention to the great danger of the method falling into the hands of the lamentably large number of charlatans, quacks, and humbugs that now carry on a precarious existence on the fringes of the medical profession, if not, indeed, as Carlyle would have put it, "in far other places." Probably our great medical corporations have been too lax towards such possibilities and such dangers. The code of honour ought to be more rigorously insisted on and the profession purged from even the semblance of scandal.

ASSOCIATED POLICE SURGEONS.

As the result of some correspondence published in our columns last year an association has been formed on the lines of the Metropolitan Association but embracing the whole of the United Kingdom. Already, we are informed, more than 100 police surgeons have joined, and a representative council has been formed containing members from London, Chester, Manchester, Carlisle, Newcastle-on-Tyne, Dundee, Belfast, Bristol, Cardiff, Portsmouth, and Plymouth. At a council meeting held last week in London, under the presidency of Mr. Thomas Bond, it was resolved, we understand, to call a general meeting of members at Bristol during the meeting of the British Medical Association there. The principal objects aimed at are the appointment of police surgeons in those towns and counties where none at present exist, the issue to all police surgeons and to police authorities generally throughout the country of some very important instructions relative to the examination by police surgeons of prisoners charged with criminal assaults (these instructions, which are at present issued only to metropolitan police surgeons, have been formally approved of by the law officers of the Crown and are introduced by Dr. Stevenson into the new edition of Taylor's *Medical Jurisprudence*), and the looking after the interests of police surgeons in the event of medical certifiers being appointed, as recommended by the House of Commons Committee. As soon as the approval of the members generally has been obtained, the Home Secretary is to be asked to receive a deputation to lay the views of the Association before him. It is also intended to try to obtain an increase of the allowance of £1 1s. a-day for attendance at sessions and assizes. The Honorary Secretaries of the Association are Mr. F. W. Lowndes, of Liverpool, and Mr. H. Culliford Hopkins, of Bath.

HOME INDUSTRY AND INFECTION.

The great home industry, by aid of which so many women in poor circumstances in all parts of the country eke out a living, is laundry work, and everyone is familiar with the frequent possibilities of infection from that source. High and low are, indeed, drawn into one net by the washerwoman, and in her tub there is but small play for class distinctions. Tailoring, boot-making, dressmaking, and all other trades concerned with wearing apparel are also common means of distributing infection, frequent just in proportion as they are liable to be carried on at the workers' homes. Among this class of trades that of glove-making probably holds a not important place, as Dr. Barnes, Medical Officer of Health for Chard, has lately pointed out in his annual report. He states that he has seen several girls making gloves while their hands were peeling after scarlet fever, and he draws attention to the habit many people have of breathing into new gloves just prior to putting them on, which, considering how suitable a substance for rubbing off and retaining loose particles of desquamation the rough lining of a glove must be, would evidently be fraught with considerable peril if the gloves were made by convalescents from scarlet fever. The lighter the employment the greater the risk of its being resumed before convalescence is complete, and it need not be said that glove-making, although wearisome, is not laborious, and it is a home industry in which sanitary lapses are not easily found out.

SURGICAL STATISTICS.

We have received a copy of a correspondence which has passed between Mr. Gilbert Barling and Brigade-Surgeon-Lieutenant-Colonel Keegan with reference to the opening paragraph of Mr. Barling's paper on the Comparative Safety of Suprapubic Lithotomy, of Lateral Lithotomy, and of Litholapaxy in Young Males. In this paragraph reference was made to certain disparaging remarks attributed to Brigade-Surgeon-Lt.-Col.-Keegan "on the truthfulness of statistics by English surgeons." It does not appear to be necessary to publish the full text of the correspondence, which is somewhat lengthy. It will be sufficient to say that Brigade-Surgeon-Lt.-Col. Keegan does not himself desire to advance the extreme opinion that all surgical statistics are unreliable. It appears from the correspondence that in a paper discussing the subject of litholapaxy in male children Brigade-Surgeon-Lt.-Col. Keegan, in his reference to the alleged unreliability of surgical statistics, had in mind a passage in a clinical lecture on Colotomy, by Mr. Christopher Heath, published in the British Medical Journal of June 11th, 1892, p. 1243. Mr. Heath wrote: "Of course we hear of one case that did

recover, but we do not hear of the ninety and nine cases that did not. When a man has a case of that kind [cases in which fæces have poured into the peritoneum] which gets well he puffs it tremendously, and you always hear of it; but those who have unsuccessful cases are content to leave them alone and keep them out of the journals. Therefore you must not believe too much in statistics. As soon as a gentleman begins to work up his statistics his moral faculty appears to become relaxed, and therefore I do not believe in published statistics—they are all more or less unreliable." Brigade-Surgeon-Lt.-Col. Keegan observes that these remarks were not controverted at the time by English surgeons, so that it seemed to him and many others in India that "the profession at large acquiesced in the accuracy of Mr. Heath's statement."

DEATHS UNDER CHLOROFORM.

Dr. J. W. Wrangham, Assistant Surgeon to the Tewkesbury Hospital, has sent us the following account of a death under chloroform which recently occurred at that hospital. The operation was undertaken for examining and scraping an iliac abscess. The anæsthetic used was the A.C.E. mixture. The patient showed signs of nervousness when brought into the theatre. From the first the anæsthetic was taken quite quietly; there was no struggling, and the breathing was quiet and regular. About ten minutes were required to produce complete insensibility. The pupils became contracted, and remained so until the end of about half an hour, when, the operation being almost completed, the breathing suddenly ceased, and the pupils became widely dilated. Before this there had been no sign of danger, the pulse being good, and the breathing easy and regular. The lips had become slightly bluish, but no more than might be expected under the circumstances. The operation was at once stopped, the head brought down over the edge of the table, and artificial respiration commenced, the back of the throat being cleared of mucus with a sponge. Hypodermic injections of ether and brandy were administered. In one or two minutes the patient began to make inspiratory gasps, but these soon ceased, and though artificial respiration was continued for about an hour and other means made use of, breathing was never re-established. The pulse was never felt after the breathing ceased. About 2 ounces of the anæsthetic were used, two-thirds of this being required to produce anæsthesia at starting. A *post-mortem* examination was made on May 21st. The brain and membranes were considerably congested. There was a small tuberculous abscess in the apex of the right lung. The heart and other viscera were healthy. Dr. Wrangham is of opinion that death was due to syncope.—Mr. J. L. B. Dixon, Junior House Surgeon to the Ancoats Hospital, Manchester, has favoured us with the following case of death under chloroform which occurred recently in that institution. The patient, a man, aged 27, was admitted on April 5th, suffering from abscess of the back which burrowed amongst the muscles for a very considerable distance in all directions. It discharged very copiously from a sinus in the right lumbar region and was exhausting the patient. The abscess first formed seven months ago and had been incised at that time. After expectant treatment had been tried, with the result of increasing the emaciation of the patient, an exploratory operation was decided upon and chloroform administered on May 3rd. Previous physical examination showed the heart, lungs, and kidneys to be normal. The patient took chloroform badly, the stage of excitement being prolonged. Just as this was ceasing and before any operation had commenced the patient suddenly became pallid and the pulse stopped, but the breathing continued for a few respirations. Every restorative measure was instantly adopted and continued for upwards of half an hour without the slightest success, not the least effect resulting therefrom. The patient had been only partially turned on his left side so as not to impede respiration and to secure conditions most favourable for himself although inconvenient to the operator. No *post-mortem* examination could be obtained though urgently requested; the immediate cause of death, however, seemed undoubtedly to be direct cardiac failure.

INDIA'S REAL WANT.

While a small section of the people of England is troubling itself mightily about the evils which are imagined to accrue to our Indian fellow subjects from the bad habit which some of them indulge in of adding a little opium to their diet, possibly in many cases for the sake of obviating the bad effects of the foul water they have to drink; others, with more enlightened ideas of what is good for nations, are doing what they can to solve the great problem which lies at the root of all sanitary progress in both East and West—namely, the provision of pure drinking water for the people at large. The question of scavenging and the treatment of sewage is one of very great difficulty in Indian cities. For agricultural purposes no one doubts the utility of irrigation, but as a means for the disposal of the sewage of a town its practicability in India is very questionable. The enormous rainfall during the wet season interposes a period during which the land is simply soaked, and in which all purifying effects of irrigation would be absolutely in abeyance, and, notwithstanding the enormous army of sweepers required for the more ancient forms of scavenging adopted in the native towns, grave doubts are expressed whether, after all, that may not be the best suited to the country; while in many cases water conveyance and river disposal of hullage and sewage, with or without precipitation, will no doubt be found more efficient, less costly, and otherwise unobjectionable. In regard to the desirability of providing pure water, however, there are no doubts, nor does it appear that, when properly put before the native population, there is any hesitation on their part to accept the obvious benefits of a pure supply. The matter is solely one of expense, but that this is no small obstacle may be judged of by the facts put forward in a paper read recently before the Indian Section of the Society of Arts, by Sir Auckland Colvin, on Municipal and Village Water Supply in the North-West Provinces and Oudh. In that portion of India alone there are 41,600,000 persons scattered over 106,000 villages and 241,194 inhabited sites. The hamlets lie for the most part on the flat land, or a little raised above it, scorched alternately by sun and drenched by continuous rain, in entire disregard of all sanitary care; their occupants drinking from the pond in which they bathe and in which their cattle wallow, surrounded by the refuse of their daily lives, far from the eye of the English officer, and, if coerced at all into cleanliness, to be coerced only by the ever-itching palm of the underling—little less opposed than themselves to the *régime* of sanitary regulations. It is these rural tracts, this innumerable firmament of hut and hamlet (the village houses numbering over 7,000,000), scattered over a total area of 112,612 square miles, where no eye can hope at all times to see, no hand to penetrate—whose millions call for sanitary aid, but whose poverty makes it impracticable, that are the despair of the sanitary reformer. The opium question is a trifle compared with the importance of endeavouring to lessen the constant standing tendency to disease and death imposed upon these people by the surroundings amid which they dwell. The difficulty in the cities is not so great; poverty is not so abject, and there is among the people more willingness to accept new ideas; and it is satisfactory to note that since 1888—the year of publication of Lord Dufferin's celebrated sanitary resolution—the cities of Agra, Allahabad, Benares, Cawnpore, and Lucknow have successively undertaken, completed, and opened extensive schemes of water works, the distribution of filtered water having for the first time been commenced in each of these towns since December, 1890. The real trouble in the large towns is the disposal of the sewage which this water produces. In the country the problem is

different; the poverty is extreme, being equalled only by the ignorance and indifference, prejudice, and passive resistance of the people, and it is probable that for a long time to come they will have to depend largely on wells and tanks and carried water. Sanitary efforts then will have to be mainly occupied in endeavouring to keep clean the supply which already exists—in itself no mean task. The mere protection of the country wells, surrounding them with cemented platforms, providing them with clean apparatus for drawing so that they shall not be befouled by those who use them, and guarding them against misuse, would be a great work for any administration, and it is slowly going on. Improvement is no doubt gradually taking place, but the immensity of the population and the poverty in which they dwell are great hindrances to progress. People, however, who talk of doing good to India should remember that India's great want is water fit to drink.

"PHTHISIN" CRYSTALS.

IT was lately announced that Professor Schrön has been for some time engaged in attempting to isolate from the cultures of pathological micro-organisms and from the organs of patients dying from infectious diseases the poisons which are characteristic of each affection. According to some of his published researches it would appear that each micro-organism secretes a particular poison, and that in the cultures of specific micro-organisms and in the organs of patients and animals dying from specific diseases, certain crystals appear which differ according to the microbe which is the subject of investigation. Thus in phthisis particular crystals are found to which Schrön has given the name of "phthisin" crystals. It is difficult to form an opinion as to the value of Professor Schrön's researches, and we look forward with interest to their full publication. It would appear, however, that the so-called "phthisin" crystals have been seen by other observers, but have been designated by them under other names, having been previously described as altered blood pigments, or even as charcoal particles which had been absorbed from the lungs. It is hoped that Professor Schrön will not long delay the publication of his interesting memoir on this subject.

THE ASSIMILATION OF NITROGEN.

OUR comprehension of the manner in which the free nitrogen of inorganic nature becomes part of the living body has always been of the vaguest and most unsatisfactory description. The fixation of carbon seemed a simple affair, its affinity for oxygen and for hydrogen and the affinity of these two elements for each other made it appear not altogether surprising that living plants should be able to build up from such friendly elements the carbohydrates which form so large a proportion of their bulk. Nitrogen, however, stands on another footing; it is an unfriendly element and tends always to separate itself from combination. While then living forms of every sort hungering for nitrogen have had to make the best use they could of such as they happened to find in combination, the uncombined element has existed in enormous profusion on every side in an apparently useless form. The earth rather than the air has come to be looked upon as the only available reservoir of useful nitrogen. We have talked of certain forms of crops exhausting the soil, we have imported vast quantities of nitrogenous manure in the form of nitrates and guano, and we have hoped that by rotation of crops, deep digging, and letting the soil lie fallow, the stores of soluble nitrogen might be brought nearer to the surface and come within reach of the rootlets of our growing plants, for the investigations of Lawes, and Gilbert, and Pugh, thirty-five years ago, had seemed to quench the last glimmer of hope that the free nitrogen of the air would ever be utilisable in the nutrition of plants. Nevertheless, the indubitable fact remained that clover and other leguminous plants possessed the power of enriching the soil in nitrogen, and although this was explained by the hypothesis that their roots drew up stored nitrogen from the deeper portions of the soil, the question how the primeval plants had managed to store this up was left unanswered. For a whole generation the mere suggestion that plants were capable of effecting the assimilation of the free nitrogen of the air was regarded as rank heresy. More recent investigations, however, have, in the opinion of many, tended to supply the missing link, pointing to the connection between the curious nodules found on the roots of leguminous plants and the well-known power of accumulating nitrogen which these plants possess. These nodules are shown to be the dwelling places of bacteria, which have the property of laying the free atmospheric nitrogen under tribute and presenting it to the rootlets in a form which they are able to assimilate. This is another instance of symbiosis—a biological partnership, not a parasitism, but a living together for mutual benefit. We thus can understand the fact—which, in its practical results, has for a couple of thousand years been known—that leguminous plants, for all the nitrogenous nature of their products, leave the soil more rich in nitrogen than they find it. The further question naturally suggests itself whether these rhizobia, as they are termed, live in symbiotic relationship with other than leguminous plants. This is still under investigation; but whether they do or not, the attempt is being made to induce them to do so. The problem is at present being investigated by Dr. Albert Schneider, at the Illinois Agricultural Experimental Station, and its importance is very considerable as tending to put on a more scientific basis the means at our disposal for preventing exhaustion of the soil. To biologists, however, the great interest of these researches lies in the fact that they tend to make the cycle of life complete, and place the circulation of nitrogen, from the inorganic to the organic and back again, on the same footing as that on which the transformations of carbon have long been established.

The May number of *Science Progress* contains an interesting statement of the present position of the question of immunity by Dr. G. A. Buckmaster, Lecturer on Physiology at St. George's Hospital. Dr. Sherrington also contributes a useful series of notes on recent progress in neurology.

The *Revista Estomalogica* is the name of a new dental journal which has just begun to appear at Madrid under the direction of Señor Garcia Velez, with the co-operation of Dr. D. L. Whitmarsh. The object of the new journal, as stated in the editorial programme, is to reform dental education and the practice of dentistry in Spain, and to strive for the elevation of the dental profession to an academical and social plane, which will give it a position in the eyes of the public equal to that which it has achieved in other countries, notably in the United States.

At a recent meeting of the Johns Hopkins Hospital Historical Class, Dr. John S. Billings showed a manuscript volume of the works of John Arderne, recently acquired by the Library of the Surgeon-General's Office through Mr. Thomas Windsor, of Manchester. The manuscript, which is supposed to date from about A.D. 1400, is imperfect, beginning at folio 41 and ending at folio 139. There are some notes and drawings on the margin, mostly illustrating cases of fistula. According to Mr. Windsor, all that is really known about John Arderne is that he was born about 1308, practised in Wiltshire and abroad, and afterwards at Newark, in Nottinghamshire, from 1349 to 1370, when he removed to London, where he wrote his treatise on fistula in 1376, and his *Cura Oculorum* in 1377. It has been stated by different authorities that he was admitted at Montpellier, and practised in France as a military surgeon; that he practised at Antwerp; that he was present at the battle of Crecy; and that he was surgeon to Richard II and Henry IV. Mr. Windsor doubts whether any of these statements can be proved, and he points out that when Henry IV came to the throne Arderne would have been about 91 years of age. The MSS. of his writings in the British Museum are almost invariably imperfect.

SIR JOSEPH LISTER IN GLASGOW.

Sir Joseph Lister, Bart., delivered an address to the medical students at a meeting held on May 17th in the Union Buildings, under the auspices of the Glasgow University Medico-Chirurgical Society. There was a crowded attendance, the body of the large hall being fully occupied by the students, and the galleries by Sir Joseph's former pupils and by other practitioners. Mr. J. F. Gemmell, M.A., President of the Society, occupied the chair, and among the others present were Principal Caird, Professor Gairdner, Professor Macewen, Professor Ramsay, Professor Buchanan, Professor Murdoch Cameron, Dr. Hector C. Cameron, Dr. J. Coats, and Dr. S. Gemmell.

Sir Joseph Lister (who was received with prolonged applause) said that just a quarter of a century had elapsed since he last addressed the students of the University of Glasgow. Then it was in the Old College in the High Street or in the Royal Infirmary. They now met in that fine Union Hall beside the stately buildings of the new College. Though so many years had passed and the outward surroundings were so different, he did not feel like a stranger. Some of his former colleagues were there, among them the Principal, who honoured them by his presence. He saw before him many whose studies it was once his privilege to guide, and who had since risen to positions of extensive usefulness and often of high eminence in their noble calling. However little he might have contributed to such results, he could not but feel proud to have been their teacher, and delighted to meet them again. As regards their successors, the new race who had asked him to come among them, the extreme kindness which had marked their invitation, made him regard them already as personal friends. He should like to say a few words to them which might be of some present interest, and also tend to help them in the future in the practice of antiseptic surgery. Since the antiseptic treatment took its origin in the wards of the Royal Infirmary of this city, advancing knowledge, while amply confirming the truth of its fundamental principle, had greatly simplified the means of reducing it to practice. Sir Joseph Lister then proceeded to to narrate various observations which, as he believed, explained the efficacy of the more simple methods now in use. The latter part of the address, which will appear in full in a later number of the British Medical Journal, was occupied with a discussion of the causes of the unsatisfactory results too often witnessed in the practice of surgeons. In conclusion, Sir Joseph thanked them heartily for the very great attention which they had given to his remarks, and begged to assure them of the extreme pleasure it had given him to be once more in his old college, and to address again the students of the University of Glasgow.

Mr. M'Phail, one of the students, proposed in beautiful and touching language a vote of thanks to Sir Joseph Lister for his address.

Professor George Buchanan said he was the only member of the college in practice at the time Sir Joseph Lister came to Glasgow in 1860 as Professor of Surgery. They were colleagues as surgeons in the Royal Infirmary, and they remained colleagues during all the time Sir Joseph was in Glasgow. He regarded himself as one of Sir Joseph's pupils. Ether was a successful hit, and was used within a few months of its discovery in America. But the address just delivered showed in what way the antiseptic treatment of wounds was elaborated. This antiseptic treatment was not a lucky hit or clever experiment, but was the result of a long process of reasoning, which culminated in the experiments in the Glasgow Royal Infirmary, and that treatment was now spread over the world.

Professor Gairdner was very glad and very proud to see his old colleague again, and to be able, he hoped, to rejoice Sir Joseph's heart a little by saying that his personal conviction was that not only had Sir Joseph done a great deal of good in Glasgow, but that he had left a legacy of good which would never be forgotten. Sir Joseph need be under no apprehension whatever that the great advances he had made in the surgical art would ever be lost sight of in the University of Glasgow.

Sir Joseph Lister, in reply, said he never felt more cordially grateful than he was now at their warm reception.

Dr. Hector Cameron, in proposing a vote of thanks to Mr. Gemmell for presiding, said that he saw in the gallery a very large number of Sir Joseph Lister's pupils; they must therefore thank the chairman and the office-bearers of the Society for having given them the opportunity of once more hearing the voice and looking upon the face of their dear old master, to whom they were attached by ties of the highest respect and by feelings of the profoundest affection.

On the motion of the Chairman, Dr. Hector Cameron was thanked for having been largely instrumental in bringing Sir Joseph Lister down to Glasgow.

This concluded the proceedings.

ASSOCIATION INTELLIGENCE.

NOTICE OF QUARTERLY MEETINGS FOR 1894. ELECTION OF MEMBERS.

Meetings of the Council will be held on July 11th and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, June 21st and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. Francis Fowke, *General Secretary.*

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

Members are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the Office.

BRANCH MEETINGS TO BE HELD.

Metropolitan Counties Branch: South London District.—The annual meeting will be held at Bethlem Royal Hospital, St. George's Road, at 3.30 P.M., on Thursday, May 31st. The election of officers for the next year will take place. Cases of clinical interest from the wards of the hospital will be shown, and demonstrated on by Dr. Percy Smith. All practitioners, whether members of the Association or not, will be heartily welcomed.—H. Betham Robinson, 1, Upper Wimpole Street, Honorary Secretary.

Metropolitan Counties Branch: East London and South Essex District.—The annual meeting for the election of officers will be held on Thursday, June 7th, at the Royal Forest Hotel, Chingford, at 6 P.M. At 6.15 the members and their friends will dine together; Mr. Henry Power, President of the Branch, will preside. Tickets 7s. 6d. each, exclusive of wine; morning dress. Anyone intending to be present is requested to communicate with the Honorary Secretary as early as possible, but not later than June 4th.—H. E. Powell, Honorary Secretary, Glenarm House, Upper Clapton, N.E.

South-Eastern Branch.—The fiftieth annual meeting will be held at the Crystal Palace on Wednesday, June 13th, J. Sidney Turner (President-elect) in the chair. Meeting at 2.30 P.M. Dinner at 6 P.M. The President-elect invites members and their friends to lunch at his house, 81, Anerley Road, close to the Palace, from 1 to 2 P.M.

South-Eastern Branch: East Sussex District.—The next meeting will be held at the Hospital, Hastings, on Thursday, May 31st: Dr. Bagshawe will preside. Meeting at 3.30 P.M.; dinner at the Grand Hotel, 5.30 P.M.; charge 6s., exclusive of wine. The following communications are promised:—Dr. Sidney Phillips (London): On Syphilitic Heart Affections; with notes of a fatal case with Angina Pectoris. Dr. Wills: Notes of a case of Gastrostomy. Dr. Batterham and Mr. W. J. Harris will show patients. A communication will be received from the Midwives Registration Association, also from Dr. Rentoul.—J. W. Batterham, Honorary District Secretary, Bank House, Grand Parade, St. Leonards.

Edinburgh Branch.—The annual meeting of the Edinburgh Branch of the British Medical Association will be held at 31, Charlotte Square, on Thursday, June 14th, at 5 P.M. Notice of motion or other business should be given ten days in advance to the Honorary Secretary, R. W. Philip, M.D., 4, Melville Crescent, Edinburgh.

SOUTHERN BRANCH.—The twenty-first annual meeting will be held at the Royal Victoria Hospital, Netley, on Wednesday, May 30th, 1894, on the invitation of Surgeon-Major-General Broke-Smith and the officers of the Army Medical Staff. The general meeting will be held at a quarter to 1. In accordance with the by-laws, two gentlemen will be elected at this meeting as representatives of the Branch on the Council of the Association for the ensuing year. The address will be delivered by the President-elect at half-past 1. Dr. J. F. Bullar will read a paper on Reforms necessary in the Professson. Dr. J. Ward Cousins will read a short paper: Remarks on Ovarian Prolapse and Displacement. The dinner will take place at the South-Western Hotel, Southampton, at 6 P.M. Tickets 6s. each, excluding wine. Gentlemen who intend to be present at the dinner will oblige by sending their names to Dr. Trend, Grosvenor Square, Southampton, on or before May 29th.—T. W. TREND, Honorary Secretary and Treasurer.

PERTHSHIRE BRANCH.—The summer meeting of the Perthshire Branch will be held in the Royal Hotel, Blairgowrie, on Friday, June 1st, 1894, at 4 P.M. Programme: Members will arrive at Blairgowrie at 1.15 P.M., and proceed to the Royal Hotel, where light refreshments will be served. A conveyance will be in readiness for a drive, as may be decided. Business meeting in the Royal Hotel, at 4 o'clock: Read minutes. Election of new member—Dr. Hood of Blairgowrie. Election of representative member and representative on the Parliamentary Bills Committee. Consider correspondence relative to registration of midwives and penal clauses of the Medical Acts. Dr. Campbell will read a paper on Poisoning by Anthriscus Oylaestris. Any other Business. Dinner will be served in the Royal Hotel, at 3s. 6d. each, in time to permit of members leaving Blairgowrie by the 6.10 train.—A. R. URQUHART, Honorary Secretary.

MIDLAND BRANCH.—The annual meeting will be held at Lincoln on Thursday, June 14th. Members desirous of reading papers or exhibiting cases are requested to communicate, before May 28th, with W. A. CARLINE, M.D., Honorary Secretary and Treasurer.

STAFFORDSHIRE BRANCH.—The third general meeting of the present session will be held at the Bell Medical Library, Cleveland Road, Wolverhampton, on Thursday, May 31st. The President, Mr. H. M. Morgan, will take the chair at 3.30 P.M.—GEO. REID, Honorary Secretary.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The annual meeting of this Branch will be held at the Birmingham Medical Institute on Thursday, June 14th, at 3.30 P.M., when, after the ordinary business has been disposed of, an address will be delivered by the President-Elect, Mr. H. Langley Browne. The annual dinner will take place the same evening at 6.30 at the Grand Hotel. Members of Branch intending to be present should intimate this to the Honorary Secretary, Mr. GILBERT BARLING, 85, Edmund Street, Birmingham.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The twenty-fourth annual meeting of this Branch will be held at the Infirmary, Cardiff, on June 28th. Mr. Victor Horsley will give a lecture on Gunshot Wounds. Further particulars in circular convening the meeting.—A. SHEEN, M.D., D. ARTHUR DAVIES, M.B., Honorary Secretaries.

BORDER COUNTIES BRANCH.

THE spring meeting was held at the Infirmary, Whitehaven, on May 4th, 1894. The chair was taken by Dr. MITCHELL, of Cockermouth, and there were fifteen other members present.

Communications.—Dr. MACLAREN, of Carlisle, read a paper on "Three Cases of Perforation of the Stomach treated by Operation." A discussion followed, touching on many points of interest.—Dr. CRERAR, of Maryport, read a paper in explanation of his theory with regard to disease produced by micro-organisms.—Dr. JACKSON, of Whitehaven, read notes of a case of Rupture of the Penile Urethra.—Dr. W. I'ANSON read notes of a case of Leucocythæmia.—Dr. TAWSE, of Whitehaven, read notes of a case of Leucoplakia.

Dinner.—The members afterwards dined together at the Grand Hotel.

CHURCH RESPONSE TO THE APPEAL FOR LEGISLATION FOR INEBRIATES.—We have already had occasion to draw attention to the gratifying response of the clergy of the Church of England to the appeal of the Inebriates Legislation Committee for petitions and resolutions urging action on the Home Secretary and the Government. We now have the pleasure of congratulating the Rev. J. Hirst on his truly remarkable and valuable work in this direction as Secretary of the Liverpool Diocesan Church Temperance Society. Already he has had petitions asking for the compulsory confinement of habitual inebriates from the magistrates of the boroughs of Bootle, Warrington, St. Helens, and Southport, and from the county sessions of Birkdale, Ormskirk, etc. The Liverpool City Bench is to discuss the matter at their next meeting. Petitions have also been passed at public meetings in the neighbouring towns. The Liverpool diocese has thus set an excellent example to the rest of England.

SPECIAL CORRESPONDENCE.

PARIS.

Microbes in Ironclads.—Vaccine Virus.—Medical Budget for 1895.—Proposed Tax on Servants.—General News.

A CHEMIST in the Navy has observed that the ironclads remained intact when in open sea, or in certain parts of ports. When in stagnant water they were attacked by a destructive agent, which manifested its action by the presence of small holes in the metal. This condition occurred more rapidly when the vessels were anchored near an outlet for sewage. Experiments proved that a sample of the iron immersed in sea water, taken from sea at a distance from the shore, remained intact; samples immersed in sea water taken near the coast were attacked more or less quickly according to the distance that the water was from the shore; where polluted sea water was sterilised by heat the metal was attacked by it very slowly, and this action, instead of increasing, was quickly arrested; the microbes and the spores being destroyed, fresh toxines were not produced. The action of those present being soon exhausted the metal ceased to be attacked. These biological facts have evidently a close relation with sanitation.

M. Hervieux, at a recent meeting of the Academy of Medicine, stated that the virulence of animal vaccine is manifested by local and general symptoms, which may be modified by the age of the heifer, its development, its state of health, the site chosen for the vaccinations, and the number made. Fresh lymph is the best vaccine for heifers; old defibrinated vaccine ought not to be used. Vaccine matter treated with glycerine is too virulent to be used for inoculating heifers, but when purified by time can be used, but it must not be said that it produces the pure vaccine matter. Dried vaccine matter is no longer used; it is less expensive and likewise dangerous. Vaccination is generally effected direct from the heifer or with vaccine matter treated with glycerine. The usefulness of the *rôle* played by the micro-organism contained in the vaccine is questionable, inasmuch as the vaccine retains its virulence after the disappearance of these micro-organisms. M. Vallin thinks vaccination with old glycerinated vaccine matter superior to that direct from the heifer. MM. Chambon and Saint Yves Ménard have demonstrated the superiority of old vaccine matter.

The budget of the Minister of Public Instruction for 1895 asks for a further grant of 100,072 francs; 1,760 francs is required for the purpose of founding chairs at the Montpellier Medical Faculty, of which one will be histology, and another a clinical chair of diseases of children at the Lyons Medical Faculty; 3,000 francs is to be devoted to defray the expenses of dental instruction in some medical faculties. The law passed on November 30th, 1893, obliges Government to provide this form of instruction. Sixteen thousand francs will be devoted to the expenses of organising preparatory instruction in the different branches of science—physics, chemistry, and natural history. Medical students, before commencing medical studies, are obliged to study these sciences in a science faculty.

M. Burdeau's proposed tax on servants troubles the general population, but more particularly the medical profession. This tax will press unjustly on medical men, inasmuch as it is not imposed on the actual number of servants, but on those judged necessary for the house inhabited. Medical men are obliged to live in good houses, otherwise they would have no patients; the necessary duties may be performed by other than mercenary hands, nevertheless the tax must be paid. This injustice is doubled by the fact that farm servants and tradesmen's shopboys are exempted from taxation, yet these bear the same relation to their employers as the doctor's man, without whom practising would be impossible.

A dentist is attached to all the French lucifer match factories. At one of these all the hands went on strike, the reason being that the dentist made them suffer too much. As their visits are compulsory at certain stated intervals, there was no escape except by the means adopted. The dentist resigned, and was replaced, and the hands returned to their work.

The Socialist deputies have proposed in the Chamber of

Deputies that the patients of both sexes in State hospitals should receive tobacco and snuff at the same reduced price as that given to soldiers engaged in active military service.

CHICAGO.

Death of Dr. John H. Rauch.—The Wanderjahr.—Professor Fenger.—Small-pox Epidemic in Chicago.—Examination for Internes.—The Pulse.—The Teaching of Obstetrics.—The Chicago Medical Society.—The New Ambulance Society.

The death of Dr. John H. Rauch, which occurred recently, removes a prominent figure from medicine. Dr. Rauch was, for many years, Secretary of the Illinois State Board of Health, and in that capacity laboured earnestly, long, and very successfully in elevating the standard of medical education. He probably did more than any other one man in this direction, and the fruit of his labour will long remain a monument to his name. Dr. Rauch had but recently retired, and death overtook him at his old home in Pennsylvania. There have been many eulogistic utterances in the medical and secular press regarding him.

The pathway to Europe is, as usual, pretty well trodden at this season by medical men; that is to say, a considerable number of our younger men are going abroad to spend months or years in special medical studies, especially at the German universities. Notwithstanding the many advantages for special research here, at our very doors, the thirst for foreign learning is still active, and the day is far away, no doubt, when this custom will have become abrogated.

Professor Chr. Fenger has quite recovered from his late prolonged and serious illness. It appears that he suffered an infection wound of the right index finger, necessitating amputation at the second phalangeal joint. The general symptoms of the infection have almost disappeared, and although the doctor is out again, he yet experiences some evidences of the trouble.

Chicago is still in the midst of a considerable small-pox epidemic. The pest-house is full to overflow, containing no fewer than 178 cases, a larger number than has as yet been under treatment. Further than this, the disease has appeared at the County Hospital, there being at present writing some eight or ten cases at that institution. A general feeling of responsibility has come upon the County Commissioners, who have passed a resolution that the County Hospital be placed under strict quarantine, for a period at least. In order to provide for the further care of the patients, a new addition to the pest-house will be immediately erected, sufficient to provide for some time, at any rate. The general public do not regard the condition as being so serious as during the winter, and the great demand for vaccination which then occurred is not apparent now; in fact, very little is said in the public places, in clubs or gatherings generally, about the disease. There is a calming of public fear, whether from confidence in the ability on the part of the officials to control and limit the disease, or whether from apathy, born of the continued presence of the disease, your correspondent is unable to state. The fact, however, remains. So far as known, there is no limit to public gatherings, to general public intercourse, no schools have been closed, and no police or sanitary restrictions have been placed. The disease will, no doubt, be definitely confined to certain insanitary locations, and among the more insanitary class of our population.

The event of the year among the large body of senior medical students has just occurred, namely, the County Hospital examinations for internes. The outcome of the strife is that three were selected from the graduating class of Rush Medical College, two from the North-Western University Medical School, and one from the College of Physicians and Surgeons. These internes serve eighteen months in the County Hospital, the period being divided into three divisions, allowing of six months' service on the medical side, six months' on the surgical, and a corresponding time in practical obstetrics. These positions are eagerly sought by the new graduates. The experience obtained is certainly a rich one.

Somewhat of an innovation in medical literature is soon to be issued by the junior class of Rush Medical College, being a book of about 300 pages, called the *Pulse*, giving a history of the college, sketches of the faculty and assistants, and a great deal of light, possibly facetious matter, will be placed on its pages. The book is to be got out in an attractive style, and already there is a large demand for it. It is said to be the first annual ever issued by medical students in this country.

One of the conditions which death imposes is now observed in the teaching corps of our colleges. I refer to the vacant chairs on obstetrics. For about two years the chair on this branch at Rush Medical College has been vacant and the death of Dr. Charles Warrington Earle last autumn caused a like vacancy in the College of Physicians and Surgeons. To be sure this branch has been taught the classes but the work has been taken up by other members of the faculty. How long these vacancies are to remain cannot be stated. It seems more difficult to find qualified teachers upon this subject than in almost any other of considerable importance.

The recent annual election of officers of the Chicago Medical Society resulted in the placing of Professor Nicholas Senn in the President's chair. This should add a needed stimulus to this large body of medical men, and reforms which have long been talked of may, under his leadership, be urged to a fruitful ending.

I have also to chronicle the perfection of the organisation of the Ambulance Society, a movement which was set on foot and urged on by Mr. Ernest Hart during his sojourn of last summer. A number of meetings were held during the winter with a definite organisation in view. Time, however, was evidently needed before the best wishes of the local promoters could be achieved, but it now looks as if this needed auxiliary to the humane and charitable demands of our city is to be consummated. Dr. Gentles, formerly of London, is Secretary of the Society, and, I believe, its executive officer. Dr. Gentles occupied an important post in the ambulance service in connection with the World's Fair and thoroughly understands the demands of Chicago and the way to meet these demands. Stations are to be started according to the resources at command, and the service is expected to be in operation at an early day. Some time, however, will be required in educating the police officers and the public at large with regard to the advantages of the ambulance system and the methods of obtaining the same. This must not be understood to mean that Chicago has been without ambulances, but the old system has long been inadequate both in the method of applying the service and in the service itself.

EGYPT.

The Water Supply of Alexandria.—The Sanitary Inspectors' Report.—The Financial Difficulty.—The Present Water Supply a Standing Danger.

Dr. Bilter, who was last year appointed Sanitary Inspector to the Municipality of Alexandria, has just presented a report on the water supply of the city, which comes at an opportune moment when negotiations are being conducted for a modification of the existing contract with the water company. He protests against the proposals of the company being accepted and demonstrates clearly that filtration exists only in name and that a radical change is necessary if the town is to be supplied with filtered water. The danger of the present supply has been previously brought to the notice of the authorities by Professor Koch in 1883, and more recently by Dr. Hobrecht, when consulted as to the drainage of the town.

Bacteriologically the water is as impure after as before filtration owing to the rapidity with which it is passed through the filter beds. Each cubic centimetre of water contains from two to five thousand bacteria.

The difficulty in finding a remedy is, as usual, a financial one, the municipality being averse to imposing local taxation to provide a pure water supply, while the company, fulfilling the conditions of their old contract, object to the heavy expenditure involved by the construction of new filter beds.

When the importance of this question comes to be recognised and Dr. Bilter's report places it clearly before the Government, the municipality, and the public, we cannot but believe that a solution will be found, for the present water supply can only be pronounced deplorable and a constant danger to the most important seaport town of Egypt.

CORRESPONDENCE.

THE MEDICAL STATISTICS OF THE METROPOLITAN ASYLUMS BOARD.

SIR,—Permit me a few words in defence of the statistics furnished by the North Western Hospital for the year 1893, and commented on in the BRITISH MEDICAL JOURNAL of May 12th.

A personal element is rightly attributed as operating somewhat in grouping together the sequelæ of scarlet fever and the other zymotic diseases which come under treatment here, and this element must of necessity be augmented where several observers are concerned in the same direction. I am too old an official hand to attempt to shelve the responsibility which rests upon the medical superintendent for the veracity of published returns; but no one, I take it, could, unless *aliéné*, believe that any one man personally reviewed 3,000 patients and more in the course of twelve months. Hence upon his coadjutors must lie, to a great extent, the conclusions rightly or wrongly arrived at, and so presumably it must continue to be until the end of time, or ubiquity becomes an attribute of the human race.

There is, as remarked, at first sight something unaccountable in any given epidemic of scarlet fever producing in one hospital 18 per cent. of albumen, while in another, five or six miles distant, and in which patients are drawn from the same class, it is only 3 per cent.; but the abnormality disappears with a few sentences of explanation. Thus, many cases occur in which the presence of albumen, as shown by a faint cloud, is very transient, and appears only during the pyrexial state. Such are not, and never have been, included in our list of complications, the term albuminuria being only employed where, for at least three consecutive days, a more or less distinctive trace is discovered. Dr. Ashley Gresswell's interesting researches are now ancient history, and, if my memory serves me right, he found as much as 90 per cent. albumen in some months of the year, and in October and November in every case. If, therefore, any institution based its observations on the same lines he followed the outcome might probably be very dissimilar.

Scarlet fever *plus* diphtheria. By a printer's error 18 are stated to have contracted diphtheria after admission. Unfortunately matters were rather worse, that is to say, 28 were so affected, as shown on page 62 of the report, and 63 previous to arrival. It is, of course, impossible to express the opinion of others, but from a practical point of view the question soon determines itself. Briefly, the cases that are classified here as having diphtheria combined with scarlet fever are those in which either the soft palate or the tonsils, or both, are invaded by exudation having the characteristic appearance of true diphtheria membrane and often with it the peculiar fœtor, sometimes white, at other times of a greyish tint, and usually associated with marked depression and albuminuria. No local symptoms can, however, I contend, give certainty of diagnosis, and in the absence of cultivations being made in every case, the opinion must be respected according to the source from whence it comes. Nevertheless, beyond all argument the unpleasant clinical fact remains that not infrequently such patients sometimes are subsequently attacked by what is uncommonly like the ordinary paralysis of diphtheria.

Twenty cases only of tonsillitis as occurring among the errors of diagnosis is again only an approximation to truth; these were admitted as a grave element of uncertainty existed at the moment of arrival; but it must be remembered that many patients were returned to their homes during the past year without entering our wards, and that such cases do not appear in the statistical tables as errors of diagnosis.

There may probably be a lack of unanimity among the medical superintendents of the Metropolitan Asylums Board as to the relation between diphtheria and tonsillitis; the contrary would indeed be remarkable seeing that the whole profession is far from being in accord on the subject. Follicular tonsillitis plays an important part in the difficulties that present themselves for diagnosis, less perhaps when diphtheria is epidemic than in isolated cases. It has nevertheless come under my notice that a so considered benign tonsillitis, without a particle of exudation at the time of examination, and unattended by any constitutional symptoms, was succeeded by such marked paralysis at the end of the fourth week as to be constituted a fit subject for demonstration in one of our largest general hospitals. Dogmatism frequently cuts but a sorry figure in the presence of eruptive diseases, and those who profess to be omniscient happily do not numerically form an important portion of the medical profession.—I am, etc.,

WM. GAYTON,
Medical Superintendent, North Western Hospital.

Haverstock Hill, N.W., May 17th.

THE STATUS OF ASYLUM MEDICAL OFFICERS.

SIR,—The correspondence evoked in your columns shows that there are grievances of asylum medical officers which are real, manifold, and should be remediable.

1. Asylums exist for the care, welfare, and treatment of patients. The new asylum medical officer soon gets disabused of this idea; he finds that the prevailing asylum spirit is one which makes for the maximum comfort, exaltation, and glorification of the superintendent.

2. The duties of a superintendent are implied in his title—physician superintendent, medical superintendent; but he will soon find that many a superintendent of an asylum, in the first place, spends most of his time in duties which elsewhere fall in the province of house stewards and farm officers, duties in which, at his best, the medical superintendent must be but an amateur; while those for which his professional training and previous experience eminently qualify him are mainly delegated to the assistants.

3. Superintendents visit the wards but seldom, and then not in company with the assistant. The whole system of hospital treatment is here set at defiance. There is no visiting together, no systematic consultation at the bedside, no co-working in the treatment of patients. On the other hand, the superintendent visits the wards at times and cursorily; he not infrequently alters the treatment prescribed by the medical officer, especially if the latter should depart from the traditional grooves with which he (the superintendent) is conversant, with results which are tantamount to a snub to therapeutical and medico-psychological work, and a deterrent to the confidence of the patient in the medical officer under whose treatment he is.

4. Superintendents have too much absolute power—such as no man however great or gifted ought to have—over the professional status, the very livelihood and prosperity of his brother physician. The fate of the latter is verily in the hollow of his hands. The door is thus open for prejudices and abuses, for the best of superintendents are fallible men with human passions and interests. "If the cases in which the careers of assistant medical officers have been thus blighted beyond repair be disclosed, the revelation would be a startling and a shameful one." Many an asylum could unfold such a tale. That such a possibility should exist in Russia or China is a disgrace which should not be tolerated and perpetuated in our branch of the service in the nineteenth century.

5. The pay of medical officers is inadequate. With a charge of 300 to 500 patients, his pittance begins at £100 a year, rising annually by about £15 to £25. Why should the superintendent, who gets £1,000 (to £2,000) a year, house, board, garden produce, etc., grudge the possession of a house and a salary equivalent to half of his own, to his deputy—the senior assistant medical officer—who in addition to his own duties has all the labour and responsibilities of the superintendant when the latter is taking his yearly vacation?

6. The prizes in lunacy are already too few; the pittance of officers is meagre, they cannot marry, and their position is subordinate, and can be made humiliatingly so according to the action and attitude of the superintendent. The asylum service is so constituted that it scotches the profession of our best men, and draws into the service a lower class of medical men than the average.

7. The majority of those who elect to remain do so from little choice. Having spent the best years of their life (say from 28 to 39), they settle into a resigned and routine life, give up indefinitely prospects of marriage or going into private practice, and wait till the turn of the tide brings the superintendency within reach.

So the world of medical science rolls on, but we medico-psychologists lag behind in the morass which ought to have vanished with the mediæval ages.

Let us look forward to doing something tangible at the British Medical Association to achieve such a consummation. I beg to propose that a private committee of medical officers—including such as Drs. Mercier, Strahan, Rees Philipps, etc.—should, with your assistance, meet in London (preliminary meeting) to discuss steps to be taken before bringing matters before the British Medical Association.—I am, etc.,

May 22nd. HOPEFUL.

*** We will willingly assist in the formation of such a committee.

THE "CHEAP" DOCTOR AND HIS DEFENCE.

SIR,—Will you kindly allow me to point out to Messrs. Toms and Cruttwell, who have written objecting to my condemnation of the sixpenny doctor that the majority of working men even in the poorest neighbourhoods can well afford shilling fees, and that, however willing a young practitioner may be to work eight and more hours continuously for something like 2s. an hour, such a course of action is somewhat unfair to his older neighbours, who are both unwilling and unable to follow his example. That the ten minutes allowed by your correspondents to each patient is not an excessive allowance is obvious, seeing that in that time the case has to be investigated, the diagnosis made, and the medicine dispensed. It may be possible for a single man who has few wants to do justice to his cases and to make a bare living; but it is open to question whether the killing drudgery entailed by this system of lowering fees to starvation point tends to elevate the practitioner or the profession in the estimation of the public.

According to your correspondents the sixpenny fee is the finest point at which medical practice can be cut, yet I know of some surgeries where only 4d. is charged for consultation and medicine. How it is done I have already hinted it.

That hard and continuous work at starvation wages tends to cause the practitioner to deteriorate both physically and in his work seems fairly obvious from the evidence afforded by trades in which starvation wages are given. The fact remains that the energy which enables a man to undertake such work soon becomes dissipated, and the Nemesis of underselling falls upon him in the shape of a premature grave or impaired health.

It is necessary to have cheap surgeries, and until a few years ago the shilling fee was the lowest charged. Low as this fee is, it yet gives a margin of profit, and does not necessitate what I fear must often be the case—the commonest of drugs and the minimum of attention. It is to be regretted that single young men, content to do with hard work and a bare living, should seek to attract patients from other men by the lowness of their fees, when doubtless the patients would soon be drawn to them by the excellence of their work, even at the higher fee.

A little patience would save them from the suicidal practice of underselling, a practice unjust to their neighbours, detrimental to themselves, and very questionably of advantage to the patients.—I am, etc.,

Dover, May 21st. A. G. WELSFORD, M.D., F.R.C.S.

MALICIOUS CONDUCT OF A JUDGE.

SIR,—I have read your able and thoughtful article on the case of Anderson *v.* Gorrie, which appeared in the *Law Times* of May 19th, with great interest. The statement of the law is in my opinion fairly and properly given, and the first views uttered by Lord Coleridge are entirely consistent with it and with the common law. The remarkable difference between those views and the judgment seemed difficult to account for, but the solution would seem to be that a change took place between the Friday when he uttered them and the day he delivered judgment. During that short space of time (and in consequence of the views he expressed) notice of an action for malicious slander was given to one of the judges of the Court of Appeal which possibly came to his ears.

It is impossible to understand how, consistently with his duties to the public, the Chief Justice should waste time, to the grave cost of many parties to actions, if he all along intended to eat his own words. If he had it in his mind from the first to order a verdict for the defendant in any event, he had no right to put the parties in the cause to the expense of fighting it out, to say nothing of other persons who were awaiting the trial of their causes; but there can be no doubt that he was perfectly sincere, and intended to do his duty and carry out the law, as he so clearly intimated his intention.

The announcement in the BRITISH MEDICAL JOURNAL that the case will be appealed will strike terror into the souls of those judges who abuse their powers, and unquestionably it ought to succeed. It is only of late years that the immunity of the judges from responsibility for the most atrocious conduct on the Bench has grown up. It may safely be concluded that the Court of Appeal will uphold the doctrine of infallibility, and if the House of Lords should do so, then there must be a statutory change in the law. It is monstrous that men in power should act as basely as they please with impunity, and though but few judges have abused this absurd exaltation, there are still a few who have done so repeatedly.

No judge need fear the result of a proper responsibility, because a judge can always protect himself by declining to adjudicate in any case when he has a personal interest or bias.—I am, etc.,

May 21st. A BARRISTER.

OPHTHALMIA IN POOR-LAW SCHOOLS.

SIR,—On all sides we hear once more of serious outbreaks of ophthalmia in our Poor-law schools, and as this is one of the most difficult matters with which managers of such schools have to deal, I am induced to believe you will allow me to advocate, for dealing with this scourge, a scheme which would relieve managers from a heavy responsibility, prevent the spread of the complaint, and improve the conditions under which sufferers are treated. I have always contended that just as we, by means of the Metropolitan Asylums Board, provide for the proper care and isolation in special establishments of people suffering from the forms of infectious and contagious disease, so, in connection with the Poor-law school system of the metropolis there should be an adequate central establishment for the treatment of our little ophthalmic patients. The advantages and the saving of such a plan would be enormous. In the first place, our various schools would have no need to provide isolation departments at all, departments which are sometimes empty, and sometimes inadequate as compared with the demand, whilst the managers are always liable to be placed in the position in which we at Hanwell found ourselves five years ago, and forced to spend a very large sum of money in great haste on temporary buildings. To such an establishment as I propose sufferers would be immediately transferred before they had time to communicate the complaint to their companions. There they would receive the treatment of specialists, under whose care they would be more likely to be permanently cured, and there also every proper provision would be made for their accommodation, their classification according to the virulence of the attack, and their education whilst under treatment. I am convinced that if, without delay or trouble, medical officers could despatch children who had developed the complaint in their schools, or who had brought it with them, to a proper hospital, the gross number of cases in the metropolis would diminish tremendously, and there would be no excuse for the epidemics which have been experienced so frequently lately. I need not dwell at length on what has taken place at Hanwell during the last fifteen years. For years we had 10 per cent. of the children suffering from ophthalmia. In 1889 the number rose to 40 per cent. We spent £25 000 on temporary ophthalmic buildings, £10 000 on the drainage, etc., and set up a new ophthalmic staff of a score of people. Thanks to Dr. Stephenson, we wore down the disease to 10 cases, and, by a special arrangement with the Local Government Board, we are utilising our spare space by taking patients from other schools. We find managers glad to be relieved of them. We cannot accommodate nearly all we are asked to provide for, and a great many of the children we do receive are in such a deplorable condition—some of them practically blind—that it is evident, even to inexperi-

enced people, that they have not received proper attention. Our buildings are only temporary, and very soon each school, unless something is done, will be thrown on its own inadequate resources. But this arrangement cannot continue. It is not our business to take in ophthalmic boarders. It is absolutely necessary that the superior authorities should take the matter up, and if the Local Government Board can be induced to deal with this question, a great deal will have been done for the little children in the boarding establishments of the nation.—I am, etc.,

HENRY JOHN SEARLE,
Chairman of Board of Managers, Central London School District.

Chestnut House, New Cross, May 22nd.

QUALIFIED ASSISTANTS AND THE SANCTITY OF A BOND.

SIR,—The usual bond between principal and assistant is a subject upon which, as far as I know, the profession has never expressed itself with sufficient determination and clearness, and the fact that many members of the profession have suffered from the manner in which law courts have treated this question is, I am sure, justification enough for my calling attention to the subject.

One would be well within the mark to say "that there are few medical men in practice sufficiently important to require assistance, having fifteen or twenty years' experience, who have not suffered through the unprincipled behaviour of one or more of their assistants." Assistants who have broken through every tie of honour and have started practice in opposition to their principals.

What I am stating is either a fact or a misrepresentation; if the latter I am slandering an honourable profession, if the former then a noble profession is disgraced by a number of men who had far better, for the profession's sake, be excluded or ignominously lopped off from the body corporate.

The question at once arises, How is this great abuse to be dealt with? And it is with a view to solving this question that I venture to trespass upon your valuable space.

This question is a vital one to a large body of general practitioners and particularly to that class of general practitioners which, having learned its profession, is not afraid to practise it.

How can a practitioner of the class I refer to undertake all the operations and manipulations of a varied practice without a qualified assistant to administer anæsthetics and assist in the details appertaining to such cases?

He simply cannot do it, and yet nearly all the practitioners of this class of 20 years' standing with whom I have conversed on the subject have told me the same thing, namely, that after years of patiently working up a position and reputation, some assistant they have employed has turned traitor and commenced practice in opposition, robbing them seriously of patients and introducing an element of discomfort, very often at a time of life and under circumstances when such an eventuality falls as a very severe blow. And now as to the remedy.

1. I do not consider any ordinary court of law at all the place for a question such as I have named to be settled in.

2. Such professional questions ought to be settled by a really high class medical tribunal.

3. I would suggest that a body such as the Medical Defence Union should carefully sift such cases, and if after unbiassed and mature consideration a breach of faith should be proved, then the General Medical Council should be urged to try the case as one of professional misconduct, and deal with the delinquent in a fitting manner.

If this were done, we should very soon cease hearing of the shameful breaches of trust which at any time are a disgrace to an honourable calling. A higher tone of conduct would soon be established, and certainly one great blot upon the escutcheon of the medical profession would be removed.

In conclusion, I cannot do better than quote from a letter received this morning from an influential member of the profession regarding the subject of qualified assistants. He says:—

"If men will only speak out properly and courageously, the profession has a chance of doing itself an enormous amount of good by raising its tone, and showing that it is not tainted deeply with so-called commercial morality. We are a nation of shopkeepers; but that is no reason why a profession should be guided by the instincts of petty tradesmen."—I am, etc.,

ALFRED SWANN, M.D.,
Honorary Surgeon to the Batley and District Hospital, Medical Officer of Health for the borough of Batley, etc.

May 18th.

MIDWIVES' REGISTRATION.

SIR,—The report of the special meeting of the Lancashire and Cheshire Branch, contained in the BRITISH MEDICAL JOURNAL of May 19th, is rather amusing reading. There were 180 members present. The adoption of the Report of the Committee on Midwives' Registration, and an amendment to the same, being a direct negative, were only proposed and seconded. The amendment was lost by 16 votes, and the original motion carried by 18 votes, 158 voting on the amendment, and 148 on the original motion. Fifty-five members only were present when the last resolution was put. I suppose all those who were against the report of the Committee had left the meeting.

This Committee has, in my opinion, raised a false issue. In its report, after stating the objects of the British Medical Association, it says, "in no way can these objects be better carried out than by opposing a scheme which would, if adopted:

"1. Impose upon the public a number of partially educated persons as duly authorised to practise one of the most important branches of medicine, namely, midwifery.

"2. Diminish the security of life among pregnant and puerperal women and infants, by legally placing them in charge of partially educated persons, who might attempt to perform the most difficult and dangerous operations in midwifery.

"3. Degrade and demoralise the profession of medicine by placing it in contact with and also on a quasi-equality with an inferior order of midwifery practitioners and in direct competition with it."

"Opposing a scheme." I am not aware of any scheme which is now before the profession, so what is the use of talking about opposing a scheme the details of which, so far, we know nothing about?

Then surely we cannot ignore this fact, that the poor have already "imposed" upon them a large number of totally uneducated persons as midwives, and that from the ignorant and uncontrolled practice of these women much avoidable illness and suffering is brought about and many lives are lost every year.

I would reiterate what I said in my letter last week; and, further, do not let us waste our time in talking about opposing legislation until we see what legislation is proposed.—I am, etc.,

Cardiff, May 19th. A. SHEEN, M.D.

CONSULTANTS AND GENERAL PRACTITIONERS.

SIR,—In Dr. Welsford's valuable paper on the "Present State of Medical Practice," published in the BRITISH MEDICAL JOURNAL of May 5th, occurs this passage, "There is unfortunately a growing distrust of the consultant in the profession, and a reluctance among general practitioners to send up cases to London, for this they do, knowing often that they shall see the faces of their patients no more. Surely this is an unfortunate state of things, and some understanding might be arrived at between the two branches of the profession, such as exists between barristers and solicitors. It is the unfortunate lack of unity and fellowship which weakens the medical profession."

In the latter half of this quotation I, as a consultant, most heartily concur, and I presume that there is some truth in the first sentence, though my fellow-consultants, so far as I know them, are very careful in this matter. But is there no fault on the side of the general practitioners? Do not many of them do their very utmost to discourage consultations, even when their patients wish them? And when their patients, without their knowledge, come up to London for a consultation, and the consultant inquires who the local doctor is, and writes to him on the subject, are they courteous enough even to acknowledge his letter, to say nothing of thanking him for his consideration for their interests? In my own experience such letters of thanks are

rare indeed. I have received some of the kind, and value them, though I have not yet observed that gratitude has prompted the sending of other patients. But, as a rule, I get no reply whatever; virtue has to be its own reward.

It is said that some practitioners have come to the resolution to have no consultations at all. Is this fair to the public? Is it wise in their own interests? Is it right towards consultants, who are doing their best, at great sacrifice, to avoid general practice and act purely as consultants? It is becoming more and more difficult for such men to live, and it seems as if they also may be forced to take up general practice among the upper classes, and thus increase the competition of which the general practitioner complains. The remedy for the "lack of unity" between the consultant and the practitioner is the same as that for the strife between the doctor and the chemist: Let each attend to his own business and refrain from encroaching on his neighbour's. The general practitioners have the matter very much in their own hands. Let them encourage consultations as much as possible, and let them agree with each other to call in, and to send patients to, those physicians only who refrain from acting as general practitioners by taking the sole charge of patients at their own homes.—I am, etc.,

May 21st. F.R.C.P.

MORBID GROWTHS AND SPOROZOA.

Sir,—I notice in the abstract of the Morton Lecture, published in the British Medical Journal of May 19th, that Mr. S. G. Shattock emphasises the importance of certain cell inclusions having a well-marked "peripheral granule layer," which are met with in cancerous growths. I may be permitted to point out that I was the first in this country to publish[1] an account of such bodies and to point out their signification.—I am, etc.,

J. Jackson Clarke,

May 19th. St. Mary's Hospital Medical School.

THE TREATMENT OF OBLIQUE FRACTURE OF THE TIBIA.

Sir,—In reference to a letter by Mr. Armstrong, in the British Medical Journal of May 5th, may I point out that my statement that the average depreciation of the labourer as a machine amounted to nearly as much as 70 per cent. of his original value referred only to oblique fractures occurring in certain classes of labourers, namely, in working men in whom much weight is habitually transmitted through the leg, and especially in those in whom, in addition, security of tread is of the greatest importance, as, for instance, men engaged in scaffolding work, etc., and the same applies to my quotation of Mr. Hulke's opinion, since he accepted my average in this limited application only.

At the same time I would call attention to the fact that the statistics obtained by Mr. Steward from cases taken indiscriminately from labourers of all kinds give a percentage not very far below that I stated for certain classes.—I am, etc.,

St. Thomas Street, S.E., May 7th. W. Arbuthnot Lane.

IS CANCER CONTAGIOUS?

Sir,—Statistical investigations have shown that the prevalence of cancer in different countries presents wide variations; moreover, in every country equally wide variations are noticeable in the prevalence of the disease in different localities. Lately the attempt has been made to utilise these irregularities as evidence of the infectious nature of cancer. In his Morton Lecture Mr. Shattock advocates this view. With your permission, I should like briefly to review the evidence adduced in favour of it, with the object of showing that the facts, as at present ascertained, will not bear this construction.

Arnaudet was the first to formulate these ideas. In certain remote rural districts in Normandy he found that cancer was very much more prevalent than in Paris. He also adduced instances of cancer coexisting in various organs of persons living in certain houses or in their vicinity. Hence he concluded that the locality where a cancer patient had lived is contaminated, and he thought it probable that contagion was propagated chiefly through cider, water, etc. Similar views have since been advocated by Sorel, Rebulet, Gueilliot, Fabre, Fiessinger, and others.

As an example of the alleged epidemic occurrence of cancer, Fiessinger has adduced the following group of cases: In a certain village a woman died of cancer of the breast, and within a comparatively short space of time two other women, lodging in the house, died also of cancer—one of the rectum, the other of the vulva. After a certain time two neighbours also died, one of cancer of the stomach, the other of sarcoma of the leg. On the strength of some exceptional coincidences of this kind, without any other requisite data, the exaggerated conclusion has been drawn that cancer is an epidemic disease, and such groups of cases have been styled cancer epidemics. If the alleged epidemiology of cancer has no surer foundation than this to rest on, the less said about it the better. It will be time enough to entertain such surmises when the cancer microbe has been discovered. What to my mind completely negatives these assertions is the significant fact that, in the crowded cancer wards of the Middlesex Hospital during the last twenty years, not a single instance is known in which a sister, probationer, nurse, ward servant, surgeon, student, or any one engaged in attendance on the cancer patients, has ever subsequently developed the disease.

The question of the prevalence of cancer in Normandy has lately been investigated by a committee of thirty-five local practitioners, and their conclusion is, that although the disease is undoubtedly unduly prevalent in certain remote hamlets—probably in consequence of heredity—yet when the whole of Normandy is taken into consideration, cancer is no more prevalent there than elsewhere in France.

In this connection I think we ought to bear in mind that many other diseases besides cancer—deaf-mutism for instance—present similar geographical and topographical variations.—I am, etc.,

Preston, May 18th. W. Roger Williams.

[1] *Med. Press and Circ.*, September 27th, 1893.

NAVAL AND MILITARY MEDICAL SERVICES.

THE ARMY MEDICAL REPORT FOR 1892.

There is, of course, little expectation of novelty in this recently issued report, which closely follows the beaten track of its predecessors. To some, also, its immense array of averages and ratios may prove a mere weariness; yet, studied with critical insight, these figures are full of meaning and interest to the vital statistician, and of great import to the nation at large. The physical condition of our youthful army affords a standard by which the vital well-being of the classes from which it is drawn may be readily and fairly estimated; its health statistics give indication of the measure of success attending the application of general hygiene and sanitation to bodies of men.

The army is a constantly-changing body, and, through death, invaliding, discharge, and transfer to the reserve, its ranks are in continual flux; the condition of the raw material, which makes good this perpetual waste, becomes of prime importance. We are, therefore, glad to note that the recruits passed in 1892 show a distinct tendency to improvement in age, height, weight, and chest; compared with 1891 that year gives the following ascending averages: Age, 19.3 and 19.2; height, 5 feet 5.7 inches and 5 feet 5 6 inches; weight, 123.8 lbs. and 122.3 lbs; chest, 33.5 and 33.4 inches. Such better results may have partly arisen from more careful selection, for the ratio of rejections in 1892 was 4.36 per 1,000 higher than in 1891.

The great mass of rejections were as usual under defective vision and below standard measurements; but, as we have before pointed out, and as is well known to experienced examining medical officers, these failures might almost be indefinitely reduced could the recruiting officers be made to exercise more discrimination in primary selection: the truth is, great numbers of impossible recruits are recklessly rushed into the medical inspection rooms, thus needlessly swelling the numbers rejected. The value of even functional improvement in accepted recruits may be judged when it is known that of our home army of 100,000 men, one-third are under one year's

service. The amount of stiffening from the reserve our home battalions would require before they could take the field would thus be very great. Regiments abroad are, of course, in a much better condition, as they are continually replenished by drafts of the older soldiers from the home linked battalions.

Marks of vaccination in recruits continue to show slow increase; but we are somewhat staggered by the persistent amount of illiteracy. No fewer than 1,700 men were passed in 1892 who could neither read nor write, notwithstanding that the Education Act has been in operation for more than twenty years. This is a matter which should be seriously considered by our School Boards.

The statistics of the volume show that the health of the army in 1892 was, on a wide survey, satisfactory.

The ratios under admissions, deaths and invaliding were all less; and those under constantly non-effective from sickness, average sick time to each soldier, and average duration of each case of sickness were fractionally more than in the decennial period 1882-91. Of this no explanation is given.

The death-rate naturally varied very widely, from a very low ratio of 1.44 per 1,000 of strength in Canada, 3.24 in Gibraltar, and 4.38 at home to 14.18 in Egypt, 17.59 in India, and a maximum of 17.86 in Mauritius. But we must beware of fallacies from disturbing elements, which may, and do, work in these ratios; they must be viewed as well regarding the total numbers on which based as the area over which applied. To apply the same rigid ratios to a handful of men in a limited area in Canada or Mauritius as to a great number spread over the United Kingdom or India can only mislead; local considerations in each case should be duly weighed and allowed for.

Ratios sometimes work out curious results, such as we note in the following anomalies: Why, for instance, should the ratio of constantly sick in England and Wales be nearly double that in Scotland, with Ireland in a middle position? Why should the average sick time to each soldier be 14½ days in Ireland, 16⅝ in England, and only 9 in Scotland? Why should the northern kingdom have from 25 to 30 per cent. relatively fewer admissions than in England or Ireland? Can it be from the relatively much smaller number of troops in Scotland?

Among the chief causes of sickness we find that all forms of venereal disease constantly caused the non-effectiveness of no less than 1650.26 men. Here were two full battalions constantly useless in hospital through disease, which, to say the least, could be very largely prevented. Enteric fever at home was somewhat more prevalent in 1892: and of 28 cases at Aldershot, 9 occurred among men who had previously taken part in the Military Tournament in London. It may be asked, where were these men billeted or quartered in London?

The report on India alone is so full and important that it might well supply matter for a lengthened review. The effect of age and service in the country on sickness is well illustrated; and the still uncertain etiology of enteric fever in the tropics receives further elucidation.

The report exhibits the usual skill and care hitherto displayed in army medical returns; and is at once a credit to its authors and to the department collectively.

BRIGADE-SURGEON-LIEUTENANT-COLONEL EVATT.

We are glad to see the notification of Brigade-Surgeon-Lieutenant-Colonel Evatt's appointment as Registrar and Secretary to the Principal Medical Officer, Netley. There are not many officers in the Army Medical Staff who have had greater experience in corps organisation and administration than Brigade-Surgeon-Lieutenant-Colonel Evatt, and his influence will not fail of being felt by the probationers at the Army Medical School.

THE NAVY.

Fleet-Surgeon Robert Hay, M.D., has been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets in Her Majesty's Fleet May 7th. He was appointed Surgeon September 7th, 1863; Staff Surgeon April 14th, 1877; and Fleet-Surgeon November 12th, 1883.

Fleet-Surgeon A. W. Whitley has been placed on the Retired List, with permission to assume the rank of Deputy Inspector-General of Hospitals and Fleets, May 19th. He dates as Surgeon from June 10th, 1863; as Staff-Surgeon from April 14th, 1877; and as Fleet-Surgeon from May 5th, 1884.

The following appointments have been made at the Admiralty: Charles A. Macaulay, Staff Surgeon, and Montague L. B. Rodd, Surgeon, to the *Endymion*, May 26th; Frederick J. Lilley, Surgeon, to the Portsmouth Division, Royal Marines, May 28th; Edgar R. Dinsey, Surgeon, to the *Barossa*, June 2nd; Frank E. Rock, Thomas T. Jeans, Norman S. Smith, Rowland A. Kirby, John H. Pead, George R. MacMahon, Robert T. Gilmour, H. C. Arathoons, Benjamin G. Heather, Leo. E. James, Thomas W. Philip, Robert S. Bernard, Lancelot Kilroy, Francis J. Barter, James Mowatt, S. H. Birt, Montague H. Knapp, Robert D. Jameson, Hugh S. Burniston, and Arthur A. J. McNabb, Surgeons, to the *Victory*, additional, for Haslar Hospital, May 16th.

ARMY MEDICAL STAFF.

Brigade-Surgeon-Lieutenant-Colonel W. S. M. Price, who is serving in the Bengal Command, and who went to India in September 1889, is appointed to officiate as Principal Medical Officer, Sirhind District, *vice* Surgeon-Colonel R. P. Ferguson, who has been granted leave out of India.

Brigade-Surgeon-Lieutenant-Colonel W. F. Burnett, serving in the Madras Command, and who arrived in India only in March last, is appointed officiating Principal Medical Officer, Belgaum and Bangalore Districts.

Surgeon-General John Drope M'Illree died at Bray, co. Wicklow, Ireland, on April 26th, aged 83. He entered the service as Assistant Surgeon February 20th, 1835; became Surgeon December 8th, 1845: Surgeon-Major October 20th, 1854; Deputy Surgeon-General December 31st, 1858; and Surgeon-General March 9th, 1867. He retired on half-pay February 28th, 1875. He was twenty-five years on foreign service. In Jamaica he distinguished himself greatly during two epidemics—one of fever, the other of cholera. He was also in Turkey and at Scutari during the Crimean war, but does not seem to have received the medal granted for the campaign. He also served in the Red River Expedition in 1870 under Sir Garnet Wolseley.

Surgeon-Lieutenant-Colonel Maurice Knox is promoted to be Brigade-Surgeon-Lieutenant-Colonel, *vice* F. Ferguson, M.D., retired, May 2nd. Brigade-Surgeon-Lieutenant-Colonel Knox's previous commissions are dated as follow: Assistant Surgeon March 31st, 1868; Surgeon March 1st, 1873; Surgeon-Major March 31st, 1880; and Surgeon-Lieutenant-Colonel March 31st, 1888. He served in the Afghan war in 1878-79, was mentioned in despatches, and has the gold medal granted for that campaign.

INDIAN MEDICAL SERVICE.

Surgeon-Colonel John Richardson, Bengal Establishment, has retired from the service, which he entered as Assistant-Surgeon, July 27th, 1859, attaining the rank of Surgeon-Colonel, April 19th, 1889. He served with the Bhootan expedition in 1864-66, and was present at the capture of the Bala Pass and at the storming of the stockades above the pass. He has the Indian Frontier medal with clasp.

Surgeon-Colonel W. P. Warburton, Bengal Establishment, officiating Principal Medical Officer Assam District, is confirmed in that appointment from January 17th. Brigade-Surgeon-Lieutenant-Colonel A. Stephen, Bengal Establishment, Sanitary Commissioner of the Punjab, officiates for Surgeon-Colonel Warburton during his absence on civil employment.

The Government of India has decided that Surgeon-Major-General De Fabeck, Surgeon-General with the Government of Madras, shall not be allowed an extension of his appointment, but shall retire on completing his 60th year, which would be on May 18th.

The following promotions in the Bengal Establishment, which have been already announced in the British Medical Journal, have received the approval of the Queen: Brigade-Surgeon-Lieutenant-Colonels G. C. Ross and W. P. Warburton, M.D., to be Surgeon-Colonels; Surgeon-Lieutenant-Colonels R. C. Sanders, M.D., B. Franklin, R. T. Wright, M.D., and G. McB. Davis, M.D., to be Brigade-Surgeon-Lieutenant-Colonels.

The retirement from the service of Surgeon-Cololonels G. C. Chesnaye and J. Richardson, of the Bengal Establishment, announced some time since in the British Medical Journal, has received Her Majesty's approval.

Erratum.—In the British Medical Journal of May 12th, under the heading "Medical Officers in West Africa," the surgeon lent from the *Widgeon*, and mentioned in Admiral Bedford's despatch, was erroneously given as "F. W. Collingwood." It should have been Surgeon George Trevor Collingwood.

THE VOLUNTEERS.

Surgeon-Captain G. J. Eady, M.D., 1st Volunteer Battalion the Queen's Royal West Surrey Regiment (late the 2nd Surrey), has resigned his commission.

Surgeon-Major W. M. Harmer, 2nd Volunteer Battalion the East Kent Regiment (late the 5th Kent), has also resigned his commission, and is permitted to retain his rank and uniform.

Honorary Assistant-Surgeon R. Wilson, 2nd Volunteer Battalion the Lincoln Regiment (late the 2nd Lincoln), has likewise resigned his commission.

Mr. Charles Franklin Wright is appointed Surgeon-Lieutenant to the 2nd Volunteer Battalion the Suffolk Regiment (late the 6th Suffolk), May 19th.

Surgeon-Captain D. T. Playfair, M.D., 2nd Volunteer Battalion the Queen's Own Royal West Kent Regiment (late the 3rd Kent), has resigned his commission.

Surgeon-Lieutenant H. Gould, 2nd Volunteer Battalion the Manchester Regiment (late the 6th Lancashire), has also resigned his commission.

Surgeon-Captain J. F. Arlidge, from the 3rd Volunteer Battalion the West Riding Regiment, is appointed Surgeon-Captain to the 1st Volunteer Battalion the Prince of Wales's North Staffordshire Regiment (late the 2nd Staffordshire), May 19th.

Mr. Samuel Elliot, M.B., is appointed Surgeon-Lieutenant to the 1st Sutherland (the Sutherland Highland), Rifles, May 19th.

Surgeon-Lieutenant C. D Grant, 24th Middlesex, is promoted to be Surgeon-Captain, May 19th.

SURGEONS IN THE ROYAL NAVY.

The undermentioned gentlemen, who competed on May 7th and following days at Examination Hall, Victoria Embankment, for appointment of Surgeon in the Royal Navy, have been granted Commissions:

	Marks.		Marks.
F. E. Rock, M.B.	2,854	T. W. Philip, M.A., M.B.	2,224
T. T. Jeans, M.B.	2,635	R. S. Bernard	2,214
N. S. Smith	2,517	L. Kilroy	2,211
R. A. Kirby, B.A.	2,527	F. J. Barter, B.A., M.B.	2,144
J. H. Pead, B.A.	2,466	J. Mowatt, M.B.	2,142
G. R. MacMahon, B.A., M.B.	2,381	S. H. Birt	2,138
R. T. Gilmour	2,378	M. H. Knapp	2,122
H. C. Arathoons	2,356	R. D. Jameson	2,111
B. G. Heather	2,259	H. S. Burniston, M.B.	2,096
L. E. James	2,256	A. A. J. McNabb, M.B.	2,076

HEALTH OF THE JAPANESE NAVY.

The *Annual Report of the Health of the Imperial Navy* [of Japan] *for the 25th Year of Meiji* (1892) shows that the mean daily force of the service for that year was 9,747 men. The total number of cases of disease and injury entered on the sick list was 4,052, which gives a ratio of 415.72 per 1,000 of the force, being an increase of 18.87 compared with the previous year, but a decrease of 200.10 when compared with the average ratio of the preceding eight years. The increase was partly due to the occurrence of epidemics of typhoid fever and influenza, but was chiefly attributable to the increased number of cases of syphilis. The average daily number of men on the sick list was 363.12, a ratio of 37.25 per 1,000, being an increase of 1.57 as compared with the previous year, but a decrease of 3.28 in comparison with the average ratio of the last eight years. The total number of day's sickness was 132,903, giving an average loss of service from disease or injury of 32.80 days for each person. The number of persons invalided was 99 (85 from disease, 14 from injury). The number of deaths was 135, a ratio of 13 85 per 1,000. Of this number, however, 62 were due to the loss of man-of-war *Chishima*. This leaves a total of deaths from disease or injury of 73, a ratio of 7.49 per 1,000, which is an increase of only 0.58 compared with the average ratio of the last eight years. Of the admissions to hospital (1,327) there were 354 cases of disease of the respiratory system, 13 of disease of the circulatory system, 171 of diseases of the digestive system, 8 of diseases of the urinary system, 40 of diseases of the nervous system, 171 of diseases of the skin (including 109 of scabies), 47 of diseases of the locomotive system, 570 of infectious diseases, including 214 cases of influenza, 119 of intermittent fever, 89 of typhoid (with 24 deaths), 58 of febricula, 32 of simple continued fever, 23 of measles, 15 of remittent fever, 5 of dysentery, 3 of small-pox, and 2 of varicella. There were only 3 cases of *kakké*. The number of cases under the head of venereal disease was 1,085, a ratio of 111.32 per 1,000, showing an increase of 19.17 as compared with the previous year.

FROG MARCHING.

We have already commented on the unfortunate Colchester case. A correspondent declares "the poor man was done to death: and this sad, sad case should give the death blow to frog marching." We do not feel warranted in subscribing to either of these conclusions. At the same time it is probably very necessary that more specific instructions should be issued to military pickets and policemen as to the best method of carrying drunk and incapables to places of safety. The opponents of "frog marching" must suggest some better method of carrying, and not stop short at mere denunciation.

SHARP PRACTICE.

Yet another complaint of the shabby manner in which army surgeons are treated comes to us from India. A medical officer who received an advance of English pay on proceeding abroad has been, owing to a somewhat shorter voyage out than usual, called upon to refund to the Government ten days of English pay at Rs. 21 8 a-day, while the amount of daily English pay credited to him in India is only Rs. 12 6 11. Is it any wonder that the Medical Department has grievances when such cases as have been quoted are founded on fact?

TRAVELLING PRIVILEGES OF SURGEON-MAJOR-GENERAL.

The *Broad Arrow* of May 5th comments very strongly on the injustice done to an administrative medical officer ordered home from abroad in anticipation of promotion to a major-general's grade. This officer, who applied for the travelling privileges of a major-general's rank, was refused them on grounds reported to be inequitable. The subject, as reported in the *Broad Arrow*, should induce some medical member of Parliament to get the case cleared up by the Secretary of State for War, as an authoritative ruling treating medical officers on fair grounds is much needed.

THE KARACHI INCIDENT.

We have received some indignant letters on the alleged order, by the general officer commanding at Karachi, on the wearing of swords by medical officers: we have also seen the existence of the obnoxious order denied, and other accounts that it was actually issued and countermanded. We should be glad to learn the true statement of the case before making further comments on it.

A NAVAL AND MILITARY MEDICAL SOCIETY.

The Army Medical Department has no institution similar to "The Association of Military Surgeons of the United States Army," holding its annual meetings, and affording opportunities to military surgeons for discussing and delivering lectures on subjects connected with the department in the field, in garrison, or in camp. The programme of the annual meeting of the American Association thus far states that some thirty medical officers deliver addresses on military and naval topics. The formation of such an association for the British and Indian medical services could not but be attractive.

PERSONAL CLEANLINESS OF THE SOLDIER.

The subjects brought before the Secretary of State for War by Mr. Hanbury and Colonel Lockwood in the House of Commons on May 4th need much more than a passing notice. It is well known among army medical officers that, owing to a total want of hot water supply in barracks, and in some hospitals, the personal cleanliness of the soldier is rendered all but impossible. Again, there can be little doubt that the responsibility which rests with officers commanding troops, companies, and batteries is insufficiently realised, for they are, by regulation, ordered to supervise the personal cleanliness of their men—a point which cannot be dealt with by the usual weekly health inspection carried out by medical officers.

MODIFIED REGIMENTALISM.

Tact writes: That a return to a modified regimentalism in peace would be both desirable and profitable I regard as a certainty. It would conduce to greater efficiency and comfort, and bring back once more that feeling of good fellowship (now gone), which is essential to the well-being of two great arms of the service. So far from such a system tending to delay medical consolidation, it would tend very materially to help it on Each attached medical officer would be placed in a position to influence himself for good in this respect. As long as grievances, which all ranks of the army proclaim call loudly for redress remain untouched, so long will officers and men refuse to believe that other suggested medical reforms are set forth with a view of benefiting the army at large. Day by day the breach has been widening, until it is now complete. Until it is healed we cannot look for efficiency or a helping hand from our would-be brethren, and certainly not till then will service in the medical corps be fraught with happiness.

ANOTHER ALLEGED GRAVE BREACH OF FAITH.

A Correspondent writes: On examining the New Warrant for Pay and Promotion for Officers in the Army, just published for 1894, I was astonished to find that Article 30 has been inserted in its old form without in any way extending its provisions to the officers of the Army Medical Staff, as distinctly stated by the War Minister some months since should be done when answering a question on the subject put by Mr. Plunket, M.P. Can it be possible that Mr. Campbell-Bannerman could be aware of this flagrant breach of faith, rendering his authoritative statement on behalf of Her Majesty's advisers to be entirely falsified? I would strongly urge on his consideration the necessity that a short warrant on the subject should be published with next month's *Army Orders and Circulars* before the schools become aware of this the most recent attempt to rob the army medical officers of what had been publicly promised by a responsible minister of the Crown.

ARMY RESERVE OF OFFICERS.

Enquirer wants to know to whom inquiries relative to the Army Reserve of Officers should be addressed. We presume, from asking us, he means reserve of medical officers; then he ought to apply to the Director-General Army Medical Department, 18, Victoria Street, Westminster, S.W.

SELECTION IN THE ADMINISTRATIVE RANKS.

Senex writes: I can endorse and give convincing proof of the truth of much which has lately been written on this subject. It is no secret that the Director-General's efforts to supersede officers known to be unfitted for promotion have been thwarted by higher authority, on the ground that nothing sufficiently adverse to them has appeared on record in the confidential reports. Officers have repeatedly been placed in positions for which they were manifestly unfit simply because of this tender regard for confidential reports. None of these reports contain exact accounts of officers' characters, and the service rule that adverse reports must be communicated to the officers concerned tends to that result. The whole system of confidential reports calls urgently for revision. Your remarks on the difficulties of the position in the Army Medical Service confirm all that the article in a contemporary contended for. Selection for promotion is the only remedy.

*** There is considerable force in our correspondent's argument of the difficulties connected with selection through confidential reports alone. The value of such reports depends largely on the worth of the person who makes them. Probably much might be done for good in recasting the system of confidential reports, but we fear before we can have ideal reports we must have perfect reporters.

ADMINISTRATIVE MEDICAL OFFICERS.

Three Years in the Rank writes: The necessity for some modification of the hard and fast rule relative to the compulsory retirement of officers at ages fixed according to rank has lately been clearly shown by a service paper. It applies to difficulties connected with the administratives of the Medical Staff. The perpetual changes in stations is almost entirely due to the short time the surgeon-major-generals serve in their rank; one retires and the promotion of three officers renders three moves necessary, equal, according to the proverb, to one fine. The remedy is to keep the surgeon-major-generals for longer periods in their appointments—a measure consistent with equity, efficiency, and the interests of all concerned. It is suggested that their retention to 62 would very soon cause a deadlock in promotion, but it is provided he may so be retained in certain instances already, but there is no such provision for the retention of a brigade-surgeon beyond 55 years. If three years in the higher ranks is required to earn a pension then let no officer who has less to serve be promoted, or if promoted let him serve it out, except, of course, unless compelled to retire through ill-health.

MEDICO-LEGAL AND MEDICO-ETHICAL.

AN UNGENEROUS RIVAL.

S. A. J.—In response to our correspondent's refuting statement in relation to "Member B.M A.'s" inculpatory letter, which appeared in the BRITISH MEDICAL JOURNAL of May 12th, p. 1,054, under the above heading, we may note that if we had been cognisant of the alleged fact that the latter had "started a cheap shop which he called a surgery, with his fees printed on cards, one in each window, and offering free advice on one or two evenings in the week," we should have felt it proper to decline according it insertion. In view, moreover, of the representment that the same "Member" omitted the duty entailed upon him as a newcomer to pay the customary visit of courtesy to the local practitioners, their non-recognition of him would be reasonable and legitimate. Nevertheless, the "obligatory visit" to the patient, as prescribed by the Poor Law, would not justify the acting medical officer in ignoring the practitioner in attendance, notwithstanding the latter's "curt and ungentlemanly letter," prompted probably by the assumed unjustifiable interference of the former, who should, in our opinion, have intimated, by note or otherwise, the transference of the patient to the workhouse infirmary by the express wish of her responsible guardian.

CARDS.

"VACCINATION direct from the calf. Fee, 6d. Surgery: 118, Stebondale Street, Cubitt Town, E. Fees payable in advance. Advice and medicine, 6d. Or for one whole week, 1s." Such is the personally-assessed value of the professional services as offered by certain Drs., who, however, suppress their names from the widely-distributed feecard.

"Dr. Gowan, Physician and Surgeon, 199, Chester Road, Hulme," doubles the cash fees of 6d. and 1s. if credit be given.

CONTRACTS IN RESTRAINT OF PRACTICE.

PARVUS.—The principle to be collected from the more recent authorities leads to the conclusion that, in the absence of express agreement, the vendor of a business is not to be restrained from dealing with or soliciting his old customers. This principle is, we think, equally applicable to the case of the sale of a medical practice; hence the necessity on the part of the purchaser to provide in a definite manner the terms intended to be imposed on the vendor in restraint of his future practice.

RIGHTS OF RETIRING PARTNER.

A FATHER.—From the facts disclosed by our correspondent, we think that the retiring partner cannot claim any share in the value of the practice, that is, goodwill, but he can claim his share of profits for the period covered by the partnership. We think there is nothing legally to prevent the partner commencing business in the neighbourhood or, apart from a Chancery action, to prohibit the collection by him of the debts due to the firm. We doubt if the licensing bodies in question would interfere unless the circulars referred to amounted to advertising or unless there was some dishonourable conduct in connection with obtaining the club appointments.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.

Prevention of Cruelty to Children's Bill.—On going into Committee on this Bill, Mr. HOPWOOD moved to omit Subsection 2 of Clause 2, which provides that a person may be convicted either by summary jurisdiction or indictment for an offence (under Section 1 of the original Act), notwithstanding the death of the child. The Bill, he said, was filled with material subversive of the plain ordinary administration of justice.—The subsection was defended by Sir R. WEBSTER and Mr. R. B. REID, and the clause was agreed to, as was also Clause 3.—On Clause 4, which gives power for the detention of habitual drunkards, Mr. G. RUSSELL urged that the matter ought to be dealt with by an Inebriates Bill, and Mr. HOPWOOD objected to the proposal to send persons convicted under the Bill to workhouses or asylums for detention.—The SOLICITOR-GENERAL also objected to the clause. Inebriates' retreats were established for the reception of persons who subjected themselves voluntarily to a period of seclusion. It would be unfair to them to have thrust upon them a certain class of criminals. It would be equally unfair to the inmates of workhouses to have this class of criminals introduced.—After some further discussion, the clause was agreed to.—On Clause 6, Mr. HOPWOOD moved to make the sending of children into the streets, for purposes forbidden under the Act, between 9 P.M. and 6 A.M., by parents or persons having charge of children, an offence only if done "knowingly."—The amendment was opposed by Sir RICHARD WEBSTER and the SOLICITOR-GENERAL, and rejected on a division by 130 to 27.—After some further discussion and another division, in which Mr. Hopwood was defeated by 198 to 21, all the clauses of the Bill except 14 (which was withdrawn) were agreed to, as were also new clauses extending the Bill to Scotland and Ireland. The Bill, as amended, was ordered to be reported to the House.

DR. ALTHAUS has resigned his post as senior physician to the Hospital for Epilepsy and Paralysis, Regent's Park, which he has held for the past twenty-eight years, and has been appointed consulting physician to that institution. Dr. Cagney, a physician to out-patients at the same hospital, has been appointed physician with charge of in-patients.

OBITUARY.

THOMAS CHARLES CADE, M.R.C.S., L.S.A.

BY the death of Thomas Charles Cade, of Spondon, the profession loses one of its oldest members and a type of practitioner that one rarely now has the pleasure of meeting. Born in July, 1809, the youngest son of Sir James Cade, who himself practised at Spondon for nearly forty years, he in "the seventh year of the reign of our Sovereign Lord, George IV," as his indentures certify, was apprenticed to his father for a term of seven years. He was never tired of lamenting that this mode of entry into the profession had been abolished. He was convinced of its utility to the future general practitioner, teaching him self-reliance in an emergency and ability to make the best of whatever was at hand. During this time he also attended the practice of the Derbyshire Infirmary, and was one of the first students enrolled upon the books. He then went to Edinburgh, where among his teachers were MacLeod, Christison, Lizars, Hope, and Knox, from the last of whom he received a prize as the best anatomist of his year.

At the end of his second year he left for London, entering for practice at the University of London, before the days of University College. Here, again, he was singularly fortunate in his teachers—Bell, Watson, and Jones and Richard Quain being among the number. When he entered, the stethoscope had not yet come into general use, and he was wont to say that the accuracy and precision with which Sir Thomas Watson indicated a pulmonary or cardiac lesion was a source of amazement and admiration to the assembled students. In 1834 he qualified at the College and Hall, and joined his father in his practice at Spondon, and ultimately succeeded him. From 1840 till the end of 1890 he was union medical officer, and public vaccinator from 1853, when the Act first came into force, till his death, and the conscientiousness with which he discharged these duties will make his name honoured throughout the district.

Possessed of a vigour both of body and mind, he worked as few have the strength to do; and, moreover, he managed to find time to gratify his taste for both hunting and shooting. In the latter form of sport he gained a great reputation, and, when 75 years of age, with fifteen cartridges he bagged seven brace of birds and a hare. For fifty-five years (1839-1894) he was registrar of births and deaths for the district. He was a most enthusiastic supporter of the Royal Medical Benevolent College, of which he was both a life governor and a local secretary. Kind, courteous, and skilful, his patients recognised him not as their doctor only, but as a firm and trusted friend. During the whole of his long life he was always ready to aid with his best efforts all who applied to him, and to the poor he specially endeared himself; his whole life, indeed, was an example of the best tradition of his profession. He had never known illness till the beginning of March, when he began to feel his strength departing, and he died peacefully on April 23rd, in his 85th year.

WE regret to have to announce the death of Mr. GILBERT WARD, of Blyth, which took place on May 17th. He was born in Newcastle in 1805, and spent his earlier days in North Shields, where he served his apprenticeship with the late Dr. Trotter. In 1827 he obtained the diploma of L.S.A., in 1828 that of M.R.C.S.Eng., and that of F.R.C.S.Eng. in 1857. The deceased was the "Grand Old Man" of Blyth, where he was held in great esteem. For the long period of fifty-five years Dr. Ward held the position of registrar of births, marriages, and deaths at Blyth, and for over fifty years every entry was made by his own hand. The funeral took place on May 21st.

DR. JOHN BABER, formerly of Thurloe Square, whose death occurred on May 4th, at the age of 72 years, studied at Lane's School of Medicine and St. George's Hospital. He took the M.R.C.S. and L.S.A. in 1843, and the M.D.St.And. in 1844. From that date until his retirement, in 1883, he practised in the West End, where he had an extensive practice, and was highly esteemed by a large number of patients and friends. Since his retirement he devoted considerable

time to the relief of the poor, and also gave his personal assistance to the Brighton Medical Mission.

THE death is reported of Dr. W. W. LEEPER, of Loughall. The deceased took the diploma of L.R.C.S.I. in 1844, and the degree of M.D.Edin. in the same year. He held the position of visiting physician to the Retreat Lunatic Asylum, Armagh, and medical attendant at the Loughall Dispensary District. Dr. Leeper was 72 years of age.

DEATHS IN THE PROFESSION ABROAD.—Among the members of the medical profession in foreign countries who have recently died are Dr. Tomas Plasencia, for many years Medical Director of the Mazorra Lunatic Asylum, the only public institution of the kind in Havana, and formerly Professor in the Medical Faculty of that city; Professor Grosser, formerly Prosector in the Anatomical Institute of the University of Breslau, aged 74; Dr. Védrénes, *Médecin Principal* of the French Army, a man of wide erudition, author of an excellent translation of Celsus, and of various papers dealing chiefly with subjects of surgical archæology; Dr. Battle, Professor in the Medical Faculty of Montpellier; Dr. Pancritius, of Lichterfeld, formerly a well-known medical practitioner in Berlin, and author of a work on *Pulmonary Syphilis*, and other contributions to medical literature; and Dr. Albert Day, formerly a member of the Massachusetts State House of Representatives, a persevering advocate of the establishment of an asylum for the treatment of inebriates, and the First Superintendent of the Washingtonian Home, aged 72.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns, including London, 5,307 births and 3,426 deaths were registered during the week ending Saturday, May 19th. The annual rate of mortality in these towns, which had been 17.2 and 18.2 per 1,000 in the preceding two weeks, declined again to 17.1 last week. The rates in the several towns ranged from 7.9 in Croydon and 9.5 in Portsmouth to 21.8 in Liverpool and in Salford, and 22.2 in Norwich. In the thirty-two provincial towns the mean death-rate was 16.8 per 1,000, and was 0.7 below the rate recorded in London, which was 17.5 per 1000. The zymotic death-rate in the thirty-three towns averaged 2.7 per 1,000; in London the rate was equal to 3.9 per 1,000, while it averaged only 1.9 in the thirty-two provincial towns, and was highest in Salford, Nottingham, and Birmingham. Measles caused a death-rate of 2.1 in London, 2.3 in Nottingham, 2.4 in West Ham, and 2.5 in Birmingham; and whooping-cough of 1.4 in Cardiff and 1.8 in Plymouth. The 72 deaths from diphtheria in the thirty-three towns included 56 in London, 3 in Leeds, 2 in Liverpool, and 2 in Hull. Three fatal cases of small-pox were registered in London, 3 in West Ham, 3 in Birmingham, 2 in Manchester, and 1 each in Wolverhampton and in Oldham, but not one in any other of the thirty-three large towns. There were 219 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, May 19th, against 151, 191, and 210 at the end of the preceding three weeks; 52 new cases were admitted during the week, against 44, 64, and 71 in the preceding three weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,307, against 2,258, 2,293, and 2,298 at the end of the preceding three weeks; 252 new cases were admitted during the week, against 268 and 262 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday last, May 19th, 894 births and 497 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had been 20.1 and 19.8 per 1,000 in the preceding two weeks, further declined to 17.4 last week, but slightly exceeded the mean rate during the same period in the large English towns. Among these Scotch towns the death-rates ranged from 14.8 in Paisley to 20.6 in Dundee. The zymotic death-rate in these towns averaged 2.1 per 1,000, the highest rates being recorded in Aberdeen and Dundee. The 232 deaths registered in Glasgow included 11 from whooping-cough, 3 from scarlet fever, and 3 from diphtheria. Two fatal cases of small-pox were registered in Edinburgh and 1 in Leith.

THE COST OF THE FOUNTAIN HOSPITAL.

WE understand that the Local Government Board has addressed a letter to the Asylums Board asking for an explanation of the very large expenditure incurred in the erection of the temporary hospital at Tooting and that a subcommittee which has been appointed to investigate the matter is expected to report in a few days. Comparisons have again and again been made between the cost of this hospital and that of the one erected during the previous year at Tottenham, but it should not be forgotten that the Fountain Hospital is built in a much more permanent manner than the other, and in fact may be looked on as a more or less permanent hospital, built of wood and iron, rather than as a temporary structure. Whether it is wise to spend such large sums of money on buildings of this nature is another matter, and we would especially draw attention to the difficulty of cleansing them. Being lined with boards, which, under the influence of heat, soon contract and gape at the joints; the air within the wards is continuous with that in the cavities between the boarding and the felt covering outside—a series of dustholes which never can be cleaned. For hospitals intended for the reception of infectious diseases the disadvantage of this arrangement is obvious, and, healthy as they are at first, we fear they will deteriorate in this respect much more rapidly than buildings whose walls are capable of being properly cleansed and disinfected.

WATERBORNE TYPHOID IN THE UNITED STATES.

IN January last a case of typhoid fever occurred in a farm which stands about 70 yards from and about 30 feet above the spring and brook which supply the reservoir of the village of Windsor, Vermont. There was a natural surface drainage from the house and outbuildings to the valley below, and the excreta appear to have been allowed to mingle with the usual drainage. The spring thus would wash all surface accumulations into the brook and thence into the reservoir. In March cases of typhoid fever began to occur in the village, and the number attacked increased so rapidly that about one-fifth of the inhabitants were, according to the report in the *Boston Medical and Surgical Journal*, affected by the end of April. The fact that the infection was waterborne was admitted early and the supply of water from the reservoir has been stopped. Several cases have occurred in neighbouring townships, the persons attacked being, it is said, supplied with Windsor water.

NEWTON ABBOT WORKHOUSE.

AT the weekly meeting of the Newton Abbot Board of Guardians, communications were read as to the recent inquiry by the Local Government Board. The inquiry was ordered to be reopened on May 31st, and the Matron was called on to resign. The Matron wrote tendering her resignation and complaining of harsh treatment.

VACCINATION IN IRELAND.

DURING the March quarter there were 16,046 persons successfully vaccinated; in 4,091 cases the operation was postponed, and 20 children were reported as insusceptible of vaccination. The deaths of 1,879 unvaccinated children under 3 months old were registered during the quarter, making a total of 22,036 children with regard to whom particulars as to vaccination were ascertained. The Registrar's notes show that in many places vaccination was suspended owing either to the severity of the weather, or the prevalence of measles, whooping-cough, etc.

SHUTTING THE STABLE DOOR.

OWING to the alleged choleraic epidemic of last autumn amongst the inmates of Greenwich Workhouse, the Board of Guardians instructed their architect, Mr. Dinwiddy, to examine and report upon the old system of drainage, and to advise upon its amendment. He recommended the abolition of the old sewers, and the construction of an entirely new system of drainage and sanitary fittings. The Local Government Board, after an investigation by Major-General Carey, have now approved the scheme in its entirety, and given the necessary authority for a loan to meet the outlay, and the work will shortly be put in hand.

SMALL-POX IN GLASGOW.

SMALL-POX continues in Glasgow and the neighbourhood to defy the efforts of the sanitary authorities to stamp it out. Last week the number of cases in the city stood at 24, and it has stood at or about this number for some weeks past, the most unsatisfactory feature of the present epidemic being that, while formerly the cases occurred in groups, now they are isolated, leading to the belief that there are various unrecognised sources of infection. At Coatbridge, about ten miles from Glasgow, six cases have occurred.

TINNED LOBSTERS.

WM. BRITAIN, a grocer of North Ormesby, has been fined £10 and costs for selling a tin of lobster, which, on the evidence of Dr. Knott, the medical officer of health, and of the inspector, was black, offensive in odour, and wholly unfit for human consumption. On further investigation, and a visit to the shop, fifteen other tins were in a similar condition, and one at least was "blown," so the prosecution naturally contended that a careful vendor would, from the mere outside appearance, suspect unsoundness. In the opinion of the bench the case was aggravated by the refusal of the vendor to take back the tin which had been bought, and also the contention of the defendant, even in the face of the evidence adduced, that the lobsters were fit for food.

Cases like these, where there are coarse and unmistakable signs of decay, are really not so dangerous to the public health as those which require some farther evidence than those of the senses, and in which an obscure and not well understood fermentation has produced toxalbumins and ptomaines. The supervision of canned goods present practical difficulties; they are seldom examined until some case of poisoning arises or, as in the present instance, a vendor complains. A simple method of taking a sample from a closed tin without injury to the rest of the contents by exposure to the atmosphere is a desideratum well worth the attention of inventors.

NOTIFICATION AND PREVENTION.

A CORRESPONDENT asks whether a general practitioner can demand a fee for notifying a case of infectious disease which has been seen by his assistant and not by himself. It seems obvious that a medical man cannot give his opinion as to the nature of the infectious disease from which a patient is suffering unless he himself has seen such a patient. If he is not in a position to notify he clearly cannot claim the fee. Our

correspondent further asks whether a medical officer of health who finds a boy "in an infectious state in a common thoroughfare" is at liberty to examine the boy there and then without a consultation with the medical attendant. Under such circumstances the medical officer of health would presumably take immediate steps with a view to preventing the spread of infection. As to the question of charge for medical attendance upon the family of a medical officer of health, a fee is not usually expected under such circumstances as those referred to.

INTERCEPTING TRAPS.

M.B., D.P.H., Borough M.O.H., writes: *Apropos* of your comments upon Hornsey and the intercepting traps in the BRITISH MEDICAL JOURNAL of May 20th, will you kindly allow me to call your attention to my letter which appears in the current issue of the *Sanitary Engineer*, and in which I have endeavoured to show that the medical officer of health for Hornsey has signally failed to prove that any ill result has accrued from the omission of the intercepting traps in so many of the houses within his district.

The action of the Hornsey Local Board has been anxiously watched by many who, like myself, are convinced that the "interceptor fad" has been carried too far, and that the great anxiety to exclude sewer air from our house drains has not unnaturally led us to the opposite extreme, so that now the great problem of the day is how to provide efficient ventilation for the public sewers. As I have expressed it elsewhere, "The suggestions laid down in the model by-laws of the Local Government Board for the ventilation of drains may no doubt be admirable from the point of view of the individual householder so long as he remains within his own curtilage." But viewed from the wider aspect of the community, these model by-laws have, I fear, placed us in a most awkward predicament, for what sanitary authority is there that cares to face the serious problem of "compensation" which crops up as soon as the compulsory erection of shafts against private property is mooted?

The plan of ventilation as sketched out by you in the paragraph in question has been advocated by me for some time past, and I feel convinced that it is the only reasonable and safe way out of the difficulty, but I fear that no little opposition will for a time be experienced from headquarters to so radical a change.

TENURE OF OFFICE BY DISTRICT MEDICAL OFFICER.

SAPO writes: I have been elected medical officer for four separate parishes and as I do not reside in three of these I am only temporarily elected, that is for one year. Are the guardians likely to appoint another candidate if he offers himself when the re-election comes on, and if so would the Local Government Board sanction the same without evidence forthcoming that I neglected the work?

*** Our correspondent does not say whether the four parishes have been formed into one district recognised by the Poor Law Board, as if so by residing in one of the parishes he must of course reside in the district and he would then be in a position to claim appointment for life if re-elected at the expiration of the first year. As he has hitherto been elected for one year only it is impossible to say what the guardians might do at the expiration of that period or what the Local Government Board might sanction under such circumstances. If, however, he fails to give satisfaction during his first year of service it will probably be better for all parties that he should not be re-elected at all. If, on the other hand, the four separate parishes constitute four different districts the four appointments would be held independently one of another and any decision of either guardians or Local Government Board in reference to re-election to one of them would not necessarily rule the others.

POOR-LAW APPOINTMENTS: "LEGAL CLAIM" FOR APPOINTMENT AS DISTRICT MEDICAL OFFICER.

SCOTUS writes: There is an impression abroad that if a medical officer resigns his post and there is already another medical man in the district, the latter has some legal claim on the appointment. Would you kindly say if this assumption is correct or not?

*** We cannot see that this assumption is strictly correct. The term "legal claim" in the sense used is, however, scarcely a suitable one, as any non-resident, if fully qualified, would have an equal claim for the appointment, and if elected would, on becoming a resident in the district, be in a position to claim appointment for life.

BRITISH MEDICAL TEMPERANCE ASSOCIATION.—Some time ago three prizes were offered by the Council to students of medicine in their third year for answers to questions on the chemical, physiological, and pathological action of alcohol. The second and third prizes were awarded, but the writer to whom the former was adjudged, proving to have been disqualified from being a fourth-year student, this prize of £3 has fallen to Mr. W. Foster, a student at Edinburgh. At the meeting on May 22nd it was announced that the roll of members and student associates was 416 of the former and 75 of the latter. Of the members, 257 were in England and Wales, 56 in Scotland, 86 in Ireland, and the remainder abroad.

THE Prince and Princess of Wales have consented to open the Poplar Hospital for Accidents at 4.30 P.M. on June 11th.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF OXFORD.

RADCLIFFE TRAVELLING FELLOWSHIP, 1894.—Mr. Gabriel William Stabel Farmer, M.B., M.R.C.S., Balliol College and the London Hospital, was elected Radcliffe Travelling Fellow on May 10th.

UNIVERSITY OF CAMBRIDGE.

DIPLOMA IN PUBLIC HEALTH.—The State Medicine Syndicate have revised the regulations for this examination so as to bring them into complete accord with those recently laid down by the General Medical Council. Candidates will now have to present evidence of having attended the practice of a hospital for infectious diseases, and of having practically studied the pathology of those diseases of animals that are transmissible to man. It is added that the examination will include every branch of sanitary science, and no candidate will be approved by the examiners who does not show a high proficiency in all the branches of study, scientific and practical, which concern the public health.

ANATOMICAL DEPARTMENT.—The General Board of Studies recommend that the fee for partial instruction in anatomy shall in future be 3 guineas per term, to include the charge for material for dissection.

DEGREES.—The following have kept the Acts required for the M.B. and M.D. degrees respectively:

M.B.: T. F. Budden, B.A., of Gonville and Caius College, and C. E. Fish, B.A., of Christ's College.

M.D.: J. J. Macan, M.A., of Jesus College, and C. Latter, B.A., M.B., B.C., of Pembroke College.

UNIVERSITY OF EDINBURGH.

THE following is the list of the candidates who have passed the First and Second Professional Examinations last month, along with the names of two candidates who have been awarded the Thomson Bursary and the Vans Dunlop Scholarship:

OLD ORDINANCE. *First Professional Examination.*—W. Anderson, F. J. H. Bateman, B.A.; J. B. Boyd, C. W. Breeks, A. J. W. Buchanan, J. Cæsar, C. J. Caddick, S. Champion, M. N. Chaudhuri, E. V. Collins, M. Corry, T. M. Coutinho, G. L. K. Finlay, J. V. Fox, W. C. H. Forster, W. H. Goldie, J. Grieve, S. J. Grinsell, W. J. H. Hislop, J. T. Hurst, A. H. James, F. F. Kerr, J. Mackenzie, M. Mackenzie, M. W. Manuk, B. N. Mullan, E. J. Nichols, D. J. C. Oliver, F. W. Rigby, N. H. Ross, D. C. Sethna, J. Stevenson, G. R. Twomey, M. Varis, R. H. Walter, J. O. Williams, and W. E. Williams.

NEW ORDINANCES.—D. V. M. Adams, A. J. T. Allan, V. G. Alexander, J. R. Anderson, E. P. Baumann, W. Bell, H. L. S. D. Belasco, S. Branch, W. Burns, M.A.; A. E. Burroughs, D. Clow, R. V. Cowey, R. Crawford, R. Cumming, L. W. Davies, R. J. Dick, W. H. Dickinson, J. E. Dods, C. L. Dunn, W. S. Eaton, D. Forbes, A. Fordyce, J. S. Fraser, A. T. Gailleton, A. Goodall, J. H. Gordon, W. Gorrie, J. T. P. Heatley, R. Hill, P. Kinmont, F. O. Lasbrey, E. W. Lewis, J. S. Low, W. C. M'Kechnie, R. W. Mackenna, W. W. Maxwell, J. Miller, J. D. S. Millin, L. H. B. Mills, W. J. Nutter, F. M. Parry, H. R. Phillips, R. Pugh, J. A. Raeburn, J. M. Reid, T. Rogerson, R. F. M. Scott (with distinction), W. M. Smith, E. Somerville, G. H. Stewart, W. Tarr, H. Taylor, W. B. Thain, A. H. Thompson, G. E. Twigge-Molecey, W. E. Wallis, W. C. Wilson, A. Wood, A. G. Worrall, and G. J. Young.

Second Professional Examination.—J. Allison, H. H. Balfour, J. Bannerman, N. D. Bardswell, W. J. Bell, G. J. Blackmore, J. B. Blakie, A. S. Brass, H. S. Brockway, D. Brough, S. Carmichael, H. C. Colman, A. J. Copplestone, W. J. C. Coulthard, J. Crawford, R. W. Cunningham, J. Davidson, J. M. Dawson, M. V. Dee, D. F. Dewar, A. Dickson, A. F. Evans, D. Evans, W. Evans, F. W. B. Fitchett, A. W. Fletcher, J. A. Forrest, W. C. H. Forster, G. B. French (with distinction), F. Gardiner, J. W. Geddes, W. E. Gibbons, F. M. Gibson, B.Sc.; J. Gilchrist, J. D. Gilruth, M.A.; L. Grant, M.A.; D. J. Graham, W. T. Grant, J. Gray, M.A.; R. Haygarth, C. M. Hector, G. Henderson, G. P. Henderson, J. H. Henderson, B.A.; J. J. Hewison, M.A.; J. T. Hewetson, A. L. Husband, F. R. Jones, G. King, J. Kirk, J. H. Lamb, H. A. Leebody, G. R. Leighton, R. M. Leith (with distinction), W. J. Lewis, W. Lillie, G. R. Livingston, J. R. Lord, A. M. Love, W. L. Lyall, A. MacCarthy-Morrogh, J. M'Donald, W. M. Macdonald, W. C. W. M'Dowell, T. H. Macfie, J. Maciver, D. M. Mackay, C. MacLaurin, J. Macmillan, J. L. Marjoribanks, W. R. Mander, J. S. Martin, J. Massey, G. H. Masson, J. Mason, R. A. Milne, J. R. Muir, J. G. P. Murray (with distinction), A. G. Naylor, S. D. Ogilvy, T. T. Ormerod, R. Owen, A. D. Peill, W. J. Penfold, W. H. Price, G. L. Procter, R. B. Purves, J. K. Raymond, E. S. Reid, E. G. Richards, H. Richardson, T. Roberts, R. S. Rodger, R. L. Roe, L. C. Saldanha, A. T. Sampson, E. W. K. Scott, J. G. C. Scott, T. M. Scott, T. B. M. Sherwen, C. M. Simpson, E. M. Skeete, B.A., J. E. W. Somerville, J. Stenhouse, A. Steven, J. B. Stewart, J. Stoddart, J. C. Stuart (with distinction), A. C. Sturrock, M.A. (with distinction), D. C. Sutton, H. F. L. Taylor, F. S. C. Thompson, W. H. Thomson, D. Waterston, J. Watt, B.A.; H. G. Waugh, G. A. Welsh, L. A. Williams, G. H. Wilson, and A. D. Yule (with distinction).

The following candidates have passed in Anatomy and Physiology: J. Ballantyne, E. Bramwell, J. Bruce, W. J. Buchanan, W. H. Carse, J. H. Dixon, H. O. Dougall, A. W. Easmon, A. M. Fleming, T. Gibson, W. G. C. Geekie, W. Hewison, W. H. Hill, J. F. Lindsay, A. P. Low, S. M'Donald, A. D. Macpherson, M.A.; M. W. Manuk, F. H. Merry, W. Mowat, J. S. Norwell, B.Sc.; A. L. Owen, A. J. Park, W. T. Ritchie, W. H. Robb, D. Rodger, J. T. Shirlaw, F. O. de Souza, G. E. Stewart, R. Thornton, A. Wallace, A. E. White, and G. F. Whyte.

The Thomson Bursary in the subjects of the Preliminary Examination has been awarded to Mr. James Masson.

The Vans Dunlop Scholarship in the subjects of Anatomy, Physiology, Materia Medica, and Pathology has been awarded to Mr. A. Corsar Sturrock, M.A.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The following gentlemen having passed the necessary examinations and having conformed to the by-laws and regulations, were, at the ordinary meeting of the Council, admitted Members of the College, namely:

Adams, E. G. B., L.R.C.P.Lond.
Annis, E. G., L.R.C.P.Lond.
Armit, H. W., L.R.C.P.Lond.
Arnold, E. G. E., L.R.C.P.Lond.
Barker, T., L.R.C.P.Lond.
Barnes, A., L.R.C.P.Lond.
Batchelor, E. H., L.R.C.P.Lond.
Bate, J., L.S.A.
Beachcroft, F. S., L.R.C.P.Lond.
Bradford, A., M.D.Toronto
Buckley, W. H., L.R.C.P.Lond.
Card, A. H., L.R.C.P.Lond.
Coates, R., L.R.C.P.Lond.
Collier, J. S., L.R.C.P.Lond.
Collis, A. J., L.R.C.P.Lond.
Cookson, F. N., L.R.C.P.Lond.
Cooley, A. G., L.R.C.P.Lond.
Cowan, F., L.R.C.P.Lond.
Davies, T. J., L.R.C.P.Lond.
De Kretser, E. W., L.R.C.P.Lond.
Dick, J. L., L.R.C.P.Lond.
Dick, M., L.R.C.P.Lond.
Dickinson, R. L., L.R.C.P.Lond.
Du Heaume, H. T., L.R.C.P.Lond.
Edmunds, P. J., L.R.C.P.Lond.
Field, G. H., L.R.C.P.Lond.
Firth, E. G., L.R.C.P.Lond.
Fox, G. R., L.R.C.P.Lond.
Fraser, F., L.R.C.P.Lond.
Garrard, F. W., L.R.C.P.Lond.
Garrett, C. D., L.R.C.P.Lond.
Giles, H. O'H., L.R.C.P.Lond.
Goldsmith, A. F., L.R.C.P.Lond.
Goodhue, F. W. J., L.R.C.P.Lond.
Gordon, J. E., L.R.C.P.Lond.
Gordon, J., L.R.C.P.Lond.
Grace, J. J., L.R.C.P.Lond.
Grimsdale, H. B., L.R.C.P.Lond.
Hardenberg, E. F. H., L.R.C.P.Lond.
Hardman, R. S., L.R.C.P.Lond.
Harwood, E. F., L.R.C.P.Lond.
Ince, A. G., L.R.C.P.Lond.
Jones, E. B., L.R.C.P.Lond.
Jones, F. S., L.R.C.P.Lond.
Keith, A., M.B.Aberd.
Kekwick, J., L.R.C.P.Lond.
Keller, H. L. A., L.R.C.P.Lond.
King, A. F. W., L.R.C.P.Lond.
Knapton, H. A. F., L.R.C.P.Lond.
Larnder, H. G., L.R.C.P.Lond.
Leathes, J. B., L.R.C.P.Lond.
Lee, W. E., L.R.C.P.Lond.
Lees, C. A., L.R.C.P.Lond.
Legge, S. C., L.R.C.P.Lond.
Leonard, R. C., L.R.C.P.Lond.
Llewellyn, T. R., L.R.C.P.Lond.
Long, T. F., L.R.C.P.Lond.
McKay, J. G., M.B.Toronto.
Mackinnon, J. A., L.R.C.P.Lond.
March, J. O., L.R.C.P.Lond.
Marris, W. A., L.R.C.P.Lond.
Marsh, E. H., L.R.C.P.Lond.
Marshall, A., L.R.C.P.Lond.
Mathew, G. P., L.R.C.P.Lond.
Matthews, J. C. S., L.R.C.P.Lond.
Miall, C. L'O., L.R.C.P.Lond.
Miller, A., L.R.C.P.Lond.
Miller, W. F., L.R.C.P.Lond.
Mills, A. McF., L.R.C.P.Lond.
Mills, T. I., L.R.C.P.Lond.
Miskin, L. J., L.R.C.P.Lond.
Morris, H., L.R.C.P.Lond.
Morris, R. A., L.R.C.P.Lond.
Mould, G. E., L.R.C.P.Lond.
Murphy, J. K., L.R.C.P.Lond.
Nariman, S. K., L.R.C.P.Lond.
Nicholson, T. G., L.R.C.P.Lond.
Noble, J. W., L.R.C.P.Lond.
Parry, L. A., L.R.C.P.Lond.
Paterson, M. S., L.R.C.P.Lond.
Pead, J. H., L.R.C.P.Lond.
Phillips, R. E. G., L.R.C.P.Lond.
Pinch, A. E. H., L.R.C.P.Lond.
Poole, J. C., L.R.C.P.Lond.
Proctor, G. H., L.R.C.P.Lond.
Pugh, W. G., L.R.C.P.Lond.
Renshaw, H. C., L.R.C.P.Lond.
Rigby, G. O., M.B.Melb.
Rigby, M. N. J., L.R.C.P.Lond.
Robertson, W. J., L.R.C.P.Lond.
Roe, E. E. W., L.R.C.P.Lond.
Romer, F., L.R.C.P.Lond.
Rowbotham, E. J., L.R.C.P.Lond.
Saunders, E. A., L.R.C.P.Lond.
Simpson, F. C., L.R.C.P.Lond.
Slater, G. N. O., L.R.C.P.Lond.
Smith, R. L. B., L.R.C.P.Lond.
Smith, T., L.R.C.P.Lond.
Spicer, H., L.R.C.P.Lond.
Sprawson, F. C., L.R.C.P.Lond.
Staniland, M. F., L.R.C.P.Lond.
Starkey, T. A., L.R.C.P.Lond.
Steele, W. K., L.R.C.P.Lond.
Sterry, J., L.R.C.P.Lond.
Swenden, B. W., L.R.C.P.Lond.
Todd, C., L.R.C.P.Lond.
Tomlinson, G. H., L.R.C.P.Lond.
Toms, P. M., L.S.A.
Tregaskis, E. P. R., L.R.C.P.Lond.
Underwood, F. L., L.R.C.P.Lond.
Waithman, J. C., L.R.C.P.Lond.
Walker, F., L.R.C.P.Lond.
Warke, C. L., L.R.C.P.Irel.
Watts, A. M., L.R.C.P.Lond.
White, C. P., L.R.C.P.Lond.
Wiggins, H., L.R.C.P.Lond.
Wilmot, P. McK. C., L.R.C.P.Lond.
Woodhouse, W. M., L.R.C.P.Lond.

The following gentlemen passed the First Professional Examination in Anatomy and Physiology for the Diploma of Fellow, at a meeting of the Board of Examiners on Thursday, May 17th:

W. M. Stevens, M.R.C.S.Eng., L.R.C.P.Lond., and C. C. Chidell, of University College, London; W. E. Plummer, of Guy's Hospital; J. A. Spear and John P. Maxwell, of St. Bartholomew's Hospital; A. H. Evans, of Westminster Hospital; and J. J. Waddelow, M.R.C.S.Eng., L.R.C.P.Lond., of King's College, London.

Nine candidates were referred back to their professional studies for six months.

Passed on Friday, May 18th:

A. E. Walter, of Middlesex Hospital; J. D. Russell, of University College, London; A. G. Butler, of Guy's Hospital; and H. M. Cooper, of St. George's Hospital.

Twelve candidates were referred back to their professional studies for six months.

Passed on Monday, May 21st:

W. I. Hancock, H. T. S. Bell, C. H. Fagge, and V. E. Collins, of Guy's Hospital; T. R. H. Bucknall and H. J. Price, of University College, London; T. J. Horder, of St. Bartholomew's Hospital; E. Maynard, of London Hospital; F. Riley, of Westminster Hospital; H. P. Noble and C. W. Alford, of Middlesex Hospital; P. S. Lelean, of St. Mary's Hospital: J. E. Barrett, of Melbourne University; and R. J. Horton-Smith, of Cambridge University.

Three candidates were referred back to their professional studies for six months.

Of the 105 candidates who presented themselves for this examination 42 passed and 63 were referred.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.

The following gentlemen have passed the necessary examinations and have been admitted Fellows of the College: J. Small, L.R.C.P.& S.E.; N. H. Forbes, M.R.C.S.Eng., L.R.C.S.Lond.; C. H. Usher, M.B., B.C.Camb.; M. A. Khan, M.R.C.S.Eng., L.R.C.P.Lond.; and H. C. Faulke, L.R.C.P.& S.E., etc.

H. M. Holt, M.R.C.S.Eng., L.S.A.Lond., passed the necessary examinations and received the diploma of Public Health granted by the Royal College of Surgeons of Edinburgh and the Faculty of Physicians and Surgeons of Glasgow.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

Election of Examiners.—The following gentlemen have been elected examiners for the ensuing year:—Anatomy and Surgery: John Barton, Thomas Myles, William Stoker, Sir William Stokes. Physiology and Histology: J. Alfred Scott. Biology: J. Alfred Scott. Pathology: R. Glasgow Patteson. Midwifery and Gynæcology: Samuel R. Mason. Ophthalmology: Arthur Henry Benson, Patrick William Maxwell. Dentistry: John Barton, John J. Burgess, F. T. Porter Newell, Samuel George Reeves, Thomas Studley, Charles Wall. Diploma in State Medicine: J. Dallas Pratt, D. Edgar Flinn, R. Glasgow Patteson, W. H. Malcolmson. Midwifery Diploma: H. Benson Goulding, Samuel R. Mason, Jeremiah O'Donovan. General Education: Robert J. Montgomery, Robert Morton.

SOCIETY OF APOTHECARIES OF LONDON.

The following candidates passed in May, 1894:

Surgery.—D. R. Bernhardt, St. George's Hospital; J. J. Edwards, St. Mary's Hospital; F. S. Flint, Birmingham; A. W. Haines, Birmingham; S. H. Long, University College; W. MacLellan, St. Mary's Hospital; R. Marshall, Manchester; G. P. U. Prior, King's College; E. Ransome, Guy's Hospital; F. W Rock, St. Bartholomew's Hospital; D. M. Ross, St. George's Hospital; A. S. Saunders, St. Bartholomew's Hospital; A. P. Woolright, St. Bartholomew's Hospital.

Medicine, Forensic Medicine, and Midwifery.—W. Allingham, St. George's Hospital; D. R. Bernhardt, St. George's Hospital; G. S. J. Boyd, London Hospital; G. J. Branson, Birmingham; J. S. Challice, London Hospital; J. E. H. Davies, London Hospital; E. E. Dufty, Sheffield; C. F. Le Sage, London Hospital; A. R. McCullagh, Charing Cross Hospital; D. McC. Ross, St. George's Hospital; F. A. Storr, Leeds.

Medicine and Forensic Medicine.—F. C. Sutherland, St. Bartholomew's Hospital.

Medicine.—J. B. D. St. Cyr, St. Bartholomew's Hospital; W. Sutcliffe, Birmingham.

Forensic Medicine.—L. J. K. Lake, King's College.

Midwifery.—D. W. Jones, Charing Cross Hospital.

To Messrs. Bernhardt, Boyd, Branson, Davies, Rock, and Ross, was granted the diploma of the Society entitling them to practise Medicine, Surgery, and Midwifery.

HOSPITAL AND DISPENSARY MANAGEMENT.

THE ROYAL SEA-BATHING INFIRMARY.

We are glad to note that an influential movement is on foot for the purpose of raising this most useful hospital out of the depressed condition in which it lies at present. It is well known that the splendid liberality of Sir Erasmus Wilson did not effect for the institution which he intended to benefit all the good which he no doubt meant. He spent money on this hospital in the same large and generous way that he did on other objects of his bounty—in building a new wing, which, however, he did not live long enough to endow. Had he done so (and his friends are confident that this was his intention) there would, as Lord Cranbrook said at the recent meeting at Grosvenor House, have been no need to ask for subscriptions, but, as it is, there is the most pressing necessity to do so, otherwise the charity must be taken away from the poor, and the beds be filled with paying patients. It would be a great pity, and a distinct contradiction of the wishes of Sir Erasmus Wilson and the other founders of the institution, to effect this transformation. The public, therefore, is to be invited to assist in raising the funds necessary to open the full number of beds—220; and the distinguished names under which the movement is begun justify us in hoping for its complete success.

GLASGOW EAR HOSPITAL.

At the annual meeting Dr. Barr, the aural surgeon, stated that the class of students attending during the winter had been larger than usual; the number of names enrolled had been 54. The director's prizes were awarded to Mr. Wm. Stewart Cook and Mr. John Gillan. Altogether, at various times, over 400 medical students and practitioners have received instruction at the hospital. During the past year the number of new out-patients was 1,043; of in-patients, 56; and of operations under anæsthetics, 31.

Charing Cross Hospital.—The Duke of Cambridge presided at the triennial festival dinner of this hospital, held at the Hôtel Métropole on Saturday, May 19th. The Chairman, in giving the toast of the evening, said the utility of the hospital could be judged by the fact that last year 2,503 in-patients and 23,001 out-patients were treated at the hospital, and of these 25,504 cases were casualties. Having no endowments, the institution had to live from hand to mouth, and he therefore made an earnest appeal on its behalf. Subscriptions to the amount of £3,269 10s. were announced.

Medical Students in Switzerland.—The total number of students of medicine in the various medical faculties of Switzerland is at present 1,009. They are distributed as follows: Zurich, 216 male and 74 female students; Geneva, 173 men, 67 women; Bern, 172 men, 43 women; Basel, 57 men, 3 women; Lausanne, 83 men, 21 women. The total number of female students is, therefore, 208. Of the total number of 1,009 students 366 are foreigners.

MEDICAL NEWS.

The Beckett Hospital, Barnsley, has received a cheque for £1,000 from Mr. W. Birks, of Retford, in remembrance of Mr. Beckett.

A young man has recently died at Shoreham from the effects of a mouthful of carbolic acid with which he rinsed his mouth in mistake for vinegar.

The fund raised among members of the Royal Medical and Chirurgical Society for the benefit of the family of the late Mr. Richard Coldrey, Assistant to the Librarian, amounted to £174 15s. 0d.

Presentation.—Dr. Reginald Koettlitz, upon leaving Butterknowle, where he had been in practice for nine years, was on May 17th presented with a valuable surgical instrument and a purse of sovereigns as a token of esteem and respect by the inhabitants of Butterknowle and neighbourhood.

Lincoln's-Inn-Fields is at last to be thrown open to the public, but the freeholders of the houses round the square are to be paid £12,000 in return for the withdrawal of their opposition to the opening of the garden. This central breathing place of London will now soon be restored to the London population. It was only through neglect that it was ever allowed to get into the hands of the freeholders.

Mr. T. Madden Stone.—In the notice of the late Mr. Stone in the British Medical Journal of May 19th his age was given as 84. We are informed that he was 79. Mr. Stone was buried at Nunhead on May 18th. We may add that last year he presented to the Royal College of Surgeons a valuable selection from the collection of autographs made by him during the last fifty years.

St. George's Hospital Graphic Society.—The general meeting of the St. George's Hospital Graphic Society will be held on Tuesday, May 29th, at 2.30 p.m. By permission of the Board of Governors, the annual exhibition will be held in the Board Room of the hospital, and will be open immediately after the meeting, and will remain open until the end of the week. Visitors are admitted on presentation of their cards on Tuesday and Wednesday from 3.30 p.m. till 5.30 p.m., and on Thursday, Friday, and Saturday from 10.30 a.m. till 5.30 p.m. The Society was started to encourage drawing, painting, photography, and the arts of representation in general amongst St. George's men, and the annual exhibition is strictly limited to the works of members.

The French Medical Press Association.—The French Medical Press Association held its second annual dinner on May 11th, Dr. de Ranse in the chair. Seventeen members were present. A letter from the Czar, acknowledging the courtesy paid to the medical officers of the Russian squadron, was read by the Secretary. MM. Laborde and Marcel Baudouin gave an account of the cordial manner in which the representatives of the Association had been received on the occasion of the Congress in Rome by the medical journalists of Italy, and announced the formation of the International Provisional Committee for the purpose of arranging special facilities for the press at the next Congress.

A Medical Centenarian.—Dr. Salmon, of Penllyn Court, Cowbridge, South Wales, is the oldest doctor and Freemason in the kingdom. He attained last month the ripe age of 104. He joined the "mystic Masons" over eighty years ago, and he is the *doyen* of that body as well as of the Royal College of Surgeons. Although he has lived in Wales for the greater part of his long life, Dr. Salmon is a native of Wickham Market, Suffolk. He has been a justice of the peace for the Cowbridge Petty Sessional Division for forty-six years, and he is also a deputy-lieutenant for Glamorgan. Within two miles of Dr. Salmon's residence there is a lady who was born the day after Dr. Salmon, and who is consequently also in the 105th year of her age.

Medical Society of London.—A *conversazione* of the Fellows and their friends took place at the rooms of the Society on May 21st, and was very numerously attended. An oration was given by Dr. W. M. Ord on "A Doctor's Holiday," which is published in our present issue. Sir Spencer Wells proposed a vote of thanks to Dr. Ord, which was seconded by Dr. C. J. Hare, carried with applause, and felicitously conveyed to the orator by Sir W. B. Dalby, the President of the Society. There was subsequently a reception by the President; after which Mr. R. Ganthony gave some amusing character sketches; and the Bijou Orchestra performed a selection of music.

New York State Colony for Epileptics.—The Governor of New York State has signed the Bill introduced into the State Legislature by Mr. Hamilton Fish providing for the establishment of a State Colony for Epileptics, which passed the Assembly by 96 votes to 4 and the Senate unanimously. The colony is to be known as the Craig Colony, in honour of the late Mr. Oscar Craig, of Rochester. The statute provides for the purchase by the State of 1,800 acres of land in one of the finest spots in the Genesee Valley, where the Shakers, who have hitherto been the owners of the property, have erected two groups of buildings, which with slight alterations will accommodate 300 patients. Indigent epileptics will be received and cared for by the State, but the colony is expected, when fully established, to be nearly self-supporting. There are now more than 600 epileptics in the poorhouses and almshouses throughout New York State.

Pharmaceutical Society of Great Britain.—The annual dinner of members and their friends took place at the Whitehall Rooms, Hôtel Métropole, on May 22nd, under the chairmanship of Mr. M. Carteighe, President of the Society. Those present included other officers of the Society, Sir F. Abel, Bart., Professor Armstrong, Sir W. B. Dalby, Sir Dyce Duckworth, Mr. Thiselton Dyer, Professor Michael Foster, Sir Walter Foster, M.P., Sir A. B. Garrod, Mr. W. Hayes (Dublin), Mr. J. W. Hulke, Professor D. Mendeléeff (St. Petersburg), Dr. F. W. Pavy, Professor G. H. Philipson (President British Medical Association), Professor Rücker, Dr. W. J. Russell, the Master of the Society of Apothecaries, Professor C. Stewart, Professor Thorpe, and many well-known members of the medical profession. The toast of "The Houses of Parliament" was given by the Chairman, and Sir W. Foster responded. Mr. Hulke replied for "The Medical Profession." Professor Mendeléeff, who was received with much applause, and spoke in French, and Professor M. Foster both responded on behalf of "Science." The toast of "The Pharmaceutical Society of Ireland" was acknowledged by the President of that Society, Dr. W. Hayes. Sir Dyce Duckworth proposed "The Pharmaceutical Society of Great Britain and the health of the President," to which Mr. Carteighe, who has now been President for twelve years, replied. The last toast, "Our Guests" was acknowledged by Sir F. Abel and Mr. Thiselton Dyer.

The Treatment of Inebriety in California.—The 31st annual report of the Home for the care of the Inebriate in San Francisco is an interesting and instructive record. This is not a commercial establishment. It is managed by trustees, no one deriving any pecuniary benefit (in this respect resembling the Dalrymple Home) except the regular *employés* on fixed salaries. The Home is empowered by an Act of the Legislature of California, passed in 1870, to receive and detain patients committed or otherwise placed in the institution. The rates vary from £3 to £5 per week. The State thus practically inaugurated the compulsory seclusion of inebriates nearly a quarter of a century ago. Over 25,000 cases have been treated. Among the admissions during last year were "46 so-called 'graduates' of the Keeley, Milen, and similar 'cures,' of which 36 had passed through the regular Keeley treatment." The health record seems to have been good, as of 705 alcoholic admissions, and 102 reputed insane but found to be delirium tremens, making 807 alcoholic cases in all, with 138 in delirium tremens, there was but one death. With morphine the drug is gradually reduced in quantity, but with alcohol at once withdrawn. Dr. Potter truly says that the influence of the mind over the body is so great as to cause the knowledge that alcohol is to be had to induce an overwhelming desire for it; while the certainty that none will be given under any circumstances operates to sustain the nervous system in the fight for recovery.

Clinical Society of London.—The report of the Council to be presented to the annual meeting on May 25th states that the affairs of the Society are in a very prosperous condition. The success of the clinical evenings has been so unequivocal that the Council propose to devote the whole of at least three evenings each session to this branch of work. These meetings will commence not at 8 o'clock, as has been customary, but at 8.30, and will close at 10. Notice of intention to exhibit may be sent to the secretaries up to four days before the meeting, and a list of specimens to be exhibited will be posted to all members before the meeting. The following is the list of officers and Council for the coming year proposed for election to-night:—*President:* John Whitaker Hulke, F.R.S. *Vice-Presidents:* Sir George Buchanan, M.D., F.R.S.; *Frederick Taylor, M.D.; *T. T. Whipham, M.B.; J. G. Glover, M.D.; John Langton; R. W. Parker. *Treasurer:* W. M. Ord, M.D. *Council:* *W. H. Allchin, M.D.; Thomas Barlow, M.D.; W. H. Day, M.D.; H. Handford, M.D.; *W. P. Herringham, M.D.; *Constantine Holman, M.D.; H. M. Murray, M.D.; Sidney Phillips, M.D.; *G. N. Pitt, M.D.; F. T. Roberts, M.D.; Dawson Williams, M.D.; *C. A. Ballance, M.B., M.S.; W. H. Bennett; *W. Watson Cheyne, M.B.; *W. Bruce Clarke, M.B.; *Victor Horsley, M.B., F.R.S.; W. Arbuthnot Lane, M.S.; G. H. Makins; A. W. Mayo Robson, *J. Bland Sutton. *Honorary Secretaries:* W. Hale White, M.D.; A. Pearce Gould, M.S. The gentlemen whose names are maked with an asterisk were not on the Council, or did not hold the same office during the year 1893 4.

MEDICAL VACANCIES.

The following vacancies are announced:

BOROUGH OF BRIGHOUSE.—Medical Officer of Health. Salary, £200 per annum; must reside in the borough. Applications endorsed on the outside "Medical Officer" to the Town Clerk, Public Offices, Brighouse, by May 28th.

BRIDGWATER INFIRMARY.—House-Surgeon. Salary, £70 per annum, with board and residence. Applications to Mr. John Coombs, Honorary Secretary, by June 15th.

BRISLINGTON HOUSE PRIVATE LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £250 per annum, with furnished apartments, board, and washing; doubly qualified. Applications to Dr. Bonville Fox, Brislington House, near Bristol.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—House-Physician. Board and residence and allowance for washing. Appointment for six months. Applications and testimonials to T. Storrar-Smith, Secretary, 24, Finsbury Circus, E.C., by June 11th.

COUNTY LUNATIC ASYLUM, Lancaster.—Assistant Medical Officer, to act also as Pathologist. Salary, £100, increasing £25 annually to £200, with board, etc.; and an Assistant Medical Officer. Salary, £100 per annum, with board. Appointments for five years. A Qualified Dispenser also required, unmarried. Salary to commence at £50, with board, etc. Applications to the Medical Superintendent.

DURHAM COUNTY HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board and lodging. Appointment for two years. Applications to V. K. Cooper, Honorary Secretary, 16, South Bailey, Durham, by June 1st.

EARLSWOOD ASYLUM FOR IDIOTS, Redhill, Surrey.—Fully qualified practitioner to take charge of the Asylum. Age 30 to 40. Salary, £500 per annum, with furnished residence and coals and gas. Applications endorsed "Medical Superintendent" to the Board of Management at the offices, 36, King William Street, London Bridge, E.C., by June 12th.

FLINTSHIRE DISPENSARY.—Resident House-Surgeon. Salary, £120 per annum, with furnished house (rent and taxes free), and coal, light, water, and cleaning, or in lieu thereof £20 per annum; knowledge of Welsh desirable. Applications to W. T. Cole, Secretary, Board Room, Bangillt Street, Holywell, by June 5th.

GENERAL HOSPITAL, Birmingham.—Assistant House-Surgeon. Board, residence, and washing provided. No salary. Applications to the House-Governor by May 26th.

GLAMORGANSHIRE AND MONMOUTHSHIRE INFIRMARY, Cardiff.—Assistant Resident Medical Officer. Appointment for six months. No salary, but board, washing, and apartments. Applications and testimonials to G. T. Colman, Secretary, by June 9th.

GLASGOW EYE INFIRMARY.—Resident Assistant House-Surgeon. Salary, £50, with apartments and board. Applications to William George Black, Secretary, 88, West Regent Street, Glasgow, by June 11th.

GLASGOW MATERNITY HOSPITAL, 146, Buchanan Street, Glasgow.—Indoor and Outdoor Surgeons. Applications to Arthur Forbes, Secretary, by June 9th.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway Road, N.—Junior House-Surgeon. No salary; board, apartments, and laundry provided. Applications to the Secretary by May 28th.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway Road, N.—Casualty Officer; must reside in the immediate neighbourhood of the hospital. Honorarium at the rate of 50 guineas per annum. Applications to William T. Grant, Secretary, by May 28th.

GROSVENOR HOSPITAL FOR WOMEN AND CHILDREN, Vincent Square, Westminster.—Anæsthetist. Applications to the Secretary by June 1st.

HOSPITAL FOR EPILEPSY AND PARALYSIS AND OTHER DISEASES OF THE NERVOUS SYSTEM, 32, Portland Terrace, Regent's Park, N.W. Physician to Out-patients. Applications to the Secretary by June 8th.

HOSPITAL FOR SICK CHILDREN, 18, Royal Arcade, Newcastle-on-Tyne.—Resident Medical Officer; doubly qualified. Salary, £60 per annum, with board, lodging, and laundry. Applications to Robert J. Gibson, Secretary, by May 31st.

JAFFRAY SUBURBAN BRANCH OF THE GENERAL HOSPITAL, Gravelly Hill, near Birmingham.—Resident Medical and Surgical Officer; doubly qualified. Salary, £150 per annum, with board, residence, and washing. Applications to the House-Governor, General Hospital, Birmingham, by May 29th.

LIVERPOOL STANLEY HOSPITAL.—Assistant Honorary Surgeon. Applications to J. E. Bennett, Honorary Secretary, by May 31st.

NEWABBEY PAROCHIAL BOARD.—Medical Officer. Salary, £50 per annum; to provide medicines and surgical appliances gratis. Applications to Captain Stewart Shambellie, Chairman of the Board, Newabbey, Dumfries.

NEW HOSPITAL FOR WOMEN, 144, Euston Road.—Female Resident Medical Officer and Female Clinical Assistant for Out-patient Department. Applications to the Secretary by May 26th.

NORTH STAFFORDSHIRE INFIRMARY AND EYE HOSPITAL, Hartshill, Stoke-upon-Trent.—Honorary Assistant House-Surgeon. Applications to the Secretary by June 5th.

OXFORD EYE HOSPITAL.—House-Surgeon. Board and lodging, and honorarium of £50 at completion of a year's residence. Applications to B. H. Baden-Powell, Honorary Secretary, 29, Banbury Road, Oxford, by June 15th.

PARISH OF BIRMINGHAM.—Resident Assistant Medical Officer for the Workhouse Infirmary. Salary, £100 per annum, with furnished apartments, rations, coals, gas, washing, and attendance. Applications (on printed forms to be obtained from the clerk) to Walter Bowen, Clerk to the Guardians, Parish Offices, Edmund Street, Birmingham, by May 31st.

PARISH OF ST. GEORGE IN-THE-EAST.—Infirmary and Workhouse Medical Officer. Salary, £350 per annum, with unfurnished house, gas, coal, and water. Applications and testimonials by June 1st to J. R. Browne, Clerk. Clerk's Office, Raine Street, Old Gravel Lane, E.

PUBLIC DISPENSARY, 59, Stanhope Street, Clare Market.—Resident Medical Officer. Salary, £105 per annum, with furnished apartments, coals, and gas. Applications to the Secretary by June 8th.

ROYAL FREE HOSPITAL, Gray's Inn Road, W.C.—Two Resident Medical Officers; doubly qualified; no salary; board, lodging, and washing provided. Applications to the Secretary by June 2nd.

ROYAL ORTHOPÆDIC HOSPITAL, 297, Oxford Street.—Resident House-Surgeon and Apothecary. Salary, £100 per annum, with partial board. Must be M.R.C.S.Eng., L.R.C.P., and unmarried. Applications and testimonials to the Secretary by May 31st.

ROYAL SOUTH LONDON DISPENSARY, St. George's Cross, S.E.—House-Surgeon, non-resident. Salary, £60 per annum. Applications to the Committee of Management by May 28th.

TIPPERARY COUNTY INFIRMARY.—Surgeon. Salary, £100 per annum. Candidates must be Fellows of the Royal College of Surgeons in Ireland. Applications to Mr. James J. Chadwick, Secretary. Election on June 22nd.

UNIVERSITY COLLEGE, Liverpool.—George Holt Chair of Pathology and Derby Chair of Anatomy. Endowment, £375 per annum each, with share of fees. Applications to the Registrar by June 2nd.

WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.—Dental Surgeon. Duly qualified and registered. Must attend the House Committee on Tuesday, June 5th.

WORCESTER GENERAL INFIRMARY.—Assistant House-Surgeon and Dispenser. Salary, £70 per annum, with board, residence, and washing. Applications and testimonials to William Stallard, Secretary, by June 2nd.

THE YORKSHIRE COLLEGE, Leeds, Department of Medicine.—Honorary Demonstrator of Surgical Pathology. Applications to the Secretary by May 31st.

MEDICAL APPOINTMENTS.

DURRANT, W. J., M.B., B.S.Durh., appointed Surgeon to the Hospital for Diseases of Women, Newcastle-on-Tyne, *vice* Charles Gibson, M.D., deceased.

FULTON, Geo. C. H., M.B., C.M.Glasg., appointed Medical Officer for the New Sanitorium, Eston Local Board District.

HUGHES, J. H., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer for the Sutton-on-Trent District of the Southwell Union, *vice* G. B. Griffiths, M.R.C.S., L.R.C.P.Lond., resigned.

HUNT, J. Aspinall, L.R.C.P.Edin., M.R.C.S.Eng., appointed Public Vaccinator for the Sponder District of the Shardlow Union, *vice* T. C. Cade, M.R.C.S.Eng., L.S.A., deceased.

McAVOY, Dr. Hugh, appointed Junior House-Surgeon to the Jervis Street Hospital, Dublin.

McCOMISKEY, A. W. S., M.B., B.Ch., R.U.I., L.R.C.P.I., appointed Medical Officer to the Killough Dispensary District, *vice* S. S. Stephenson, L.R.C.P., L.R.C.S.Edin., deceased.

McDOUGALL, A. H., M.R.C.S., L.R.C.P.Lond., appointed Medical Officer of the Crumpsall Workhouse and of the New Bridge Street Receiving and Casual Wards of the Township of Manchester.

MOLLOY, William J., M.B., B.Ch., R.U.I., appointed Senior House-Surgeon to the Jervis Street Hospital, Dublin.

MULLALLY, W. T., M.D., M.Ch., R.U.I., Dip.San.Scien., R.C.P.I., appointed one of the Honorary Physicians to the Ballarat District Hospital, Australia.

O'CONNOR, Mr. John E., appointed Medical Officer for the Glenfield District of the Cockermouth Union.

PARE, J. W., M.D.Edin., C.M., L.D.S., appointed Demonstrator to the National Dental Hospital.

PATRICK, Robert, M.D.Durh., L.R.C.P.Edin., M.R.C.S.Eng., reappointed Honorary Surgeon to the Bolton Infirmary and Dispensary.

ROBERTS, Edward, M.R.C.S., appointed Surgeon to the Manchester Royal Eye Hospital.

SAYERS, Dr, appointed Medical Officer and Public Vaccinator for the Wincanton District of the Wincanton Union, *vice* H. O. H. McDougall, L.R.C.P.Edin., M.R.C.S.Eng., resigned.

SHAW, R. F., L.R.C.P., L.R.C.S.Edin., appointed Medical Officer for the Kirkburton District of the Huddersfield Union.

SKEEN, Jas. H., M.B., C.M.Aberd., appointed Medical Superintendent to the Kirklands Asylum, Bothwell.

STEINTHALL, Wm., M.R.C.S.Eng., appointed Resident Assistant Medical Officer to the Crumpsall Workhouse of the Township of Manchester.

TWYFORD, W., M.R.C.S., L.R.C.P.Lond., appointed Medical Officer for the Audlem District of the Nantwich Union.

WEEKES, H. H., M.R.C.S., L.R.C.P.Lond., appointed Medical Officer for the Gillingham District of the Medway Union.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Bacteriological Laboratory, King's College, W.C., 3 to 5 P.M.—Lecture: Anthrax and Malignant Œdema. Practical Work: Staining Sections. London Throat Hospital, Great Portland Street, 8 P.M.—Mr. George Stoker: Chronic Glandular Diseases of the Naso-pharynx.

ROYAL COLLEGE OF SURGEONS, 5 P.M.—Erasmus Wilson Lectures. Mr. J. H. Targett, M.S., F.R.C.S. Lecture I.: On the Pathology of Hydatids in Bone.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr. Percy Smith: Puerperal and Lactational Insanity.

THE CLINICAL MUSEUM, 211, Great Portland Street.—Open at 2, Lecture at 4.

WEDNESDAY.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 1 P.M.—Dr. Payne: Pemphigus and its Allies.

POST-GRADUATE LECTURES, Metropolitan Hospital, N.E., 5 P.M.—Dr. Gow: The Surgical Aspect of Tubal Disease.

ROYAL COLLEGE OF SURGEONS, 5 P.M.—Erasmus Wilson Lectures. Mr. J. H. Targett, M.S., F.R.C.S. Lecture II: On the Pathology of Hydatids in Bone.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and Epileptic, Queen Square, 2 P.M.—Dr. Beevor: Muscular Atrophy. Hospital for Sick Children, Great Ormond Street, 3.30 P.M.—Dr. Barlow: Clinical Lecture. Central London Sick Asylum, Cleveland Street, W., 5.30 P.M.—Dr. Pye-Smith: Cases in the Wards.

NEUROLOGICAL SOCIETY, 8.30 P.M.—Dr. Alexander Bruce: (1) The Relations of the Lemniscus: (2) The Connections of the Auditory Nerve (with lantern demonstration).

FRIDAY.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY, West London Hospital, 8 P.M.—Clinical meeting. Dr. Scanes Spicer: Case illustrating the Radical Cure of Fœtid Suppuration of the Nose by Free Opening, *Curettement*, and Drainage of Maxillary Antrum. Mr. McAdam Eccles: (1) Case of probable Deposit of Urates of Soda in the Scrotum; (2) Case of Multiple Tumours of Abdominal Wall. Mr. T. R. Atkinson: Case of Multiple Lipomata. Mr. L. A. Bidwell: (1) Congenital Tumour over Sacrum; (2) Syphilitic Disease of Humerus which caused Spontaneous Fracture. Dr. Morgan Dockrell: (1) Rodent Ulcer of Twenty Years' Duration treated with Resorcin; (2) Case of Mycosis Fungoides. Dr. Abraham: Cases of Skin Disease.

ROYAL COLLEGE OF SURGEONS, 5 P.M.—Erasmus Wilson Lectures. Mr. J. H. Targett, M.S., F.R.C.S. Lecture III. On Tumours connected with the Kidney in Children.

SATURDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M.—Dr. Hyslop: Climacteric and Senile Insanity.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTH.

LEONARD.—On May 11th, at The Terrace House, Camberwell Green, London, S.E., the wife of Stephen Leonard, L.A.H. and L.R.C.P., of a son.

DEATH.

WEIR.—On May 17th, at St. Mungho's, Grea Malvern, Archibald Weir, M.D., F.R.C.S.Edin., aged 65 years.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies.*

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

COST OF CARRIAGE AND HORSE KEEP.

MEDICUS wishes to know what would be the approximate cost of keeping a vehicle in a middle-class London suburb, under the following conditions: (1) Horse, trap, and man kept. (2) Horse and trap kept at livery, surgery boy used as coachman. (3) Horse and trap hired by contract, say for three hours a day. Boy used as in (2).

*** The approximate cost would vary entirely according to the style. Arrangement (1) would be the most expensive, and could probably not be done under £150 per annum. Arrangement (3) would of course be the least expensive.

DEATH-RATE OF GENERAL PRACTICE.

M.D. wishes to know what, under ordinary circumstances, would be considered a fair average death-rate, in a mixed, middle, and lower class practice in London, counting all patients attended, whether cases trivial or severe.

*** This appears to be an insoluble problem, as it would depend on so many data which it is quite impossible to obtain. Many of the patients that come under a busy general practitioner in the course of the year pass out of his sight, and he does not in the least know what becomes of them; they may even in the year be attended by several different practitioners, so that practically it would be quite impossible to tabulate any death-rate with the smallest claim to accuracy.

ANSWERS.

F.R.C.S.—Classes for teaching "lip reading" to the dumb, and or improvement of defects of speech, are held by Miss E. F. Boulbee, 37, Gloucester Place, W.

VOICE TRAINING AND ARTICULATE SPEECH.

WE have received a number of letters from correspondents who, in reply to "Aphonia's" question in the BRITISH MEDICAL JOURNAL of May 19th, p. 1115, recommend the method of voice training employed by Mrs. Emil Behnke, of 18, Earl's Court Square, S.W.

TREATMENT OF CHYLURIA.

SURGEON-MAJOR H. J. BARNES, M.S. (Ahmadnagar, India), writes, in reply to "Army Surgeon's" question in the BRITISH MEDICAL JOURNAL of March 17th: Some years ago, while serving in the West Indies, I was called in consultation on the case of a lady who had been a lifelong sufferer from chyluria, and for whom all the usual remedies had been tried without effect. As she was suffering from considerable nervous exhaustion, I—more, I confess, with the idea of improving her general health than with a view to any specific effect upon the chyluria—prescribed an emulsion of cod-liver oil with syrup hypophosphit. co. (Fellowes), made with the yolks of eggs. To the surprise of everyone connected with the case, the result of this treatment was the entire disappearance of the chyluria. As to the *modus operandi* of the treatment, presumably the syr. hypophosphit. co. has some direct effect on the larvæ of the filaria. Apparently the worm itself was not killed, as the chyluria recurred occasionally, though in very slight degree compared to its former severity, when it was not unusual for the coagulum to form inside the bladder. I gave the syrup in full doses.

NOTES, LETTERS, Etc.

ANSELL v. TAIT.

DR. G. T. KEELE, Treasurer (81, St. Paul's Road, Highbury), writes: Will you kindly acknowledge the following additional subscriptions to the above fund?

	£	s.	d.		£	s.	d.
Mr. Thomas Smith ...	5	5	0	Mr. D. O. Fountaine... ...	1	1	0
Dr. R. D. Batten	2	2	0	Dr. D. McB. Greig	1	1	0
Mr. Anthony A. Bowlby...	2	2	0	Mr. C. P. Hooker ...	1	1	0
Dr. T. Lauder Brunton ...	2	2	0	Dr. J. Langton Hewer ...	1	1	0
Dr. F. H. Champneys ...	2	2	0	Mr. C. M. Kelly	1	1	0
Mr. W. Bruce Clarke ...	2	2	0	Dr. John Mulvany	1	1	0
Dr. Walter Griffiths ...	2	2	0	Dr. A. M. Phelps	1	1	0
Mr. John Langton... ...	2	2	0	Mr. D'Arcy Power	1	1	0
Mr. W. J. Walsham ...	2	2	0	Mr. Henry Power	1	1	0
Mr. Henry T. Butlin ...	2	0	0	Dr. Leonard Remfry ...	1	1	0
Dr. John Abercrombie ...	1	1	0	Dr. A. E. Sansom	1	1	0
Mr. E. Calthorpe	1	1	0	Mr. Alexander Scott ...	1	1	0
Mr. W. Dingley	1	1	0	Mr. H. G. Sworn	1	1	0
Mr. Alban Doran	1	1	0	Dr. E. D. Berton	1	1	0
Dr. D. Fairweather ...	1	1	0	Dr. E. Clapham	0	10	6

REGISTRATION OF DEATH WITHOUT MEDICAL CERTIFICATE.

MR. J. BARLOW, Chemist and Druggist, Grocer, and Wine and Spirit Merchant (Blackheath, nr. Dudley) writes: Referring to your report in the BRITISH MEDICAL JOURNAL of May 12th, page 1043, I beg to say that I made no examination of the child whatever, neither did I charge a shilling for the box of ointment, nor promised to give a certificate of death, nor promised to attend at the house.

THE AIR OF SCHOOLS.

DR. C. STENNETT REDMOND, a member of the Gateshead School Board, writes with reference to a paragraph under the above heading published in the BRITISH MEDICAL JOURNAL on May 5th, that "under the 'Plenum System' of combined warming and ventilation, patented and perfected by Mr. W. Key, of Glasgow, the air of a school can be changed as often as twelve times in an hour without any appreciable draught, as I have myself experienced in a large school in Glasgow."

*** Our observations referred to the condition of things commonly to be found in schools. A perfect system of ventilation would be one by which warmed or cooled air should be propelled or exhausted by mechanical force. The defect of most propulsion systems is that while large streams of air traverse the room there is a greater liability for dead or stagnant spaces to be left in corners out of the main route. The success of any particular system of propulsion must depend mainly upon how far it obviates this stagnation while at the same time avoiding draughts.

DISLOCATION BY MUSCULAR ACTION.

DR. L. P. GIBSON (Cowes) writes: The following case is, perhaps, a little unusual. A patient of mine, a very strongly-built young man, was requested by a friend to draw the cork of a champagne bottle that had defied the waiters of a *table d'hôte*. Taking the bottle in his left hand in the usual way, he endeavoured to pull the cork with his right, and in trying to do so he dislocated his left ulna backwards. He had no history of previous dislocations nor any apparent weakness of any joints. I have seen no record of a similar case.

SULPHUR AND DIPHTHERIA.

M.R.C.S. writes: I notice a remark of one of your correspondents that sulphur had only a local effect in diphtheria. Surely this is underrating its action, for it is freely excreted by the mucous membrane and by the skin, as is shown by any silver worn by patients taking the drug. I have not the slightest doubt that by being secreted by the mucous membrane of the throat the bacteria are attacked in front and rear, and are thus made to sicken of the contest. Of fifteen cases so treated, most of them very serious ones, the membrane has withered on the second or third day, never to return. The writer also remarks how seldom sulphur seems to be used. The history of Naaman the Syrian will account for this. Indeed I always suppress the name as far as is possible, as patients themselves despise a remedy so simple. Thirty grains every three hours is my dose, swallowed dry, as in this way it sticks to the throat.

A SEXLESS MONSTER.

DR. GEORGE WILLETT (Keynsham, Somerset) writes: On April 23rd I was called to see Mrs. B., a multipara, said to be in labour. On arrival I was told that the waters had broken an hour earlier and that the pains had been frequent and severe before, but had then ceased immediately. I found the os well dilated and protruding through it a substance which I took to be placenta. As bleeding was pretty free I brought down the feet and after some trouble and a good deal of traction delivered a full-time fœtus, the after-coming head presenting the most serious resistance to the slight expulsive efforts of the uterus. The child proved to be a sexless monster. It presented no trace of external genitals and no anus; it had a spina bifida as large as a good-sized orange springing from the lumbar region, and on its abdominal aspect above the umbilicus and of similar size to the last, it had a cyst or expansion of abdominal wall ruptured and containing the liver, stomach, spleen, and small intestines. In addition to all this it had a double talipes valgus.

LETTERS, COMMUNICATIONS, ETC., have been received from:

(**A**) Mr. J. Attfield, London; Dr. J. T. Arlidge, Stoke-on-Trent; Mr. E. Atkinson, Leeds; Mr R. B. Anderson, London. (**B**) Mr. W. F. Brook, Swansea; Mr. S. C. Bloxham, London; Dr. Thomas Barr, London; H. G. Barling, M.B., Birmingham; Mr. J. Barlow, London; Dr. F. C. Barker, Kattiawar; Mr. R. J. Bedford, Kegworth; Mr. D. Biddle, Kingston-on-Thames; Dr. J. Barr, Liverpool; Mr. K. Behnke, London; K. B. Barnett, M.B., Colchester; Barrister; R. M. Brown, M.B., Derby; F. W. Burton-Fanning, M.B., Norwich. (**C**) Mr. D. Costine, Liverpool; Dr. E. J. Cave, Crewkerne; Dr. G. Cowen, New Malden; Mr. G. Clifford, London; Mr. G. E. Claxton, London; C. Collingwood, M.B., London; Dr. W. M. Campbell, Liverpool; F. W. Clark, M.B., Lowestoft; J. J. Clarke, M.B., London; Dr. A. H. W. Clemow, London; Clergyman; Carrandra; Mr. T. E. Constant, Scarborough; Mr. E. S. Cockell, West Hartlepool. (**D**) W. J. Durrant, M.B., Newcastle-on-Tyne; D.; Dr. P. G. de Saussure, Charlestown, S.C.; Mr. A. Douglas, Matlock; Dico; Mr. D. Dupré, London; Dr. H. Drinkwater, Wrexham. (**F**) Fal.; Mr. C. E. S. Flemming, Bath; G. C. H. Fulton, M.B., South Eston; F.R.C.P. (**G**) Mr. W. Galton, London; Messrs. Grierson, Oldham, and Co., London; Mr. G. Godding, Southsea; Messrs. Charles Griffin and Co., London; P. R. Griffiths, M.B., Cardiff. (**H**) Mr. W. Hall, Southampton; Dr. S. L. Haynes, Malvern; Dr. W. E. Hacon, Christchurch, New Zealand; Mr. J. A. Hunt, Borrowash; Dr. H. C. Highet, Singapore; Mr. H. N. Hardy. London; Dr. E. Holland, London; Mr. G. Hamilton, Daventry; Hopeful; Dr. L. Humphry, Cambridge. (**J**) Mr. S. E. Jones, Mold; Dr. C. E. Jennings, London; J. Y.; Mr. F. W. Jollye, Alresford. (**K**) Mr. G. T. Keele, London; Mr. E. M. Knapp, Ross. (**L**) Mr. F. Little, London; Dr. H. H. Lankester London; Mr. J. Lawrence-Hamilton, Brighton. (**M**) Medicus; Mr W. Marriott, London; Dr. H. P. Major, Hungerford; Dr. E. Malins, Birmingham; T. F. Macdonald, M.B., Glasgow; Dr. J. W. Miller, Dundee; Mr. P. McDonald, New Abbey; Messrs. S. Mackenzie and Co., Dover; M.D., F.R.C.S.E.; Dr. W. T. Mullally, Ballarat; Mr. J. D. Menzies, Bournemouth; Mr. G. H. Makins, London; M.D. Lond.; Member. (**N**) Dr. T. W. A. Napier, Egremont. (**O**) W. J. O'Meara, M.B., London; Dr. W. M. Ord, London. (**P**) Mr. C. E. Pinfold, York; Mr. E. Playter, Ottawa; Mr. C. J. Prime, Butterknowle; Dr. J. W. Pare, Leyton; Mr. J. E. Panton, Watford. (**R**) Dr. B. Rake, Trinidad; Mr. T. Ryan, London; Dr. N. Raw, Dundee; Dr. H. B. Robinson, London; Dr. A. Rosenau, Bad Kissingen; E. Roberts, M.B., Manchester; Revilo; Mr. H. J. Roberts, Pen-y-groes. (**S**) Mr. R. R. Sleman, London; Mrs. E. Stone, London; Senex; Mr. O. Sunderland, Bexley Heath; C. Slater, M.B., London; Dr. A. Swann, Batley; Dr. F. J. Smith, London; E. Solly, M.B., Harrogate; Dr. A. Sheen, Cardiff; Mr. W. Stallard, Worcester; Mr. H. J. Searle, London; Dr. L. G. Smith, London; Messrs. J. Squire and Sons, London; Mr. G. Stevens, Bury-St.-Edmunds; Dr. H. Snow, London; Mr. G. S. Stansfield, Birkenhead. (**T**) Three Years in the Rank; Mr. B. R. T. Trevelyan, Bath. (**U**) Unqualified. (**V**) Dr. H. Verdon, London; Mr. H. Vezin, London. (**W**) Mr. H. E. Walker, Corwen; W. H.; Mr. W. B. Wedgwood, King's Lynn; Dr. T. Wallace, Cardiff; Mr. W. R. Williams, Preston; E. T. Wynne, M.B., West Brighton; Dr. A. G. Welsford, Dover; Mr. J. W. Wrangham, Tewkesbury; Mr. O. Withers, Sale; etc.

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***** In forwarding books the publishers are requested to state the selling prices.**

SOME OBSERVATIONS ON OUR OUT-PATIENT DEPARTMENTS.

BY SIR EDWARD H. SIEVEKING, M.D.,
Consulting Physician to St. Mary's Hospital, etc.

Now that the Medical Schools of London aspire to form a constituent part of a university, it becomes necessary that each governing body should put its house in order. The fact that the London hospitals have hitherto been regarded mainly as charities, destined for a certain class of sick only, must yield to the more important fact that their chief function, by force of circumstances, has become the training and education of the medical student. The greater attention paid during the last fifty years to the development of workhouse infirmaries, the admirable manner in which these are conducted, the spread of excellent nursing of the poor, both in and out of the infirmaries, renders the exclusively eleemosynary character of our hospitals a minor consideration. Their teaching value, and the teaching power of their medical officers, now, more than ever before, assume a position of national importance.

It is especially with reference to our out-patient departments that I venture to submit a few remarks which appear to me to bear closely upon the present tendencies, though for the last forty years I have borne similar testimony when the opportunity offered.[1] Hitherto the ardent love of their profession has induced our out-patient physicians and surgeons to submit to unreasonable demands of the governors of hospitals which ought no longer to be borne; a regulated system should be uniformly introduced which would enable the students to study disease and its treatment in a manner which the unavoidable urgency of time and the numbers of the patients at present render generally impossible. As I have said elsewhere, the out-patient departments ought to bridge over the interval between clinical instruction in the wards and independent practice. The numbers that at present attend as out-patients render adequate teaching perfunctory, and it is quite impossible for the physicians and surgeons, however they may be conscious of the flagrant abuses to which the out-patient department is subjected, to distinguish between deserving and undeserving applicants. Both on economic as well as on scientific grounds (the latter of which I am alone concerned with at present), a thorough weeding out of unsatisfactory cases is the first consideration.

If the view is adopted and acted upon that the out-patient departments of our hospital schools of medicine are to be made more prominent features in medical education than has been hitherto the case, there are three factors that require special notice and demand great attention. They are: 1, the patients; 2, the students; and 3, the teachers.

1. *The Patients.*—If the teaching is to be effective it seems to follow that a definite mode of selection of suitable cases must be adopted. A variety could not fail, and probably every school would prefer its own procedure to having one dictated to it. If the principle is adopted, a definite number of new cases should be agreed upon, and any surplus should either be handed over to other institutions or left to their own discretion. A long experience in hospital work teaches us that patients to whom special clinical attention is paid would be rather flattered than not by their particular cases receiving the extra care and discussion which would be unavoidable. Perhaps the physician or surgeon in attendance would most speedily discriminate at a cursory glance the particular form of disease specially suitable for teaching: which patients should be left to the house-physicians or house-surgeons, or which admitted to his consulting room. These, as well as other matters connected with the question, require careful elaboration, and would, assuming the main principle to be acceptable, probably be best solved by a discussion of the points of practical importance by a friendly meeting of the physicians and surgeons of out-patients of the London schools of medicine.

2. *The Students.*—The haphazard way in which medical students have attended the out-patient departments has generally been of a most irregular and perfunctory kind, and ought under any circumstances to be put an end to. It seems very doubtful whether they ought to be permitted to receive instruction such as can be conveyed in the out-patient department until after they have not only attended to systematic lectures on medicine and surgery, but also received bedside instruction in the wards of the hospital. They ought to have laid a foundation to their practical knowledge of disease and the social as well as therapeutic treatment of patients, from their clinical, before they present themselves to their policlinical,[2] teachers. Each student should, after the case has been duly examined and the outline of treatment determined by the physician or surgeon, be required to take notes of the case and its progress, and, if requested by his teacher, to follow it up at home and report upon it. The limitation of the number of patients would prevent any abuse of such a system and avoid converting the policlinic into an ordinary dispensary, or appearing to compete with the neighbouring general practitioners. If this method is conscientiously and rigidly carried out, it would in a great measure form a substitute for advantages often attributed to the ancient apprenticeship: while, as said before, it would serve to bridge over the chasm that now exists between hospital teaching and independent practice.

3. *The Teachers.*—If the proposed system is carried out, it is not calculated to increase the drudgery of the present out-patient work, but to enhance the intellectual interest and the prestige, now not very exalted, attaching to the office of out-patient physician and surgeon. The terms, which are most misleading, of "assistant-physician" and "assistant-surgeon" should be reserved for cases in which the physicians or surgeons are really assisted by their subordinates, and not applied to gentlemen whose qualifications and social status are in every way equal to those of the gentlemen attending the in-patients. It is a question whether it would not be wise to let each class of officers be interchangeable annually, so that the clinical and policlinical professors had throughout the same interest in the students and their careers. The question of fees requires reconsideration, the more so as, under such a system as proposed, there would be a similarity of duties and responsibilities. It certainly seems hard that, according to present arrangements, the arduous work of the out-patient officers is neither acknowledged by prestige nor by remuneration. Labouring as they do, they have never found a politician to make pets of them, and it is only common justice that their claims to recognition and to reward for their devotion to the public good should be listened to, though they themselves are probably the last to advance them. There seems no reason why the fees now received for hospital practice should not be equally divided by all who are engaged in teaching, whether in the wards or in the out-patient department.

The object of the foregoing remarks is solely the advancement of the scientific study of medicine and an enlargement of the value of our large hospitals. It is not to be denied that there are difficulties; especially is it to be apprehended that some of the present supporters of hospitals may be alienated when they find that they do not obtain an exact *quid pro quo* for their subscriptions. But it is to be hoped that, when they understand the importance of doing everything that is possible for the advancement of the most beneficial of all professions, and know the sacrifices made by those who cultivate it, their objections may yield.

If my readers adopt the general views suggested in the preceding remarks, there ought to be no doubt that their

[1] The gist of the present remarks are to be found in the Report of the General Medical Council's Report on Professional Education for 1869, p. 157.

[2] The term "policlinical" has not found favour in England, but it seems very convenient as a substitute for our more cumbrous term. When it was first suggested to a distinguished Oxonian friend of the writer many years ago, now deceased, he misinterpreted it as being derived from πολυς and not from πολις.

influence would sooner or later ensure a realisation of the principles involved, and thus place the medical schools of London and the country on even a higher plane than they have already occupied.

AN INTRODUCTORY ADDRESS
ON
THE RELATIONS OF DERMATOLOGY TO GENERAL MEDICINE.

Delivered at the First Meeting of the Dermatological Society of Great Britain and Ireland.

BY P. H. PYE-SMITH, M.D., F.R.S.,

President of the Society, and Physician to Guy's Hospital.

THERE is, perhaps, no branch of medicine, not even ophthalmic surgery, which is so instructive in the broad principles of pathology and therapeutics, as that of diseases of the skin. Like the eye, the affected parts are obvious and easily investigated; so that we can see the various stages of disease which are invisible in the case of the mucous membranes, the solid viscera, or the bones and joints.

Unfortunately it was long before the morbid changes of the skin were studied as a matter of direct observation. The two foibles of medicine—the desire to explain instead of to investigate which has always impeded pathology, and the desire to cure instead of to understand which has always obstructed therapeutics—have been, perhaps, more mischievous in this than in any other department.

At the new birth of science which followed that of literature and art in the sixteenth century, medicine was found dominated by the ancient Greek hypothesis of the four humours with the temperaments which resulted from their union. The whole of a physician's knowledge then consisted of an acquaintance with Latin writers and Latin translations of Greek and Arabian writers, a knowledge of books and phrases and theories, with contented ignorance of objects and of facts. The first step in advance was made by Vesalius and the great Italian anatomists of the sixteenth century. The second was the work of Harvey in demonstrating that the heart was a muscle, and that the blood was driven round the body by its contractions. Succeeding inquiry proved that phlegm is not secreted by the pituitary gland, and that there is no such thing as black bile. Nevertheless, by a common infirmity of human nature, physicians clung to the conclusion when the premisses were proved fallacious, and still ascribed cutaneous disorders to humours and their ill mixtures. Even now there are insurance offices which gravely ask whether an applicant is of sanguine or lymphatic temperament.

Another hypothesis which long took the place of observation was that affections of the skin, beside being due to diseased humours and impurities of the blood in general, were in particular caused by a widespread condition known as scorbutus or scurvy, a real disease, as we now know, of dietetic origin, preventable, and by the efforts of scientific medicine now happily prevented, except in rare cases, when officers of Her Majesty's forces refuse to follow the physician's advice. Even now our patients will sometimes speak of eczema or scabies or syphilis, as "a breaking out of the scurvy."

Another imaginary cause of cutaneous eruptions was scrofula or struma; terms applied at first to swellings of the neck whether of the thyroid or lymph-glands, and afterwards to any condition of ill-health which the physician or surgeon chose to "explain" instead of investigating.

To some extent the diagnosis of syphilis was abused in the same manner as an arbitrary explanation of whatever could not be understood, and I have known a surgeon pronounce an eruption to be syphilitic "because he did not know what else it could be." Since, however, Mr. Hutchinson has taught us to recognise the later stage of congenital syphilis by definite marks, we no longer hear of it as a possible remote cause of non-syphilitic diseases, including what was once described as the "ugly type of scrofula."

In countries where malaria is common there have not been wanting attempts to ascribe one, or many, or all of common affections of the skin to this source, but they have not been accepted by any but their authors. A similar fallacy is, I think, the ascription of eczema and psoriasis and countless other diseases to what in England is called a gouty diathesis, and in France *arthritisme*. Now "diathesis" in Greek is "disposition" in Latin, and how, I would ask, are we to define a gouty disposition? If carried out the patient is no longer "gouty" but has gout, and if the disposition is not carried out it remains an unproved assertion.

So far as these various hypotheses were guesses at the real nature and cause of disease their aim was right, but they were all absurdly premature, almost as much so as the conclusion of a patient of my own who once said, with frank inconsequence, "Of course, I know nothing about medicine, but I am quite certain all diseases arise from the stomach." The fact is that our patients are adepts at etiology. They are sure that consumption is not (in their family) hereditary; that dyspepsia is never due to overeating, nor cirrhosis of the liver to intemperance in drink; that rheumatic fever is caused by sleeping in a damp bed, and Bright's disease by overwork, and psoriasis by "worry", and scabies by mental strain, and tinea versicolor by too frequent use of soap and water.

True etiology is the last outcome of long-continued observation and experiment. We can now assert that every child with the rash of measles has been in contact with a case of the same disease; that every case of anthrax depends upon the presence of a particular species of plant in the lymph, blood and tissues; that every case of rupia has been preceded by specific infection; that ringworm is caused by a fungus, and scabies by a mite; and thus far we are as certain as when a blue line on the gums tells us the cause of paralysis of the arms, when we ascribe a case of pericarditis to rheumatism, or one of multiple synovitis to gonorrhœa. At present, however, what most hinders progress in this department is that our questions are prematurely answered by the allegation of causes, some of them non-existent, some of them unproved and unprovable, and most, even if true in part, so limited in their action and so dependent upon concomitant conditions that their influence may be practically neglected.

We now know that the Galenical theory of the four humours was false, and if by chance it included an accidental admixture of fact here and there, this must be proved on independent grounds. Diseases which once were confidently attributed to disorders of the blood—as scabies to a "psoric dyscrasia"—are now known to be the result of definite local irritants. We know the very limited and constant effect of scurvy on the skin. We have abandoned such misleading terms as "scrofulous" or "strumous" because, so far as they have any meaning, they are insincere synonyms of tubercle. We recognise an eruption as due to syphilis or not due to it, and warn our students against talking of a syphilitic psoriasis as they would of a measly scarlatina or inflammatory sarcoma. Let us hope that our German colleagues will no longer call iritis "rheumatic" only because it is not syphilitic, and that we in England shall leave the use of "gout"—when we do not mean deposit of urate of soda in the tissues—to our patients and the term "nervous debility" to advertising quacks.

In dermatology we are taught by the clearest examples that we must begin by accurate observation of anatomical facts. Willan and Bateman were the first writers to be imitated; Alibert was the example to be shunned.

When the various anatomical lesions have been recognised and defined; when their microscopic as well as their external characters have been thoroughly investigated, then only may we proceed to a pathological classification. This was the attempt of Hebra, following Rokitansky, as Willan and Bateman followed Linnæus.

Thirdly comes the "historical" classification, we may call it, of diseases of the skin by their origin, development, and natural history.

An important step in this direction was made by Biett when he grouped together all diseases of syphilitic origin.

Small blame to his eminent successors in France if they prematurely extended the principle beyond the limits of knowledge. We now can use a reformed and corrected edition of the scrofulides under their proper title of tuberculous diseases of the skin, and it is possible that at some future day the dartrous group may also be reconstituted upon a scientific basis.

Can we at all forecast the future of dermatology? It will, we hope, never again fall into the hands of empirics or specialists in the offensive sense of the word. It will be studied as a branch of scientific medicine by those who are thoroughly trained in general pathology, diagnosis, and treatment. Obsolete synonyms, pedantic and unscholarly innovations, artificial and elaborate classifications, will be discarded, together with secret remedies and advertised nostrums of unknown composition. We shall learn to be, if possible, still more acute and accurate in discerning anatomical varieties, and every form of cutaneous lesion will be subjected to histological examination by modern methods. But we shall recognise that the structure of a lesion is only the morbid anatomy of a disease. We shall add to it the important and perhaps scarcely enough appreciated character of local distribution, which forms so important a character of animals and plants, and also of many diseases, as phthisis, cancer, and synovitis. How much may still be done in accurate observation of the anatomical distribution of diseases of the skin, is shown by Dr. Henry Head's most interesting paper upon the locality of pain in visceral disease, with respect to zona.[1]

We shall also, I think, give increased importance to the acute or chronic course, to the geographical distribution, the incidence on sex and age, and, in fact, the whole natural history of the cutaneous affections, including their reaction to remedies. Further, we shall probably give a more important place to the action of local infection, and recognise in addition to what we call specific diseases many others due to the action of parasites, bacterial as well as fungous, and animal as well as vegetable. In diagnosis we shall, I hope, avoid the old error of multiplying minute distinctions of form or aspect, which do not correspond to any differences in natural history, prognosis, or treatment. Syphilis, lupus, ringworm, psoriasis, leprosy are clear, complete, and satisfactory diagnoses, and it would be a serious retrogression if, with some Continental dermatologists, we were to return to the pedantry which named diseases more elaborately than animals or plants, and yet told us nothing of their real nature or their proper treatment.

In our prognosis we shall, I believe, be more hopeful and less confident. In our treatment we shall not think it necessary to order every patient to drink a disagreeable and expensive mixture made by a druggist, but when internal treatment by drugs is necessary, we shall insist upon its being thoroughly carried out. We shall use external remedies more intelligently, and therefore more confidently. We shall believe that water is water, and exerts its natural action upon the skin according to its temperature and saline constituents, whether it be applied in England, Germany, or America, and whether the patient uses it in his own house or travels to a distant hotel for the purpose.

Among the few valuable suggestions which have reached us from the International Congress at Rome was one in Dr. Michael Foster's address, that some international tribunal should decide questions of scientific nomenclature. In zoology and botany there are rules generally recognised which, if followed by the light of common sense, keep nomenclature tolerably uniform. But in medicine we have no rules at all, and in no branch is the resultant inconvenience so great as in dermatology. Reform appears to be almost hopeless. The names of many well-known and very common diseases are unsettled. Typhus, enterica, morbilli, rubeola, zona, gutta rosea, are all names which are constantly represented by obsolete or misleading synonyms. Even in England few writers pay attention to the official nomenclature of the Royal College of Physicians, a work which is revised every ten years with infinite pains, which is the result of the combined labours of physicians, surgeons, and the best authorities in obstetrical, ophthalmic, aural, and dermatological medicine; a nomenclature which is used by the Registrar-General, the medical officers of both services, and the Local Government Board. Surely it is not too much to ask that in our writings, if not in our conversation, we should sacrifice a little of our cherished individual liberty for the sake of a common understanding.

If we look abroad the confusion is worse confounded. Nothing can induce German writers to cease calling enterica "typhus," or exophthalmic goitre "Basedow's disease," and both in France and Germany many authors seem bent on inventing new names or misapplying old ones. If in England and America we are somewhat less to blame in this respect, we are too ready to accept every new statement without due criticism, and to cling to facts which have been disproved, and names long obsolete.

May we not set before us the following objects in attempting to improve our practice: (1) Let us as much as possible give up the cumbersome binominal system, with its misleading analogy of diseases with natural objects. Every disease should have a single distinctive title capable of forming an adjective, and if possible of genuine Greek or Latin form, but in any case with a meaning fixed by medical usage and not by etymology or classical precedent. (2) Let no term used by a writer previous to Willan and Bateman be considered of authority, but let the terms used by them and by subsequent authors in first describing a disease be adhered to as far as possible, simplifying or correcting a word where this can be done without destroying its identity, and extending or restricting its application in accordance with improved knowledge, but never replacing it by the arbitrary coinage of one's own fancy. (3) While the ordinary rules of priority should be respected, new names must of course be coined to denote newly recognised pathological conditions. These should be invented only when necessary, after due consultation and, if possible, oral discussion before they are fixed by publication. (4) I think we should agree not to add to the number of diseases which are named after their discoverer. Such titles are often historically inaccurate, and the fame or notoriety they confer does not correspond with the honour we would gladly pay eminent discoverers. Thus, while some names, like flies in amber, excite wonder as to how they got there, we have no such memorial of the *dii majores* of our art, of Virchow, of Bärensprung, of Willan, or of Hebra.

The multiplication of such names, applied not only to diseases but to symptoms, and sometimes very trivial symptoms, is a serious obstacle to the student. If we desire to identify certain cases, of which the nature is not sufficiently clear to receive a definite title, it is surely sufficient to describe them as the group of cases described by such or such a writer. Nor can there be any objection to adding the name of the author to the title he imposed; for example, lichen ruber (Hebra), dermatitis herpetiformis (Dühring).

With respect to classification of diseases of the skin I will not repeat what I have on several occasions urged upon the profession: that classifications which treat diseases as constant natural objects, are scientifically absurd and practically mischievous; and that a single permanent or "natural" classification is no more possible in dermatology than in other branches of medicine.

These questions of nomenclature and classification, as well as many more important will, I trust, form the subject of fruitful scientific discussion in the Society which to-day we start. The need of such a means for interchange of views among those particularly interested in dermatology was shown by the formation of the Dermatological Society of London ten years ago. We all owe much to the tact and energy of the first secretaries, Dr. Sangster and Dr. Stowers, and to their successors, Dr. Pringle and Dr. Colcott Fox; and we trust that the parent Society will long continue to flourish side by side with the present Association, and in more or less formal union with it as convenience may dictate. The older Society was formed for the exhibition of cases, and was therefore limited in numbers. In this Society we include many who have not numerous hospital patients to furnish cases for exhibition, but who desire to learn, and others who have relinquished their hospital practice but are loth to forget. We shall inform each other from time to time of new observations; we shall criticise new theories; we shall keep up each other's acquaintance with the ever-flowing stream of cases and commentaries which are published in France, in

[1] *Brain*, 1893, pp. 1—133.

Germany, and among our American kinsmen; we shall, I hope, be a strong support to the *Dermatological Journal*, which is already so admirably edited; and we shall, I trust, form a committee of reference, for the United Kingdom at least, which may help in some degree to fix the nomenclature of this department. Our credit and usefulness depend upon ourselves; and since we include all, or almost all, the dermatologists of this country, the result is scarcely doubtful. We meet in the home of other societies, to which most of us belong, and hope to rival them in the high standard of professional conduct we maintain, the liberal and scientific spirit we foster, and the value, the thoroughness, and the interest of our Proceedings. May we become as numerous, wealthy, and dignified as the Royal Medical and Chirurgical Society; as accurate and objective as the Pathological; as brief and practical as the Clinical.

It depends upon us, gentlemen, to maintain and increase the reputation of the British School of Dermatology, and with the support of those who meet to-day, I cannot doubt that we shall abundantly succeed.

BONE-MARROW IN THE TREATMENT OF PERNICIOUS ANÆMIA.[1]

By THOMAS R. FRASER, M.D., LL.D., F.R.S., F.R.C.P.E.,
Professor of Materia Medica and of Clinical Medicine in the University of Edinburgh.

ALTHOUGH this communication deals with only one case of pernicious anæmia treated with bone-marrow, the curative effect seems sufficiently evident to justify the publication of the case, especially as an opportunity occurred for testing in it the value of the chief remedies hitherto used in the treatment of this disease.

The patient, A. R., a gardener, 60 years of age, entered the Royal Infirmary on September 30th, 1893. His symptoms were frequent vomiting and diarrhœa, œdema of the feet and ankles, moderate and irregular pyrexia, dimness of vision, retinal hæmorrhages, anorexia, dyspnœa, and, latterly, complete prostration. The illness had existed for about four months.

Although I was desirous at once to treat this patient with bone-marrow, the condition was so serious a one that, in the absence of experience regarding the therapeutic value of bone-marrow, I considered it advisable to administer, in the first instance, some of the remedies usually employed in pernicious anæmia. Only after they had failed in producing benefit was bone-marrow given.

For the sake of brevity, I shall divide the history of the patient into eight periods, which correspond with the treatment adopted in each period (see Diagram).

First Period, two weeks, no medicinal treatment. During this period, the hæmocytes of the blood varied from 1,860,000 to 1,460,000 per cub. mill., and the hæmoglobin from 28 to 30 per cent., the specific gravity being 1038. There was great distortion in the shape and variation in the size of the hæmocytes, which did not form rouleaux. Retinal hæmorrhages were present in both eyes.

Second Period, two weeks and a-half; ferrous chloride 6 to 12 grains daily. The hæmocytes and hæmoglobin steadily fell to 900,000 per cub. mill. and 20 per cent., respectively, and the specific gravity to 1036.

Third Period, eight days: arsenic (15 to 30 min. of liquor arsenicalis daily) was given in addition to 12 grains of ferrous chloride daily. Still further deterioration occurred in the hæmocytes and hæmoglobin, the former falling to only 843,000, and the latter to 18 per cent.; but the specific gravity remained at 1036.

Fourth Period, three weeks; arsenic and iron were continued in the above doses, but ox bone-marrow was now also given by the mouth, uncooked, and in the quantity of 3 ounces, daily.

An almost immediate improvement occurred, so that at the end of this period the hæmocytes numbered 1,800,000, the hæmoglobin amounted to 35 per cent., and the specific gravity was 1042. The patient now began to recover strength; he could remain out of bed for several hours each day, and the appetite was greatly improved.

Fifth Period, twenty-six days; ox bone-marrow, arsenic, and salol (15 to 30 grains daily). The improvement was continued. The hæmocytes rose to 2,470,000, the hæmoglobin to 55 per cent., and the specific gravity to 1047. The patient felt much stronger, and his complexion was distinctly pink, and had almost entirely lost its original yellow hue. He had also gained in weight.

Sixth Period, thirty-two days; ox and calf bone-marrow and salol (30 grains daily).

The improvement was still further continued, so that the hæmocytes reached an absolute maximum of 4,130,000, though they afterwards fell to 3,400,000; the hæmoglobin rose with the hæmocytes to 75 per cent. and also fell to 70 per cent., and the specific gravity became 1058. The blood had now a healthy appearance. It could flow readily from a small puncture, it formed fairly good rouleaux, and the red cells were more uniform in size and fewer of them were distorted.

The patient was now able to do light work in the ward without fatigue; the alimentary system was perfectly healthy; œdema, pains, headache, pyrexia, and the venous *bruits* in the neck had disappeared; and the skin had a healthy appearance.

Seventh Period, one month; ox and calf bone-marrow and ferrous chloride (6 to 12 grains daily). The hæmocytes remained, with some oscillations, at about 3,400,000; the hæmoglobin averaged from 70 to 75 per cent., on one occasion reaching 80 per cent., and the specific gravity remained steadily at 1059.

The patient felt strong, and enjoyed assisting in ward work, such as carrying coals up a long flight of stairs. He remained out of bed all day, there were no subjective symptoms even on considerable exertion, and "hæmic" venous and cardiac *bruits* were no longer audible. Ophthalmoscopic examination of the eyes showed that all traces of retinal hæmorrhage had disappeared.

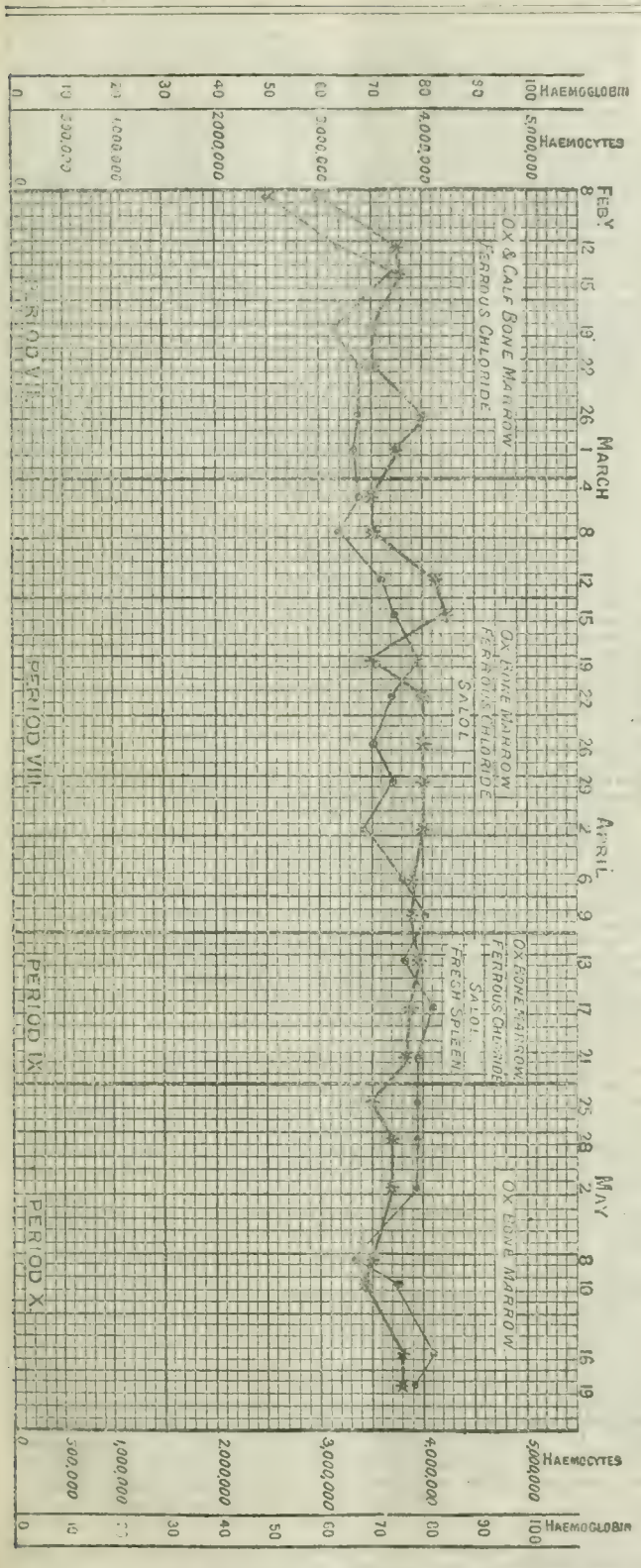
Eighth Period, not concluded (when this paper was communicated to the Congress); ox bone-marrow, iron, and salol. The improvement was maintained, so that the hæmocytes reached 4,000,000, the hæmoglobin 85 per cent., and the specific gravity 1060. The patient was now practically in a normal condition. His appetite was good, and his appearance that of a healthy man.

An examination of the graphic representation of the progress of the case (see Diagram) shows that no benefit was obtained—that, indeed, deterioration occurred—during the prolonged administration of iron and arsenic in both medium and large doses; but that the remarkable improvement which occurred was produced only after the administration of bone-marrow had been commenced, while it continued to be produced during periods in which neither arsenic nor iron were being administered.

The demonstration of a curative influence by bone-marrow may appear to be somewhat obscured by the introduction of salol into the treatment, and a further examination of the therapeutic value of this substance in pernicious anæmia appears, indeed, to be suggested. The introduction of salol was due to the urgency of the case requiring that no description of treatment should be neglected in whose favour any theoretical or experimental evidence had been advanced. Since, however, this communication had been made to the International Medical Congress, the patient was treated with only bone-marrow for a period of twenty-seven days (Period x), and the improvement was well maintained to the end of this period.

He was discharged from the hospital because of his urgent wish to return to work as a gardener, for which he declared himself more able than he had been for the last five or six years; and, to use his own expression, he felt "as if he had been made over again." On the day when he left the hospital (May 19th, 1894), the hæmocytes numbered 3,900,000 per cub. mill., the hæmoglobin was 78 per cent., and the specific gravity 1058; the hæmocytes were nearly uniform in size, only a few of them showed slight "tailing," and no

[1] Abstract of a communication to the Eleventh International Medical Congress, held in Rome, April, 1894



The greater part of Period VIII and Periods IX and X represent the progress of the case after the date on which the paper was communicated to the International Medical Congress

megalocytes were present; there was no excess of leucocytes or of blood plates; and good rouleaux were formed on the microscope slide.

It may be worthy of note that before medicinal treatment had been commenced, and in the earlier periods of treatment when the patient was receiving large doses of iron and arsenic, the blood plates were conspicuously deficient in number; while soon after the administration of bone-marrow had been commenced, a great increase occurred in their number, which was followed by a reduction to a moderate number during the later periods when the blood had been restored to a nearly normal condition.

The frequent failure of therapeutic measures in pernicious anæmia confers an interest upon any remedy which appears capable of controlling this malignant disease, even although the evidence is derived from one case only, and notwithstanding the circumstance that temporary improvement occasionally, though very rarely, appears to occur spontaneously. The facts now stated appear to justify the hope that bone-marrow will be found to have a remedial value in some at least of the cases of pernicious anæmia.

It is with much satisfaction that I express my obligations to Mr. D. A. Welsh, M.B., C.M., resident physician in my wards, for the efficient aid he has given me in conducting the numerous microscopic and other observations that were made in connection with this case, and to which only a general reference has been made in this abstract.

ACUTE DISSEMINATED MYELITIS.

[With Coloured Plate.]

By JULIUS DRESCHFELD, M.D., F.R.C.P.,
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Acute myelitis, according to the situation, distribution, and extent of the affection, is divided into poliomyelitis, when the affection is confined to the grey matter of the anterior horns; and leucomyelitis, when the white matter is chiefly implicated; of the latter we distinguish again between transverse or circumscribed myelitis, diffuse myelitis, and disseminated myelitis. (As in many cases of leucomyelitis the grey matter is also involved, this term, which was introduced by Vulpian, is now rarely used.) The terms diffuse and disseminated myelitis are not always used in the same sense by different writers—thus, while some, like Ross, include under acute diffuse myelitis all acute inflammations of the cord with the exception of the systemic diseases, others use the terms diffuse and disseminated myelitis as synonymous; while others, again (Leyden), group diffuse myelitis with transverse or circumscribed myelitis. Both from an anatomical and from a clinical point of view the classification of Gowers is to be recommended. He divides myelitis into—transverse myelitis, when the whole thickness of the cord is affected in a small vertical extent; diffuse myelitis, when an extensive area of the cord is inflamed in continuity; focal myelitis, when one small area is affected; and disseminated myelitis, when there are many foci contiguous or distant.

Of the different varieties of acute myelitis, the disseminated form is one which presents many points of interest, both on account of its etiology—it being frequently observed after infectious and toxic diseases—its symptomatology and its relations to other spinal diseases.

As but few cases of acute disseminated myelitis with *post-mortem* records have as yet been described, I wish to record the following case:

J. R., aged 23, was seen by me on May 20th, 1893, in consultation with Dr. Harris and Dr. Rigby, of Chorley.

History.—He had enjoyed good health and had been very fond of athletics; he had been very regular in his habits and there was no history and no sign of syphilis. Several members of his family had died of tuberculosis. Whilst out shooting in the middle of April, 1893, he fell into a pond and had to walk two miles to change his garments. About ten days after the accident he suffered from severe pain on the right side of the forehead and rapidly lost the sight of the right eye. He consulted Dr. Little, of Manchester, who found pronounced optic neuritis of the right eye. He improved under treatment and regained vision to some extent. About the middle of May he had much pain and swelling in the right leg, for which he was confined to bed for a few days. The pain and swelling subsided but on attempting to get up he found that he could not use the left leg. Soon after both legs became weak, he complained of numbness and cramps in the legs, and shortly after the left leg became completely paralysed and the right very weak; he had pain round the body in the region of the ensiform cartilage. Incontinence of urine for one night was followed by retention necessitating the regular use of the catheter. Constipation was also present.

When I saw the patient, I found him to be a muscular, well-developed youth; he was in bed and unable to walk or stand, and with some difficulty could raise himself in bed. He did not complain of any pain then. The vision of the right eye was very much diminished, the pupil dilated and sluggish in its reactions, and the optic disc greyish in colour and showed marked swelling; its outline was indistinct and its vessels were hyperæmic. The fundus of the left eye was normal. All other cranial nerves appeared normal. The upper extremities were normal, both as regards motion and sensation; the radial and triceps reflexes were increased, there was no inco-ordination of the upper extremities, and the muscular sense was intact; the upper part of the trunk appeared normal. About 2 inches below the ensiform cartilage there was a line of anæsthesia on the right, of paræsthesia on the left side; the anæsthesia on the right side affected the whole of the right half of the abdomen, right half of the scrotum and penis, and the whole right lower extremity; the anæsthesia was complete for tactile impressions, for pain, and for temperature; on the left side the loss of sensation was not quite so marked, but some patches both on the abdomen and on the left lower extremity appeared quite insensible. There was complete loss of power of the left leg and thigh and marked weakness of the right lower extremity; the superficial and the plantar reflexes were diminished on both sides, the knee reflexes increased, cremaster and abdominal reflexes were absent, and the epigastric reflexes increased on both sides. The chest and abdominal organs showed nothing abnormal; the pulse was 80, fairly strong, the temperature normal. There was retention of urine, but it was free from pus and mucus, and in other respects normal.

Diagnosis.—The motor and sensory symptoms left no doubt that we had to do here with acute myelitis affecting the lumbar region of the cord, and extending almost across the whole thickness of the cord. The optic neuritis in the absence of other cerebral symptoms except a localised pain was looked upon as either due to meningitis, or as due to an inflammation of the optic nerve. As optic neuritis had been noticed in several cases of disseminated myelitis, I ventured upon the diagnosis of disseminated myelitis, and expressed the fear that the disease would extend. The cause of the affection remained obscure, for there was no history of syphilis, and the patient had not suffered from any acute infectious disease. The symptoms having come on soon after the immersion in the ditch, it was thought that this probably might have acted as the exciting cause.

Treatment.—Iodide of potassium, mercurial inunction, salicylate of sodium, and liquor strychninæ.

Progress.—The patient was removed to Manchester and placed under the care of Dr. R. Wild, with whom I saw him several times. The symptoms rapidly got worse and the affection spread, as will be seen from the following short extracts from Dr. Wild's notes:

May 26th. Complete paralysis and anæsthesia of both lower extremities; knee-jerks absent, no ankle clonus; band of hyperæsthesia about 2 inches broad passing all round the body at the level of the ensiform cartilage, and the patient complained of girdle pain in this region; the skin of the abdomen below this line completely anæsthetic; complete retention of urine; the rectum anæsthetic; the bowels were moved by an enema.

June 1st. The urine drawn off by the catheter contains blood, pus, and mucus; the temperature 100°, pulse 90, tongue furred; bed sores began to form on the heels, back, and over the left trochanter.

June 16th. Sensation has partially returned over the whole of the abdomen and part of the right thigh; the left leg and thigh remain anæsthetic. The symptoms of cystitis have disappeared; the bed sores are healed.

June 23rd. Can move the right foot and also the right thigh slightly; complains of painful spasmodic twitchings in both legs.

June 24th. Headache over left side of forehead and in left orbit; the sight of the left eye is rapidly failing, left optic disc very much swollen.

July 4th. Vision of left eye slightly improved, pain over right side of forehead and orbit, total blindness of right eye with increase of papillitis, condition otherwise the same except that there are signs of beginning contractures in the lower extremities, the knees slightly flexed and pressed together.

July 21st. The spastic condition of the legs more marked. The patient now complains for the first time of a hot feeling in the left arm with occasional numbness and tingling. Motor power in both arms still very good.

July 22nd. Marked tremor in the left arm and hand when any movement is attempted, the grip of the left arm is weaker, the right arm shows marked hyperæsthesia, and is painful on the slightest touch.

July 23rd. Tremor and weakness in left arm more marked, and there is slight rigidity to passive movement; the reflexes in left arm are much increased. In other respects the condition the same, patient more emaciated.

July 24th. The right arm is now almost completely paralysed, but still hyperæsthetic; a band of hyperæsthesia passes across the chest at the level of the third costal cartilage; complete anæsthesia and motor paralysis below this level except intercostal muscles which act, but somewhat feebly; the diaphragm is contracting feebly, the upper part of the chest moves well, the lower intercostal muscles, are nearly paralysed; speech and deglutition not affected. The lower extremities are completely paralysed and rigidly contracted. The temperature is slightly raised, pulse quickened. The patient is quite conscious, and there is no affection of any of the cerebral nerves except the optic nerves; he is now completely blind.

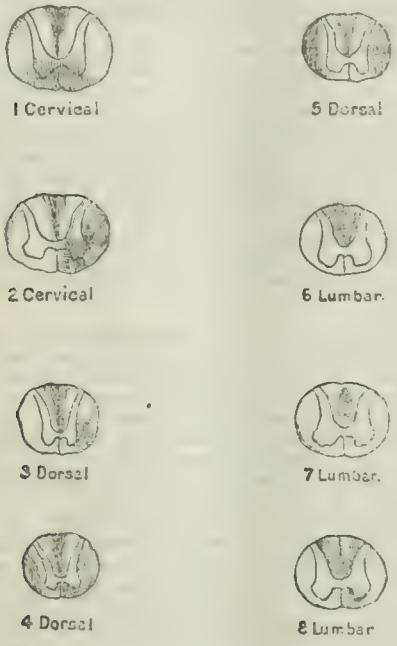
July 26th. The respiratory movements are gradually failing, face and lips are cyanosed.

The patient gradually sank and died from asphyxia on July 27th.

Briefly summed up we had here the case of a young man who, in the midst of good health, was suddenly seized with optic neuritis of one eye, followed by a gradually ascending

spinal paralysis, affecting both motion and sensation, beginning first in the legs and followed soon after by optic neuritis of the other eye and then by paralysis of the upper limbs, death being caused by paralysis of the respiratory muscles.

Post-mortem Examination Fourteen Hours after Death.—Body much emaciated, especially the left leg; brain normal but œdematous; optic nerves presented red points on transverse section, there was no distension of the sheath: spinal cord, dura mater distended by fluid, but there was no pus or blood; the pia mater not thickened; the upper part of the cord from the second cervical to the lower end of the cervical enlargement was soft and on section almost diffluent: the dorsal and lumbar region appeared firmer. Fragments of the pulp of the cord, examined microscopically, showed fat cells, masses of compound granular cells, small round cells, and blood corpuscles. The cord was placed at once in hardening fluid for microscopic examination in the clinical laboratory of the Owens College by my assistant, Dr. Williamson. After hardening in Müller's fluid numerous disseminated patches of pale colour were seen on transverse section; these patches were scattered throughout the cord in the most irregular manner. The subjoined diagram shows the distribution of the larger patches of myelitis as seen with the naked eye.



DISSEMINATED MYELITIS

In sections stained according to Weigert's method and examined under a low power, numerous pale brownish-yellow patches, irregular in shape and size, were seen in all three regions of the cord. (See coloured drawings.) In these pale brownish-yellow patches the nerve fibres were absent, completely or partially. The small vessels at the pale (myelitic) patches were greatly dilated and filled with red corpuscles. Under a higher power their perivascular sheaths were seen to be greatly distended with cells. The whole of the more recent patches of myelitis were seen to be densely infiltrated with round cells—compound granular cells and leucocytes. In those parts at which these patches extended to the grey matter of the cord the ganglion cells and fine nerve fibres were absent, and their place occupied by leucocytes and compound granular cells.

In the older patches there was an increase of neurogliar connective tissue. The posterior median columns in the cervical region presented the usual changes found in ascending degeneration of these columns—absence or marked degeneration of nerve fibres and increase of neurogliar connective tissue to a marked extent; this new-formed connective tissue contained numerous nuclei, and many round and oval spaces, from which the nerve fibres had disappeared. In sections stained according to Marchi's method, numerous black dots (degenerated fibres) were seen in the patches of myelitis, and also in the parts affected by ascending degeneration (Goll's columns cervical region). The chief points respecting the changes in the cord were:—

1. The irregular distribution of the myelitic patches.

2. The irregular size and shape of the patches. At some places the myelitis occupied one half of the white matter of the cord: at other parts the patches were so small that they could only be recognised under the microscope.

3. The changes were most marked around blood vessels, and where the myelitis patches were small they were limited to the neighbourhood of small arteries.

4. Another striking feature was the marked distension of the perivascular sheaths with leucocytes and compound granular cells. In every section the vessels at some part were markedly dilated, and the perivascular sheaths distended with cells.

5. There was well-marked ascending degeneration in the posterior columns (in disseminated sclerosis ascending degeneration is generally absent).

OPTIC NERVES.

On transverse section of the optic nerves marked changes were found in both nerves. In sections stained according to Weigert's method, there was almost complete absence of nerve fibres in the centre of the optic nerve. At the periphery of the transverse sections there was a narrow irregular rim of bundles of healthy nerve fibres, stained black, whilst the centre was occupied by brown stained neuroglia connective tissue, from which the nerve fibres had disappeared; this connective tissue was well supplied by nuclei, as seen in the sections stained with logwood. The sections presented many greatly dilated blood vessels, especially in the central part of the nerve. The perivascular sheaths of the vessels were enormously distended with cells—compound granular cells and leucocytes.

Specimens stained according to Marchi's method showed that around the periphery of the sections there were numerous degenerated fibres, stained black, mixed with the healthy fibres, whilst in the centre of the sections, where the connective tissue was in great excess, the degenerated myelin had for the most part disappeared. Both optic nerves presented similar appearances. Sections of the cord of the optic nerve were examined for micro-organisms after the usual methods, but with negative results.

A case similar to the above both in its symptoms and in its combination with optic neuritis I described in the *Lancet*, 1882, p. 14; a similar case is given by Archard and Guinon,[1] and another by Sharkey and Lawford.[2] Other fatal cases are those by Westphal,[3] Kussner and Brosin,[4] Th. Barlow, Francotte,[6] and Gowers.[7]

That so few cases have been recorded is partly due to the fact that primary acute myelitis is not a very common disease, as is shown by the observations of Oppenheim,[8] who during a period of eight years in the Charité Hospital, at Berlin, could only record the necropsy of two cases of pure myelitis (I am bound to state that the *post-mortem* records of the Manchester Infirmary show a larger number, most of which had been carefully examined and shown to be pure and uncomplicated cases of myelitis), chiefly because many cases of acute myelitis do not run a fatal course and may often undergo a complete cure.

It may not be without interest briefly to refer now to some of the chief features of acute disseminated myelitis.

ETIOLOGY.

1. In a few cases we cannot find any definite cause, except cold or excessive muscular work, and these we may look upon as belonging to the so-called rheumatic form.

2. In by far the greater number of cases the affection comes on during or after an acute infectious or contagious disease such as measles (Barlow), erysipelas, small-pox (Westphal), typhoid, malaria, scarlet fever, gonorrhœa (Gowers). I may here mention a case which I saw with Dr. Massiah, of Didsbury, and Dr. Little, of Manchester, where a young lady whilst suffering from an attack of measles, was seized

with intense headache and optic neuritis, which caused total blindness, followed by paralysis and by numbness of all the four limbs, and where eventually complete recovery took place.

3. In a number of recorded cases syphilis is cited as the etiological factor, and several of these were associated again with optic neuritis,[9] whilst in a few they have been found associated with the puerperal state, with tuberculosis or cancer.

4. The toxic agents which so often give rise to peripheral neuritis may also affect the spinal cord, but the peripheral changes are here much the more prominent ones.

5. In pernicious anæmia Lichtheim[10] and others have often found marked disseminated changes in the cord, affecting, however, chiefly the posterior and lateral columns.

6. Occasionally disease or injury of peripheral nerves may give rise to acute myelitis, probably by extension.[11]

SYMPTOMATOLOGY OF ACUTE DISSEMINATED MYELITIS.

The affection consists in a more or less complete paralysis, first of one, then of both limbs, and extending gradually to the upper extremities, with the accompanying sensory disturbances and affections of bladder and rectum. From transverse myelitis and compression of the cord the disease is often at first indistinguishable; but the extension of the affection, and especially the early disappearance of the deep reflexes which is noted in nearly all the cases quoted above, will often enable us to distinguish between the two affections. Not that in transverse myelitis or compression myelitis the knee reflexes are always found exaggerated, for we know from the observations of Bastian and others that where there is a complete transverse myelitis affecting all motor and sensory tracts the deep reflexes are absent; but while this occurs usually only in a few cases—unless the transverse myelitis is traumatic as in the cases recorded by Thorburn,[12]—and late in the disease, in disseminated myelitis it occurs early, and, as the *post-mortem* examinations have shown, there is no complete transverse myelitis in these cases. The presence of optic neuritis due to a distinct acute inflammatory process appears to be a not infrequent complication of acute disseminated myelitis, and may thus form another diagnostic feature; other parts of the central nervous system—medulla, pons, and brain—may be affected in acute disseminated myelitis, and the combination of symptoms which thus arise will vary considerably.

Leyden describes under acute ataxia a form of disseminated myelitis, about which I would like to make some observations.

Acute ataxia includes a variety of diseases. We have the acute pseudo-ataxia, which is a form of peripheral neuritis; and acute ataxia, which is an affection of the central nervous system. This latter may either prove quickly fatal, or undergo complete cure, or improve for a time, and eventually show all the signs of ordinary ataxia. Of this type I have seen lately two cases where after a severe cold marked ataxia came on in two days. After a week other typical signs of locomotor ataxia developed; marked improvement took place in both cases, so that the patients could again follow their employment; but both cases relapsed, and are now suffering from advanced locomotor ataxia. Some of the cases of acute ataxia, of the bulbo-spinal type, Leyden regards as cases of acute disseminated myelitis. Up to now there appears to be only one *post-mortem* record[13] of such a case, for the recorded case of disseminated myelitis quoted above, and, indeed, the other cases quoted also, showed no marked ataxia.

The following case, which I saw with Dr. T. M. Helme, of Manchester, evidently belongs to the class of cases mentioned be Leyden, and may be briefly described.

A boy, of 10, was taken ill with some febrile symptoms of an indefinite nature, lasting a few days. He complained of sore throat, but no membrane was seen on the fauces. The boy quickly recovered from the acute attack, but three weeks after was taken with weakness, first in one and then in the other leg, and had such marked ataxia that he was unable to walk. He became feverish with quick pulse and considerable prostration. When I saw the boy he was in bed. The legs were weak but he could move them, but the movements were very inco-ordinate; he was able to stand, but only with his eyes open and his legs apart, and, when attempting to walk, his legs jerked from excessive inco-ordination; he could not stand or walk with his eyes shut; there was some dysæsthesia of the lower extremities, but, owing to the prostrate condition, the degree and extent of this could not be made out satisfactorily. The knee reflexes were absent, the superficial reflexes diminished; the arms showed little weakness and only slight inco-ordination; the breathing was quick and shallow, the diaphragm and intercostal muscles appeared very weak, and it was noticed that on the left side of the chest the respiratory movements were much weaker than on the right side; there was difficulty of swallowing, the voice was weak and husky, the uvula moved slightly, there was marked weakness in the movements of the lips and of the tongue; the upper part of the facial nerve appeared unaffected, and he was able to close both eyes; there was no affection of the eye muscles, and the pupils reacted to light and accommodation. The pulse was 130 and very weak. The condition rapidly got worse, the paralysis of the diaphragm became soon complete, and the boy died with all the symptoms of suffocation. The *post-mortem* examination, which was made by Dr. R. Wild, showed the cord and peripheric nerves to be normal, and only a small patch of softening was found in the left half of the medulla, extending to the periphery implicating the restiform body, and the nuclei of the pneumogastric and hypoglossal nerves. The part affected was almost diffluent, and microscopic sections were obtained only with great difficulty; they showed small hæmorrhages, engorgement of vessels, cell proliferation in the perivascular sheaths, and large collections of round cells in the neighbourhood of the vessels. Of the nerve elements little more than masses of broken up myelin could be observed. A few similar, but much smaller, foci of inflammation were found on the right side of the medulla.

This case, which resembled in its symptoms post-diphtheritic paralysis, was evidently one of acute myelitis of the medulla, and the ataxic symptoms could be readily explained by the situation of the myelitis, which had destroyed the greater part of the restiform body on the right side. Whether the attack from which the boy suffered three weeks before the onset of the nervous symptoms was diphtheria could not be ascertained.

The pathological changes in acute disseminated myelitis appears sufficiently obvious from the cases so far recorded; in all of them we find an inflammatory process most marked round the blood vessels, which are dilated, their sheaths distended with round cells and cell accumulation in the neighbourhood. From this it would appear that the inflammatory process starts from the blood vessels and extends thence to the surrounding tissue, and that the nerve elements are, to a great extent, only secondarily affected. The pathological changes found are very similar to those seen in other forms of acute myelitis and of many cases of acute poliomyelitis, as pointed out by Goldscheider[14] and Reinhold.[15]

PATHOLOGY OF ACUTE DISSEMINATED MYELITIS.

Considering the principal causes of disseminated myelitis, which are either of an infectious or a toxic nature, and the distribution of the inflammatory changes near the blood vessels, we naturally connect the two, and look upon the lesions as the effect of some toxic agent circulating in the blood. This view, which is now held by many observers, explains the close connection between peripheral neuritis and the various forms of myelitis, and it is now well established that in peripheral neuritis we do occasionally find inflammatory changes of the cord. It explains also the irregular distribution of the affection, and how it may affect other portions of the central nervous system and cranial nerves, such as the optic nerve, where, indeed, the perivascular inflammatory changes are most marked, and best studied. It is interesting to note that in multiple peripheral neuritis very similar changes are sometimes seen in the optic nerves.[16] As the process affects at first only the interstitial tissue we can also readily understand that absorption of the cells infiltrating the tissues may take place, and if the nerve elements are not irreparably damaged, marked improvement and even a complete and permanent cure may ensue, as no doubt it does in many cases.

We may go further, and compare acute disseminated myelitis with another affection of the cord—namely, disseminated sclerosis—and we notice a close relationship. Here we must often assume an infective agent as the primary cause; we notice, also, the irregular distribution of the lesion in various parts of the central nervous system, and the almost constant implication of the optic nerve; further, we find here, as Déjerine, Hess, Buss, Babinsky, and others have pointed out, the changes proceeding from the blood vessels; and, lastly, we often observe here, also, great amelioration of the symptoms.

About the treatment of acute disseminated myelitis little need be said, as it does not differ from that of other forms of primary myelitis. It is essential as soon as the affection is recognised, and before there is complete paraplegia, to confine the patient to bed, and enjoin him to keep absolute rest.

The application of a spinal ice bag, of counter-irritation to the back, at the outset of the disease may have some tendency to check the exudation. Bearing in mind the toxic nature of the affection, and the good effects seen in multiple peripheral neuritis and retrobulbar optic neuritis (not infrequently seen after epidemics of influenza), large doses of salicylate of sodium and of iodide of potassium should be given, and the internal or subcutaneous administration of strychnine, even if spastic symptoms are present, may well be tried, though it should be given cautiously. The marked improvements which have been noticed after the administration of mercury in some cases where there was a syphilitic history may perhaps have been due to an antitoxic property of this drug, and it might, therefore, be tried in non-syphilitic cases. The same applies to arsenic and quinine. As arsenic, even when administered in medicinal doses, may occasionally produce peripheral neuritis, we should be careful in using it; on the other hand, the beneficial effects of arsenic in pernicious anæmia, where, as pointed out above, a disseminated myelitic affection has repeatedly been noticed, is a strong recommendation for a trial with this drug. Massage and electricity had better be deferred to a later stage of the disease.

EXPLANATION OF COLOURED PLATE.

Sections of the cord and optic nerve stained after Weigert's method (low power). Fig. 1. Cervical region. Fig. 2. Dorsal region. Fig. 3. Lumbar region. Fig. 4. Optic nerve. The areas of degeneration in the white matter are stained brownish yellow.

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A NOTE ON A NEW METHOD OF PREPARING CULTURE MEDIA.

BY J. LORRAIN SMITH, M.A., M.D.,

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ONE of the chief sources of the difficulty which is experienced by bacteriologists in regard to the cultivation of pathogenic microbes lies in the fact that the composition of many of the media used for the purpose differs so widely from that of the blood and other fluids found in the animal tissues. By means of the method here described media can be prepared directly from these fluids by a process which reduces the difficulties of manipulation to a minimum.

The one perfectly satisfactory method of sterilising any medium is to raise it to the temperature of boiling water. What is required, therefore, is that from these fluids solid media should be prepared which are perfectly transparent and yet easily sterilised at 100° C. or over it.

Ordinary serum, when coagulated by raising it to the boiling point of water, forms an opaque mass. If on the surface of this the germ of anthrax be planted, it grows with the greatest readiness. As the germ continues to grow, it can be observed that in the layer of the coagulum immediately in contact with the anthrax the opacity begins to disappear. This change proceeds till finally there remains in place of the opaque mass a clear transparent jelly. The most probable explanation of this change is that it is due to a body of an alkaline nature which diffuses into the medium and combines with the proteid. We are already acquainted with a form of proteid, first described by Lieberkühn in 1848, which closely resembles this substance; it is known as "Lieberkühn's jelly," and is formed by adding potash to egg white. By this means he obtained a solid and very insoluble proteid in the form of a clear jelly. It was pointed out by Lieberkühn that if this alkali-albumin be washed till the free alkali is completely removed, it has a neutral reaction to litmus. According to Mörner, who has more recently investigated the question, the reaction is weakly acid. It is important to bear this in mind, because it shows that in the process of combination with the proteid, the alkali disappears. If, therefore, we add to a solution of proteid such as a tissue fluid, a quantity of free alkali just sufficient to form the combination, we do not seriously alter the weak alkaline reaction which it normally has. In any case, the amount of alkali needed to prevent the occurrence of opacity in coagulation by heat is very small.

A fact illustrating the ease with which the opacity may be prevented in coagulation is that if serum be in a sufficiently thin layer in a glass vessel, the result of raising it to the boiling temperature is a clear jelly. The rule for a method of solidifying solutions of proteid in a clear form must be to add an amount of alkali which is just sufficient to discharge opacity. If we add to ox serum 0.1 per cent. to 0.15 per cent. caustic soda, and heat the solution to 120° C. in the autoclave, we obtain the desired transparent jelly. Too little alkali gives a coagulum with a greyish appearance. Care must be taken to have clear serum, and in particular it must be free from hæmoglobin. The amount of alkali required varies a little with the character of the serum. In regard to egg white the same facts hold. Here, again, the amount of alkali to be added depends on the nature of the egg used. Certain kinds of eggs coagulate in a fairly transparent form without any addition.

In the case of the hen's egg the following method has been found reliable. Break up the white with an egg beater till it loses its consistency. Add to it 40 per cent. of water, and mix well. Pass the mixture through muslin to remove any shreds of insoluble material, or let it stand overnight in a cylinder till these settle to the bottom. Add 0.1 per cent. caustic soda, and solidify in the autoclave. Egg white is naturally more free from pigment than serum, and with a little care in clearing it a jelly can be obtained closely resembling gelatine in transparency. Substances like glucose may be added as desired.

In regard to the question of growth, experiments have been done to show that a large variety of bacteria grow on this medium with great readiness. The effect of the alkali on the pathogenic character of the bacteria or their products has not been to any extent determined. A few preliminary experiments on the diphtheria bacillus seem to indicate that virulence is maintained as efficiently as in the case of agar or beef-broth cultivations. It may also be noted that alkali albumin in the liquid form has been extensively used as a culture medium. The ease with which the solid form can be prepared renders its introduction desirable.

HOSPITALS AND BACTERIOLOGICAL STATIONS IN TURKEY.—The Sultan of Turkey has decreed that each of the ten municipalities of Constantinople is to be provided with a hospital with a sufficient staff in order that day and night a medical man may be in attendance. A great many have what is called a hospital, organised in a private house, therefore very imperfectly. The Constantinople Bacteriological Laboratory is finished and will soon be opened; analyses of water and food will be made in it. The Bacteriological Institute has received a grant of fr. 480, and will receive an annual income (fr. 320). Hydrophobia patients will be treated at Stamboul at a hospital which will be built for the purpose with a bacteriological laboratory attached to it; meanwhile, the Constantinople institute will receive patients from all parts of the Turkish Empire.

MEDICAL EDUCATION FOR WOMEN IN RUSSIA.—The question of the establishment of the proposed school of medicine for women in St. Petersburg will shortly come before the Imperial Council. An endowment sufficient to produce a revenue of 63,000 roubles (£6,300) a year is required. Of this revenue only 42,000 roubles can be counted on. The city of St. Petersburg has promised a subvention of 15,000 roubles annually, and the rest is made up from legacies and funds supplied by private persons. Apparently the State does not see its way to unloose its purse strings. The Municipal Council has given a site for the building, and the city hospitals have promised to throw open their wards to the female students.

CASE OF SPORADIC CRETINISM TREATED WITH THYROID GLAND.

By TELFORD SMITH, M.A., M.D.,
Medical Superintendent, Royal Albert Asylum, Lancaster.

In the British Medical Journal of March 28th, 1891, Dr. T. C. Railton, of Manchester, published an account of two sporadic cretins, who were brothers, and gave their portraits. The younger of the brothers — D. B. — was admitted to the Royal Albert Asylum, Lancaster, on August 5th, 1891, and has been here since that date. On March 27th, 1893, at the suggestion of Dr. Shuttleworth, I commenced to treat the patient by thyroid feeding.

[The history of the elder brother is given by Dr. Railton at page 1180.]

Family History of Patient.

His father, aged 45, is a fish salesman in Manchester. He is temperate, and is an intelligent man. He is stout and measures about 5 feet 6 inches in height. Is subject to asthma, as was his (the father's) mother. There is no history of intemperance in his family. The patient's mother is aged 35. She is temperate, and an intelligent, but very neurotic, woman, and inclined to be delicate. Her father was intemperate, and died at the age of 44 of phthisis. There is no further history of intemperance in her family. The father and mother of the patient were not related, and there is no history of consanguineous marriages in their families. There is no history of insanity on either side.

History of Patient.

The patient was born on June 24th, 1884. He is the fourth born child. His eldest brother, aged 14, is also a cretin. A healthy brother and sister were born between the patient and his eldest brother. There are five brothers and sisters healthy and normal, physically and mentally. D. B. was born at full time and normally; labour was protracted. No instruments were used, and he was not asphyxiated when born. He was not convulsed soon after birth, nor has he ever had any kind of fit. He is said to have been bright as an infant, and cut his first teeth early. His mental deficiency began to be noticed at about 2 years of age. He did not begin to walk till about 2½ years. He has had measles, whooping cough, and diphtheria.



G. B., 11 years D. B., 6 years 3 months.

Description of Patient on Admission to the Royal Albert Asylum (August 5th, 1891).

A well-marked case of sporadic cretinism. He has a rather pleasant expression and bright smile. His temperament is phlegmatic, and he is slow and deliberate in all his movements, even a smile taking a long time to spread over his face. He seems to take some interest in his surroundings, but will not speak. His mouth is always open and his teeth slightly parted, showing the extremity of his tongue, which is thick and very blunt, and rounded at the end; it seemed somewhat too large for the mouth. The papillæ on the tongue are small, and the surface is smooth and rather pale on the upper surface; on the lower it tends to be blue. His palate is normal in height and formation. He still has his first set of teeth, which are set widely apart; the molars are carious. He does not slaver. His mouth is wide; but the lips are fairly well formed and of a good colour; they are not everted, but the lower is larger than normal. His nose is wide, especially at the root, and the septum and alæ are thick; the nose is short and rather turned up; the nostrils are broad. His eyes are bright and his eyelids are well formed and horizontal, as are also the eyebrows, which, with the eyelashes, are of normal thickness and length, and are well placed. Pupils medium in size and react well to light and accommodation. Ears well formed and normal in size and position. His skin is rather dry and rough on the face, but on the unexposed surface of his body it is smooth, though dry. His complexion is pale, with a tinge of sallowness, and a rather waxy look. Malar blush very slight. His head is large. Circumference 21 inches. Dolichocephalic. Cephalic index 73.3. Fontanelles closed. There is a distinct ridge to be felt over the sutures on the vertex. His hair is rather thin, straight and dry, and grows slowly. He has a large and protuberant abdomen, and a small umbilical hernia. Chest circular and barrel-shaped. His legs are bowed, and the ankles are enlarged. Feet short and square. Second toe small, and over-riding third. Hand square and short. Good grasp. Wrists enlarged. Slight beading of ribs. Respiration normal. Heart sounds weak, with a faint systolic murmur at apex. He walks slowly, and in a heavy manner. His run is a very awkward waddle. Knee-jerk slightly exaggerated. Skin sensibility normal. Extremities cold. A small portion of thyroid can be felt. No pseudo-lipomata. No exaggeration of the spinal curves. His bowels are constipated. He is easily teased or frightened, and if his temper is ruffled he has prolonged fits of sulkiness, during which he will neither smile nor show any sign of friendliness. He was over a month in the asylum before he was heard to utter a word.

Effects of Treatment.

Thyroid treatment was commenced on March 27th, 1893. He was given not quite a quarter of one lobe of a fresh sheep's thyroid minced, and mixed with some warm rice and jam at tea-time. He took it well without perceiving any unpleasant taste.

March 28th. He complained of headache, vomited several times and took no breakfast. Looked very depressed and was very pale and cold. Put to bed.

March 29th. The vomiting continued in the early morning, but he took a little lime-water and milk later on. The tongue was clean. The bowels had not been moved since March

27th. He was very depressed and apathetic, and complained of headache. He did not vomit again, however, and the headache was better in the evening. He was kept on a diet of beef-tea and milk, and was ordered calomel, gr. ij, at bedtime.

March 30th. The bowels acted; no headache nor sickness; he took breakfast of bread and milk, was bright and smiled. On April 1st he was quite himself again.

April 13th. He was ordered ½ part of the fresh lobe twice a week, minced in rice and jam. He took it well and showed no unpleasant after-effects.

April 26th. He was brighter and more active, spoke much more readily, and had become playful and lively. His face was beginning to lose the cretinoid appearance, and the features were all sharper and clearer. His skin was becoming softer and smoother. He had had a kind of scurfy, dirty patch on his nose and forehead, which soap would not remove; this came off almost in one piece, like a crust. He perspired rather copiously, especially about the head.

May 13th. The skin on the feet and hands was peeling. He was much brighter and more active. His tongue was now normal in size and appearance, having lost the thick blunt shape and blue tinge. He could run fairly fast without awkwardness.

July 6th. Mentally he was wonderfully bright; he liked to talk and answer questions, and had learnt "Little Jack Horner" from a girl patient. His vocabulary was enlarging considerably. He was full of spontaneous playfulness and mischief. Physically he had got very thin, except in the face, which was plump and healthy-looking without the least sign of puffiness. His appetite was good, and his bowels regular, without constipation. He was cutting two lower central incisors.

On June 5th the dose was diminished to one-twelfth, as he was getting thin.



Present condition of D. B. and G. B. To illustrate the papers of Dr. Telford Smith and Dr. Railton.

He did not take the gland after July 7th, and, on September 13th, it was noted that he began to show signs of slowly reverting to his former state. The condition of solid œdema was quite perceptible again. His speech was not so distinct nor so quick, owing to the tongue beginning to thicken and to his mental state not being so active. He was not so bright, and he had lost some of his spontaneity. On September 16th he was put on one tabloid (Burroughs and Wellcome) once every day at dinner time—equivalent to one-twelfth of a lobe. On October 18th I took him to Manchester to go home to his parents for a holiday, and showed him that evening at the Manchester Medical Society. (Dr. Railton also showing the eldest brother, whom he was treating with thyroid.) The members of the Society, who had seen the two brothers before, were struck by the very marked change for the better in them both.

December 13th. The patient returned to the Royal Albert Asylum from home, where he had continued taking one tabloid every day. His mother said he had become so active and mischievous that she could hardly put up with him. His father's report, on bringing him back, was: "I find that my son, D. B., has improved very much; he is much brighter and more cheerful and intelligent than before in every way." He was now cutting two upper central incisors.

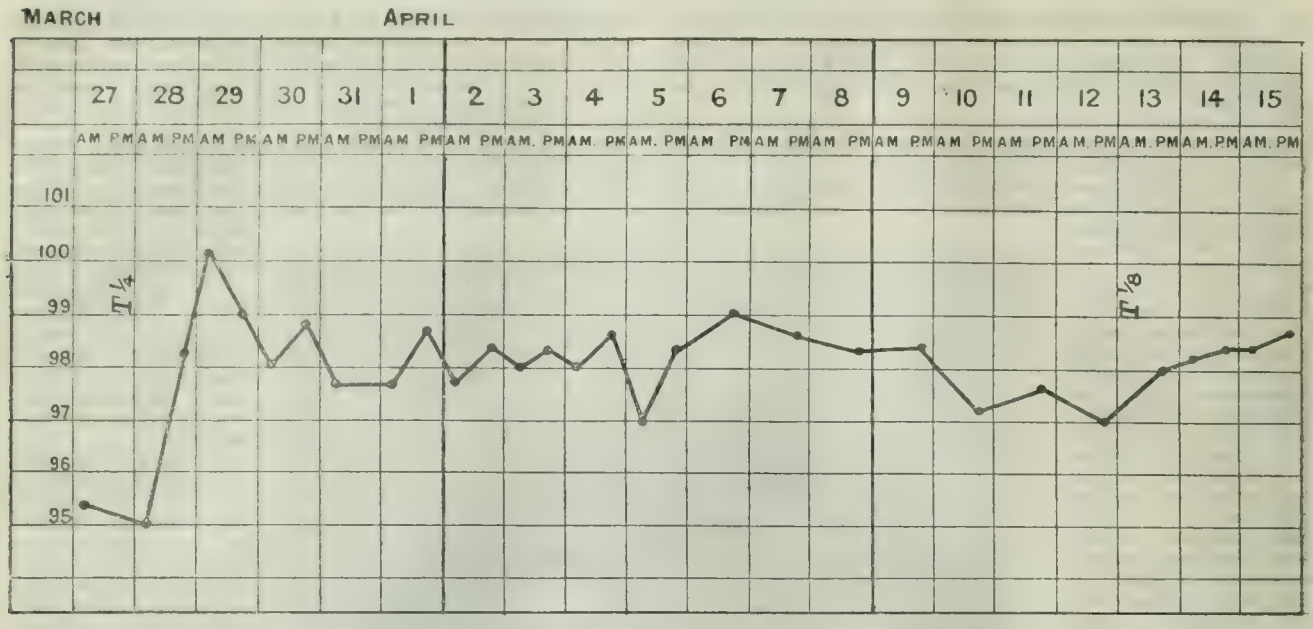
February 16th, 1894. He has continued to take one tabloid a day, and maintains his mental and physical improvement. He is growing taller, and is active in all his functions. There are at present few traces of sporadic cretinism about him. The umbilical hernia is now imperceptible. His average temperature before treatment was 95°; since treatment it has been about 98°.

REMARKS.

Dr. Byrom Bramwell, in his "Clinical Remarks on a Case of Sporadic Cretinism," in the BRITISH MEDICAL JOURNAL of January 6th, notices that "an umbilical hernia is nearly always present in cases of sporadic cretinism;" this is certainly so in the greater number of the cases, but it is perhaps worth recording that there have been two (out of four) rather extreme cases of cretinism in the Royal Albert Asylum in which this deformity did not exist—both girls.

It is also remarkable that, where the hernia has been small, improvement and even disappearance of the hernia has taken place during the thyroid treatment, as occurred in the boy D. B., and in the case published by Dr. John Thomson in the *Edinburgh Medical Journal* for February 1894, and in cases published by Dr. A. Gordon Paterson and by Dr. John B. Hellier in the *Lancet* of November 4th, 1893.

The constancy with which numerous symptoms which accompany rickets also occur in cases of sporadic cretinism is noticeable. Thus we almost invariably find the tibiæ bent, and the ankles and wrists enlarged, while beading of the ribs is sometimes present, and altered or exaggerated spinal



Temperature chart, case of D. B. at the commencement of treatment, showing the rise of temperature which followed the administration of a quarter of a lobe of fresh sheep's thyroid on March 27th, the maintenance of a relatively high temperature (as compared with the temperature of 95° to 96° before treatment) for 11 days, a decline, and a second rise of temperature after the administration of one-eighth of a lobe on April 13th.

curves. Also the open fontanelles, barrel-shaped chest, and protuberant abdomen, delayed dentition, and lateness in walking and talking. In the boy, D. B., there is decided thickening of the cranial bones along their edges, some of the sutures feeling like ridges. The absence of perspiration in sporadic cretinism is very constant. However, the boy D. B., since thyroid treatment was commenced, sweats remarkably copiously when asleep, especially about the head and neck.

Table of Measurements.

Date.	Height	Weight	Circumference round Navel.	Circumference round Mammæ.	Circumference round Calf.
1891.	Ins.	lbs.	Ins.	Ins.	Ins.
March ...	33	32¾	—	—	—
August ...	34	35	—	—	—
1893.					
March ...	34¾	40	22	21½	7½
April ...	—	38	20	21	—
May ...	—	37½	19	20¾	—
June ...	—	37½	19	21	7½
August ...	37	43	22½	21½	8
September	—	43½	22	21½	8½
October ...	—	40	21	21½	8
November	—	38½	—	21½	—
1894.					
January ...	39	41½	22	22	8
February...	—	—	22¼	22	8

Head Measurements.

Circumference 21 ins. ...	Above ears and over occipital tuberosity.
Transverse (*a*) 13 ins., (*b*) 4 ins.	(*a*) Tape measure from ear to ear over vertex. (*b*) Calliper measure from ear to ear over vertex.
Longitudinal (*a*) 13 ins., (*b*) 7½ ins.	(*a*) Tape measure from nasal notch to occipital tuberosity. (*b*) Calliper measure from nasal notch to occipital tuberosity.
Width of forehead 4¾ ins. ...	Between external angular processes of frontal.

In investigating the etiology of sporadic cretinism, it is striking how prominently "maternal depression and worry during pregnancy" seem to stand out among the alleged causes. In the case of both D. B. and his brother, the mother (a neurotic woman) alleges abnormal depression while pregnant with each of them (and not during the pregnancies of the other normal children). In the case of another sporadic cretin in the Royal Albert Asylum at present, the most prominent cause to be found in the family history is unusual and great worry and depression on the part of the mother during her pregnancy with the patient (owing to money difficulties), all her other children being remarkably fine specimens, as is she herself and her husband. May it not be that the atrophic condition of the thyroid gland, which exists in sporadic cretinism, is brought about by a numerous class of causes, all of which tend to produce slow impairment of nutrition in the fœtus?

Among the more prominent of these causes we might expect to find maternal depression and worry, or a lowered vitality in the parents produced by bad air or food, cold damp houses, or insufficient sunlight and want of cleanliness.

In the family histories of the patients it is remarkable that goitre, consanguinity, insanity, intemperance, phthisis, or syphilis seldom appear to be present.

SPORADIC CRETINISM TREATED BY ADMINISTRATION OF THE THYROID GLAND.

By T. C. RAILTON, M.D.Lond., M.R.C.P.Lond.,
Physician to the Manchester Clinical Hospital for Women and Children.

G. B., whose case, with that of his brother D., was reported in the British Medical Journal in 1891, has now been under treatment by the administration of the thyroid gland for nearly a year, and the following brief notes respecting his progress and present condition may prove of interest.

Upon his admission for the second time into the Clinical Hospital in April, 1893, it was found that he had practically remained unchanged during the interval which had elapsed since his description was published in the Journal.[1] Although he was two years older (14 years), the account then given still represented his condition and appearance with considerable accuracy. He had only grown three-quarters of an inch in the time, and therefore measured 33 inches in height, while his weight had but increased from 34 to 36 lbs. He had deteriorated, however, in health; he looked paler and more sickly than before; the lateral curvature pre-

[1] British Medical Journal, March 2nd, 1891.



Fig. 1.

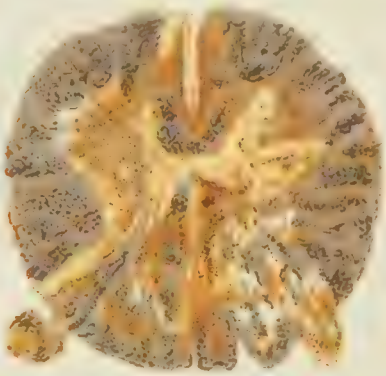


Fig. 3.



Fig. 2.



Fig. 4.

viously observed had grown worse, and I learnt that he had been subject to attacks of bronchitis during the winter months. As regards his mental condition no improvement was observed. His expression was as dull as before, he used the same childish words, his vocabulary not appearing to have increased, and his voice was as guttural as ever.

For a week after admission he was merely kept under observation, and his temperature was regularly taken. This was found to be mostly subnormal. The treatment was then commenced by the administration of 36 grains of raw thyroid gland. The temperature rose slowly until, at the end of twenty-four hours after the dose, it stood at 102.4°, and for the next four days it fluctuated between 100° in the morning, and 102° at night. In addition to his feverishness he fell off his food, vomited once, was restless at night, heavy and morose during the day. The temperature then fell to normal. In these four days he lost 2 lbs. in weight. He subsequently took four similar doses of the raw thyroid at intervals of several days, but after none of these later administrations was the effect anything like that of the first, the highest temperature being about 100°. He continued, however, to lose flesh, though more slowly than before, and, after having taken four doses of the gland, he weighed 32 lbs.

On May 17th he began to take daily two of the thyroid tabloids of 5 grains each manufactured by Messrs. Burroughs and Wellcome, and since then this dose has been gradually increased until at the present time he is taking five tabloids daily. The treatment has been followed by a manifest improvement, both physical and mental, and this result has been obtained without any injurious effects being shown. The temperature has rarely exceeded 100°; for the last month it has been usually about 99°.

To enable the reader to glance shortly over the symptoms of his progress as they were observed I will give extracts from the notes taken at the bedside.

May 11th. His hands are moist, his tongue is not so prominent, his face is less puffy, and his complexion is losing its earthy hue.

May 29th. His lips are thinner, the lower lip especially; the tongue seems narrower, and he often has his mouth closed. He is much more lively—in fact, he can hardly be kept covered by the bedclothes, although efforts are constantly being made to keep him quiet.

June 11th. He has gained an inch in height, and has lost 5½ lbs. in weight. His abdomen is flatter than it was.

July 4th. He was heard telling the patient in the adjoining bed to "lie down," but his voice is still guttural.

On July 17th he was sent home for a time, his parents being instructed to give him two thyroid tabloids daily.

On November 1st he was readmitted, suffering considerably from bronchitis. He measured 35 inches in height and weighed 31¾ lbs. He continued to take two tabloids as before, and an estimation of the amount of urea passed by him was commenced. In November the daily average was found to be 182 grains, in December 208 grains, in January 180 grains, in February 165 grains, and in March, to the time of writing, 175 grains. On November 9th the number of tabloids given daily was increased to three, on the 24th to four, and on February 19th to five. These doses, as I have already said, have not caused him the slightest inconvenience.

The bronchitis has persisted more or less throughout the winter, but has lately improved. He has now fourteen permanent teeth, together with one or two old stumps of his milk teeth. Some of the first set have been extracted during his stay in the hospital. An attempt has been made to improve the great distortion of the spine by daily suspensions, persevered with for three months, but without perceptible improvement, and a plaster-of-paris jacket has been substituted recently with the same object.

His height is now 37 inches, and his weight 35¾ lbs. He has mobile features, and looks a pleasant and intelligent little boy, bearing, however, traces of illness and the resulting delicacy of constitution. His rather large mouth is the only feature reminiscent of his previous state so far as his face is concerned. He understands readily what is said to him, but, as we might expect, his command of language is not commensurate with his improvement in other directions.

Summing up shortly the effects of the thyroid gland in this case, we have, first, an extraordinary development of all parts of the body, with a concomitant increase of metabolism, as shown by the amount of urea excreted and by the range of temperature. Of this development the rate of growth in stature is a very noticeable feature. To grow four inches in less than a year would be remarkable even in a healthy boy of 14; but in a cretin—and one who to our knowledge only grew three-quarters of an inch during the previous two years—it affords very strong evidence as to the potent character of the remedy. Secondly, we have the establishment of the normal functions of the skin and presumably of all the other excretory organs of the body. Thirdly, there are the changes in the brain and nervous system to be mentioned. We are justified, in my opinion, in believing these changes to have been almost as great as in the case of the body, and in concluding that language more or less perfect will come to the patient in due time. Just before the treatment began the condition of his brain was comparable to that of an infant of two years or so. Since then the development of the cerebral functions may be supposed to have been proceeding in much the same ratio as that of the body, so that practically he is now to be considered on a par mentally with a child about three years old, and we cannot expect that his thoughts and speech will improve faster than they would in a child of that age. On the contrary, the long sleep his brain has experienced may quite possibly prevent him ever being more than backward in intelligence. It still remains, however, to be seen what the effect of education may be. Time alone will decide what kind of a man he will make.

A CASE OF UNIVERSAL DERMATITIS: PROBABLY A RARE VARIETY OF MYCOSIS FUNGOIDES.

[WITH CHROMO-LITHOGRAPH.]

BY MALCOLM MORRIS, F.R.C.S.ED.,
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THE following case appears to me to be worthy of record on account of its rarity, and still more on account of the pathological problems which it opens up as to the causation of the process which gave rise to lesions of the skin so obstinate and so widespread, and as to the possible relation between long-continued inflammatory action and the development of malignancy.

A. P., a clerk, aged 45, was admitted into St. Mary's Hospital under my care on December 29th, 1892. There was nothing of any etiological importance in his family history, and his own health, except as regards the cutaneous affection for which he sought advice, was in all respects excellent. The first appearance of his skin disease was referred by him to the summer of 1872, when he noticed a red patch on the back of his right leg; it measured about two inches in diameter, and was somewhat raised, dry, and irritable. On this patch after a time a boil developed; this was "lanced" and the irritation was in some measure relieved. In the following spring similar patches appeared on the backs of both legs, and the palms and fingers of both hands were covered with vesicles, which discharged for about a fortnight. The patient was treated for eczema, and a complete cure seemed to be effected. Later in the same year (1873) he proceeded to India; on his arrival in that country the eruption broke out again in the legs and spread down to the ankles; the hands also were attacked in the same way. He said the discharge was perfectly clear. This state of things continued until the patient returned to England in 1874, when the hands got well; the legs, however, continued to be troublesome. After a time the disease developed on the arms, the elbows being the parts first attacked. In the spring of 1875 the dermatitis assumed a more intense character, and spread more widely; there was much swelling of the legs, and exudation was abundant. At this time the patient consulted a London physician, who treated the case as a severe form of eczema, with the result that the eruption again completely disappeared.

In 1875 the patient returned to India, when the hands were immediately attacked, and in a short time the disease also recurred in the legs, which gradually became as bad as before, although the same treatment which had proved successful in London was employed. This state of things continued, with occasional fluctuations in the intensity of the process, for several years. The patient was treated by several different practitioners in India, but without any benefit. During all these years the lesions were confined to the legs, arms, and hands. The course of events might be described as a continued series of eruptions, appearing in the parts referred to, and breaking out in one place as they died away in another. The lesions were eczematoid in type, and consisted of crops of vesicles on an erythematous base, causing great itching.

In 1884 the patient returned to England for a holiday, and then for the first time he noticed a change in the character of the eruption. The dermatitis became more permanent in the parts already affected, and fresh lesions appeared on the outer aspects of the thighs in the form of macules, dull red in colour, varying in size and irregularly scattered about. He placed himself at this time under the care of a well-known physician, who

treated the disease as eczema, but without success. Among the new features in this stage of the disease was the development of a series of boils. This was followed by enlargement of the glands in the left groin. Next the glands in both axillæ became enlarged, and in the following year the glands in the right groin became similarly affected. The patient proceeded to Harrogate, where he went through a course of sulphur waters. Distinct improvement followed, and after eighteen months the disease was considerably modified though not cured. In 1887 he came to London, where he resided for some time.

The irritation of the skin persisted in the arms and legs, and acute exacerbations occurred in the hands every summer. The disease meanwhile continued to make steady progress, with alternate remissions and exacerbations; the eruption gradually spread upwards over the trunk, both front and back; the exudation became purulent—except on the legs, where it was always clear—and crusts formed.

In 1891 the patient was treated for pustular eczema; the scales were removed and the discharge ceased. After a time the disease entered on a new phase, the skin becoming the seat of a generally-diffused redness, and presenting an appearance resembling lichen ruber planus. Treatment had no influence on this condition.

In the spring of 1892 the patient went through a course of hydropathic treatment at Malvern with considerable benefit as far as the lesions on the trunk, legs, and arms were concerned, the skin in these parts becoming paler and more natural in appearance; there was still, however, a good deal of "weeping" on the hands and feet, and it was noticed for the first time that the discharge from the hands had a peculiarly offensive smell. The patient at this time was in a very low state of health, and went to Matlock, where he remained for four months under treatment; the feet showed some improvement, but otherwise no appreciable change in the condition of the skin took place. The patient now came under my care, and from the history and appearance of the lesions I made a provisional diagnosis of mycosis fungoides, and admitted him to St. Mary's Hospital.

It should be noted that in the early years of his illness the skin lesions were always much worse in the summer than in the winter, and the fact may be recalled that each time he went to India the dormant disorder was at once quickened into activity on his arrival in that country. Another point to be noted is that during the whole course of the skin affection—more than twenty years—the patient's health had continued absolutely unimpaired, except in the spring of 1892, when, as already stated, he was considerably pulled down.

Condition on Admission.—The following is a summary of the notes of the "present state" taken on admission to St. Mary's Hospital. The patient is a healthy-looking man, well made, and muscular. The skin over nearly the whole of the body, with the exception of the scalp, the face, and the upper part of the front of the chest, is of a dark mahogany colour. There is immense infiltration of the integument over the whole surface of the limbs, notably on the thighs, where the skin is so thick and stiff that it cannot be pinched into folds; the skin, particularly on the legs, is of a dark red colour, mottled with purpuric spots, and irregularly streaked with dilated venules. All over the thickened and reddened surface are scattered crops of vesicles, here and there intermingled with boils. Marks of scratching are very evident, especially over the shins, where there are several abrasions of considerable size. The palms of the hands are the seat of abundant exudation and exfoliation. On the back of the left hand is a scab of about the size of a shilling, from beneath which exudes a sero-purulent discharge. The nails are deformed, and marked with transverse grooves; the glands in the right axilla are greatly enlarged; in the lower extremity the legs are less severely affected than the thighs, but the general condition is the same; the feet are swollen, tender, and painful; there is great infiltration of the soles, and vesicles and pustules are scattered in considerable numbers on the soles and dorsa of the feet; the ends of the toes beyond the distal extremities of the nails are tense with serous effusion. There are masses of enlarged glands in the groin (five on each side); the largest of them is of about the size of a small Tangerine orange. The patient states that these glands are subject to variations in size from day to day without any apparent cause, but they are never painful. The hair on the pubes has disappeared. The surface of the abdomen is covered with an eruption similar in character to that on the limbs but milder in degree. The front of the chest below the nipples presents an elementary stage of a similar process, the lesions consisting of a few isolated and dark coloured papules of about the size of a pin's head. The back and the buttocks are covered with lesions of the same kind, the face, and, to a less extent, the scalp, are also the seats of a similar eruption. The neck is practically free. The most striking lesions present are three ulcerated growths, one situated on the back of the right hand, another on the right temple at the outer end of the supraorbital ridge, the third on the left cheek between the outer canthus and the ear. The growths—the largest of which (on the hand) is about the size of a florin, the smallest that of a sixpenny piece—are irregularly rounded or oval in shape, with a distinctly raised slightly indurated border, and a somewhat depressed centre, the base of which is covered with a dry brownish scab. In short, the growths have exactly the appearance of a rodent ulcer. They are painless, and show little or no signs of active spreading at the edge.

Itching is so severe at night as to keep the patient awake, and cause him to scratch himself violently. As he himself expresses it, he feels as if he could only dig out the vesicles he would get rid of the cause of his trouble. During the day he is absolutely free from irritation. His mental condition is not unnaturally one of great depression, with the worst forebodings as to the issue of his disease, and he sometimes talks of suicide.

The patient was shown at the Dermatological Society on January 10th, 1893. The provisional diagnosis of mycosis fungoides was based (1) on the universal diffusion and obstinate character of the dermatitis; (2) on the great infiltration and thickening of the skin over extensive surfaces, especially in the extremities; (3) on the three small ulcerated growths developed on the site of previous inflammatory lesions; and (4) on the enormous glandular enlargement in the inguinal regions.

The patient was at first treated by the daily application to all the affected parts of resorcin ointment (gr. x to xv ad ℥j) with sulphonal (gr. x) every night to induce sleep. Marked improvement was almost immediately observed, the infiltration diminishing especially in the thighs, and the eruption fading away to a considerable extent on the left arm and on the abdomen. This improvement was, however, evanescent; two days after the date of the note recording it I find the following report by the clinical clerk (dated January 22nd): "To-day the feet and hands are very swollen and tender. A serous effusion can be seen at the ends of the fingers and toes presenting under the bed of the nail. There are several pustules on the palmar aspect of the hands and on the plantar aspect of the feet. The discharge is fœtid. There is slight pyrexia." This may be taken as a type of the periodical exacerbations which I had many subsequent opportunities of observing. They seemed to be in the nature of pathological storms, or, more strictly, "high tides," each of which marked a distinct advance in the disease, and each of which in its ebb left its mark on the patient's skin in the form of fresh lesions and increased filtration.

The fluctuations in the intensity of the process and in the degree of thickening chronicled from day to day in the clinical clerk's notes represent the alternate advance and recession of the pathological tide which, however, when observation was extended over a sufficiently long space of time, could be seen to be steadily gaining. It is worthy of note that the force of the rising tide was always spent mainly on the arms and feet. The extremities would suddenly, without any visible cause, become hot, swollen, and tender, the skin being full of deep-seated vesicles and distended with effusion. Sometimes, especially on the feet, bullæ of considerable size formed. Great irritation and smarting of the surface accompanied these phenomena, and occasionally there was slight pyrexia. The sequence of events appeared to me to be analogous to the periodic "elephantoid" fever which marks a further step in the advance of the obstruction of the lymphatics, and consequent hypertrophy of the skin, which constitute the disease process known as elephantiasis Arabum.

Even in the interval between these periodic exacerbations the affection was never at a standstill; in fact, the appearance of the eruption changed from day to day, advancing at one point and receding at another, but on the whole slowly but surely gaining ground.

The disease spread chiefly by the development of new centres of eruption in different parts; these in course of time coalesced, and in this way practically the whole surface of the skin came to be invaded. The appearance of a fresh crop of vesicles was preceded by heat and redness of the skin; when the vesicles began to discharge, tension was relieved and the patient felt easier. After a time the attack subsided, the discharge ceasing and more or less desquamation taking place, and except for increasing discoloration and thickening of the skin, the disease at that spot became for a time quiescent. During all the time the patient was under my care the growths on the right hand and on the face became very little if at all larger; nor was any change noticed in their appearance. No fresh growths developed, although at one time (January 30th) the right thigh became greatly swollen, and a hard mass could be felt over the tendon of the adductor longus, and extending some inches down the inner side of the thigh. This mass was tender, and I believed that an abscess was about to form, but the swelling subsided in a day or two without leaving any trace of its presence. The appearance of this swelling had been preceded by a sharp attack of influenza, in which the temperature continued somewhat high for three or four days, rising on one occasion to 104° F., without modifying the skin condition.

Treatment seemed to have no effect on the progress of the disease. Arsenic was useless. Considerable relief of the acuter symptoms was given by lotions of lead and borax, by ointments of resorcin, borax, and creolin, and baths.

The patient was kept under observation in the hospital until April 13th, 1893, when he was discharged, with instructions to report himself once a month. I saw him at regular intervals as an out-patient till the end of July, and once again on my return from my autumn holiday. The condition of the skin remained as has been described, the process continuing with alternate remissions and exacerbations in different parts. No new development of any kind occurred, and the man's health did not seem to suffer, though the too evident hopelessness of his case made him extremely despondent. His urine, carefully examined from time to time, showed no abnormality beyond a slight amount of albumen on one occasion and some excess of urates once or twice; no sugar was ever found. He died in the country, of intercurrent pneumonia, in the beginning of November, 1893, after two days' illness. There was no opportunity of making a *post-mortem* examination. The histological investigation of the more important lesions—the largest of the three growths and one of the enlarged glands in the groin—removed during life, was kindly made for me by Mr. Jackson Clarke, M.B. Lond., F.R.C.S., Pathologist to St. Mary's Hospital. The following is his report:

HISTOLOGICAL REPORT.

The patient's full and ready consent having been obtained, a piece of skin and a gland as large as a chesnut were removed after complete anæsthesia had been produced by injecting a 2 per cent. solution of cocaine. The piece of skin was taken from the back of the right hand, and it comprised a portion of a decidedly raised plaque, about as large as a shilling. Sections of the skin cut at right angles to the surface showed, under a low power, a considerable increase in the thickness of the epidermis and marked infiltration of the papillary layer of the corium. The interpapillary epidermal processes were elongated in every part of the piece of skin, but in the raised plaque there was a distinctly papillomatous structure, similar to that seen in mucous tubercles, so that, in sections as nearly as possible vertical to the surface, there were two or three series of connective-tissue spaces insulated by epidermis.

Under higher powers the cells of the hyperplastic rete were seen to have been in a state of abnormal activity, as was evidenced by the very great number of mitoses present in every field; these mitoses were for the most part quite regular, but in some cases there were three instead of two daughter-asters. Thus these cells (which belonged, to all appearance, to the epithelium) had been on the point of dividing into three instead of two daughter cells.

I made a careful search for the bodies named by Darier[1] "grains," and for bodies such as I have described[2] in cysts of the ureter, squamous epithelioma, cancers of the uterine cervix, etc., as free and sporing sporozoa. In this I was disappointed. The few bodies which somewhat resembled the "grains" of Darier were not sufficiently well defined to identify them. I next investigated the sections carefully to see if the cell inclusions described as sporoza by Nils Sjobring, Soudakewitch, Foà, and myself, among others, were present. In the regions where mitoses were most numerous, many of the resting epithelial cells did contain such bodies in spaces close to the nucleus; moreover, in sections stained by the Biondi-Heidenhain method, some of these cell inclusions had all the characters described as requisite for the diagnosis of "protozoa" in cancer.

Some of these intracellular bodies gave evidence of subdivision, and none of them had the characters of any of the varieties of leucocytes. In the hair follicles the cells of the outer root sheath showed changes in every way similar to those already described in the epidermis. The sweat and sebaceous glands showed no noteworthy change.

The morbid change in the corium had the characters of an ordinary inflammatory infiltration. It affected the superficial layers. Amongst the small round cells were others of highly refracting granular protoplasm known as "plasma-cells.' Some of these appeared to be undergoing indirect division.

In the lymphatic gland all the normal anatomical parts could still be recognised—the capsule with its inward prolongations; the trabeculæ, and between the latter the dense adenoid parenchyma which is separated by the lymph sinuses from the fibrous supporting structures, capsule and trabeculæ.

A glance at the sections of the gland under a low power showed that its great increase in size was due to hyperplasia of the adenoid parenchyma. I was not able, with the aid of higher powers, to detect any abnormal feature in the adenoid tissue beyond increase in amount. The lymph corpuscles everywhere appeared to be normal. The capsule of the gland and some of the trabeculæ showed some round-cell infiltration, and in the hilum there were several plasma cells among the fibres of the capsule.

There were, as far as I could ascertain, no newly formed blood vessels, so that there was no "new growth" in the sense of lymphosarcoma, etc. Thus in a rough general anatomical summing up, the leading features of the case may be said to be:—

1. Hyperplasia of the epidermis with some new growth, with cell inclusions resembling some of those met with in cancer.
2. Inflammatory infiltration of the papillary layer of the corium.
3. Inflammatory hyperplasia of lymphatic glands.

It is necessary to attempt to arrive at a conclusion as to the pathological place of the disease.

Hyperplasia of the epidermis, accompanied by inflammatory infiltration of the corium, is met with in chronic eczema, but, as far as I am aware, the cell inclusions mentioned above do not occur in eczema; and of the changes characteristic of eczema, namely, formation of vesicles by accumulation of fluid between the epidermis cells which are drawn out into fusiform and elongated shapes, there is here no trace. Nor are the changes described as the result of chronic irritation of stratified squamous epithelia, such as have been described by D'Arcy Power,[3] namely, perinuclear vesiculation of cells and accumulation of leucocytes in spaces between epithelial cells, present in the case under consideration.

The changes recall rather certain inveterate and ingravescent affections of the skin such as the eczematoid stage of mycosis fungoides, Paget's and Darier's diseases. The fullest description I know of the histology of the first of these diseases is that of Philippson.[4] This author, in an erythematous patch (*eczéma prémycosiforme*) found the epidermis thickened, the horny layer increased in amount, and numerous mitoses present in the deeper layers of the epidermal cells, and also, in spaces between the epithelial cell, numerous corpuscles different from epithelial cells, and resembling cells of new formation present in the corium in the same sections. The interepithelial spaces which contained these cells, some of which were undergoing mitotic division, were found to communicate with the corium. There were also œdematous changes in and between the epithelial cells. The corium Philippson found was the seat of new growth of connective tissue origin. All the normal elements could be distinguished, but in addition, around the small blood-vessels of the papillæ and those surrounding the larger vessels, the pilo-sebaceous follicles and sweat glands, collections of round, oval, and giant cells, with nuclei rich in chromatin. These changes in the corium were not met with in the case now under consideration, and thus there is not complete evidence that Mr. Malcolm Morris's case is one of mycosis fungoides, which is in the main a connective-tissue growth of sarcomatous type.

The histological features of the case are not at all those of Paget's disease, for the above account shows that the bodies fully described by Wickham are absent. Nor does the condition entirely coincide with that given by Darier[5] of the disease which bears his name. The hair follicles in this case are not more changed than the intervening skin, and the bright, highly-refracting bodies, "grains," were not present in any noteworthy numbers. Still the occurrence of definite cell inclusions with all the characters of those described by many in cancer affords a link with Darier's disease if the latter be a psorospermosis, for we may regard these bodies of peculiar structure and staining reactions as probably protozoa, and I have come to the conclusion that they constitute one extremity of a chain of which the other and more readily intelligible end is, I think, to be found in large free bodies, such as those I have described in cancers of various kinds—for example, of the uterus;[6] and in the latter situation W. Miller[7] appears to have confirmed my view. Thus, *although the chain of evidence is not to my mind complete*, I conclude that the epidermis of Mr. Malcolm Morris's patient probably contained sporozoa, which may have determined the affection, and in this case it would deserve the appellation "psorospermosis," and may be akin to, though different from, Darier's disease. And although the case appears to be essentially an affection of the epidermis with secondary changes in the corium and lymph glands, and thus different in character from fully developed mycosis fungoides, which is in the main an affection of the connective tissue, the ingravescent character of these two otherwise dissimilar affections may, by the close study of future cases, be found to depend in both instances on the presence of sporozoa; for it will be remembered that Wernicke[8] has described, with exceptionally clear photographs, sporozoa found by Posada in mycosis fungoides. Moreover, the numerous mitoses found by Philippson in the early stage of mycosis leave open the possibility of Mr. Morris's case being an early stage of the same morbid process.

I would here append a word or two on methods. The portion of skin and the gland cut in thin slices were placed successively for twenty-four hours in Flemming's fluid, running water, 30, 60, 90, and 100 per cent. alcohol, then embedded in paraffin, cut with Minot's microtome, and fixed in series on slides and stained, some with Ehrlich's acid hæmatoxylin, some with Ruffer's modification of the Ehrlich-Biondi-Heidenhain triple stain.

It is to be regretted that I did not make a complete bacteriological investigation of the case. I decided not to attempt this because I knew from experience that in the case of the skin, owing to the abundance of microphytes found there, an investigation of this kind requires leisure hours on many successive days if results of any value are wished for, and my daily duties did not allow of my entering on so long a task.

It is clear that the case which has been described does not correspond, either in its clinical phenomena or in its pathological features, with any recognised type of disease. The process appears to have manifested itself first as an eruption indistinguishable from eczema, and for a time the lesions yielded more or less readily and completely to treatment. Entrance on a new phase was indicated by the eruption becoming more diffuse and permanent and by the occurrence of great glandular enlargement and extensive infiltration of the skin. From this time onwards the disease was steadily progressive and proved more and more intractable. A further stage in the evolution of the process was marked by the formation of the three small growths. There was never any sign of visceral metastasis, and the general health was affected only indirectly by want of sleep and persistent depression of spirits. Finally, death was due to what, as far as the special disease process was concerned, may be called an accidental cause. The salient clinical features may, therefore, be summed up as follows: (1) Long continued dermatitis gradually becoming universal; (2) general infiltration of the skin and great enlargement of lymphatic glands (inguinal and axillary); (3) absence of extensive exfoliation; and (4) tumour formation.

What was the cause which produced the remarkable series of phenomena observed in this case? There was nothing in the constitutional state or in the life-history of the patient to account for the disease. The persistent and intensive character of the lesions suggests the action of a continuous irritant, parasitic or chemical—that is, some abnormal product of tissue change or some poison circulating in the blood. The latter hypothesis seems to be negatived by the general absence of constitutional disturbance and the very partial and apparently capricious distribution of the lesions for many years after the commencement of the disease. Mr. Jackson Clarke's report indicates the presence of what is at least a possible source of irritation in the presence of sporozoa. The disease would thus come under the head of psorospermoses, and would represent the results of a pathological process, perhaps allied to Darier's *psorospermose folliculaire végétante*. My case, however, differs widely in its clinical features from Darier's disease, which is an affection of the pilo-sebaceous follicles, the orifices of which are plugged by small masses resembling sebum, and containing bright oval bodies like molluscum corpuscles. The characteristic lesion is a small horn-like papule surmounted by a brown, firmly-adherent crust, one end of which projects from the surface of the skin, making it feel rough like a nutmeg-grater, while the other dips into the funnel-shaped opening of the dilated follicle. The lesions proceed to the warty vegetations, which may grow so luxuriantly as to constitute true tumours.

Nothing at all resembling this was observed in my case. It might plausibly be suggested that the disease was a hitherto undescribed form of dermatitis caused by sporozoa. On the whole, however, I am inclined to adhere to the diagnosis which I made provisionally on first seeing the patient. I therefore present the case as an example of a somewhat aberrant form of mycosis fungoides, which never reached its full development. It will, perhaps, more accurately express my opinion if I say that I look upon the disease in the case above related as having been in a phase of its evolution intermediate between the premycosic stage, and what I may call complete mycosis fungoides. A brief comparison of the case with the typical forms of that disease, as described by recognised authorities, will serve to bring out more clearly the points both of resemblance and of difference.

Mycosis fungoides was first described and figured by Alibert[9] in 1832. It has since been studied by Bazin,[10] Köbner,[11] Hochsinger,[12] Rindfleisch,[13] Payne,[14] Jamieson,[15] Hallopeau,[16] and others. It is (fortunately) extremely rare, so that its pathology is still obscure, but the clinical picture is fairly complete.

The lesions at first are those of simple erythema, or eczema, and for years there may be nothing beyond the unusual obstinacy of the symptoms to suggest that there is a more formidable disease behind them. In this stage the condition is often, as in my case, diagnosed and treated as eczema. In time, however, the eruption, which was at first more or less amenable to treatment, becomes permanent and intractable; the process extends to the deeper part of the skin; the corium is infiltrated and thickened; the redness of the affected surface becomes deeper and more diffuse, and patches having the appearance of lichen ruber planus are formed. All this period of gradually intensified dermatitis constitutes the "premycosic stage." The darker features of the malady begin to disclose themselves in the next stage. This mycosic stage is characterised by the development of tumours, which generally form on the site of pre-existing lesions, less frequently on skin apparently healthy. In certain cases tumour formation occurs without any previous lesion, that is, without any premycosic stage. These tumours are generally roundish in shape, smooth on the surface, and bright red in colour, having, in fact, something of the appearance of tomatoes, as pointed out by Alibert. Sometimes the tumours are pale. The growths after a time usually burst like rotten fruit (Jamieson), and give rise to deep ragged ulcers. In rare instances tumours disappear spontaneously without leaving any trace of their presence. They are as a rule little, if at all, painful. Great enlargement of the lymphatic glands is sometimes observed, but there is some difference of opinion as to the frequency and significance of this complication. Payne says it is "so far from common, that it can hardly be regarded as having an important bearing upon the pathology of the disease;" on the other hand, Hallopeau speaks of voluminous "adenopathies" as being a constant feature in cases in which dermatitis had preceded the formation of tumours.

Itching is in most cases a pronounced and constant feature of the case from the first, and in forming a judgment of the nature and severity of the lesions, the effects of scratching must be taken into account. Another constant symptom is a peculiar sickening fœtor which is given off from the patient's skin. Pain, as already said, is rarely complained of. The disease appears to be confined to the skin, and the general health remains for a long time unaffected. The almost invariable termination is death, which occurs from cachexia or from some intercurrent disease.

My case conforms in its clinical features to the type of mycosis fungoides except in one point, namely, the absence of the characteristic tumours. Growths there were, as has been seen, but they were of the epithelial type, and neither in their appearance, their clinical course, nor their structure, did they resemble the tomato-like masses of Alibert or the paler nodules described by Payne. These growths to my mind constitute an important element in the case. Their structure is suggestive of malignancy, though clinically, while under my observation they showed no sign of active extensions. I am unable to say what their relation was to the pathological process. The pathology of mycosis fungoides is so obscure that little help is to be derived from a comparison of the results of the microscopic examination in this case with those recorded by other observers. There is, in fact, as yet no type which can serve as a standard of comparison; in other words, there is no structural element, no microscopic appearance, absolutely distinctive of the processes connoted by the term "mycosis fungoides." There is a wide diversity of opinion among pathologists even as to the morbid anatomy of the tumours which constitute the most characteristic lesion of the disease. While Kaposi and others look upon the growths as sarcomatous, Ranvier believes them to be akin to lymphadenoma, and Payne regards them as granulation tumours, that is to say, chronic inflammatory growths. Hallopeau says that granulations resembling those seen in tuberculous disease are sometimes seen in "mycosic tumours." Jamieson's view is that mycosis fungoides presents features which, while in some respects analogous to sarcoma, are yet sufficiently distinct to warrant us in separating it from the sarcomata properly so called. Philippson, who carefully examined not only the fully-developed tumour but the premycosic lesions, came to the conclusion that the disease originates in the connective tissue cells, and that the erythematous or eczematoid stage is anatomically the commencement of the granuloma.

As to the causation of mycosis fungoides we are still almost entirely in the dark. Micro-organisms have, it is almost needless to say, been carefully searched for by several investigators, but although cocci of various kinds have been found by different observers, notably Hochsinger, Schiff, Rindfleisch, and Stelwagon and Hatch,[17] the evidence as to the relation of these organisms to the disease is looked upon by competent authorities as very doubtful. Bacteria have never, so far as I am aware, been found. Wernicke, as stated in Mr. Jackson Clarke's report, found sporozoa in a case of mycosis fungoides, and this fact is interesting in connection with Mr. Clarke's similar discovery in my case. In the present state of our knowledge, however, it is clearly impossible to formulate any general conclusion as to the influence of any real or supposed parasitic factor in the production of the disease. As Payne points out, "it is quite possible that fluid or soluble ferment formed in the body may be the irritant."

Of the other etiological factors nothing can be said except that the disease has usually occurred in middle-aged or elderly persons who have previously been healthy, and who have continued to be so for a considerable time after the development of the skin affection.

It is evident that the results of pathological examination taken by themselves furnish a very unsatisfactory basis for a diagnosis, and in the meantime at least I prefer to rely on the clinical phenomena. I think the sequence of events and the general appearances justify me in looking on the case as

one of mycosis fungoïdes running an unusually protracted course, in which the full development of the disease was prevented by the death of the patient.

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NOTE ON AN INJURY CAUSED BY THE LEE-METFORD BULLET.

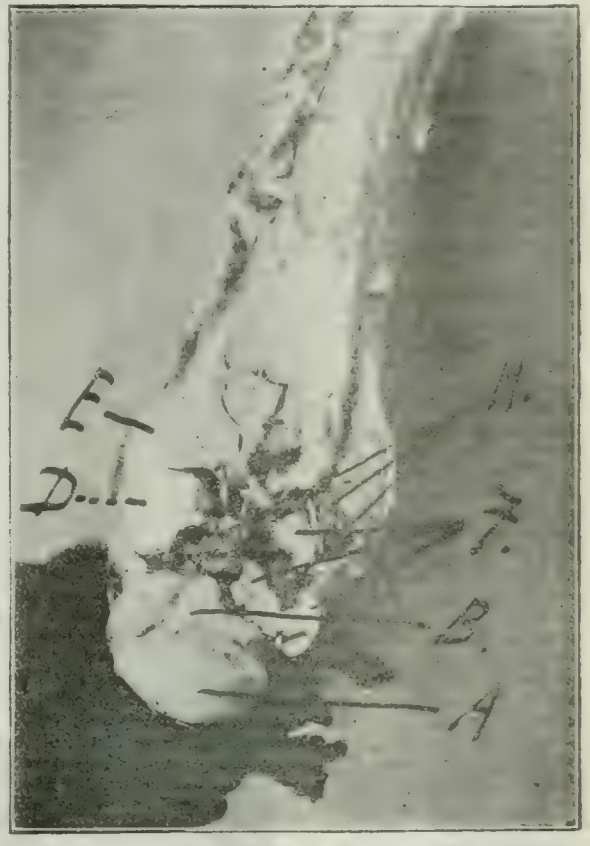
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AN opportunity offering itself, I lately made an experiment with the new rifle bullet by firing it through a recently-amputated lower extremity at a 50 yards range, using the cordite cartridge; the velocity of the projectile under these circumstances would be about 2,000 foot-seconds. The bullet passed through the ankle-joint, entering the astragalus behind, above the surface for articulation with the os calcis, and passed out in front through the neck of the bone. The skin wounds were very small, that of entrance being a little less in diameter than the bullet, and that of exit a little smaller than the former. On dissection, it was found that the bullet had passed through the astragalus about half an inch beneath the articulating surface for the tibia. All the astragalus except its head was pulverised, and all its articulating surfaces split except that for the scaphoid. The lower end of the tibia was fissured in many directions and to a certain extent pulverised, although the bullet had not actually touched any part of this bone. The cause of this condition of the tibia was evidently the bursting apart of the astragalus while firmly held by the grasp of the two malleoli. The attachment of the external malleolus of the fibula to the outer surface of the tibia did not give way and the internal malleolus was not fractured; thus it was that when the bullet passed through the astragalus, greatly distending that portion of the bone held between the malleoli, the articulating surface of the tibia was split and the lower end of the bone extensively fissured. Had one or other malleolus given way it is probable that the fissuring of the tibia would have been less, if it occurred at all. The accompanying illustration is from a photograph of the bone injury taken immediately after dissection.

There are certain points in connection with this experiment, although made on dead tissues, which are well deserving of consideration. The entrance and exit wounds were mere harmless-looking punctures; there was no displacement of bone apparent on inspection, and, on such examination as I made of the joint, no crepitus was perceived. Knowing how great is the damage usually done by small-bore bullets at high rates of velocity when bone is traversed, especially on the exit side, and seeing how slight appeared the injury done in this case, my first idea was that the bullet had passed through the joint, causing but little, if any, fracture of the bones forming it. But, on dissection of the parts, most extensive bone injury was found, as already detailed. This, no doubt, was due to the very cancellous texture of the bone traversed by the projectile, and to the slight resistance it offered. The bone was pulverised, the fragments being driven apart in directions at right angles to the track of the bullet, not forwards through the exit wound. Then, again, the extent of serious damage found beneath these two inoffensive-looking skin wounds points strongly towards the imperative necessity there is for a careful exploration and examination of all wounds caused by small-bore rifle bullets in situations where bone *may* have been traversed, in order to arrive at a definite diagnosis, on the accuracy and completeness of which the treatment must entirely depend: it shows that slight skin wounds and absence of displacement and crepitus are no guarantees against extensive fracture.

The older military surgeons taught the advisability of avoiding exploration of bullet wounds wherever possible. They had learnt from a sad experience that bullet wounds which had been explored were more likely to "go wrong" than were those in which this procedure had not been carried out. But, nowadays, when even exploratory laparotomies are known to add hardly anything to the gravity of those cases in which they may be considered necessary, so in small-bore bullet wounds, where bone may have been traversed, one or both of the skin orifices should be enlarged, and a complete examination of the track made. This procedure, if carried out with the precautions of modern surgery, can in no way increase the severity of the injury, and it must give the surgeon his only clue to treatment.



A, head of astragalus; B, neck of astragalus; D, articulating surface of astragalus for tibia displaced; F, bits of same; E, internal malleolus; H, bits of the cancellous structure of the astragalus.

Had the injury above described occurred in a soldier on active service, and had the treatment been carried out on the lines indicated by the outward appearances of the wounds, good surgery would not have been practised, and the result must have been most unsatisfactory. On the other hand, a thorough exploration of the bullet track would have left the choice of two methods of treatment: excision of the ankle joint, or amputation above it. If the existing conditions of the campaign did not necessitate the evacuation of the field hospitals and the passage of the wounded towards the base of operations, probably excision would have had a fairly hopeful outlook; but if transport towards the rear was imperative, then amputation would probably have been the sounder line to adopt.

ELEPHANTIASIS ARABUM IN THE SOUTH SEA ISLANDS.

By PATRICK MANSON, M.D., M.R.C.P., LL.D.,
Physician to the Seamen's Hospital, Greenwich.

Elephantiasis Arabum is nowhere more frequently met with than in the South Pacific. So common is it there that in some of the islands few attain adult life without having undergone attacks of the characteristic elephantoid fever and inflammation; and a very large proportion of the inhabitants —variously stated at from 1 in 20 to 1 in 3—develop genuine elephantiasis. Concurrently with this remarkable prevalence, there is enhanced liability to extreme degrees of development; and this not only as regards size of elephantoid swelling, but also as regards number of regions of the body and extent of area involved. Thus in those islands elephantiasis of the arms — a comparative rarity in India, Brazil, China, and other better known haunts of the disease—is very common; and a form still rarer in the countries I enumerate, occurring there only once in about 700 cases, elephantiasis of the mamma, is far from infrequent. The island of Huahine has an evil reputation for the disease. The few Europeans who reside there are nearly all affected, and very much in the same way and to the same degree as the natives. Samoa, likewise, though not so markedly as Huahine, is a well-known centre of elephantiasis: and there too the disease is seen in Europeans as well as natives, frequently attacking the arms, and, at times, the breasts, in addition to the usual sites—the legs, scrotum, or labia. The accompanying photograph, kindly sent me by Dr. Davies, of Samoa, is an excellent and unique representation of the mammary form of the disease. The picture is a valuable one, for I know of no other representation of this variety of elephantiasis in medical literature. That it represents a case of undoubted elephantiasis and not simply one of ordinary hypertrophy of the mammæ, is clearly proved by the concurrent and well-marked elephantiasis of the left leg.



The elephantiasis of the South Sea Islands has not hitherto been adequately studied. Further than its extreme prevalence and its symptomatology, little seems to be known about it. The important subject of etiology has never been properly attacked. Although I believe that the elephantoid diseases, in their endemic forms at all events, are caused by filaria nocturna, I admit the possibility that this parasite may not be the only and universal cause, and that the endemic elephantiasis of the South Sea Islands may be the result of lymphatic disease induced by some pathological agent other than the filaria. I do not think so; but the possibility of this, until we are in possession of additional evidence in favour of filaria nocturna being the cause, must be admitted. Such a possibility is suggested by certain features, not quite peculiar to, but so frequent in South Sea Islands elephantiasis as compared with elephantiasis elsewhere, that they are to this extent characteristic and call for explanation. Chief amongst these is the great liability to implication of the arms and breasts as already mentioned. Assuming that South Sea Islands elephantiasis is the same disease as the elephantiasis of other countries and that it is caused by filaria nocturna, the question occurs, how may we explain this unusual frequency of arm and breast implication there? This I would do by referring to the obvious consideration, that in countries in which elephantiasis is unusually common, the endemic cause of elephantiasis must be unusually rife; and that therefore extreme degrees and rare forms of elephantoid infection are more likely to be met with there than in countries in which the endemic influence is more thinly sown so to speak. As a corollary to this, and still assuming that filaria nocturna is the cause of elephantiasis in the South Sea Islands as elsewhere, we are led to the inference that filaria nocturna is present in proportionately larger numbers and in a larger ratio of the inhabitants of these islands than it is in countries in which elephantiasis is less common. This is a point which could and which can only be determined by direct observation. It is an interesting and important one, both as regards the geographical distribution of a dangerous parasite, and also as regards the etiology of elephantiasis; and I venture to avail myself of this opportunity to ask our *confrères* and others in the South Sea Islands to assist in settling it.

Some time ago I had an opportunity of determining the unusual frequency of the filaria in a district in which elephantiasis is particularly prevalent. According to Waring, in certain districts of Cochin, India, about 1 male in every 16.5 is affected with elephantiasis. Applying the reasoning process to Cochin which I seek now to apply to the South Sea Islands, I concluded that filaria nocturna must be very common in that part of India. Through the kindness of Surgeon-Major Elcum, I obtained suitable specimens of night-blood from eighty-eight Cochinese. In twenty-one of these I found filariæ. Now, as elephantiasis is still more common in the South Sea Islands, if my view as to the pathology of elephantiasis is correct, we may expect to find the filaria even more frequently there than in Cochin. I am perhaps right, therefore, in conjecturing that nearly every South Sea Islander, in those islands in which elephantiasis is so common, has filariæ in his or her blood. I must be careful to qualify this conjecture in one important respect; I ought rather to say, nearly every islander, except those affected

with elephantiasis, has filariæ in his blood. This circumstance, namely, the comparative absence of filariæ in those affected with elephantiasis, strikes one at first sight as somewhat strange, and, on superficial consideration, might seem to upset the doctrine of the filarial origin of elephantiasis. Properly considered, however, it is a powerful argument in favour of this doctrine. Elephantiasis is caused, I hold, by the infarction by filarial products of the lymphatic glands connected with the diseased areas. To give rise to this infarction, the parent filariæ must lie on the distal side of the glands. Being in this position it is impossible for the young filariæ—the filariæ we would otherwise encounter in the blood—to pass the blocked glands and get into the general circulation. Therefore, the person least likely, in a filarial district, to have filariæ in his blood, is one who is the subject of elephantiasis. My observations on Cochinese blood thoroughly bear this out. Of the 88 Cochinese blood-slides I have referred to, 14 came from cases of elephantiasis: only 1 of these showed filariæ. Of the remaining 66 slides, none of which came from cases of elephantiasis, 20 showed filariæ, or 1 in 3.7. This circumstance should be borne in mind. The filaria by the very fact that it has given rise to elephantiasis ensures the absence of its progeny from the circulation.

Although, reasoning from what is known about the filaria in other countries, there seems to be good reason to believe that it is the cause of South Sea Islands elephantiasis, until the blood of the natives of those islands has been carefully and systematically examined, we cannot claim that this has been proved. I have made many attempts to procure specimens of blood from the South Pacific, but, hitherto, my efforts have been in vain. I therefore avail myself of this opportu- to appeal to any of the profession who may be located in these islands, and to the surgeons of our cruisers and those of other countries, to missionaries, and to scientific travellers, to try to settle this matter. Should they themselves not have the necessary leisure and conveniences for the examination of blood, I would willingly undertake the examination for them provided they supply me with material. The preparation of suitable blood-slides is a very easy matter. The blood must be procured after sunset and in this way: Prick a ligatured finger with a needle, transfer a full drop of blood to an ordinary glass slip, 3 inches by 1 inch, spread the blood out in a fine layer with a needle, say over an area of 1 inch by 1½ inch, lay the slip on its back until it dries, label it with name, hour, place, and disease (if any), pack away the slides in bundles, taking care by placing a piece of paper between the ends of the slips to keep the blood surfaces from coming in contact. Slides so prepared if kept dry do not spoil and can be examined successfully months or years afterwards. To find any filariæ they may contain, all that is necessary is to immerse the slides for about an hour in a weak watery solution of fuchsine, one or two drops of the saturated alcoholic solution to the ounce of water; decolorise in weak acetic acid, three or four drops to the ounce; wash in clean water, and then examine with an inch or half inch objective, searching every bit of the slide. A cover-glass is neither necessary nor desirable. The filariæ and white blood corpuscles are alone found to be stained; the former, therefore, are very readily discovered. The difficulty in procuring a sufficient number of glass slides in such countries can easily be overcome. Window glass and a glazier's diamond can be procured almost anywhere. To anyone willing to help in this matter I would repeat: Procure the blood always after dark, best about 9 or 10 P.M.; take it from all natives indiscriminately; search the stained blood with a low power; do no expect to find filariæ often in cases of developed elephantiasis. As some islands are said to be free from elephantiasis it would be important to ascertain if they are free also from filariæ; if possible, therefore, slides should be procured from the natives of these islands as well as from the natives of islands in which elephantiasis prevails. Twenty or thirty slides from as many natives from each island would suffice to settle this question of etiology of South Sea Islands elephantiasis for or against filaria nocturna.

[We shall be happy to receive such slides at the office of the BRITISH MEDICAL JOURNAL, 1, Agar Street, Strand, W.C., for transmission to Dr. Manson.]

10

RETENTION OF A GUM ELASTIC BOUGIE FOR MORE THAN ELEVEN MONTHS IN THE UTERUS.

By ALFRED SYKES-WARD, M.D.,
Nottingham.



ON October 15th, 1893, Miss H. consulted me about a sinus, situated over the sacrum, which had been discharging for six months. I arranged to give ether, and lay the sinus freely open and scrape the cavity, which at the time of the operation was found to lead down to the bone. The day after operation my attention was called by the patient to a purulent discharge which came from the vagina. On examination I felt a foreign body, part of which was in the vagina and the remainder in the uterus. The vaginal portion was bent round, and rested on the posterior wall. With considerable difficulty it was removed by the finger, and found to be a piece of gum elastic bougie measuring 5½ ins. There was no evidence of perimetritic inflammation or implication of neighbouring viscera. On questioning the patient, she admitted that it had been inserted by a woman who is now undergoing penal servitude for procuring abortion in another case. The bougie was inserted on November 3rd, 1892. She miscarried two days later, and had suffered from pain in the back and purulent discharge from the vagina from that time up to April, 1893, when the sinus began to discharge. After the removal the patient did well, and was able to return to her occupation in a fortnight.

The points which seem to me to be noteworthy are, first, the retention of the bougie after the miscarriage had taken place; secondly, the comparatively slight mischief that resulted from the long residence of the bougie. The accompanying photograph gives a very correct idea of the appearance of the bougie.

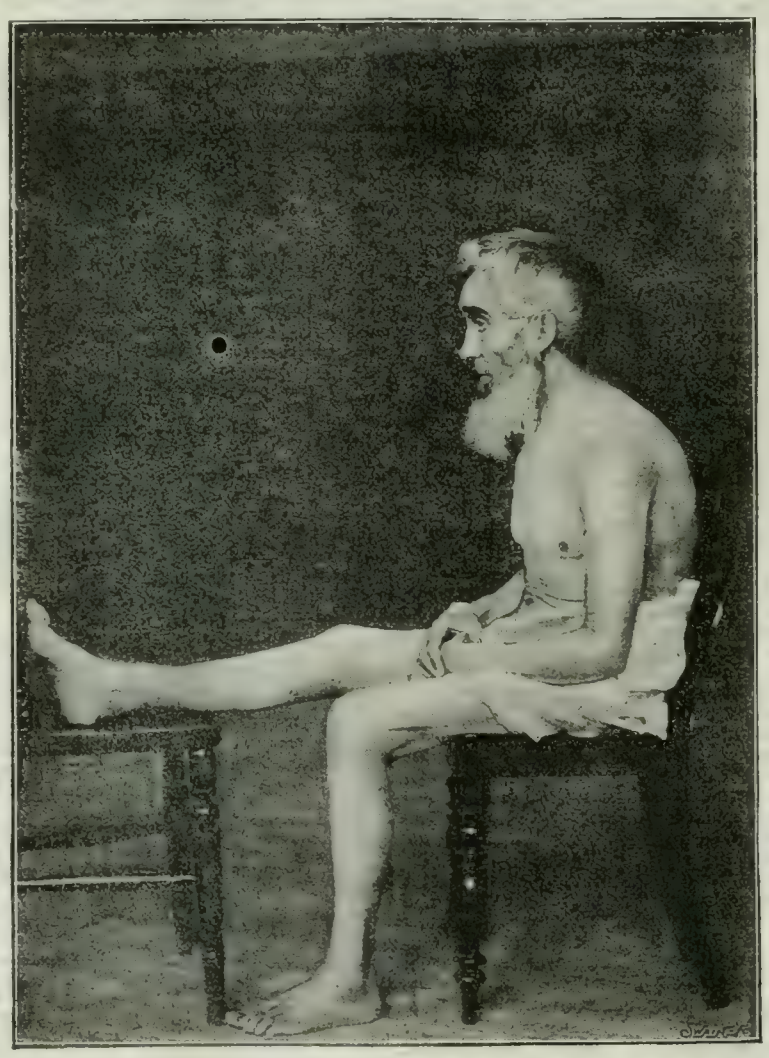
ALCOHOLISM AND INSANITY.—The part which alcohol has played in the genesis of insanity in Ireland has been brought out in bold relief in the special Report, just issued, of the Inspectors of Lunatics in that country. Of the medical superintendents of the twenty-two district asylums, twenty agree that, in their experience, the most prevalent cause of insanity, after heredity, was alcoholism. The proportion of cases of lunacy due to alcohol varied from 10 to 35 per cent. of the whole admissions. The reports from two asylums pointedly refer to transformed in ebriate transmission. The superintendent of the Ballin asloe district says that the offspring of inebriates are liable to many neurotic diseases, and, from Killarney, that cases of epileptic mania have occurred in the children of inebriates.

OSTEOPOROSIS OF THE CRANIAL VAULT.

By GEORGE WHERRY, M.C.Cantab., F.R.C.S.
University Lecturer in Surgery, Cambridge.

Except in cases of osteitis deformans, there have been no clinical records of symmetrically-growing heads in adults such as might furnish examples of osteoporosis. The thickened calvaria of our museums are usually without history, and though Sir James Paget, by his epoch-making account of osteitis deformans has enabled some of these to be classified, there remain many gaps in our knowledge which can only be filled by clinical accounts.

The accompanying figure is from the photograph of a carpenter, aged 56, who came under my care in Addenbrooke's Hospital, suffering from fracture of the lower third of the tibia. The bone was broken in two places, about 3 inches apart, with a rounded swelling between the breaks, the fibula being sound. The swelling is tender rather than painful. He had been laid up several months with a "rheumatic" knee, and three months ago broke the leg in getting off a night stool, and has borne no weight upon it since.



There is evidently a sarcomatous growth in the bone, resulting in the fractures from such an inadequate cause.

There is well-marked evidence of arthritis deformans in both knee-joints, the lipping of the articular ends of the bones being characteristic. There is no thickening or curving of the shafts of any long bones in his body.

The spine is bent and stiff in the dorsal region, but the neck and loins are fairly free from stiffness.

The head is large, but retains its symmetry, and merely gives the man an intellectual appearance, without any deformity. It measures above the ears in circumference 26 inches, and has been growing for years; he thinks as many as ten years. His hats have been obtained of increasing size, until they had to be made for him. His hatters—Golding and Son, Newmarket—write to me as follows:

> We have supplied him with hats about three or four years, and during that time we have noticed that his head has been growing larger. The first hat or two that he had we were able to supply from our stock (size 7¼, the largest size we stock), and then the next he wanted 7⅜, and the next 7½, and we had then to get a 7⅝ made for him; the last one he had from us was 7⅞ full; this of course is a tremendous size, the largest we have come across in our experience. We are rather interested in this man ourselves, as we have often remarked that we thought he must have some disease of the head for it to grow to such an extent, especially as our experience is just the opposite; if heads vary at all with our customers we find that they decrease instead of increase.
>
> Hatters' scale of sizes: 7¼, head measures 22⅞ in.; 7⅜, 23⅛ in.; 7½, 23⅝ in.; 7⅝, 24 in.; 7¾ full, 24¼ in.

This patient first came under my notice as an out-patient in the eye department in July, 1890. He was suffering from atrophy of the optic nerves apparently from neuritis. There was albumen in the urine, but there were no retinal hæmorrhages. He was a considerable smoker, but there were not evidences of tobacco amblyopia. His tobacco was stopped, and he was treated with cod-liver oil, iron, and digitalis during twelve months. His vision improved in this period from counting fingers at 4′ to V = $\frac{2}{3}\frac{0}{0}$, and reading J 2. He has greyish-white atrophic discs. He has become very deaf of late from chronic catarrh of the tympanum. The drum-heads are easily seen, and there is no exostosis or bony deformity of the aural canal, but the optic nerve affection may have been due to alterations in the optic foramina.

He is now, and has always been mentally quite alert and intelligent, and, except for the infirmities mentioned, has had good health, and never suffered from headaches. He has been a cheerful well-occupied man all his life.

From the fact that unusually large heads required hats to be made for them, I was led to elicit from Messrs. Lincoln and Bennett, hatters, the following information on the subject, with a diagram showing a head of unusual size with no evidence of want of shape or symmetry; the circumference of this gentleman's head increased 3⅜ inches in fourteen years. The final measurement was twenty-seven inches.

Measurements and dates were taken.

1870, Sept. 16th, 23⅝ inches.
1872, July 1st, 23⅞ ,,
1873, May 22nd, 24¼ full.
1874, Nov. 16th, 24¼ bare.
1875, Feb. 26th, 24¼ full.
1877, Jan. 22nd, 24⅝ ,,
1878, April 10th, 24⅝ ,,
1878, Sept. 18th, 24⅝ full.
1880, July 5th, 24⅞ ,,
1881, Jan. 10th, 25¼ ,,
1882, May 31st, 25⅝ inches.
1884, March 26th, 25⅞ ,,
,, May 26th, 26¼ ,,
,, Oct. 20th, 27 ,,

This gentleman died, aged about 70, soon after the last measurement. He used to walk with a stoop both of head and body, and always appeared glad to sit down. He was slightly lame in one leg. The remarkable increase in the growth of the head at the end of life is noteworthy.

In another case of enlargement of the head, the gentleman stooped and walked heavily in the same way. He died aged about 80. His head, always large, began to grow in 1872, between which date and June, 1878 (shortly before he died), the increase in circumference was three-quarters of an inch, the actual size being 26¼ inches.

Both these are probably cases of osteitis deformans. Sir James Paget notes in his typical case that his patient wore a shako in 1844 measuring 22⅔ inches inside; in 1876 his hat measured 27¼ inches inside; but "the changes in shape and size in both the limbs and the head were arrested, or increased only imperceptibly, in the last three or four years of

life," in decided contrast to the rate of growth as recorded by Messrs. Lincoln and Bennett.

At present, without more evidence, my case can hardly be pronounced one of osteitis deformans, and yet the enlarging head occurs in that disease, and is not found associated with arthritis deformans; also new growth is often found with osteitis deformans, as in several of Sir James Paget's case. In Mr. Lunn's case there was a sarcoma in the pelvis. The entire skeleton is in the St. Thomas's Museum, and is beautifully figured in *St. Thomas's Reports*, 1883, and described by Professor Stewart.

As rarefying osteitis is the chief feature of the disease in osteitis deformans, this would afford also the best explanation of the symmetrically enlarging cranial vault in my patient.

ABDOMINAL SARCOMA INFILTRATING THE ABDOMINAL WALL.

BY J. WARD COUSINS, M.D., F.R.C.S.,
Senior Surgeon to the Royal Portsmouth Hospital, and the South-East Hants Eye and Ear Infirmary.

M. A., a married woman, aged 27, was admitted into the Royal Portsmouth Hospital during September, 1891. The



abdominal swelling had been noticed twelve months. Her general health had previously been good, and the catamenia regular. On examination the surface of the abdomen appeared regular and full, and a well-marked and elastic tumour could be readily defined, which extended upwards 3 inches above the umbilicus. There was no trace of fluctuation. The pelvic cavity was free, the uterus was drawn upwards, and the os felt soft and healthy. The circumference at the umbilicus measured 32 inches, and the distance from the symphysis to the ensiform cartilage 17 inches. An exploratory operation was performed on October 1st. The abdomen was found filled with an omental tumour, which was intimately associated with the internal organs. Its surface was highly vascular. A small portion of the growth was removed, but microscopic examination revealed only normal omental structure.

Shortly after the patient left the hospital in fair health, and returned to her situation. She stated that the operation had given her much relief.

In July, 1893, she was admitted again under my care. The abdomen had greatly increased in size. The circumference at the umbilicus measured 38 inches, and midway between this line and the symphysis it reached 45 inches. She appeared much emaciated, and her features had the pinched expression which has often been described as the "facies uterina." For some months she had been unable to follow any occupation. The abdominal surface was deeply pigmented, especially around the scar, and the cicatrix was completely infiltrated with new growth, and measured 3 inches from side to side. In many places it presented a nodular appearance, and the infiltration had even penetrated through the suture scars, and from these pedunculated masses of new growth were protruding.

The accompanying photograph was taken at the hospital a few days since, and I am much indebted to my colleague Mr. Newby for his kind assistance.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

CASE OF VIPER BITE.[1]

C.B., aged 16, while playing with a viper, was bitten in the ball of the thumb at 5.10 P.M. The wound was sucked immediately, ammonia applied, and a ligature tied tightly around the wrist.

He was seen by me at 6 P.M. The fang marks, about 1 inch apart, were distinct; the hand was much swollen below the seat of ligature, but the patient felt perfectly well. Three minims of liquor ammoniæ fortis, diluted, were injected at the seat of injury, and 2 drachms of sal volatile given internally. At 7 P.M there was so much œdema that it was thought wise to loosen the ligature. The œdema spread rapidly up the arm to the shoulder. As the patient was now feeling faint, 2 ounces of brandy were administered in tea, and he felt better; the pulse was very irregular. At 8 P.M. he felt very sleepy, and said later that at this time he felt that he did not care what happened to him. The pupils were enormously dilated, the pulse most irregular—peculiarly so at times, 20 beats or more with extreme rapidity, then long intermission followed by a few slow beats. A teaspoonful of Wyeth's meat juice, and half a tumbler of champagne, were given. A few minutes later there were rigors, followed by vomiting about 9 P.M. Hot-water bottles were applied to the lower extremities, and the patient was put to bed, where he remained in a very drowsy condition, but the heart became more regular. By 8 P.M. a patch of blackened tissue, about 2 inches in diameter, was found at the seat of injury. About 11 P.M. there was a sharp attack of diarrhœa, and at 11.30 he was fairly comfortable.

At 2 A.M. his mother roused me, as he was rather restless and excited. The pulse was rapid, and he seemed feverish, but without any rise in temperature. The drowsiness had passed away. I now gave him 25 minims of chlorodyne, after which he had a good night's sleep, and in the morning felt

[1] Read at a meeting of the Isle of Wight District of the Southern Branch of the British Medical Association.

quite well and enjoyed a breakfast. The arm was enormously swollen, and the livid patch apparently gangrenous.

He was sent home in a carriage about twenty-four hours after the accident. The swelling very gradually abated, and, in doing so, passed through all the phases of a bruise. The livid patch necrosed, and gradually healed up.

Sandown. W. E. GREEN, M.R.C.S.

SCARLET RASH AFTER ENEMATA.

THE occasional occurrence of a bright scarlet rash after injections of warm water into the bowel should be borne in mind. The rash appears in about two hours after the injection, and lasts about twenty-four hours. It covers the whole of the body and limbs, and is especially marked on the face. In rare cases it is accompanied with sore throat and slight fever. The rash is almost exactly like that of scarlet fever, and may easily be diagnosed as such, especially if a sore throat is also present. It occurs more commonly in children than in adults, and is occasionally distinctly urticarial. It is due to toxæmia caused by absorption of fæcal matter liquefied by the injection of a large quantity of warm fluid into the rectum. In all cases of supposed scarlet fever it will be well to exclude the possibility of the rash being due to an aperient enema.

I have lately met with two well-marked illustrations of this toxæmic rash. Case 1 was that of my own son, aged 11. I was told that a scarlet rash had come out on him. I found that he was covered with a bright scarlet rash, but there was no sore throat, no fever, and no increase in the pulse rate. A soap and water enema had been used about two hours before the rash was noticed. I could not diagnose the case until thinking it over I remembered making a note on rashes after enemata. On reference I find the note was made from a very interesting paper by Dr. Burford, "On a Mild Form of Septic Toxæmia Occurring after Enemata."[1] The rash disappeared in about twenty-four hours, and the boy was quite well. Case 2 I met with at the Queen's Hospital. A little girl was to be operated upon, but just before the operation a scarlet rash was observed on the child and I was asked to see her. On inquiry I found that a soap and water enema had been used that morning. There was no sore throat or fever, and the rash shortly disappeared.

C. W. SUCKLING, M.D.,
Professor of Medicine, Mason College, Birmingham.

AUDITORY VERTIGO AND HIGH PULSE TENSION.

IN the interesting papers of Dr. Stephen Mackenzie and Sir William Dalby, which have appeared in the recent numbers of the BRITISH MEDICAL JOURNAL, great stress is laid upon the needfulness of keeping down the systemic arterial pressure by means of purgatives.

May I suggest that, in those cases in which the vertigo is possibly an expression of the action of high blood pressure upon the cranial contents, this method of treatment may be probably often wisely and happily supplemented by either local or general blood-letting, especially in those instances which do not quickly and readily yield to purgatives? Just lately a patient, an elderly lady, with very full, hard, bounding pulse, and suffering constantly from hyperæmic headache and sudden vertigo, was much relieved by free leeching of the temples, though purgatives had given her but little comfort. And some time ago I was called to a patient, a drinking man, aged 39, and found him sitting on a chair, breathing heavily, with swollen purple face sunk upon his breast; blue, throbbing neck, and full pulse; consciousness fast slipping away. The onset of all this had been sudden and without warning. In a few moments, as blood flowed freely from the arm (a vein of which I had opened), the breathing became soft and quiet, the blueness slowly vanished, and consciousness quickly returned again. The man was speedily in his usual health.

In these days we have, I venture to think, a very unwholesome dread of leeches and lancet—an unconscious psychological protest against the blood-letting excesses of our forefathers.

Sale, Cheshire. OLIVER WITHERS.

[1] *Lancet*, December 15th, 1888.

REPORTS
ON
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS

COTON HILL LUNATIC ASYLUM.

CASES OF BEARDED WOMEN.

(By L. HARRIS-LISTON, Assistant Medical Officer.)

As these cases are stated in Dr. Hack Tuke's *Dictionary of Psychology* to be very rare, it may be of interest to record some examples which are at present under care in this hospital.

CASE I is that of an inmate who has been insane for forty-three years, and is 83 years of age. The form of insanity she was afflicted with was puerperal mania following parturition. This was a first attack, and became chronic; she is now quite demented. She was very irritable and vain, wore bright-coloured caps, considered herself a queen, and curled her beard in papers every night. The first mention of her beard in the case book is in 1873, when she was well past the climacteric period, and where it is said "the downy hair under her chin is now developing into quite a respectable beard." She will not allow it to be cut, and now it consists of a growth of white curly hairs fairly thick. On the chin the length varies between 8 and 10 inches; on the upper lip hairs are scarce, and about 1 inch long. Her physical development is womanly. She is a widow, and has borne children.



CASE II, 36 years old, insane since puberty, when she had an attack of emotional melancholia, which has drifted into dementia. The menses were late in appearing, but she is now quite regular. She is at times destructive, and has an excessive flow of saliva, which she spits about her. About two years ago a few downy hairs appeared on her chin, and these have increased in number and size, so that at the present time there are tufts of thick curly hairs on her chin 2 inches long, of a light yellow colour. There are a few straggling hairs on the upper lip.



CASE III.—This single patient has been insane for thirty-nine years, and is now 64 years old. There is a hereditary history of insanity. She was admitted suffering from chronic mania, the chief symptoms being love of admiration, a strong passion for the male sex, and paroxysms of excitement, when she is dangerous and destructive. The first mention of her beard in the case book is 1878, it being then "fully developed." She menstruated regularly till the menopause. The trustworthy attendant who has charge of her tells me the beard appeared some years before the change of life. Her subsequent history is that she gradually passed into a demented state, with fewer paroxysms of excitement, during which she plaits her beard, which is now 7 to 8 inches long on her chin, and about 1 inch on her upper lip. The hairs are fine, black and grey in colour. Her physical development is womanly except for her beard and very hairy legs.



CASE IV.—This patient is aged 62, and has been insane for thirty-six years. She suffers from mania, with paroxysms of excitement at the menstrual periods which have always been regular. She is now demented, and every five or six months has attacks of excitement which last for three or four weeks, when she is noisy, and destructive to her dress. Her father, brother, and sister were insane, and her sane mother had a beard. Her physical development is womanly except her features and beard. She is bald. Her beard appeared before the climacteric. The hairs, white and coarse, are thickest on the chin, where they are 3 inches long; on the upper lip they are about 1 inch long.



The accompanying photographs are prints from "untouched" negatives.

LEPROSY IN ICELAND.—The Danish Government proposes to send a scientific expedition to Iceland to investigate the prevalence and distribution of leprosy in that island. Professor Neisser, of Breslau, has been invited to accompany the expedition.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

J. W. HULKE, F.R.C.S., F.R.S., President, in the Chair.

Friday, May 25th, 1894.

THE USE OF CHLORINE GAS IN THE TREATMENT OF CHRONIC ULCERS OF THE LEG.

DR. E. DIVER (Kenley) read this paper. The gas used was formed by pouring about 2 drachms of potassium chlorate, and f3j or more of HCl into a pickle or marmalade jar, the outside of which was covered by brown paper. After this a disc of white paper was introduced, and on top of the paper a sufficiency of absorbent wool; a large cork was then fitted to the neck of the jar. The wool (yellowish-green on the surface when at first exposed to view), was next placed over the ulcer in each case, and quickly covered by gutta-percha tissue; then the patient was left to do in the way of bandaging or covering what she had been used to. No rest was enjoined. The gas was probably chiefly Cl with some peroxide of Cl in mixture. The result of the treatment was satisfactory in each case. The patients were exhibited to show their present condition.

After some remarks by the PRESIDENT and DR. BENHAM, the author said that he had been led to try chlorine gas by observing the extraordinary way in which it increased the germinating power of poor samples of barley. This had induced him to employ it as a local stimulant.

PANCREATIC CYST WITH DIABETES: ATROPHY OF PANCREAS.

DR. CHURTON (Leeds) related a case of this kind in a man aged 35. With respect to the treatment of pancreatic cysts surgical opinion seemed to favour incision rather than aspiration, but the author, instructed by the present instance, considered aspiration preferable in cases associated with glycosuria, since (1) the glycosuria is a sign that the pancreas had become atrophied; (2) that being so, it did not appear that life could be much prolonged, even with the aid of pancreas extracts; (3) diabetic patients were more likely to become a prey to septic organisms; (4) pancreatic cysts had been cured by aspiration; (5) in eight successful cases treated by incision to which the author had been able to refer glycosuria was not present; (6) he had not been able to find records of any successful cases in which it existed.

THE PRESIDENT said these cases were very infrequent, though he and Mr. Gould had both brought instances before the Society. In recent cases the nature of the fluid contents might furnish ground for diagnosis, but in old cysts this was not so, as the fluid was often much altered. The cysts were of two kinds: (1) Relatively stalked, often mobile, and easily brought to the surface, thus admitting of easy drainage; (2) broadly sessile, and much less easily treated.

MR. PEARCE GOULD said that of his two published cases one was successful, the wound healing perfectly; the sinus in the other cases remained open for a year, when malignant disease appeared at the part. He had since had a third case, the prominent symptom of which was jaundice. The progress was good for two days after the cyst had been cut down upon and drained, when peritonitis appeared, of which the patient died on the following day. The examination of the parts had not yet been thoroughly made, but the cyst was a large one, involving the head of the pancreas, with the common bile duct lying across it and much flattened. Aspiration of these cysts must, in his opinion, be dangerous. In the four cases he had seen he was glad aspiration had not been selected; there was great danger of wounding vital parts, large vessels, the stomach, etc. The fluid was difficult to draw out, being thick, and flowing only with difficulty. Peritonitis also was very apt to follow. With pancreatic cysts associated with glycosuria he doubted if anything should be done. The cyst, moreover, was apt to fill again, so that when it was associated with diabetes he considered aspiration scarcely justifiable.

MR. F. C. WALLIS thought aspiration was not an advisable operation in any case of abdominal cyst, and that for various reasons.

DR. CHURTON, in reply, said he did not recommend aspiration otherwise than as a *pis aller*. Diabetic persons were peculiarly prone to septic influences; in this case suppuration followed an attempt to collect some of the fluid for analysis; but, as to abdominal aspiration in general, hydatids, if single, had been cured by one aspiration; also, cysts of the pancreas, it was stated, had been successfully dealt with by a single aspiration. If this were so, aspiration was justifiable; but if it always failed to relieve diabetic patients, they should be left alone.

PURPURA HÆMORRHAGICA WITH ACUTE PEMPHIGUS, PROBABLY INDUCED BY INFLUENZA.

DR. SANSOM read notes of this case. A girl, aged 12, was admitted into the London Hospital, November 15th, 1893, in a critical condition. Extravasations of blood were seen about the eyelids; there was much oozing of blood from the mouth; hæmorrhagic stains and spots were observed on the skin covering the chest, abdomen, and back, as well as upper and lower extremities. Bullæ (as of pemphigus) containing deeply blood-stained fluid were present on the left ala nasi, over the abdomen, the arms and legs. The tongue generally stained darkly, presented several small bullæ over its dorsum and sides; similar blebs were seen within the lips, all containing blood-stained fluid, some bursting and liberating their contents to produce oozing from the mouth. There was vomiting, the vomit being blood-stained, and much blood was voided with the evacuations. The urine contained a trace of blood. The pulse 124, respiration 34 per minute; cough, with deeply blood-stained sputa; bronchitic *râles* heard on chest front and base of right lung. The temperature on admission was 98.8° F., but rose on the day following to 103.8 F. Half-drachm doses of sodium sulphocarbolate were administered every four hours. During the next five days the signs were little changed. After nine days, though there were indications of some general improvement, hæmorrhagic extravasations were observed on each fundus oculi, with signs of double optic neuritis. There was, however, continuous amendment, though the temperature rose on one day to 105° F., and on the next to 104° F. The patient was discharged quite well

after having been in the hospital for thirty-six days. It was thought probable, considering the mode of onset and the accompanying pyrexia, that the disease in this case was due to an infective agency. Collateral evidence showed that influenza might be attended with the signs and symptoms noted. In a well-marked case the administration of sodium sulphocarbolate in half-drachm doses every four hours for a protracted period had been practised, and the patient completely recovered. Encouraged by this, Dr. Sansom adopted the like plan of treatment in the case now brought forward; the recovery was equally satisfactory.

LARYNGOLOGICAL SOCIETY OF LONDON.

Felix Semon, M.D., F.R.C.P., President, in the Chair.

Wednesday, May 9th, 1894.

Cases.

Dr. Dundas Grant showed: (1) A case of Lupus of the Nose and Larynx, which was being treated by scraping and the application of lactic acid, with arsenic internally; (2) a case of probable Epithelioma Laryngis in a man aged 67, who had suffered from hoarseness for three years—the case seemed a favourable one for thyrotomy; (3) a case of Paralysis of Thyro-arytænoid Muscles.

Removal of Right Lobe of Thyroid for Graves's Disease.

Mr. R. Lake showed a young woman who had suffered in 1893 from symptoms of Graves's disease, from whom he had removed the right half of the thyroid gland and the isthmus. Relief to many of the symptoms had been complete. The remaining lobe appeared to have shrunk considerably. Microscopically the goitre was partly composed of small cysts and partly of acini showing active cell formation as described by Greenhill.

The President suggested the possibility of the subsequent occurrence of myxœdema.

Dr. Spicer commented on the occasional failure of thyroid extract in the treatment of these cases.

Mr. Lake had met with successful cases so treated.

Lupus of Pharynx and Larynx.

The President showed a girl, aged 10, in whom the gums, the roof of the mouth, the posterior palatine arches, the epiglottis, and the ventricular bands were all affected with a rough, uneven, granular ulceration, in places partly cicatrised. The case would be treated by scraping, application of lactic acid, and possibly by the galvano-cautery, arsenic and cod-liver oil being given internally.

Doubtful Malignant Disease of the Larynx treated by Thyrotomy and Radical Removal of the Growths.

The President showed two cases. In neither had the diagnosis of malignancy been established beyond doubt, but in both it was deemed prudent to perform the radical operation. Case I.—A gentleman, aged 63, with an ill-defined papillary growth on the anterior half of the right vocal cord. Repeated recurrence had taken place after intralaryngeal removal, and therefore all the parts affected were removed by thyrotomy. No recurrence had taken place. The growth was papillomatous, with extraordinary horny thickening of the epithelium covering it. Case II.—A gentleman, aged 55, in whom a reddish growth on the left vocal cord had gradually spread, and infiltrated the whole cord, producing an almost uniform thickening. The cord was removed and the basis scraped. At Mr. Butlin's suggestion, Hahn's tube was removed immediately after the operation, and no other introduced. The patient was kept strictly horizontal, but on one side. He made a rapid and uninterrupted recovery. The suggestions made by Mr. Butlin as to the removal of Hahn's tube after the operation and the leaving of the wound completely open while the patient remained in the horizontal position had made exploratory thyrotomy so much simpler and easier that it might safely be adopted as the operation of the future for dealing with these cases.

Sequel to a Case of Obscure Ulceration of Pharynx in a Case of Arrested Pulmonary Tuberculosis of Lung and Pharynx.

The President showed a case which had already been described[1] in which pharyngeal ulceration had resisted treatment by scraping and the use of lactic acid, which had completely arrested the apparently similar disease in the larynx. Examination of scrapings from the pharyngeal ulcers had recently failed to show the presence of tubercle. The ulceration had healed of itself, and the patient stated that it had done so before, hence its exact nature was still doubtful. Creasote had been given internally in large doses, and much of the success of the case was attributed to its constant use.

Dr. Dundas Grant agreed that creasote had formerly been given in much too small doses.

Dr. Clifford Beale quoted the experience of the Chest Hospital practice, where creasote had been given very freely both in large and small doses, and also in concentrated vapour. It appeared to be singularly well borne by the delicate stomachs of tuberculous patients, but there was as yet no positive evidence to show that in the cases of rapid and active disease any marked effects were produced.

Cases were also shown by Dr. Scanes Spicer, Mr. W. R. H. Stewart, Dr. J. B. Ball, Dr. Watson Williams, and Dr. Bond.

[1] *Proceedings*, p. 74.

BRITISH GYNÆCOLOGICAL SOCIETY.

Henry Savage, M.D., President, in the Chair.

Thursday, May 10th, 1894.

Polypoid Growth in Uterus.

Mr. F. Bowreman Jessett showed a large polypoid uterine growth, beginning to become sarcomatous. The uterus and tumour were removed together by combined abdominal and vaginal hysterectomy. The patient had made a good recovery.

After some remarks from Dr. Purcell, Dr. Bantock said that out of nearly 200 cases of uterine fibroids on which he had operated only one showed malignant disease, and that was a sarcoma of the lower segment of the uterus.

Conservative Treatment of Diseases of the Uterine Appendages.

The adjourned discussion on Dr. Routh's paper was opened by Dr. Heywood Smith, who said he could not admit that the results of removal of the ovaries were so terrible as was sometimes represented. He protested against such expressions as "castration," etc.; they were misleading, and apt to do much harm.

Dr. Purcell said Dr. Routh's paper came as a "salutary break" on the too general method of removal of the adnexa by operation.

Dr. R. T. Smith objected to the term "castration." He had done the operation many times, but never with the idea which the term implied. He had laid down six years ago that in combined tubal and uterine disease the uterus should be first attended to.

Dr. Macnaughton Jones did not agree with Dr. G. H. Savage that there was a true clinical and physiological analogy between the changes produced by the climacteric and those resulting from ovariotomy, nor had he seen the disastrous results that were stated to follow this operation.

Dr. Bantock, referring to a statement of Dr. Keith's quoted by Dr. Routh that insanity followed hysterectomy in 10 per cent. of the cases, said that his experience was quite otherwise. He had operated on nearly two hundred cases of uterine fibroids, and in not one was the operation followed by insanity as long as there was no predisposition to it. He thought far too much was made of the mortality of a disease as a determining factor in operations. As a matter of fact not more than 10 per cent. of operations were done to save life; at least 90 per cent. were operations of expediency. When did anyone die of piles, unoperated on? Their main duty, after all, was to relieve suffering and remove incapacity. As to the "conservative operations," many of them were simply meddlesome surgery; tubes and ovaries, with bits chipped out of them, would be often as well left alone; whilst the value of such operations in restoring functions was absolutely *nil*.

Mr. Jessett agreed with Dr. Routh that in the past there had been unnecessary operations on the appendages; it was, in fact, an epidemic, analogous to that wherein all violent pain in the right iliac region was regarded as due to typhlitis, the indication being removal of the vermiform appendix.

Dr. Routh, in reply, said one speaker regretted that he (Dr. Routh) had spoken favourably of injections of spermin, etc. That speaker entirely misunderstood him; in fact, in the paper he had distinctly stated his aversion to the practice. He maintained that aspiration was one of the best methods of dealing with many of the cases of pelvic abscess, and just lately the view had been corroborated by Hofman, who had obtained excellent results from it.

CAMBRIDGE MEDICAL SOCIETY.

Hyde Hills, M.R.C.S., President, in the Chair.

Friday, May 4th, 1894.

Chronic Ulcers of the Leg.

Sir George Humphry contributed a communication on this subject, which was read by the Hon. Secretary.

Inversion of Uterus.

Mr. Wherry read notes of a case of inverted uterus of twelve months' duration, reduced under an anæsthetic by manipulation.

Partial Thyroidectomy and Tracheotomy for Goitre.

Mr. Wherry related this case and showed the patient, a fat, flabby youth, aged 15, who weighed 14 stone. He had had repeated attacks of so-called "asthma." After a severe attack of dyspnœa, which ended in complete unconsciousness, he was admitted to the hospital, where at once a complete exposure of the trachea was made, but the whole of the middle lobe and part of each ala of the thyroid had to be removed, leaving the flattened windpipe exposed at the bottom of a deep wound. (The portions removed were exhibited.) This was done without any anæsthetic, and the patient was recovering nicely, but the next day developed some tracheitis, and the trachea was opened in the middle line and a large Durham's tube was inserted. The trachea was flattened laterally. His condition for a long time was very precarious, from attacks of bronchial and tracheal distress of breathing and accumulation of mucus. With careful nursing, in spite of many relapses, he recovered, but his mind was often wandering, and he wetted his bed, became generally babyish, and had to be managed like a child. His friends stated that this condition occurred some time before the operation. He took tabloids of extract of thyroid gland three times a day for two months, with great benefit. He had now lost 4 stone in weight, and seemed rational. His nocturnal snoring, from narrowing of the air passages, which was a great disturbance to the patients when the tube was first left out, was not now troublesome. The wound had healed, and the enlarged thyroid alæ were very much smaller.

Specimens.

Dr. J. Griffiths exhibited a Fœtus, aged 6 months, in which the eyes were fused into one central mass, the middle and inferior maxilla absent, the ears being almost joined together in front of their lower parts. The skull was almost globular. Both feet were in a state of talipes equinovarus, and in the right upper limb the radius and thumb were absent, the hand being in the position usual in such cases of extreme radial flexion. The mother had borne other children, who were alive and well, and who did not present any deformity.—Mr. Cox showed a specimen of so-called Superfœtation. It was decided to defer the question of superfœtation to a discussion at the next meeting.—Mr. C. Lucas showed a specimen of Anencephalous Fœtus.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Surgery.

Sir W. Stokes, M.D., in the Chair.

Friday, May 4th, 1894.

Naso-Pharyngeal Fibroma.

Mr. Woods read a paper on naso-pharyngeal fibroma, in which he related the case of a man, aged 28, who at the end of 1889 had been operated on

by two American surgeons consecutively, and in 1891 by Mr. Thornley Stoker, who in January, 1892, transferred the case to Mr. Woods. At this time the whole naso-pharynx and the greater part of the left nasal fossa were filled with a typical fibroma. Mr. Woods repeatedly operated with the galvanic snare, and lopped off pieces until the snare would no longer grip. He then devised an instrument which he calls a "galvanic curette," and which consisted of a semicircle of platinum wire brazed to the ends of two insulated copper rods; the platinum arc could be heated at will by an electric current. With this instrument he ploughed the tumour away piecemeal, sometimes attacking it from the front through the nostril, and sometimes from behind through the naso-pharynx. The patient never suffered very much, and the bleeding was never very considerable. By January, 1893, the tumour was completely removed, and the patient perfectly well again. His voice was quite normal, and admitted of his adopting the stage as his profession. The advantages claimed for this method of operating were the following: (1) It is less dangerous and more certain than any other method, experience proving the bleeding to be trivial; (2) the patient is neither maimed nor disfigured, as frequently happens in cases of operation where the nose is cut or the palate divided by any of the well-known methods: (3) there is no danger of injuring healthy structures, since the operator an see exactly what he does.

Remarks were made by Sir WILLIAM STOKES, Mr. SWAN, Mr F. NIXON, Mr. MAXWELL, Dr. MYLES, Mr. THOMSON, and Mr. CHANCE; and Mr. WOODS, in reply, said he saw no reason why the instrument should not be used to remove exostoses, particularly those in the external auditory meatus.

HYDROCELES OF THE NECK.

Mr. WHEELER read a paper on this subject.

Sir WILLIAM STOKES said that, as far as his experience went, the treatment of tapping the hydroceles and injecting iodine was not successful. He advocated free incision and dissecting out the cyst.

Mr. SWAN said he thought these hydroceles were due to a failure of closure of the branchial clefts occurring in the embryo. Many years ago he saw a case of a lady with a supernumerary auricle in the neck. She developed what he believed to be a hydrocele of the corresponding branchial cleft, for a cystic tumour arose, extending from the auricle deep into the substance of the neck and ultimately reaching the wall of the pharynx. It burst in front of the auricle.

Mr. WHEELER, in reply, stated that in all cases of recorded hydrocele the fluid withdrawn had been quite watery and not like glycerine in consistence. A true hydrocele was usually too deeply attached to admit of dissecting it out.

REVIEWS.

PYOGENIC DISEASES OF THE CENTRAL NERVOUS SYSTEM.[1]

IN this remarkable book the various diseases of the brain and skull which depend on the entrance of pyogenic organisms are discussed in detail. The name of the author affords a guarantee, which the book amply fulfils, that this discussion is of the highest order, and one is struck in reading the work not only by the extent and accuracy of the author's pathological and clinical knowledge and experience but by the large number of cases which he has had under treatment successfully and about which but little has been heard in the medical papers. For example, while surgeons have been publishing individual cases of successful operations for abscess of the brain Dr. MACEWEN has operated on no fewer than 19, of which 18 recovered: and his successes in other cases, more especially in cases of leptomeningitis and sigmoid sinus thrombosis, are equally remarkable. We have here to do with the work of a surgeon who, irrespective of fashion, goes on collecting facts and making observations till he has mastered the subject and then he surprises us with the knowledge he has gained and the success he has experienced. Naturally such a work stands far above books which are, in the main, compilations and abstracts from the work of others.

In discussing the pathology of abscess of the brain, the author ascribes the occurrence of these in most cases to a direct extension of the infective process from the middle ear or from the mastoid antrum. As the result of the chronic inflammatory affection of the antrum the roof of the cavity or the posterior wall adjacent to the sigmoid sinus becomes inflamed and ulcerated, and following this occurrence the dura mater on the surface becomes thickened and inflamed, and very often a subdural abscess results, or in the case of the posterior wall an infective thrombosis of the sigmoid sinus. Either after the formation of this subdural abscess, or without its formation, the infective process extends to the surface of the dura mater, and may then become diffused in the arachnoid space causing there a leptomeningitis, which may be either diffuse or circumscribed, or the arachnoid space becomes obliterated and the pia mater becomes inflamed, and the infective process attacks the surface of the brain leading to what Dr. Macewen terms "ulceration of the brain." Or it may extend into the white substance, chiefly along thrombosed veins, or lymph spaces surrounding the vessels, and there set up a cerebral abscess. Or even without this obliterative meningitis the author considers that the veins may become thrombosed in connection with the inflammation of the dura mater, and, passing in between the convolutions of the brain, convey the infective material into its substance. Where the roof of the antrum is the part which becomes eroded, an abscess forms in the temporo-sphenoidal lobe; where the posterior wall of the antrum is attacked, we have either sinus thrombosis or abscess in the cerebellum.

As to the future of abscesses, the author refers to interesting cases in which apparently abscesses of the brain have become spontaneously evacuated, or empty themselves from time to time through the mastoid antrum. Although the most common disease leading to these troubles is tuberculosis of the middle ear and its adnexa, the troubles which occur in the brain or meninges are much more often due to septic or pyogenic infection of the diseased tissues, and subsequently of the parts in the cranial cavity than to extension of the tuberculous disease itself; but in some cases an ordinary tuberculous leptomeningitis results.

After considering the pathology of the various affections in full detail, with numerous illustrative cases, the author goes on to the consideration of the symptoms, and these are described with a clearness and fulness which leave nothing to be desired. Perhaps the most interesting point in his description of the symptomatology of these diseases is the stress which he lays on the value of percussion of the cranium, as showing the presence of fluid in the ventricles or elsewhere. This percussion is carried out by ordinary instruments, or even by the tip of the finger striking lightly on the cranium, and the author prefers the latter method. In healthy children the percussion note is a dull one, which is nearly equal over the whole vault; but the note differs considerably according to the thickness of the skull, in adults the bones being sometimes too thick and dense to permit of any active vibrations. Where the lateral ventricles are distended with fluid, the resonance of the percussion note is greatly increased over that region, and this is a very important feature as an aid to diagnosis, more especially in tumours or abscesses of the cerebellum, where pressure on the veins of the Galen leads to distension of the lateral ventricles.

Full details are also given of the symptoms and diagnosis of thrombosis, whether infective or marasmic, of the several cerebral sinuses, meningitis, encephalitis, etc., and at the end of the book the author enters minutely into the question of treatment, full details being given as to the opening of the mastoid antrum and the procedure afterwards in cases of abscess in the brain or suppuration in the sigmoid sinus.

In all cases the author commences by opening and examining the mastoid antrum, and where an abscess in the temporo-sphenoidal lobe is diagnosed—even although the roof of the antrum may be perforated and pus may ooze from it—the author recommends that a trephine opening be made above the ear at the point where this erosion of the bone occurs, and that the abscess should be opened and all sloughs of cerebral tissue should be thoroughly washed out. This is a point on which one might differ from him, namely, as to the necessity of washing out these cerebral abscesses. The author himself points out the risk of dissemination of the infective material as the result of this procedure, and it seems—judging from the results of simple drainage in acute abscesses generally—to be in the main unnecessary and possibly hurtful. After having washed out the abscess cavity and removed any sloughs which are present, the author introduces decalcified chicken-bone drainage tubes, and leaves on the dressing for some two or three weeks, when the wound will generally be found to be healed.

A large number of very remarkable cases are given in which successful and unsuccessful results have followed treatment, and these form probably the most valuable part of the book, because the details are very fully and fairly given; one is

[1] *Pyogenic Infective Diseases of the Brain and Spinal Cord.* By William Macewen, M.D. Glasgow: James Maclehose and Sons. 1893. (Demy 8vo, pp. 378. 18s.)

greatly struck by the doggedness with which the author has carried out the treatment in spite, in some cases, of the most unfavourable complications. Perhaps one of the most remarkable, as indicating the great surgical acumen and perseverance of the author, is case No. 26, where a patient was admitted with symptoms pointing partly to encephalitis, but essentially to cerebro-spinal meningitis. In the first instance, on September 25th the mastoid antrum was opened; further, as the roof was found to be perforated, the base of the skull was opened, pus removed from between the inflamed dura and the skull, and an incision made through the thickened dura and pia mater, giving vent to flaky serous fluid. On a second occasion, on October 3rd, symptoms had set in indicating encephalitis, and possibly the beginning of a cerebral abscess, and after the dura in the cerebellar fossa had been examined, the temporo-sphenoidal lobe was investigated, but without finding any pus. As the symptoms got worse, on October 7th the dura mater was again opened, and an abscess was evacuated from the temporo-sphenoidal lobe. After going on well for some time symptoms of a second abscess appeared, and on November 19th the skull was again opened, and 3 ounces of pus, mixed with sloughs of cerebral tissue, were evacuated from the brain. From this date the patient slowly recovered, and ultimately became quite well.

It is impossible to discuss the numerous facts and observations which are given in this book, but we recommend all surgeons to take the opportunity of reading it, because these are diseases which anyone may be called upon to treat, and which everyone must therefore be thoroughly acquainted with.

POPULAR MEDICAL TERMINOLOGY.[1]

IN this interesting work Professor BRISSAUD reverses the part of the populariser, and comes forward as the interpreter, and not infrequently as the apologist, of the medical language of common life to the learned, who are, perhaps, too prone to despise knowledge not clothed in the trailing garments of scientific terminology. The task is one for which M. Brissaud is peculiarly fitted by his familiarity with the folklore of his native land and his highly cultivated philological instinct, enlightened and controlled by accurate technical knowledge. The book is intended for students of medicine, and it is just in that stage of professional evolution, when there appears to be a special virtue in loose-jointed words in —itis and —osis, that such a key to popular pathology is likely to be most useful. To gain the confidence of a patient it is not always enough to understand his case; the practitioner must be able to place himself at his point of view, and, like Wilhelm Meister, "imitate his manner of conceiving."

Popular medicine has a historic as well as a philological interest, for it preserves something of the form and pressure of the scientific thought of a bygone age. The doctrines of the schools percolate slowly through to the lower intellectual strata, and the medical concepts of the ordinary lay mind are those which were dominant among the scientific teachers of the sixteenth century. Popular pathology is essentially humoral, with the admixture of a vague diathetic element, a crude notion of metastasis, and a still cruder parasitism. M. Brissaud points out that the popular medical language of the present day in France is almost precisely the same as that used by Ambroise Paré, who said of himself that he preferred to write in the language of the common folk of his nation, being unwilling to be of those who wish to keep science cabalistic.

Space will not allow us to follow the author through the several chapters of his book; we can only glance through it, noting a few points. The anatomy of the "man in the street" is that of the pork butcher, and is considerably less accurate than that of Homer (who, in De Quincey's opinion, would have been qualified for the post of house-surgeon at St. Thomas's Hospital). His physiology may be summed up in Cabanis's definition of man, as "a tube open at both ends."

[1] *Histoire des Expressions Populaires Relatives à l'Anatomie, à la Physiologie, et à la Médecine.* Par Edouard Brissaud, Professeur Agrégé à la Faculté de Médecine; Médecin des Hôpitaux de Paris. Paris: G. Masson. 1894. (8vo, pp. 358, 3 fr. 50.)

The part played by parasites in popular pathology has already been alluded to. A phrase in common use among the French peasantry to describe a man in a sound state of health is *sain comme un poireau*, the leek being proverbially free from parasites. An adumbration of the very modern doctrine of antagonism between different species of microbes appears in the following quotation from Voltaire:

"We have had quacks who pretend that all diseases are caused by worms and that each species of animalcule being devoured by another species, one might so manage that the worms of apoplexy and epilepsy should be devoured by anti-apoplectic and antiepileptic worms." A certain unorthodox practitioner named Boïle attempted to carry this doctrine into practice and used to show under an immense microscope drops of his patients' blood containing the animalcules which he said were the cause of syphilis. On introducing a liquid swarming with antagonistic animalcules the former vanished as if by enchantment. One unlucky day, however, the microscope was found to have a double bottom.

M. Brissaud insists on the fact that at all times and in all countries, "from Thucydides to Chantemesse," popular belief has fixed on unwholesome water as the cause of epidemics. Last century Voltaire warned the inhabitants of Paris that one-tenth of the poorer part of the population was poisoned by the water of the Seine polluted by the Hôtel Dieu.

The frightful prevalence of small-pox before the introduction of vaccination is strikingly shown by the richness of the popular terminology for the symptoms, complications, and effects of that disease, which, according to the estimate of D'Alembert, destroyed from one-eighth to one-seventh of the human race last century. It is curious, in view of the aristocratic associations of gout at the present day, to find Ambroise Paré speaking of it as "catarrh, since the name of gout is distasteful." Madame de Sévigné says the doctors invented the term "arthritis" as a polite substitute for gout. The objection to the word seems to have been founded on the notion that the disease was caused by what Sydenham calls *Venus immodica*.

The intestinal gases naturally have a prominent place in popular pathological systems, especially in France, where the diet is so largely vegetable. The school of Salerno insisted strongly on the dangers of retained "flatuosity"—which M. Brissaud says is the proper expression in polite Parisian circles at present.

> Non ventrem stringens retines bombum venenosum,
> Nam ventrem stringens nutris morbum veteratum.

It is not surprising, therefore, that our rude forefathers went greatly in fear of "wind," but it is rather startling to a less outspoken generation to find Madame the Duchess of Orleans writing to the young King Louis XV on this subject in terms as far as possible removed from the decent obscurity of learned language.

We must, however, reluctantly tear ourselves away from Professor Brissaud's delightful book, which we commend to all readers interested in folk-lore and popular medicine.

THE PHYSIOLOGY OF THE CARBO-HYDRATES; THEIR APPLICATION AS FOOD AND RELATION TO DIABETES. By F. W. PAVY, M.D., LL.D., F.R.S., Consulting Physician, and formerly Lecturer on Physiology at Guy's Hospital. London: J. and A. Churchill. 1894. (Cr. 8vo, pp. 290. 10s. 6d.)

IT would be difficult to overrate the importance for physiology and medicine of the subject of this book, which will be published within the next few days. The constitution of proteid matter is a question which lies at the root of physiological chemistry, and its solution would undoubtedly throw much light on the pathology of nutritional diseases. In a paper communicated to the Royal Society about a year ago, "On the Glucoside Constitution of Proteid Matter," the author gave an outline of the theory which he advances and of the evidence on which it rests. In the pages before us he strengthens his position by further experimental evidence, and applies the theory to the study of certain physiological and pathological problems, especially those associated with diabetes.

The key to the disposal of carbo-hydrates in the body is to be found, Dr. PAVY holds, by inquiries directed to the influ-





TO ILLUSTRATE MR. MALCOLM MORRIS'S PAPER ON UNIVERSAL DERMATITIS.

ence of protoplasmic action, and he advances evidence to prove that, as a result of the operations of life, carbohydrate matter becomes (1) transmuted to a lower state of hydration, a movement, that is to say, in the reverse direction to that produced by fermentation; (2) applied to the production of proteid; and (3) transformed into fat. It is the second proposition which has the greatest element of novelty and the most far-reaching effect on our conception of nutrition. A glucoside, as is well known, is a body which, by the agency of ferments and by the action of acids and alkalies, and even in certain instances of water alone, undergoes a cleavage, sugar being one of the products of this disruption. Dr. Pavy advances evidence to prove that a sugar is one of the products of the peptic digestion of albumen. Further, the presence of peptone is easily to be demonstrated within the intestinal canal, but it is not to be discovered in the contents of the general circulation, nor even in the portal blood or chyle; that is to say, "it disappears from view just where it should do under the view that it is utilised in the production of proteid by the agency of.....the cells belonging to the inner surface of the intestinal canal."

This is the fundamental proposition in Dr. Pavy's book, and it is defended by a wealth of illustration, experiment, and argument which goes far to carry absolute conviction to the reader's mind. Moreover, he shows how its application serves to explain various physiological and pathological problems, and that in particular it throws much light on the nature of diabetes. We do not, however, propose to enter on a review of this application of the theory, as we learn that it will form the main topic of the Croonian Lectures which Dr. Pavy is to deliver before the Royal College of Physicians in about a fortnight's time.

A MEDICAL MISSIONARY IN CENTRAL AFRICA: THE ARAB AND THE AFRICAN. By S. TRISTRAM PRUEN, M.D. London: Seeley and Co.

THE medical missionary is undoubtedly the best pioneer of civilisation and christianity in a savage and unsettled country. He gains the confidence of the natives by curing their diseases and by easing their sufferings; he inculcates self-control by enforcing sanitation, and he teaches a higher morality by example and precept; he is at the same time a careful and accurate observer, and is able to give invaluable advice to Europeans who come after him. From this point of view the little volume published by Dr. PRUEN is very useful. It contains no blood-curdling stories of adventures with lions or savage tribes, but is a simple record of three years passed in Central Africa teaching, helping, and closely observing the native races. The daily life of the people is minutely described, and Dr. Pruen, speaking from personal knowledge of the lives of the very poor in our cities, does not hesitate to express the opinion that the African has more comfort and pleasure from his surroundings than they. Of the enervating character of the climate he has much to say. Under its influence the active Englishman becomes less and less energetic, and absolute indifference is the curse of the native races, a more insuperable barrier to their civilisation, he thinks, than the slave trade.

To fouled water Dr. Pruen attributes most of the diseases from which Europeans suffer so severely. He says: "Drinking unboiled water, however clear-looking, is a very dangerous proceeding. Even in the healthy upland districts such an indulgence is apt to cause, among other disasters, the severe form of malarial fever; but whilst impure water is one of the chief sources of malarial fever, it is the chief if not the only source of dysentery and the chief source of typhoid. If the traveller follows out the precaution of boiling all drinking water, and does not sleep in swampy districts, nor expose himself unprotected to the sun, he will in all probability never have a severe attack of fever; he will certainly not get dysentery or sunstroke, and he will most certainly not get typhoid. In fact East Africa, except in parts, is not dangerous to the traveller who will let the habit of taking precautions become a second nature to him." A recipe is given for clearing muddy water which may be useful. Stir up a teaspoonful or two of alum in a bucketful of water and allow the liquor to stand. The alum will throw down the organic matter, and the upper clear layer of water can then be poured off, filtered, and boiled.

The epidemic diseases are generally of a mixed type, and can in almost every instance be traced to foul drinking-water. Dr. Pruen says that he has seen a small collection of people taken ill all on the same day, some with malarial fever, some with dysentery, some with typhoid, and some with dengue, and some with diseases to which he could give no name; and he inclines to the belief that in Central Africa filth causes so-called specific diseases to be generated *de novo*. The usual diseases of the natives do not, however, differ much from those which afflict the European. Zymotic diseases, ophthalmia, St. Vitus's dance, epilepsy, insanity, and leprosy, are all common, as well as dropsy, heart complaints, lung affections, and small-pox. For the latter inoculation is practised among some tribes, and they are eager to be vaccinated when they have the opportunity. Strange as it may seem in the land of unending summer and abundant vegetation, "the majority of the natives in Africa come to their end through cold and hunger." To the unclothed the fall of the temperature to 60° is dangerously chilling, and local famines caused by destruction of the crops are not unusual.

To common maladies are added those of a tropical country, the intrusion of the bot-fly (*Œstrus*) under the skin, and the blood sucking of the wood-tick (*Ixodes*). Snakes are common but snake bites rare; even the cobra seeming to be under the influence of the climate, and not to show its usual activity in rising. Of the mountainous uplands of Kikiyu and Uganda, Dr. Pruen knows nothing by personal experience, his stay being mostly at Mpwampa.

The capacity to endure fatigue without food seems to be as remarkable in the Wanyamwezi as with the Indians of the Cordilleras of South America. The day's march is generally from ten to twenty miles, and the weight carried on the head or shoulders 60 pounds. Most of the carriers prefer to go empty, and to take no food till the day's work is over, when they can rest and eat at leisure. Meat is relished when it can be obtained, but the usual food is *ugali*, or a porridge made of ground corn. Dr. Pruen has a good word to say for the Arabs, and states that the slaves "prefer their Arab masters to their English or German deliverers, who want them to work hard, and who do not treat them as if they were fellow-countrymen;" and he sees that the slave question and its solution are not such simple matters as is thought in Exeter Hall; for at the bottom of the whole difficulty is the character of the native—his indifference, idleness, indigenous vices, his lying and improvidence, combined with his good-tempered happy inconsequence. In freeing and educating the children lies the hope of the race, which is capable of much better things than are possible to it at present.

At the end of the volume is a valuable and detailed list of articles required by the traveller. Dr. Pruen's book is a useful contribution to the literature of Central Africa.

NOTES ON BOOKS.

Bexley Heath: Considered with Regard to Health. By OLIVER SUNDERLAND, M.R.C.S., L.R.C.P., Medical Officer of Health to the Bexley Local Board. Six illustrations. Bexley Heath: Thomas Jenkins. 1894. (Cr. 8vo, pp. 22).—London is undoubtedly a most fortunate city in possessing charming suburbs for residence and recreation. If Mr. Sunderland's example should be largely followed we may expect to receive monographs on the "Salubrity of Wimbledon Common"; on "Banstead Downs as a Health Resort"; on "The Pine Woods of Walton and Weybridge and their Influence on Health;" on "The Bracing Climate of High Barnet," and from many other pleasant suburban localities whose sanitary authorities may think they have as good claims as Bexley Heath to an advocate and a historian. We should delight to see such wholesome rivalry, and in course of time we might look forward to encountering in such authoritative expositions collections of actual scientific observations, accurately noted and precisely stated, rather than mere general statements of opinion the correctness of which we are asked to take on trust. Bexley Heath, at a distance of only twelve miles from London, has, according to our author, a fine bracing

climate, a dry subsoil, relative freedom from fogs and rain, much sunshine, and protection from certain noxious winds. Even our dreaded east winds, we are assured, are warmed up and made pleasant for the inhabitants of Bexley. As to the existence of disease there: tubercle is rarely encountered: cancer occurs in only one-fifth of the number it reaches in some other districts; acute rheumatism is conspicuous by its absence: rickets is seldom seen; and asthma is "in many instances cured and in nearly all considerably relieved." And yet we go to the Engadine and the Riviera, to Madeira and Teneriffe, while within twelve or thirteen miles of our door there is Bexley Heath! Why is this? Perhaps the railway fares are too high, and we would call the attention of the local authorities to the significant fact that a first-class return ticket from Charing Cross to Bexley costs 4s., while one to Sutton, a mile further, costs 2s. 9d.; to Epsom Downs, three miles further, 3s.; to Pinner, the same distance, 3s.; and to Bickley, actually on the same line and at the same distance, 2s. 6d.! Bexley, then, is clearly handicapped in the race for popularity by its railway fares.

Illustrated Encyclopædic Medical Dictionary. By Frank P. Foster, M.D. Vol. iv, with illustrations. (London: Sampson Low and Co. New York: Appleton and Co. 1894. Royal 4to, pp. 2321-3095.)—This is another instalment of one of those monumental dictionaries or encyclopædias of which American medical literature possesses more than one example. It is a dictionary of the technical terms used by writers on medicine and the collateral sciences in the Latin, English, French, and German languages. This volume runs from "Minnequa Spring" to "Zythum", and 3,078 large quarto double column pages have been occupied although evidently a good deal of care has been taken to condense the articles to the utmost. We have already expressed our hearty approval and admiration of the enormous industry, the critical discrimination, and the intelligent zeal with which this great work is being carried out by Dr. Frank Foster and his collaborators. The care and skill with which the present volume has been executed fully justifies the favourable opinions which we have already expressed. A word of praise may also be given for the liberality and good taste evinced by the publishers in the mechanical execution of this great work.

An Essay on the Chief Causes of Diseases and their Prophylactic or Preventive Treatment: a Summary of Medicine and Surgery. By C. Thamodarampillay, Medical Practitioner. (Colombo: *Times of Ceylon* Steam Press. 1894. Cr. 8vo, pp. 82. Rs. 1.50.).—The author has tried to condense and exhibit the whole theory and practice of medicine and the science and art of surgery within the limits of 72 small pages. The result is a pitiable effort to reduce the causes, symptoms, prophylaxis, and treatment of diseases to a few general (so-called) principles. A sorrier tissue of nonsense, and in many respects dangerous nonsense, we have never had the misfortune to peruse, and although we have read every word of the book we have failed to encounter one novel fact or one instructive thought. If Mr. Thamodarampillay and others of his class desire to benefit medical science, or enlighten their fellow workers in the East, they should direct their attention to the investigation of one disease or the action of one remedy rather than essay the fruitless and bewildering task of "generalisation."

Dwelling Houses: their Sanitary Construction and Arrangements. By W. H. Corfield, M.A., M.D., F.R.C.P. (London: H. K. Lewis. 1894. Cr. 8vo, pp. 125, 45 illustrations, 3s. 6d.)—This little volume has now reached a third edition: it is founded on the course of Cantor Lectures delivered several years ago by the author before the Society of Arts. The work has been revised throughout, and several fresh illustrations have been added in issuing the present edition. The book deals in a simple yet comprehensive way with house construction, ventilation, water supply, refuse removal, sewerage, waterclosets, traps, etc. It is copiously illustrated, and forms an eminently readable and useful guide for those interested in making their habitations wholesome.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

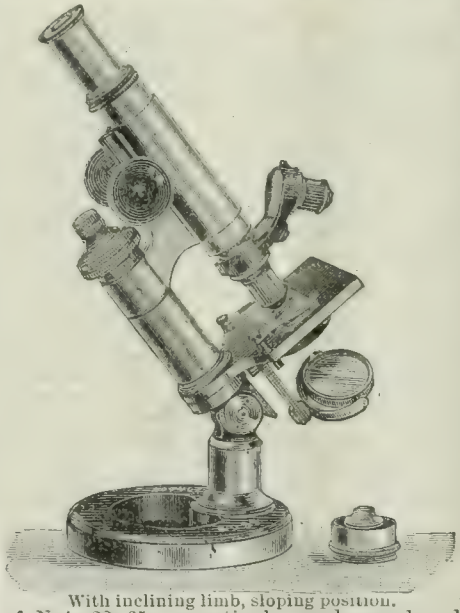
"PURE GRAPE BRANDY."

Since the destruction of the vines in the Cognac district by the phylloxera the brandies produced in France from 1878 have been largely distilled from other sources than the grape, and it is certain that she has exported as Cognac a great variety of mixed products of distillation into which various kinds of spirit (grain or potato) have largely entered. No other kind of brandy corresponds better to medical necessities than pure grape brandy. The "pure grape brandy" which Messrs. Canton and Co., 35, Great Tower Street, have sent to us is correctly so described, and for aroma and flavour equals the old style of French brandy to which we were accustomed prior to 1875, but which is now hardly to be got.

STUDENTS' MICROSCOPES.

Messrs. Ross and Co., the well-known firm of opticians in New Bond Street, have again turned their attention to the production of microscopical apparatus and objectives, and have brought out recently some new forms of students' microscopes, serviceable for all kinds of investigation, including bacteriology, and for very high power work. The lenses are good, and are made upon the calculations of Dr. Schroëder, who has been very successful in working out the curves of many of this firm's latest lenses.

The two new forms of microscopes which Messrs. Ross have now brought out, and which are called the "Eclipse," are both made of brass and well finished. The one form is rigid—an arrangement preferred by some microscopists—the other inclining; both have circular feet, but the foot of the inclining pattern is movable, so that it may be turned to give the greatest amount of support when the body of the instrument is inclined. The rigid body model is fitted with sliding tube for focussing, and a good fine adjustment draw tube extending to 8 inches, with 1 inch and ¼-inch objectives of N.A. 22, 65 respectively, and angular double nosepiece, both objectives focussing in the same plane.



With inclining limb, sloping position.

The price of this instrument with mahogany case is £6 5s.; if with two-third and one-sixth instead of 1 inch and ¼-inch, 10s. extra. The inclining body pattern, with diagonal rack and fine adjustment, is a very useful instrument, and suitable for the very highest power work; if with two-third and one-sixth inch objectives and double nosepiece, the price is £8, packed in a portable mahogany case. This instrument is also a very convenient one for photomicrography. There are extra fittings for both forms, making a complete working instrument in each case.

REPORTS
ON
THE NURSING AND ADMINISTRATION OF PROVINCIAL WORKHOUSES AND INFIRMARIES.

SPECIALLY REPORTED TO THE "BRITISH MEDICAL JOURNAL."

I.

Workhouse Infirmaries as They Were.—Foundation of the Workhouse Infirmaries' Reform Association.—The Workhouse Visiting Committee.—The Battle against Officialism.—Mr. Gathorne Hardy's Act.—Trained Nurses for Sick Paupers.

IN 1865 Mr. Ernest Hart, and subsequently Dr. Anstie and Dr. Rogers as his colleagues, initiated an investigation into the condition of the sick poor in the Metropolitan workhouse infirmaries on behalf of a great medical journal. Two cases of grievous hardship and neglect had awakened the public conscience, and Mr. Hart took the initiative in conducting an investigation into the state of the pauper sick, bringing to bear on the question those powers of patient research that are a matter of course to the medical man, and also the special knowledge of the requirements of the sick gained in hospital life. The Workhouse Infirmaries' Reform Association was soon after founded by the same gentlemen, taking as its manifesto an article in the *Fortnightly Review* by Mr. Hart on "The Hospitals of the State," of which 50,000 copies were reprinted. The labours of this Committee aroused the utmost interest, whilst at the same time it horrified by tale after tale of the greatest neglect, ignorance, and stupidity in the treatment of the sick, and of the total absence of anything like intelligence in their management. It was not that the country grudged the money necessary for the proper care of the sick, it was not that the guardians as a body intended the ill-treatment of the sick, it was not that the officials—master, matron, or others—were brutal or hard-hearted; the reports of the Association reiterate how every facility was given by the guardians for the investigation, how at times they showed with pride an infirmary "up to date," as they thought, where everything nevertheless was wanting for the treatment of the sick, and in many cases the officials are spoken of as humane people doing their best according to their lights. It was ignorance, want of experience and knowledge, that was the cause of this neglect. In the report of the Commission are these words: "The guardians are by their experience and their position unacquainted with the primary facts and with the first principles which should guide the government of a hospital;" and again, "The present is a system of patchwork; originally no doubt the workhouses were intended for the sturdy vagrant and the ne'er-do-well, and partook largely of the nature of a prison; the care of the sick and feeble was an afterthought."

This was in 1865, but, previous to that date, much preparatory work had been done. Going back fifteen years, we find the Workhouse Visiting Committee had by their patient labours gradually been letting daylight in upon these grievous abuses. Until that time the workhouses had been as fast closed to the casual visitor as the prison, and very great difficulty was experienced by that band of women in obtaining permission to visit the inmates. The name of the energetic secretary of that body (Miss Louisa Twining) is now identified with the movement then commenced, which had for its aim the amelioration of the condition of the sick poor in the workhouses, and with her must be associated the surgeon of the Strand Union, the late Dr. Joseph Rogers, a man cast in a heroic mould, who fought his battle against officialism, ignorance, and apathy to the last. The education of the public mind had been carried on by pamphlets, letters to the press, meetings, etc., by any means that could be devised to lay facts before it, so that when these two ghastly cases of neglect and hardship were brought to light, they were but the match to the train of powder. It seemed inconceivable that such utter callousness to human suffering should be possible in a Christian country; that such gross neglect was to be discovered under the rule of men in all respects humane and enlightened; but there it was in all its hideous nakedness, and the worst of it was that these were no isolated instances, proofs of the breaking down of a system otherwise of fair utility, but that rather they were the result of the system of Poor-law management, and that similar instances could be multiplied in nearly every workhouse in the metropolitan area. We are a proverbially slow nation to arouse to enthusiasm or energetic action, but when aroused we are in earnest. As the result of the labours of the Association three public inquiries were carried on at as many London workhouses, Mr. Hart acting as public prosecutor; and deputations and public meetings were organised, the result of which was the introduction of a Bill drafted by Mr. Gathorne Hardy, the then President of the Poor-law Board, which is the origin of all the improvements that have been made in the metropolitan infirmaries. It provided for the erection of separate buildings for the reception of the sick, and ordered the classification of the sick in wards apart from the lunatics, imbeciles, able-bodied or infectious patients. Twenty-four sick asylums of the metropolis, which vie in fitness of appointment and in the necessary machinery with many of the voluntary hospitals, are the result of that Bill.

Whilst this agitation was at work around the pauper sick of London, the experiment of trained nursing for the sick in the workhouse infirmary was being actually tried in Liverpool; in 1865, Miss Agnes Jones, of the Nightingale Training School, undertook the nursing of the vast establishment of Brownlow Hill Infirmary. In that quaint old building, where everything was most rudimentary, she proved the great advantage of skilled nursing from all points of view; we have but to turn to her life, with its graphic pictures of the difficulties she encountered, the hardships she underwent, and the excessive strain on mind and body, to realise what the task was. Agnes Jones, in three short years, gave her life for the work she loved so well; but the cause of the sick pauper was practically won.

There is one thing more wanted to make these great city infirmaries remunerative to the ratepayer, and that is, that they should be utilised as medical schools where the student might learn the treatment of the chronically sick—a class of patients which represents a large proportion of his practice, and of which, from the nature of his hospital training, he is often very ignorant. Within these walls there is an immense amount of teaching material that is quite out of reach, though the ratepayer has a more real claim on it than on the material placed at his disposal in the voluntary hospital.

The above retrospect brings us to the point at which we now stand—a point that leaves the bulk of the country workhouses in the more remote districts untouched. Much has been done in those large centres of population that resemble London in their circumstances to bring the infirmaries up to date, but of the conditions of the sick poor in the country we are comparatively ignorant.

The public conscience has recently received another shock from the revelations of the management of a country workhouse, as the result of an inquiry held by the Local Government Board. The state of affairs therein disclosed differs in no particular from that found in many of the metropolitan infirmaries when Mr. Hart and his colleagues made their round.

If this be so, who is to blame? Surely that system must be at fault which makes such things possible, for whilst Mr. Gathorne Hardy's Act gave increased powers to those boards of guardians who sought for reform, it exercised no control over those boards who had neither the knowledge nor the experience to decide upon the requirements of the sick. This is evident to anyone who will wade through the pages of *Glen's Consolidated Orders*, wherein are many recommendations from the Local Government Board on the fitting management of the sick, quotations from Miss Nightingale's regulations for the training of probationers, suggestions from the reports of medical inspectors as to the proportion of nurses to the sick, and indeed an elaborate series of by-laws concerned with the relations of the officials to the sick; but the power of the Local Government Board to enforce the same is *nil* in the teeth of a non-progressive board of guardians.

The old prejudice that trained nursing is extravagant still remains there, and will die hard; to such we could commend

the aphorism, "That work badly done, though ever so cheaply, can never in the end be economical;" and reiterate the opinion expressed after the results of the old system had been ascertained, "if, as we assert ought to be the case, all the infirm were medically treated, there would be a larger percentage of recoveries, and consequently, as before stated, an important saving of the rates."

THE ANTWERP EXHIBITION.

[From our Special Commissioner.]

An Easy Holiday.—An Unfinished Exhibition.—Advertising Trophies.—Meat Essences.—Alcoholic Drinks.—Cooling Beverages.—Medicines and Aperient Waters.—Ambulances.—Sanitary Appliances within and their want without.

Among the minor excursions open to those whose holidays are short, and who, nevertheless, find a trip abroad more refreshing than even longer travel nearer home, Antwerp will probably be a favourite place this year, both on account of its great accessibility and because of its exhibition. There is a sameness in these heterogeneous collections which makes them wearisome to many people, and one can well believe that to be condemned to visit them with undue frequency would be far from pleasant. To many people, however, to whom even a holiday is a rare event, who have by constant work got out of the way and lost the art of enjoying idleness, an exhibition is a godsend, both as an indication where to go, as an excuse for going, and as providing something to do when one has reached one's destination; and assuredly it would be difficult in any other trip of such small dimensions to find such thoroughly new surroundings as one does in a run across to Antwerp.

The Exhibition itself is at present in a very pronounced condition of unpreparedness; immense packing cases cumber the ground, the sound of the hammer is heard on every side, temporary tram lines run through the courts in all directions, and dust lies over everything. Still there is a good deal to be seen, and in another month no doubt things will be in full swing.

Antwerp itself is no mean sight; it is a most interesting town, rich in works of art and historical reminiscences, touched with antiquity, and at the same time modern to a degree in all its business relations. The progress the town has made during recent years is extraordinary, population having increased and new quarters having sprung up, as it has become in a yearly increasing degree the western port of Central Europe. And yet there remain traces, or perhaps revivals, of old time customs which strike one as different from those of other towns, and which make it attractive to all who wish to get in their short holiday, not merely rest, but change.

It must be confessed that as the Exhibition stands at present it does not contain much which is of direct interest to us from a professional point of view, unless, indeed, we include dietetics in our survey. One of the most striking objects seen on entering the grounds is the enormous trophy erected in honour of the Kemmerich extract of meat. Towering up nearly as high as the Eddystone Lighthouse did at the late Naval Exhibition is what appears as a pile of monster meat tins, each bearing its name and title in a different language, while, as a base, there is a Grecian temple, on the roof of which stands a great model of a cow, apparently an indication of the contents of the tins above.

Much less massive, but far more artistic, is the trophy of the Liebig Company, in the Belgian Section; three bronze bullocks climbing over the world, and bearing on their shoulders an enormous pot of extract of meat, on which is mounted a bust, presumably of Liebig, all of which, as I put it on paper, seems absolutely absurd, but, in truth, the trophies of strange products so common in all parts of the Exhibition, although ridiculous and laughter-moving when taken in detail, have a finely decorative effect when seen in their own locality. No doubt they drown each other, and so lessen their efficacy as advertisements, but that difficulty is met by the more ambitious by soaring high. As trees stretch upwards to catch the sunlight, so do the advertisers to catch the public eye, hence, perhaps, such things as the Kemmerich monstrosity.

In many parts of the Exhibition will be noticed evidences of the great interest now taken in the problem of preserving animal food. Sometimes the meat itself is to be found in tins, but much more common are the different concentrated essences and extracts. More modest than some in regard to showcase, but exhibiting a far greater variety of products than most, is the well-known London firm of Brand and Co., Mayfair, who show essences of various meats, concentrated beef-tea and broths, meat juice and other specialities for invalids. They also show savoury meat lozenges, *entrées*, and potted meats, and their A 1 sauce. As to the power of a few meat lozenges to carry one through a somewhat fatiguing pilgrimage, I now speak with experience, although I must confess they took away the edge of my appetite for lunch.

The Australian Meat Company show their Ramornie extract of meat. In the English Section also Messrs. Coleman and Co. have a stand for the display of their Wincarnis, which one may call both meat and drink; and passing by Fuller's American candies, one fancies oneself in Regent Street again. In the same line again comes the Viking Food and Essence Company, with a case full of beef essences and meat juice.

Next to eating—nay almost before it in the position taken in the Exhibition—is drinking. The Belgian brewers make a brave show, not only by their trophy and the frequent reiteration of the emblem "Brasseries Belges," but by the large number of exhibits of brewing appliances, from mountains of tubs and triumphal arches of barrels, down to shelves full of culture tubes, showing the various microscopic forms of life engaged in the process of fermentation.

Distilling also is well represented, as indeed might be expected. Every conceivable product of the still is shown. At any rate the bottles are there with labels on them. For variety, Belgian, Germany, and Holland, take the palm, England contenting herself chiefly with showing whisky, rum, and gin. "Liquid Sunshine," as a name for rum (made by Anderson and Co., London), seemed to me both poetical and suggestive, for assuredly the warmth and comfort derived from spirit drinking is more like that obtained from the fleeting glimpses of sunshine on a cold and showery day than anything else. Nevertheless we enjoy even the glimpses, and the world enjoys its "nips," so they might as well be good. John Jameson and Son show their Dublin whisky, and John Dewar and Son their old Highland. Canadian Club whisky has a house to itself; a real Canadian log hut, in which are exhibited the beauties of this agreeable stimulant.

Life, however, is not all cakes and ale, and the bottling of natural waters evidently forms no mean source of wealth to many Continental communities. Over a cool grotto stands an immense pyramid of bottles of many forms and many colours but all bearing the same legend—Apollinaris. The results of the recent investigations in Paris, and the report of the Académie de Médecine have placed Apollinaris water at the head of all the waters examined for purity and freedom from disease germs. The strong effervescence of this water as bottled has given rise to some misapprehension. The facts are that, rising from a deep rocky source, the Apollinaris water is obtained at a great depth. In the process of bringing it to the surface its carbonic acid necessarily and unavoidably escapes, but is recaptured, and it (and no other carbonic acid) is, by means of proper machinery, reunited with the Apollinaris water in the same proportion in which it belonged to the water in the source. The great value of natural carbonic acid, and its superiority over the artificial product, is now well recognised and appreciated, so that the Apollinaris water claims with justice to be the type of what a natural mineral effervescent table water should be; its purity and the abundance of its natural carbonic acid gas combine, with its soft velvety taste, to make it pre-eminent. In mineral constitution Apollinaris stands between Niederselters and Emser Krähnchen, and it serves medicinally in place of either; its pleasant taste and its richness in natural carbonic acid are agreeable qualities which have largely contributed to its world-wide popularity. The Idris Water Company also has a stall with all kinds of effervescing table waters, and various fruit-flavoured compounds dear to the heart of teetotalers who have not yet attained a taste for *aqua pura*.

The London and Provincial Dairy Company have an exten-

sive exhibit of milk and milk products, together with a representative working dairy, and a description of the sanitary safeguards adopted in the production and distribution of milk and dairy products to the public.

Messrs. W. A. Ross and Sons show the Royal Belfast ginger ale and other temperance drinks.

Messrs. Alfred Bishop and Sons, Limited, have a full series of their well-known granular effervescent preparations.

Messrs. Joshua Brothers show excellent specimens of Australian grape brandy distilled from Australian grapes.

Of aperient waters there is no lack, various trophies being built thereof, rising in a high pyramid between the Austrian and Hungarian quarters.

To come to more professional matters, Messrs. Burroughs and Wellcome come easily first, not only having a large stand, but showing a great variety of their well-known tabloids and other medicinal preparations. Among these considerable prominence is given to their new tea tabloids, which seem likely to come into extensive use. They also show photographic materials, developers, etc., doing away with the necessity for weights and measures in the production of solutions. Kepler's malt extract and all the ordinary medicinal tabloids are also shown, among which are those prepared from the thyroid gland for use in myxœdema and other diseases in which that substance has been found useful, and of course there are the various inhalers for chloride of ammonium, pinol, etc., for which Messrs. Burroughs and Wellcome are so well known.

In the German Section there are also many good exhibits of chemical and pharmaceutical preparations, Joh. Diedr. Bieber, Hamburg, showing many of the *B. P.* preparations. Ollendorf-Wilden, of Bonn, show an apparatus for the domestic sterilisation of milk, more especially arranged for its preparation for the feeding of infants. The milk is placed in small bottles, a cage of which is introduced into a proper heater by which the proper temperature is maintained for a time. The speciality seems to lie in the india-rubber cap which is left on until the milk is required and can then be replaced by the teat, the same bottle being used for feeding as for sterilising—an obvious advantage.

In the section devoted to the military art the Belgian Government shows examples of ambulances, etc. The large four-wheeled ambulance has provision for four stretchers within, with sitting room for six invalids, and room on the box for two persons besides the driver. The interior is so constructed that the lower ends of the stretchers project into the box below the driving seat, so as to leave room behind them for invalids to sit upright, but in case they should all be able to sit the support for the upper stretcher is reversible so as to form a seat the whole length of the interior.

The stretchers are simple frames with a dark waterproof canvas bottom, the upper part being double so as to be capable of being stuffed with grass or hay to make a pillow. The upper end also can be raised by a rack, as in a bed-rest. Short legs are provided, which are made to turn up parallel with the cross-bar, so as to be out of the way when not in use.

There is also a two-wheeled ambulance by Dr. Mullier, inspecteur général du service de santé de l'armée, such as has been used in the Congo State. It is made to carry four invalids lying down and four sitting, those who sit being held up by pieces of canvas fastened across the chest. The stretchers used in this ambulance are different from the others, being collapsible, much after the Furley pattern. A *pharmacie* on wheels is also shown. Doors on both sides open outwards and upwards, so as to at the same time display the contents and protect them from rain. The whole has a very workmanlike appearance, especially the ambulances.

There is a surprising absence throughout this Exhibition of that display of sanitary appliances which in some has been so obstrusively prominent. Twyford, of Hanley, however, has a very good show of lavatories, baths and waterclosets which seems to excite considerable interest among the visitors, although to the English they are now too well known to attract much attention.

W. H. Wright et Cie., of Brussels, also show in the English section various waterclosets, baths, etc., on modern principles. It may, perhaps, be worthy of note in passing that almost all the waterclosets exhibited are of the pedestal type, having the exit pipe at the bottom—that is, within the area of the pedestal, and that the safety of the apparatus will depend on the perfection of the joint made at that point with the soil pipe. Now, a joint in this position is by no means an easy one to make with anything like certainty, and so the installation of these closets by no means relieves one of the dangers arising from the idiosyncrasies of foreign plumbers.

Finch and Co., of Lambeth, supply a few of their well-known waterclosets, lavatories, and urinals for use in the grounds, very good so far as they go, but ludicrously small in number if the place is ever to be filled with visitors. This part of the administration is certainly defective. Those who remember the shameless but most useful publicity given to the word "waterclosets" at the Paris Exhibition—arrows all over the grounds pointing to these necessary conveniences—will be much struck by the paucity of the supply here. Moreover, to have to pay 5 centimes for the use of an *urinoir* after all the trouble of finding it is a vexatious tax, and already various stretches of hoarding have been consecrated by the public as *urinoirs gratuits*, and no doubt when the odours appropriate to such institutions advertise their locality they will be more used even than at present.

Among sanitary appliances one ought to mention the parquet flooring exhibited by Howard and Sons, of Berners Street. The eye is taken by their display of easy chairs, and one might miss the flooring on which they stand, which is, however, one of their specialties. Their representative told me that they had lately laid it throughout the whole of the Bristol Infirmary, and in parts of the Westminster Hospital, and one of the children's hospitals—Shadwell, I think. The hard clean surface presented by a well laid parquet floor certainly should be considered a sanitary appliance.

I must repeat that the place is not half ready; in every direction there are enormous packing cases, many bearing names suggesting the interesting nature of their contents, as yet inaccessible; tramlines carry trucks in various directions; painters are about: holes in the floor exist: and the administration does well to print a notice on every ticket that it will in no way be responsible for one's safety: but in another month it will no doubt be in order. What we may call the peepshow part—the Algerian quarter, the Syrian quarter, and others, especially the admirable reproductions of portions of Old Antwerp—are very amusing and even interesting already.

THE REVISION OF THE *BRITISH PHARMACOPŒIA*.

THE near approach of the period at which it will be reasonable to expect the issue of a revised *Pharmacopœia* gives increasing interest to the report which is now presented annually to the Committee of the General Medical Council charged with the work of revision. The report for this year, which has just been presented by Professor Attfield, differs from the reports of previous years in dealing less with the details of pharmaceutical progress than has hitherto been usual, and in directing attention mainly to certain general principles which in the opinion of the reporter are of fundamental importance in regard to the reconstruction of the *Pharmacopœia*. From that point of view, three subjects are referred to in the report:

1. The extent to which the definition of manufacturing processes should be included in, or excluded from, the next *British Pharmacopœia*.

2. The further recognition of the metric system of weights and measures as one that may be adopted in practice.

3. The particular atomic weights which should be adopted officially.

In connection with the first of these subjects, reference is made to the opinion expressed in the *Pharmacopœia* of 1867 that in the case of certain medicinal agents, the exact composition of which is but imperfectly understood, the necessity of following some peculiar process in their preparation rendered an official statement of the processes to be adopted indispensable. Since that time the progress of knowledge as well as the advance of manufacturing industries have done away with the necessity of adhering to this practice in the case of many chemical products employed in medicine.

Some of the processes for preparing chemical products were omitted from the *Pharmacopœia* of 1885, and Professor Attfield suggests that the time may now have arrived for the omission of the remainder, since the possibility of defining the character of the chemical products used in medicine and of ascertaining it by analysis is in most instances sufficient for all practical purposes. In regard to Galenical preparations, however, he considers that the statement of the processes to be adopted in making them is essential, because adherence to a particular procedure is still the only guarantee of constancy of properties to be relied upon for Galenical medicines.

The general conservative tendency prevailing throughout the kingdom in regard to weights and measures is well illustrated by the action of the Pharmacopœia Committee of the General Medical Council. While long since acknowledging the advantages which would result from the adoption of a system corresponding with the usage of other countries, and approving the efforts made to realise that object, the disinclination to recommend a departure from previous practice in preparing and dispensing medicines was scarcely less marked in the last issue of the *Pharmacopœia* than it was in that of 1867. The attempted introduction of an alternative method of expressing by proportional parts the relative quantities of ingredients in official formulæ was at best but a clumsy approximation to the metrical system, and it has been of little practical utility. Professor Attfield suggests that the time has now arrived for adopting the metric system alternatively in a more concrete form than was ventured upon in the *Pharmacopœia* of 1885. There are many arguments in favour of such a course, and it is difficult to imagine what sound objection could be urged.

On the subject of atomic weights Professor Attfield enters into a long disquisition upon the merits of various altered expressions of their precise numerical relations, which have been rendered necessary by the progress of chemical science. These alterations apply to only eleven out of the thirty-two elementary substances included in the table of atomic weights in the *British Pharmacopœia*. The alterations are in all instances small, and insufficient to be of importance for everyday pharmaceutical purposes. It is therefore doubtful whether the alteration of the atomic weights hitherto adopted is desirable in such a work as the *British Pharmacopœia*, or likely to be accompanied with any commensurate advantage. In most instances the differences are within the first place of decimals, and though important in the higher refinements of chemistry, their expression is not yet entirely agreed upon by chemists, or shown to be ascertainable with absolute exactness.

Among the articles of materia medica particularly referred to in the report, aconitine is mentioned as requiring to be defined in accordance with recent determinations of its character, so that a basis may be provided for the supply of a substance definitely recognisable by the chemist, and of such uniform medicinal potency as to enable medical practitioners to employ it with confidence. In regard to the various forms of ether recognised in the *Pharmacopœia*, it is suggested that some alterations should be introduced in the future by which ether more suitable for inhalation and for local anæsthesia would be procurable.

The omission of "acetum" as an official article of the *British Pharmacopœia* is recommended with an amount of argument disproportionate to the importance of the article or of the use to which it is directed to be applied. As a crude form of dilute acetic acid, acetum might long since have been dispensed with in favour of the preferable form of that article, which is also official. The difficulty of ascertaining what official articles are so rarely used as to justify their omission from the *Pharmacopœia* is made the ground for a suggestion that medical or pharmaceutical associations throughout the country might render assistance in that respect by collecting data as to local practice. This is a useful suggestion, and it might be the means of eliminating from the *Pharmacopœia* some obsolete preparations.

THE AYRSHIRE MEDICAL CLUB.—The annual meeting of the Ayrshire Medical Club was held on May 25th. The annual report presented was very satisfactory. The members afterwards dined together.

SELECT PRESCRIPTIONS AND PHARMACEUTICAL NOTES.

III.

Compound Tincture of Coal Tar.—Dr. Dühring (*Amer. Jl. Med. Sci.*, May, 1894) has made a series of experiments in conjunction with Mr. J. M. Baer, apothecary, to obtain a tincture of coal tar possessing trustworthy and uniform therapeutical and pharmaceutical properties. He finds that the best preparation is made with tincture of quillaia (soap bark). The tincture of quillaia is made by macerating the powdered bark in alcohol (95 per cent.) for twenty-four hours, and then percolated as recommended by the British Pharmaceutical Conference; the proportion of bark to alcohol should be 1 to 4. Coal tar, 1 part, should be digested with the tincture of quillaia, 6 parts, for at least eight days, with frequent agitation, and finally filtered. The resultant product is a brown-black clear tincture, which, upon the addition of water, forms a cleanly yellowish emulsion, the colour and certain other characters varying with the kind of coal tar used. The tincture is stimulating, and may be prescribed with from 10 to 60 parts of water as a wash. It is useful where tar is indicated, as in certain forms of eczema, psoriasis, pruritus, and in other inflammatory diseases of the skin. It is often more useful when employed weak than strong.

Calomel Plaster in Congenital Syphilis.—Gillet (*La Méd. Inf.*, May, 1894, p. 287) recommends Quinquaud's plaster in the treatment of congenital syphilis in place of inunction. The chloride of sodium and alkaline salts of the sweat transform the insoluble subchloride into the soluble perchloride, which is absorbed and keeps up a continuous action. The formula for the plaster is:

Calomel 10 parts
Castor oil 3 parts
Diachylon plaster 30 parts.

Four square inches of this plaster ought to contain about 18 grains of calomel. A piece about 6 to 8 inches long, by 4 broad, is applied after thoroughly cleansing the skin, and renewed weekly.

The Blue of Roux and Yersin in Diphtheria.—Bonain (*La Méd. Inf.*, May, 1894) recommends the blue of Roux and Yersin as a local application every two hours in diphtheria of the fauces, whether complicated with croup or not. It is made as follows:

Methyl green 10 parts
Dahlia violet 5 parts.
Distilled water 2,000 parts.

Mix: let it stand for 24 hours and filter. The ingredients must be chemically pure.

Pulvis Antirachiticus.—Among the new formulæ introduced this year for the use of the physicians of the Berlin Workmen's Medical Club is the following "pulvis antirachiticus" (*Deutsche med. Woch.*, January 11th, 1894):

Precipitated calcium carbonate 32 parts
Calcium phosphate 15 parts
Lactate of iron 3 parts
Sugar of milk 50 parts.

"*Phosphorus Butter.*"—Comby (*Prat. des Mal. des Enf.*, 1893) recommends the following prescription, a modification of Trousseau's, for the preparation of iodo-phosphorated butter, which may be used as a substitute for cod-liver oil in hot weather:

Fresh butter 1 lb. 1½ oz.
Iodide of potassium gr. iv
Bromide of potassium gr. xv
Chloride of sodium ʒij
Phosphorus gr. ½.

About one-third of an ounce daily spread on bread.

Prevention of Iodism.—Dr. H. N. Spencer (*Int. Med. Mag.*, December, 1893) recommends the following mode, due to Professor Hardaway, of prescribing iodide of potassium; the tendency to coryza is counteracted by the nux vomica and ammonio-citrate, while the tonics prevent depression:

Iodide of potassium ʒss
Citrate of iron and ammonium ʒj
Tincture of nux vomica ʒij
Water ʒiss
Compound tincture of cinchona to make up ʒiv.

Dose: One teaspoonful in half a glass of water after meals. The quantity of iodide may be increased to any desired extent by adding the necessary amount of a saturated solution.

THE prevalence of rabies in Athens and the neighbourhood is causing much alarm. A number of patients are in Paris under treatment by the Pasteur system.

BRITISH MEDICAL ASSOCIATION.

SUBSCRIPTIONS FOR 1894.

SUBSCRIPTIONS to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, JUNE 2ND, 1894.

OUR SEMI-ANNUAL REVIEW.

Continuous Growth.—Weekly Issue of 18,000.—Pressure of Interests and Subjects.—Amendment of the Medical Acts.—Secret and Patent Medicines.—The Medical Brotherhood of Greater Britain.—Medical Etiquette.—Education and Restraint of Midwives.—Provincial Workhouses and Infirmaries: an Investigation and an Appeal.—Barrack School Reform.—The Annual Meeting at Bristol.—The Library of the Association.

THE present issue of the BRITISH MEDICAL JOURNAL contains the programme of the forthcoming annual meeting of the British Medical Association at Bristol, and in accordance with our annual custom will have been placed in the hands of the few remaining thousands of the profession whom our ordinary weekly issue does not reach. This is happily a minority steadily decreasing from year to year; for the number of our readers and of the members of the Association grows with surprising regularity, and in a singularly well-maintained ratio. That growth has again reached the figure which has been customary since 1866, and, as the figures printed on the front page indicate, 18,000 copies of the JOURNAL are now called for by the regular weekly demand, a growth of upwards of 500 since we last had occasion to mention the figures.

The pressure imposed upon us by the continually-widening circle of our readers and correspondents, the multiplication, development, and expansion of the varied interests which claim representation in our columns make growing demands upon our space, which can at present be met only by further efforts at condensation and selection. They compel us once more to ask the assistance and the indulgence of our correspondents in lessening the continually-growing labour and responsibility which these involve.

The BRITISH MEDICAL JOURNAL has, in its purview and under its charge, an almost endless variety of medical and public interests. A very slight purview of those handled during the last six months, and of others which are in course of development, will indicate how important and how actively growing some of these are. Among immediate topics of the moment is the amendment of the penal clauses of the Medical Acts. As the result of the important contributions in our columns to the discussion of this question, a report with draft clauses has been prepared and submitted to the Parliamentary Bills Committee of our Association, which has adopted them, and transmitted them for consideration to the branches of the Association and to the General Medical Council. The Metropolitan Counties Branch has taken the matter into careful consideration, and is preparing a further draft report on the subject, and the General Medical Council has done us the honour of referring these reports for examination and report to its Executive Committee. Other bodies will no doubt adopt a like course, and it may be hoped that a further amended Bill will, on this authoritative basis, be ready for presentation to Parliament by the time that august assembly is prepared to give its consideration to such matters.

Our continuous exposure of the violation of the law in the practice hitherto tolerated of selling secret medicines—or, as they are sometimes miscalled, patent medicines—without labelling them "poison," has borne good fruit. The Pharmaceutical Society has, after twenty years' neglect, awakened to its duty, and numerous prosecutions have been successfully carried through, with the result of practically putting an end to this abuse. It is now proposed to go a step further, and a Bill is, with the approval of our Parliamentary Committee, now being drafted, which will aim at compelling proprietors of patent medicines bearing the Government stamp to make known the composition of such medicines, in accordance with the practice in this respect which exists in Continental countries.

The abuses of the out-patient departments of hospitals, and of so-called medical aid societies, have been thoroughly and most ably discussed by a variety of correspondents, and there is an evident tendency, we are glad to see, in many metropolitan and provincial centres to treat this matter more seriously than hitherto. We have always inclined to the opinion that in this matter much depends upon the serious action of individual members of the medical profession, and that there is more likelihood of reform from the individual action of hospital staffs and of local groups of medical practitioners acting upon them each in their own district and locality than from any interference of the State or combined action of outside bodies. It is an internal abuse which well admits of domestic reform.

The vexed question of the reform of the existing abuses in connection with unrestricted practice of a vast body of uneducated midwives is again cropping up with renewed activity. It is being discussed by some with a special eye to supposed interests which would, it is asserted, be endangered by any form of legislation however restrictive, which would recognise the existence of this body of uneducated women alleged to be upwards of 10,000 in number, at present practising under no kind of government or restraint, and under no compulsion to have any knowledge of the art which they practise. Another body of opinion is, however, asserting itself in the profession in favour of dealing with this matter under conditions which shall safeguard professional interests and yet afford adequate protection to women practised on. The subject appears to be one which has the painful privilege of giving rise to a voluminous controversial literature, which on one side at least is carried on with undesirable heat, not to say violence of expression. In this case, however, as in many others, violence of language by no means indicates strength of argument. In the end we have little doubt that the highest considerations will prevail with the

profession, and that it will in this, as in other cases, readily adopt the great principle of public affairs, that "privilege" can only effectively be advocated or finally maintained when it can be translated by the corresponding word "duty." Meantime it is only for us to ask that in this, as in all debatable questions within the limits of our Association, and indeed within the bounds of the profession, the maxim may be observed which has been attributed to St. Augustine: *In necessariis unitas, in dubiis libertas, in omnibus caritas.*

All our readers will have welcomed the increasingly frequent and important contributions to our pages from medical men resident in India, in Canada, in Australasia, and in other colonies—distant, but yet united in common brotherhood, and among whom it is one of our proudest thoughts that this Journal serves in an increasing degree as a bond of continuous association, and a means of unbroken weekly intercommunication. Nor does this communication serve only to advance that search for knowledge, that improvement and perfecting of clinical methods, that comparison of therapeutic results, that advancement and promotion of medical science and medical education, which are our chief scientific objects. It helps also—and this has been conspicuously evident during the last few months—in raising, affirming, and maintaining the medico-ethical standard throughout the English-speaking world.

The addresses on medical etiquette, delivered by the Editor of the British Medical Journal last year in America, and printed in these columns, have been republished not only all over that great continent, but among our brethren in the Antipodes, and, as the presidential address of Dr. Ralph Worrall, before the Sydney and New South Wales Branch, recently illustrated, this public discussion has resulted in an authoritative affirmation of the principles therein laid down in more than one of those great communities. We are glad to learn that it has been further transferred from our pages to those of some of the Continental journals, and that an authoritative effort is now being made in Austria-Hungary to deal with this subject upon the basis and in the terms of which Mr. Hart was the exponent. An eminent Hungarian physician is at the present moment in London engaged in the preliminary proceeding for obtaining this result.

We have been much concerned of late with the painful revelation made at the Forest Gate Schools and at many other district schools of the physical evils not to speak of the moral mischiefs resulting from the methods of administration of the great barrack schools in which the pauper children of this vast metropolis are aggregated. So far as we can judge from a review of the whole facts of the Forest Gate scandals and of many others which have recently come to the surface these are but occasional and accidental outcrops of a system which is in itself inherently bad. We have set ourselves the task of obtaining at the hands of the Government a thorough inquiry into the whole system. Already within a short space of time we have secured the attention of some leading members of Parliament, and the subject is being ventilated in the House of Commons and in the daily press. We shall not rest contented until a practical result has been obtained, and we have some reason to hope that this will be reached at no distant period.

The scandals in the administration of the sick wards of the Newton Abbot Workhouse, have also engaged our attention, and we have set on foot a series of detailed investigations in continuance of and in the same spirit as those which led to the reform of the treatment of the sick poor in metropolitan workhouses, and to the creation of that magnificent series of institutions known as the Metropolitan Sick Asylums. These investigations, which will be carried out in a spirit of sympathy and of justice will extend over a wide range throughout the country. The first of them is published to-day, and we shall hope for the assistance and suggestions of any and all of our readers connected with extra-metropolitan workhouses and Poor-law infirmaries in making this inquiry extensive, minute, thorough, and publicly useful. We invite the attention of all medical officers in the Poor-law service connected with such institutions to the introductory paper of to-day, and we earnestly ask for their help and co-operation, and promise the most careful attention and confidential consideration of any communications they may address concerning the nursing and medical administrations of all such institutions, especially of those which may seem to need the saving touch of humane reform.

Passing now to more purely domestic affairs, we may notice as matter of congratulation that the Library of the Association has continued to increase in number of books and general usefulness during the past year. Many important illustrated works have been added, including works on anatomy and clinical surgery. Steps have been taken to collect for the future a complete series of the theses presented to the Paris Medical Faculty, and in this way 450 for the session 1892-93 have been added. They are provided with an index which facilitates greatly the task of consulting this valuable collection of essays, which is not, we believe, elsewhere available in this country. The number of foreign medical periodicals filed has been increased, and the collection is now fairly representative. Great attention is given to maintaining the representative character of the modern collection of books. Numerous gifts of books have been received, and, from the accumulated reserve of duplicate volumes, it has been possible to arrange to make grants of books to the Melbourne and Victoria, and the Sydney and New South Wales Branches of the British Medical Association. Similar assistance has been given to several medical societies in this country forming reference libraries.

The estimation in which the Library is held by members is shown by the increasing number of readers, whose numbers during the first quarter of the year show an increase of some 25 per cent. over the corresponding quarter of last year.

The Annual Meeting at Bristol.

The sixty-second annual meeting of the Association will be held in the historic city of Bristol, and, as will be seen from the detailed programme published at page 1219, the arrangements made by the Local Executive Committee and by the Committees of Sections promise a most interesting and instructive meeting. The Association will have for President Dr. E. Long Fox, Consulting Physician to the Bristol Royal Infirmary, and the general addresses will be delivered by Sir T. Grainger Stewart, of Edinburgh, in Medicine; Mr. Greig Smith, of Bristol, in Surgery; and Sir Charles Cameron, of Dublin, on Public Health. A perusal of the arrangements already made for the business of the sections shows that an admirable selection of subjects for debate have been made. In the

Section of Medicine the topics of functional diseases of the heart, of the nature and treatment of pyrexia and of ataxia are not only of great clinical importance, but are excellently suited to stimulate discussion. The same may be said of the subjects selected for discussion in the Section of Surgery, the operative treatment of perforative ulcer of the stomach and intestines, and of injuries of the spine and spinal cord especially being topics of the greatest interest to surgeons at the present day. In the Section of Pathology has also been selected a subject of very general and practical interest at the present time in the pathology of vaccinia, and there is good reason to anticipate that the Pathological Museum, which has been one of the most valuable features of recent meetings, will on this occasion contain a very important collection of specimens and drawings. The Section of Dermatology, which was most successful last year, has arranged a programme of general interest; and the Section of Diseases of Children, which is also justifying its existence as a constant section of these meetings, will discuss subjects of such immediate clinical importance as the treatment of whooping-cough, diphtheria, and tuberculous diseases of joints. The Sections of Psychology, of Public Medicine, and of Laryngology and Otology also announce discussions on subjects of current interest in these departments of medicine. The solid fare, therefore, provided for members who attend the annual meeting is most attractive, and the lighter elements of a successful meeting will not be wanting. The meeting places of the Sections are on the confines of Bristol and Clifton, and it will therefore be possible to take advantage of the healthy and picturesque neighbourhood of Bristol as a place of residence during the meeting. The immediate neighbourhood is most interesting and picturesque, and will afford numerous opportunities for short excursions, and a number of longer excursions have been arranged for the end of the meeting.

A COURSE of three lectures on Tumours of the Breast will be given by Mr. Raymond Johnson, M.B., F.R.C.S., at the Royal College of Surgeons, on June 4th, 6th, and 8th, at 5 P.M.

H.R.H. PRINCESS CHRISTIAN is to be presented with the gold medal of the National Health Society on the occasion of the annual distribution of medals and certificates of that Society by Her Grace the Duchess of Westminster, to take place in the Reubens Gallery, Grosvenor House, W., on Thursday, June 7th, at 4.30 P.M.

PROFESSOR CZERNY has, it is stated, declined the offer of the Chair of Surgery in the University of Vienna, made to him by the Austrian Government. It is believed that the reason for his refusal to accept the succession of his old master, Billroth, is the inadequacy of the laboratory and teaching equipment in the Allgemeines Krankenhaus. Not long ago Professor Erb, a colleague of Professor Czerny's at Heidelberg, also declined the offer of a Chair in the University of Vienna for a similar reason.

THE CORONERSHIP FOR NORTH-EAST LONDON.

THERE were, we understand, forty-nine applications for the vacant office of Coroner for the North-East Division of London, out of whom the following three candidates were selected at the last meeting of the County Council: Dr. Charles Gross, Dr. Wynn Westcott, Dr. F. H. Daly, J.P.

MR. GLADSTONE.

WE are happy to be authorised to state that Mr. Gladstone's condition since the operation upon his eye on May 24th has been quite satisfactory. The eye has progressed steadily without unfavourable symptoms, and a brief trial has proved the sight to be as good as is usual at the present stage. Mr. Gladstone sleeps and eats well, sits up in his bedroom or in an adjoining apartment for several hours each day, and is able to receive a few visitors.

LONDON BAKEHOUSES.

THE Secretary of the Local Government Board has addressed to the various local sanitary authorities in London a circular desiring them to ensure the adequate and systematic inspection of the bakehouses in their several districts, and to report any cases of non-compliance with statutory provisions with a view to the institution of legal proceedings.

ALCOHOL IN WORKHOUSES.

IT is a significant sign of the increasing attention paid by Poor Law administrators to the alcohol question, that, on the candidates for the post of medical officer to Lewisham Workhouse being asked as to how they would order alcoholic liquor, the answers were (according to the *Kent Chronicle*) in the main "as a medicine only in very extreme cases." In a report presented by Mr. Wilkinson, one of the guardians, it was stated that the average cost for intoxicants last year had been 4s. a head, which was far in excess of several other metropolitan workhouses, the expenditure at St. George's and Wandsworth having been practically *nil*. The medical officer is to be asked for an explanation as to why sick paupers, who had been taking malt liquor daily for four years without being benefited, still received the medicine.

WATERBORNE TYPHOID FEVER AMONG OFFICERS IN INDIA.

THREE officers have died at Agra within the brief period of a week from enteric fever, namely, Second-Lieutenants W. A. Lindsay and C. M. Walker, and Lieutenant R. N. Rose, all belonging to the East Surrey Regiment. The explanation of this sad mortality is, we are informed, that municipal, that is, pure water has been supplied to the cantonments, but it stops a hundred yards from the mess, to which foul water of the usual Indian type is still supplied. Such is the explanation to be sought of the great mass of typhoid cases in India as elsewhere.

SCARLET FEVER AT ALDERSHOT.

THE prevalence of scarlet fever among the troops at Aldershot is worthy of notice. In the Army Medical Department Blue Book for 1891 it is observed that of a total of 215 admissions in the United Kingdom for this disease 121, or more than half, were seizures in the Aldershot garrison. In the Blue Book for 1892 the admissions from scarlet fever totalled 361, out of which 305 occurred in England, but the number for which Aldershot is responsible is not given. Now we have the Duke of Connaught's report, presumably for 1893, giving us 284 cases of scarlet fever among the men, specifying that 119 cases were under treatment at one time. No doubt if the cases of the women and children of the garrison were added to these figures a very large total would be arrived at. It would be instructive to receive some special sanitary report of this epidemicity from army medical sources, and to know whether local conditions affect it.

ADVERTISING BY DENTISTS: A WARNING.

As will be seen by the report of the proceedings of the General Medical Council on another page, the Council, before separating, discussed briefly the steps which should be taken to check the practice of advertisement by registered dentists. A large number of glaring specimens of this objectionable mode of seeking practice was exhibited on the

walls of the Council Chamber, and there was a general feeling that steps should be taken by the Council to check the practice. As a preliminary step, a resolution, printed in full at page 1216, was adopted, expressing the authoritative opinion of the Council that the issue of advertisements of an objectionable character, especially such as contain claims of superiority over others, or depreciation of them, "may easily be carried so far as to constitute infamous and disgraceful conduct in a professional respect."

LADY ARTISTS IN HOSPITALS.

Attention has been called to the appointment, at one of the large London hospitals, of a lady artist, whose duties consist in taking water-colour drawings or sketches in pencil of the various rare forms of disease which the staff deem worthy to be thus recorded. We believe that at Guy's, in consequence of the prolonged illness of her husband, the artist to the hospital, Mrs. Toogood Hill, herself a painter of considerable merit, has been appointed to act as his substitute for a period of six months. Competent artists in this branch are so few, and Mr. Toogood Hill's work is so widely known and appreciated, that there would be a general feeling of regret if the crippling disease from which he suffers should render locomotion impossible for him, or by attacking the joints of his hands should compel him entirely to relinquish his profession. We hope that the end of his vacation may find Mr. Hill restored to such a measure of health as may permit him to resume his duties at Guy's.

CLOTHIERS AND SMALL-POX.

What would the English folk say, small-pox threatening, if there was a conference between wholesale clothiers and health officers, and the conference terminated by the clothiers bearing the whole expense of precautionary measures? Yet this seems to have happened in the United States. The health officers have met the wholesale clothiers of Illinois, Ohio, Wisconsin, Michigan, and Indiana, and we are told[1] that within a few days extra inspectors and physicians will "attack the plague in the sweat districts;" the expense of the attack will be borne by the clothiers. May all success attend these endeavours. No doubt the American authorities are well acquainted with the good results obtained in this country from prompt notification, speedy isolation in hospital, efficient disinfection and vaccination and revaccination. The fact of the conference having taken place shows that Americans attach immense importance to the possibility of spread through the agency of the trade of the tailor. In England we have no experience justifying special attention to manufactured clothing, save the remarkable series of cases recorded by Dr. Boobbyer, in which, apparently, infected lace conveyed the disease. In the vast proportion of cases the dissemination has been proved to be owing to actual contact with persons suffering from small-pox.

TUBERCULOSIS IN DOMESTIC PETS.

Professor Fröhner, of the Berlin Veterinary School, has recently made some investigations as to the prevalence of tuberculosis among small domestic animals, the results of which are as important as they are interesting. In the clinic for small animals during the last seven years, out of a total number of 70,000, only 281, or 0.4 per cent., have been found to be suffering from tuberculosis. The proportion of tuberculous dogs was as low as 0.04 per cent.; cats seem to be considerably more subject to the disease, the proportion of tuberculosis among them being 1 per cent. The animals most severely affected are parrots, the ratio of tuberculosis among them being as high as 25 per cent., no doubt owing to imperfect acclimatisation. Living as these birds mostly do in rooms constantly used by members of the family, their liability to tuberculosis makes them somewhat dangerous pets.

[1] *Boston Herald*, May 12th.

STATUS OF ASSISTANT MEDICAL OFFICERS IN LUNATIC ASYLUMS.

It will be observed that a discussion on the subject of the status of assistant medical officers in lunatic asylums, which has recently been so much and so ably discussed by correspondents in our columns, will be opened at the forthcoming general meeting of the Association at Bristol by Dr. Charles Mercier. An opportunity will then be afforded to those who are interested in the subject fully to ventilate the existing evils and the various proposals for their amelioration, from which it may be hoped that good results might be obtained and some practical scheme devised which may subsequently be carried into effect under the auspices of a Committee appointed for the purpose, should the subject prove to be ripe for practical treatment.

THE CONGRESS OF THE DERMATOLOGICAL SOCIETY.

The newly-formed Dermatological Socieiy of Great Britain and Ireland has been inaugurated this week by a congress, which it is proposed shall be an annual event. The first meeting was held at the house of the Royal Medical and Chirurgical Society on May 30th, when the President, Dr. Pye-Smith, delivered the address, which is printed at page 1170. Afterwards a large number of cases of great interest were exhibited by, among others, Mr. Jonathan Hutchinson, Dr. Abraham, Dr. Arthur Davies, Dr. Radcliffe Crocker, and Dr. Eddowes. Among the cases shown were examples of leprosy, morphœa, gangrene of the fingers, keloid, and a remarkable case of tuberculous disease of the skin of the foot and leg, shown by Mr. Sheild for Mr. John Cahill. A case of leprosy, shown by Dr. Abraham, was noteworthy, inasmuch as the man, who had married shortly before the disease commenced to develop, had since had four healthy children. Mr. Hutchinson also showed numerous drawings of affections of the skin. The congress met again on Thursday afternoon, and will be brought to a close this day (Friday). The number of members and visitors who attended the first day's proceedings was over a hundred, and the congress has been in every respect most successful.

DRAPED ANATOMIES.

One of our contemporaries, which is much exercised at the present time about the doings of the medical profession, has been taking the Royal College of Surgeons to task because the "nude figures" in the museum "are neatly draped with little white sashes." Our contemporary, who concludes that anatomical studies will soon be carried on only under the rigid control of a vigilance society, may, however, be at ease. The advancement of surgery by the study of anatomy will not be hindered by the regulations in force in the College of Surgeons, however much they may be hampered by hysterical sentiment in other directions. The regulations are not new, but have been in force for many years, and the inquiring "young person," who has a right to inquire, finds that his studies are by no means limited.

CHILDREN'S COUNTRY HOLIDAYS.

The improvement in the appearance of children sent out of the slums to seaside camps or country cottages is very gratifying, but the thought that they must, after their brief holiday, return to the unfavourable surroundings of their wretched homes, must often raise a doubt whether any permanent good is done. Does the holiday do anything more than give the children a slight fillip, introducing a little pleasure into their lives, but leaving behind no lasting improvement in physical organisation? The question is not very easy to answer, but an interesting attempt has been made by Dr. Schmid-Monnard, of Halle, who has made a minute study of the growth of children of the poorest classes and of those belonging to that next above. There is an excellent system at Halle, by which the poorest children are sent away every summer for three weeks in the country, and many of these "holiday colonies" are situated in the

mountains. The result of Schmid-Monnard's weighings and measurements goes far to prove that the holiday does produce a permanent effect, for he found that on the average the children increased in weight and chest measurement as much during their three weeks' holiday as they would have done in a year at home. Throughout the school age the children of the poorest class are on the average inferior in development to those who belong to the class a little higher in the social scale. Comparing the children who were sent to the holiday colonies by public charity with those whose applications to be sent were rejected on the grounds that their parents were too well off to deserve this assistance it was found that on the average the children of the former class were a year behind those of the latter; that is to say, a boy of 11 belonging to the poorest class would have the same weight, height, and chest development as a boy of 10 belonging to the better-off class. His bracing surroundings during the holiday, the open-air life, the constant healthy exercise, and the good nourishing food have so stimulating an effect on the poor boy that he returns to town the equal of his better off contemporary in weight and in girth and expansion of chest, instead of his inferior by one year. There can be no doubt that the gain in chest, girth, and in freedom of lung action is permanent, and that the improvement not only makes him a better grown boy, but renders him much less liable to fall a victim to diseases of the lungs. A distinct diminution in the rate of growth may be observed in children sent to school about 7 years of age. This arrest is only temporary, and is attributed by Schmid-Monnard to the influence of school conditions. The long hours spent mainly in the sitting posture in crowded class rooms begin to tell. The impure air tends to produce impoverishment of the blood and loss of appetite, and the sudden transition from the active habits of early childhood to a life which is largely sedentary produces various other digestive disturbances. As the child grows older it appears to adapt itself to the new conditions, and growth again becomes more rapid. It cannot be doubted that the summer holiday, producing, as it does, better nutrition and greater chest expansion will have a most favourable influence in enabling the child to tide over the period of crisis.

CLASSES FOR LEGISLATORS.

THE German Cultus-Minister has, in response to repeated stimulation by a sanitarian Deputy, consented to organise systematic courses of instruction in matters appertaining to public health for the special benefit of members of the German Legislature. Lectures are to be given by the professors of hygiene of the various German universities on the principles of hygiene. Probably in the fear lest the legislators might not go to the lectures, it has been arranged that the lectures are to come to them, for they will be given within the precincts of the Legislative Chamber itself. The idea is excellent, and worthy of imitation. The only difficulty is in carrying it into effect. It is an axiom of proverbial philosophy that, though a horse can be brought to a well, he cannot be made to drink. We doubt whether the average British legislator will ever be got to drink of the waters of the temple of Hygeia—at least till that neglected goddess has more votes and more patronage to dispose of.

"BLUE FROGS."

SOME exaggerated details have been published concerning blue frogs on the Riviera. A resident writes to us: "For many years we have known of blue frogs (of a greyish-blue tint) being found in various parts of the Mentone district. My daughters and some of their friends have themselves occasionally found a blue frog in their rambles in the hills. Sometimes one of the usual green frogs is found to have bluish spots or limbs. Visitors have been anxious to see these frogs, and in consequence a potter has contrived to have one or two animals on show. Last winter he had one for which he asked 200 francs, as someone seemed very anxious to buy it; on former occasions he has sold a blue frog for 100 francs. The man cannot explain the cause of this special coloration, and feeds his frogs with ordinary house flies. I thought the change in colour might be due to some skin affection, but there is no evidence of this; the coloration, whether entire or partial, does not seem to be modified by time. The statement that these frogs are fed with fire-flies is, I believe, an erroneous one."

THE NEW UNIVERSITY SCHEME AND THE MEDICAL SCHOOLS.

THE position of the University of London with regard to the scheme of reconstruction proposed by the Royal Commission is at present rather peculiar. Some approach to unanimity of opinion seems to have been reached by the medical schools, whose delegates have met and agreed to an expression of approval of the general features of the scheme, coupled with a reservation that there are important questions of detail which the Statutory Commission should be empowered to receive representations upon from the various bodies interested, and to modify if necessary. On this basis, it is understood, a number of the schools are prepared to join other bodies in urging the Government to proceed with the matter. Sir Albert Rollit's proposal for a joint committee of the Senate and Convocation having been adopted, a committee was some weeks back nominated partly by the Senate and partly by the Annual Committee of Convocation. But almost immediately after, when the time for electing the annual committee came round, three-fourths of the members of the then existing annual committee were unseated and replaced by others understood to be more favourably disposed towards the Commissioners' scheme. The Convocation moiety of the joint committee stands, therefore, in the uncomfortable position of being backed only by a minority of its constituency, and it remains to be seen how far the decisions of the committee will be accepted by the majority now apparently prevailing in Convocation.

SIR GEORGE BUCHANAN.

IT will be fresh in our readers' memory that upon Sir George Buchanan's retirement from the post of medical officer to the Local Government Board, which he held for over twelve years, it was decided to present him with a testimonial, and a committee was formed, of which Sir Henry Acland was Chairman, Dr. Bristowe Treasurer, and Drs. Hamer and Thresh Secretaries. A sum of over £300 was raised, and, at Sir George Buchanan's wish, part has been expended on a die, and the remainder presented to the Royal Society for the foundation of a gold medal, to be presented periodically by the Society to persons who, by their administrative ability or by original research have rendered distinguished service to the cause of public health. Recently the officers mentioned met Sir George and Lady Buchanan at Dr. Bristowe's residence, and there presented Lady Buchanan with the first gold medal and Sir George with a copy in bronze, together with an illuminated book containing a list of subscribers to the fund.

OWENS COLLEGE, MANCHESTER.

FEW colleges have recognised in so thorough a manner the need for practical teaching in all departments of science as Owens College. Large though some of the existing laboratories are, still they have been found to be inadequate for what the Council regards as the efficient teaching of the sciences on which medicine so largely depends. The Council of Owens College is now erecting a magnificent pile of new buildings chiefly for the departments of physiology, pathology, hygiene, and toxicology, at an expense of about £40,000. This is in addition to the medical buildings already in existence. The existing buildings will by-and-bye be apportioned amongst the other departments, so that labo-

ratories in future will be attached to the departments of medicine, surgery, midwifery, and other branches of medicine. It is hoped that the new buildings will be ready for occupation early next session, when it is further hoped that the President of the College, the Duke of Devonshire, will be able to open them. On the practical side also, for the training of medical students, matters are progressing. The more intimate union between the Royal Infirmary and the College is bound to react for the benefit of both institutions; while the magnificent gift of the Lewis trustees of £70,000 to the St. Mary's and Southern Hospital jointly will enable these institutions to unite and work together for the common good with the least expenditure of time and energy. A magnificent new hospital for women and children will shortly be erected, where not only the suffering poor will be treated, but where also the portals will be open to the student to acquire a practical knowledge of these departments of medicine.

BARRACK SCHOOLS.

The *Daily Chronicle* writes as follows on this subject: "Fresh light is thrown on the evils of barrack schools for workhouse children in the British Medical Journal this week. The system of massing together many hundreds of children under one roof, besides the risks of infection and the absence of home life which it entails, inflicts, as our contemporary points out, a serious educational disability on pauper children. The workhouse child, who has been clipped to one pattern, morally and mentally is turned out marked, and too often a deficient type, unequal to the battle of life, and helpless by the side of the child who has been taught in the elementary school and reared at home. There are upwards of 24,000 children who are receiving their education in workhouse and district schools, though, on the other hand, 377 unions arrange for the children to attend the public schools. Could not Mr. Shaw Lefevre give up a few days in the summer to going round these workhouse schools and seeing for himself whether it would not be as well to transfer the children to the care of Mr. Acland?"

THE COUNCIL OF THE COLLEGE OF SURGEONS.

As the usual notices will be sent out to-day (Friday, June 1st), no official intelligence of new candidates for the Council has yet been received. Mr. Lund has determined not to seek re-election. Having served two terms of office, he has decided to leave the field open for younger men. Mr. Harrison and Mr. Howard Marsh seek re-election. The vacancy made by the retirement of Mr. Lund ought, no doubt, to be filled by another representative from the provinces—an advocate of progress with both the will and power to attend the meetings of Council as regularly as possible. The number of provincial members would thus remain 6, that is to say, one-third of the Council—a fair proportion, though geographical position must handicap all the six. Mr. Reginald Harrison was elected in 1886 as a provincial, but since then he has removed to London. He is an excellent representative of the specialist unattached to a medical school, and his well-known and deserved popularity will probably ensure his re-election. Mr. Howard Marsh has served but two years, as he was elected in 1892 as a substitute for Mr. Berkeley Hill, who died after holding the office of Councillor for six years. He is an eminent surgeon, well supported by the large school to which he belongs. Mr. Norton, of St. Mary's Hospital, is a candidate entirely in favour of progress. His hospital at present has no representative on the Council; it is possible, we understand, that other candidates from the same medical school may appear in the field. No doubt there will be candidates from the large schools, where old and more recent pupils can afford strong support. One-sixth of the Council consists of surgeons from St. Bartholomew's Hospital, one-eighth coming from Guy's. The staff of the great schools doubtless consists of picked men, but to counteract a monopoly is quite legitimate, hence the meaning of the associations which have sprung up. One has worked hard for years, and recently published the result of its labours; another has sprung but recently into existence. The aim of such bodies is to act as vigilance societies, to counteract any tendency to the domination of the Council by any single influence. They must avoid the risk of degenerating into mere election committees for the benefit of a candidate rather than a cause. No doubt the question of selection involves friction; but College of Surgeons politics proceed far more smoothly than they did ten years ago. The system of voting papers has proved very useful; indeed, it is but justice to Fellows who live far from Lincoln's Inn Fields. The question of future election of the President by the Fellows and not by the Council is the subject of much controversy on all sides. The result would always be very doubtful, and some shrewd thinkers fear that the victory would lie between a provincial supported by a solid provincial vote, and a surgeon from a large London school. Hence candidates from the smaller metropolitan schools would be at a distinct disadvantage.

ALARMING INCREASE OF SMALL-POX AT LEITH.

During last week 61 new cases of small-pox were returned in Leith, and 58 of these were admitted to the hospitals set apart for this disease; 9 further cases were reported up to Monday night, making a total of 70 cases in nine days. There was one known death from the same cause. It is further known that other cases of small-pox occurred in Leith last week, though these are not known to the authorities, who still persist in despising any proper system of notification. The present condition of affairs constitutes a grave public scandal. An extension of the existing hospitals is being rapidly pushed on. This addition is to be 100 feet long and 22 feet broad, and will house 30 or 40 patients. In order to face the great increase of work at the sanitary office the staff has been augmented, and the officials are said to be doing "what they can" to cope with the epidemic. Much alarm exists among all classes of the community. At a meeting of the Leith School Board on May 28th it was agreed to ask the medical officer of health and the sanitary inspector to meet the School Attendance Committee, "to consider as to the best means of obtaining information regarding infected houses, so that precaution may be taken against the spread of infection in the schools." Most people of average intelligence would have discovered that the State had placed at disposal "the best means of obtaining information," in the Infectious Diseases Notification Act. But Leith! *O tempora! O mores!* A number of school children are affected by small-pox, but it has not been thought necessary to close any of the schools.

MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

Ten years have elapsed since the Medical Sickness, Annuity, and Life Assurance Society was started at a meeting summoned at Liverpool by its present Chairman. In March, 1884, when the Society commenced operations, few doubted that such an organisation of medical men was greatly needed, but the experience of similar societies was not very encouraging, and many who fully realised the benefits which a mutual sickness assurance scheme might confer upon the profession had, nevertheless, grave doubts whether any such plan could be satisfactorily worked out. Time has shown that the Society was well planned, and the experience of ten years has removed all doubt of its financial stability. From the first it was a success, and in a few months after its foundation was giving valuable assistance to many

medical men who were suffering from accident or disease. As the advantages it offers have become more widely recognised the Society has grown, and year by year has paid an ever-increasing amount to those of its members who needed its aid. In the year ending June, 1893, £3,327 was paid in this way, and in the year now closing the sickness claim account will be more than a thousand pounds in excess of the amount paid in the previous year. Large as the amount is, it is well under the amount provided for in the tables, and every year the Society's accounts have shown satisfactory and increasing reserves. The low rate at which the management expenses have been kept has considerably added to the reserves. By the rules 10 per cent. of the premiums are applicable to management charges, but hitherto less than half this amount has been actually spent. The bulk of the sick claims arise from ordinary illnesses, which incapacitate the members for short periods only, but many of them are of quite a different kind, and cause the Society to continue the weekly sick pay for many months, sometimes for years. There are at present on the books nine chronic cases in all of which there is little hope that the claim will cease before the death of the member. Of these, two are cases of mania, one of them being the result of an accidental injury to the head, and in the others the members are disabled by some form of paralysis, neuritis, phthisis, acute diabetes, or angina pectoris. In all these cases the members were in good health but a few years ago; now they or their friends have reason to be thankful that they had sufficient forethought to provide against evils, seemingly remote, but which, as medical men at least are well aware, all men are liable to. A large proportion of the smaller claims arise from bronchial affections, and the influenza caused a very great increase in the number of these. Since January 1st this year over forty members have been incapacitated by influenza for short periods, but 1894 has, so far, been principally noticeable for its accident claims, which have been both numerous and severe, and it is quite certain that the accounts to be issued in June next will show that the Medical Sickness, Annuity, and Life Assurance Society in its tenth year of work has more than ever justified the hopes of its founders that it would prove to be a valuable help to many members of the medical profession. Forms and particulars may be had of Mr. F. Addiscott, F.I.A., 77, Chancery Lane, London.

MIDWIVES' REGISTRATION.

WE have received from the Honorary Secretaries of the Midwives' Registration Association, Dr. Robert Boxall and Mr. Rowland Humphreys, a copy of a scheme for the registration of midwives, drawn up by that Association. We regret we have not room to publish it, but we shall return to the subject at a later date.

A RACIAL DISTINCTION.

AT a meeting of the Jewish Ladies' Visiting Association, held at Manchester, the Medical Officer of Health, Dr. Niven, after referring to the great importance of the visiting work done by ladies, stated that in the Jewish Quarter—in Red Bank and Strangeways—he had been much struck by the great difference between the death-rate of those quarters inhabited by the poorer class of Jews and the adjoining districts. In Red Bank the death-rate was 17.1, and Strangeways 18.1, per 1,000 while in other districts it ranged from 25.1 to 40, and in one district 50.9, per 1,000. Moreover, the death-rate for children's diseases, including diarrhœa, convulsions, and atrophy, was lower in Red Bank than in other districts of the city; while from phthisis the death-rate was considerably lower than in whole city. The deaths from violence, also, were fewer. In trying to account for these differences Dr. Niven suggested that the Jewish people took very much greater care of their children than the people of the surrounding districts. It seems that the women, also, do not go out much to work. The difference may be due partly to the peculiar mode in which food was prepared for the Jewish community, and probably to some extent to the more temperate lives which the Jewish people lived. Be the causes what they may, there remains the striking fact of the great difference in the death-rate of children and from chest diseases and consumption in the Jewish quarter as compared with other portions of Manchester.

THE BELFAST STUDENTS' UNION FETE.

THE great *fête* and fancy fair on behalf of the Students' Union was an unqualified success. The Queen's College buildings and grounds, and the adjacent Botanic Gardens, were all utilised, and proved hardly adequate for the accommodation of the vast crowds attending the *fête*, which was happily favoured by magnificent weather, in spite of this ungenial May. It was opened on Wednesday, May 23rd, by the Marquis of Londonderry, K.G., who delivered a vigorous and lengthy speech, explaining the object of the *fête* and enlarging on the benefits that would accrue to the Queen's College by the erection of the proposed Students' Union. On the motion of the Lord Mayor of Belfast, seconded by Mr. H. J. McCance, J.P., high sheriff of co. Antrim, a cordial vote of thanks was presented to Lord Londonderry for the valuable assistance which he had given to the movement on behalf of the Students' Union. The proceedings thus happily inaugurated were continued during six days, the attendance of the public, both of town and country, being extremely large and beyond expectation. Among the stall holders were Lady Londonderry, Lady O'Neill, Lady Cowan, Mrs. Hamilton, Mrs. W. Connell, Mrs. Park, and Mrs. Byers. The number, variety, and excellent quality of the entertainments was a great feature of the *fête*. An admirable *café chantant* was organised under the bâton of Mr. A. E. J. W. Creary, L.Mus., and the members of the D'Oyley Carte Opera Company, who were performing at the Theatre Royal, kindly gave their services on several occasions. Telephonic concerts from Dublin were given in the evenings and excited the most lively interest. A performance of serpentine and skirt dancing was given twice daily in the Exhibition Hall by a band of sixty children, under the direction of Miss Alice Haines. But perhaps the most popular of all the amusements was a grand military spectacle—the battle of Tel-el-Kebir—given each evening by a band of 150 students, organised and trained by Mr. Pain, of London. This was nightly viewed by a great multitude of people, and received with much applause. On the whole, the warm sympathy shown towards the College by all classes was most satisfactory. We have not yet received any authentic report of the net proceeds, but it is believed they will be very large, and fully sufficient to meet the object contemplated by the promoters of the *fête*.

MR. STANSFELD AT CHELSEA.

THE Right Honourable J. Stansfeld, M.P., entertained a meeting of "Anti's," at the Chelsea Town Hall, on May 24th, with an account of the aims and objects of the British Institute of Preventive Medicine. He was supported by two M.P.'s, and the usual contingent of clergy. He told his audience that the Institute would be "worse than a slaughter house," that it would disseminate disease, and be the scene of vivisection, etc.; and then he went on to denounce the Vivisection Act as a "fraud," and to make the usual statements as to the inadequacy of the "inspectors" meted out to the licensees. It is quite useless to argue with these persons, but we see no reason to think that British common sense will allow itself to be over-ridden by sentimentalists of Mr. Stansfeld's order. Whether or no the cause of mercy and morality is served by making exaggerated and ridiculous statements, and whether a member of Her Majesty's Privy Council, which is the chief educational authority in the country, should allow himself to oppose the weight of his "right honourable" ignorance to

the extension of medical and scientific knowledge, are questions which Mr. Stansfeld must answer for himself. The medical profession is apathetic in using its political power, but we trust that any of our readers who may be constituents of Mr. Stansfeld, or any of his Parliamentary colleagues who make a point of vilifying the profession of medicine, will not forget the fact when the time arrives for exercising the franchise. Mr. Stansfeld, as a serious legislator, apparently endorses the silly cry of the antivivisectionists, who appear to wish to have an inspector permanently attached to every laboratory, whose duty it is to stand beside the experimenter whenever he uses a hypodermic needle upon a guinea-pig or rabbit. One might as well ask that inspectors of vaccination should watch every case. There are less than a dozen experiments per diem performed in the United Kingdom, and these are done in more than fifty different licensed places, some of which are more than five hundred miles apart. The framers of the Act, enthusiasts as they were, had too much sense and too much respect for the overburdened taxpayer to suggest the possibility or the necessity of inspecting individual experiments. The Peculiar People, who regard disease as being of Divine origin, and only to be cured by Divine interference, act logically enough when they refuse the services of the medical profession; but the "Very Peculiar People," who are led by Mr. Stansfeld, and who will tolerate doctors only on the conditions that they remain ignorant, are guiltless of logic, and form an interesting study for the psychologist.

OUT-PATIENTS AND SUBSCRIBERS' LETTERS.

The *Birmingham Gazette* and the *Post* are still occupied with the out-patient question. It seems that at the West Bromwich Hospital all persons are admitted as out-patients who produce a subscriber's "ticket," and that some of the subscribers of a guinea have issued between eighty and ninety tickets. It is felt that this is stretching "charity" too far, and therefore it is now proposed, at the District Hospital and Eye Infirmary, only to allow seven tickets for a guinea—that is, to sell the tickets to their subscribers at 3s. each. It seems a vain attempt to make hospital governors see that the eligibility of candidates for admission as out-patients is not a mere money question, and ought not to be decided by the mere fact of the candidate knowing a person who will give him a 3s. ticket. If the candidates were really persons unable otherwise to obtain relief, whose cases are fit for hospital treatment, the more of them that the hospital treats, the more it is fulfilling its duty; but the contention of those who wish to reform our out-patient system is that no pains are taken to ascertain either of these essential facts. The issue of 3s. tickets seems to us one of the worst possible ways of attempting reform. The possession of such a ticket is no guarantee whatever of the suitability of the applicant, and the tickets will most likely soon become a regular article of traffic among the poor. We can only repeat once more what we have said over and over again—that persons ought not to be admitted as out-patients without a proper investigation showing their fitness in both the above respects. A plan was proposed in the Birmingham district for preliminary medical sanction to applications for out-patient treatment.[1] Has any action been taken towards carrying it into effect?

COMPULSORY NOTIFICATION OF INFECTIOUS DISEASE.

The Bill now before Parliament for extending the scope of the Infectious Diseases (Notification) Act, 1898, by making it operative throughout the whole of England and Wales, appears to us to be one deserving of hearty support from both sides of the House. When we know that a year back more than 25,000,000 persons were under a voluntary system of notification—that is, were resident in districts where the Act had been voluntarily adopted—out of 29,000,000 persons in the whole country, there seems but little reason for any longer delaying the extension of the operation of the system to the remaining population. It is, we know, held by some that the system will not work so harmoniously if it be forced on an unwilling minority, and that the principle of adoption had better be adhered to. But there is much to be said on the side of the large majority, in that, while they expend the local rates in an attempt to safeguard their districts, they are thwarted by the inaction of their neighbours who have not adopted a system that would enable them at once to treat cases newly arising with the gratifying result, in many instances, of cutting short at its onset what might otherwise prove a dangerous epidemic, costing its immediate locality, and, perhaps, also the adjacent districts, much more than a system of notification continued for many years. The Woodbridge Local Board is, perhaps, typical of the sanitary bodies that refuse to adopt the Act. They not only will not take over the Act, but they want to secure the services of a health officer at a salary of 10 guineas per annum! And again we have but to consider the case of Hinckley, in its recent epidemic of small-pox, to see how a local board is handicapped by the absence of compulsory notification in the face of infectious sickness. It is just such experiences that ultimately lead unwilling local bodies to adopt the Act. But why allow the experience to enforce the system?

A "CHARITABLE BOARD."

In the Dundee Sheriff Court a medical man the other day sued the parochial board under the following circumstances. A sudden case of illness having occurred in the poor house, the medical officer was sent for in haste. He happened to be from home, and his deputy was sent for in turn. He also was from home, and the governor of the poorhouse, in the emergency, called in another medical man, who came immediately, saw, and prescribed for the patient. This medical man, in due course, sent in an account for his fee to the parochial board, who declared it to be excessive, and offered him a smaller fee. This he declined, and entered an action for the full amount in the sheriff court. The most learned judge, notwithstanding the admission of liability by the parochial board, decided that the board was not liable, and proceeded to expound the most extraordinary and perilous doctrine. The medical man, he said, had no contract with the board, and was not entitled to recover. He was a free agent; it was in his option to consider the chances of his getting a fee, and to decide whether or no he should attend. The observations of this gentleman would be worth having in the event of a case coming before him in which it appeared that a medical man, called in to attend a person bleeding to death (it might be a most learned judge!), had paused to consider his chances of a fee, and had finally decided not to go. The sheriff, perhaps conscious that this argument needed strengthening, advanced the further, but not less singular view, that the parochial board is a charitable body, and that work done at their instance is charitable work, and requires no pecuniary recompense. It apparently did not occur to the enunciator of this new doctrine that the legislature, in appointing salaries to be paid to Poor-law medical and other officers, had taken a different view of the subject. The decision is, unfortunately, not open to appeal; it would have been interesting to have had the commentary of the judges of the high court upon the comments of the sheriff.

[1] See British Medical Journal for February 3rd.

Donations and Bequests.—The Committee of the Great Northern Central Hospital has received the sum of £400 from the trustees of Smith's (Kensington Estate) Charity towards the large debt on the maintenance fund.

A medical and Surgical Home for affording paying patients the comforts of home with the benefits of skilled nursing, has been started at Sheffield by two of the Nursing Sisters recently at the General Infirmary.

BRITISH MEDICAL ASSOCIATION.

SIXTY-SECOND ANNUAL MEETING AT BRISTOL.

THE sixty-second annual meeting of the British Medical Association will be held at Bristol on Tuesday, Wednesday, Thursday, and Friday, July 31st, and August 1st, 2nd, and 3rd, 1894.

PROGRAMME.

On Tuesday, July 31st, the first general meeting will be held in the large hall of the Victoria Rooms, Clifton, at 11 A.M., preceded by the meeting of the Council of the Association at 9.30 A.M. in the same building. At 3 P.M. the annual service will be held in the Cathedral, College Green, when the sermon will be preached by the Rev. Canon Ainger. Through the kindness of the Very Rev. F. Pigou, D.D., Dean of Bristol, special arrangements for the service will be made. The collection will be on behalf of the Royal Medical Benevolent College, Epsom, as is customary.

The adjourned general meeting will be held in the Victoria Rooms in the evening, at 8.30, when the President of the Association, Dr. Long Fox, will deliver his address.

On Wednesday, August 1st, the Council will meet at 9.30 A.M., and the Sectional meetings will be held from 10 A.M. to 2 P.M. At 3 P.M. the second general meeting will be held in the Victoria Rooms, when the Address in Medicine will be delivered by Professor Sir T. Grainger Stewart, of Edinburgh. A garden party will be afterwards given by Mr. Lewis Fry, at Goldney House, Clifton, and in the evening, at 8.30, the Association will be entertained at a *conversazione* at Clifton College, by the President and the Local Executive Committee. The Orpheus Glee Society have kindly consented to sing during the evening. The Committee of the Clifton Zoological Gardens, which adjoin the College grounds, will illuminate the gardens and throw them open to the Association during the evening.

On Thursday, August 2nd, the Council will meet at 9.30 A.M., and the Sectional meetings will be held from 10 A.M. to 2 P.M. At 3 P.M. the third general meeting will be held in the Lecture Room of Victoria Chapel, opposite the Reception Rooms, when Professor J. Greig Smith, of Clifton, will deliver the address in Surgery. Sir Greville and Lady Smyth will give a garden party from 4 to 6 P.M. at Ashton Court. The public dinner of the Association will be held in the Victoria Rooms at 7 P.M.

On Friday, August 3rd, the Sectional meetings will be held from 9.30 to 11 A.M. At 11 A.M. the concluding general meeting will be held in the Victoria Rooms, when the Address in Public Medicine will be delivered by Sir Charles Cameron, of Dublin. At 1.30 P.M. the Society of Merchant Venturers will entertain a party at luncheon in the Merchants' Hall. On the same afternoon the Association will be invited to visit Bath by the Mayor and Corporation of that city, and a party will visit the Bristol Waterworks Reservoirs at Barrow Gurney, where tea will be provided. Another party, at the invitation of residents of Clevedon, will pay this favourite resort a visit; and Sir Edmund Elton has kindly promised to receive the visitors at Clevedon Court, and to show his potteries. At 8.30 P.M. the Mayor and citizens of Bristol will entertain the Association at a *conversazione* in the Colston Hall. It is expected that the Madrigal Society will give a performance during the evening, and that there will afterwards be dancing.

Saturday, August 4th, will be devoted to excursions, a list of which is given further on.

There will be the following ten Sections: Medicine, Surgery, Obstetric Medicine and Gynæcology, Public Medicine, Psychology, Pathology, Ophthalmology, Laryngology and Otology, Dermatology, and Diseases of Children. The work of each Section, so far as it is at present arranged, will be seen in the programme printed below.

PLACES OF MEETING.

All the buildings which will be used for the purposes of the meeting are situated close together, practically upon the boundary line between Bristol and Clifton. The Reception Room will be in the Victoria Rooms, Clifton; and in the same building is the large hall, which will be used for the general meetings (except that on Thursday) and the dinner. On account of the latter, Thursday's general meeting will be held in the Lecture Room of Victoria Chapel, immediately opposite. In the Victoria Rooms there will also be provided post-office, telephone, and cloak room accommodation.

The Sectional meetings (with one exception) will be held in University College, which is about three minutes' walk from the Victoria Rooms; and its various class rooms and lecture theatres will be found to afford admirable accommodation for the Sections. The building consists of two portions: one devoted to the Faculty of Medicine, and the other to that of Arts and Science. The following arrangements have been made for the Sections: Medicine, Medical Library; Surgery, Physical Science Lecture Room; Obstetric Medicine and Gynæcology, Lecture Room No. II; Public Medicine, Lecture Theatre of the Bristol Museum and Library, lent by the city authorities, adjoining the College; Psychology, Lecture Room No. IV; Pathology, Chemical Lecture Theatre; Ophthalmology, Medicine Theatre; Laryngology and Otology, Physiology Theatre; Dermatology, Lecture Room No. III; Diseases of Children, Lecture Room No. V.

The Pathological Museum will be placed in the Engineering Drawing-rooms, which are exceptionally well lighted, and close to the room where the Pathological Section will meet. The three hospital museums in Bristol will contribute a selection of their most interesting specimens, and it is hoped that a special feature will be made of Bacteriology. In the Pathological Section every facility will be given for the exhibition of lantern slides of microphotographs, and probably an excellent projecting microscopic lantern will also be provided. Arrangements will be made for the supply of microscopes wherever required, and lanterns will also be furnished in the Sections of Ophthalmology and Laryngology and Otology.

The arrangements for the Annual Museum will be exceptionally complete. The Museum will be placed in the Drill Hall immediately adjoining the College, with a floor space 150 feet by 90 feet; and it will be arranged in four sections: Food and Drugs, Instruments, Books, etc., and Sanitary and Ambulance Appliances. Further details are given below.

The daily Luncheon will be provided in a large room in the basement of the College, and also in a tent in the College grounds, immediately adjoining the rooms where the Sectional meetings will be held, and close to the Annual Museum.

RAILWAY FACILITIES.

Bristol is situated on the main Great Western line from London to the west, and the service of express trains in either direction is remarkably good. The city is also very accessible from the Midlands and the North, and from Scotland; either by the Midland Railway, *viâ* Gloucester, or by the London and North Western "West Coast" route through the Severn Tunnel. The train service on both lines is very convenient. Passenger boats also run regularly between Bristol and Dublin and Cork. The railway companies do not grant a reduction of fares for visitors coming to Bristol, but during the meeting tickets will be issued from Bristol to places within a distance of fifty miles, at single fares for the double journey.

BRISTOL AND ITS SUBURBS.

Much of the old city lies on the low ground formed by the valleys of the rivers Avon and Frome. The hills that rise around it are more or less broad table-lands; to the north-west plateau belongs the well-known Durdham Down, which is intersected by the picturesque gorge through which the Avon passes to the Bristol Channel eight miles distant. The river here forms the boundary between the counties of Gloucester and Somerset. It may be mentioned that Bristol is a distinct county in itself, being so constituted by a Charter of Edward III. Clifton, which forms practically a part of Bristol, is situated on the eastern heights above the valley of the Avon, partly occupying the table-land before mentioned, and partly an abrupt declivity which sinks down to the once fashionable district of the Hotwells, on the same level as Bristol.

Extending eastward from Clifton to the north of the city, and along the side and summit of the same plateau, are the other favourite residential suburbs of Bristol—Redland and Cotham. In determining "where to stay" during the meet-

ing, visitors will do well to bear in mind that the buildings which will be used for the purposes of the Association are situated practically at the top of the steep hill leading from Bristol to the high-lying suburbs above mentioned. There is a good tramway and omnibus service between the city and Clifton and Redland. A list of hotels and lodgings will be published later on, and the Honorary Secretary to the General Purposes Subcommittee, Dr. Rogers, of 11, York Place, Clifton, will be pleased to give all information and assistance to members. Visitors who prefer the seaside can stay at the watering places of Weston-super-Mare, Clevedon, and Portishead, which are within easy distance of Bristol by rail.

The Hospitals of Bristol.

The chief hospitals are the following:—The Royal Infirmary, in Maudlin Street, with 264 beds; the General Hospital, close to the docks, with 200 beds; the Hospital for Sick Children and Women, in St. Michael's Hill, with 102 beds; and the Eye Hospital, Lower Maudlin Street, with 17 beds. These will all be open to the inspection of members during the meeting.

Places to be Visited.

A number of the leading local manufacturers have already promised to throw open their works to members of the Association.

The Committee of the Zoological Gardens, Clifton, have consented to allow members free access to these Gardens during the week. The collection of animals is the finest out of London, and the Clifton Gardens are noted for their success in lion breeding; the grounds are most tastefully laid out.

The neighbourhood of Bristol is of much interest, both archæologically and also on account of the beauty of its scenery. The view from the Downs is very fine, commanding the gorge of the Avon, bounded on the further side by high woods with the Nightingale valley and crowned by ancient British earthworks, while to the left lies the open country, and to the right is the Bristol Channel with the Welsh hills in the background. Within easy driving distance is Cadbury Camp, an ancient British earthwork situated on the road to Clevedon and commanding extensive views of the surrounding country. A drive of about 5 miles to Penpole Point, overlooking Portishead and the Channel, may be combined with a visit to Kingsweston Hill, with its camp and arbutus walk. Other "camps" are scattered through the surrounding country. The Druidical stones of Stanton Drew, 7 miles from Bristol, are, for size, inferior only to those of Stonehenge, while they are more numerous. The lovely scenery of Brockley Coombe is about 9 miles' drive from Bristol; while closer at hand are Abbot's Leigh, Blaise Castle, and Henbury. Short excursions can also be made by water to Weston-super-Mare, Clevedon, Chepstow, and other places on the Channel.

Saturday Excursions.

1. *To Berkeley Castle.*—Lord and Lady Fitzhardinge have kindly promised to receive a party of 100, and entertain them to luncheon. This party will proceed by road through Tortworth Park, Lord Ducie's demesne; and having viewed the historic portion of Berkeley Castle, will make the return journey to Bristol through Thornbury. Members wishing to go North can do so from Berkeley Road Station (Midland).

2. *To Chepstow Castle, Tintern, and Symond's Yat.*—This excursion will leave Bristol *viâ* Severn Tunnel for Chepstow, where the Castle will be visited. Thence the party will be conveyed in carriages to the far-famed Wynd Cliff, which they will descend to Moss Cottage, where the carriages will be met. Tintern Abbey will be viewed after luncheon, which will be taken in the grounds of the Abbey by kind permission of Mr. L. Baldwin. Symonds Yat will afterwards be reached by rail through the famous Wye Valley. After a walk up the Yat and through Colwell Woods, which command a splendid panoramic view of the Wye. Tea will be partaken of, and the party will return *viâ* Pontypool Road. At the latter station members for the North can join the express. Party limited to 150.

3. *To Glastonbury and Wells.*—Limited to 100. Proceeding first to Glastonbury, the party will be driven to the British Lake Village, which will be described by its discoverer, Mr. Arthur Bulleid, and thence back to Glastonbury, where the Abbey will be viewed, and also the Museum, in which numerous objects of interest are preserved. Mr. J. G. L. Bulleid, President of the Glastonbury Antiquarian Society, will describe the Abbey and various objects of interest in the ancient town. The party will then proceed by rail to Wells, and partake of luncheon at the Swan Hotel. In the afternoon the Dean of Wells will offer a welcome to the Deanery and Cathedral, over which Canon Buckle and Mr. Edward Buckle (Diocesan Architect) will conduct the party, and the latter will explain the points of interest. The Lord Bishop of Bath and Wells and Lady Arthur Hervey have kindly invited the party to view the palace grounds, and partake of tea in the ruins of the banqueting hall or in the palace, as the weather may suggest. Bristol will be reached in good time.

4. *To Weston-super-Mare and Cheddar Rocks.*—At the invitation of members of the Association residing in Weston-super-Mare, a party of 100 will visit this watering-place. The excursion will proceed from Bristol by special saloon steamer, and will be met at Weston Pier and taken in carriages to Worlebury Camp, Weston Sanatorium, and other places of interest. They will afterwards be entertained at luncheon at the Grand Atlantic Hotel. In the afternoon the party will be driven to Cheddar, and will proceed up the celebrated gorge, and visit the stalactite caverns illuminated by gas; and after tea the return journey will be made by rail to Bristol with the Wells and Glastonbury party.

5. *To Lynmouth and Ilfracombe by Water.*—The special saloon steamer will convey a party to Lynmouth and Ilfracombe, thus affording to members an enjoyable sea trip of some 3½ hours each way, and view some of the most lovely portions of the North Devon Coast. There will be ample accommodation for a party of 200 or 300.

Guide Book.

A new and complete guide to Bristol, Clifton, and the environs, is being compiled and edited by Mr. James Baker, of Clifton, expressly for the Association. Mr. White, of the Linnæan Society, is responsible for the Botanical section, and Professor Lloyd Morgan, Principal of University College, for the Geological portion; while Mr. Whatley, a well-known local artist, has undertaken the illustrations. A copy of the guide will be presented by Mr. Baker to every member of the Association present at the meeting.

SMALL-POX AND VACCINATION IN 1893.

VI.—Keighley.

Keighley occupies a position probably unique in 1893, so far as any large amount of small-pox is concerned. No fewer than fifteen times was the disease brought into the town by persons of the vagrant class. The local board have acted very wisely in the matter of an isolation site, as they have joined with other sanitary bodies in obtaining a site of some sixteen acres, right away from any population. The nearest habitation is nearly half a mile away. But the hospital erected is only of iron.

The per-case mortality on the total attacks was nearly 13 per cent., made up of 3.2 per cent. in the vaccinated and 14.6 in the unvaccinated. The only death in the vaccinated was of a female, aged 20 years, who had a hæmorrhagic attack, fatal in nine days. This death made the rate in the vaccinated over 10 years of age to be 3.3 per cent. In the unvaccinated the rates were:

Under 10 years...	24 cases	...	4 deaths	... 16.7 per cent.
Over 10 years.....	17 cases	...	2 deaths	... 11.8 per cent.

As to age incidence, the facts were:

Vaccinated ...	0—10 years...	1 case	= 3.2 per cent.
	0—20 years...	3 cases	= 9.7 per cent.
Unvaccinated	0—10 years...	24 cases	= 58.5 per cent.
	0—20 years...	33 cases	= 80.5 per cent.

The classes of attack were as follows:

	Vaccinated.		Unvaccinated.	
Discrete.....	24 cases ...	77.4 per cent.	..... 8 cases ...	17.5 per cent.
Confluent.....	6 cases ...	19.4 per cent.	..... 33 cases ...	82.5 per cent.
Hæmorrhagic	1 case ...	3.2 per cent.	..... — cases ...	0.0 per cent.

The average duration of illness was in the case of vaccinated patients thirty-six days, and in the case of the unvaccinated patients fifty-three days. The above facts are strikingly in favour of vaccination.

GENERAL COUNCIL

OF

MEDICAL EDUCATION AND REGISTRATION.

SUMMER SESSION, 1894.

Sir RICHARD QUAIN, Bart., President, in the Chair.

Thursday, May 24th.

(*Continued from page 1140.*)

CASE OF MR. ALABONE.

AFTER dealing with the penal cases (reported in the BRITISH MEDICAL JOURNAL of May 26th), the Council proceeded to consider *in camerâ* communications made by Mr. E. W. Alabone through his solicitor. Mr. Alabone, whose name was removed from the *Medical Register* in 1886, now wrote requesting that his name might be restored to the *Register*, as it had been removed without a separate and due inquiry being held as provided by statute. It was resolved:

That the Registrar be directed to reply to Mr. E. W. Alabone's solicitor that the Council declines to restore his name to the *Medical Register*, or to hold any inquiry into his conduct.

THE CASE OF DR. HERBERT TIBBITS.

A communication was read from the Royal College of Physicians, Edinburgh, stating that Dr. Herbert Tibbits had been "deprived of his Fellowship and Membership for infamous conduct in a professional respect."

The Council then considered *in camerâ* a communication from Dr. Herbert Tibbits, protesting against the removal of some of his qualifications from the *Medical Register*, on the ground that such removal was illegal; the qualifications erased having, he alleged, been withdrawn from him because he had adopted the theory of the beneficial treatment of disease by currents of electricity of small power—a theory of medicine. The erasure, he added, was as much illegal as if a homœopath were deprived of his qualifications. It was resolved:

That the Registrar be directed to reply to Dr. Tibbits that his letter has been considered by the Council, and that the Council must decline to hear him on the question of the removal of his qualifications of Licentiate of the Royal College of Physicians, London, 1865; Member 1874, and Fellow Royal College of Physicians 1876, Edinburgh, or to reconsider their action in removing them.

Dr. TUKE asked whether, with reference to a statement on the minutes, to the effect that "the Council's solicitor explained the reason for deferring the inquiry into Dr. Tibbits's conduct to the next session," it was proposed to take any further action in regard to Dr. Tibbits's conduct. The Council then deliberated *in camerâ*.

Mr. MUIR MACKENZIE made an explanation with regard to the matter, and recommended that the Council should direct proceedings in reference to Dr. Tibbits to be taken next session.

On the motion from the chair, it was resolved:

That with reference to the communication of the Royal College of Physicians of Edinburgh alleging infamous conduct in a professional respect against Dr. H. Tibbits, the Council should direct an inquiry to be made into his conduct, and that his case be brought before the next session of the Council.

REGISTRATION OF SCHOOLBOYS AS MEDICAL STUDENTS.

Dr. TUKE, as Chairman of the Education Committee, called the attention of the Council to the fact that six students had been registered in the Medical Students' Register, as in pupilage with a certain registered practitioner who was said to be a Science master in a public day-school where the students were ordinary pupils; and that the day-school had now been recognised by one of the licensing bodies as a teaching institution wherein the subjects, physics, chemistry, and biology were taught. Dr. Tuke pointed out that under present regulations the registrars could not refuse to register such schoolboys, but at the same time it was evident that this course of proceeding would be in opposition to the five years' scheme as it was intended to be carried out by the Council. It was then moved by Dr. TUKE, seconded by Dr. BRUCE, and agreed to:

That the Education Committee should inquire into the subject in its relation to the Council's resolutions as to the five years' curriculum, and report to the next session.

REGISTRATION OF MEDICAL STUDENTS BY THE UNIVERSITY OF DUBLIN.

The report of the Education Committee with regard to the registration of medical students by the University of Dublin was, on the motion of Dr. TUKE, seconded by Dr. BRUCE, received and adopted.

Friday, May 25th.

Sir RICHARD QUAIN, Bart., President, in the Chair.

SIR JAMES PAGET.

The PRESIDENT announced that he had received a communication from Sir James Paget acknowledging the receipt of the Council's resolution, and expressing the extreme satisfaction of himself and Lady Paget at the expression of esteem and good wishes on the occasion of their golden wedding from so many distinguished and representative members of the profession.

THE UNIVERSITY OF EDINBURGH.

The Council proceeded to consider the report of the Education Committee on Section 5 of the Draft Ordinance, Edinburgh, No. 10, on regulations for degrees in medicine, supplementary to Ordinance No. 14, issued by the Commissioners acting under the Universities (Scotland) Act, 1889.

The report stated that communications had passed between the President of the Council and the Scottish Universities' Commission on the subject of this Ordinance. The Section in question states:

If any candidate shall, before presenting himself for his preliminary examination, have attended in any University of the United Kingdom, or in any University or institution specially approved, or under any teacher specially recognised for the purpose by the University Court, a course or courses of instruction in physics, chemistry, botany, or zoology equivalent in the judgment of the Senatus to the qualifying course in the same subject in the University of Edinburgh, such attendance shall (notwithstanding anything hereinbefore ordained) be held as entitling him to be examined in these subjects; and if the candidate shall have attended such course or courses in each of the said subjects, he shall be held to have completed his first year of medical study.

The Committee points out that this provides a means for evading one of the five years of *bonâ fide* medical study required by the Council, that it offers an inducement to irregularity, and it enables students in the Scottish Universities to disregard the requirements of the Council as to registration.

Dr. BATTY TUKE said it was of the greatest importance for the Council if possible to obtain the withdrawal of this section. He moved:

1. That the President be requested, on behalf of the Council, to transmit to the Scottish Universities' Commission a copy of the Education Committee's Report, and to represent to the Commissioners:

(1) That Clause V of the Draft Ordinance, supplementary to Ordinance No. 14, does not meet the objections against Section X which have already been urged by the General Medical Council, inasmuch as it does not require that a candidate on whose behalf special grounds are alleged shall have passed a preliminary examination in Arts or in Science before commencing the study of the special subjects of the first *annus medicus*.

(2) That in the preamble to the Draft Ordinance no reference is made to the fact that, in the opinion of the Commission, it is desirable to limit the powers given by Section X.

(3) That in the interest of medical education in general, and of the Medical departments of the Scottish Universities in particular, it is desirable that the action of Section X should by supplementary Ordinance be suspended.

Dr. MACALISTER seconded the motion, which was carried.

The following resolution was then agreed to, on the motion of Dr. TUKE, seconded by Dr. MACALISTER:

II. (1) That the President be further requested to communicate with the Lord President of the Privy Council, asking that in case an Ordinance supplementary to or otherwise dealing with Section X should be submitted by the Commissioners for Her Majesty's approval, the General Medical Council may through its President be notified of the fact, and have an opportunity of representing to the Committy of the Privy Council its views thereupon.

(2) That, if necessary, the President be authorised to take the proper steps for presenting the views of the Council before the Committee of the Privy Council.

DEFICIENT PRELIMINARY EDUCATION.

The Education Committee, in their report on cases of deficient preliminary education, expressed the opinion that the returns from English and Scottish bodies are satisfactory, so far as the numbers therein given are concerned. As regards the Irish returns the result is not so satisfactory. The Committee note that out of nineteen instances of bad spelling thirteen were those of candidates who had passed the Preliminary Examination of the Royal College of Surgeons in Ireland. This is one of the examinations in the Council's list to which a note is appended stating that "The Council has recommended that these examinations be discontinued."

On the motion of Dr. BATTY TUKE, seconded by Dr. BRUCE, the report was adopted.

THE SOCIETY OF APOTHECARIES OF LONDON.

The Council next considered a report by the Examination Committee upon the report of the Visitor and Inspector of Examinations on the qualifying examinations for the diploma in Medicine, Surgery, and Midwifery of the Society of Apothecaries of London. The Committee summarise the report of the Visitor and Inspector, which states that the Final Examinations are "sufficient." The suggestion is made that more time should be spent in the examination in Clinical Surgery, and that a written report of at least one case should be required in addition to the oral examinations. The examination in Operative Surgery is considered to be inadequate.

Sir DYCE DUCKWORTH moved the adoption of the report.

Dr. WILKS seconded the motion, which was adopted.

CONJOINT BOARD OF THE ROYAL COLLEGES IN IRELAND.

The Council then proceeded to consider the Report by the Examination Committee on the Final Examinations of the Conjoint Board of the Royal Colleges of Physicians and Surgeons in Ireland.

Sir DYCE DUCKWORTH moved the reception of this Report, which was seconded by Mr. BRYANT and agreed to.

USE OF TITLES AFTER REMOVAL FROM "REGISTER."

Mr. CARTER moved:

That, following the precedent furnished by the case of Steel, the legal advisers of the Council be instructed to institute prosecutions, under Section 40 of the Medical Act of 1858, against persons whose names have been erased from the *Register* by order of the Council, and who, nevertheless, continue to use the titles of which they have been deprived.

The PRESIDENT observed that Steel had no right whatever to use the title of M.D., and that the case of people holding degrees from universities was not in the same category. He proposed that the question should be referred to the Executive Committee to consult with the legal advisers, and to frame some resolutions on the subject for the next meeting. This suggestion was, after a brief discussion, adopted.

AMENDMENT OF THE PENAL CLAUSES OF THE MEDICAL ACT.

Moved by Dr. MACALISTER, seconded by Mr. WHEELHOUSE, and agreed to:

That the Executive Committee be requested to consider and report at a future session of the Council on the proposals for the amendment of the Medical Act, 1858, contained in the communication received and entered on the minutes of May 22nd (pp. 33 to 40).

This had reference to the report of the Parliamentary Bills Committee of the British Medical Association, printed in the BRITISH MEDICAL JOURNAL on April 28th, 1894, p. 920.

THE OFFENCE OF COVERING.

Sir DYCE DUCKWORTH, in proposing:

That the Registrar be instructed to publish annually in a prominent place in the medical journals the resolutions of the General Medical Council in respect of the offence of "covering" unqualified persons, and to supply a copy of the regulations to every person applying for registration,

explained that the motion was intended to prevent persons who were brought up before the Council complaining that they were unaware of the rules with regard to the matter.

Mr. BRYANT seconded the motion, which was agreed to.

REPORTS OF THE PHARMACOPŒIA AND FINANCE COMMITTEES.

On the motion of Dr. MACALISTER, seconded by Dr. LEECH, the report of the Pharmacopœia Committee was adopted.

Mr. BRYANT moved, and Sir DYCE DUCKWORTH seconded the adoption of the Finance Committee's report.

Dr. GLOVER expressed the hope that the large increase of legal expenses for the year would act as a caution against raising abstract and impracticable questions. In 1891 the law expenses amounted to £314; in 1892, to £469; while this year they had risen to £1,557.

Sir JOHN SIMON, Sir WILLIAM TURNER, and others objected to the description of the issue with the Royal College of Physicians as abstract and impracticable. The question was one of law, which could be decided only by a court of justice, and was beyond the competence of the Council. The Council had accepted without appealing, as they might have done, the decision given in the matter. The decision was well worth the money spent on it.

The report was then adopted.

D.P.H. EXAMINATIONS.

Dr. MACALISTER moved, and Dr. TUKE seconded, that a communication from the British Institute of Public Health, suggesting that the Inspector appointed to visit the examinations for diplomas in Public Health should be one possessing a diploma in Public Health, and further animadverting on the increased fee charged for the registration of such diplomas, be received and entered in the minutes, which was agreed to.

Dr. MACALISTER pointed out that this did not imply that the Council admitted the contentions of the British Institute.

RECEPTION OF REPORTS.

On the motion of Mr. WHEELHOUSE, seconded by Sir WILLIAM TURNER, the following reports from the Education Committee were received and entered upon the minutes: Instruction in Vaccination; Curriculum for the Licence in Dentistry granted by the Royal College of Surgeons in Ireland.

On the motion of Sir DYCE DUCKWORTH, seconded by Mr. BRYANT, a second Report from the Examination Committee upon the Final Examinations of the Conjoint Board of the Royal College of Surgeons and the Apothecaries' Hall of Ireland, was received and entered upon the minutes.

APPOINTMENT OF COMMITTEES.

The Executive Committee was then balloted for, the following gentlemen being elected: Sir Dyce Duckworth, Sir Walter Foster, Sir Philip C. Smyly, Dr. Moore, Mr. Bryant, Sir William Turner, Dr. Heron Watson, and Mr. Wheelhouse, the President (*ex-officio*).

On motion from the Chair, the following Committees were reappointed: Pharmacopœia, Finance, Dental, and Penal Cases.

The Council then adjourned.

Saturday, May 26th.

Sir RICHARD QUAIN, Bart., President, in the Chair.

ALLEGED COVERING.

The first business was the deferred consideration of the case of Robert Ingram Robertson—registered as M.B. Mast. Surg., 1890, Univ. Edin.—complained of by the Medical Defence Union, who had been summoned to appear before the Council to answer the following charge, as formulated by the Council's Solicitor: "That, being a registered medical practitioner, he had for a considerable time past acted, and still acts, as cover to an unqualified person named Charles Graves, of Windsor Road, Penarth, and lends his presence, advice, and assistance to enable the said unqualified person to attend patients, and recover charges therefor, and generally conduct a medical practice as though he were legally qualified."

A communication was read from Mr. Robertson, forwarding a medical certificate that he was unable to attend.

Dr. Bateman, as Secretary, appeared as representing the Medical Defence Union, Mr. Farrer, the Council's Solicitor, attended to advise the Council on the cases before it, and Mr. Muir Mackenzie attended as Legal Assessor.

Dr. BATEMAN opened the case and read the affidavits in support.

Mr. MUIR MACKENZIE read to the Council a written defence which Mr. Robertson had supplied.

Strangers, by direction of the Council, withdrew, and the case was deliberated upon *in camerâ*, after which, on motion from the chair, it was resolved:

> That, in the opinion of the Council, Mr. Robert Ingram Robertson has committed the offence of covering an unqualified practitioner charged against him; that in the opinion of the Council the offence is infamous conduct in a professional respect; that the Registrar be directed to erase the name of Mr. Robert Ingram Robertson from the *Medical Register*.

Strangers were then readmitted, and the PRESIDENT informed them of the foregoing resolution.

THE DENTAL CURRICULUM.

The Council next proceeded to the consideration of the Report by the Education Committee on the curriculum for the licence in dentistry granted by the Royal College of Surgeons in Ireland, which recommended: (1) That the Council should intimate to the Royal College of Surgeons in Ireland that unless the course of study for its licence in dentistry be amended so as to bring it into compliance with the requirements of the Council prior to the next examination for said licence, the Council will feel it to be their duty to report to the Privy Council, in accordance with Section 23 of the Dentists Act, 1878, "That it appears to the General Medical Council that the course of study to be gone through in order to obtain the licence in dentistry of the Royal College of Surgeons in Ireland is not such as to secure the possession by persons obtaining such certificate of the requisite knowledge and skill for the efficient practice of dentistry or dental surgery;" and further, to request the Privy Council to make order that the certificates granted under their present regulations by the Royal College of Surgeons in Ireland shall not confer the right to be registered under the Dentists Act. (2) That in order that the Council may be assured that their requirements are being fully complied with, they shall, in accordance with Section 22 of the Dentists Act, 1878, appoint an inspector or inspectors, whose duty it shall be to visit and report on the examinations conducted by the bodies granting qualifications in dentistry, with special instructions to examine the schedules and certificates presented by every candidate.

Dr. TUKE moved the first recommendation of the Committee, which was seconded by Dr. MACALISTER and agreed to.

Dr. TUKE next moved the second recommendation, with the addition of the following words: "and that it be remitted to the Executive Committee to consider the best way of carrying out the inspection." This was seconded by Dr. BRUCE and agreed to.

INSTRUCTION IN VACCINATION.

The Council next considered the report by the Education Committee on instruction in vaccination, which was adopted.

THE CONJOINT BOARD OF THE ROYAL COLLEGE OF SURGEONS AND APOTHECARIES' HALL IN IRELAND.

The next business was the consideration of the report by the Examination Committee on the Final Examination of the Conjoint Board of the Royal College of Surgeons and the Apothecaries' Hall of Ireland, in which it was stated that the Royal College of Physicians of Ireland brings to the notice of the Council certain matters relating to the curriculum of students and to the earlier stages of the examinations of the Conjoint Board of the Royal College of Surgeons and Apothecaries' Hall in Ireland. It is pointed out that, owing to irregular arrangements, some candidates have been enabled to evade a strict and efficient examination in Physiology at the hands of the Conjoint Board of the Colleges of Physicians and Surgeons, Ireland, by passing an earlier and elementary one before that Board, which examination has been accepted by the Conjoint Board of the College of Surgeons and the Apothecaries' Hall, Ireland, as qualifying for admission to their Final Examinations. Particulars are given in detail in support of the contention that at least five students so availed themselves, and were ultimately admitted into the profession. The same system, it is alleged, was practised in the case of chemistry up to 1890. Evidence is further offered of the case of an undergraduate of the Royal University who, having been rejected at the Third Professional Examination of his University, was nevertheless admitted to the Final Examination of the Conjoint Board of the College of Surgeons and Apothecaries' Hall, and passed it, thus evading an efficient examination both in anatomy and in physiology. Another case is reported in which a candidate was examined who had not taken out a course of midwifery, and who had been rejected three times by the Apothecaries' Society in London. The Secretary of the Council of the College of Surgeons is charged with unfair dealing in favouring certain candidates by procuring information from the Secretary of the Conjoint Board of the Colleges of Physicians and Surgeons, and using it in his capacity as Secretary of the Committee of Management of the Conjoint Board of the College of Surgeons and the Apothecaries' Hall.

In reply to these allegations the Committee of Management of the Conjoint Board of the College of Surgeons and the Apothecaries' Hall declare that they are unsupported by any facts which can be investigated. The complaint of evasion by certain candidates of complete examination in physiology is explained by the fact that alterations took place in the arrangement of the examinations by the Conjoint Board of the two Royal Colleges, which were not communicated to the Conjoint Board of the College of Surgeons and Apothecaries' Hall, and a counter complaint is lodged against the former Board for not warning the sister Board of the possible evils that might arise under the altered system. Now that attention has been so forcibly called to the matter, arrangements are made which compel students to pass in the whole subject of physiology before proceeding to the third examination. The Secretary admits that notice of these alterations may have passed through his hands some years ago, but did not attract his attention. The Committee of Management considers that all Conjoint Examining Boards are invested with authority to use a limited discretion in occasional departure from set rules in minor details of matters relating to examination systems.

The conclusions of the Examination Committee are as follow:

The Examination Committee is prepared to accept the allegations made by the Royal College of Physicians of Ireland as virtually founded on facts, and believes that serious irregularities have arisen, for which the Conjoint Board of the Royal College of Surgeons and the Apothecaries' Hall in Ireland is mainly responsible. The Examination Committee is of opinion, having regard to the laxity and incompleteness of the examinations of that Board, as proved by the two recent inspections of them, that the continuance of that combination in Dublin is no longer desirable, especially when the small number of students who avail themselves of

it is considered, and believes that the Royal College of Surgeons would be well advised to sever its connection with the Apothecaries' Hall. Two universities and two Royal Colleges can certainly supply sufficient qualifications for the requirements of practitioners in Ireland.

Sir William Turner said that if the report were adopted, the Council would have to adopt all the recommendations in the report. If Sir Dyce Duckworth wished any particular point brought out in the report to be put before the Council for its consideration, it should be in the form of a specific motion.

On the motion of Sir Dyce Duckworth, seconded by Mr. Bryant, the Council resolved itself into a Committee of the whole Council for the consideration of the Report.

Sir Dyce Duckworth then moved:

> That it appears to the General Medical Council that the standard of proficiency in Medicine, and in certain branches thereof, required from candidates at the Qualifying Examination held by the Conjoint Board in Ireland of the Royal College of Surgeons and Apothecaries' Hall, Dublin, is insufficient, and that the General Medical Council do accordingly make a representation to the Privy Council to that effect.

Mr. Bryant seconded the motion.

Dr. Heron Watson proposed the following amendment:

> That all the Examinations of the Conjoint Board of the Royal College of Surgeons in Ireland and the Apothecaries' Hall shall be inspected, visited, and reported upon during the next twelve months' period.

Dr. Pettigrew seconded the amendment.

Mr. Carter thought the Council was not entitled to allow the matter to remain in its present condition for another twelvemonth. He apprehended the Privy Council would not take any steps without giving time for defence. The matter had now passed out of the Council's hands, and they were entitled to ask for the help of the Privy Council, and they would be open to censure if they did not take that step.

Mr. Teale said there was a very weak point with regard to taking that action. The condemnation was on account of insufficiency in medicine, not on account of insufficiency in surgery or midwifery. The Examination was now revisited, and the visitors were unable to condemn the medicine again, for the simple reason that the only candidates who came out were rejected in medicine. In order to go to the Privy Council with a case of that kind, their position ought to be strong, and in the present case he thought they would break down.

Sir Dyce Duckworth said in his opinion this was the weakest Board in the three kingdoms, and it was their duty to do what they could to suppress the work of such a body.

Dr. Atthill suggested that the Council should consider the memorial—which would be in their hands on the Monday morning—first, and then vote upon the matter.

Sir Dyce Duckworth agreed to that course, and the debate was adjourned.

The Council then resumed on the motion of Mr. Wheelhouse, seconded by Sir Wm. Turner.

Sir Dyce Duckworth moved, and Mr. Bryant seconded:

> That the Report by the Examination Committee on the Memorial from the Royal College of Physicians of Ireland in regard to the Royal College of Surgeons and Apothecaries' Hall of Ireland be received and entered in the minutes;

which was agreed to.

The Council then adjourned.

Monday, May 28th.

Sir Richard Quain, Bart., President, in the Chair.

Conjoint Board of Royal College of Surgeons and Apothecaries' Hall, Ireland.

The first business was the adjourned consideration of the reports by the Examination Committee on the final examinations of the Conjoint Board of the Royal College of Surgeons and the Apothecaries' Hall of Ireland.

Sir Dyce Duckworth, speaking to the resolution he had moved on this subject on the previous day, said it was a matter of common knowledge and belief that the examination of the Conjoint Board of the Royal College of Surgeons and the Apothecaries' Hall, Dublin, was not in all respects a creditable or desirable one. That was no new opinion; certainly as regards the Apothecaries' Hall it was no new matter. In 1882 an inspection of the examination showed a most unsatisfactory state of things. Since then the Council had held two inspections of the Board in which the Apothecaries' Hall took part, and on each occasion it was reported on unsatisfactorily. It certainly looked like a matter which was well-nigh incorrigible, and yet they were told that the time had not come when any severer measures should be dealt out. In his opinion, the time had come when the College of Surgeons in Ireland would be well advised to break off with what he called the left-handed Board in Ireland. In dealing with the matter the Examination Committee were moved by a strong sense of public duty and by a strong feeling that what they proposed would be to the best interests of the whole profession and of the College of Surgeons of Ireland itself. He begged again to move the resolution.

Mr. Bryant again formally seconded the resolution. He said that he entirely agreed with the conclusions laid before the Council. He saw no reason at all why they should postpone their final decision in the matter.

Sir William Turner asked if the resolution had not better be split into two.

The mover and seconder having assented, the resolution was amended to read as follows:

> That it appears to the General Medical Council that the standard of proficiency in medicine and in certain branches thereof, required from candidates at the Qualifying Examination held by the Conjoint Board in Ireland of the Royal College of Surgeons and Apothecaries' Hall of Ireland, is insufficient.

Dr. Atthill said a more painful duty never devolved on anyone than that which he felt compelled to perform that day in offering a few words of justification of the position of himself and of his College in the matter. As far as pecuniary interest went, he desired to point out that the Royal College of Physicians in Ireland would gain nothing if the Council withdrew its sanction from this Conjoint Board. All they asked was that a stop should be put to such a system as was going on at present. After dealing with the causes which lead the Royal College of Physicians of Ireland to move in this matter, Dr. Atthill said there was hardly a paragraph in the reply of the Committee of Management of the Conjoint Board that did not either convey misinterpretation or was a direct misstatement of the facts. The Committee of Management, in reply to the memorial of the Royal College of Physicians of Ireland, admitted the correctness of the charges made by the Colleges: First, "that candidates have been, and still are, granted the licences of the Royal College of Surgeons of Ireland and the diploma of the Hall, and consequently have become registered practitioners and as such entitled to hold any public appointment, without in several instances having been fully tested at their examination, and in some cases, we believe, without having been examined at all in, or required even to produce evidence of having studied, at least one important branch of medical education." That subject being physiology, the Council would have to decide if a body guilty of such conduct had fulfilled its duty to the public. Secondly, they admitted that they availed themselves of the position of their Secretary, who, as Secretary of the Council of the Royal College of Surgeons in Ireland, had opportunities afforded him in this latter capacity to obtain privately information relative to the details of the examination conducted by the two Royal Colleges which would have been refused to any licensing body. The rest of the reply consisted of the enumeration of what the Committee deemed to be palliative circumstances which in their opinion justified their conduct. It was unnecessary to discuss these in detail, but the inaccuracies of some of them should be pointed out. 1. The Committee stated "that the scope of the Physiological Examination at their Second Examination was originally the same as that required by the Royal Colleges." That passage conveyed the impression that the Second Examinations were at first identical, which they never were, for the Second Examinations of the Colleges embraced the physiology of the

circulation, respiration, and digestion only. The Committee of Management also said: "If the subject did not for five years attract the notice of the College of Physicians or of its Committee, through whose hands the certificates of all students passed, it is not surprising that it should have escaped the notice of this Committee." The Committee of Management of the two Royal Colleges invariably insisted on their curriculum and the requirements of the General Medical Council being complied with by all candidates for their diplomas, but they had no means of knowing what passed at the Committee of Management of the College of Surgeons and the Apothecaries' Hall. Moreover, irregularities complained of related to examination, not only to curriculum. The latter part of the statement of this Committee seemed, therefore, meaningless. As to the first part, the College of Physicians had no suspicion of the system of evasion of examination in physiology which the Committee of Management now admitted had been going on for years till the autumn of last year, when, as a result of the discussion which took place at the May meeting (1893) of the General Medical Council, statements were made to their representative on the Council by medical students and junior practitioners who felt themselves aggrieved, which induced the Royal College of Physicians to investigate the question; and, finding the statements to be true, the matter was without delay brought before the General Medical Council at the last meeting, in the form of the following resolution: "That the question be referred to the Education Committee for investigation and report." That resolution was, at the request of the representative of the College of Surgeons, withdrawn, and the memorial now before the Council substituted. The College of Physicians, therefore, lost no time in bringing the matter before the Council, that being the proper body to deal with the subject. The Committee stated, referring to certain cases X. and Y., that it had not been afforded means of identification or of investigation: "had they, no doubt a complete refutation of the statements or satisfactory explanation would be forthcoming." Yet in the postscript at the end of their reply they say, in reference to case X., "the Committee has learned that a candidate was in fact admitted to examination without presenting the requisite certificate of lectures in midwifery. He produced the diploma in midwifery of the Coombe Hospital, which was accepted by oversight as an equivalent for that course." It was therefore evident that the Committee had no difficulty in identifying these cases; at any rate, they never applied to the College of Physicians for information which, if asked, would have been at once given. As a matter of fact, however, the statement that the diploma of the Coombe Hospital was accepted by "oversight" is not correct, for the candidate in question made the acceptance of this diploma in lieu of lectures in midwifery a matter of special application to the Royal College of Surgeons. The fact of this candidate having been several times rejected by the Society of Apothecaries of London and experiencing no difficulty in passing the examination for the L.R.C.S.I. and L.A.H. was significant. The Committee of Management of the Royal College of Surgeons, Ireland, and Apothecaries' Hall repudiated the statement made by the College of Physicians that "it is difficult to avoid the inference that the system of evasion of certain subjects, if not openly approved, was not disapproved of by the Committee." It was impossible in face of facts to come to any other conclusion, for everything tended in the same direction. Thus, in their reply, the Committee said with respect to Candidates Nos. 425, 41, and 343, "these candidates had already passed the First and Second Professional Examinations held by the College of Surgeons before the Conjoint Boards were formed, and were therefore entitled to present themselves for the Third and in the subjects of the Third only;" but a reference to the curriculum of the Royal College of Surgeons of Ireland of the date referred to showed that the Physiology of the Circulation, Respiration, and Digestion only formed part of the examination at the Second Professional Examination. The Committee of Management deliberately formulated a scheme which omitted a full examination in Physiology in the class of candidates referred to, and this action on their part confirmed the impression held by the College of Physicians "that they did not disapprove of the evasion" of examination in Physiology in the case of other candidates. In conclusion, he said that the matter before the Council was a very simple one. Would they, Aye or No, permit in one corner of the United Kingdom a retreat for the refuse of the medical schools of Ireland and Great Britain for the dullards who could never learn, for the idle who would not learn, and for the dissipated and reprobate?

Sir PHILIP SMYLY said that the resolution before the Council was, in fact, the summary execution of this body, since certain conditions were not complied with. It was not, he thought, just to inflict the penalty when he could show that the conditions had been fully complied with. The conditions laid down by the Council had been laid before the Conjoint Board, who accepted them without any contradiction, and were now carrying them out. As to the certain irregularities, he was instructed to acknowledge them, and to assure the Council that certain changes had been made which would secure that such irregularities should not occur again.

Dr. CHARLES MOORE endorsed the statement of Sir Philip Smyly. On behalf of the Apothecaries' Hall, Dublin, which body he represented, he could say that every attention should be paid to the requirements and wishes of the Council. In the future they trusted that some more systematic and orderly course of procedure would be undertaken, and he pledged himself and his Board to do all they could to meet the requirements of the Council.

Without further discussion, the resolution was then agreed to.

Sir DYCE DUCKWORTH then moved, in continuation of the previous resolution:

> That the General Medical Council do make a representation to the Privy Council to that effect.

Mr. BRYANT second the resolution.

It was then pointed out that no notice had been taken of Dr. Heron Watson's amendment, whereupon the President allowed it to be moved as an amendment to the above resolution.

Dr. MACALISTER doubted whether the Council, having passed the resolution declaring the examination to be insufficient, had any power under the Act of 1886 to do other than represent the body to the Privy Council.

Sir JOHN SIMON thought they might pass a provisional resolution, leaving it to the legal advisers to say whether this course was lawful.

Dr. HERON WATSON then moved his amendment, which, after certain additions on the suggestion of various members of the Council, read as follows:

> That as the Conjoint Board of the Royal College of Surgeons in Ireland and of the Apothecaries' Hall of Dublin have given an assurance by the representatives of these two bodies that they will carry out to the fullest extent and without delay all the recommendations of the General Medical Council on the subjects of education and examination, subject to legal opinion on the construction of Clause 4, Subsection (i) of the Medical Act (1886), the Council decides that it will not meanwhile report these bodies to the Privy Council, but that all the examinations, whether final or previous, held by the Conjoint Board of the Royal College of Surgeons of Ireland and the Apothecaries' Hall of Dublin, shall be specially visited, inspected, and reported upon during the next twelve months, under the direction of the Executive Committee.

Dr. PETTIGREW seconded the amendment, which was carried by 20 to 8.

Subsequently the amendment was put in the shape of a substantive resolution, and carried.

PRELIMINARY EXAMINATION.

A report was brought up from the Education Committee on the preliminary examinations by Indian, Colonial, and Foreign Universities and Colleges. They stated that considerable difficulty had been experienced in obtaining exact information with regard to certain of these examinations. It appeared, however, that some of them did not meet the requirements of the Council as regards general education. Before definitely proposing that these examinations should be removed from the Council's list, the Committee desired to be empowered to forward to each of the bodies concerned a

copy of the draft report which they had prepared on the subject, and to invite them to communicate to the Registrar of the General Medical Council any explanation or objection they might have to make in regard to it.

Dr. TUKE said there had been considerable trouble in obtaining full information with regard to the various Colonial and Foreign bodies, and the Committee asked for longer time to obtain such information. Certain bodies had not replied at all. He asked the Council to receive this draft provisional report, and to allow it to be sent to the various bodies, with a view to elicit further information on certain points.

Dr. PHILIPSON seconded the motion, which was agreed to.

On the motion of Dr. TUKE, seconded by Dr. MACALISTER, it was resolved:

That the Registrar be instructed to obtain at least two calendars of all the bodies whose names stand in the Council's list.

Dr. MACALISTER pointed out that the University of Cambridge had no official calendar. There was one brought out by a firm of booksellers entirely on their own responsibility.

Dr. CHURCH said the University of Oxford was in the same position.

Mr. BRUDENELL CARTER moved a resolution, drafted by Mr. Muir Mackenzie, providing that in adjudging a penal case brought before them the Council might, after the person charged had been found guilty of the offence charged against him, either proceed to the consideration of the remaining questions, whether such offence amounted to infamous conduct in a professional respect, and whether the name should be erased from the *Register*, or might postpone any decision upon those questions and adjourn the inquiry either *sine die* or until the next or some other future session, and that upon the matter coming before the Council again further evidence might be received.

Sir WALTER FOSTER seconded the motion, which was agreed to.

STUDENTS' REGISTRATION.

A report from the Students' Registration Committee, dated May 24th, dealing with various applications for permission to antedate on *Register* under exceptional circumstances, was received and adopted.

APPOINTMENT OF COMMITTEES.

It was resolved, on the motion of Mr. WHEELHOUSE, seconded by Sir DYCE DUCKWORTH, to appoint Sir John Simon as an additional member of the Education Committee.

The members of the following Committees were then appointed:

Examination Committee: Sir Dyce Duckworth, Dr. Pettigrew, Dr. William Moore, Mr. Carter, Sir Wm. Turner, Dr. Charles Moore, Mr. Bryant, Dr. Heron Watson, Sir P. C. Smyly.

Education Committee: Sir John Simon, Mr. Wheelhouse, Sir John Banks, Dr. Glover, Dr. Tuke, Rev. Dr. Haughton, Dr. Kidd, Dr. MacAlister, Dr. Bruce, Dr. Fraser.

DENTAL REPRESENTATIVES.

A communication was read from the British Dental Association pointing out the advantages which would accrue from the presence of a dentist familiar with the necessities of his profession on the Council. It showed that there were many dentists holding full medical and surgical qualifications, who would be fully competent to take part in the general business of the Council, whilst as practising dentists they would be capable of advising the Council in reference to dental matters. It suggested the addition of one or more dental representatives to the Council.

Sir WM. TURNER moved a resolution, expressing the belief of the Council that it had no legal power to adopt this suggestion.

Mr. WHEELHOUSE seconded.

Sir WALTER FOSTER thought the dentists were hardly treated in having no representative on the Council. He believed the time would come when they would be so represented, but at present the Council had no power under the Act of Parliament to give them such a representation.

Sir JOHN SIMON objected to the dentists being specially represented on the Council any more than gynæcologists or other specialists.

After some discussion as to form, the resolution was agreed to.

ADVERTISING DENTISTS.

Mr. BRUDENELL CARTER moved:

That the attention of the Council having been called to the practice of advertising by certain dentists, it is hereby resolved—That the issue of advertisements of an objectionable character, and especially of such as contain either claims of superiority over other practitioners, or depreciation of them, may easily be carried so far as to constitute infamous or disgraceful conduct in a professional respect.

This was seconded by Sir DYCE DUCKWORTH and agreed to.

Mr. CARTER then called attention to a number of pictorial and other advertisements emanating from dentists, which were exhibited on the walls of the Council room and moved:

That they be referred to the Dental Committee on penal cases for their consideration.

Dr. MACALISTER seconded the resolution, which was, however, after some discussion, negatived as premature.

This concluded the business of the present session.

BIRTHDAY HONOURS.

THE Lord Provost of Edinburgh, Dr. James Alexander Russell, who has received the honour of knighthood, was born in 1846 in the island of Skye, the son of a Free Church clergyman. After early education in Argyllshire he entered the University of Edinburgh, taking first the degree of M.A., afterwards in 1868 the degrees of M.B. and C.M., with first-class honours, and lastly, in 1875, the degree of B.Sc. in Public Health, again with high distinction. For several years he was Demonstrator of Anatomy and assistant to Professor Sir Wm. Turner. Later he spent some time in England and on the Continent in studying practical sanitation, a subject on which he lectured for several winters in the Watt Institute of Edinburgh. He was elected a Fellow of the Royal College of Physicians of Edinburgh in 1881; he is a Fellow of the Royal Society of Edinburgh, and Inspector of Anatomy for Scotland, and is the author of *Sanitary Houses*. Sir James A. Russell has never practised, but has devoted his great energies and marvellous organising powers to the service of the city of Edinburgh. He became a member of the Town Council in 1880, a Baillie in 1885: he was Convener of the Public Health Committee from 1885 to 1891; and in November of the latter year he was elected Lord Provost. During his term of office as Lord Provost, much has been done in the way of purifying the water of Leith, and in improving the slum districts of the city. *Ex officio* he has been an invaluable member of the University Court, and Manager and Chairman of the Board of the Royal Infirmary. In April last his University conferred upon him the Honorary Degree of LL.D., in recognition of his merits as "a man of science, a man of affairs, a benefactor both to the city and to his ancient town's college." Few men have better deserved the honour which Her Majesty has now been pleased to confer upon him. He is a man of absolute honesty of purpose, of sterling integrity, and of great business capacity.

A knighthood has also been conferred on Professor Grainger Stewart. He was born in Edinburgh in 1837, educated at the High School and University of Edinburgh, where he graduated M.D. in 1858. He subsequently studied at Berlin, Prague, and Vienna. On his return to Edinburgh he became a house-physician in the Royal Infirmary; in 1861 he was admitted a Fellow of the Royal College of Physicians; and in 1628 he was appointed Pathologist to the Royal Infirmary and Lecturer on Pathology in the Extra-Academical School. In 1868 he published *A Practical Treatise on Bright's Disease of the Kidneys;* in 1873 he was appointed an Extra-Academical Lecturer on the Practice of Medicine, and on the death of Professor Laycock he was in the same year elected to the chair of the Practice of Medicine in the University of Edinburgh. He has since published a number of lectures and studies in clinical medicine. In 1887 he received the honorary degree of M.D. from the Royal University of Ireland, and in the same year he was elected a Fellow of the Royal College of Physicians of Ireland. In November, 1889, he was elected President of the Royal College of Physicians of Edinburgh. As a practical physician and a clinical teacher Sir Thomas Grainger Stewart is at his best. He goes straight to the central points of the case before him, brushes aside superfluous

details, and with a broad grasp presents the crucial features of the disease. As professor of the practice of medicine in the University, the same breadth of view, along with a power of graphic description in easy and forcible language, makes him one of the most brilliant lecturers, and one of the ablest teachers in the Medical Faculty. In politics the new knight is a Liberal and not a Conservative, as the *Scotsman* erroneously stated, and he is a prominent Elder in the Free Church.

To the knighthood conferred on Dr. J. C. Bucknill, "one of the originators of the National Volunteer Force in 1852," a brief reference was made last week. Dr. Bucknill, who took the degree of M.B.Lond. in 1840, and M.D. in 1852, is a Fellow of the Royal Society and of the Royal College of Physicians. He was at one time superintendent of the Devon County Asylum, and was subsequently Lord Chancellor's Visitor in Lunacy. He is joint author with Dr. Hack Tuke of the standard *Manual of Psychological Medicine*. Dr. Bucknill has also written essays on the psychology and on the medical knowledge of Shakespeare. As we have already said, the honour now conferred has been well earned by services to medicine and science quite apart from his share in originating the volunteer movement.

Sir Francis Seymour Haden as President of the Royal Society of Painter Etchers has received the honour of Knighthood, in recognition of the fact that to his exertions and example is in large measure due the revival of English etching. But for many years Mr. Seymour Haden had an important medical practice in the West-end of London. He became a Member of the Royal College of Surgeons in 1842, and a Fellow in 1857.

The Hon. Arthur Renwick, M.D., Commissioner of New South Wales at the recent exhibition at Chicago, formerly Minister of Mines, and Minister at Public Instruction, and now member of the Legislative Council of New South Wales, who has received the honour of Knighthood, is a Fellow of the Royal College of Surgeons of Edinburgh, and an M.D. of Edinburgh University.

Surgeon-General James Mouat, V.C., C.B., who has been nominated a Knight Commander of the Bath, had a distinguished career in the Army Medical Department, which he entered as Assistant-Surgeon in 1838. He served in the Crimea with the 6th Dragoon Guards, and was in medical charge of the general field hospital of the 3rd Division until the fall of Sebastopol, and was present at the battles of Balaklava, Inkerman, and Tchernaya. He was awarded the Victoria Cross "for having voluntarily proceeded to the assistance of Lieutenant-Colonel Morris, 17th Lancers, who was lying dangerously wounded in an exposed situation, after the retreat of the light cavalry at the battle of Balaklava, on October 26th, 1854, and having dressed that officer's wounds in presence of the enemy. Thus by stopping hæmorrhage he assisted in saving that officer's life." He served through the Maori wars, was several times mentioned in dispatches, and received the thanks of the New Zealand Government for "special and valuable services rendered to the colony." He retired from the service in 1876.

Surgeon-General W. G. N. Manley, V.C., who is made a Companion of the Bath, served with the Royal Artillery in the Crimea, and also in the New Zealand war. He received the Victoria Cross for his gallant conduct during the storming of the Gate Pah near Tavranga, when he risked his own life to save that of Commander Hay, R.N., and others. He was in charge of one of the divisions of the British Ambulance to the Franco-German war, and received the Steel War Medal and the 2nd class of the Iron Cross. He served in the Afghan war of 1878-79, and in Egypt in 1882. He retired from the service in 1884. It may also be recorded that Surgeon-General Manley received the Bronze Medal of the Royal Humane Society for swimming to the assistance of a gunner who fell overboard in a New Zealand river in 1865, and saving his life.

Services in the recent operations against Fodey Silah in Combo on the Gambia have been recognised by the appointment of Fleet-Surgeon William Rogerson White, R.N., to be a Companion of the Bath; of Surgeon Walter Bowdon, R.N., to be a Companion of the Distinguished Service Order.

In Dr. Robert Grieve, Surgeon-General of the Colony of British Guiana, who has been made a Companion of the Order of St. Michael and St. George, the Queen has honoured an able public servant who has discharged the duties of a difficult office with much tact, discretion, and ability.

THE FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE ASSOCIATION OF FELLOWS.

A SPECIAL meeting of the Committee of the Association of Fellows of the Royal College of Surgeons of England was held on May 23rd; Mr. George Pollock, President, in the chair. There was a large attendance. The minutes of the last meeting having been read and confirmed, the Honorary Secretary (Mr. Percy Dunn) explained the reasons for which the Committee had been summoned. Some correspondence had recently passed between a provincial Fellow and himself with reference to the formation of a local branch of the Association at an important provincial centre. It appeared, from the letters of the Fellow above referred to, that in his district no definite information existed in regard to the organisation of the Association, so much so that it had lately even been freely alleged that the Association, as such, was dead. With a view to the removal of these erroneous impressions, the correspondence contained a request to the effect that the Committee should issue an authoritative statement of the organisation of the Association, and any other details it might be considered necessary to promulgate.

A resolution was unanimously passed to (*a*) reprint the rules of the Association; (*b*) to appoint a subcommittee, to meet forthwith, to prepare a statement concerning the constitution of the Association; (*c*) to empower the subcommittee to take such steps as might be deemed to be necessary to make the Fellows of the College better acquainted with the working of the Association.

The probable vacancies on the Council of the College at the July election were then discussed. The retiring members of Council would be Mr. Lund, Mr. Reginald Harrison, and Mr. Howard Marsh, and of these Mr. Harrison and Mr. Marsh intended to offer themselves for re-election. There would, therefore, be one absolute vacancy, and, in accordance with a previous resolution, Mr. A. T. Norton, Senior Surgeon of St. Mary's Hospital, was again unanimously invited by the Committee to come forward to represent the views of the Association at the forthcoming election.

The date of the annual general meeting was altered from June 14th to Tuesday, June 19th. Due notice of the time and place will be issued to each member of the Association.

THE SOCIETY OF FELLOWS.

The Central Executive Committee of this newly-formed Society has just taken their initial procedure by issuing to the Members a circular respecting three questions that are now ripe for discussion. The opinions of the constituent Fellows are sought upon each of the three questions which are stated as propositions, and arguments *pro* and *con.* are given with each. Fellows are requested to reply soon, that their views on the points under discussion may be presented at the half-yearly meeting of Fellows to be held at the College on July 5th. The programme of the Committee is not ambitious. The propositions contained in the circular relate to three questions. The first occupies itself with misconduct of Fellows and Members of the College. It is proposed that increased powers should be given to the Council to deal with all Fellows or Members guilty of misconduct. Should the Society support the Council in their endeavour to obtain extra powers of action against offenders, an application to the Home Office to effect that object would probably be successful. The next question refers to the election of President. Three methods of election are considered: (1) By the Fellows generally: (2) nomination by the Council and election by the Fellows: (3) election by the Council as at present. The third subject considered concerns the Court of Examiners. It is discussed under two propositions: (1) That the number of members of the Court shall be increased; (2) that the number shall remain as at present. The arguments are fairly stated for each side of the two last questions; and all the questions are important. It remains to be seen whether the Fellows who have called the Society will take this opportunity of justifying its existence.

LITERARY NOTES.

A second volume of lectures by Sir William Jenner is announced by Messrs. Rivington, Percival and Co., for publication in October. The volume will contain classical lectures on Rickets, as well as a collection of clinical lectures and essays on Tuberculosis, Abdominal Tumours, and other subjects.

Mr. Ernest Hart's address on Cholera Nurseries has been translated into Italian by Professor Ruata, of Perugia, and published in *La Salute Pubblica*. It is in course of separate reprint here from the British Medical Journal with appendices (Smith Elder and Co.)

The *Archives of Pediatrics* will in future be edited by Dr. Dillon Brown, Adjunct Professor of Pediatrics at the New York "Polyclinic."

The *Transactions of the First Pan-American Medical Congress*, held last autumn at Washington, are in the hands of the public printer.

Dr. S. Weir Mitchell has issued an Analytical Catalogue of his various publications; these range from 1852 to the present year. The books and papers are arranged in chronological order, and a short note is appended to each giving a summary of its contents.

Dr. Oliver Wendell Holmes is said to be writing an autobiography. He works at it an hour or two a day, and has already completed about one-half of what he intends to write. The work will not be published till after the author's death. For the first time in his long and brilliant literary career the innumerable admirers of the genial "Autocrat" will wish that the publication of a book of his may be indefinitely delayed.

The *Sketch* for May 16th contains a portrait of Mr. W. Salmon, the senior member of the Royal College of Surgeons of England. Mr. Salmon was born March 16th, 1790, and admitted a member of the College in 1809.

Professor Roux, of Innsbruck, is about to establish a periodical devoted to development; it is to be entitled *Archiv. für Entwickelung-mechanik der Organismen*, and the first number is expected to appear about the middle of the present year.

The *Boston Medical and Surgical Journal* states that the appropriation for the Library of the Surgeon-General's Office at Washington has been cut down in the House of Representatives from 10,000 dollars to 7,000 dollars. We are glad to learn that an effort is to be made to have the amount restored to the old figure in the Senate. Remonstrances against the action of the House are making themselves heard from many parts of the United States. The Academy of Medicine of Cincinnati has passed a series of resolutions to the effect that inasmuch as the Library of the Surgeon-General's Office is of the greatest importance to medical education and to the medical profession throughout the entire country it is for the public good that it should receive the liberal support of the Government. By the reduction of the appropriation the continued growth of the library would be seriously crippled. A similar memorial in the United States Senate is being signed by the leading members of the profession in Boston and its neighbourhood.

A magnificent *Atlas de Laryngologie et de Rhinologie*, by Dr. A. Gouguenheim, Physician to the Lariboisière Hospital, Paris, and Dr. J. Glover, formerly his clinical assistant in the laryngological department, has just been published by G. Masson. The drawings, which are most artistically executed, include the methods of examining the pharynx, larynx, nasopharynx, and nasal passages, and every form of lesion commonly seen in these cavities. The descriptive letterpress is in English as well as in French. Both the authors and the publisher are to be congratulated on the appearance of the work, which is destined to take its place among classical pathological atlases.

EPSOM COLLEGE.

The annual meeting of the Royal Medical Benevolent College was held on May 31st.

The Treasurer, Dr. Constantine Holman, who occupied the chair, in moving the adoption of the report of the Council, stated that the number of boys now at Epsom College was 250—as many as could be accommodated—and that there were numerous additional applicants for admission. The discipline and progress of the school was in every way satisfactory, and the successes attained at the Universities of Cambridge and London during the year had been remarkable. A scholarship founded under the will of the late Miss Johnson, in memory of the late Dr. Jenks, of Brighton, would in future be awarded annually on the presentation of the Presidents of the Royal Colleges of Physicians and Surgeons alternately. Mr. France had founded another girl's scholarship at St. Anne's Schools, making the tenth which this generous member of the Council had now given at the cost to himself of £10,000. With regard to the benevolent or pensioners' side of the work of the institution, Dr. Holman was able to point to the fact that eight new non-resident pensioners have been elected under the terms of the Pugh bequest, and stated that there was reason to anticipate that the principle of giving such non-resident pensions would shortly be considerably extended, so that in time the class of resident pensioners would disappear. To achieve all that ought to be done, however, increased funds were urgently needed, as the number of applicants for pensions was now fourfold what it had been twenty years ago.

The names of the scholars and pensioners elected were announced as follow:

Foundation Scholars.	Partridge, M. W. C.	Pugh Pensioners.
Burt, J. B.	Hodgson, A. F. B.	Scott, John
Hemsted, S. R.	Robinson, J. H.	Coffin, John N.
Walsh, J. C.		Cuff, Michael H.
Green, L. B.	Pensioners.	Archer, Charlotte.
Thurland, F. E.	Bullen, Catherine.	Beedell, John
Roberts, O. P.	Harris, Harriet.	Sadd, Harriet.
Moore, E. W. A.	George, Mary.	Washbourne, Frances A.
	Summers, Louisa.	Jennings, Elizabeth S.

ASSOCIATION INTELLIGENCE.

GRANTS FOR SCIENTIFIC RESEARCH.

The Council of the British Medical Association desire to remind members of the profession engaged in researches for the advancement of medicine and the allied sciences that they are prepared to receive applications for grants in aid of such research. Applications for sums to be granted at the next annual meeting must be made on or before June 15th in writing addressed to the General Secretary, at the office of the Association, 429, Strand, W.C. Applications must include details of the precise character and objects of the research which is proposed.

Reports of work done by the assistance of Association grants belong to the Association.

Instruments purchased by means of grants must be returned to the General Secretary on the conclusion of the research in furtherance of which the grant was made.

Research Scholarships.

The Council of the British Medical Association are prepared to receive applications for one of the three Research Scholarships which is vacant, of the value of £150 per annum, tenable for one year, and subject to renewal by the Council for another year.

Applications to be sent in writing addressed to the General Secretary on or before June 15th, stating the particulars of the intended research, qualifications, and work done.

Francis Fowke, *General Secretary*.

429, Strand, London, May 8th, 1894.

ELECTION OF MEMBERS.

Meetings of the Council will be held on July 11th and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, June 21st and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. Francis Fowke, *General Secretary*.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the Office.

BRANCH MEETINGS TO BE HELD.

METROPOLITAN COUNTIES BRANCH.—The annual meeting will take place at Limmer's Hotel, George Street, Hanover Square, on Tuesday, June 26th, at 5.30 P.M.—ANDREW CLARK, ISAMBARD OWEN, Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH: EAST LONDON AND SOUTH ESSEX DISTRICT.—The annual meeting for the election of officers will be held on Thursday, June 7th, at the Royal Forest Hotel, Chingford, at 6 P.M. At 6.15 the members and their friends will dine together; Mr. Henry Power, President of the Branch, will preside. Tickets 7s. 6d. each, exclusive of wine; morning dress. Anyone intending to be present is requested to communicate with the Honorary Secretary as early as possible, but not later than June 4th.—H. E. POWELL, Honorary Secretary, Glenarm House, Upper Clapton, N.E.

SOUTH MIDLAND AND CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCHES.—A combined meeting of these Branches will be held at Bedford, on Thursday, June 21st, at 2.30 P.M. Agenda:—Dr. Rowland H. Coombs will give a brief introductory address. Mr. G. E. Wherry (Cambridge) will introduce a discussion on the Treatment of Hernia. Dr. Buszard (Northampton) will introduce a discussion on the Treatment of Acute Febrile Diseases. Sir G. M. Humphry, F.R.S. (Cambridge): The Treatment of Wounds. Dr. A. H. Jones (Northampton): The Arrest of Hæmorrhage in Hæmophilia. Mr. W. G. Nash: A Case of Subdural Abscess and Septic Thrombosis of Lateral Sinus following Middle-ear Disease. Dr. J. Griffiths (Cambridge): Chronic Inflammation of the Breast with and without the Formation of Cysts.—CHARLES JEWEL EVANS, JOSEPH GRIFFITHS, M.D., Honorary Secretaries.

MIDLAND BRANCH.—The annual meeting will be held at the Guildhall, Lincoln, on Thursday, June 14th, at 2 P.M. After the transaction of the usual business the following papers will be read and discussed:—Dr. Newman: To call attention to some of the more pressing difficulties which the members of the medical profession have now to face, and to propose a resolution. Mr. C. J. Bond: A few remarks on the Treatment of Vesico Vaginal Fistula by Operation from within the Bladder. Dr. Elder: Notes on Cholecystotomies and other Abdominal Cases. Mr. R. C. Stewart: On General Paralysis. Dr. Pope: Ulcerative Endocarditis with a Case of Recovery. Dr. Mansel Sympson: (1) Notes on the Treatment of Chronic Muscular Rheumatism by Arsenic; (2) Microscopic Sections of a Congenital Fatty Tumour from a Child aged 8 months. Mr. Cant: On the Radical Cure of Hernia, with cases. Mr. Cant will also give a demonstration at the hospital with the Electric Cystoscope. Luncheon will be provided by the President-Elect, at the Saracen's Head Hotel, at 1 o'clock. The dinner will take place at the Saracen's Head Hotel at 5 o'clock; tickets 7s. 6d., exclusive of wine.—W. A. CARLINE, M.D., Honorary Secretary and Treasurer.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.—The summer meeting of this Branch will be held on Thursday, June 14th, at the New Inn, Ellon, at 2 P.M. Business:—Minutes, nominations, etc.; Communication from the Lancashire and Cheshire Branch anent the proposed legislation for Registration of Midwives. An excursion to Bullers of Buchan, *viâ* Slains Castle and Port Erroll has been arranged for members who can attend early in the day; and dinner will be served at the conclusion of the meeting. Fare for the excursion and luncheon 5s. each. Tickets for dinner 3s. 6d. per head. Members intending to join the excursion leave Aberdeen by 9.25 A.M. train. Those attending meeting and dinner only leave Aberdeen by 12.20 train.—J. MACKENZIE BOOTH, C. THISELTON URQUHART, Honorary Secretaries.

SOUTH-EASTERN BRANCH.—The fiftieth annual meeting will be held at the Crystal Palace on Wednesday, June 13th, J. Sidney Turner (President-elect) in the chair. Meeting at 2.30 P.M. Dinner at 6 P.M. The President-elect invites members and their friends to lunch at his house, 81, Anerley Road, close to the Palace, from 1 to 2 P.M.

EDINBURGH BRANCH.—The annual meeting of the Edinburgh Branch of the British Medical Association will be held at 34, Charlotte Square, on Thursday, June 14th, at 5 P.M. Notice of motion or other business should be given ten days in advance to the Honorary Secretary, R. W. PHILIP, M.D., 4, Melville Crescent, Edinburgh.

NORTHERN COUNTIES BRANCH.—The annual meeting of this Branch will be held on Thursday, June 14th. Mr. David MacBrayne's ss. *Glengarry* has been engaged for the day to convey members and their friends to Fort Augustus and back, calling, if time permits, at Temple, Inverfarigay, and Forgue. Will start from Muntown Wharf, at 11.20 A.M., and return in time for the last trains from Inverness. Members are requested to communicate at once with the Secretary as to their intentions to be present, and as to whether any friends will accompany them.—J. W. NORRIS MACKAY, Secretary and Treasurer, The Tower, Elgin.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The annual meeting of this Branch will be held at the Birmingham Medical Institute on Thursday, June 14th, at 3.30 P.M., when, after the ordinary business has been disposed of, an address will be delivered by the President-Elect, Mr. H. Langley Browne. The annual dinner will take place the same evening at 6.30 at the Grand Hotel. Members of Branch intending to be present should intimate this to the Honorary Secretary, Mr. GILBERT BARLING, 85, Edmund Street, Birmingham.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The twenty-fourth annual meeting of this Branch will be held at the Infirmary, Cardiff, on June 28th. Mr. Victor Horsley will give a lecture on Gunshot Wounds. Further particulars in circular convening the meeting.—A. SHEEN, M.D., D. ARTHUR DAVIES, M.B., Honorary Secretaries.

METROPOLITAN COUNTIES BRANCH.

The Suppression of Unqualified Practice.—A general meeting of this Branch was held on May 23rd, for the purpose of taking into consideration a report of a committee appointed to go into the question of the desirability of urging certain amendments in the Medical Acts with a view to the suppression of unqualified medical practice. The PRESIDENT (Mr. Henry Power) occupied the chair, and there was a good attendance of members.—Mr. VICTOR HORSLEY, in some preliminary remarks, stated that, with a view to help forward the work of the Parliamentary Bills Committee of the British Medical Association, the Committee of the Branch had drawn up and formulated the opinions expressed in the document which was in the hands of the members, and they had done this after comparing the legislation in this country with that in Germany, France, Belgium, and other foreign States. He suggested that it should be read paragraph by paragraph, and the opinion of the meeting taken on each separately.—Mr. J. SMITH TURNER suggested that the matter was one in which the Branch should not interfere, but which should be left entirely in the hands of the Parliamentary Bills Committee.—This, however, did not appear to be the view of the meeting, and Dr. HOLMAN mentioned that the Parliamentary Bills Committee would always be glad to receive any resolutions from the Branches bearing upon matters under their consideration.—A long discussion ensued, and, in the end, the larger number of paragraphs were approved, several, however, being referred back to the Subcommittee for certain modifications, and in the end it was decided that a modified report be presented at the annual meeting of the Branch on June 26th.—A vote of thanks to the President terminated the proceedings.

BRITISH MEDICAL ASSOCIATION.

SIXTY-SECOND ANNUAL MEETING.

THE sixty-second Annual Meeting of the British Medical Association will be held at Bristol on Tuesday, Wednesday, Thursday, and Friday, July 31st, August 1st, 2nd, and 3rd, 1894.

President: GEORGE HARE PHILIPSON, M.D.Cantab., D.C.L., F.R.C.P., Professor of Medicine in the University of Durham.

President-Elect: E. LONG FOX, M.D.Oxon., Consulting Physician to the Bristol Royal Infirmary.

President of the Council: J. WARD COUSINS, M.D.Lond., F.R.C.S., Senior Surgeon to the Royal Portsmouth Hospital.

Treasurer: HENRY TRENTHAM BUTLIN, F.R.C.S., D.C.L., Surgeon to St. Bartholomew's Hospital, E.C.

An Address in Medicine will be delivered by Sir THOMAS GRAINGER STEWART, M.D.Edin., Professor of the Practice of Physic and Clinical Medicine in the University of Edinburgh.

An Address in Surgery will be delivered by JAMES GREIG SMITH, M.B., F.R.S.E., Surgeon to the Bristol Royal Infirmary.

An Address in Public Medicine will be delivered by Sir CHARLES CAMERON, M.D., Medical Officer of Health, Dublin.

A. MEDICINE.

Library of Medical School.

President: FREDERICK T. ROBERTS, M.D. *Vice-Presidents:* E. MARKHAM SKERRITT, M.D.; R. SHINGLETON SMITH, M.D. *Honorary Secretaries:* W. T. BROOKS, M.A., M.B., 32, Holywell, Oxford; J. MICHELL CLARKE, M.D., 28, Pembroke Road, Clifton, Bristol.

Wednesday, August 1st.—I. Discussion on Functional Diseases of the Heart, introduced by Douglas Powell, M.D. The following have announced their attention of taking part in this discussion: Sir Frederic Bateman, Paul Chapman, M.D., W. Soltau Fenwick, M.D., James A. Lindsay, M.D., G. A. Gibson, M.D., E. Markham Skerritt, M.D., and Francis Hawkins, M.B.

II. Discussion on Pyrexia and its Treatment, introduced by W. Hale White, M.D. The following will join in the discussion: E. Markham Skerritt, M.D., Shingleton Smith, M.D., James Barr, M.D., James A. Lindsay, M.D., and W. Soltau Fenwick, M.D.

III. Ataxia and the Diseases of which it is a Symptom, introduced by J. A. Ormerod, M.D., James Cagney, M.D., and Mitchell Clarke, M.D.

The following papers are announced:

Fenwick, W. Soltau, M.D. Dyspepsia of Strumous Origin.
Gibson, G. A., M.D. The Conduction of Cardiac Murmurs.
Griffiths, P. Rhys, M.B. 1. The Remote Effects of Spinal Injuries in Miners. 2. Sporadic Cretinism and Thyroid Feeding.
Hawkins, Francis, M.B. The Treatment of Croupous Pneumonia.
Whitby, C. J., M.D. Modern Hydropathy; its Relation to General Therapeutics.
Williams, P. Watson, M.D. A case of Pancreatic Diabetes, treated by Grafts of Sheep's Pancreas.

B. Surgery.

Physical Science Lecture Room—University College.

President: W. Mitchell Banks, M.D. *Vice-Presidents:* Nelson C. Dobson, F.R.C.S.; Professor Victor Horsley, F.R.S. *Honorary Secretaries:* G. A. Wright, M.B., 8A, St. John Street, Manchester; James Swain, M.D., 14, Buckingham Place, Clifton, Bristol.

The following subjects have been selected for discussion in the Section:

1. The Operative Treatment of Perforative Ulcer of the Stomach and Intestines. To be introduced by A. Pearce Gould, M.B., F.R.C.S. The following gentlemen will take part in the discussion: G. H. Hopkins, F.R.C.S. (Swansea), R. Maclaren, M.D. (Carlisle), Mayo Robson, F.R.C.S. (Leeds). J. Ward Cousins (Portsmouth)
2. The Surgical Treatment of Injuries of the Spine and Spinal Cord. To be introduced by William Thorburn, M.D., F.R.C.S. The following gentlemen will take part in the discussion: G. H. Hopkins, F.R.C.S. (Swansea), W. M. Barclay, F.R.C.S. (Bristol), C. B. Keetley, F.R.C.S. (London), H. Langley Browne, F.R.C.S. (West Bromwich).
3. The Treatment of Injuries of the Lower End of the Humerus. To be introduced by Jonathan Hutchinson, jun., F.R.C.S. The following gentlemen will take part in the discussion: G. H. Hopkins, F.R.C.S. (Swansea), Professor Landerer (Stuttgart), R. Jones, L.R.C.P. (Liverpool), J. Ward Cousins (Portsmouth).

The following papers have been announced:

Jones, R., L.R.C.P. (Liverpool). On Amputation and Shock and Amputation through Shoulder-joint for Diffuse Spreading Traumatic Gangrene.
Mayo Robson, F.R.C.S. (Leeds). On a Consecutive Series of Ovariotomies performed in the Surgical Clinic at a General Hospital.
Snow, H., M.D. (London). The "Dispersible" Tumours of the Mamma.

C. Obstetric Medicine and Gynæcology.

Lecture Room No. 2—University College.

President: Professor J. G. Swayne, M.D. *Vice-Presidents:* E. Malins, M.D.; A. E. Aust-Lawrence, M.D. *Honorary Secretaries:* R. Boxall, M.D., 29, Weymouth Street, London, W.; Walter C. Swayne, M.B., 8, Leicester Place, St. Paul's Road, Clifton, Bristol.

D. Public Medicine.

Museum Theatre.

President: Professor W. H. Corfield, M.D. *Vice-Presidents:* J. Lane Notter, M.D.; D. S. Davies, M.D. *Honorary Secretaries:* B. H. Mumby, M.D., Town Hall, Portsmouth; J. C. Heaven, M.R.C.S., 2, Queen Square, Bristol.

The following subjects are suggested as suitable for discussion in the above Section on this occasion, but the list is open to modification:

1. Small-pox: Methods of Diffusion and Preventive Measures; Vaccination.
2. Notification: Difficulties Experienced; Value of.
3. Hospital Isolation and Accommodation required for Urban Sanitary Districts, Counties, and Rural Districts.
4. Water Supplies: Pollution of; Relative Value of Analytical Results and their Interpretation.
5. Water Supplies: Filtration of Potable Waters; Water-borne Enteric Fever.
6. The Factory and Workhops Act: Value of, and Suggestions for its Working.
7. Municipal Lodging Houses: Salvation Army Shelters; the Housing of the Poor.
8. Diphtheria: its Causation and Prevention; its Connection with Defective Sanitary Arrangements.
9. The Ventilation of Public Buildings.
10. The Ventilation of Sewers.
11. The Disposal of the Sewage of Towns.
12. Public Measures for the Prevention of Phthisis.
13. Sanitary Regulations for Bakehouses.
14. The Value of the Bacteriological Determination of Cholera.
15. Port Preventive Measures and the 1893 Cholera Epidemic in England.
16. Public Health Administration: Effect of Recent Legislation (Parish Councils Bill, etc.).
17. Regulation of Offensive Trades: Occupational Diseases and Mortality.
18. Infant Mortality in Relation to Female Labour.
19. Seasonal Prevalence of Disease.

The following papers have been announced:

1. Priestley, J., M.D. (Leicester). Some Lessons to be Learnt from an Epidemic of Small-pox in an Unvaccinated Community.
10. Davies, Sidney, M.D. (Plumstead). Ventilation of Sewers.
10. Anderson, A. Jasper, M.D. (Blackpool). Ventilation of Sewers.
12. Allan, F. J., M.D.
19. Cameron, J. Spottiswoode, M.D. Diarrhœa in the Autumn of 1893.

The following gentlemen will take part in the discussions: 1, J. Spottiswoode Cameron, M.D.; Walter Dowson, M.D. 2, Sydney Davies, M.D. 6, J. Spottiswoode Cameron, M.D. 7, Herbert Jones, L.R.C.S.I. (Crewe). 8, Sidney Davies, M.D. 12, Herbert Jones, L.R.C.S.I. (Crewe); Jasper Anderson, M.B. (Blackpool). 14, A. Robinson, M.D. (Rotherham). 18, J. Spottiswoode Cameron, M.D.; Jasper Anderson, M.B. (Blackpool).

Sidney Davies, M.D. (Plumstead), will take part in the discussions 2, 8, 10; Herbert Jones, L.R.C.S.I., D.P.H. (Crewe), will take part in the discussions 7 and 12; J. S. Cameron, M.D., will take part in discussions 1, 6, 18, and 19.

E. Psychology.

Lecture Room No 4—University College.

President: G. F. Blandford, M.D. *Vice-Presidents:* S. R. Philipps, M.D.; Fletcher Beach, M.D. *Honorary Secretaries:* C. S. W. Cobbold, M.D., Bailbrook House Asylum, Bath; R. S. Stewart, M.D., Glamorgan County Asylum, Bridgend.

On August 1st the President will open the work of the Section by giving an address upon the "Prevention of Insanity," and a discussion is specially invited upon this subject.

On August 2nd it is proposed to hold a discussion upon "The Law in Relation to the Criminal Responsibility of the Insane;" L. A. Weatherly, M.D., has promised to open it, and members of the legal profession will be invited to join (as visitors) in the debate.

The following additional discussions have been promised: The Treatment of Neurasthenia, to be opened by G. H. Savage, M.D. The Status of Assistant Medical Officers in Lunatic Asylums, to be opened by C. Mercier, M.D. Points Connected with the Education of Feeble Minded Children, to be opened by G. E. Shuttleworth, M.D.

The following papers have been announced:

Blake, Henry, M.B. (Great Yarmouth). Four Cases Illustrating the Origin and Possible Prevention of Different Types of Insanity.
Bullen, F. St. J., M.D. The Influence of Reflex and Toxic Agencies in Insanity and Epilepsy.
Kerr, Norman, M.D. Probationary Curative Restraint of the Alleged Insane.
Shaw, James, M.D. (Liverpool). The Early Treatment of Mental Cases in Private Practice.
Smith, Telford, M.A., M.D. Cases of Sporadic Cretinisms Treated by Thyroid Extract.
Stewart, R. S., M.D. (Bridgend). The Spastic and Ataxic Types of General Paralysis.

Members attending the Section will be invited to inspect the Bristol City and County Asylum at Fishponds, near Bristol.

F. PATHOLOGY.

Chemical Lecture Theatre—University College.

President : G. SIMS WOODHEAD, M.D. *Vice-Presidents :* JOSEPH FRANK PAYNE, M.D.; M. A. RUFFER, M.D. *Honorary Secretaries :* NORMAN DALTON, M.D., 4, Mansfield Street, London, W.; C. A. MORTON, F.R.C.S., 24, St. Paul's Road, Clifton, Bristol.

On Wednesday, August 1st, a discussion on the Pathology of Vaccinia, to be introduced by S. M. Copeman, M.D., of the Local Government Board. M. A. Ruffer, M.D., H. G. Plimmer, M.R.C.S., and R. W. Boyce, M.B., will take part in the discussion.

Professor E. M. Crookshank, S. Coupland, M.D., A. P. Luff, M.D., and T. W. Hime, M.D., will endeavour to be present and speak.

The following papers have been announced:

HARRISON, Reginald, F.R.C.S. The Pathology of Enlarged Prostate.
HUTCHINSON, Jonathan J., F.R.C.S. Tertiary Syphilitic Disease of Lymphatic Glands, with specimens.
POWER, D'Arcy, M.B. An Experimental Investigation into the Causation of Cancer.
RITCHIE, James, M.B. Relation between Chemical Composition and Antiseptic Action.
RUSSELL, J. S. Risien, M.B. Degenerations consequent on Lesions of the Cerebellum.
SNOW, Herbert, M.D. Cancer and Phagocytosis.

J. H. Targett, F.R.C.S., has promised a Pathological Demonstration.

J. Galloway, M.D., Vaughan Harley, M.D., and C. G. Brodie, F.R.C.S., have each promised papers, titles of which are uncommunicated.

G. OPHTHALMOLOGY.

Medical Lecture Theatre, Medical School.

President : F. R. CROSS, M.B. *Vice-Presidents :* H. E. JULER, F.R.C.S.; SIMEON SNELL, F.R.C.S. *Honorary Secretaries :* C. H. WALKER, M.B., 3, Leicester Villas, St. Paul's Road, Clifton, Bristol; J. TATHAM THOMPSON, M.B., 24, Windsor Place, Cardiff.

The following papers have been announced:

BEAUMONT, W. M., M.R.C.S. The Soldier's Red Coat as a cause of Retinal Hyperæsthesia.
CHISHOLM, J. J., M.D. (Baltimore). On the Good Effects of Dressing one Eye only after Cataract Extractions.
DA GAMA, Dr. (Bombay). Some remarks on Subjunctival Mercurial Injections in Syphilitic and other Diseases of the Eye.
EDRIDGE-GREEN, F. W., M.D. A New Spectroscope for the Quantitative Estimation of Defects of Colour Perception.
GRIFFITH, John, L.R.C.P. Criticism concerning Recent Views as to the Secretory Function of the Ciliary Body.
HEWETSON, H. B., M.R.C.S. 1. Blepharitis and Asthenopia in German Jew Tailors in Leeds. 2. Asthenopia and Headaches in Girl Machinists in Leeds. 3. The effects of Electric Welding Operations upon the Eyes.
JOHNSON, G. Lindsay, M.D. The Influence of Prolonged Excessive Light on Vision.
JULER, H., F.R.C.S. On the Diagnosis and Treatment of the Three Chief Forms of Contagious Ophthalmia, namely, the Catarrhal, the Purulent, and the Granular Varieties.
RUSSELL, J. S. R., M.B. Experimental Investigation of Eye Movements.
STEVENS, Dr. G. T. (New York). The Maintenance of Equal Rotation of the Eyes after Operations on the Ocular Muscles.
LANDOLT, Professor E. Some Rules to Simplify the Diagnosis of Ocular Paralysis.
SCOTT, Kenneth, M.B. The Treatment of Granular Conjunctivitis or Trachoma.
TAYLOR, S. J., M.B. A case of Probable Disease of the Lenticular Ganglion.
THOMPSON, J. Tatham, M.B. Keratomalacia in Acute Infantile Jaundice.
WRAY, C., F.R.C.S. Mixed Astigmatism.

Papers have also been promised by Messrs. Simeon Snell, F.R.C.S.: Jonathan Hutchinson, F.R.S.; Hermann Snellen; A. McGillivray, M.B.; T. J. Bokenham, L.R.C.P.; R. W. Doyne, F.R.C.S.; and Ernest Clarke, M.D.

H. LARYNGOLOGY AND OTOLOGY.

Physiology Lecture Theatre, Medical School.

President : P. MCBRIDE, M.D. *Vice-Presidents :* W. H. HARSANT, F.R.C.S.; BARCLAY J. BARON, M.B. *Honorary Secretaries :* P. WATSON WILLIAMS, M.D., 2, Lansdown Place, Victoria Square, Clifton, Bristol; W. MILLIGAN, M.D., 28, St. John Street, Deansgate, Manchester.

The following subjects have been proposed for formal discussion:

August 1st.—The Treatment of Acute and Chronic Laryngeal Stenosis, to be opened by David Newman, M.D., Glasgow, and William P. Northrup, M.D., New York.

August 2nd.—The Prognosis of Non-Suppurative Otitis Media (with Imperforate Membrane), to be opened by G. P. Field, M.R.C.S., London, Thomas Barr, M.D., Glasgow, and Dr. J. Ward Cousins, Portsmouth.

August 3rd.—The Diagnosis and Treatment of Empyema of the Nasal Accessory Sinuses, to be opened by Greville Macdonald, M.D., London; Charters Symonds, M.S.Lond., F.R.C.S.

Urban Pritchard, M.D.; Dundas Grant, M.D.; Wyatt Wingrave, M.R.C.S.; B. Fullerton, M.D.; R. Mackenzie Johnston, M.D., J. B. Ball, M.D.; Scanes Spicer, M.D.; T. Mark Hovell, F.R.C.S.Ed.; H. B. Hewetson, M.R.C.S.; and J. W. Downie, M.B., have intimated their intention to take part in the discussions.

Time will also be allowed for the reading and discussion of special papers.

The following papers are announced:

DOWNIE, J. Walker, M.B. The Care of the Ear during the Course of the Exanthemata.
LOVE, J. Kerr, M.D. Deafmutism as a Clinical Study.
PERMEWAN, W., M.D. 1. Laryngeal Paralysis in Chronic Nervous Disease. 2. Deafness and Stupidity in School Children.
WINGRAVE, V. H. Wyatt, M.R.C.S. Turbinal Varix: its Pathology, Symptomatology, Diagnosis, and Treatment.

I. DERMATOLOGY.

Lecture Room No. 3—University College.

President: A. J. HARRISON, M.B. *Vice-Presidents :* STEPHEN MACKENZIE, M.D.; H. WALDO, M.D. *Honorary Secretaries:* J. HANCOCKE WATHEN, M.R.C.S., 16, York Place, Clifton, Bristol; H. LESLIE ROBERTS, M.B., 46, Rodney Street, Liverpool.

Wednesday, August 1st, 10 A.M.—Lupus: its Etiology, Pathology, and Relations to Other Forms of Cutaneous Tuberculosis, introduced by Professor Leloir. H. G. Brooke, M.B.; Norman Walker, M.B.; Henry Waldo, M.D., and Dale James, M.R.C.S., have promised to take part in the discussion.

Thursday, August 2nd, 10 A.M.—Management of Eczema, introduced by Malcolm Morris, F.R.C.S.Ed. E. D. Mapother, M.D. (London), and A. S. Myrtle, M.D. (Harrogate), will take part in the discussion.

Etiology and Treatment of Acne, introduced by Stephen Mackenzie, M.D. Dr. Phin. S. Abraham, Dr. Eddowes, and Dr. Leslie Roberts have promised to take part in the discussion.

Friday, August 3rd, 9.30 A.M.—The Nervous Origin of Diseases of the Skin and its Importance in Treatment, introduced by Dr. J. J. Pringle. Dr. Radcliffe Crocker, Dr. Colcott Fox, and Dr. Stephen Mackenzie have promised to take part in the discussion.

Dr. G. W. Potter will take part in the discussions.

The following papers are announced:

ANDERSON, Professor McCall. On the Necessity on the Part of the Student for the Clinical Study of Dermatology.
BOWLES, R. L., M.D. Observations on the Scientific Aspect of the Influence of Solar Rays on the Skin.
BROOKE, H. G., M.B. Trade Eczema or Dermatitis.
DUNBAR, Eliza L. W., M.D. The Use of Belladonna in Allaying Irritation and Healing Certain Skin Diseases.
EDDOWES, A., M.D. The Ways of Infections: their Importance as regards Treatment of Skin Affections and the Prevention of Relapses.
FOX, T. Colcott, M.B. Remarks on a Case of Acne Necrotica.
HUTCHINSON, Jonathan, F.R.C.S., F.R.S. On Certain Diseases of the Skin induced by Exposure to Sun.
JAMES, Dale, M.R.C.S. Some Relations between Psoriasis and Eczema.
ROBERTS, H. Leslie, M.D. The Present Position of the Question of Vegetable Hair Parasites.
TAYLOR, Stopford, M.D. Remarks on the Use of Belladonna in Irritable Skin Affections.

J. DISEASES OF CHILDREN.

Lecture Room No. 5—University College.

President: W. HOWSHIP DICKINSON, M.D. *Vice-Presidents:* JOHN EDWARD SHAW, M.B.; FREDERIC S. EVE, F.R.C.S. *Honorary Secretaries:* R. W. MURRAY, F.R.C.S., 15, Rodney Street, Liverpool; BERTRAM M. H. ROGERS, M.D., 11, York Place, Clifton, Bristol.

On Wednesday, August 1st, a discussion on the Treatment and Complications of Whooping-Cough. To be opened by J. Carmichael, M.D. The following gentlemen have signified their intention to take part in the discussion: W. B. Cheadle, M.D., C. Elliott, M.D.

August 2nd.—Diphtheria: It Diagnosis and Treatment.

To be opened by H. R. Hutton, M.D. The following gentlemen have signified their intention to take part in the discussion: W. B. Cheadle, M.D., D'Arcy Power, M.B., J. Dacre, L.R.C.P., W. S. Black, E. M. Simpson, M.D.

August 3rd.—The Treatment of Tuberculous Disease of Joints. To be opened by Frederick S. Eve, F.R.C.S. The following gentlemen have signified their intention to take part in the discussion: J. Ewens, E. A. Barker, Noble Smith, D'Arcy Power, M.B., W. S. Black, M.R.C.S., A. Parkin, M.D., C. H. Milburn, M.B., R. Jones, F.R.C.S.

The following papers will be read:

Ewens, J., F.R.C.S. Deformities of the Lower Extremities (with Exhibition of Cases).
Jones, H. R., M.D. How the Health of Infants is Influenced by their Food.
Jones, Robert, F.R.C.S. 1. The Stiffening of Frail Paralytic Joints. 2. The Treatment of Injuries about the Elbow-joint in Children.
Morgan, George, L.R.C.P. Varicella Bullosa.
Milburn, C. H., M.B. Osteotomy for Genu Valgum.
Murray, R. W., F.R.C.S. The Treatment of Rickety Deformities by means of Osteoclasis.
Parkin, Alfred, M.D. The Treatment of Spinal Caries and its Results by Laminectomy.
Roué, Barrett, M.D. The Study of Diseases of Children and its Place in the Medical Curriculum.

Honorary Local Treasurer: W. Johnstone Fyffe, M.D., Rodney Place, Clifton.

Honorary Local Secretary: E. Markham Skerritt, M.D., Edgecumbe House, Richmond Hill, Clifton.

Programme of Proceedings.

Tuesday, July 31st.

9.30 A.M.—Meeting of 1893-94 Council.
11 A.M.—First General Meeting, Large Hall, Victoria Rooms. Report of Council. Reports of Committees and other business.
3 P.M.—Sermon.
8.30 P.M.—Adjourned General Meeting from 11 A.M. President's Address.

Wednesday, August 1st.

9.30 A.M.—Meeting of 1894-95 Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting, Large Hall, Victoria Rooms. Address in Medicine.

Thursday, August 2nd.

9.30 A.M.—Meeting of Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting, Room of Victoria Chapel (opposite Reception Room). Address in Surgery.
7 P.M.—Public Dinner of the Association.

Friday, August 3rd.

9.30 to 11 A.M. Sectional Meetings.
11 A.M.—Concluding General Meeting, Large Hall, Victoria Rooms. Address in Public Medicine.

Saturday, August 4th.

Excursions.

SPECIAL CORRESPONDENCE.

PARIS.

Hospital Appointments in Paris.—The Bathing of Lunatics.—Epidemics in France.—Sterlised Milk for Hospital Nurslings.—Necropsy of an Anarchist.—The University Festival at Caen.

The question who is to replace Dr. Quinquaud and Dr. Ollivier, the one at the St. Louis Hospital, the other at the Hospital for Sick Children, will probably bring about a reform. When a hospital post becomes vacant it is filled by a hospital surgeon or physician who wishes to have it; seniority only decides the choice; thus a *chef* treating general diseases becomes specialist if the caprice takes him. Dr. Ollivier's career furnished several instances of this change, which is called *roulement*. This system is justly condemned. *Chefs*, patients, and students all suffer, the one runs the risk of not becoming as competent as his colleagues who avoid *roulement*, consequently his patients are not so skilfully treated or the students so well taught. Dr. Ollivier's service is a very important one: nevertheless, M. Peyron proposes that it should be suppressed; the only reason he advances is one of economy—a question of 120fr. a year. This economy in a budget of 1,800,000fr. is badly chosen; it might be replaced by many others showing greater wisdom.

A patient at one of the Paris hospitals was lately scalded to death in his bath owing to the negligence of the male nurse. This sad occurrence has been fruitful in suggestion concerning the organisation of hospital bath services, how the baths are to be filled, how the tanks are to be placed, etc. At present no satisfactory plan has been drawn up. M. Lunier, at the Ministerial Committee formed to study what improvements are needed in the legislation for the insane, suggested that hot baths should be filled from the upper part, and when a patient is actually in the bath by emptying pails of hot water into it. M. Bourneville, who has already devoted several pages of the *Progrès Medical* to discuss this question, objects to M. Lunier's suggestion.

M. Henri Monod, at the Comité Consultatif d'Hygiène Publique, stated that from May 1st to the 16th there have been 25 deaths from "choleriform" disease, spread over twelve communes, some of which are distant from each other. Diphtheria appeared at Cruet in Savoy in 1893; it reappeared in 1894, and caused 6 deaths; 4 deaths from the same malady have occurred at Juré, 2 of these were adults. A child from Juré died at Roanne with diphtheria, and its wet nurse died also. Diphtheria has also appeared in the communes of Saint Sebastien, Dun, Mais au Feyne, and Montier-Maleard (Creuse). Three cases broke out at Lorret, on board a boat of the Havre-Paris-Lyons Company. Two deaths from typhus occurred at Rouen. At Paris 5 cases of typhus occurred during the month of April. Some anxiety is felt lest typhus should break out at the Hôtel Dieu Hospital, at Chalons-sur-Marne. Two tramps attacked with typhus are being treated there. Small-pox has appeared at Cherbourg and at Rouen. Epidemics are plentiful in the Vendean Department. Whooping-cough has attacked a great many people, and in several villages at Saint Mars-la-Réorthe 17 people are ill; 13 of these are school children. At Roche-sur-Yon a case of typhoid fever has occurred. At Saint Fulgeal 4 small-pox cases; at Ceigaud one of puerperal fever.

Dr. Budin has organised at the Charité Hospital an excellent service for providing the nurslings in his wards with milk, sterilised in accordance with his direction and in his laboratory; this milk is also given at Dr. Budin's personal expense to his baby out-patients. Dr. Budin will soon publish some interesting statistics concerning this organisation, and earnestly wishes to see sterilised milk centres established in Paris. The result would be a decrease of infant mortality.

The necropsy made on Emile Henry's body demonstrated that the viscera were healthy. A minute examination of the brain and other parts of the body was being made in different histological and anthropological laboratories, but have been stopped by the family tardily claiming the body for burial. Professor Brouardel, the Dean of the Paris Medical Faculty, immediately gave orders that the different parts of the body distributed among the laboratories should be collected and the body reconstituted. This has been done, and it now lies in the Brévanne Cemetery.

The *fêtes* at Caen to celebrate the inauguration of the University Palace promise to be exceptionally brilliant. They will commence on June 1st and terminate on the 8th. On Sunday, June 3rd, the medical students will hold a congress to study the question of a federation of the students' Associations. On Monday the French and foreign students will go by sea to Havre.

The election of Professor Baillon to be Foreign Fellow of the London Royal Society gives great satisfaction.

The Senate has appointed a commission to examine the Seine Sanitation Bill, which is to authorise a loan of 4,680,000 francs. Dr. Cornil, senator, is the reporter.

BERLIN.

The Hygienic Topography of Garrison Towns.—Cholera Vigilance on the Vistula.—Slanting Handwriting.

The medical department of the Prussian War Ministry has started an important piece of work, namely, the hygienic topography of every garrison town in Prussia. The work is being done by the military sanitary officers of each garrison, on a plan arranged by the central medical department, and which embraces: (1) A description of the town, its geographical and geological situation and climate, exact accounts of the water supply and systems of drainage, and descriptions of prisons, churchyards, hospitals, slaughter houses, casual wards, public disinfecting institutes, etc; (2) a

description of the sanitary arrangements of the military buildings, such as barracks, military schools, prisons, and hospitals; and (3) statistics regarding the population, its increase or decrease, nationality, chief trades, frequency and kinds of epidemics, percentage of military to the other inhabitants, etc. These topographical descriptions will supply a want long felt in Prussia; when completed they will be published, and it is hoped the work may give an impetus to other towns and townlets not blessed with a garrison to render a sanitary account of themselves.

The cholera vigilance service on the Vistula has begun its work early this year, greatly to the disgust of the floating population, who are necessarily much "worried" by it.

The "slanting handwriting," so dear to our grandmothers and grandfathers, has long been out of fashion in England and America. It will soon be a thing of the past in Germany. There, however, the change will not be due to æsthetic considerations; it is a sacrifice made to hygiene. An inquiry, set on foot by the School Committee of Hanover, at the desire of the Prussian Minister of Education, leads to the conclusion that while a slanting handwriting favours a crooked position of the writer, straight-up writing forces him to have his copybook or writing paper straight before him, and thus helps the writer to keep his body straight while writing. For this reason slanting writing is henceforth to be discouraged in German schools.

CORRESPONDENCE.

LANCASHIRE AND CHESHIRE BRANCH: REGISTRATION OF MIDWIVES.

SIR,—Will you please publish the enclosed protest, a copy of which will be sent to each member of the Lancashire and Cheshire Branch, and others? The signatories appended to it are those of the Committee who have framed it.—I am, etc.,

C. THURSTAN HOLLAND,
Secretary to the Committee.

Liverpool, May 29th.

Protest against, and Reasons for Dissent from, the Report of the Committee on the Question of Midwives' Registration.

FOR the following reasons we the undersigned members of the Lancashire and Cheshire Branch of the British Medical Association dissent from the Report of the Committee "appointed to watch the progress of, and to oppose, any proposed Legislation for the Registration of Midwives" passed at a meeting of the Branch on May 11th, 1894, and protest against the funds of the Branch being used for a purpose which, in our opinion, will degrade rather than maintain the honour and highest interests of the Medical Profession.

1. The finding of the Select Committee of the House of Commons that "the services of midwives are a necessity," and the equally strong pronouncement of the General Medical Council quoted below, together with the undoubted popular feeling on the subject, support us most strongly in our dissent from the statement in the Report that no demand for an educated class of midwives exists.
2. We emphatically dissent from the statement that if any "demand exist for such proposed legislation, it is from those who are interested in lecturing or granting certificates or diplomas in midwifery." We regard such a statement as an unmerited insult to honourable members of our profession, who have for years been striving to mitigate the evils to poor women arising from the ignorance of untrained midwives; and, in view of the pronouncement of the General Medical Council to the effect that "this Council regards the absence of public provision for the Education and Supervision of midwives as productive of a large amount of grave suffering and fatal disease among the poorer classes, and urges upon the Government the importance of passing into law some measure for the Education and Registration of midwives," we regard it as little less than an insult to that Council to ask it to hold medical practitioners "guilty of infamous conduct in a professional respect" who have been endeavouring to mitigate the evils deplored by the Council.
   (NOTE. While allowing that many certificates and diplomas of lying-in hospitals and other institutions have been injudiciously expressed and may have been improperly used, we feel that a uniform system of Registration and Certification will form the only effectual remedy for such abuse.)
3. We dissent from the statement that the security of life among pregnant woman and infants will be diminished owing to there being no statutory penalty against Midwives' "attempting to perform the most difficult and dangerous operations in Midwifery." As there is no Bill at present in existence, a fact which was again and again and again impressed upon witnesses by the Select Committee, it is impossible to tell what statutory penalties may be provided for cases in which the limits of practice shall have been exceeded.
4. Finally we dissent from the Report, on the ground that it is against the best traditions of the Medical Profession to oppose any reasonable measure, which has for its object the protection of the lives and health of the public.

LIVERPOOL.
W. Maefie Campbell, M.D. (Chairman)
E. Adam, M.D.
W. Alexander, M.D., F.R.C.S.
R. S. Archer, M.D.
J. Armstrong, M.B.
R. A. Bickersteth, F.R.C.S.
T. R. Bradshaw, M.D., M.R.C.P.
J. E. Burton, M.A., L.R.C.P., M.R.C.S.
William Carter, M.D., F.R.C.P.
Richard Caton, M.P., F.R.C.P.
Lucy E. Cradock, L.K.Q.C.P.I.
J. N. Cregeen, L.R.C.P., M.R.C.S.
A. Davidson, M.D., F.R.C.P. (with a qualification)
Peter Davidson, M.B.
E. H. Dickenson, M.D., F.R.C.P.
T. R. Glynn, M.D., F.R.C.P.
T. B. Grimsdale, M.B., M.R.C.S.
Arthur R. Hopper, M.R.C.S., L.R.C.P.
John M. Hunt, M.B.
Robert Jones, F.R.C.S.E.
Charles G. Lee, M.R.C.S., L.R.C.P.
J. R. Logan, M.B.
Charles J. Macalister, M.B., M.R.C.P.
J. McClelland, M.D.
N. Percy Marsh, M.B.
Llewellyn Morgan, M.D.
R. W. Murray, F.R.C.S.
J. Tawse Nisbet, M.B.
Frank T. Paul, F.R.C.S.
W. Permewan, M.D., F.R.C.S.
Chauncey Puzey, F.R.C.S.
Henry G. Rawdon, M.D., F.R.C.S.E.
N. E. Roberts, M.B.
David Smart, M.B.
J. Kellett Smith, M.R.C.S., L.R.C.P.
Alexander Stookes, M.B.
G. G. Stopford Taylor, M.R.C.S.
W. Thelwall Thomas, F.R.C.S.
John Wallace, M.D.
J. W. Warburton, M.D.
George Westby, M.K.Q.C.P.I.
D. M. Williams, M.R.C.S.
Richard Williams, M.R.C.S., L.R.C.P.
Arthur H. Wilson, M.R.C.S., L.R.C.P.

MANCHESTER.
Henry Ashby, M.D., F.R.C.P.
E. Stanmore Bishop, F.R.C.S.
Frederic Cox, M.D.
A. Donald, M.A., M.D., M.R.C.P.
J. Dreschfeld, M.A., F.R.C.P.
Henry H. Hutton, M.A., M.B.
Thomas Jones, F.R.C.S., M.B.
D. Lloyd Roberts, M.D., F.R.C.P.
W. J. Sinclair, M.D.
F. A. Southam, M.A., M.B., F.R.C.S.
G. A. Wright, B.A., F.R.C.S.

BIRKENHEAD.
Joseph Blood, M.D.
Alfred C. E. Harris, M.B., F.R.C.S.E.
Francis Johnston, M.B.

CHESTER.
A. Hamilton, F.R.C.S.E.

GRASSENDALE.
John Grimes, M.D.

HAYDOCK.
T. Ernest Hayward, M.B., F.R.C.S.

LANCASTER.
J. F. Gemmel, M.B.
J. H. Irvin, M.R.C.S.
Telford Smith, M.D.

NEWTON-LE-WILLOWS.
John W. Watkins, M.D.

NESTON.
C. W. Yeoman, M.B.

WARRINGTON.
T. Starkey Smith, M.B.

WAVERTREE.
Henry Harvey, M.B.

WIGAN.
W. C. Barnish, M.R.C.S.
William Berry, F.R.C.S.I.

WOOLTON.
J. M. Chisholm, M.D.

C. THURSTAN HOLLAND, M.R.C.S., L.R.C.P., Hon. Secretary, 86, Princes Road, Liverpool.

SIR,—Dr. Sheen's letters in your issues of May 15th and 26th, hardly deserve a serious reply.

The South Wales Branch, of which he is Honorary Secretary, is in the absurd position of having committed itself to the support of the "Principles of the Midwives Registration Association," which "principles" are as non-existent as Sairey Gamp's friend, Mrs. Harris!

Dr. Sheen's last letter is simply a red herring drawn across the scent. When he gets his Branch out of its dilemma, it will be time enough to regard his criticism of the Lancashire and Cheshire Branch as otherwise than amusing.—I am, etc.,

COLIN CAMPBELL,
Joint Honorary Secretary, L. and C. Br. Committee.

Saddleworth, May 27th.

THE GENERAL MEDICAL COUNCIL AND THE REGISTRATION OF MIDWIVES.

SIR,—In common with a great many other medical men I was much surprised to read the resolution proposed by Mr. Wheelhouse at the General Medical Council on May 22nd. Everyone will admit that care should be taken in the form of certificate given to the educated midwife: but to frame a general resolution proposing to condemn as guilty of infamous conduct gentlemen who are trying to mitigate the evils arising from want of education because they adopt the only plan as yet possible to enable the public to tell who are and who are not educated, namely, the granting of a certificate, would seem as inexpedient as it is unjust.—I am, etc.,

WILLIAM CARTER.

Liverpool, May 29th.

MEDICAL AND VETERINARY FEES: A CONTRAST.

SIR,—The official scale of fees paid by the police authorities in the metropolitan district presents several points of interest to the medical profession. For an ordinary casualty involving the health or the life of a human being, the medical man called in by the police authorities is paid 3s. 6d. for a day visit, and 7s. 6d. for a visit between the hours of 10 P.M. and 8 A.M. For a casualty involving the health or the life of a horse, as in an ordinary cab accident, the veterinary surgeon who is called in by the police authorities is paid £1 1s. for his visit, whether it be made in the day or night time. Now the only explanation of the very great difference

between the two fees must be that either the police authorities consider the life of a horse to be at least three times more valuable than the life of a human being, or that they find that the veterinary surgeons are not so simple as to work for the beggarly fees for which the police authorities expect the doctors to be thankful. The above official scale of fees, incredible as it may seem, can be verified by application to Scotland Yard or the Royal College of Veterinary Surgeons. Possibly the police authorities may be induced to raise the fees for attendance upon a human being so as to equal at any rate half that which is given for attendance upon a horse.—I am, etc.

Dover, May 6th. A. G. Welsford.

THE STATUS OF ASYLUM MEDICAL OFFICERS.

Sir,—The letter of "Hopeful" on this subject might almost be a paraphrase of a chapter in my book on the Organisation of Lunatic Asylums, so closely is it in accord with the opinions there expressed, save only that "Hopeful's" charges are more indiscriminatingly general. There is evidently an intense feeling on the subject in certain quarters, but from the scarcity of replies to my appeal in the British Medical Journal, this feeling appears to be less widely prevalent than I and others imagined.

With regard to the proposed committee, the function of a committee I take to be to work out the details of a scheme whose principles have already been settled. On this subject no principles have been settled, and until some agreement has been come to as to the lines upon which a reform should proceed—an agreement which could be reached only by full discussion among those interested—the nomination of a committee would, I think, be premature. A committee to which nothing is committed is not apt to be a useful body.—I am, etc.,

Catford, S.E., May, 29th. Chas. Mercier.

THE OPIUM QUESTION.

Sir,—With reference to the letter of Dr. Maxwell on this subject in the British Medical Journal of March 10th, I should like to make a few remarks to show how inapplicable experience gained in China is to India.

The district of which I am at present in medical charge contains, according to the last census, a population of 3,472,186. It is low-lying and malarious, and opium is freely consumed in this as in other parts of Eastern Bengal. There are sixteen (the number has recently been raised to nineteen) charitable dispensaries treating amongst them several hundred patients daily, and yet from inquiries made from the assistant surgeons, hospital assistants, and native doctors in charge, I find that fifteen have never been consulted by patients with a view to assist them in overcoming the opium habit, and one was once asked for help by a confirmed opium eater. Personally, my assistance has never been sought by any patient afflicted with the opium habit in this or in other districts in which I have served.—I am, etc.,

J. T. Calvert, M.B.Lond., D.P.H.Camb.

Mymensingh, Bengal, April 30th.

THE LEWISHAM LUNACY CASE.

Williams *v.* Beaumont and Duke.

Sir,—It will be within the recollection of your readers that at the time the inquiry was being held at the instance of the Local Government Board, Mr. J. M. Williams made numerous charges affecting the conduct of Drs. Duke and Beaumont. In dismissing with costs yesterday the action brought against these two gentlemen by Williams, Mr. Justice Wills said (I am quoting from the transcript of the shorthand notes of the judgment): "But it seems to me their (the defendants') proceedings were marked by humanity and by deliberation, and anything but a hasty or impatient consideration of the case."

In justice to my clients I will ask you to give currency in the British Medical Journal to this expression of judicial opinion.—I am, etc. Thos. J. Savage,

Ludgate Hill, May 25th. Defendants' Solicitor.

NAVAL AND MILITARY MEDICAL SERVICES.

ARMY MEDICAL STAFF EXCHANGE.

The charge for inserting notices respecting Exchanges in the Army Medical Department is 3s. 6d., which should be forwarded in stamps or post office order with the notice. The first post on Thursday mornings is the latest by which these announcements can be received.

A Surgeon-Major who has been home a little over two years is willing to exchange to Bermuda, Barbadocs, the Cape, Mediterranean, or Egypt for a part tour. Apply, with full particulars, to Surgeon-Major, British Medical Journal Office, Strand, W.C.

THE NAVY.

The following qualified candidates have been appointed Surgeons in Her Majesty's Fleet, dated May 16th: F. E. Rock, M.B., T. T. Jeans, M.B., N. I. Smith, R. A. Kirby, B.A., J. H. Pead, B.A., G. R. MacMahon, B.A., M.B., R. T. Gilmour, H. C. Arathoon, B. G. Heather, L. E. James, T. W. Philip, M.A., M.B., R. S. Bernard, Lancelot Kilroy, F. J. Barter, B.A., M.B., James Mowat, M.B., S. H. Birt, M. H. Knapp, R. D. Jameson, H. S. Burniston, M.B., A. A. J. M'Nabb, M.B.

The following appointments have been made at the Admiralty: John W. Slaughter, B.A., M.B., Surgeon, to the *Hibernia*, May 23rd; Frederick D. Lumley, Surgeon, to the *Wildfire*, May 23rd; Alexander G. W. Bowen, B.A., M.B., Surgeon, to the *Minotaur*, temporarily, May 25th.

INDIAN MEDICAL SERVICE.

Surgeon-Colonel D. O'C. Raye, Bengal Establishment, is appointed Principal Medical Officer of the Bundelcund and Nerbudda Districts.

Surgeon-Colonel Charles Sibthorpe, Madras Establishment, Principal Medical Officer of the Secunderabad District and of the Hyderabad Contingent, is appointed Surgeon-General with the Government of Madras, *vice* W. F. De Fabeck, who has retired from the service. Surgeon-Colonel Sibthorpe is promoted to be Surgeon-Major-General from May 18th. He was appointed Assistant Surgeon, April 1st, 1870, and became Surgeon-Colonel, May 29th, 1890. He is now in his 48th year, having been born in February, 1847. He served in the Afghan war in 1879-80 with the Peshawur Valley Field Force, receiving the medal for that campaign, and with the Burmese Expedition in 1885-86, when he was Staff-Surgeon to the General Officer in command of the expedition, and later had medical charge of the Headquarters Staff; he was mentioned in despatches, promoted to be Brigade-Surgeon, and received the Indian Frontier medal with clasp.

Surgeon-Major-General W. F. De Fabeck, M.D., Madras Establishment, Surgeon-General with the Government of Madras, has retired from the service from May 18th, when he completed his 60th year. He dated as Assistant Surgeon from January 29th, 1857, and as Surgeon-Major-General from May 29th, 1890. He was in the Eastern campaign in 1854-55, including the siege of Sebastopol and the assault of the Redan (medal with clasp), and in the Indian Mutiny campaign in 1857-58 (medal). He is in receipt of a reward for distinguished service, granted him in 1891.

The services of Brigade-Surgeon-Lieutenant-Colonel F. H. Blenkinsop, Madras Establishment, Principal Medical Officer Chin Hills Command, have been replaced at the disposal of the Public Department from April 1st.

THE VOLUNTEERS.

The undermentioned gentlemen are appointed Surgeon-Lieutenants to the corps specified, dated May 26th: Thomas Hammond, 1st Lancashire Artillery; Robert Ebenezer Beveridge, M.B., 3rd (Sunderland) Volunteer Battalion the Durham Light Infantry; Quartermaster Hamilton Chambers Reid, M.B., the Glasgow Companies of the Volunteer Medical Staff Corps.

Surgeon-Major T. Joyce, 2nd (the Weald of Kent) Volunteer Battalion the East Kent Regiment (late the 5th Kent), is promoted to be Surgeon-Lieutenant-Colonel May 26th.

Surgeon-Captain W. Robinson, M.B., 2nd Volunteer Battalion the Durham Light Infantry (formerly the 2nd Durham), has resigned his commission.

The following Surgeon-Lieutenants have also resigned their commissions: F. Peirce, M.D., and H. R. Preece, 1st Volunteer Battalion the Cheshire Regiment; T. Martland, 2nd Volunteer Battalion the South Staffordshire Regiment; M. Hunter, M.D., 3rd (the Sunderland) Volunteer Battalion the Durham Light Infantry; and G. L. H. Milne, M.B., 3rd (Morayshire) Volunteer Battalion the Seaforth Highlanders.

Surgeon-Lieutenant-Colonel G. H. Turnbull, M.D., 1st Roxburgh and Selkirk (the Border) Volunteer Rifles, is appointed Brigade-Surgeon-Lieutenant-Colonel to the South of Scotland Brigade Volunteer Infantry.

ARMY MEDICAL OFFICERS AND SANITARY WORK.

Observer writes: Little benefit will result in referring plans of buildings, etc., to the Director-General unless he ascertains the opinion of district principal medical officers on the spot; at present local principal medical officers are very much at sea in these matters. Shortcomings in buildings in the end fall upon the taxpayer, and such might doubtless be often obviated by taking the medical department into confidence in the first instance.

POSITION OF PRINCIPAL MEDICAL OFFICERS ON A GENERAL'S STAFF.

Inquirer suggests that the Parliamentary Bills Committee of the British Medical Association should cause a question to be asked of the Secretary of State for War why medical officers on the staff of generals commanding districts are always placed at the bottom of the list of staff officers, when such is not the sequence of departments in the *Army List*.

*** It is a fair question.

MEDICO-LEGAL AND MEDICO-ETHICAL.

SALE OF A MEDICAL PRACTICE.

THE case of the Scholastic and Medical Association *v.* Hobson came before his Honour Judge Lumley Smith, Q.C., on May 23rd, in the Westminster County Court. The claim was for £32 for commission for the sale of the practice of Dr. Hobson, of Harrogate. The plaintiffs received instructions for the sale of the practice, they made efforts to find a purchaser, and Dr. Pesquit agreed to acquire it, but defendant then declined to sell, saying he was negotiating for a partnership with Dr. Dale, of Scarborough. Plaintiffs contended that as they had obtained a willing purchaser for the amount agreed upon (£800), they had earned their commission. Mr. Stratham said the commission would have been earned if the Scarborough partnership transaction had been completed. The contract with the plaintiffs were made on those terms. He contended that the fee of two guineas provided in the terms of the association was the utmost they could recover. His Honour said it was no doubt hard on Dr. Hobson, but he must find for the plaintiffs for the full amount claimed, with costs.

UNQUALIFIED ASSISTANTS AND THE QUESTION OF COVERING.

A YOUNG PRACTITIONER writes: (1) Can a general medical practitioner employ an unqualified assistant to visit, dispense, and attend midwifery? If the assistant lives at a house a quarter of a mile away from principal, but does not see patients at his own residence but attends to messages sent by principal, (2) can the unqualified assistant see and prescribe for patients at a branch surgery at which the principal attends daily? (3) Supposing that all this is done, would it be a case in which the General Medical Council would be likely to interfere?

*** The case as described seems to have features which would bring it under the General Medical Council's definition of "covering."

CALLS ON NEW RESIDENTS.

A MEMBER writes: Can a bachelor doctor, when calling on newcomers in his district, call on the lady of the house or must he call on the gentleman only; also, would the same rule apply socially?

*** In lieu of giving a specific answer to "A Member's" exceptional queries, we deem it better to direct his attention to the following footnote, which he will find appended to Rule 3 in Chap. ii, Sect. 1 of the medico-ethical *Code:* "Closely akin to solicitation is that of calling upon new residents in the neighbourhood and leaving their card, ostensibly as a mark of respect, but in reality to seek for practice. It cannot, therefore, be too deeply impressed upon such that the true dignified practice, and the most consistent with a due respect for self and the faculty, is to wait until their professional or social acquaintance is sought. In such cases, moreover, it is far more likely to be appreciated."

PARTNERS, ASSISTANTS, AND CONSULTATIONS.

E. S. C.—1. "My assistant at once drove away and left him." Was it not the assistant who refused to meet Dr. M.? Possibly a few courteous words of explanation might have made the meeting an amicable one.

2. The fault seems to have been with the patient's friends, who let Dr. C. think that they approved the arrangement he was making with Dr. S., while they were asking Dr. M. to attend. As Dr. C. refused to meet Dr. M., we do not see how Dr. M. can be blamed for attending the case.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF OXFORD.

THE funeral of the late Professor Romanes took place at the Cathedral, Christ Church, Oxford, on May 28th. There was a large gathering of the prominent members of the University present, including the Vice-Chancellor and the Proctors, Professors Burdon Sanderson and Vines, Sir Henry Acland, and the majority of the heads of Colleges. Amongst the visitors were Professor Michael Foster and Sir James Paget. Professor Romanes had for some years been a member of Christ Church.

An examination for Scholarships and Exhibitions in Natural Science at Merton and New Colleges will be held on Tuesday, June 26th. Further particulars can be obtained from the Warden of Merton College.

There will be an examination for three Scholarships and two Exhibitions in Natural Science at Balliol and Trinity Colleges and at Christ Church on November 20th. Candidates should apply to the Master of Balliol College by letter.

H. P. Hawkins, M.B., has been approved by the Examiners for the degree of Doctor of Medicine.

UNIVERSITY OF CAMBRIDGE.

PHARMACOLOGY.—Professor Bradbury has appointed, as Assistant to the Downing Professor, Mr. C. R. Marshall, M.B., Ch.B., Research Fellow in Pharmacology of the Victoria University.

PATHOLOGY.—Professor Roy announces a course in Bacteriology to be given during the long vacation by Dr. Kanthack, Mr. Cobbett, Mr. Drysdale, and Dr. Lorrain Smith, beginning on July 9th. The course will be of service to students preparing for the diploma in public health A course in Elementary Pathology with practical work will be given by the Professor and Dr. Lazarus-Barlow, beginning on July 10th.

DEGREES.—At the congregation on May 24th the following medical and surgical degrees were conferred:

M.D.—C. Latter, Pembroke; and J. J. Macan, Jesus.

M.B.—L. B. Hayne, Caius; and C. E. Fish, Christ's.

B.C.—L. B. Hayne, Caius; G. B. Woodroffe, Caius; and C. E. Fish, Christ's.

DR. CLIFFORD ALLBUTT'S NOTICE.—The Regius Professor of Physic gives notice that he will deliver in the Long Vacation a course of twelve lectures on Diseases of the Heart and Arteries. The lectures will be open to graduates and students, and the first lecture will be given on Tuesday, July 10th, at 9 A.M., in the Regius Professor's Room.

UNIVERSITY OF LONDON.

M.B. PASS EXAMINATION, May, 1894.—*First Division.*—B. Collyer, St. Barth. Hospital; H. B. Dickinson, University College, and Royal Infirmary, Liverpool; E. P. A. Mariette, King's College; W. P. Montgomery, Owens College, and Manchester Royal Infirmary; C. T. Parsons, St. Mary's Hospital.

Second Division.—E. L. Adams, Guy's Hospital; A. P. Allan, Guy's Hospital; Fanny Armitage, London School of Medicine for Women; J. C. Baker, B.A., St. Bartholomew's Hospital; R. T. Bakewell, University College; J. R. Buckley, Owens College, and Manchester Royal Infirmary; A. T. Collum, Charing Cross Hospital; S. E. Gill, St. Bartholomew's Hospital; J. Harvey, University College, and Royal Infirmary, Liverpool; T. W. Hicks, St. Thomas's Hospital; E. Huntley, Guy's Hospital; H. J. Johnson, St. Bartholomew's Hospital; G. L. Kemp, Guy's Hospital; W. A. Marris, Queen's College, and General Hospital, Birmingham; A. Miller, Guy's Hospital; E. J. Morgan, St. Mary's Hospital; A. Paling, Middlesex Hospital; L. A. Parry, Guy's Hospital; C. H. Perram, St. Bartholomew's Hospital; A. E. Price, St. Thomas's Hospital; C. M. Rhodes, St. Mary's Hospital; S. S. Swift, School of Medicine and Royal Infirmary, Liverpool; T. S. Vincent, Mason College; H. P. Ward, King's College.

EDINBURGH UNIVERSITY.

UPWARDS of 270 candidates have entered for the Final Examination for the Degrees of M.B. and C.M. of the University of Edinburgh, which is now going on.

VICTORIA UNIVERSITY.

VICTORIA University has given notice that after January, 1895, candidates presenting themselves for the Final M.B. and C.M. must present certificates of attendance on (1) Infectious Diseases, and (2) Mental Diseases.

The Chair of the late Professor Marshall (Zoology) has been filled by the Council of Owens College. The Council has appointed Dr. Sydney J. Hickson, who will enter on his duties in October next. Dr. Hickson comes with a good record both of work done and of teaching experience. He has taught in University College, London, has acted as deputy for the Linacre Professor in Oxford, and is at present a lecturer in Cambridge. Dr. Hickson is well known by his contributions to the *Microscopical Journal*, the *Transactions* of the Royal Society, and by his charming volume the record of his visit to the Celebes in the Eastern Archipelago.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

FELLOWSHIP EXAMINATION.—The following gentlemen have passed the necessary examinations for the Fellowship of the College:

P. T. Bolger, F. W. Condon, J. Cæsar, J. Dowling, C. E. Ryan, R. P. Rogers, J. G. Shea, and M. T. Yarr.

The following gentlemen have passed the primary portion of the examination for the Fellowship of the College:

R. L. Joynt and J. Pim.

DENTAL EXAMINATION.—The following gentlemen, having passed the necessary examinations, have been admitted Licentiates in Dental Surgery of the College:

S. Aveline, R. N. Kiddle, R. L. Pollard, E. Poock, and F. O. Stoker.

The following gentlemen have been elected examiners to examine candidates under the conjoint regulations with the Apothecaries' Hall:

Anatomy.—M. A. Ward.
Surgery.—J. D. Pratt.
Physiology, Histology, and Biology.—G. B. White.
Pathology.—C. Coppinger.
Midwifery.—J. O'Donovan.
Ophthalmology.—F. Ode-Raine.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, IRELAND.

CONJOINT EXAMINATIONS.—The April Examinations, 1894, commenced on April 9th, and concluded on May 7th. Candidates have passed these examinations as undernoted:

A. *First Professional.*—R. V. Brews, P. Coffey, J. M. H. Conway, R. L. Davies, E. S. L. Heard, H. E. Howley, T. F. Loughrey, T. C. M'Kenzie, R. H. Moffitt, F. J. Palmer, R. H. D. Pope, C. Powell, E. E. Roberts, B. Scribner, W. Taylor, T. A. J. White, T. F. Whyte.

B. *Second Professional.*—A. J. Benson, J. W. Benson, D. F. Clarke, H. F. Conyngham, A. A. Cooper, T. P. Cormack, E. Corsellis, H. E. Eardley, E. A. Fenton, T. Fitzgerald, J. R. Hewetson, E. C. Hodgson, C. A. Kenny, M. R. L. Moore, B. M'Call, J. F. O'Keeffe, F. J. W. T. O'Rork, S. J. Scott.

C. *Third Professional.*—J. A. Beaumont, T. Cairns, H. G. F. Dawson, R. Hassan, E. J. K. Hogan, R. D. Jephson, W. J. Keane, H. T. J. Kennedy, H. S. Laird, W. Lawler, James Lynch, M. P. Murphy, D. O'Brien, A. C. Seale, J. Sheridan, J. Thomson.

D. *Final Examination.*—J. G. Berne, M. Betty, J. Campbell, C. J. Fallon, W. B. Felton, Miss Goodwin, T. C. Harte, C. Kapp, P. F. Lyons, L. P. Martin, F. J. Mathews, H. M'Avoy, E. Smith, W. A. Twigg.

Note.—Passes in fractions of the examination are not included in the above.

A SOUTH German Laryngological Society has recently been established. It held its first meeting at Heidelberg on May 18th. The Society already numbers forty-three members.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.

Alleged Increase of Insanity in Ireland.—Mr. J. REDMOND asked the Chief Secretary to the Lord Lieutenant of Ireland if he had observed that the special report of the inspectors of lunatics on the alleged increase of insanity, recently presented, conflicted with their statutory reports, annually laid before Parliament on the subject of increase, and whether any explanation of the difference could be given, and whether he would lay upon the table the reports of the resident medical superintendents of the several district lunatic asylums, upon which the special reports in question had been founded.—Mr. J. MORLEY, in reply, said that he had been informed by inspectors of lunatic asylums that, in their statutory reports annually presented to Parliament, they expressed the opinion that the increase of insanity in Ireland was absolute as well as relative, and they founded this opinion on the increasing number of first admissions to asylums, and the larger number of cases brought under official cognisance. Upon fuller inquiry, and having regard to special information obtained in the reports from the different lunacy districts, the inspectors, in their special report to which reference was made, had now expressed the opinion that, as at present advised, the absolute increase of insanity was not large, and was limited to certain districts. The reports referred to in the second paragraph of the question would be published in full in the next statutory report of the inspectors to be laid on the table in the course of a couple of months.

Tuberculous Commission.—Mr. SHAW LEFEVRE, in answer to Mr. CHAPLIN, said the Royal Commission on Tuberculosis was appointed on July 21st, 1890. He was informed by the Commissioners that they had completed the taking of evidence, but had been engaged upon a long and elaborate experimental inquiry. Owing to the illness of one of the inquirers there had been a delay in the completion of one of the scientific reports, but that was now being revised in passing through the press. Immediately it was printed the Commissioners would meet, and their report might be expected shortly.

Pauper District Schools.—Sir JOHN GORST asked the President of the Local Government Board whether pressure was being applied by the Local Government Board to any of the boards of guardians in the metropolis for the purpose of obtaining an extension of the accommodation in pauper district schools, and whether, in view of the proved inadequacy of the district schools system for the proper education of pauper children, he would pledge himself that no extension of district schools should take place until a complete and public inquiry had been held into the merits of the various methods of dealing with these children.—Mr. SHAW LEFEVRE, in reply, said that there were cases in which additional provisions for pauper children of unions included in school districts was necessary, and the question how such additional accommodation should be provided was now under the consideration of the managers and of the Board. He could not admit that there had been any proved inadequacy of these district schools. At the same time, the Board did not favour the aggregation of very large numbers of children in the same building, and careful consideration would be given to the question as to how the additional provision could best be made in connection with the circumstances of each particular case.

Vivisection Returns.—Mr. JOHN ELLIS asked the Home Secretary whether the figures of experiments on living animals were obtained by the department from the licensees, who perform the experiments, and in that case whether any steps were taken to verify their accuracy.—Mr. ASQUITH said the returns were made by the licensees, and no reason has hitherto been found to doubt their accuracy. The licensee must necessarily be the judge of the fact at the time whether the severe pain has been produced which necessitates the killing of the animal. All the licensed places actually in use had been inspected in the course of the year—19 twice, 20 three times, and several four or five times. The visits of the inspector were as often made without notice as with notice, and 109 visits were so made without notice during the year in question. The operation of the Act was carefully watched in the Home Office, and he was satisfied that the licences and certificates were issued only to such places and persons, and with such objects as were contemplated by the Act.—Mr. JOHN ELLIS asked whether he was to understand that the licensee was the judge as to whether severe pain had been induced.—Mr. ASQUITH replied yes, necessarily so.

Food Adulteration.—Mr. SHAW LEFEVRE, in answer to Mr. KEARLEY, said some time ago he received a deputation on the subject of the adulteration of dairy products, and, after consultation with his colleagues, he intimated the willingness of the Government to give its assistance to the appointment of a Select Committee. Since then another deputation had urged the widening of the inquiry into the general subject of adulteration, and he felt that he could not well do otherwise than consent to it. It was obvious that it was not desirable to have two Committees sitting at the same time, and if, therefore, Sir C. Cameron and Mr. Channing could agree on a reference which would extend to the whole subject, the Government would agree to the appointment of a Committee.

On the motion of Mr. CHANNING, a Select Committee was appointed to inquire into the working of the Margarine Act, 1887, and the Sale of Food and Drugs Act, 1875, and to report whether any, and if so what, amendments of the law relating to adulteration were desirable.

The Gresham Commission.—The CHANCELLOR OF THE EXCHEQUER, in answer to Sir A. ROLLIT, said that the evidence had been printed, and was now before the Commissioners for revision.

Prevention of Cruelty to Children Bill.—Mr. JOHN WILSON (Govan) moved a clause providing that a child admitted to the workhouse or handed over to the custody of the parochial authorities, in consequence of the second conviction of the parents for any offence, should not be removable by the parents until after 12 years of age. General approval was expressed by several speakers of the intention of the clause, but Sir R. Webster and Mr. Asquith objected to its form, and it was withdrawn.—Mr. JAMES LOWTHER moved to omit the subsection relating to recharging for other offences under the original Act persons acquitted of murder or manslaughter.—Mr. ASQUITH said the Government sympathised with the object of the clause, but thought it would be unworkable in its present form; and Sir R. WEBSTER promised to consider whether the subsection could not be brought forward in a better form, and it was therefore omitted.—An amendment moved by Sir R. WEBSTER to Clause 4, providing that a person accused of habitual drunkenness should receive notice, and should not be sent to an inebriates retreat without his consent, and unless provision was made for expenses, was agreed to.—Mr. SNAPE moved a new subsection (Clause 6) to prevent children taking part in performances in licensed premises (other than theatres). After a long discussion this was withdrawn, but a second amendment, moved by Mr. SNAPE, raising from 10 to 11 the minimum age at which children might be employed in places of entertainment other than theatres was adopted on a division by 274 to 80. A long conversation took place on the remainder of Clause 6, and the House was twice divided, but the Clause was eventually adopted with an amendment by Sir R. WEBSTER, providing that a license may be separately granted for the purposes of this enactment. A proviso, moved by Mr. J. LOWTHER, that no licence should be required by parents or guardians training their own children, was carried by 305 to 107. On the motion of Sir R. WEBSTER, words were omitted with view of inserting an amendment to prevent the frequent employment of children in entertainments on premises licensed for sale of intoxicating liquors. Sir R. WEBSTER then moved the amendment, and Mr. T. HEALY was speaking at 5.30 P.M., when under the rules the debate stood adjourned.

PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns, including London, 6,315 births and 3,543 deaths were registered during the week ending Saturday, May 26th. The annual rate of mortality in these towns, which had been 18.2 and 17.1 per 1,000 in the preceding two weeks, rose again last week to 17.7. The rates in the several towns ranged from 10.1 in Plymouth and 11.2 in Croydon, to 21.1 in Manchester and 28.4 in Salford. In the thirty-two provincial towns the mean death-rate was 18.0 per 1,000, and was 0.7 above the rate recorded in London, which was 17.3 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.8 per 1,000; in London the rate was equal to 3.7 per 1,000, while it averaged only 2.1 in the thirty-two provincial towns, and was highest in Salford, Hest Ham, and Nottingham. Measles caused a death-rate of 2.0 in London, 3.1 in West Ham, and 3.3 in Nottingham; scarlet fever of 1.3 in Bolton and 1.0 in Salford; and whooping-cough of 2.1 in Cardiff and in Huddersfield. The 62 deaths from diphtheria in the thirty-three towns included 41 in London, and 3 each in Croydon, Manchester, and Bradford. Seven fatal cases of small-pox were registered in London, 2 in West Ham, and 2 in Birmingham, but not one in any other of the thirty-three large towns. There were 236 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, May 26th, against 191, 210, and 219 at the end of the preceding three weeks; 69 new cases were admitted during the week, against 64, 71, and 52 in the preceding three weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,271, against 2,293, 2,298, and 2,307 at the end of the preceding three weeks; 216 new cases were admitted during the week, against 262 and 252 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday last, May 26th, 888 births and 542 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had declined from 20.1 to 17.4 per 1,000 in the preceding three weeks, rose again to 19.0 last week, and exceeded by 1.3 per 1,000 the mean rate during the same period in the large English towns. Among these Scotch towns the death-rates ranged from 13.7 in Leith to 21.0 in Dundee. The zymotic death-rate in these towns averaged 2.1 per 1,000, the highest rates being recorded in Perth and Dundee. The 268 deaths registered in Glasgow included 12 from whooping-cough, 4 from scarlet fever, and 3 from diphtheria. A fatal case of small-pox occurred in Leith.

THE SUTHERLANDSHIRE COUNTY COUNCIL AND ITS MEDICAL OFFICER.

CERTAIN of the doings of local authorities upon which we have occasion from time to time to comment are such as to raise grave doubts as to the expediency of the general application of the principle of local self-government. One of the most recent instances of the sort is reported in the columns of the *Northern Ensign*. It appears that the parish of Lairg, in the county of Sutherland, labours under the disadvantage of having no resident medical practitioner. The ordinary method of overcoming such a difficulty is for the inhabitants to guarantee a certain salary or nucleus, sufficient to secure the services of a local medical man. It appears to have occurred to certain of the local representatives that the matter might be arranged in a more economical fashion. There was a county medical officer, who, if he restricted himself to what these parties regarded as the necessary duties of his office and did not occupy himself in making "over-stated" reports, could not possibly have enough to do. Why should they not constitute him the resident medical practitioner, endowed from the county funds? His modest salary of £300 a year, with allowance for travelling and other expenses, these gentlemen regarded as excessive. Accordingly, notice of motion was given for the May County Council meeting that the salary of the county medical officer of health be reduced to £200 per annum, inclusive of all expenses, that he be allowed private practice, and "ordered" to reside in the parish of Lairg. It evidently did not occur to the promoters of the movement

that the health of the county was a matter of any particular concern, or that the proposal to subsidise the parish of Lairg out of the county funds was of the nature of a malversation of the public money. Nor did they seem to be aware that any resolution of the sort, even if adopted, would be entirely inoperative, as the contract with the medical officer could only be dissolved under the sanction of the central authority, which would never be granted in such a case. At the meeting of the county council the motion was withdrawn, not for any of the reasons above suggested, but because "the Lairg people proposed to get a doctor for themselves." It is to be regretted that the matter was not allowed to come to a vote, as it can hardly be doubted that the good sense of the council would have shown itself in the emphatic rejection of this ill-advised proposal.

RECENT SMALL-POX OCCURRENCES.

THERE has been during several weeks past a somewhat widened dissemination of small-pox. In London the cases numbered 121 in the first three weeks of May; in West Ham there were 70 cases in the same period. Patients from the latter place have by agreement been received into the hospital ships at Long Reach. Attacks have also been recorded at Leyton and in other suburbs. In the midlands, Birmingham has continued to suffer severely, some 400 attacks having been heard of during the current quarter. Among other towns which have been invaded in the quarter we may mention Smethwick, with its upwards of 50 cases, Worcester with some 30, Aston Manor with 40, and Walsall, West Bromwich, Rowley Regis, and Hinckley. At the latter place the cases have been numerous, and matters have been further complicated by the absence of hospital accommodation and compulsory notification. An iron building for 24 beds has been decided on. One medical man in the town has created some ill feeling by an expressed determination to send no case to hospital if a hospital medical officer be appointed. At Willenhall an alarming epidemic has recently occurred, no fewer than 40 cases coming to light in one week. The local authority have been censured by the guardians on account of absence of hospital, and for imposing measures of quarantine. A hospital is to be provided, and meanwhile much vaccination has been performed. Several fresh cases at Coseley have accentuated the need for hospital provision. Manchester has had 42 cases in seven weeks of the present quarter, and Oldham nearly 30; whilst Salford, Bradford with its 30 cases, Hull, and Gateshead are among many other towns which have recently had acquaintance with small-pox. In Scotland, the epidemic at Leith is assuming very alarming proportions, 61 cases having been notified last week, and others, it is feared, being unreported. The hospital at Coat Hill has had to be reopened, and additions are to be made to the temporary wooden erection on the links.

SMALL-POX IN EDINBURGH.

EIGHTEEN cases of small-pox were reported in Edinburgh last week, and the medical officer of health issued to the members of the medical profession, on May 25th, a circular to this effect: "I am desired by the Public Health Committee to draw your attention to the increase of small-pox in some districts of the city, particularly in the Canongate and the neighbourhood of Leith Walk, and to request you to do what you can in the way of vaccination and revaccination of your patients, and especially of their dependents, to prevent the further spread of the disease."

CHOLERA AND DIARRHŒA AT ROTHERHAM IN 1893.

DR. ALFRED ROBINSON has presented his annual report as Medical Officer of Health for the Borough of Rotherham. He reports that, owing to an extraordinary number of deaths from diarrhœa and a few fatal cases from cholera, the death-rate had gone up to 19.91 against 17.86 in the previous year. The town had gone through a short but sharp outbreak of small-pox. There had been 52 cases, with 2 deaths. The outbreak was most seriously felt at the workhouse where the two deaths occurred, but it was stamped out by the arrangements that were made for the prompt removal of all cases to the isolation (borough) hospital. The high death-rate from diarrhœa was due to 76 cases, 54 of which were in children under one year. He stated that Rotherham was the first inland town attacked with cholera, which was all the more extraordinary because it was further away from the sea than any other town in England. The cases had been strictly sporadic, in isolated districts, and in small numbers. He remarked on the improved character of the water supply.

THE ISOLATION OF PAUPER INFECTIOUS CASES.

THE old and frequently debated question of the isolation of pauper patients sick of infectious disease has once again been to the fore; and this time the action of the Rawmarsh Local Board has been matter of severe comment at the hands of the Rotherham guardians. It appears that cases of diphtheria arising at Rawmarsh had been sent for isolation at the workhouse infirmary, a building intended for four persons only at one and the same time. We have not infrequently spoken of the action desirable in such circumstances—namely, that the local sanitary authorities should relieve the Poor-law body of the duty of isolating the cases, and instead should themselves provide for their isolation, and recover the expenses attending the method from the guardians. It has always seemed to us that this is the way best fitted to safeguard the public health, and any practice which has for its object this end is one eminently for exercise by a sanitary, in preference to a Poor-law, body. And, again, in the Rotherham Union there are already constituent sanitary bodies receiving pauper cases of infectious disease into their hospitals at the cost of the guardians. The extension of the principle to the whole union is what we should desire to see effected throughout the entire country. It cannot be too strongly insisted upon that when danger to the public health is in question, whether in regard of paupers or not, the paramount duty of the sanitary authority is to secure the prompt isolation of those cases, charging the guardians with their share in the transaction. We trust that the Rawmarsh Local Board will adopt this plan forthwith.

A MEDICAL OFFICER FOR THE COUNTY OF ESSEX.

AT the recent meeting of the Executive Committee of the Essex County Council under the Contagious Diseases (Animals) Act, the replies received from sanitary authorities as to the isolation hospital accommodation in their districts were considered. It appeared that out of forty authorities only about seventeen had provided such hospitals. It was resolved to call the attention of those who had not done so to the powers of the County Council under the Isolation Hospitals Act. The chairman of the committee, however, pointed out that before an inquiry as to the provision of an isolation hospital in any district could be held, the county must have a medical officer to conduct that inquiry under the Act. It was suggested that Dr. Thresh, who has acted as adviser to the Council, and who has collated the reports of the local medical officers, should be appointed medical officer for the county. The chairman proposed that Dr. Thresh's services should be secured, and that he should continue to act as medical officer to the Chelmsford and Maldon rural sanitary authorities. A member of the committee expressed the view that the officer appointed should give his whole time to the service of the county.

It was ultimately decided to reappoint Dr. Thresh to collate reports on the old terms up to the next April meeting of the Council. We trust that when this recommendation is communicated to the Council the matter will be reconsidered. It appears most desirable that an important county like Essex should possess a formally appointed medical officer of health, and the matter seems sufficiently urgent to warrant its being referred to a special sanitary committee without delaying its further consideration till next April.

THE ADULTERATION OF FOOD.

A DEPUTATION from the Federation of Grocers' Associations of the United Kingdom on May 22nd waited on Mr. Shaw Lefevre, President of the Local Government Board, to ask for an amendment of the Adulteration Acts, so that the rule of implied warranty, now held to apply in the case of retail shopkeepers, should extend to manufacturers and wholesale dealers. Mr. Shaw Lefevre suggested that the question should be included in the scope of inquiry of the Committee which it was proposed to appoint to investigate the working of the Acts relating to margarine and the adulteration of dairy products.

EXTENSION OF EDINBURGH CITY FEVER HOSPITAL.

IT is proposed to increase the Edinburgh City Hospital so as to increase the accommodation for scarlet fever patients from 182 to 206, and that 70 beds should be provided for measles, 30 for typhoid fever, 70 for whooping-cough, erysipelas, and typhus, and 10 for diphtheria, making 386 in all. The total cost of these additions will be £124,100.

WORKHOUSE BUTTER.

THE Chesterfield Guardians have recently had the butter supplied to the workhouse analysed, and as a result they find that the specimen submitted contained little or no butter at all. It consisted of margarine. As often happens in such cases, the contractor put the blame upon the people from whom he purchased the butter. The Clerk was desired to make inquiries and, if thought advisable, to take proceedings against the contractor.

VACCINATION IN IRELAND.

ACCORDING to the returns of vaccination for the first quarter of the year, there were 16,046 persons successfully vaccinated; in 4,091 cases the operation was postponed, and 20 children were reported as insusceptible of vaccination. The deaths of 1,879 unvaccinated children under 3 months of age were registered during the quarter, making a total of 22,036 children with regard to whom particulars as to vaccination were ascertained. The registrars' notes show that in many places vaccination was suspended owing either to the severity of the weather, or the prevalence of measles, whooping-cough, etc.

THE LAW AS TO "DETENTION" AND "EXPOSURE" IN RELATION TO THE SPREAD OF INFECTION.

THE question as to the power of the hospital authorities to prevent a patient from leaving the precincts of the building if he be so disposed, has been raised recently. If the person be a pauper, under the care of the Poor-law authority, then the guardians have power to detain him—infectious disease being always in question—under 30 and 31 Vict., chap. 106, sect. 22. As regards non-pauper infectious cases, power is given under sect. 12 of the Infectious Disease (Prevention) Act, 1890, for the making of an order by a justice for detention in hospital for such time as is deemed necessary of any person who, on leaving hospital, would not be provided with lodging or accommodation in which proper precautions could be taken to prevent the spreading of the disorder by such person. Of course there is also the power, made use of in the Bristol small-pox case, of proceeding under Section 126 of the Public Health Act, 1875, in regard to wilful exposure, without all needful precaution, of a person suffering from infectious disease. Instances have not been few in which, during the past year or two, patients have escaped from small-pox hospitals while in a condition to spread the disease.

AWARDS TO PUBLIC VACCINATORS.

A. T.—Article 5 of the published rules for Awards to Public Vaccinators runs thus: "Cases to be taken into account for purposes of award shall be all the successful infantile vaccinations recorded in the vaccinator's register, and verified by the board of guardians from the quarter day preceding the last inspection to the quarter day preceding the present inspection." The amount of award is one shilling for each such case.

GUARDIANS AND PAID OFFICERSHIPS.

D.—*Ex-officio* guardians cease to exist from November next, under the terms of the Local Government Act of 1894. No one holding a paid office under a board of guardians can sit on the board as a member.

QUALIFICATIONS OF HEALTH OFFICERS.

A Member.—It is necessary, by the terms of the Local Government Act of 1888, that all newly-appointed medical officers of health must be qualified in medicine, surgery, and midwifery. The Local Government Board have the power of dispensing with some of the needed qualifications if they see sufficient cause. In practice this power is, we believe, but little exercised.

INQUESTS.

J.P. for Berks asks whether the coroner should not have held an inquest in the case of a woman attended by a midwife who died during her confinement, no medical man being in attendance, and consequently no medical certificate of the cause of death forthcoming.

*** In all cases of death accelerated or caused by violence or injury the coroner is bound by law to hold an inquest, but in cases of sudden death he has a discretionary power, and is guided by the reports he receives. Unless, however, he is satisfied with the statement or certificate of a medical man that such death without reasonable doubt arose from natural causes, and that the circumstances in connection with the death gave no grounds for possible suspicion, he should advisedly hold the statutory inquest, and obtain skilled evidence as to the cause of death.

Under the circumstances of the case mentioned by our correspondent, the possibility of neglect or want of skill in connection with the case not unreasonably arises, and in our opinion it would have been desirable to have held an inquest, as by so doing not only would the exact cause of the death have been ascertained, but the question of any neglect would have been investigated and settled.

OBITUARY.

We regret to have to record the death of Dr. A. H. Twining, of Salcombe, from the result of a carriage accident. The deceased gentleman qualified as L.S.A. in 1875, and M.R.C.S.Eng. in 1876, taking the M.D.Durh. degree in 1892. Dr. Twining took up his residence at Salcombe in 1881, entering into partnership with Dr. Webb, his brother-in-law. On April 14th, 1883, he was appointed Medical Officer of Health for the Kingsbridge Union Rural Sanitary District, which appointment he held up to the time of his death. The funeral took place at Salcombe on May 11th.

INDIA AND THE COLONIES.

INDIA.

The Maharajah of Bhownagger has given a sum of 5,000 rupees towards the establishment of a Pasteur Institute in India.

The Government of India has instituted a systematic inquiry into the efficacy of hypodermic injections of strychnine in the treatment of snake-bite. The Punjab Government has, at the request of the Viceroy, forwarded a list of cases so treated in the province during the past year.

WESTERN AUSTRALIA.

The number of medical practitioners resident in Western Australia on March 1st, 1894, was 52, being in the proportion of 1 to every 1,250 inhabitants. Twelve months ago there were only 40 doctors in the colony, or 1 to every 1,375 of population. The population of Western Australia is now 65,000; a year ago it was 55,000. In Queensland the proportion of medical practitioners to population is 1 to 2,050.

SOUTH AUSTRALIA.

Dr. E. C. Stirling, F.R.S., of Adelaide, has been nominated by the Government a member of Mr. Horn's proposed scientific expedition to the Macdonnell Ranges.

NEW SOUTH WALES.

Leprosy.—The number of lepers under detention in the Little Bay Leper Lazaretto, near Sydney, on January 1st, 1894, was 36, being 6 more than on the corresponding date in 1893.

From a report to the Government of New South Wales in 1893 we learn that 73 cases of leprosy had been reported officially in Australia in the preceding ten years, and that of this number 54 (nearly three-fourths), were Chinese. In view of this fact, and as two Chinese lepers had been recently removed from a Chinese camp near Bombala, a special examination of all Chinese camps and quarters in the colony had been made. The Board of Health hope that by strict notification and segregation of lepers, the inspection of Chinese camps and quarters, and the decline of Chinese immigration, that leprosy will not acquire a permanent hold in Australia.

SOUTH AFRICA.

Hospital Management in Kimberley.—Problems of hospital management are curiously alike all the world over, and on the diamond fields—just as in any English town—we find a board of managers getting into difficulties with its house-surgeons in consequence of its devotion to its matron. The trouble at the Kimberley Hospital seems to centre largely round the question whether the house-surgeon or the matron is to be head of the establishment; and, however strongly we may hold to the view that a medical authority should be the head of so purely medical an institution as a hospital, we cannot but see that frequency of change in the resident surgical staff is more likely than anything else to confirm the governors in their inclination to throw the major responsibility on the more permanent official—in this particular case on the sister in charge. From the reports we have received we can quite understand Dr. Bishop feeling himself badly used. It seems probable that the proceedings of the board were marked more by excitement than by courtesy, and that Dr. Bishop was dealt with in a manner which a gentleman may properly protest against. It is clear enough that the difference between him and the board arose in consequence of his honest endeavours to introduce much needed reforms into the management of the hospital; but unfortunately some of these touched upon the nursing department, and seemed to trench upon the authority of the sister in charge, who, having held that post for many years, appears to occupy a position of considerable influence. The time would seem to have come when the people of Kimberley might well reconsider the desirability of dividing the work and the responsibility within their hospital in a somewhat more modern fashion. In rapidly growing colonial towns institutions pass quickly through their various stages of evolution, from the "cottage" to the "general hospital" type, and it is clear that the organisation most fitted for the first, in which the "sister" may properly reign supreme, is quite inappropriate for the fully equipped hospital, with its visiting staff and its resident medical officers.

American Jottings.—A hospital for the exclusive use of coloured patients is about to be established at St. Louis.—The medical profession appears to be greatly overcrowded in California, where, according to Dr. C. G. Kenyon, President of the Medical Society of that State, there are about 2,700 practitioners of medicine and surgery without counting several hundred licentiates of homœopathic and eclectic "colleges." The population of the State is 1,500,000, which gives a proportion of medical practitioners to inhabitants of 1 to 500.—The American public was not long ago edified by the spectacle of a millionaire squabbling over the fees of the surgeon whose skill had saved his life. It is refreshing to find that millions and meanness do not always go together. Dr. E. L. Keyes, who recently accompanied Mr. Vanderbilt on a four months' cruise in his yacht *Valiant*, has (according to the New York *Sun*) received a fee of 60,000 dollars (£12,000) for his services.—A New York physician has satisfied himself that a person who is privileged to possess a head whose diameter at the thin portion of the temporal bone measures five and a-half to six inches is almost sure to have a history of longevity on the father's side of 70 to 90 years or over. If the head measures in front, from the external auditory canal to the nasal frontal suture, as much as four and three-fourths or five inches, we may be almost sure of long life on the maternal side. This will be great news to the people who wear seven and three-quarter hats.—The existence of a Suicide Club, the members of which are all pharmaceutical chemists, was recently discovered at Indianopolis. Two of the members had poisoned themselves during the last few months. Suicide clubs like the one so vividly described by Robert Louis Stevenson in one of his earlier collections of tales are said to be not uncommon at the present day in the United States.

Hospital Collection in Birmingham.—The annual hospital collection, which took place in Birmingham on May 26th, has resulted so far in the receipt of £9,900, which is about the same amount as that at the corresponding stage of the collection last year. The street collection, owing to bad weather, shows a falling off as compared with last year.

Medical Magistrates.—The following have been appointed justices of the peace for their respective counties—namely, Dr. J. J. Hopkins, for co. Galway; Dr. William Delaney and Dr. P. F. Colgan, for co. Carlow; Dr. Connor Maguire, for co. Mayo; and Dr. J. Harrington, for co. Kerry.

Royal Microscopical Society.—A meeting of the Royal Microscopical Society was held on May 16th: Mr. A. D. Michael, F.R.S., President, in the chair. Mr. C. Lees Curties exhibited and described a microscope which had been specially made for photographic purposes; the leading feature of the instrument is that the nosepiece is removable, so that an ordinary photographic lens can be substituted for the objective if required. He also exhibited a new form of apparatus for obtaining instantaneous photographs of objects under the microscope; as examples of what could be done with this apparatus, he showed photomicrographs of blood corpuscles taken with powers × 300 and 600 diameters, and also some low-power photographs of living specimens of lophopus with tentacles extended.

MEDICAL NEWS.

WOMEN DOCTORS IN EDINBURGH.—There are now eight ladies engaged in the practice of medicine in Edinburgh and Leith.

PROFESSOR GUSSENBAUER, of Prague, has been chosen President of the Twenty-fourth Congress of the German Society of Surgery, to be held in 1895.

THE use of the metric system of weights and measures has now been made compulsory in the prescription and dispensing of medicines in Russia.

THE Sheffield Public Hospital and Dispensary, which recently received a gift of £5,000 from the Duke of Norfolk, in five yearly payments, is to make a public appeal for further funds for the new buildings at a meeting in July, when it is expected the Duke will preside.

ROYAL SOCIETY OF EDINBURGH.—At a special meeting of the Royal Society of Edinburgh on May 28th, Professor James Geikie, Vice-President, in the chair, Dr. C. Hunter Stewart read a paper written by Dr. James Buchanan Young, dealing with the chemical and bacteriological examination of soil, with special reference to that of graveyards.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.—At the recent annual general meeting of the Glasgow Medico-Chirurgical Society the following office bearers were elected: *President*, Dr. Hector Cameron. Section of Medicine: *Vice-President*, Dr. Finlayson; *Councillors*, Dr. W. A. M'Lachlan and Dr. James W. Allan; *Secretary*, Dr. C. O. Hawthorne. Section of Surgery: *Vice-President*, Mr. A. E. Maylard; *Councillors*, Dr. MacPhail and Dr. James A. Adams; *Secretary*, Dr. John Barlow. Section of Pathology: *Vice-President*, Dr. Charles Workman; *Councillors*, Dr. T. K. Monro and Dr. L. R. Sutherland; *Secretary*, Dr. R. M. Buchanan. Section of Obstetrics: *Vice-President*, Dr. M. Cameron; *Councillors*, Dr. Jardine and Dr. George Halket; *Secretary*, Dr. Lawrence Oliphant. *Treasurer*, Mr. H. F. Clark; *General Secretary*, Dr. Walker Downie.

CO-OPERATION AMONG NURSES.—Under the title of the Registered Nurses' Society, another co-operation of private nurses has been formed, with the object of securing to each member the whole of her earnings, *minus* a fixed proportion (7½ per cent.) to cover working expenses. Its offices are at 269, Regent Street. The special feature of this new Society is that it consists exclusively of those who are on the Register of the Royal British Nurses' Association, by which means an assurance is given to the public that every nurse provided by it has had at least three years of hospital training. Every arrangement by which the fees so freely paid for the undoubted benefits of trained nursing can be directed into the pockets of those who earn them deserves sympathy and support.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—The annual dinner of this Society took place at the Criterion Restaurant on May 30th. Dr. Donald Hood, President, was in the chair, and proposed the usual loyal toasts, in felicitous terms. Sir William Broadbent proposed the toast of the evening, "The West London Medico-Chirurgical Society," and expatiated on the advantages of medical societies to their members. He coupled with it the name of the President, Dr. Hood, who responded. Mr. Keetley, in a humorous speech, proposed "The Visitors," to which Mr. Eastes, President of the Harveian Society, responded. Mr. Bowreman Jessett proposed the last toast, "The Officers of the Society," to which the Senior Secretary, Dr. Clemow, replied. This young Society—for it is still but twelve years old—already numbers, as was incidentally stated in the course of the evening, about 400 members.

MEDICAL VACANCIES.

The following vacancies are announced:

ARMAGH UNION, Loughgall Dispensary.—Medical Officer. Salary, £120 per annum, with £20 yearly as Medical Officer of Health, together with vaccination and registration fees. Applications to Mr. Jacob Orr, Honorary Secretary, Cranagill, Loughgall. Election on June 11th.

BRIDGWATER INFIRMARY.—House-Surgeon. Salary, £70 per annum, with board and residence. Applications to Mr. John Coombs, Honorary Secretary, by June 15th.

CARLOW DISTRICT LUNATIC ASYLUM.—Assistant Medical Officer. Salary, £100, per annum, and emoluments valued at £100 yearly. Candidates must be unmarried and not more than 30 years of age. Election by the Governors on June 8th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—House-Physician. Board and residence and allowance for washing. Appointment for six months. Applications and testimonials to T. Storrar-Smith, Secretary, 24, Finsbury Circus, E.C., by June 14th.

EARLSWOOD ASYLUM FOR IDIOTS, Redhill, Surrey.—Fully qualified practitioner to take charge of the Asylum. Age 30 to 40. Salary, £500 per annum, with furnished residence and coals and gas. Applications endorsed "Medical Superintendent" to the Board of Management at the offices, 36, King William Street, London Bridge, E.C., by June 12th.

FLINTSHIRE DISPENSARY.—Resident House-Surgeon. Salary, £120 per annum, with furnished house (rent and taxes free), and coal, light, water, and cleaning, or in lieu thereof £20 per annum; knowledge of Welsh desirable. Applications to W. T. Cole, Secretary, Board Room, Bangillt Street, Holywell, by June 5th.

GLAMORGANSHIRE AND MONMOUTHSHIRE INFIRMARY, Cardiff.—Assistant Resident Medical Officer. Appointment for six months. No salary, but board, washing, and apartments. Applications and testimonials to G. T. Colman, Secretary, by June 9th.

GLASGOW EYE INFIRMARY.—Resident Assistant House-Surgeon. Salary, £50, with apartments and board. Applications to William George Black, Secretary, 88, West Regent Street, Glasgow, by June 11th.

GLASGOW MATERNITY HOSPITAL, 146, Buchanan Street, Glasgow.—Indoor and Outdoor Surgeons. Applications to Arthur Forbes, Secretary, by June 9th.

GOREY UNION.—Medical Officer for the Workhouse and Fever Hospital. Salary, £100 per annum, with £20 yearly as Consulting Sanitary Officer. Election on June 9th.

HOSPITAL FOR EPILEPSY AND PARALYSIS AND OTHER DISEASES OF THE NERVOUS SYSTEM, 32, Portland Terrace, Regent's Park, N.W. Physician to Out-patients. Applications to the Secretary by June 8th.

LEICESTER INFIRMARY.—Assistant House-Surgeon. Salary, £80 per annum, with board, apartments, and washing. Applications to the Secretary, at his offices, 24, Prior Lane, Leicester.

MILLER HOSPITAL AND ROYAL KENT DISPENSARY, Greenwich.—Honorary Surgeon. Applications to the Honorary Secretary, by June 8th.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney Road, N.E.—House-Physician for six months. At the expiration of this term he will be required, if eligible, to serve as House-Surgeon for six months. Salary as House-Physician, £60 per annum, and as House-Surgeon £80 per annum. Doubly qualified. Applications to the Secretary, at 27, Clement's Lane, E.C., by June 13th.

NORTH STAFFORDSHIRE INFIRMARY AND EYE HOSPITAL, Hartshill, Stoke-upon-Trent.—Honorary Assistant House-Surgeon. Applications to the Secretary by June 5th.

OXFORD EYE HOSPITAL.—House-Surgeon. Board and lodging, and honorarium of £50 at completion of a year's residence. Applications to B. H. Baden-Powell, Honorary Secretary, 29, Banbury Road, Oxford, by June 15th.

PARISH OF ST. PANCRAS.—Medical Superintendent for the Infirmary, Dartmouth Park Hill, N.; doubly qualified; between 30 and 45 years of age. Salary, £400 per annum, with house, coals, gas, washing, and paid substitute. Applications, on forms to be obtained at the office, to A. A. Millward, Clerk to the Guardians, Vestry Hall, Pancras Road, N.W., by June 12th.

PUBLIC DISPENSARY, 59, Stanhope Street, Clare Market.—Resident Medical Officer. Salary, £105 per annum, with furnished apartments, coals, and gas. Applications to the Secretary by June 8th.

ROYAL ALBERT HOSPITAL, Devonport.—Assistant House-Surgeon for six months. Board, lodging, and washing provided. No salary. Applications to Chairman of Medical Committee by June 20th.

ROYAL BERKS HOSPITAL.—Assistant House-Surgeon. No salary. Board and lodging provided. Appointment for six months. Applications to the Secretary, by June 12th.

ROYAL FREE HOSPITAL, Gray's Inn Road, W.C.—Two Resident Medical Officers; doubly qualified; no salary; board, lodging, and washing provided. Applications to the Secretary by June 2nd.

ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields.—Curator non-resident. Appointment for one year; renewable. Salary, £120 per annum. Applications to the Secretary by June 30th.

ST. LUKE'S HOSPITAL, E.C.—Clinical Assistant. Appointment for six months, with board and residence. Applications to Percy De Bathe, M.A., Secretary.

TIPPERARY COUNTY INFIRMARY.—Surgeon. Salary, £100 per annum. Candidates must be Fellows of the Royal College of Surgeons in Ireland. Applications to Mr. James J. Chadwick, Secretary. Election on June 22nd.

UNIVERSITY COLLEGE, Liverpool.—George Holt Chair of Pathology and Derby Chair of Anatomy. Endowment, £375 per annum each, with share of fees. Applications to the Registrar by June 2nd.

UNIVERSITY OF EDINBURGH.—Chemical Assistant to Professor of Physiology. Salary, £180 per annum. Applications to the Secretary of the University Court before July 1st.

WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.—Dental Surgeon. Duly qualified and registered. Must attend the House Committee on Tuesday, June 5th.

WORCESTER GENERAL INFIRMARY.—Assistant House-Surgeon and Dispenser. Salary, £70 per annum, with board, residence, and washing. Applications and testimonials to William Stallard, Secretary, by June 2nd.

MEDICAL APPOINTMENTS.

ANDERSON, Wm. S., M.D.Glasg., M.R.C.S.Eng., appointed Workhouse Medical Officer to the Chapel-le-Firth Union, *vice* T. E. Jones, L.R.C.P. Edin., L.F.P.S.Glasg.

ANDREW, B. H., M.R.C.S.Eng., L.R.C.P.Lond., appointed Medical Officer for the Hadderham District of the Ely Union.

APPLEYARD, F. E., B.A.Cantab., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Special Department for Diseases of the Throat at St. Thomas's Hospital.

ATKINS, S. E., L.R.C.S.I., L.S.A., appointed Medical Officer for the Dalwood District of the Axminster Union.

BOGER, W. H., L.R.C.P.Edin., M.R.C.S.Eng., appointed Medical Officer for the No. 5 District of the Liskeard Union.

CAGNEY, James, M.A., M.D., M.R.C.P., appointed Physician, with charge of In-patients, to the Hospital for Epilepsy and Paralysis.

CLAYTON, W. K., M.D.Brux., L.R.C.P., L.R.C.S.Edin., appointed Medical Officer for the Wakefield District of the Wakefield Union.

COLLCUTT, A. M., M.A., M.B., B.C.Cantab., L.R.C.P., M.R.C.S., appointed Resident House-Physician to St. Thomas's Hospital.

COOKE, C. W., M.D.Lond., L.R.C.P., M.R.C.S., reappointed Clinical Assistant in the Special Department for Diseases of the Ear at St. Thomas's Hospital.

COWPER, John, M.B., C.M.Edin., reappointed Medical Officer of Health for Shanklin District.

CUFF, A. W., B.A., M.B., B.C.Cantab., L.R.C.P., M.R.C.S., appointed Assistant House-Surgeon to St. Thomas's Hospital.

DAVIES, Dr., appointed Medical Officer of Health to the Maesteg Local Board, *vice* W. H. Thomas, L.R.C.P.Edin., M.R.C.S.Eng.

DAVIES, Rees T. E., L.R.C.P.Edin., M.R.C.S.Eng., appointed Medical Officer for the New Tredegar District of the Bedwellty Union.

DE SANTI, Philip R. W., F.R.C.S.Eng., appointed Surgical Registrar to Westminster Hospital.

DINWOODIE, W., M.D.Glasg., appointed Medical Officer for the Elsdon District of the Rothbury Union.

ATON, James, M.R.C.S.Eng., reappointed Medical Officer of Health for the Grantham Rural Sanitary District.

FENWICK, P.C., L.R.C.P., M.R.C.S., appointed Senior Obstetric House-Physician to St. Thomas's Hospital.

FISHER, J. H., F.R.C.S., L.R.C.P., reappointed Ophthalmic House-Surgeon to St. Thomas's Hospital.

GREEN, A. S., L.R.C.P., L.R.C.S.Edin., appointed Medical Officer for the Fourth District of the Leeds Union.

GRÜNBAUM, A. S. F., B.A.Cantab., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Special Department for Diseases of the Skin at St. Thomas's Hospital.

HAINWORTH, E. M., B.Sc.Lond., L.R.C.P., M.R.C.S., reappointed House-Surgeon to St. Thomas's Hospital.

HALE, E. T., L.R.C.P., L.R.C.S.Edin., appointed Medical Officer for the Fourth District of the Bedminster Union.

HARRIS, J. S., M.R.C.S., L.R.C.P.Lond., appointed Medical Officer for the Frittenden District of the Cranbrook Union.

HARTY, J. T., L.R.C.P., L.R.C.S.I., appointed Medical Officer for the No. 4 District of the Liskeard Union.

HELSHAM, H. P., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer for the First District of the Loddon and Clavering Union.

HUTTON, Henry R., M.A., M.B.Cantab., appointed Physician to the Manchester Hospital for Consumption and Diseases of the Throat and Chest, *vice* Arthur Ransome, M.D.Cantab.

JAFFÉ, C. S., M.B., B.S.Lond., L.R.C.P., M.R.C.S., appointed Senior Obstetric House-Physician to St. Thomas's Hospital.

KENDALL, Nicholas F., M.R.C.S.Eng., L.R.C.P.Lond., appointed Assistant Medical Officer to Woolwich Infirmary.

KENWOOD, Harry Richard, M.B., C.M.Edin., appointed Medical Officer of Health for Stoke Newington.

KING, A. F. W., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Special Department for Diseases of the Throat at St. Thomas's Hospital.

MILTON, A. R. O., L.R.C.P., M.R.C.S., reappointed House-Surgeon to St. Thomas's Hospital.

MISKIN, L. J., L.R.C.P., M.R.C.S., reappointed Assistant House-Surgeon to St. Thomas's Hospital.

MORRIS, Sylvanus Glanville, M.B., C.M.Edin., appointed Medical Officer for the Cwmtwrch and Cwmllynfell Colliery Districts.

NICHOLLS, J. M., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer of Health to the St. Ives' Town Council.

NICHOLSON, T. G., B.Sc.Lond., L.R.C.P., M.R.C.S., appointed Clinical Assistant in the Special Department for Diseases of the Skin at St. Thomas's Hospital.

NIX, R. E., B.A., M.B., B.C.Cantab., L.R.C.P., M.R.C.S., appointed Resident House-Physician to St. Thomas's Hospital.

PERSHOUSE, F., L.R.C.P., M.R.C.S., reappointed Non-resident House-Physician to St. Thomas's Hospital.

RAMSDEN, Herbert, M.B., L.R.C.P.Lond., M.R.C.S.Eng., appointed Deputy Medical Officer for the Saddleworth Rural Sanitary District.

RANSOME, Arthur, M.D.Cantab., appointed Consulting Physician to the Manchester Hospital for Consumption and Diseases of the Throat and Chest.

RICHARDSON, S. W. F., B.Sc.Lond., L.R.C.P., M.R.C.S., reappointed House-Surgeon to St. Thomas's Hospital.

RUDALL, J. F., M.B., B.S.Melb., M.R.C.S., reappointed Ophthalmic House-Surgeon to St. Thomas's Hospital.

RUDD, Arthur, M.R.C.S., L.R.C.P.Lond., appointed Medical Officer for the First St. George's District of the Parish of St. Giles, Camberwell.

SELBY, Mr. F. J., appointed Medical Officer for the Workhouse of the Runcorn Union.

SYME, W. S., L.R.C.P., L.R.C.S.I., appointed Medical Officer for the Third District of the St. Neot's Union.

SYMONS, R. Fox, L.R.C.P., M.R.C.S., reappointed Clinical Assistant in the Special Department for Diseases of the Ear at St. Thomas's Hospital.

THOMPSON, G. W., B.A., M.B., B.C.Cantab., L.R.C.P., M.R.C.S., reappointed House-Surgeon to St. Thomas's Hospital.

WILSON, Arthur C. J., L.R.C.P.Edin., M.R.C.S.Eng., reappointed Medical Officer of Health to the Thurstone Local Board.

WINDSOR, C. W., M.A., M.B., B.C.Cantab., reappointed Non-resident House-Physician to St. Thomas's Hospital.

WINTER, L. A., M.R.C.S., L.R.C.P.Lond., appointed Medical Officer for the Second District of the Bridge Union.

DIARY FOR NEXT WEEK.

MONDAY.

ROYAL COLLEGE OF SURGEONS, 5 P.M.—Mr. Raymond Johnson's Lectures on Tumours of the Breast. Lecture I.

LONDON POST-GRADUATE COURSE, Bacteriological Laboratory, King's College, W.C., 3 to 5 P.M.—Lecture: Tuberculosis and Leprosy. Practical Work: Staining Sputum and Sections. London Throat Hospital, Great Portland Street, 8 P.M.—Mr. Charles Wilkin: Aural Polypi.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN, 40, Leicester Square, W.C: Paper by Mr. Edmund Owen: On the Treatment of Carious Milk Molars. Casual communications by Mr. S. A Coxon: The adjustment of spiral springs. Mr. W. G. Routledge will show a low voltage motor.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr. Corner: Developmental Insanity. Circular Insanity.

THE CLINICAL MUSEUM, 211, Great Portland Street.—Open at 2, Lecture at 4.

WEDNESDAY.

ROYAL COLLEGE OF SURGEONS, 5 P.M.—Mr. Raymond Johnson's Lectures. Lecture II.

POST-GRADUATE LECTURES, Metropolitan Hospital, N.E., 5 P.M.—Mr. Walsham: Diseases of the Nose and Naso-pharynx.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 1 P.M.—Dr. Payne: Lupus Vulgaris.

OBSTETRICAL SOCIETY OF LONDON, 8 P.M.—Specimens will be shown by Dr. Crawford, Dr. Blacker, Dr. Lewers, Dr. Horrocks, Dr. Cullingworth, and Mr. J. Bland Sutton. Dr. Remfry: Ligature and Division of the Upper Part of both Broad Ligaments, and the result as compared with that following Removal of the Uterine Appendages. Dr. Braithwaite: A case of Adenoma of the Portio Vaginalis Uteri forming a Depressed Sore or Ulcer.

POST-GRADUATE COURSE, West London Hospital, Hammersmith Road, 5 P.M.—Mr. Keetley: Orthopædic and other Surgical Cases.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and Epileptic, Queen Square. 2 P.M.—Dr. Charlton Bastian, F.R.S.: Aphasia and other Speech Defects. Hospital for Sick Children, Great Ormond Street, 3.30 P.M.—Mr. Bernard Pitts: The Treatment of certain Congenital Deformities in Children. Central London Sick Asylum, Cleveland Street, W., 5.30 P.M.—Mr. Watson Cheyne: Cases in the Wards.

FRIDAY.

ROYAL COLLEGE OF SURGEOES, 5 P.M.—Mr. Raymond Johnson's Lectures. Lecture III.

SATURDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M.—Dr. Percy Smith: Alcoholic Insanity.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTHS.

GRANT.—At Egmore, Madras, on April 28th, the wife of Surgeon-Captain A. E. Grant, M.B., I.M.S., of a son.

LANSDOWN.—At 39, Oakfield Road, Clifton, Bristol, on May 15th, the wife of Robert G. Poole Lansdown, M.D., of a son.

PANTON.—At Moss House, Bolton, on May 12th, the wife of J. E. Panton, M.D., of a son.

WIGMORE.—At 39, Compaigne Gardens, N.W., on May 25th, the wife of Arthur William Wigmore, L.R.C.P.Lond., of a son.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

TREATMENT OF DUPUYTREN'S CONTRACTION.

SURGEON, R.N., writes: One of our officers has Dupuytren's contraction of the middle finger, right hand. (1) Is this disease hereditary, this officer's father and sister being similarly affected? (2) What is the best treatment in a very slight contraction, but with the skin firmly attached to the fascia?

A CASE FOR DIAGNOSIS.

AN OLD MEMBER OF THE ASSOCIATION, aged 81, is repeatedly attacked with pain about the bladder and constant calls to urinate. When a catheter or sound is passed it appears to push before it a movable body just within the prostate. There is no hæmorrhage and the urine is normal. Alkalies and anodynes do not remove the irritation. Can any reader suggest anything to relieve the suffering, which is growing worse?

ANSWERS.

R.S.—Our correspondent's questions are not medical.

INSUFFLATOR.—A qualified English practitioner desiring to practise in Switzerland is required to pass an examination at a university in that country. The examination may be passed at Basle or Zurich or Berne in German, or at Geneva or Lausanne in French. The applicant should obtain from one of his teachers in this country an introduction to a professor at the university at which he proposes to pass the examination.

THE LIGHTING AND VENTILATION OF SCHOOLS.

DR. C. STENNETT REDMOND (Gateshead) writes: "M.D." will find *School Hygiene*, by Arthur Newsholme, M.D. (London: Swan, Sonnenschein), a practical and useful treatise on the above.

EFFECT OF ERASURE FROM THE "MEDICAL REGISTER."

JUVENIS and W. G. K.—The power of the General Medical Council extends only to the erasure of a practitioner's name from the *Register*. It cannot prevent him from practising. If the person in question continues to use titles of which he has been deprived or signs certificates as a legally-qualified practitioner, he is liable to prosecution under Section XL of the Medical Act (1858).

PAYMENT FOR POLICE CALLS.

A CORRESPONDENT at Horley complains that having been called by a policeman to a tramp taken ill on the road, whom he directed to be taken to the local infirmary, he was told on asking for his fee that it is not the custom to give fees in such cases in that district. We think that he has good cause for complaint, seeing that if he lived a few miles nearer London, that is within the metropolitan district (which extends to Epsom), he would be entitled by police regulations to a fee of 3s. 6d. for a day visit and 7s. 6d. at night. We would advise that written application for the fee should be made to the police superintendent of the district, stating the above facts, and that the correspondence should be forwarded to one of the hon. secretaries of the Police Surgeons' Association—Mr. Lowndes, of Liverpool, or Mr. Hopkins, of Bath. Until some settlement is arrived at our correspondent is justified, we think, in declining to attend to police cases.

THE TREATMENT OF DELIRIUM TREMENS.

DR. A. S. BARLING (Lancaster) writes: Hyoscine was introduced into the Leeds Infirmary in 1887 by Dr. Barrs when I was house-physician. I gave it many times during my residence there, and also afterwards through my three and a-half years' house-surgeoncy at the North Staffordshire Infirmary. I have never known it to fail in cases of delirium tremens if thoroughly tried in increasing doses. It acts as a rule in less than five minutes. In a severe case in a powerful man with a compound fracture of the leg I have given one-twentieth of a grain in less than an hour, of course in several doses.

INCOME-TAX.

I. T. writes: I am purchasing my practice by a series of yearly payments. Can you kindly inform me whether in making the income-tax return I should deduct the amount of these payments?

*** "I. T." cannot deduct the money paid for his practice, whether he pays it in a lump sum or by a series of instalments. The special balance sheets prepared for making out doctors' returns to the Inland Revenue, issued by the Income-tax Repayment Agency, 25, Colville Terrace, Powis Square, London, W., give all the items which can be deducted as expenses.

A MEMBER will find the information he wishes given in the above answer.

NOTES, LETTERS, Etc.

ERRATUM.—In the report of the annual dinner of the Charing Cross Hospital, it should have been stated that the number of casualties treated in the hospital last year was 11,230, and not 25,504 as stated.

THE GRIFFITHS FUND.

DRS. E. LE CRONIER LANCASTER (Winchester House, Swansea) and D. F. BROOK, write: Will you kindly acknowledge the following further subscriptions to the above fund:

	£	s.	d.
Amount already acknowledged	94	12	6
T. Lauder Brunton, London	2	2	0
Lawson Tait, Birmingham	2	2	0
A. Garrod Thomas, Newport, Mon.	2	0	0
A. Sheen, Cardiff	1	1	0
G. Herbert Hopkins, Swansea	1	1	0
C. J. Cullingworth, London	1	1	0
W. E. Snow, Bournemouth	1	1	0
G. Grice-Jones, Pontardawe	1	1	0
Henry T. Butlin, London	1	0	0

ANSELL V. TAIT.

DR. G. T. KEELE, Treasurer (81, St. Paul's Road, Highbury), writes THE following additional subscriptions have been received towards defraying the legal expenses in the above case.

	£	s.	d.		£	s.	d.
Mr. Howard Marsh ...	5	5	0	Dr. B. G. Morison	1	1	0
Mr. W. A. Meredith ...	2	2	0	Mr. W. H. Paine	1	1	0
Dr. W. S. Playfair	2	2	0	Dr. W. E. Porter	1	1	0
Dr. A. Garrod Thomas ...	2	0	0	Mr. E. B. Reynolds	1	1	0
Dr. W. S. Church	1	1	0	Mr. Pattmore Sheehy ...	1	1	0
Sir Dyce Duckworth ...	1	1	0	Mr. A. Q. Silcock	1	1	0
Mr. G. Angus Hunt ...	1	1	0	Mr. W. R. H. Stewart ...	1	1	0
Mr. Reginald Harrison ...	1	1	0	Mr. Waren Tay	1	1	0
Mr. C. A. James	1	1	0	Dr. Samuel West	1	1	0
Mr. W. J. S. Ladell ...	1	1	0	Dr. J. J. Lough	0	10	6
Mr. E. H. May	1	1	0	Dr. Robert Ostlere	0	10	6
Dr. A. Morison	1	1	0	Mr. Stephen Paget	0	10	0

JOHN OF VIGO'S BOOK ON SURGERY.

MR. J. Y. W. MACALISTER, Resident Librarian, Royal Medical and Chirurgical Society, 20, Hanover Square, W., writes: With the permission of our Honorary Librarians, I beg leave to protest against the statement made by the author of the article "Archæologica Medica" in the BRITISH MEDICAL JOURNAL of May 26th reflecting upon the condition of our copy of the first edition of Vigo's works. Our copy has been religiously preserved in the exact condition in which it was first received in the Library by my esteemed predecessor, the late Mr. B. R. Wheatley. Mr. Wheatley was too true a book lover to have submitted our copy to the tender mercies of a bookbinder, for in its present condition of semi-ruin as regards the binding, it is infinitely more interesting, and even of higher market value, than the choicest binding of a Zaehnsdorf could make it. The book itself is complete and perfect, and is in the original binding, which consists of stout beech boards covered with thick sheepskin, fastened on with leather thongs and with the remains of brass clasps. The front cover has been partly destroyed, but the portion that remains is an extremely interesting specimen of early stamped work.

I greatly admire the learning displayed by the writer of the article, but I should tremble to see him invested with power to deal with the ancient treasures of such a library as ours. I may add that the book which he says is "neglected" has been kept from the first in a locked glazed case, from which it can only be taken by special permission, and it cannot be taken away from the Library without a special order of the Council.

ANTIMALARIAL LEMONADE.

THE following is a receipt for making a lemonade which has a great reputation among the Italian peasantry for the prevention and cure of malarial fevers: Cut a fresh lemon, including the rind, into thin slices and boil it with three glasses of water in an earthen saucepan until the bulk is reduced by two-thirds; filter it through linen, squeeze the residue, and set the fluid to cool through the night.

THE MODE OF PROPAGATION OF CHOLERA.

F. R. C. writes: In looking over my notebooks I find the following, written in 1870 by a medical correspondent of the *Bombay Times*:

Surgeon-Major Bryden's view.

"Earth grown, wind blown:
Air and vapour hatch'd and sown:
Thus the pest o'er earth has flown."

C. N. Macnamara's view.

"Man bred, man shed;
Anon diffused in watery bed—
Multiplied and further spread:
Thus the pest o'er earth has sped."

Chemistry of the Seventeenth Century.

At the closing meeting of the Philosophical Society of Glasgow Professor Ferguson submitted a paper on Some Early Treatises on Technological Chemistry. At the beginning of the seventeenth century chemistry was pursued in Paris under the name of pharmacy by a man named Jacques Gohory, whose physic garden ultimately formed part of the Jardin des Plantes. At the same time in the garden there was founded a school of medicine. The first occupant of the chair of chemistry in that school was a Scotsman named William Davisson, who was succeeded by Lefebvre, who afterwards came to be chemist at St. James's. At the same time there was a man outside this school named Jean Beguin (John Beguinus). The practice of the teachers at the time was to dictate to their students, and in order to save himself the trouble of dictating and his students the trouble of writing, so that they might attend to the demonstrations, he wrote a book, which was printed privately. Professor Ferguson had obtained a copy of this edition, which he exhibited. This copy was pirated at Cologne. This led Beguinus to publish an edition of the textbook which appeared in 1612; it was originally written in Latin, and in 1615 a French edition appeared. In 1669 an English translation was published. The textbook had a large circulation, having altogether gone through no fewer than fifty-three editions. Beguinus's book was an indication of the energy that was expended on the study of chemical science during the seventeenth century.

The Hackney Union Schools.

At the Brentwood (Essex) Court House on May 26th, Ella Gillespie, aged 54, was formally charged before the Hon. Frederick C. E. Petre with ill-treating several children placed under her charge whilst she was a nurse at the Hackney Union Schools at Brentwood. The accused was discharged from the schools five weeks ago in consequence of the allegations of cruelty made against her. On May 2nd, the Hackney guardians decided to institute a prosecution, and a warrant for her apprehension was issued, but in the meantime she had quitted the neighbourhood, and was not discovered until May 25th. She was noticed by a constable who was in search of her looking out of a window at 334, Strand, and he succeeded in arresting her. In the warrant of her arrest she was charged with having generally ill-treated the children. The dates of the alleged cruelties were fixed between April and October last year, and the counts upon which the guardians instituted the prosecution were—basket drill, accompanied by acts of cruelty, whipping the children on their nude bodies with stinging nettles, knocking children's heads against a wall, cutting a child's head by striking it with a bunch of keys, knocking children down and cutting their heads; making children kneel on their bare knees on the edge of the wire guards surrounding the hot water pipes; immersing the children's heads in buckets of water, and continually punishing the children without authority by beating them upon their heads and bare feet.

A Judge on Medical Certificates.

In the Queen's Bench Division on May 23rd, Mr. Corner applied to Mr. Justice Hawkins for the postponement of the case of Graham *v.* Parslow and Another. The plaintiff, he said, was too ill to attend, and he had a medical certificate to that effect. He asked that the case should stand over until the plaintiff was well enough to attend. Mr. Justice Hawkins said he must have the fact on affidavit. He could not accept a doctor's certificate. He was once imposed upon by a certificate which said that a lady was excessively ill and could not stir, and within an hour he saw her hobbling about the court. He said, "No more certificates for him. It should be known that they could not act upon them. The facts must be on affidavit." The case was allowed to stand over to be mentioned again when the facts were verified by affidavit.

The Mandrake.

The attention of Dr. Alexander Paterson, of Fernfield, Bridge of Allan, N.B., has been called to this remarkable and very interesting plant, from the fact that it has not only flowered, but also fruited in the garden there for the first time in forty years, since it was planted. He has never seen it in fruit before, except on one occasion, and that was in the Edinburgh Botanic Gardens some years ago. Dr. Paterson will be glad if any readers can give any further information regarding the mandrake, its therapeutic uses, etc. He sends us the following note on the subject: The "mandrakes" of Gen. 30, 14, 18, and Cant. 7, 13, are, in Hebrew, Dudaim, which word Gesenius translates as "love apples." These fruits have been used from a very high antiquity as philtres or love-potions, as the foregoing passages from the Old Testament seem to indicate. The LXX translate Dudaim by Mela Mandragoron, thus enabling us to identify the plant as that known to us by the name of Mandragora Officinalis. The mandrake belongs to the natural order of Solanaceæ, an order with which most people are acquainted through the nutritious tuber of the potato and the narcotic leaf of tobacco. Its leaves spring directly from the root, in somewhat the same fashion as those of a lettuce, before it shoots into flower, and its purplish blossoms are succeeded by a yellow berry or "apple," which still ripens in Palestine at the time of the wheat harvest, Gen. 30, 14, in the month of May. An overdose of this fruit is said to produce a sort of temporary insanity. The root of the mandrake is spindle-shaped, and a lively imagination can see in it a rude resemblance of the human figure. From the remotest ages it has been credited with magical virtues, and supposed to confer superhuman powers on its possessor. The most potent specimens were those which grew under a gibbet, where a malefactor hung in chains. But to obtain a root was a perilous undertaking. It was believed that, on being torn out of the earth, the mandrake uttered a groan, which, whosoever heard, dropped dead on the spot. The approved method was to fasten the plant to a dog's tail, and beat the animal till his struggles pulled it up. The dog heard the groan and died, but those who directed the operation escaped by having their ears stopped with pitch or wax.

LETTERS, COMMUNICATIONS, Etc., have been received from:

(**A**) Professor T. Clifford Allbutt, Cambridge; An Outsider; Mr. W. Armstrong, Buxton. (**B**) Mr. J. F. Braga, Sunbury; Messrs. O. Bruster and Co., London; Dr. F. Beach, Kingston Hill; R. C. Bailey, M.B., London; Mr. J. T. Boyes, London; L. B. Beddie, M.B., Strichen; Mr. N. D. Best, Edgbaston; Mr. J. Bark, Liverpool; Mr. L. A. Bidwell, London; Mr. G. G. Bullmore, Newquay. (**C**) Mr. J. F. Colyer, London; Mr. Cross, Forest Hill; Mr. W. H. Clark, London; Dr. R. W. Carter, Weymouth; Dr. G. W. Crowe, Worcester; Mr. L. J. G. Carré, London; Mr. H. W. D. Cardew, London; Mr. C. Campbell, Saddleworth; Dr. C. C. Claremont, Southsea; Dr. W. W. Campbell, Duns; Dr. H. Campbell, London; Dr. J. Cagney, London; Dr. W. A. Carline, Lincoln. (**D**) Dr. J. Dalberg, Manchester; Dr. W. Downie, Glasgow; Mr. A. Davis, Cardiff; Mr. E. de Sinner, London; Mr. P. R. W. de Santi, London. (**E**) Mr. E. H. Ellison, Castleton; G. G. Eyre, M.B., Cape Town; Enquirer. (**F**) Mr. H. A. Franklin, London; G. W. S. Farmer, M.B., Oxford; Mr. W. Fearnley, London; Professor E. Fawcett, Bristol; F. R. C.; F.R.C.S. (**G**) Mr. H. H. Graham, London; G.B.B.; R. M. Gilchrist, M.B., Bolton-le-Moors; P. R. Griffith, M.B., Cardiff; G. P.; Dr. H. R. Greene, Knaphill. (**H**) H. R. Hutton, M.B., Manchester; Mr. G. E. Hall, Buxton; Mr. H. M. Holt, London; Dr. W. Harrison, Matlock; Mr. H. N. Hardy, London Dr. J. P. Henry, London; Mr. E. B. Holland, London; Dr. L. Henry, Melbourne; Mr. G. A. Hawkins-Ambler, Liverpool; Mr. E. Howgate, London. (**I**) Dr. C. R. Illingworth, London; G. W. Isaac, M.B., London; Inquest; Inquirer. (**J**) Juvenis; Mr. T. Jackson, Holbeach; Dr. E. L. Jones, Cambridge. (**K**) Mr. N. F. Kendall, London; Dr. G. T. Keele, London. (**L**) Mr. T. Laffan, Cashel; E. Le Cronier Lancaster, M.B., Swansea; Ladas; Mr. H. Littlewood, Leeds; Dr. A. E. A. Lawrence, Clifton. (**M**) Dr. J. Moore, London; Mr. F. C. Melhado, London; Mr. F. W. D. McCachen, Rugby; J. MacNamara, M.B., London; Mr. B. F. Meadows, Hastings; Mr. M. McBride, Southend; Mr. A. A. Millward, London; Member B. M. A.; Dr. M. M. Moore, Coventry; S. G. Morris, M.B., Swansea; M.D.; Mr. C. Mercier, Southend. (**N**) Mr. F. W. Nutt, London; Mr. A. C. Morton, Norfolk. (**O**) Oxon; Old Member B. M. A.; Mr. S. Osborn, London; Mr. E. M. H. O'Connor, Market Deeping; Mr. W. H. O'Meara, Holbeach. (**P**) Dr. C. Porter, Stockport; Mr. R. Pollock, London; Dr. R. W. Philip, Edinburgh; Mr. C. M. Perry, Tunbridge Wells; Dr. F. C. H. Piggott, Teignmouth; W. Pyle, M.B., Portmahomack; W. A. Paterson, M.B., Bridge of Allan; W. F. Phillips, M.B., St. Austell; Pentagon. (**Q**) Qualified Assistant of Ten Years' Standing. (**R**) The Royal College of Surgeons in Ireland, the Registrar, Dublin; Mr. A. Roche, Dublin; Dr. T. C. Railton, Manchester; Dr. W. Rutherford, Edinburgh; Mr. J. Rankin, Kilmarnock; R. S.; Dr. J. C. Russel, Southport. (**S**) Messrs. Squire and Sons, London; Messrs. F. Stearns and Co., London; Dr. A. S. Sheen, Cardiff; W. R. Smith, M.B., Rhyl; Surgeon R.M.; Dr. A. Strange, Shrewsbury; Dr. T. Smith, Lancaster; Dr. J. F. J. Sykes, London; Dr. J. L. Smith, Cambridge; Messrs. Street Bros., London; Mr. E. F. Stephenson, Lismore; Sufferer; J. L. Siordet, M.B., Geneva; *Science Progress*, Editor, London; Mr. W. Sansdowne, Clifton. (**T**) Dr. T. W. Trend, Southampton; Mr. W. T. Thomas, Liverpool, W. E. Tresidder, M.B., Nottingham; Dr. J. Taylor, London; Dr. J. C. Thresh, Chelmsford. (**V**) Mr. T. J. Verrall, Brighton. (**W**) Dr. W. W. Wagstaffe, Sevenoaks; Dr. H. Worthington, Bradford; Mr. C. F. Williamson, Horley; Dr. K. R. M. Wilson, Belfast; W. W. Webb, M.B., Netley Abbey; R. H. Woods, M.B., Dublin; W. J. G.; Dr. F. H. Walmsley, Dartford; Mr. A. Willett, London; W. G. K. (**Y**) Young Practitioner, etc.

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*** **In forwarding books the publishers are requested to state selling prices.**

AN ADDRESS
ON
THE TREATMENT OF BLEEDING AND OTHER UTERINE FIBROIDS BY REMOVAL OF THE APPENDAGES.[1]

BY ALBAN DORAN, F.R.C.S.,
Surgeon to the Samaritan Free Hospital; Vice-President, Obstetrical Society of London.

EXPERIENCE shows that removal of the ovaries and tubes involves suppression of menstruation. Experience also shows that removal of the appendages stops the severe bleeding associated with some cases of myoma of the uterus, and usually does so without entailing much, if any, neurotic disturbance. It also arrests the growth of the "fibroid," excepting in the case of certain varieties of that form of tumour. These facts are important, for though removal of the appendages is sometimes difficult, it is certainly not so dangerous as hysterectomy, whilst the hæmorrhages may be the sole source of trouble in a case of "fibroid." The explanation of the good effects of the operation in question is by no means clear. Pathologists have shown that both the ovaries and endometrium undergo changes in fibroid disease, but the significance of these changes is obscure; indeed, they seem to me to be purely secondary. As to the cutting off of nutrition by ligature of the ovarian vessels, that may account for the arrest of menstruation. It cannot satisfactorily explain why the fibroid grows less, for the uterine arteries remain unligatured and can supply the tumour with an indefinite amount of blood. I need not discuss nerve influences; they may be left to the consideration of neurologists.

In comparing the spontaneous disappearance of uterine fibroids[2] with their disappearance or conspicuous diminution after removal of the appendages, it must be remembered that in the latter case pregnancy, so powerful a factor in the former, cannot occur. Again, it must not be forgotten that the menopause is often postponed in cases of fibroid neglected, or treated by purely palliative measures, nor does the tumour begin to decrease immediately after the menopause. Case II in the present series was 45 years old, the eldest of the six. The tumour was steadily increasing, and menorrhagia was severe. Directly after the operation the period was reduced to a few spots of "show" at long intervals, whilst the tumour steadily diminished in size. The result could not be due to the coincidence of a natural menopause, and the same may be said of the five other cases, all younger.

One interesting result of successful removal of the appendages is the advent of marked stoutness. This was seen in Cases I, II, and V. In all the corpulence was marked and clearly represented more than mere restoration to health.

The well-marked neurotic symptoms which not rarely follow removal of the ovaries are well known and should always be recorded by the operator in a report of his cases. They differ entirely from the symptoms of hæmatocele or pelvic inflammation, septic or otherwise, setting in late after operation. They are often most marked when the checking of the period is most complete from the first, as in Case I. The severe nerve disturbance of an artificial menopause is a strong contraindication to removal of the ovaries for a purely functional neurosis aggravated at the menstrual period. For if a woman, aged 25, suffer mentally at her period she is likely to suffer worse from its premature suppression. In cases of bleeding fibroid neuroses are seldom present excepting as effects of anæmia.

In all the six cases here recorded neuroses were observed after operation. In Cases II III. IV, and V flushings of the face, a well known sign of the menopause, occurred, and in Case II as early as the eighth day. This symptom appeared on the twenty-first day in a patient on whom I operated in February, 1894. In Case I there was a feeling of extreme weakness and discomfort when a slight show appeared during the third week. The miliary eruption soon after operation must not be ranked as a neurosis of the same class, if it be a neurosis at all. In Case VI there were free perspirations and numbness of the upper extremities. In Case III there was severe lumbar pain three months after operation, but the suffering was in great part due to a chill. None of these neuroses involve any danger.

The surgeon must always endeavour to remove every trace of ovarian tissue. This is easy and safe when, as in Case IV, the ovarian ligament is elongated. The task, however, not rarely proves to be impossible. The ovarian ligament, often very long when its ovary has become a large cystic tumour, is, in the normal condition, frequently too short to allow of a safe pedicle if all the ovary be cut away. In cases of large myoma this ligament frequently remains unstretched and not hypertrophied. Moreover, just as small myomata sometimes develop on the ligament close against the ovary, so, on the other hand, semi-detached pieces of ovarian tissue may lie on the ligament close against the uterus. The operator must tie the ligature as close to the uterus as possible; then, if any trace of ovarian tissue remain on the stump, it will be on the distal side of the ligature, where it will almost certainly undergo atrophy. When the surgeon finds that the ligature, as he pulls it tight, cuts into the pedicle that means that it is cutting into ovarian tissue. The silk should be loosened and tied closer to the uterus. The ovarian ligament is very tough, and is not readily cut by the ligature silk. In Case I, though there was a distinct piece of ovarian tissue left, the catamenia were completely suppressed, nor, as other cases (II, III) here related will prove, does the leaving of a minute piece of ovarian tissue prevent the involution of a hitherto growing fibroid. We must not overlook the fact that the operation is not without danger. The appendages may be diseased and strongly adherent to the tumour and adjacent structures, as in one case which I will relate: but their separation and removal will not involve much peril if the operator be fairly experienced. The operation must not be performed when the anæmia is so marked as to involve in itself immediate danger to life. Under such circumstances the hæmorrhage should be checked for a time by local applications and ergot (if that drug is of any avail), and then tonics must be given. In the summer of 1890 I lost a case by operating too late.

The patient, a single woman aged 40, had bled severely for six years, and all kinds of treatment had been tried. She was very anæmic, and subject to frequent syncope, even when lying in bed. A solid fibroid reached to the umbilicus; the cavity of the uterus measured five and a-half inches, the cervix was expanded by a submucous growth. The urine was distinctly albuminous. The fluid blood and clots which came away at every period were very pale. On June 26th, 1890, I operated. The peritoneal cavity contained a little reddish fluid. The uterus was invaded by a large myoma, which extended into Douglas's pouch. There was also a pedunculated subperitoneal fibroid anteriorly. Hence any attempt to get away the submucous growth (which was part of the main tumour) from the vaginal side, would have been useless, and the patient was not in a condition to bear hysterectomy. I therefore decided to remove the ovaries. This was easily performed, and no ovarian tissue was left behind. Antiseptics were used without the spray. Unfortunately the faintness and albuminuria increased after the operation. On July 2nd the patient passed a few clots, the faintness grew worse, and she died on July 8th, after two severe attacks of syncope. At the necropsy no signs of thoracic disease, peritonitis, or sepsis were found. The left kidney was rather below the normal size, and its capsule was strongly adherent. There was evidence of slight subperitoneal hæmorrhage around the right pedicle, and it was loosely adherent to the parietal peritoneum, which (owing to its position on the tumour) it touched. The extreme anæmia had proved fatal. No doubt the renal disease played a prominent part in bringing about the fatal result.

I have ever since remembered the case, which I feel it my duty to report, as a warning against operating when the patient is in an acute stage of anæmia, and I remain averse to remove appendages when there is evidence that part of the tumour presents very definitely in the uterine cavity. When anæmia is steadily progressing in a case of bleeding fibroid, interference is called for as soon as possible, before the patient's health is dangerously reduced.

I will now relate in detail six cases where I operated over twelve months ago. As the benefits of removal of the appendages are not always immediate, no more recent case can be safely reported as cured. An artificial menopause is a

[1745]

[1] Read at a meeting of the Devon and Exeter Medico-Chirurgical Society, April 20th, 1894.

[2] I have discussed this question at length in a communication "On the Absorption of Fibroid Tumours of the Uterus, with a Report of a Suspected Case." (*Trans. Obstet. Soc.*, vol. XXXV, 1893.)

phenomenon which demands long and patient observation.

CASE I, aged 41. *Fibroid: Menorrhagia: Removal of Normal Appendages Four Years and One Month ago: Show during Convalescence and Nineteen Months later: Total Suppression of Catamenia afterwards.*—M. S., aged 41, single, came under my care in March, 1890. She had been subject for over seven years to great losses of blood at and between the periods, and no palliative treatment had been of any avail. I found that the uterus was bulky and anteverted; the cervix, very short, lay high up in the pelvis, the os, which was narrow and circular, looking backwards. The sound passed four inches and a half forwards and distinctly upwards; in fact, there was a fibroid in the anterior wall of the uterus. On March 28th, 1890, I removed the appendages. The right were easily reached and secured by ligature; the left were rather difficult to draw up from the pelvic cavity, as part of the fibroid enlargement of the uterus overhung them. They were secured, and then both appendages were cut away. The appendages first secured were not amputated until the ligature had been applied on the opposite side; otherwise, in searching for the left appendages, the stump of the right might have been dragged upon and the ligature loosened. Owing to the shortness of the ovarian ligaments, a minute portion of ovarian tissue was left on the distal side of the pedicle. I rather feared at the time that the object of the operation would be frustrated.

On the fourth day an eruption of sudamina appeared on the wrists, with free metrorrhagia and rise of temperature. On the thirteenth day a fresh miliary rash appeared on the abdomen, and there was distinct show. Ten days later a small clot was expelled; this was on April 20th, 1890, and the menstrual molimen was said to be present, causing a feeling of extreme debility and discomfort. After recovery from the operation, nothing like a period was seen until the last week of October, 1891, when there was show for fourteen days, not so free as before the operation. On February 6th, 1894, the patient informed me, in a letter, that she was in excellent health and had grown very stout. No show of any kind, nor the slightest menstrual molimen, had occurred since October, 1891.

The eruption of sudamina with fever and uterine hæmorrhage, observed in this case, represents a phenomenon not rare after simple ovariotomy. The eruption seems unusual after removal of the appendages for fibroid disease. I have never observed it in any of the numerous cases performed by my colleagues and myself at the Samaritan Hospital.

CASE II, aged 45. *Fibroid: Menorrhagia: Removal of Normal Appendages and of a Pedunculated Growth Three Years and Five Months ago: Steady Reduction of Tumour: Catamenia Practically Suppressed.*—E. L., aged 45, single, a patient of Mr. Canning Wilkins, of Tulse Hill, first consulted me on December 13th, 1890. She had enjoyed excellent health until three years previously, when she noticed that a tumour had developed in the lower part of the abdomen. Two years later menorrhagia set in suddenly, and was accompanied by severe frontal headaches. The tumour began to increase rapidly in size. After a chill in the early autumn of 1890, she consulted Mr. Wilkins, who found her suffering from hysterical hyperæsthesia, especially in the region of the abdomen. None of the symptoms of peritonitis were observed.

The patient was pale and thin. A tumour occupied the lower part of the abdomen, reaching to within an inch of the umbilicus. Three lobes could be distinguished. Its appearance is represented in Fig. 1. The

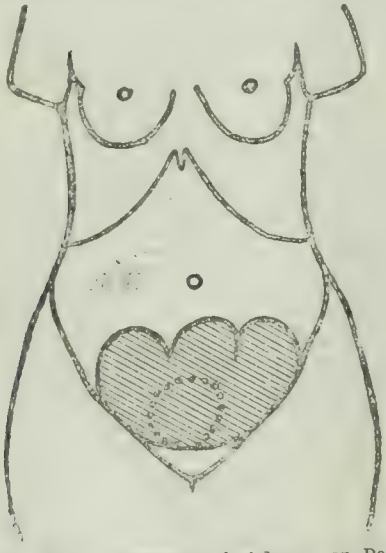


Fig. 1.—Case of E. L. Appearance of abdomen on December 14th, 1890. The dotted line shows the outline of the tumour on September 15th, 1893.

right lobe was the largest; the lobe on the left side was freely movable. The large right lobe descended into the pelvis, involved the upper part of the cervix, which was very short and invaded the broad ligament. The os lay so high, close against the pubes, that the sound could not be safely or satisfactorily introduced. Touching any part of the tumour caused pain. Ergot had proved unavailing to check the profuse show which occurred every four weeks, and the tumour was growing larger. On December 27th, 1890, I performed abdominal section. On pushing up the omentum I found the right appendages projecting, low down and rather anterior to their normal position, from the outer surface of the right lobe, which came close to the brim of the pelvis on the right side. The valley between them was just wide enough to admit my fingers when I drew up the appendages. The middle lobe of the fibroid projected into the upper part of Douglas's pouch, and four or five small pedunculated growths hung from its back aspect. The same lobe blocked the left side of the pelvis, invading the left broad ligament and pushing the left appendages upwards and backwards. In front of the appendages lay the left lobe, which was pedunculated. Thus the left side of the pelvis was more involved than appeared on bimanual palpation; the tumour invaded both broad ligaments, and the appendages were fairly accessible. Thus removal of the ovaries and tubes would be safe, and the symptoms indicated it, whilst the tumour would have been, owing to its connections, difficult and dangerous to remove. The pedunculated left lobe was, however, unavoidably bruised, so I transfixed and ligatured its pedicle with No. 3 silk, and cut through it, after enucleating the lobe, so that the stump of the pedicle consisted of nothing but capsule. The left appendages were easily removed. The right gave more trouble. The vessels in the infundibulo-pelvic ligament were large; I secured them separately, and then transfixed the broad ligament, tied it, and cut away the tube and ovary. A very small piece of ovarian tissue was left on the distal side of the ligature. The ovaries together weighed 2 ounces, and the right contained a large recent corpus luteum.

Recovery was rapid. On the eighth day the patient suffered from flushings of the face. On September 15th, 1893, I saw her for the first time since her recovery. She had grown stout, and ever since the operation the period had been reduced to the appearance of a few spots of blood at intervals of four or five months. In the spring of 1893 she felt aching pains in the tumour, which seemed to grow slightly larger for awhile. I examined the pelvis and abdomen. The appearance of the tumour is represented (Fig. 1). It was reduced to a small (almost smooth-surfaced) spherical mass, rising hardly 2 inches above the pubes. It lay chiefly to the right of the abdominal cicatrix, which was firm and sound. The mass still projected be hind the cervix, which was short. The sound passed forwards 3½ inches.

CASE III. *Large Fibroid: Menorrhagia: Great Pain: Removal of Normal Appendages Three Years and Three Months ago: Great Reduction of Tumour and Disappearance of Pain: Partial Suppression of Catamenia.*—M. G., aged 41, single, a patient of Dr. McClement, R.N., came under my care in January, 1891. Two years before a small tumour was discovered rising above the left groin. She consulted Mr. Knowsley Thornton, who prescribed medicine, which gave considerable temporary benefit. By January, 1890, the tumour had grown very large; afterwards its increase was slow. The patient's health was bad, as severe lumbar pains came on about a week after the catamenia, and lasted four or five days. They were most severe just before their disappearance. The catamenia appeared every four weeks, the show lasting about three days, and often reappearing for a day within a week later. On the first day the show was profuse. The lumbar pain succeeding the period was the particularly distressing feature in her condition. The period was not more painful and hardly more profuse than before.

The lower part of the abdomen (Fig. 2) was occupied by three spherical

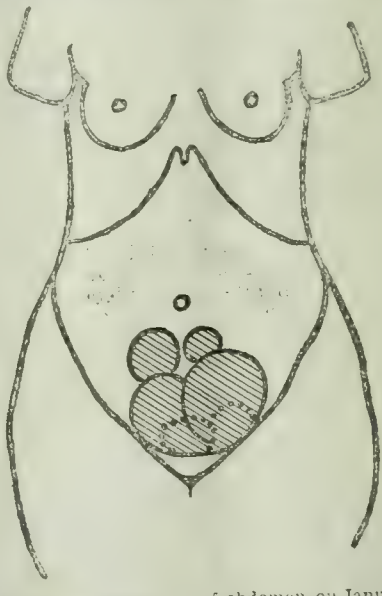


Fig. 2.—Case of M. G. Appearance of abdomen on January 21st, 1891. The dotted lines show the extent of the tumour on April 5th, 1894.

solid growths, all movable as though pedunculated. A fourth mass evidently included the uterus, being continuous with the cervix, which lay high up behind the pubes. This mass filled Douglas's pouch.

On January 24th, 1891, I operated. The fundus of the bladder was drawn up 2 inches above the pubes, and lay on the enlarged uterus, very much in the way. The left appendages were to the left of the large spherical pedunculated growth in the left groin. The ovary was much enlarged, measuring about 2 inches in long diameter. It contained a ripe corpus luteum and a dropsical follicle. I removed the appendages, securing separately the enlarged vessels in the infundibulo-pelvic liga-

ment. The ovarian tissue was entirely removed. The right appendages lay inconveniently low down on the side of the uterus. I removed them, securing the vessels separately as on the left side. A minute piece of ovarian tissue remained on the distal side of the stump. In this case the part of the fibroid which lay unpedunculated in the uterine wall had burrowed into both broad ligaments, stopping short of the mesosalpinx,[1] that is to say, that portion of the broad ligament which lies between the tube and the ovary; had that fold been opened up by the growth, of course the appendages could not have been removed.

The patient made a rapid recovery. In April, 1891, however, she suffered from very severe lumbar pain, with menorrhagia. Dr. F. McClement, R.N., who attended her when these symptoms appeared, informed me that she caught cold at church two days before the violent lumbar pain came on. She had also been exerting herself a great deal for several weeks before the illness. The pains disappeared in a few weeks, and never recurred. In October she was in excellent health; in December, 1891, she wrote to say that she had never felt so well since the appearance of the fibroid.

On April 5th, 1894, the patient, now 44 years of age, came to London for examination. I found that the mass of spherical fibroids, which at the time of the operation nearly reached the umbilicus, was reduced to two small swellings which lay in the hypogastrium (Fig. 2) and could hardly be detected except by firm pressure. The pelvic mass was reduced to a small swelling behind the cervix. The sound could easily be passed two inches forwards. The pain from which the patient suffered before the operation had entirely disappeared. In 1893 the patient was troubled with headaches and general heaviness at times, otherwise her health was good. Flushing of the face was frequent till last winter. Hardly any show was seen in 1893, but smart uterine hæmorrhage occurred in January and February, 1894. The patient appeared to be in excellent health; she had not grown stout.

CASE IV. *Fibroid: Dysmenorrhœa: Removal of Normal Appendages Two Years and Four Months ago: Podagra during Convalescence: Steady Reduction of Tumour: Total Suppression of Catamenia.*—M. B., aged 35, single, a patient of Dr. Beeby, of Bromley, Kent, came under my care in November, 1891. She was a gouty subject, and had suffered from podagra repeatedly, the last attack occurring three months before I saw her. Two years previously she was laid up with what she termed "inflammatory indigestion." For the last twelve months she had noticed an abdominal swelling. Dr. Beeby wrote: "On October 19th, 1890, I was called to see her, and found her complaining of pain in the abdomen running through to the back, and she said that a doctor had told her she was subject to gravel. I found the bladder partly full of water. She then told me that she had not passed any since the evening before, and that when the attacks of pain came on she usually had a difficulty in passing water." The urine was drawn off and then a tumour was discovered, rising half way to the umbilicus. The period was regular, appearing every fourth week, and very painful on the first day. There was, it is interesting to note, no menorrhagia.

I found a solid tumour in the hypogastrium (Fig. 3). It was bilobed, rising on the right side half way to the umbilicus; the top of the left lobe was lower and lay in the left groin; the fundus of the uterus was in front of this lobe, about 2 inches above the pubes. The cervix was short, high up in the pelvis, and displaced to the left; it was continuous with the left lobe of the tumour, which descended into Douglas's pouch. The sound entered 3 inches.

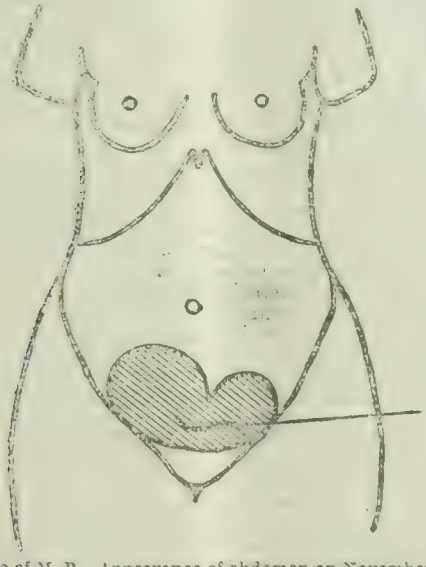


Fig 3.—Case of M. B. Appearance of abdomen on November 8th, 1891. The straight line on the left points to the fundus uteri.

The operation performed on December 3rd, 1891, was rather difficult, and the bladder was drawn high up, lying much in the way. The lobes had invaded the broad ligament, but fortunately, as in Case III, the mesosalpinx was not involved. Thus the left tube and ovary lay rather high on the surface of the left lobe of the tumour. Their removal was not difficult; the vessels in the outer border of the broad ligament were tied separately, being very large. The right appendages were hard to find. They were jammed between the bulging right lobe and the bony pelvis. The mesosalpinx contained three large lacunar cysts. I snipped the wall of the uppermost cyst with a pair of scissors; it collapsed, and the cut part appeared as a wound dangerously low down. I pricked the second with a needle. The appendages were then secured, and removed without much trouble. As the ovarian ligament happened to be stretched on each side, there was no difficulty in cutting away the ovaries without leaving any ovarian tissue behind

On the eighth day an attack of gout in the right great toe occurred. It rapidly yielded to specific remedies. The patient made a speedy recovery. On April 8th, 1892, I saw the patient, who was in excellent health; she was, however, troubled with flushings of the face, especially at night. The period had not reappeared. The tumour was distinctly smaller and caused no pain. On November 10th, 1893, I saw her again. She was strong and healthy. The flushings had disappeared for over a year, and the catamenia had never been seen since the operation. The tumour could hardly be felt above the pubes. Dr. Beeby saw her on March 10th, 1894; she was then in excellent health, and no show had been seen.

CASE V. *Fibroid: Menorrhagia: Acute Perimetritis: Removal of Diseased Appendages Two Years and Three Months ago: Great Reduction of Tumour: Partial Suppression of Catamenia.*—R. L. B., aged 38, married, sterile, was seized with violent hypogastric pains in December, 1891, for which she applied to Dr. McLaurin, of Barnsbury, who called me in consultation. I found her in bed, suffering great pain; there was a tumour continuous with the uterus, too tender for satisfactory examination. In the spring of 1890 she first noticed a lump in the hypogastrium. Menorrhagia set in, and she was treated successfully for some months, when violent hypogastric pains occurred. There were the usual symptoms of perimetritis. After a few days' rest the pain passed off, the tumour feeling distinctly smaller than it was when I first saw her. It was firm and smooth, and lay chiefly to the right of the middle line (Fig. 4). The

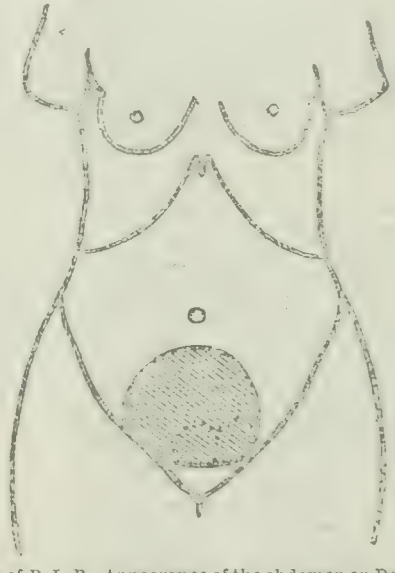


Fig. 4.—Case of R. L. B. Appearance of the abdomen on December 31st, 1891. The dotted lines represent the extent of the tumour on March 9th, 1894.

cervix was short and continuous with the abdominal tumour. On January 4th, 1892, her period set in, and very large clots were passed for several days with great pain.

On January 21st, 1892, I operated. The tumour was a general fibroid enlargement of the uterus. There were two pedunculated outgrowths on the fundus to the left, rather posteriorly; the omentum adhered to them. The right appendages were reached without difficulty; they adhered to the surface of the uterus, to the omentum, and to a coil of intestine, and bled as they were set free. The tube was obstructed and dilated, the ovary slightly enlarged. After securing the vessels in the infundibulo-pelvic ligature I succeeded, not without difficulty (as the ovarian ligament was extremely short), in keeping the ligature on the proximal side of all ovarian tissue. The left appendages were difficult to reach, as the tube, greatly dilated, ran downwards and backwards over the surface of the fibroid. By rotating the tumour a little to the right I managed to draw up the greatly dilated tube and the ovary, which was much enlarged, being about 2½ inches in length. The tube adhered strongly to the pelvic peritoneum. I at length transfixed and ligatured the appendages, and cut both, right and left, away. By the pressure of sponges I succeeded in checking the free oozing which issued from the left side of the pelvis when the appendages were freed from adhesions. This was fortunate, as it is hard to manage the drainage tube when a large tumour is left behind in the abdomen. Altogether, I felt inclined to think, after the operation, that removal of the uterus ought to have been performed. Yet notwithstanding the difficulty in removing the appendages entire—for a small piece of ovarian tissue was left on the

[1] This condition, not uncommon in cases of uterine fibroid, is explained in a drawing illustrating my paper on a "Large Cystic Myoma of Uterus of over Twelve Years' Duration removed by Enucleation: Recovery" (*Med. Chir. Trans.*, vol. lxxvi, p. 329).

distal side of the right stump—the best result of the operation was the steady diminution of the tumour, which continues to the present day. Convalescence was unexpectedly rapid, for though I had disturbed structures which had recently been in a state of acute inflammation, there was no high temperature.

The result was that the fibroid has steadily grown smaller, till on March 9th, 1894, it just rose above the pubes (Fig. 4). On the other hand, since January 10th, 1892, when the last period before the operation occurred, down till February 13th, 1894, uterine hæmorrhage has been seen, but without any menstrual molimen, six times. In the spring and summer of 1892 the patient suffered from flushings of the face, though her health was good; in August there was free show for a day or two. The next show was on December 11-12th, and was very slight. On March 8th, 1893, there was slight show for the third time, on May 19-25th free show. One day in August after a sea bath, slight show was noticed. From December 27-29th there was free show. From that date to March 9th, 1894, when I last saw the patient, no show was seen. She has grown very stout, and is in excellent general health. The feeling of weight caused by the size of the tumour when it was large has entirely disappeared, and no attacks of pelvic inflammation have occurred since the operation, nor any painful expulsion of clots. She has never been laid up since through any cause.

CASE VI. *Fibroid; Great Anæmia from Menorrhagia: Removal of Normal Appendages One Year and Two Months ago: Great Reduction of Fibroid and Complete Suppression of Catamenia.*—E. J., aged 42, single, came under my care in January, 1893, referred to me by Dr. Amand Routh, who had observed her case for over two years. Profuse menorrhagia existed and was clearly due to fibroid disease of the uterus, and Dr Routh considered the case as favourable for oöphorectomy. The patient was extremely anæmic. The period lasted for a week beginning with perfect regularity once a month. The show was very free so that a dozen napkins were required daily; large clots often passed. When 23 years old she had an attack of hæmatemesis and was dieted for seven months. I examined her and detected a spherical tumour which rose four inches above the pubes and was clearly connected with the uterus. The cervix lay close against the pubes and was continuous posteriorly with a spherical mass which extended into Douglas's pouch and proved to be the lower part of the abdominal tumour. The sound passed five inches into the uterine cavity and the body of the uterus moved independently of the mass. Dr. Routh and myself considered that immediate interference was advisable. I feared delay lest the anæmia should advance so as to become an immediate source of danger, as in the fatal case already described. I operated on February 11th, 1893. As already shown by exploration there was a large fibroid growing from the back of the enlarged uterus. There was the usual alteration in the planes and level of the broad ligaments. Thus the left appendages lay abnormally forward and high up. I had no difficulty in removing them. The right appendages were, on the other hand, far back and rather low down; the tumour could not be rotated so as to bring them forward as it burrowed under part of the right broad ligament. I succeeded in securing and removing the right tube and ovary. The bladder was drawn high up and lay rather in the way. I could detect no ovarian tissue on the distal end of the stumps of the pedicles.

This patient made a good recovery. The period has never recurred since the operation. In June, 1893, the anæmia had nearly disappeared. She complained of severe headaches with free perspirations and a feeling of numbness along the right arm and left fingers. There was also depression of spirits. On February 2nd, 1894, the patient wrote to me from Southend stating that she had resided there since July when her health had began to improve, all the above-named symptoms disappearing. At the time she wrote her health was excellent and no trace of show had been observed. I have not had an opportunity of examining the fibroid, but according to the patient's account it has disappeared. Such accounts are, however, not always absolutely trustworthy.

The after-histories of these cases show that all the patients derived marked benefit from the operation. In 3 out of the 6 menstruation stopped completely; in 3 it was reduced to a very slight or occasional show of blood. In 1 of the total suppression cases the operation was successfully performed for fibroid disease with dysmenorrhœa, but no abnormal hæmorrhage. In all the tumour of the uterus was reduced more or less. In Case I. where the menorrhagia was stopped effectually, I have not had the opportunity of examining the patient for four years, but the uterus, judging from the patient's report, is at least much reduced in size. In 4 cases where I have been able to explore the pelvis and abdomen long after the operation, the reduction of the tumour was very marked. In all 6 neurotic symptoms followed the operation. For this reason, among others, patients require care for many weeks after amputation of the appendages for fibroid disease, especially when a period is due. The case may be almost as simple as an uncomplicated ovariotomy, but this very fact must put the surgeon on his guard; otherwise, if he allows the patient to get up before the third week, she will probably suffer from severe pain and from other complications, annoying to herself and discrediting to the operation which with due care has proved so satisfactory.

In respect to failures after removal of the appendages for fibroid, they are almost certain when attempted for the cure of very large fibroids, pedunculated or otherwise, especially where the catamenia remain normal. In cases of bleeding fibroid, failure follows the leaving of follicles in ovarian tissue on the proximal side of the ligature. I know of a case where "menorrhagia" continued after removal of the appendages by a skilful and experienced operator. A large fibroid polypus was afterwards discovered in the uterine cavity. This proves how necessary it is to use the sound carefully whenever possible. In cases, however, where the cervix is pressed against the pubes, that instrument cannot always be passed, at least to its full extent and without risk, and I have known of serious results following attempts to pass it.

CLINICAL REMARKS
ON
AFFECTIONS OF THE RIGHT SIDE OF THE HEART.

BY THOMAS R. BRADSHAW, B.A., M.D., M.R.C.P.,
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THAT affections of the left cavities of the heart should seem to outweigh in importance those of the right side is the natural consequence of the fact that disease on the right side is seldom primary, and that its distinctive signs are commonly overshadowed by those of the conditions with which it is associated. It should, however, be remembered that in most cases of valvular heart disease compensation is chiefly effected by means of an increased activity of the right ventricle, that it is the failure of the latter that precipitates the onset of the common symptoms of backward pressure in the veins, and that so long as the right ventricle can propel the blood the patient may continue to enjoy immunity from urgent symptoms, in spite of extensive valvular disease on the left side. The circulation in such a patient, as I once heard an eminent physiologist observe, in some degree resembles the circulation in the fish. In the fish the blood is driven by the one ventricle through the gills, where it is aërated, and the *vis a tergo* suffices to drive it onwards into the aorta, and so throughout the systemic vessels. In like manner, when there is great destruction of the mitral valve in man, the onward movement of the blood in the aorta must be largely dependent on the *vis a tergo* on the other side of the lungs; and in a certain degree, proportionate to the damage to the valve, the left ventricle becomes a mere channel for the blood to flow through. Such being the case, it is scarcely necessary to insist on the importance of attending to the condition of the right ventricle in the study of cases of valvular heart disease.

By far the most frequent form of valvular disorder on the right side of the heart is tricuspid regurgitation, and as a diseased condition we meet with it almost daily associated with mitral disease—stenosis or incompetence—or with impeded circulation in the lungs from emphysema and bronchitis. The well-known safety-valve action of the heart is a provision by which, when the right ventricle is overdistended, the chordæ tendineæ pull upon certain parts of the tricuspid valve in such a way that it no longer closes during systole, and a certain amount of regurgitation takes place until the ventricle has got rid of the excess of blood it contained. When dilatation more or less permanent has arisen from excessive internal pressure the same mechanism comes into play. We then see the familiar symptoms of impeded circulation in the veins, and we may often distinguish a systolic murmur in the tricuspid area. When a mitral murmur is present it may not be easy to decide whether a tricuspid murmur also exists, but the latter may often be differentiated by its having a point of maximum intensity near the sternum. In cases of dropsy depending on lung disease this murmur is often distinct, and in favourable cases may be observed to diminish in intensity, and even disappear as the patient recovers.

But although increase of pressure in the pulmonary artery usually takes effect on the tricuspid valve, in some cases its action is manifested elsewhere. The well-known effect of high tension in the systemic arteries upon the aortic valves would lead us to look for similar effects on the pulmonary valves when tension is raised in the arteries of the lungs.

Probably pulmonary regurgitation from this cause would be more frequent than it is were it not for the safety-valve action of the right ventricle, and its occasional occurrence was pointed out by Dr. Fothergill.[1] I have little doubt that it was present in the following case.

CASE I. *Mitral Regurgitation; Obstructive and Regurgitant Murmurs in Pulmonary Area.*—M. M., aged 36, housewife, admitted into the Royal Infirmary under my care in the absence of Dr. Davidson, May 15th, 1893, with dropsy in legs and abdomen. Her illness began eight months before with palpitation and dyspnœa on exertion, followed by swelling in the legs. She denied having ever had rheumatism. When first admitted there was great abdominal distension, which was relieved by successive tappings, and the pulse was quick; but the general condition improved greatly in two or three weeks, and I was able to note carefully and repeatedly the exact conditions of the heart. The pulse was regular in time and force and of moderate rapidity, and was not in the least suggestive of aortic disease. The impulse was in the sixth left intercostal space, 5½ inches from the middle line and 1½ outside the mammillary line. It was regular and strong and no thrill was felt. The second sound was reduplicated, and was loudly accentuated at the pulmonary cartilage. In the mitral area there was a loud systolic murmur, conducted towards the left axilla, and heard at the back. There was also a loud systolic murmur heard at the right border of the sternum at the base of the ensiform cartilage, apparently due to tricuspid regurgitation. In the pulmonary region two murmurs were heard, the one systolic, the other diastolic. The systolic murmur was loud, had the rough quality of a direct murmur, and was conducted towards the left clavicle; the diastolic murmur was soft; it began with or directly after the second sound, was heard best in the second left intercostal space close to the sternum, and was also audible in the third space and faintly in the first. In the aortic area a much fainter systolic murmur was heard, probably radiated from the left side; but no diastolic murmur was present, nor was one heard at the lower end of the sternum nor in the carotid artery.

Primary endocarditis is as rare on the right side of the heart as it is common on the left, judging from the extreme infrequency with which signs of inflammation, either old or recent, are found in *post-mortem* examinations in this situation. I once found some vegetations, probably recent, about the size of a split pea, on the margin of the tricuspid valve, when I was making a *post-mortem* examination on the body of a patient who died in the Stanley Hospital some years ago; but I have unfortunately not been able to find the notes of the case among the records at the hospital. The following case, treated in the Royal Infirmary, seems to have been one of rheumatic endocarditis affecting the tricuspid valve.

CASE II. *Antecedent Rheumatism; Loud Systolic Murmur in Tricuspid Area.*—W. J. R., aged 17, errand boy, admitted under my care, in the absence of Dr. Davidson, June 15th, 1893, suffering from some functional nervous disorder, apparently independent of the condition I am about to describe. He stated that he suffered from shortness of breath and swelling of the legs, and that when 11 years old he was treated in the Children's Infirmary for rheumatism and heart disease. While he was under my care a systolic murmur was audible all over the precordium, and was very loud in the tricuspid area. Its point of maximum intensity was at the left border of the sternum at the level of the fourth intercostal space, and it could be heard to the right of the sternum. In passing from the tricuspid to the mitral area it diminished in intensity, and although it was loud in the former situation it was quite inaudible at the back.

In the foregoing instances the murmurs pointed with tolerable clearness to organic disease on the right side of the heart; but it need hardly be said that murmurs in the pulmonary region generally admit of a different interpretation. Not to speak of hæmic murmurs which are always systolic and are hardly likely to be misinterpreted, we sometimes hear a diastolic murmur in this situation, while yet the associated conditions make us hesitate to affirm that pulmonary regurgitation is present. In the following case the interpretation of such a murmur presented no small difficulty.

CASE III. *Mitral Stenosis and Regurgitation: Diastolic Murmur in Pulmonary Area probably Aortic in Origin.*—F. J., aged 16, confectioner, was admitted under Dr. Caton on June 3rd, 1893. She had had rheumatic fever two years, and a second attack seven months before admission. The heart was enlarged, its action tumultuous, pulse 96; there was a presystolic thrill at the apex, and a diastolic shock at the second left cartilage. At the apex we heard a long rough presystolic, and a systolic murmur, which together occupied nearly the whole cardiac cycle. In the second left interspace a *bruit* was heard with the second sound, having the peculiarity that it lessened in intensity, or even disappeared at the end of expiration. There was no systolic murmur in the same region, but one was heard at the aortic cartilage. The tumultuous action and the presence of loud mitral murmurs throughout nearly the whole cardiac cycle made the exact differentiation of the diastolic murmur very difficult, but the absence of a pulmonary systolic murmur made it unlikely that there was regurgitation, since, according to Dr. Balfour, in all cases of pulmonary regurgitation the murmur has been double. Further, the pulse was somewhat collapsing, and there was visible capillary pulse; the conclusion arrived at was that there was aortic regurgitation, and that the murmur was really aortic in origin. The indications of the sphygmograph are not often of practical value but the tracing in this case had a percussion stroke of great amplitude, and so far supported the diagnosis of aortic disease. It is not easy to say why the murmur was not heard in the usual situation.

[1] *The Heart and its Diseases*, 2nd edition, p. 180.

A CASE OF PEMPHIGUS FOLIACEUS.

By C. FIRMIN CUTHBERT, M.R.C.S.,
Surgeon to the Children's Hospital, Gloucester.

THIS case (the accompanying photographs of which were kindly taken for me by my friend Mr. Hodges, of this city) was that of a young woman, aged 27, first seen by me on June 1st, 1892.

She complained of aphthæ on and under the tongue, and on the mucous membrane of the mouth and pharynx. There was considerable swelling of the lips and tongue, salivation, and fœtor. Her condition had been getting gradually worse since March 27th. She was very constipated. She stated that for the previous three summers she had large blisters on the soles of her feet, but walked about on them all the time, with the exception of resting a day or two now and then. The blisters had gradually dried up and the skin peeled off. She had always had tender, sweating, and fœtid feet, and moist, clammy hands. She had had amenorrhœa at 20 for nine months, but dysmenorrhœa was usual. The catamenia commenced at 14, and were regular up to 20. She had been always well as a child, and no medicine had been taken likely to produce her illness. The family history was good. She had used the ordinary drying powders for the blistered feet. She was prescribed boro-glyceride to wash out the mouth and throat frequently, and a chlorate of potash mixture.

Her condition gradually got worse up to June 15th, when bullæ made their appearance over the extensor surfaces of each elbow. A few days later the conjunctivæ became swollen and suffused, and small vesicles were to be seen on them. Bullæ also appeared on the ears, and the lips became much more swollen and painful, so that the taking of nourishment was distressing to her. She was ordered to remain in bed about June 11th.

Her treatment now consisted of charcoal dusted into the mouth at frequent intervals, with the occasional local use of iodoform. For the bullæ lead lotion was kept constantly applied. Internally arsenic and general tonic remedies were employed. Six weeks later the mouth began to clean, and the patient herself improved considerably, and no fresh bullæ made their appearance, but after a few days the mouth became as bad as ever, and large bullæ made their appearance upon various parts—on the axillæ, neck, back, chest, abdomen and legs, and around the anus and vulva; they were intensely irritable and painful. The eyelids, face, and scalp were affected next; the bullæ became confluent, and the masses of excoriated surfaces were covered over with pigmented crusts of a dark brown colour, some being almost black. She had no bullæ on her feet during this time. Her condition from the beginning of August became worse and worse, and during the last three weeks of her life she was scarcely able to be moved at all, and the dressings were extremely painful to her. She had constant diarrhœa, which was followed by exhaustion and death on August 26th. At no time was there any albuminuria or blood in the urine. The fluid in the bullæ was invariably turbid from the first.

The cause of this condition could not be attributed to cold or damp, or bad and insufficient food, or any mental worry; neither was there any suspicion of a syphilitic taint; neither did the scabs leave any but superficial excoriation under them and no ulcer, as under the crusts of rupia.

In his very able work on diseases of the skin, Dr. Jamieson says, "Pemphigus in any form is rare," and classes it under the head of general exfoliative dermatitis; and at page 35 of book his account of the foliaceous variety corresponds with this case. Hebra is quoted as finding that pemphigus foliaceus is more common in women. It is peculiarly malignant, extremely rare, and always fatal.

Erasmus Wilson tells us that amenorrhœa predisposes to pemphigus, and that it occurs usually in people with habitually dry skins, and may be preceded by some poisonous injury. In this case there appeared to be no predisposing cause existing except the amenorrhœa, which, however, was years previous to the commencement of the pemphigus.

Although pemphigus is said sometimes to be accompanied by aphthæ and vesicles on various mucous membrane, this

case seems to have made its first appearance (excluding the bullæ she previously had on her feet) on these surfaces. Among other plans of treatment, some parts affected were



treated perfectly dry, with starch or flour powdered on, but with no better effect than those treated with soothing lotions. Curiously enough, another case of pemphigus was under my



care at the same time as the one I have previously described. This was in a married lady, about 35 years of age. Two or three bullæ made their appearance on the shin, coming on with cold, and febrile symptoms. They were irritable and painful. The bullæ dried up, and the skin peeled off after about three weeks, and no others have since appeared. The patient was suffering at the time from neuralgia, and was in a generally weakly condition.

MULTIPLE INSULAR NECROSIS OF SKIN AND SUBJACENT TISSUES.

By HERBERT SMITH RENSHAW, M.D.

A PECULIAR necrosis of small patches of skin subjacent connective tissue and small portions of bone, has been under my care for two years. In many respects the case has been similar to those observed and classified by Dr. Maurice Raynaud.

This disease occurred in a stout, cheerful, healthy, well-nourished child, aged 4 years, living in a new well-ventilated and well-drained house. Previous to this illness she had croup, followed by whooping-cough and measles, from which she recovered perfectly. Her father died of diphtheria, one of his brothers died of diabetes, another of fever. Her father's father is living, and her mother's parents are healthy people.

In May, 1891, she complained of cold extremities, and her feet swelled; there was also a mottled bluish appearance of the surface of both legs, and a dusky coloration extending across the lower part of the abdomen. Shortly afterwards the fingers of both hands became very painful. During this attack the second finger end of the right hand dried up; a portion of bone necrosed and separated, the part healing with bulbous enlargement of the bone stump. At the point of separation a new nail formed, and grew over and round the end of the cicatrix. The skin of the tip of the little finger and of the index finger of the left hand dried up without further injury, except that the nail of the little finger fell off and was renewed. A slough formed in the middle of the right arm, and healed up slowly after throwing off a tough dried up patch of skin.

The patient became gradually worse, the general symptoms being extreme irritability of temper, pain, restlessness, increasing emaciation, and loss of appetite. She often preferred to sit near an open outside door, and when in severe pain pressed her hands firmly together, with her fingers downwards between her knees, and in this position often rocked herself, or caused her attendant to do so, for many hours. When the line of separation formed marking off the dead from the living parts, pain rapidly abated, appetite returned, and with this a great desire for fat food. This was freely indulged. Cod-liver oil and iron were given, and the former plump and cheerful state returned. This attack commenced in May, 1891, and did not terminate before March, 1892.

The winter of 1892 passed without further disaster, but in the spring of 1893 the old symptoms returned: appetite failed; the body emaciated; pain became intense, destroying the child's rest and making her extremely irritable, excitable, and passionate. During this relapse she was not sensitive to cold, and often preferred to sit with the outside door open, and exposed to a current of cold air. Her feet were often damp and cold, but were not affected by the same intense changes that destroyed patches of the upper extremities and parts of the fingers. On March 11th, 1893, the first indications of relapse were ushered in with great restlessness.

The child became almost sleepless, and her rest was broken by startling dreams. Nausea became a prominent symptom attended by epigastric pain, and vomiting, with partial perspirations on the head and neck. The pulse varied between 100 and 140. The temperature, which rose to 100° on March 11th, subsided to normal on March 19th, rose again to 100° on March 22nd, was down again on March 28th, and never rose again to 100°. Though occasionally subnormal during the relapse, after this date it was sometimes 99.2°. In the period of increased temperature the skin was flushed. At the same time the right side of the neck became stiff, and some pain was also noticed in the right knee. The voice became

hoarse, cough and sore throat troublesome; and there was some nasal regurgitation of fluids.[1]

There was neither sugar nor albumen in the water at this time, or throughout the relapse, or any high coloration, or jaundice. No hæmoglobinuria was noticed; the skin troubles were generally distributed as blotchy, blanched spots, multiple purple stains, small hard surfaces, patches of livid skin, stains of bluish tint, circular or semi-circular in shape. Under pressure some of these livid patches became blue, assuming slowly a pallid look.

On March 16th the chin and finger ends became livid, the pallor extending to the second joints. The hands mottled with blue stains. Then the fingers assumed a red tint deepening into purple, all the finger ends of the left hand becoming gradually black, and the skin of the right thumb and the terminal phalanx of the right little finger also assumed the same condition. The legs were marked by purple stains. A livid patch formed on the dorsum of the left foot. The skin on the outside of the leg, on the site of an exudation crust, became a dense dead area. The elbows became purple; the livid patch on the chin sloughed, the part loosing a portion about the size of a small pea. Dense, circumscribed, dried up dead pieces formed symmetrically on the back of the neck.

Ultimately two sores formed, one on either side of the cervical spine, the granulations healing slowly by cicatricial tissue, similar to burn scars. On March 21st the left little toe became purple, but afterwards recovered its normal condition. The feet suffered no destructive change except that a



Fig. 1.

very superficial purple stain on the dorsum of the foot was followed by an exudation crust, and peeling of the epidermis.

The second finger of the right hand, severely damaged in the previous illness, was not affected; the enlarged stumpy end covered with a new nail sharply curved over it remaining free from pain, and was warm and without discoloration.

At the commencement of April the child slept better, but on April 4th intense pain became again a prominent symptom; the left half of the upper and lower lip was black and covered with dark crusts, the right knee swollen and livid. The epidermis of the left knee peeled off, and a hard leathery patch formed over the knee-cap.

On April 9th the patient slept five hours without opiate and the appetite improved, but it was very painful for her to eat owing to the state of her lips; several portions of tissue were separating, and on April 12th a slough separated from the right elbow. (See Fig. 1.) On April 14th the dead portion of the lower lip fell off, leaving a healed surface, with loss of the whole thickness of the red margin to the centre of the lip. (See Fig. 2.) On April 22 the two sores near the spine were filling



Fig. 2.

with pale granulations exuding a tenacious discharge. At this time both elbow sloughs had separated. There was a diastolic murmur at the top of the sternum, none at midsternum, or at the left nipple. On May 20th the sores at the back of the neck had healed, the cicatrices being depressed. On June 8th the teeth became loose, appetite worse, and she was losing flesh. The dead tip of a finger separated; other parts, separating with suppuration at the line of demarcation, caused much local irritation.

On June 13th she was able to walk with some difficulty. Raised tender indurations similar to erythema nodosum formed on the feet and legs, but these nodes subsided without destructive change. On June 22nd the left thumb end fell off.



Fig. 3.

On July 20th the little finger nail of the right hand dropped off, and the stump of the finger end was healed. The third finger nail of the left hand separated, together with a portion of the dried up pulp tip and terminal bone of the phalanx.

[1] As only at this time was the temperature high during the whole course of the attack, the thought occurs to me that this rise of temperature was foreign to the complaint, and due to a rheumatic complication of a temporary nature.

(See Fig. 3.) The sore on the upper inner side of the right arm healed. Appetite and sleep and walking power were all improving. The figures show some of the transitions that occurred up to the date when the patient recovered.

At the present time—November, 1893—the patient has recovered her usual health. The palms of the hands and the fingers are very sensitive, but the sores have all healed up soundly.

Quite well February, 1894.

Treatment.

The chief indications for treatment were: to support the strength, to relieve pain, and to protect injured and dying parts. Ammonio-citrate of iron or dialysed iron has been given regularly, arsenic occasionally, when sickness was not troublesome and wasting was rapid, and cod-liver oil when the appetite permitted, and nutritious full diet could be digested. Belladonna extract on lint covered with cotton-wool afforded great relief to local pain. Opiates were given to relieve sleeplessness caused by pain.

Remarks.

This case differed from some previously observed. The appetite always failed at the commencement of relapse. The temperature twice rose above 100°, was sometimes subnormal and sometimes normal. Some of the parts first attacked were exempt from further action. Cold did not appear to aggravate the symptoms or to influence the onset, and the last attack commenced at the termination of the winter, and was most severe during an exceptionally mild springtime. The pulse was often above 100°. Mortification was not limited to the skin, but affected connective tissue, and caused necrosis of bone. Her feet were often damp and cold, but never ulcerated.

On treatment with glycerine and spirit, the dead parts show that the structures retain a considerable quantity of tissue, and that the black carbonised change is more or less superficial, and in no portion complete.

The case has a certain medico-legal interest. Changes so sudden and severe might be attributed to traumatism or to improper treatment. A patient was sent to me with mummified fingers following, but certainly not consequent upon, the use of a linseed poultice, applied without medical advice. In another instance, a case of mummified toes, the symptoms commenced five months after a perfect restoration of the general circulation from ligature of the femoral artery, for popliteal aneurysm. The pulp of the big toe, the tip and nail of the second toe, the whole of the third, and only the terminal phalanx of the fourth toe, dried up and fell off. The little toe was not affected. These changes occurred some years since, and nothing further had happened, except that in, and only in, hot weather, there are occasionally pains in the broad under surface of the foot.

Unable to classify these cases with embolism, arteritis, fibroid, calcareous, or fatty degeneration, peripheral neuritis, or paresis, we have evidence pointing to a special poison.

CANCER HOUSES AND THEIR VICTIMS.

By D'ARCY POWER, M.A., F.R.C.S.Eng.,
Demonstrator of Surgery at St. Bartholomew's Hospital; Surgeon to the Victoria Hospital for Children.

Mr. Shattock, in his Morton Lecture, again calls attention to the interesting fact that cancer, like tubercle, may repeatedly show itself in certain houses. The following series of cases further illustrate this point. They were communicated to me by the medical man who had them under his care.

Miss B., aged 45, lived in a certain house in a suburb of London for thirteen years, and died of cancer of the stomach in 1884. Miss T., aged 47, then succeeded to her place, and occupied her bedroom. She had lived in the house for twenty years, and died of cancer of the liver in October, 1885. Mrs. J., aged 67, who had lived in the house for eight years, succeeded to the place and to the bedroom successively occupied by Miss B. and by Miss T. Mrs. J. died of cancer of the breast and uterus in 1893. Each of these patients, my informant adds, appeared to be in perfect health until they took one another's place as "housekeeper" to the barmaids of the establishment in which they had each lived for so long a time. There was no blood relationship between them. One of the sons of the house, who is a nephew of Miss T., has a keloid which has been removed three times.

Similar cases of cancer occurring in a single house amongst persons who are not related by blood to each other have been published by Mr. Shattock in the *St. Thomas's Hospital Reports*, vol. xx, p. 233. The house was situated at Ashburton, in Devonshire. It was damp, and within a period of fourteen years four persons were affected with cancer in it, of whom three died.

Mr. Cooper, of Chatteris,[1] mentions three cases of cancer of the parotid and submaxillary glands and tongues of cows occurring on a piece of land a mile and a-half from Chatteris, in Cambridgeshire.

Mr. Clement Lucas[2] relates the case of a gentleman, who was operated upon in 1881 and again in 1883 for a rodent ulcer of the eyelid and forehead. His wife had a scirrhus of the breast removed in 1884, and a partner, who has always lived in the same house with them, had an epithelioma of the tongue removed in 1886. Mr. Lucas does not suggest that there is anything more than an accidental association between these cases, but says that the coincidence is the more interesting in that there is no blood relationship between the patients.

Mr. Wynter Blyth[3] narrates the case of three successive tenants of a house in Buckland Brewer, who died of cancer. Mrs. V. frequently visited the last of the tenants, to whom she was not related, and she subsequently became affected with cancer of the breast and lung. Her niece, a girl of 14, slept with her and nursed her. This girl developed cancer of the breast, and was operated upon, seemingly with success.

Dr. Fabre, in an excellent treatise on the contagion of cancer, which deserves to be more widely known in England,[4] records the following observation by Dr. Mollière: "There is a well-built house in Lyons, standing on the banks of the Saône, which has long been occupied by well-to-do people. In 1873 the owner, aged 80, who lived on the first floor, died of cancer of the stomach. Four years later a tailor, aged 45, who lived in the *entresol*, also died of cancer of the stomach. The porter, a healthy old soldier, aged 55, died three years later of the same disease, also affecting his stomach. Lastly, a man, of 35, who lived on the second floor, was attacked two years after the death of the *concierge* with cancer of the cervical glands, which killed him in a year. Thus in ten years there were no fewer than four deaths from cancer in this house; and although other people were living in it, no death from any other cause occurred during this period."

Mr. Roger Williams[5] has recently called attention to Fiessinger's cases.

These cases, and others like them, may be, and probably are, mere coincidences, such as might happen when we consider the enormous number of deaths which occur annually in Europe from cancer. They may, however, point to a more specific origin of the disease. We are still unable to explain them, but such local outbreaks have to be borne in mind in all investigations connected with the question of the causation of cancer. No one, I suppose, imagines that cancer is directly contagious. It is possible, however, in epidemic cases that there may be some condition of earth or water common to all the individuals attacked, in which the organism, if such there be, may pass a part of its existence. The cases, however, are so rare that it is better worth while to record them as they occur than to argue as to their origin, for any conclusion that can as yet be arrived at can only be based upon insufficient premisses, and is therefore worthless.

[1] *Veterinarian*, vol. 42, p. 518.
[2] *Lancet*, vol. ii, 1887, p. 985.
[3] *Public Health*, vol. i, pp. 129 to 132.
[4] *De la Contagion du Cancer*, Paris, Baillière and Fils, 1892, p. 172.
[5] British Medical Journal, vol. 1, 1894, p. 1158.

The festival dinner of the North London Hospital for Consumption and Diseases of the Chest was held on June 2nd at the Whitehall Rooms of the Hôtel Métropole. It was reported that no fewer than 227,977 patients have been relieved since the foundation of the hospital. Subscriptions amounting to £1,200 were announced.

ON SYMPHOROL (SODIUM CAFFEINE SULPHONATE) AS A DIURETIC.

BY ERNEST E. WATERS, M.B.EDIN.,
House-Surgeon, Sheffield Union Infirmary.

DURING the past five weeks I have been trying this new diuretic on several patients, with negative results. In the pamphlet sent round to the profession it is stated that a dose of 60 grains daily increased the urine by 270 c.c. on the first day and by 730 c.c. on the second day after administration. The introducers of the drug state that it is likely to be particularly useful in dropsy arising from heart and kidney troubles. How far this action can be depended on, the following notes may show:

CASE I.—E. C., aged 37, suffering from mitral incompetence, with some pulmonary congestion and œdema of the lower extremities, was first put on tincture of digitalis, mx, thrice a day. The amount of urine was then small, and when first measured, after taking digitalis for five days, only 11 fluid ounces had been passed (April 30th), and on May 1st, 17 fluid ounces. On May 2nd 60 grains of symphorol were administered and 22 fluid ounces of urine were passed. This fell on the next day to 18 fluid ounces, and the day after to 16 fluid ounces. On the 5th only 11 fluid ounces were passed; so digitalis was again ordered, with the result that the urine rose to 15, 21, and 22 ounces respectively on the following days.

CASE II.—S. G., aged 56, suffered from mitral disease much more marked than in Case I. The œdema was general, and the face at times was livid. On April 23rd, after taking tincture of digitalis, mxv, every four hours for four days the quantity of urine was 11 ounces. On April 24th liquor trinitrinæ, mj every four hours, was given, and for the three days the quantity of urine passed was 14, 17, and 21 fluid ounces respectively. On April 27th symphorol, 60 grains, was given in twenty-four hours, and 24, 27, and 29 fluid ounces of urine were passed from then till May 1st, when the amount dropped to 20 fluid ounces. On the following two days 22 and 18 fluid ounces were recorded, and the medicine was changed to digitalis. Since then the daily amount has been 15, 31, 23, and 25 fluid ounces. This patient was drinking a large quantity of barley and lemon water, and had all through only a light diet.

CASE III.—A. W., aged 72, suffered from emphysema, weak heart, albuminuria, and dropsy. April 25th. After some days of digitalis the quantity of urine was 10 fluid ounces. April 26th. Liquor trinitrinæ, mj every four hours; the quantity of urine was 7 fluid ounces. April 27th and 28th. Symphorol, 60 grains; the quantity of urine was 12 and 7 fluid ounces. April 29th. Liquor trinitrinæ, mj every four hours, the quantity of urine was 9 fluid ounces. May 3rd. Death from suppression.

CASE IV.—J. D., aged 26, suffered from typhoid fever; in the third week. The urine was drawn off with the catheter. The bowels were usually constipated, and were opened with enemata when necessary. The patient was taking 4 pints of milk daily and unlimited lemon and barley water. April 26th and 27th. Salol, 10 grains, t. d. s., quantity of urine 32 and 31½ ounces. April 28th. Symphorol, 60 grains; quantity of urine 22 fluid ounces. April 29th and 30th. Symphorol, 60 grains; quantity of urine 19 and 32 fluid ounces. May 1st. Symphorol, 60 grains; quantity of urine 17½ fluid ounces. May 2nd. Symphorol, 60 grains, quantity of urine 17 fluid ounces. May 3rd. Symphorol stopped; diarrhœa commencing.

In no case could any appreciable benefit be ascribed to the symphorol. In Case III it completely failed, and in the other cases the effect was not sufficiently marked to justify one in continuing its use to the exclusion of better known and more trustworthy remedies.

CANCER OF THE PROSTATE COMPLICATED WITH SPASMODIC CONTRACTION OF THE BLADDER.

BY C. E. LIESCHING, M.R.C.S., L.R.C.P.,
Tiverton.

J. G., aged 51, first came under my care in April, 1892, suffering from hæmaturia and retention, which he was able to relieve by using a catheter, and he told me he had done so for many months. At this time his symptoms were those of enlarged prostate. I found the right lateral lobe to be enlarged and very hard. There was no enlargement of the glands, but the man was a little sallow, and appeared prematurely old. The hæmaturia soon yielded to treatment, but there remained a good deal of irritability of the bladder.

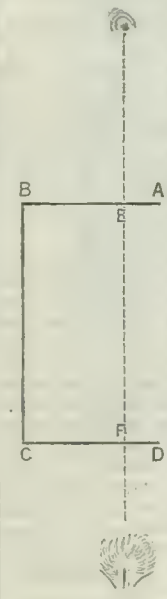
He came to me again in October, having discontinued treatment for three months. He complained of much more pain, and it had altered in character. It came on, he said, like a wave, increasing in violence from the penis upwards, making him desire immediately to relieve himself. He would seize hold of the penis and hold it tightly, and, when the pain had reached its height, there would be a flow of a little white fluid: this would be repeated in a few minutes unless he relieved himself with the catheter. In the right inguinal region above Poupart's ligament there was now to be felt a rounded hard fixed mass, which I took to be glandular. It steadily increased in size, and œdema of the leg ensued. As the pain increased in frequency, and having tried as sedatives morphine, cocaine, and belladonna as suppositories and injections without any relief, I sent him in November to Mr. Hurry Fenwick for any suggestions he could make for the relief of the spasms. At his suggestion I used 20 minim-doses of belladonna, together with ethereal tincture of phosphorus, and it gave slight relief for a time. Things went on getting worse, and he was getting more cachectic and weaker, and as life was becoming unbearable owing to the pain, I suggested a suprapubic operation as a possible means of relief. This was done in June by Mr. Paul Swain, and had the almost immediate effect of relieving all spasm, though, until the time of his death, he complained much of pain in the back, which was worse at night and in changes of weather. The interest in this case lies in the spasmodic nature of the pain, which seemed to be beyond the reach of therapeutics, and was only relieved by the suprapubic operation. My only regret is that I had not suggested this earlier in the case.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

LAPAROTOMY BY COMPOUND INCISION.

IN laparotomy our first and true line of defence against subsequent hernia consists of the properly secured peritoneum. Stitching together the cut edges of the peritoneum only will not do: we must appose and stitch securely together the inner surface of the peritoneum on either side of the incision, so that this apposed surface is not less than half an inch broad, and co-extensive with the entire length of the incision. To do this we must be at close quarters with the peritoneum; we cannot stitch it thus at the bottom of a hole as in the direct vertical incision in subjects who have even a moderate depth of subcutaneous fat. By adopting the following method we quite overcome the difficulty. First make a rectangular flap composed of the skin and entire thickness of subcutaneous fat by beginning an incision at A and ending at D. Next turn this flap over to the left, and envelope it in lint wrung out of hot antiseptic solution. Now open the peritoneum along the middle line E F. After the intra-abdominal manipulations secure the peritoneum as indicated above, and flood the denuded surface with 1 in 2,000 solution of corrosive sublimate before lowering the flap. We can insert a drainage tube, where one is required, at either F or E as easily as we do now.



WILLIAM FEARNLEY.
Elgin Avenue, Maida Vale, W.

PUERPERAL SEPTICÆMIA AND PEMPHIGUS NEONATORUM.

MRS. P. was confined on September 19th, 1893. The child was well nourished and healthy looking. The labour was rapid, the child being born very shortly before the midwife arrived. The cord was tied by the patient's mother; as soon as this was done the midwife arrived and expressed the placenta without difficulty. This was the second confinement: the first child is living and healthy.

On the night of the 21st the patient was restless and suffered from diarrhœa. The following morning I was called to see her; she had a temperature 103°, pulse 110, small, soft, compressible; tongue furred; breathing quick; no abdominal tenderness or distension; discharge rather scanty and ill smelling; vagina hot, no sores of any description to be seen. The condition did not improve in spite of frequent

douchings (hydrarg. perchl., 1 in 2 000), carbolic acid internally, brandy, turpentine, quinine sulph.

During the latter half of the illness bullæ came out over chest, buttocks, and face; one large one was situated over the right sterno-mastoid, another occupied the whole of the left half of the forehead. They contained slightly turbid serum. The patient died after a seventeen days' illness; the immediate cause of death being pneumonia.

On the occasion of my first visit my attention was called to the child, the nurse stating that "something" had come out on the skin shortly after birth, and that there were diarrhœa and vomiting. On examination could be seen a plentiful eruption of bullæ over buttocks, chest, and neck; they varied in size, some being as large as a five-shilling piece; in shape some tended to ovoid, numerous shallow excoriations, the sites of ruptured bullæ. The diarrhœa and wasting continued, and the child died on the eighth day.

There is absolutely no history of syphilis in either parent. During the time of my attendance on both patients I was unable to trace the source of the infection. There was no vaginal examination made by anybody, and the house was in a sanitary condition. Recently a case of typhoid has occurred in the same row of houses, but it could not be attributed to anything insanitary in the house or neighbourhood.

I am inclined to think that the puerperal case was of endogenous origin, but I am unable to state what was the septic stimulus. It is remarkable that the pathogenic organisms should inoculate puerperal septicæmia and pemphigus neonatorum simultaneously.

W. JONES GREER.
Blaina. Assistant Surgeon, Blaina and Nantyglo Collieries.

A CASE OF PERFORATIVE PERITONITIS.

THE following may be of interest as an unusual cause of "peritonitis."

Lance-Corporal M., according to his own statement, was perfectly well until the morning of February 14th, 1894. On that day at 8 A.M., while at the ration stand, he suddenly felt ill with great pain at the bottom of the belly. After completing his duty and lying down some time in his barrack room, he walked to hospital—about a quarter of a mile—where he arrived at 11 A.M., appearing very ill. No cause could be discovered for his illness, which was diagnosed as "peritonitis," and ended fatally two days afterwards.

At the necropsy all the organs were found healthy except that the peritoneal surface of the intestines was inflamed and covered with lymph, and there were several ounces of foul acrid matter in the peritoneal cavity. This was found to come from a minute hole in the gut about a yard above the cæcum. The hole was the size of a No. 5 shot. One inch from it was seen a piece of grass sticking in the mucous membrane. It was the crown of a species of spear grass common in this country, and only too well known to sportsmen for its penetrating qualities. It had penetrated about half an inch between the mucous and muscular coats. I have little doubt that the hole, which gave exit to the fæces and caused the man's death, was due to a similar piece which escaped observation. How he managed to swallow the grass is unknown; possibly it was blown into his drinking water.

F. P. NICHOLS, B.A., M.B.Cantab.,
Secunderabad. Surgeon-Major A.M.S.

A CASE OF CYSTICERCUS IN THE VITREOUS.

THE prognosis in cases of cysticercus affecting the eyeball is usually very grave, and, unless one can deal effectually with the hydatid by surgical means, the eye will almost certainly be lost. The case which I now report is of peculiar interest, therefore, because the patient has always complained of defective vision in the right eye. He came to me complaining of intractable Dhobi itch, and, while engaged in conversation, he casually remarked that the sight of the right eye had always been defective. He is twenty-six years of age, and has never noticed any change in the condition of the eye.

The vision is $\frac{2}{60}$. There is slight divergent strabismus, but otherwise the eye looks perfectly normal. On ophthalmoscopic examination I found that there projected into the vitreous from the upper portion of the globe a dark object, which, on further examination, was found to be a dead and somewhat shrivelled cysticercus. The vitreous is otherwise perfectly clear, and the edge of the disc is readily seen with a − 3 D lens. By direct focal illumination, the head of the entozoon is seen to have pierced the retina, and to lie in the posterior chamber close up against the lens. The body of the cyst is covered by detached retina. Hooklets and cephalic suckers are made out with the ophthalmoscope, aided by a 20 D convex lens behind the mirror. The patient has never complained of any pain or trouble in the eye. Glasses do not improve vision. The left eye is myopic to 0.5 D, but otherwise is perfectly normal.

Considering the long duration of the affection, the patient had no desire to run the risk of an operation, and so things remain *in statu quo*.

H. CAMPBELL HIGHET, C.M., M.D.
Singapore, Straits Settlements.

DIVISION OF THE SCAPULA BY A SWORD CUT.

Two months ago a sepoy was attacked by a Ghazi (Mohammedan fanatic) while coming out of the guard room. The door is low, and it is necessary to stoop slightly to pass out. The Ghazi was standing on the right side of the door, and three or four feet from it. The blow landed on the right shoulder, and, having divided a thick cloth tunic and shoulder strap, a knitted woollen waistcoat, and a shirt, inflicted a wound extending from half an inch above the clavicle to below the inferior angle of the scapula. I saw the man within three minutes of his receiving the injury, and found that the blow had cut the scapula clean in half, the line of division running from the suprascapular notch to the inferior angle. By muscular traction the two halves were separated for an inch, and on inserting a finger the third rib was felt to be notched. Hæmorrhage was free, but not nearly so great as would be expected from such a vascular region. It was controlled by pressure on the wound, no forceps being required. The wound granulated, and is now almost healed, but the arm is still useless.

The Ghazi was immediately shot. The bullet entered just behind the left great trochanter, and came out one inch above the right pubic spine. The left hip-joint was smashed, the small intestine perforated, and small intestine and omentum protruded through the wound of exit. Besides this a lot of dirt entered the abdominal wound by his falling face downwards on the ground, and when in this position he was pinned down by a bayonet through the arm. In spite of all these injuries there was no sign of shock, and he sang and talked in great spirits for some time. Peritonitis soon set in, and he died twenty-six hours afterwards. The shot was fired from a Martini-Henry at about fifteen yards.

W. H. OGILVIE, M.B., C.M.,
Loralai, Beloochistan. Surgeon-Lieutenant I.M.S.

VENESECTION IN RENAL ASTHMA: INSTANT RELIEF: URIC ACID IN THE SERUM.

I WAS hastily summoned to this patient on November 20th, 1893, in the absence of his ordinary medical attendant, and found the symptoms so urgent that I was obliged to act alone and at once. The case was that of a man, aged 52, who had been under treatment for albuminuria, and dropsy for rather less than a week. I found him in a state of orthopnœa and tossing about in bed in his distress. Expiration was prolonged and accompanied with loud dry *râles*: the pulse was somewhat slow—the actual rate was not noted—and, as it appeared to me, of markedly high tension.

I immediately bled the patient *pleno rivo* to 15 ounces, with the result that he could at once lie down, and that all the distressing symptoms had disappeared next morning. He was afterwards in the Western Infirmary for some time, and there is reason to believe that the attack has been an acute one, and not likely to merge into chronic Bright's disease.

Having previously discovered crystals of uric acid in the serum of two cases of convulsions which I had bled, and being much interested in the important researches of Dr. Haig on uric acid in the causation of disease, especially headache, high-tension pulse, convulsions, epilepsy, etc., I forwarded a specimen of the blood to him in the above case, which he was so kind as to examine. He reports as follows on November 24th, 1893:

The specimen of blood you sent me on November 21st contained uric

acid to the extent of 0.015 per cent. My experience with blood drawn during life is too small to draw any sweeping conclusions from; but the largest quantity I have found in blood of venesection was 0.03 per cent. in a case of cerebral hæmorrhage. I have often found smaller amounts, 0.002 to 0.004. I should think, therefore, that 0.015 per cent. represents a distinct excess of uric acid, but that double this quantity may be found in some cases.

ROBERT KIRK, M.D.,
Physician to the Dispensary, Glasgow Western Infirmary.

REPORTS
ON
MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

BRISTOL GENERAL HOSPITAL.

CASE OF COMPLETE INVERSION OF THE UTERUS CAUSED BY A FIBROMA IN THE FUNDUS—SPONTANEOUS REINVERSION UPON REMOVAL OF TUMOUR.

(By A. E. AUST LAWRENCE, M.D., Obstetric Physician to the Hospital.)

E. L., married 10 years, never pregnant; always had profuse menstruation, but no pain until eight months ago, when on lifting a heavy bed she felt great pelvic pain and bearing down, and in a few days she could feel just inside the orifice of the vagina what she described as her "womb down." This condition of affairs went on for eight months, until one week before her admission into the hospital, when she was taken with great pain, and faintness and bleeding, in consequence of the vaginal swelling becoming extruded from the vagina and remaining outside.

I found a large fibroma as big as my fist, with apparently a long pedicle which reached to the top of the vagina. I soon realised that some of this pedicle was the completely inverted uterus, and it was impossible to say where the pedicle ended and the uterus began, so I transfixed close to the tumour and tied the pedicle in two halves and again once completely round it. I then cut off the tumour, which was an ordinary fibromyoma of the uterus. The next day I found the uterus partially reinverted and only prevented from being more so by the wedge of tissue below my ligature. I now put a wire round at the seat of ligature, and cut off this remaining portion of the growth. No bad symptoms occurred, and at the end of three days I found that the uterus was completely reinverted, and that the pedicle, although divided close to the tumour, left very little space between it and the uterine wall.

REMARKS.—This case is interesting, as it is not common for complete inversion of the uterus to be caused in this way, nor is it usual for the uterus so completely to reinvert itself as it did in this case. I have no doubt that the woman had partial inversion for some eight months, and that the complete inversion only took place when the tumour was forced outside the vagina, and then it was that her symptoms became very alarming, and most profuse bleeding set in. At the operation I found that the uterus was stretched to such an extent as to be absolutely like an ordinary pedicle. I operated as I did as I dared not use an *écraseur* at first for I feared it would draw in too much tissue and possibly damage the uterus; but when, after twenty-four hours' ligation, the pedicle was sufficiently softened and its vessels blocked, then I had no hesitation in cutting through it with a fine wire, which would not be so likely to drag in tissue as a thick one. The danger of bleeding is more in using a fine wire, but this I combated by a preliminary ligature for twenty-four hours. This is long enough to leave on a ligature, as the centre of the pedicle had in this short time become gangrenous. Had I allowed this portion of the tumour to slough off my patient would most likely have died from septicæmia. I regard the rapid restoration of the organ to its normal situation to be due chiefly to its very recent displacement. I exerted no pressure whatever, as I feared I might damage the fundus uteri at this stage of the case.

GENERAL HOSPITAL, ST. KITTS, W.I.

(Under the care of W. J. BRANCH, M.D.)

REMOVAL OF TUMOUR FROM LOWER JAW.

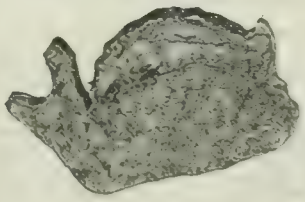
G. D., black, aged 23, was sent from the Island of Montserrat, with a large tumour of the lower jaw. She was anæmic and feeble from want of nourishment, as the tumour nearly filled the mouth.

Operation.—After anæsthetising the skin with chloride of ethyl spray (Dr. Benguć's) an incision was made from the chin to the angle of the jaw along the under edge of the bone. The facial artery was then ligatured in its continuity. The chloride of ethyl spray was kept working during these manipulations and the subsequent extension of the incision upwards to just below the centre of the lower lip anteriorly and the ear posteriorly. The girl manifested no symptom of pain. Ether was next administered with an Ormsby's inhaler, and the bone divided at the symphysis, cleared from the soft parts, and disarticulated. There was very little hæmorrhage.

The girl made a good and rapid recovery.

The ligature of the facial in the first instance and the use of a local anæsthetic in the external part of the operation seem to me little improvements, especially when this resection has to be performed on debilitated subjects.





The photograph here reproduced of the girl was taken ten weeks after the operation. The other photograph shows the bone removed. Two of the molar teeth are imbedded in the internal part of the tumour, but they cannot be clearly seen in the photograph.

PRESENTATION.—Dr. M'Callum, on the occasion of his leaving Dunning, has been presented with a purse of sovereigns and a handsome walking stick, by the inhabitants of Dunning, as a mark of respect and esteem.

REPORTS OF SOCIETIES.

HARVEIAN SOCIETY OF LONDON.

George Eastes, M.B., F.R.C.S., President, in the Chair.

Thursday, May 17th, 1894.

Syphilitic Laryngitis.

Mr. G. C. Wilkin exhibited a married woman, aged 38, suffering from syphilitic laryngitis, with consolidation of the apex of the right lung. There was no family history of phthisis. She had had two miscarriages and no children. There was swelling of the epiglottis and of the false vocal cords, the latter meeting completely in the anterior half. There was dulness of the upper lobe of the right lung, in front and behind, with increased vocal resonance and pectoriloquy above the spine of the right scapula. Three examinations of the sputum were made, and tubercle bacilli were never found. The laryngeal and lung troubles gradually subsided and entirely cleared up under a mixture containing potassium iodide and liq. hydrarg. perchlor.

Remarks were made by the President and Dr. Illingworth.

Pigmentation of Cicatrix after Ovariotomy performed during Pregnancy.

Dr. Boxall showed this case. The patient was of fairly dark complexion, and aged 25 years. She came under observation with a swelling in the lower part of the abdomen on the right side reaching one inch above the level of the umbilicus. It had gradually increased for the last nine months, and shifted its position from time to time, and had recently become painful. *Per vaginam* it appeared that the uterus was enlarged to the size of a four months gestation. The last menstrual period was two months ago. There was no evidence of pregnancy in the breasts. On opening the abdomen by a median incision the tumour was found to be an ovarian cyst on the right side, and was removed. This was done just in the middle of pregnancy The patient left the hospital three weeks after operation with no appreciable pigmentation of the scar, but in fourteen days it became deeply pigmented—almost black—and every stitch hole also. The pregnancy went on to term. The pigmentation had been fading since, but was still quite distinct.

Mr. Alban Doran wished to know Dr. Boxall's opinion about pigmentation in the middle line. It was often associated with pregnancy, but it was sometimes seen in sterile women and in men. Among the patients in a lying in hospital at Bordeaux, Mr. Doran noted that the line often extended above the umbilicus. He asked if Dr Boxall had ever observed pigmentation in abdominal cicatrices situated elsewhere than along the linea alba. He had not found that pregnancy after abdominal section specially predisposed the subject to pigmentary deposit in the cicatrix. In January, 1892, he removed the appendages, much diseased from chronic inflammation, in a case of rapidly growing fibroid. The patient was a fair-haired, sterile woman, aged 39. Within twelve months the skin along the abdominal scar became deeply pigmented, and remained so to this day.

Dr. Boxall, in reply, pointed out that in pregnant women of dark complexion there was often pigment deposited in the middle line of the abdomen, even as high as the ensiform cartilage, the line being divided at the navel and joining again above it. This pigmentation also occurred apart from pregnancy, but he could not say whether it took place in connection with the growth of fibroids. In this case the incision was made at the period of pregnancy when pigmentary deposit was most active, and the scar became pigmented only some weeks later. He thought it possible that any scar in the abdominal wall might become pigmented if pregnancy subsequently occurred, for he had seen the striæ produced at one pregnancy by the stretching of the skin become pigmented during a subsequent pregnancy.

Poisoning by Strychnine.

The President related particulars of a case of unintentional poisoning by strychnine. Liq. strychninæ had been prescribed by a medical man in a mixture combined with sod. bicarb. The soluble sulphate of strychnine had been thereby decomposed, and replaced by the insoluble carbonate, which became deposited as a sediment. The bottle had not been shaken when the first eleven doses were taken, so that the last dose of the mixture contained far more than the normal dose of strychnine. After swallowing this the patient was quickly seized with severe tetanic spasms. Vin. ipecac with hot water was given, and vomiting thereby produced. The stomach was then washed out with warm water. The patient recovered in about half an hour.

Adenoma of the Body of the Uterus.

Dr. Boxall related this case. The patient was a widow, aged 59, who had suffered from irregular uterine hæmorrhage with a tumour in the lower part of the abdomen for five or six years. Her general health had not suffered. Before coming under his care she had had full doses of ergot, which had not arrested the hæmorrhage. On examination the tumour gave the impression of uterine fibroid; this was confirmed by examination *per vaginam*. The mass was obviously an enlargement of the body of the uterus, and was freely mobile; the cervix was healthy. The loss increasing, the cervix was dilated under an anæsthetic. The cavity of the uterus was found full of material, which bled freely when touched, springing from the posterior wall and fundus, and of the consistence of brain matter. This was rapidly removed by curetting. The *débris* deprived of blood weighed 2 lbs. 10 ozs. The loss ceased; there was a slight discharge for fourteen days and none at all for the last six weeks. A section of the mass showed typical tuberculous glands lined by a single layer of columnar epithelium. The specimen was exhibited.

Presentation.—Dr. Richardson Rice, of Coventry, has been presented by the members of his St. John Ambulance classes at Hampton-in-Arden with a solid silver cigar case and matchbox as recognition of his services as lecturer.

LEEDS AND WEST-RIDING MEDICO-CHIRURGICAL SOCIETY.

T. Kilner Clarke, M.A., F.R.C.S., in the Chair.

Friday, May 4th, 1894.

Gastrostomy.

Mr. Atkinson read a paper on gastrostomy which will be published.

Cases.

Mr. C. Smeeton showed a case of Tuberculous Peritonitis successfully treated by tapping.—Mr. H. B. Hewetson and Mr. Littlewood showed a case of Orbital Aneurysm of the left side, occurring in a woman aged 33, who was seven months pregnant. Ten days after the appearance of the pulsating swelling in the orbit the left common carotid was tied by Mr. Littlewood, with the result that six weeks later the swelling had greatly diminished and pulsation disappeared, but there was no return of vision.

Specimens.

Dr. Churton showed specimens from a case of Acute Gastritis occurring in a stomach greatly dilated and hypertrophied from (apparently congenital) stenosis of the pylorus and first part of the duodenum. These structures were thin, free from neoplasm and cicatrix. Near the pylorus there was a diverticulum of the duodenum which would contain a filbert. The gastritis was produced by alcohol. The patient was a man, aged 50.—Dr. Churton also showed a Heart from a boy, aged 17, completely invested by a thick adherent fibrous pericardium, the central layers of which were calcareous. There was no history of acute disease. The onset was gradual and insidious five years ago. Reasons were given for regarding the case as originally one of chronic tuberculous pericarditis, calcification of the central layers being the last stage in the process.—Cases and pathological specimens were also shown by Mr. Lawford Knaggs, Dr. Adolph Bronner, Mr. Littlewood, Mr. Atkinson, Dr. Wardrop Griffith, and Dr. J. Liddell (Harrogate).

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

W. Hunter, M.B., President, in the Chair.

Wednesday, May 16th, 1894.

Small-pox.

Dr. Boobbyer gave a short account of the past history of small-pox, together with that of inoculation and vaccination. After comparing the deaths and death-rates from small-pox in years prior and subsequent to the further extension of vaccination from time to time, he drew attention to the fact that in 1889 and 1890 the disease had so nearly disappeared from this country, that only 23 and 16 deaths in the two years respectively were recorded throughout its whole extent. He gave some account of local outbreaks from which the general epidemic of 1893 and 1894 had arisen, and pointed out that the disease frequently showed a tendency to run for considerable periods through single social strata. A large part of the 1893 epidemic in Nottingham was confined to tramps and workhouse inmates, whereas that of 1894 had been almost exclusively restricted to persons employed in factories and warehouses. He next discussed the symptoms of small-pox in its several varieties in detail, and showed photographs illustrating each variety in its several stages. Referring to prodromal rashes, he said they were more common than they were once thought to be; they were also recognised as occurring more frequently in modified than unmodified small-pox. In one batch of 37 cases occurring in the Nottingham Lace Market, which he had had an opportunity of studying from their onsets, he had recorded no fewer than fourteen instances of this rash. All the fourteen were vaccinated, all were females, and all but three were under 30 years of age. He described one case in which the prodromal rash occurred, where the latter was distinctly hæmorrhagic, and especially dark in the axillæ and groins—without extravasation, however, into eyes or internal organs—and which made a good recovery, without a bad symptom, after an extremely modified subsequent small-pox rash This variety of prodromal rash was referred to in books, but not often seen. He described two cases in which the patients appeared to have inoculated themselves by manipulating infected material. In discussing the differential diagnosis of small-pox, and especially of the modified form, from chicken-pox and other diseases, he had noticed one sign which he could not find recorded in any books—namely, the polished, circular, often rayed scab seen on the upper extremities especially, but also elsewhere, in almost all small-pox cases. These scabs were always more or less developed in mild and modified cases, in all those cases, indeed, which were otherwise difficult of diagnosis. They appeared to originate in and around the retaining bands which connected the epidermal covering with the skin beneath, and with the aid of a glass could be seen beginning to form at a very early stage in most aborting pocks.

The President and Drs. Wills, Wood, Watson, and Mutch discussed the paper.

Specimens.

Dr. Elder showed (1) Malignant Papilloma involving both Ovaries removed from a woman, aged 40. The patient had previously been tapped twelve times for ascitic accumulation. (2) Gall Stones removed from two patients, aged respectively 37 and 46, by cholecystotomy on April 28th and May 7th; both patients had histories of repeated biliary colic, but in neither case was there any tumour. (3) Specimen of Pyosalpinx (right) from a patient aged 42; operation done April 23rd. Clear history of gonorrhœal infection and subsequent peritonitis. Tumour could be felt behind uterus like a fair-sized sausage. Left ovary and tube fairly healthy.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Obstetrics.

Andrew J. Horne, F.R.C.P.I., President, in the Chair.

Friday, May 18th, 1894.

Exhibits.

Dr. Wm. J. Thompson exhibited a typical specimen of Anencephaloid Monstrosity.—Dr. W. J. Smyly showed a Myomatous Uterus, which he

had removed from a primipara, aged 40, in the Rotunda Hospital. Upon abdominal examination the uterus was found infested with myomatous nodules, the fœtus presenting in the second position, with the head freely movable above the pelvic brim. *Per vaginam*, a tumour as large as a fœtal head was found occupying Douglas's pouch, and encroaching upon the conjugate diameter to such an extent as to render the passage of the child impossible. Abdominal section was performed on May 4th, and the uterus drawn out and opened. The fœtus extracted began to cry almost immediately, and was still alive and well. An elastic ligature was placed around the cervix, below the tumour, and the latter, with the uterus, removed. The stump (too short to be treated extraperitoneally) was extirpated *per vaginam*, the broad ligament having been secured by clamps. A large mass of tissue was, however, found outside the clamp on the left side, and another clamp having been placed outside of this it was removed, and upon examination was found to be a second uterus, with a normal non-pregnant cervix, which easily admitted a uterine sound. The patient developed a thrombosis in the short saphenous vein of the left leg, but was progressing favourably.—Dr. ALFRED SMITH stated that the patient originally came to him complaining of great pain and cessation of menstruation. The signs of pregnancy were so badly marked that it was only when abdominal section had been performed with a view to removing the uterus, and the uterus grasped and *ballottement* obtained, that the diagnosis of pregnancy was established. The wound in the abdominal wall was immediately stitched up, and the case allowed to go on to full term.—Dr. PUREFOY related the history of a somewhat similar case which had come under his care.—Dr. SMYLY also showed a Uterus and Double Pyosalpinx, removed *per vaginam*. The patient was in a very debilitated condition from prolonged hectic fever, which necessitated the operation. The operation was not more difficult than an abdominal one would have been, but the left ureter was unfortunately drawn down and included in the clamp. The patient died of peritonitis on the fifth day.

THE ETIOLOGY, PREVENTION, AND TREATMENT OF PUERPERAL SEPTICÆMIA.

Dr. THOMAS MORE MADDEN read a paper on this subject. Under the heading puerperal fever, or septicæmia, he included all forms of infectious pyrexial disease directly consequent on parturition, whether peculiar to the puerperal condition or then assuming a specific character. These were all primarily ascribable to the invasion and development of pathogenic micro-organisms, in some cases identical with the streptococci of erysipelas or other infective diseases. Prophylaxis largely depended on the sanitation and maintenance of the constitutional condition of pregnant women before delivery, supplemented, when not specially contraindicated, by ferruginous tonics throughout the later months of pregnancy. The vital importance of asepsis in everything relating to the patient, her surroundings, and her attendants during delivery and the puerperium could not be too strongly insisted on. At an early period during labour, and again before its termination if protracted, as well as after delivery, the vagina should be washed out by warm antiseptic irrigation, with either carbolic (1 in 40), boric acid (1 in 25), or lysol (1 in 100) solution. The (1 in 1,000) bichloride of mercury solution recommended by some authorities, although a potent germicide, was an unsafe uterine application after delivery, and was mentioned only to be condemned for that purpose. But for the cleansing of the external genitalia during or after labour, a 1 in 2,000 solution of this salt might be employed by means of wood-wool pads, which should be destroyed immediately after use. Such obstetric manual cleanliness as was essential before any vaginal examination or contact with the lying-in or puerperal patient could only be secured by diligent hand scrubbing with clean hot water and soap by means of the nail brush, after which, and not before, the hand should be immersed in the antiseptic solution prior to touching the patient. On the completion of labour, and, above all more especially whenever that had been tedious, instrumental, difficult, or complicated, the uterine cavity as well as the vagina should be thoroughly flushed out with hot boric or carbolic solution, or peroxide of hydrogen. For this purpose the irrigator should invariably be employed, as the ordinary siphon syringe, when misused for uterine injection shortly after delivery, was extremely liable, as exemplified by cases referred to by the writer, to force the injected fluid or even air through the Fallopian tubes, giving rise to metro-peritonitis, or into the thrombosed uterine sinuses and thus possibly occasion death from embolism. As regards treatment in the now more prevalent typhoidal form of puerperal fever, the disease was distinctly of a remittent character, as shown in several clinical charts exhibited. Free stimulation, suitable nutrition, and strict asepsis by local irrigation of the uretro-genital tract were essential, whilst in the way of medicine there were only three drugs which appeared to the writer to possess any approach to specific, remedial, or germicidal action in such cases, namely, quinine, sulphurous acid, and turpentine. In the earlier stage of puerperal fever no remedy had afforded the author such advantage in reducing temperature and pulse rate, unlocking pent-up lochial and mammary secretions, inducing sleep and tranquillising the patient as phenazone in small and repeated doses. The effects thus produced were, however, too frequently but temporary, and in the later stages of puerperal septicæmia or where from the first the intensity of the puerperal septicæmic intoxication and consequent prostration were most marked, antipyrin was distinctly contra indicated.

Remarks were made by Dr. E. HASTINGS TWEEDY, Dr. A. SMITH, Dr. DOYLE, and Dr. SMYLY; and Dr. MORE MADDEN replied.

SECTION OF ANATOMY AND PHYSIOLOGY.

Friday, May 25th, 1894.

Professor FRASER, President, in the Chair.

EXHIBITS.

Dr. BIRMINGHAM exhibited (1) a specimen of Horseshoe Kidney, in which the two kidneys lay over the common iliac arteries and extended into the true pelvis, the isthmus lying on the front of the sacrum; and (2) a specimen in which the superior longitudinal sinus divided into two 1½ inch above the internal occipital protuberance; the straight sinus divided in a similar fashion; the two branches of each ran out and united nearly 2 inches from the protuberance to form the lateral sinuses.

COLLECTIVE INVESTIGATION REPORTS.

The reports of the Collective Investigation from the Anatomical Departments of Trinity College and the Catholic University were presented:

(a) Termination of the Spinal Cord.

Mr. J. H. MOORHEAD reported that the most frequent level of termination of the spinal cord in both sexes taken together was the lower third of the first lumbar vertebra. In male subjects it most usually ended on the first lumbar vertebra, and in females on the second lumbar vertebra. The cord has a distinct tendency to terminate at a lower level in females than in males. Relatively to the average length of the spinal column, the cord was slightly longer in females than in males.

Mr. J. A. ROUGHAN reported that out of nine subjects examined by him, in four the cord ended at the disc between the first and second lumbar vertebræ: in two at the junction of the middle and lower thirds of the first lumbar: in two at the junction of the middle and lower thirds of the second lumbar; and in one case at the lower end of second lumbar vertebræ.

(b) Bifurcation of the Abdominal Aorta.

Mr. PEERS SMITH reported that the place most frequently chosen for bifurcation was the lower third of the fourth lumbar vertebra (75 per cent.). The taller the male subject the greater was the tendency to bifurcation at a lower level; but in females the tendency, if any, was in the opposite direction.

Mr. FARNAN reported that of twenty-two cases the aorta divided in fourteen on the body of the fourth lumbar vertebra, slightly to the left of the middle line; of the remaining eight, seven were opposite the disc between the fourth and fifth lumbar, and one opposite that between the third and fourth. In the cases in which division took place on the body of the fourth lumbar, four were above, one at, and five below, the middle.

Reports on the Presence of the Palmaris Longus, Plantaris, and Pyramidalis were presented by Mr. W. SHACKLETON and Dr. FAGAN.

Dr. CUNNINGHAM, in proposing a vote of thanks to the several gentlemen who had so laboriously and carefully investigated the different subjects, said he was surprised to learn from the results they had obtained that the usual description was in the majority of cases correct.

After remarks from the PRESIDENT and Dr. BIRMINGHAM, the vote was carried by acclamation.

COMPLETE TRANSPOSITIONS OF THE VISCERA.

Mr. FRASER made a communication on this subject, exhibiting a specimen, which he had obtained in the dissecting room during the course of the winter session. The abnormal condition occurred in a female subject, about 45 years of age, and only 4ft. 2in. in height. He had now an experience extending over at least 1,400 bodies, and this was the first example he had met with. The transposition was complete, not only in regard to the viscera, but also to the blood vessels and to the thoracic duct. He considered the subject to have been one of twins from a single egg, in support of which opinion he showed a double monstrosity where dichotomy was complete except in the thoracic region (thoracopagus), and in which the left of the two fœtuses had transposition of the viscera. The same cause had been suggested by Mr. Morrant Baker to Mr. Bland Sutton, as stated in his work on *Evolution and Disease*, London, 1890, p. 132.

ANATOMY OF THE EAR MUSCLES.

Dr. BIRMINGHAM read a preliminary note on the subject, in the investigation of which he is at present engaged.

SINGLE AND DOUBLE MONSTROSITIES.

Mr. FRASER made a communication on various forms of single and double monstrosities, especially on anencephalic and amyelic nervous systems.

REVIEWS.

ATLAS OF THE DISEASES OF THE SKIN: In a Series of Illustrations from Original Drawings, with descriptive letterpress. By H. RADCLIFFE CROCKER, M.D., F.R.C.P. Edinburgh and London: Young J. Pentland. Sold by J. Lewin and Co., 2, Amen Corner, Paternoster Row, E.C. (Royal folio; 21s.)

[THIS Atlas, when fully issued, will be comprised in sixteen fasciculi, royal folio size, each fasciculus consisting of six full-page plates with descriptive letterpress. The fasciculi are issued at bi-monthly intervals, the price of each being one guinea nett. The publishers announce that subscriptions are received only for the entire work. The ninety-six plates represent fully two hundred life-size figures reproduced by chromo-lithography from the original water-colour drawings in the possession of the author.]

We have before us the first and second fasciculi of Dr. CROCKER'S Atlas. The first fasciculus contains Plate II, in which two examples are given of erythema tuberculatum and one of erythema circinatum; Plate XLII, in which dermatitis gangrænosa infantum with varicella and miliaria infantum are shown; Plate XLIII, ichthyosis of trunk; Plate LVIII, xanthoma, which is shown in four figures; Plate LX, lupus vulgaris with epithelioma; and Plate XCVI, with two figures showing scabies in the infant and in the adult. The execution of these plates is excellent, even the very difficult subject

of tuberculated and circinate erythema being fairly well shown; the more easy subjects of gangrenous varicella, ichthyosis, and xanthoma leave hardly anything to be desired. The utility of a good plate of a skin disease is well shown in the admirable picture of epithelioma developing in a lupus. This complication, which has been so well described by German authors, is sufficiently rare, but few observers who are capable of diagnosing lupus would fail to diagnose an epithelioma developing on a lupus if they had seen this plate, even although they had never seen an actual case in which these diseases are combined.

The second fasciculus contains Plate V, in which urticaria papulosa is depicted in two figures, one of them showing the combined effects of the eruption and scratching; Plate LXI, in which the early and developed stages of lupus are represented: Plate LXVIII, which is interesting and instructive as showing well the distinctive appearances of chronic scrofulous ulceration, and giving a fairly good picture of lupus verrucosus (one of the figures in this plate represents an unusually well-marked example of *post-mortem* warts, verruca necrogenica, as they were observed on the back of the hand of the porter of the *post-mortem* room of a London hospital); Plate LXXII, which shows an unusual and very exaggerated form of keloid that was well worthy of being thus placed permanently on record; Plate LXXX, which gives a good picture of the common form of eczema of the scalp under the name seborrhœic dermatitis, and a fair representation of eczema palmare; and Plate LXXXII, which gives a large picture of the peculiar form of eczema so frequently found on the chest of people who sweat much and wear thick flannel—the so-called "flannel rash."

Whilst the production of books on diseases of the skin may be easily overdone, and is probably excessive, leaving the would-be purchaser in some bewilderment, this never can be the case with atlases of skin diseases. All that is requisite in the case of an atlas is that the portraits shall be good. No two cases of skin disease are exactly alike; and, as accuracy of diagnosis can come only by observing many cases, it follows that the more good atlases which are accessible the better. The possession of one, so far from excluding the necessity of possessing another, ought to be a stimulus to purchase. Those of our readers who have interested themselves in such atlases are, of course, familiar with the valuable plates issued by the Sydenham Society; with the atlas of the late Dr. Tilbury Fox, which contains many of the original illustrations of Willan and Bateman's work; with many new plates, some of them possessing considerable interest; and with Dr. Dühring's most excellent atlas, containing thirty-six plates of high artistic excellence, giving most life-like illustrations of the commoner diseases of the skin. They will find that Dr. Crocker's Atlas promises to equal in value the most important of them, while it possesses the advantage of representing, faithfully and liberally, the most recent acquisitions to dermatological nosology.

In the list of illustrations which accompanies the prospectus we notice that one plate is assigned exclusively to arsenical pigmentation and keratosis, and that one plate will illustrate an interesting und important case of circumscribed sclerodermia of the skin supplied by the fifth nerve. The subject of lichen planus has assigned to it no fewer than three plates, and many other of the commoner as well as rarer forms of skin disease are referred to in the prospectus.

The explanatory letterpress is short, clear, and practical, consisting of a few sentences describing the nature of the affection, the most important points connected with the case pourtrayed and the treatment.

We trust this important work will receive from the profession the high appreciation and support to which it is entitled.

CLINICAL LECTURES ON RECENT SURGERY. By ARTHUR TREHERN NORTON, F.R.C.S., Senior Surgeon and Lecturer on Clinical Surgery at St. Mary's Hospital, etc. London: Baillière, Tindall, and Cox. 1894. (Crown 8vo, pp. 70. 3s.)

THIS is a small collection of clinical records which have been selected as representing some recent advances in surgery. All these lectures are interesting, and some two or three, particularly those on the radical cure of irreducible hernia and on tumours of the bladder, are really instructive and able contributions to surgical literature.

The remarks on the use of the thermometer, though giving very clearly the distinctive variations of temperature in several morbid conditions, present no novel points. That a thorough knowledge of this instrument is very serviceable with regard to both diagnosis and prognosis is, we believe, generally recognised, and, therefore, many of the results of Mr. NORTON's observation must be well known to most practical surgeons. Mr. Norton has had much experience in the operative treatment of tumours of the bladder, and his lectures on this subject will be read with much profit. It would be interesting to know whether in the interesting cases of so-called gangliar disease of joints any very rigorous observations have been made to prove the presence or absence of tubercle. Many surgeons, we imagine, will not be disposed to regard Mr. Norton's ingenious operations for fractured patella and olecranon as preferable to direct exposure and "wiring" of the fragments. This work contains many useful suggestions, and can be commended as a record of much good and earnest work in clinical surgery.

A TREATISE ON HYGIENE AND PUBLIC HEALTH. Edited by THOMAS STEVENSON, M.D., F.R.C.P., Lecturer on Chemistry and on Medical Jurisprudence at Guy's Hospital, and Official Analyst to the Home Office; and SHIRLEY F. MURPHY, Medical Officer of Health of the Administrative County of London. Vol. II. London: J. and A. Churchill. 1893. (Imp. 8vo, pp. 858, xlv plates. 32s.)

THE first volume of this *Treatise* has already been commented upon in the BRITISH MEDICAL JOURNAL of March 3rd. The second volume fully confirms the impression formed on studying its predecessor, that the work will be accepted as the standard English authority on the subject. The third and final volume, which deals with sanitary law, is nearly ready. The plan adopted, as already intimated, consists in the treatment of special subjects in a series of essays by "writers whose names are the best guarantee of the value of their contributions." The first volume contained sixteen such essays, the second contains eight, and includes some of the most elaborate and important sections of the work. As the editors remark in their preface to the first volume, the system of treatment might be expected to render it difficult, "without destroying the completeness of an article, to avoid dealing in it with matters also treated by another writer." This difficulty has been skilfully met, and there is a remarkable absence of such repetition. It is, moreover, noteworthy that the proportion of attention devoted to the various topics is carefully regulated in accordance with their relative importance, and it is almost impossible to detect any omission.

The section devoted to Vital Statistics, however, extends only to some forty pages, and though excellent as far as it goes, unmistakably whets the appetite for more. Some readers may incline to the opinion that Marine Hygiene is in comparison too liberally treated in being allotted twice as much space. The last-named article, however, is full of valuable information, and in any case it would be a question not of loving marine hygiene less, but rather of loving vital statistics more. The most important sections in the present volume are those dealing with the Pathology and Etiology of Infectious Diseases (Dr. E. Klein), the Natural History of Infectious Diseases (Dr. T. W. Thompson), and Small-pox and Vaccination (Dr. John C. McVail).

Dr. Klein's discussion of his subject extends to 31 chapters and is illustrated by 42 plates. His treatise is elaborate yet concise, the pages are as full of information as an egg is full of meat; they present not only what will probably be regarded as the most important contribution to bacteriological literature which has appeared in this country, but also an epitome of the etiological discoveries which have been made in England during recent years. The plates are admirably executed and for the most part original, consisting of reproductions from microphotograms and coloured drawings of Dr. Klein's beautiful preparations.

The section on the Natural History of Infectious Diseases constitutes an original development; it consists of an intro-

duction, and of a series of 21 essays dealing with as many diseases, each disease being considered from the point of view of Distribution, Periodicity, Influence of Climate and Season, Mortality, Fatality, Influence of Race, Age and Sex, Cause, etc. A very large amount of information is condensed into a relatively small space in this carefully written article.

Dr. McVail's essay on Small-pox and Vaccination is a most interesting digest of the history of small-pox, inoculation, and vaccination, and deals with the evidence as to the value of vaccination, and with the arguments of anti-vaccinators.

In the article on Vital Statistics Dr. Arthur Ransome has embodied a considerable amount of information. The exigencies of space have, however, compelled him to deal briefly with the subject, and to condense "a great reckoning in a little room." Dr. Ransome lays so much stress on the imperfections of statistics that the sceptical reader may think him inclined, like Carlyle, to look upon tables as a kind of sieve of the Danaides, beautifully reticulated, orderly to look upon, but capable of holding no conclusion; but of course it is true enough, and will bear being insisted upon, that "in vital statistics all students must learn to use imperfect materials, and yet to guard, as far as possible, against fallacious results."

Dr. Armstrong contributes an exhaustive article on Marine Hygiene, and the subject of Military Hygiene is dealt with by Professor Lane Notter. Methods of Disposal of the Dead are discussed in two sections. Sir Spencer Wells gives an interesting account of the history of the subject, deals with the evils of the modern burial system, and describes the efforts made by the Cremation Society to popularise its views. Mr. Lowndes treats of the conditions which should be observed in the management of burial grounds.

The concluding section, on the Medical Officer of Health, is an eminently readable and instructive article, and a model of condensation.

The editors have, indeed, conferred a boon upon all sorts and conditions of men interested in hygiene, in placing at their disposal a work so instructive and fascinating.

Die Krankheiten der Oberen Luftwege (The Diseases of the Upper Air Passages). By Dr. Moritz Schmidt, Frankfort. Berlin: Julius Springer. 1894. Demy 8vo, pp. 727. 15s.

Of the multiple affections to which the upper air passages are subject, it may be truly said that the more we know of them the more we find there is to know. The many valuable textbooks, the numerous papers presented to Societies, and the formation of special Societies for their discussion, all bear witness to this fact, and in the large work before us will be found a store of information founded strictly on clinical observation which will not only serve to clear up many points at present uncertain, but will open up the way to further study and investigation. Dr. Moritz Schmidt has not written a textbook in the strict sense, but a comprehensive clinical treatise, his object being to set before the profession the results of his own large experience, or, as he tersely puts it, he has written "*aus der Praxis für die Praxis.*" But whilst he never loses sight throughout the work of this practical object, he has kept in view the requirements of the student, and has made admirably clear all the minor points of description such as might well be omitted from a work written for the use of experts, without rendering his book either tiresome or uninteresting.

An important chapter occurs early in the work, dealing with "General Considerations," in which are many shrewd bits of advice and warning, the outcome of personal experience and perhaps failure in former years, which may be read with interest and advantage by senior and junior students alike. The dangers of over-specialising are very forcibly put and cleverly contrasted with the still more unsatisfactory practice of ignoring special subjects altogether.

Of the methods of local examination and local treatment a clear and interesting summary is given. The conditions of chronic catarrh are carefully considered, as being very often the cause of interminable troubles if allowed to follow their ordinary course. Pachydermia laryngis is fully described as occurring very frequently in association with naso-pharyngitis sicca, and as being secondary to it. In dealing with morbid conditions of the tonsils and the operation of tonsillotomy, a decided preference is accorded to the galvano-caustic loop instead of the tonsillotome. Of perichondritis two forms are recognised: the one suppurative and the other sclerosing. This latter is said to lead occasionally to stenosis of the larynx. In treating of the presumably syphilitic forms of perichondritis the use of iodide is discussed, and the idea that it is sometimes productive of œdema is met with the author's thirty years' experience to the contrary. The various effects that may be produced in the upper air passages by specific diseases are discussed very thoroughly. Certain after-effects of influenza, such as laryngitis hæmorrhagica, are worthy of note as not coming within the range of ordinary experience in this country. Of new growths the author writes with a happy combination of modern theory and actual experience. Especially noteworthy is his belief that a papilloma appearing for the first time after the age of 40 may be associated with a deep-seated carcinomatous base, as offering the true explanation of an idea that at times has been put forward to the effect that benign growths may be converted into malignant ones by the irritation of repeated removal.

Of the work as a whole it may be said that it is the best clinical treatise on the subject that has yet appeared. Written in a style that is eminently interesting and readable, it bears evidence that the greatest care has been taken to bring together the best and most recent work of other authorities. Quotation and original observation are so cunningly wrought together that a continuous and consistent whole is produced, which will doubtless meet with recognition from all who seek for trustworthy information on a subject which is even yet too little known and appreciated.

Sewage Disposal Works: A Guide to the Construction of Works for the Prevention of the Pollution by Sewage of Rivers and Estuaries. By W. Santo Crimp. Second Edition revised and enlarged. London: Charles Griffin and Company. 1894. (Demy 8vo, pp. 366. 30s.)

The usefulness of Mr. Crimp's work on sewage disposal published in 1890 is evidenced by the call for a second edition in 1894. Opportunity has been taken to amplify several points, so as to bring the subject up to date, and to add to the account of existing systems the more recent methods adopted for London, Berlin, and Margate. The examples which are given of the several methods of sewage treatment are of great value, for it is certain that we have not yet arrived at the point of having discovered any satisfactory universal system for sewage treatment. Towns near the sea will, when the currents admit, preferably turn their sewage direct into the sea, and in this way, besides saving the cost of treatment, they will probably recover some of the value, apparently thrown away, in the increased number of fish; but seaside towns, not favoured with currents which prevent accumulations on the beach and inland towns must seek some method of purification so as to obtain an effluent which can be admitted into sluggish estuaries or into rivers. River pollution by sewage is, chemically speaking, the addition of nitrogen compounds to the water, in the forms of organic nitrogen and ammonia. When the water is purified in porous ground, the final result is the conversion of all the nitrogen into its most highly oxidised condition, that is to say, into nitrates; and the amount of the nitrogen in this form is an indication of the amount that once existed in the organic form.

The question of the pollution of a river is, however, not a simple one, because an examination of water covering only a short period is not only insufficient to reveal the real character of the water, but may be positively misleading. Dr. Attfield, in a paper published in the British Medical Journal, June 17th, 1893, showed that infusoria in water appear to have a powerful influence in getting rid of bacteria and so aiding the self-purification of water. But if we turn large volumes of dirty water into a clear stream the free oxygen in the water is rapidly absorbed and without oxygen the conversion of the organic matter cannot proceed. Consequently the effluent must be made as free as possible from solid matter before being turned into a stream. The

several methods which have been adopted to effect this may be briefly classified under the following heads:—(1) Broad irrigation over land, that is, running the sewage over land by surface carriers and removing the effluent by subsoil drains. This is roughly calculated to require one acre for the sewage of one hundred persons. (2) Intermittent downward filtration. This means that the sewage is run through a filter of from 5ft. to 6ft. in depth in such a manner that each volume of sewage shall be succeeded by an interval during which the sewage is allowed to drain out and air to penetrate. The very valuable experiments made by the Massachussets Board of Health showed that about 170 000 gallons of sewage could be purified daily on an acre through a simple sand filter 5ft. 6in. deep when the sewage was applied in equal doses half hourly during the day and night. (3) The chemical treatment of sewage to free it from suspended matter.

The whole art of treating sewage chemically lies in precipitating and clarifying it when fresh before active fermentation has set in. Precipitation means the mixing of some chemical substance with the sewage which forms a coagulum which sinks to the bottom and entangles and carries down the solid matter. This solid matter is collected from the bottom as sludge and either pressed and dried, and then sold or dug into the ground, or else, as in London, it is put into barges and carried out to be dropped into the sea.

(4) It seems possible that the use of chemicals for causing a deposition of the sludge may be eventually superseded by Webster's or some other analogous process of treatment by electrolysis. The chemical changes that take place in sewage when it is electrolysed, depend on the fact that water as well as sodium, magnesium, and other chlorides (which are always present in sewage), are split up by the electric current into their constituent parts. Thus, we have at the positive pole chlorine and oxygen set free, and these elements are liberated in a nascent state—a condition in which they are intensely active, so that the organic matter in the sewage is rapidly oxidised into innocuous compounds. This process is, however, as yet only in the trial stage.

The conclusion to which a perusal of Mr. Santo Crimp's interesting volume brings us is that when our knowledge is more extended we shall probably find that it is easier to get rid of the evils of our sewage either by encouraging some form of organism to act as our scavengers for clarifying sewage, or where space is more limited by bringing electricity to our aid in lieu of the costly processes of chemical treatment to which we now have recourse. In any case this book of Mr. Santo Crimp's is an important contribution to the literature of the sewage question, and it will prove of great value to all students of methods of sewage disposal both in this country and elsewhere.

La Famille Névropathique, Théorie Tératologique de l'Hérédité et de la Prédisposition Morbides, et de la Dégénérescence. [The Neuropathic Family: A Teratological Theory of Morbid Heredity and Tendencies, and of Degeneration.] Par Ch. Féré, Médecin de Bicêtre. Paris: Alcan. 1894. (Crown 8vo, pp. 334. Price 4 francs.)

Dr. Féré has given proof of great diligence in the composition of this book. In addition to a careful study of the ample materials to be found amongst the inmates of the Bicêtre, he seems to have read almost every noteworthy book and article which has appeared in European and American neurological literature. In the table at the end there are 673 names of authors, many of whom are quoted several times for different observations. Nevertheless, Dr. Féré does not lose himself in details. Accepting some recognised data, he seeks to reduce the phenomena of degeneration to general laws. He finds that in families which are degenerating, the descendants resemble their parents less than they do degenerated members of other families.

The primary cause of hereditary degeneration is a lowering of the nutritive force, which affects the progeny with deformations and functional incapacities in divers parts of their organisms, and leads in the end to a dissolution of heredity and the extinction of the race. In his chapter on prophylaxis, Dr. Féré recognises that this degenerative tendency is not absolutely fatal; the family may be restored by better conditions of nutrition, avoidance of accidental troubles, and fortunate intermarriages, in which, however, the healthy risk something.

Dr. Féré's experiments on the artificial production of monstrosities in hatching eggs confirm his views on the nature of a pathological heredity. He mentions colour-blindness amongst the functional signs of degeneracy, but this incapacity is not relatively common in idiots, in whom the eyesight is generally good, though touch and hearing are often deficient. The engravings, twenty-five in number, are well designed and well executed. Altogether this book contains many curious facts and some sagacious generalisations. It cannot fail to increase the already well-deserved reputation of the author.

Advanced Physiology. By John Thornton, M.A. London: Longmans, Green, and Co. 1894. (Crown 8vo, pp. 440, illustrations 266, some coloured. 6s.)

This volume is one of the daily increasing class of educational works compiled for a limited circle or readers, it being written specially to meet the requirements of the advanced stage of science subjects as laid down in the syllabus of the directory of the Science and Art Department. Of the dangers attendant on this method it is not our purpose to speak. Confining ourselves to the actual volume under consideration it may be said amply to fulfil its object. The writing is clear and concise and even in places suggestive, but in common with all books of its kind it lacks the inspiration which it is the aim of all good teachers to give. The scope of the book coincides with that laid down in the advanced syllabus to which it adheres more or less exactly, and treats adequately. The strong feature of the book is the excellent choice made by the author in the matter of illustrations. These are both numerous and good and are all reproductions of well known plates. Many of them are taken from recent additions to physiological and anatomical literature, the treatises of Testut, Quain, and Gray among others affording some of their best illustrations.

This is an example which deserves to be widely followed, and is the best method of illustrating elementary works. The histology of the science is amply dealt with, but the chemistry is relegated to an appendix where it is not so well treated. It would have been better to have incorporated it in the body of the work.

On all points which may be regarded as provisionally settled the book is well up to date; in short it is a volume that we could confidently place in the hands of students preparing for the examination for which it is written, and in many respects it is worthy of a wider circulation. A set of progressive questions is placed at the end of the volume. These will be useful not only in enabling the student to see the nature of the examination he may have to undergo, but also in calling attention to those little points which are essential to accurate knowledge and which are so likely to be missed in a course of reading alone.

NOTES ON BOOKS.

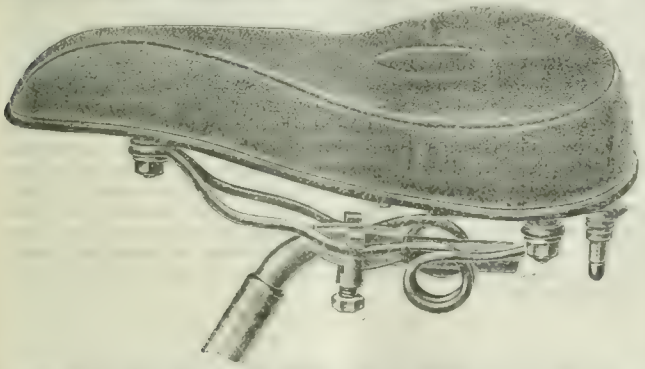
A Handbook of Medical Pathology for the Use of Students in the Museum at St. Bartholomew's Hospital. By W. P. Herringham, M.D., F.R.C.P.; A. E. Garrod, M.D., F.R.C.P.; and W. J. Gow, M.D., M.R.C.P. (London: Baillière, Tindall, and Cox. 1894. Cr. 8vo, pp. 320. 7s. 6d.)—This small handbook, we do not doubt, will be greatly welcomed by the students of the excellent museum at St. Bartholomew's Hospital. Indeed, it is somewhat difficult to understand why such a guide to the medical and gynæcological specimens, on similar lines to Walsham and Power's surgical handbook (known to former students as Walsham's *Pathology*), has not appeared long enough ago. The general plan here followed is to give a short account of the morbid anatomy of the disease, and then a brief description in smaller type of the illustrative numbered specimens. The reasons for the omission of aortic aneurysm and even tumours of the larynx hardly appear sufficient. Rather curiously, no specimen is cited under so fairly common a disease as pyosalpinx. Cold still

appears as a cause (apparently direct) of acute pneumonia, pleurisy, and Bright's disease. This handbook is portable, well got up, and will no doubt satisfactorily fulfil the objects for which it has been designed.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

PNEUMATIC CYCLE SADDLES.

ONE of the great objections to the bicycle or tricycle as a means of locomotion is the amount of vibration which is transmitted to the perineum, and is apt to cause discomfort or worse. Various devices have been brought out from time to time to obviate this; among the best and most recent is the pneumatic cycle saddle, manufactured by Messrs. Guthrie and Hall, South Shields. The rider sits upon a saddle-shaped airbag, the tension of which can be easily



adjusted. The general appearance of the saddle is neat, as it is not noticeably larger than an ordinary leather saddle, and it has the further merit of diminishing the liability to "saddle-soreness." We are informed that Mr. R. H. Carlisle, who it seems is a member of the medical profession, used one of these saddles from Warrington onwards in his recent ride from Land's End to John o' Groats. As the rider never slept on his journey, and was in the saddle almost continuously for 86¾ hours, he put the qualities of the saddle to a pretty severe test.

AMERICAN PHARMACEUTICAL PRODUCTS.

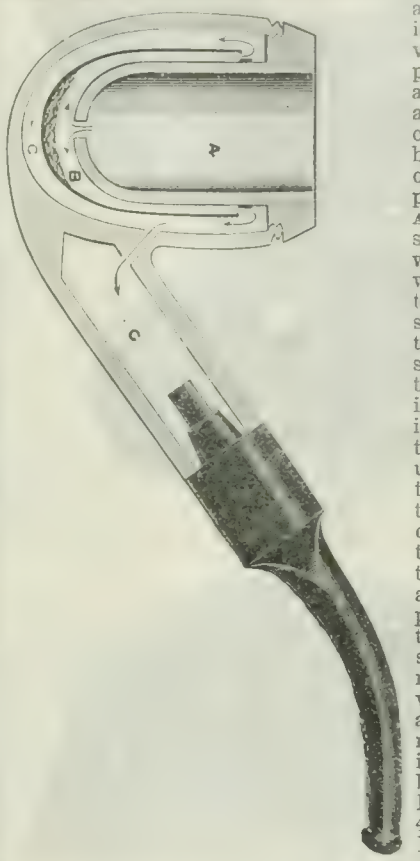
MESSRS. FREDERICK STEARNS AND CO., manufacturing pharmacists, Detroit, Mich., U.S.A., have sent from their London office, 25, Lime Street, E.C., samples of some of their pharmaceutical products. Wine of cod-liver oil, with peptonate of iron, is an entirely new and original article, the preparation of which has been based upon the recent researches made on the various constituents and active matters of cod-liver oil. From these researches it would appear that the organic derivatives to which cod-liver oil owes its therapeutic qualities are of biliary origin, and of the nature of alkaloids. Morrhuine, one of the most important of these alkaloids, is stated to be a powerful stimulant of the functions of nutrition and assimilation, and to possess a special appetising effect. The other bases—butylamine and amylamine—excite the nervous system, accelerate assimilation, and increase the appetite. The manufacturers state that wine of cod-liver oil with peptonate of iron contains 25 per cent. of cod-liver oil as represented by its active medicinal constituents morrhuine, butylamine, amylamine, iodine, bromine, and phosphorus, combined with peptonate of iron. This preparation appears to have given satisfaction in the United States. It is certainly very palatable, and, since all the unpleasant characteristics of cod-liver oil are absent, will no doubt be appreciated.

Cascara aromatica is a fluid extract of the bark; it has a sweet taste, mixes with water, and is decidedly an active preparation.

Dike's pepsin is in scales, soluble in water, free from any unpleasant smell, and fully answers the test of digestive power as given in the *United States Pharmacopœia*. It is in every respect a good pepsin.

A PIPE INHALER.

DR. CHARLES FORBES has designed a tobacco pipe which can also be used for inhaling eucalyptus or other volatile drugs. The pipe is of briar wood, and does not differ in appearance from the ordinary pipes in use, but the bowl consists of three concentric parts, an inner bowl, A, of wood, which screws into an case of wood, which forms one with the stem; between the two is a small aluminium retort, B. The air or smoke passes through the central aperture in the bottom of A into the retort, where the oil and moisture are deposited; thence it passes through apertures D D, cut in the retort, into the outer bowl, and so to the stem. The retort appears to serve the purpose of condensation well in ordinary smoking, and the mouthpiece remains very clean. The portability of the pipe may make it useful as an inhaler. The pipe can be obtained from the Leadenhall Company, 48, Leadenhall Street, London, E.C.



A PRESCRIPTION BOOK.

WE have received from Messrs. Wright and Co., of Bristol, a duplicate prescription book, which will be found convenient. The physician writes on a thin leaf, and the prescription itself is traced at the same time on another stronger sheet by the interposition of a leaf of carbon paper. The fault of this, in common with other prescription books of the same kind, is that the sheets are too small. The size before us is considerably smaller than a sheet of ordinary notepaper. Messrs. Wright and Co. also issue a book without the thin interleaves for copies. Volumes containing 100 with copies, or 150 without, are sold at 1s.

CASCARA JELLY.

WE have received from Messrs. C. R. Harker, Stagg, and Morgan, manufacturing chemists, 15, Laurence Pountney Lane, E.C., a specimen of a new preparation, in the form of an aromatic jelly, of cascara sagrada bark. It is stated that the bitter after-taste of the drug has been disguised solely by the use of flavouring agents. The bitterness of this bark can be removed by the use of certain chemical agents, but there appears to be little doubt that its efficiency is impaired by the process. The cascara jelly is very palatable, it can be taken without any difficulty, and we can say that the specimen we have examined is certainly an active one.

AN IMPROVEMENT IN GAS STOVES.

The Prevention of Lighting Back.

Dr. C. Bernard Voisey forwards particulars of an invention for the prevention of "lighting back" in atmospheric burners for gas fires, stoves, and other gas appliances. The accompanying photographs will render the description more intelligible.

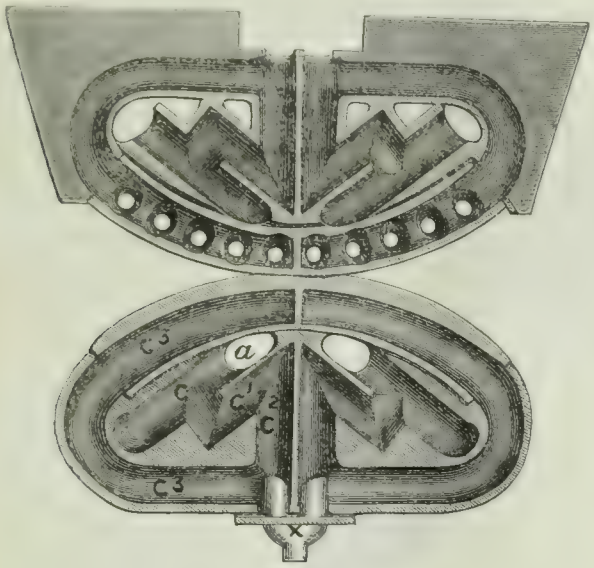


Fig. 1.

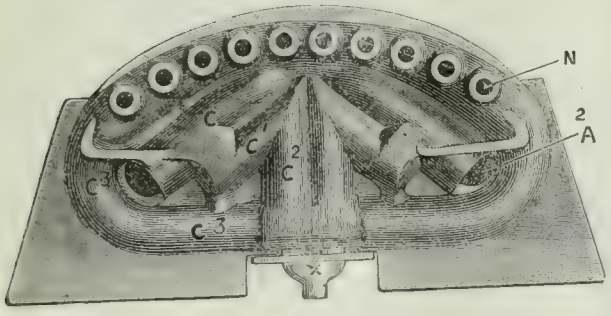


Fig. 2.

Figure 1 represents a horizontal section of the burner, showing its internal construction, and Figure 2 the burner itself as seen from above. Lighting back may be caused by: (1) Down draughts playing upon the nipples, for example, a faulty chimney. (2) Draughts playing upon the air inlets, for example, sudden opening or closing of doors, moving objects in front of the stove, etc. (3) Sudden and varying pressure of gas. (4) Too small a nozzle or choking of the nozzle. (5) Insufficient gas. When a burner is lighted back the gas burns in the mixing chamber at the point where it issues from the nozzle, and it is then unable to obtain a sufficient amount of air to insure complete combustion; the consequence being that acetylene (C_2H_2) and carbonic oxide (C.O.) are produced. The former is at once poisonous and offensive to the smell, and is easily recognised, and were it not for the fact that attention is thus drawn to the faulty action of the burner, the latter still more poisonous (C.O.) carbonic oxide might be blown into the room, where the chimney is defective, and escaping detection might produce serious consequences. It is obvious that any burner which diminishes or annuls these drawbacks must tend to the more general adoption of gas for heating purposes.

Gas heating is a luxury and convenience which modern invention has placed at our disposal, but up to the present time the drawbacks, though often exaggerated, are considered by many to more than counterbalance the recognised advantages. The new improved "patent choke damp burner" surmounts the difficulty of preventing "lighting back," and should do much to overcome the prejudice which has developed in connection with the atmospheric burners of the old type. We have tried it and found it very efficient, even when working under so low a pressure as 0.4 inch, which is more than can be said, so far as we know, for any other invention of the kind.

The principles involved in the construction of this stove are two: (1) The utilisation of CO_2 to extinguish the flame at the nozzle (X Fig. 1), where the gas is ignited in consequence of draughts playing upon the nipples. (2) The utilisation of the fact that a feeble negative or minus pressure (that is, a pressure a very little less than 15lbs. to the square inch) is ineffectual to cause lighting back when applied to the air inlet at the point where the gas and the air enter the mixing chambers. (1) When draughts from a faulty chimney or other source play upon the nipples (N Fig. 2), the flame is blown into the mixing chamber (C^3 Fig. 1), and causes the mixed air and gas to explode, the products of the explosion, namely, C_2O, H_2O, etc., being received in the tubes C^2C^1C, Fig. 1. The gas is for the moment burning at the nozzle (X Fig. 1), but on the cessation of the draught the injecting action of the flame subsequently draws the CO_2, stored in C^2C^1C, Fig. 1, over the nozzle, and so extinguishes the flame there, and allows the burner to right itself. But in addition to obviating the influence of draughts at the nipples and the air inlets, Nos. 1 and 2 in the list of causes given above, it is found that the arrangement also renders the burner much more tolerant of causes 3 and 5. The only remaining cause is 4, and this is either a defect of careless manufacture or the result of deposition of C in consequence of the burner having previously been often lighted back. The former can be remedied in the making, and the latter in the case of the new burner does not occur. The invention is patented, and the manufacturers are Messrs. Richmond and Co., Limited, of Warrington.

HOME MADE BEEF POWDER AND HOW TO PREPARE IT.

Dr. William R. Huggard (Davos Platz, Switzerland) writes: Most, if not all, of the beef powders in the market smell and taste of the chemist's shop, and are not readily taken by an invalid whose palate requires to be coaxed. A happy idea struck me several months ago that beef powder might without difficulty be prepared fresh and on a small scale by any ordinary cook. The experiment was made, and the result was satisfactory beyond expectation. Beef powder made at home is appetising, has a delicate aroma and flavour, and can be taken with pleasure by invalids who turn with aversion from ordinary food. If a little pepsin be taken at the same time, it is digested even when the ordinary peptonised foods are not retained. The mode of preparation is simple. Lean beef is cut into small pieces; these are put into boiling fat, dripping, or butter for a couple of minutes until the surface is browned. They are then removed from the fat and placed on a strainer for a few moments. Afterwards they are placed in a mincing machine. The resulting mince is placed in a slow oven and dried. The drying process may take from five to twenty-four hours, or even longer, according to the heat employed. When thoroughly dried, the meat is quite crisp, and can be ground in a coffee mill that has not been used for any other purpose. In the drying process the meat loses a trifle more than four-fifths of its weight. This beef powder can be taken in various ways: with hot water or soup, with mashed potatoes, with bread and butter in a sandwich, or with a little pepsin in a starch wafer. I have given this home-made beef powder with such excellent effect in several cases where there was much difficulty with food that I think my professional brethren may also find it useful.

*** We find that beef powder carefully prepared according to the directions here given has an agreeable flavour, and admits of being used like potted meat by persons of delicate or fanciful appetite. By regulating the heat applied in making the powder, the albuminous constituents need not be coagulated, but merely dried, and the digestibility of the powder would then be increased. In any case the finely divided condition would facilitate digestion. A very good beef-tea may be made from the powder by infusing it in moderately hot water. For the preservation of the powder it would be necessary to keep it from contact with atmospheric air and to avoid the access of mites or similar deteriorating influences.

St. Mary's Hospital.—The Duke of York presided on June 1st over the festival dinner in aid of the general maintenance fund and the Clarence memorial fund of St. Mary's Hospital. A list of subscriptions amounting to £5,282 10s. was read by the Secretary.

REPORTS
ON
THE NURSING AND ADMINISTRATION OF PROVINCIAL WORKHOUSES AND INFIRMARIES.

SPECIALLY REPORTED TO THE "BRITISH MEDICAL JOURNAL."

II.

HATFIELD.

HATFIELD is a small country town, which owes most of its importance to the junction on the Great Northern Railway, and to Hatfield House, the seat of the Marquis of Salisbury. The workhouse is less than a mile from the station; it is an old house, and scattered in its arrangement. On the immediate right on entering the gate is the new block for the male infirmary; on the left are quarters for the vagrants and casuals; in the centre, some distance from the gate, is the main block of the house. The building is nowhere above two storeys in height.

We were received by the Master and Matron, who most courteously gave us every opportunity of seeing all parts of the house; and Dr. Lovell Drage, the medical officer, was kind enough to accompany us.

MALE INFIRMARY.

The male infirmary is a comparatively modern building. It consists of two wards holding twelve beds each, a day room, and an empty ward, used for lock or other isolation cases. In a small lobby close to the wards is a sink for washing up, and two fixed washing basins, over which are taps, but there is no water supply. Outside the entrance is the closet, which is on the earth principle, but there was no earth in it at the time of our visit; it was simply a metal pan to receive the evacuations, and, considering its faulty construction, it was a wonder it was not more unwholesome than we found it. The wards are bright and cheerful, and nearly square, about 18 or 20 feet; the bedsteads are 3 feet wide, and the bedding is either flock or straw, the latter being preferred for its cleanliness. Of those in bed, the only acute case was one of phthisis; the temperature chart over his bed looked very businesslike. Each patient has his or her bed card, with the disease, treatment, and diet written by the medical officer. The other two cases in bed were senile debility; the linen was clean, and the beds comfortable. There is no bath room, nor is any hot water supplied to any part of the building; we saw in one corner a small copper supposed to be heated by gas, but, as it was set quite close to an external door in a draught, it could not be kept alight, nor if the flame were maintained would there be much chance of the water being hot. There were a few movable baths about, but these are not on wheels; they have to be filled by kettles and baled in emptying; to give such baths in an infirmary is to make a mock of bathing. The only fixed bath that we saw was in the tramps' quarter, and it was large enough for a good-sized child to take a comfortable bath.

FEMALE INFIRMARY.

The female infirmary is in a line with the main block, and is located in some old cottages, buildings as unsuitable for the purpose as can well be imagined. On the occasion of our visit we found about half a dozen old women huddled round a fire in a small room about 10 feet wide by 20 feet or less long. There were six beds in this ward, two of them being occupied by aged patients; the windows were small, there was no cross ventilation, but sliding shutters to admit the fresh air. On questioning the nurse she said that the foulness of the ward after the night was excessive; the only possible provision for their natural wants was the commode, and this was not emptied until the morning. The water-closet attached to the female infirmary was at a little distance out of doors, and to this they had to make their way in all weathers; moreover, this convenience was immediately under the window of the labour ward, and, though on the earth principle, was without that necessary deodoriser. This ward was in direct communication with the airing court, and the cold air easily made its way through the ill-fitting door. The bedsteads were the narrow 2 feet 3 inch frame, the ward not admitting the wider bedstead. The ward above had six beds in it, but at this time it was empty. The quarters for the nurse are in this block. The staircases are narrow and steep, and the impossibility of carrying a corpse down decently, or of bringing helpless patients out in the hurry of an alarm of fire, was painfully evident.

THE LYING-IN WARD.

The labour ward is a small attic about 8 feet square, with a proportion of the air space taken off by a sloping roof; there is a small fireplace quite inadequate to maintain a sufficient temperature in the depth of winter, and of but little use to the nurse. All slops and refuse must be carried down to the outside closet. The bedding was in a soiled condition, but the matron said that she was having new bedding made as fast as possible, and that she had supplied the nurse with mackintoshes; both she and the nurse had only recently been appointed. The only ventilation was from the window opening just above the convenience above named. We can hardly conceive that a board of guardians would acquiesce in this state of things, but wherever the difficulty of reform lies we trust that action will soon be taken either by the medical officer or the inspector to have them remedied. As long as they stand they are a disgrace to Hatfield, and if any deaths result from the low temperature of the ward, the board must be held morally responsible for them.

SANITARY APPLIANCES.

In making our round we came across another convenience, this time a watercloset, but without water; of course it was not sweet, and the matron told us that it was only by the liberal use of disinfectants that she was able to keep it even tolerably wholesome. The water that is used in the house and in the infirmary is pumped up by the tramps, though the town main passes outside the gates.

SYSTEM OF NURSING.

There is one trained nurse for these thirty-six beds, there is no night nurse, but in the event of a patient requiring more attention the matron divides the work with the nurse. There are no means of communication with the officials at night except by sending a pauper across the courts to the master's or the nurse's quarters, and the male infirmary is at some distance from either. The cleaning of the wards is done by the wardsmen and women; they have not been responsible for the nursing since the trained nurse came; the old wardsman who had been infirmary attendant over twenty-five years had become quite skilled as a nurse.

ISOLATION.

There were no lock cases in at the time of our visit; such cases are isolated in the small wards in the male infirmary, and the same course is pursued for the insane, attendants being sent in from the town to take charge until removal to the asylum. We saw one imbecile on the female side, but she was quite harmless.

DIETS.

The medical officer has a free hand in diets, and the food given is suitable to their condition. The doctor receives a salary of £30 for attendance and drugs, and there is a separate fee for operations.

SICK COMFORTS.

The wards on the male side were provided with comfortable armchairs and—most unusual sight—a sofa; on the female side there was no room in the wards for anything but the bare necessaries. In the male wards we saw some screens, but so cumbersome that a nurse could hardly be expected to carry them. The airing courts are dreary prison-like yards, asphalted, the garden, with its wealth of flowers, being behind the house out of sight. We are at a loss for the reason why the sick poor are so carefully excluded from the use of the gardens; it would surely relieve the monotony of their lives to be allowed to walk among the flower beds. In view of the deficiencies disclosed, we append the following

RECOMMENDATIONS.

To build a new female infirmary contiguous to the male block, fitted with suitable appliances for sick nursing. The

remodelling of the drainage and water supply. The employment of a paid attendant in the wards at night. To provide a communication with the officers' quarters for use at night. To build bath rooms in the infirmary, with hot and cold water in them.

DUAL NOTIFICATION AND THE DEATH-RATE.

We publish in another column an elaborate letter from Mr. Biddle, defending his views with regard to dual notification. Mr. Biddle draws attention to the errors of inadvertence in printing the tables published in the British Medical Journal of May 19th. They, however, do not affect the calculations or the argument. We would further point out that the definitions in the groupings in Table A should read: "II. Single system of notification"; and "III. Becoming wholly under dual system of notification."

Dealing with Mr. Biddle's several points *seriatim*: We must adhere to our opinion that the most satisfactory method of dealing with varying figures, with a view to showing the true significance of the variations, is to ascertain the relative proportions which each class of figures bears to its predecessors. The differing significance of a fall from 100 to 97, and of a fall of 3 in 10, is patent in much clearer fashion when we speak of falls of 3 and 30 per cent. respectively than when we merely speak of a fall of 3 in each case.

It is indeed interesting to note the place taken by the *plus* and *minus* signs in Mr. Biddle's Table E.; but then the interest to us lies in the fact that eight of the nine *minus* signs have to do with total zymotic and notifiable diseases. Only in London in respect of both these classes, and in Group II as regards the latter, has there been any loss in 1890-93 as compared with 1886-89. And as regards this Group II, what does it consist of? Only of three towns, hardly 11 per cent. of the total number, and having under 6 per cent. of the aggregate population. The results of a four-year period on this small section do not deserve serious consideration; but since Mr. Biddle takes exception to our omission of the middle period in our argument, we have taken out the data for that period on the lines of Table D on page 1087 of the British Medical Journal of May 19th.

Table D (1), *showing the Relation which the Death-rates in Tables A, B, and C., during the four-year Periods 1886-89 and 1890-93, bear to the Period 1882-85, the rates of this earlier Period being in all instances represented by 100.*

Death-rates from	Period	22 Towns	Group I. London.	Group I. 10 Provincial Towns	Group I. Whole Group.	Group II (3 towns)	Group III (14 towns)
All causes	1886-89	95.1	94.7	92.5	94.0	94.7	98.0
	1890-93	99.9	105.0	99.0	100.5	92.8	98.7
Total zymotic diseases	1886-89	90.4	86.9	87.0	87.0	99.0	99.0
	1890-93	86.6	88.0	80.4	85.1	87.6	90.6
Notifiable Diseases	1886-89	74.8	69.0	69.7	69.0	76.6	97.0
	1890-92	74.5	[illegible]	[illegible]	72.8	82.8	[illegible]

It is interesting to note that in all the groups and sub-groupings, except Group II, there was rise in the all-cause death-rate in the third period as compared with the second. In the total zymotic class it was London only that showed rise. As regards notifiable diseases, Group II shows rise, but we have just shown the utter insignificance of this group in comparison with the whole for the purpose of trustworthy inference. The only other rise shown is by London (rise therein entirely governing Group I, which elsewise shows continuance of greatly reduced proportion). There are factors which in large measure account for this rise. The period is very short, as we stated in our issue of May 19th. To take one factor only, namely, diphtheria, we find that that disease has been specially epidemic in London of late, and we well know the habit of this fell disease to fasten on children of school ages, particularly the ages from 5 to 10 years. The malady is becoming acclimatised to town life, and is the one disease which above all others is now taxing the resources of sanitary science to find means of arresting its epidemic extension. In London in the years 1878-87 the average annual death-rate from the malady per 1,000 living was 0.20; in 1888-90 it was 0.33; in 1890 the rate was 0.32; in 1891, 0.32; in 1892, 0.44; whilst in 1893 the mean of the quarterly rates gives an annual rate of no less than 0.75. And, again, in 1892, the last year for which an annual summary has been issued by the Registrar-General, the balance of excess of deaths from all causes as compared with the decennium 1882-91, was 719, whilst the actual excess from diphtheria alone was 712. Now examining Table D (1) apart from London and the small Group II, what do we see? This: In all the towns together a very small diminution, but still a continued diminution, in the notifiable diseases. Next, in the ten provincial towns of Group I, a very respectable diminution—namely, from 69.7 to 55.9; London, as we have said, governing this group. Next, again, in Group III, the group having the largest number of towns, we see the effect of dual notification on any great aggregation of population, even for such a short period of time. Here the fall is no less than from 97.0 to 80.6, a condition of things not paralleled in any other section.

Thus we see that the third in contrast with the second period lends itself to the credit of dual notification. It is true that the third period does not show so large a continued fall from the data of the second period as does that period on the first. But rate of progress cannot always be maintained at one level, and the true test of the system is in the fall from the earlier period shown in the second being continued in the third, whatever its amount, the persistence of the fall proving the operation of some influence for the further lessening of the death-rate. It will only be as we deal with longer periods and with masses of people that we shall truly estimate the value of notification. When a universal system, on the lines of the Bill now before Parliament, shall have been in operation for ten years we may have data in a measure sufficing for the purpose.

If we mistake not, Mr. Biddle attempts, in his reference to his Tables E and F, to compare the rates of differing groups in different periods of time. The relative proportion of fall in the third period from the second was much greater in Group III than in Group I.

A reference to the above Table D (1) will show that the fall from 100 to 69.7 in the second period for the ten provincial towns of Group I has been followed by a further fall to the extent of nearly 14.0 per cent. in 1890-93.

With regard to the remarks as to influenza, may it not be that the enormous fall in the rates from the strictly notifiable diseases has prevented any effects from influenza from finding expression?

In his further remarks on Leeds Mr. Biddle is dealing with one town only, and that a town having had, if we mistake not, some system of voluntary notification.

With regard to Mr. Biddle's remarks as to crowded hospitals, errors of diagnosis, and the death-rates under the prevailing system of dual notification, we would only say that the larger use of hospitals is one of the most satisfactory results of notification, and one likely to be in great degree the future means of checking small outbreaks from assuming the proportions of epidemics. Mistaken diagnosis is surely better discovered than that a patient be left to improper treatment at the hands of a medical man who has not properly named his disease. Notification will prove a benefactor in this direction. We have already, we trust, sufficiently proved the fallacy of crediting dual notification with any increase of the death-rates.

In our opening statement in the Journal of May 19th we were setting forth Mr. Biddle's plan of procedure. In Table A and in our comments on the transition stage of Group III in the second period we were dealing with facts coming to our own knowledge. So far as we can learn, the local Acts under which Preston, Birkenhead, and Blackburn possess powers of compulsory notification do not contain reference to dual notification. The onus of notifying seems to fall on the medical man alone, and only in his absence on the occupier. This

appears to us to savour of the single system. Moreover, as still further detracting from the already small significance of Group II, we find from a Parliamentary paper—No. 194 of 1892—that one of the three towns, Brighton, did not adopt the Notification Act until February 1st, 1891, thus cutting into the short period by more than a year. And again, as regards Group I, we find from the same return that the Act was not adopted in Liverpool until September, 1890, and in Brighton until March, 1891. Thus it is seen that the several groups were not strictly comparable even for the third period.

LIFE-SAVING SURGERY.

The Saving of Life and the Saving of Suffering.—The Cure of Diseases previously Incurable.—The Diminution in the Death-rate after Amputations.—The Great Development of Conservatism in Surgery.—The Immense Diminution in the Death-rate after Ovariotomy.—The Statistics of a Provincial Hospital.

IT would be impossible to find space, even if the undertaking would repay the labour it would involve, to follow all the wild statements which have been made recently about "human vivisection" in certain daily papers and trace out their origins in ignorance or malice. Without staying to controvert these misrepresentations, however, we have briefly marshalled some of the most striking affirmative facts relating to the results of the "new surgery" which has been assailed. It is well known to all who have any acquaintance with the recent advances of surgery that these advances have aimed at attaining—and have to a very large measure attained—a diminution in the mortality after operation, a decrease in the number of persons submitted to such mutilating operations as amputation of a limb, and a shortening of the period of suffering after accident and operation.

The saving of human suffering which we owe to the antiseptic system and to the improved methods of modern surgery is incalculable. It is not merely that patients recover who formerly died, that limbs are saved which were formerly amputated, that tumours are removed which were formerly beyond the reach of surgery, but that the patients recover from operations and accidents much more rapidly, so that the period spent in hospital is now often measured by weeks where before it numbered as many months. All this is matter of common knowledge to all persons of ordinary intelligence and information who are not wilfully blind; but it may be worth while to review some of the work that is now done in our hospitals to show how steadily their results in surgery have improved.

Some of our best work is of such recent growth that we have no past record with which to contrast it; we cannot contrast our pictures with blank canvas. If we take, for example, renal surgery, and look back only fifty years, we find Lawrence saying, "The kidney, gentlemen, is fortunately beyond the reach of the surgeon." If we take the surgery of the vermiform appendix, we find nothing less than fifty years ago—nothing but deaths. So, too, with the radical cure of hernia, and with the surgery of the brain. Barker's[1] 50 consecutive cases of the former, without a death; Macewen's[2] success in 16 out of 17 cases of cerebral abscess, and in 16 out of 20 cases of thrombosis of the lateral sinus; we look a few years back, and we seem to be in another century.

But let us take two major operations the names of which at least are familiar to the public—amputation and ovariotomy. Dent's[3] statistics of St. George's Hospital show that for amputations between the ages of 30 and 40 the mortality during 1872-74 was 40 per cent., during 1874-1888 it was 14.2 per cent. From 1874 to 1879 the percentage of mortality after amputation, at all ages, was 26.3; from 1880 to 1888 it fell to 18.8; and of these latter years he says, "If we exclude the cases of death already tabulated as not really due to amputation, we are left with 21 deaths in 341 cases, or a mortality of about 6 per cent." During 1852-1874 there were 500 cases of amputation, and 75 of these died of pyæmia; during 1874-1888 there were 400, and 8 of these died of pyæmia.

Mr. Page's[4] statistics of the Newcastle-on-Tyne Infirmary show, during 1879-1888, 484 cases of amputation, with a general mortality of only 7.6 per cent.

The statistics of St. Thomas's Hospital[5] for 1876-85 give a mortality of 12.8 per cent. for amputations of all kinds. Schede[6] has compiled a table of 321 cases of amputations, performed antiseptically, and attended by a mortality of only 4.4 per cent., while in 387 cases of amputation of equal importance treated during the preantiseptic period the mortality was 29.18 per cent; and in 1840 the mortality in the London hospitals after amputation was 36 per cent.[7] So late as 1858 Dr. Sansom writes: "In Paris, lately, nearly half the cases were fatal. They do not stimulate, and their hospitals are too crowded." During 1836-46, the mortality in Paris for all amputations for injury (excluding those of the hands or feet) was at the fearful height of 65 per cent.[8] During the latter half of the Crimean war, the mortality among our men from amputation of the thigh was 63.5 per cent. (85 deaths out of 134 cases). In the American Civil War[9] there were 3,949 primary amputations of the thigh: their mortality, according as the amputation was in the upper, middle, or lower third, was 50.7, 40.3, or 48.7 per cent.

Mr. Arthur E. Barker, Professor of Surgery in University College, has been good enough to send us the following notes, compiled about a year ago from the Surgical Registrar's Annual Reports of University College Hospital. These reports are drawn up without any special purpose, except the record of cases treated in the institution from year to year. "These notes," Mr. Barker adds, "were the outcome of my own private study, and were made simply because such statistics have always had an interest for me. I have carefully analysed all the general operations (exclusive of ovariotomies) done at University College Hospital during the years 1875 to 1890 inclusive. Taking 1880 and 1881 and 1889 and 1890, in which the same number of beds were in use, I find that the increase of general operations has been 52.8 per cent. At the same time the actual decrease of major amputations, for instance, has been 57.8 per cent. I note, too, that in 1875 the percentage of major amputations to all other operations was 14.8, and from this on there has been a steady fall from year to year, until during 1889 and 1890 they have been 2.2 and 2.5 per cent. respectively. Further, the percentage of deaths on all operations was in 1875 16.1, and this has gradually and steadily fallen to 7.7 and 6.9 in 1889 and 1890 respectively. Again, the percentage of deaths from major operations was in 1875 and 1876 25.0 and 28.5, with a steady fall to 9.0 and 9.0 in 1889 and 1890 respectively. These facts, among many others, show clearly: (1) That improved methods have rendered perfectly justifiable the application of operative surgery to double the number of cases, inasmuch as the risks are largely reduced; (2) That conservatism in surgery is immensely advanced by the scientific methods now employed, for example, amputations have enormously decreased in frequency (actually from 24 and 28 in 1875 and 1876 to 11 and 11 in 1889 and 1890, and relatively to all other operations from 14.8 and 12.3 in 1875 and 1876 to 2.2 and 2.5 in 1889 and 1890); (3) That if we take a test group of operations, for example, amputations, the mortality has fallen in the most remarkable way from 25.0 and 28.5 per cent. in 1875 and 1876, to 9.0 and 9.0 per cent. in 1889 and 1890."

If we take, instead of amputations, excisions of joints, we find that during 1855-57 in London there were 69 excisions, with 13 deaths, a mortality of 18.8 per cent.[10] A few years ago Wright, of Manchester, recorded 104 excisions of the hip, with 3 deaths.[11]

Now let us take ovariotomy, remembering the bitter opposition that greeted its revival. "This is how we stood at the end of 1857.[12] Everything was against the venture.....Only once had a successful result been obtained in any of our large metropolitan hospitals." How did we stand in 1884? "Thousands of perishing women have been rescued from death; many more thousands of years of human life, health, enjoyment, and usefulness have been given to the race; and to all future victims of a malady before inevitable in its fatality, the operation gives consolation, hope, and almost certainty of cure." The mortality of Spencer Wells's last 100 published cases[13] was 11 per cent. In Thornton's table[14] of "Three Hundred Additional Complete Ovariotomies" there are only 21 deaths, or 7 per cent.; and the same surgeon, in his opening address at the Medical Society in October, 1890, said: "Of my last 106 ovariotomies I have lost 2, one dying in a few hours of acute peritonitis, which was present when I operated; and the other, an old lady aged 69, of

bronchitis, acquired from carelessness, when she had practically recovered from the operation." In Meredith's[15] 104 completed ovariotomies, there were only 10 deaths, or 9.6 per cent. Eight years before,[16] the mortality was 13.2 per cent.

On this point Mr. Mayo Robson, Surgeon to the Leeds Infirmary, observes: "Ovariotomy twenty years ago was a very fatal operation in our infirmary. In 1870 there were 13 ovariotomies of which 6 died; in 1871, 4, of which 2 died; in 1872, 7, of which 3 died; in 1873, 10, with 4 deaths; and practically these were the only abdominal operations performed at that time. This year 30 ovariotomies for cystoma (tumours, not simply appendage disease) were performed, with only one death, and that was from intestinal obstruction."

"With regard to compound fractures (the same surgeon writes) in the old days they led frequently to loss of life or loss of limb; now the limbs are as a rule saved, and life is seldom endangered; for example, we had 22 compound fractures of the leg in 1893, and of these only one was not saved, and that patient developed tetanus. In the treatment of diseased joints, which used to be frequently treated by amputation, twenty years has made all the difference. Now excision is resorted to, for example, 14 excisions of the knee were performed last year, 13 being cured, and one only unrelieved, and I think that was afterwards saved by amputation. Out of 80 amputations in 1893, 8 died; but out of 45 amputations for disease, only one succumbed. But the greatest advance is shown," he continues, "in the numerous operations now undertaken for the relief of suffering or deformity, or the saving of life, which it was impossible to attempt before the antiseptic days.

"(*a*) Extirpation of the uterus for cancer or for myomatous tumours; (*b*) osteotomy—72 such operations were performed in the infirmary last year; (*c*) intestinal obstruction when not relieved by medical means; (*d*) radical cure of hernia. Many examples might be given to illustrate the beneficial results of operations which were once considered 'experimental,' as in skin grafting, nerve grafting, bone grafting, all of which are now established operations. I could give good examples from my own experience of effective operations on the brain and spinal cord based on knowledge obtained as the result of experiments on animals—for example, paralysis of the right side cured by trephining over the left motor area; patient now robust and well. Tapping of the ventricles of the brain in a patient dying of coma; patient now well. Trephining of the spine for paraplegia and the cure of paralysis; etc."

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[1] *Med. Chir. Trans.*, 1890. [2] *Pyogenic Diseases of the Brain and Cord*, 1893. [3] *Med. Chir. Trans*, 1890. [4] *Lancet*, July 13th, 1889. [5] See Treves's *Operative Surgery*, i, 314, 1891. [6] *Ibid.* [7] A. E. Sansom, Mortality after Amputation: prize essay, King's College, 1858. [8] Malgaigne, quoted by J. H. James, "Causes of Mortality after Amputation," 1850. [9] History of the War of Rebellion, Part Third. [10] A. E. Sansom, *loc. cit.* [11] Jacobson, *Operations of Surgery*. [12] Spencer Wells, "Revival of Ovariotomy." Birmingham Address, 1884. [13] Diagnosis and Treatment of Abdominal Tumours, 1885. [14] Published 1886. See also his address, Med. Soc., October, 1890. [15] *Med. Chir. Trans.*, 1889. [16] *Med. Chir. Trans.*, 1881.

THE HERMITE PROCESS OF SEWAGE TREATMENT.

Bacteriological Tests.—General Results of the Investigation.—The Method of Experiment.—Rate of Action.—Imperfect Disintegration of Fæces.—Directions in which Improvements are Required.

DR. RUFFER has furnished us with a copy of a summary of the results which have been obtained in the British Institute of Preventive Medicine with regard to the experiments on the Hermite process of sewage treatment. The investigations were made in Sir Henry Roscoe's laboratory by Mr. J. Lunt, B.Sc., and Dr. Ruffer. The electrolysed fluid which they used was either made in their presence, or sent to them by Dr. Goldsmith, of Worthing, who took it himself from the tanks supplying the houses.

The conclusions they arrive at are: (1) That a solution of electrolysed sea water of less than 0.75 grammes of available chlorine per litre is useless as far as sterilisation of fæcal matter is concerned; (2) that sewage treated with a sufficient quantity of electrolysed fluid of 0.75 of available chlorine per litre or more can be made quite sterile, provided the fæces are well broken up, and mixed with the electrolysed fluid; (3) that the deodorisation of sewage with the electrolysed fluid is immediate.

The following are a summary of the facts on which these conclusions are based. The motive power of Worthing was obtained from a road traction engine belonging to the corporation. This engine was not particularly well suited for scientific experimental investigations, as its speed, and therefore the constancy of the current produced by the dynamo, was not under absolute control, and could not be very accurately regulated. This is shown by the slight variations in the results of the experiments on the electrolysis of sea water, but the inequalities were too slight to affect the results. The engine also drove a rotary pump used for conveying the sea water from the corporation water carts into the tanks, and moreover pumped the electrolysed liquid into other storage tanks placed at an elevation. The latter supplied the electrolysed sea water to the water-closets of fourteen cottages and two public water-closets used by a number of workmen employed in the neighbourhood.

The first point was to ascertain whether the electrolysed sea water containing 0.5 grammes of available chlorine per litre, as estimated by the arsenite test, was of sufficient strength to sterilise sewage, and was also stable enough for use in the houses supplied with it. In two experiments the tanks were thoroughly cleaned out and filled with fresh sea water, and this, when tested before the experiment, was found to contain no available chlorine. The volume of sea water used in each experiment was about 750 litres. The amount of available chlorine was ascertained every fifteen minutes during the electrolysis, and it was found that, with a current of 250 ampères at a pressure of 6 volts, it took from 90 to 100 minutes before these 750 litres contained 0.5 grammes of available chlorine per litre. Whereas the sea water before electrolysis was swarming with bacteria, it was found to be absolutely sterile after being submitted to this process; this sterility being tested in the usual way by pouring 1 cubic centimetre of it into tubes containing gelatine. These were then kept at a temperature of 37° C. On estimating the amount of available chlorine present in the solution the next day it was found to have diminished by over 90 per cent., and further experiments showed that fresh fæcal matter could not be sterilised by it even when 2 gallons of this water was added to one stool. The deodorising power of the liquid when freshly prepared was, however, perfect, so that as soon as it was poured over the fæcal matter, this lost its smell absolutely. Twenty-four hours after making it proved to be ineffectual on broth cultures of the bacillus pyocyaneus, the staphylococcus albus, the typhoid bacillus, the diphtheria bacillus, and the anthrax bacillus, even when only 1 cubic centimetre of broth culture was acted on by five volumes or more of electrolysed fluid for twenty-four hours. It was also ineffectual on the spores of moulds.

These experiments so conclusively proved the great instability of a solution of half-a-gramme strength, and also its uselessness as a bactericidal agent twenty-four hours after making, that on their next visit to Worthing on March 20th the experiment was repeated; but, instead of stopping the engine when a strength of half a gramme of available chlorine per litre was reached, the dynamo was allowed to run on until a strength of over 1 gramme per litre was obtained. An extended series of experiments carried over several days showed conclusively that, although the product which contained only half a gramme per 1,000 was very unstable, and lost 90 per cent. of its strength in the first twenty-four hours, yet the solutions of higher strengths were not so unstable. The stability of the solutions increased with their strength, so that a solution of 1.05 per 1,000 only lost 7 per cent. on the first day. At the end of 46 days it still contained nearly 0.5 per 1,000. The solution containing 0.75 per 1,000 lost 34 per cent. the first day, and after 46 days it had fallen to 0.33 per 1,000.

It must be pointed out, however, that solutions of higher strength are not so economically produced as are the weaker ones. If the amount of the current—or, rather, the length of time—used for the production of a solution containing 0.5 gramme per 1,000 was doubled, the solution did not contain double the amount of chlorine, namely, 1 gramme per 1,000, but only 0.75 per 1,000. If the current, therefore, were increased 100 per cent., the increase in yield would be only

50 per cent., and it should be observed that it is just this increase which renders the solution relatively stable. It seemed to them to be necessary that the disinfecting solution should remain of an efficient strength for at least twenty-four hours, and if this be accepted as a condition, then it followed that all strengths below 0.75 grammes per litre are inefficient, owing to their great instability and because the lower strengths are not effective bacteriologically.

Turning now to the action of these solutions on bacteria, it was shown that solutions of 0.25 per 1,000 were practically useless for killing bacteria, and that the solution of 0.50 was only effective if employed very shortly after it had been made, and then only on such micro-organisms as do not produce spores. A solution containing 0.75 of chlorine per 1,000 was not effective in any proportion on mature subtilis spores, but the solution kills an equal volume of culture of some non-sporing organisms in thirty minutes, if used within six hours after it had been made, whilst, if not used within twenty-four hours, sterilisation was not complete in thirty minutes with an equal volume but was so in two hours and a-quarter, or in thirty minutes if double the volume is used. There were certain micro-organisms, however, such as the bacillus pyocyaneus, which required a larger amount and a longer time (as much as eight or ten times the amount), but even with these the sterilisation could be made absolutely complete in half an hour, provided eight to ten times the amount of fluid was used. In a large series of experiments in proportions varying between 1 to 1 and 1 to 10, which they made on the bacillus of diphtheria, the bacillus of typhoid, the bacillus pyocyaneus, the micro-organisms of suppuration, the staphylococcus albus, the staphylococcus aureus, the streptococcus pyogenes, the bacillus of anthrax, and other micro-organisms, it was found that the solution of 0.8 strength used twenty-four hours after making was effective in absolutely sterilising the liquid in less than half an hour; the only micro-organisms which resisted even the gramme solution after one hour and two hours' action being the spores of the bacillus subtilis.

M. Hermite, in all his publications, claims that fæcal matter is instantaneously destroyed. This, however, was not the case in the many laboratory experiments which they made with fæces and urine. Samples of electrolysed sea water, varying from 0.25 to 1 gramme per 1,000 in strength, had no appreciable solvent or disintegrating action on solid stools over and above that possessed by ordinary sea water; and there was also no complete sterilisation even with strengths up to 0.75 gramme, unless the fæces were well mixed with the fluid. In these experiments they weighed out 10 to 15 grammes of fæcal matter, and added to it a like proportion of the urine voided at the same time. This was then mixed with a proportionate quantity of electrolysed sea water corresponding to two gallons to the whole stool, and it was found that the supernatant fluid was quite sterile, with the exception of a few resistant spores, and that the outside of the fæcal matter was also sterile, but that the bacteria inhabiting the inner part of the fæces had not been destroyed. In some cases they mixed the two thoroughly and by means of a glass rod broke up all the lumps of the fæces, and it appeared that when the fæces had been reduced to a pulp and the electrolysed fluid of 0.8 per 1,000 strength or more was allowed to act on them they were perfectly sterilised and remained sterile as long as the access of the air was prevented, but if the air was allowed to contaminate them bacteria again grew on the surface of the liquid after some days, although the smell never returned.

Previous to April 16th, when they again visited Worthing, they had no direct control over the manner in which the experiments with the water-closets of the fourteen cottages and the two public water-closets had been conducted, and they had not accurately ascertained the strength of the solution habitually employed during the demonstration at Worthing. They had evidence, however, that it was much higher than 0.5 per 1000, as all the samples taken by them from the tanks supplying water-closets were of a stable character, as were also those collected by Dr. Goldsmith, and sent up to London for examination. They also did not know what was the volume of liquid employed for each stool, and hence they had made no series of experiments with the effluents actually obtained from the fourteen cottages and two public water-closets until that date. On April 17th Dr. Ruffer sealed up the siphon connected with the two public water-closets, which were thereafter kept sealed for a week, except when opened by Mr. Lunt or Dr. Ruffer for the purpose of making cultures and taking samples of the effluent. The tap in the courtyard was kept under lock and key, which was retained by one of them. The electrolysed sea water used during this week's trial, tested by them every day, was always sent up to the supply tanks of a strength of 0.8 gramme per 1,000, and it was ascertained that the effluent flowing away into the drain always contained a distinct excess of chlorine. Servants of their Institute were constantly stationed in the yard where the siphon and water-closets were placed, and they took note of the number of times the water-closets were frequented, and also saw that only two gallons of electrolysed sea water were used on each occasion. The plate cultures of the effluent were usually made with several quantities, graduated from a sterile platinum loop full of fluid to 1, 2, 3, 4, or 5 c.c., and they showed that the effluent was sterile, with the exception of a few (less than half a dozen per c.c.) spores of the bacillus subtilis and allied organisms, which had alone survived. When they remember that 1 c.c. of sewage contains 1,000,000 bacteria at least, this reduction in number was truly astonishing.

This experiment is a most striking one, but at the same time Dr. Ruffer desires to draw attention to the condition of the intercepting basket used as recommended by M. Hermite. At the end of the week it was found that the basket was choked with fæcal matter, and this was by no means sterile, and, although the effluent was so, it was plain that sooner or later the contents of the basket would have to be dealt with.

Two ways present themselves, either to stir up the contents of basket and break up the fæcal matter, in which case most of it passes into the effluent, which will then be no longer sterile; or, the other way is to take the basket out and deal with the contents elsewhere. It is plain, therefore, that although the effluent is practically sterile when the solution of electrolysed sea water is of sufficient strength and is used in sufficient quantities, the system is not as yet perfect, and some means must be taken to disintegrate the fæces, either before or after they pass into the drain.

They also made some experiments with some putrid liquid sewage taken at the metropolitan outfall at Crossness, and found that this was comparatively easily sterilised and deodorised; one volume of 0.75 per 1,000 of the Hermite fluid being sufficient to sterilise an equal volume of this sewage.

They regret that the defective arrangements of the cottages did not justify them in making any experiments with the effluent, inasmuch as the siphon was constantly liable to be flooded with the untreated wash water of the houses.

It would be useless for them at this stage to enter into the question of cost and general application of the Hermite system. It is evident that no general conclusion can be drawn, and that each town must be considered by itself after careful investigation of its present drainage and sewage system.

Dr. Ruffer begs to draw attention to the fact that this report is to be considered as referring to a preliminary investigation. In the course of this inquiry several very important and novel questions have presented themselves which will form the subject of future work in the Institute. The data on which this report is based will be published at some future date in one of the scientific journals.

DONATIONS AND BEQUESTS.—Mr. W. H. Worthington has given £10,000 to the Burton Infirmary. The donor, who is the principal member of the brewing firm bearing his name, imposes the condition that the money shall be invested in debenture or preference stock of some first-rate railway company, and that the dividends shall be used for ever towards the maintenance of the institution. The capital amount is never to be used.—The late Miss Grace Isabella Buchanan, of Cheltenham, has by her will bequeathed, among other bequests to benevolent institutions at Cheltenham, £1,000 to the General Hospital, £500 to the Delancey Hospital, £500 to the Home for Sick Children, and £500 to the District Nursing Association.

THE SLAUGHTERING OF ANIMALS.

Enquiry conducted by Dr. Dembo for the Russian Society for the Prevention of Cruelty to Animals.—Cruelty in English Slaughterhouses.—How Long it Takes to Stun an Ox.—Masks.—Severance of the Spinal Cord.—Poisoning, etc.—The Superiority of the Jewish Method by Bleeding.

DR. DEMBO, physician to the Alexandra Hospital, in St. Petersburg, has recently published the results of his investigations in connection with the various methods of slaughtering animals which are at present in vogue. In compliance with a request from the "Society for the Prevention of Cruelty to Animals," in St. Petersburg, he took up this question in January, 1891, and in October of the following year he was one of a Special Commission appointed to consider the matter, which Commission pronounced its verdict in favour of the Jewish method of slaughter. So interested was Dr. Dembo in the question at issue, that he has since visited a large number of the principal abattoirs in Germany and Switzerland; and more recently some of those in France and in this country. These observations have been further supplemented by physiological and chemical experiments of the highest value and importance. The method of stunning the animal before bleeding it as conducted in the Continental abattoirs, presented so horrible a picture, that Dr. Dembo determined to visit this country, where he supposed this method would be seen in greatest perfection. But what amount of perfection may be claimed for it here may be gathered from the following account of one of many such spectacles which Dr. Dembo witnessed. At a certain slaughterhouse no fewer than seven blows were delivered on the head of an ox before the animal lost consciousness. After the first two or three blows, the animal got its head a little free, and repeatedly tried to dodge the axe, so that it became difficult to aim the blows accurately, and the whole procedure of stunning occupied no less than ten to twelve minutes, as timed by Dr. Dembo, who stood watch in hand. So much for our method of slaughter; what of our abattoirs? Dr. Dembo considers them a disgrace to our country. In all his travels he has never seen anything, even in the smallest villages, to compare with the insanitary condition of the majority of our slaughterhouses. That an opinion of this kind should be formed by such an authority is so great a disgrace to our country that we are sorry that duty compels us to record the fact.

In his book Dr. Dembo deals with the problem as to the best method of slaughtering animals, from three standpoints—humanity, hygiene, and economy. At the outset of his consideration of the subject from the humanitarian point of view, he points out that two categories of methods of slaughter may be considered—simple bleeding (the Jewish method), and previous stunning of the animal to be slaughtered. The first question which naturally arises is, What length of time elapses before consciousness is lost when either method is practised? As a result of his observations in abattoirs, and of direct physiological experiments conducted in the laboratory, he concludes that consciousness is lost in three to five seconds by the Jewish method, owing to anæmia of the brain. The objection that has been put forward, that after the carotids have been divided the brain still receives blood through the vertebral arteries, has been controverted on experimental evidence. It is pointed out that at best the amount of blood which the brain receives from the vertebral arteries is insignificant, and that it is further diminished owing to the great fall of blood pressure consequent on the escape of blood from the divided carotids, so that next to no blood reaches the brain by way of the vertebrals. Further evidence is adduced in support of the correctness of this view, from the fact that vertebrals have been ligatured in man without any particular inconvenience being experienced, while simple compression of the carotids in the neck produces loss of consciousness. Other more trivial objections are equally satisfactorily refuted; and, finally, as we have more than once had occasion to point out, Dr. Dembo insists that a cut made with an exceedingly sharp knife is almost painless, and that particularly must this be the case in the neck, where so few sensory nerves of any size are divided.

In dealing with other methods of slaughtering animals, he finds that of the hundreds of instances in which he has seen the operation of stunning carried out, the average number of blows necessary to produce loss of consciousness has been five to six: Allowing a second for each blow, and for each interval between the blows, the time occupied would be 10 to 12 seconds; but seldom was it Dr. Dembo's good fortune to be able to count the time thus occupied by seconds. The difficulty of stunning an ox is ascribed to the small size of the brain as compared with the large size of the head and the thick skull, and evidence is adduced that even in man, whose brain is large and whose skull is comparatively thin, instances of severe injury to the skull without loss of consciousness occur, and that even when the brain itself has been injured. Further, a rabbit weighing 1,950 gr. not only remained standing, but was conscious after receiving a blow on the front of the head with an iron hammer weighing 650 gr., the blow being delivered with all the force that the operator could command. But even after the animal has been stunned, it not infrequently happens that so much time elapses before the stab with the knife is given that the animals show distinct signs of consciousness when the knife is plunged into them, and have even been heard to groan with pain.

Dr. Dembo has still greater horrors to describe in that portion of his book which deals with various masks that have been employed; their common object is to facilitate the operation of stunning the animal. It will be sufficient for us to record his experience of the results obtained with one of these. The object of Bruneau's mask is to allow an iron bolt to be driven into the brain; and in one instance no fewer than twelve blows were necessary to drive this bolt through the skull. In connection with this and certain other masks it is usual to pass a long Spanish cane into the hole in the skull, with the view of destroying the medulla oblongata, a procedure which occupied eight minutes in one instance; and even then, on *post-mortem* examination, the medulla oblongata was found to have been absolutely untouched. The extreme difficulty of directing the cane accurately towards the medulla is insisted on, and instances of brain injury in man are cited as evidence of the inutility of the method, unless the medulla oblongata can be directly injured.

As to the method of sticking a dagger between the occipital bone and the atlas, for the purpose of destroying the vital centres in the medulla, Dr. Dembo's anatomical investigation of the conformation of these parts in the ox has proved that the spinal cord is injured far below the medulla by such a procedure, and that to injure the medulla oblongata in the way the blow is given is an anatomical impossibility. The method thus becomes a very cruel one, for the posterior nerve roots are injured, giving rise to great pain, and the animal lies paralysed in all its extremities, and yet still perfectly conscious.

The impracticability of killing animals by electricity and of guillotining them is discussed; and it is pointed out that killing by narcotics will be discarded owing to its costliness and the alterations which may be produced in the meat, in which connection he records an instance in which certain animals became narcotised by eating the flesh of an animal to which chloral had been administered during life. Thus Dr. Dembo concludes that from a humanitarian point of view none of the practicable methods of slaughtering animals can compare for one moment with that in vogue among the Jews; and that if the word "ideal" could be employed in connection with the killing of any living being, it would be applicable to this method of slaughter.

In considering the question from the hygienic standpoint, Dr. Dembo first deals with the amount of blood that can be drained from the animal, and the amount that remains in its tissues. An animal killed by the Jewish method, he finds, loses 72 per cent. of blood, while only 28 per cent. remains in the tissues; when death is produced by stunning before the animal is bled, only 28 per cent. escapes, while 71 per cent. is retained; and when stunned and the neck vessels are subsequently divided 46 per cent. of blood escapes, while 54 per cent. is retained. Vasomotor paralysis is held responsible for the large amount of blood retained in the tissues when stunning is resorted to; and this is urged as a reason against

the method of dividing the spinal cord by a stab between the occipital bone and the atlas, as considered from the hygienic point of view.

The next point dealt with is as to the rate at which *rigor mortis* sets in, and it is pointed out that the sooner this is established the longer does the meat remain sound. Two artificial methods of hastening its onset are discussed and shown to be prejudicial to the meat, whereas a third, consisting of rendering the flesh acid, is recognised as of great advantage. Not only does *rigor mortis* set in more rapidly in an animal killed by the Jewish method, but in certain observations made by Dr. Dembo, whereas all *post-mortem* rigidity had disappeared in thirteen days when the stunning method had been adopted, it was eighteen days before it had disappeared after the Jewish method of slaughter.

By chemical analyses he found that the amount of ammonia liberated by flesh in the same time, and under similar conditions, was far greater in stunned animals. The results of his analyses prove that the flesh of animals slaughtered by the Jewish method will keep two days longer than any other flesh in summer. The conditions obtained by this method are detrimental to the development of lower organisms, and prevent decomposition taking place for a longer time. The reasons for this are: that less blood remains in the organism; the more rapid the loss of blood the more quickly lactic acid is formed; the epileptic convulsions hasten the formation of lactic acid in the flesh, diminish the alkalinity of the blood, assist in the emptying of the small blood vessels, and hasten the onset of *rigor mortis*; and more water is drained from the muscles, so that in two hours the flesh of such animals is as firm as that of animals killed by stunning methods is ten hours after death. These and other physiological and chemical problems which have engaged Dr. Dembo's attention lead him to look on the Jewish method of slaughtering animals as far superior to any other when viewed from the standpoint of hygiene.

Space does not permit of our going more fully into the various problems which have been raised in support of the *shechita* on physiological and chemical grounds; nor can we do more than state that from the standpoint of economy also this method is shown to be the most advantageous.

No more complete answer could have been given to those who condemn the *shechita* as barbarous, and our only regret is that, as the book is written in the German tongue, it is inaccessible to the majority of people in this country. An English translation of Dr. Dembo's work would, we feel sure, be most acceptable to those who are not familiar with German, and who nevertheless are anxious to satisfy themselves as to which is the best method of slaughtering animals.

GLASGOW SEWAGE PURIFICATION WORKS.

THE opening of the new sewage purification works at Dalmarnock, in the east end of Glasgow, marks the commencement of a new era in the history of the rivers pollution question in Scotland. Hitherto the only sewage disposal scheme of any magnitude in Scotland has been that which had for its object the purification of the water of Leith, which flows through Edinburgh and Leith. In that case, however, while works were established for the purification of the effluents from particular manufactories, the scheme in its essence was one for the interception of the sewage which formerly found its way into the stream, and for its conveyance seaward. At Dalmarnock the authorities of the city of Glasgow have taken up the question of sewage purification in earnest, and on the larger scale.

The condition of the Clyde has long been a matter of reproach and complaint. As far back as 1853, Mr. Bateman, C.E., was asked to report as to a remedy, and at a later date a large scheme was projected for the diversion of the sewage of the city and the contiguous burghs from the river, and its conveyance, by means of an immense conduit, to the Ayrshire coast. There is sometimes, however, virtue in waiting, and it would appear that the city authorities have now found a more excellent way. The construction of an underground railway rendered necessary the provision of a large intercepting sewer for the east end of the town—at the expense of the railway company, of course. The municipal authorities, with that foresight which has always characterised their larger operations, seized the opportunity to secure the conveyance of the sewage of about one-fifth of the city area, with a population of nearly 270,000 comprising most of the manufactories of the town, dye works, tanneries, etc., to a common point at Dalmarnock, and proceeded to acquire land there considerably more than sufficient for the works which have since been established.

The system, in the main, is that adopted at Sheffield and Bradford, and the works have been designed by Mr. Alsing, C.E. The cost of the land was £38,000, and the buildings, tanks, and machinery are estimated at an additional £62,000. The sewage on entering the works passes through rotary screens which remove the larger floating matters, and on its way to a well underneath the pump room in the central building deposits the heavier matter in suspension in a catchpit. From the well the sewage is raised by powerful centrifugal pumps to a mixing chamber, where the precipitating agents (at present sulphate of alumina and milk of lime) are added. On leaving the mixing pit the sewage passes by gravitation to the settling tanks, twenty-four in number; in these it is brought to a state of quiescence for about an hour. When the process of precipitation is complete, the supernatant liquid is drawn off by floating arms, and runs in thin sheets over the stepped bottoms of aëration beds. From these it runs by a joint central channel to the filter beds, where it passes through layers of coke to sand and gravel filters of the ordinary type. The sludge is forced by hydraulic rams into filter presses, from which the solids are removed in cakes.

At the opening ceremony the Lord Provost announced that the Corporation hoped to obtain Parliamentary powers this year to enable them to take the remainder of the sewage of the city north of the river to an estate some miles further down, which had been purchased for sewage purification purposes in 1877. The Chairman of the City Health Committee significantly remarked that the Corporation would co-operate with the other offending local authorities in securing a great and noble highway to the sea, but that, whether they liked it or not, they were going to have the river purified!

THE OFFICERS OF POOR-LAW UNIONS IN IRELAND SUPERANNUATION BILL.

THE following petition in favour of this Bill has been presented to the House of Commons by Mr. William J. Kenny, Q.C., Member of Parliament for the St. Stephen's Green Division of the City of Dublin, on behalf of the Dublin Branch of the British Medical Association:

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.

THE Petition of the President, Council, and Members of the Dublin Branch of the British Medical Association humbly showeth:

That your petitioners have long been convinced of the very unsatisfactory state of the law which deals with the superannuation allowances of the Poor-law Union (Ireland) medical officers, and on March 2nd, 1889, your petitioners joined with the Council of the Irish Medical Association in addressing the Right Hon. A. J. Balfour, M.P., the Chief Secretary to the Lord Lieutenant, on the subject of the serious grievances under which those officers suffer.

Your petitioners, having carefully considered a Bill intituled "An Act to make better Provision for the Superannuation of the Officers of Poor-law Unions in Ireland," brought in by Mr. Charles C. Connor, Mr. Justin McCarthy, Mr. T. W. Russell, Mr. John E. Redmond, and Mr. Robert Farquharson, and now before your honourable House, are of opinion that its enactment would relieve grievances under which the Poor-law medical officers of Ireland have so unjustly suffered for many years.

Your petitioners therefore do pray your honourable House to pass the said Bill with as little delay as possible, in the interests of a deserving class of public servants, but still more of the welfare of the people at large.

And your petitioners will ever pray.

Signed on behalf of the Dublin Branch of the British Medical Association,

JOHN WILLIAM MOORE, M.D.Univ.Dubl., F.R.C.P.I., President.
JOHN MOLONY, F.R.C.P.I., Hon. Secretary and Treasurer.

May 23rd, 1894.

DONATIONS AND BEQUESTS.—The late Mrs. Livius, of Bristol, has by her will bequeathed £50 to the Bristol Royal Infirmary and £50 to the Bristol General Hospital.—The National Hospital for Consumption at Ventnor has received £105 from the Court of Common Council of the City of London.

OPHTHALMIA AT THE HACKNEY UNION SCHOOLS, BRENTWOOD.

In reply to inquiries which we have thought it our duty to make, we have received the following valuable information from Dr. A. W. Wallis, medical officer of the Hackney Union Schools at Brentwood:

In June, 1893, there was a slight increase in the number of cases of ophthalmia, and in several of the girls already under treatment the disease suddenly became acute without any apparent exciting cause. These cases were accompanied by phlyctenular ulcer, keratitis, iritis, etc., and were very slow to yield to treatment. This state of things continued till about the middle of September, the number of ophthalmic cases fluctuating between 25 and 30, when they suddenly increased, and by the end of the month had reached 55. This serious addition made the ordinary infirmary accommodation insufficient, and the probationary department was requisitioned for cases of general sickness, further batches of children from London being stopped. At the same time it was impressed on the superintendent, matron, and other officers in charge of the children in the body of the school to exercise the greatest care in the lavatory arrangements; also the necessity for free ventilation and other hygienic conditions. The desirability of introducing the jet system in the lavatories was strongly urged on the guardians, and it is being introduced. Special inspections in the school were instituted, and children who exhibited any indication of ophthalmia were removed to the infirmary for observation, and if found suffering therefrom detained.

In spite of all precautions, however, the disease increased rapidly in numbers, as the following figures will show. The total number of children in the school at the time of the outbreak (September, 1893) was 554, but during the year there had been as many as 615 at one time in the school, or 65 over the certified number.

1893.	No. of Children under Treatment in Infirmary.	1894.	No. of Children under Treatment in Infirmary.
September 1st ...	30	January 5th.....	192
,, 29th ...	55	,, 19th.....	192
October 13th ...	81	*February 2nd.....	164
,, 27th ...	152	,, 16th.....	168
November 10th ...	162	March 2nd.....	167
,, 24th ...	190	,, 30th.....	160
December 8th ...	184	April 13th.....	161
,, 22nd ...	189	,, 27th.....	150
——	——	May 11th.....	126
——	——	,, 25th.....	124

* Thirty children were transferred to Hanwell on February 1st.

From the above figures it will be seen that the epidemic reached its height in January and February of the present year, and is now practically over. To anyone acquainted with the management of such institutions it will be easy to infer what an amount of dislocation and disorganisation in the general working of this establishment and of the London workhouses such an epidemic must produce. From the outset the disease was of the purulent kind, at least two-thirds of the cases exhibiting thick mattery discharge with exuberant granulations. In most of the cases at present under treatment the affection has become of more or less chronic form, the purulent discharge having become muco-purulent or mucous. The present difficulty is the tendency to relapse. The epidemic having ceased, it is proposed temporarily to acquire some building to which the whole of the infected children can be transferred. This will relieve the congested number of children in the Hackney Workhouse, and will allow of the various blocks of the medical department here resuming their former functions.

Dr. S. M. Lukjanoff, Professor of Pathological Anatomy in the University of Warsaw, has been offered the post of Director of the Imperial Institute of Experimental Medicine, St. Petersburg. Professor Lukjanoff was President of the last Congress of Russian Medical Practitioners.

NOTES ON HEALTH RESORTS.

XVI.—THE KAROO DISTRICT.

By P. C. De Wit, M.R.C.S.E.,
Cradock.

The Karoo—as everyone is aware who has read the *Story of a South African Farm*, and other works of our only Colonial authoress—consists of wide undulating plains, barren of all vegetation but the small shrub called the "Karoo bush," which bush is only found "up country" on the high ground. It possesses, beyond the beautiful sunsets so admirably described by the same authoress, something far more important, namely, wonderful restorative powers in certain chest cases. Unfortunately it is only beneficial in certain chest cases, and this fact is too often overlooked, badly selected cases returning in worse condition than when they left home.

Cradock is one of the towns situate in the Karoo, and though at present almost if not entirely unknown to the medical profession in London, is undoubtedly most beneficial in its climatic influence. The altitude of the town itself is 2,850 feet above the sea level, but many portions of the district rise 1,500 feet higher. It possesses an excellent water supply from springs nine miles distant, a dry climate, and beautiful pure air.

It is one of the most easily accessible towns in the Colony. The distance from England may tend to prevent invalids coming out, but when it is considered that the whole voyage only occupies some three weeks under the most pleasant circumstances, this should not act as an insuperable obstacle. The train journey from Port Elizabeth to Cradock is done in a day. Another objection is the want of comfort out here, and this certainly is not entirely without reason; but as the class of patients hitherto sent out has not been a wealthy one, there has been no demand for luxuries of any sort, and if a real demand arose the supply would soon follow.

The most important point, however, is to know what class of cases are suitable, and with this object in view I have selected from my notes what I consider typical cases of both sorts, good and bad, to enable medical men further to judge for themselves and form an estimate of the climate:

Case I.—T. G., aged 27 years, weight 113 lbs. when examined two year. ago, height 5 ft. 5 in. Consolidation over the left apex extending about 2 inches below the clavicle and about 1 inch at the back. There was very slight crepitation in front. There was no dulness on the right side, but expiration was prolonged at the apex, and the breathing a little roughs The patient had had hæmorrhage about three months before examination (about half a pint). There were no night sweats, no fever; expectoration was limited, and cough not very troublesome.

Present Condition.—No hæmorrhage since, weight increased about 10 lbs., cough disappeared, lung dry.

Case II.—E. J., aged 26, when examined nine months ago weighed 128 lbs., and stood 5 feet 7 inches. There was consolidation over the apex of the right lung, running down to near the nipple, and about the same distance over the back. There was a moist condition of the whole of the right lung, but about the middle third it was slightly drier. Pectoriloquy was well marked over the point 1½ inch below clavicle. The left lung was clear, except very slight consolidation at the apex. Cough was irritable, and expectoration fairly profuse. The patient had been subject to occasional severe hæmorrhage for the last eighteen months. There was no pyrexia, no sweats, and the larynx was unaffected.

Present Condition.—Cough very slight, weight increased about 7 lbs., expectoration almost *nil*, and lung found considerably drier.

Case III.—J. M., aged 23, height 5 feet 5 inches, weight 117 lbs. There was a small cavity at the apex of the left lung, coarse crepitation for about 3 inches down below clavicle, and patchy consolidation to the lower end of the scapula at the back. There was also consolidation over the apex in front of the right lung, with fine crepitation, and patchy consolidation at the upper part behind. The temperature was elevated in the evening, there were night sweats, expectoration was considerable, but the cough was not very irritable. The larynx was affected, and there had been slight hæmorrhage. The unfavourable signs were pyrexia, night sweats, affection of larynx, and bilateral disease. The patient died five months after examination.

The first two cases, of which I am only able to give very rough notes, will sufficiently indicate the class of phthisical patients who, in the early and fairly advanced condition, are suitable for this country. Early consolidation, unilateral pneumonia, phthisis, and cases of hæmorrhage without extensive disease, do well in almost every instance, and, finally, but most important, there must be no evening fever. The last case illustrates what is undoubtedly a bad patient for this climate; the unfavourable symptoms have already been pointed out. I have, unfortunately, also notes of cases where the disease has been in various stages, over almost the whole of both lungs, and the unhappy people have simply come a long journey to die. Besides phthisical cases, chronic bronchitis

and chronic pneumonia undoubtedly improve, that is, if no extensive emphysema and secondary heart trouble have developed. Spasmodic asthma is relieved in some instances, but this disease is ubiquitous, and is found even here. The following are the average meteorological data for the last three years:

adock—lat., 32° 11′; long., 25° 38′. Distance from coast, 108 miles; height above sea level, 2,856 feet.

Shade Temperature.

Summer.	Mean Max.	Mean Min.	Absolute Max.	Absolute Min.
January ...	87.9°	56.5°	100.0°	45.6°
Winter.				
July ...	65.6°	33.7°	75.2°	25.0°

Rainfall, 14 inches for the year.

THE CHOLERA.

DR. PROUST, Inspector-General of the Sanitary Service, reports as follows upon the state of cholera in France: The sanitary state of Constantinople is satisfactory. Cholera has greatly diminished at Sivas, there now being from 2 to 4 deaths daily; the disease is spreading to the suburbs, cases being reported from Iskelep, Castamouni, and the villages of Memouret-ul-Iziz and Komiah. The spread of the disease may be feared in Anatolia.

The sanitary situation of Hedjaz is favourable. The two cases of death following suspected diarrhœa occurring amongst the pilgrims coming from Bombay have not been followed by further cases.

Three new cholera cases and one death were reported in the Prussian town of Myslowitz, in Upper Silesia, near the Russian frontier, on June 3rd. The authorities of the district state that the focus to which these cases are traceable is Silbe, in the Russian district of Bendzin, and that the frontier river Przemsa is infected. The traffic over the border has, therefore, been subjected to rigorous supervision. Pilgrimages are forbidden and passports refused. The President of the district has requested the Russian authorities to take all necessary precautions.

A Reuter's telegram from Berlin, dated June 2nd, states that a despatch from Warsaw, dated June 2nd, reports that five cases of cholera and two deaths have recently occurred there, while twenty-one cases and two deaths are reported from other places in the government, and six cases and three deaths in the government of Radom. At Mlawa, in the government of Plock, the total cases up to the present, number twenty-eight, of which sixteen have proved fatal, while the other twelve are still under treatment. The outbreak has not extended beyond the two houses in which it was first detected, and there have been no fresh cases for several days.

Reuter's agent on June 4th states that reports received there from Myslowitz announce that the number of cholera patients has increased to such an extent that the lazaretto at that place is overcrowded, and huts have been erected for the reception of patients. Three fishermen are reported to have succumbed to Asiatic cholera at Schillas, near the Russian frontier. The authorities have declared the Vistula contaminated, the bathing establishments on the river near Thorn have been closed, and bathing has been prohibited.

In view of the possible recurrence of cholera in London, the Public Health Committee of the London County Council propose to continue the precautionary arrangements made last year. A letter will accordingly be addressed to the local medical officers of health, inviting them to give the Council's officer notice of any cases of supposed cholera in their districts, and the latter will make a weekly return showing the deaths in the metropolis attributable to cholera or any cognate disease. The Committee also recommend the Council to continue the arrangement made with Dr. Klein for the bacteriological examination of suspected cholera cases.

CONSULAR REPORT ON CHOLERA AT TENERIFFE IN 1893.

THE report of Consul Harford on the trade and sanitary condition of the Canary Islands during the past year gives the facts of the cholera epidemic in Teneriffe in the autumn. The disease had previously been unknown in the island, and indeed no epidemic had visited the island since the yellow fever of 1811. Cholera appeared in mid-October last, and continued until mid-December, the deaths numbering 411, of which 371 were in Santa Cruz, and the remaining 40 in San Andres, a village five miles north of the town. Many attribute the origin of the disease to a cholera-infected vessel from Rio, which, although closely quarantined, is thought to have possibly evaded the restrictions. The two earliest cases were in relatives of coalers of this vessel. Captain Harford inclines to abnormal atmospheric conditions and a contaminated water supply as the more likely causes, seeing that any connection of the infected vessel with the shore is stoutly denied. The north-east trade winds were absent last autumn, and the state of the atmosphere as the result of want of rain was conducive to spread of disease. However this might be, it is not pleasant reading to learn of the contents of leaky sewers finding their way into defective water pipes. But it is well to know that the defective pipes are to be replaced by iron ones. Captain Harford repudiates the startling letter in the *Times* of December 16th last, purporting to have come from a British resident in Orotava. He says: "We had no dead carts parading the streets, no dead body was ever seen on any road in town or country, no corpse was ever left unburied, and no Governor was stoned." Of the 411 deaths, 187 were of males and 224 of females; whilst 81 were of children under 10 years of age, and 61 of persons aged over 70 years. The population of Santa Cruz was 23,000 in 1889. Captain Harford states that the disease only attacked a certain class living in localities and under conditions which, in any other climate, would render cholera endemic. It seems to behove the authorities to remove these disease-fostering conditions.

A Reuter's telegram from Breslau dated May 29th, states that the second of two suspicious deaths that occurred at Myslowitz is certified to have been due to Asiatic cholera. Another person has fallen ill of a disease presenting choleraic symptoms.

LITERARY NOTES.

L'Italie Médico-Chirurgicale, the birth of which into the journalistic world was announced in the BRITISH MEDICAL JOURNAL only a few weeks ago, shows all the enterprise of youth. Its third number appeared on June 8th, but it has further improved the shining hour by issuing a special number in honour of the Roman Congress. This *Numero-Ricordo* contains phototype portraits and biographical sketches of the following, among other, celebrities of the medical world: Guido Baccelli, Eduardo Maragliano, Angelo Mosso, G. Bizzozero, M. Semmola, C. Lombroso, F. Durante, Bouchard, Charles Richet, Péan, R. Virchow, R. Koch, E. Leyden, H. Senator, H. Nothnagel, W. Winternitz, M. Kaposi, H. von Ziemssen, Joseph Lister, James Paget, W. Macewen, and Victor Horsley. The phototype portraits are printed on special paper, and are detachable. Each portrait has a phototype *facsimile* of the signature of the person represented.

Dr. Orville W. Owen, of Detroit, U.S.A., has thrown Mr. Ignatius Donnelly, the author of the "Great Cryptogram," altogether into the shade. He claims to be the actual and sole discoverer of a practical scheme of cipher writing by which he establishes the following facts; (1) That Francis Bacon was the lawful son of Queen Elizabeth and the Earl of Leicester, who, it appears, were secretly married in the Tower of London [readers of *Martin Chuzzlewit* will be reminded of the American gentleman's confident belief that Queen Victoria lives in that historic Golgotha]; (2) that Francis Bacon, for the purpose of concealing the secret histories which he wrote for posterity, composed all the plays not only of Shakspeare, but of Marlowe, Greene, and Peele, together with all the poems of Edmund Spenser and Burton's *Anatomy of Melancholy*. These, we are assured, taken in connection with the undisputed works of Bacon, constitute the general web into which are woven the threads forming the cipher stories. In addition to all this, Dr. Owen claims to have deciphered other secret writings "from the same source," containing circumstantial accounts of the destruction of the Spanish Armada and the killing of Christopher Marlowe; biographical sketches of Shakspeare, Spenser, Peele, Greene, and Burton; "the Knight's Tale," described vaguely as "a story," a translation of a considerable portion of Homer's *Iliad*; and a general history of England. Still further disclosures are promised. If all this be true, it was no vain boast of Bacon's that he had taken "all knowledge to be his province." It is sad, however, to think that the Moses of the promised land of scientific discovery should be the innocent begetter of the elaborate system for the discovery of mare's nests of which Dr. Owen is an exponent. It is impossible to give a full account of his method, which is a miracle of perverse ingenuity; a single example will, however, be sufficient to show how the results are arrived at. By piecing together a number of passages scattered through the plays (such as "The doctor new come from Padua," in the *Merchant of Venice*; "Master Doctor Caius," in the *Merry Wives of Windsor*; "Little Tydie Bartholomew," in *Henry the Fourth*, etc.) Dr. Owen reconstructs the following, which he offers us, apparently in all seriousness, as a proof that Shakespeare could not have written the plays because he was ignorant of the circulation of the blood, which, on the other hand, was well known to Bacon, as Harvey was his physician.

I have oft seene Dr. William Harvey, the new doctor at Bartholomew Hospital, in the presence of the learned doctors, force a purple, distilling liquor through the veines of a dead body, and, after it had descended to the heart, liver, and lungs, the blood-coulored liquor returneth againe to the face, which blacke and full of blood, or pale, meagre, and bloodless before, doth blush and beautifie, as if with life; you would think the body breathed; the very lippe is warme to look upon; but we are mocked with art, as there is no pulse gainst the finger, and though the arteries seeme full yet no life is present. The legs, waist, armis, hand, brow, and limes seeme alive, but we can never ransom nature. The Doctor was enrolled at Caius College.

Shakspeare—or Bacon—would almost seem to have made a prophetic allusion to this kind of thing when he made Olivia say, "Why, this is very midsummer madness!"

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

DIPLOMA IN PUBLIC HEALTH.—The next examination for the diploma in Public Health will begin on October 2nd. Names of candidates, together with the necessary certificates, must be sent to the Registrary, Cambridge, on or before September 18th. Arrangements have been made for a six months' course of laboratory instruction and of practical sanitary administration. A. General course of Hygiene by Dr. Anningson during the Long Vacation (July and August). B. Practical Sanitary Administration, six months' course by Dr. Anningson. C. Course in Bacteriology in the Pathological Laboratory by Drs. Kanthack and Lorrain Smith, and Messrs. Cobbett and Drysdale. Those proposing to attend should send in their names to L. Cobbett, M.A., New Museums, as soon as possible. D. Course in Chemistry and Physics in the Chemical Laboratory by Dr. T. H. Easterfield. A special short course will be held for candidates who obtained a registrable qualification prior to January 1st, 1890. Further particulars can be obtained on application to Dr. Anningson, Barton Road, Cambridge.

M.B. DEGREE.—The following have kept the Act as required for the degree of Bachelor of Medicine:

A. L. Jackson, M.A., Clare; C. Neill, B.A., Caius; T. A. Bowes, B.A., Caius; F. W. Sell, B.A., Caius; A. H. Wilson, B.A., Christ's.

EXAMINERS.—The following examiners for the Third M.B. Examination have been appointed:

Medicine: Dr. W. H. Dickinson, Dr. J. K. Fowler, Dr. L. Humphry, Dr. J. F. Payne.

Surgery: Mr. H. H. Clutton, Mr. F. Treves, Mr. H. Marsh, Mr. W. H. Bennett.

Midwifery: Dr. W. S. A. Griffith, Dr. J. Phillips.

VICTORIA UNIVERSITY.

PRINCIPAL WARD, of Owens College, has been elected Vice-Chancellor, in succession to Professor Rendall, of University College, who has resigned the position.

THE GROWTH OF THE UNIVERSITY.—The Vice-Chancellor, speaking at a recent Court meeting, said that the University had made remarkable progress during the last four years. Candidates for examination had increased from 387 in 1890 to 447 in 1891, 613 in 1892, and 762 in 1893, exclusive of those who entered twice over. Thus in the space of four years the University had practically doubled the number of its candidates for University examinations. The number of degrees actually conferred was, in 1890, 57; in 1891, 70; in 1892, 85; and in 1893, 117, showing again that in the same period the successful candidates for degrees had more than doubled. This session was largely in excess of previous results, and he was informed that already the number of candidates for University examinations was 600.

THE SCOTTISH UNIVERSITY COMMISSION.

THE MEDICAL EDUCATION OF WOMEN.—The Scottish Association for the Medical Education of Women has forwarded for presentation in both Houses of Parliament a petition against Section 9 of Ordinance No. 45 of the Scottish Universities' Commissioners; they ask that assent should be withheld from this ordinance on the ground that, when read with Section 11, Subsection 4 of Ordinance No. 18, and pending the time when provision shall be made in the University of St. Andrews for the instruction of women in all the subjects qualifying for graduation, it would seem to imply the necessity of university residence at St. Andrews during attendance on such medical classes as are already open to women in the University, such as chemistry, physics, botany, zoology; that this implied condition as to residence involves an unfair hindrance to women who, with a view to a university degree, have commenced, or may be commencing, their studies at the Medical College for Women, all of whose teachers have been recognised by the University Court of St. Andrews, and constitutes a hardship which is not offered to male students, in the case of whom residence is exacted during any two of the five years of study; that they believe it would be to the advantage of medical education in Scotland if the restrictions as to residence at St. Andrews University were removed altogether, and that the privilege hitherto exercised by that University of granting medical degrees were adjusted so as to include in its scope candidates who hold the aforesaid triple qualification granted by the Scottish Medical Corporation. Failing this, the regulations of the University as to term of residence should be so arrange as to encourage, rather than to hamper, the entrance of women students to the study of medicine, with a view to graduation at that University.

ROYAL UNIVERSITY OF IRELAND.

THE *Calendar* of the Royal University of Ireland for 1894 has been issued. It contains the usual information as to examinations for degrees, as to prizes and scholarships and lists of graduates, of honours, and of persons who have passed examinations during 1893. A supplementary volume, containing the examination papers set in 1893, forms somewhat melancholy reading to middle-aged people who do not like to be reminded of how much they have forgotten. The volumes are printed for the University by Alex. Thom and Co., of Dublin, and the *Calendar* is published in London by Longmans, Green and Co. The price of either volume is 3s.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

AT a meeting of the Fellows, held on Monday, June 4th, the following gentlemen were elected for the ensuing year:—*President*: William Thornley Stoker. *Vice-President*: William Thomson. *Secretary*: Sir Charles A. Cameron. *Council*: Sir George Porter, Bart.; Archibald Hamilton Jacob, E. H. Bennett, Sir Philip Crampton Smyly, R. L. Swan, H. R. Swanzy, W. I. Wheeler, Austin Meldon, Wm. Carte, Sir Charles A. Cameron, F. A. Nixon, Kendal Franks, Charles B. Ball, J. B. Story, HENRY Fitzgibbon, Francis T. Heuston, H. J. Broomfield, John Lentaigne, Arthur Chance.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.

Scottish Universities Commission.—The MARQUIS OF BUTE presented petitions from various medical bodies in Edinburgh and Glasgow, against Section 8 of the Ordinances of the Scottish Universities Commission.

HOUSE OF COMMONS.

Food Adulteration.—Mr. SHAW LEFEVRE, in reply to Mr. KEARLEY, said that some little time ago he received a deputation on the subject of dairy products, and after consulting with his colleagues he intimated that the Government would give its assent to the appointment of a Select Committee. Since then another deputation had urged the widening of the inquiry into the general subject of adulteration, and he could not well do otherwise than assent to the wider Committee.

Sight Testing.—Dr. MACGREGOR asked the President of the Board of Trade what steps, if any, the Board of Trade proposed to take respecting the correspondence passed between the Board and the railway companies bearing on the subject of the method of sight testing practised by the companies, and was the Board satisfied that every precaution was now being taken for the public safety.—Mr. BRYCE said the railway companies were fully alive to the importance of the subject, and were endeavouring to institute a system of tests, and to do what was necessary in the interests of public safety on the lines suggested by the Committee of the Royal Society. The Board of Trade did not propose to take any further action at present, but would not lose sight of the matter.

Experiments on Living Animals.—Mr. G. RUSSELL, in answer to Colonel LOCKWOOD, said that, as stated in Table 3 of the Inspector's return, no return was received from Messrs. Liu Boon Keng, Otto Lang, and Conrad Gerland, nor from the late Dr. Romanes. The inspector had ascertained, in the case of Messrs. Romanes and Gerland, from inquiries at the laboratories where the licences were available, that they had not performed any experiments, and, therefore, had included their names in Table 2. From similar inquiries in the case of Messrs. Keng and Lang, he ascertained that they had performed experiments, and therefore had included them in Table 1. The licences to persons included in Table 2 were renewed from time to time, because for various reasons the licensees were unable to take up that work in one year, whereas they could in another; and some (such as Professor George Thomas Brown) hold such licences in case they might have to perform experiments with regard to the cattle disease, or for judicial purposes. The number of animals experimented upon might be taken as closely corresponding to the number of experiments—namely, 4,046. The names of the kinds of animals were all reported to the inspector except those animals that were experimented on under Certificate C, or under a licence without a certificate, all such experiments being upon animals in a state of complete anæsthesia. The information which was to be gathered from Tables 2 and 3 was, he thought, sufficient, and in his opinion there was no occasion for any further table.

Cholera at Mecca.—Sir HENRY ROSCOE asked the Under Secretary of State for Foreign Affairs whether any information had been received at the Foreign Office from Constantinople or elsewhere to the effect that an outbreak of cholera had occurred at Mecca; and whether, if so, steps would be taken to urge the Porte to carry out the recommendations of the Sanitary Congress as to preventive and repressive measures.—Sir E. GREY said that it was reported on June 2nd that, according to latest telegraphic advices from Mecca, the public health there was good. The Porte was represented at the Sanitary Congress, but its delegates did not sign the recommendations.

Workhouse Inmates and Special Hospitals.—Mr. MICHAEL AUSTIN asked the Chief Secretary to the Lord Lieutenant of Ireland whether his attention had been directed to a report appearing in the local papers of a meeting of the Limerick Board of Guardians from which it appeared that the mayor of the city acting on a certificate from the medical officer of the union had two children who were suffering from rabies sent to the Pasteur Institute for treatment; and whether, as President of the Local Government Board, he would see that the expenses in connection with the case would be sanctioned, as if, in compliance with the law, the children had become inmates of the workhouse in the first instance fatal results might have followed?—Mr. JOHN MORLEY said his attention had been drawn to the newspaper report of the proceedings of the Limerick Guardians at the meeting referred to. Boards of Guardians were legally empowered to send inmates of workhouses to any hospital for special treatment and to pay the incidental expenses. The Pasteur Institute in Paris was recognised as such a special hospital, and the sanction of the Local Government Board was not requisite to the payment of expenses in such cases. There was, however, no legal authority enabling boards of guardians to send to hospitals persons who were not workhouse inmates, and no sanction given by the Local Government Board would legalise such expenditure or in any way authorise the auditor to pass it.

Infectious Diseases in Pauper District Schools.—Mr. BARTLEY, on behalf of Sir J. Gorst, asked the President of the Local Government Board whether he would direct a return to be made of the number and dates of the epidemics of ophthalmia, scarlet fever, measles, throat complaints, and other infectious maladies, which had broken out during the last ten years in the pauper district schools belonging to the metropolitan unions, specifying in the case of each epidemic the number of children attacked, the duration of the treatment of cases, the number of deaths and of permanent physical disablement, and the total extra cost occasioned to the ratepayers of the metropolis by the outbreak.—Mr. SHAW LEFEVRE said he had made inquiry, and found that it would not be practicable to furnish such a return as was suggested. If the right honourable gentleman would desire a return as to the mortality among children in these schools during a limited period, say of three years, he would be prepared to consent to it.

Prevention of Cruelty to Children.—On the further consideration of this Bill as amended, Mr. HOPWOOD withdrew from his attitude of opposition. Certain minor amendments, moved by Sir R. WEBSTER and Mr. ASQUITH, were agreed to, and the Bill was read a third time.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

SUBSCRIPTIONS to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, JUNE 9TH, 1894.

THE DISCIPLINE OF THE GENERAL MEDICAL COUNCIL.

THE session of the Council, which closed last week, was short, but full of interest. The work in hand was promptly carried through, there was no unnecessary eloquence, and the decisions arrived at were in general sound and business-like. The President, Sir Richard Quain, deserves much credit for his share in this result. We propose here to refer briefly only to some of the most far-reaching of the Council's efforts in the direction of professional discipline.

Penal cases, such as would usually occupy a day a-piece, were dealt with in an hour. Among them were two which have what we may call an Imperial bearing. Hitherto the discipline of the Council has been extended only to practitioners within the three kingdoms. On this occasion an offender in Queensland and another in Victoria were made to feel that Australia is not beyond the Council's reach.

The scandal of objectionable advertisement by medical practitioners has attained a high degree of offensiveness in some of the colonies. The Queensland Medical Board is loyally endeavouring to abate the nuisance, and formally complained of one Campbell, registered in the Colony on a British qualification, who, with several unqualified quacks, ran a notorious "Progressive Remedy Institute" in Brisbane. The defence was practically a confession, and the Council, having considered certain flagrant specimens of the "institute's" literature, resolved to strengthen the hands of the Queensland authorities by declaring Campbell's conduct "infamous," and striking his name from the *Register*. The other complaint had this of novelty, that it referred to a lady doctor (of Zürich), who had caused offence in Victoria by her clamant placards and newspaper advertisements of her "phenomenal skill." Her vaunt that she is the "only duly qualified and registered lady specialist in Australasia" will now have to be modified. Fortified by the judicial decisions in the cases of Partridge and Allinson, the Council deemed that by her advertisements she had broken her engagements with the Irish College of Physicians, and had sinned against the honourable traditions of the profession, and accordingly it removed her from the *Register*.

These instances will, we trust, encourage the profession in Greater Britain again to seek the aid of the home authorities in their praiseworthy efforts to raise the tone of medical practice in the Colonies. The General Medical Council has obviously warmed to its work, as its tentative decisions have in succession been supported by the English courts of justice, and there is good ground for hope that the range of its important function, as a *forum domesticum* for British medicine in the widest sense, will steadily widen.

At home this tendency is shown in several directions. An "epilepsy specialist" with a secret infallible cure, who, moreover, had unjustifiably assumed the title of M.D., was sentenced to suffer the Council's only punishment. The law as it stands will still permit him to practise his "speciality"; but physicians who have regard for the ethics of the profession will no longer be offended by seeing his name with theirs in the official *Register*. Against Dr. Tibbits, whose case has of late come frequently before the public in association with that of the notorious "Medical Battery Company," the Edinburgh College of Physicians made an allegation of "infamous conduct in a professional respect," and indicated their own judgment on the charge by removing him from their membership. The legal officers of the Council were accordingly instructed to make inquiry into the grounds of the allegation, and to bring up the case at the next session.

Under cover of a protest against the form and phraseology of certain certificates of competency in practical midwifery granted to women, an attempt was made to induce the Council to reverse its previous declarations in favour of the better education and regulation of midwives. It was soon apparent that the attempt must fail. The common sense of the majority perceived that, if midwives exist, it is expedient that they should be trained and supervised by competent authority; and the movers in the matter hardly dare, as yet, to propose that women should by law be forbidden to assist women in their travail—in other words, that midwives should cease legally to exist. In the end the measures proposed became attenuated to a disciplinary warning that midwives' testimonials must not seem to convey a registrable qualification—a monition which all may endorse without difficulty. But it clearly does not touch the vexed question of education and registration. The President's address opportunely recalled to the Council the cordial endorsement it had already given to proposals for legislation in this direction; and nothing was advanced in the debate that would justify the rescinding of the deliberate resolutions now standing on its records.

Under the Dentists Act the Council possesses even wider powers than those conferred by the Medical Acts: and, urged by a consensus of professional opinion which does honour to the registered dentists of the country, the Council agreed to issue a declaratory warning against dental advertising. The specimens of arrogant and vulgar self-praise which were exhibited in the Council chamber were enough to convince members that the time had come for action in the matter. Without a dissent it was agreed to insert in the medical and dental journals a notice to those concerned that objectionable advertisements, and in particular such as claimed superiority to other practitioners, or asserted their inferiority, might bring those who issue them within the penal jurisdiction of the Council.

Lastly, the proposals drawn up by the Chairman of the Parliamentary Bills Committee of the British Medical Association and approved by that Committee

with reference to the amendment of the Medical Acts were referred to the Executive Committee for consideration and report. Should these proposals ultimately pass into law, the powers of the Council, and of the judiciary also, would be materially enhanced. Fraudulent and irregular practice would receive a severe check, and recent examples have forced on the public mind the conviction that some such check is needed. The manner in which the Council has this session used the powers it has suffices to show that, with freer hands, it would be ready to act still more vigorously for the protection of the public and the elevation of the profession.

"EXPERIMENTS" ON PATIENTS.

It is perhaps time for us to ask what is the aim of the present agitation in certain daily papers, addressing themselves largely to working classes, against operative treatment in hospitals. The whole question, if that may be called a question, which is but a bogus newspaper discussion, would seem to hinge on the word "experiment." Physiologists are denounced by the great meat-eating, coursing, pigeon-shooting British public, because they experiment on animals. Surgeons are said to experiment on their patients in the operating room; gynæcologists are especially held up to obloquy as experimenting on women; and the action of our hospitals in curing and restoring to useful activity patients suffering from painful and disabling diseases is stigmatised as human vivisection!

It is not our aim here to attempt to dispel the profound ignorance of the actual conditions involved which is displayed in all this, but we must draw attention to the fact that experiment is the thing denounced, and that if the protests raised against modern surgery could have any influence it would be in the direction of restricting all treatment within the bounds of undisputed knowledge. Doubtless the man in the street, revelling in his blissful want of knowledge, will retort "and a very good thing too;" but those who know how the frames of individuals vary, and who recognise how largely even the simplest medical treatment is experimental, will understand that such a proposal would mean, not only the refusal of help to whole classes of sufferers who at present get the advantage of what one may speak of as the average gain of modern methods, but would absolutely block the way to any further progress.

To the best class of practitioners every operation done, every bath ordered, every pill or potion prescribed, is an experiment to be watched and noted, and to serve as a stepping stone to greater knowledge, which shall render such experiments in the future more exact and their results less uncertain. It is, in fact, this gradual and step by step improvement in the powers of the experimental physician or the experimental operator that makes such a man safer and more successful than one who limits his treatment to what he thinks (on the balance of probabilities) is positively known, and who, slavishly following some great teacher, does his operation according to the recipe, much as a cook would make a pudding. We must not hesitate to carry to their logical conclusions these attacks on medical men, who are said to perform experiments in their private practice, and on the hospitals in which such operations are performed, for the benefit alike of patient and pupil. To limit operative or any other sort of treatment to such as is thought sure to be successful, would mean a death sentence to untold numbers of sick people who at present are able to obtain a cure at the expense of running some amount of risk. What that risk is it is not always easy to estimate. Not only do cases vary, but so do operators, and certain procedures which to the "safe" surgeon of the past generation would not only seem, but in his hands might actually be, of necessity fatal, are, in the hands of men who are steeped in experimental experience, life-saving and conservative. Compare the life saving operations of MacEwen, which we last week recorded, with the death-roll of the previous decade; who, then, is to judge and restrict within arbitrary limits the efforts to cure? We definitely and with ample knowledge deny that in English hospitals operations are done for any other purpose than that of giving relief to the patients. Who is to judge how far experiment may, nay *must*, go in this direction, unless a great body of sufferers are to be denied all help? The suggestion that a British jury, with a coroner at its head, should be asked to decide on the most anxious and delicate questions of medical science, open on all sides to various debate and possibly to differing conclusions, and that the Clinical and Medical and Chirurgical Societies should be superseded by the law courts, is the immediate absurdity to which the proposal leads. Perhaps the attempt to submit operative mortality to the judgment of medical officers of health, who by the very terms of their appointments are debarred from any living experience on the subject, is only one trifle less ridiculous.

It should be remembered that in our hospitals all operative work is done under such conditions as to be open to the criticism and judgment of the whole staff, and, to speak in general terms, of the whole medical profession; that there is a strong and influential conservative element even among the senior officers of the various hospitals; that in the profession operators are in a small minority, and that professional opinion, founded as it always is upon results as well as reasons, exercises a strong and—according to some—an unwisely repressive influence on dangerous operative procedures.

To suggest that the poor are experimented on and submitted to operations which would not be attempted on the rich shows an absolute ignorance of the facts of the case, and some malicious baseness of intent. The fact is that the poor in hospitals are far better protected from abuse in this respect by the absolute publicity which prevails in those institutions, than are the rich who go to private nursing homes or the cabinet of the operator. The publicity of our hospitals, and the subjection of all their doings to an outside and not always friendly professional criticism, render any abuse of the kind suggested, if not absolutely impossible, a matter of the extremest improbability. It is a non-existent danger—one which is being exploited in their opinion by some in pure ignorance and under humanitarian delusion, by others from a desire to manufacture facts which shall seem to give countenance to their theory of what should be the sequel of the biological experimental investigation to which they are opposed. It is not the fact, but so much the worse for the facts, and so much the more needful for their argument of a little artistic exaggeration and even sensational fabrication.

DR. KARL POSNER, one of the responsible editors of the *Berliner klinische Wochenschrift* has been appointed Professor of Internal Medicine in the University of Berlin.

THE foundation stone of the new buildings of the Royal Alexandra Children's Hospital at Rhyl will be laid by Her Royal Highness the Princess of Wales on July 13th.

MR. WILLIAM THORBURN, of Manchester, will give a course of lectures on the Surgery of the Spinal Cord and its Appendages at the Royal College of Surgeons, at 5 P.M., on Monday, Wednesday, and Friday next.

THE Council of Mason College, Birmingham, on June 6th, appointed Dr. Percy F. Frankland, F.R.S., to the Chair of Chemistry and Metallurgy, vacant through the resignation of Professor Tilden.

THE New French Cabinet includes two representatives of the medical profession among its members. Dr. Viger retains the portfolio of Minister of Agriculture, which he held in the last Ministry, and Dr. Lourties has been appointed Minister of Commerce. Dr. Lourties, who has represented the Landes in the Senate since January, 1888, is now 49 years of age. He has been a very active politician for several years.

SIR SPENCER WELLS has been elected a Fellow of the Hungarian Academy of Sciences, the highest scientific honour obtainable in Hungary, and a Foreign Corresponding Member of the Medico-Chirurgical Society of Bologna, "as having by teaching and practice done honour to medicine and surgery." It is always pleasant to us to acknowledge acts of international courtesy, especially to members of our Association.

SLAUGHTER OF THE INNOCENTS.

THE report of the Manchester Medical Officer of Health for the quarter ending March tells a woeful tale. The infantile death-rate is 168 per 1,000, or 14 per 1,000 higher than the average in the thirty-three great English towns. Of the 2,946 deaths during the March quarter no fewer than 1,185 were those of children under five years of age. Thirty-nine infants were "found dead in bed." Scarlet fever only accounted for 26, while measles carried off 48, and whooping-cough 129 children.

THE NEWTON ABBOT WORKHOUSE INFIRMARY INQUIRY.

THE Local Government Board inquiry into the management of the Newton Abbot workhouse has been reopened, and, until it comes to an end, we refrain from comment on the evidence. We are glad, however, to find that the Local Government Board has instructed its inspectors (Lord Courtenay and Dr. Fuller) not only to go fully into all matters connected with the workhouse, but to carry their inquiry back a considerable time. In consequence of this they have decided to commence at the date of the coming of the present master, which was in 1884. We may hope, then, for an interesting picture of ten years of workhouse life, if the inmates will but lay bare all they know. Those, however, who are accustomed to the workings of the indoor pauper's mind have their doubts on this point; but we shall see.

SCARLET FEVER AT LARGE.

THE Medical Officer of Health for Marylebone draws attention to the fact that the hospital accommodation for scarlet fever patients is likely soon again to be exhausted, presuming that the ordinary increase in the number of cases which is to be anticipated at this time of year manifests itself. In that event Mr. Wynter Blyth points out that his authority will again be face to face with the question whether "the poorer sufferers are to be treated at home in crowded tenements and in blocks of artisans' dwellings," or whether the expensive experiment of providing temporary hospital accommodation for such patients is to be once more adopted. The number of scarlet fever cases under treatment in the hospitals of the Metropolitan Asylums Board at the beginning of this year was less than at the beginning of last year, but on comparing the numbers at the end of March the condition of things will be found reversed, there being more patients in 1894 than in 1893. Last year the numbers increased slowly during April, rapidly during May and June, and the accommodation failed in July. This year the same slow increase during April was manifested, but the numbers admitted during succeeding weeks in May did not increase so rapidly as in 1893. The available accommodation is greater this year than last so that the prospect is, as matters at present stand, more hopeful. It has been estimated, however, that had sufficient accommodation existed last year the number of cases under treatment at one time would have reached 6,000, a number nearly double that actually attained.

MR. GLADSTONE.

WE understand that Mr. Gladstone continues to make good progress, and that his eye is in a perfectly satisfactory condition. He passes a considerable portion of his time downstairs, goes out every day, and is able to receive a few friends. His general health also remains good. As is not uncommon in such cases, there is a certain amount of dislike to light, and Mr. Gladstone finds it comfortable to have the eye protected by dark glasses or other means. There is, however, nothing in its condition which is in the slightest degree abnormal. It having been reported that Sir James Paget had seen Mr. Gladstone with Mr. Nettleship, we may state that, although —possibly in deference to medical etiquette—an appointment was arranged, the meeting in no way partook of the character of a medical consultation. No complete examination of the eye as regards acuity of vision has as yet been made, and probably will not be undertaken before next week. The operation, as is known, was done under the influence of cocaine, the ordinary upward section being made and a portion of iris removed. There were no complications. The cataract had probably been mature for a considerable time, and, as is so common in such cases, it was the failure of the opposite eye which brought the matter into prominence.

IRISH MEDICAL ASSOCIATION.

THE annual meeting of this Association was held in the Royal College of Surgeons, Dublin, on June 4th. Dr. Hercules McDonnell, of Dundalk, presided. The report stated that the Association was engaged in pressing forward the Bill to secure compulsory superannuation of medical officers. They were of opinion that it would be unwise at present to proceed with the larger Bill for the redress of grievances. Resolutions approving of the report and protesting against the duties imposed on dispensary doctors by the Education Act, 1892, were adopted. In the evening the annual dinner was held. The Lord Mayor, the Solicitor-General, Sir R. Sankey, Sir A. Read, Dr. Smith, President of College of Physicians, and Mr. Thornley Stoker, President of the College of Surgeons, were among the guests.

NEW MEDICAL SCHOOL AT ST. THOMAS'S HOSPITAL.

THE new medical school and students' club in connection with St. Thomas's Hospital which are to be opened this day by His Royal Highness the Duke of Connaught, form a very handsome as well as useful addition to the block of buildings which faces the Houses of Parliament from the south side of the river. Built in a style of architecture corre-

sponding to the other portions of the institution, the new buildings, in red brick with stone facings, present a very imposing appearance. They occupy a site between the main hospital buildings and the mortuary, and are divided into two wings, one of which will be used as a science school, and will contain a laboratory, a physiological museum, and a spacious and handsomely-decorated lecture hall. The other wing, farthest removed from the river, will be almost exclusively devoted to the requirements of the students' club, and will be fitted throughout on an elaborate scale, with dining, reading, writing, smoking, billiard rooms, etc. Between the new buildings and the hospital proper ground has been laid out as a tennis lawn. Mr. Currie, of Norfolk Street, Strand, is the architect of the building, which has taken over a year to complete.

VIVISECTION IN A NUTSHELL.

AT Prince's Hall this week Mr. Arthur Arnold put the case against vivisection in a nutshell. "If cruelty were allowable," he said, "because good results were certain to follow from it, society might sanction vivisection as applied to malefactors and children." These nutshell pronouncements on public questions usually take everything for granted which needs to be proved, and this is no exception. Cruelty is the infliction of unnecessary pain. Mr. Arnold assumes that such is inflicted, and then condemns it. If the infliction of pain alone were the accepted criterion, then Mr. Arnold could never eat a mutton chop, and his conscience would forbid the matutinal rasher, nor could he ever again drive behind a horse or a gelding, nor consent to any of the customary farmyard operations (performed without anæsthetics), not to speak of the slaughterhouse, the rabbit warren, and the field sports to which game of all kinds fall victims.

DIRTY STREETS AND DIRTY AIR.

THOUGH it may not be easy to prove by statistics, there can be no doubt that the filthy condition in which London streets are allowed to remain is a cause of bad health and lowered vitality, if not directly of sore throats, sore eyes, and sore skins. Nobody who remembers what London dust is, and the potency for evil of many of its constituent parts, can doubt this for a moment. London is the dirtiest capital in the world; not only is the air smoky, but it is loaded with dust which contains every kind of abomination. It does not require very keen senses to both smell and taste horse dung in the air on any fine day at any time of the year. Lord Meath, in a letter to the *Times*, asserts that the only part of the metropolis in which the streets and pavements are kept in tolerably decent condition is the City. This is perfectly true, as anyone may convince himself by walking down Oxford Street and Holborn in the small hours. On crossing the City boundary the air changes as by enchantment: westward the air is heavy, dirty, and offensive; eastward it is clear, and clean, and sweet. The reason for the difference is, again quote to Lord Meath, that in the City the streets are flushed at night with hoses fixed to hydrants, and boys are kept constantly at work during the day removing manure. We have pointed this out, and have drawn attention to the conspicuous contrast between the City and the rest of London again and again, but the fact is that the sanitary authorities westward of the City have a very imperfect idea of street scavenging. Even when here and there a hose is used, the custom appears to be to lay the streets under water at one of the times of day when they are being most used by pedestrians, between 9 A.M. and 10.30 A.M. Again, it is not necessary to go to Paris or Holland for a better way; in the City an army of men are at work before 5 A.M., washing and sweeping, and the streets are clean and dry long before business people are going to their offices. It is objected that there are difficulties in the way of washing the streets in London which do not exist in Paris. Again the answer is complete: they have been overcome in the City. Why not in St. George's, Hanover Square?

THE FOREST GATE SCHOOL SCANDALS.

WE publish in another column a letter from Mr. Elliott, formerly the officer in charge of the receiving ward at Forest Gate schools, disclosing material facts concerning the health and care of the boys, which are in the highest degree discreditable to the present system, and once more indicate the necessity for a thorough and radical readjustment of the practice of collecting together masses of children into child barracks, where they do not and cannot receive individual attention. Elliott himself has done much for his infant charges, and suffered much. On the occasion of the terrible fire, when the poor creatures were locked in, and the person in charge of the keys was at a distance, Elliott, it will be remembered, forced open the door, and saved 38 children, who alone were rescued out of 85; for this he was presented with the medal of the Royal Society for the protection of life from fire. Subsequently 144 children were seized with severe illness traced to food poisoning. At the coroner's inquest Elliott had the courage to state certain facts as to the supply of stale or even putrid food to the children, which led to a Local Government Board inquiry. At this inquiry the accuser was treated as though he were the accused. The inquiry was held by an inspector, whose mode of inspection should itself have been the subject of inquiry. All testimony not strictly within the "limits of the laws of evidence," and pertinent to the individual charges, was excluded in spite of protests. The guardians were represented by counsel. In the end there was what is undoubtedly a practical miscarriage of justice. Elliott's allegations on behalf of the children were proved and accepted, but his "resignation" was called for, and after eighteen years' service of exceptional fidelity and devotion he has been turned out on the world to get his living as he may, and none of those responsible for "the irregularities" (*sic*) suffer. This is a poor encouragement to fidelity and brave outspeaking in the service of the public. It is really incumbent on Mr. Shaw Lefevre to order an inquiry into the whole question of barrack schools, which is fruitful in so many kinds of mischief.

BACTERIOLOGICAL EXAMINATION OF WATER.

To many people the bacteriological examination of water appears to have little or no meaning, but in spite of the prejudice entertained by such people it is now well recognised, not only amongst scientific observers but also amongst practical workers, that the bacteriological examination of water supplies data which cannot be obtained in any other manner. There can be little doubt that the regular bacteriological examination of water in the large European and American cities has enabled steps to be taken to purify the water supplies, the necessity for which would never have been appreciated had no such examinations been resorted to. The monthly reports on the London water supply, the reports by the State Board of Health of Massachusetts, those published in Berlin, in Paris, and in numerous other centres, form a literature bulky and weighty both in mass and in importance. At a recent meeting of the General Board of Health of the Port of Spain, Trinidad, Drs. Chittenden and Beaven Rake draw attention to this subject, and it is to be hoped that they will, with the support of the Board, be able to carry through the scheme that they recommend. Though there is undoubtedly much to be learned concerning contamination of water through the bacteriological examination, such examination should not be confined to a mere enumeration of the organisms present; a determination of the number of species, of the nature of the different organisms, for example, whether they are merely water organisms, or whether they are rapidly liquefying organisms such as those as are most frequently met with in putrefying substances; whether they are organisms that are usually met with in sewage or in fæces, such as the bacterium coli communis, or whether there are present those organisms (including the mould fungi, etc.) which are

usually met with in surface drainage, and, finally, whether they resemble pathogenic organisms or not. All these factors, when properly interpreted, throw a vivid light on the source of the water, and therefore on its suitability for drinking purposes. Any method which affords such valuable information can not be ignored or lightly cast aside.

EPIDEMICS AT BARRACK SCHOOLS.

THE Camberwell guardians, like the Hackney guardians, are troubled about their children, and certainly the Camberwell children are in no small trouble from their guardians. For want of facilities for segregation of cases of ophthalmia at the Sutton schools, children suffering from that disease are returned on the guardians' hands; all which is very good for Sutton, but bad for the workhouse children. For the erection of these great district schools has knocked on the head such educational facilities as existed in the workhouses; and now, because there is fever in the workhouse, these children cannot go to the public elementary schools, so they are cut off from their education at each end. We would strongly support the managers of the Sutton schools in keeping out all cases of infectious disease; at the same time, we would remark that the system of these barrack schools stands condemned if it is necessary for their safe management to exclude from them the very children for whom they were built. As for the poor children who happen to contract ophthalmia or ringworm, or be exposed to scarlatina, they stand between the Devil and the deep sea, and are debarred from education at each end. We should like to know what right the guardians have to allow fever to prevail in the workhouse. Surely the Asylums Board Hospitals were erected especially to prevent such a contingency. If it is true that while the Board's ambulances are trotting all over London for fever cases, the workhouse children so affected are being treated in the "house." This is but another instance of paupers being ousted from their rights, for primarily and in essence the Asylums Board is a Poor Law institution, and was created as such.

FOUR DEATHS UNDER CHLOROFORM.

WE are indebted to Mr. J. M. Wrangham, Assistant-Surgeon, for the following account of the death under chloroform which occurred recently at the Tewkesbury Hospital. The operation was undertaken for exploring and scraping an iliac abscess. The anæsthetic used was the A.C.E. mixture. The patient showed no signs of nervousness. From the first the anæsthetic was taken quite quietly; there was no struggling, and the breathing was regular. About ten minutes were required to produce complete insensibility. The pupils became contracted, and remained so until the expiration of about half an hour, when, the operation being almost completed, the breathing suddenly ceased, and the pupils became widely dilated. Before this there had been no sign of danger, the pulse being good, and the breathing easy and regular. The lips had become slightly blue, but no more than might be expected under the circumstances. The operation was at once stopped, the head was brought down over the edge of the table, and artificial respiration commenced, the back of the throat being cleared of mucus with a sponge. Hypodermic injections of ether and brandy were administered. In one or two minutes the patient began to make inspiratory gasps, but these soon ceased, and though artificial respiration was continued for about an hour, breathing was never re-established. The pulse could not be felt after the breathing ceased. About two ounces of the anæsthetic were used, two-thirds of this being required to produce anæsthesia at starting. Mr. Wrangham made a *post-mortem* examination, and found the brain and membranes considerably congested. There was a small tuberculous abscess in the apex of the right lung. The heart and other viscera were healthy. Advanced disease of the right sacro-iliac joint was present. Mr. Wrangham's opinion is that the death was due to syncope. We have also received notices of deaths under chloroform at King's College Hospital, the Great Northern Hospital, and the Royal Southern Hospital, Liverpool, as to which we hope to be enabled to publish further details.

EPSOM COLLEGE AND THE MEDICAL PENSIONERS.

DOWN to the present time the great institution at Epsom has accommodated two classes of residents—the schoolboys and the medical pensioners. It has long been felt that this plan presented certain disadvantages: it tended to give too much prominence to the purely eleemosynary side of the work of the institution, to the disadvantage of the College as a public school, and it compelled the medical pensioners, as a condition precedent to taking advantage of the pension fund, to sever all family ties and break with old associations. The report of the Council, which we noted in the BRITISH MEDICAL JOURNAL of June 2nd, showed that a beginning had been made in getting into work the scheme which proposes to devote the buildings at Epsom entirely to the purposes of the school, and to grant pensions to be enjoyed by members of the medical profession who for various reasons were in reduced circumstances, or to their widows, to be enjoyed without restrictions as to place of residence. An amending Act of Parliament has now been obtained, varying the constitution of the institution as established by the Act of 1855, and giving the governing body power to extend the principle outlined above. The College will now be able to take its place beside Marlborough and Wellington as a school designed primarily to meet the special requirements of boys destined to a particular profession, but open to all classes of society. The institution is relieved from the obligation to provide an asylum either within the buildings at Epsom or elsewhere for any pensioner, and is authorised to convert the buildings heretofore used for pensioners to the uses of the school, or to replace them by buildings better adapted to the purpose. The privileges of the medical foundationers are rigidly safeguarded, and the sons of medical men will continue to receive at Epsom a first-rate public school education on specially favourable terms. At the same time, the admission of boys destined to other careers than the medical and the sons of members of other professions will remove the special class character of the school, which has been found to stand somewhat in the way of achieving the highest success. While improving and consolidating the position of the school, the claims of the poor and aged of the profession must not be allowed to suffer, and we trust that the appeal of the governors for increased funds to enable them to grant pensions to worthy recipients to reside in their own country and among their own people will meet a ready response from the profession, which has always shown itself most ready to extend a helping hand to those who have fallen in the battle of life. We may hope that at the next annual meeting the Treasurer, Dr. C. Holman, may be able to announce that the response to the appeal made has been ready, and that the new scheme is in a fair way to completion.

THE MINUTES OF THE GENERAL MEDICAL COUNCIL.

THE half-yearly volume of the *Minutes* of the General Medical Council and of its Committees and Branch Councils (January 1st to June 1st, 1894) has been issued by Mr. Miller, the Registrar. In addition to the proceedings of the Council itself during its recent session, the volume contains those of the Executive and other Committees, and a series of reports by the Examination and Education Committees.

These were submitted at the last session, and were referred to in our reports. The volume also contains the annual financial statement, from which it appears that the total sum received in registration fees during the year 1893 was £8,160 15s., namely, £3,978 7s. 6d., paid to the English Branch Council, £3,242 7s. 6d. paid to the Scottish Branch Council, £890 paid to the Irish Branch Council, and £50 paid to the General Medical Council direct for the registration of Colonial medical qualifications. Excluding these ten Colonial medical qualifications registered, the number of original registrations was 1,568, which brought in a total of £7,840, the difference between this and the first total stated being made up by fees paid for registration of additional qualifications. The sale of the official publications is credited with £417 7s. 11d. net, and dividends on invested stock with £1,108 12s. All the Branch Councils have considerable cash balances in addition to invested funds. The main items of expenditure are fees and other expenses to members of the Council, salaries and house expenses, printing, and law expenses. The lawsuit with the Royal College of Physicians cost £893, and other legal expenses amounted to £663. The visitation and inspection of examinations cost £540, and the expenses of the Medical Aid Associations Committee amounted to £121.

SANITARY EXHIBITION AT BOULOGNE.

An International Exhibition of Hygiene is to be held at Boulogne from July 15th to September 15th with, amongst others, patrons so distinguished as M. Henri Monod, Councillor of State and Director of the Sanitary Services of France; Professor Brouardel, Dean of the Paris Faculty of Medicine; M. Pasteur; Dr. Proust, Inspector General of the Sanitary Services; Dr. Napias, Dr. A. J. Martin, M. Emile Trelat, the eminent architect and authority on ventilation; M. Bechmann, the engineer; and M. Louis Masson, the Sanitary Inspector of Paris. Dr. Aigre, the mayor of Boulogne, is the president of the Organising Committee, and he is assisted by the chief medical men, municipal councillors, engineers, and other local notabilities. The Exhibition will be inaugurated by the Minister of the Interior. From July 25th to 29th a Medical and Hydrotherapeutic Congress will meet at Boulogne under the presidency of Professor Verneuil, of the Institute, and Dr. Bergeron, Perpetual Secretary of the Academy of Medicine.

THE LOCAL GOVERNMENT BOARD AND THE DISTRICT SCHOOLS.

In the House of Commons on Monday, June 4th, Mr. Bartley, on behalf of Sir John Gorst, asked the President of the Local Government Board whether he would direct a return to be made of the number and dates of the epidemics of ophthalmia, scarlet fever, measles, throat complaints, and other infectious maladies which had broken out during the last ten years in the pauper district schools belonging to the metropolitan unions, specifying in the case of each epidemic the number of children attacked, the duration of the treatment of cases, the number of deaths and of permanent physical disablement, and the total extra cost occasioned to the ratepayers of the metropolis by the outbreak. In reply to this question, Mr. Shaw Lefevre said he had made inquiry, and found that it would not be practicable to furnish such a return as was suggested. If the right hon. gentleman would desire a return as to the mortality among children in the schools during a limited period, say of three years, he should be prepared to consent to it. It results from this answer to Sir John Gorst's very pertinent request that the Local Government Board is not in possession of and keeps no record of outbreaks of infectious disease in the district schools; an omission which cannot be but deeply deplored, and which it is very desirable should at once be remedied. A return such as the President of the Local Government Board was good enough to offer to Sir John Gorst would obviously be entirely useless. The diseases to which these unfortunate children massed in barracks are especially subject are not fatal diseases, but disabling diseases. They are the diseases of crowding, of malnutrition, and those incidental to the unnatural conditions of life imposed upon them by the barrack system, which is of all others the most unsuited to the necessities of child life, diseases such as ophthalmia, chronic throat diseases, defective hearing, nocturnal enuresis, the development and aggravation of scrofulous disease and skin complaints of the scalp and body. These, which are the torments, the terrors, and the miseries of child life in barrack schools are not only torturing to their unfortunate subjects and drawbacks to their further progress in life at a later age, and obstacles to their proper training and teaching in the schools, but they are also a source of enormous and unnecessary expenditure to the ratepayers. The cost of maintaining these children under the existing miserable conditions is estimated at not less than £25 per head per annum, an expenditure which is beyond that which will be necessary if these institutions were broken up, and the children relegated to cottage life, put once again upon the land, allowed to enjoy fresh air, country life, home training, and Board School education. If Mr. Shaw Lefevre is unable to give figures such as those for which Sir John Gorst advisedly asked, he may at least be able to furnish reports on the prevalence of ophthalmia, skin diseases, throat diseases, and scrofulous complaints in the Metropolitan district schools for the last five years. It is difficult to suppose that a good deal of material of this sort does not exist in the archives of the Local Government Board, and any deficiencies in that report might be made up from the records of the committees in charge of these district schools. We hope, therefore, that Sir John Gorst will not be satisfied without obtaining such information as the Local Government Board may be able to furnish under these heads, nor do we doubt that, however trammelled by official reticence, Mr. Shaw Lefevre's sympathies are really altogether in accord with those of his questioner, and that he will in some modified form be able to give a more sympathetic and affirmative answer, and one less drily negative than he has felt called upon to furnish on this occasion.

THE TREE OF KNOWLEDGE.

In a symposium remarkable for the variety of its contributors rather than for the profundity of its philosophy, the *New Review* discusses the ever interesting question how far it is desirable to partake of the fruit of that Tree of Knowledge, the first influence of which on our first parents would seem to have been to render them ashamed. The point discussed is whether girls should be left ignorant of the doings of the wicked world in which they live, and should be allowed to marry without knowing, so far as it may be capable of being known, what is before them. The general drift of the opinions is strongly in favour of knowledge, although there is much divergence as to how or when it is to be imparted, and this is where the difficulty comes. Many probably will think it best to follow the Rev. H. Adler, Chief Rabbi, when he says, "Maidens will, in the course of Nature, by their reading, nay even by the study of the Bible, with its chaste outspokenness, gain all the knowledge which is needful to protect them from evil." Others will consider more definite teaching necessary if good is to be done. When knowledge is incomplete, imagination is apt to fill up the gaps, and, according to Max Norden, "Its wild fictions, based probably upon morbid art, detestable literature, suggestive plays, and unconsidered drawing-room and table talk, will certainly defile the mental purity of the poor girl in a far more alarming way than any physiological teaching ever could do, even if it is clumsy or brutal." Mr. Zangwill looks on the whole discussion as too late. "Owing to the circulation of the woman novel

and of the modern newspaper, nine girls out of ten must know as much as their parents, and the tenth a good deal more;" but that this is not entirely so is shown by the contribution of Madame Adam, in which she says: "I married, when I was quite young, a man whom I detested, because I had been led to believe that a kiss on a young girl's mouth constituted her betrayal. The man whom my parents wished me to marry, being instructed as to my innocence, kissed me, and I therefore thought that my marriage was an obligation." This is an extreme instance but most medical men of an age to beget confidence in such affairs will be able to recall instances in which an ignorance, which would have been ludicrous if it had not been so sad, has been displayed on matters regarding which every woman entering on married life ought to have been accurately informed. It seems plain that the existing generation of mothers are neither willing, nor perhaps capable, of taking up the *rôle* of teachers in this matter. The contribution by Thomas Hardy suggests that plain handbooks, specially prepared, on natural processes and morbid contingencies, should be placed in the daughter's hands, and goes on to say, "Innocent youths should, I think, also receive the same instruction; for (if I may say a word out of my part) it has never struck me that the spider is invariably male and the fly invariably female," a remark which is not devoid of common sense. There can, we think, be little doubt that much unhappiness and a great deal of illness would be prevented if young people of both sexes possessed a little accurate knowledge regarding their sexual relations, and were well impressed with the profound importance of selecting healthy mates. Knowledge need not necessarily be nasty, but even if it were, it certainly is not comparable in that respect with the imaginings of ignorance.

CORONER FOR THE NORTH-EASTERN DISTRICT.

AT a meeting of the London County Council held on June 5th the Public Control Committee reported that in response to their advertisements for a coroner for the North-eastern District, the office being vacant in consequence of the death of Dr. Macdonald, forty-nine applications had been received. The Committee selected and saw nine of the candidates, and submitted the names of Dr. W. Wynn Westcott, Dr. Charles Gross, and Dr. F. H. Daly. All these gentlemen were highly qualified, but Dr. Westcott appeared to them to have had most of the special kind of experience desirable for the post, having acted as deputy coroner for the Central and Western Districts, and held nearly 3,000 inquests. Dr. Wynn Westcott was elected at a salary of £1,150 per annum. This is a very judicious and impartial selection.

THE TRAGIC SIDE OF MEDICAL LIFE.

ANOTHER name has to be added to the ever growing list of medical martyrs to professional duty. Dr. A. L. Copner, of Ilfracombe has died of diphtheria, contracted while in attendance on a child suffering from that disease. The child refused to take any remedies, and when it was sought to apply medication directly to the diseased parts by means of syringing, struggled and coughed, bespattering Dr. Copner with infective material. Dr. Copner was "union medical officer," and the patient belonged to a poor family. This tragic ending of a promising career is a fresh instance of the grave risks quietly, unostentatiously, and cheerfully taken every day by the medical officers of the Poor-law service. The Barnstaple guardians, at their last meeting, resolved unanimously to address a letter of condolence to the widow, and the chairman, in moving the resolution, said that Dr. Copner had died in the execution of his duty. "He died as a soldier would, in front of his regiment; and if ever there was a man deserving of the Victoria Cross it was he." The words were generously spoken, but as we read on we find a guardian expressing the opinion that the salary attached to the office held by Dr. Copner was "totally inadequate." According to the *Medical Directory*, the population of his district was 8,914, the area 14,635 acres, and the salary £70. So little is said about the risks to life involved in ordinary medical practice—all are taken so much as a matter of course—that the public are apt to forget how real they are. A tragic incident such as this, when a man in the prime of life is suddenly struck down, cannot fail, we should hope, to impress upon the public mind that the "parish doctor"—more, perhaps, than any other class in the profession—runs risks which cannot be gauged by money payment, but that the consequences, to those dependent on him, may be alleviated by a generous estimate of the pecuniary reward offered.

THE CONGRESS OF THE DERMATOLOGICAL SOCIETY.

ON the second day of the meeting of this Congress Dr. Byrom Bramwell gave an address on thyroid feeding in diseases of the skin, a subject with which he has dealt pretty fully in a series of papers published in the BRITISH MEDICAL JOURNAL recently. The address, which was illustrated by photographs shown by limelight, dealt especially with the benefit derived from such treatment by cases of psoriasis, lupus, and ichthyosis. In the evening a largely attended and most successful *conversazione* was held, under the hospitable auspices of Mr. Jonathan Hutchinson, at which numerous drawings and specimens were exhibited by Drs. Payne, Crocker, Abraham, J. D. Savill, Stopford Taylor (Liverpool), Eddowes, and Stowers, and by Mr. Anderson. An ordinary meeting of the Society will be held on Thursday, June 14th.

PREVENTIVE INOCULATION FOR CHOLERA IN INDIA.

THE method of preventive inoculation for cholera worked out by M. Haffkine in the Pasteur Institute in Paris, and applied extensively in India by the investigator himself, has been put to the test of actual experience near Calcutta. Dr. Simpson, the health officer, took special steps to make the inoculations in the neighbourhood of Calcutta serve as tests, as severely scientific as possible, of the efficacy of the method in man. A telegram in the *Times* states that one of these tests has recently been completed. Of the 200 inhabitants of a native *bustee* (hamlet), 116 were inoculated with the protective vaccine. Not long afterwards, an outbreak of the disease occurred in the hamlet; ten persons were affected, none of whom had been inoculated, and seven died. All those who had been inoculated remained free. Dr. Simpson has submitted a memorandum to the Calcutta municipality, recommending that the tests should be continued for two years more, and that, if the results are favourable, a permanent department should be established to carry on the inoculations. The estimated cost is trifling when compared with the possible advantages. The course of events among the inhabitants of the *bustee* mentioned afford gratifying support to the expectation that the protection against cholera which is known to be produced in animals by these inoculations will also be produced in man. Calcutta affords special facilities for watching the effects of the inoculations on the subsequent liability to cholera. Investigations made by M. Haffkine and Dr. Simpson showed that the cholera vibrio was always present in the water tanks which supplied those localities which were affected by cholera, while it was absent from the water tanks of those which were free from the disease.

DIVIDED FEES.

A FOREIGN correspondent writes: The Medical Society of Berlin recently decided that it is incompatible with the dignity of the profession that medical practitioners should give midwives who call them in consultation a percentage on the fee. The arrangement referred to can hardly be considered dignified, but it is not more disgraceful than the

system of "dichotomy" which is openly practised in a certain Continental country where we are often told the medical profession holds its head very high. "Dichotomy," which in plain English means sharing the spoils, consists in the handing over by the consultant to the general practitioner who brings him a patient of a certain proportion of the fee. This is not done merely by the young consultant struggling into practice; the custom, which is decidedly one more honoured in the breach than in the observance, is much more prevalent among the so-called "princes of science." So ingrained is the habit that we have knowledge of a case in which one "leader of the profession" claimed his commission from another to whom he had sent his own sister for a serious operation. "Gyp" has alluded to the practice of dichotomy in one of the most powerful of her dramatic stories. The arrangement is not confined to medical men in their relations of professional brotherhood. "Dichotomy" is also practised between certain medical practitioners and the druggists who make up their prescriptions. So little disguise is considered necessary that a voluminous pharmaceutical catalogue is issued by a French firm and on the back of the volume is the significant word *Dichotomie*, naked and unashamed. There are some things which they do not do better in France.

THE SICK POOR AT HATFIELD.

Moved by the recent disclosures of still continuing scandals and defects in the treatment of the sick poor in certain provincial workhouses and infirmaries, the Editor of the British Medical Journal—Mr. Ernest Hart—has set on foot an investigation, by a specially appointed Commission, into the nursing and administration of some of the smaller institutions. Since the investigation of Mr. Hart and his colleagues, Dr. Anstie and Dr. Rogers, in 1866, which led to the creation of the Metropolitan Asylums and the reorganisation of the workhouse system of treatment of sick poor, there has been an extensive and progressive reform in these respects, not only in the metropolis, but throughout the country, and many of the great provincial workhouse infirmaries are models of comfort and good management. But evidently there are others—as at Newton Abbot—where much remains to be done before the requirements of humanity can be held to be fulfilled. Beginning near home, our Commissioner reports this week as to the Hatfield Workhouse Infirmary. The first impression is nearly always pleasing, and Hatfield was no exception. The bright flowers, the neat walks and well-swept approach, polished brass handle and knocker, give an idea of cleanliness and attention to detail, and a step across the threshold confirms this idea; there is the common appearance of official cleanliness characteristic of an institution. Turning aside from the main entrance to the infirmary department, the men are found lodged in a modern block near the gate; the females are at some distance in makeshift quarters of three old cottages. This at the outset struck us as faulty in management, for the one nurse responsible for the sick nursing cannot be with the men and in reach of the women, or *vice versâ*; and as it is impossible to guarantee that the one sex shall not interfere with the nursing of the other, the nurse, presuming that she is anxious to do her utmost for the sick committed to her care, at times will be distracted at the hopelessness of the task before her. Taking into consideration that all the help at the disposal of the nurse is such as can be given by the inmates, this system of nursing may break down at any minute; it can bear no strain. On looking in the so-called women's infirmary we were dismayed at finding it draughty, crowded, ill-ventilated, and quite unprovided with the necessaries of sick nursing. In the lower room, about 20 feet by 12 feet, there were six beds, a table, a few chairs, and a night stool; two women were in bed and four huddled round a small fireplace; the door, an ill-fitting one, opened on to the court, the windows, such as are seen in small cottages. Up a narrow stair a similar ward above. It might be necessary to escape from an alarm of fire down that stair or there might be a corpse to be brought down; the aged sick could not safely be brought down, and a dead body could not be handled decently. The lying-in ward was a disgrace to the infirmary, a miserable attic without any conveniences, a small fireplace, a small window, and no appliances for the nursing of such cases. All sanitary arrangements were quite elementary. We saw earth closets without earth, waterclosets without water, these all being outside, a sanitary precaution which was their only redeeming point, only we wondered what befell the infirm or sick in inclement weather or at night. The only apparatus for heating water (the heat being gas) was, with an amusing innocence, placed in a lobby close to an external door frequently opened, and was a small boiler sufficient for one bath of moderate capacity. We are not pointing out these defects in a captious, critical spirit, but with the sincere hope that the public will look into these matters themselves, so that when the guardians ask for powers to make such improvements as are imperative public opinion shall be ready to endorse their action.

UNDETECTED FRACTURES OF THE SKULL.

It is always a circumstance much to be regretted when a house-surgeon fails to recognise a fracture of the skull and the patient dies after being refused admission to a hospital, and yet we do not see how the occasional occurrence of such an event is to be avoided. If alcoholic stupor were less common matters would be far easier, but at present the taint of alcohol blurs the symptoms of the great majority of head injuries taken to the hospitals, and unless the general rule were acted on that every such case wfth a history even of momentary unconsciousness should be admitted, we do not see how mistakes are to be avoided. What hospital, however, in a busy district could find beds for all the broken heads which come to its surgery, and how many of its patients would be willing to submit to such a rule? A man went into a public house. He had nothing to drink, but a few minutes afterwards he was found at the bottom of a flight of stairs with his head bleeding. He was taken to St. Bartholomew's Hospital in a cab; so goes the story. His head was dressed, and after being detained four hours and a-half he was told he could go home. He was helped there by two men and put to bed, but died soon afterwards, and a *post-mortem* examination showed that his skull was fractured. Unfortunate; but what more could be done? Evidently he was treated carefully, being not only dressed but detained for observation, and the *contretemps* could only have been prevented by a routine system of admitting all cases. This, however, is a large subject, and introduces many considerations, first among which is the relation of the hospitals to the police organisation. Probably half the cases of scalp wound received in hospital surgeries are taken there by the police, and but for the accident of an external wound, would be taken to the station and locked up for the night. All that is done at the hospital is in direct relief of the police funds, and if the public should demand that cases be detained until a definite diagnosis can be arrived at, the public must be prepared to repay the hospitals out of its general rate for the expenses they are put to in the treatment of these police cases, for they are a noisy lot, and definitely injurious to the other inmates if admitted into general wards.

The Sheffield Guardians have decided to allow inmates of good character an ounce of tobacco a week.

THE OLDEST UNIVERSITY IN THE WORLD.

ACCORDING to the *Revue Scientifique* the oldest University in the world is that of Fez, the holy city of Morocco. This seat of learning was founded in the 11th century by Fatma the Holy. In its early days—while as yet Paris, Oxford, and Cambridge were not—the University of Fez had French, Spanish, and English, as well as Tunisian and Egyptian, students on its benches. At the present day it is the Western centre of Mussulman theology. The University occupies an extensive site in the middle of the city; the buildings are a collection of mosque-like edifices, with minarets of varnished brick, and shady quadrangles with fountains playing in the middle. The structure is at once a university, a library, a mosque, and a caravanserai. The doors are open both day and night, and the precincts are always crowded with faithful come to pray, as well as with students. The teaching staff consists of *Foukis* or professors and *Emins* or lecturers. The majority of the students are grossly illiterate, and at the University they learn little beyond a number of verses of the *Koran*. Some, however, are fairly learned in the law. Medicine seems to have no place in the programme of studies. There are about 1,000 students, 400 of whom are the holders of small scholarships which entitle them to "free commons" of a very meagre kind, with the right to sleep in the courtyard of the mosque. The library contains a considerable number of European books, but they are mostly allowed to repose undisturbed on the shelves. There are also maps in which Morocco has the place of honour, with Egypt, Syria, and Arabia grouped about it. Persia and Russia are mentioned, but England and France are conspicuous by their absence.

MODERN GREEK AS THE LANGUAGE OF SCIENCE.

NOT long ago we referred to the suggestion of Dr. Rose (appropriately named Achilles), of New York, that modern Greek should be adopted as the official language of science at all international congresses, and generally for all purposes of communication on scientific matters between workers of different countries. That a scientific *lingua franca* of some kind would be most useful can hardly be denied. That modern Greek is the language best suited for such a purpose seems to us open to question. We are assured by Dr. Rose and by the editor of the New York *Medical Record* that, unlike Latin, Greek is not dead, but "a living language, flexible, and perfectly adapted to all the needs of human intercourse." Further, it is "a beautiful tongue, easily learned, and lends itself to every form of verbal and literary expression." The notion that it is difficult is founded (so Dr. Rose tells us) on the absurd method by which the ancient language is taught in schools. As to the absurdity of the ordinary manner of teaching Greek we fully agree, but when the learned Achilles is so far carried away by his enthusiasm as to assert that the Greek spoken and written to-day in Athens differs very little from modern Greek, we feel bound to enter a mild protest. The very simplicity of modern Greek which is put forward as an argument by the advocates of its claim to be the international language of science, is a proof that it differs widely from classical Greek. If one take up a modern Greek newspaper he will find, as Mr. Andrew Lang says, that the idioms "are the idioms of all newspapers, that the grammar is the grammar of modern languages, that the opinions are expressed in barbarous translations of barbarous French and English journalistic *clichés* or commonplaces." Modern Greek is, in fact, in the words of the same scholarly writer, an "ugly and undignified mixture of the ancient Greek characters and of ancient Greek words with modern grammar and idioms, and stereotyped phrases most distasteful to the scholar." Distastefulness to the scholar might be tolerated if modern Greek offered any compensating advantage to the scientific man, but we confess we see none. The fundamental objection to all such schemes of an artificial medium of scientific intercourse is that they will not work. Men will not take the trouble to learn a language in the way it must be learnt for such a purpose, unless they are compelled to do so by the stress of the struggle for existence. Commercial competition will in time inevitably develop a living speech in which all traders can communicate, and this speech must ultimately become the language of science. All attempts to galvanise dead languages into life or to invent artificial ones are foredoomed to failure by the laws that regulate the development of human speech.

THE LEPER IN GREATER BRITAIN.

THE segregation of lepers as a prophylactic measure against the spread of leprosy is now on full trial in several of the Colonies of the British Empire, and we may hope that in time the value of this drastic method will be determined one way or the other. In New South Wales an Act was passed by the Legislature in 1890 "to provide for the notification of cases of leprosy; for the detention and isolation of lepers; the appointment of lazarets; and other purposes;" and since then considerable activity has been displayed in the detection of cases in various parts of the colony. Ten lepers were discovered in 1891, twelve in 1892, and only seven in 1893, all being sent to the lazaret at Little Bay, which had been established so long ago as 1883. From the report of the Board of Health, which has recently been laid before the Legislative Assembly, we learn that since the establishments of the lazaret fifty patients have been admitted, fourteen being natives of New South Wales (of European descent), twenty-nine Chinese, one West Indian (coloured), one from Java, one Englishman, one from Fiji, one from the Solomon Islands, one from New Zealand, and one native of India. The number remaining in the institution on December 31st, 1893, was thirty-six. The whole department is under the able direction of Dr. J. Ashburton Thompson, Chief Medical Inspector of the Board of Health, whose exhaustive annual reports are valuable contributions to our knowledge of the disease. We may, on a future occasion, refer to some of the important points touched upon by that observer.

THE CHELTENHAM MINERAL WATERS.

THE Town Council of Cheltenham have obtained from Professor Thorpe a recent analysis of their mineral springs, which once had so great a vogue, and which are referred to in the celebrated will scene in the comedy of *Money*, now being played at the Garrick Theatre. It is true the testator in the comedy does not appear to have derived any benefit from their use, and the only acknowledgment he makes to the gentleman who prescribed them is a legacy of the "empty bottles!" But the Cheltenham local authorities evidently believe that it is possible to restore the fame of these springs, and for that purpose they have been protecting their wells from the influx of surface water, to which it appears they had been exposed, and specimens have been examined and analysed by Professor Thorpe. The analyst divide these springs into two classes: (*a*) Magnesia-saline Waters; and (*b*) Soda-Saline Waters. The strongest of the first group contains about 390 grains of saline matter per gallon, and if we take the more convenient estimate of the quantities of the different ingredients in each pint we find in the "cottage" well about 15½ grains of magnesium sulphate, 14 grains of sodium sulphate, 12 grains of calcium sulphate and carbonate, estimated together, and 5 grains of sodium chloride. It will be seen that in order to administer 1 drachm of magnesium sulphate, together with 1 drachm of sodium sulphate, we should have to prescribe 2 quarts of this spring. We should be disposed to regard these springs as most suitable to the class of cases that it is now the fashion to send to Contrexéville, cases in which it is desirable to ensure the ingestion of very large quantities of water, and we doubt

the propriety of comparing them with the waters of Carlsbad, Kissingen, and Tarasp. It will be wiser for the authorities at Cheltenham closely to specialise and limit the applicability of their springs, than to seek to generalise their use and to compare them with important sources with which they have little in common. Next as to Class B., the "soda saline" group; these closely resemble one another, and the analyst sees no practical objection to their being mixed together. They are all characterised by containing sodium chloride as their chief ingredient. The strongest of these has 644 grains of saline matter per gallon, and the following quantities of the chief ingredients per pint: Sodium chloride about 60 grains, sodium sulphate about 14 grains, sodium bicarbonate nearly 4 grains, and magnesium and calcium carbonate about 1½ grain; there are also in each gallon about 36 cubic inches of free carbonic acid. These springs resemble somewhat the Kissingen springs, but they must be far less agreeable to drink and less easy to digest on account of the comparatively small proportion of free carbonic acid they contain. They would be more suitable than Class A., for baths when heated.

REGISTRATION OF MIDWIVES.

SCHEME FOR THE REGISTRATION OF MIDWIVES DRAWN UP BY THE MIDWIVES' REGISTRATION ASSOCIATION.

May 30th, 1894.

Sir,—We beg to forward you a copy of the scheme for the registration of midwives, drawn up by the Executive Committee of the Midwives' Registration Association, after some twenty-three meetings for the purpose, and submitted to and approved by the Association at a special general meeting held on May 30th, 1894, at the Medical Society's rooms, Chandos Street, Cavendish Square.—Yours truly,

Robert Boxall, M.D.,
Rowland Humphreys,
Honorary Secretaries.

We have been unable to find space for the full text of the scheme, which is in much detail, but the following is a summary of its leading points. The Secretaries request us to state that a copy of the scheme will be forwarded to anyone applying for it.

The scheme suggested by the Midwives' Registration Association for the registration of midwives is in the main based upon the recommendations contained in the report of the Select Committee of the House of Commons (August 8th, 1893). This scheme aims at making the examination and registration of midwives self-supporting by means of the fees from candidates. On public grounds the county councils are asked to defray the expenses of the local supervision and discipline of the midwives practising in each district, and to keep a current copy of the register for public inspection. Advantage has been taken of the offer of the General Medical Council to exercise a general control in the matter by sanctioning the rules and regulations to be framed in respect of the education, examination, and discipline of midwives, and by appointing examiners. The detailed working of the scheme is vested in local boards (to be specially formed for the purpose both in London and in provincial centres, and consisting of examiners appointed by the General Medical Council), and in a central board comprising the members of all the local boards. By this means all parts of the country are placed on precisely the same footing; uniformity is further secured by an interchange of members serving on the different local boards.

The scheme may be advantageously considered under three separate heads: 1. Examination. 2. Registration. 3. Discipline.

1. Examination.

Candidates for examination will be required to produce evidence of having undergone the qualifying course of instruction, and to have complied with other conditions laid by the General Medical Council for admission to the examination.

The scope of the examination will be defined by the General Medical Council.

The knowledge of each candidate will be tested by two examiners, one of whom at least would have taken no part in her instruction.

It is recommended that the certificate granted to the successful candidates should contain a clause to the following effect: "This certificate does not entitle the holder to treat any complication or abnormal condition in mother or infant, to treat or prescribe for any case of illness, or to perform any obstetric or other operation. In such cases the services of a registered medical practitioner should be obtained."

2. Registration.

Every woman who shall have passed the qualifying examination and shall have conformed to the rules of admission to the register will be entitled to registration, on undertaking to conform to the rules limiting and regulating the practice of midwives laid down by the Central Board, under the direction of the General Medical Council.

Every woman already in practice as a midwife at the time of the passing of the Act will be entitled within a period of twelve months thereafter to registration on giving a similar undertaking, provided she is able to comply with either of the following conditions:

I. The production of a diploma or certificate granted after training and examination by an institution approved by the General Medical Council or the Privy Council.

II. (*a*) Satisfactory evidence of having been, at the time of the passing of the Act, in *bonâ fide* practice as a midwife for a period to be defined by the General Medical Council or the Privy Council; and (*b*) certificates of moral character and sobriety from two respectable householders to whom the midwife is personally known, one of whom it is advisable should be a registered medical practitioner.

No woman unless registered will be allowed to assume the title of midwife or its equivalent, or to hold any public appointment as midwife, under pain of conviction for misdemeanour, punishable by fine or imprisonment.

3. Discipline.

Every woman practising as a midwife will be under the supervision of a medical officer appointed by the county council, to whom she will be required to submit a periodical return of the cases attended by her. This medical officer would act as the general medium of communication between the county council and midwives of the district on the one hand, and the central and local board on the other.

All complaints of malpraxis, negligence, or misconduct on the part of a midwife would be reported by the medical officer to the central board, who, before deciding, might refer the case to the local board for consideration.

Provision is made in case of misdemeanour or felony, of misconduct in respect of her calling as midwife, or of wilful infraction of the rules regulating the practice of midwives, for the removal of the name of a midwife from the register.

OPINIONS OF THE BRANCHES OF THE BRITISH MEDICAL ASSOCIATION.

Perthshire Branch.

At the summer meeting of the Perthshire Branch held on June 1st, Dr. Hay in bringing before the meeting correspondence relative to the registration of midwives, observed that midwives were a necessity. This had been acknowledged by a Select Committee of the House of Commons and by the General Medical Council. It seemed to him, therefore, that the question was not one between midwife and no midwife, but between trained and not trained. At present a midwife might or might not be competent, but a registered midwife would be a trained and responsible person. Not being engaged in general practice, he refrained from making a proposal.—In the discussion that followed all the members agreed that some form of registration was desirable, but they did not feel justified in considering details. They agreed

that registration would be a boon to the poor, and the profession did not approve of the tone of the opposition. Registration would be a "hall-mark" on which the practitioner could place reliance. A qualified midwife would foresee difficulty and danger, and call in medical aid when necessary.—Dr. CARRUTHERS then formally moved:

That this meeting approves of the principle of the registration of midwives.

Dr. TAYLOR seconded, observing that some of the certificates of training in use at present were good, while others were misleading. Registration would dispose of this by putting midwives on an equally high level.—The motion was carried unanimously, the CHAIRMAN observing that he was glad that the money question did not enter into the discussion. He thought, in spite of what some people upheld, that the registration of midwives would make no difference to the practitioner, while it would safeguard the poor. He thought that provision should be made for prosecuting persons who wrongfully assumed the style and title of registered midwife.

SOUTHERN BRANCH: SOUTH-EAST HANTS DISTRICT.

At an ordinary meeting of this Branch held at Southsea on May 8th, Mr. HACKMAN moved, and Dr. WARD COUSINS seconded, the following resolution:

1. The present system of allowing any woman, even without the slightest training or fitness, to practise as a midwife and under no control, is unsatisfactory.
2. Legislation is needed for enforcing the proper education, registration, and efficient medical control and supervision of midwives.
3. The action of the Midwives' Registration Association in seeking to obtain information on which to found future legislation be cordially supported.

The discussion was adjourned to a special meeting on May 22nd, when the following amendment to Mr. Hackman's proposition was proposed by Mr. LORD, seconded by Dr. BLACKMAN, and carried by 10 votes to 3:

That this meeting is of opinion that the action of the Midwives' Registration Association, in endeavouring to obtain legislation to secure the registration of midwives, is entirely uncalled for, and would prove injurious to the public welfare and to the best interests of the medical profession, and that, whilst desirous of granting increased facilities for the efficient training of monthly or midwifery nurses, this meeting hereby records its emphatic protest against any such proposed legislation.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

At the annual meeting of this Branch held on May 24th, Dr. WELSFORD (Dover) moved the following resolution:

That the East Kent District of the British Medical Association, while desirous of seeing obstetric nursing improved, are of opinion that the registration of midwives would be a retrograde step, harmful both to the public and the medical profession; and that any step which would tend to give the sole management of a case of labour to any but persons legally qualified to practise medicine, midwifery, and surgery, would be most dangerous and ill-advised. They are also of opinion that the action of certain medical practitioners who grant diplomas and certificates to midwives and other unqualified persons is disgraceful and harmful, and that this diploma trading is of such a serious nature as to to call for the active and energetic interference of the General Medical Council.

After an animated discussion, in which the opposite side was ably advocated by Dr. NICHOL (Margate), the resolution was carried by a majority of three to one.

ASSOCIATION INTELLIGENCE.

GRANTS FOR SCIENTIFIC RESEARCH.

THE Council of the British Medical Association desire to remind members of the profession engaged in researches for the advancement of medicine and the allied sciences that they are prepared to receive applications for grants in aid of such research. Applications for sums to be granted at the next annual meeting must be made on or before June 15th in writing addressed to the General Secretary, at the office of the Association, 429, Strand, W.C. Applications must include details of the precise character and objects of the research which is proposed.

Reports of work done by the assistance of Association grants belong to the Association.

Instruments purchased by means of grants must be returned to the General Secretary on the conclusion of the research in furtherance of which the grant was made.

RESEARCH SCHOLARSHIPS.

The Council of the British Medical Association are prepared to receive applications for one of the three Research Scholarships which is vacant, of the value of £150 per annum, tenable for one year, and subject to renewal by the Council for another year.

Applications to be sent in writing addressed to the General Secretary on or before June 15th, stating the particulars of the intended research, qualifications, and work done.

FRANCIS FOWKE, *General Secretary.*

429, Strand, London, May 8th, 1894.

ELECTION OF MEMBERS.

MEETINGS of the Council will be held on July 11th and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, June 21st and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. FRANCIS FOWKE, *General Secretary.*

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the Office.

BRANCH MEETINGS TO BE HELD.

EAST ANGLIAN BRANCH.—The annual meeting of this Branch will be at the Town Hall, Great Yarmouth, on Thursday, June 21st. 11.30 A.M. Meeting of the Council of the Branch. 12 noon. Business: To receive Report of Council of Branch. To elect two representatives on the Council of the Association. To elect a representative on the Parliamentary Bills Committee. To arrange for Autumnal Meeting. To elect President for 1895, and arrange place of Annual Meeting that year. To consider proposed By-laws for East Anglian Branch. 1 P.M. Luncheon at Town Hall by invitation of Mr. A. C. Mayo, President-elect. 2.15 P.M. Introduction of New President by Retiring President. Short Address by the President. Professor Clifford Allbutt (Cambridge): Notes on Angina Pectoris. Professor William Rose (King's College, London): A Surgical Paper. Dr. W. S. A. Griffith (Assistant Obstetric Physician St. Bartholomew's Hospital, and Examiner in Midwifery Cambridge University): On Gonorrhœa in Women. Mr. A. H. Tubby (Surgeon to the Evelina Hospital): The Diagnosis of Pott's Disease of the Spine. Mr. Charles Williams (Norwich): A case of Intestinal Obstruction due to Hernia into the Foramen of Winslow. Mr. S. H. Burton (Norwich): Notes of two unusual cases of Intestinal Obstruction. Dr. Sinclair Holden (Sudbury): Remarks on a case of Peripheral Pseudo-Tabes. Dr. W. B. Wedgewood (Lynn): The Perchlorides of Mercury and Iron in the Treatment of Typhoid. The President will show cases of Radical Cure of Hernia in Elderly People; Arthrectomy of Knee-joint; Mayo Robson's Treatment of Fracture of Patella. Dr. H. Blake (Yarmouth) will show cases of Cancer of Tongue removed in 1886; Symmetrical Gangrene of Legs in a Child; Suppurating Ovarian Cyst treated by Drainage; Nephrolithotomy. Dr. Ryley (Yarmouth): Interesting Ophthalmic Cases. In the Town Hall will be an Exhibition of Surgical Instruments and Appliances by Messrs. Down Bros., of London; and of Pharmaceutical Preparations by Messrs. Burroughs, Wellcome, and Co. Arrangements will be announced for Afternoon Tea. By the kindness of Commander Presketh, R.N., an Exhibition of the Rocket Life-saving Apparatus will take place on the beach by the Coast Guard Station. Rev. Canon J. J. Raven, D.D., and Mr. F. D. Palmer, D.L., will conduct parties interested in archæology round the extremely interesting old parts of Yarmouth. Mr. Charles Diver (Churchwarden) will be pleased to show the historic old church of St. Nicholas. Drs. Wilson and Underhill have kindly undertaken to take those interested round the Royal Naval Hospital. A military band will play in the Beach Gardens from 6 to 8 P.M. Those interested in hospital construction and management are invited to visit the New Hospital, opened by Sir James Paget in 1887. Dinner at Royal Hotel at 7 P.M.

SOUTH-EASTERN BRANCH.—The fiftieth annual meeting will be held at the Crystal Palace on Wednesday, June 13th, Mr. J. Sidney Turner (President-elect) in the chair. Meeting at 2.30 P.M. After the routine business the following resolution will be proposed by Dr. Welsford: "That this Branch considers that it will be to the advantage of both the medical profession and the public that the Council of the British Medical Association have power and authority to proceed against unqualified prac-

tice, and in other ways to protect the interests of the medical profession, and that it will be to the advantage of all if the Council were to authoritatively decide questions which affect medical men *inter se*. And this Branch requests the Council of the Association to take such steps as are necessary to carry these suggestions into effect, and to promote union and combination among medical men." Dinner at 6 P.M. The President-elect invites members and their friends to lunch at his house, 81, Anerley Road, close to the Palace, from 1 to 2 P.M.

SOUTH-WESTERN BRANCH.—The annual meeting will be held at Liskeard, under the presidency of Dr. Nettle, on Wednesday, June 27th. The Honorary Secretary will be glad, as early as possible, to receive intimations from members of their probable intention to attend the meeting, also of short notes of cases to be shown, specimens to be exhibited, etc. —WM. GORDON, Honorary Secretary, Barnfield Lodge, Exeter.

METROPOLITAN COUNTIES BRANCH.—The annual meeting will take place at Limmer's Hotel, George Street, Hanover Square, on Tuesday, June 26th, at 5.30 P.M.—ANDREW CLARK, ISAMBARD OWEN, Honorary Secretaries.

SOUTH MIDLAND AND CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCHES.—A combined meeting of these Branches will be held at Bedford, on Thursday, June 21st, at 3.30 P.M. Agenda:—Dr. Rowland H. Coombs will give a brief introductory address. Mr. G. E. Wherry (Cambridge) will introduce a discussion on the Treatment of Hernia. Dr. Buszard (Northampton) will introduce a discussion on the Treatment of Acute Febrile Diseases. Sir G. M. Humphry, F.R.S. (Cambridge): The Treatment of Wounds. Dr. A. H. Jones (Northampton): The Arrest of Hæmorrhage in Hæmophilia. Mr. W. G. Nash: A Case of Subdural Abscess and Septic Thrombosis of Lateral Sinus following Middle-ear Disease. Dr. J. Griffiths (Cambridge): Chronic Inflammation of the Breast with and without the Formation of Cysts.—CHARLES JEWEL EVANS, JOSEPH GRIFFITHS, M.D., Honorary Secretaries.

MIDLAND BRANCH.—The annual meeting will be held at the Guildhall, Lincoln, on Thursday, June 14th, at 2 P.M. After the transaction of the usual business the following papers will be read and discussed:—Dr. Newman: To call attention to some of the more pressing difficulties which the members of the medical profession have now to face, and to propose a resolution. Mr. C. J. Bond: A few remarks on the Treatment of Vesico Vaginal Fistula by Operation from within the Bladder. Dr. Elder: Notes on Cholecystotomies and other Abdominal Cases. Mr. R. C. Stewart: On General Paralysis. Dr. Pope: Ulcerative Endocarditis with a Case of Recovery. Dr. Mansel Sympson: (1) Notes on the Treatment of Chronic Muscular Rheumatism by Arsenic; (2) Microscopic Sections of a Congenital Fatty Tumour from a Child aged 8 months. Mr. Cant: On the Radical Cure of Hernia, with cases. Mr. Cant will also give a demonstration at the hospital with the Electric Cystoscope. Luncheon will be provided by the President-Elect, at the Saracen's Head Hotel, at 1 o'clock. The dinner will take place at the Saracen's Head Hotel at 5 o'clock; tickets 7s. 6d., exclusive of wine.—W. A. CARLINE, M.D., Honorary Secretary and Treasurer.

ABERDEEN, BANFF, AND KINCARDINE BRANCH.—The summer meeting of this Branch will be held on Thursday, June 14th, at the New Inn, Ellon, at 2 P.M. Business:—Minutes, nominations, etc.; Communication from the Lancashire and Cheshire Branch anent the proposed legislation for Registration of Midwives. An excursion to Bullers of Buchan, *viâ* Slains Castle and Port Erroll has been arranged for members who can attend early in the day; and dinner will be served at Ellon at the conclusion of the meeting. Fare for the excursion and luncheon 5s. each. Tickets for dinner 3s. 6d. per head. Members intending to join the excursion leave Aberdeen by 9.25 A.M. train. Those attending meeting and dinner only leave Aberdeen by 12.20 train.—J. MACKENZIE BOOTH, C. THISELTON URQUHART, Honorary Secretaries.

EDINBURGH BRANCH.—The annual meeting of the Edinburgh Branch of the British Medical Association will be held at 34, Charlotte Square, on Thursday, June 14th, at 5 P.M. Notice of motion or other business should be given ten days in advance to the Honorary Secretary, R. W. PHILIP, M.D., 4, Melville Crescent, Edinburgh.

NORTHERN COUNTIES BRANCH.—The annual meeting of this Branch will be held on Thursday, June 14th. Mr. David MacBrayne's ss. *Glengarry* has been engaged for the day to convey members and their friends to Fort Augustus and back, calling, if time permits, at Temple, Inverfarigay, and Forgue. Will start from Mintown Wharf, at 11.20 A.M., and return in time for the last trains from Inverness. Members are requested to communicate at once with the Secretary as to their intentions to be present, and as to whether any friends will accompany them.—J. W. NORRIS MACKAY, Secretary and Treasurer, The Tower, Elgin.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.—The annual meeting of this Branch will be held at the Birmingham Medical Institute on Thursday, June 14th, at 3.30 P.M., when, after the ordinary business has been disposed of, an address will be delivered by the President-Elect, Mr. H. Langley Browne. The annual dinner will take place the same evening at 6.30 at the Grand Hotel. Members of Branch intending to be present should intimate this to the Honorary Secretary, Mr. GILBERT BARLING, 85, Edmund Street, Birmingham.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The twenty-fourth annual meeting of this Branch will be held at the Infirmary, Cardiff, on June 28th. Mr. Victor Horsley will give a lecture on Gunshot Wounds. Further particulars in circular convening the meeting.—A. SHEEN, M.D., D. ARTHUR DAVIES, M.B., Honorary Secretaries.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

THE annual meeting of this Branch was held at the Kent and Canterbury Hospital on May 24th, DR. PARSONS, President of the Branch, in the chair. Twenty-nine members and one visitor were present.

Confirmation of Minutes.—The minutes of the last ordinary meeting and of the last Council meeting were confirmed.

Accounts.—The accounts of the past year, audited by Dr. Styan, were presented and passed.

Election of Honorary Secretary.—Mr. Raven (Broadstairs) was unanimously re-elected Honorary Secretary.

Meetings for 1894-95.—It was resolved that the invitation of Mr. R. H. Clarke to visit Belle Vue, near Lympne, on the occasion of the September meeting be accepted with thanks. Mr. Clarke was appointed chairman of this meeting. It was resolved that the meeting in March, 1895, should be held at Faversham.

Communications.—Mr. BRIAN RIGDEN (Canterbury) read notes of the cases of Two Abnormal Children. The first, a female, weighed 3 pounds at 3 months of age, and 10 pounds when 1 year old. In all respects she was quite healthy. The second, a male, who was shown to the members, was 3 years and 5 months old. He weighed 68¾ pounds, was 38 inches in height, measured 34 inches round the chest, 35 inches round the abdomen, 16¾ inches round the thigh, and 11½ inches round the calf. The child had been brought up entirely by hand. He could neither walk nor crawl.—Dr. BOWLES (London) read a paper on the Connection of Pyelitis with Renal Abscess. A case was related illustrating diagnosis and treatment. Vesical irritation was held to be an important diagnostic symptom, and in respect of treatment stress was laid upon the necessity of avoiding the introduction of instruments into the bladder owing to the danger of septic mischief. Dr. Bowles showed the two kidneys of a patient who had died of pyelitis. The right kidney contained three pints of pus, and the left kidney was double its natural size and was distended with turbid urine.—Dr. WHITE (Margate) read a paper on Tracheotomy for Laryngeal Diphtheria. He recounted eight cases, four of which recovered. He discussed the treatment of diphtheria from three points of view, namely: When does tracheotomy become necessary? What is the best method of operating? How is after-treatment most effectually carried out? He advocated a moderately high incision and the use of Parker's cannulæ, and he believed that frequent spraying with boracic acid gave greater relief than steam inhalation after the operation.

Case.—Mr. WHITEHEAD REID (Canterbury) showed a patient on whom he had performed both Gastrostomy and Tracheotomy; and also a woman, doing well after Abdominal Section for Extra-uterine Fœtation.

Dinner.—After the meeting, eighteen members dined together at the Fountain Hotel, under the presidency of the Chairman. [The result of the debate on the Registration of Midwives will be found at page 1271.]

DUNDEE AND DISTRICT BRANCH.

THE first annual meeting of this Branch was held in Dundee on May 24th; Dr. J. W. MILLER in the chair.

Report of Council.—The SECRETARY reported that the Dundee Branch was founded at the beginning of the present year, and now included sixty-eight members, forty-one belonging to Dundee and twenty-seven to the surrounding district. The boundaries of the district included the city and county and the members of the profession resident in the adjacent parts of the county of Fife. The Council had been occupied mainly with the organisation of the Branch, but they had also discussed and taken action regarding certain professional questions which had come up for consideration.

Election of Officers.—Office-bearers for the ensuing year were appointed as follows:—*President:* Dr. Sinclair (Dundee). *President-Elect:* Dr. MacEwan (Dundee). *Vice-Presidents:* Drs. J. Rorie and A. J. Duncan (Dundee). *Council:* Drs. G. P. Alexander (Forfar), J. K. Anderson (Arbroath), G. C. Dickson (Carnoustie), A. M. Anderson, R. C. Buist, and Steel Moon (Dundee). *Treasurer:* Dr. D. M. Greig (Dundee). *Secretary:* Professor A. M. Paterson (University College). Professor Paterson was also elected representative on the Council of the Association and representative on the Parliamentary Bills Committee.

President's Address.—Dr. MILLER, in his Presidential address, referred to the improved state of the medical profession in the city. Thirty years ago the only medical association was the Forfarshire Medical Association, which met once a-year. In 1864 the Dundee Medical Society was formed, but that was not the first organisation, as there had been one in existence from 1829 till about 1837, having its habitation in Victoria Square. The second Society had likewise a short life—about seven years. In 1879 a medical library was inaugurated, and, a good collection of medical books having been brought together, it had found a home in University College. Three years ago the Forfarshire Medical Association took on greater activity by instituting quarterly meetings, and now there was this Branch of the British Medical Association, so that the profession in the city was fairly well equipped. Dr. Miller then referred to the importance of the department of therapeutics as a subject for discussion at the meetings of the Association, and the great discoveries and advances which had been made in recent years. He concluded his address by pointing to the enormous diminution of epidemics of typhus fever as a crowning testimony to the value of the measures taken by the public health authority. In support of this contention, he pointed out that in Dundee Royal Infirmary in the year 1833-34 there were 670 cases of typhus fever treated, in 1835-36 773 cases, and in 1836 37 700 cases. Then the cases fell to 183; but in the year 1842-43 there were 941, and in 1844-45 156, in 1847-48 1,033, with 1,790 cases of other fevers, in 1848-49 144 cases, in 1850-51 822, and in 1851-52 782. Since 1874 the number in any year had never reached 100 cases, nor had the number ever reported to the sanitary authorities risen to 100—the highest having been last year, when 99 cases were reported. When they looked at these figures they had to remember the great increase which had taken place in the city.

Dinner.—In the evening the members dined together in the Queen's Hotel. Dr. Miller presided, and the croupiers were Drs. Rorie and MacEwan. After the loyal and patriotic toasts had been submitted, the Chairman gave "The British Medical Association," which was responded to by Dr. Urquhart, Perth. Dr. MacEwan proposed "Our Guests," and Professor Annandale responded. The other toasts included "The Scottish Universities," proposed by Dr. Sinclair, and responded to by Principal Peterson; "The Dundee Medical School," proposed by Professor Annandale, and acknowledged by Professor Paterson; "The Dundee Royal Infirmary," given by Dr. Philp, and responded to by Mr. Gilroy; "The Forfarshire Medical Association," proposed by Dr. Stalker, and replied to by Dr. Rorie; "The Ladies," and "The Chairman."

SOUTHERN BRANCH.

THE annual meeting of this Branch was held on May 30th, at the Royal Victoria Hospital, Netley, on the invitation of Surgeon-Major-General Broke-Smith and the officers of the Army Medical Staff. After luncheon in the messroom the meeting was held in the anteroom of the officers' quarters; Professor J. LANE NOTTER, M.D., senior Vice-President, in the chair. The Chairman alluded to the serious illness of Mr. Barrow, their esteemed President, and moved that a letter of sympathy be sent to him, with a hearty expression of hope for his recovery.

Election of Officers and Council.—Dr. J. Ward Cousins, having been promoted to the office of President of the Council of the Association, resigned his position of representative of the Southern Branch on the same Council, and also the post of Secretary and Treasurer of the Southern Branch. Mr. Manning (Salisbury) was elected representative on the Council, and Dr. Trend was re-elected a representative to the Council of the Association, and also Secretary and Treasurer of the Branch. Professor Notter was re-elected a Vice-President; Dr. Axford (Southsea) also being appointed a Vice-President. The other members of the Branch Council appointed were Dr. Wade (Southampton), Dr. Knott (Southsea), Mr. Darke (Salisbury), Mr. Brook (Fareham), Dr. Groves (Carisbrooke), and Dr. Harman (Winchester). Mr. Langdon (Winchester) was appointed representative of the Branch on the Parliamentary Bills Committee. Mr. Harcourt Coates (Salisbury) was elected President-Elect.

Next Annual Meeting.—An invitation from the South Wiltshire District to hold the next annual meeting at Salisbury was unanimously accepted.

President's Address.—Dr. NOTTER retired from the chair, and introduced the President for the ensuing year, Professor Cayley, F.R.C.S., who delivered an address on the history of the Royal Victoria Hospital and of the Army Medical School. After the Crimean war a Royal Commission was appointed, with Mr. Sydney Herbert as President, to "investigate and report on the various subjects connected with the health and the medical administration of the British army." This resulted in the establishment of an army hospital for the sick and wounded coming from all foreign stations. Netley was selected as the site. The scheme was warmly supported by the Queen and the late Prince Consort, who took deep interest in carrying it out, aided also by Miss Nightingale. With the hospital an Army Medical School was organised for the "special instruction of army surgeons before taking up their military duties, also for training the army hospital orderlies." The hospital was commenced in 1856 and opened in 1862. The hospital had beds for about 1,000 patients, and there were now upwards of 1,000 sick, without counting the lunatic asylum, which held about 60 patients. At some seasons the hospital was more than full; at other times there might be only 150 or 200 sick. Nearly all the patients were adults in the prime of life. In the medical wards the diseases were to a large extent foreign, and presented great variety. The patients came from nearly every part of the world. Many came from India and other malarious countries. There were many cases of the endless varieties of fever and other diseases due to the malarial poison, also many cases of tropical diarrhœa and dysentery, of abscess and other affections of the liver, due to residence in hot climates. Many cases of that special form of fever commonly known as Malta, or Mediterranean fever, or rock fever of Gibraltar, which occurred in nearly all parts of the Mediterranean, was a specific fever, but unfortunately had no name in the official nomenclature, and was often returned as simple continued, and sometimes as enteric or typho-malarial. It was quite distinct from enteric fever, from malarial fevers, and from the simple continued and ardent fevers of hot climates. Surgeon-Captain Bruce, lately the Assistant-Professor of Pathology at Netley, had shown that it was due to the presence in the system of a special bacillus or micrococcus which he and other observers in Malta had cultivated in artificial media. At Netley were many cases of phthisis which was more prevalent among soldiers, in all Continental as well as in the British army, than among the population generally at like ages. When men lived congregated together in large numbers, as soldiers did in barracks, they were very liable to become infected. The ravages of phthisis among our soldiers were much lessened of late years, the result of improved sanitation and barrack accommodation. Heart disease, both organic and functional, especially the latter, were very prevalent among soldiers—the soldier's irritable heart—which caused a large number of men every year to be permanently invalided from the service. There were at Netley many cases showing the effects of sun or heat stroke, with symptoms ranging from simple headache up to general paralysis or hopeless insanity. Occasionally there were cases of elephantiasis, bilharzia, Oriental sore, and other special diseases of particular localities. There was also a certain proportion of the ordinary diseases of civil hospitals, and occasionally cases of enteric fever, small-pox, scarlatina, and other infectious diseases. In the surgical side a great variety of surgical diseases and injuries were treated. In war time the wounded came to Netley for final treatment. A great variety of surgical operations were performed with great skill and success. Of the patients at Netley many recovered and returned to duty. Many were permanently invalided as unfit for further service, and received a pension or gratuity. A few—in these days only a small proportion—died. The deaths were chiefly from phthisis, heart disease, and chronic dysentery. The PRESIDENT then gave an account of the foundation of the Army Medical School and of the special training given there to young medical officers, and concluded with a graceful allusion to the death of Surgeon-Major Parke, so lately one of the staff at Netley, whom he described as the *beau ideal* of an army medical officer.

Payment of Railway Fares of Parliamentary Bills Committee.—With reference to the payment of expenses of members of the Parliamentary Bills Committee, on the motion of Dr. Groves it was resolved by a large majority that in the opinion of the Southern Branch the railway fares of the members of the Parliamentary Bills Committee should be paid.

Communications.—Dr. J. Ward Cousins presented a paper on Ovarian Prolapse and Displacement, which from press of time was taken as read.—Mr. Luckham (Salisbury) exhibited a specimen of a Branched Calculus from the left kidney.—Dr. Harman exhibited a specimen of Cirrhosis of Kidney taken from a man, aged 40, of small stature, rickety large head, and bowed tibiæ, marked mask-like pigmentation of forehead, face, and neck, extreme ulceration of gums (no blue line), horrible fœtor of breath, and hawking up of tenacious bloody mucus, some vomiting, œdema of lower limbs, no albuminuria, great tremor of hands, pulse hardly to be felt; other signs negative. He died on May 13th, 1894, four days after admission into hospital. He had no definite illness until March, 1893; there was then one-third albuminuria, but he improved under treatment until July, 1893, when he got weaker and had some loss of power in the wrists. In September the pigmentation was noticed. The adrenals were normal.

Abuses in Medical Practice.—Dr. Bullar presented a paper on "Reforms Necessary in the Profession," and moved a resolution:

That the usefulness of the British Medical Association would be increased if it were to investigate and prepare cases of professional misconduct for presentation to the General Medical Council, and if its organisation and influence were brought to bear on the various abuses which now oppress and endanger the profession.

—After some discussion, it was resolved, on the motion of Dr. Parkinson, seconded by Dr. Knott, that the subject be referred to the Districts for consideration.

Visit to Docks.—On returning to the Dock Station at 5.10 p.m. a party of members was kindly received, on the part of the London and South-Western Railway Company, by Mr. Wiltshire and carefully conducted over the docks by Mr. Johnson and Captain Lewis. The new Royal Mail steamer *Danube*, lying in the Empress Dock previous to departure for Brazil, was thrown open to the members by the courtesy of Captain Chapman and the officers of the ship.

Dinner.—Several members and friends afterwards dined together at the South-Western Hotel, under the presidency of Professor Cayley.

EAST YORK AND NORTH LINCOLN BRANCH.

The thirty-eighth annual meeting was held at the Hull Royal Infirmary on May 30th.

Election of Officers.—The following officers were elected: *President:* Dr. W. C. Rockliffe. *Ex-President:* Mr. E. H. Howlett. *President-elect:* Dr. J. W. Mason. *Vice-Presidents:* Dr. Lowson and Mr. W. H. Sissons. *Secretary:* Dr. H. W. Pigeon. *Representative of the Branch:* Mr. R. H. B. Nicholson. *Representative on the Parliamentary Bills Committee:* Dr. C. H. Milburn. *Council:* Drs. E. O. Daly, G. F. Elliott, E. Harrison, and J. Merson: Messrs. A. G. Francis, H. Thompson, E. P. Hardey, and J. M. Evans.

The Association and the Legal Defence of Practitioners.—On the motion of Mr. R. H. B. Nicholson, it was resolved that: "In the opinion of this Branch it is desirable that some part of the surplus funds of the Association should be devoted to the legal defence of members against the public, and to the prosecution of irregular practitioners."

Amendment of the Medical Act.—On the motion of Mr. J. M. Evans, it was resolved that this Branch approves of the Parliamentary Bills Committee's amendment to the penal clauses of the Medical Act, and also approves of the report of the Committee against the payment of the travelling expenses of its members.

Donation.—The usual grant was made to the Medical Benevolent College and Fund.

President's Address.—The President delivered an address on Recent Advances in Ophthalmology.

Cases.—The following cases were shown: Dr. A. Parkin: Two cases of Spinal Laminectomy for Paraplegia.—Dr. Daly: Case of Bazin's Disease of the Skin.—Mr. Howlett: Case of Thyrotomy.—Mr. Francis: (1) Case of Microcephalus after Linear Craniotomy. (2) Case of Empyæma of Frontal Sinus.—Mr. Thompson: Two Cases of Trephining for Middle Meningeal Hæmorrhage.—Mr. R. H. B. Nicholson: Traumatic Tetanus; Lupus showing Comparative Treatment by Salicylic Acid and Erasion.

Specimens.—The following specimens were exhibited: Dr. Harrison: Sarcoma of Spermatic Cord.—Dr. Lowson: Myoma removed by Hysterectomy; Vermiform Appendix; Tubal Abortion; Middle Lobe of Prostate removed by Cystotomy.

Dinner.—Fifty members afterwards dined together at the Station Hotel.

SOUTHERN BRANCH: SOUTH-EAST HANTS DISTRICT.

An ordinary meeting of this Branch was held at Southsea on May 8th.

Election of President.—Dr. C. Knott was elected President for the ensuing year.

New Members.—Drs. J. E. H. Kelso and John Phillips, already members of the Association, were elected members of the Branch.

Donation.—A donation of three guineas was voted to Epsom Medical Benevolent College.

Communications.—Dr. Ward Cousins exhibited a child on whom he had performed a plastic operation for Noma, and Dr. Blackman, under whose care the child had been, gave an account of the illness.—Dr. Ward Cousins also exhibited a man, aged 44, on whom he had successfully performed Excision of the Knee for disease of forty years' duration.—Dr. Blackman exhibited (1) Case of Lupus of the Larynx—a young woman, aged 17, who had had an Ulcerating Patch on her Cheek, now healed. There were adhesions between the soft palate and the pharynx. (2) An elderly man, suffering from a Tumour of the Pharynx, probably malignant.—Mr. Emmett showed the Stomach from a fatal case of Carbolic Acid Poisoning.—Dr. Watson read notes on Elephantiasis, and showed microscopic specimens of the Filaria Sanguinis Hominis.

[The result of the debate on the Registration of Midwives will be found at p. 1271.]

PERTHSHIRE BRANCH.

The summer meeting of this Branch was held at Blairgowrie on June 1st, 1894, Dr. Robert S. Irvine in the chair.

Confirmation of Minutes.—The minutes of the last meeting were read, approved, and signed by the chairman.

The late Dr. W. S. Irvine.—A letter from Mrs. Lees acknowledging minute of condolence on the death of Dr. W. S. Irvine was read.—The Chairman said that Dr. W. S. Irvine was one of the original Presidents of the Branch. As nephew of the deceased he wished to express his thanks to the Branch for their kindly reference to his uncle.

New Member.—Dr. Hood (Blairgowrie) was elected a member.

Representative on Council and on Parliamentary Bills Committee.—Dr. Urquhart was re-elected. The meeting took this opportunity of recording their thanks to Dr. Urquhart for his past services and for the ability with which he had represented their views.

Amendment of Medical Act.—Dr. Taylor moved:

That this proposed amendment of the penal clauses of the Medical Act as drawn up at the last meeting of the Parliamentary Bills Committee on April 10th, 1894, have the approval of the Perthshire Branch of the British Medical Association.

Dr. Carruthers seconded, and the motion was carried unanimously.

Payment of Railway Fares of Parliamentary Bills Committee.—The report of the Committee of Council was on this subject read and generally approved.

Dinner.—The members subsequently dined together at the Royal Hotel.

[The result of the debate on the Registration of Midwives will be found at p. 1271.]

Donations and Bequests.—The Baroness Burdett-Coutts has given £2,000 to the building extension fund of the Great Northern Central Hospital. The bazaar recently held for the benefit of the fund was the means of raising no less a sum than £3,000, after deducting all expenses.

SPECIAL CORRESPONDENCE.

BERLIN.

Cantharidin in Lupus.—Cremation.—Appointment of a Prosector at the Urban Hospital.

AT a recent meeting of the Hufeland Society in Berlin Professor O. Liebreich exhibited a lupus case that had been under cantharidin treatment for three months. A photograph taken at the commencement of the treatment showed the lupus patch on the cheek and nose. After three months the case was apparently cured, that is, no nodules were visible to the unassisted eye, but Liebreich, by the aid of his phaneroscopic method (glass pressure) demonstrated the presence of tiny nodules below the surface of the cheek.

A petition praying for permission to introduce cremation into Prussia was read and quietly set aside in the Prussian Diet on May 26th. Hamburg has its crematorium and so has Gotha, and year by year numbers of corpses are transported to one or the other of these towns from Berlin. Prussia, however, still holds out and forbids the erection of a crematorium on her territory, probably from religious scruples chiefly.

Dr. Karl Benda, who for some years has held the post of assistant in the microscopic anatomy department of the Physiological Institute, has been appointed prosector at the Urban municipal hospital. This appointment is of interest as regards the university classes of pathological anatomy. These hitherto only had at their disposal the *post-mortem* material of the Charité and Augusta Hospitals, but henceforth material will be given them from the Urban too.

CORRESPONDENCE.

THE MECCA PILGRIMS.

SIR,—I have read with much interest the article in the BRITISH MEDICAL JOURNAL of May 26th, entitled "The Mecca Pilgrims," by the Moulvie Rafiuddin Ahmad. The article supplies valuable information concerning the duty of the Moslem to make the pilgrimage to Mecca. But this information does not, I think, completely clear up one of the difficulties involved in this question.

During the sittings of the Paris Conference, a proposal was made by the French delegation that the Indian authorities should insist that intending pilgrims should give evidence that they were in possession of the necessary pecuniary means, not only for the journey to and from the holy places, but also for the maintenance of their families whilst away; and it was definitely added, in the French programme: "*C'est là d'ailleurs une prescription de la loi musulmane.*" It was then announced by the Anglo-Indian delegation that if the Sultan, as head of the Moslem religion, would definitely make it known that these requirements did constitute a prescription of the Moslem law, the weight and influence which such an announcement on his part would have might possibly remove the difficulties that would otherwise stand in the way of the Indian Government in enforcing conditions which would at present be regarded as a grave Governmental interference with the freedom of religion. The Turkish delegation were accordingly asked to state precisely whether the Moslem law was really that announced in the French programme.

The reply could not be obtained until there had been communication with Constantinople, and when it ultimately arrived the principal Turkish delegate announced that he had received instructions to answer as follows: "J'ai l'honneur de déclarer que le pélérinage, étant l'un des cinq commandements fondamentaux de la religion musulmane, celle-ci ne saurait l'interdire à personne."

This statement in no way conflicts with the quotation from the Koran at the head of your article, to the effect that "There is due to God from man a pilgrimage unto the House for whosoever is able to find his way there;" for I assume no one would contend that the word "able" in that quotation covers all the financial ability asked by the French programme.

But the Conference was also told that, as a matter of fact, the Dutch Government had, in their Indian possessions, enforced the very conditions on which it was sought to secure a vote of the Conference. When, however, the matter was inquired into, it was suggested, amongst other things, on the authority of Fewzi Effendi in 1890, that any such law applied only to certain divisions or sects of Moslems, and the princial Dutch delegate also declared that nearly all the pilgrims in the Netherland communities belong to one of these sects; and not only so, but that they were well-to-do ("*aisés*"). This, of course, at once placed the Dutch pilgrims on a totally different footing from the many millions of Mohammedans living under British rule.

Now, the Moulvie, after quoting the passage from the Koran already referred to, adds in his article that, according to *Sharah Wikayah*, "a book, much valued by all Sünnis," pilgrimage is incumbent only upon a Moslem "possessing means of subsistence and conveyance, a little more than what is essentially necessary for the maintenance of himself and his family till his return from the pilgrimage." The point that is not yet cleared up is as follows: Is the extract from the Koran that which governs Moslem duty in relation to the pilgrimage, or is it the book referred to; and if the latter, does this apply to all Moslems, or only to certain divisions or groups of them, as, for example, the Sünnis which are named?

I need hardly state that it is important to know whether or not the 60 millions of Her Majesty's Mussulman subjects come within the rule laid down in the book in question, or whether they are governed in this matter by the rule quoted from the Koran.—I am, etc.,

June 6th. R. THORNE THORNE.

HOSPITAL SUNDAY.

SIR,—We are once more on the eve of Hospital Sunday in London, and for the twenty-second year in succession the courtesy of your assistance is asked to enable me in my capacity as Treasurer of the fund, to make a very urgent appeal to the charitable public to support this annual effort in aid of the hospitals, dispensaries, and convalescent institutions which are so continuously and so largely providing for the wants of the sick-poor of the metropolis.

Last year the fund reached a total of £39,290, being less than has been raised in any year since 1885, and this amount was distributed among 122 hospitals and 55 dispensaries. It is computed that at least £100,000 is needed to clear these institutions from debts incurred beyond their normal incomes, in the medical and surgical treatment of the London poor. An interesting return recently published in the *Lancet* shows that last year no fewer than 103,585 in-patients, and 3,871,290 out-patients were treated in the various hospitals, in addition to 243,801 accident and emergency cases. In spite of this, it is a fact that whereas 200 years ago the hospitals in London could take in one sick person out of every 133 residents, the proportion is now one out of every 660. But the good done by the hospitals cannot be estimated by mere statistics of treatment, for as the same article points out:

"New principles in medicine, a new era in surgery, and a clearer comprehension of the laws of health and of the secret processes of disease are the offspring of the tenderness, skill, and assiduity with which the sick poor have been cared for in the hospitals. Sanitary laws have been formulated, and, although even now these are often very inadequately applied, their absence, if hospitals were abolished in London altogether, would reduce us from the present high degree of civilisation, for which we are in a great part indebted to the hospitals, again to a condition little short of barbarism."

For these reasons I venture, with your permission, to prefer an especially pressing appeal for the benevolence of the various congregations on Hospital Sunday. It is the one opportunity given in each year for the churches of the metropolis through their ministers and laity to join in an expression of gratitude for the good work effected by the London hospitals, and also of thankfulness for the immunity from sickness and accident which in our own families we have enjoyed.

I would therefore very earnestly plead for a hearty and munificent response to the appeals which will be made from the pulpit on Hospital Sunday, and I would add the usual

intimation that I shall be glad to receive at the Mansion House any donations towards the fund which may be sent to me.—I am, etc. Geo. Rob. Tyler,
Mansion House, June 7th. Lord Mayor.

HOSPITAL SUNDAY AND HOSPITAL ABUSE.

Sir,—On Sunday next many of our profession will either abstain from giving, or give very sparingly, to the Hospital Fund, on account of the too prevalent hospital abuse. I would with all deference suggest that those who do so should—with your approval and co-operation—send you a contribution towards a Doctors' Hospital Sunday Fund, the same to be divided equally among those hospitals which have a thorough system for excluding undeserving patients.

There are, I believe, but three or four of these hospitals, including the Great Northern. You can doubtless supply the names of the other hospitals.

If this suggestion meets with approval I shall be glad to send a guinea towards the fund.—I am, etc.,
Plumstead, June 5th. Sidney Davies, M.D.

BLOXHAM v. COLLIE: COLLIE v. BLOXHAM.

Sir,—Inasmuch as the reports of the termination of these actions which have appeared in the press are so meagre, I shall be glad if, on behalf of my client, Dr. Bloxham, you will permit me to give the following explanation:

In the action brought by Dr. Collie he sought to restrain Dr. Bloxham from practising within a radius of three miles of Catford, and to recover a penalty of £100 a month, from August, 1893, and to recover damages in addition thereto.

In the action brought by Dr. Bloxham he sought to recover damages from Dr. Collie for the breach by the latter of an agreement alleged to have been entered into whereby Dr. Bloxham was to have been admitted into partnership with Dr. Collie from January 1st, 1894, Dr. Bloxham to receive one-fourth of the net profits of the practice. To this claim Dr. Collie counter-claimed £81 14s. 6d. with interest at 7½ per cent. from May 1st, 1893.

Upon the two actions coming before Mr. Justice Hawkins the following order was by consent made: A juror withdrawn all imputations of professional misconduct mutually withdrawn, Dr. Bloxham undertaking not to practise within three miles of Dr. Collie's present residence for ten years, the counter-claim of Dr. Collie abandoned, and no costs to be taxed or paid on either side. The sum of £20 16s. 8d. paid into court by Dr. Collie to be received by Dr. Bloxham.—I am, etc.,
Ludgate Hill, June 6th. Thos. J. Savage,
Solicitor for Dr. Bloxham.

HOSPITAL ABUSE.

Sir,—As speech is much more ready than the pen of the readiest writer, permit me to suggest a meeting of members of the Association who are interested in this subject in the Library of the Association, 429, Strand. A full and free discussion, especially with reference to the plan you approve of and refer to in the British Medical Journal of June 2nd in Out-patients and Subscribers' Letters, could not but be productive of much good.—I am, etc.,
West Kensington, June 2nd. C. R. Illingworth, M.D.

DUAL NOTIFICATION AND THE DEATH-RATE.

Sir,—I am highly honoured by the lengthy criticism to which you have subjected my letter which appeared in the *Times* of April 16th. The figures which I there gave, and which you complain of as being cramped, were taken from tables which will shortly be published *in extenso*, including the death-rates—for the three periods of four years and for 1893 by itself—not only of the groups, but of each of the twenty-eight large towns; and this not only under the three heads of "general," "total zymotic," and "notifiable zymotic," but under the four additional heads of "small-pox," "scarlet fever" "diphtheria," and "fever (chiefly enteric)."

I am extremely pleased to find that you have made a careful study of my statistics, and also taken pains to set them forth in better form. In your Tables B and C there are, however, two slight errors, which your readers who are interested in the subject can correct in the margin, as I have done: in Table B, first column, Group III, for 3.297, read 3.277: and in Table C, second column, London, for 8.71, read 0.71. In Table A, second column, the final clause of description of Group II should be erased, namely, "becoming wholly under."

You have also been at the trouble of making additional calculations based upon my figures; but, as I showed several years ago in your columns, the method of contrasting death-rates at different periods by the percentage one bears to the other, is not nearly so satisfactory as taking the simple difference between the two, which gives the actual saving or loss of life per thousand or million of the population. Moreover, you have skipped the middle period of four years, which would have told against your own cause in almost every particular, and have contrasted the third with the first alone. If you had gone back thirty years, or to the beginning of the century, you might have derived from a corresponding contrast still greater consolation. Perhaps, however, you will allow me to supplement your Table D with another, contrasting the third period with the second, by giving the differences in the several death-rates, with a − or + sign to indicate saving or loss of life.

E.—*Table showing the Differences between the Mean Death-rates of the Period of Four Years, 1890-93, and those of the Similar Period immediately preceding it, 1886-89. N.B. +=loss of life; −=saving.*

Death-rates from	28 Towns.	Group I. London.	Group I. 10 Provincial Towns.	Group I. Whole Group.	Group II (3 towns).	Group III (14 towns).
All causes	+1.07	+1.40	+1.12	+1.38	−0.45	+0.15
Total zymotic diseases	−0.125	+0.030	−0.244	−0.058	−0.314	−0.312
Notifiable zymotic diseases	−0.003	+0.150	−0.164	+0.040	+0.047	−0.153

Allow me also to submit a further table, in order to show the progress which had previously been made under the several heads:

Table F.—*Similarly Comparing the Mean Death-rates of the Second of the Three Periods, 1886-89, with the First, 1882-85. N.B. +=loss of life; −=saving.*

Death-rates from	28 Towns.	Group I. London.	Group I. 10 Provincial Towns.	Group I. Whole Group.	Group II (3 towns).	Group III (14 towns).
All causes	−1.08	−1.10	−1.30	−1.28	−1.11	−0.46
Total zymotic diseases	−0.309	−0.410	−0.431	−0.425	−0.024	+0.003
Notifiable zymotic diseases	−0.261	−0.320	−0.358	−0.336	−0.178	−0.028

It is interesting to observe the numerous + signs in Table E, indicating loss of life, as compared with the single one in Table F, representing the loss of life from zymotic diseases of Group III between the first two periods, when it had come wholly under the dual system. True, the loss did not accrue ostensibly from notifiable diseases, for a slight saving of life was apparent as regards those; but we must bear in mind that there was faulty diagnosis then as there is (to a lamentable extent) now, and also that there would be a failure on the part of parents and others to call in medical aid early, from a fear (ungrounded in many instances) that the case might be notifiable.

I do not think you can fairly attribute the lowered death-rate from zymotic diseases of Group III, as revealed in Table E, to the dual system of notification, when a still greater diminution on the part of Group I, whilst under no system of notification, can be pointed out in Table F. But I do consider it of terrible significance that since Group I succumbed (with the single exception of Leeds, now, alas, no longer an exception) to the Notification Act, its death-rate from notifiable diseases, which for many years had compared favourably with that of Group III, has maintained a higher, and therefore worse, average than the latter.

I have already, in the letter you criticise, shown that influenza had no direct effect in raising the death-rates either "notifiable" or "total zymotic," since it was not included by the Registrar-General under even the latter of these heads. Its direct effect was solely on the general death-rate. It may have had some indirect effect upon the former, but if so, why in Group I and Group II, and not in Group III? Moreover, why should Leeds, the exceptional town in Group I as regards immunity for the time being from notification, have had immunity in this other respect also? Comparing, as you have done, the death-rates of the third period with the first, I find that the death-rate of Leeds from notifiable diseases declined actually 1.19, surpassing in this respect any other town of the 28. To commence with it had the highest notifiable death-rate of all, but during the last period of four years it has (without any system of notification) maintained an average which is only eighth from the lowest. Its position in this respect remained unchanged even during 1893.

In your leading article on the subject in the same number of the JOURNAL, I find the following astounding assertion: "The conspicuous success of the Act, in spite of the difficulties which attend its operation, is a striking proof of its reasonableness and value." Do not the crowded wards of our infectious hospitals, the numerous additional cases of infectious disease treated at home, the black list of mistaken diagnoses and wrongful removal, but, more than all, the augmented death-rates, prove to demonstration that the system embodied in the Notification Act is a conspicuous failure and an egregious blunder?—I am, etc.,

Kingston-on-Thames, May 19th. D. BIDDLE.

P.S.—Only since writing the above have I become aware that your disregard of the middle period of four years arose from a patent misapprehension. At the beginning of your paper the description of my grouping of the large towns and of their conditions in regard to notification during each of the three periods, was so lucid and satisfactory that I was led to believe you had a thorough grasp of the situation. In the first column of the second page (1087), about two inches from the foot, however, occurs the following sentence, which must not pass unnoticed. "It will be noticed, from Table A., that the years 1886-89 formed a transition period, a period in which, whilst fourteen of the twenty-eight towns remained as before, the other fourteen towns were passing from their partial dual system into the full and complete adoption of that system. Hence we leave that period and proceed to discuss the relation borne by the last to the first period," etc. A further reference to your own earlier description will convince you that you have inadvertently applied to the second period what properly belongs to the first. All fourteen towns of Group III had come under the dual system by the end of the first period, 1882-85. No further change in the condition (as regards notification) of any one of the twenty-eight towns occurred until the end of the second period, and the passing of the Notification Act of 1889. The second period, therefore, was that in which the three groups of towns were most contrasted, to the great disadvantage of the dual system, which then showed itself in its true colours as one of the most pernicious influences with which sanitation has been oppressed. To those who have fully studied that period, 1886-89, what has subsequently occurred can be no mystery. D.B.

THE SUPPRESSION OF UNQUALIFIED PRACTICE.

SIR,—May we be allowed to state that Mr. Verrall, the Honorary Secretary of the South-Eastern Branch, has placed on the agenda paper for the Branch meeting which will be held at the Crystal Palace on June 13th, at 2.30, the following resolution in the name of Dr. Welsford, and that the resolution will be supported by us, the undermentioned members of the East Kent District?

> That the members of this Branch consider that it would be to the advantage both of the medical profession and the public if the Council of the British Medical Association were to take power and authority to proceed against unqualified practice and quackery, and in other ways to protect the interests of the medical profession; and that it would be of advantage if the Council were to authoritatively decide questions which affect medical men *inter se*. And that this Branch requests the Council to take such steps as may be necessary to carry these suggestions into effect, and to promote union and combination among medical men.

And may we refer the members of the Branch to the papers of Dr. Welsford, published in the BRITISH MEDICAL JOURNAL of May 5th last, and to the important editorial article relative to it which appeared in the same issue?—We remain, yours, etc.,

ROBERT H. CLARKE,
FREDERICK EASTES,
FRANK EDWD. NICHOL,
T. WHITEHEAD REID,
BERTRAM THORNTON,
WM. J. TYSON,
ARTHUR G. WELSFORD,
THOS. F. RAVEN,
Honorary District Secretary.

June 1st.

THE STATUS OF ASYLUM MEDICAL OFFICERS.

SIR,—I ask for a further short space in the BRITISH MEDICAL JOURNAL for a few words in reply to some of your correspondents.

To "Experientia Docet" I would repeat the advice already given to him by others, namely, that abuse is not argument: and I would add that bare assertion is not generally to be relied on. I must object to his putting a construction on my letter which it does not bear, and to his saddling me with opinions I have never held.

It is, I think, very greatly to be deplored that a discussion raised with a view to improving the position of assistant medical officers should have been conducted by them in the way it has been. They have certainly by an exhibition of temper—I think I may say gross exaggeration—done all they can to place themselves beyond the pale of any sympathy from others.

I, of course, do not know where "Hopeful" hails from, and possibly his assertions may be correct as regards his own experience. I am happy to say I do not know of any asylum corresponding with his description, but as regards the majority of our county asylums, I venture to assert that his description of superintendents, their work, and their treatment of assistant medical officers, is, to put it very mildly, contrary to facts; he also is utterly at fault in his statements as to salaries. "Hopeful" has possibly in himself fared badly, but this is no justification for his branding a body of superintendents as if they were demons. I assert boldly that the exact reverse is the truth. Superintendents as a rule have the greatest sympathy with their assistants, and endeavour to do all in their power to make their position as easy and good as possible.

Let the position of assistant medical officers be discussed, and any suggestions as to improvement in their position be brought before the Annual Meeting, but utterly uncalled-for abuse and misrepresentation is not the way in my opinion to further the cause of the assistants.

To the suggestion of Surgeon-Lieutenant-Colonel Evatt I will merely say, with all respect to him, that his scheme could never be carried out. It would mean such alterations in the lunacy laws as would take years to effect, and, even if adopted, it would, I think, utterly break down.

The present system of working asylums may not be perfect, and if we were to start *de novo* possibly a better plan might be adopted, but, as the system has been at work for years, and has on the whole done well, and continues to advance the treatment of the insane—for whom, I may remark, asylums were built, and not for the benefit of superintendents

or assistant medical officers—I think it will require a stronger and more just agitation than that now going on in the British Medical Journal to effect any important alteration. I greatly doubt if the majority of the assistant medical officers agree with the views and statements of your few dissatisfied correspondents, and I would suggest that before framing the Committee to which you have given your support you should, by a circular letter or otherwise, endeavour to ascertain the opinion of assistant medical officers on the subject, and ask for suggestions from them. At present little is known, except from the (to my mind) groundless complaints of your few correspondents, as to what change is required, and to discuss such a question on this basis would be simply waste of time.—I am, etc.,

Shrewsbury, June 1st. Arthur Strange, M.D.

Sir,—Four months of correspondence in the columns of the British Medical Journal can but represent a tithe of the actual feeling in our service. Many are unwilling to write even under the shelter of anonymity, and many, as in every community, passively acquiesce in a destiny because it seems hopeless. My suggestion arose from two grounds: first, your well-known willingness to advocate reforms if need be, and secondly, to prevent a recurrence of failure which our first attempt met with when brought before that well-known trade union, the Medico-Psychological Association, a few years ago. To Drs. Strahan, Mercier, Philipps, and others we owe thanks for initiating the present movement.

I see that the subject is open for discussion in the Psychology Section at Bristol. Could a preliminary meeting, however, be held in London, something might be done in preparing and sending a printed circular to all our asylum medical officers, to gain a consensus of opinion prior to sending a deputation to the Parliamentary Bills Committee and General Council of the British Medical Association. I should be amongst those willing to work for such an end.—I am, etc.,

June 2nd. Hopeful.

Sir,—Many asylum officials will thank you for lending your support to the proposal to form a committee to discuss the bearings of this question (see British Medical Journal, May 26th, p. 1156). Briefly, your correspondents affirm that the position of the asylum medical superintendent is one of uncontrolled despotism with its attendant evils. Is this so? If so, the sooner it is mended or ended the better. In the departments of the State large powers have to be entrusted to individuals; the love of influence and control, so extensive in human nature, prompts to intolerance and needs to be curbed.

"Hopeful" says: "The prevailing asylum spirit is one which makes for the maximum comfort, exaltation, and glorification of the superintendent." Is not this language a little immoderate? Is it calculated to strengthen the cause which "Hopeful" and I venture to say many asylum medical superintendents have at heart?

Individuals cannot hope to advance their position or to raise themselves in character by dwelling on the defects of others; rather let them reflect that by force of persuasion, or intellectual ascendency, anyone may have the consciousness of power without the authority of office. Such power, may, in asylum life or any other, be brought to bear on any person (whatever his position), guilty of a breach of any of the many obligations society imposes on all for the good of all. Committees of management nowadays are keen and vigilant; they constitute a court of appeal, and may be freely approached by all their officials—medical or lay.—I am, etc.,

Francis H. Walmsley, M.D.,

May 26th. Medical Superintendent, Metropolitan Asylum, Darenth.

DEFECTIVE EYESIGHT OF SCHOOL CHILDREN.

Sir,—In reply to inquiries elicited by your note on this subject in the British Medical Journal of May 26th, p. 1,147, may I state that the wall-chart headed "Eyesight and School Work," adopted by the Birmingham School Board, is published by the Midland Educational Company, Birmingham, and that the directions to teachers for the physical examination of school children, including a test for the detection of defective sight, issued by the Anthropometric Committee of the British Association, may be obtained by applying to the Honorary Secretary of this Committee, Professor Windle, Mason College, Birmingham.—I am, etc.,

Birmingham, May 28th. Priestley Smith.

THE FOREST GATE SCHOOLS SCANDAL.

Sir,—Your articles of late *re* barrack life of pauper children, together with Miss Davenport Hill's letter recently published in the *Daily Chronicle*, are not only too true, but do not go far enough into the question, and convey but a poor idea even to the initiated or the managers of these large schools, who either don't know or won't know. Now I venture to say when I tell the managers of the Forest Gate Schools, through your kind favour, that they have about 12,000 wet beds, independent of soiled beds, year after year, they will exclaim, "Never heard of such a thing."

Well, the following is taken from a rough book—not in my handwriting, but that of another officer. After the fire of January 1st, 1890, many children were taken out of the schools by their parents, and we had not 600 for the years 1890-91. I have not the exact number in the boys' department—say 270; this, I believe, is above the number. Here is a return showing but one of the many difficulties of child life in these large institutions:

	1890.					1891.		
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March
No. of beds wetted ...	436	437	541	589	594	492	333	288
,, beds soiled ...	48	14	24	33	61	49	34	36
,, boys wetted beds	44	52	43	55	52	57	33	26

In round numbers this would give 5,000 wet beds for twelve months in the boys' department—is not this most astonishing and appalling? Now this could not happen in cottage homes, or the boarding-out system. All the children on admission to the schools are placed under our care. Mrs. Elliott, myself and one maid, in a detached block of buildings, and the number of children with us vary from 40 to 15. These children remain in our block (or cottage home, and if I may say so to those who know the department) for fourteen days, when they pass to the main block; we are then ready to receive others, and I say in very emphatic terms that the above table is a great disgrace, and ought not to be; not one in a hundred of the children on admission wet the bed—boys, girls, or infants; but if so it is invariably wetted by a re-admission. My reason for selecting the above table at that particular date is to show that by the same individual attention to the children in the main block better results may be obtained, if not nearly as good as are obtained in our own department—receiving wards. By looking at the table before you, February and March, 1891, shows a marked decrease. Those two months I was doing duty temporarily on the boys' side, and by March 3rd I had reduced this matter to a cipher; one boy only wetted the bed; 5 boys on the 5th, and 5 boys on the 6th. There is not another record like this in the school; the children require more individual attention, you have a very large staff, indeed more than the average of cottage homes. Then there is the great sickness; quite forty on the average are in the sick wards, and here again not one in a hundred passes from us to these sick wards. I could fill volumes of matter in reference to the great disadvantages of pauper children.

The industrial training is worse than useless, and it is the cause of unfitting many for their life after leaving school. I can speak upon this matter with some authority.—I am, etc.,

Wandsworth Road, S.W., June 4th. Henry Elliott.

THE LATE DR. CHARLES CLAY, OF MANCHESTER.

Sir,—The representatives of this distinguished surgeon have placed at my disposal a mass of material for the preparation of a suitable memorial of him, including an autobiographical sketch of much interest. Unfortunately the material is deficient in that period of his life which is of greatest interest, between 1842 and 1850. A still greater misfortune is that the great age to which Dr. Clay lived has left few who can tell much about him at that time. My own efforts by private inquiry have failed so far, and I am therefore compelled to trespass on your courtesy for permission to

ask through your widely-read columns that anyone who may be in possession of documents or recollections of Charles Clay would be good enough to put me in possession of them.—I am, etc.,

Birmingham, May 29th. LAWSON TAIT.

SIR F. SEYMOUR HADEN.

SIR,—For the sake of accuracy, allow me to state that in 1862, when the accompanying report was written, I had been for some years what is called—and to my mind absurdly called—a pure surgeon, and that at no time was I, in the sense I think you intend, the possessor of "an important medical practice in the West End of London."—I am, etc.,

Alresford, Hants, June 3rd. F. SEYMOUR HADEN.

*** The report enclosed is Mr. Seymour Haden's very able and still valuable report on the surgical instruments shown at the great Exhibition of 1862.

CHEAP DOCTORS: THEIR DEFENCE.

SIR,—Your comments on "Experiences of the Provident Dispensary System" and a letter headed "The Cheap Doctor: A Word in Defence," which appear in the BRITISH MEDICAL JOURNAL of May 19th, afford material for serious reflection. I am not an advocate of "cheap physicking;" still we have these facts staring us in the face: Overcrowding of the profession, small fees per visit paid by provident dispensaries, and the inability of the poorer class to pay, for any length of time, the smallest fee usually asked for for each visit or consultation. The poor do not particularly value the services of those members of our profession who charge very small fees, but consult them, compelled by their poverty. This should not be. We have provident dispensaries and the out-patient departments of hospitals in competition with the profession. How can such competition be equitably dealt with? Only by honest, conscientious, and reliable members of our profession establishing themselves in poor neighbourhoods, charging small fees (cash payments), and taking the same care of their patients as if they were able to pay much higher fees. I know that I am treading on dangerous ground. I would not accept a small fee myself, but still I cannot help feeling that the only way of meeting successfully the competition of the provident dispensaries and hospital out-patient departments is for good men in the profession to charge small fees to poor people and deal honestly by them.—I am, etc.,

Cardiff, May 19th. A. SHEEN, M.D.

THE LEAVESDEN SCHOOLS.

SIR,—Referring to the paragraphs appearing in the BRITISH MEDICAL JOURNAL of April 28th and May 5th, with reference to the late outbreak of diphtheria at the St. Pancras Schools at Leavesden, and the report thereon, prepared at the request of the guardians, by Dr. J. F. J. Sykes, the Medical Officer of Health of St. Pancras, I am desired to intimate that the comments upon the attitude of the guardians in relation to the precautions necessary to preserve the health of the children may lead to a mistaken judgment.

The guardians wish to correct a possible inference, that they have not only crowded the schools regardless of consequences, but have persistently refused to give attention to their medical officer's advice on that point.

The guardians have always well recognised the abilities and services of Dr. Adams Clarke, the medical officer of the schools. It is the custom for him to attend every meeting of the Schools Visiting Committee, and he, on his part, must be willing to admit that the Committee have taken the keenest interest in his reports and suggestion, to which they have constantly attached paramount importance; and the Committee have in many instances taken the initiative in steps for the better classification of the children and in improved arrangements for the treatment of the sick; and Dr. Clarke is invariably consulted on all matters in which is responsibilities are concerned.

The guardians regret very much that the observations made upon this unprecedented visitation by diphtheria at their schools, in your much-quoted JOURNAL, for the guidance of the medical profession, might also convey a misleading impression as to the management and general condition of the schools. It is true that during a few weeks last winter the total number of children exceeded the certificate (678), but it was quite an exceptional occurrence, and at that time there was no available accommodation at other schools.

In dealing with the large number of children then chargeable, choice therefore lay only between the contracted and otherwise imperfect accommodation for children at the workhouse of the parish (the reconstruction of which is still incomplete) and the schools at Leavesden, situated in the open country, with facilities for isolation. It should also not be forgotten that at the time diphtheria appeared at the schools it was epidemic in the metropolis.

The cause of the outbreak at the Leavesden Schools could not be traced, even by experts, with absolute certainty. In the report by Dr. Sykes, he pointed with reserve to various possible sources of infection, but apparently emphasised his opinion that in one or two sections of the school the ventilation had become curtailed by the additional means of heating the dormitories and class rooms.

The better heating of those rooms had been adopted upon suggestions made to the guardians for the benefit of the children of low vitality, and with beneficial results to children of that class. This points to one of the oft-recurring puzzles of ventilation, so difficult to solve where the health conditions of the occupants of the rooms are so varied. Several valuable suggestions, arising out of the report by Dr. Sykes, have since been promptly adopted.

The guardians have many reasons to be proud of their splendid establishment at Leavesden, as the annual reports upon the results of their management will show.

I enclose copies of the last three years' reports, containing, *inter alia*, tabular statements by which it will be seen that with a general population of upwards of 600 children, the average number of deaths has been less than 6 per annum, and in nearly every instance the cause of death has been unconnected with the influence of the school.—I am, etc.,

ALFRED A. MILLWARD,
Clerk to the Guardians.

Vestry Hall, Pancras Road, N.W., May 28th.

*** We publish this letter with some satisfaction because we regard it as definite evidence that the guardians of St. Pancras appreciate the fact that the overcrowding of their schools is inconsistent with good management. The question is, however, whether there has been overcrowding of the Leavesden schools. The letter of the guardians states that "It is true that during a few weeks last winter the total number of children exceeded the certificate (678), but it was quite an exceptional occurrence, and at that time there was no available accommodation at other schools." Our contention is therefore admitted, and we refer to our previous statement: "The class rooms exhibited difficulties of change of air only in a less degree than the dormitories, one room being, moreover, so packed with boys that Dr. Sykes had trouble in getting at the inmates to examine their throats." The statement that "the Committee have taken the keenest interest in his (Dr. Adams Clarke's) suggestions" is not, we presume, to be taken as implying that Dr. Adams Clarke approved the condition of overcrowding, and has not called the attention of the Committee to it. We cannot accept the plea that the absence of available accommodation at other schools is justification for overcrowding the Leavesden schools. If the school accommodation of the guardians is insufficient, more should be provided. The remedy is in their own hands.

PHARMACOLOGICAL RESEARCH AND THE SALTERS' COMPANY.—In connection with the recent foundation of a Research Fellowship in Chemical Pharmacology by the Court of the Salters' Company, the Research Committee of the Pharmaceutical Society announces that the selection of the Salters' Company Research Fellow will take place on July 3rd next. Written applications for the Fellowship must be received by the Director of the Research Laboratory, 17, Bloomsbury Square, before June 30th.

MR. VICTOR HORSLEY, the President, and Dr. Bateman, one of the Honorary Secretaries, of the Medical Defence Union, intend to address members residing in South Wales and Monmouthshire at Cardiff on June 28th.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

The following appointments have been made at the Admiralty:—Wm. B. Drew, Fleet-Surgeon, to Haulbowline Hospital, May 30th; Herbert E. Marsh, Staff Surgeon, and Bernard B. Gilpin, Surgeon, to the *Northampton*, June 14th.

ARMY MEDICAL STAFF.

It has been decided that the Professors of the Army Medical School, who are on the Active List, shall be considered as extra regimental officers under para. 551, Royal Warrant.

Surgeon-Lieutenant-Colonel A. Anderson, recently arrived in India, is directed to officiate as Principal Medical Officer, Madras District.

ARMY MEDICAL RESERVE.

Surgeon-Major Wm. M. Harmer, having resigned his volunteer appointment, ceases to be an officer of the Army Medical Reserve, June 6th.

INDIAN MEDICAL SERVICE.

Brigade-Surgeon Henry William Graham, Bengal Establishment, died at Barnes on June 1st, aged 67 years. He entered the service as Assistant-Surgeon, February 14th, 1854, and retired with the honorary rank of Brigade-Surgeon, June 16th, 1881. He served with the Sittana Expedition on the North-West Frontier of India in 1858, and received the Frontier medal, with clasp.

Surgeon-Colonel Thomas Walsh has been granted the local and temporary rank of Surgeon-Major-General pending promotion, while employed as Principal Medical Officer, Madras.

Surgeon-Lieutenant-Colonel C. J. H. Warden, Bengal Establishment, officiating Medical Storekeeper at the Presidency, is confirmed in that appointment from April 7th.

An examination for thirteen appointments to her Majesty's Indian Medical Service will be held in London on August 10th and following days. Copies of the regulations for the examination, with information regarding the pay and retiring allowances, etc., of Indian medical officers, may be obtained from the Military Secretary, India Office, London, S.W., to whom the necessary certificates must be sent so as to reach him not later than July 27th, 1894.

THE VOLUNTEERS.

Surgeon-Captain W. F. Lovell, from the 1st Cinque Ports Volunteer Artillery, is appointed Surgeon-Captain to the 2nd Cinque Ports Artillery (Eastern Division Royal Artillery), June 2nd.

Surgeon-Lieutenant F. E. Row, 2nd Devonshire Artillery (Western Division Royal Artillery), has resigned his commission, which was dated July 12th, 1884.

Surgeon-Lieutenant C. L. Cunningham, 1st Devon and Somerset Engineers, Fortress and Railway Forces Royal Engineers, is promoted to be Surgeon-Captain, June 2nd.

Surgeon-Captain A. O. Wiley, 1st Volunteer Battalion the Prince of Wales's Own West Yorkshire Regiment (late the 1st West Riding of Yorkshire), is promoted to be Surgeon-Major, June 2nd.

Surgeon-Lieutenant A. Cunningham, 1st Volunteer Battalion the Worcestershire Regiment (late the 1st Worcestershire), has resigned his commission, which bore date May 28th, 1884.

George Herschell, M.D., is appointed Surgeon-Lieutenant to the 22nd Middlesex Rifles (Central London Rangers), June 2nd.

Surgeon-Lieutenant R. Rannie, M.B., 5th (Deeside Highland) Volunteer Battalion the Gordon Highlanders (late the 1st Kincardine and Aberdeen), is promoted to be Surgeon-Captain, June 2nd.

Surgeon-Captain T. W. Richardson, of the Norwich Company Volunteer Medical Staff Corps, is gazetted Surgeon-Major June 2nd. Surgeon-Major Richardson has, however, held that rank in the Army Medical Reserve since June 7th, 1893.

VOLUNTEER OFFICERS' DECORATION.

The following officers have been awarded this decoration: Surgeon-Captain W. H. B. Crockwell, Manchester Companies Volunteer Medical Staff Corps; Surgeon and Honorary Surgeon-Major Edmund Carver, retired, 4th (Cambridge University) Volunteer Battalion the Suffolk Regiment; Surgeon-Lieutenant-Colonel H. F. Holland, M.D., 3rd Volunteer Battalion the Bedfordshire Regiment; Surgeon-Lieutenant-Colonel Ralph Gooding, M.D., 2nd Kent Artillery.

THE SUMMER DRILL SEASON IN IRELAND.

The *Broad Arrow* states that during the summer drill season at the Curragh, one field hospital and one bearer company are to be mobilised for service during the manœuvres. In Ireland there will be formed a couple of bearer companies and three field hospitals. The 5th Bearer Company will be formed from the 14th Company Medical Staff Corps at Dublin, which Company will also form the 7th Field Hospital. The 6th Bearer Company will be formed from the 16th Company at Cork, and that Company will also furnish the 8th Field Hospital. The 9th Field Hospital will be formed by the 17th Company Medical Staff Corps, at the Curragh. It is the 9th Field Hospital and the 5th Bearer Company that will be mobilised at the Curragh this year.

THE INDIAN NATIVE HOSPITAL CORPS.

The *United Service Gazette* of May 26th devotes an article to certain reforms needed in the Native Army Hospital Corps, which is, as at present constituted, inefficient and not thoroughly fit for duties in the field or in garrison. It is gratifying to find that Service papers manifest an interest in the efficiency of the Medical Department, whether it be at home or abroad.

MARRIAGE IN THE ARMY MEDICAL STAFF.

Cassandra, writing from India, says: Out here we are constantly surprised at the number of juniors arriving married. Every trooper brings them, and in mine there were three under four years' service. Their love and devotion were the pride and plague of the ship, but their ruling characteristic was impecuniosity. Some years ago you published statements as to the impossibility of a married junior living on his pay, yet here they try to prove the contrary. One here came out because he could not stand the constant movements at home, with "houses on hand," yet in India moves are just as constant. Recently a newly-married junior arrived to start on a four months' march and leave his bride in a strange country to shift as she best could. P.M O's. are at their wit's end to know what to do with married juniors. Such is my experience, and I would warn all of the impossibility of anyone under ten years' service marrying and living on his pay alone either at home or abroad.

*** In a philosophic but strictly impersonal way we sympathise with our correspondent's solemn warnings and examples. Yet in mere worldly prudence, with some dread of female resentment, we confess to a lurking tendency to dissemble. Love, perhaps happily for mankind, is blind, and not even the eye-opening effects of a medical education can remove the scales. We have seen and published such warnings before, not, we hope, without good effect in isolated cases; but we fear to the majority they prove like mere inveighing against the east wind. In sober earnest, however, we believe there is only too much truth in our correspondent's pleadings. Early, and therefore imprudent, marriage in the army medical service is a source of much difficulty and even suffering to all concerned. It is not a mere question of money, although that is all important, but for the officer a constant fight between duty and natural affection. We have sincere sympathy with kind-hearted and, may be, very much married principal medical officers driven to their wit's end in ordering about married juniors. To all junior medical officers about to marry we can only offer the old advice—don't.

RETIREMENT.

Nitram writes to suggest:

(1) That foreign service be allowed to count as a factor in qualification for voluntary retirement as it did prior to 1889.

(2) That on an officer being promoted to the rank of Brigade-Surgeon-Lieutenant-Colonel he be permitted to retire on the pension of that rank immediately, if two-thirds of his service have been abroad.

(3) That on an officer being promoted to the rank of Brigade-Surgeon-Lieutenant-Colonel he be permitted to retire on the pension of that rank after one year, if one half of his service have been abroad.

(4) That on an officer being promoted to the rank of Brigade-Surgeon-Lieutenant-Colonel he be permitted to retire on the pension of that rank after two years, if one third of his service have been abroad.

(5) That the same rules be applied to voluntary retirement from the administrative ranks.

*** This is a reopening of a proposal most favourably received a short time ago by a large number; in fact, we have no doubt, the majority of army medical officers. We think it ought to receive the attention of the Secretary of State for War. The present hard and fast rule of three years in a rank before pension not only operates hardly on individuals, but we have no doubt is intensifying the almost deadlock in the administrative ranks of the department. The relaxation of the rule is especially needed in the rank of Brigade-Surgeon-Lieutenant-Colonel, so as to clear the way for the promotion of younger men to the grade of Surgeon-Colonel.

MEDICO-LEGAL AND MEDICO-ETHICAL.

REASONABLE CARE IN LUNACY CERTIFICATES.

Queen's Bench Division.

(Before Mr. Justice Wills and Mr. Justice Collins.)

Williams *v.* Beaumont and Duke.

This was an appeal by the defendants, Dr. John Charles Hetherington Beaumont and Dr. John Challen Duke, against an order of Mr. Justice Kennedy at Chambers dismissing an application of the defendants for an order that this action be stayed on the ground that there was no reasonable ground for alleging want of reasonable care on the part of the defendants, or either of them, in respect of the certifying the plaintiff as a lunatic or otherwise acting under the provisions of the Lunacy Act, 1890, and on other grounds.

The statement of claim alleged that on October 15th, 1893, the plaintiff was in ill-health and became a pauper inmate of the Lewisham Union Workhouse, of which the defendant, Dr. Duke, is the medical officer and Dr. Beaumont the assistant medical officer. That on October 16th the defendants wrongfully and improperly and without reasonable care and without making any proper inquiries agreed together to certify the plaintiff to be a lunatic and thereupon illegally and improperly confined and imprisoned him in the said workhouse or its precincts as a pauper lunatic until his removal therefrom on October 18th, 1893. That whilst he was so imprisoned the defendants negligently and improperly did not give him due care and attention. That on October 16th, 1893, the defendant, Dr. Beaumont, without reasonable and proper care, and with the consent of Dr. Duke, signed a medical certificate under the Lunacy Act, 1890, alleging that the plaintiff was of unsound mind and a proper person to be taken charge of and detained under care and treatment as a lunatic in an asylum for the purpose of being removed as a pauper lunatic to the Cane Hill Lunatic Asylum. That in consequence of the said certificate, the plaintiff was, on October 18th, 1893, removed to the Cane Hill Asylum and con-

fined there by the authorities until November 20th, 1893, when he was ordered to be discharged as "not insane," and as not having shown any indication of insanity.

Mr. F. Dodd appeared for the appellants; Mr. Lockwood, Q.C., and Mr. C. Herbert Smith for the respondent.

Mr. F. Dodd, for the appellants, submitted that the action ought to be stayed. A report had been made by the Inspector to the Local Government Board, and the Board were of opinion that the medical officers proceeded in good faith and with due care and professional discretion. The plaintiff had not shown reasonable cause for his allegation of want of reasonable care on the part of the defendants. He referred to Section 330 of the Lunacy Act, 1890, and Articles 90 and 91 of the Poor-law Orders of 1847.

Mr. Herbert Smith, for the respondent, contended that the action oughe not to be stayed. The onus of proof lay on the persons who had imprisoned the plaintiff. The inquiry of the Local Government Board ought not to deprive the plaintiff of his right to go to a jury. He cited "Hall *v.* Semple (S.F. and F., 337); "Queen *v.* Pinder (24, *L. J. Rep.*, Q. B., 148), and the Lunacy Act, 1890, Sections 24, 35.

Mr. Lockwood, Q.C., by leave of the Court, submitted, at the conclusion of Mr. Smith's argument, that the Court must be satisfied that there was an absence of reasonable ground for the allegation of want of reasonable care before it could stay the action.

The Court allowed the appeal.

Mr. Justice Wills, in the course of his judgment, said the questions involved in that action were very important, but he had come to a very clear conclusion that the action ought to be stayed. He did not decide whether an action of this kind would lie, but he wished to point out that it would be of extreme consequence if it would, because it a medical officer was to be liable to an action at the suit of any inmate who conceived he had not been treated with proper skill, it would be impossible to get any gentleman of position to hold the office. If such an action would lie, he could not see why a prisoner convicted of misdemeanour should not bring an action against the gaol surgeon because he thought the gaol surgeon had not treated him with adequate skill. Therefore the proposition contended for by Mr. Herbert Smith was one of alarming magnitude. One of the charges in this action was that one defendant improperly signed the certificate and not the other. He could not see how the other could be made legally responsible for an act of his colleague. The allegation that they imprisoned him in the workhouse was mere flourish. There was no trace of these gentlemen having done anything except having signed the certificate. No question as to good faith had been raised. That carried them very far towards the solution of the question whether there was a want of reasonable care. It seemed to him that the proceedings were marked by humanity and deliberation. The patient was suffering from alcoholism. Mrs. Williams, the plaintiff's sister-in-law, stated before the inspector that he was given to drink. He was in a condition of depression and distress; in this condition he was examined. The medical gentlemen were properly called in by the justices. Mrs. Williams stated he threatened to murder her and threatened self-destruction. He could not conceive that there was any reasonable ground for alleging want of reasonable care. Having read the affidavits with the greatest care, he was satisfied that there was a disposition to make the worst of everything, and that the plaintiff's statements were not those upon which the greatest or any reliance could be placed. The board had come to the conclusion that these gentlemen acted with due care and skill, and he had, with less satisfactory materials, come to the same conclusion. As to the allegation that "whilst the plaintiff was wrongfully imprisoned the defendants negligently and improperly did not give him due care and attention," there was no foundation for the charge. The defendants did not detain him. Then there was a general allegation of want of proper medical care during his detention in the workhouse. He had already expressed his opinion that it would be a most alarming thing if the plaintiff could allege this as a cause of action. But, further, he could find no foundation for the statement, and he thought it an abuse of the process of the Court. These gentlemen had done their duty in a difficult matter, and he had no hesitation in coming to the conclusion that the action ought to be stayed.

Mr. Justice Collins concurred.

Mr. Justice Wills said that he should like to add that, in his opinion, the inspector to the Local Government Board acted with extreme judicial impartiality.

Action stayed.

ELECTROPATHIC BELTS.

QUEEN'S BENCH DIVISION, June 6th, 1894.

(Before Mr. Justice HAWKINS.)

ALABASTER AND OTHERS *v.* HARNESS.

THIS case arose out of the controversy which has been carried on in reference to the Harness electrical belts. The plaintiffs were proprietors of the *Electrical Review*, and they being interested in the subject, statements appeared from time to time in the *Review* about it. Dr. Tibbits wrote a pamphlet about the belts, and this pamphlet was reviewed in the plaintiff's paper. Dr. Tibbits complained of some statements made in the course of this review, and he founded upon them an action of libel against the present plaintiffs. He did not succeed in that action, but the present plaintiffs did not get their costs from Dr. Tibbits, and the amount of liability which they incurred in this respect was £596 costs as between solicitor and client and £435 costs as between party and party. In the present action the plaintiffs claimed damages for "maintenance," their contention being that the defendant had instigated Dr. Tibbits to bring an unfounded action of libel against them, and had thus caused them to incur their liability for costs. Some time ago the case came on before his lordship and a special jury, and evidence was given as to what were the facts of the case. After that discussion arose upon matters of law, and it was arranged that the jury should be discharged, and that his lordship should give his decision upon any questions of law that should be raised upon the facts as they had been proved. The case accordingly came on before his lordship on June 2nd and 6th, and the principal question raised was whether, as to the pamphlet and the review of it, Mr. Harness had a common interest with Dr. Tibbits such as would justify him in assisting Dr. Tibbits in bringing his action of libel against the plaintiffs. Mr. Lawson Walton, Q.C., and Mr. Bankes were for the plaintiffs, and Mr. Jelf, Q.C., and Mr. Frank Dodd for the defendant. Mr. Justice Hawkins, upon the conclusion of the arguments, said that the question involved was one of general importance, and his decision would probably be appealed against by one party or the other. He would, therefore, take time to put his judgment into writing.

A DUBLIN WILL CASE.

[FROM OUR DUBLIN CORRESPONDENT.]

THE case of Ormsby *v.* Good and others was before the Probate Court in Dublin on June 4th. The plaintiff is surgeon to the Meath Hospital, and the defendants are trustees of the Adelaide Hospital. The suit was to establish the will and a codicil of the late Mr. Gervas Taylor, who died leaving about £90,000. In the will bequests were made to several hospitals, and among these to the Adelaide Hospital. In a codicil made some weeks before his death the testator revoked some of the bequests to the Adelaide, made Mr. Ormsby one of the executors, left him £3,000, £2,000 to a nursing institution, and £1,000 to a children's hospital, of which Mr. Ormsby is surgeon. The usual charges were made by the opponents of the will, but on the second day of the trial the defendants' counsel withdrew all pleas, and it was agreed that the plaintiff should pay to the defendants £900 towards costs.

UNSATISFACTORY INQUESTS.

THE *Birkenhead News* of May 19th reports the holding of an inquest in which the jury returned the following verdict: "The man died either from the effects of an accidental fall or from excessive drinking, but the evidence is insufficient to prove which of the two causes he died from the effects of." The house surgeon of the borough hospital gave evidence and stated that the deceased, who was not identified, was admitted in an unconscious condition with a slight injury to the nose and with some indication that there had been bleeding from the nose and left ear, which might have arisen from a fracture of the skull, but that there was no other evidence as to the cause of the death. A quantity of beer was removed from the stomach of the diseased by aid of the stomach pump. The deceased never recovered consciousness and died two days after admission. No *post-mortem* examination was ordered by the coroner, and hence the very unsatisfactory verdict recorded by the jury and the failure of the coroner and jury to ascertain the true cause of the death. This is the more regrettable as the evidence required was readily obtainable. A similarly unsatisfactory inquest has recently been held by the same coroner, in which a *post-mortem* examination, made after the inquest was held and the verdict recorded, revealed the presence of poison in the stomach of the deceased, previously suspected by the medical attendant. This case has led to correspondence with the Home Secretary, and, it is to be hoped, the result will induce the coroner to order and the jury to insist on more frequent *post-mortem* examinations being made and the result given in evidence before the verdict is returned.

"PATENT MEDICINES."

WITH the consent of the Treasury the Pharmaceutical Society has obtained, upon petition to the Chancery Court, revocation of patents for medicines which, in the opinion of the Society, were taken out to evade the Sale of Poisons Acts. On May 29th, in the Chancery Division, the Society petition to revoke letters patent No. 16,946 of 1892, granted to Thomas Kay, G. A. Shaw, and Kay Brothers, Limited, manufacturing chemists, Stockport, was heard by Mr. Justice Stirling. The patent was for an improved method of preparing chlorodyne, which, to distinguish it from the earlier preparation, was spelled "klorodyne." Counsel for the respondents said that on the ground of prior user his clients could not contest the petition; but their application for the patent was perfectly *bonâ fide*, they believing at the time that they had made a good discovery. There was no foundation for the suggestion that the patent was intended to enable a poisonous mixture to be sold by unlicensed persons. In terms of minutes agreed upon by the parties his lordship made an order revoking the patent, and giving the petitioners their costs.

"THE PETTY TRADESMEN."

WE are informed that the following "business card" has been freely circulated by a newcomer in a certain district, who has had it pushed under doors and displayed in windows, etc.:—"Dispensary, 28 Nile Street. Consultation hours: mornings, 9 to 1; evenings, 6 to 10; Sundays: mornings, 10 to 12; evenings, 7 to 9. Fees: Advice and medicine, 4d.; visit and medicine, 1s.; attendance and medicine per week at patient's home from 2s. 6d. Midwifery, 10s. 6d. Vaccination; teeth extracted."

The person who issues it has the grace to omit his name from the advertisement, but he may be assured that whatever he may gain by pushing his trade in this manner, he will lose far more in the respect and goodwill of right-thinking patients and colleagues.

AN INTERNATIONAL CASE.

A CURIOUS difficulty on the part of the prosecution arose in a charge preferred against John Henry Nicholson, described as a doctor,[1] brought before Sir John Bridge, for extradition, for alleged offences within the jurisdiction of the Belgian Government. Mr. Bartlett was for the prosecution, and M. Emile Cannot for the prisoner. It was alleged that Nicholson induced a firm of money changers in Brussels to cash a large number of cheques for him. At first they were for small sums, and were duly met. The accounts were gradually increased, and then no fewer than fifteen cheques were dishonoured, the total sum being a large one. The cheques were drawn on the International Bank of London, and the prosecution contended that this was a bogus bank. Evidence was given to show that about three years ago prisoner took an office in Rathbone Place, and practised there as an "ear doctor." Subsequently he took a shop below the offices and traded as the Union Drug Company. He soon gave that up but retained the offices. After a time these were taken by a Mr. Cardinal, and a brass plate bore the words "International Banking

[1] This name does not appear on the *Medical Register* for 1894.

Company" and "Nicholson's Patent." The bank appeared to carry on a regular business until about six weeks ago, when the premises were given up. M. Cannot argued that no false pretences had been shown. Sir John Bridge pointed out that it had not been proved that prisoner had not got a good account at the bank. Counsel for the prosecution said the bank had disappeared, and it was impossible to produce its books. The prisoner was remanded for further evidence. Sir John Bridge agreed to accept bail—two sureties in £500 each, and Nicholson in £1,000.

AN UNGENEROUS RIVAL.

MEMBER B.M.A.—With reference to the case which, under the above heading, appeared in the BRITISH MEDICAL JOURNAL of May 26th, p. 1161, and in which "S.A.J." accused the member in question of addressing to him a "curt and ungentlemanly" note, the latter has transmitted to us a copy thereof, an unbiassed perusal of which wholly fails to impress us with the justness of the accusation. In regard to the query submitted by "Member" in relation to his professional cash charges for "attendance and medicine per week at the surgery and at the patient's home," we may observe that, in our opinion, they are not, as alleged, consistent with a due regard to his position as a medical practitioner, nor in accord with the general custom in this country, which, in his own true interest, we would counsel him to adopt. Moreover, in the matter of the "courtesy visit," if, as a stranger in England, he was ignorant of our professional usages, it especially behoved him to avail himself of the various resources open for obtaining the desired information. We note with satisfaction his assurance that, on finding it contrary to custom, he withdrew from the windows the objectionable fee cards; at the same time it may be well to remind him that the imputation of like offences by others affords no justification for his own wrong-doing.

A MEDICAL AID SOCIETY.

J. B. S.—We can only repeat the same advice we have so often given in our columns—that is, to have nothing to do with societies of this description, as the terms they offer are of a most wretched character from a pecuniary point of view, and the system of practice which they encourage is most derogatory to the dignity of our profession. We are sorry to state that many documents similar to that sent to us by our correspondent come under our observation during the year, but one of the clauses of this beautiful production is worthy of a wider publicity, and we therefore print it *in extenso*:

"And I promise and agree to use my best endeavours to further the interests of the society, and not to interfere with its members in any way, even after I may leave its service, nor to do any act whereby the society may be injured or prejudiced in any way whatever."

Whatever may be the legal value of this agreement, it is at least satisfactory to find that these societies have thought it necessary to insert such a clause, as it speaks volumes with regard to the general relations of such societies with their medical officers. We would strongly advise applicants for this office to study very carefully this clause in all its bearings.

AN INDISCREET CORONER.

MEMBER writes us a long letter concerning a case in which he recently gave evidence.

*** We cannot reply *seriatim* to all the points raised, but we would say generally that a coroner has power to call any number of witnesses, medical or other, he thinks proper, and to collect all the evidence he can get on the case, but he certainly is not justified in admitting the hearsay opinions of a medical man not present as against the sworn testimony of the medical witness who gave evidence in the court. The observations of the coroner to which our correspondent takes objection appear indiscreet, and some of his remarks and suggestions might well have been omitted, especially those suggesting the incorrectness of the medical testimony. Had the coroner been a medical man instead of a lawyer, it is probable no difficulty would have arisen in the case.

JURISDICTION OF CORONER.

HOSPITAL SURGEON asks if the coroner has any jurisdiction over a body upon which an inquest has been held, the verdict given, and the burial order issued.

*** As soon as the coroner or his officer receives notice of the death of any person upon which an inquest may be held the body is without doubt in the legal custody of the coroner, and any person afterwards making a *post-mortem* examination or interfering with the body in any way without the order of the coroner would be acting *ultra vires*, but, directly the inquest is concluded and the verdict of the jury recorded and properly signed, then the coroner no longer possesses any jurisdiction over the body, which is usually taken charge of by the friends or, in the case of its being unclaimed, by the relieving officer on behalf of the guardians.

DR. L. J. HOBSON (Harrogate) writes: I observe in the BRITISH MEDICAL JOURNAL of June 2nd a report of the case of the Scholastic and Medical Association *v.* myself which calls for rectification. It is stated "but defendant then declined to sell, saying he was negotiating for a partnership with Dr. Gale, of Scarborough." The fact was the defendant could not sell in consequence of his being prevented from accepting the terms offered him for a partnership at Scarborough. The acquirement of his practice by another was to be entirely conditional upon such a partnership being concluded. The "willing purchaser" was personally made aware of this sole condition of a disposal of the practice at Harrogate. He awaited, consequently, the issue of the negotiations, and, upon their collapse, proceeded to seek another practice—since obtained through the plaintiff Association. Moreover, it will be evident there was no "sale of a medical practice," no agreement being completed.

OBITUARY.

DAVID DAVIES, M.R.C.S., L.S.A.

MR. DAVID DAVIES closed a long and useful life on March 9th at Aberceri, a small property near Newcastle Emlyn, Cardiganshire, which was his native place, and to which he had retired in 1886. He had been distinguished as a student of St. Thomas's Hospital, and in particular had won the Cheselden medal there for clinical surgery. For three years he held the appointment of house-surgeon to the Loughborough Infirmary, which he resigned in 1848 in order to enter upon private practice in Bristol. The next year the city was visited by a severe epidemic of cholera, and young Davies threw himself into the work with conspicuous courage, zeal, and ability. He formed an intimate friendship with the late Dr. William Budd, whose views on the nature of infectious diseases, and on the means necessary for combating them, were much in advance of those of most of his contemporaries. The locality and nature of Davies's practice in and about the port of Bristol gave him opportunities for testing these views, and he became an ardent exponent of them. When, therefore, in 1865 the great prevalence of typhus in some of the worst and poorest districts of Bristol led the authorities to appoint a "medical inspector," the general voice of the profession and the public indicated him as the man best qualified for the office, but it was not until the next year that the Local Board of Health had the courage to constitute a "medical officer of health" for the city.

This appointment he held for twenty years, during which the annual mortality actually fell from about 28 to less than 20, well below which figure it had remained for six consecutive years before his retirement. This remarkable improvement was due in great part to his organising faculty, his untiring watchfulness, sound judgment, knowledge of mankind, and physical and moral courage. The whole sanitary organisation of the city and port had to be created by him. Typhus was extinguished. The mortality from Asiatic cholera diminished from 430, which had been the figure in 1854, to 29 in 1866; although in that year it was of a virulent type and was repeatedly imported, it was never allowed to spread. Enteric fever, diarrhœa, small-pox, and scarlatina showed a gradual though of course irregular decline, and diphtheria never got a hold in the city.

Mr. Davies held several honorary offices, among which was that of consulting surgeon to the Bristol Dispensary. He was a member of the British Medical Association during the greater part of his life, and was President of the Public Health Section at the annual meeting of the Association held at Bath in 1878; he occupied the chair of the Bath and Bristol Branch in 1881-82; he was also Lecturer on Hygiene in the Bristol Medical School, and, after his retirement, was appointed a magistrate for Cardiganshire.

He was something of a Celtic scholar, but constant and active work left him little leisure for such studies, and he wrote little, but put valuable matter into his reports and addresses. He married the daughter of Mr. Eddowes, a well-known surgeon of Loughborough, and she survives him, as do a son and daughter, the former of whom, Dr. David S. Davies, succeeded with general approbation to the office his father had so worthily filled.

THOMAS PATTERSON, B.A., M.D.

WE have to record the death of Dr. Thomas Patterson in the 45th year of his age on June 2nd. His loss will be widely felt. Twenty-two years ago Dr. Patterson took up his abode in the district of Chadderton, and shortly afterwards was appointed medical officer to the Oldham Union Infirmary. For twenty-two years he has also held the position of medical officer of health to the district of Chadderton, and in that capacity showed the utmost interest and activity in relation to all sanitary matters. During the outbreak of small-pox

in 1886, he at an early period called attention to the probability that the Oldham Small-Pox Hospital was the means of spreading the disease in the neighbouring district of Chadderton, an opinion which was subsequently strengthened. It is in connection with the smoke question that Dr. Patterson was best known. Finding that the local authorities were not disposed to pursue a vigorous policy in regard to the emission of smoke from manufacturing chimneys, and holding strongly that the pollution of the atmosphere by smoke is injurious to the health and comfort of the community, Dr. Patterson availed himself of the powers given by the Public Health Act of 1875 to enforce reform. He had the gratification of knowing that the influence of his work was not only fully recognised in his own district, but had extended to surrounding towns. About a month ago he was presented with a gold watch by a few friends as a token of regard and of recognition of his public service. A year ago he was returned unopposed as member of the Lancashire County Council for Chadderton.

JAMES WILL, M.D.ABERD.

WE regret to announce the death of Dr. James Will, of Aberdeen, which occurred suddenly at his residence on June 1st. About a month ago the deceased suffered from a serious illness, but he so far recovered as to be able to resume his professional duties. He visited his patients on June 1st as usual, but on reaching home in the afternoon was suddenly attacked with faintness. His son, Dr. Ogilvie Will, was immediately sent for, and the patient rallied for a time. Two hours afterwards another attack supervened, and Dr. Will passed away quietly without any suffering.

A native of Aberdeen, Dr. Will, studied at the University, where he took the degree of M.D. (King's College) in 1840, having previously qualified as M.R.C.S.Eng. in 1832. For some time he acted as superintendent of the Aberdeen Lunatic Asylum. He was certifying surgeon under the Factory Act, and medical officer to the Post Office, and a Justice of the Peace for Aberdeenshire.

WE regret to record the death of Mr. RICHARD REECE, of Walton, which took place on May 19th. The deceased gentleman, who was in his 90th year, took the L.S.A. in 1832, and became a M.R.C.S.Eng. in 1851. He first went to Walton in 1839, and soon secured a large practice. In January last Mr. Reece slipped downstairs and broke his leg. Since then he has been confined to his bed, and eventually succumbed to bronchitis and syncope.

WE regret to announce the death of Mr. WILLIAM MARDEN, at Southport, on May 22nd. The deceased gentleman, who was in his 82nd year, had been in failing health for a long while. His career in the medical profession was a successful one. After distinguishing himself as a student at University College, London, where he gained the gold medal for materia medica, he qualified as M.R.C.S. and L.S.A. in 1836. He studied for some time in the Paris hospitals. For a long period he held the posts of Medical Officer of Health for Mirfield, Ravensthorpe, and Thornhill, and Surgeon under the Factory Acts. The deceased leaves a widow and one married daughter.

DEATHS IN THE PROFESSION ABROAD.—Among the members of the medical profession in foreign countries who have recently passed away are Dr. Eduard Sperk, Director of the Imperial Institute of Experimental Medicine, St. Petersburg, aged 57; Dr. Karl Peters, Privy Councillor and President of the Mecklenburg Medical Association, aged 85; Dr. José Aparicio, formerly Professor of Ophthalmology in the University of Valencia and a man of wide knowledge and ripe experience, whose career came to a premature end some years ago owing to cerebral disease; Dr. Antonio Gargia, formerly Lecturer on Forensic Medicine in the University of Naples, aged 78; and Dr. Nikolas Stroganoff, *Privatdocent* in the University of Odessa, one of the founders of the *Jushno Russka'a Medizinskaja Gaseta*, and author of numerous papers, principally on pathological subjects, aged 52.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

THE REGISTRAR-GENERAL'S REPORT.

THE Registrar-General's annual report, which has just been issued, deals with the vital statistics of England and Wales for the year 1892. Although the earlier publication of quarterly returns somewhat discounts the interest attaching to the principal statistical facts of the year, the report now published gives a large amount of detailed information relating to the causes of death and the ages at death necessary to the true appreciation of the general death-rate. It is satisfactory to note, with regard to the marriage-rate, that although it showed a slight decline from that recorded in the preceding year, it was above the average. The birth-rate did not exceed 30·5 per 1,000 of the population, and with one exception was lower than in any year on record. The recent epidemics of influenza have had a considerable effect upon the birth-rate, which, it may be anticipated, will shortly show a marked recovery. As is invariably the case, the mining and industrial counties yielded the highest birth-rates, the proportion of young married persons being higher in such counties than in the country at large.

The death-rate in 1892 was equal to 19.0 per 1,000 living; this rate was slightly lower than the average rate in the preceding ten years, and as much as 1.2 per 1,000 below the exceptionally high rate recorded in 1891, when influenza was more fatally prevalent than during the year under notice. With regard to age at death, it appears that the death-rate among persons aged below 45 years was below the average, while at each age-period above 45 the death-rate showed an excess. This excess was due to the epidemic prevalence of influenza. With regard to infant mortality, the proportion of deaths under 1 year of age to registered births was 148 per 1,000, and slightly exceeded the average.

With reference to the assigned causes of death during the year, the death-rate from zymotic or specified febrile diseases showed a further increase upon that recorded in recent years, and exceeded the rate in any year since 1884. After three years of practical immunity from small-pox the deaths from this disease suddenly rose to 431 during 1892, of which 13 per cent. were stated to have been vaccinated and 25 per cent. unvaccinated, while in the remaining 62 per cent. no statement as regards vaccination was made. The Registrar-General expresses regret that medical men continue to neglect, in so large a proportion of cases, to give this very desirable information. There was also an increase in the mortality from measles, scarlet fever, and diphtheria during the year under notice, but the death-rate from enteric fever and whooping-cough showed a decline.

As was the case in the preceding two years, 1890 and 1891, the year 1892 was marked by a severe epidemic of influenza, accompanied by a great increase in the mortality from diseases of the respiratory organs. The loss of life from influenza was relatively greatest in London, and rather greater in the south than in the north of the country. The Registrar-General estimates that the excess of mortality from influenza and from diseases of the respiratory organs during the three years 1890 1·2 represents a loss of not fewer than 110,000 lives.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns, including London, 6,055 births and 3,403 deaths were registered during the week ending Saturday, June 2nd. The annual rate of mortality in these towns, which had been 17.1 and 17.7 per 1,000 in the preceding two weeks, declined again last week to 17.0. The rates in the several towns ranged from 12.3 in Brighton and 12.6 in Croydon to 21.7 in Birkenhead and 30.0 in Wolverhampton. In the thirty-two provincial towns the mean death-rate was 17.4 per 1,000, and was 1.0 above the rate recorded in London, which was 16.4 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.6 per 1,000; in London the rate was equal to 3.2 per 1,000, while it averaged only 2.1 in the thirty-two provincial towns, and was highest in West Ham and Birkenhead. Measles caused a death-rate of 2.2 in Birmingham, 2.5 in Birkenhead, and 2.6 in West Ham; scarlet fever of 1.8 in Salford; whooping-cough of 1.9 in Sunderland; and fever of 1.1 in Burnley. The 53 deaths from diphtheria in the thirty-three towns included 36 in London, 3 in Leeds, and 3 in Sheffield. Four fatal cases of small-pox were registered in London, 3 in Birmingham, 3 in West Ham, and 1 each in Liverpool, Plymouth, Bristol, and Bradford, but not one in any other of the

thirty-three towns. There were 244 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, June 2nd, against 210, 219, and 236 at the end of the preceding three weeks; 58 new cases were admitted during the week, against 71, 52, and 69 in the preceding three weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,277, against 2,298, 2,307, and 2,271 at the end of the preceding three weeks; 218 new cases were admitted during the week, against 252 and 216 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

During the week ending Saturday last, June 2nd, 879 births and 578 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had been 17.4 and 19.0 per 1,000 in the preceding two weeks, further increased to 20.3 last week, and exceeded by 3.3 per 1,000 the mean rate during the same period in the large English towns. Among these Scotch towns the death-rates ranged from 13.8 in Perth to 28.9 in Leith. The zymotic death-rate in these towns averaged 2.6 per 1,000, the highest rates being recorded in Aberdeen and Leith. The 276 deaths registered in Glasgow included 19 from whooping-cough, 3 from diphtheria, and 3 from scarlet fever. Five fatal cases of small-pox were recorded in Leith.

THE LEITH EPIDEMIC OF SMALL-POX.

A special meeting of the Public Health Committee of Leith Town Council was held on June 2nd "to deal with certain letters that had been received concerning the spread of small-pox." These letters were:—

1. From the Edinburgh Town Clerk suggesting on behalf of his Council that a private and friendly conference would materially assist the joint endeavours of Edinburgh and Leith in checking the progress of the disease.

2. From the Board of Supervision, stating that the Board had on more occasions than one pressed the local authority to take advantage of the provisions of the Infectious Diseases (Notification) Act, and that they would fail in their duty if they did not once more urge its adoption. It was the only statute at present in force which enabled the local authority to take prompt and decisive measures for dealing with such an outbreak of infectious disease as now existed in Leith.

3. From the collector of customs at the Port of Leith, stating that if small-pox continued to spread, he would be compelled to declare Leith "a foul port."

The reply to the first of these letters, after criticising the reported public utterances of the Lord Provost at the Edinburgh Council meeting on May 29th, expressed willingness to join in the conference asked; but the Edinburgh Council is told that everything has been done that ought to have been done to check the disease; that free vaccination has been offered to all; that as regards small-pox the notification fee of 2s. 6d. is "tendered to medical men;" that they believe all these with one exception notify; that this one excepted gentleman only notifies those that he thinks ought to be removed; and so on.

At a meeting of the Council held on June 5th, it was unanimously agreed to adopt the Notification Act: and a letter to the medical practitioners was approved, asking them to "at once notify all cases of infectious disease as if the Act were already in force, for which the statutory fees would be paid."

It is to be regretted that a proposal that the medical officer of health should henceforth devote his whole time to the duties of the burgh was not carried—indeed, was not seriously discussed.

Eighteen new cases of small-pox were known to have occurred in Leith last week, and five deaths. In Edinburgh, seventeen cases. The magnitude of the Leith epidemic will be made somewhat comprehensible by the statement that 61 cases in one week (discovered without compulsory notification) in the population of that burgh is equivalent to 229 in Edinburgh and 582 in Glasgow.

BARNSTAPLE AND COMPULSORY NOTIFICATION.

In the British Medical Journal of June 2nd we discussed briefly the question of universal compulsory notification, and instanced as an argument in favour of widening the scope of the general Act that its inoperation in certain districts was not to the advantage of those neighbouring localities in which the system is in force, inasmuch as disease not known in the place where notification was absent might invade adjacent parishes and do harm there. A case very much in point is that of Barnstaple, where the proposal to adopt the Act of 1889 has just been outvoted. Barnstable is an urban district in the heart of the rural district of the same name, and has around it many parishes belonging to the rural authority in which the Act is in force; and, in addition, the Act obtains also at Ilfracombe and at Northam, both urban places not far distant. It therefore needs but little imagination to foresee how injuriously an epidemic started in Barnstaple, for want of early knowledge might do harm, say, to Ilfracombe for a whole season, by reason of disease of an infectious nature becoming imported through ignorance of the Barnstaple local authority of its existence in their midst. It is essentially the early cases of disease which have to be promptly isolated if an epidemic is to be cut short at its onset. It is greatly to be hoped that on all grounds the sanitary authority of Barnstaple will at once reverse their recent decision, and proceed to the steps necessary for the enforcement of the Act. We do not say anything as to the aspersions cast on the medical profession by members of the authority in relation to the working of the system. We have had our say on the matter generally in another place; the remarks at Barnstaple do not call for serious notice,

ENTERIC FEVER IN SHILDON AND EAST THICKLEY.

Dr. R. Bruce Low's report to the Local Government Board on the outbreak of enteric fever which took place in the urban district of Shildon and East Thickley, in the county of Durham, during the months of July to November, 1893, is both searching and instructive. The area under report had enjoyed a comparative immunity from enteric fever during a long series of years preceding this outbreak. A return of deaths for the thirteen years 1880 to 1892 shows 33 fatalities from enteric fever and 90 from diarrhœa. The disease commenced in April and May, 1893, attained its climax in September, and subsided in November; 167 houses were attacked, 224 cases occurred, and 41 of these ended fatally; 20 deaths from diarrhœa were registered during the same time. The attacks bore a proportion to population of 23.4, the deaths of 4.2, and the fatal cases amounted to 18.3 per cent. of those attacked. During the same period there was an excessive prevalence of enteric fever throughout the county of Durham; cases amounting to about 31 per 1,000 of population and deaths to 0.4. The rhythm of the disease was similar in the larger area. The Shildon outbreak may, therefore, plausibly be attributed to an exceptionally severe participation in a "wave" of typhoid fever which invaded the county, and the exceptional meteorological features of 1893—excessive heat and deficient rainfall—coinciding with the outbreak, would constitute, to some minds, sufficient cause for the origin and spread of the disease. But allowing that exceptional weather conditions exercised a causative influence in favouring the development and growth of the disease in an area previously immune, the question arises, in what manner were these conditions operative in facilitating the conveyance from man to man of the specific contagium, regarding the existence of which no reasonable doubt exists in the present day.

Dr. Bruce Low addresses himself to the solution of this question by a searching inquiry into and admirable analysis of the conditions under which the disease prevailed. He shows that in all probability the disease was imported from an adjoining locality. The earlier cases were, however, anomalous and imperiectly diagnosed, and the evidence as regards importation is somewhat confined on this account. He acquits the water arrangements, though not altogether faultless, of complicity in diffusing the disease. The facts detailed in the report as regards privies and sewers indicate a most deplorable neglect of proper precautions, and display conditions prejudicial to health in a high degree, and such as offered to a fæcal poison every facility of gaining access to living and sleeping apartments, to food, and to milk. The type of privy in general use is a coarse variety of the "midden" arrangement, and it is unquestionable that in the earlier days of the outbreak typhoid evacuations were cast into these without disinfection. The washings of these "middens" found their way into drains, sewers, yards, and houses. The sewers themselves were found to be badly planned, badly constructed, badly ventilated, and badly trapped. Grids and other openings had been closed on account of the smell, and when heavy rain came regurgitation of sewer air into houses was inevitable. There was every reason to believe that it was in this way that one particular source of milk supply, whose area of distribution coincided with an excess of cases, had been fouled. Those parts of the area which were higher, and where sewer ventilation was less defective, suffered less from fever than others. This inquiry, though it falls short of being absolutely demonstrative, furnishes a new and vivid proof of the facility with which the typhoid poison can be distributed by means of faulty arrangements for the removal of sewage.

DIPHTHERIA SPREAD BY SCHOOLS.

The influence of schools in favouring the spread of diphtheria has been once again been demonstrated, this time at Rainham, in the Romford rural sanitary district. The parish has some 1,700 inhabitants, mainly engaged in agriculture. Its dwellings are fair, its sewerage *nil*, its drainage nuisances many, and its existing water supply dangerous in the extreme. Excrement disposal in privy pits has been in time past provocative of much nuisance, and houses of recent date have had privies and closets placed in dangerous positions in regard of sculleries. Despite the proximity of water mains, wells continue to be used, and in the case of modern houses have been sunk within half a dozen yards of privy pits and cesspools.

Diphtheria had been some time absent when it reappeared in the early spring of 1893. Thence till February of this present year it was only absent one month. In all 77 cases occurred with 19 deaths, but notified cases represented only a fraction of the total occurrences of throat illnesses arising with, as well as prior to, the unequivocal diphtheria. Many parents did not call in medical advice on account of the mildness of the attacks. Schools were closed on three separate occasions, and, indeed, were the main cause of spread of the disease, the intervals between school closure being apparently bridged by those very mild cases which were not notified. It was in houses and localities that offered the greatest facilities for intimate intercourse that the disease gained most ground; and the want of means of isolation and the overcrowding of houses, especially of those exposed to excremental effluvia, appeared not to be without influence in inducing liability to attack and death. Secondary attacks occurred generally in those houses where there was a case in a school going child. No steps seem to have been taken to keep school teachers informed of the presence of diphtheria in the families of children attending school. Several dwellings notified as invaded were never visited by the sanitary officers, no disinfection was practised, and in many ways the rural authority seem to have been guilty of negligence. The absence of hospital accommodation was a means of spread which should never have been allowed to remain to be chronicled. The report illustrates afresh the need for notification of all forms of throat ailment during the presence in a district of cases of a diphtheritic nature.

INSANITARY HOUSE PROPERTY IN LIVERPOOL.

At the Liverpool Town Hall, on June 5th, a Local Government Board inquiry was held with reference to the application by the Corporation of Liverpool to borrow £25,000 for the demolition of insanitary property under the last presentment of the medical officer of health, by which it is proposed to pull down 578 houses. The whole of the houses are in a state of ruinous dilapidation, and it was stated that the worst form of overcrowding prevailed therein, and that if the presentment were carried out there would still be accommodation within a mile of the area dealt with for 6,873 persons.

MEDICAL NEWS.

THE Sixth Congress of Russian Physicians will be held at Kieff in the early part of May, 1896.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY, IRELAND.—The annual meeting of this Society was held in the Royal College of Physicians, Dublin, on June 4th. Dr. W. G. Smith, President of the College, occupied the chair. The subscriptions received amounted to £1,164. The usual resolutions were proposed, and officers appointed for the ensuing year.

IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.—The annual provincial dinner of this Association will be held at the Midland Hotel, Bradford, Yorks, on Saturday, June 30th, at 7 P.M., Dr. Richard Heath, President, in the chair. A large gathering of members resident in the Northern and Midland counties is expected. Dr. T. W. Hime is the local honorary secretary of the Dinner Committee. The Council of the Association will meet before the dinner for the election of new members.

THE SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The annual general meeting of the Society for the Relief of the Widows and Orphans of Medical Men was held on Friday, May 25th, at 11, Chandos Street; the chair was taken at 5.30, by the President, Sir James Paget. The report was read by the Secretary. Thirteen new members were elected in 1893, 15 had died, and 2 resigned, leaving 308 on the books. Fresh applications for grants had been received from 2 widows and 1 orphan; 6 widows had died, and 4 children had become ineligible for further grants. A sum of £2.880 10s. had been distributed among the widows and orphans on the funds of the Society. The expenses of the year had been £250. The receipts available for the payments of grants and expenses had been £3.247. A legacy of £791 had been paid, and the funded property increased by the purchase of £843 10s. stock. A vote of thank to the editors of the medical journals, for their kindness in making known the objects of the Society, was passed. The following gentlemen were elected to fill the vacancies in the offices of the Society: Mr. Merriman, a vice-president; Dr. Church, a treasurer; and Dr. Braxton-Hicks, Dr. Russell Reynolds, Dr. Dr. Morison, Mr. Rouse, Mr. Langton, Dr. Oswald, and Dr. W. Wharton Hood, directors. A vote of thanks to Sir James Paget, for his kindness in presiding, was carried unanimously.

MEDICAL VACANCIES.

The following vacancies are announced:

ARMAGH UNION, Loughgall Dispensary.—Medical Officer. Salary, £120 per annum, with £20 yearly as Medical Officer of Health, together with vaccination and registration fees. Applications to Mr. Jacob Orr, Honorary Secretary, Cranagill, Loughgall. Election on June 11th.

BARNSTAPLE UNION.—District Medical Officer. Salary, £70 per annum, and 10s. for each case of midwifery if the patient resides less than one mile from the medical officer, 15s. if one mile and less than four, and £1 if four miles or beyond that distance. Applications to Wm. Henry Toller, Clerk, by June 20th.

BRIDGWATER INFIRMARY.—House-Surgeon. Salary, £70 per annum, with board and residence. Applications to Mr. John Coombs, Honorary Secretary, by June 15th.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria Park, E.—House-Physician. Board and residence and allowance for washing. Appointment for six months. Applications and testimonials to T. Storrar Smith, Secretary, 24, Finsbury Circus, E.C., by June 14th.

COUNTY ASYLUM, Whittingham, Preston.—Junior Assistant Medical Officer. Salary, £100 per annum, with apartments, board, and washing. Applications to the Superintendent.

COUNTY DOWN INFIRMARY, Downpatrick.—Registrar, Compounder of Medicine, and Assistant to the Surgeon. Salary, 60 guineas, with board, fuel, and washing. Applications to the Registrar by June 14th.

COVENTRY AND WARWICKSHIRE HOSPITAL.—House-Surgeon and Assistant House-Surgeon. Salary, £100 per annum for the House-Surgeon. The Assistant will be appointed for six months, with honorarium of £15. Board, rooms in the hospital, and attendance provided in each case. Applications to Arthur Seymour, Secretary, by June 1sth.

DEVIZES UNION.—Medical Officer for the Sixth District. Salary, £25 per annum, with usual extra fees. Applications to F. M. Lush, Clerk, by June 12th.

DISTRICT INFIRMARY, Ashton-under-Lyne.—House-Surgeon, doubly qualified. Salary, £90 per annum, with board and lodging. Applications, marked "Application for the office of House-Surgeon," to William Bottomley, Honorary Secretary, by June 19th.

EARLSWOOD ASYLUM FOR IDIOTS, Redhill, Surrey.—Fully qualified practitioner to take charge of the Asylum. Age 30 to 40. Salary, £500 per annum, with furnished residence and coals and gas. Applications endorsed "Medical Superintendent" to the Board of Management at the offices, 36, King William Street, London Bridge, E.C., by June 12th.

EAST RIDING LUNATIC ASYLUM, Beverley.—Assistant Medical Officer, unmarried. Salary, £100 per annum, with board, lodging, and washing. Age between 23 and 30. Applications to C. W. Hobson, Clerk to the Visiting Committee, by June 1sth.

GLAMORGANSHIRE AND MONMOUTHSHIRE INFIRMARY, Cardiff.—Assistant Resident Medical Officer. Appointment for six months. No salary, but board, washing, and apartments. Applications and testimonials to G. T. Colman, Secretary, by June 9th.

GLASGOW EYE INFIRMARY.—Resident Assistant House-Surgeon. Salary, £50, with apartments and board. Applications to William George Black, Secretary, 88, West Regent Street, Glasgow, by June 11th.

GLASGOW MATERNITY HOSPITAL, 146, Buchanan Street, Glasgow.—Indoor and Outdoor Surgeons. Applications to Arthur Forbes, Secretary, by June 9th.

HEIGHAM HALL PRIVATE LUNATIC ASYLUM.—Assistant Medical Officer; doubly qualified, and unmarried. Salary, £100 per annum, with furnished rooms, board, and washing. Applications to Dr. Compton, Heigham Hall, Norwich.

KAMA HOSPITAL, Bombay.—Lady Doctor as First Physician. Salary, Rs. 700, rising by annual increments of Rs. 40 to Rs. 900 per annum. First class passage to Bombay provided. Applications to the Secretary, Public Department, India Office, London, S.W., by June 20th.

LONDON COUNTY COUNCIL.—Medical Men to give such medical assistance as may be required by the officers and men of the Metropolitan Fire Brigade and the men employed at the main drainage pumping stations and other persons in the service of the Council. Remuneration at the rate of 10s. per annum per man in the district. Applications on official forms (which, together with particulars of appointments and list of districts, can be obtained from the Clerk) to H. De la Hooke, Clerk of the Council, Spring Gardens, S.W., by June 21st.

NEWPORT AND MONMOUTHSHIRE INFIRMARY, Newport, Mon.—House-Surgeon, doubly qualified. Salary, £100 per annum, with board and residence. Applications to the Secretary by June 23rd.

NORFOLK AND NORWICH HOSPITAL.—Assistant to House-Surgeon. Board, lodging, and washing provided. Applications to the House-Surgeon by June 22nd.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney Road, N.E.—House-Physician for six months. At the expiration of this term he will be required, if eligible, to serve as House-Surgeon for six months. Salary as House-Physician, £60 per annum, and as House-Surgeon £80 per annum. Doubly qualified. Applications to the Secretary, at 27, Clement's Lane, E.C., by June 13th.

OXFORD EYE HOSPITAL.—House-Surgeon. Board and lodging, and honorarium of £50 at completion of a year's residence. Applications to B. H. Baden-Powell, Honorary Secretary, 29, Banbury Road, Oxford, by June 15th.

PARISH OF ST. PANCRAS.—Medical Superintendent for the Infirmary, Dartmouth Park Hill, N.; doubly qualified; between 30 and 45 years of age. Salary, £400 per annum, with house, coals, gas, washing, and paid substitute. Applications, on forms to be obtained at the office, to A. A. Millward, Clerk to the Guardians, Vestry Hall, Pancras Road, N.W., by June 12th.

ROYAL ALBERT HOSPITAL, Devonport.—Assistant House-Surgeon for six months. Board, lodging, and washing provided. No salary. Applications to Chairman of Medical Committee by June 20th.

ROYAL BERKS HOSPITAL.—Assistant House-Surgeon. No salary. Board and lodging provided. Appointment for six months. Applications to the Secretary, by June 12th.

ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields.—Curator, non-resident. Appointment for one year; renewable. Salary, £120 per annum. Applications to the Secretary by June 30th.

ST. PANCRAS AND NORTHERN DISPENSARY, 126, Euston Road, N.W.—Surgeon. Applications to H. Peter Bodkin, Honorary Secretary, 23, Gordon Street, Gordon Square, W.C., by June 22nd.

SUNDERLAND BOROUGH LUNATIC ASYLUM.—Medical Superintendent, doubly qualified. Salary, £350 per annum, with furnished house, board for self and wife (if married), washing, coals, light, two servants, and use of garden. Applications, endorsed "Medical Superintendent," to Fras. M. Bowey, Clerk to the Visiting Committee, Town Hall, Sunderland, by June 30th.

TIPPERARY COUNTY INFIRMARY.—Surgeon. Salary, £100 per annum. Candidates must be Fellows of the Royal College of Surgeons in Ireland. Applications to Mr. James J. Chadwick, Secretary. Election on June 22nd.

UNIVERSITY OF EDINBURGH.—Chemical Assistant to Professor of Physiology. Salary, £180 per annum. Applications to the Secretary of the University Court before July 1st.

WEXFORD UNION, Broadway Dispensary.—Medical Officer. Salary, £125 per annum, with £15 yearly as Medical Officer of Health, together with registration and vaccination fees. Applications to Mr. Wm. Pettit, Honorary Secretary, Rathmore. Election on June 15th.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—Resident Assistant. Appointment for six months. Applications, inscribed "Application for Resident Assistant," to the Chairman of the Medical Committee by June 25th.

MEDICAL APPOINTMENTS.

ALLOTT, W. L., M.R.C.S.Eng., L.R.C.P.Edin., reappointed Medical Officer of Health to the Hoyland Local Board.

COOPER, Walter, L.R.C.P.Lond., M.R.C.S.Eng., appointed Honorary Surgeon to the Barnstaple and North Devon Infirmary, *vice* H. W. McConnell, M.A., M.B.Cantab., resigned.

CRUICKSHANK, Adam Lind P., M.B., C.M.Aberd., appointed Resident Medical Officer to the British Hospital at Buenos Ayres.

DEANE, E., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer for the Caversham District of the Henley Union.

GRIFFITHS, Dr. W. A., appointed Medical Officer for the Third District of the Andover Union.

DENSHAM, A. B., M.R.C.S., L.R.C.P., L.D.S., appointed Demonstrator in the London School of Dental Surgery, Leicester Square.

FIELD, Edgar, L.D.S. appointed Dental Surgeon to the Croydon General Hospital and the Croydon Provident Dispensary.

GRIFFITHS, W. A., M.R.C.S.Eng., appointed Medical Officer of the Michledever District of the New Winchester Union.

GUILDING, Lansdown Murray, M.A.Oxon., M.B., B.Ch., appointed Workhouse Medical Officer of the Reading Union.

HARPER, J. R., M.R.C.S., L.R.C.P.Lond., appointed Honorary Surgeon to the Barnstaple and North Devon Infirmary, *vice* Joseph Harper, M.R.C.S., L.R.C.P.Lond., resigned.

JONES, Mr., appointed House-Surgeon to the Royal Cornwall Infirmary, Truro.

KIRK, Thomas Sinclair, M.B., B.S.Irel., appointed House-Physician to the Belfast Royal Hospital, *vice* Jas. Colville, B.A., M.B., appointed House-Surgeon.

KOETTLITZ, M., L.R.C.P.Lond., appointed Medical Officer for the Hurnstenley District of the Auckland Union.

MACDONALD, P. M. A., appointed Resident Medical Officer to the York Dispensary.

MITCHELL, T., M.D.Glasg., appointed Medical Officer for Llandilo Talybont.

MORRIS, Sylvanus Glanville, M.B., C.H.M.Edin., appointed Medical Officer for the Cwmtwrch and Cwmllynfell Districts.

POWELL, Dr., appointed Medical Officer for the No. 2 District of the Shepton Mallet Union.

RAKE, A. T., M.B.Lond., F.R.C.S., appointed Registrar and Pathologist to the East London Hospital for Children, Shadwell, E.

RUDD, W. A., M.R.C.S.Eng., appointed Assistant Medical Officer of the Infirmary of the Parish of St. Mary Abbott's, Kensington.

SAW, A. J. H., M.A., M.B., B.C.Cantab., appointed House-Physician to St Mary's Hospital.

SENIOR, E. W., M.R.C.S., L.R.C.P., appointed House-Physician to the East London Hospital for Children, *vice* J. McGregor, M.B., C.M.

TAYLOR, D. M., M.B.Glasg., appointed Medical Officer of the Bromley Workhouse of the Stepney Union.

TROUTBECK, Henry, M.A., M.B., B.C.Cantab., appointed House-Surgeon to the East London Hospital for Children, *vice* Cecil E. Fish, B.A., M.B., B.C.Cantab.

TODD-WHITE, Arthur Thomas, M.R.C.S.Eng., L.R.C.P.Lond., L.S.A., appointed House-Surgeon to the Lancaster Infirmary and Dispensary.

WALKER, W. W., B.A., M.B., B.C.Cantab., appointed Junior House-Surgeon to the Great Northern Central Hospital.

WESTCOTT, Wm. Wynn, M.B.Lond., M.R.C.S.Eng., appointed Coroner for North East London, *vice* Dr. Macdonald, deceased.

WILSON, John Gordon, M.A., M.B., appointed Dispensary Surgeon to the Tradeston Dispensary of the Victoria Infirmary of Glasgow.

DIARY FOR NEXT WEEK.

MONDAY.

ROYAL COLLEGE OF SURGEONS, 5 P.M.—Mr. William Thorburn: On the Surgery of the Spinal Cord and its Appendages. Lecture I.

LONDON POST-GRADUATE COURSE, Bacteriological Laboratory, King's College, W.C., 3 to 5 P.M.—Lecture: Actinomycosis and Glanders. Practical Work: Staining Sections and Cultivations. London Throat Hospital, Great Portland Street, 8 P.M.—Dr. Whistler: Catarrhal Affections of the Upper Air Passages.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr. Hyslop: General Paralysis.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M.—Dr. Sansom: A Review of Cases manifesting Pain at the Heart or Morbid Acceleration of the Heart's Contractions (Tachycardia) subsequently to Influenza. Mr. Malcolm Morris: A Case of Acanthosis Nigricans.

THE CLINICAL MUSEUM, 211, Great Portland Street.—Open at 2, Lecture at 4.

WEDNESDAY.

ROYAL COLLEGE OF SURGEONS, 5 P.M.—Mr. William Thorburn: Lecture II.

POST-GRADUATE LECTURES, Metropolitan Hospital, N.E., 5 P.M.—Dr. Tooth: The Anatomy and Pathology of the Spinal Cord.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 1 P.M.—Dr. Payne: Lupus Erythematosus.

POST-GRADUATE COURSE, West London Hospital, Hammersmith Road, W., 5 P.M.—Dr. Ball: Throat and Nose Cases.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed and Epileptic, Queen Square. 2 P.M.—Dr. Gowers, F.R.S.: Clinical Cases. Hospital for Sick Children, Great Ormond Street, 3.30 P.M.—Dr. Lees: Cases in the Wards. Central London Sick Asylum, Cleveland Street, W., 5.30 P.M.—Dr. Cheadle: Cases in the Wards.

BRITISH GYNÆCOLOGICAL SOCIETY, 8.30 P.M.—Specimens will be shown by Mr. O'Callaghan, Dr. Eden, and Dr. C. Martin. Paper by Mr. J. W. Taylor on Intraperitoneal Hæmatocele and its Relation to Unruptured Tubal Pregnancy ("Tubal Abortion").

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—Living and Card Specimens at 8 P.M.:—Dr. S. Stephenson: A Case of Coloboma of the Lens (Double). Mr. H. Work Dodd: A Case of Binocular Polycoria. Papers at 8.30 P.M.—Dr. James Taylor: Optic Neuritis in its Relation to Cerebral Tumour and Trephining. Mr. N. C. Ridley: Some Points in the Histology of Trachoma. Mr. Simeon Snell: (1) Cases of Congenital Serous Cyst of Eyelids associated with an Ophthalmos or Microphthalmos; (2) Osteoma of Orbit. Mr. Spencer Watson: A New Operation for Trichiasis and Distichiasis. Dr. A. Freeland Fergus: Notes on Peculiar Ophthalmic Conditions occurring in Members of the Same Family.

DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND, 5 P.M.

FRIDAY.

ROYAL COLLEGE OF SURGEONS, 5 P.M.—Mr. William Thorburn: Lecture III.

SATURDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M.—Dr. Corner: General Paralysis.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTHS.

JONES.—On Sunday, June 3rd, at Heathmont, Aberavon, Glamorgan, the wife of J. Arnallt Jones, L.R.C.P.Lond., M.R.C.S.Eng., of a daughter.

KEY.—On the 2nd inst., at 30, Wilton Place, Belgrave Square, S.W., the wife of A. Cooper Key, M.D., M.R.C.P., L.S.A., of a daughter.

LIMONT.—On May 31st, at 3, Queen's Square, Newcastle-on-Tyne, the wife of James Limont, M.B., of a son.

MAKEHAM.—On the 31st ult., at 330, New Cross Road, S.E., the wife of H. W. Payne Makeham, M.R.C.S.Eng., L.R.C.P., L.S.A.Lond., of a son.

MARRIAGES.

HENDERSON—RUEFF.—On the 2nd inst., at St. George's, Bloomsbury, by the Rev. Henry G. Le Neveu, M.A., Thomas Henderson, M.B., C.M. Edin., M.D.Florence, of Florence, Italy, to Isabella Margaret Rueff (Ella), widow of F. G. Rueff, Esq., of Ficsole, and daughter of the late W. F. de Mëy, M.D., of Newcastle-on-Tyne.

LAWTON—STITT.—On Tuesday, the 5th inst., at the Parish Church, Bidston, Cheshire, by the Rev. M. A. Lawton, B.A., Vicar of Kilnwick-Percy, Yorkshire, father of the bridegroom, and the Rev. S. Stewart Stitt, M.A., Curate of St. Luke's, Jersey, brother of the bride, assisted by the Rev. J. F. Buckler, M.A., Rector of the Parish, and the Rev. E. Elmer Harding, M.A., Principal of St. Aidan's College, Birkenhead, William Lawton, M.B., C.M.Edin., Bugbrooke, Northants, to Ruth, eldest daughter of Colonel Stitt, V.D., Claughton, Cheshire.

LEE-BROWN—KINGSBURY.—At St. Margaret's Episcopal Church, Leven, Fife, on the 30th ult., by the Rev. A. T. Grant, Vicar, Robert Lee, son of R. Brown, Esq., Galambie, Victoria, Australia, to Ada Mary, eldest daughter of John Kingsbury, Esq., Manly Beach, Sydney.

LUMLEY—BALL.—On the 2nd inst., at St. Augustine's, Honor Oak, by the Rev. P. White-Collard, Vicar, Frederick Davidson Lumley, Surgeon R.N., younger son of Thomas Lumley, Fleet Engineer R.N.(retired), to Pattie Codrington, younger daughter of the late Staff-Commander Edward Codrington Ball, R.N., K.L.H.

MACBEAN—BARTON.—June 5th, at the Parish Church, Lancaster, by the Rev. G. H. Spooner, M.A., Rector of Woolton, Liverpool, and the Rev. W. Bonsey, M.A., Vicar of Lancaster, Robert Baillie Macbean, M.B., C.M.Edin., of Lancaster, late of Annan, N.B., to Emily Charlotte, younger daughter of the late Thomas Barton, of St. Mary's Gate, Lancaster, and granddaughter of the late William Jackson, J.P., Church Street, Lancaster.

NORWAY—HUGHES-PARRY.—June 2nd, at Llantysilio, Denbighshire, Nevell Edmund Norway, M.R.C.S., L.R.C.P., of Newquay, Cornwall, to Daisy, second daughter of T. Hughes-Parry, Esq., of Llangollenfechan.

REDFERN—HENRY.—June 4th, at S. Stephen's, South Kensington, by the Rev. R. W. Hoare (Vicar of SS. Michael and All Angels, Croydon), assisted by the Rev. G. S. Flack (Vicar of S. Stephen's), John Joseph Redfern, M.A., M.D., of Croydon, eldest son of Professor Redfern, M.B.London, F.R.C.S., of Belfast, to Eva Maud, daughter of the late Rev. P. Shuldham Henry, D.D., President of Queen's College, Belfast, and of Mrs. Henry, Drayton Mansions, South Kensington.

DEATHS.

HOWARK.—On May 30th, at his residence, Derby House, Derby Street, Bolton, George Howark, L.R.C.P.Edin., M.R.C.S.Eng., L.S.A., aged 54 years.

WILKINSON.—On June —, at Holly House, Tynemouth, Northumberland, Henrietta, the beloved wife of Auburn Wilkinson, M.D.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

LAMBDA asks the results of experience as to the best form of chair or couch for gynæcological and general consulting-room purposes.

E.S., who has a patient suffering from asthma of twelve months' duration, who is anxious to try the effect of a sea voyage or residence in some suitable climate, asks for advice in the matter. A voyage round the Cape to Australia or a stay at Teneriffe have been suggested.

G.B.B. wishes to know of a suitable home or institution in or near London where a child, aged 13, with weak spine (no bone disease) and who is dull and listless in mind, could be boarded and have regular muscular exercises daily. The parents can afford only £1 a week?

THE STERILISATION OF CATHETERS.

G.P. would be glad to receive information as to the best means to render silk elastic catheters in constant use aseptic. He finds that keeping them in a solution of carbolic acid, even 1 in 40, damages the instruments. Is there an instrument for sterilising silk catheters?

A "COVERING" PROBLEM.

J. W. W. writes: I should be glad of an opinion as to whether a medical man is acting rightly in giving an anæsthetic to one of his own patients for an unqualified dentist to extract teeth, or if by so doing he renders himself liable to a charge of "covering."

*** No such case has been yet brought before the Council. It would be well to submit the facts to the President, Sir Richard Quain.

ANSWERS.

T. W.—Our correspondent should give up dosing himself with dangerous drugs, and consult a medical practitioner of good repute in the town in which he resides.

ENQUIRER.—A person who has been deprived of his qualifications and removed from the *Register* would probably involve his principal in proceedings for "covering" if put by the latter in charge of a branch practice.

F.C.—The publication to which Mr. Gladstone alluded was "An obituary notice extracted from the annual address read before the annual meeting of the Royal Medical and Chirurgical Society on March 1st, 1894," by William Selby Church, M.D., Senior Vice-President of the Society. (Printed for private circulation by Adlard and Son, Bartholomew's Close.)

W. J.—The General Medical Council took up the case of the *Weekly Times and Echo*, and its action in the matter has been sustained in the High Court of Justice. If our correspondent will lay before the President of the Council any evidence connecting the advertisement sent with a particular registered practitioner, he will be doing a good service.

L.R.C.P. and S.I.; OXON.—The only way to obtain a qualification to practise in France, even among English residents, is to obtain the degree of Doctor of Medicine by examination before one of the seven French "faculties"—Paris, Lyons, Montpellier, Nancy, Lille, Bordeaux, and Toulouse. In Belgium the Government is authorised, on the advice of a jury which has the power of granting the diploma of Doctor, to give permission to applicants who have obtained a diploma abroad, entitling them to practise in their own country, but no permission can be given to practise medicine unless the original diploma authorises the holder to practise medicine, surgery, and midwifery. The best preparation for examination by a French faculty would, of course, be a period of study in a French medical school. Residence in Brussels would afford facilities as far as colloquial mastery of French is concerned.

MEDICAL AID AND ASSURANCE SOCIETIES.

M.B.—We do not know what the exact constitution of the London, Edinburgh, and Glasgow Assurance Company, Limited, may be, nor in what way a medical aid business is intended to be associated with it. The London and Manchester Assurance Society has a medical department of which its policy holders can avail themselves on paying additional premiums, which amount to about the ordinary contributions of members to sick benefit societies. If the medical department is a mere adjunct to a *bonâ fide* assurance company and not the real mainstay of that institution, especially if it abstains from touting indiscriminately among all classes of the public to obtain patients for its medical officers regardless of the injury done to other practitioners, we are of opinion that much more might be urged in the favour of such schemes than on behalf of the ordinary medical aid societies. At the same time it most not be forgotten that it is very easy for a medical aid society of the ordinary type to associate itself nominally with such an assurance company and under its cover to carry on the usual objectionable practices of these institutions. On the whole we think that while all societies of this kind should be looked on with suspicion it does not follow that all ought to be equally condemned.

NOTES, LETTERS, Etc.

THE GRIFFITHS FUND.

DRS. E. LE CRONIER LANCASTER (Winchester House, Swansea) and D. F. BROOK, Hon. Secretaries, desire to acknowledge the following subscriptions to the above fund received since our issue of May 19th:

	£	s.	d.
Amount already acknowledged	94	12	6
Sir William Jenner, London	21	0	0
William Price, Cardiff	10	10	0
F. T. Roberts, London	5	5	0
R. Douglas Powell, London	5	0	0
John Williams (London)	5	0	0
Lawson Tait, Birmingham	2	2	0
Edward Woakes, London	2	2	0
T. Lauder Brunton, London	2	2	0
J. G. Glover (London)	2	2	0
A. Garrod Thomas, Newport, Mon.	2	0	0
W. E. Green, Sandown	2	2	0
A. Sheen, Cardiff	1	1	0
G. Herbert Hopkins, Swansea	1	1	0
W. V. Snow, Bournemouth	1	1	0
G. Grice-Jones, Pontardawe	1	1	0
C. J. Cullingworth, London	1	1	0
Victor Horsley, London	1	1	0
F. H. Champneys, London	1	1	0
Bilton Pollard, London	1	1	0
Harrison Cripps, London	1	1	0
G. D. Prothero, Swansea	1	1	0
Henry T. Butlin, London	1	0	0
Edmund Carver (Cambridge)	0	10	6

ANSELL V. TAIT.

DR. G. T. KEELE (81, St. Paul's Road, Highbury), Treasurer of the fund being raised to pay Dr. E. S. Tait's legal expenses, has received the following additional subscriptions:

	£	s.	d.		£	s.	d.
Mr. John Couper	5	5	0	Mr. Alfred Willett	2	2	0
Mr. C. O'B. Harding ...	3	3	0	Dr. C. J. Cullingworth ...	1	1	0
Mr. A. E. Cumberbatch ...	2	2	0	Dr. J. F. Woodroffe	1	1	0
Sir Joseph Lister	2	2	0	Mr. E. H. Hare	0	10	6
Dr. Stephen Mackenzie ...	2	2	0	Dr. W. L. Penny	0	10	6
Mr. E. Nettleship	2	2	0	Dr. J. Burnett Smith ...	0	10	6

The Committee will be glad if gentlemen intending to subscribe will forward their subscriptions without delay, as they are anxious to close the fund.

THE HOSPITALS OF BRISTOL.

IN the note on the Hospitals of Bristol, published in the BRITISH MEDICAL JOURNAL of June 2nd, page 1210, it should have been stated that the number of the beds in the Eye Hospital is twenty six.

TREATMENT OF NASAL POLYPI.

DR. K. R. MACDOUGALL WILSON (Belfast) writes: With reference to Dr. Dutt's recommendation of "Tincture of Teucrium" in cases of nasal polypi, that he applied the "undiluted tincture" to the nasal mucous membrane twice daily, and that local applications of alcohol are frequently exceedingly efficacious in causing the disappearance of nasal polypi.

BLUE FROGS AND VIPER BITES.

DR. ARTHUR STRADLING (Watford, Herts) writes: The blue frogs which are met with not infrequently in the South of Europe are simply discoloured specimens of the green tree frog (*Hyla arborea*). Green appears to be a colour which is extremely unstable among reptiles and amphibians; lizards, normally of that hue, such as the tuberculated iguana, often fade or turn brown under slightly altered conditions, and it is probable that the pictorial batrachian of Belt's celebrated description was nothing more than a variant of this sort. All turn blue after death in alcohol, a transformation which has given rise to many amusing errors in works of natural history founded on museum lore. Blue is one of the rarest pigmentary colours in nature. In the interesting case of viper bite reported by Dr. Green, no mention is made of the locality in which the accident occurred, but it is stated that the fang wounds were an inch apart. Surely this cannot refer to any European viper. The punctures in a bite from one of the western *Crotalidæ*, which came under my observation, presented an interval no greater, though the snake was 7 feet long.

THE AIR OF SCHOOLS.

DR. C. SHENNETT REDMOND (Gateshead) writes: As in Key's "Plenum System" of ventilating the atmosphere throughout a building is kept constantly under a pressure slightly in excess of that of the external air (this I understand Mr. Key to regard as main factor of success), and that the air currents traverse every corner, I have seen demonstrated by the smoke test, and by the introduction of very fine feather down, or small cuttings of coloured tissue paper, which could be seen wafted to every corner of that room. It may be of interest to mention that the new General Hospital being erected at Birmingham will contain a capacity of two million cubic feet of air; and that provision is being made under Key's system to propel through the building twenty million cubic feet of washed and warm air every hour = a change ten times an hour.

NOTES ON GIBRALTAR.

SURGEON-CAPTAIN W. G. MACPHERSON, A.M.S. (Gibraltar), writes: In the BRITISH MEDICAL JOURNAL of May 19th it is stated, under "Notes on Gibraltar," that the medical officer of health is allowed to compete in private practice with the civil practitioners, and that I hold the appointment. These facts are perfectly accurate, but I should like to correct the impression that I personally engage in or desire to engage in private practice here. I hold the opinion that medical officers of health should not, as a rule, engage in private practice, and during the three years I have been in Gibraltar and held the appointment in addition to my military duties I have adhered to this rule.

A HOSPITAL AT HOME.

IN reference to an editorial article bearing the above title in the BRITISH MEDICAL JOURNAL of May 19th, Mrs. Panton writes to say she has already advocated the same view, and has published a work on the subject. It would indeed be odd if so common-sense a suggestion had not occurred to various minds; the point of interest is that the architectural mind does not seem as yet to have grasped its importance.

PAST ATTITUDE OF THE MEDICAL PROFESSION ON ALCOHOL.

AT the annual meeting of the British Medical Temperance Association on May 22nd, Dr. Norman Kerr said that more than a hundred years before the beginning of the modern temperance reformation, the voice of medicine, by Dr. Baynard, in 1702, thundered against the milder intoxicant liquors. He characterised ales as "unwholesome and dangerous liquors," and suggested the making their sale criminal. A quarter of a century later Dr. George Cheyne, of Bath, commended abstinence as natural, healthy, and safe, and denounced moderate drinking as "unhealthy and dangerous." In another quarter of a century, in the *Universal Pharmacopœia*, Dr. James (1747) approved the wisdom of Mahomet in forbidding fermented liquors to his followers. Seven years before the dawn of the nineteen century, Benjamin Rush taught that no nourishment and no strength were found in spirituous beverages, followed a year later by Erasmus Darwin, who stigmatised wine as a pernicious luxury, injuring thousands. In the first days of the present century, Beddoes declared that wine, constantly taken moderately, was mischievous and enfeebling: immediately after whom Trotter, while also declaiming against wine, reprobated beer as a poisonous morning beverage.

Over sixty years ago Physician-General Cheyne ardently championed abstinence, as did Dr. Daniel Richmond, of Paisley, who was one of the founders of one of the first teetotal societies in 1832. To these pioneer temperance champions fell to be added, prior to 1876, when the British Medical Temperance Association was founded, among a host of medical abstainers, such outstanding men as Professor Rolleston of Oxford, Menzies and Burn of Edinburgh, Kirk of Greenock, Linton of Aberdeen, McKenzie of Inverness, Grindrod of Manchester, Beaumont of Bradford, Higginbotham of Nottingham, Fothergill of Darlington, Collenette of Guernsey, Clay of Manchester, Mudge of Bodmin, Thompson of Bideford, and Henry Munroe of Hull. Though the medical profession had often been abused for opposing the temperance cause, it was remarkable that from the ranks of medicine had gone forth unsparing condemnation of beer and wine before the early temperance pledge of abstinence from ardent spirits alone had been publicly proclaimed. In proof of the sympathy of medicine and surgery with temperance, Dr. Kerr cited the three great medical declarations on alcohol, the first in 1839 given by Julius Jeffreys, the second in 1847 by John Dunlop, the third in 1871 by Mr. Ernest Hart and Mr. Rae.

LETTERS, COMMUNICATIONS, ETC., have been received from:

(**A**) Professor Clifford Allbutt, Cambridge; An Old Boy; Dr. S. T. Armstrong, New York; Dr. B. Anningson, Cambridge; Anti-Advertiser. (**B**) Messrs. J. Baker and Sons, Clifton; Dr. H. Barnes, Carlisle; Dr. R. Boxall, London; Dr. F. R. Blaxall, London; Messrs. Baillière, Tindall, and Cox, London; Mr. F. Bisset, Glasgow; Mr. Blackett, London; Mr. C. E. R. Bucknill, Twickenham; Dr. J. Beddoe, Stratford-on-Avon; Mr. W. Bernard, Londonderry; Dr. J. B. Brierley, Manchester; Mr. J. C. H. Beaumont, London; Messrs. Brown, Gould, and Co., London. (**C**) Mr. H. Cuthbertson, Aberdeen; Mr. G. Collingwood, London; Dr. W. Carter, Liverpool; Dr. A. Charpentier, Uxbridge; Messrs. F. Canton and Co., London; F. R. Cross, M.B., Clifton; Dr. W. W. Campbell, Duns; F. W. Clark, M.B., Lowestoft; Dr. F. H. Collins, Manchester; Mr. C. Cotterill, Wincanton; Dr. F. W. Cock, London; Mr. H. A. Cruttwell, London. (**D**) Mr. G. F. Dickinson, Leamington; Defeated; Dr. C. R. Drysdale, London. (**E**) Mr. Evans, London; Mr. J. Ewens, Bristol. (**F**) Mr. D. B. Foley, Wombwell; Dr. T. Fisher, Clifton; Dr. R. W. Felkin, Edinburgh; Professor E. Fawcett, Bristol; Mr. E. Field, London. (**G**) Messrs. Guthrie and Hall, South Shields; Dr. W. F. Grant, London. (**H**) Mr. R. Hield, London; Mr. J. T. Hartell, Willenhall Mr. C. T. Holland, Liverpool; Mr. A. Harkness, Hampton Hill; Mr. A. E Harris, London; Hopeful; Mr. A. W. Hall, Warrington; Dr. L. J. Hobson, Harrogate; Mr. H. M. Holt, Malton; Mr. W. Harris, Norwich; Mr. F. L. Haden, Alresford. (**I**) Dr. C. R. Illingworth, London. (**J**) Mr. T. Jackson, Holbeach; Mr. G. H. Jones, Deddington; Mr. J. T. Jones, Corris; Mr. J. A. Jones, Abcrayron Juvena; Justitia; J. W. W.; Jeye's Sanitary Compound Co., London. (**K**) Dr. R. Kirk, Glasgow; A. B. Kelly, M.B., Glasgow; G. E. Keith, M.B., London. (**L**) E Le Cronier Lancaster, M.B., Swansea; Mr. T. P. Lowe, Bath; Lambda; Messrs. Lorimer and Co., London; Mr. F. D. Lumley, Sheerness. (**M**) Medicus; M. F.; Mr. C. A. Morton, Clifton; Mr. H. A. Moffat, London; Mr. A. C. Morton, North Walsham; Dr. H. W. G. Mackenzie, London; Dr. J. Murphy, Sunderland; M.B.; Member; Manchester G. P.; Member of Medico-Psychological Society. (**N**) Mr. E. Nettleship, London; Nunquam dormio; Mr. N. E. Norway, Newquay; Dr. J. Neil, Oxford. (**O**) Professor A. Ogston, Aberdeen; Mr. W. R. Ormsby, London; Mr. W. H. O'Meara, Holbeach; Mr. E. M. H. O'Connor, Market Deeping. (**P**) Penshurst; Dr. G. Vivian Poore, London; Dr. A. Paterson, Dundee; Dr. C. Porter, Stockport; H. Philpots, M.B, Birkenhead; Mr. J. Pease, London; Dr. C. Phillips, London; H. W. Pigeon, M.B., Hull. (**Q**) Querens. (**R**) Mr. W. Randall, Brigend; G. Robertson, M.B., Aberdeen; Mr. T. F. Raven, Broadstairs; Mr. C. S. Redmond, Gateshead; Mr. C. H. Riley, Huddersfield; Mr. R. T. Richardson, Trowbridge; G. J. Robertson, M.B., Oldham; Dr. W. R. Rice, Coventry; Dr. L. Roberts, St. Asaph. (**S**) Mr. J. Stewart, Clifton; Dr. C. J. Symonds, London; Messrs. Squire and Sons, London; Dr. W. J. Sinclair, Manchester; South Africa; Dr. A. Strange, Shrewsbury; Mr. W. H C. Staveley, London; Dr. A. Swann, Batley; Mr. W. A. Stradling, Watford; Mr. J. Sheen, Bothwell; Messrs. R. Sumner and Co., Liverpool; Dr. F. F. Schacht, London; Mr. E. Somerset, Oundle. (**T**) Mr. E. Trimmer, Dublin; Dr. T. W. Trend, Southampton; Mr. P. J. K. Turner, Wincanton; G. Templeton, M.B., London; Mr. A. Todd-White, London. (**V**) Mr. T. J. Verrall, Brighton. (**W**) Mr. G. Walpole, London; Mr. C. J. West, Grantham; W. H.; Mr. E. Wilson, Oxford; Dr. W. Walter, Manchester; Mr. C. H. Whitcombe, Westerham; Mr. J. W. Wrangham, Tewkesbury; W. W. Walker, M.B., London; Mr. A. W. Wallis, Brentwood; G. A. Wright, M.B., Manchester; Dr. A. Wilkinson, Tynemouth. (**X**) X. P. (**Y**) Mr. P. Yates, London; etc.

BOOKS, ETC., RECEIVED.

Analyses of Twelve Thousand Prescriptions. By W. Martindale, F.C.S. London: H. K. Lewis. 1894. 2s. 6d.

Régénération des Os et Résections sous-périostées. Par L. Ollier. Paris: G. Masson. Fr. 2.50.

Examen et Sémeiotique du Cœur: Signes Physiques. Par Dr. P. Merklen. Paris: G. Masson. Fr. 2.50.

La Paralysie Générale. Par V. Magnan et P. Sérieux. Paris: G. Masson. Fr. 2.50.

Les Eaux-Bonnes les Eaux-Chaudes et leurs environs (Basses-Pyrénées). Paris: Hachette et Cie. 1894.

100 illustrirte Fälle aus der Frauen-Praxis. Von Dr. A. Auvard. Leipzig: A. Abel. 1893. M. 6.

Midwives' Education and Registration and the Lancashire and Cheshire Branch of the British Medical Association. By William Carter. Liverpool: T. Dobb and Co. 1894.

Ueber den Einfluss von Ruhe, mässiger Bewegung und körplicher Arbeit auf die normale Magenverdauung des Menschen. Von W. Spirig. Bern: Buchdruckerei Stampfli, Lach, Scheim, et Cie. 1892.

On Septic and Auto intoxications as Causes of Disease. By Dr. W. Carter. Liverpool: T. Dobb and Co. 1894.

Pathologie und Therapie der Perityphlitis (Appendicitis simplex und Appendicitis perforativa). Bearbeitet von Dr. E. Sonnenburg. Leipzig: F. C. W. Vogel.

Spinal Caries (Spondylitis or Inflammatory Disease of the Spinal Column). By Noble Smith, F.R.C.S. London: Smith, Elder, and Co. 1894.

National Veterinary Association. Twelfth General Meeting, London, 1894. Animal Vaccines. By J. A. W. Dollar, M.R.C.V.S. Birmingham: G. Jones and Son.

Catechism Series. Physiology: Part IV. Edinburgh: E. and G. Livingstone. 1s.

Examination Questions in Practice of Medicine, with Answers. Part II: Skin Diseases. Adapted for those preparing themselves for the Final Examination by "Utile Quod Facias." Edinburgh: E. and G. Livingstone. 1s.

Les nouvelles idées du Système nerveux chez l'homme et chez les Vertébrés. Par Dr. S. R. Cajal. Paris: C. Reinwald et Cie. 1894.

The Mother's Help and Guide to the Domestic Management of her Children. By Dr. P. M. Braidwood. London: The Scientific Press. 1894. 2s. 6d.

Les Universités des États-Unis et du Canada et spécialement leurs Institutions Médicales. Par Dr. O. Laurent. Bruxelles: H. Lamertin. 1894. Fr. 5.

*** In forwarding books the publishers are requested to state their selling prices.

A CLINICAL DEMONSTRATION

ON A CASE OF

RHEUMATIC PERITYPHLITIS.

Given in King's College Hospital.

BY I. BURNEY YEO, M.D., F.R.C.P.,
Physician to the Hospital.

GENTLEMEN,—The case before you I am justified in calling, as you will see when I have related to you its history, a case of rheumatic perityphlitis. Rheumatic affections of the peritoneum are believed to be exceedingly rare, but we shall discuss that point with more interest after I have given you an account of the history and course of this case.

I will outline on the patient's abdomen the region to which our attention is now to be especially directed—namely, the right iliac region and the adjacent part of the right lumbar region. In this region, as you know, we have the cæcum and the commencement of the ascending colon and the termination of the small intestine at the ileo-cæcal valve; and there is also here another very important structure, and one claiming great consideration in connection with the occurrence of evidences of disease in this locality, and that is the vermiform appendix, which usually lies closely applied to the cæcum. Let me also remind you that the cæcum is almost invariably entirely surrounded by peritoneum.

Since in inflammatory affections in this region, and particularly in the grave and fatal forms, the appendix is usually found *post mortem* to have been the structure especially involved, and in which the malady originated, those who are prone to read the history of disease backwards—and there is much to be said on behalf of this mode of reading—are disposed to regard nearly all inflammations arising in the right iliac region as primarily dependent on appendicitis; and you must always be on the alert, when you have to deal with such attacks, and bear in mind that local suppurative inflammation in, or connected with, the appendix is a very common cause of the troubles that arise in this locality. But the case I am now showing you proves as clearly as possible that clinically we may have a true perityphlitis without any necessary involvement of the appendix.

Our patient is a young girl 18 years of age, who was admitted into the Todd Ward on April 16th. Her previous history may be related in a very few words. She had been attending for about a fortnight as an out-patient, complaining of anæmia and menstrual irregularity, and of pain in the head and in the elbows and knees. She had had an attack of acute rheumatism last November.

The present attack began four days before her admission, with stabbing pains in the right iliac region spreading into the adjacent part of the right lumbar region. She vomited several times and, indeed, whenever she took solid food, and her bowels were constipated. Two days before her admission she felt giddy and was obliged to leave her work (wig making). She was still inclined to vomit after taking solids, but she could retain liquid food. She also felt pains in the arms and knees.

On admission she was still complaining of pains in the right iliac and lumbar regions. There was entire loss of appetite. She was constipated, and her tongue was large and flabby and thickly furred with a moist dirty covering, and her breath was offensive. Examination of her abdomen revealed no general distension or tenderness, but over the right iliac region and just above in the lumbar region there was much tenderness on pressure; there was also great rigidity of the abdominal walls over the situation of the cæcum and the first part of the ascending colon. This part of the abdomen was hard, tense and resisting, and felt pungently hot to the touch. We could not, however, distinguish any distinct local tumour or bulging, nor any notable dulness on percussion.

There was no evidence at this time of any pain or swelling of any of her joints, but there was a loud systolic murmur audible over the pulmonary area, which was referred to the previous anæmia, and there was a softer systolic murmur heard over the cardiac apex. The pulse was 84 and rather full. The urine was of normal aspect, its density 1022, free from albumen and with no deposit of lithates.

Her temperature the evening of her admission was 102.8° (a dose of castor oil had been given her, and she had passed a fluid motion). The next day it fell a degree or more, but on the following day (18th) it rose in the evening to 105°, and the pulse to 124. She was then suffering from much local tenderness in the right iliac region, and especially when pressure was made over the first part of the ascending colon behind, in the lumbar region.

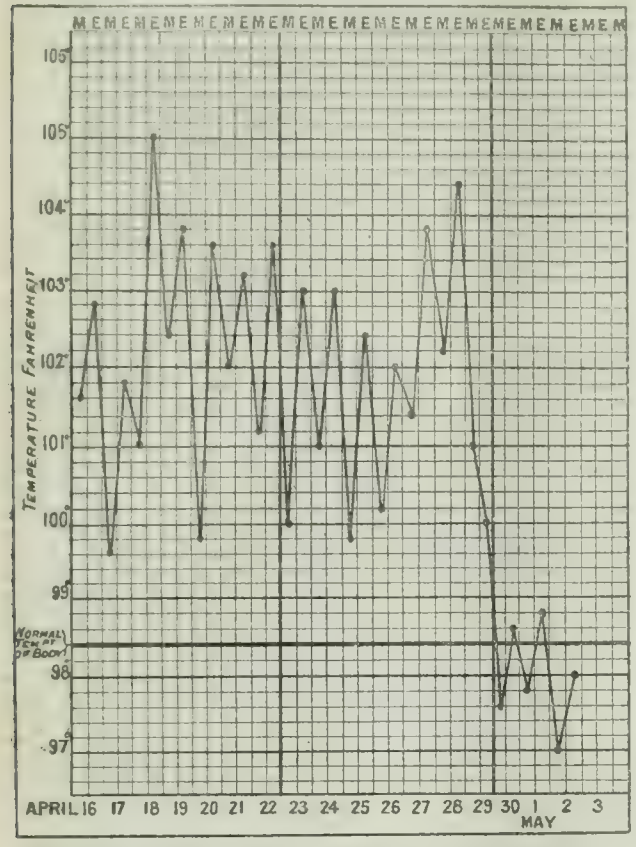
On the 19th the temperature was still high (104° to 105°), and the enemata (she was given a large enema of warm water, containing a little bicarbonate of soda in solution twice a-day) brought away a number of small, dark, hard fæcal masses mixed with the fluid of the injection.

On the 20th some fulness as well as great hardness and resistance was noted in the right iliac region, and the superficial veins were unduly prominent. The enemata continued to bring away small hard masses as before. The tongue remained thickly coated and the mouth was foul, although an antiseptic mixture was being taken regularly. She now complained of some pain and tenderness over the right patella. For the next two days she was freer from pain, and the temperature oscillated between 100° and 103°, but on the 22nd she suddenly developed an acute arthritis of the joints of the right arm (shoulder, elbow, and wrist), and the temperature in the evening rose to 103.6°. At the same time, the systolic apex murmur became louder and more marked. When I saw her the next day, I ordered her 20 grains of sodium salicylate every three or four hours. She had hardly taken more than five or six doses before the arthritis entirely disappeared; but the salicylate had caused so much cardiac depression with an intermittent pulse, that Mr. Turner, our excellent and zealous house-physician, most properly at once stopped its administration, more especially as the joint affection was completely relieved. The temperature had fallen for two days below 102°. On the 26th, however, we noted that there was an increased feeling of fulness in the right iliac region, with much resistance and rigidity of the abdominal wall over this locality, and we were able to make out distinctly, on gently pressing the abdominal wall with the hand horizontally over the subjacent parts, a palpable creaking friction.

On the night of the 27th the temperature again rose rapidly, and on the 28th had reached 104.4°. When I visited the hospital on that day, Mr. Turner, who had watched the case most attentively with his usual zeal and interest, remarked to me on this return of high temperature and its possible significance, although the arthritis had completely disappeared; and, bearing in mind the predominating tendency to regard all inflammatory attacks in this region as probably connected with some suppurative affection of the appendix, we discussed the advisability of calling a surgical colleague into consultation, with the view of some possible operative exploration. I had, however, expressed my belief early in the case that this was an instance of perityphlitis independent of any affection of the appendix, the sudden occurrence of acute arthritis of the joints of the right arm, and its rapid disappearance under the influence of sodium salicylate and the history of a former attack of acute rheumatism suggested to me the possibility that this local peritonitis might be of rheumatic origin, so I again prescribed the sodium salicylate in 20-grain doses every three hours.

A glance at the temperature chart will show you the remarkably rapid effect, on the local peritonitis and the temperature, of this second administration of the salicylate. Within little more than twenty-four hours the temperature had fallen from 104.4° to below normal, and it has not risen since, although we had again to discontinue the salicylate after five or six doses, on account of the great cardiac depression and intermission of the pulse it produced. As the temperature fell the tongue began to clean rapidly, and the tenderness, hardness, and resistance in the right iliac region, as well as the palpable creaking, gradually disappeared, and the patient is now quite convalescent. She has had a few doses of sodium sulphate as an aperient, and her bowels now

act quite naturally. The cardiac apex murmur is only just distinguishable, but the murmur over the pulmonary area remains much the same.



Extremely rare though the occurrence is, there can be no doubt that this was a case of rheumatic perityphlitis. The intercurrence of rheumatic arthritis of the joints of the right arm, the previous history of acute rheumatism, the endocarditic murmur, the complete and rapid disappearance of the local symptoms, and the sudden fall of temperature on the administration of sodium salicylate, are facts which leave no room for doubting the rheumatic nature of this attack of local peritonitis.

All authorities agree in regarding rheumatic peritonitis as a rare affection. Fagge asserts that "rheumatism seldom or never affects the peritoneum." Bauer, in Zeimssen's *Cyclopædia of the Practice of Medicine*, says rheumatic peritonitis "is undoubtedly an exceedingly rare complication of acute articular rheumatism," but he adds that when it occurs it tends to run a very favourable course, as in this present instance. Professor R. Palmer Howard, in Pepper's *System of Practical Medicine*, observes: "I have but once met with acute peritonitis as a complication of acute rheumatism." He adds: "The immunity of this serous membrane from rheumatic inflammation is an inexplicable anomaly in view of the proclivity of the pericardium and pleura to that process."

Many French authorities, however, from Andral downwards, have recorded cases of rheumatic peritonitis and a valuable summary of these is to be found in the article on "Péritonites" in the *Dictionnaire Encyclopédique des Sciences Médicales*.[1] The authors of this article point out that the observations they have collected show that all degrees of rheumatic inflammation of the peritoneum may occur "from simple hyperæmia with very little exudation, to fibrinous, sero-fibrinous, purulent and hæmorrhagic exudations," and they insist that "in order that we should admit without reserve the diagnosis of rheumatic peritonitis, it is necessary that there should be at the same time other manifestations, visceral or articular, of rheumatism," as we had in the case before us.

I will only add a few words with regard to the treatment that was pursued in this case. In the first place I will mention three courses which we avoided.

1. We did not purge this patient; it is true a single dose of castor oil was given her on her admission, but no other aperient was given until she was convalescent. In avoiding aperients we acted on the principle of keeping an inflamed part at rest. It is possible we may push this principle a little too far in certain cases, analogous to the one before us, and that an unirritating saline aperient might often be of service, but we can rarely be quite sure of this. What we did was to wash out the large intestine twice a day with copious warm water enemata, and we added a little bicarbonate of soda to this water to lessen its hardness and to increase its solvent and cleansing properties. At the same time we gave an intestinal antiseptic in the form of the euchlorine mixture which you see me so often prescribe. Had we suspected at the onset of the attack that it was of rheumatic nature, salol would certainly have been the appropriate intestinal antiseptic to employ.

2. We avoided the internal use of opium. We applied opium locally, but we did not give any opium internally. There was no need to do so, although I find many practitioners, whenever they have a case of peritoneal inflammation to deal with, give opium as a matter of routine. I advise you not to do so. It may be necessary, in cases where there is very acute suffering, to give opium to allay it; but my experience is that the routine use of opium in these cases often retards recovery. It checks excretion and elimination at a time when the blood is often charged with pyrogenic toxins, and it aggravates the paretic condition of the intestinal walls. The local application of opium on linseed poultices or hot fomentations will often be found as effectual in relieving pain. I have discussed this question more fully in my *Manual of Medical Treatment*.

3. We did not apply an icebag—a very popular expedient now in treating inflammation of serous membranes. I am glad we did not, as we should probably have provoked some very undesirable metastasis.

Finally, let me call your attention to the remarkable action of the sodium salicylate in this case. We gave it first because of the appearance of acute arthritis of the joints of the right arm; a very few doses caused its complete subsidence. The extreme sensitiveness of the patient to this drug was shown by its depressing effect on the heart, so that we had to discontinue this remedy as soon as the arthritic symptoms were relieved. When we administered it a second time for the perityphlitis, when the temperature had again risen to over 104°, its action was even more striking, as will be apparent to you all on glancing at the temperature chart. The temperature came down with great rapidity as the other symptoms disappeared. Again, its use had soon to be suspended owing to the amount of cardiac depression it induced.

[1] I am indebted to Mr. Treves for this reference.

BEQUESTS AND DONATIONS.—At the monthly meeting of the Swansea General Hospital Committee, on June 7th, it was announced that someone who wished to be known as "a friend" has given, through Mrs. Ebenezer Davies, £1,300 for the endowment of a bed to be placed in the institution.

DR. CORNELIUS HERZ, the sick untried extradition prisoner, whose miserable ill-health has kept him at Bournemouth since December, 1892, has further changed in appearance, and has been distressed by almost hourly sickness since January last. Medicines afford him no appreciable relief; he never leaves his bed, and suffers from dangerous syncope if he rises from the recumbent position. Long deferred legal proceedings in France, which may, it is to be hoped, elucidate the situation, are at last promised, and may be in progress while the patient still lives, for with his inflexible determination he avows, even during his worst paroxysms, that he will never die while the stain is unremoved from his name. He rigidly follows the *régime* dictated by his diabetic condition, and cherishes the hope that summer weather will bring an amelioration of his condition.

A CONTRIBUTION TO THE STUDY OF PIPERAZINE.

By JOHN GORDON, M.D.,

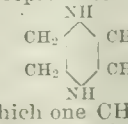
Physician Aberdeen General Dispensary; Assistant to Professor of Materia Medica, University of Aberdeen.

THE following study was undertaken to ascertain the solvent action of piperazine on uric acid. Uric acid calculi were employed, as well as uric acid deposits in urine, and also artificially prepared uric acid. In contrast to other observers, who estimated the solvent action of piperazine on uric acid in the presence of water, the experiments to be described were all done in the presence of urine. It was supposed that investigations conducted in this way were more likely to yield results in accordance with the conditions that exist in the system when piperazine is exhibited to combine with the uric acid present in the blood, the urine, or retained in the form of calculi in the bladder. Piperazinum purum was the form in which the drug was used in all the experiments.

CHARACTERS OF PIPERAZINE.

Brown-Séquard in 1889 stated to the Paris Société de Biologie the result of various injections of extracts made from the testicles of young animals; amongst these were the sensations of enhanced well-being and increased nervous and muscular capability. Disagreeable symptoms of reaction at the injection points led to the solution of the active principle in the extracts, this active principle being termed spermine. Spermine is an organic base, its phosphate occurring in the form of crystals. Schreiner in 1878 obtained crystals from fresh seminal fluid, also from calves' livers, the formula of which was C_2H_5N. Ladenburg and Abel, by the action of heat on hydrochlorate of ethylenediamine, obtained a base which which they called ethylenimine (C_2H_4NH), and this they regarded as the same as Schreiner's crystals. Kobert investigated this base ethylenimine physiologically, and found that it was non-poisonous.

The formula of piperazine is $C_4H_{10}N_2$, or two molecules of spermine (C_2H_5N). It is also called dispermine. In graphic formula it may be thus represented:



It is a piperidin in which one CH_2 group is replaced by an imide or NH group. It is a synthetical compound, and was prepared to replace the active principle, spermine, which was obtained from testicular fluid. It has, however, been found to be a new body, both in its chemical and its physiological characters. It is manufactured by a patented process from the hydrochlorate of ethylenediamine, or from the acid derivatives of ethylenediamine, by the action of sodium glycol: $C_2H_4(ONa)2+C_2H_4(NHCOR^1)2=$
$(C_2H_4NH)2+2R^1COONa$.

This is the method alleged to be employed by the Schering Company.

It may also be formed, in small quantities, by the reaction of glycol-ethylene alcohol ($C_2H_4(OH)2$ on ethylenediamine. Elimination of water takes place in this process, and only by the aid of high temperatures and dehydrating agents can a small quantity be procured.

$C_2H_4(OH)2$ + $C_2H_4(NH_2)2$=
glycol ethylenediamine
$(C_2H_4NH)2$ + $2H2O$
piperazine water.

PHYSICAL AND CHEMICAL PROPERTIES.

Piperazine occurs in crystalline masses, sometimes acicular, at other times in lustrous tables. It is deliquescent, absorbing water and carbonic acid when exposed. It is readily soluble in water, and the solution is strongly alkaline. Its taste is cool, saline, or slightly ammoniacal, and bitter. It has a faint ammoniacal odour. Piperazine is soluble in normal urine, forming at first a clear solution. After a few seconds a flocculent precipitate (phosphates) begins to form; the solution in urine is strongly alkaline.

In the system piperazine is not entirely oxidised, because it can be detected in the urine by the application of potassium bismuth-iodide. This test was employed frequently. One patient, to whom 2 grammes daily were given, may be selected as a type. The urine excreted was tested by the following method:

Ten c.c. of the urine were decomposed by a small quantity of concentrated solution of soda, and warmed for a short time. The solution was then filtered from the phosphates, which appear as a flocculent precipitate. Hydrochloric acid was then added in slight excess. Next potassium bismuth-iodide. A precipitate of nucleo-albumin forms; when the solution is heated, this precipitate aggregates, and is got rid of by filtration. The filtrate is then briskly stirred with a glass rod, and, after standing for a few hours, a compound of piperazine with bismuth falls out in purple red points, which tend to collect into groups of feathery crystals.

A control observation was made with urine, to which a definite quantity of piperazine was added. The application of the above test yielded crystals of like characters; and, calculating by the weight of the piperazine-bismuth compound obtained in this manner, it was estimated that the patient who took 2 grammes daily excreted unoxidised piperazine to the extent of 0.3 gramme.

The urine of the patient was slightly acid. No unpleasant sensation has been complained of by any patient. In none has there been evidence of gastric disturbance nor loss of appetite. In all cases the drug was given well diluted in water. It is proposed in a future paper to detail clinical observations on the drug.

ACTION OF PIPERAZINE ON URIC ACID CALCULI.

The calculi employed in these experiments were not entirely composed of uric acid, but contained, in varying proportions, the other ingredients that form calculi. Uric acid was, however, the main ingredient. In each series of experiments the fragments employed were selected from the same calculus, as far as possible of the same size and shape, so that equal surfaces might be exposed to the various fluids.

Normal urine was the medium used in all the experiments, and the piperazine was contrasted in its solvent power with several other substances supposed to have the property of dissolving uric acid calculi. These other bodies were borax, sodium carbonate, lithium citrate, and potassium citrate.

Method Employed.—The experiments were made by placing 10 c.c. of normal urine in test tubes in which had been dissolved a percentage of the solvent substances. A piece of uric acid calculi weighing 50 mg. or 100 mg. was then added to each test tube. The test tubes were then transferred to a water bath, which was kept at 39° C. At definite times the whole of the test tubes were shaken for an equal period of time, and at fixed intervals the fragments, after careful drying on filtering paper by the aid of heat, were weighed. The test tubes were kept plugged with cotton wool during the whole of the experiments to prevent decomposition of the urine.

The simple solubility of uric acid in water by the agency of the various solvents is quite a distinct condition from their solubilities in urine in the presence of the products of tissue activities and changes. It is also to be remembered that still other results regarding solubility with the various substances employed may be obtained if the urine be pathological in its character.

The accompanying tables and charts illustrate the results in the various series of experiments on the solubility of uric acid calculi.

To ascertain what relation the strength of the solution of piperazine had to the rate of solubility further sets of experiments were initiated; and the following may serve as an example:

Fragments of a uric acid calculus of equal size, shape, and weight were taken, and treated in the manner before mentioned. The strengths of the solutions of piperazine in urine were 5 per cent., 2·5 per cent., and 1.25 per cent. The results at the end of twelve hours were: The 5 per cent. solution had reduced the weight 12 per cent.; the 2·5 per cent., 10 per cent.; the 1.25 per cent., 8 per cent. The 5 per cent. solution had in addition reduced the fragments to a state of fine soft precipitate. The other two solutions had also converted the fragments to a condition of granular *débris*, which was not gritty in its character.

The result of this set of experiments was to indicate that the stronger solutions of piperazine had the greater solvent power; but that the difference was much less than might be expected from the relative strength of the solutions. This is a point of clinical importance, since it is proved that the piperazine is not entirely oxidised in the body, but that a

Experiment I.—*Consisted in treating 50 mg. of Uric Acid Calculus in 10 c.c. of Normal Urine, which contained 1 Per Cent. of the following Substances. Temperature 39° C.*

Hours.	Piperazinum Purum.	Borax.	Lithium Citrate.	Sodium Carbonate.	Potassium Citrate.
15	Solution alkaline turbid; calculus friable; loss in weight 25 mg.	Solution neutral; calculus with white deposit; loss in weight 10 mg.	Solution faintly acid; calculus no change; no loss of weight	Solution alkaline; slight deposit in calculus; no loss in weight	Solution neutral; calculus unchanged; no loss in weight.
27	Solution same as above; calculus disintegrating; loss in weight 30 mg.	Solution neutral; calculus with white deposit; loss in weight 20 mg.	Solution neutral; no evident change in calculus; loss in weight 5 mg.	Solution as above; calculus with deposit; loss in weight 5 mg.	No change.
37	Solution as above; calculus very friable; loss in weight still 30 mg.	Solution turbid; white deposit in calculus; no further loss in weight.	Solution neutral; no change in calculus; no further loss in weight	Solution as above; calculus with deposits; no further loss in weight	No change.
47	Solution as above; calculus very soft, friable; loss in weight 40 mg.	Solution as above; calculus as above; no further loss in weight	Solution as above; no change in calculus; loss in weight 10 mg.	Solution as above; calculus as above; loss in weight 10 mg.	Loss in weight 4 mg.
71	Solution as above; calculus pulpy; loss in weight 46 mg.	No further change	No further change	No further change	No further change.
	Total loss in weight 46 mg.	Total loss in weight 20 mg.	Total loss in weight 10 mg.	Total loss in weight 10 mg.	Total loss in weight 4 mg.

The activity of the urine containing the piperazine continued till 71 hours had elapsed, when the calculus was practically dissolved. No further solvent action was obtained after 47 hours by any of the other bodies. The percentage solution in 71 hours was 92 per cent. for piperazine, 60 per cent. borax, 20 per cent. lithium citrate, 20 per cent. sodium carbonate, 8 per cent. potassium citrate.

Experiment II.—*Consisted in treating 50 mg. of Uric Acid Calculus in 10 c.c. of Normal Urine which contained 2 Per Cent. of the undermentioned Substances. Temperature 39° C.*

Hours.	Piperazinum Purum.	Borax.	Lithium Citrate.	Sodium Carbonate.	Potassium Citrate.
6	Solution turbid alkaline; calculus soft; loss in weight 30 mg.	Solution neutral; calculus unchanged; no loss of weight	Unchanged	Unchanged	Unchanged.
14	Solution turbid alkaline; calculus pulpy	Solution neutral; calculus with white deposit; no loss in weight	Solution neutral; calculus hard; loss in weight 10 mg.	Calculus with slight deposit; no loss in weight	Unchanged; no loss in weight.
	Total loss in weight 45 mg.	——	Total loss in weight 10 mg.	——	——

Experiment III.—*100 mg. of Uric Acid Calculus were Digested at 39° C. in 5 Per Cent. Solutions of the undermentioned Substances in Normal Urine.*

Hours.	Piperazinum Purum.	Borax.	Lithium Citrate.	Sodium Carbonate.	Potassium Citrate.
2	Solution alkaline turbid; no change in calculus	Solution alkaline turbid; calculus unchanged	Solution clear neutral; calculus unchanged	Solution alkaline turbid; calculus unchanged	Solution clear acid; calculus unchanged.
8	Solution as before; calculus disintegrating and softening; loss in weight 7 mg.	Solution as before; loss in weight 4 mg.	Solution as before; loss in weight 5 mg.	Solution as before; loss in weight 4 mg.	Unchanged.
16	Solution as above; calculus more softened; loss in weight 8 mg.	No further change	No further change	No further change	Solution turbid; loss in weight 2 mg.
24	Solution as before; no further loss in weight; friable and very soft	Solution as before; loss in weight 3 mg.; increase of weight caused by the copious deposit	Solution as before; loss in weight 7 mg.; calculus splitting into layers	No further change; slight deposit in calculus	No further change.
30	No further change	Ditto	Ditto	Ditto	Ditto.
40	Solution as before; very soft and friable	No further change	Solution as before; loss in weight 10 mg.	No further change	Ditto.
	Total loss in weight 10 mg.	Total loss in weight 3 mg.	Total loss in weight 10 mg.	Total loss in weight 4 mg.	Total loss in weight 2 mg.

Experiment IV.—*100 mg. of Uric Acid Calculus were Digested at 39° C. in 7.5 Per Cent. Solutions of the following Substances in Normal Urine.*

Hours.	Piperazinum Purum.	Borax.	Lithium Citrate.	Sodium Carbonate.	Potassium Citrate.
16	Solution alkaline turbid; calculus disintegrating, soft; loss in weight 5 mg.	Solution alkaline turbid; calculus with white deposit; loss in weight 4 mg.	Solution neutral character; calculus no visible change; loss in weight 3 mg.	Solution alkaline; no change in calculus; no loss in weight.	Solution acid; no change.
24	Solution as above; calculus soft, pulpy; loss in weight 10 mg.	Solution as above; calculus as above; loss in weight 7 mg.	Solution alkaline character; calculus as above; loss in weight 9 mg.	No further change.	Solution alkaline character; loss in weight 2 mg.
32	Solution milky from suspended particles; the whole remaining undissolved; portion of calculus was so disintegrated that it was impossible to weigh it further, and the experiment was stopped for this reason; loss in weight 22 mg.	Solution and calculus as above; loss in weight 10 mg.	No further change.	Solution as above; loss in weight 1 mg.	Solution as above; loss in weight 4 mg.
	Total loss during whole experiment 22 mg.	Total loss during whole experiment 10 mg.	Total loss during whole experimen mg.	Total loss during whole experiment 1 mg.	Total loss during whole experiment 4 mg.

considerable amount is excreted unchanged and in a state to combine with uric acid in excess.

The deduction from these various experiments with different strengths of piperazine on uric acid calculi is that it has a distinct power of dissolving so far the calculi, that the parts of the calculi that remain undissolved are rendered soft and friable, and that frequently the fragments of calculi are disintegrated into a granular pulp.

Experiments with solutions weaker than 1 per cent. were not undertaken. It was, however, evident that with solutions of 1 per cent. a very considerable solvent action was obtained on calculi, provided these experiments were continued over a fairly long period. With solutions of 2 per cent. more activity was indicated in solvent power, as is shown in the experiment detailed, and the time at which action took place was earlier. In this experiment there was a loss of weight of 30 mg. in six hours, and at the end of fourteen hours the loss had increased to 45 mg., the remaining undissolved portion of the fragment of calculus having become quite pulpy.

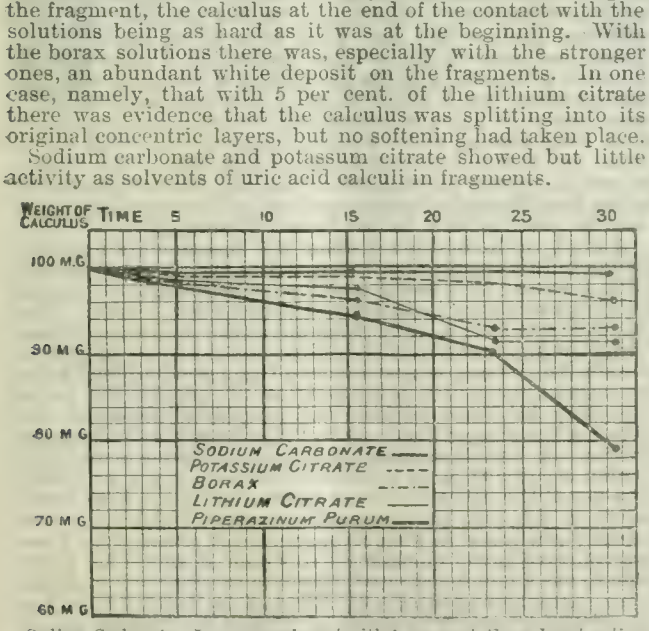
It may therefore be stated that, as the result of the whole series of experiments, piperazine is a substance which, in strengths of 1 per cent. to 7.5 per cent. in normal urine, at the temperature of 39° C., has the property of dissolving uric acid calculi, and of disintegrating and rendering soft and pulpy the undissolved portion.

So soft often are the undissolved portions of the calculi which have been exposed to the action of the piperazine solutions, that it may be possible that the normal movements of the tissues in the parts where the calculus may be lodged might in some cases succeed in completing the action which the piperazine has initiated, and lead to the expulsion of the pulpy *débris*.

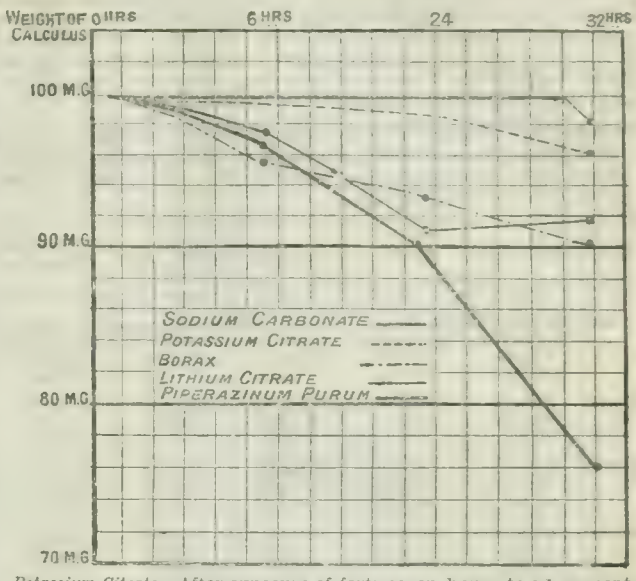
Borax and Lithium Citrate.

The other substances that contrast favourably with piperazine are borax and lithium citrate. With both of these substances there was always obtained, after a longer or shorter time, a loss in weight of the calculus, never so great as that with the piperazine experiment. And with none of the other substances was there any evidence of softening in the fragment, the calculus at the end of the contact with the solutions being as hard as it was at the beginning. With the borax solutions there was, especially with the stronger ones, an abundant white deposit on the fragments. In one case, namely, that with 5 per cent. of the lithium citrate there was evidence that the calculus was splitting into its original concentric layers, but no softening had taken place.

Sodium carbonate and potassum citrate showed but little activity as solvents of uric acid calculi in fragments.



Sodium Carbonate.—In an experiment with 1 per cent. the solvent action began between the thirteenth and seventeenth hour, at which latter hour a loss of 5 mg. was found to have taken place; no further loss in weight took place till the forty-seventh hour, when there was 10 mg. of loss; the fragment then till the seventy-first hour remained unchanged in weight. With a 2 per cent. solution of the sodium carbonate no alteration in weight took place in fourteen hours. After the action of a 5 per cent. solution for eight hours, 100 mg. of a uric acid calculus lost 4 mg., and though the fragment was exposed till the end of forty hours no further loss was sustained. Another fragment of 100 mg. only lost 1 mg. after exposure of thirty two hours to a 7.5 per cent. solution.



Potassium Citrate.—After exposure of forty-seven hours to a 1 per cent. solution there was a loss of 4 mg. in a fragment which weighed 50 mg.; and fourteen hours' exposure to a 2 per cent. solution effected no alteration in weight; while the action by a 5 per cent. solution for sixteen hours dissolved only 2 mg. of a calculus that weighed 100 mg. Further a solution of 7.5 per cent. in twenty-four hours reduced a fragment 2 mg. and at the end of thirty-two hours there was a loss of 4 mg.

Experiments with Calculi of Ascertained Composition.

It was thought that more exact results might be obtained if calculi of known composition were employed to test the solvent activity of the various substances that were employed in these series of experiments. I have to thank Mr. T. S. Murray, D.Sc., assistant to the Professor of Chemistry in the University of Aberdeen, for his kindness in analysing the calculi. The one, the results of which are appended in the accompanying table and chart, had the following composition.

Analysis of Calculus.

Uric, phosphoric, and sulphuric acids, along with magnesia and lime, were estimated in one portion of the powdered calculus. Water was determined by heating another portion to 110° C., and volatile and oxidisable organic matter was determined in the same portion by heating repeatedly with concentrated nitric acid, and finally igniting. The loss on heating in the latter treatment includes uric acid and ammonia.

The analytical results are as follows:

		Per Cent.
Loss on heating to 110° C., water		= 7.89
,, ,, igniting	= 78.37 per cent.	
Consisting of { Uric acid		= 59.29
Consisting of { Other organic matter and ammonia by difference		= 19.08
Phosphoric anhydride	P_2O_5	= 3.19
Sulphuric ,,	SO_3	= 5.96
Magnesia	MgO	= 1.69
Lime ,,	CaO	= 3.02
Oxalic acid	... ...	0.00
		99.12

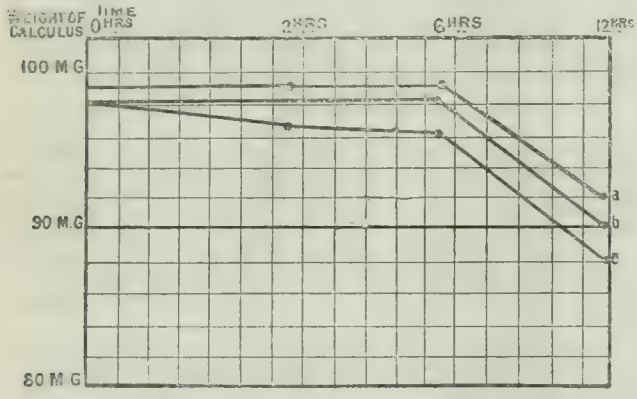
In this set of experiments the calculus was employed in the form of a fine powder, which was added to the test tube which contained the 10 c.c. of urine to which had been added the 1 per cent. of the solvent agent. In order to get rid of the phosphates in urine, it was first treated with a slight excess of ammonium hydrate, and the precipitate removed by filtration.

The result of these experiments was to show that in twenty-four hours a 1 per cent. solution of piperazine was capable of dissolving 48 mg. of the 50 mg. employed. In the earlier stages of the experiment it was evident that borax had a solvent action as marked as the piperazine, but that this potency in solution was sooner exhausted in the borax, and that after eighteen hours the solution of borax had no further action. It will also be observed that in these experiments all the other substances evinced greater solvent power than when the calculus was employed in

the form of fragments, no doubt owing to the fact that greater surface was offered to their activity. Not only was the piperazine solution capable of dissolving the uric acid contained in the calculus, but it also dissolved nearly the whole of the other ingredients that were present, for out of the 50 mg. employed only 2 mg. were left undissolved.

Table IV.—*Experiment to show the Action of 1 per cent. Solution of Piperazine in Normal Urine on 50 Milligrammes of a Calculus, the Composition of which had been ascertained by Analysis. Temperature 39° C.*

Time.	Piperazine.	Borax.	Lithium Citrate.	Sodium Carbonate.	Potassium Citrate.
6 hrs.	The calculus had lost in weight 30 mg.	The calculus had lost in weight 30 mg.	The calculus had lost in weight 20 mg.	The calculus had lost in weight 15 mg.	The calculus had lost in weight 15 mg.
12 hrs.	Loss in weight 40 mg.	Loss in weight 30 mg.	Loss in weight 20 mg.	Loss in weight 15 mg.	Loss in weight 25 mg.
18 hrs.	Loss in weight 44 mg.	Loss in weight 35 mg.	Loss in weight 30 mg.	Loss in weight 20 mg.	Loss in weight 28 mg.
24 hrs.	Loss in weight 48 mg.	Loss in weight 36 mg.	Loss in weight 32 mg.	Loss in weight 25 mg.	Loss in weight 30 mg.



Action of Piperazine on Artificial Uric Acid.

As the result of numerous experiments on artificial uric acid, and also on uric acid which was collected from urine which had been treated with hydrochloric acid, it was found that piperazine was capable of dissolving almost its own weight in urine, after the phosphates had been removed; but when stronger solutions than 2.5 per cent. were employed an insoluble precipitate formed.

Summary of Results.

1. Piperazine is not wholly oxidised in the body, and may be detected in the urine of those to whom it is exhibited.

2. Piperazine in solutions of 1 per cent. in normal urine, when kept in contact at a temperature of 39° C. (body temperature) for a given time, has the property of dissolving to a great extent a fragment of a uric acid calculus.

3. That the stronger the solution of piperazine in urine (up to 7.5 per cent.) the earlier did the solvent action begin and the more rapid was the completion.

4. That, notwithstanding this, with the stronger solutions of piperazine in urine the rate of solubility was not so markedly rapid over the weaker solutions as might be expected.

5. That the solvent action of piperazine in similar circumstances was greater than any other of the substances that were employed, namely, borax, lithium citrate, sodium carbonate, and potassium citrate.

6. That piperazine, in weak and strong solutions in urine, converted the undissolved portion of the calculus into a soft granular or pulpy condition.

7. That neither borax, lithium citrate, sodium carbonate, nor potassium citrate in similar circumstances rendered the fragment of calculus soft or pulpy.

In conclusion, my thanks are due to Professor John Theodore Cash, F.R.S., in whose pharmacological laboratory the experiments were for the most part performed, for his guidance and suggestion. I have to express my obligations to Professor Alexander Ogston, to whom I was indebted for supplies of calculi, which he most willingly placed at my disposal. I have also to acknowledge that the expenses connected with these investigations were defrayed by the Scientific Grants Committee of the British Medical Association.

EIGHT HUNDRED AND FIFTY-TWO OPERATIONS FOR STONE IN THE BLADDER.[1]

By P. J. FREYER, M.A., M.D., M.Ch.,
Surgeon-Major H.M. Bengal Army.

My first lithotomy operation was performed on May 4th, 1877. Since that time I have operated on 852 cases of stone in the bladder by all methods—namely, 245 by perineal lithotomy, 6 by suprapubic lithotomy, 3 by rapid dilatation of the urethra in females, and 598 by litholapaxy, or "lithotrity at one sitting," as the operation is sometimes called. Though for statistical purposes it will be necessary for me to deal comprehensively with the whole of my operations for stone, it is to these latter 598 cases removed by Bigelow's method that I propose directing particular attention in the present paper—demonstrating what a vast influence the modern operation has had in ameliorating the sufferings and diminishing the mortality attendant on stone in the bladder.

I performed my first litholapaxy operation on July 3rd, 1882. In 1886 I published my work on litholapaxy,[2] dealing with 128 cases of the operation performed by me down to the beginning of that year. I have from time to time published papers in the medical journals (British Medical Journal, *Lancet*, *Indian Medical Gazette*) giving full details of several series of this operation performed by me. The great majority of these operations were done in hospital practice, and careful notes of every case have been kept by my assistant surgeons and myself. In a large proportion I have had the pleasure of operating in the presence of one or more surgeons and showing them the results. There was no selection of cases, my rule being to operate on every patient suffering from stone coming under my care, no matter in what condition. No case was allowed to leave hospital, or observation in case of private practice, till a cure had been effected. My paper may, therefore, be accepted as an accurate and trustworthy record of work in this branch of surgery.

A word in the first place about the instruments now used by me in this operation. The lithotrites are all of one pattern, (Fig. 1) having fully fenestrated blades, with Bigelow's handle and mechanism for locking and unlocking the blades. They range in size from 5½ to 18 (English) at the angle, the former being the smallest used for children and the latter the largest for adults. I have now abandoned the use of all but fully-fenestrated lithotrites in my practice. I consider the use of any other kind unnecessary, and almost unjustifiable, considering the danger that exists of *débris* getting impacted in the jaws of non-fenestrated instruments—an accident which cannot occur with fully fenestrated ones when properly used. The use of the lithotrite in the modern operation is to crush, never to fish out, the fragments—a *rôle* to which it was frequently consigned in the old operation of lithotrity. I cannot conceive any circumstances in which it would be advisable to use a non-fenestrated lithotrite in the modern operation. After having used many forms of aspirator, I have now abandoned all others in favour of Bigelow's simplified aspirator (Fig. 2), modified by Weiss of London, in accordance with suggestions made by myself and others. The cannulæ (Fig. 3) used by me are only slightly curved, with the eye on the concave surface close to the end. These are more easily introduced into the bladder, and more effective than straight

[1] Read at the International Medical Congress held in Rome, April, 1894.
[2] *The Modern Treatment of Stone in the Bladder by Litholapaxy.* London: J. and A. Churchill.

cannulæ. They range from No. 6 to 18 (English). Larger than this I never use, though sometimes a patient is met with in whom a No. 19 and 20 will pass with ease.



Fig. 1.



Fig. 2.

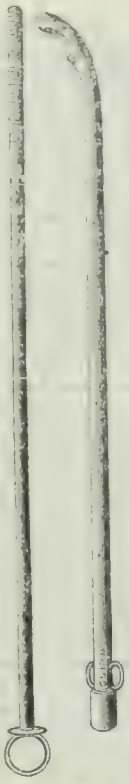


Fig. 3.

Sex and Age.

There were amongst these 598 cases of litholapaxy 434 adults—namely, 427 males and 7 females; and 164 children—namely, 158 males and 6 females. The adults varied in age from 16 to 96 years, the average being 48¼ years; the children from 1½ to under 16 years, the average being just 7 years.

Duration of Treatment.

The average number of days spent in hospital after the operation, or under treatment in cases of private patients, was in the case of adults 6½ days, the period varying from 2 to 28 days; in the case of children 5⅔ days, varying from 2 to 31 days. I may mention, however, that in many instances the patients were kept in hospital one, two, or three days longer than absolutely necessary as a precautionary measure, or for purposes of observation.

Weight of Calculi.

The *débris* of calculi removed varied in weight in adults from 2 grains to 6⅛ ounces, the average weight being 262 grains; in children from 1⅓ grain to 3 ounces and 2¼ drachms, the average being 93⅓ grains. The weights here given are those of the *débris* when carefully dried. The specimens have all been carefully preserved by me, and are now exhibited before you. The total weight of the calculous *débris* removed in these 598 litholapaxy operations amounts to 128,689 grains, or 294¼ ounces. There were 188 calculi, weighing half an ounce and upwards; 88, 1 ounce or more; 30, 2 ounces and over; 8, 3 ounces and upwards, and 1 weighing 6⅛ ounces.

Statistics of Recurrence.

These 598 operations occurred in 587 different individuals, the disease having recurred once in nine instances, and twice in one instance. In three other cases litholapaxy had previously been performed by other surgeons. In all these cases long intervals had elapsed between the first operation and the recurrence of the symptoms of stone; and, after careful inquiry, I am bound to say that neither in the cases of those previously operated on by myself nor in those operated on by others did the recurrence seem to be due to a fragment having been left behind at the first operation. They were all simple cases of recurrence of stone from constitutional causes. In eight other instances the patients had previously undergone lithotomy, three of them twice. Three of these lithotomy operations had been performed by myself. I attribute the rarity of recurrence of stone after litholapaxy in my practice to the extreme care exercised by me in seeing that the last fragments of calculus are removed. So far as my experience goes, recurrence of stone is as frequent after lithotomy as after litholapaxy.

Operation at a Single Sitting.

There is no point on which I have laid more stress in my published writings on this subject than the absolute necessity of completing the operation at a single sitting, no matter how large the stone may be. This is the essential feature of the operation. Amongst my 598 operations, in eight instances only was it necessary to have recourse to a second sitting, and in two cases only designedly. One was that of a boy aged 15, from whom I removed successfully a stone (or rather two stones), the *débris* of which weighed 3⅓ ounces, the details of which have been published[3]; the other, that of a man, aged 45, with a large calculus, 3 ounces in weight. After removing 2 ounces of *débris* I had to postpone finishing the operation to a second sitting, owing to the extreme exhaustion of the patient. In this case a fatal result ensued, from pyæmia. In the remaining six instances a fragment was undesignedly left behind at the first sitting, revealing its presence next day by the pain, stoppage of urine, and other symptoms, when it was removed at a second sitting.

Duration of Operation.

The length of time occupied by the operation ranged from a couple of minutes to two hours. It will vary, of course, with the size and consistence of the stone, the capacity of the urethra, the facility with which the instruments can be introduced, and the experience and dexterity of the operator. I am now in the habit of crushing as much of the stone as possible before withdrawing the lithotrite, so that in most cases of stone of ordinary size only one introduction of this instrument is necessary. The repeated introductions of instruments should, I think, be avoided as much as possible. Rapidity of execution is a quality which comes with practice; and there is no doubt that, all undue haste and roughness of manipulation being avoided, it is desirable to complete the operation as rapidly as possible, particularly when the patient is old and worn by the disease.

Anæsthetics.

The patients were, as a rule, anæsthetised during the operation. During the last three or four years I have, however, been performing the operation without an anæsthetic in an increasing number of suitable cases. With a capacious urethra in an adult I should not hesitate to attack a stone of about an ounce in weight without the aid of an anæsthetic, or with local anæsthesia by cocaine, in a case in which the internal administration of an anæsthetic was undesirable or strongly objected to by the patient.

Complications.

Amongst these 598 litholapaxy operations there were many cases in which the calculous disorder was complicated by the co-existence of urethral stricture. My rule is to deal with the stricture by internal urethrotomy, or rapid dilatation by graduated steel sounds, and at once attack the stone by litholapaxy.

Enlargement of the prostate was present in a large number of cases. I have not found a moderate enlargement of this

[3] British Medical Journal, May 9th, 1891.

organ any bar to the performance of this operation, but when great hypertrophy exists suprapubic cystotomy should be had recourse to. There is generally a good deal of bleeding during the performance of litholapaxy when the prostate is enlarged. It is necessary in such cases to exercise great care in removing the last fragments of *débris*, for they frequently get embedded in clots of blood in the bladder, which have to be broken up by frequent washings with the aspirator and then removed with the entangled *débris* of stone.

Cystitis accompanied the calculous disorder in a large proportion of cases, and in many instances the urine was fœtid. For this complication no special treatment is, as a rule, necessary, the removal of the stone—the cause of the cystitis—almost invariably resulting in its disappearance.

Many of the patients also suffered from enlargement of the spleen, dysentery, piles, prolapsus ani, and other diseases. In short, no case of stone coming under my care has been refused the benefit of operation, no matter in what state of health, some having been apparently moribund when placed on the operating table.

Under these circumstances I need scarcely add that kidney disease in all its stages was frequently present, but, so far as the performance of litholapaxy goes, I never desist from the operation on this account; for, no matter what the state of the kidneys may be, I perform the operation, knowing that it gives the best prospect of recovery. Contrast in this respect Bigelow's operation with the old operation of lithotrity, which was contraindicated when kidney disease was present.

CASES IN WOMEN.

There were 13 females amongst this series of 598 litholapaxy operations, all turning out successful. One woman, from whom I removed a stone over an ounce in weight, was seven months pregnant and made an excellent recovery. The only special difficulty met with in this operation in the female is in retaining water in the bladder during its performance. Owing to the shortness and width of the urethra the water rushes out beside the instruments. This I now obviate by getting an assistant to place the fore and middle fingers of one hand in the vagina and press the posterior lip of the urethra against the lithotrite or cannula, a manœuvre which prevents the water from rushing out.

LARGE STONES.

I have already mentioned that there were amongst this series 30 calculi weighing 2 ounces and upwards. One was a hard uric acid stone, 6¼ ounces; and as this is, I believe, the largest stone on record removed by litholapaxy, and as the case has not yet been published, I will give the details briefly.

The patient was a male, aged 45, with symptoms of stone lasting twelve years. He was in wretched health, the urine being muco-purulent and fœtid. The operation was performed on February 20th, 1892, Surgeon-Major Tuohy being present. When placing the patient on the operating table I imagined that suprapubic lithotomy would be necessary, but determined to try litholapaxy. Introducing my largest lithotrite, after some manipulation I caught a portion of the stone (which I found was irregular in shape), broke it off, and reduced it to fine fragments. This process I repeated again and again, chipping off portions or scraping the sides of the stone till I had removed about 3 ounces of *débris*. I then found that the main body of the stone was lying in a wide-mouthed pouch at the fundus of the bladder. After some difficulty I grasped the stone in this position, but could not move it from the sac into the main cavity of the bladder. After much effort I crushed the stone *in situ*, and then pulverised the fragments one by one, some in the pouch and some in the general cavity of the bladder. The central portion of the stone, 1½ inch in diameter, was so extremely hard that several most powerful efforts with the lithotrite were necessary before it was crushed. The operation lasted two hours, during which 3½ ounces of chloroform were used. A small pedunculated mucoid tumour, the size of a small cherry, was brought away by the lithotrite during the operation. The patient was much exhausted after the operation, but soon picked up strength. Surgeon-Major Seymour saw him with me on February 24th, when he was sitting up in bed; and on March 9th he was free from urinary symptoms, but weak. On June 18th Dr. Seymour, who took charge of my work during my holiday, wrote me: "That man from whom you removed that enormous stone came to show himself the other day. The last time I saw him he came in a dooly, looking like an old man of 70. Now he looks a fairly robust man of 40. I would not have believed such a change possible. He is able to walk as well as ever." One year after the operation (February 21st, 1893) this man appeared before me in hospital in perfect health. He informed me that his wife had presented him with a daughter one month previously, though he had lost all sexual power for several years before the operation.

The removal of large calculi of 2 ounces and upwards demands much patience, perseverance, skilful manipulation and manual labour. By the process of chipping and scraping above indicated, and fully described in a paper of mine,[4] large calculi can be reduced to such a size that they can be caught and crushed by a lithotrite which would not originally lock on them. In this way I have crushed successfully in a lad of 15 a stone weighing more than 3½ ounces by a No. 9 lithotrite. The amount of manual labour required for deal ng with these large calculi is excessive. My hands were often blistered and my arms frequently ached for days after performing litholapaxy in one of these cases.

ENCYSTED CALCULUS.

The manner in which the main portion of the large calculus above referred to, which lay in a pouch, was disposed of, naturally leads one to the consideration of encysted calculus of the bladder. Hitherto such cases have, by general consensus of opinion, been relegated to suprapubic lithotomy, and I am unaware of any published writings in which dealing with them by litholapaxy has been advocated. When the opening into the sac in which the stone lies is narrow, or when the stone almost fills the pouch, it will be necessary to have recourse to cystotomy, but, so far as my experience goes, such cases are rare, the stone as a rule lying loosely in a wide-mouthed pouch. For several years I have now been in the habit of dealing with encysted calculi mostly by litholapaxy, withdrawing the stone into the general cavity of the bladder when possible and crushing it there; otherwise crushing it in the sac. Though limits of time will not permit of my dealing exhaustively with this subject here, I will venture to give one typical example.

On January 30th, 1892, a male, aged 60, was admitted to hospital with symptoms of stone of three years' duration. These had commenced with severe kidney colic. The patient was so weak and in such pain that he could not leave his bed. He was passing blood and pus in the urine. Dysentery and piles were also present. On January 31st I performed litholapaxy. The stone was felt to be a large one, lying in a sac on the right side of the bladder, about the position of the ureteral orifice. It was found impossible at first to grasp the stone, owing to the walls of the sac hugging it rather tightly. By injecting water into the bladder by the aspirator this difficulty was overcome, the stone being caught by the lithotrite in the sac. I tried to withdraw it into the bladder, but this could not be effected owing to the neck of the pouch being too narrow; so the stone was crushed *in situ*. After this the fragments were crushed, some in the sac and some in the general cavity of the bladder. No. 15 lithotrite and No. 18 cannula were introduced several times before the whole of the *débris*, which weighed 705 grains, was removed. The stone was mainly phosphatic. After the calculus had been removed I made a survey of the sac by means of the lithotrite. It appeared to be egg-shaped, with smooth walls. The opening into the bladder was circular, with a sharp, smooth, well-defined edge, and 1½ inch in diameter. The depth of the sac as felt by the lithotrite was 3½ inches. The day after the operation the patient was sitting up in bed, free from pain and passing urine freely. He said he had not felt so well for two years. He made a rapid recovery, and was discharged on February 6th.

DIAGNOSIS.

In the *Indian Medical Gazette*, March, 1884, I first drew the attention of the profession to a new method of diagnosis for small calculi by means of the aspirator and cannula. It frequently happens that no matter how carefully we search with the sound, a small stone, weighing a few grains only, evades detection. When, therefore, a patient comes under my care with the usual symptoms of stone, and the sound fails to detect one, I pass a full-sized cannula, apply the aspirator, and go through the process of pumping in and exhausting water, moving the eye of the cannula about in the bladder in various directions, and inserting it into pouches, should such exist. Should a small stone be present, it will be carried with force against the eye of the cannula by the outward stream, and a ringing click announces its existence. Frequently the small calculus will pass through the cannula and appear in the glass receiver, thus obviating the necessity of passing a lithotrite. I have by this means detected a large number of small calculi in my practice. The practical advantages of this simple process have been recognised by several fellow labourers in this branch of surgery.

LITHOLAPAXY IN MALE CHILDREN.

As already mentioned, there were 158 male children, or lads below the age of 16, operated on by litholapaxy. It was not till 1886, four years after I had commenced to perform litholapaxy in adult males, that I performed the operation in children. Though an ardent advocate of the modern operation in the adult, I, like most other surgeons, at first opposed its extension to the case of male children, basing my oppo-

[4] BRITISH MEDICAL JOURNAL, October 12th, 1889.

sition on the undeveloped condition of the genital organs, the bladder being small, the urethra narrow, and the mucous membrane sensitive and liable to laceration. On the other hand, lithotomy in the child had always been a comparatively successful operation; and, so far as my own practice goes, I had no cause in this respect to abandon this operation in favour of litholapaxy, having had the good fortune to have now performed 197 lithotomies in male children with only 1 death. In fact, it was only after having had a run of 191 successful lithotomies in children that a fatal case occurred. In spite of this, however, I was so much impressed by the results announced by Keegan in two very able papers published in the *Indian Medical Gazette* in 1885, that I at once ordered the necessary instruments, and decided on giving the operation a trial. Since that time I have performed litholapaxy in male children 158 times, with 2 deaths. My first 119 cases were all successful, and I had then the misfortune of losing 2 cases consecutively. All our foregone theoretical objections to this operation in case of male children have vanished into thin air when pitted against the stern reality of accomplished facts. Notwithstanding the great success I have had with lithotomy, I have now practically abandoned the operation in favour of litholapaxy, owing to the two great advantages that the latter possesses—rapidity of cure and avoidance of a cutting operation. To Keegan is due the honour of having, in the face of strong opposition, shown that litholapaxy in male children is a feasible and safe operation.

MORTALITY.

Amongst these 598 litholapaxy cases there were 11 deaths; namely, 9 amongst 426 operations on adults, and 2 amongst 164 on children. These fatal cases, with the exception of the last two, have been fully reported in the medical journals from time to time; and the details of the remaining two will be given in due course, when I publish my next series of stone operations. The causes of death were: exhaustion 5 (with pneumonia superadded in 1); peritonitis, 2; pyæmia, 1; acute nephritis, 1; and acute cystitis, 2. All these were in bad health when coming under operation except one; and this patient had had retention of urine for thirty-six hours, with the calculus blocking the prostatic urethra. The kidneys were diseased in several of the cases, particularly in one, from whom I removed 3½ ounces of oxalate of lime stone, and in the case which died from acute nephritis. In this latter I found at the necropsy two calculi in the right kidney, weighing 2 drachms. One patient was 90 years of age. One, a child of 13 years, who died of cystitis, had been roughly sounded a week before coming under my care, since which time he had been in great agony, so that probably the bladder had been injured during the sounding.

The 11 deaths in 598 litholapaxy operations, namely, 434 adults with 9 deaths, and 164 children with 2 deaths, give a mortality of 1.84 per cent. on the whole, or about 2 per cent. in adults and 1.22 per cent. in children. There were, on the other hand, 254 lithotomies in my practice with 11 deaths, namely, 54 adults with 10 deaths and 200 children with 1 death, giving a mortality of 4⅓ per cent. on the whole, or 18½ per cent. in the adult, with ½ per cent. in children.

This is, however, not a fair method of comparing the results of the two operations, as since the introduction of litholapaxy into my practice only those patients that were unsuitable for this operation were subjected to lithotomy. Previous to my commencing to operate by litholapaxy I had done 94 lithotomies, of which 33 were in the adult with 6 deaths, or a mortality of 18 per cent., there being no deaths amongst children. Since then I have performed 758 operations in all with 16 deaths, or about 2 per cent., namely, 455 in the adult (434 litholapaxies with 9 deaths, and 21 lithotomies with 4 deaths) with 13 deaths, or less than 3 per cent.; and 303 in children (164 litholapaxies with 2 deaths, and 139 lithotomies with 1 death) with 3 deaths, or about 1 per cent. This is the proper method of comparing the results of the two operations; and, setting aside the results in children in whom lithotomy has always been a comparatively successful operation, it will be observed that the introduction of litholapaxy into my practice has had the effect of reducing the mortality in operations for stone in the adult from 18 to 3 per cent.

I may here point out that though I have been singularly fortunate in my lithotomy cases in children, the mortality attending this operation in the adult in my hands approximates pretty closely to that recorded in hospital practice both in England and India. Thus, Sir Henry Thompson has collected details of 1,827 lithotomies performed in British hospitals previous to the introduction of litholapaxy, showing 229 deaths, or 12½ per cent. There were 1,028 children with 68 deaths, or 6⅔ per cent., and 799 adults with 161 deaths, or 20 per cent. In an article in the *Lancet*, March, 1885, I gave the statistics of 2,592 lithotomy operations performed in Indian hospitals in 1882, showing a mortality of about 13 per cent. on the whole, practically the same as in British hospitals.

When I commenced to perform litholapaxy in 1882, I at first adopted this operation in selected cases in the adult only, relegating the difficult cases to lithotomy; then, as I gained experience, extending it to most of my adult cases. Then, in 1886, influenced by Keegan's results, I extended the operation to male children. I have now practically abandoned lithotomy in my practice in favour of litholapaxy, the force of which remark will be seen when I state that amongst the last 300 cases of stone performed by me in patients of all ages from 2 to 90 years, the calculi weighing from 2 grains to 6⅛ ounces, there were only 6 lithotomies (1 suprapubic and 5 perineal), the modern operation having been found feasible in all the other 294 cases. In 1890 I had 106 cases of stone under my care, and they were one and all treated by litholapaxy with one death. With results such as these I have not felt inclined to follow the lead of Sir Henry Thompson in his attempt to revive the operation of suprapubic lithotomy in cases of large calculi when I could deal with them by litholapaxy, nor of his somewhat rash imitators who adopt the suprapubic operation in cases of small stone. I do not think that we can expect to improve on the results above indicated whilst we continue to extend the operation of litholapaxy to all patients coming under our care, no matter in what condition, even to apparently hopeless cases. They are, indeed, results unequalled, I venture to say, in any other large and important operation in surgery, and entirely due to the introduction of Bigelow's method of operating. That great surgeon is now no more, but his name is imperishably connected with the modern operation for stone and the word "litholapaxy" which he introduced to denote it.

THE POSITION OF A HUMAN BODY BURNT, BUT NOT COMPLETELY DESTROYED, BY FIRE.

BY JONATHAN BECKER, M.B.,
Colchester.

PHYSIOLOGICALLY, we know that a muscle contracts by heat, and that if the action of heat be continued, it passes into a state of heat stiffening or heat rigor, a condition beyond recall by the use of any known process. Anatomically, it is interesting to note that the larger a muscle in any one group, the nearer its relation to the surface.

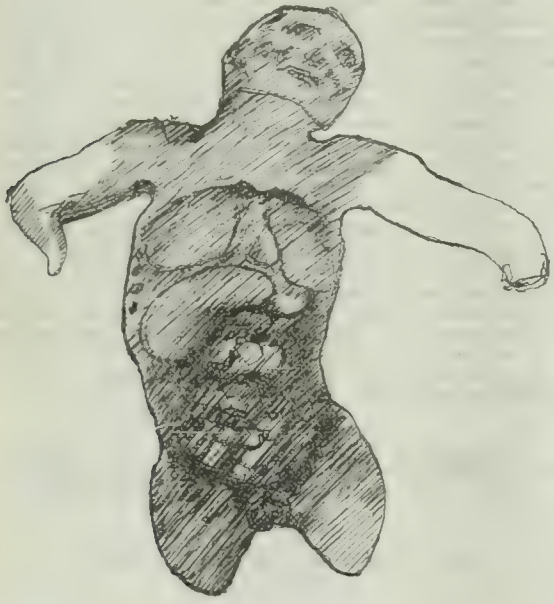
The muscles of the human body are not conductors of heat; it follows, therefore, that heat would take a longer time to affect the deeper muscles than it would the more superficial ones, as heat must reach the deeper ones in the first place by convection and radiation through the already stiffened superficial muscles. It follows, therefore, that an intact human body which is subjected to heat in a sufficient degree, and which has not been affected with *rigor mortis*, will assume a position which is determined by the contraction of all the superficial muscles. This position, being the resultant of all the superficial muscular forces, might be called the position of superficial muscular equilibrium. If heat stiffening has taken place, this position is permanent until putrefaction is complete, unless destroyed by mechanical means.

The position of such a body clearly has no relation to the position it occupied before being affected by heat. The head must be kept in the middle line of the body, the jaws

firmly closed, the chin extended, the head extended back upon the neck, the neck straight, the upper part of the chest in a position of inspiration, the shoulders slightly raised, the arms raised outwards almost to a right angle, more backward than forward, the elbow flexed, the forearm in a position of supination, the spine straight and extended, the pelvis very slightly tilted upwards, the thigh extended, abducted and rotated outwards, and the knee flexed.

In a body in which *rigor mortis* is fully established in its second stage, or has passed off, the muscles are dead and will not react to heat: so such a body would occupy the same position as it did when heat reached it. Would it not be possible, then, to say, from the position of such a body, whether *rigor mortis* had occurred or not, so as to reach some data as to the time such a body had been dead? The factors of *rigor mortis* being destroyed by heat, *rigor mortis* would not occur in contracted and heat-stiffened muscles, as it would not have had time to declare itself.

The accompanying drawing—made from a rough sketch I took of the remains of the late Mr. Welch, the victim of the recent case at Colchester—is a fair representation. It is seen that the head inclines to the left shoulder; there was no skin on the right side of the anterior part of the neck; what was part of the sterno-mastoid was retracted high up in the neck;



below there was no trace of that muscle because the superior and anterior surfaces of the clavicle at its sternal end had been charred off; the carotid sheath was exposed, and on the antero-external side of the right internal jugular vein were found two small transverse apertures, whose edges were adjacent and regular; on the left side, in front of the neck, the skin, although discoloured and burnt, was intact.

I am of opinion that the sterno-mastoid muscle was cut through, the position of the head to my mind showing that the action of the right sterno-mastoid was wanting.

Some rough experiments I made on the bodies of fresh and kept animals led me to believe that it is possible in a fresh cadaver to modify the position of equilibrium by dividing one or more of the superficial muscles.

In passing I may state that the identity was mainly confirmed by the spinal curvature, which was clearly shown in the remains: and this is worthy of note because I think it shows that if any defect existed before death it would be made apparent after.

Would it be unreasonable to formulate the following?—

1. For bodies burnt before *rigor mortis:* (A) The position of superficial muscular equilibrium described. (B) If a superficial muscle has been divided before the fire reached it position (A) would be altered to an equivalent extent.

2. For bodies burnt after *rigor mortis:* (A) No definite position. (B) If a muscle be divided there is no equivalent alteration of position.

REMOVAL OF UTERUS, OVARIES, AND FALLOPIAN TUBES: RECOVERY.

BY EDWARD MALINS, M.D.,
Obstetric Physician to the General Hospital, Birmingham.

AT a meeting of the Obstetrical Society, held on December 5th, 1892, I showed a specimen of left hæmatosalpinx, weighing 4½ ozs., removed from a girl, aged 19, on May 5th. Through the kind interest of Mr. J. H. Targett, the specimen was reported upon, and placed in the museum of the Royal College of Surgeons. It is represented in Fig. 1.



Fig. 1.—Left Fallopian tube and ovary, Royal College of Surgeons Museum.

The after-history of the case is interesting. In the complete form it may be described as a case of vaginal atresia, left hæmatosalpinx, removal, subsequent hæmatometra; and right hæmatosalpinx, removal. After the first operation the patient apparently did well for a time. She was readmitted into the General Hospital on January 11th, 1893. She stated that up to three months previously her health had been very good. There had been no sign of any menstruation. About this time she noticed a lump on the right side of the abdomen; this became painful and tender to the touch. The uterus could be felt above the pubes, and to the right of it a mobile, elongated tumour, some 3½ inches in length, occupying the iliac fossa. The vagina was occluded at its upper end, and no cervix could be felt through it. It was evident that the two swellings were the uterus and the right Fallopian tube filled with blood.

On January 16th the abdomen was again opened. There were some adhesions to the anterior wall, omentum, and between the two masses, which embraced the uterus, Fallopian tube, and ovary; these were separated, and the whole manipulated free. The tube was transfixed, and tied up with the accompanying ovary; the uterus was drawn up to the opening, transfixed with a knitting needle about the level of the cervix, a *serre-nœud* placed above it, and the distal part cut off. The peritoneal edges of the wound were carefully sewn round the pedicle, the stump smeared with perchloride of iron, and double cyanide gauze dressings applied. The

clamp was removed on January 29th. The highest temperature recorded was a little over 100° F., and the recovery was uneventful. In cutting away the uterus some thick, dark blood escaped; when emptied from the uterus there was 4 ounces; the tube with its ovary weighed 6 ounces (Fig. 2).



Fig. 2.—Right Fallopian tube and ovary, uterus cut away.

In the record of the first operation it was noted that the patient first menstruated three years previously, not again for eighteen months and then only slightly, never since. There was an indistinct recollection of some injury at the age of 11, but about four months before her first admission she was knocked down and sustained some injury to the abdomen, which confined her to bed for several days. When admitted the vagina was examined; there was a small aperture in a transverse septum at the upper part, which no doubt became quite occluded, for it could not be found afterwards, nor could the cervix be defined through the obstruction; the occlusion was, therefore, practically complete. The patient has remained in good health since the time of the operation.

REMARKS ON A CASE OF CONGENITAL RICKETS.

By T. C. RAILTON, M.D.Lond., M.R.C.P.,
Physician to the Manchester Clinical Hospital for Women and Children.

CASES of rickets in the full tide of evolution at the time of birth are rare, though the milder forms of development are not very infrequent. I have seen well-marked beads upon the ribs of infants two months old, which served to show, I think, that the disease had originated during fœtation. But of actually advanced rickets at birth, published cases are few in number, at all events so far as my knowledge extends. Amongst other observers, Jules Guérin, writing in 1837, mentioned having met with three cases of congenital rickets out of a total of 346 cases of rickets at all ages. Léon Tripier, in his article in the *Dictionnaire Encyclopédique*, written in 1874, stated his belief that the disease could commence as early as the third month of intrauterine life. Bode in 1884 showed an infant stillborn at seven months with symptoms said to be confirmed by a microscopical examination of the bones. Dr. Thomas Barlow exhibited a case at the Clinical Society of London in 1888, the features of which bore a striking resemblance to the case I am about to describe.

A. W., aged 7 months, was brought to the Clinical Hospital on April 21th, 1893, on account of certain deformities of the limbs, which are shown in the accompanying photograph.

Personal History.—Her mother stated that these deformities were in existence at the time of her birth, and that the peculiar softness of the back of the head, to be presently mentioned, was remarked about the same time. The child had always sweated a great deal, and her limbs had been noticed to be tender when they were handled, especially the left arm. These points were, of course, carefully inquired into, and, apart from the evidence of the bones themselves, which one could hardly imagine to have become so completely and universally deformed had the rickets commenced after birth, there remained no reasonable doubt that the child had come into the world with the disease fully developed. She had been brought up at the breast until she was 2 months old, and subsequently she had been fed upon condensed milk. She had not cut any teeth.

Family History.—There was no family history pointing to syphilis: the mother certainly had miscarried once (after the birth of her second living child), but none of her children had shown any symptoms either of snuffles or rash. She herself had suffered from rickets in childhood, and as a consequence had bow legs and a somewhat contracted pelvis. Of the four other children of the family, I had the opportunity of examining one, aged 2½ years, and found beading of the ribs, enlarged epiphyses of the radii, slightly bowed tibiæ, but no signs of syphilis. The mother had not been in ill-health during the time she was carrying the patient.

Condition on Admission.—On her admission the following notes of the child's condition were taken. She has an intelligent face, with good though very thin features, the sucking pads showing distinctly. Her height is 18 inches instead of 24, her weight 6 lbs. instead of 19 lbs. Her limbs and body, except the abdomen, are emaciated. There are no blood extravasations and no indications of cachexia. The forehead is rather bossy, but the vertex of the skull is not flattened. The anterior and posterior fontanelles and the sagittal suture are widely open, and there are small lateral fontanelles at the inferior angles of the parietal bones. The membranous part of the occipital bone is quite unossified, so that it feels soft and yielding wherever pressure is applied. The neck is thin but not short, and there are no fatty swellings. The thyroid gland can be felt. The chest has the sternum thrown forwards, and there are well-marked beads at the junction of the ribs with their cartilages, and also smaller beads behind in the region of the angles. In front a deep transverse groove passes outwards and downwards from the ensiform cartilage. The abdomen is globular, and shows no enlargement of either liver or spleen. The patient moves both upper and lower extremities perfectly well. The arms are shortened by the extreme distortion of



the humeri, so that the tips of the fingers barely reach the junction of the upper and middle third of the thighs. At the upper end of each humerus there is an abrupt bend, with the convexity turned towards the axilla, and the corresponding receding angle is visible on the outer side of the arm below the acromion process. There is no thickening of the shafts of the humeri or of any other bone. In each forearm there is a curvature of the radius and ulna, with the concavity forwards, especially marked on the left side. There is little or no enlargement of any epiphysis in the upper extremities. The hands are small, and have long, delicate, tapering fingers. The lower extremities are greatly shortened by their various curvatures, and are habitually folded in tailor fashion, much the same, I imagine, as they were in the womb. The lower epiphyses of the femora are enlarged. The femora themselves are much curved, with the convexity outwards. In the middle of the left femur there is a green-stick fracture, bending the lower half forwards and causing a projection behind and externally. The tibiæ are the most deformed bones in the body, the upper two-thirds in each leg being much curved, with the convexity forwards, while at the junction of the lower with the middle third, there is an abrupt bend backwards, leaving a strongly projecting angle in front. The lower third on each side has two curves, so that there is a convexity both forwards and outwards. On the left side this double curvature is exceedingly abrupt. The feet are small and well formed.

After-history and Treatment.—After admission it was observed that the child perspired profusely during sleep, so that the sweat stood in beads upon her forehead. She showed great tenderness in the

limbs when they were handled. Five days after admission she suffered from a rather severe attack of bronchitis, but recovered in the course of another week. She was kept under treatment in the hospital nearly five months, and was then sent home very much improved, and having gained one pound and three-quarters in weight. The treatment adopted was as follows: Cod-liver oil and iodide of iron were given by way of medicine, and on May 28th the right leg was forcibly straightened by my colleague, Mr. Southam, and put up in splints. On June 2nd the left leg was treated in the same way. A month later the splints were removed, and extension was applied to both legs. On July 19th the following note was taken: "The limbs are straighter, the legs being firm, and can be handled without any pain." With the view of straightening the femora, splints and plaster-of-paris bandages were applied on August 18th, but without much improvement being effected. After her discharge from the hospital, the child was brought once to the out-patient room, and looked very well, but I heard a few weeks later that she had died from broncho-pneumonia, after a very brief illness.

These cases of intrauterine rickets help to show that we are still far from an adequate explanation as to the causation of the disease, that is, if it be accepted, as I think it should, that the two forms, postnatal and antenatal rickets, are identical. Improper diet, damp, and want of sunlight, often apparently potent factors in the production of the disease, cannot be assigned as exclusive causes. It would appear that some underlying influence affecting nutrition, of the bones especially, and perhaps acting through the nervous system, may be set in motion by a variety of causes.

The fact of the mother in the above case having suffered from rickets in childhood, and of the patient's brother also showing signs of the disease, appears to me to be worthy of consideration as supporting the view long since suggested by Trousseau and others, that heredity plays a part in the etiology of the disease, though to what extent it does so we have no evidence at present to show.

MEMBRANOUS VAGINITIS AND ENTERITIS.

By P. RHYS GRIFFITHS, M.B., B.S.(Lond.),
Medical Officer to Out-patients, the Infirmary, Cardiff.

History of Case.

E. M. C., aged 39 years, a single woman of frail *physique*, medium height, and dark complexion, was first treated for membranous discharges from the vagina in 1883. Menstruation began at 14. She was regular every month until the "shreds" appeared. The catamenia were accompanied by severe pain. The shreds began to appear when she was 26 years of age; since then the catamenia have been very irregular. The passage of the shreds took place during and in the intervals between the menstrual periods; it was more abundant with the menses, and was accompanied with "stinging, smarting, and heavy shooting pain." On two occasions I had an opportunity of seeing the patches upon the vaginal wall. They were about the size of a shilling, and resembled closely patches of diphtherial membrane without surrounding signs of inflammation. When detached they left a slightly reddened but unbroken surface.

Urinary troubles had been severe. She said that in the beginning of her illness she passed "very heavy gravel" and some blood. Occasionally there were periods of total suppression of urine, at the close of which, with "slenting, tearing pains," the shreds would pass accompanied by urine and sometimes blood. Incontinence of urine was for a long time a prominent symptom. The urine was generally alkaline, and it rapidly became fœtid on standing; it contained no albumen, and presented no special microscopic characters.

For some years tumefaction and great tenderness of the bowels had been experienced. Shreds were passed in comparatively small number from the rectum. These had been overlooked by the patient till her attention had been directed specially by me to the fæces in 1887. She was always very constipated. The appetite was very capricious; the tongue generally coated with white fur. At irregular intervals the patient suffered from attacks of retching and vomiting, lasting for about twenty-four or forty-eight hours, accompanied by marked prostration, the temperature going up to 101° F. She complained at this time of acute pain in the epigastrium. No increase in the number of shreds was observed during these attacks. She attributed them to the separation of flakes in the bowels.

From 1883 till 1889 a pustular rash and deep ulcers appeared in the left arm and forearm and the left side of the face and head. The rash was apparently worse during the menstrual periods, and the recently-healed ulcers would often burst open at these times. The hair of the head was almost completely shed at this time. Between 1885 and 1887 the rash only appeared at the menstrual periods. The patient is very intelligent. There is a marked emotional tendency. Toothache and neuralgia have occasioned considerable suffering. She has always slept badly.

Recovery was very slow. In June, 1892, she returned from Bournemouth, very much better in all respects. The shreds had gradually diminished in number and in size and then finally disappeared, and she was able for the first time in ten years to walk about without much fatigue. Since 1892 there has been occasional irritability of stomach and intolerance of food, and she has on two occasions suffered from gastric ulcer.

Treatment was directed chiefly to improving the general health. For the relief of pain hot applications were applied to the abdomen, and an occasional blister, with morphine internally. Of many remedies tried, the only one which seemed to exert any good general effect was arsenic. This was pushed to its full physiological limit for considerable periods, the membranes diminishing in size and number during its administration.

Description of False Membranes.

The membranes, when I first saw the patient, were some of them from 3 to 4 inches long and 1 to 2 inches wide. Those in my possession now are about the size of a florin, irregular in shape, some opaque, others translucent. The outer surface is smooth, the inner rougher and thrown into folds. Under the microscope they are seen to consist of a structureless matrix in which epithelial cells and granular *débris* are embedded. The cells here and there exist in layers. This is especially marked in the vaginal shreds, where the epithelium is distinctly stratified. In the intestinal shreds the epithelium is spherical and cylindrical.

My friend, Dr. Sidney Martin, has very kindly furnished me with a report upon one specimen. Chemically (1) it gives the xanthoprotein reaction for proteids; (2) it is insoluble in acids or alkalies; or (3) it is undigested by pepsin. His microscopical examination confirms my own. Dr. Sidney Martin further states that there are no bacteria, and that the cast is made up of hypertrophied epithelium and contains no mucus or other element.

Pathology.

The general opinion is that the pathogenesis of this very rare condition must be looked for in the nervous system. The wide distribution of the disease, the well-marked neurotic indications, the appearance of a pustular rash concurrent with increase in the discharge of membranes at the menstrual periods point to a nervous origin. The shreds *in situ* suggested a bacterial origin, but this was negatived after examination. In the absence of pathological data in regard to the nerves and nervous system, the cause of this disease is as yet only a matter of speculation. For the inflammatory theory of Trousseau and some American writers there is no evidence, either in the condition of the organs upon which the membranes are found or the general symptoms, or the membranes themselves. The casts have been attributed to the "exhalents," to the administration of mercury, to the growth of sporules, to a papular eruption of the mucous membranes, and to a variety of other causes.

This disease would appear to be more common in America, where it is generally known as mucous colitis, than in this country. Membranous enteritis is met more frequently in women than in men. The disease is usually of long duration—sometimes nineteen and twenty years—but the termination is almost invariably favourable. The subjoined references to the literature of the subject may be of interest.

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A NOTE ON THE MODE OF ACTION OF IODINE.

BY DAWSON TURNER, M.D.EDIN., M.R.C.P.LOND.,
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THE value of iodine as an absorbent has long been known. It is used to cause the absorption of enlarged glands, of serous effusions, and of thickenings due to chronic inflammations; and this action is believed to be due to a stimulation of the lymphatic system.

Perhaps the most remarkable results due to the action of a compound of iodine in producing absorption are those which were attained by Major Holmes and Captain Cunningham in the treatment of goitre in India. They recommended that the enlarged thyroid should be smeared over with the red iodide of mercury ointment, and that then the patient should be made to sit with his neck exposed to the rays of the sun or of a hot fire for many hours. The results were extraordinary.

Sixty thousand natives were treated in two years, and a cure was commonly effected.[1] My object in this communication is to offer a suggestion, from the point of view of the physicist, as to the mode of action of the iodine in these cases. Iodine is used in physical experiments to cut off the visible rays of the spectrum. A solution of iodine in bisulphide of carbon will quench the visible rays of the sun, but will transmit the invisible heat rays. The solution is remarkably transparent to the heat rays: it is diathermanous. Now, the fact that Major Holmes found that the action of the ointment was much intensified by exposing the patients to the direct rays of the sun has appeared to me to depend upon the physical action of the iodine that I have mentioned. At any rate, I offer this as a suggestion. Further, the fact that the red iodide is so efficacious points in the same direction, because the red substance would also serve to transmit chiefly the heat rays. The solar radiation would be filtered by the application, and the gland would be subjected to the full blaze of the calorific rays without the vibrations of its molecules being interfered with by the visible rays. Professor Tyndall[2] made some experiments with paper reddened by the red iodide of mercury, and found that it was also very transparent to heat rays; it therefore falls into line with simple iodine. If this suggestion as to the mode of action of iodine be correct, we do wrong in covering up diseased parts to which iodine has been applied; we ought rather to expose them freely to the sun's rays.

SUCCESSFUL LIGATURE OF COMMON CAROTID FOR SECONDARY HÆMORRHAGE FROM INTERNAL MAXILLARY: TRANSFUSION OF SALINE SOLUTION.

BY S. EDWARDS JONES, L.R.C.P., L.R.C.S.EDIN., ETC.,
Late Senior House-Surgeon, Glasgow Royal Infirmary;
Is-y-coed, Wrexham.

I RECORD the following case for two reasons: 1. The usually high percentage of mortality in ligature of the carotid for secondary hæmorrhage. 2. The benefit accruing from the transfusion of a saline solution.

F. L., aged 55, a coal dealer, was admitted on March 15th, 1894, to Glasgow Royal Infirmary, under Professor Knox, for epithelioma of the lip and malignant tumour of inferior maxilla of about two years' duration.

On March 21st, under chloroform, Dr Knox excised the left half of the inferior maxilla. The hæmorrhage was free, but well under control.

The patient progressed favourably. The external wound healed by first intention, and the temperature was normal, but there had been a foul discharge from the mouth. On April 2nd profuse bleeding set in, coming from the left side of the mouth. An attempt was made to control it from the mouth, which proved of no avail; Dr. Knox made an incision along the course of the former wound, and by the free use of the actual cautery succeeded in arresting the bleeding. The wound was then packed with gauze.

The foul discharge increased on April 5th and 6th, and the gauze on the face wound was changed frequently. No bleeding occurred until the night of April 7th, when it became of a very severe character. From the difficulties experienced in the attempt to arrest it before, and the failure to prevent a recurrence, I decided, in the absence of Dr. Knox, to at once cut down upon and ligature the common carotid on the left side. Chloroform was administered, and the shoulders having been elevated, an incision was made 2½ inches long opposite the thyroid and along the course of the inner edge of the sterno-mastoid. The skin and platysma were divided, the anterior jugular avoided, the deep cervical fascia cut through, and the sterno-mastoid and the omo hyoid muscles having been displaced, the carotid sheath was exposed with the descendens noni nerve in front of it. A piece of sheath was then pinched up, a small opening made in it, a director introduced, and the artery exposed for a quarter of an inch. An aneurysm needle, with a strong aseptic ligature of silk, was passed behind the artery from without inwards, and tied. At the time of tightening the ligature the breathing was hardly appreciable, but it improved in a few seconds. The wound was then douched out with carbolic, 1 in 40, dried, dusted with iodoform, a strand of catgut left in for drainage, and the wound sutured. Dressings were then applied.

The patient was pale, covered with a clammy sweat, and the radial pulse could not be felt. It was decided to transfuse. The median cephalic was opened, and 20 ounces of a warm saline solution infused. The patient seemed to revive in a few seconds, the pulse became appreciable, and the skin warmer. He was a little restless immediately after the operation, but a morphine suppository (a quarter of a grain) was given, and he passed a good night.

After the operation he on one or two occasions complained of slight headache on the left side, relieved at once by bromide of potassium in 20-grain doses. The carotid wound healed nicely, in spite of a continual dribbling from the face wound. On three occasions a small amount of blood oozed from mouth, but it was overcome easily by packing from external wound. There was no pulsation in the carotids or temporal arteries above seat of ligature. The general condition of the patient on May 12th was good. With the exception of the slight headache he had suffered no ill-effects from the ligature. The temperature was normal.

I have no doubt in my own mind, and this is also borne out by Dr. Knox, that the bleeding in this case was from some branches, if not from the main trunk, of the internal maxillary.

It may be asked: Why was no attempt made to ligature the external carotid? My reasons were that: First, we had a wound on the face, communicating with the mouth, which wound could not be kept aseptic. A continual dribbling down the neck could not be always avoided, however great our care, and this circumstance offered but a poor chance to the perfect healing of a wound in its immediate proximity; indeed, it affected the wound made, although some distance away. Secondly, where seconds were a consideration it was only right that I should choose the least difficult operation.

Was the oozing mentioned a recurrence? I think not. I put it down as due to the sloughing which continued for some time from the interior of the mouth; it could not have come from any large vessel, as it was so easily controlled by packing.

The mortality from this operation, however, is so high—according to Guthrie over 50 per cent.—that under more favourable circumstances as regards the choice of a site for an incision, I should, if called upon in future, ligature the external carotid, which must be the much less dangerous procedure.

The shock from the ligature, considering that the patient (1) lost so much blood, (2) was recovering from the effects of a severe operation, and (3) the deprivation of the brain for the time being of half its blood supply, was very small indeed. Whether the rapidity of his recovery could be accounted for by the infusion of saline solution (20 ounces) is a matter for investigation. I may say, however, that in six cases of transfusion which I have seen, two of which I did myself, the change in a few seconds has been remarkable, and in all these cases has been followed by good results. The solution used in the case was: ℞ Sodium chloride ʒij, sodium phosphate ʒss to 20 ounces of warm water.

[1] Quain's *Dictionary of Medicine*, Goitre.
[2] *Heat as a Mode of Motion*, chap. xiii.

MEDICAL PROTECTION IN ROME.—The medical practitioners of the city and province of Rome have determined to form a "College" or association for the protection of their interests not only in their relations with patients, but against public authorities and hospital governing bodies. At a recent meeting of the Società Lancisiana, an elaborate report on the scheme, which has been for a considerable time in contemplation, was presented by Professor Sciamanna, and a provisional executive committee was formed to carry the proposal into effect. The members of the committtee are Professors Sciamanna, Marchiafava, and Postempski, and Drs. Parisotti, Bertini, Mazzoni, Impaccianti, Torti, and Rossoni. The provisional committee has power to add to its number by inviting six of the best-known and most influential practitioners in the Italian capital to join it.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

CANCER HOUSES AND THEIR VICTIMS.

WHETHER the present state of our knowledge will permit us to declare that cancer is directly contagious or not, we cannot ignore the fact that in certain houses it does repeatedly show itself among those who have no blood relationship between them. The following cases occurring under my own care always appeared to me as most interesting coincidences—and probably they are only such—but after reading the abstract of the Morton Lecture by Mr. Shattock, which ably disposes of the histological element, as well as the valuable contribution in the BRITISH MEDICAL JOURNAL of June 9th by Mr. D'Arcy Power, I resolved to communicate them to the profession.

J. K., aged 50, employed as a night watchman, occupied a house of two apartments, and for the sake of quietness always slept in a concealed bed in the room. He died of cancer of the liver.

J. L., aged 54, succeeded to the work and house, and within two years died of cancer of the bladder.

A. L., aged 60, was then appointed, and he succumbed to cancer of the stomach about eighteen months thereafter.

It should be noted:

1. That these three men were all strong, healthy, and well developed, and had had no previous serious illness.
2. That there was no history of hereditary transmission.
3. That there was no relationship whatever between them.
4. That the conditions of home and work were exactly similar.
5. That in all the cases the disease ran an extremely rapid course.

The house itself was one of a row of workmen's houses, built of brick on the slope of a hill, and, though somewhat damp, was otherwise clean and healthy.

ALEXANDER SCOTT, M.D.,
Assistant Physician, Glasgow Royal Infirmary, etc.

As a contribution to the subject of Mr. D'Arcy Power's paper in the BRITISH MEDICAL JOURNAL of June 9th, the following may be narrated:

Three years ago, at a small seaside health resort on the North Coast, I met the oldest practitioner in consultation; and on driving me to his patient's residence he said that he filled up more death certificates for cancer than for any other disease.

In confirmation of this statement he pointed out a beautiful house standing on its own grounds, and said the present tenant was under his care for cancer of the rectum, and that his patient was the third occupier of that house with the same disease affecting the rectum.

On seeing the doctor last year I inquired if the same proclivity to cancer existed in the little town, and the reply was in the affirmative.

The town referred to is generally considered a healthy one. It is situated on rising ground, and is bounded on the seacoast by bluff cliffs. The soil is marl and sand; subsoil chalk. Area: 1,680 acres of land; 390 of water.

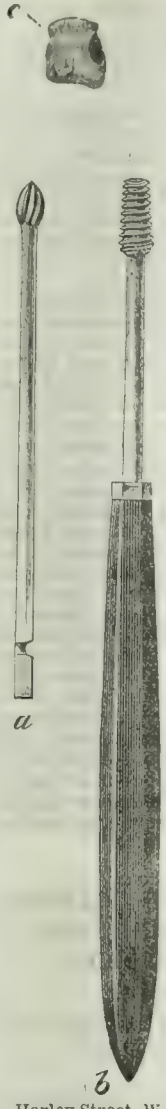
Weymouth Street, W. C. W. CHAPMAN, M.D.

THE PERCHLORIDES OF MERCURY AND IRON IN TYPHOID FEVER.

I WAS much interested by Dr. Wedgwood's report[1] of the treatment of typhoid fever by the perchlorides of mercury and iron. I have myself treated almost every case of typhoid fever for the past eighteen years with perchloride of mercury—a drachm of the liquor three times a day. The results have, on the whole, been excellent. The mortality has been low, and I feel confident that the course of the disease has been shortened. I have never seen any ill-results follow, and diarrhœa has been the exception. Milk diet has been used in all cases. Beef-tea I never allow, as I feel sure it is injurious in this disease. I have not used the perchloride of iron in typhoid fever, but have found the combination useful in diphtheria, given internally every four hours, the throat being painted with a stronger solution of the perchlorides in glycerine.

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[1] See BRITISH MEDICAL JOURNAL, May 26th, p. 1126.



REMOVAL OF AN EXOSTOSIS OF THE AUDITORY MEATUS BY COMBINED DRILLING AND TRACTION.

M. C., a Dutch Jewess, aged 22, was admitted into the London Hospital in November, 1892. There was a purulent discharge from her left ear, which had been present for some time; but she came on account of a pain in the right ear, which had existed for about six months, and was of daily and frequent occurrence. There was no discharge from the right meatus, but the hearing on this side was considerably impaired, and had been defective since the commencement of the pain.

On making an examination, a hard, smooth, whitish mass, with a rounded outline and tender to the touch, was seen filling the meatus, its outermost part being about an eighth of an inch from the entrance. A very fine probe could with difficulty be passed between the exostosis and the walls of the canal for about a quarter of an inch, but no attachment could be felt.

The patient having been anæsthetised, the meatus was well illuminated by a strong light reflected from a frontal mirror, the lateral walls protected by a self-retaining speculum and its roof and floor by two copper guards, held by an assistant. A hole was then carefully bored into the exostosis with the drill, *a* (see figure), attached to a dental engine, and when this had been made of a sufficient depth to enable a firm hold to be obtained, the screw, *b*, was inserted. On traction being made, the pedicle was felt to break, and the exostosis, firmly fixed to the screw, was withdrawn from the meatus.

Examination of the growth showed that it had been attached at *c* to the junction of the upper and anterior wall. Hearing was restored on removal of the growth, and was stated to be as good as it was before the onset of the pain.

Harley Street, W. T. MARK HOVELL, F.R.C.S.Ed.

PERNICIOUS ANÆMIA.

THE case published by Dr. Gowers in the BRITISH MEDICAL JOURNAL for April 28th, together with his remarks thereon, suggests that the following brief notes of a case recently under the care of Dr. Barnes in the Cumberland Infirmary may be of interest.

J. H., aged 26, was admitted on March 18th, 1894, complaining of great weakness, and inability to work on account of shortness of breath. His friends had noticed his pallor for about ten months, he himself for about six months, but he had found nothing to prevent his doing his work till about fourteen days before admission. He had never had any sudden pain, nor fainting, nor any pain in the bones, nor had he had any diarrhœa. He was extremely pale, so feeble that he could hardly sit up in bed, and doing this caused considerable dyspnœa. He was extremely restless, almost constantly yawning and sighing. He complained somewhat of thirst,

and was rather confused mentally. There was a loud systolic murmur over the mitral and pulmonary areas, and considerable systolic pulsation in the veins of the neck; the pulse was very rapid (130) and weak. There was a marked cadaveric odour about the patient. The urine was light in colour, but contained nothing abnormal; specific gravity, 1025. After repeated examination of the eyes no hæmorrhages could be discovered. Several examinations of the blood showed that there was rather less than 15 per cent. of red corpuscles, many of which were small and many of irregular shape; there was no increase in the number of white corpuscles. It is much to be regretted that no hæmoglobinometer was available. He became much more restless, vomited nearly all the food given, and, becoming more and more apathetic, died three days after admission; the temperature was never above 100°. No necropsy was permitted.

He had been seen in private by Dr. Lediard on February 26th. He had then pain and tenderness over the lower part of the left kidney, but no swelling was felt; otherwise he had the same symptoms as on admission.

Dr. Gowers points out that at first sight such a case suggests the existence of a specific poison, and upon admission the patient, being a butcher by trade, this was thought of, but there was no fact in the history of the case which was in favour of such a theory of causation, and the only reason for recording this case is the comparatively early age at which the disease proved fatal.

HARRY FINLEY, M.D.Lond.,
House-Surgeon, Cumberland Infirmary, Carlisle.

"CYSTIC" OR "ADENO-FIBROMA," RECURRING AS SCIRRHUS AND AS SPINDLE-CELLED SARCOMA.

On the view of all malignant disease as intrinsically a cell-devolution to which even the most innocent tumours, to say nothing of the normal tissues, are occasionally liable, it becomes highly interesting to trace the links intermediate between the benign and the malignant series of new growths. One of the most typical of these transition forms is the "adeno-fibroma" or "cystic fibroma" which attacks the breasts of elderly women. This slowly and painlessly grows for several years, often to a considerable size, and if left alone passes eventually into true cancer, recurring repeatedly after excision, and proving fatal. In compliance with the principle indicated, the malignant lesion may be either of two species. The numerous islets of acinar epithelium, which are always scattered profusely through the solid fibrous tissue base, and which, when dilated, give rise to the microscopic or macroscopic cysts, may generate carcinoma; or else sarcoma may appear from a gradual development of embryonic spindle-cells in place of well-organised white fibres. The two cases following well illustrate this point, and are not without their practical lesson as indicating the importance of operative removal in the pre-malignant stage.

CASE I.—In Feb., 1887, Mrs. S. K., aged 64, had her left breast excised for a tumour of several years' duration as large as a good-sized orange. A small cyst occupied the centre; the bulk was composed of firm white fibrous tissue, studded with minute acinar dilatations, and exactly corresponded to the plate of "Cystic Fibroma" in Green's *Manual of Pathology*. No trace of carcinoma could anywhere be detected, and there was no gland deposit. In March, 1888, recurrence took place in the scar, in the axilla, and internal viscera. The microscopical examination, after a necropsy, of those deposits revealed the most typical scirrhous carcinoma.

CASE II.—In April, 1893, E. M., aged 42, applied to me with a large prominent bossy tumour of the right breast. Duration above four years; rapid increase two months; pain three weeks. After excision, the larger part found to consist of well-organised white fibrous tissue; a smaller area of soft grey material. The former microscopically revealed the redundant fibrous tissue and cribriform spaces denoting cystic fibroma; the latter was typical spindle-celled sarcoma. In September the lesion recurred under the cicatrix; this time as sarcoma only; and a second growth, with the same microscopical characteristics, has just been removed from the right margin of the sternum.

HERBERT SNOW, M.D.Lond.,
Portman Square, W. Surgeon to the Cancer Hospital.

PRUSSIAN MEDICAL ASSOCIATIONS.—The Prussian medical associations (Aerzte-Kammern) have elected a joint subcommittee, whose function it will be to act as a medium of communication between the Prussian Ministry and the different associations in all medical questions. The subcommittee is to meet twice a-year only, except when the President may think more frequent meetings advisable.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

SAMARITAN FREE HOSPITAL.

REMOVAL OF A RAPIDLY GROWING OVARIAN TUMOUR IN A PATIENT WHO HAD RECENTLY BEEN CONFINED, AND ON WHOM OVARIOTOMY HAD BEEN PERFORMED PREVIOUSLY.

(By A. C. BUTLER-SMYTHE, F.R.C.S.Edin., Surgeon for out-patients to the Hospital, and Surgeon to the Grosvenor Hospital for Women and Children.)

E. F. W., aged 24, a married woman, consulted Dr. Seccombe, of Terrington, Norfolk, in March, 1892, on account of pains in her stomach, which were at first thought to be due to flatulence. A tumour was discovered which was diagnosed, in consultation with Dr. Plowright, of King's Lynn, to be an ovarian cyst. The patient was sent to the Samaritan Free Hospital, and was admitted under my care on April 30th, 1892. The following history was elicited from her. Menstruation first appeared at 12 years of age, and since then the periods had been regular, though scanty. She had been married two and a-half years, but had not become pregnant. In June, 1891, she had influenza, and in the following August very nearly succumbed to an attack of measles, which left her in a delicate state of health. Her first experience of abdominal pain occurred in February, 1892, and as it became worse she sought medical advice.

On admission, the patient, who was much emaciated, flushed, and feverish, complained of great tenderness in her abdomen, and was evidently suffering from extreme distension, the circumference at the umbilicus being 48 inches. Her breathing was rapid and shallow, pulse 120, temperature 101°, tongue coated, urine acid, sp. gr. 1015, clear, and no trace of albumen. The abdomen was œdematous and the vulva and thighs were swollen. Her appetite was fair, but she had been losing flesh steadily for the last few months. Of late she could not lie on her right side because of a dragging pain in her abdomen to the left of the navel.

The abdomen was distended by a tense swelling, which fluctuated freely. There was dulness up to the ensiform cartilage and in both flanks. The tumour was adherent to the parietes. Vaginal examination showed that the uterus was behind the tumour, which almost filled the pelvis. The uterine cavity measured 2½ inches, and the uterus could be moved laterally.

On May 4th Mr. Stormont Murray administered ether, and, assisted by my colleague, Dr. Rutherfoord, and in the presence of Dr. Seccombe and other visitors and colleagues, I opened the patient's abdomen, separated the parietal adhesions, and tapped the tumour, 34 pints of dark viscid fluid being drawn off. After a tedious operation, owing to the universal adherence of the cyst in the abdomen and pelvis, I succeeded in removing the tumour, the pedicle of which was doubly twisted and adherent to the large intestine. The right ovary was then brought to the surface and carefully examined, and, as it appeared to be healthy and was not enlarged, it was returned into the abdomen. The peritoneal cavity was then washed out and a drainage tube inserted, and the wound closed with silkworm-gut sutures.

The patient made a good recovery, though the pulse never reckoned less than 120, and temperature kept above 100° till the end of the second week. She left the hospital on June 4th, and went to her home, where she remained in good health up to November, 1892, when she became pregnant. Her health was excellent up to July 20th, 1893, at which date she was delivered of a stillborn male child which weighed over 11 lbs. The presentation was a breech, and the labour very tedious. The child was alive at the commencement of labour, but owing to its unusual size, and the marked deficiency of expulsive power, notwithstanding the administration of ergot, it was impossible to save its life. The placenta came away easily, and the patient went on well and got up

on the eleventh day. It was remarked after delivery that the mother was as slight as ever she had been, and Dr. Seccombe is confident that no swelling other than the contracted uterus could be detected in her abdomen. On the fifteenth day, however, when up and about, she had an attack of pain in her right side which compelled her to go back to bed, where she remained for a couple of days, when the pain passed off, and she thought no more about it. A month after her delivery she noticed that her abdomen was rapidly becoming enlarged, and later on she sent for Dr. Seccombe, who examined her, and found a large cystic swelling on the right side of her abdomen. He wrote at once to me, and on September 1st, 1893, I saw the patient with him, and confirmed his diagnosis. It was decided that the case should wait till October, when she could come into the hospital. She was brought to town on October 4th, and readmitted. I found that the tumour had increased so rapidly in the month as to double its size. There was also much free fluid in the peritoneal cavity, and the patient had again emaciated, and was even in a worse condition than when she came up for the first operation.

On October 6th the patient was chloroformed by Mr. Murray, and assisted by my colleague Dr. Bantock, Dr. Seccombe and others being present, I opened the abdomen, and disclosed a dark-coloured swelling, which was adherent to the abdominal parietes, and covered by adherent omentum in its upper part. These adhesions were separated and the tumour tapped, 30 pints of dark thick fluid being withdrawn. It was then seen that the tumour had burrowed into the broad ligament, and had passed across in front of the uterus, between that organ and the bladder, completely stripping off the peritoneum from the anterior surface of the uterus. This portion of the tumour was enucleated, and the broad sheet of peritoneum in front of it tied in four pieces, cut across, and dropped back into the peritoneal cavity. The rest of the cyst was then separated from the surrounding adherent intestine, and the pedicle transfixed and tied. The tumour having been cut away, the abdominal cavity was thoroughly washed out and drained. The peritoneum was then dissected off for about an inch round the incision, and the scar tissue cut away. The wound was then closed with three layers of sutures—a continuous suture of thin catgut for the peritoneum, interrupted sutures of thick catgut for the aponeuroses, and silkworm gut for the skin. The patient made a rapid recovery, and went out on November 4th quite convalescent. Curiously enough, after the second operation the pulse and temperature kept above 120 and 100° respectively for the first fortnight this condition being due to a small abscess in the lower angle of the wound where the tube had rested.

Remarks.—This is the only instance in which I have met with an ovarian tumour burrowing in front of the uterus and displacing the peritoneum between that organ and the bladder; in other words, completely stripping off the peritoneum from the anterior surface of the body of the uterus. Tumours burrowing behind that organ and raising the peritoneum from its posterior surface are not infrequently met with, but the former condition is, I believe, uncommon. It is not often that the growth of an ovarian tumour can be dated with any degree of certainty, but in this case it is certain that, so far as one could judge by sight and touch, the right ovary was healthy on May 4th, 1892. Dr. Seccombe states that, after the patient's delivery in July, 1893, no swelling other than the contracted uterus could be felt in her abdomen. A fortnight later the patient had severe pain in the right side, and about a month or six weeks after her confinement her abdomen began to get big, when, on examination, a cystic tumour was discovered, and this growth increased so rapidly that when seen a month later it was as large again. I presume the disease started during pregnancy, and that, after delivery, the pressure having been removed, the growth rapidly developed, as such tumours usually do under similar circumstances. The first tumour was a large multilocular growth with dermoid material in parts. The second tumour was very similar as regards size, fluid contents, and, so far as one could judge from the history, in the duration and rapidity of growth, but no dermoid material was observed in it. The success attending this case is in a great measure due to the able assistance rendered by my colleagues, Drs. Bantock and Rutherfoord; and it gives me much pleasure to acknowledge their valuable services. The patient was in excellent health on April 19th, 1894.

BOSCOMBE HOSPITAL, BOURNEMOUTH.

A CASE OF SUPPRESSION OF URINE TREATED BY NEPHROTOMY.

(By A. Heygate Vernon, F.R.C.S., Hon. Surgeon to the Hospital.)

H. M., aged 63, was admitted into the Boscombe Hopital on December 28th, 1893, suffering from complete suppression of urine. Two days before admission he had been seen at his own house by the house-surgeon, and was then suffering from high temperature—sweating freely—and very severe general acute pains in the head and body, especially in the abdomen. All these symptoms had come on suddenly. The urine was scanty, high coloured, and contained albumen and pus. He was treated with calomel and diuretics. The following day he seemed better, but could pass no urine.

On admission he was suffering great pain in the loins, which radiated all over the abdomen; the bladder was empty; temperature and pulse normal. Heat was applied to the loins and a diaphoretic and purgative mixture administered. The next day the pain was easier, but no urine was passed, and the face began to get slightly œdematous. The following day his breath and the ward smelt strongly of ammoniacal urine. He was given an injection of pilocarpin, which caused free perspiration and great relief of pain.

On December 31st, three days after admission, as no urine had been passed, I decided to open the kidney. The man had previously been in hospital with a sinus in the left loin, about four inches long, which ran towards the vertebræ, and not in the direction of where the kidney would be supposed to be. He stated that no urine had ever escaped from the wound, nor did he think it ever had anything to do with his kidney. Knowing this, I opened the right kidney, and found its substance very rotten, being able to open it with a pair of forceps and my finger. A large quantity of foul urine and pus escaped; a probe was passed in about 10 inches, but no calculus was found. From the operation he rallied well, considering his weak and uræmic condition. The kidney secreted a wonderful amount of urine considering its state; everything about the man was soaked in an hour. He steadily improved for a few days, and on two or three occasions passed urine naturally, but most came through the wound. He never passed entirely out of the drowsy uræmic state, and this towards the end of a week increased again. He died just a week after the operation, from uræmia and exhaustion. The temperature after the operation was always subnormal, only once rising as high as 96° F.

Post mortem the right kidney was found very enlarged, in a state of acute inflammation, with three large acute abscesses in its upper portion. The pelvis and ureter were also acutely inflamed, and about half way down the right ureter a small phosphatic calculus was found. There was hardly any remnants of the left kidney; it contained no calculus, and under the microscope its atrophied tubes were completely blocked up with *débris*. The bladder was greatly hypertrophied.

"Hommage à M. Pasteur."—On May 30th, at Lille, M. Pasteur presided over a meeting arranged in his honour by the Société de Secours des Amis des Sciences. The eminent *savant* was accompanied by Madame Pasteur, his daughter, and his son-in-law, M. Vallery-Radot, and by several of his colleagues of the Academy of Sciences, MM. Bertrand and Milne-Edwards among others. The party was received at the station by the authorities of the city of Lille and of the department, and by the rector and professors of the faculty of that town. A large crowd of students massed in the streets outside the station gave M. Pasteur a most enthusiastic reception, and the cheers began again when the illustrious gentleman, after having dined, he drove to the hall where the meeting took place. M. Pasteur addressed the members of the Société de Secours des Amis des Sciences in an eloquent speech, in which he warmly thanked them for the cordial reception they had given him, and enlarged upon the services rendered by the society.

Dr. E. Besnier, the well-known dermatologist of Paris, and Senior Physician to the Hôpital St. Louis, has been promoted to the grade of Officer of the Legion of Honour.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

JONATHAN HUTCHINSON, F.R.S., President, in the Chair.

Tuesday, June 12th, 1894.

A REVIEW OF CASES MANIFESTING PAIN AT THE HEART, OR MORBID ACCELERATION OF THE HEART'S CONTRACTIONS (TACHYCARDIA), SUBSEQUENTLY TO INFLUENZA.

DR. A. E. SANSOM read this paper. He had submitted to review and analysis the evidence in 100 cases under his own observation, in which pain referred to the heart, disturbances of the cardiac rhythm, or structural disease had been manifested after attacks of influenza. The cases were thus distributed—pain at the heart, 23 cases; morbid acceleration of the heart's action (tachycardia), 37 cases; irregularity (arrhythmia), 25 cases; abnormal retardation of the heart rate (bradycardia), 5 cases; organic disease, 10 cases. The present communication dealt with the first two sections of cases. The pain experienced in the region of the heart was in some cases paroxysmal, in others more or less protracted. The paroxysmal pain in some cases resembled that of angina pectoris; it might be intense and occur with extreme suddenness, so that some patients fell completely unconscious. In some unconsciousness might occur paroxysmally in the absence of severe pain. There were not the associated signs of true angina pectoris. Hysteria was excluded, for several patients were men, and some typical athletes, who had been in perfect health until the attack of influenza. In the cases manifesting more constant pain the beating of the heart was often accompanied by subjective discomfort; there were sometimes tender spots in the intercostal spaces close to the sternum, with more deeply seated pain in defined situations, and, in several instances symptoms of concomitant neuritis involving some of the nerves proceeding from the brachial plexus. In regard to pathology, the author considered that the symptoms might be due to a neuritis affecting some of the ganglia of the cardiac plexuses, or to a disturbance of the sensorium analogous to that in epileptiform neuralgia or in visceral neuralgia. With reference to treatment, quinine in five-grain doses with antispasmodics, morphine sparingly and cautiously administered subcutaneously, and a course of the bromides and iodides with arsenic were considered the best agents. The evidence showed that good results might follow the use of a weak continuous galvanic current from the nape of the neck to the region of the vagus. Morbid acceleration of the heart's action was found to be the most frequent of all the cardiac disorders induced by influenza. It might occur immediately after the attack, or be manifested after the lapse of several months. It might continue for long periods—at least eighteen months. In many cases the heart was very irritable, quickened action being provoked by very slight causes, or occurring at intervals without assignable cause. The evidence showed that post-influenzal tachycardia might be accompanied by many of the symptoms, or even by all the cardinal signs, of Graves's disease—a circumstance of interest in the question of the pathology of the latter affection. After reviewing the evidence concerning the pathology of post-influenzal tachycardia, the author considered it to be most probable that the initial cause was a disturbance of the vagus at its origin or in some parts of its course, whereby its controlling power over the cardiac contractions became impaired. It was possible that irritative lesions of the accelerator nerves of the heart, in the cord, in the course of the sympathetic filaments, or in the ganglia, might be concurring causes, and in some cases hypersecretion by the thyroid might be a subsidiary cause. In the treatment of post-influenzal tachycardia drugs seemed to be inefficacious except as modifying the associated symptoms. There was evidence, however, to show that the systematic use of weak continuous galvanic currents from the nape of the neck to the region of the vagus might be followed by good results.

DR ALTHAUS considered the paper a valuable contribution to scientific medicine. Although records of epidemics of influenza dated back to the thirteenth century, the sequelæ of this and of other infectious diseases had only been known of recent years. He mentioned how recent our knowledge of the effects of syphilis on the brain and spinal cord was. He agreed with the author that the nervous symptoms were due in some cases to neuritis, but in the majority to affections of the central nervous system. He coincided with the author in his treatment, and added that he had obtained great benefit from the use of salicylate of soda in the early stages, and from phenacetin and caffeine in the later stages. He had found the constant current produce good results even in currents as weak as 1 milliampère. With regard to the second part of the paper, he thought that the tachycardia and the symptoms similar to those of Graves's disease might be due to neuritis, but were more probably due to want of tone of the centres in the medulla oblongata. With regard to Graves's disease, many theories as to its pathology were current; thus in France it was considered a neurosis, in Germany as disturbed nutrition of the thyroid gland. He was himself of opinion that the disease was due to organic disease and hyperæmia of the medulla oblongata. Physiologists had found that in animals injury to the restiform bodies produced symptoms like those of Graves's disease, and Dr Sansom's evidence supported this view. With regard to Graves's disease, he thought that recovery was rare; he could not recall a single instance of complete recovery.

MR. SPENCER WATSON asked the author what were the signs by which it was possible to distinguish tachycardia and heart pains due to influenza from those due to other causes; whether any group of symptoms consecutive to epidemics of influenza had not before been seen in association with other diseases.

DR. DOUGLAS POWELL, after paying tribute to the great importance of the author's paper, asked whether he had been able to prepare a table giving the salient points, such as age, sex, interval between the influenza and onset of symptoms, together with any other important facts, of his cases. He asked Dr. Sansom whether he had been able to trace actual organic disease of the heart in any of his cases to the influenza. He inquired what was the result of examination of the urine in cases which had exhibited cardiac phenomena shortly after an attack of influenza, as in his own experience of such cases there had been an enormous excess of urea, and the specific gravity occasionally rose as high as 1040. He endorsed Dr. Sansom's views with reference to digitalis for these cases, that it was of no advantage. It was well known that a considerable period of time frequently elapsed before the onset of nervous phenomena after an attack of influenza or other infective disease such as diphtheria.

DR. THEODORE WILLIAMS had seen both tachycardia and slowing of heart at considerable periods after influenza. He noticed that the author attributed these symptoms to neuritis of the central ganglia. He asked if other neuroses, such as spasmodic asthma, had been observed consequent on influenza. He himself had not done so; and yet, if the ganglia were involved, one would expect some such symptoms to occur. If influenza were chiefly a neurosis, it was difficult to explain the other phenomena, such as pneumonia, abscess of the lung, etc. He regarded it as a general poison, with special liability to infect the nervous system. He, like the author, was able to speak highly of the value of sumbul, as he had found it a very useful drug for men as well as women.

DR. SANSOM, in reply, said that he had intended to give a table, but when he began to work on his paper, he had found that to include all the facts that he had observed would have made his paper too long. The chain of evidence between the influenza and the sequelæ seemed to be complete in his cases, and he had never observed a similar grouping of symptoms without a previous attack of influenza. He agreed that salicylate of soda was good in the early stages and in the pyrexial period, but had been chary of using it on account of its liability to produce toxic effects. Phenacetin and caffeine he had found very valuable. As to the question of absolute recovery in Graves's disease, he had seen some very bad cases get absolutely well, except for an occasional outburst of emotional disturbance to which so many women were liable. As regards the urine, he had noticed exceptionally large quantities of nitrogenous products excreted, and sometimes albuminuria. He had never seen glycosuria in post-influenzal tachycardia, though he had met with it in Graves's disease. Although he had never seen a typical case of spasmodic asthma due to influenza, yet he had seen several cases of marked dyspnœa of the peculiar character known as tachypnœa. There seemed to be a general consensus of opinion that the symptoms noted were due to changes in the central nervous system, and these changes might, he suggested, be minute hæmorrhages. If these hæmorrhages occurred in a region which impaired the function of the vagus, then tachycardia would result; but if they occurred lower down, bradycardia and cardiac irregularity would be produced.

A CASE OF ACANTHOSIS NIGRICANS.

MR. MALCOLM MORRIS showed this case. The patient, a single woman, aged 35, was admitted into St. Mary's Hospital on February 15th, 1894, suffering from widely-disseminated discoloration of the skin with diffuse warty growths in various parts. Previous to the appearance of the lesions her health had been good, but for more than a year before the onset of the disease menstruation had been very irregular, chiefly on the side of excess. In October, 1893, she noticed general bronzing of the skin over the upper part of the body, and crops of large flattish warts came out on the hands, in the axillæ, on the umbilicus, and elsewhere. This was soon followed by the appearance of black patches in various situations, but mainly where wartiness was most marked. On admission she looked wasted and weak, but her temperature was normal, and there was no evidence of disease of any of the internal organs. The skin over nearly the whole of the body was rough, and for the most part distinctly bronzed, with the exception of the face which was the seat of a permanent deep blush; the natural folds were almost everywhere exaggerated, particularly in the neck and on the hands, where the skin felt like rough-piled velvet. Round the neck there was a wide band of blackish discoloration, which spread downwards in front between the mammæ and some way on the abdomen; similar patches were seen in the axillæ, the bends of the elbows, and the popliteal spaces. The axillæ were occupied by masses of warty growths deeply fissured here and there; from the fissures there oozed an offensive discharge which seemed to have washed the staining material out of the middle part of the papillomatous mass. A few small warts were scattered about the face and the lower part of the forearm on the flexor aspect. The umbilicus was the seat of a button-like wart of considerable size, surrounded by a black zone; from this wart an offensive discharge exuded. A few warts were scattered about on the thighs, and there was general roughening and thickening of the skin, particularly on the soles of the feet, with bronzing about the knees and ankles, and yellow discoloration of the soles. There were masses of warts in each auditory meatus, and the patient was partly deaf in consequence. The mucous membrane of the lips, cheeks, palate, and gums was wrinkled, dry, and warty; there were large warts, with deep fissures between them, on the tongue. A similar condition existed in the vagina. The throat was unaffected. The black stains were found to be caused by masses of tiny granules situated in the superficial layers of the epidermis; on microscopic examination they were found to consist of dried epithelial scales with no trace of pigment. The warty growths were papillomatous in structure. The condition gave rise to no subjective symptoms except an uncomfortable dryness of the lips and mouth. While the patient was under observation the black discoloration spread over the whole of the abdomen, and over the back as high as the middle of the scapula. There was some further development of warts on the scalp and in the lumbar region. A thick growth of light-coloured hair took place on the face, and to a less extent on the chest and abdomen. Slight improvement was noticed in some parts, especially on the hands, knees, and feet. The patient's general condition continued fairly good, but she had become very nervous, and the knee jerk was absent on both sides. The umbilical growth had been removed, and the warts in the ears had been treated with salicylic acid with some success. The case was submitted as an example of the disease called by Unna acanthosis nigricans. Only two similar cases had been recorded (Pollitzer, Janovsky). Nothing was known as to the pathology of the condition.

DR. EDDOWES showed some sections taken from Pollitzer's case. A great deal of the discoloration appeared to be due to dirt, as was the case in ichthyosis. He suggested that there was a close connection between this condition and seborrhœic eczema. He asked if thyroid extract had been tried.

THE PRESIDENT asked what could have let loose this remarkable in-

crease in the growth of papillæ. He had seen partial cases with the same tendency, but which did not run to such an extreme degree, and he mentioned a case of Dr. Thin's, published in the Society's *Transactions*, in which there had been a rapid growth of minute warts in a child.

Mr. MALCOLM MORRIS, in reply, mentioned that the urine had been normal throughout. He thought the condition was probably due to some central nervous lesion. He had seen no other case involving the mucous membranes or with symmetry of distribution, but he had seen one slight case of velvety skin following injury to a nerve. There was, in his opinion, no association with eczema seborrhoicum. In the present instance the disease began, according to the patient, about the neck.

OBSTETRICAL SOCIETY OF LONDON.

G. E. HERMAN, M.B.Lond., F.R.C.P., President, in the Chair.

Wednesday, June 6th, 1894.

SPECIMENS.

THE following specimens were shown: Dr. CRAWFORD: Fibroma of Ovary.—Dr. HORROCKS: Fibroma of Ovary (2) and Fibroid of Uterus.—Dr. BLACKER: Uterus with Placenta Prævia Marginalis.—Mr. BLAND SUTTON: Tubal Gestation, with Effusion of Blood between Amnion and Chorion.—Mr. MALCOLM: Uterine Fibroids removed for Pyrexia after Miscarriage.

LIGATURE AND DIVISION OF THE UPPER PARTS OF BOTH BROAD LIGAMENTS, AND THE RESULT AS COMPARED WITH THAT OF REMOVAL OF THE APPENDAGES.

Dr. REMFRY read this paper. A case of bleeding fibroid was cited in which the above operation was performed as an alternative to oöphorectomy, the latter being impossible, owing to the conditions present. The procedure was compared with oöphorectomy: (1) anatomically, especially as regards the circulation; (2) as to result. The principal theories concerning the amenorrhœa after removal of the appendages were discussed. Changes in the circulation, with lessening of blood supply to the uterus, were considered to form the chief factor in its causation, a theory supported by the history of the case given. The blood supply of the broad ligament was illustrated by an injection experiment.

Dr. PETER HORROCKS had never himself seen a case where both ovaries had been completely removed, and yet menstruation had continued for any length of time. Operators knew how difficult it was in many cases to be quite sure of removing the ovaries entire. He had never been able to find the nerve which was said to influence menstruation, and he would be glad of proof of its existence. There could be no doubt about the influence of the nervous system on menstruation. He quoted cases of amenorrhœa from shock, but he still believed the ovaries were essential to menstruation, and that, while ovulation could take place without menstruation, menstruation could not take place without ovulation.

Dr. DUNCAN said he had had four cases in which, many months after complete removal of the appendages, the patients suffered from menorrhagia, to account for which he was at a loss, except that the ligatures tying the stumps of the pedicles were perhaps causing irritation. Again, he had had several cases in which the ovaries and tubes were so completely matted down in the pelvis that, although he was able to tie the stumps beyond the ovaries, still he had thought it safer in cutting across the pedicle to leave a little of the firm ovarian tissue so as to prevent slipping of the ligature, and yet in none of these cases had there been any subsequent menstruation. He believed that so long as no ovarian tissue was left at the proximal side of the ligature, a little left on the distal side was of no moment.

The PRESIDENT said that other cases had been published in which the broad ligaments had been tied: by Dr. Murphy, in the Society's *Transactions*, vol. xxvii, and by Dr. Kilner Clarke, in the BRITISH MEDICAL JOURNAL, 1893; and in these menstruation was not arrested. It had been proposed to tie the broad ligaments in order to arrest the growth of malignant disease. Dr. Remfry's case, with the others he had referred to, had an important bearing on this proposition.

Dr. AMAND ROUTH thought that the possibility of an intrauterine polypus as a cause of continued hæmorrhage after oöphorectomy should always be considered. He had dilated the uterus in three cases of persistent hæmorrhage after oöphorectomy, finding a polypus in two and a cluster of villous growth in the other. He believed that the ovaries influenced menstruation through the medium of ganglionic nerves passing between the ovary and the uterus, and it must be remembered that these nerves were to a great extent removed during oöphorectomy, so that they could not be altogether ignored as a cause of menstruation.

Dr. REMFRY, in reply, said the shock theory of amenorrhœa in this case was improbable, considering the slightness of the operation and the fact that menstruation did not return for three months. He did not agree that removal of the ovaries ensured amenorrhœa, as cases showing the contrary had been published. The explanation given that these were incomplete removals was not easy to refute. As to the argument that shrinking of the ovaries at the menopause favoured this idea, the fact that this was only part of a general atrophy of pelvic organs—a condition accompanied by diminished blood supply—rather strengthened the circulatory theory advocated in the paper than otherwise.

A CASE OF ADENOMA OF THE PORTIO VAGINALIS UTERI FORMING A DEPRESSED SORE OR ULCER.

Dr. BRAITHWAITE gave the clinical history of this case, the measures taken for its relief, the histology of the tissues removed, and the subsequent progress of the case to recovery. The paper was accompanied by drawings.

Dr. DAKIN thought that everyone would agree with Dr. Braithwaite that his case was of an adenomatous nature, but from the description of the clinical appearances of the microscopic sections, and from the history and subsequent course of events it was difficult to see the distinction between the case in question and one of erosion of the cervix. The fact that there was a depression was possibly an accident, and due to the erosion having appeared over an area already depressed, seeing that the woman was a 3-para. The histological appearances were those of an erosion, namely, sections of numerous glands, like those of the cervix, and not showing any sign of commencing malignant action.

Dr. AMAND ROUTH alluded to the fact that a cervical adenoma was extremely prone to become malignant, and it was possible that this change had occurred in that portion of the adenoma where the ulceration had been seen, although the microscope did not prove it.

The PRESIDENT said that Dr. Braithwaite's case was a very unusual and obscure one. Had it not been that the surface of the ulcer was depressed, he thought everyone would have considered it an ordinary erosion. The microscopic structure resembled that of an erosion; there was no infiltration, and there was no statement that the patient had wasted.

REVIEWS.

A MANUAL OF PRACTICAL ANATOMY. Vol. II. By D. J. CUNNINGHAM, Professor of Anatomy, University of Dublin. Edinburgh and London: Young J. Pentland. 1894. (Cr. 8vo, pp. 664; 182 woodcuts and one coloured plate. 12s. 6d.)

THIS book is the second and concluding volume of Professor CUNNINGHAM'S *Manual of Practical Anatomy*. It deals with the anatomy of the thorax, head and neck, brain, and organs of special sense. The first section, comprising 102 pages, is devoted to a description of the anatomy of the thorax. The order of dissection adopted is that followed in the Edinburgh school. First, the thoracic walls are described in detail, and then follows an account of the thoracic cavity and its contents. The mediastinal space is very lucidly explained, and the anatomy and relations of the thoracic structures are made especially clear and easy of comprehension by the introduction into the text of a considerable number of diagrams of transverse sections of the thorax at various levels. An illustration of a dissection of the roots of the lungs and adjacent structures from behind is somewhat difficult at first to understand. An excellent diagram of the azygos veins is given, which shows their mode of commencement in the ascending lumbar veins, and their connection with the vena cava inferior. An account of the topographical anatomy of the heart and lungs, and the mode of marking them out on the surface of the undissected body, has been omitted.

The second section deals with the head and neck, and extends to 376 pages. Careful directions are given for the removal of the brain from the cranial cavity after the overlying structures have been dissected and learnt. The membranes of the brain and their arrangement and connections are carefully and succinctly described. The spinal column and its contents receive due attention. The chapter dealing with the orbit is somewhat short. The origin of the recti muscles from the ligaments of Lockwood and Zinn are well shown, whilst the account of the capsule of Tenon is exceptionally clear.

In the description of the action of the laryngeal muscles, the results of the researches of Anderson Stuart are incorporated; hence the superior aperture of the larynx is said to be closed during swallowing by the approximation and the forward folding of the two arytenoid cartilages, so that their apices become closely applied to the cushion of the epiglottis. The muscles chiefly concerned in this movement are the external thyro-arytænoid muscles and the transverse arytænoid muscle. These muscles form a true sphincter vestibuli. The thyro-ary-epiglottidean muscle also assists in the closure.

The third section of 114 pages is devoted to the anatomy of the brain. This is the best part of the volume, and is well up to date in all respects. Numerous diagrams and illustrations many of them original, supplement the text. The blood supply of the various portions of the brain is exceedingly well described and depicted in the illustrations. In this part there is a coloured plate representing the head of an adult female in which the brain is exposed *in situ*. Bars of bone are left along the lines of the cranial sutures and also along the line of the temporal ridge. The external surface of the various lobes of the cerebrum are shown in different colours. An exact collected account of the topography of the brain is not given. This might have been introduced with great advantage. This omission throughout the volume of surface marking is to be regretted, since it is a very important point in anatomical education to impress upon the student at an early period the necessity

and value of being able to mark out on the surface of the undissected body the position of the structures which he has learned by dissection and visual observation. The final part of the book deals with the anatomy of the auditory and visual organs, of which the former is particularly well done.

As a whole this work is one of the best manuals of practical anatomy written up to the present time. The descriptions are particularly clear, and there are few ambiguities or redundancies. In some cases the attachment of muscles might be given a little more exactly, but this is not a matter of much importance.

As a handy and compact guidebook for the student to work with in the dissecting room we can confidently recommend this book. No one who has mastered it ought to fail in his anatomical examination.

Squire's Companion to the British Pharmacopœia. Revised by Peter Wyatt Squire, F.L.S., F.C.S., and Alfred Herbert Squire. Sixteenth edition. London: J. and A. Churchill. 1894. (Demy 8vo, pp. 733. 12s. 6d.)

In the sixteenth edition of this most useful and complete commentary on the *British Pharmacopœia* the original method and plan have been strictly adhered to, and these are so well known to everyone interested in prescribing and pharmacy that a description of the arrangement and contents would be at this date quite superfluous. In passing we may remark, however, that the contents extend far beyond the limits of the *Pharmacopœia*, as a very large number of unofficial drugs and preparations are considered with the same care and minuteness as the others. One or two minor improvements have been introduced, such as index letters at the top of each page to facilitate reference, and the book has been considerably enlarged, although the bulk is not materially increased owing to the index being now printed in double columns.

The comparison with other national *Pharmacopœias* has been brought down to the latest editions of these, and a great amount of new matter has been incorporated regarding both old and new remedies, partly from published literature, but largely from the editors' own experiments and experience. Long use has accustomed practitioners of medicine and pharmacists to appreciate the reliability and practical value of all information thus given. Among the most important additions are the results of Professor Charteris's valuable researches on the impurities contained in salicylic acid and salicylate of sodium, the results of the investigation of the Therapeutic Committee of the British Medical Association regarding the toxic effects of antipyrin, acetanilide and phenacetin, and the results of recent researches on the chemistry of aconitine, eucalyptus oil, hyoscine, and other important remedies. The minor additions are very numerous also.

The therapeutical index and classification of remedies is a very minor part of the work, but it might be improved by a careful revision. We notice also that three American spas have been included under the title "Spas of Europe." This edition fully maintains the high character of its predecessors for practical utility, completeness, and accuracy.

Storia della Teratologia. [A Treatise on Teratology.] By Cesare Taruffi, Professor of Pathological Anatomy in the University of Bologna. Tomo VII. Bologna: Regia Tipografia. 1894.

We are glad to be able to congratulate Professor Taruffi upon the near completion of his gigantic undertaking. In the seventh volume of his monumental *Storia della Teratologia*, he brings to a close the original part of the work. The eighth volume, to be published during the course of the present year, will contain indices, addenda, and the details of individual cases, the insertion of which in the text would have fatally encumbered the pages of the treatise. The first volume appeared in January, 1881, so that the publication has taken fourteen years, and the preparation doubtless many more.

The first volume contained the introductory matter, including chapters on the history of the subject, on customs and laws, theological questions, myths and symbols, false monsters, etiology, frequency, and classification. The second was devoted to the consideration of some of the polysomatous terata, the omphalo-angiopagous twins, and certain of the double monsters (syncephalus, dicephalus, thoracopagus, and omphalopagus). The third completed this part of the subject, and contained an account of the parasitic fœtuses (cephalo-parasitus, etc.), and the rare trisomata or triple monsters. Volume IV was given up to details of individual cases, and to a good index of authors and subjects. In the fifth volume Taruffi began the history of the single terata (terata monosoma), and discussed the deformities of the ovum, embryo, and fœtal annexa, as well as the beings known as giants and dwarfs, and the curious cases of transposition of the viscera. In the sixth and seventh volumes the abnormalities of the various regions of the body were described, and a full account given of such well known terata as anencephalus (acrania), cyclops, exomphalos, ectopia vesicæ, sympodia, and the like.

With regard to the volume under review, the seventh and penultimate, it need only be said that it fully maintains the high standard reached by its predecessors. The work as a whole is exhaustive, critical, and well up to date; it contains much that is an improvement upon all previous treatises on the subject; and it is marked throughout by the signs not only of thoroughness but of originality on the part of its author.

It has, however, two defects. The first is a somewhat grave one, and consists in the scarcity of the illustrations. Those that are given are of small size, and are not very well executed. Possibly, however, the illustrious Bolognese Professor intends to supplement and complete the whole undertaking by the publication of an atlas. The second defect is the omission of all reference to such conditions as fœtal rickets, fœtal ichthyosis, and the like, which are probably as much monstrosities as diseases. In spite of this, however, the work is one no teratologist can dispense with.

The Organisation of Charities, being a Report of the Sixth Section of the International Congress of Charities, Corrections, and Philanthropy, Chicago, June, 1893. By Daniel C. Gilman, LL.D. Baltimore and London: The Scientific Press. 1894. (Demy 8vo, pp. 432. 6s.)

We regret that, as this valuable book deals with a subject not strictly medical, we cannot give to a review of it the space which its merits would otherwise claim. Still the subject is one which so nearly touches on medical charity, and which is so important to all medical practitioners that we cannot leave it unnoticed. All practical philanthropists, and especially all who are engaged in that newest and most practical form of it, which is now called "charity organisation," ought to procure the volume and study it carefully. It commences with a very sensible paper by the editor, entitled a Panorama of Charitable Work in many Lands, in which are concisely set forth the aims and principles of charity organisation, its history, and the main features of the administration of charity in the various leading states of the world. It is the latter feature of the work which gives it its intrinsic value.

We know not where else are to be found such authentic and complete views of the very different systems by which the lot of the poor, the unfortunate, and the vicious is rendered somewhat more tolerable, from the rigid administrative system which is in action in France, to the liberty (which some would call licence) prevailing in England and America. In France "charity organisation" is simplified by placing all charities, their finance, their administration, and all that concerns them, in the hands of the public authorities. The results as far as hospitals are concerned (which is the only department of public charity in France with which we have any personal acquaintance) are not to our minds encouraging. Improvements are tardy and costly. Departments which are in the closest natural relation with each other, such as medical treatment, diets, and nursing, are placed under different *bureaux*, and a chronic feud seems to prevail between the medical and the administrative authorities. The paper of M. Valleroux on this and on the kindred topic of charity in Belgium will well repay perusal. It is followed by a short paper on Italy by Signor Rossi, possibly

too "statistical," but of considerable interest as showing the steps taken by the new central Government to introduce some sort of order into the chaos of a number of small States, each administering its own little groups of charities, founded in mediæval times and on mediæval models. Then comes the turn of Germany, in which, of course, a similar problem has presented itself, but with a much more powerful Government and a more advanced public opinion to assist. In this connection a full account is given by Dr. Münsterberg, Dr. Thoma, and Dr. Seyffardt of the Elberfeld system of poor relief, the central idea of which is localisation under a central board, which divides the district into appropriate parts, appoints inspectors and overseers for those parts, and puts the families which require relief under the honorary charge of the householders of the district. "The law," we are told (p. 193) "makes the acceptance of these honorary positions obligatory. As a rule, however, no compulsion is necessary." The system seems to be spreading over all Germany, but is obviously inapplicable to our ideas and circumstances. Russia is dealt with by Dr. Georgievsky, from whose paper we gather that the relief of poverty in that country was entirely a matter of Christian charity till the eighteenth century, when it became largely a question of police, and that now an attempt is being made by the Government to organise some system in which private societies and individuals shall be joined in one organisation with the public authorities; but that this (like so many reforms in Russia, and perhaps in more advanced countries) is still a hope rather than a possession. The rest of the book contains a full account of the American and English systems. Charity organisation in the States was introduced later than here, and their system was, we presume, founded on ours, though we do not find it so stated here. Those engaged in the practical work of such societies on both sides of the Atlantic will find much food for reflection in comparing the institutions which are pursuing similar ends under circumstances so dissimilar as prevail in "the old country," and her gigantic offspring. For instance, the account here given by Mrs. Lowell, of New York (p. 77) of the experimental "labour colony" at Plainville will be interesting at the present time, when the scheme foreshadowed in General Booth's *Darkest England* is said to be near to a practical trial. At Plainville it was a complete failure. Those who believe in the superiority of American institutions will be surprised to learn from Mrs. Lowell that "the common county gaols of the United States are in but few respects any better than the gaols found and reported upon by Howard in 1776 in England and elsewhere, and bear a strong resemblance to the prisons now existing in Russia" (p. 85).

We must not trespass further on the attention of our readers, but commend this most interesting work to their serious perusal.

DIE BEHANDLUNG DER TUBERCULÖSEN LUNGENSCHWINDSUCHT (The Treatment of Pulmonary Consumption). By Dr. AUGUST VON SZÉKELY. Berlin: A. Hirschwald. 1894. (Demy 8vo, pp. 128. M. 2.80.)

THIS very practical monograph is designed for the practitioner. It is divided into two parts, the treatment of those predisposed to the disease and that of those actually suffering from it. The objects of the preventive treatment are, as far as possible, to prevent the access of the tubercle bacillus and to render the lungs as unsuitable a soil as possible. Questions of atmosphere, dwelling, mixing with already tuberculous patients, the removal where possible of local tuberculous foci, the avoidance of infected food, etc., are considered. Pulmonary gymnastics, the use of cold water, the occasional administration of iron and arsenic, the careful avoidance of catching cold, or of taking diseases likely to render the lungs less resistant, are also discussed.

The objects in the treatment of the disease itself are to destroy the tubercle bacillus, and to arrest its growth. Great efforts in the former direction have been made in recent times, but as yet without any real success. The author thinks that tannin may be of service here as well as in the preventive treatment of the disease. The arrest of the growth of the bacillus is brought about by raising the general nutrition of the patient and improving the pulmonary circulation. The use of cod-liver oil is discussed here, with its modes of administration, contra-indications, and its possible substitutes, including lipanin. The dangers of pulmonary gymnastics are not overlooked. Some value is attached to Pressnitz's compresses. The dwelling and mode of life are also carefully considered. The treatment of fever, night sweats, gastric and intestinal complications, hæmoptysis, cough, and expectoration is fully described.

Under the head of fever, antipyretics seem to be in danger of being somewhat over-estimated. Large rectal injections of tannic acid are not mentioned under diarrhœa, yet they are of undoubted value at times. Under hæmoptysis sprays of ferric perchloride (Ziemssen), and the application of a ligature round the limbs are mentioned. Nothing, however, is said about subcutaneous infusion, transfusion, or hot rectal injections of saline solution in extreme cases. The account of climatotherapy is satisfactory.

This monograph may be recommended as containing a very practical account of a very important subject.

AËRO-THERAPEUTICS, OR THE TREATMENT OF LUNG DISEASES BY CLIMATE, ETC. By CHARLES THEODORE WILLIAMS, M.A., M.D.Oxon., F.R.C.P., Senior Physician to the Hospital for Consumption and Diseases of the Chest, Brompton. London and New York: Macmillan and Co. 1894. (Cr. 8vo, pp. 200. 6s. net.)

WHILE it is recognised generally by the public not less than by the medical profession that climate is a potent determining cause of deterioration or of improvement in health, yet the greatest confusion still prevails in the use of the valuable therapeutic agent which change of climate affords. There are few things about which men, and especially women, are so prejudiced as the health resorts which they like or dislike, and too many books published by physicians are tainted by more or less interested preferences. From these weaknesses Dr. THEODORE WILLIAMS is singularly free. With impartial eye he surveys all climates from China, or at least from India, to Peru, and finds something to praise, and as a rule something to criticise, if the word may be allowed, in every one. He has made a special study of meteorology, and brings his knowledge to bear on the returns presented by interested municipalities; moreover, he has been a great traveller, and has pushed his personal investigations even as far as the newest and most uncomfortable health resorts of Southern California.

The result of much study, of long experience, and of careful statistical investigation of many series of cases of phthisis is given in this volume, which is founded on the Lumleian Lectures of 1893, published in the BRITISH MEDICAL JOURNAL at the time. It is a thoroughly practical manual, which ought to be in the hands of every physician in this and other countries of the temperate zone. The thread of meteorological theory binds together the detached facts of climatology, and makes the book pleasant reading, while at the same time the most explicit advice is given as to the various disorders for which each climate is suited.

ON THE INSTRUCTION AND AMUSEMENTS OF THE BLIND. By Dr. GUILLIÉ, Physician to the Royal Institution for the Blind, Paris. Published in 1819. Translated into English and reprinted in 1894. London: Sampson Low. 1894. (Demy 8vo, pp. 170, with 21 engravings. 8s.)

THIS essay, printed by the blind themselves, is reprinted at the cost of a gentleman who believes the book will prove, owing to recent legislation, of special value and interest at the present time. We would fain share in this hope, but legislation for the blind, the deaf, and dumb tarries long. The treatise comprises general considerations on the genius and character of the blind, with memorials of blind men who have distinguished themselves in the arts and sciences. The twenty-two concluding chapters are artistically and profusely illustrated, and deal with occupations, trades, and games of the blind.

The chapters on books for the blind on writing, geographical maps, mathematics, and musical notation are not up to date, whilst showing that the author was in advance of his times.

The chapters on knitting, matting, spinning, weaving, also on making shoes, carpets, purses, ropes, whips, etc., are likely to prove of value now, as are also those on chess, draughts, cards, and other games. The French dotted system of writing has now superseded the methods described. The work should find a place in all schools for the blind, and will be of historical interest to all.

CROCKER'S ATLAS OF DISEASES OF THE SKIN.

In the review of the first and second fasciculi of this work it should have been stated that the *Atlas* is published only by Mr. Young J. Pentland, of Edinburgh and London, whose imprint alone it bears.

NOTES ON BOOKS.

Lectures on Surgery. By DAVID W. CHEEVER, A.B., M.D.Harv., Emeritus Professor of Surgery in the Medical School of Harvard University; Senior Surgeon of the Boston City Hospital, etc. Boston: Damrell and Upham. 1894. (Demy 8vo, pp. 600.)—This is a collection of lectures dealing with injuries and the ordinary surgical diseases of some few organs. They represent the views and conclusions of a thoroughly practical surgeon, who has had much experience both as an operator and as a clinical teacher. As Dr. Cheever has lectured for thirty years, and is able to dedicate his book to no fewer than thirty-three medical classes, it will be readily acknowledged that he is well fitted to express the teaching and to indicate the progress of American surgery. Whilst some of these lectures are very elementary and contain little to instruct either practitioner or advanced student, others, particularly those on anæsthetics, delirium tremens, and foreign substances in the throat, will be found of much practical value. The lectures on fractures present a clear review of the best methods of treatment, together with many useful hints on diagnosis in obscure cases. Dr. Cheever is cautious and conservative. Whilst acknowledging that the gain in surgery from asepsis has been very great, he is disposed to think that it has led to undue rashness in operations, and, in some instances, to a dangerously prolonged sojourn of the patient on the operating table.

Congenital Affections of the Heart. By GEORGE CARPENTER, M.D. London: John Bale and Sons. 1894. (Cr. 8vo, pp. 103, 3s. 6d.)—In this little work the author first gives a summary of the development of the heart and great vessels, and then discusses the different varieties of congenital defect of the heart; the etiology of these conditions receives only the most brief consideration. What he has to say about diagnosis we may give in his own words: "It really amounts to this, that given a case with the signs and symptoms I have mentioned in the text, the particular cardiac malformation is very possibly of such a nature as has been described in association with these signs and symptoms. When there is no *bruit* nothing more can be said but this is an illustration of congenitally deformed heart, and when there is one the preceding remarks apply." We are informed that students have found the instruction contained in this book serviceable.

The Student's Handbook of Medicine and Therapeutics. By ALEXANDER WHEELER, L.R.C.P., L.R.C.S.Ed. (Edinburgh: E and S. Livingstone. 1894. Cr. 8vo. pp. 402; 10s. 6d.)—It may be said at once that these smaller works on medicine are only sufferable on the condition that students supplement them from the larger and excellent manuals now at their disposal. It does not appear from the author's preface that there is any such intention here—at least it is not, as it should be, expressly stated. Under Enteric Fever, besides such inaccurate expressions as embolism of the femoral vein, the pneumonic condition, it may be noted that so constant an accompaniment as bronchitis is not even so much as named; that not a word is said about prognosis or about the antiseptic treatment; that we are not told when intestinal hæmorrhage is likely to occur; that the rash is said frequently not to appear; and that splenic enlargement is only mentioned under the morbid anatomy. It is not intended to imply that all sections are as wanting as this one, nor that this book is not without some good points; yet enteric fever is one of those diseases of which a full and exact account is required of the student, and much more so of him who would be the student's guide. Again, under Bronchitis no mention whatever is made of the relation of this disease to rickets or cardiac disease. Gastric dilatation is most inadequately described; washing out the stomach is not named here. Comparative tables are in profusion. In these days of book making, each new book may reasonably be expected to justify its existence. This work does not appear to us to do so; even the author's claim that it is practical cannot always be allowed.

Essentials of Practice of Pharmacy arranged in the Form of Questions and Answers. By LUCIUS E. SAYRE, Ph.G., Professor of Pharmacy and Materia Medica of the School of Pharmacy of the University of Kansas. Second edition. (Philadelphia: W. B. Saunders. 1894. Crown 8vo, pp. 200. 1 dollar.)—This work is arranged in the form of questions and answers, and has been especially prepared for pharmaceutical students. It is not intended to be a textbook of pharmacy, its object being to assist the student in his studies by presenting to him a series of questions upon the instruction he has received. The questions and answers are arranged so as to include the main facts relating to the various departments of pharmaceutical knowledge; and there can be no doubt that the book contains a great deal that will assist him in his studies. Although based upon the United States *Pharmacopœia*, there is a considerable amount of matter, such as the various pharmaceutical processes and manipulations, drug and plant analysis, incompatibility, etc., which the pharmaceutical student in this country will find useful.

A Revision of the Adult Cestodes of Cattle, Sheep, and Allied Animals. By C. W. STILES, Ph.D., and ALBERT HASSALL, M.R.C.V.S. Washington: Government Printing Office. 1893. (Demy 8vo, pp. 103, 16 plates with letterpress.)—This report, emanating from the United States Department of Agriculture, is a piece of conscientious work of much interest to veterinarians and naturalists. It is an attempt to determine and identify, as well as to describe, the cestodes of American herbivora. As a preliminary to this laborious investigation, it includes a fresh study of the tapeworms of European herbivora. Although it is one of the best and most complete studies of the tapeworms of cattle and sheep yet attempted, it shows how little is really known of this intricate subject, important as it is from the scientific and economic points of view, and how great the necessity still is for further investigations conducted with similar care.

On the Application of Suitable Mechanism to a Case of Amputation of both Hands. By F. GUSTAV ERNST. (London: Sprague and Co. 1893. Demy 8vo, pp. 15, illustrated by 20 plates. 3s. 6d.)—This work describes with clearness and brevity an interesting and successful attempt to fit an unfortunate gentleman, who had lost both hands, with effective artificial limbs. Mr. Ernst appears to have worked out the various problems for himself, the primary one being how to enable a completely handless person to fit and remove the various separate appliances necessary. This was solved in an ingenious and beautiful manner, for a description of which the reader must refer to the book itself and its illustrations. The hooks, knife, fork, spoon, razor, pen, brushes, and grasping appliance needed are arranged in a bag, which also contains a purse. For taking the money out of it, Mr. Ernst has arranged an instrument which we really think may prove too simple and effective, especially when in the hands of the open-hearted-looking subject of the book, whose pleasant face is presented so often in the admirable plates. An important adjunct, which appears to be quite new, is the "lavatory arrangement."

Asepsis in der Gynäkologie und Geburtshülfe (Asepsis in Gynæcology and Midwifery). Von Dr. M. SÄNGER, Professor an der Universität, Leipzig, und Dr. W. ODENTHAL, früher Assistenzarzt in Prof. Säuger's Heilanstalt. Mit 2 Tafeln und 42 Abbildungen im text. (Leipzig: C. G. Naumann. Cr. 8vo, pp. 128. Mk.1.50).—This little book contains an

account of the modes of sterilising and disinfecting hands, instruments, sponges, ligatures, etc.; of surgically cleansing the parts of the body liable to infect, or be infected, in the practice of midwifery and gynæcology; of the after-treatment of the wounds made in operations on the sexual organs. As will be seen from its title page, it is written by a former assistant of Professor Sänger, and the methods recommended are those approved by that able operator. The book is a clear, full, and practical guide on the subject of which it treats.

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This preparation is an acid solution of pepsin of fairly good quality capable of dissolving twice its weight of albumen, according to the tests prescribed in the *British Pharmacopœia*. When tested according to the directions of the German *Arzneibuch* (*Pharmacopœia* iii) the result obtained indicates a somewhat higher solvent power, but that is a consequence of the greater dilution of the liquid in the experiment and the longer time of digestion. The solvent action, however, does not under these conditions come up to anything like that which the preparation is stated to possess, if it be intended that 1 gramme of the liquid is equal to 0.5 gramme of pepsin capable of dissolving one hundred times its weight of albumen when tested according to the method of the German *Pharmacopœia*. The London agents are Messrs. R. W. Greeff and Co., 29, Mincing Lane, E.C.

THE "PERFECT" COCOA EXTRACT.

The sample of cocoa sent by Messrs. Twining gives results which indicate the purity of the article and the absence of any admixture of starch, etc. The cocoa has been deprived of some portion of the fat naturally present in the beans, as is usually the case with prepared cocoa. Used in the ordinary way this extract makes a beverage of agreeable flavour and aroma; but there is a peculiarity in the colour, which has a purple tinge. This may be due to the peculiar kind of cocoa bean employed, or to the roasting having been too slight; but there is no evidence of its being artificially produced, though it is somewhat exceptional, and might be objected to by some persons accustomed to cocoa of the usual pure brown colour.

The "perfect" cocoa extract is manufactured by Messrs. R. Twining and Co., of 216, Strand, London.

GERMICIDE SOAP.

This soap is intended to obviate the risk attending the use of active antiseptics, and at the same time to secure the advantages of external antisepsis in surgical operations, and whenever that object is desirable. This is effected by intimately incorporating with the soap naphthol, eucalyptol, and methyl salicylate, together with mercuric chloride and sal alembroth. The soap is slightly alkaline, and contains mercury equivalent to 1 part in 2.000 of each of the last named ingredients. It is claimed that in the use of this soap as a detergent no fear need be entertained of its causing irritation of the skin, and it is recommended as a most efficient prophylactic to lessen the danger of contagion, for clearing wounds and ulcers, as well as in the treatment of cutaneous and venereal diseases, for enemata and in cases of uterine catarrh. The soap is manufactured by Fels and Co., of Philadelphia, and the agents in this country are Messrs. Lorimer and Co., Britannia Row, Islington.

AN APPARATUS FOR THE LOCAL APPLICATION OF DRY HEAT.

A local medical hot-air bath, designed by Mr. Lewis A. Tallerman, the Hon. W. Sheffield, and Mr. T. H. Rees has been tested at St. Bartholomew's Hospital, and has been the subject of a recent clinical lecture by Mr. Willett. The bath, which is made in various sizes, consists of a copper cylinder, and is heated by gas. One end of the cylinder is closed by a metal cap or cover, which may be opened quickly if necessary. At the opposite end is a strip of asbestos cloth, over which fits a piece of india-rubber sheeting. The limb to which the hot air is to be applied passes through this sheeting, which is then bandaged firmly round the limb. When in the cylinder the limb rests on an asbestos sheet, which is supported by a cradle separated by an air space of about 1 inch from the bottom of the vessel. This is to preserve the limb from actual contact with the heated metal. In use, the cylinder is heated to about 130° F., the limb is then fixed in the bath, and the temperature is raised gradually to 180°. At about this temperature the patient will probably complain that the bath is uncomfortably hot; the door is then opened, and relief is instantaneous; on closing it again the temperature may be raised to 200° before complaint is again made. In this way the temperature may be raised gradually to 240° or 250° without any inconvenience. Mr. Willett stated that in one instance under his observation the temperature of 300° had been reached. Special precautions need to be taken, by the use of asbestos covers, to prevent scorching of the patient's clothes, sheets, etc.

Mr. Willett observed that the physiological effect on the limb was greatly to increase diaphoresis and the flow of blood in the skin, so that the surface had a boiled lobster colour. The most conspicuous and constant effect was anodyne. This was specially striking in painful rheumatic joints. The actual excursions of the limb on movement were not increased, but the movement ceased to be painful. "When employed in recent affections or subacute inflammatory diseases, such as simple synovitis," he said, "cases, that is, which would yield readily and without force under an anæsthetic, I feel confident that the therapeutic action of this hot-air bath to the part will be both marked and rapidly curative .....If articular or capsular adhesions exist, valuable time will be wasted in attempting to cure such cases in this hot-air cylinder. Sooner or later the adhesions will have to be forcibly broken down under an anæsthetic, but this having been done, I think recovery will in many cases be hastened by the subsequent use of the heated cylinder." As to the length of time required to obtain the full value of the treatment, Mr. Willett stated that in recent cases a week's treatment might be sufficient, but in old-standing cases it might be necessary to continue it for six months or a year. A bath (which takes about an hour on the average) should be administered three times a week. Further particulars as to the apparatus (which appears to be well worthy of trial in suitable cases, and especially for the relief of painful chronic or subacute rheumatic affections) can be obtained from the proprietors of the patent at 1 and 2, Chiswell Street, Finsbury Square, E.C.

NASAL OINTMENT SYRINGE.

This instrument, designed by Dr. Whistler and made by Messrs. Mayer and Meltzer, of 71, Great Portland Street, affords an effectual means of applying ointments to the nasal passages. It is especially adapted to the inunction of the intranasal surface by substances which are too sparingly



soluble in parolein or adepsin oil to be available in the form of spray. The syringe consists of a glass barrel with plated metal fittings. The glass cylinder is short and broad and can be easily fitted with the ointment by detaching the nozzle, which is fitted to it by a bayonet joint.

Professor Madelung of Rostock has been appointed Professor of Surgery in the University of Strassburg in succession to the late Professor Luecke.

A TONSILLOTOME.

Mr. Stanley Boyd sends us the following description of a tonsillotome which Messrs. J. Weiss and Son have taken a good deal of trouble in making in accordance with his wishes. Mr. Stanley Boyd states that it suits him better than either Mackenzie's or Mathieu's, and it may perhaps suit others. In general form it resembles Mackenzie's instrument, being like it strong and rigid, but it has a ring knife, like Mathieu's instrument and not a guillotine or chisel-blade like Mackenzie's. The faults, as Mr. Boyd deems them, in Mackenzie's tonsillotome are that after it has been placed in position it tends to spring away from the pharyngeal wall when the thumb is moved from the handle to the top of the guillotine to press it down; that the handle is not so shaped as to be firmly held by the fingers alone, and that an assistant is often necessary even with a fairly quiet patient, both hands of the operator being required to place and keep the instrument in position. The metal handle of the tonsillotome which Mr. Stanley Boyd submits was cast from a pattern in modelling clay, moulded by his own hand. It is securely and easily held by three fingers and the palm. The forefinger rests on the trigger and gives steadiness. The thumb rests on the button at the end of the fixed blade, giving most perfect control over the instrument, and enabling the surgeon to adjust it with great accuracy. This is rendered still more easy if the surgeon places his free hand beneath the patient's chin—the head resting against the back of the chair—so that his second finger rests outside the tonsil. By pressure with the tonsillotome from within and counter-pressure by the finger from without the tonsil can be protruded to the desired extent. Then, without altering the position of the instrument in the least, the forefinger draws the ring-knife home and the tonsil is cut off against the chisel edge of the fixed blade. The instrument is made in the usual three sizes.



SPECIAL INSTRUMENTS FOR VAGINAL HYSTERECTOMY.

Mr. C. E. Jennings (Seymour St., W.) writes: Vaginal hysterectomy having now acquired recognition as the proper resource for certain cases, it may be interesting to some surgeons desirous of performing this operation to be informed that in 1886, when I reported a successful hysterectomy for cancer, I also described some special instruments (manufactured by Messrs. Krohne and Sesemann) to facilitate the application of pressure to the broad ligaments at the necessary stage of the operation. First, there is a steel sound, with the beak at a right angle to the shaft, as ordinarily used for the detection of vesical calculus; but with a deep notch cut at the point, around which a stout silk ligature must be entwined. Secondly, there is a strong pair of forceps, by which, after a broad ligament has been surrounded with the loop of silk, a split shot can be passed upwards encircling the free ends of the loop, and tightly compressed near the side of the uterus.

Traction being now made upon the ligature, the operator must grasp the broad ligament to the outer side of the ligature with pressure forceps, the jaws of which are 1½ inch in length. This manœuvre having been repeated on the opposite side of the uterus, the excision of the organ is completed with scissors, and the pressure forceps are left *in situ* for the number of hours considered necessary to prevent hæmorrhage. A ligature applied around the entire broad ligament would be sure to slip after removal of the uterus.

Sanitary Reform in Spain.—There appears at last to be some prospect of a new law relative to public health coming within the sphere of practical politics in Spain. Señor Aguilera, the Minister for Home Affairs, is engaged, with the assistance of the members of the medical profession who have seats in the Chamber of Deputies and in the Senate, in drafting the main lines of a large scheme of sanitary reform.

REPORTS
ON
THE NURSING AND ADMINISTRATION OF PROVINCIAL WORKHOUSES AND INFIRMARIES.

Specially Reported to the "British Medical Journal."

III.
ST. ALBANS.

The next house that we visited was St. Albans, situated at a little distance out of the town, and standing on a slight elevation, with open space all round. The inmates are drawn from an agricultural population, and this class is low in intelligence, and enters the infirmary at an advanced age. The building set apart for the sick is small, crowded, and unsuitable for its work, but the matron informed us that the guardians were contemplating the erection of the new infirmary.

At Time of Visit.

The matron was most obliging in showing us over the infirmary and in giving us every information. The wards were rather empty, but when all the beds are occupied there must be overcrowding; they are small rooms, holding five or six beds and these wards serve as dayrooms, the meals of those patients who are up being taken in them. The dinner was being served when we were going round; it consisted of boiled pork and potatoes; it was well cooked, but the thick slices of fat pork could hardly be an appetising morsel for a sick man. Special diets are ordered by the doctor, such as fish, milk puddings, eggs, beef-tea: these we saw on the bed cards, and the matron informed us that milk and beef-tea was given to the sick at night, for they have their last meal at 6 o'clock.

System of Nursing.

In the infirmary there are two nurses, the senior being fully trained, and the assistant having had some experience in the infirmary work. There is no night nursing of any description, the usual wardsman or wardswoman sleeping in the ward. In the event of a patient being seriously ill, the watches are taken by the two nurses; no patient dies unattended. There are fifty-eight beds in the infirmary, the heaviest work just now being on the male side; the cases included paralysis, rheumatism, bronchitis, and several of senile debility. The paupers help with the bed making, and wait on the patients, except those serious cases which are attended to by the nurses themselves, who also wash the patients.

The labour ward is small, opening out of one of the infirm wards; it is not often used, and then principally for unmarried women.

Classification.

The imbeciles are kept apart; there is no provision for dealing with the insane, but in the event of a patient being uncontrollable, paid attendants are hired to take charge of the insane until removal to the asylum. There were no lock cases in the building at the time of our visit, nor is there any ward for their reception; such as may require isolation are kept in the receiving ward.

Wards and Offices.

The bedsteads were the miserable 2 feet 3 inch bed with a flock mattress and a proper supply of bedding, but we were pained to see the poor old people, many of whom never leave their bed, condemned to lie on a bed which was almost too narrow to turn round on; one big woman to whom we made this remark said they were most uncomfortable, and more easy to roll out of than to lie in. The bathrooms are on each floor, but from the overcrowded state of the infirmary they were full of a miscellaneous collection of articles, making it evident that they could not be frequently used. They were supplied with hot and cold water, and there was a good flush in the closets. There are no slop sinks, nor did there appear to be any convenience for emptying water except in the closet.

Isolation Hospital.

There is an infectious hospital attached to the Union, at this time empty; it is provided with a disinfecting oven, but here we noticed that the important duty of placing the clothing in the receptacle is entrusted to a pauper. What is the use of having complicated apparatus, when they are rendered useless, or worse than useless, by neglecting to provide a responsible man to see that they are properly worked? Nor was the infectious hospital kept ready for the reception of patients; a nurse would have to be found, a certain amount of lumber to be removed, and the place cleaned up. It is a new building, so perhaps the guardians do not yet understand the use of their possession.

Recommendations.

That a new infirmary be built bringing the sick of both sexes under one roof, thus economising the nursing staff.

A paid attendant to be put on duty in the sick wards at night. The setting apart of wards for the insane and the lock cases. That a responsible officer be put in charge of the disinfecting apparatus, and that the infectious hospital be maintained in a state of efficiency.

LIFE-SAVING SURGERY.

II.

The disgraceful attacks now being made by a portion of the press on modern life-saving surgery need occasion no surprise. Psychical aberrations of this kind occasionally assail every progressive movement; but, fortunately, though oft renewed, the folly of the moment soon passes away.

In the present instance nothing will, I think, be more conducive to this end than clear demonstration of the falsity of the statements made. In the annual statistical reports published by St. Bartholomew's, St. Thomas's, University College, and Middlesex Hospitals, we have ample data for so doing.

In the whole range of surgery it would be impossible to find a more typical operation for testing the value of modern surgical proceedings than extirpation of the breast for cancer. I have ascertained, from data derived from the above-mentioned and other sources, with regard to this proceeding, that modern operations, notwithstanding their increased severity, are attended by a much smaller mortality than was formerly experienced; that the liability to septic diseases has been greatly diminished; that a considerable proportion of cures are now thereby effected; and that in cases not cured life is prolonged by operation.

Subjoined is a brief epitome of the data on which these statements are based; a fuller account of them will be given in my forthcoming monograph on *Diseases of the Breast*.

Of 167 hospital extirpations for breast cancer done by Velpeau[1] prior to 1854, the mortality was 19 per cent.; of 305 similar operations done by Billroth[2] prior to 1877, the mortality was 15.7 per cent. Thus of these 472 non-antiseptic operations the mortality was over 17 per cent.

Compare these results with those attained by modern antiseptic treatment in four large metropolitan hospitals.

At St. Bartholomew's, during the years 1886-90, 157 extirpations were done, with 15 deaths, or the mortality was 9.5 per cent.

At St. Thomas's, during the same years, 138 similar operations were done, with 12 deaths, or 8.7 per cent.

At University College, during the years 1884-89, 94 breast extirpations were done, with 9 deaths, or 9.5 per cent.

At Middlesex Hospital, during the years 1882-89, 100 of these operations were done, with 10 deaths.

Thus at these four hospitals 489 antiseptic mammary extirpations for cancer were done, with 46 deaths, being a mortality of 9.4 per cent. as against 17 per cent. in former times, when the operations done were much less extensive.

This great improvement has coincided with diminution by more than half in the liability to septic diseases. Velpeau[3] relates that after 235 hospital breast extirpations for cancer, 54 patients were subsequently attacked by erysipelas, or 23 per cent., whereas I have ascertained that after 395 of the above metropolitan hospital operations only 40 were subsequently thus attacked, or about 10 per cent.

The success attained by some modern surgeons, acting on strictly antiseptic principles, has far surpassed even these improved results.

Owing to the greater thoroughness of modern operations for breast cancer, a considerable proportion of cures are now thereby effected. Of recent operators, those who have done the most thorough operations have obtained the best results. Of 1,234 operated cases collected by Gross, 146, or 11.83 per cent., resulted in radical cure, while Koenig, Küster, Gross, Barks, Estlander, and Gussenbauer estimate the cures in their latest series of similar operations respectively at 22.5, 21.5, 21, 20.35, 20, and 16.7 per cent.

Lastly, in cases not cured, life is prolonged by the operation. The correctness of this statement I have proved by making an analysis of 64 fatal cases of breast cancer that came under my observation at the Middlesex Hospital. Of the operated cases the total duration of life averaged 60.8 months; whereas for the non-operated, in which the disease ran its natural course, the total duration of life only amounted to 44 8 months; thus the average gain of life for the operated cases was sixteen months.

If the results of other surgical proceedings were worked out on similar lines to the above I have no doubt they would exhibit equally satisfactory progress. We need only appeal to plain facts of this kind to dissipate the misrepresentation of these latter-day calumniators. W. Roger Williams.

[1] *Traité des Maladies du Sein*, Paris, 1854, p. 151.
[2] *Deutsche Chir.*, Licf. 41, S. 155.
[3] *Op. cit.*, p. 682.

THE PUBLIC MEDICAL SERVICE OF COVENTRY.

The first annual meeting of this institution was recently held. Its object is to provide, for small weekly payments, medical relief to those whose weekly earnings are below £2. The exigencies of professional life in Coventry rendered it inevitable that some movement of this nature should be started, and a meeting of local practitioners was held last year, when it was resolved to inaugurate this service, with a twofold object: In the first place to break down a most irksome monopoly, and in the second place to endeavour to carry out certain measures of reform, some of which are in course of being effected. Its success, financially and numerically, has more than justified the anticipation then formed. The number of members enrolled in the year was 3,261. The monopoly referred to is the provident dispensary, founded partly by charity, with 26,000 members—almost half the population—and a staff of six doctors. An attempt was made to induce these gentlemen to co-operate with their professional brethren for the purpose of the proposed reforms. The result was unfortunate, and eventually all semblance of a wage limit was abandoned by the committee of management. In the opinion of many, this step was disastrous to all concerned, both to the medical men and the poorer classes, who from the nature of things are at a disadvantage in a crowded institution when better class citizens apply for medical relief on the same terms. The massing together of such crowds is liable to perpetuate epidemic disease in the town.

It is claimed for the service that, having a staff of ten medical men, who see patients at their own homes at specified times, the danger of large numbers collecting in one place is greatly obviated, and greater individual attention can be given to each member, a higher tone of professional life is engendered, and greater opportunity given for the scientific treatment of disease. We hope in course of time to give further particulars regarding the general working of the system which may enable practitioners in other towns to avail themselves of the experience obtained from the Coventry Public Medical Service. Such are the particulars which have reached us, and to which we are glad to give publicity: but the details of any such scheme are of its very essence; and therefore we are not in a position to form any opinion on the proposal. We have, however, always held it to be essential to a perfect provident dispensary that all the medical men of the district should be at liberty to join it, and regret that this should be otherwise in that city.

Dr. Rosalie Pawlowska, a graduate of the Paris Medical Faculty, has been appointed physician to the French hospital in Buenos Ayres after passing the qualifying examinations required by the Government of the Argentine Republic.

UNIVERSITY EDUCATION FOR WOMEN.

M. LOUIS FRANK, of Brussels, has collected a large amount of information about the extent to which universities are open to women in different European countries and in the United States. It was in 1863 that the French Faculties were first opened to female students. The first lady who took the degree of Doctor of Medicine in Paris was an Englishwoman. In 1868 the number of women studying medicine in Paris was 4; this had risen in 1878 to 32, and in 1886 to 119. Three women have studied law in the Paris Faculty. The Prussian Universities still remain closed against women. From 1871 to 1880 the University of Leipzig and some of the Bavarian Universities allowed women to attend lectures as "free" students, but this privilege was afterwards withdrawn. The women however are now knocking at the doors of the German Universities with such vigour and persistence that admission can hardly be denied them much longer. A petition signed by more than 50,000 ladies, praying for the removal of their academical disabilities, was laid before the Reichstag not long ago. In Belgium women are admitted by law to all universities, and they can graduate in any faculty they please. Though they are allowed to practise medicine, the privilege of practising law is denied them. Is it invidious to surmise that this curious anomaly is not wholly unconnected with the fact that in the Belgian legislature, as elsewhere, the legal element is strong enough to make it a political force to be reckoned with? In Russia a special school of medicine for women was established by an Imperial decree dated August 2nd, 1890. A ukase was issued on January 7th, 1876, in response to the petition of a lady to be allowed to plead in a court of justice, forbidding the practice of the legal profession by women. In Switzerland, while there is a large number of female students in the universities, there are very few women engaged in the practice of medicine. In a population of three million souls there are 1,157 medical practitioners, of whom, according to M. Frank, only 10 are women. Though women are excluded from the bar, a lady Doctor of Laws is a Professor of Law in the University of Zurich. In Italy the liberal professions, with the exception of that of law, are open to women.

In Denmark, Norway, and Sweden women are admitted to all the faculties, but are not allowed to fill public appointments in the service of the State. In Iceland they are allowed to practise medicine, and they may become Doctors of Divinity, and therefore presumably may teach theology, but they are not yet allowed to preach. In Holland there are many women studying at the universities. In Roumania the Universities of Jassy and Bucharest are open to them. In Austria-Hungary and in Spain they are absolutely excluded from the universities. In the United States there are 2,000 female practitioners of medicine, of whom 610 are specialists in the diseases of their own sex, 70 are alienists, 65 orthopædists, 40 oculists and aurists, and 30 are electrotherapeutists. Seventy women hold appointments on the medical staff of hospitals and 95 are teachers in medical schools. Of the 2,000, 130 are said to be homœopaths, while 580 are classified as "allopaths." What particular 'pathy is professed by the remainder is not stated. There are ten schools of medicine for women in the States, one of which is homœopathic. As regards the law, twenty-three States allow women to plead, and, by the law of February 15th, 1879, they are permitted to practise in the Supreme Court of the United States. In our own colonies, the Madras Medical School has been open to women since 1875; the Medical Faculty of the University of Melbourne since 1878; those of Sidney and Wellington since 1881; that of Calcutta since 1883. At Toronto in Canada there is a special school of medicine for women.

THE annual picnic of the Glasgow Eastern Medical Society took place on June 1st. The outing took the form of a Hunterian pilgrimage, visiting the burial place of the Hunters in the parish church graveyard of East Kilbride, where the inscription on the flat tombstone was deciphered by the President, Dr. Mather. The party then proceeded to Long Calderwood, the birthplace of the Hunters. They afterwards dined together at the Commercial Hotel, Hamilton, and returned to Glasgow by Bothwell and Uddingston.

ST. THOMAS'S HOSPITAL SCHOOL.

ON June 9th the Duke of Connaught, who was accompanied by the Duchess, opened two new blocks in enlargement of the Medical School of St. Thomas's Hospital. There was a large and distinguished company present.

By the two new blocks the school buildings will be doubled in width. The extension not only offers new accommodation to departments which have risen in importance but they will also relieve the main structure of a considerable amount of work. The extension contains laboratories and class rooms for pathology, biology, and practical surgery, as well as a large day club for students.

Mr. MAKINS, in his report as Dean, said that, when the present medical school was opened in 1871, 77 new students entered, and since then 2,167 had pursued their studies. For the extension the governing body, with the permission of the Court of Chancery, had lent £16,000, the general body of medical and surgical officers and lecturers making themselves responsible for the yearly interest, and in thirty years the buildings would become the property of the governors as part of the school.

The DUKE OF CONNAUGHT said that in 1874 the in-patients of the hospital numbered 3,500, but last year the number was 5,840, while in the period there had been relieved 467,319 out-patients and 1,150,393 casualty cases. The hospital was founded 300 years ago by an ancestor of his. Unfortunately the lands then given brought in only half the amount they formerly yielded, and the hospital was therefore fettered in its good work. At the same time everybody connected with and interested in such a great institution might well feel proud at what had been accomplished for the benefit of the present and future students of the school.

Mr. WAINWRIGHT, the Treasurer, said that when the new hospital was designed very careful estimates were prepared of what the prospective income for hospital purposes was likely to be, and it was fully anticipated that in the course of a few years there would be no uncertainty as to the necessary funds for maintaining the whole hospital for the reception of poor patients being provided by the estates and funds of the charity, but, unfortunately, this had not been fulfilled. Under these circumstances the Governors had been unable to meet the increased needs for medical teaching by building those necessary laboratories, lecture rooms, and the like, out of their corporate funds, as was originally done, but the medical staff, with due devotion to their important profession, had themselves come forward and provided the necessary building, making themselves responsible for both interest and capital repayment. He would like to lay before them the idea that could sufficient funds be provided to pay off the remaining debt upon the hospital, amounting to about £60,000, the Governors saw their way to open the, at present, closed wards for reception of poor patients, which would provide for the treatment of 2,000 more in-patients per annum. On the south side of the river there were only two hospitals, St. Thomas's and Guy's, to serve the population of a district which in 1891 was 961,000. He felt that there was one other very important feature in connection with St. Thomas's Hospital which could not fail to be deeply interesting, namely, that it was after the noble services rendered to our soldiers in the field and hospitals during the Crimean war by the band of devoted nurses led by that distinguished and self-sacrificing lady Florence Nightingale that the great school of nurses, the first of its kind, was established there, which had been the pioneer of all the improvements made in this important branch of the treatment of the sick both in hospitals and throughout the parishes of the country.

The ARCHBISHOP OF CANTERBURY then offered up prayer, after which, amid cheers,

HIS ROYAL HIGHNESS declared the buildings opened.

A vote of thanks to the Duke of Connaught was proposed by Sir HENRY DOULTON, who is the senior almoner, and seconded by Dr. W. M. ORD, senior physician, and with the response of His Royal Highness the opening ceremony terminated.

PROFESSOR A. WEICHSELBAUM has been elected Dean of the Medical Faculty of the University of Vienna for the academic year 1894-5.

THE ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A meeting of the Committee of the Association of Fellows of the Royal College of Surgeons of England was held on June 7th, 1894, Mr. George Pollock, President, in the chair.

The report of the Subcommittee, appointed to draw up a statement of the organisation of the Association, was presented. It comprised a recapitulation of the original articles of the Association, founded on the four resolutions passed at a general meeting of the Fellows and Members of the College in March, 1884, the revised rules of the Association, a statement of the position of the Fellows' Association in relation to the Members' question, and some suggestions with the object of improving the organisation of the Association.

A suggestion was made with reference to a resolution to be proposed at a meeting of Fellows on July 5th next. The resolution was to the following effect: "That, in the opinion of this meeting, the concessions granted by the Council, and such other changes as the body of Fellows may desire, shall be embodied in a new charter."

This report of the Subcommittee was unanimously approved and adopted.

The Hon. Secretary reported that he had communicated with several members of the Committee with reference to their reappointment, and, with only one exception, all expressed their desire to be renominated at the next annual meeting.

The Honorary Secretary was instructed to have the rules printed and sent to each member of the Association; and a suggestion with regard to the annual subscription that a proposition should be made at the next annual meeting that any elected member might commute the subscription for a sum of ten shillings was approved. It was arranged to hold the annual meeting on January 9th, 1895. This concluded the business of the meeting, and the Committee adjourned.

A VICTORY FOR SANITATION.

[From a Parliamentary Correspondent.]

The Scotch Grand Committee, in spite of the sinister prophecies of evil which ushered in its birth, has begun and continued its work with energy and smoothness. Party feeling up to this time has been entirely absent, and cross voting was conspicuously absent in the important divisions which settled the composition of the Board. The point which naturally interested us most was the retention or otherwise of the medical officer; and whilst Sir Charles Pearson gratified his constituents by an affirmative reply to the query Aye or No, Mr. Graham Murray cast his energy and ability on the other side. The late Lord Advocate on this occasion was on the winning side, and taking as judicial a view of the question as we can, it seems to us that the decision was a right one.

Under the proposed constitution of the Board it would be unjust to include a lawyer among its members and exclude the doctor; and, considering that a great deal of the work of the future will be hygienic in its nature, the presence of the sanitary member on terms of absolute equality with his colleagues will be necessary both to make his authority felt and to impart essential information from within. As a mere servant the doctor's subordinate position must react unfavourably on the great interests which it is his duty to serve, and the badge of inferiority will cling to his work as well as to himself; whereas, when he takes his seat as a matter of right and not of favour, he can enforce by vote as well as by argument the principles which he is appointed to preach, and will eventually permeate others with their practical application in practice; and in spite of the opposition of the lawyers on the Committee, who arrogated to themselves, as Dr. MacGregor put it, a monopoly of common sense, we hold strongly to the belief that the medical member of the Board will prove himself to be no mere narrow specialist, but a good man of business, able to take an intelligent part in the discussion of any questions that may arise.

One word of warning in conclusion. We may be certain of this, that when the question comes up again for debate in the House of Commons, the opposition will be renewed with greater intensity, and the Government may have to give way. It will be necessary, therefore, for those who think that a substantial victory has been gained for sanitation to keep up their organisation, and see that the enemy do not catch them napping. For jealousy of the doctors is by no means an extinct superstition, and the growing power and influence of the medical profession excites suspicion and opposition even in the House of Commons.

THE CHOLERA.

Waterborne Cholera: Story of the Leghorn Epidemic, 1893.

A very interesting account of the epidemic of cholera from which Leghorn suffered in the autumn of 1893 is given by Mr. Consul Chapman in his report for 1893 on the trade of the district. He tells how the epidemic caused panic, general consternation, and paralysis of commerce; and that, though it began after the bathing season had come to a close, yet between 30,000 and 40,000 visitors and residents fled from the town on the advent of the disease. Baneful as was the effect on trade accruing from the outbreak, the Consul states that it was well for the place that the malady delayed its appearance till it did, else the distress arising from interference with the season would have told even more disastrously than was the case. This account once more confirms the immense mass of evidence accumulated by Mr. Ernest Hart in his analysis of recent epidemics, showing that cholera epidemics are exclusively "waterborne."

The disease prevalence lasted from September 10th to October 30th—or, rather, there were two distinct prevalences, as shown later—and during this period there were 370 attacks, with 173 deaths. On the date first named there were announced 16 cases and 5 deaths; of the 22 cases first coming to knowledge, no fewer than 21 were females, of whom all were women who had been washing in the public washhouses. This incidence led to inquiry into the means whereby these places could have derived their disease-disseminating properties, with the result of discovering that large bodies of workmen were arriving from Marseilles; and that, although disinfection of their clothing was carried out theoretically, yet no doubt existed that unwashed and undisinfected linen found its way into the public washhouses, and caused the cholera epidemic. Some men evaded the required disinfection by wearing several changes of linen, others sold their effects over the ship's side, and in other ways dirty clothing got imported.

The disease was confined to two localities, both inhabited by the poorest of the populace, and not a single case occurred in barracks, prisons, or asylums, even though situated in the infected districts; whilst no attack occurred in nurse, attendant, or disinfecting officer. The second outbreak happened when it was confidently hoped the disease was over, and caused fresh consternation by the announcement, on October 14th, that 46 cases and 38 deaths had newly occurred in the locality of the washhouses. The fresh manifestation was traced to specific fouling of a branch conduit of drinking water, through a fissure, by dirty water from the washhouses, the cholera bacillus having been found in samples of the drinking water. Fortunately there were means whereby the contaminated water was prevented from polluting the whole supply of the town.

St. Petersburg.

The history of cholera in Russia during the past winter may be told in a few words. At the beginning of the year the disease was present in the governments of Volhynia, Kovno, Kursk, St. Petersburg, Tambof, Tchernigof; in the Polish[1] governments of Warsaw, Ploçk, and Radom; and in the Caucasian governments of Staveopol and Erivan. In the month of February the disease died out in all parts of Russia, save the governments of Kovno, Ploçk, and Tchernigof. In March it disappeared from the last-named government, but reappeared in the governments of Podolia and Radom, while still remaining in those of Kovno and Ploçk.

[1] The ten governments which formerly were part of the Kingdom of Poland, are not officially spoken of in Russia as Polish, but as the *Privislinskié* governments, or governments lying on or near the Visla (Vistula). The word Polish is, however, still used colloquially, and in non-official documents in Russia. The use of the term has therefore something more than convenience to justify it.

On April 20th (May 2nd) the monthly bulletin showed that cholera was present in the governments of Kovno, Plock, Podolia, and Radom, and in the city of Warsaw. The exact figures are given below:

				Cases.	Deaths.
Warsaw (city)	from March 29	to April 13*	...	2	2
Kovno (government)	,, 6	,, 9	...	53	34
Plock ,,	,, 6	,, 9	...	75	40
Podolia ,,	,, 25	,, 11	...	20	5
Radom ,,	from April 3	,, 9	...	11	6

* The dates are according to the Old Style.

The bulletin published on May 6th (18th) is as follows:—

				Cases.	Deaths.
Warsaw (city)	from April 10	to April 23	...	4	2
Kovno (government)	,, 10	,, 23	...	18	10
Plock ,,	,, 10	,, 23	...	120	56
Podolia ,,	,, 11	,, 27	...	53	15

LISBON.

A telegram from Lisbon, dated June 7th, states that considering the extreme mildness of the epidemic in Lisbon, which has not caused a single death, the Brazilian Consul-General called a meeting of the consuls of other nations yesterday, when it was decided to communicate to Europe and America that all the Portuguese ports are healthy. In future the Brazilian Consul-General will give clean bills of health to ships leaving here for Brazil, and other consuls will no doubt follow his example. His decision was arrived at after he had consulted the Portuguese Government, and had received from it an official communication to the effect that the bacteriologists, Dr. Koch and Dr. Klein, had declared the bacillus found at Lisbon not to be that of cholera. The consuls of the United States and of the two South American Republics have jointly signed a document with the Brazilian Consul-General, declaring Lisbon to be healthy. Portugal may now be said to be recognised as free from any suspicion of cholera by all countries except Spain, which will probably immediately withdraw its quarantine regulations. Many doctors and members of the public are indignant that some leading members of medical society, who insisted that the epidemic was cholera, should have caused so much misery and commercial loss to the country.

BERLIN.

It is officially stated that the cholera at Myslowitz, in Upper Silesia, close to the Russian and Austrian frontiers, was introduced by a female tramp who arrived there from Russian Poland on May 22nd, and, together with six members of the families with whom she had come into contact, was found to be suffering from cholera. Six of these seven cases ended fatally. The President of the District, and several members of the Sanitary Board of the Save, have arrived at Myslowitz to make investigations. They have convinced themselves that there is no likelihood of a further spread of the disease. All the patients are isolated and convalescent, and no fresh cases have occurred for three days past. All arrivals from Russia are required to report themselves, and name the places visited by them during the preceding five days.

Dalziel's agent at Thorn, telegraphing on June 9th, states that 2 cases of cholera were reported from the Prussian district of the Vistula. In the city of Warsaw there have been within five days 22 cases and 10 deaths, in the Government of Warsaw within four days 22 cases and 13 deaths, and in the Government of Plock in two days 11 cases and 6 deaths.

Professor Koch has gone to Danzig to confer with the authorities there as to the precautions to be taken against cholera, and to inspect the localities where cases have occurred. Cholera bacteria have been found in the water of the Vistula near Danzig, and the police have forbidden the use of the water of that river, and closed the bathing establishments in it. The disinfecting establishments have been enlarged. Three steamers have been prepared for the work of supervision, and all the sanitary stations in the districts are prepared.

OTTOMAN EMPIRE.

Cholera continues to exist in the district of Sivas. Within little over a month the chief place of this district has suffered a loss of one-fortieth of its inhabitants. The disease is also present at Tokat. Since May 18th cholera has shown itself at Samsoun and neighbourhood, especially at the village of Kadikeur. At Iskilip, in Castamouni, the cholera carries off from 5 to 8 of the inhabitants a day. Cholera still treats Koniah and Mimouret-ul-Aziz with severity

The reports as to the sanitary condition of the Red Sea continue to be satisfactory. Nearly 30,000 pilgrims embarked from Jeddah since May 15th. The sanitary state of Camaran continues also to be satisfactory.

THE METROPOLITAN PROVIDENT MEDICAL ASSOCIATION.

The annual meeting of this Association was held on June 12th, in the Jerusalem Chamber, Westminster Abbey, the chair being taken by the Dean of Westminster. Sir Douglas Galton, Sir Spencer Wells, Mr. Bryant, and Mr. Timothy Holmes were among the speakers.

It was pointed out that although there were many provident dispensaries in London unconnected with this Association, this was the only propagandist organisation concerning itself especially with the spread of the provident dispensary system. It was for this purpose that money was chiefly required. In every case the aim was to make these dispensaries self-supporting, and in some this object was almost achieved, but the establishment of new dispensaries in fresh districts always cost money, and for this purpose funds were required.

Mr. Bryant spoke strongly on the evils of gratuitous out-patient relief, showing that it led people to look upon medical and surgical assistance as a right rather than a charity. With equal vigour he attacked the medical aid associations, showing the impossibility of giving to each patient proper attention when, in return for a salary of £100 or £200 a year, a young man undertook the charge of thousands of patients. The provident system, coupled with a proper wage limit, gave the best results. The patients were not pauperised, and yet the medical men obtained a fair remuneration.

Mr. Timothy Holmes thought everyone would agree that there must be some limit to gratuitous medical service, and that when it could be shown that one-third of the whole population of the metropolis was receiving free medical attendance this limit had been reached. He also insisted on the inappropriateness of hospital out-patient treatment for cases of ordinary illness. The working classes did not really get what they wanted when for slight ailments they went to the out-patient departments of great hospitals; they wanted exactly the same as those in better circumstances, namely, a family doctor, who would know their constitutions and peculiarities. This they could get by the provident dispensary system, but they certainly could not obtain it by going to an out-patient department. He also drew attention to the fallacy of supposing that the out-patient departments of our hospitals were really free to working people. They might not pay in money but they paid in time, the four to six hours spent being in many cases a far more onerous tax than the penny a week.

The report of the Association showed that in the metropolitan district there are now eighteen provident dispensaries or organisations in connection with the Association, having over 10,000 cards of membership, and about 30,000 persons entitled to treatment from their own payments. An institution of this character cannot fail to have the sympathy and support of the medical profession so long as the wage limit is strictly and honourably maintained.

LITERARY NOTES.

Herr H. Bechhold, of Frankfort, the publisher of the *Index der gesammten chemischen Litteratur*, announces that owing to the occurrence of "editorial difficulties" the publication of that useful periodical has been discontinued.

Dr. J. E. Minney, Dean of the Kansas Medical College, has resigned the editorship of the *Kansas Medical Journal*, which he has held for five years. He is succeeded by Mr. W. E. M'Vey.

The *New York State Medical Reporter* is the name of a new "monthly journal of medicine and surgery," edited by Dr. H. Bronson Gee, and published at Rochester, New York State.

The *Railway Surgeon* is the title of a new "bi-weekly" journal published at Chicago. It is to be the organ of the 1,767 surgeons of the United States, Canada, and Mexico, forming the National Association of Railway Surgeons.

We have received the eleventh annual issue of the *Year Book of the Scientific and Learned Societies of Great Britain and Ireland*, published by W. Griffin and Co. (7s. 6d.). The general character of this annual, which contains not only particulars as to the objects, constitution, and officers of the various societies, but also lists of papers read during the year is now well known, and its value as a work of reference pretty generally recognised.

In the *Deutsche medicinische Wochenschrift* of May 31st, the editors, Professor A. Eulenburg and Dr. Julius Schwalbe suggest that all the medical journals of Germany, Austria, and German-speaking Switzerland should unite themselves into an association on the lines of the Association de la Presse Médicale, which was established in France in 1889. The objects of the association are to protect the interests of medical journalism, and particularly to obtain greater facilities than exist at present for the report of the proceedings of congresses and medical gatherings of all kinds.

Dr. N. J. Grigorjeff, of St. Petersburg, has obtained permission from the Russian Government to start a monthly journal, to be called *The Messenger of Temperance*.

Professor N. P. Iwanowski, of the Military Medical Academy of St. Petersburg, has retired from the editorship of *Russkaja Medicina*, in which he is succeeded by Dr. Kossorotoff and Dr. Fomin.

An index to vols. xvi-xxxi of the *Transactions of the Obstetrical Society of London* is issued with the concluding part of the *Transactions* for 1893. The index has been compiled by Mr. R. W. Savage, the Society's Librarian.

The American Government Printing Office has issued a pamphlet entitled *Twelve Edible Mushrooms of the United States, with Directions for their Identification and their Preparation as Food*, by Dr. Thomas Taylor, Chief of the Division of Microscopy of the Department of Agriculture. Dr. Taylor describes the following species: *Lactarius deliciosus, Cantharellus cibarius, Marasmius Oreades, Hydnum repandum, Agaricus campestris, Coprinus comatus, Morchella esculenta, Clavaria cinereia, Clavaria rugosa, Boletus edulis, Lycoperdon giganteum*, and *Fistulina hepatica*. The pamphlet is illustrated with coloured lithographs of all the species of edible fungi described.

Dr. J. Farquhar, of Marlborough, and Dr. Eaton W. Waters, of Huddersfield, have independently called our attention to a misquotation of certain lines from Goldsmith's *Traveller*, which appeared in the BRITISH MEDICAL JOURNAL not long ago, in an article entitled "The Death of Francis II: a Historical Case of Adenoid Growths." We quoted from memory, and inadvertently altered the words, though giving the sense of the passage with perfect accuracy. The lines should run as follows:

> How small of all that human hearts endure,
> That part which laws or kings can cause or cure.

With regard to the authorship of the lines, which were attributed in our article to Johnson, we may be allowed to point out that though they occur in *The Traveller*, they were inserted in that poem by Johnson, who looked through it in manuscript. It was pretty generally believed in literary society, for some time after the appearance of *The Traveller*, that Johnson was the real author, but he declared that he had only written the two lines in question. Macaulay, in his essay on Croker's *Boswell*, quotes them as "the well known lines which he (Johnson) inserted in Goldsmith's *Traveller*." Johnson had previously put very similar expressions in the mouth of Rasselas; and in Boswell's *Life* we find him, in the course of a conversation with Sir Adam Ferguson, saying: "I would not give a guinea to live under one form of government rather than another. It is of no moment to the happiness of the individual."

In the *Bulletin of the Johns Hopkins Hospital* for May Dr. Hunter Robb gives an interesting account of Madame Boivin. The famous midwife was born in 1773 and died in 1847. She was in the Paris Maternité from 1797 to 1811, and had Lachapelle and Chaussier, among others, for her teachers. Her *Mémorial de l'Art des Accouchements* was published in 1812, at the suggestion and with the liberal help of Chaussier. In addition to papers on Vesicular Mole, Abortion, the Measurement of the Pelvis, and Cæsarean Section, she afterwards published a *Traité Pratique des Maladies de l'Utérus et de les Annexes*, written in association with A. Dugès, a Professor in the Medical Faculty of Montpellier. This work appeared in 1833 and was translated into English by G. O. Hemming, Consulting Obstetrician to the St. Pancras Infirmary. In another work, published in 1828, when speaking of the operations which had been performed for diseases of the ovaries, Madame Boivin mentions the case of extirpation of the ovary recorded by Dr. Nathan Smith in the *Edinburgh Medical and Surgical Journal*, as well as four cases of Mr. Lizars. She adds that the English are not in favour of the operation, and she quotes the editor of the journal just named as saying that it was impossible to believe that such an operation had been performed with success, and that he did not think one should ever undertake it. Madame Boivin, however, expressed her belief that the operation had been performed with success "because there are circumstances which accompany diseases of the ovaries which permit us to believe in a sort of cure; but since these favourable conditions can never be known until after the operation has been begun, the attempt, we must admit, savours of rashness, and the success obtained could not guarantee a lasting cure." Madame Boivin, though she all her life called herself and practised as a midwife, had the honorary degree of Doctor of Medicine conferred on her by the University of Marburg on account of her writings.

The June number of *Science Progress* contains an excellent review by Professor Halliburton of the present position of the glycogen question. The origin and destination of glycogen is one of the most important physiological problems of the day, and one which has a direct bearing on practical medicine.

The *Journal of the American Medical Association* of May 5th contains an interesting article by Dr. A. M. Fernandez de Ybarra on the medical history of Columbus and the part taken by the medical profession in the discovery of America. Although no priest accompanied Columbus on his first voyage, the bodily welfare of his little force of 120 men was looked after by two *fisicos* or surgeons, Maestre Alonzo and Maestre Juan. The former sailed in the caravel *Santa Maria*, which was commanded by Columbus himself; Maestre Juan was in the *Pinta*. The latter remained at the fort of Navidad when Columbus returned to Spain, and was one of the thirty-eight men massacred by natives at San Domingo. The chief medical officer in Columbus's second expedition, which numbered 1,500 men, and left Cadiz in September, 1493, was Dr. Diego Alvarez Chanca, of Seville, Physician in Ordinary to the King and Queen of Spain. Speaking of him in a memorial addressed to Ferdinand and Isabella, Columbus wrote: "You will inform their Highnesses of the continual labour which Dr. Chanca has undergone from the prodigious number of the sick and the scarcity of provisions; and that in spite of all this he exhibits the greatest zeal and benevolence in everything that relates to his profession. As their Highnesses have entrusted me with the charge of fixing the salary that is to be paid to him while out here (although it is certain that he neither receives nor can receive anything from anyone, and does not receive anything from his position equal to what he did receive and could still get if he were in Spain, where he lived peaceably and at ease in a very different style from what he does here) I have nevertheless not ventured to place to the credit of his account more than fifty thousand maravedis (£145) per annum as the sum which he is to receive for yearly labour during the time of his stay in this country." Dr. Chanca saved the life of Columbus when threatened by severe and protracted fever, and wrote the first scientific account of the New World in the form of a report to the Municipal Council of Seville. On his return to Spain he wrote a *Commentum Novum in Parabolis Divi Arnaldi de Villanova*, which was published at Seville in 1514. From Paolo del Pozzo Toscanelli, a famous physician and astronomer of Florence, Columbus got valuable advice as to the practicability of a voyage westward to India, and a chart of the course he should follow. Another doctor who played an important part in his career was Garcia Fernandez, who practised his profession in the little village of Palos de Moguer in Andalusia. At the convent of Santa Maria de la Rabida near that place Columbus sought shelter on one occasion when he was worn out with fatigue and suffering. The Prior, thinking his guest to be mad, called in Dr. Fernandez, who, discoursing with the traveller on geographical and astronomical subjects, soon found that he was not a madman, but a genius. The clear-sightedness of this humble village doctor was probably the means of saving Columbus from a miserable end and the world from the loss of one of its greatest men. With regard to Columbus himself, Dr. Fernandez de Ybarra maintains, in opposition to "all the standard historical authorities," that he died, not of gout (the great navigator being "of too humble birth to have inherited the gouty diathesis"!) but of the cardiac complications of chronic rheumatism. This diagnosis appears to be founded mainly on the fact that persons who saw Columbus while bedridden in the last months of his life have left it on record that his body was extraordinarily swollen from the chest downwards.

DR. ANGUS FRASER has been appointed certifying surgeon under the Factory and Workshop Act in Aberdeen in succession to the late Dr. James Will.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

SUBSCRIPTIONS to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, JUNE 16TH, 1894.

THE AGED POOR QUESTION: MEN AND NOT MEASURES.

MR. BOOTH again offers a mass of figures for the service of the community.[1] The mass is too great for immediate digestion, and almost overwhelms inquirers who want clear and distinct views as to the condition of the old.

Two conclusions seem, however, to stand out for immediate acceptance: (1) The poverty of the old; (2) the failure of any system of Poor-law relief to prove itself the best.

The old are very poor. The fact that 30 per cent. of all persons over 65 years of age are in receipt of parish relief is in itself sufficiently striking, but when it is remembered that a considerable section of the population—perhaps one third—is lifted far above parish relief, it is obvious that among the working classes the rate of pauperism must be not less than 40 to 45 per cent.

Mr. Booth, by careful analysis of figures, and by inquiring into the conditions of living, heaps up proofs as to this poverty. He seems to have ransacked the records of every union in England and Wales. He has compared the conditions in north, south, east, and west. He has studied the comparative poverty of town and country. The conclusion of the whole matter is that the national conscience has not yet realised how the old live. In the course of the inquiry many interesting points have come out. For instance, the proportion of the old relieved is greatest in the Eastern Counties, and smallest in the North. The country is better than town for giving comfort to old age; Nature is kinder, and neighbours more neighbourly. In towns the increasing strain of life seems to tell more and more on the physique. Improvements in machinery and methods of business require new hands—young hands—and so at earlier and earlier ages the old are discharged. The fact that so large a number apply to the Poor Law for relief is sufficient proof that few other resources are available. Those that exist have been carefully estimated. Friendly societies have failed almost as completely as the Post Office to start any attractive superannuation scheme. In some cases where a kindly management has let sick pay be continuous to take the place of a pension the financial condition has become dangerous. Building societies have done more, but at the present moment are discredited. Children in some cases do a little, but here again the tendency is for them to diminish their contribution as the demands of their families increase. Trades unions have done most in the direction of meeting the needs of their members in old age; in some cases spending as much as £5,000 a year, and in one case over £40,000. But here again a fund which has to meet strike pay, out-of-work help, and funeral expenses, cannot afford a stable basis.

But perhaps the most interesting as it is the more unexpected conclusion of Mr. Booth's inquiries is the failure of the advocates of any system of Poor-law relief to prove the superiority of their system. In some unions out relief is given freely, in some only after careful inquiry into character, and in some out relief has been abolished. The various systems do not in themselves seem to have much influence on the pauperism, or, as far as it can be judged, on the character of the neighbourhoods. "The deliberate acceptance of the charitable use of out relief does not, it would appear, increase the volume of old-age pauperism, but rather the reverse, where it may be supposed that private charity steps in to replace the parish allowance." "The proportion of the old relieved is, on the whole, no more when assistance is promptly given in the form of outdoor relief than where comparatively little is distributed in this particular manner." "The success of a complete anti-out-relief policy in country districts, when it has been fairly and fully tried, is most striking."

These quotations are sufficient to show that so far as results can be measured by figures no trust must be placed in a policy. Mr. Booth himself puts his opinion in a sentence: "This at least I believe, that wherever a policy is carefully considered and acted upon, then, whatever that policy may be, good results do certainly follow."

It is in fact the old lesson—men and not measures effect changes. Wherever there are guardians or a clerk who cares, and who caring takes thought, then be the policy adopted out relief or indoor relief, the results are good. It is above all things necessary therefore that guardians ask themselves, as Mr. Booth says: "What is our policy?" They who drift and in a kindly way meet needs as they arise, do least good.

At the same time there is a result of an out relief policy which is not to be measured by figures, and which is thus out of Mr. Booth's present reach—the result, that is, on character. It can hardly be a healthy experience to receive a dole which must be grudgingly given, or a good example to set in a community. Mr. Booth says nothing in this volume of the endowment of old age, which he has previously advocated, but the teaching of his figures—their terrible indictment against the neglect of the old, and the light they throw on the inadequacy of Poor-law policies—leads up to the wish that it might be possible to provide the old with a pension which will leave them their homes and their self-respect.

[1] *The Aged Poor in England and Wales.* By Charles Booth. London: Macmillan and Co. 1894. (Demy 8vo, pp. 538. 8s. 6d.).

THE LOCAL GOVERNMENT BOARD FOR SCOTLAND.

A WARNING AND APPEAL TO THE SCOTTISH MEMBERS OF OUR ASSOCIATION; ITS MEDICAL MEMBER.

AT the termination of the first session of the Grand Committee on the Local Government (Scotland) Bill, the proposals of the Government for the creation of a purely official board to consist, *de facto*, of three members, had been

accepted. It had further been determined that, of the three members, one should be chairman and another a legal member. At this stage the Committee adjourned, but not before indications had been given that a great effort was to be made to upset the Government proposal that the third should be a medical member. This movement appears to have had its origin in the feeling of jealousy and distrust with which the legal and official classes regard the growing influence of the medical profession. In addition to this, however, it was evident that the opposition would receive support from the members of the Committee, who were antagonistic to the idea of a purely official board, and who hoped, through the displacement of the medical member, to be able to secure in some sort the representation on the Board of some of the bodies concerned in local government administration. It evidently did not occur to this section of the Committee that the practical effect of the adoption of their proposal would probably be the establishment of a board consisting of three lawyers, in which case the last condition of things would be worse than the first.

It was necessary to act with promptitude if this attempt to swamp the medical element was to be successfully combated; and Mr. Ernest Hart, as Chairman of the Parliamentary Bills Committee of the British Medical Association, immediately placed himself in communication with the medical members of the Committee, in order to secure concerted action for the defeat of the reactionary proposal. At the next meeting of the Committee, Dr. Farquharson led off in support of the original proposal of the Government, and the Committee, after a keen discussion, decided, by 36 votes to 27, to retain the medical representative on the Board. This happy result was largely attained through the aid of Sir Charles Pearson, ex-Lord Advocate, and member for the Universities of Edinburgh and St. Andrews, who, casting aside all legal bias, acted as became the representative of the greatest medical constituency in the country.

There are indications, however, that the attempt to keep the medical profession "in its place" will be renewed on the report stage of the Bill, when a good deal of nonsense will doubtless be repeated about a "doctor-ridden" country, and as to doctors being "faddists" and "professionally unfit" to act judicially. It is, therefore, desirable that the profession should make itself heard in the matter, *and that strong representations on the subject should be made to all the Scottish Members of Parliament by the Scottish Branches of the Association and by individual members, in the course of the next month*, in favour of the retention of medical members on the Board.

If the Board were to be constituted as a deliberative body, consisting of selected representatives of town councils, county councils, and the Poor-law authorities, according to the proposal urged upon Sir George Trevelyan, the matter would assume a different complexion, and the appointment of a medical officer, who should be upon a footing of equality with the other permanent officials, might be regarded as adequately meeting the requirements of the case. But with its duties and constitution as now defined, it is of great public importance that sanitary knowledge, scientific and administrative, as possessed and judged by medical men, should be represented by at least one member.

THE LONDON COUNTY COUNCIL AND THE METROPOLITAN ASYLUMS BOARD.

There are not two public authorities in London rendering greater service to the inhabitants than the London County Council and the Metropolitan Asylums Board. Each has work to do in some respects different from that which the other has to undertake; but the duties of the one body are so closely allied to those of the other, that there is no reason why either of the two should not perform the duties of both. The Metropolitan Asylums Board is the older body, and has provided for London an unequalled series of hospitals and an ambulance service for which the London population will always be grateful. The County Council has shown itself a moving power in bringing about a better health administration in the metropolis. Each might be trusted with the responsibility of caring for the health of the inhabitants, but obviously there is not room for both acting independently.

When the Infectious Diseases (Notification) Act was passed in 1889, the duties under this Act relating to the central metropolitan authority were made to devolve on the managers. Speculation was rife as to the meaning of this decision of Parliament. It could not be denied that the notification of infectious disease would be useful to the Council's administration, for the Council had just appointed a medical officer of health, and it might, therefore, be reasonably expected that the responsibilities of the Council in connection with the public health would increase. It was, however, thought by some that it would eventually matter little which body was mentioned in the Act; that the newly-created Council must eventually absorb the work of the older body, and the fact that the managers were constituted under this Act to be the metropolitan authority was thought to indicate this intention. It is probable that this expectation will now be realised and that the first step necessary to bring about the anticipated change has been taken by the adoption of the resolutions before the Council last Tuesday.

The London County Council has been moved to consider the redistribution of its own duties and those of the Metropolitan Asylums Board by a member of both bodies, and the result is an interesting report by a Committee representing the Public Health, the Asylums, and the Industrial and Reformatory Schools Committees. Representatives of all these Committees appear to have been invited to express their views together with the Medical Officer of Health of the County and the Clerk of the Asylums Committee, and the report is, we presume, the outcome of these deliberations. It is in every sense a thoughtful document, dealing first with the rational distribution of functions and secondly with schemes for administration. At the present moment we can touch only on the former, and looking at the subject broadly we may say that the conclusions of the Committee do not appear open to objection.

The Committee points out that both the Council and the managers are now engaged on duties of an allied kind, and certainly one of these duties may properly devolve on a third authority—the London School Board. The London County Council has the charge of the industrial and reformatory schools, which it has inherited from the county magistrates. The Metropolitan Asylums Board

has the charge of a training ship. All these are educational establishments which should properly be transferred to the London School Board. In such transference the Committee would propose to include the schools now managed by the boards of guardians, and there are, we imagine, few who would not say that this change is desirable.

With regard to the insane the Committee points out that while the Council is charged with the care of lunatics, that of imbeciles is vested in the Metropolitan Asylums Board. There is no reason why these duties should not be undertaken by the same body, and it is no doubt the mere accident that the Council's own existence is of but recent date that it has not been called upon to administer both classes of institution. Whether the Council should continue to provide for the insane is an open question, and it may be that it would be well to relieve it of this duty if further responsibilities were imposed upon it.

Concerning the desirability of vesting the public health functions of the managers and of the Council in one body there can be little hesitation by those who are familiar with London health administration.

These duties must inevitably be undertaken by the Council. It is a directly elected authority, is intimately associated with the administration of local sanitary authorities, and has done its own public health work well. To take from it its newly acquired position would, therefore, be impossible; to take from an indirectly elected body its duties is more easily accomplished. Such change would imply no want of confidence in the managers, who have done good service for London, but would be the outcome of the development of public health administration in the metropolis.

The question has to be considered whether the Council will be able to perform all the work which it proposes to undertake. On this point we do not think there ought to be difficulty, but it must somewhat abandon its desire to discuss and decide in Council matters which ought to be settled by committees, and it may indeed have to make changes even more radical than this. There are some subjects which properly belong to a body acting for the whole metropolis, and the administrative system of the Council must be arranged to meet the demands which will be made upon it.

THE Croonian Lectures of the Royal College of Physicians, with the title A New Departure in connection with Diabetes, will be delivered by Dr. Pavy, F.R.S., at the Examination Hall, The Savoy, on Tuesdays and Thursdays, June 19th, 21st, 26th, 28th, at 5 P.M.

WE may remind medical officers of the Army Medical Staff that the annual dinner of the Army Medical Staff will be held in the Whitehall Rooms, Hôtel Métropole, at 7.30 P.M., on Monday, June 18th.

THE Committee of the Calcutta Municipality have unanimously resolved to recommend the adoption of the health officer's suggestion to vote a sum of money for two years in order to test thoroughly M. Haffkine's system of cholera inoculation.

A COURSE of lectures at the Royal College of Surgeons will be given on Monday, Wednesday, and Friday next, at 5 P.M., by Mr. T. Pickering Pick, on diseases of the ends of the long bones in children.

THE new and revised edition of Sir Richard Quain's *Dictionary of Medicine*, which has been for some time in preparation, will, we understand, be issued on Monday next.

THE Council of the Royal College of Surgeons of Ireland has, we are informed, resolved to modify the course of study required by it, in accordance with the resolution adopted by the General Medical Council on May 26th. This resolution was to the effect that if the required modifications were not introduced the matter would be reported to the Privy Council.

THE portrait of Sir Andrew Clark, painted by Mr. Rudolf Lehmann for the Royal College of Physicians, may now be seen in the library. It is a half-length sitting figure, with the face shown almost in profile. The face is an excellent portrait, and the poise of the head is life-like and characteristic. It is notified that subscribers of two guineas to the memorial fund, which is still open, will receive an autotype copy of the picture.

IT is stated that the Chair of Surgery, declined by Professor Czerny, has been accepted by Professor Gussenbauer of Prague, another distinguished pupil of the late Professor Billroth, whose name was among the three recommended for the post by the Professorial College. The final refusal of Professor Czerny appears, from a discussion on the subject which took place at a recent meeting of the Professorial College, to have been partly due to a misunderstanding.

ALREADY, it is stated, upwards of a thousand persons have intimated their intention of being present at the meeting of the British Association in Oxford, and the gathering promises to be very successful. Nearly a hundred of the most distinguished scientists on the Continent have accepted invitations. Lord Salisbury, President for the year, will be the guest of the Warden of All Souls. He will deliver the opening address on August 8th in the Sheldonian Theatre, which will be specially lighted by electricity.

HOSPITAL SUNDAY.

SUNDAY, June 10th, was Hospital Sunday in London, and the usual special sermons were preached and collections made on behalf of the hospitals and kindred charities in most of the churches and places of worship of all denominations. The collections received at the Mansion House up to Thursday last amounted to £14,000.

THE DUBLIN WILL CASE.

IN the case of Ormsby *v.* Good, the result of which we stated last week, the defendant's counsel stated that he withdrew "not only the plea of undue influence, but also all the imputations upon the character and professional honour of Dr. Ormsby." It is right that this should be fully known in view of the charges which were so publicly made.

THE LATE SIR ANDREW CLARK.

WE understand that with the sanction and approval of Lady Clark a biography of the late Sir Andrew Clark is in course of preparation, to which an introduction is promised by Mr. Gladstone. Those who may possess letters or other communications from the late physician would confer a great favour if they would lend the same with a view to publication. Documents should be sent to Lady Clark, Camfield, Essendon, Herts, who will immediately copy and return them.

TYPHUS FEVER EPIDEMIC IN IRELAND.

TYPHUS fever has broken out at Derrymore, about five miles to the west of Tralee, and already some twenty persons have been attacked with the disease. Typhus has also appeared

at the Spa, three miles from Tralee, and at Farranfore, in the Killarney Union. Dr. Stafford, Medical Inspector Local Government Board, has inspected the various places where the disease appeared, and is of opinion that the outbreak is due to want of proper ventilation and overcrowding. At Derrymore, the relieving officer found three and four typhus patients occupying the same bed.

THE MECCA PILGRIMAGE.

The Egyptian Sanitary Department has received direct information from Jeddah stating, in contradiction to published reports, that up to May 30th no cholera had appeared amongst the pilgrims.

H.M.S. THUNDERER.

On June 5th a case of scarlet fever appeared on H.M.S. *Thunderer*, a second on June 6th, and three doubtful cases on June 7th, all of which were removed to the Royal Naval Hospital, Chatham. It was considered advisable, in view of stopping any further progress of the disease, to remove the crew to the *Hotspur*, so that the *Thunderer* may be thoroughly disinfected. On the return of the crew to their ship, in order that every precaution may be taken, the *Hotspur* will be similarly dealt with.

THE COST OF SMALL-POX.

The *Westmoreland Gazette* of June 9th furnishes us with a useful contribution towards this information which we are gathering from various sources. It tells the ratepayers in the Sedbergh Union what the recent small-pox cases at Millthorp have cost them. Two cases were discovered in April of last year. After being treated for some time in the lodging house where the outbreak occurred, the patients were removed to a temporary hospital erected on the Riggs, and a nurse obtained to attend upon them. Gibson, one of the men, was discharged in June, while the other man, Scott, remained in the hospital until November. The maintenance of the patients and nurse, cost of disinfectants, etc., during this time amounted to £103 8s. 1d., while the iron building, furnishing, etc., cost £157 14s 3d. This outlay was not a separate charge against Sedbergh township but was spread over the union, and resulted in a rate of about 2½d. in the pound. In addition to the above cost, Dr. Thorburn, the medical officer, claims a large sum for attendance.

THE NILE RESERVOIRS AND FRENCH OBSTRUCTION.

The report of the International Technical Commission on Nile reservoirs has just come to hand. We find that on the sanitary aspect of the question there is absolute unanimity, which is expressed as follows (para. 34): "Rogers Pasha, Director-General of the Sanitary Administration, has published a report on Nubian reservoirs from the sanitary point of view. The Commission entirely adopts the conclusions of para. 26 of this report, as follows: '1. The quantity of water in the river will be increased during low Nile from May 5th to July 25th, which must be an advantage from the health point of view. 2. The quantity of water in the river below the reservoir will be diminished while the reservoir is being filled, but not to an extent prejudicial to health. 3. A certain gradual deterioration in the quality of the water stored in the reservoir will take place, but there are no grounds for supposing that a Nubian reservoir will reduce the purity of the water supply throughout the country below what it is now; on the contrary, if anything it will have the opposite effect. 4. Special precautions will have to be taken to prevent the pollution of such a reservoir.'" "The Commission calls the attention of the Government to the question of the removal of cemeteries mentioned in para. 24 of Rogers Pasha's report." The Commission is of opinion that the acceptance of the Wady Raiyan scheme might lead to the formation of marshes and the outburst of springs in the lower lands of the province of Fayum, which would necessitate special drainage, and in general is unfavourable to the Wady Raiyan project. Sir Benjamin Baker and Professor Torricelli pronounce strongly in favour of a dam at Assuan, as proposed by the Government engineers. M. Boulé, the French member of the Commission, sketches vaguely an alternative scheme of several barrages, and suggests the formation of an international board of engineers to further consider a question to which Mr. Willencks, the Director-General of Reservoirs, and his staff have devoted four years of exhaustive work.

TIGHT LACING.

Gloomy prophecies of the future of the human race, owing to tight lacing, are being circulated here. They are evidently being repeated by popular writers, inspired from non-medical sources across the Channel. We read of "the disappearance of the roots of the dorsal nerves" in 80 per cent. of Dr. Charpy's patients, and about woman possessing the extra rib. We also read that wasp-waists will make men and women assume the form and character of wasps. These absurdities need no refutation. Tight lacing no doubt exists to some extent in this country, and produces bad results. It existed just as much, or more, thirty, sixty, and a hundred years ago. Nevertheless, our eyes may convince us that the race has not degenerated. Indeed, English women seem to be growing finer and taller than ever, though their mothers were widely addicted to tight lacing. Among the richer classes golf, lawn tennis, and the abandonment of "fine-ladyism" of the bad old type accounts for the superior development of contemporaneous womanhood. The experience of hospital doctors also tends to show that the women of the poor are bigger and healthier than their mothers. As for the male youth of Great Britain their mothers' vanity has done them little if any harm.

THE AUTOCRACY OF PUBLIC WATER COMPANIES.

Dr. Charles Porter, the Health Officer of the borough of Stockport, has recently presented a report to his Health Committee on the water supply of the borough. The document is one demanding close attention at the hands of the council and of the water company, and moreover reflects great credit on its writer, being a careful and painstaking record of studies which have been both untiring and important. From its very nature it is one likely to meet with opposition from certain quarters where vested interests are in question; but it is not our intention to discuss the report in its strictly local application, but rather to draw attention to one special point to which Dr. Porter has given prominence in his "Conclusions and Recommendations." We refer to the question of "Right of Entry." Dr. Porter very properly directs attention to the disability under which sanitary officers labour in not having this right in regard of water companies' premises, both as to the actual works and the sources of supply. The Royal Commission on the Metropolitan Water Supply had the subject before them, and they recommended the appointment of a public water examiner with powers of entry. Mr. Ernest Hart has already referred to the matter in so far as county councils are concerned, desiring that their officers should have this right in regard to the supplies furnished by sanitary bodies as well as by public companies. But the power should by all means be also in the hands of sanitary authorities in places where the district is at the mercy of public companies. We have seen enough of the part played by water in spreading disease to cause us to urge the necessity of this power being granted without delay. Now that the premises of our food suppliers are receiving so much care and supervision, it seems strange that the works and gathering grounds of our water companies should remain outside the pale of sanitary supervision. We would therefore desire to see granted to county councils and sanitary authorities (to use Dr. Porter's words)

the right of entry at any time, by day or night, to every part of every source from which water for the public supply is obtained, and especially to those places in which filtration or purification is effected. Admission "on sufferance" is all very well so long as matters are fair and above board; it is not all that can be desired when reason for its sanction is most wanted and may be refused.

THE RECONSTITUTION OF THE UNIVERSITY OF LONDON.

AN important meeting of the Senate of the University of London was held on June 13th. The scheme of the Royal Commission for the reconstitution of the University was under consideration, and, after discussion, a resolution was adopted, almost unanimously, expressing general approval of the scheme, but expressing a desire that, in making the reference to the proposed Statutory Commission, power should be given to it to modify the scheme in certain details. The memorial in favour of the scheme, which has been signed by some 850 graduates, was received and ordered to be entered on the minutes. The Senate also expressed its readiness to confer with the Annual Committee of Convocation or with any members of Convocation; but we understand that the proposed Consultative Committee of the Senate and Convocation will not meet. It will be remembered that the Annual Committee, shortly before its year of office expired, appointed representatives on this Committee who were understood to be opposed to the scheme, and that at the annual meeting of Convocation the complexion of the Annual Committee was entirely altered. In consequence of this defeat at the ballot the members appointed to the Consultative Committee resigned, and at the first meeting of the newly-constituted Annual Committee members were nominated in their place. Exception was taken at the meeting of the Senate to the regularity of these new appointments, and after discussion it was the general sense of the meeting, which was very largely attended, to let the proposal drop.

THE JACKSON-HARMSWORTH POLAR EXPEDITION.

MR. ARTHUR MONTEFIORE, Honorary Secretary of the Jackson-Harmsworth Polar Expedition, 119, Pall Mall, S.W., writes: "May I ask you to allow me to make public through your columns the fact that we are now receiving applications for the post of surgeon to this expedition? Perhaps I may add that we should much prefer a man who has seen service in cold climates, and had a fair experience of roughing it. His age should not exceed forty."

UNIVERSITY OF WALES.

THE second meeting of the University of Wales was held at Shrewsbury on Friday, June 8th. Lord Aberdare presided. The court sat for some seven hours. The reports of various committees were discussed, and various statutes governing the business of the University were enacted. It was announced in the course of the meeting that Sir Edward Burne Jones had kindly undertaken to design a seal for the University. The next meeting of the Court will be held in London on July 20th. The University Senate will hold its first meeting in Oxford on July 3rd.

ROYAL SOCIETY CONVERSAZIONE.

THE usual "ladies' *conversazione*" was given by the Royal Society on June 13th, and among the novel inventions and discoveries demonstrated more than the usual proportion belonged to the biological sciences. Mr. Shelford Bidwell showed a new experiment in physiological optics which excited great interest. It consisted in a demonstration that a rapidly moving spot of green light on a dark screen was followed by a violet coloured "ghost;" with increase in speed the distance between the green spot and the "ghost" increased, and decreased as the speed was lessened until the violet "ghost" coalesced with the primary green impression. An ingenious electrical apparatus for the local application of heat was shown by Mr. T. Snedekor; in it resistances which generate heat when an electric current passes were enclosed between layers of soft material. A uniformly high temperature can be maintained in the fabric. It can be used for the local application of dry heat, or a large sheet can be adjusted round a patient so as produce the effect of a Turkish bath. The Marine Biological Association sent from Plymouth various living and preserved specimens; Professor Stewart exhibited a case of crabs to show how ten-legged animals walk, and illustrations of the effect of the colour of their *habitat* on larvæ were shown by Lord Walsingham and Professor Poulton. Mr. T. P. Hawksley exhibited a sonometer for comparing the hearing of the two ears. A highly ingenious camera for instantaneous photographs of microscopic objects was shown by Mr. Charles Baker; the camera is so arranged that the image is kept in view until the exposure is made.

ABERDEEN UNIVERSITY EXTENSION SCHEME.

THE Executive Committee of the Aberdeen University scheme met on June 8th, and disposed of a report of the subcommittee, in which it was stated that the sum of about £50,000 was still required to carry out the full scheme of the extension. A draft appeal detailing the steps which led to the resolution for the extension of Marischal College, and the support given to the movement by the public, and soliciting further support was submitted. It is hoped that this appeal to a wider circle than has yet been solicited may meet with a generous response, and that graduates of Aberdeen University may cordially support the scheme.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE fifty-third annual meeting of this Association was held in Dublin during the present week. The proceedings began in the College of Physicians on Monday, when, after the formal business had been disposed of, the new President (Dr. Conolly Norman, of Dublin) delivered an address. He spoke of the advances which had been made in the study of mental diseases, and referred with satisfaction to the requirements of the General Medical Council that students should take out a course of instruction in this department. He thought there was still more to be done. They should press upon asylum authorities that no medical officer should be permanently appointed to an assistancy who had not, within a limited period of probationary service, passed an examination entitling him to promotion. The President also dealt with the study and teaching of the pathology of the brain and the developments in the care of the insane, making special reference to the great asylum at Alt Scherbitz and to the insane colony at Lierneux, in Belgium. Dr. Nicholson moved and Dr. Whitcombe seconded a vote of thanks to the President. It was supported by Dr. Hack Tuke and carried by acclamation. Professor Alec Fraser gave a lantern demonstration on a case of porencephaly. The meeting was continued on Wednesday and Thursday morning and afternoon and on Friday morning.

THE BARRACK SCHOOL SCANDALS.

WE regret to see that the Hackney scandals have developed further. Upon the case of Nurse Gillespie, who has been committed to take her trial, it would be unfair to offer any comment. But it is a very serious matter that the Board of Guardians have felt obliged to hold an extraordinary meeting, first for the purpose of considering the conduct of one of their own members in connection with the prosecution itself; and secondly for the purpose of considering the conduct of the master and matron in relation to the same matter. The allegations against the incriminated guardian, who is said to be a retired police superintendent, were that he had availed himself of facts which came to his

knowledge at a private meeting of the Schools Committee, for the purpose of endeavouring to defeat the proceedings which the Board had instituted. The Chairman of the Board is reported to have gone so far as to declare that his conduct was that of "a traitor to his colleagues and to his constituents," and the Board eventually passed a vote of censure upon him by a large majority. During the inquiry into the master and matron, who were alleged practically to have screened Nurse Gillespie, the very serious charge was made by the Rev. Mr. Howlett that "considerable terrorism was being exercised over the children who were to give evidence in the case." The result of this deliberation was a resolution suspending the master and matron pending a Local Government inquiry. It is the old story of the barrack schools. Such an establishment has a tendency, almost unavoidable, to create a powerful official ring; and, when any trouble arises, the instinct of an official ring is, at all costs, to hush it up. Such a state of things is dangerous anywhere, and it is doubly dangerous where the inmates of the institution are pauper children, who, from every point of view, are practically helpless. We are glad to acknowledge the earnestness with which the Board of Guardians has resolved to get to the bottom of the matter, and, as Mr. Shaw Lefevre has already promised an inquiry, we hope it will at least be a comprehensive and thorough investigation of all the aspects of a very awkward case.

THE SCIENTIFIC WOMAN OF TO-DAY.

There is a great change working in the French habit of thought. That unphilosophical sentence, "Cela n'entre pas dans nos habitudes," is falling into desuetude. Formerly it was a satisfactory sanction for continuing in a deplorable routine. This evolution is evident in many ways. The universal cry against the Napoleonic *régime* maintained in the French lycées, crushing out all spirit of intellectual and moral initiative; the enthusiastic adoption of antiseptic measures even to the extent of hairdressers washing combs and brushes with perchloride of mercury solution, disinfected omnibuses and railway stations and railway carriages, are all indications, without touching on politics, of a more independent form of thought, which will lead ere long to a well developed strongly rooted initiative such as forms the backbone of the Anglo-Saxon race. The tolerance, nay more, almost popularity, gained by the formerly ridiculed, if not despised, lady medical student is an interesting indication of the coming change. Mme. Stanisla Meunier, in her clever novel, *M. de Prévannes*, describes a lady American medical student. In her picturesque charming language she shows that a woman can study medicine and science and be as attractive, and even as well dressed, as the most successful drawing-room belle. This conception a few years ago could not have been arrived at, even in a novel.

THE BROMPTON HOSPITAL.

Dr. C. Theodore Williams, the senior physician to the Brompton Hospital for Consumption and Diseases of the Chest, has just resigned this office. During the twenty-seven years for which Dr. Williams has been connected with the hospital—for twenty-three of which he was full physician—he has done good service to the institution and has enriched medical literature by many valuable contributions. His resignation will be a matter of regret to all connected with the hospital, as will also that of Dr. Reginald Thompson, who has served for twenty-four years. The vacancies thus created will be filled up by the appointment of Dr. Biss and Dr. Acland to the senior staff, and two new assistant physicians will be appointed.

TREE MARKING IN BEHAR.

A well-informed medical correspondent writes to us from Agra: "I think everyone does not agree with the letters of Sir A. Lyall and others in the English papers making out that the dabs of mud on the Behar trees are religious, and not political, and that therefore they indicate no danger. Out here no political movement can have any hold on the people unless it is religious. Here everything is religious. No servant ever wants a holiday except to attend some religious function, whether a funeral, a wedding, or a public festival. These dabs of mud are certainly arousing a good deal of anxiety among experienced officials. The movement is spreading. In Agra it takes another form. An old fakir is sticking on to every native house a little disc of tin, with the name of his god written on it in red letters. He only gives explanations which are obviously untrue when questioned on the subject."

NATIONAL HEALTH SOCIETY.

There was a large attendance on June 7th in the Rubens Gallery of Grosvenor House, where the Duke of Westminster presided at the annual distribution of medals and certificates to those who had gained them under the auspices of the National Health Society. The company included the Princess Christian, the Duchess of Westminster, Sir J. Crichton Browne, Mr. Ernest Hart, Sir H. Roscoe, M.P., Dr. Farquharson, M.P., Lady Theodore Fry, Dr. Thorne Thorne, Lady Priestley, Lady Duckworth, Lady Galton, Miss Lankester, Mr. Shirley Murphy, Dr. Schofield, Mr. Acland (Devon), Mr. Edward Halsey, Mr. Spooner, etc. The President alluded with satisfaction to the increasing public interest which was being displayed in all matters concerning health and sanitation. He thought that the whole community ought to be most appreciative of the exertions of this Society for its efforts to promulgate a knowledge of hygiene not only in London, but throughout the country. This work, he was convinced, deserved to receive the most cordial and grateful thanks of a large part of Her Majesty's subjects. Mr. Ernest Hart, on behalf of the Council, then requested the President to present Princess Christian with the gold medal of the Society, and in doing so he referred to the services rendered to their movement by the Princess, who was one of their patronesses, and who not only gave the objects of the Society her personal sympathy, but had studied very carefully, and always shown herself both willing and able to afford personal assistance in trying to alleviate suffering and promote health among all classes of the community. Having, amid hearty acclamation, received the medal, the Princess proceeded to bestow the rewards made to the various students who had won diplomas in various examinations. After speeches emphasising the claims of the National Health Society from Sir Henry Roscoe, Sir James Crichton Browne, and others, votes of thanks were accorded to the Duke and Duchess of Westminster for placing Grosvenor House at the disposal of the Society, and to the Princess Christian for her presence; and it was further urged that a meeting should be convened to impress upon school mistresses the desirability of the subjects of sanitary science and domestic and personal hygiene being included as an important feature in the education of every woman.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

Monday, June 11th, was the last day on which the applications of candidates for the coming elections could be received. The list is, therefore, now complete. Owing to a mistake, the application of Mr. A. T. Norton, of St. Mary's Hospital, was received too late. The new candidates are: Mr. Davies-Colley (Guy's), Fellow in 1870, Member in 1868; Mr. Herbert Page (St. Mary's), Fellow in 1871, Member in 1869; and Mr. James Hardie (Manchester), who took the two diplomas together in 1882, but received the degree of M.D.Edin. twenty years earlier. Of the two retiring members of Council, Mr. Reginald Harrison (London) became a Fellow in 1866 and a Member in 1859, and Mr. Marsh (St. Bartholomew's) a Fellow in 1866 and a Member in 1861. We are informed that Mr. John Astley Bloxam (Charing Cross)

has not applied, not wishing in any way to prejudice the candidature of Mr. Herbert Page, whose cause he strongly advocates. A Manchester correspondent writes to say that, in view of the vacancy caused by Mr. Lund's resignation, a committee has been formed to promote Mr. Hardie's candidature. It is thought that Manchester, as possessing the largest provincial medical school, should, no less than Leeds, Liverpool, and Birmingham, have a representative on the Council—a view that will doubtless commend itself to the large body of Fellows. Mr. Lund's labours on the Council have been unwearied, and the claims of Manchester to be represented can hardly be denied. It is hoped, our correspondent adds, that Mr. Hardie's candidature will be strongly supported, both by London and provincial Fellows.

THE INTERNATIONAL HYGIENIC CONGRESS AT BUDA-PESTH.

We are requested to state that a British Committee, of which Sir Douglas Galton, K.C.B., F.R.S., is the Chairman, and Professor W. H. Corfield, M.A., M.D.Oxon., is the Treasurer, has been formed to further the interests in this country of the Eighth International Congress of Hygiene and Demography, which is to be held in Buda-Pesth, from September 1st to 8th this year. Any information may be obtained about the Congress from the Hon. Secretary, Dr. Paul F. Moline, 42, Walton Street, Chelsea, S.W.

HOSPITAL SUNDAY CONVERSAZIONE.

At the invitation of the Lord Mayor and Lady Mayoress, about 500 ladies and gentlemen interested in the Hospital Sunday movement were present on June 7th at a *conversazione* at the Mansion House. Mr. Henry C. Burdett gave an address on "Living Pictures from the Hospitals," illustrated by dissolving views. In the saloon a number of exhibits were placed, including sphygmographs, electric lighting apparatus for surgical purposes, and neurotome apparatus. At intervals during the evening musical selections were rendered under the direction of Mr. W. Coates.

DEATH UNDER CHLOROFORM.

Mr. C. R. Edmondson, House-Surgeon to the Royal Southern Hospital, Liverpool, has favoured us with the following notes of a case of death under chloroform which occurred in that institution: E. H. was admitted in the Royal Southern Hospital on March 28th, suffering from metritis, with hæmorrhage and some fever. I gave her chloroform, which she took well. The uterus was curetted. The temperature still kept up, and during the next few days she had several rigors. At the end of a month she was apparently well, and about to leave the hospital, when her temperature again rose and continued high for some time, and pelvic abscess was diagnosed. On May 31st she was to have undergone operation for pelvic abscess. Previous to being brought into the anæsthetic room she expressed great fear of the operation. The heart was examined, but nothing abnormal found. Chloroform was given gradually, sprinkled on a small inhaler—a triangular wire frame covered with flannel—and held about two inches from the nostrils and mouth, being gradually brought nearer. She took the chloroform quietly, breathing regularly, and there was no indication of anything going wrong till the pulse suddenly failed and she became very pale. The window was at once opened, the lower jaw pulled well forward and the tongue out, and the patient made several attempts at respiration. Hypodermics of brandy and ether were given, and artificial respiration begun and continued throughout; the battery was also used, hypodermic of liq. strych. hydrochlor. given, amyl nitrite applied on lint to the nostrils, and lastly the heart was punctured with a needle. The treatment was continued for upwards of half an hour, but without any sign of recovery. The amount of chloroform used was about 2½ drachms. *Post mortem*, brain and membranes not abnormally injected; the heart was small, weighing 7 ounces, with rather much fat on its surface; the right auricle was greatly distended with fluid sherry-red blood, and the left ventricle was contracted; the muscle was healthy; there was a small amount of tuberculous deposit in the upper lobe of the left lung; there was an abscess in each broad ligament. The syncope occurred about two minutes after the commencement of the anæsthetic.

PROVIDENT DISPENSARIES IN BIRMINGHAM.

The *Birmingham Gazette* of June 5th records the annual meeting of the Balsall Heath branch of the Birmingham Provident Dispensary. It tells the usual tale of an arduous, almost hopeless, struggle against "the overlapping and competitive efforts made in the name of charity." Yet it was at Birmingham that we were promised the introduction to public discussion of a scheme whereby applicants for out-patient treatment should have to produce medical sanction for this application[1]. If any really feasible scheme could be devised for securing this end, it would go far to obviate this overlapping and competition. Why, then, is not the scheme ventilated? We have had enough of "suggestions"—most of them visionary. Cannot a city justly so proud of its practical genius and its municipal organisation as Birmingham do the public the great service of at least discussing fully in public the feasibility of the scheme recently suggested there for the reform of the present out-patient system? In social and municipal life this country owes much to Birmingham for its able, initiative, and highly-skilled administration. Cannot the genius of a Chamberlain, aided by his colleagues in municipal organisation, and with the powerful aid of the Midland Counties Branch of the British Medical Association, take this matter once more seriously in hand, and give us an example much needed throughout the kingdom?

THE SICK POOR IN PROVINCIAL WORKHOUSES: ST. ALBANS.

It will be observed from the third report of our Special Commissioner, that here is to be found an old house, of which everything was made that was possible, but the infirmary buildings are very unsuitable for their work: the wards are small and crowded, and because there are no day rooms the absolutely sick, those really ill enough to be in bed, can never have quiet or refreshment, for the inmates who are able to be up have no separate room for meals or recreation. The visit was paid at the dinner hour, which was being taken in the small wards by the infirm as well as the sick. In the winter, when there is no outlet into the airing courts, the atmosphere of these wards must be anything but wholesome. We were glad to hear that the guardians are contemplating a new infirmary, and, as they have a good site, they will have the opportunity of building one of modern construction, male and female under one roof, with suitable quarters for the nurses in the centre, and wards for isolation and classification. There is certainly a spirit of progress in the St. Albans Board of Guardians; the number of nurses compares favourably with other infirmaries of the same size; but with the curious forgetfulness of the needs of the sick which is doubtless due to inexperience in sick nursing, there is no provision made for the night. These old people may be well cared for by day, but at night the door is shut, the lights are turned down, and helplessness, sickness, old age, paralysis are left to each other's tender mercies for at least one-third of the twenty-four. The fact that no catastrophe has occurred is due to good fortune and not good management. When the new infirmary is built, nay before, we hope the guardians will provide the sick with wider bedsteads: those we saw when going through the wards were not wide enough for a full sized man to stretch himself or to turn round in; the sick are

[1] See British Medical Journal for February 3rd.

thus denied that simple relief from weariness, a change of posture. Then there is the infectious hospital, a neat little compact building, but in want of that human machinery that would make it complete. The infectious hospital cannot do its work efficiently until it has its staff of responsible officers. These are a few of the details in the working of the infirmary which would be evident to a visitor going through the building, and when they are fully grasped, then public opinion will call urgently for these necessary reforms; in the meantime we would suggest that the ratepayers of St. Albans make opportunity to see how the sick poor are housed and nursed.

THE LIFE-SAVING SOCIETY.

By dint of classes, demonstrations, and competitions the Life-Saving Society endeavours to disseminate practical knowledge of the best methods by which people can be saved from drowning, and by which, when apparently drowned, they can be restored. It also tries to stimulate public opinion in favour of the general adoption of swimming and life-saving as a branch of instruction in schools, and to encourage the practice of floating, diving, plunging, and such branches of the swimming as are directly useful in the saving of life, in preference to the more ornamental exercises affected by many swimmers. In reading the annual report of the Society, and the many interesting descriptions of the methods advocated, one can but feel how poor a creature after all is the highest product of a purely mental training compared with the athlete skilled in the art of self-defence, able to ride wild horses, clever with the oar, and so thoroughly at home in the water as to be able to save his fellow creatures from the fatal embraces of that unfriendly element. Few positions are so full of ignominy as that of the man who, for all his love of humanity in the abstract, has to stand on the bank unable to save his own brother from drowning, all for want of proper training in the art of saving life. A Society which aims at diverting into useful and life-saving channels that tendency towards athletic exercises which is so prominent a feature of the life of to-day certainly deserves every sympathy and encouragement.

SMALL-POX PREVENTION: THE STATISTICS MISUSED.

MR. ISAAC DOXSEY, Fellow of the Statistical Society, has addressed to a contemporary a long letter, bristling with figures, in which he falls foul of the practice of "giving small-pox to everybody to save them from catching it." One-half of the letter is devoted to a condemnation of variolation proper, or inoculation of human beings with human small-pox. This proceeding simply amounts to slaying the slain. No person in his senses advocates or practises variolation in these days, nor can the fact be denied that, employed as it was in Europe in the last half of the eighteenth century, small-pox inoculation increased rather than diminished the incidence and mortality of variola. Still, there is much to be said on the other side. The death-rate of the inoculated disease was inconsiderable as compared with that of natural small-pox, and in the East, where the margin of immunity or the contingency of escape during lifetime from small-pox is, or used to be in prevaccination days, much less than in Europe, variolous inoculation, performed, as it generally was in old times in India, under careful precautions, undoubtedly reduced small-pox mortality. The second half of Mr. Doxsey's letter is devoted to a bitter denunciation of vaccination. He is unable to combat the indisputable facts that the prevalence and mortality of small-pox have been reduced in every civilised community since the adoption of the practice; that the reduction has been directly proportionate to the thoroughness and care with which vaccination has been done; that individuals and communities may acquire from vaccination and revaccination an almost complete immunity from small-pox. He acknowledges that "statistics show reduced numbers of deaths from small-pox." But he makes the astounding statement that "these are now registered as measles or chicken-pox, or the deaths are attributed to erysipelas or other diseases which have arisen from cow-poxing." A mad declaration of this sort is better met by pity than by argument. The only "proof" advanced in support of it is that the ratio of deaths from measles to those from small-pox has risen coincidently with the decline of the latter! It would be, indeed, miraculous were it otherwise unless the death-rate from measles had undergone a corresponding decline. But he finds more plausible evidence against vaccination in Indian statistics. Vaccination is largely and increasingly practised in India. Small-pox is still a widespread and deadly plague in that country, and the number of deaths attributed to it exhibit an increase rather than a decrease—nay, the general death-rate of the Indian Empire is gradually rising coincidently with the spread and increase of "prophylactic poxing." But India is a large word. Not much more than two-thirds of the population of India are being vaccinated, and only about one-fourth of the children born to that section obtain vaccine protection. Vital statistics in India are quite unreliable, and the higher death-rates of recent years simply mean better but still very incomplete registration. Small-pox mortality exhibits remarkable fluctuations, both in time and area, and if Mr. Doxsey had taken a later year than 1890-91 he would have discovered a substantial abatement. On the other hand, evidence of the most convincing character is available in India that really effective and exhaustive vaccination confers immunity from small-pox and reduces or abolishes small-pox mortality. A more pitiful example of the misuse of statistics than this we have seldom met with. Arithmetical accuracy is made to conceal profound ignorance and support prejudice, while no attempt is made to ascertain the value or interpret the real meaning of the numerals employed.

ALBUMINURIA AND LIFE ASSURANCE.

AT a recent meeting of the Life Assurance Medical Officers' Association a discussion on the relation of slight degrees of albuminuria to life insurance was opened by Dr. Poore. The importance of defining what was meant by albuminuria was generally recognised, and distrust was expressed of the newly-introduced tests as guides determining the acceptance or rejection of lives. Urine which did not show a trace of albumen with the boiling and cold nitric acid tests properly applied might be considered free. There was a general agreement that if albumen was found the final decision should be adjourned until the applicant had been seen on two or three subsequent occasions. Instances were given by several speakers of persons surviving for lengthened periods with permanent albuminuria; thus, Dr. Poore mentioned the case of a lady, aged 76, who was known to have had albuminuria for twenty years. Dr. Heron instanced that of a lady who had albuminuria after scarlet fever at 18, who lived for twenty-two years and had a family, though all the time she had a trace of albumen in the urine. Dr. Poore insisted—and in this he was supported by several speakers—on the importance of examining urine passed actually in the presence of the medical officer and not accepting specimens brought in bottles. Dr. Hector Mackenzie quoted a good example illustrating the necessity for this precaution. If albuminuria was slight but permanent, Dr. Poore held that the life should be loaded, and loaded considerably. Allowing for the increased frequency with which systematic examination revealed albumen in the urine, temporary or permanent, it was, he held, possible that there was a real increase of kidney disease. The expectation of life in males over 20 appeared to be diminishing, the death-rate from diseases of the urinary organs tended steadily to increase, as did the mortality among the class from which candidates for life insurance were drawn. Dr. Theodore Williams said that in following up applicants with albuminuria who were well-known members of society, he had found that most

had died before he had expected. He would reject unhesitatingly if albumen was found on more than one occasion, unless there was distinct evidence of urethral discharge, and Dr. Symes Thompson urged that microscopical examination might afford valuable evidence as to the source of the albumen. Dr. Crosby said that if albumen was present after two or three weekly examinations, to defer the case for three months; and if albumen was still present in appreciable amount, to reject. Dr. Douglas Powell pointed out that age was an important element in a decision; a certain amount of albumen over 60 was not uncommon in people who lived for a considerable time. With a possible history of calculus albuminuria was less important, since one part of the kidney might be damaged and the rest healthy. The President (Dr. J. E. Pollock), Dr. Hoar, and Dr. Hingston Fox also spoke.

SMALL-POX IN SCOTLAND.

SEVENTEEN cases of small-pox were reported in Edinburgh last week, and 4 deaths. Up to mid-day of June 12th, 3 further cases were reported. There are now 59 cases in the hospital. As far as Edinburgh is concerned, the outbreak of small-pox can scarcely be described as a serious epidemic. The cases have been mostly of a mild type, and the four deaths were in children, where it is possible the vaccination had been originally defective, or had ceased to be protective. We are informed that a medical practitioner is now suffering from a mild attack of small-pox. Revaccination is being resorted to on a large scale in Edinburgh. In Leith 16 fresh cases and 4 deaths were reported during last week. Fourteen cases were removed to the hospital. Since mid-day of Saturday some 8 cases had been reported. A steamship, *The Talisman*, arrived in Leith from Rotterdam on Sunday forenoon, and it was found that one of the passengers was suffering from small-pox, and that a fireman with well-marked scabs of small-pox was also on the vessel. The latter had been fifteen days in a hospital in Rotterdam, whence he was discharged as "free from infection." He was removed to the Small-Pox Hospital. We are informed by a Reuter's telegram, dated Copenhagen, June 6th, that "The Minister of Justice has issued an order subjecting all arrivals from Leith and Rotterdam to medical inspection and disinfection." It is believed that small-pox was originally introduced to Leith from Rotterdam. A conference between representatives of the Edinburgh and Leith Corporations has been held with the view of taking joint action to arrest the spread of small-pox. Several cases are reported in the county of Midlothian, 3 in Dundee, and 1 in Aberdeen. A fatal case of small-pox has occurred in Aberdeen. The victim was a guard on the passenger train running between Aberdeen and Edinburgh. Energetic measures were at once taken by the medical officer of health for the city to limit the spread of the disease.

FATAL ACCIDENT AT ST. THOMAS'S HOSPITAL.

THE death of Emma Soper, a patient in St. Thomas's Hospital, who lately committed suicide by drinking nitric acid, has called forth much adverse comment from the lay press. The jury at the inquest recommended that the cupboard containing the urine-testing reagents should be kept under lock and key, and the sister of the ward with the house-physician is reported to have said that there would be no difficulty in keeping it locked. This might no doubt be done at night, and it was at night that the accident happened, but in the daytime the plan would be highly inconvenient, and in fact impracticable. It is desirable that in every hospital with a large medical school there should be a small clinical laboratory off each ward into which a patient would not be likely to penetrate, and where the necessary work of testing could be done without the rather unappetising public display of morbid secretions inseparable from a testing table placed in the ward. We quite agree with the statement that no blame attaches to the night nurse, during whose temporary and necessary absence the lamentable accident occurred. So far as we can judge, the mistake seems rather to have lain with those authorities who failed to arrange for a special nurse to watch the case, if it be true, as stated, that Mrs. Soper had previously showed signs of mental aberration.

MILK, SEWAGE, AND TYPHOID FEVER.

AT the May meeting of the Surrey County Council, the Sanitary Committee presented a report which touches upon two matters of considerable general interest. The first is the relation of milk supplies to the public health. In January and February last there was a sudden outbreak of scarlet fever at Richmond, 55 attacks being notified within ten days. This, of course, led to immediate investigation, which was made by Dr. Rowland, the medical officer of health for the borough, in conjunction with Dr. Seaton, the county medical officer. It was found that 52 of the cases, in 26 houses, had a common milk supply, which served only 416 out of the 6,000 households in the borough. There was no evidence of illness, or suspicious circumstances connected with the vendor's family or staff. The milk came from Buckinghamshire, and in March Dr. Seaton visited a number of dairy farms in that county. He found no direct clue to the origin of the outbreak, although there had been some prevalence of scarlet fever in one village, but met with conditions suggestive of danger to the public health. By way of example he mentions an instance in which some 36 cows had to wade through liquid and semiliquid filth knee deep on their way to the milking sheds. Dr. Seaton points out the pressing need for attention to the sanitary condition of dairy farms, and also the importance of the early detection and prevention of epidemics by means of systematic notification. In the present instance the source of supply was changed, and the epidemic speedily subsided. In another part of the committee's report reference is made to the evidence given by Major Tulloch, the chief of the engineering department of the Local Government Board, in an action brought by a neighbouring sanitary authority (the Hartley Wintney R. S. A.) against the Aldershot local board for alleged pollution of the river Blackwater by sewage effluents. Major Tulloch insisted strongly that the analysis of one sample, or even half a dozen, proved little or nothing. Samples of effluents from sewage works, to be worth anything, ought, he contended, to be taken daily, so as to avoid the risk of unduly favourable or unfavourable selection. With all due respect for the evidence of such high authority, we cannot help suspecting that there is some misunderstanding here, assuming the report to be substantially correct. Surely it cannot be the deliberate opinion of the engineering staff of the Local Government Board that if an effluent is sometimes clean and sometimes dirty all reasonable and legal requirements are satisfied? If so, the fact is one which should be very constantly present in the recollection of water companies who take their supplies from rivers. Hitherto it has been generally supposed that the discharge of a foul effluent on a given date (apart perhaps from the legitimate use of a properly constructed storm overflow) was in itself an infraction of the law, but now it seems to be suggested that maxima matter little, unless the offence can be shown to be pretty constant. It is with some relief that we observe that the county court judge by whom the case was heard gave his decision against the defendant authority.

BRUSSELS MEDICAL GRADUATES' ASSOCIATION.—The annual general meeting of this Association will be held at the Café Monico, 46, Regent Street, W., on July 7th, at 6.30 P.M. At 7 P.M. the members and their friends will dine together. Any Brussels medical graduate wishing to be present is requested to communicate with the Honorary Secretary, Dr. M. Greenwood, 243, Hackney Road, N.E.

THE EPIDEMIC OF PLAGUE IN HONG KONG.

Our special correspondent telegraphs to-day from Hong Kong: "While regretting to have to confirm the announcement of an epidemic outbreak of the Oriental plague in this settlement, I am glad to be able to give the latest information, which is of a somewhat reassuring character. The plague commenced here on May 5th; it presents all the symptoms of the true bubonic pest which devastated Europe in the Middle Ages, and produced the terrible ravages described by Defoe during the great plague in London. This bubonic pest, although extinct in Europe, has never ceased to prevail in China from time to time, and has also spread from there to Persia and Asiatic Russia. The present outbreak is characterised by intense symptoms corresponding to those of typhus, and by the bubonic boils characteristic of the disease. The deaths up to to-day have amounted to 1,708, but I am glad to say that the Europeans here are unaffected except in the case of ten of the military employed by the authorities in carrying out disinfecting work in the native quarter where the plague is located; one of them has unhappily died."

With respect to the above, while glad to be able to convey the reassuring information which our correspondent furnishes as to the freedom of Europeans and the immunity which they have enjoyed from the plague, it is impossible not to recognise that the outbreak of this pestilence in Hong Kong is a calamity of serious importance, for Hong Kong is the distributing centre for all China. Under the fostering influence of British enterprise it has become rapidly the third great seaport of the world, ranking next to London and Liverpool. If, as is stated, and probably with truth, 100,000 Chinamen have fled from Hong Kong, many of them presumably plague-smitten, and are let loose in Canton, and all over the Kwantung and Fokien provinces, this would portend an irremediable spreading of the disease. Plague was epidemic in Yunan, one of the central provinces, early between 1871 and 1873, and it has frequently shown itself in Pakhoi, where it was epidemic from March to June, 1884, and according to a report from Dr. Lowrie, caused 500 deaths at that place. In 1890 it appeared in Lung Chow. Pakhoi is an open port to the south of Hong Kong about one day's steaming. The plague has probably been introduced into Hong Kong from Pakhoi, which sends every week several steamers filled with passengers and pigs to Hong Kong. This bubonic pest is eminently contagious from person to person, and although aërial infection is not unknown in connection with it, and may be esteemed to be a factor in its diffusion, it is so probably only to a slight extent. Like typhus, the plague is mainly diffused by personal contact, and its diffusion is one of the results of overcrowding and dirt. Hong Kong is well drained, and is now a cleanly, well-built, and healthy settlement. It has an active sanitary board, and in all probability the immunity which the European settlement has thus far enjoyed will be maintained under the efficient sanitary supervision of this well-governed and flourishing British port.

On the other hand, the overcrowding of the coolie population in their native quarter is to a European mind almost inconceivable, and their personal habits are such that the most energetic measures will have to be taken to repress the epidemic. This we gather is already being done, and the employment of soldiers to carry out the work of disinfection indicates the energy with which the local authorities are combating the plague. It will, however, it may be feared, be far otherwise in the native towns to which the fugitives from Hong Kong are flying. Canton is peopled by a seething multitude of natives, such that its streets are habitually in the daytime packed like the Strand on Lord Mayor's Day. Open sewers run through every street, and the whole place is a mass of festering filth. A similar description applies to most of the great towns, and it is difficult to forecast the extent of the ravages which such an epidemic may cause thus rapidly diffused from a great centre like Hong Kong.

We have received a further telegram from Hong Kong which states that from 70 to 80 deaths are occurring daily among the Chinese, but that the position is slightly better.

OPENING OF A NEW PUMP ROOM AT BUXTON.

An interesting and brilliant ceremony was witnessed at Buxton on Wednesday. The Duke and Duchess of Devonshire visited the town of Buxton for the purpose of opening and presenting to the town a new pump room. This addition to the attractions of Buxton is a convenient and handsome building appropriately fitted up, and facing that fine pile of buildings known as the Crescent, erected at a cost of £5,000, defrayed by the Duke.

The Duke and Duchess with their friends were received on the platform by a troop of soldiers and most of the influential residents in Buxton and its neighbourhood, together with many medical visitors who had been hospitably invited to take part in the ceremony. A long procession of carriages was formed, which, starting from the railway station, passed through the streets of the town, which were most tastefully decorated, and on arriving at the new pump room the Duke and Duchess alighted, and after one or two short speeches—one from the Duke on the great value and efficacy of the Buxton springs—his Grace opened the pump room and formally presented it to the town.

This part of the ceremony was followed by a luncheon in the concert room in the beautiful gardens, which are justly regarded with so much pride by the people of Buxton. There was a large gathering, including the county members, the Master Cutler from Sheffield, and many other notables. About 300 guests in all sat down to lunch. Many speeches were made, and some of these, of course, emanated from the medical visitors. A telegram was received from Mr. Ernest Hart expressing his congratulations and his regret at being unable to keep his promise to attend and speak on the occasion. Sir William Broadbent being also detained in London by the critical condition of Lord Coleridge, Dr. William Ord and Dr. Burney Yeo were called upon to speak on behalf of the profession in London. Sir T. Grainger Stewart spoke on behalf of the profession in Scotland, and Dr. Leech, of Manchester, and Dr. Dolan, of Halifax, on behalf of the large northern towns. The weather was most propitious, and the beauties of Buxton were greatly enhanced by the brilliant sunshine which accompanied the ceremonial.

The reputation and popularity of Buxton as a much valued British health resort cannot fail to be promoted by such an influential and brilliant gathering.

LORD COLERIDGE.

Lord Coleridge caught cold either at the Royal Academy or the College of Music, and was attacked with a series of most violent rigors, with considerable rise of temperature. Careful search was made for indications of pneumonia, but none were found. Shortly after this a slight attack of jaundice developed. He gradually recovered, and had begun to get up and lie on the couch. About a fortnight ago, however, improvement ceased, and he began to drift back again, becoming drowsy and lethargic; and last Sunday he passed into a condition of stupor, which gave rise to the greatest anxiety. Under the influence of treatment, however, these symptoms passed away, consciousness returned, and he was able to talk on various matters; but on Tuesday he was attacked again with violent rigors, and again the temperature ran up, and he sank into an unconscious condition, which persisted.

The annual meeting of the Birmingham Medical Benevolent Society was held at the Medical Institute, Birmingham, on June 5th. Mr. Priestley Smith was elected President for the ensuing year. The report of the directors presented to the members showed the Society to be in a sound financial state, having invested funds amounting to £11,893, while no less than £502 was distributed during the year. The Society now numbers 333. The only regret is that it contains so small a proportion of those who reside within the area of its operations; for certainly it ought to include every registered practitioner within the prescribed radius. The annual dinner was held in the evening, and was unusually well attended.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 11th day of July next, at 2 o'clock in the afternoon.

June 14th, 1894. FRANCIS FOWKE, *General Secretary.*

GRANTS FOR SCIENTIFIC RESEARCH.

THE Council of the British Medical Association desire to remind members of the profession engaged in researches for the advancement of medicine and the allied sciences that they are prepared to receive applications for grants in aid of such research. Applications for sums to be granted at the next annual meeting must be made on or before June 15th in writing addressed to the General Secretary, at the office of the Association, 429, Strand, W.C. Applications must include details of the precise character and objects of the research which is proposed.

Reports of work done by the assistance of Association grants belong to the Association.

Instruments purchased by means of grants must be returned to the General Secretary on the conclusion of the research in furtherance of which the grant was made.

RESEARCH SCHOLARSHIPS.

The Council of the British Medical Association are prepared to receive applications for one of the three Research Scholarships which is vacant, of the value of £150 per annum, tenable for one year, and subject to renewal by the Council for another year.

Applications to be sent in writing addressed to the General Secretary on or before June 15th, stating the particulars of the intended research, qualifications, and work done.

FRANCIS FOWKE, *General Secretary.*

429, Strand, London, May 8th, 1894.

NOTICE OF QUARTERLY MEETINGS FOR 1894.

ELECTION OF MEMBERS.

MEETINGS of the Council will be held on July 11th and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, June 21st and October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. FRANCIS FOWKE, *General Secretary.*

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

MEMBERS are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the offices of the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the Office.

BRANCH MEETINGS TO BE HELD.

STIRLING, KINROSS, AND CLACKMANNAN BRANCH.—The annual meeting of this Branch will be held in the Crown Hotel, Tillicoultry on Friday, June 29th, at 3.30 P.M. Dr. Currie will take the chair, and deliver his Presidential Address. The annual dinner will be served in the hotel after the meeting. Members who desire to exhibit cases or specimens will kindly intimate their intention to the Honorary Secretary, C. J. LEWIS, Sutherland House, Stirling.

SHROPSHIRE AND MID-WALES BRANCH.—The annual meeting will be held at the Salop Infirmary, on Tuesday, June 26th, at 3 P.M.—H. WILLOUGHBY GARDNER, Honorary Secretary.

LANCASHIRE AND CHESHIRE BRANCH.—The annual meeting of this Branch will be held at Stockport, on Wednesday, June 27th. Notice of motion or other business should be sent at once to the Honorary Secretary, JAMES BARR, M.D., 72, Rodney Street, Liverpool.

WEST SOMERSET BRANCH.—The annual meeting will be held at the Railway Hotel, Taunton, on Thursday, June 28th, under the presidency of Mr. A. D. Willcocks, who will deliver an address on "Alexander Popham, M.P. for Taunton, and the Bill for the Prevention of Gaol Distemper 1774." Members wishing to read papers or bring forward cases, and also those proposing to be present at dinner are requested to give notice to the Honorary Secretary, WM. KELLY, M.D., Taunton.

EAST ANGLIAN BRANCH.—The annual meeting of this Branch will be at the Town Hall, Great Yarmouth, on Thursday, June 21st. 11.30 A.M. Meeting of the Council of the Branch. 12 noon. Business: To receive Report of Council of Branch. To elect two representatives on the Council of the Association. To elect a representative on the Parliamentary Bills Committee. To arrange for Autumnal Meeting. To elect President for 1895, and arrange place of Annual Meeting that year. To consider proposed By-laws for East Anglian Branch. 1 P.M. Luncheon at Town Hall by invitation of Mr. A. C. Mayo, President-elect. 2.15 P.M. Introduction of New President by Retiring President. Short Address by the President. Professor Clifford Allbutt (Cambridge): Notes on Angina Pectoris. Professor William Rose (King's College, London): A Surgical Paper. Dr. W. S. A. Griffith (Assistant Obstetric Physician St. Bartholomew's Hospital, and Examiner in Midwifery Cambridge University): On Gonorrhœa in Women. Mr. A. H. Tubby (Surgeon to the Evelina Hospital): The Diagnosis of Pott's Disease of the Spine. Mr. Charles Williams (Norwich): A case of Intestinal Obstruction due to Hernia into the Foramen of Winslow. Mr. S. H. Burton (Norwich): Notes of two unusual cases of Intestinal Obstruction. Dr. Sinclair Holden (Sudbury): Remarks on a case of Peripheral Pseudo-Tabes. Dr. W. B. Wedgewood (Lynn): The Perchlorides of Mercury and Iron in the Treatment of Typhoid. The President will show cases of Radical Cure of Hernia in Elderly People; Arthrectomy of Knee-joint; Mayo Robson's Treatment of Fracture of Patella. Dr. H. Blake (Yarmouth) will show cases of Cancer of Tongue removed in 1886; Symmetrical Gangrene of Legs in a Child; Suppurating Ovarian Cyst treated by Drainage; Nephrolithotomy. Dr. Ryley (Yarmouth): Interesting Ophthalmic Cases. In the Town Hall will be an Exhibition of Surgical Instruments and Appliances by Messrs. Down Bros., of London; and of Pharmaceutical Preparations by Messrs. Burroughs, Wellcome, and Co. Arrangements will be announced for Afternoon Tea. By the kindness of Commander Presketh, R.N., an Exhibition of the Rocket Life-saving Apparatus will take place on the beach by the Coast Guard Station. Rev. Canon J. J. Raven, D.D., and Mr. F. D Palmer, D.L., will conduct parties interested in archæology round the extremely interesting old parts of Yarmouth. Mr. Charles Diver (Churchwarden) will be pleased to show the historic old church of St. Nicholas. Drs. Wilson and Underhill have kindly undertaken to take those interested round the Royal Naval Hospital. A military band will play in the Beach Gardens from 6 to 8 P.M. Those interested in hospital construction and management are invited to visit the New Hospital, opened by Sir James Paget in 1887. Dinner at Royal Hotel at 7 P.M.

SOUTH-WESTERN BRANCH.—The annual meeting will be held at Liskeard, under the presidency of Dr. Nettle, on Wednesday, June 27th. The Honorary Secretary will be glad, as early as possible, to receive intimations from members of their probable intention to attend the meeting, also of short notes of cases to be shown, specimens to be exhibited, etc. —WM. GORDON, Honorary Secretary, Barnfield Lodge, Exeter.

METROPOLITAN COUNTIES BRANCH.—The annual meeting will take place at Limmer's Hotel, George Street, Hanover Square, on Tuesday, June 26th, at 5.30 P.M.—ANDREW CLARK, ISAMBARD OWEN, Honorary Secretaries.

SOUTH MIDLAND AND CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCHES.—A combined meeting of these Branches will be held at Bedford, on Thursday, June 21st, at 2.30 P.M. Agenda:—Dr. Rowland H. Coombs will give a brief introductory address. Mr. G. E. Wherry (Cambridge) will introduce a discussion on the Treatment of Hernia. Dr. Buszard (Northampton) will introduce a discussion on the Treatment of Acute Febrile Diseases. Sir G. M. Humphry, F.R.S. (Cambridge): The Treatment of Wounds. Dr. A. H. Jones (Northampton): The Arrest of Hæmorrhage in Hæmophilia. Mr. W. G. Nash: A Case of Subdural Abscess and Septic Thrombosis of Lateral Sinus following Middle-ear Disease. Dr. J. Griffiths (Cambridge): Chronic Inflammation of the Breast with and without the Formation of Cysts.—CHARLES JEWEL EVANS, JOSEPH GRIFFITHS, M.D., Honorary Secretaries.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The twenty-fourth annual meeting of this Branch will be held at the Infirmary, Cardiff, on June 28th. Mr. Victor Horsley will give a lecture on Gunshot Wounds. Further particulars in circular convening the meeting.—A. SHEEN, M.D., D. ARTHUR DAVIES, M.B., Honorary Secretaries.

WORCESTERSHIRE AND HEREFORDSHIRE BRANCH.—The annual meeting of this Branch will be held at Hereford on Friday, June 22nd.—GEO. W. CROWE, Worcester.

LONDONDERRY AND WEST OF IRELAND BRANCH.

At a meeting of this Branch, held on June 6th, the following gentlemen were elected officers and members of the Council for 1894-95: *President:* Dr. Rankin. *Vice-Presidents:* Dr. Hetherington, Dr. MacCullagh. *Treasurer:* Dr. MacCullagh. *Secretary:* Dr. J. G. Cooke (County Infirmary, Derry).

Council: The above officers *ex officio* with Drs. D. J. Brown, Bernard, Byrne, Donaldson, Hunter, Thos. MacLaughlin, Fras. McLaughlin, O'Kane, and Weir. *Member of General Medical Council and Representative on Parliamentary Bills Committee:* Dr. Donaldson.

BRITISH MEDICAL ASSOCIATION.

SIXTY-SECOND ANNUAL MEETING.

The sixty-second Annual Meeting of the British Medical Association will be held at Bristol on Tuesday, Wednesday, Thursday, and Friday, July 31st, August 1st, 2nd, and 3rd, 1894.

President: George Hare Philipson, M.D.Cantab., D.C.L., F.R.C.P., Professor of Medicine in the University of Durham.

President-Elect: E. Long Fox, M.D.Oxon., Consulting Physician to the Bristol Royal Infirmary.

President of the Council: J. Ward Cousins, M.D.Lond., F.R.C.S., Senior Surgeon to the Royal Portsmouth Hospital.

Treasurer: Henry Trentham Butlin, F.R.C.S., D.C.L., Surgeon to St. Bartholomew's Hospital, E.C.

An Address in Medicine will be delivered by Sir Thomas Grainger Stewart, M.D.Edin., Professor of the Practice of Physic and Clinical Medicine in the University of Edinburgh.

An Address in Surgery will be delivered by James Greig Smith, M.B., F.R.S.E., Surgeon to the Bristol Royal Infirmary.

An Address in Public Medicine will be delivered by Sir Charles Cameron, M.D., Medical Officer of Health, Dublin.

A. Medicine.

Library of Medical School.

President: Frederick T. Roberts, M.D. *Vice-Presidents:* E. Markham Skerritt, M.D.; R. Shingleton Smith, M.D *Honorary Secretaries:* W. T. Brooks, M.A., M.B., 32, Holywell Oxford; J. Michell Clarke, M.D., 28, Pembroke Road Clifton, Bristol.

Wednesday, August 1st.—I. Discussion on Functional Diseases of the Heart, introduced by Douglas Powell, M.D. The following gentlemen have announced their attention of taking part in the discussion: Sir Frederic Bateman, Paul Chapman, M.D., W. Soltau Fenwick, M.D., James A. Lindsay, M.D., G. A. Gibson, M.D., E. Markham Skerritt, M.D., R. Shingleton Smith, M.D., A. Ernest Sansom, M.D., P. Watson Williams, M.D., and Francis Hawkins, M.B.

II. Discussion on Pyrexia and its Treatment, introduced by W. Hale White, M.D. The following gentlemen will take part in the discussion: E. Markham Skerritt, M.D., Shingleton Smith, M.D., James Barr, M.D., James A. Lindsay, M.D., J. E. Shaw, M.D., and W. Soltau Fenwick, M.D.

III. Ataxia and the Diseases of which it is a Symptom, introduced by J. A. Ormerod, M.D. The following gentlemen will take part in the discussion: James Cagney, M.D., L. Andriezen, M.D., F. W. Mott, M.D., and Mitchell Clarke, M.D.

The following papers have been announced:

Campbell, Harry, M.D. The Mechanical Treatment of Heart Disease.
Fenwick, W. Soltau, M.D. Dyspepsia of Strumous Origin.
Fisher, Theodore, M.B. Diastolic and Presystolic Murmurs in Dilated Hearts without Valvular Disease.
Fyffe, W. K., M.B. Value of Creosote Treatment of Phthisis.
Gibson, G. A., M.D. The Conduction of Cardiac Murmurs.
Griffiths, P. Rhys, M.B. 1. The Remote Effects of Spinal Injuries in Miners. 2. Sporadic Cretinism and Thyroid Feeding.
Hawkins, Francis, M.B. The Treatment of Croupous Pneumonia.
Mott, F. W., M.D. Pernicious anæmia.
Sansom, A. Ernest, M.D. Disturbances of the Cardiac Rhythm subsequent to Influenza.
Sharp, Gordon, M.B. Cactus Grandiflorus, its Literature, Chemistry, Pharmacology, and Therapeutics.
Whitby, C. J., M.D. Modern Hydropathy; its Relation to General Therapeutics.
Williams, P. Watson, M.D. A case of Pancreatic Diabetes, treated by Grafts of Sheep's Pancreas.

B. Surgery.

Physical Science Lecture Room—University College.

President: W. Mitchell Banks, M.D. *Vice-Presidents:* Nelson C. Dobson, F.R.C.S.; Professor Victor Horsley, F.R.S. *Honorary Secretaries:* G. A. Wright, M.B., 8A, St. John Street, Manchester; James Swain, M.D., 14, Buckingham Place, Clifton, Bristol.

The following subjects have been selected for discussion in the Section:

1. The Operative Treatment of Perforative Ulcer of the Stomach and Intestines. To be introduced by A. Pearce Gould, M.B., F.R.C.S. The following gentlemen will take part in the discussion: G. H. Hopkins, F.R.C.S. (Swansea), R. Maclaren, M.D. (Carlisle). Mayo Robson, F.R.C.S. (Leeds), J. Ward Cousins, M.D., F.R.C.S. (Portsmouth), Rutherford Morison, F.R.C.S. (Newcastle-on-Tyne), Gilbert Barling F.R.C.S. (Birmingham).

2. The Surgical Treatment of Injuries of the Spine and Spinal Cord. To be introduced by William Thorburn, M.D., F.R.C.S. The following gentlemen will take part in the discussion: G. H. Hopkins, F.R.C.S. (Swansea), W. M. Barclay, F.R.C.S. (Bristol), C. B. Keetley, F.R.C.S. (London), H. Langley Browne, F.R.C.S. (West Bromwich), Gilbert Barling, F.R.C.S. (Birmingham).

3. The Treatment of Injuries of the Lower End of the Humerus. To be introduced by Jonathan Hutchinson, jun., F.R.C.S. The following gentlemen will take part in the discussion: G. H. Hopkins, F.R.C.S. (Swansea), Professor Landerer (Stuttgart), R. Jones, F.R.C.S.Edin. (Liverpool), J. Ward Cousins, M.D., F.R.C.S. (Portsmouth).

The following papers have been announced:

Jones, R., F.R.C.S.Edin. (Liverpool). On Amputation and Shock and Amputation through Shoulder-joint for Diffuse Spreading Traumatic Gangrene.
Mayo Robson, F.R.C.S. (Leeds). On a Consecutive Series of Ovariotomies performed in the Surgical Clinic at a General Hospital.
Morison, Rutherford, F.R.C.S. (Newcastle-on Tyne). On Some Points in the Anatomy of the Right Hypochondriac Region relating especially to Operaton for Gall Stones.
Snow, H., M.D. (London). The "Dispersible" Tumours of the Mamma.

C. Obstetric Medicine and Gynæcology.

Lecture Room No. 2—University College.

President: Professor J. G. Swayne, M.D. *Vice-Presidents:* E. Malins, M.D.; A. E. Aust-Lawrence, M.D. *Honorary Secretaries:* R. Boxall, M.D., 29, Weymouth Street, London, W.; Walter C. Swayne, M.B., 8, Leicester Place, St. Paul's Road, Clifton, Bristol.

The following subjects have been selected for discussion in the Section:

1. The Necessity of Inducing Labour in Certain Conditions of the Mother not Obstructing Delivery. To be opened by Robert Barnes, M.D., Consulting Physician Accoucheur to St. George's Hospital, London. The following gentlemen will take part in the discussion: Fancourt Barnes, M.D., R. Bell, M.D., J. W. Byers, M.D., T. More Madden, M.D., J. Murphy, M.D., W. H. C. Newnham, M.A., M.B., J. Inglis Parsons, M.D., A. J. Smith, M.D., and John Campbell, M.D.

2. The Treatment of Hæmorrhage during the Last Two Months of Pregnancy. To be opened by W. J. Symly, M.D., Master of the Rotunda Hospital, Dublin. The following gentlemen will take part in the discussion: Fancourt Barnes, M.D., R. Bell, M.D., J. W. Byers, M.D., T. More Madden, M.D., J. Murphy, M.D., W. H. C. Newnham, M.A., M.B., J. Inglis Parsons, M.D., and A. J. Smith, M.D.

The following papers have been announced:

Aust-Lawrence, A. E., M.D. On Abdominal Section as Part of the Treatment in Certain Cases of Menstrual Retention due to Atresia of the Genital Tract
Barnes, Fancourt, M.D. Selection of Cases for Hysterectomy.
Bell, Robert, M.D. On Ovariotomy.
Collins, E. T., F.R.C.S. The Nervous Impulses Controlling Menstruation and Uterine Hæmorrhage.
Cullingworth, C. J., M.D. On a Case of Advanced Extrauterine Gestation in which a Living Child was Removed, the Placenta left undisturbed, and the Abdominal Wound entirely closed.
Jessett, F. B., F.R.C.S. On Thirty Cases of Vaginal Hysterectomy for Carcinoma Uteri with Two Deaths.
Keith, George E. The Operative Treatment of a Form of Dysmenorrhœa and Sterility.
Madden, T. More, M.D. On Pruritus and other Hyperæsthetic Conditions of the Vulva and Vagina.
Murphy, James, M.D. Notes of a Case of Hæmatometra successfully Treated by Hysterectomy.
Nairne, J. Stuart, F.R.C.S. On Resection of the Uterus for Fibroid Tumours and other Diseases.
Newnham, W. H. C., M.B. Successful Treatment of Sterility.
Parsons, J. Inglis, M.D. The Treatment of Prolapse of the Uterus by Colpoperineorrhaphy, with Notes of Twelve Cases.
Rabagliati, A., M.D. Some Obscure Ailments which simulate Ovarian Disease, their Causes and Treatment.
Scharlieb, Mary A. D., M.D. Treatment of Uterine Myomata.
Taylor, John, F.R.C.S. On Doubling of the Uterus and Vagina and Allied Malformations.
Walter, W., M.D. Ovarian Dermoid containing 3,940 Pea-like Bodies.

D. PUBLIC MEDICINE.

Museum Theatre.

President: Professor W. H. CORFIELD, M.D. *Vice-Presidents:* J. LANE NOTTER, M.D.; D. S. DAVIES, M.D. *Honorary Secretaries:* B. H. MUMBY, M.D., Town Hall, Portsmouth; J. C. HEAVEN, M.R.C.S., 2, Queen Square, Bristol.

The following subjects are suggested as suitable for discussion in the above Section on this occasion, but the list is open to modification:

1. Small-pox: Methods of Diffusion and Preventive Measures; Vaccination.
2. Notification: Difficulties Experienced; Value of.
3. Hospital Isolation and Accommodation required for Urban Sanitary Districts, Counties, and Rural Districts.
4. Water Supplies: Pollution of; Relative Value of Analytical Results and their Interpretation.
5. Water Supplies: Filtration of Potable Waters; Water-borne Enteric Fever.
6. The Factory and Workhops Act: Value of, and Suggestions for its Working.
7. Municipal Lodging Houses: Salvation Army Shelters; the Housing of the Poor.
8. Diphtheria: its Causation and Prevention; its Connection with Defective Sanitary Arrangements.
9. The Ventilation of Public Buildings.
10. The Ventilation of Sewers.
11. The Disposal of the Sewage of Towns.
12. Public Measures for the Prevention of Phthisis.
13. Sanitary Regulations for Bakehouses.
14. The Value of the Bacteriological Determination of Cholera.
15. Port Preventive Measures and the 1893 Cholera Epidemic in England.
16. Public Health Administration: Effect of Recent Legislation (Parish Councils Bill, etc.).
17. Regulation of Offensive Trades: Occupational Diseases and Mortality.
18. Infant Mortality in Relation to Female Labour.
19. Seasonal Prevalence of Disease.

The following papers have been announced:

1. PRIESTLEY, J., M.D. (Leicester). Some Lessons to be Learnt from an Epidemic of Small-pox in an Unvaccinated Community.
10. DAVIES, Sidney, M.D. (Plumstead). Ventilation of Sewers.
10. ANDERSON, A. Jasper, M.D. (Blackpool). Ventilation of Sewers.
12. ALLAN, F. J., M.D. (Title not communicated.)
19. CAMERON, J. Spottiswoode, M.D. Diarrhœa in the Autumn of 1893.

The following gentlemen will take part in the discussions: 1, J. Spottiswoode Cameron, M.D.; Walter Dowson, M.D. 2, Sydney Davies, M.D. 6, J. Spottiswoode Cameron, M.D. 7, Herbert Jones, L.R.C.S.I. (Crewe). 8, Sidney Davies, M.D. 12, Herbert Jones, L.R.C.S.I. (Crewe); Jasper Anderson, M.B. (Blackpool). 14, A. Robinson, M.D. (Rotherham). 18, J. Spottiswoode Cameron, M.D.; Jasper Anderson, M.B. (Blackpool).

Sidney Davies, M.D. (Plumstead), will take part in the discussions 2, 8, 10; Herbert Jones, L.R.C.S.I., D.P.H. (Crewe), will take part in the discussions 7 and 12; J. S. Cameron, M.D., will take part in discussions 1, 6, 18, and 19.

E. PSYCHOLOGY.

Lecture Room No 4—University College.

President: G. F. BLANDFORD, M.D. *Vice-Presidents:* S. R. PHILIPPS, M.D.; FLETCHER BEACH, M.B. *Honorary Secretaries:* C. S. W. COBBOLD, M.D., Bailbrook House Asylum, Bath; R. S. STEWART, M.D., Glamorgan County Asylum, Bridgend.

On August 1st the President will open the work of the Section by giving an address upon the "Prevention of Insanity," and a discussion is specially invited upon this subject.

On August 2nd it is proposed to hold a discussion upon "The Law in Relation to the Criminal Responsibility of the Insane;" L. A. Weatherly, M.D., has promised to open it, and members of the legal profession will be invited to join (as visitors) in the debate.

The following additional discussions have been promised: The Treatment of Neurasthenia, to be opened by G. H. Savage, M.D. The Status of Assistant Medical Officers in Lunatic Asylums, to be opened by C. Mercier, M.B. Points Connected with the Education of Feeble Minded Children, to be opened by G. E. Shuttleworth, M.D.

The following papers have been announced:

BLAKE, Henry, M.B. (Great Yarmouth). Four Cases Illustrating the Origin and Possible Prevention of Different Types of Insanity.
BULLEN, F. St. J., M.R.C.S. The Influence of Reflex and Toxic Agencies in Insanity and Epilepsy.
ANDRIEZEN, W. Lloyd, M.D. Contributions and Suggestions towards a Pathological Classification of the Insanities (with Microscopic Demonstration of Specimens).
CAMPBELL, Harry, M.D. Train Panic.
KERR, Norman, M.D. Probationary Curative Restraint of the Alleged Insane.
SHAW, James, M.D. (Liverpool). The Early Treatment of Mental Cases in Private Practice.
SMITH, Telford, M.A., M.D. Cases of Sporadic Cretinism Treated by Thyroid Extract.
STEWART, R. S., M.D. The Spastic and Tabetic Types of General Paralysis.

Members attending the Section will be invited to inspect the Bristol City and County Asylum at Fishponds, near Bristol.

F. PATHOLOGY.

Chemical Lecture Theatre—University College.

President: G. SIMS WOODHEAD, M.D. *Vice-Presidents:* JOSEPH FRANK PAYNE, M.D.; M. A. RUFFER, M.D. *Honorary Secretaries:* NORMAN DALTON, M.D., 4, Mansfield Street, London, W.; C. A. MORTON, F.R.C.S., 24, St. Paul's Road, Clifton, Bristol.

On Wednesday, August 1st, a discussion on the Pathology of Vaccinia, to be introduced by S. M. Copeman, M.D., of the Local Government Board. M. A. Ruffer, M.D., H. G. Plimmer, M.R.C.S., and R. W. Boyce, M.B., will take part in the discussion.

Professor E. M. Crookshank, S. Coupland, M.D., A. P. Luff, M.D., and T. W. Hime, M.D., are expected to be present and will speak.

The following papers have been announced:

CAMPBELL, Alfred W., M.D. Degenerations Consequent on Distinctive Lesions of the Human Cerebellum.
HARRISON, Reginald, F.R.C.S. The Pathology of Enlarged Prostate.
HUTCHINSON, Jonathan J., F.R.C.S. Tertiary Syphilitic Disease of Lymphatic Glands, with specimens.
POWER, D'Arcy, M.B. An Experimental Investigation into the Causation of Cancer.
RITCHIE, James, M.B. Relation between Chemical Composition and Antiseptic Action.
RUSSELL, J. S. Risien, M.B. Degenerations consequent on Lesions of the Cerebellum.
SNOW, Herbert, M.D. Cancer and Phagocytosis.

J. H. Targett, F.R.C.S., has promised a Pathological Demonstration.

J. Galloway, M.D., Vaughan Harley, M.D., and C. G. Brodie, F.R.C.S., have each promised papers, titles of which are uncommunicated.

There will be an exhibition of specimens, bacteriological cultures, instruments for pathological research, etc., in the museum attached to the Section.

G. OPHTHALMOLOGY.

Medical Lecture Theatre, Medical School.

President: F. R. CROSS, M.B. *Vice-Presidents:* H. E. JULER, F.R.C.S.; SIMEON SNELL, F.R.C.S. *Honorary Secretaries:* C. H. WALKER, M.B., 3, Leicester Villas, St. Paul's Road, Clifton, Bristol; J. TATHAM THOMPSON, M.B., 24, Windsor Place, Cardiff.

The following papers have been announced:

BEAUMONT, W. M., M.R.C.S. The Soldier's Red Coat as a cause of Retinal Hyperæsthesia.
CHISHOLM, J. J., M.D. (Baltimore). On the Good Effects of Dressing one Eye only after Cataract Extractions.
DA GAMA, Dr. (Bombay). Some remarks on Subjunctival Mercurial Injections in Syphilitic and other Diseases of the Eye.
DOYNE, R. W., F.R.C.S. The Influence of Education as a Cause of Eye Disease.
EDRIDGE-GREEN, F. W., M.D. A New Spectroscope for the Quantitative Estimation of Defects of Colour Perception.
GRIFFITH, John, L.R.C.P. Criticism concerning Recent Views as to the Secretory Function of the Ciliary Body.
HEWETSON, H. B., M.R.C.S. 1. Blepharitis and Asthenopia in German Jew Tailors in Leeds. 2. Asthenopia and Headaches in Girl Machinists in Leeds. 3. The effects of Electric Welding Operations upon the Eyes.
JOHNSON, G. Lindsay, M.D. The Influence of Prolonged Excessive Light on Vision.
JULER, H., F.R.C.S. On the Diagnosis and Treatment of the Three Chief Forms of Contagious Ophthalmia, namely, the Catarrhal, the Purulent, and the Granular Varieties.

Landolt, Professor E. (Paris). Some Rules to Simplify the Diagnosis of Ocular Paralysis.
McGillivray, A., M.B. The Therapeutic Value of Ice in Ophthalmic Surgery.
Russell, J. S. R., M.B. Experimental Investigation of Eye Movements.
Ruttle, Robert, L.M.Dub. Report on Three Cases of Orbital Tumour.
Scott, Kenneth, M.B. The Treatment of Granular Conjunctivitis or Trachoma.
Snell, Simeon, F.R.C.S. On the Relations of Occupation to Eyesight.
Stephenson, Sydney H. A., F.R.C.S. Cellulitis following Mules's Operation.
Stevens, Dr. G. T. (New York). The Maintenance of Equal Rotation of the Eyes after Operations on the Ocular Muscles.
Taylor, S. J., M.B. A case of Probable Disease of the Lenticular Ganglion.
Thompson, J. L., M.D. (Indianopolis). Observations on some Phases of Opacity and Luxation of the Crystalline Lens.
Thompson, J. Tatham, M.B. Keratomalacia in Acute Infantile Jaundice.
Wray, C., F.R.C.S. Mixed Astigmatism.

Papers have also been promised by Messrs. Jonathan Hutchinson, F.R.S.; Hermann Snellen; T. J. Bokenham, L.R.C.P.; and Ernest Clarke, M.D.

H. Laryngology and Otology.

Physiology Lecture Theatre, Medical School.

President: P. McBride, M.D. *Vice-Presidents:* W. H. Harsant, F.R.C.S.; Barclay J. Baron, M.B. *Honorary Secretaries:* P. Watson Williams, M.D., 2, Lansdown Place, Victoria Square, Clifton, Bristol; W. Milligan, M.D., 28, St. John Street, Deansgate, Manchester.

The following subjects have been proposed for formal discussion:

August 1st.—The Treatment of Acute and Chronic Laryngeal Stenosis, to be opened by David Newman, M.D., Glasgow, and William P. Northrup, M.D., New York.

August 2nd.—The Prognosis of Non-Suppurative Otitis Media (with Imperforate Membrane), to be opened by G. P. Field, M.R.C.S., London, Thomas Barr, M.D., Glasgow, and Dr. J. Ward Cousins, Portsmouth.

August 3rd.—The Diagnosis and Treatment of Empyema of the Nasal Accessory Sinuses, to be opened by Greville Macdonald, M.D., London; Charters Symonds, M.S.Lond., F.R.C.S.

Urban Pritchard, M.D.; Dundas Grant, M.D.; Wyatt Wingrave, M.R.C.S.; R. Fullerton, M.D.; R. Mackenzie Johnston, M.D., J. B. Ball, M.D.; Scanes Spicer, M.D.; T. Mark Hovell, F.R.C.S.Ed.; H. B. Hewetson, M.R.C.S.; G. W. Hill, M.D.; C. W. Warden, M.D.; and J. W. Downie, M.B, have intimated their intention to take part in the discussions.

Time will also be allowed for the reading and discussion of special papers.

The following papers have been announced:

Bronner, H., M.D. 1. On Intratympanic Injections in the Treatment of, *a*, Chronic Dry Catarrh of the Middle Ear; *b*, Chronic Purulent Catarrh of the Middle Ear. 2. On the Use of the Curette in the Treatment of Tuberculous Laryngitis.
Downie, J. Walker, M.B. The Care of the Ear during the Course of the Exanthemata.
Grant, Dundas, M.D. A More Exact Appreciation of Binnie's Test.
Harsant, W. H., F.R.C.S. The Hearing Power of Deaf Mutes.
Hill, G. W., M.D. Otitis Media Acuta, a Personal Experience.
Love, J. Kerr, M.D. Deafmutism as a Clinical Study.
Milligan, W., M.D. Observation upon Excision of the Ossicula Auditus in Chronic Suppurative Otitis Media.
Permewan, W., M.D. 1. Laryngeal Paralysis in Chronic Nervous Disease. 2. Deafness and Stupidity in School Children.
Spicer, Scanes, M.D. Title uncommunicated.
Wingrave, V. H. Wyatt, M.R.C.S. Turbinal Varix: its Pathology, Symptomatology, Diagnosis, and Treatment.

I. Dermatology.

Lecture Room No. 3—University College.

President: A. J. Harrison, M.B. *Vice-Presidents:* Stephen Mackenzie, M.D.; H. Waldo, M.D. *Honorary Secretaries:* J. Hancocke Wathen, M.R.C.S., 16, York Place, Clifton, Bristol; H. Leslie Roberts, M.D., 46, Rodney Street, Liverpool.

Wednesday, August 1st, 10 A.M.—Lupus: its Etiology, Pathology, and Relations to Other Forms of Cutaneous Tuberculosis, introduced by Professor Leloir. H. G. Brooke, M.B.; Norman Walker, M.B.; Henry Waldo, M.D.; G. W. Potter, M.D.; and Dale James, M.R.C.S., have promised to take part in the discussion.

Thursday, August 2nd, 10 A.M.—Management of Eczema, introduced by Malcolm Morris, F.R.C.S.Edin. E. D. Mapother, M.D. (London), A. S. Myrtle, M.D. (Harrogate), T. D. Savill, M.D., and G. W. Potter, M.D., will take part in the discussion.

Etiology and Treatment of Acne, introduced by Stephen Mackenzie, M.D. Phin. S. Abraham, M.D., A. Eddowes, M.D., and Leslie Roberts, B.A., M.D., have promised to take part in the discussion.

Friday, August 3rd, 9.30 A.M.—The Nervous Origin of Diseases of the Skin and its Importance in Treatment, introduced by J. J. Pringle, M.B. Radcliffe Crocker, M.D., T. Colcott Fox, M.B., Stephen Mackenzie, M.D., T. D. Savill, M.D., and G. W. Potter, M.D. have promised to take part in the discussion.

The following papers have been announced:

Anderson, Professor McCall. On the Necessity on the Part of the Student for the Clinical Study of Dermatology.
Bowles, R. L., M.D. Observations on the Scientific Aspect of the Influence of Solar Rays on the Skin.
Brooke, H. G., M.B. Trade Eczema or Dermatitis.
Dunbar, Eliza L. W., M.D. The Use of Belladonna in Allaying Irritation and Healing Certain Skin Diseases.
Eddowes, A., M.D. The Ways of Infections: their Importance as regards Treatment of Skin Affections and the Prevention of Relapses.
Fox, T. Colcott, M.B. Remarks on a Case of Acne Necrotica.
Hutchinson, Jonathan, F.R.C.S., F.R.S. On Certain Diseases of the Skin induced by Exposure to Sun.
James, Dale, M.R.C.S. Some Relations between Psoriasis and Eczema.
Roberts, H. Leslie, M.D. The Present Position of the Question of Vegetable Hair Parasites.
Taylor, Stopford, M.D. Remarks on a Case of Mycosis Fungoides.

J. Diseases of Children.

Lecture Room No. 5—University College.

President: W. Howship Dickinson, M.D. *Vice-Presidents:* John Edward Shaw, M.B.; Frederic S. Eve, F.R.C.S. *Honorary Secretaries:* R. W. Murray, F.R.C.S., 15, Rodney Street, Liverpool; Bertram M. H. Rogers, M.D., 11, York Place, Clifton, Bristol.

On Wednesday, August 1st, a discussion on the Treatment and Complications of Whooping-Cough. To be opened by J. Carmichael, M.D. The following gentlemen have signified their intention to take part in the discussion: W. B. Cheadle, M.D., C. Elliott, M.D.

August 2nd.—Diphtheria: Its Diagnosis and Treatment. To be opened by H. R. Hutton, M.D. The following gentlemen have signified their intention to take part in the discussion: W. B. Cheadle, M.D., D'Arcy Power, M.B., J. Dacre, L.R.C.P., W. S. Black, M.R.C.S., W. P. Northrup, M.D. (New York), E. M. Simpson, M.D.

August 3rd.—The Treatment of Tuberculous Disease of Joints. To be opened by Frederick S. Eve, F.R.C.S. The following gentlemen have signified their intention to take part in the discussion: J. Ewens, L.R.C.P., A. E. Barker, F.R.C.S., Noble Smith, F.R.C.S. Edin., D'Arcy Power, M.B., W. S. Black, M.R.C.S., A. Parkin, M.D., C. H. Milburn, M.B., R. Jones, F.R.C.S., E. L. Freer, M.R.C.S.

The following papers have been announced:

Chaplin, Henry D., M.D. (New York). A System of Infantile Measurements.
Ewens, J., L.R.C.S., and L.R.C.P. Deformities of the Lower Extremities (with Exhibition of Cases).
Freer, E. Luke, M.R.C.S. 1. Some Notes on the Orthopædic Treatment of Deformities, with Illustrative Cases. 2. An Effective and Inexpensive Instrument for the after-treatment of Talipes.
Jones, H. R., M.D. How the Health of Infants is Influenced by their Food.
Jones, Robert, F.R.C.S. 1. The Treatment of Paralytic Joints. 2. The Treatment of Injuries about the Elbow-joint in Children.
Morgan, George, L.R.C.P. Varicella Bullosa.
Milburn, C. H., M.B. Osteotomy for Genu Valgum.
Murray, R. W., F.R.C.S. The Treatment of Rickety Deformities by means of Osteoclasis.
Parkin, Alfred, M.D. The Treatment of Spinal Caries and its Results by Laminectomy.
Roué, Barrett, M.D. The Study of Diseases of Children and its Place in the Medical Curriculum.

Honorary Local Treasurer: W. Johnstone Fyffe, M.D., Rodney Place, Clifton.

Honorary Local Secretary: E. Markham Skerritt, M.D., Edgecumbe House, Richmond Hill, Clifton.

Programme of Proceedings.

Tuesday, July 31st.

9.30 A.M.—Meeting of 1893-94 Council.
11 A.M.—First General Meeting, Large Hall, Victoria Rooms. Report of Council. Reports of Committees and other business.
3 P.M.—Sermon.
8.30 P.M.—Adjourned General Meeting from 11 A.M. President's Address.

WEDNESDAY, AUGUST 1ST.
9.30 A.M.—Meeting of 1894-95 Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Second General Meeting, Large Hall, Victoria Rooms. Address in Medicine.

THURSDAY, AUGUST 2ND.
9.30 A.M.—Meeting of Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—Third General Meeting, Room of Victoria Chapel (opposite Reception Room). Address in Surgery.
7 P.M.—Public Dinner of the Association.

FRIDAY, AUGUST 3RD.
9.30 to 11 A.M. Sectional Meetings.
11 A.M.—Concluding General Meeting, Large Hall, Victoria Rooms. Address in Public Medicine.

SATURDAY, AUGUST 4TH.
Excursions.

SPECIAL CORRESPONDENCE.

PARIS.

Epidemics in France.—Purulent Ophthalmia in the Paris Maternité.—Sterilisation of Catgut.—Actions against Bone Setters.—Attack on a Medical Man.—Hospital Appointments.—Pay Wards in French Hospitals.—General News.

AT a recent meeting of the Comité d'Hygiène M. Monod stated that there have not been any cases of cholera in Finistère since May 31st. There are 2 cases of cholera nostras in the Necker Hospital in Paris. Typhus cases have occurred in the following localities: Amiens, Poix, Pleissier, Rozainvillier, Seules, Meurthe and Moselle, Dieppe and Rouen. Seven cases occurred at Meurthe and Moselle, of which 2 ended fatally. This is the highest return. Sixteen small-pox cases occurred at Rouen between May 23rd and 29th. On the 26th there were 36 cases being treated in the Rouen Hôtel Dieu. In the Seine et Marne Department there has been an epidemic of diphtheria imported by the boat *Achilles*; it broke out among the steerage passengers.

Two epidemics of purulent ophthalmia broke out last year in the Maternité Hospital, one in March, the other in July. Twenty children were affected, and some of the sufferers were blinded for life. The Paris Municipal Council, at a recent meeting, discussed the question, and decided that the administration deserved great blame for the entire absence of superintendence in the Paris hospitals.

The Assistance Publique administration is directing its attention to the sterilisation of catgut, and will probably adopt Dr. Répin's method, which is as follows: The catgut must be thoroughly freed from fat by means of ether or carbon disulphide in ebullition. It must then be thoroughly dried; if a trace of water remains it will be spoiled. To arrive at complete desiccation the catgut is dried in sulphuric acid, or in a disinfecting stove, where the temperature is gradually raised to 110° C., and maintained for one hour; it is then placed in sealed tubes containing alcohol over proof; these tubes are placed in an autoclave at 120° C., and kept in it during one hour. The degree of strength of the alcohol is important; 1 per cent. of water is even injurious to the catgut; this is more evident as the temperature rises. Dr. Répin has ascertained that the spores of the bacillus subtilis, of the tetanus bacillus and the bacillus anthracis previously treated by desiccation are completely sterilised when exposed to the influence of alcohol above proof brought to a temperature of 120° C. Catgut obtained from animals suffering from charbon, then sterilised, and afterwards used to inoculate animals, was perfectly inert.

A medical syndicate has proceeded against a bone setter for illegally practising medicine, and won the case; this is the first example of the kind. At the same time a similar case was being tried in a Dinan law court. Neither the syndicate nor the patient, who was lamed for life, got redress. A nominal fine was imposed on the bone setter, and the patient was ordered to pay costs; the court deciding, with more common sense than justice, that he had no business to go to the bonesetter.

Dr. Ménard, physician at the Berck Hospital, after a visit to a patient whom he had treated for a long time, handed his account to the child's father. The latter refused to pay, locked himself in with the doctor, drew a pistol from his pocket, and threatened to shoot Dr. Ménard if he did not sign two promises to pay £200. Dr. Menard wrote them to gain time, then he tore them up and wrested the pistol from his aggressor, but was slightly wounded in the struggle. The man was arrested.

The Conseil d'État has been called upon to act as umpire, concerning a question disputed between the Prefect d'Indre et Loire and the Administrative Commission of the Tours Hospital. The post of physician attached to the department for insane patients annexed to the hospital being vacant, the Prefect considered that the insane department attached to the "hospice" belonged to the category of public asylums, consequently giving him the power of naming the physician. The Conseil d'Etat judged otherwise, and annulled the prefectoral decree appointing a medical man to fill the post.

In the Grenoble Hospital paying wards are organised, where patients are charged 5 francs a day, and receive every care and attention. They are allowed to choose the hospital surgeon or physician they prefer. The *Union Médicale* demands that similar wards should be organised in the Paris hospitals.

M. Henry Joly has been commissioned by the Assistance Publique to study in England the measures taken to befriend children abandoned or illtreated by their parents and guardians.

At the general council of the Paris University a letter was read from the Secretary of the Committee for Befriending Foreign Students, stating that the French Government had given £400 to found a scholarship for the said students. The Committee is organising "homes" for the said students.

ST. PETERSBURG.

Ptomaine Poisoning by Koumiss.—Death of Dr. Sperk.

IN July, 1893, great alarm was created among the visitors at Jeleznovodsk, one of the most frequented of the Caucasian group of watering places, by the occurrence of a large number of cases of irritant poisoning among persons who had drunk koumiss.[1] It was at first feared that the much-dreaded cholera had broken out; but when all the cases were traced to the consumption of koumiss, and of koumiss from one particular source, it was suggested that the symptoms were due to arsenic or some other mineral poison. Both these surmises proved to be wrong. From the report of the legal investigation into the matter, which has just been published, it appears that, in the opinion of the medical experts examined, the symptoms of poisoning were due to a ptomaine. This ptomaine, they consider, was found in the koumiss as a result of want of cleanliness in the tubs or barrels in which the mare's milk underwent fermentation. The owner of the dairy in fault has been sentenced to six weeks' imprisonment, and ordered to pay the costs of the investigation.

The case is of considerable interest. The mode in which koumiss is prepared has to be remembered. Among the nomad Kirghiz and Bashkirs it is usually prepared in bags made of dried and smoked horse's hide, with the hairy side outside, and the fermenting process is started by various means, from a mixture of honey and flour to a piece of fresh horse's hide or an old copper coin. Elsewhere it is made in wooden barrels, and great care and cleanliness are observed in order to obtain the best results. In the present instance, however, sufficient attention does not seem to have been paid to the cleanliness of the barrels. They were only washed out before use with warm water, and not scalded. But here is one of the most striking points in the history. The owner had prepared koumiss in the same way, and had washed his barrels in the same way, with warm water only, for the past twenty years, and with no untoward results. So had his forefathers done, and so do doubtless hundreds of his contemporaries in the koumiss trade. But the risk is there. Some day, without any warning, some new form of fermentation is set up in the mare's milk, a highly poisonous substance is produced, and nearly a hundred persons are made severely ill, five or six narrowly escaping with their lives.

The death of Dr. Sperk, the Director of the Imperial

[1] BRITISH MEDICAL JOURNAL, September 23rd, 1893, p. 717.

(formerly the Oldenburg) Institute of Experimental Medicine in St Petersburg has caused very general regret. Dr. Sperk was best known as an authority upon syphilis and skin diseases As senior physician to the Kalinken Hospital (the immense hospital for venereal and skin diseases in this city), a post held by Dr. Sperk for twenty-one years, he had almost unrivalled opportunities for studying these maladies. He was appointed three years ago to the Directorship of the Institute founded by the Prince of Oldenburg. The cause of death was, I am informed, malignant disease, with widespread secondary deposits.

MELBOURNE.

Poisoned Wounds produced by the Duckmole (Platypus).—The Want of a Fever Hospital at Melbourne. — Water-Borne Typhoid.

Is the platypus venomous? This is a question which is now being medically discussed. Dr. Lalor reported several cases which had lately been brought under his notice, in which it appeared that severe poisoning followed upon the wounding by the spurs on the hind legs of the platypus, or duck-mole. Two dogs thus wounded had been reduced almost to skeletons. A man wounded in the hand had lost some of his fingers. Another man at the time under his care, and wounded in the hand, was suffering severely, the arm being greatly swollen and the temperature going up to 104° F. In connection with this matter Dr. Gresswell showed a stuffed male and a stuffed female platypus. The spur, he stated, was found on the hind leg of the male, and not on the female. A gland, the so-called crural gland, discharged its secretion by a duct which, traversing the spur, opened about half-way along the length of it in a groove; and it appeared that in general the whole apparatus was very similar to the poison gland and the fang of the snake. In his *Descent of Man*, Darwin has drawn attention to this peculiarity in the male ornithorhynchus, but on the authority of Hartung he regards the secretion as not poisonous. There could be no doubt that the constitutional mischief in the cases reported by Dr. Lalor was due to an intoxication derived from the platypus, and not to an infection with the soil microbes. One point of importance in the latter connection was the fact that many men were at work in draining the swamp where the above mentioned cases occurred, and that though wounds of the hands and opportunities for infection of them with soil microbes must be frequent, it was only after wounds inflicted by the male platypus by means of the spurs that cases such as have been referred to had been noted at the swamp drainage works. The monotremata, which included only the platypus and the echidna, formed, Dr. Gresswell observed, a most interesting group, intermediate between the stem forms of birds and reptiles on the one hand, and of mammals on the other hand; and in regard to this it was curious to note that the temperature of these animals had been recently observed to be much below that of other mammals, and not much above that of some of the reptiles.

That a large city like Melbourne, containing about half a million inhabitants, should be without a fever hospital shows either a remarkable freedom from disease or a sad backwardness in applying the recognised methods of isolating and treating communicable disease. The latter condition unfortunately exists, and to remedy it Dr. Cobb moved a resolution at the Victoria Branch of the British Medical Association in favour of such an establishment being at once erected.

The typhoid epidemic, which has been a little more severe in character than for some years past, is now on the wane. It is interesting to know that, according to carefully-conducted bacteriological investigations made by Dr. Nelly, the increase in the number of cases notified in the metropolitan area was in sympathy with the increase in the number of micro-organisms found in a cubic centimetre of our drinking water. In November, 1893, the number of micro-organisms in the water was 280; in January, 1894, it was 1,074, and the typhoid cases numbered 186. In February the organisms were 3,620, and the typhoid cases notified were 257.

CORRESPONDENCE.

MEDITERRANEAN FEVERS.

SIR,—In Mr. Hart's Notes on Gibraltar, in the BRITISH MEDICAL JOURNAL of May 26th I observe with much interest that he desires to draw a distinction between the long and short cases of fever now returned at that station as simple continued fever. This is a point I have long contended for, and there is this coincidence that while he has taken three weeks as the dividing line, I, at the recent meeting of the local Branch of the Association, adopted twenty days.

Mr. Hart says that at Gibraltar about one-half the cases returned as simple continued fever may be regarded as typical rock or Mediterranean fever. At Malta the proportion is far smaller and therefore the distinction more obvious.

At Gibraltar, in 1893, with an average strength of 4,743, the number of cases returned as simple continued fever was 132. At the Valetta hospital, the old hospital of the Knights of St. John, with an average strength of 3,346, the numbers were 363, or rather 481, as I shall further on explain.

On dividing these 481 cases into two categories it was found that only 83 were over twenty days in hospital, or less than one-sixth.

The effect of this division was otherwise striking, for it was found that, whereas these 83 cases had an average duration of over forty-six days, the remainder, 398 cases, were only a decimal point over six days. But even these figures do not represent the full extent of the difference, for, of the 83 long cases, 40 were invalided to England, and a further large proportion sent to the Sanatorium Hospital for further treatment. Could the duration of these latter be added the disproportion would probably be as 1 is to 10.

It is obvious that two distinct febrile affections are thus returned under the same heading. But this is not the only difficulty, for authorities are divided as to the nature, not only of the long cases, but also the short ones.

With regard to the long cases, I believe them to be a modified form of enteric fever, and similar to that prevalent in India and all the tropical and subtropical countries I have been in. The disease should be called "pseudo" or "false" enteric fever.

I agree with Mr. Ernest Hart that the mild or short cases "must be attributed to 'chills' from incautious exposure and sudden changes of temperature;" but I wish to record the opinion that they are in no essential different from that known as malarial fever all the world over.

During the past year we had the novel experience of seeing cases among soldiers recently arrived from Mauritius and India side by side with those of endemic origin, and I must say that after long service both in Mauritius and in India I found no essential difference. During the months of May, June, and July, 1893, I made a departure from the beaten track, and returned 118 cases as remittent fever which have been added as previously mentioned to the simple continued fever to make up the number to 481.

Notwithstanding the difficulty caused by having to render a weekly return, the experiment was so successful that only 4 turned out long cases. By remittent fever I do not mean the bilious remittent fever of the older writers, but the intermittent or subcontinuous fever of Baccelli of Rome, which is identical with the Malta variety.

During the year 33 cases of ague were returned because the men came either from Mauritius or from India. The average duration of the cases of simple continued fever, less than twenty days in hospital, was 6·7 days, the cases returned as remittent fever (114) 7·5, and the ague cases 7 days, or practically the same period for each.—I am, etc.,

J. MACARTNEY, M.D.,
Brigade-Surgeon-Lieutenant-Colonel A.M.S.

Malta, June 6th.

THE ABUSE OF HOSPITALS AND THE "CHEAP DOCTOR."

SIR,—There is no question more pressing at the present moment than that of providing cheap and good medical advice and medicines to the working class. On the one hand, we have the doors of our hospitals thrown far too widely open to all and sundry as out-patients, and, on the other, we have members of our profession struggling for a

livelihood, and, no doubt, meeting a felt want by giving advice and medicines for 6d. or less, touting for cheap club work, or, still worse, accepting appointments under medical aid associations.

In as far as these latter results are due to congestion in the profession, I can see no cure but time and limitation of the number of registrations through the stress of over-production. But to meet the abuse of out-patient departments, on the one hand, and to provide really sound advice cheap there is, Sir, a remedy which, if I mistake not, you have often advocated, namely, provident dispensaries founded on a thoroughly sound basis. As a constituent part of these institutions, I would suggest that they should become schools for the teaching of practical medicine and surgery.

This is no new idea. It is at work already in many places, and I would urge its extension in all our large towns. I have visited out patient admission rooms, such as those in Edinburgh and Glasgow—medical and surgical—and I have been told that it would be much better both for patient and student if many of the cases could be followed up and attended at their own homes. Public dispensaries I am acquainted with, such as that in Aberdeen, would exactly meet the desideratum. How is this to be secured? The Aberdeen Dispensary has lately instituted a lying-in department, but it is doubtful if the funds will be forthcoming from public liberality to keep it going. Some other source of revenue must be looked for. It seems to me this would be found in fees from pupils. I should hand over to each dispensary doctor a limited number of students, say twelve, for a period of six months, or even twice that time where a teaching hospital or hospitals may be available, and let these men become his private pupils, and as such pay him a handsome fee. Let him use their services, but always under his own eye, and make him thoroughly responsible for their work. Provided the fee were large enough—and I should be disposed to put it at a minimum of £25 for a six months' apprenticeship, and double for twelve—then a considerable fund would be available to pay the teacher for his trouble and to provide the necessary drugs, thus keeping the patients' subscriptions at a point low enough to compete with sham dispensaries and bogus medical aid associations on the one hand and reducing the number of out-patients at hospitals on the other.

But it may be said students cannot pay such additional fees: they are burdened enough already. In one sense this is true enough. But what right has the General Medical Council to allow raw, merely crammed men into the profession? They have recently refused to do so in the case of dentists; surely they ought equally to refuse in the case of medical practitioners.

Let the rule be made absolute that every student must either be a resident assistant in a hospital or have been under the personal training of a selected practitioner connected with a dispensary or engaged in similar work, and then fees will be found. We can afford to make the entrance to our ranks a little more difficult provided we ensure to the public a better class of practitioners.

I unhesitatingly affirm that men are now being turned out as qualified who are not safe to be trusted with the lives of their patients, and that no mere examination is, in the strict sense, "sufficient" to prove their capability for practice.

The General Medical Council insists on a five years' curriculum, and they lay down fixed periods for certain branches of study. They ought also to insist on a minimum amount of personal training as pupils, antecedent to, or as I believe subsequent to, their scientific studies before being admitted as candidates for the final examination. Without such a test men will continue to pass and pose as doctors who are not in the true sense fit to appear on the register of duly qualified medical practitioners, and who as such are nothing more nor less than frauds upon the public.

I cannot leave this subject of cheap doctors without thanking Messrs. Toms and Cruttwell and Dr. Sheen for their manly letters.—I am, etc.,

Dingwall, N.B., June 10th. WILLIAM BRUCE, M.D.

SIR,—Birmingham is not the only place where letters are sold to all comers for advice and medicine. In the West of London letters are sold by the porter for one shilling (1s.), which last fourteen days. No questions are asked; in fact, if the average every month is not kept up, the secretary or certain of the committee inquire the reason why, and the porter is only glad to curry favour with them. A patient not long ago was under a doctor in the neighbourhood, and paid 5s. per visit, but was told she could obtain all that was wanted for 1s. at the dispensary; of course she availed herself of the offer. The only persons who can give reliable information on the abuse of charities are men who have held the post of resident for about three years, not the secretary or honorary staff.—I am, etc.,

Albemarle Street, W., June 10th. E. CARNALL, M.R.C.S.

THE SICK POOR AT HATFIELD.

SIR,—It is only fair for me to state that the matters reported in your article on the Hatfield Workhouse have been reported in the book provided for the purpose, either wholly or in part. I believe the local authority is anxious to do all that is right, but it is idle to expect it to move when the Local Government Board do not take up such a report as I wrote (some time ago now) on the condition of the women's infirmary. Notwithstanding the condition of the lying-in ward, I can recollect no case of any sort of puerperal sepsis.—I am, etc.,

Hatfield, Herts. LOVELL DRAGE.

COLLIE v. BLOXHAM: BLOXHAM v. COLLIE.

SIR,—Mr. Savage's letter of "explanation" printed in the BRITISH MEDICAL JOURNAL of June 9th, omits certain important details associated with these actions which renders it necessary for us to place before your readers a full statement of the actual circumstances in order that they may correctly understand matters.

Dr. Collie's action was brought to obtain an injunction restraining Mr. Bloxham from practising in Catford, or within three miles thereof, for a period of ten years contrary to and in violation of the terms of a written agreement which Mr. Bloxham signed on becoming Dr. Collie's assistant, and an interim injunction was granted by Mr. Justice Wright on September 13th last pending the trial of the action. Dr. Collie also claimed penalties provided by the assistantship agreement and damages.

Mr. Bloxham's action was for damages for breach of a partnership agreement alleged by Mr. Bloxham to have been entered into by Dr. Collie with him verbally. In this action Dr. Collie counterclaimed for moneys personally and privately lent by him to Mr. Bloxham.

The £20 16s. 8d. paid by Dr. Collie into Court was a sum admittedly due to Mr. Bloxham for one month's salary as assistant under his assistantship agreement in lieu of notice, and for which on his dismissal Dr. Collie sent him a cheque which he (Mr. Bloxham) subsequently returned. The main issues, therefore, were—in Dr. Collie's action, to restrain Mr. Bloxham from practising in the towns mentioned; and in Mr. Bloxham's action, to establish a partnership with Dr. Collie.

In the settlement effected Mr. Bloxham personally undertook forthwith to remove his nameplates from his house and a certain notice board from his garden, and he also undertook not to practise within three miles of Dr. Collie's present residence for a term of ten years, which being sufficient for his purpose, Dr. Collie waived his claim for the penalties and damages; and Dr. Collie, in Mr. Bloxham's action, abandoned his counterclaim for the amount of his loans to Mr. Bloxham, and consented to the £20 16s. 8d. paid into court by him, in the circumstances mentioned, being paid out to Mr. Bloxham, and no order was made in relation to Mr. Bloxham's alleged verbal partnership agreement. All imputations of professional misconduct were mutually withdrawn.

We must apologise for trespassing on your space at such length. We should not have referred to the matter at all in the public press but for Mr. Savage's letter, which has necessitated these further explanations.—We are, etc.,

King Street, Cheapside, June 12th. HEMPSON AND ELGAR.

DYSENTERY AND "TROPICAL" LIVER ABSCESS.

SIR,—The assertion under this heading made in the BRITISH MEDICAL JOURNAL of March 31st by Dr. Macleod, of Shanghai, that tropical abscess of the liver is invariably the result of dysenteric ulceration of the bowel, will scarcely be approved

of by most observers. Amongst Europeans tropical abscess is by no means a rare disease; and although ulceration of the bowel is undoubtedly a frequent accompaniment, yet I think it can scarcely be placed in the position of cause and effect: for if so, why does not the same relationship obtain in the case of natives? Natives of India suffer very severely from dysentery, certainly to quite the same extent, if not much more than Europeans, and yet "tropical abscess" is extremely rare amongst them. In my hospital, where natives alone are treated, there have been during the last three years no fewer than 135 admissions for dysentery, and against this I can only find in the records one case of abscess of the liver. If dysentery is the invariable cause of tropical abscess, how can this discrepancy be explained? I think the true explanation should be that dysenteric ulceration, in cases of tropical abscess, must be considered a coincidence rather than the producer of the disease, and the real cause or causes must be looked for in some other direction.

What, then, are these causes? I consider there is little doubt that they are those which have already been suggested and taught by experienced writers on tropical diseases, namely, the tendencies of Europeans to eat, drink, and live in the tropics as they do at home. When to this is added a naturally torpid liver or some inherent tendency in the individual himself, I think there is but little else required to explain the etiology of tropical liver abscess.—I am, etc.,

ROBT. A. YEATES,
Surgeon-Lieutenant I.M.S.

Mandalay, Burmah.

SIR,—Many medical officers who have had experience of hepatic abscess in India will not agree with Dr. Neil Macleod's conclusion that dysentery is the invariable cause of suppuration in the liver, for in many of the cases that occur in India *post-mortem* examination shows that the patients have never suffered from dysenteric or any other form of intestinal ulceration. Dysentery, when it occurs in temperate climates, does not manifest any tendency to infect the liver. The same remark applies equally to intemperance and to excessive indulgence in nitrogenous food, for in temperate climates these may be carried to their utmost limits without exciting suppuration in the liver.

A study of the climatology of the regions in which tropical abscesses of the liver occur appears to render the conclusion inevitable that the only condition which is common to them all is a long-continued high temperature. One of the first effects of exposure to a high range of temperature is a very decided increase in the secretory functions of the liver. In persons who have healthy constitutions, who take regular and sufficient exercise, and who live temperately, this increased action of the liver is beneficial, and is, indeed, the first step towards acclimatisation. On the other hand, in those of a bilious or strumous diathesis, who are sedentary or intemperate in habits, the stimulation of the liver becomes excessive, and the normal result of excessive stimulation, namely, depression or exhaustion, follows. Every organ which is in a state of exhaustion is liable to inflammation. Anyone, therefore, who is suffering from hepatic exhaustion is liable on slight causes to further morbid changes in the liver. In cases of this kind the added strain of a sudden chill or of an attack of dysentery is often sufficient to light up inflammation, and, when inflammation of the liver occurs in a bilious or strumous subject living in the tropics, it not infrequently ends in suppuration.

Professor Alexander Dochmann has found that exposure of an animal to an artificial temperature about equal to that of the hot weather in India caused an acceleration of the bile secretion. This acceleration had its maximum beyond which any further increase of temperature caused retardation. When the temperature exceeded 44° Centigrade, the secretion of bile became wholly suspended.—I am, etc.,

G. HARRISON YOUNGE, F.R.C.S.I.,
Surgeon-Major A.M.S.

Mandalay, Burmah, May 3rd.

THE POWERS OF SANITARY AUTHORITIES AS TO ISOLATION AND QUARANTINE.

SIR,—With reference to the article in the BRITISH MEDICAL JOURNAL of May 26th on the powers of sanitary authorities as to isolation and quarantine, will you permit me to say neither the Willenhall Sanitary Authority nor its officers have prevented healthy persons from earning their living, and that they have not placed any healthy persons in "quarantine," notwithstanding anything which may have been said by the guardians of Wolverhampton.

What has occurred is this. Employers of labour, for their own protection and that of their workpeople, have in some instances declined to find employment on their own responsibility and their own premises for workmen from infected houses; and in some cases both the employers and the workpeople have made some provision for the absent workmen.

As regards my own personal action in the matter, I refer you to my Annual Report for 1893, already in your possession. I also enclose a card and a bill sent to each infected house as soon as the cases are notified, and newspaper cuttings from the *Midland Evening News* for May 10th, 11th, and 12th, bearing upon the subject.

If, however, as you seem to argue, there is no power in any case to order a person in an infected house to be idle, a laundry woman conducting her business at home and at the same time nursing a sick relative might be permitted to disseminate small-pox broadcast.

Of course the mentioning of such a possibility would only strengthen the case for isolation, but the fact remains that there are at present far more places without the means of efficient isolation than with it; and there are probably scores of local boards who are not financially prepared, even if convinced of its utility, to provide the maintenance of isolation hospitals on a large scale.

The Willenhall Board is providing temporary accommodation for about sixty persons.—I am, etc.,

JOHN T. HARTILL,
M.O.H. Willenhall.

May 28th.

NAVAL AND MILITARY MEDICAL SERVICES.

ARMY MEDICAL STAFF EXCHANGE.

The charge for inserting notices respecting Exchanges in the Army Medical Department is 8s. 6d., which should be forwarded in stamps or post office order with the notice. The first post on Thursday mornings is the latest by which these announcements can be received.

A SURGEON-CAPTAIN who returned home last trooping season is willing to accept a good offer of exchange to India or Colonies, for whole or part tour. Address N. W., care of Messrs. Holt and Co., 17, Whitehall Place, London, W.

THE NAVY.

THE following appointments have been made at the Admiralty:—FREDERICK A. CAPPS, Surgeon to the *Waterwitch*, June 12th; CHARLES S. WOODWRIGHT, Surgeon to the *Triton*, June 12th; VINCENT W. TWINING, M.B., to be Surgeon and Agent at Prawle, Salcombe, etc., June 8th; WILLIAM J. WELDON, M.B., to be Surgeon and Agent at Courtown and Ballymoney, June 8th; CHARLES JAMES, Staff-Surgeon to Ascension Hospital, June 9th; JOHN S. LAMBERT, Staff-Surgeon to the *Alexandra*, June 10th.

ARMY MEDICAL STAFF.

SURGEON-MAJOR A. H. MORGAN has been nominated a Companion of the Distinguished Service Order (D.S.O.), in recognition of his services during the recent operations on the West Coast of Africa. It will be remembered that Surgeon-Major Morgan was mentioned by his commanding officer in his official report of the operations as "especially active in the arrangement of his department."

Brigade-Surgeon-Lieutenant-Colonel W. S. M. PRICE, who is serving in India, is directed to officiate on the Administrative Medical Staff of the Bengal army, with the temporary rank of Surgeon-Colonel, from April 24th.

Deputy-Inspector-General RICHARD FRANCIS VALPY DE LISLE died in Guernsey on May 1st. He entered the service as Assistant Surgeon, August 27th, 1841; became Surgeon, November 5th, 1852; Surgeon-Major, December 10th, 1861; and Honorary Deputy-Inspector-General on retirement, June 8th, 1867. We learn from Hart's *Army List* that he served with the 4th Regiment throughout the Eastern campaign in 1854-55, including the battles of Alma and Inkerman, and the siege and fall of Sebastopol. He received a medal with three clasps, and the Turkish medal, and was a Knight of the Legion of Honour.

A Royal Warrant has been issued to provide for the employment and pay of warrant and non-commissioned officers and men of the Medical Staff Corps as clerks in Army Medical offices, and to make other alterations as to their corps and extra duty pay. The pay as clerks is to be as follows: Sergeant-Major, 5s. 9d. a day; Corporal, 3s. a day on appointment, if not above the rank of corporal; Sergeant, 4s., after three years, 4s. 3d.; 2nd Class Staff-Sergeant, 4s. 6d., after three years, 4s. 9d; 1st Class Staff-Sergeant, 5s., after 3 years, 5s. 3d. a day. Previous service as clerk in the Medical Staff Corps, in the rank held on appointment under Article 641A, will count towards the next higher rate of pay. A non-commissioned officer employed at the War Office may be granted 6d. a day in addition to the ordinary rates.

ARMY MEDICAL RESERVE.

SURGEON-CAPTAIN A. B. WADE, M.B., 3rd Volunteer Battalion the Hampshire Regiment, to be Surgeon-Captain, June 13th.

Surgeon-Lieutenant A. J. BOYD, M.D., 2nd Volunteer Battalion the Bedfordshire Regiment, to be Surgeon-Captain, June 13th.

INDIAN MEDICAL SERVICE.

BRIGADE-SURGEON-LIEUTENANT-COLONEL F. H. BLENKINSOP, Madras Establishment, is directed to officiate in the administrative grade of the Madras Army, with the temporary rank of Surgeon-Colonel, dated May 18th.

Brigade-Surgeon-Lieutenant-Colonel E. F. DRAKE-BROCKMAN, Madras Establishment, is permitted to retire from the service, from April 4th. He was appointed Assistant-Surgeon, October 1st, 1866, and became Brigade-Surgeon-Lieutenant-Colonel, April 21st, 1890.

The death, on April 5th, by drowning is reported of Surgeon-Lieutenant H. L. SUTHERLAND, of the Madras Establishment. He joined the service in July last, and was doing duty in the China Hills Command.

THE VOLUNTEERS.

SURGEON-CAPTAIN S. DAVIES, M.D., 3rd Kent (Royal Arsenal) Artillery, has resigned his commission, June 9th.

The undermentioned gentlemen are appointed Surgeon-Lieutenants to the corps specified, from June 9th: JOHN COWAN, M.B., 1st Volunteer Battalion the Leicestershire Regiment; THOMAS BENSON, 4th Volunteer Battalion the Durham Light Infantry; JOSEPH GEORGE TURNER, 7th Middlesex (London Scottish); JOHN BINNIE MACKENZIE ANDERSON, M.B., Glasgow Companies, Volunteer Medical Staff Corps.

ABERDEEN MEDICAL STAFF IN CAMP.

THE members of the Medical Staff Corps who went into camp at Auchinblae last week were inspected by Surgeon-Colonel Robertson, principal medical officer Scottish district. The corps was under the command of Surgeon-Captain MacGregor, and there were on parade 4 officers, 4 staff-sergeants, 5 sergeants, and 88 rank and file. At the close of the inspection Surgeon-Colonel Robertson expressed himself highly pleased with the drill he had witnessed. After lunch the corps was marched into canteen, where Surgeon-Captain Booth presented Surgeon-Captain MacGregor with a handsome fruit and flower stand on the occasion of his approaching marriage. Surgeon-Captain MacGregor, in happy phrases, expressed his thanks for the gift, and extolled the merits of the corps which had just been inspected. Ere long, he stated, it would be a corps that would be difficult to match, and he pointed out that such training as field and camp afforded was in strict keeping with high mental standards.

INDIAN NOTES.

THE *Pioneer* states that, on apparently good authority, it is proposed to extend the age of surgeon-major-generals to 62. This would be a most unpopular step, and raise a storm in the senior ranks, whose promotion, already slow, would be seriously delayed.

Complaints are rife that foreign reliefs are not punctually carried out, and, through general uncertainty in the reliefs, much inconvenience and expense is caused to officers.

In compliance with the recommendations of the Principal Medical Officer, British Forces, exchanges will be henceforth allowed between medical officers of the different Presidencies.

Complications connected with the fall of the rupee develop; with a general increase of 15 per cent. in the cost of all European goods, the diminished pay of surgeon-major generals will greatly lessen the value of their Indian appointments. In the Civil Service it is stated that officers who have completed twenty years' service, and become entitled to £1,000 a year pension at home, are freely retiring.

TRAINING IN MEDICAL FIELD DUTIES.

THE mobilisation and training of field hospitals and bearer companies at Aldershot last month was apparently carried out in a systematic and fairly thorough manner. This is the first fruits of much that has been urged in the BRITISH MEDICAL JOURNAL on this matter, and pressed on the attention of the Secretary of State for War. Let us hope that in future such practical training will be considered just as necessary periodically as drill in any other branch of the service.

The training lasted two weeks, the first being devoted to the handling of equipment and the disposal of sick and wounded, including railway entraining of men and *matériel*: the second in operations connected with sham fights and manœuvres with brigades of troops. We understand the whole of the comprehensive orders of the adjutant-general were carried out except operations against a supposed savage force which would not respect the Geneva badge.

Finally, the embodied units marched past H.R.H. the Duke of Connaught on the Queen's birthday, being the first occasion, we believe, on which this has been done with full medical transport. We have received an admirable photograph of No. 3 Bearer Company as it appeared at the march past, and very effective it looks with its wagon transport. The mounted officers are Surgeon-Major Risk, commanding; Surgeon-Captain Deane and Surgeon-Lieutenant Mangan, of the half companies; and Captain Longden, Army Service Corps, transport officer, all wearing the Geneva badge.

We are still far from assured, despite the opinion of the Secretary of State for War, that the latter, as a combatant corps, are entitled to wear the badge; and what we should therefore like to see would be the formation of purely medical transport. We believe this initial mobilisation has revealed the fact that both bearer companies and field hospitals are not strong enough for the duties which fall to them as units; more men are wanted in the field hospitals, and the bearer companies should have double the number of stretcher squads they now possess, if they can hope to meet the sudden and severe strain which is certain to fall to them in these days of repeating small arms. We hope the authorities will see to this if they hope to avoid a lamentable breakdown in the first general action of a war.

We are glad to hear that field hospitals and bearer companies are also to be embodied for training and manœuvres in Ireland. All this is as it should be; but meanwhile we shall not cease to urge reforms in the field medical service of both the home and the Indian armies, in order that it may be equal to the duties required of it in modern warfare, which assuredly it is not as at present constituted.

THE DISUSE OF OFFICIAL TITLES.

ROYAL SURGEON, serving in India, very justly complains of the custom, more prevalent, we may say, abroad than at home, of army medical officers being designated in official correspondence as "Doctor," instead of by their proper military titles. Such evasion of the Royal Warrant of 1891, conferring distinct titles on army surgeons, is inexcusable on the part of staff officers (for example, A. G.'s, Q. M. G.'s, and their deputies) of districts and commands when conveying orders to the officers of the Army Medical Department. We have recently been informed of at least two commands abroad where the reprehensible practice against which our correspondent protests was permitted by principal medical officers, much to the astonishment and distaste of their successors in office, who at once took steps to have it discontinued.

The remedy for the irregularity is very simple, and may thus be summed up: The medical officer aggrieved should lay his protest officially before his principal medical officer, who in his turn, with all the emphasis in his power, should support and forward the correspondence to the general officer commanding, on whose staff the principal medical officer has a definite status.

It is but a short time ago we saw a semi-official note written by a general officer commanding an important and large district at home to his principal medical officer, in which the latter was addressed as "Dear Colonel." This would be a good example for general officers and staff officers generally to follow, both at home and abroad, when communicating with medical officers, who have just as much right to their proper official titles as have any other officers, regimental or staff, to theirs.

As to the diversity of forms in which medical officers have their cards printed we cannot see why uniformity in this respect should not be arrived at now that the compound titles have been conferred. At home medical officers generally adhere to the titles before the name, after which come the words Army Medical Staff.

As to the sneers and carpings at army medical titles which our correspondent states, appear in the Indian press, we can only say that while we consider these in bad taste it is impossible to suggest a remedy. Time, and with it expansion of ideas, may rectify the existing feeling against army surgeons possessing military titles.

MEDICO-LEGAL AND MEDICO-ETHICAL.

THE SUPPLY OF MEDICINAL PREPARATIONS.

IF there be any meaning in medical or pharmaceutical qualification it must be admitted that the supply of medicine for remedial purposes should be confined to the hands of persons possessing appropriate knowledge. The puffing recommendations of proprietary nostrums now so frequently met with do not furnish any guarantee that this essential requirement is or can be provided for when such articles are used as remedies, though they are very likely to influence a credulous or ignorant public. This view of the matter appears to have guided the Legislature in imposing a limitation upon the free supply of medicinal preparations through the agency of the Medicine Stamp Act, which renders all such articles liable to stamp duty when they are in any way held out or recommended as beneficial for the prevention, cure, or relief of any distemper, malady, ailment, or complaint, incident to or in anywise affecting the human body. Its application may sometimes appear to be harsh, as in the case of the sale of Gregory's powder, for which a store at South Shields was prosecuted as having infringed the Medicine Stamp Act. This case has just been made the subject of an appeal, but Mr. Justice Cave has decided that there should have been a conviction, because the article in question was recommended in a book issued for the purpose of attracting customers. If it be desirable to escape liability to medicine stamp duty, and in the case of a familiar preparation like Gregory's powder that cannot be denied, it is a simple matter to do so by avoiding the recommendations which entail liability and bring such preparations to the level of secret quack nostrums.

PROSECUTIONS UNDER THE PHARMACY ACT.

WHILE the power of prosecuting unqualified persons for the sale of poisons or for keeping open shop for retailing, compounding, or dispensing poisons is reserved to the Pharmaceutical Society, the seventeenth section of the Act gives a general power of procedure against chemists who sell poisons without conforming to the regulations prescribed by the Act, and it appears that even chemists do not always observe the necessary formalities in the sale of articles which are poisons within the meaning of the Act. It is strange that this should be the case considering the protective tendency of the Act in regard to the chemist's business. But at Leeds several chemists have recently been fined for neglecting the regulations, and at the Oldham police court a number of similar charges were made last week against local chemists. Among the articles sold were arsenical fly papers, and a proprietary preparation of strychnine known as "Fellowes's syrup." In regard to the first-named article, the magistrate's clerk was of opinion that arsenical fly papers do not come within the Act, and the other cases were adjourned for the purpose of considering decisions which have recently been given. It may be mentioned that at the late annual meeting of the Pharmaceutical Society the President expressed a very decided opinion that it is the duty of every chemist to know what he is selling, and to conform with the requirements of the Pharmacy Act in the strictest manner. If that is not done by chemists the Act will be nullified, and of no avail for protection of the public.

PROSECUTIONS UNDER THE DENTISTS' ACT.

THE British Dental Association has instituted a series of prosecutions against certain persons for infringing the Dentists' Act, 1878, by either holding themselves out as dentists or as being specially qualified to practise dentistry when, as a matter of fact, they were not registered and held no legal qualifications. At Manchester, before Mr. Headlam, the stipendiary, James Macdonald was fined £10 for using the expression 'Telegraphic address—Dentist, Manchester," in his advertisement, and £5 for describing his premises as a free dentorium, with £5 costs. L'Estrange was fined, at the same court, £5 and costs for describing his premises as a dental surgery. At Lancester, before the justices, R. Knowles, a chemist, of Morecambe Bay, was fined £1 and costs, "as a warning to others," for holding himself out as being specially qualified to practise dentistry. In each case Mr. R. W. Turner, barrister, instructed by Messrs. Bowman and Crawley-Boevey, prosecuted on behalf of the Association.

TOUTING.

"INFLUENTIAL men wanted to obtain lodges, clubs, friendly societies for doctor (central); 10s. per 100 members allowed. S. 85, Daily News." This indefensible advertisement appeared in the *Leeds Daily News* recently. From information received it would seem to have emanated from a University graduate, who is also a diplomate of several licensing bodies. The matter should be brought to the notice of these bodies.

PROVIDENT SOCIETIES.

G. H. J.—The rules of the Deddington and District Provident Medical Society seem to be much of the same character as those of other benefit societies. Under certain circumstances we admit that these institutions are necessary, and that medical practitioners may legitimately take them; but we are by no means disposed to look on them as desirable institutions when started by an individual practitioner in his own interest, who must be aware that they are very likely to withdraw from his professional brethren in the neighbourhood their poorer patients. We cannot, therefore, feel surprised when our correspondent tells us that some of his medical neighbours object to his action, and regard it as unprofessional. If, indeed, the true test of professional etiquette is to do to a professional brother as you would wish him to do to you, our correspondent's conduct does not seem altogether praiseworthy. It is essential in a provident dispensary scheme that all the medical men of the district who choose to do so should be at liberty to join.

SALE OF A MEDICAL PRACTICE.

MESSRS. HUNTERS AND HAYNES write: In the BRITISH MEDICAL JOURNAL of June 2nd, your reference to the case of the Scholastic Clerical and Medical Association *v.* Hobson is likely to produce an unfair impression against the plaintiffs, and as their solicitors we beg to say that they expressed through their counsel their willingness, even at the trial, to accept half the sum claimed, notwithstanding the fact that they were assured by their counsel that their claim against the defendant was (as it turned out to be) unanswerable

We may further state that we have reason for knowing that Dr. Hobson bears no ill-will towards the Association for their action in the matter, and in fairness to the Association we will ask you to insert this letter.

THE WORDING OF LUNACY CERTIFICATES.

L.R.C.P. writes: I have just had a lunacy certificate returned to me for amendment by the Commissioners in Lunacy for the following reason. Under the head of "place of abode of patient" I had written "Messrs. —— and Co.'s establishment, c/o J. B., Manager" (the patient being the manager's wife). "What is the meaning of 'care of'?" was written in pencil on the margin.

*** Possibly, in the case above described, the certificate may have been returned for explanation and amendment, because, in stating the patient's place of abode in a certificate, the main object of which was to place and detain her under "care and treatment," he described her as already living at a certain address under the care of someone else. Or the certificate may have been returned because (as quoted in his letter to this JOURNAL) he used in it the contraction "c/o," instead of the full words "care of." These are the possible explanations that occur to us.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

MEDICAL DEGREES.—At the Congregation on June 7th the following degrees in Medicine and Surgery were confirmed:

M.D.—W. Gordon, Trinity; G. B. Courtney, Pembroke; W. W. Groome, St. Catharine's; T. H. Kellock, Emmanuel.

M.B. and B.C.—T. W. Parry, St. John's; A. L. Jackson, Clare; T. A. Bowes, T. F. Budden, A. S. F. Grünbaum, C. L. Hopkins, R. W. Michell, G. H. K. Martyn, C. Neill, J. W. Noble, F. W. Sell, Gonville and Caius; A. H. Wilson, Christ's; A. J. Collis, Selwyn Hostel.

B.C.—G. H. Nowell, St. Catharine's.

SCOTTISH UNIVERSITIES COMMISSION.

THE Scottish Universities Commissioners recently issued a draft ordinance setting forth regulations for the encouragement of special study in research, for the institution of research fellowships, and giving additional regulations for the degree of Doctor of Science in Scotch universities. Under this ordinance it is proposed that the Senatus, with the approval of the University Court, shall have the power to make regulations under which graduates of Scottish universities or of other universities recognised for the purpose, or other persons who have given satisfactory proof of general education and of fitness to engage in some special study or research in the university. Research students shall be eligible for election to such research fellowships as the University Court may institute, with or without stipend, and to such other fellowships or scholarships as may be open to them by ordinance or deed of foundation. Research students may be admitted to the Degree of D.Sc. under certain conditions.

UNIVERSITY OF EDINBURGH.

THE written examinations on the systematic courses of medicine, surgery, midwifery, public health, and medical jurisprudence for the Final Examination for the degrees of M.B. and C.M. begin on Monday, June 18th.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.

Nile Reservoirs.—In reply to Mr. GRAHAM, Sir E. GREY said that the subject of Nile reservoirs had occupied the attention of the Government for four years. After considering the various schemes submitted to them by their own experts and others, they appointed an International Technical Commission, consisting of an English, a French, and an Italian engineer, to advise them as to the one most suitable for adoption. He had seen the article written by Sir Benjamin Baker, the English member. It gave a clear account of the object and labours of the Commission, and showed the extent to which Egypt will benefit by the construction of a reservoir. It was evident from the context that in using the expression "absolute necessity," Sir B. Baker meant to indicate that the advantages of a reservoir were undoubted and convincing now that the barrage of the Nile had been completed. Her Majesty's Government had not been asked to recommend a scheme, and they saw no reason for consulting independent experts in this country with regard to a matter which the Egyptian Government very wisely decided to refer to an International Commission of experts on the spot.

Death under Chloroform.—Mr. CHANNING asked the Home Secretary whether his attention had been called to the inquest on Arthur Thomas Payne, who died on May 31st in King's College Hospital during an operation under chloroform, when it was proved that the deceased was a minor; that his mother had given her consent to the operation, with the proviso that the hospital authorities should notify her of the date of the operation; and that no such notice was given to the mother. And whether he would take steps, by legislation or otherwise, to require the authorities of King's College and other hospitals to give notice to parents of patients who were minors, when operations, involving risk of a fatal result, were decided upon.—Mr. ASQUITH, in reply, said he was informed by the Secretary to the Governing Body of King's College Hospital that the young man referred to was 20 years of age, that soon after his admission on March 14th his mother was informed that an operation would be requisite, and that she gave her consent without qualification, and without any such proviso as alleged. There did not, so far as he knew, appear to be any sufficient ground for legislation of the kind suggested by his hon. friend.

Compulsory Vaccination Abolition Bill.—The Bill brought in by Mr. Hopwood, Mr. Channing, Mr. Byles, and Dr. Clark to abolish the compulsion to vaccinate was issued on June 8th. It is as follows: Be it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords, spiritual and temporal, and Commons in this present Parliament assembled, and by the authority of the same, as follows: (1) No person shall henceforth be compelled to vaccinate, or cause to be vaccinated, any child or young person under the age of 14 years; and all prosecutions in respect of the neglect or refusal to vaccinate, or cause to be vaccinated, shall cease and determine, and any law and statute compelling to vaccinate, or cause to be vaccinated, is hereby repealed. (2) This Act may be cited as the Vaccination Law Amendment Act, 1894.

The Hospital for Incurables, Dublin.—Mr. J. MORLEY, in answer to Mr. TIMOTHY HEALY, said the Royal Hospital for Incurables, Dublin, was a corporation created by letters patent, and that the Government had no power to interfere in the selection or appointment of the officers of the institution. By his direction, however, a copy of the question was referred to the registrar of the hospital, and that gentleman had written a letter from which he read the following extract: "The hospital was founded 150 years ago by a few Protestant gentlemen, and has ever since continued very much under Protestant management. The facts stated by the hon. member for North Louth are generally correct, and the only explanation I can give for there being a greater number of Protestants than Roman Catholics in the management is that of the 486 ladies and gentlemen comprising the board (each of whom by a contribution of 20 guineas or upwards have been constituted a life governor), 334 are Protestants and 152 are Roman Catholics. Each governor has a vote, and uses it as he or she pleases, no one having the power to control the voting. The Protestants are largely in excess at most meetings of the board, and I may observe that the chairman never allows politics or religion to be introduced. The hospital has been, and still is, one of the most prosperous and popular charities of the city; it contains 182 beds; at present there are 67 Protestants and 113 Roman Catholic patients in residence. Two of the medical men on the staff of the institution are Roman Catholics. The chairman and vice-chairman have for some years been Protestants, but their election, which is yearly, has invariably been moved or seconded by Roman Catholics. Four governors are elected monthly for visiting the hospital, two being Roman Catholics and two Protestants."—Mr. T. W. RUSSELL asked whether the right hon. gentleman knew that the Hospital Sunday collection was confined in Dublin to the Protestant churches, and that the funds collected were given to hospitals having a large percentage of Roman Catholic patients.—Mr.

MORLEY said he was glad to hear that the funds were distributed impartially.

Alleged Cruelty by a Nurse.—Major RASCH asked the President of the Local Government Board whether his attention had been called to the trial at Brentwood, Essex, of Nurse Gillespie for cruelty to the little children at the Hackney Board of Guardians School at Brentwood.—Mr. SHAW LEFEVRE said his attention had been drawn to the trial referred to. He understood the superintendent of the school had been suspended from the performance of his duties. It was the intention of the Local Government Board to direct an inquiry by one of their inspectors as to the management of the schools.

The Vaccination Act.—Sir W. FOSTER, in reply to Mr. KEIR HARDIE, said he was unable to state in what number of cases boards of guardians were refraining from directing proceedings for the enforcement of the Vaccination Act. It was the duty of the guardians to give the necessary directions for that purpose, and the appointment of the Royal Commission did not in any way affect their duty in that matter. The Board considered that the law should be enforced, and they could not therefore advise the guardians as suggested.—Mr. KEIR HARDIE asked whether the law gave boards of guardians any option in the matter.—Sir W. FOSTER replied in the negative.—Mr. CHANNING asked whether in communication with boards of guardians the Local Government Board drew attention to what was known as the Evesham letter, expressing an opinion that the guardians should not prosecute in cases more than once.—Sir W. FOSTER said that the Local Government Board had occasionally drawn the attention of boards of guardians to the letter.

The Housing and Diet of Soldiers.—In the discussion on the Army Estimates, Colonel LOCKWOOD urged that a more liberal diet should be provided for soldiers. Better feeding would diminish drunkenness. The provision of proper baths and of a plentiful supply of hot water would also contribute to keep the soldier in health.—Sir F. FITZWYGRAM suggested that a school should be established at Aldershot to give instruction in the detection of adulteration and other frauds in food and material.—Mr. HANBURY urged the provision of better bedding and the abolition of straw beds, a suggestion which Mr. WOODALL promised to consider.

Contagious Disease in the Army.—In the discussion on the Army Estimates, Mr. JEFFREYS called attention to the increased prevalence of contagious disease in the army, and suggested that the subject should be inquired into by a committee of medical experts.—COLONEL LOCKWOOD spoke to the same effect.—Mr. CAMPBELL-BANNERMAN quoted returns showing a progressive decrease in the number of cases taken together since the abrogation of the Contagious Diseases Acts. If local authorities at home stations exerted the powers they already possessed a still greater improvement might be effected. He considered that it was idle to talk of reimposing the old system.—Sir G. CHESNEY said that by yielding to a wave of fanatical and hysterical excitement, the Government had made itself responsible for the greater prevalence of contagious disease in India.—Mr. H. J. WILSON denied the accuracy of the statement that contagious disease had increased among troops in India, and Mr. CAINE said that a departmental inquiry made in 1885, when he was a Lord of the Admiralty, had led to the conclusion that the Acts had failed.

OBITUARY.

ROBERT JOLLY, M.D., F.R.C.S.EDIN.

THE death is announced of Dr. Robert Jolly, of Birmingham. He graduated M.D.Edin. in 1862, and took the diploma of F.R.C.S.Edin. in 1868. While in Edinburgh he held the post of Resident Surgeon to the Royal Infirmary, Edinburgh, and Demonstrator of Anatomy at the Royal College of Surgeons, Edinburgh. His first appointment in Birmingham was that of House Surgeon to the Queen's Hospital, which post he occupied for about five years. He left the Queen's Hospital to take up the post of assistant-surgeon at the Birmingham General Hospital, an office which was shortly afterwards abolished; upon which he was, in 1870, admitted a full surgeon. Soon after taking the diploma of F.R.C.S.Edin., in 1868, he was appointed Lecturer on Anatomy at Queen's College, an appointment which he held for many years.

Dr. Jolly was also Consulting Surgeon to the General Dispensary, and many years he held the office of police surgeon. Some months ago he was compelled to give up work on account of the development of a severe form of renal disease. He repaired to Bournemouth, and recently made so much improvement that he was in hopes of an early return to practice. His illness, however, took an unfavourable turn, and terminated fatally on June 9th.

BRIGADE-SURGEON G. C. GRIBBON, M.B.

THE many friends of Brigade-Surgeon G. C. GRIBBON, M.B., Medical Staff, will much regret that his long illness proved fatal at Bournemouth on June 12th, in his 58th year. He suffered from influenza in January last, complicated with double pneumonia, and had several relapses, the last proving fatal. He also, in the third month of his illness, had thrombosis of the left femoral vein. The deceased gentleman was widely known and respected in the service, alike for his honourable and kindly nature as for his courtly and manly bearing. He was a graduate of Dublin University, and a man of high education and many accomplishments. He leaves a widow and a large family. He entered the service on April 20th, 1859, retiring in the rank of Brigade-Surgeon in 1889; since which he has served on the recruiting staff of the Home District till his death. He served for a number of years in the 25th King's Own Scottish Borderers. His war services comprised the Afghan War of 1878-79 (medal) and Suakim expedition of 1885, in which he was in charge of the hospital ship *Ganges* (medal and clasp, and mentioned in despatches).

LAST week a telegram was received in Manchester announcing the death of the medical missionary, F. C. ROBERTS, M.B., C.M., at the age of 32. He was the son of an alderman of Manchester, and was educated at the Manchester Grammar School, and afterwards at Aberystwyth College. He pursued his medical studies at Edinburgh University, where he graduated in 1886. Having offered himself to the London Missionary Society, he was sent in 1887 to North China. At first he was sent to Mongolia, but later on he was appointed to take charge of the hospital at Tientsin, where he succumbed to an attack of fever. His work has been arduous, many have been the difficulties with which he has had to contend, but his earnest zeal and almost superabundant enthusiasm helped to sustain him in all his labours.

WE regret to have to record the death of Mr. GEORGE HOWARTH, of Bolton-le-Moors, which occurred on May 30th, at the age of 54. The deceased took the diplomas of M.R.C.S.Eng., L.S.A. in 1861, and became a L.R.C.P.Edin. in 1867. Mr. Howarth held several important appointments, including that of Honorary Surgeon to the Bolton Infirmary, Medical Officer to the Lostock Certified Industrial School, Medical Officer for the Western District of the Bolton Union, and Public Vaccinator for the Great Bolton District. The funeral, which took place on June 2nd, was attended by a great number of friends.

DR. JACKSON, of Ballyhaise, died on June 2nd, aged 49. The funeral of this gentleman took place at Belturbet from the residence of his brother. The deceased had been dispensary medical officer for Ballyhaise for the past twenty-five years, where he was popular with all classes.

DEATHS IN THE PROFESSION ABROAD.—Among the members of the medical profession in foreign countries and the colonies who have recently passed away are Dr. Scipione Giordano, formerly Professor of Obstetric Medicine in the University of Turin, and the oldest member of the Royal Academy of Medicine of Turin; Dr. Alexander Glénard, Honorary Director of the Lyons School of Medicine; Dr. Elijah S. Elder, of Indianapolis, President of the Indiana Medical Society, aged 53; Dr. Peter Ssobkewitch, Physician to the Moscow Conservatoire, and a well-known laryngologist, aged 50; Dr. Emile Reliquet, lecturer on surgery at the École Pratique, Paris, and author of numerous contributions to surgical literature, chiefly on diseases of the genito-urinary apparatus, aged 57; Dr. Antonio Diaz Albertini, formerly Director of the Hospital de San Lazaro, Havana, and a leading sanitary reformer, especially active in the promotion of vaccination; Dr. José Bonilla y Carrasco, Director of the Archena baths, and a leading Spanish hydrologist; Dr. Giovanni Brugnoli, Professor in the Medical Faculty of the University of Bologna, and Director of the *Bolletino delle Scienze Mediche di Bologna*; Dr. J. C. Taché, Professor of Physiology in the Laval University, Quebec; and Dr. Philippe Wells, Professor of Materia Medica in the same University, and for many years one of the leading practitioners in Quebec, aged 70.

CORRECTION.

IN an obituary notice published in the BRITISH MEDICAL JOURNAL of June 9th, p. 1283, the name of the late Mr. William Marsden, of Southport, was incorrectly printed Marden.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns, including **London**, 5,907 births and 3,388 deaths were registered during the week ending Saturday, June 9th. The annual rate of mortality in these towns, which had been 17.7 and 17.0 per 1,000 in the preceding two weeks, further declined last week to 16.9. The rates in the several towns ranged from 9.8 in Portsmouth and 12.4 in Blackburn to 20.5 in Birmingham and 20.8 in Salford. In the thirty-two provincial towns the mean death-rate was 17.0 per 1,000, and was slightly above the rate recorded in London, which was 16.7 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.6 per 1,000; in London the rate was equal to 3.3 per 1,000, while it averaged only 2.0 in the thirty-two provincial towns, and was highest in Oldham, West Ham, Liverpool, and Newcastle-upon-Tyne. Measles caused a death-rate of 2.0 in London and 2.4 in West Ham; and whooping-cough of 2.0 in Sheffield and 2.6 in Newcastle-upon-Tyne. The 51 deaths from diphtheria in the thirty-three towns included 34 in London, 4 in Liverpool, and 2 each in West Ham, Cardiff, Birmingham, and Oldham. Eight fatal cases of small-pox were registered in Birmingham, 3 in London, 3 in Manchester, and 2 in West Ham, but not one in any other of the thirty-three towns. There were 227 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, June 9th, against 219, 236 and 244 at the end of the preceding three weeks; 42 new cases were admitted during the week, against 52, 69, and 58 in the preceding three weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,232, against 2,307, 2,271, and 2,277 at the end of the preceding three weeks; 264 new cases were admitted during the week, against 216 and 218 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday last, June 9th, 948 **births and** 551 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had increased from 17.4 to 20.3 per 1,000 in the preceding three weeks, declined again to 19.3 last week, but exceeded by 2.4 per 1,000 the mean rate during the same period in the large English towns. Among these Scotch towns the death-rates ranged from 16.6 in Leith to 21.4 in Paisley. The zymotic death-rate in these towns averaged 2.2 per 1,000, the highest rates being recorded in Greenock and Leith. The 253 deaths registered in Glasgow included 11 from whooping-cough, 5 from scarlet fever, and 5 from diphtheria. Four fatal cases of small-pox were occurred in Edinburgh and 4 in Leith.

THE ABERYSTWYTH GUARDIANS AND THE MEDICAL OFFICER OF THEIR UNION.

ACCORDING to a paragraph in the *Llangollen Advertiser*, the Aberystwyth guardians recently passed a resolution calling upon one of the medical officers of the union to resign, "because, we believe, he refused to give a certificate for the retention of the lunatics recently brought to the workhouse from Carmarthen Asylum, and since taken back. If we understand the matter aright, he refused to give the certificate until proper provision had been made for the safety of, and attendance upon, the persons transferred." As the facts of the case are not further explained or stated in the place cited, it is not quite clear how the matter really stands. Although, in most possible cases, lunatics cannot be detained in a workhouse unless the medical officer of the workhouse certifies that the accommodation therein is sufficient for their proper care and treatment (and other provisions); yet there is one section of the Act under which, apparently without any certificate, the visitors of an asylum may make arrangements with the guardians of any union for the reception into the workhouse of any chronic lunatics, not being dangerous, who are in the asylum and have been selected and certified by the manager of the Asylum as proper to be removed to the workhouse. In such cases, however, the consent of the Local Government Board and the Commissioners must be obtained, and the arrangements are subject to such regulations as they respectively prescribe.

THE NOTIFICATION OF MEASLES: WAITING FOR GUIDANCE.

IT has been the practice of the Local Government Board to lend some support to the notification of measles, at all events to the extent of advising local authorities to retain it if once scheduled amongst the notifiable diseases. From time to time mention has been made of an inquiry which is or was being made by the Board as to the experience gained in those districts in which measles is notified, but so far the results have not been made public. Whatever may be the reason for the delay, the effect is not altogether satisfactory to those who desire to see system extended. One after another the local authorities who have added measles to the list seem to have been reconsidering their decision, and several of them—sometimes against the advice of their medical officer of health—have intimated to the Board their wish to make a change. The Lincoln Rural Sanitary Authority, for example, have quite recently done so, and it may be anticipated that they will in due course receive from the Local Government Board the usual reply. It would be far more to the point if medical officers of health throughout the country, who have, in the first instance, to advise the local authorities upon this difficult matter, could be placed in possession of such information as the Board have succeeded in accumulating. Great as may be the difficulty of formulating any precise conclusions at present, and unpleasant as might be the admissions that the evidence is conflicting, at all events the central authority must know what is known upon the question, and their reticence adds to the perplexity of local authorities and their advisers.

THE WARRINGTON GUARDIANS AND THEIR MEDICAL OFFICER.

WE cannot refrain from expressing our mingled astonishment and regret at the treatment which Dr. Gornall has received at the hands of the guardians of the Warrington Union. The local press states that the guardians have determined Dr. Gornall's contract as public vaccinator, on the grounds that he is health officer of the borough and has a population of some 60,000 persons to cater for in the way of gratuitous vaccination. He has been a servant of the Poor-law body for upwards of twenty years, and has in that time vaccinated a number of people nearly equal to the present population of the town. Why, then, have the guardians determined to put an end to his contract? Seemingly on grounds altogether untenable as reasons sufficing to account for the step taken. Dr. Gornall, as health officer, is looked upon as a person dangerous to the public health on account of the fact that he will of necessity have to come across infectious cases, which might lead to the spread of disease through the medium of his office as public vaccinator. Was ever such paltry excuse given? As well decline to allow a medical attendant to vaccinate a child because he had a wide practice. Indeed, the reason would be the more cogent in this latter case, since a private practitioner is daily going direct from house to house on his rounds and attending all kinds of complaints. The one and the other have to take all reasonable care that disease is not spread by their action. There is, too, an utter absence of evidence that disease has ever been spread by Dr. Gornall in the discharge of his public duties. But still more unreasoning is the second point which has been brought forward by a guardian as tending to show why Dr. Gornall should go.

It was stated, quite erroneously, that the Local Government Board did not advise districts being held by one man for vaccination purposes which had more than 25,000 people in them. How far this is from the truth will be at once seen by reference to the memorandum issued by that Board on vaccination arrangements, in which it is distinctly laid down that those districts are the best which have upwards of 50,000 population. Birmingham has but one public vaccinator under the sanction of the guardians and the London Board, and the districts beside which the population of Warrington sinks into small proportions are not few; but even so, Warrington, with its 60,000 persons, is a typically favourable district for purposes of lymph choice, and we trust that the attempt to divide it, which is in contemplation, will not meet with sanction at the hands of the central authority, the more especially when the reasons for its division are made known to them. Nay, we will go so far as to hope that the Board will require to know why Dr. Gornall is to be dismissed in this summary manner after his long and faithful service to Warrington, and will refuse to allow his contract to be determined in the irregular way in which it is reported to have been done, in direct opposition to the ruling of the legal adviser of the guardians.

TYPHOID FEVER AT BRIXTON.

ON May 31st the Lambeth Vestry had under discussion the question of the advisability of publishing the report of the medical officer of health dealing with the recent outbreak of typhoid fever at Brixton. The Sewers and Sanitary Committee had decided not to publish the report, but after some discussion the vestry reversed this decision, and unanimously resolved to make it public. It is difficult to understand why the Sewers Sanitary Committee should not have adopted this course in the first instance.

BARNSTAPLE AND THE NOTIFICATION ACT.

NOW that the last of the great towns has gone over to the majority, it remains to be seen which of the smaller boroughs will longest resist the inevitable acceptance of the Notification Act. A few still remain unconvinced that their local conditions and needs are not in some unexplained way different from those of ordinary communities, and continue to reject a means of protection which has been secured by an overwhelming majority of sanitary authorities. Barnstaple has reasserted its claim to prominence among the dissentient minority by refusing for the second time to adopt the Act. The proposal led to a debate in the Town Council, which was anything but amicable; indeed, the *North Devon Herald*, while deploring the bitterness and personalities which characterised it, refers in particular to the discourtesy and scanty justice accorded to the medical officer of health. The arguments advanced in opposition were of the kind familiar on such occasions, consisting chiefly of assertions that the Act was not needed in Barnstaple, and was fraught with vague potentialities for evil there, notwithstanding its apparent success elsewhere. One of the speakers, conspicuous for his evident ignorance of the practical working of the Act, and also for the rudeness of his references to the medical officer of health, said that notified cases would become publicly known, and went so far as to assert that the system was an attempt on the part of the profession to make money out of the ratepayers. Times are indeed changed since the days when medical men were accused of obstruction if they hesitated to accept the doctrine of compulsory notification. However, the question has now practically outgrown the stage of controversy, and the minority who voted affirmatively in the Barnstaple Town Council may rest assured that their point will be carried before long, though possibly not by a local vote.

PERILS OF POOR-LAW PRACTICE.

THE case of Bridge *v.* Gibson, recently decided, affords a striking illustration of the risks run by Poor-law medical officers in the discharge of their duties. The pursuer, Mrs. Bridge, was seen by Dr. Hill Gibson's qualified deputy on an ordinary order for medical attendance. He found her to be insane, and, in the exercise of a statutory duty, the non-performance of which would have involved a penalty, notified the fact of her insanity, and of the need for her removal to an asylum, to the relieving officer. She was conveyed to the Marylebone Workhouse, and placed in the ward specially set apart for persons of unsound mind and deemed lunatics. On the order of a justice, Dr. Gibson examined Mrs. Bridge there. On Dr. Gibson certifying that she was of unsound mind, she was sent, by order of the justice, to an asylum where she remained for nine months, when she was remitted to the care of her friends, though not discharged "cured." Within a few days thereafter she raised an

action against Dr. Gibson. The case, on the defendant's application, was stayed in Chambers, but this decision was appealed against. After several adjournments the appeal was finally dismissed by Mr. Justice Lawrance. There were five medical affidavits affirming the pursuer's insanity. On the other side there was only one medical affidavit, stating that in the opinion of the witness the pursuer could not have been of unsound mind at a date, defendant's counsel stated, when this witness had not seen the pursuer, nor for about three months after it. The most cruel feature of the whole procedure was the support of the pursuer by a well-known religious organisation.

Dr. Gibson has thus been put to great trouble and expense, though he was fortunate in having so unusually strong a case. As there is no escape from the statutory duty of a Poor-law medical officer to report within three days to the relieving officer all pauper cases of lunacy requiring removal to an asylum, it is to be hoped that some less harassing and expensive proceedings for a successful defence than existing law affords will ere long be provided.

MODEL DWELLINGS IN SHOREDITCH.

THE vestry of St. Leonard's, Shoreditch, applied on June 5th for closing orders in respect of "model dwellings" known as Norfolk Buildings, Shoreditch. It appeared that counsel had been instructed to defend, but it was urged on behalf of the vestry that counsel had no *locus standi* unless the name of the owner were given. A Mr. Pilbrow then came forward saying he was manager to the owner's agent. The magistrate held he had no title to appear, and counsel then gave the owner's name as Frederick Carrol, but declined to give the address of that person. The magistrate said the Act directed that proceedings should be taken against the owner, and if the owner were represented there was nothing in the Act to compel his representative to disclose anything. There were forty-six summonses in all, and it was decided that each case should be taken separately and discussed on its own merits. After hearing evidence on "No. 1," the case was adjourned.

INCREASE OF SMALL-POX IN LONDON.

AT the meeting of the Metropolitan Asylums Board on June 9th, the Ambulance Committee were instructed to make further provision at the South Wharf for the accommodation of small-pox patients. The returns showed that there were 2,623 fever patients in the hospitals, an increase of one during the past fortnight. The small-pox patients were reported to number 220, an increase of five during the same period.

SMALLPOX IN DUBLIN.

LAST week a patient was admitted to the Hardwicke Hospital, Dublin, suffering from smallpox. Two days later four cases were sent in from the North Dublin Union Workhouse, and two have since been admitted from the same place. All necessary precautions have been taken to prevent the extension of the disease.

SEWER-BORNE TYPHOID.

AN interesting report has been made by Dr. Bruce Low on an epidemic of typhoid fever in the local board district of Shildon and East Thickley in the summer and autumn of last year. It is the more interesting because it may claim to rank among the few outbreaks of which the etiology is classed as "sewer-borne." The district has some 10,000 population, and after a period of comparative freedom from fever had cases imported in April and May, the cases being at first scattered, but in July tending to occur in groups. The main outbreak was in August and September. In all, from April to November, there were 224 cases and 41 deaths. Many of the earlier cases were anomalous in character, and hence escaped notification, whilst much diarrhœa prevailed contemporaneously, the chief period of its mortality being in July, that from fever being September. Both diseases reached their maximum intensity earlier than is usual. Mild unnotified cases helped to spread the malady, since no precautions were taken with regard to the infective excreta. The epidemic became general after a heavy rainstorm early in July, basements and cellars being flooded, some by regurgitating sewage, others by midden contents. Many complaints were made of foul gases from sewers, and the contamination of food supplies by entry of sewer air into pantries is held to have probably occurred; milk being regarded as having acquired infective properties in this way, with subsequent spread of fever by its consumption. In fact, no inconsiderable share in the spread of fever is attributed to milk, especially of one dealer having on his premises direct connection of sewer and storeroom. It is evident, however, that defects of sewer ventilation are to be credited with the major number of cases.

Different portions of the district suffered disproportionately. The localities known as Chapel Row and Old Shildon, were hit in lighter fashion than New Shildon and East Thickley, the sewers in the first two places having much better ventilation than the rest of the district; whilst there is half a mile of fields between the two main divisions, where the sewers have a fall and plenty of openings. Far otherwise is it with the sewers in the two latter places, where such ventilators as existed were closed, and no other means substituted. The condition of privies, specifically contaminated, doubtless did something towards spread of the disease, the open midden system being specially thought of in this connection. Water supply was entirely eliminated as a cause of spread.

The incidence of attack on males was greater than on females at all age-periods except 5 to 10 years. Early cases were, as has so frequently happened elsewhere, attributed to influenza. The course of the epidemic seemed to show for awhile a gradual increase of intensity and then a gradual diminution in its severity. There is no hospital in the district, and we are told that the home treatment of the sick was attended with spread of the disease, owing to the disposal of untreated infective excreta in midden privies and the emptying of foul water down the nearest gully, thus leading to specific contamination of drains.

VALUE OF NOTIFICATION.

A TRAGIC incident is reported from North Devon. At a meeting of the Bideford Local Board the medical officer reported that a lady at Instow had sent home her servant, who was suffering from diphtheria, in an open carriage which was used as a public conveyance. The members of the Board determined to make an example of this case, especially in the light of the fact that the poor girl's relative was a laundress, and had in consequence to refuse washing and thus deprive herself of her living. The sanitary inspector was directed to issue a summons against the mistress for exposing an infected person. The summons was issued; but when about to serve it the inspector found that she was dead. After sending the girl away in order to get the infection out of the house, she herself was struck down with it, and died on June 1st.

In a comprehensive report for the past month, the medical officer stated that two out of four cases of scarlet fever could be "easily traced to contact with a boy sent from Wear Gifford." Another case of removal of an infected patient was also reported. In every case the medical officer was promptly able to trace the infection, and most probably prevent it from spreading. Through one notification case two defective drains were discovered and ordered to be remedied, and this could scarcely have been accomplished if the public officials had not moved in the matter.

It is this close grasp of all the facts connected with every case of infection which enables Bideford to keep such a clean bill of health and which saves the working classes a very great deal of money. Measles, whooping-cough, and other infantile diseases have to be notified, so that children may not be allowed to attend school until the danger of infection is past. It is very creditable to the town to pursue such an enlightened sanitary policy, and a neighbouring borough on the Taw might derive much profit from a careful digestion of the Bideford medical officer's report.

RIVER POLLUTION AND WATER SUPPLY.

DR. R. BRUCE LOW's report to the Local Government Board on the water supply of the Penrith Urban Sanitary District, together with the chemical analyses appended to it, bring into clear prominence the fact that a water may be, according to the most elaborate chemical tests of the day, pronounced to be "a pure soft water, well fitted for drinking purposes and general domestic use, and for steam boiler purposes;" and still liable to excremental pollution. The water is drawn from the Eamont river, about five miles below its origin from the Ulleswater Lake, and supplied to the town of Penrith without filtration. The distributing pipes are of a very faulty description, and leak badly. Dr. Bruce Low shows that both lake and river receive numerous additions of a very undesirable kind, and he considers the "Eamont liable to become at any moment dangerously polluted by human excrement and filth," and the town of Penrith "liable at all times under present conditions to be attacked by epidemic disease, such as can be conveyed by water, as, for instance, enteric fever and cholera." It appears that less questionable sources of water are available, and although it is not easy to appraise the precise amount of risk to the health of the town which the present arrangements involve, it would seem reasonable and wise to avoid it, and so place the unpleasant contingency and probable evil consequences of excremental pollution beyond possibility. At the least, if the present conditions of supply are retained, filtration should be resorted to, and the faulty mains and pipes thoroughly repaired or replaced.

COMPULSORY NOTIFICATION AT PORTSMOUTH.

DR. MUMBY, in his annual report for 1893, embodies a very instructive table in which are stated the death-rates from the notifiable and non-notifiable zymotic diseases, from 1874 to 1893 inclusive, obtaining in the borough of Portsmouth. The facts given show that in the ten years preceding the adoption of the system of compulsory notification the average annual death-rate from notifiable diseases was 1.54 per 1,000 of population. In the ten succeeding years the average rate fell to 0.71 per 1,000. This fall represents a decline of 54 per cent. The average death-rates from non-notifiable zymotic diseases in the respective periods averaged 1.78 and 1.74. The diminution hereby shown is only 3 per cent.

SANITATION IN BAKEHOUSES.

M.O.H.—In the Factory and Workshops Act of 1883 a retail bakehouse is defined as a place in which bread, etc., is baked for other than wholesale purposes, being sold in some shop or place "occupied together with the bakehouse." Section 36 of the Act of 1891 states that the expression "retail bakehouse" in the Act of 1883 shall "not include any place which is a factory within the meaning of" the Act of 1878. Bakehouses not retail remain subject to the provisions of the last named Act, and are under the control of the inspectors of the Home Office. But Section 4 of that Act provides that, where it appears to an inspector that there exists in such bakehouse any default, etc., punishable or remediable under the law relating to public health, but not under the Act of 1878, he is to give notice thereof to the sanitary authority of the district, and that authority are to make inquiry and take action if they think proper.

MEDICAL ATTENDANCE AT REQUEST OF POLICE.

C. F. W., whose previous inquiry was replied to on April 28th, at page 948 of the BRITISH MEDICAL JOURNAL, writes again to say that his attendance was given to the patient in question at a public house, at the request of the police, there being no police station near. He writes again as follows: In future will the police have perfect right in calling me up at any time, and am I to get no fee?

*** So far as we are able to understand the law on this point, the police will be at liberty to send for medical attendance when they think it necessary, and we believe that if the patient is not in custody at the police station the only legal claim for remuneration will be on the patient. It will, of course, not be compulsory on our correspondent to attend any request of the police—he not being under any contract to do so—but if he should decline attendance it is not unlikely that some unpleasantness might ensue.

MEDICAL NEWS.

THE QUEEN has, through the Duke of York (who presided at the festival dinner on June 1st), forwarded a donation of £100 to St. Mary's Hospital, Paddington, in connection with which a Clarence Memorial Wing is being built.

Dr. WEST-SYMES, of Halifax, has been elected an Honorary Associate of the Order of St. John of Jerusalem, in recognition of his distinguished services in connection with the St. John Ambulance Association.

THE Berlin Society of Dentists has written to the magistrates of Berlin, proposing to establish dental examinations of school children at regular intervals, a sanitary measure which is already in practice in many schools of England and France, as well as in the Prussian military colleges.

THE Russian Pirogoff Surgical Society held its annual meeting on May 23rd. The Society has now a membership of 101. The funds at its disposal amount to 88,000 roubles (£8,800). Last year it almost exactly fulfilled Mr. Micawber's ideal of financial perfection, for its income was 6,745 roubles and its expenditure 6,740.

A CONGRESS of Applied Chemistry will be opened in Brussels on August 4th. There will be four sections: Chemistry of Sugar; Agricultural Chemistry; Chemistry of Food; and Biological Chemistry. Communications should be addressed to M. F. Sachs, 68, Rue d'Allemagne, or to M. Van Laer, 15 Rue de Hollande, Brussels.

CONGRESS OF GERMAN ALIENISTS.—The Association of German Alienists will hold its annual meeting at Vienna on September 14th and 15th. Among the subjects proposed for discussion are Criminal Psychology, to be introduced by Privatdocent Sommer, of Würzburg; and the Limits of General Paralysis, introduced by Professor Binswanger, of Jena.

ACCORDING to the Belgian medical journals, Dr. Bodard, one of the victims of the recent bomb outrage at Liége, is so much better that he expects shortly to be able to resume practice. Dr. Renson on the other hand has, as was feared from the first would be the case, entirely lost his sight, and he is in such pain that he has to be kept under the influence of morphine.

THE ST. PETERSBURG MEDICO-CHIRURGICAL SOCIETY.—The newly-founded Medico-Chirurgical Society of St. Petersburg held its inaugural meeting on June 2nd, when Dr. Weljaminoff, Honorary Surgeon in Ordinary to the Emperor, was elected President; Professor A. J. Lebedeff, of the Military Medical Academy, Vice-President; and Dr. M. P. Manassein, Secretary. There are now sixteen medical societies in the Russian capital, not including informal meetings of the physicians and surgeons of the principal hospitals for the discussion of scientific and practical questions.

THE DUKE AND DUCHESS OF YORK'S VISIT TO LEEDS.—It has been definitely decided that on the occasion of their visit to Leeds in the autumn the Duke and Duchess of York will stay at Templenewsam, the residence of the Hon. Mrs. Meynell-Ingram. The precise date of the visit has not yet been fixed, but it will probably take place in the last week in September. It is yet too early to make detailed arrangements, but it is anticipated that an address of welcome will be presented from the corporation to their Royal Highnesses, who will inspect and formally open the new buildings of the medical department of the Yorkshire College, and also the College hall and library. The distinguished visitors will, it is expected, be entertained to luncheon by the Yorkshire College authorities.

THE SAMARITAN FREE HOSPITAL.—A festival dinner in aid of the funds of this hospital was held at the Whitehall Rooms on June 12th. The Duke of Fife, who presided, in proposing the toast of the evening, stated that he had paid a visit to the hospital in company with H.R.H. the Duchess of Fife, and that they had been greatly struck by the admirable management of the hospital and the home-like appearance of the wards. The Samaritan Hospital, he continued, was associated with the career of a great English surgeon—Sir Spencer Wells—who within its walls had taught the world to perform, with reasonable security of a fortunate result, an operation at one time considered to be fatal. His genius had revolutionised the treatment of a terrible class of women's diseases at one time looked upon as incurable. The hospital brought the triumphs of science to the bedside of the poor and helpless, and conferred incalculable benefits upon generations yet unborn. The Secretary announced subscriptions and donations to the amount of £2,050.

MEDICAL VACANCIES.

The following vacancies are announced:

BARNSTAPLE UNION.—District Medical Officer. Salary, £70 per annum, and 10s. for each case of midwifery if the patient resides less than one mile from the medical officer, 15s. if one mile and less than four, and £1 if four miles or beyond that distance. Applications to Wm. Henry Toller, Clerk, by June 20th.

BOOTLE BOROUGH HOSPITAL, Derby Road, Bootle.—House-Surgeon. Salary, £80 per annum, with board, lodging, washing, etc. Applications, and testimonials to the Chairman, by June 19th.

BOYLE UNION, Ballinameen Dispensary.—Medical Officer. Salary, £120 per annum, with £10 yearly as Medical Officer of Health, together with vaccination and registration fees. Applications to Mr. T. A. Cox, Honorary Secretary, Hermitage, Croghan. Election on June 25th.

CHELTENHAM GENERAL HOSPITAL.—Junior House-Surgeon, unmarried, doubly qualified. Salary, £40 per annum, with board and apartments. Applications to Mr. F. W. Hayward Butt, Honorary Secretary and Treasurer, by June 23rd.

COVENTRY AND WARWICKSHIRE HOSPITAL.—House-Surgeon and Assistant House-Surgeon. Salary, £100 per annum for the House-Surgeon. The Assistant will be appointed for six months, with honorarium of £15. Board, rooms in the hospital, and attendance provided in each case. Applications to Arthur Seymour, Secretary, by June 18th.

DARENTH SCHOOLS FOR IMBECILES, near Dartford, Kent.—First Assistant Medical Officer, doubly qualified. Salary, £160 per annum, rising £20 annually to £200, with board, furnished attendance, and washing. Applications, on forms to be obtained at the office of the Board, Norfolk House, Norfolk Street, Strand, W.C., to T. Duncombe Mann, Clerk to the Board, at the offices, by June 23rd.

DISTRICT INFIRMARY, Ashton-under-Lyne.—House-Surgeon, doubly qualified. Salary, £90 per annum, with board and lodging. Applications, marked "Application for the office of House-Surgeon," to William Bottomley, Honorary Secretary, by June 19th.

EAST RIDING LUNATIC ASYLUM, Beverley.—Assistant Medical Officer, unmarried. Salary, £100 per annum, with board, lodging, and washing. Age between 23 and 30. Applications to C. W. Hobson, Clerk to the Visiting Committee, by June 18th.

ESSEX COUNTY LUNATIC ASYLUM, Brentwood.—Assistant Medical Officer and Pathologist. Salary, £120 per annum, with board, lodging, and washing. Applications to the Medical Superintendent by June 20th.

GENERAL INFIRMARY, GLOUCESTER AND GLOUCESTERSHIRE EYE INFIRMARY.—Assistant House-Surgeon. Appointment for six months, eligible for re-election. No salary, but board, residence, and washing provided. Applications to H. P. Pike, Secretary, by June 27th.

KAMA HOSPITAL, Bombay.—Lady Doctor as First Physician. Salary, Rs. 700, rising by annual increments of Rs. 40 to Rs. 900 per annum. First class passage to Bombay provided. Applications to the Secretary, Public Department, India Office, London, S.W., by June 20th.

LONDON COUNTY COUNCIL.—Medical Men to give such medical assistance as may be required by the officers and men of the Metropolitan Fire Brigade and the men employed at the main drainage pumping stations and other persons in the service of the Council. Remuneration at the rate of 10s. per annum per man in the district. Applications on official forms (which, together with particulars of appointments and list of districts, can be obtained from the Clerk) to H. De la Hooke, Clerk of the Council, Spring Gardens, S.W., by June 21st.

NEWPORT AND MONMOUTHSHIRE INFIRMARY, Newport, Mon.—House-Surgeon, doubly qualified. Salary, £100 per annum, with board and residence. Applications to the Secretary by June 23rd.

NORFOLK AND NORWICH HOSPITAL.—Assistant to House-Surgeon. Board, lodging, and washing provided. Applications to the House-Surgeon by June 22nd.

ROYAL ALBERT EDWARD INFIRMARY, Wigan.—Junior House-Surgeon. Salary, £80 per annum, with apartments, rations, and washing. Applications and testimonials to Will. Taberner, General Superintendent and Secretary, before July 25th.

ROYAL ALBERT HOSPITAL, Devonport.—Assistant House-Surgeon for six months. Board, lodging, and washing provided. No salary. Applications to Chairman of Medical Committee by June 20th.

ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields.—Curator, non-resident. Appointment for one year; renewable. Salary, £120 per annum. Applications to the Secretary by June 30th.

ST. PANCRAS AND NORTHERN DISPENSARY, 126, Euston Road, N.W.—Surgeon. Applications to H. Peter Bodkin, Honorary Secretary, 33, Gordon Street, Gordon Square, W.C., by June 22nd.

SALTERS' COMPANY.—Research Fellowship in Experimental Pharmacology. Annual value of £100, and is tenable in the Medical School of St. Thomas's Hospital. Applications to the Secretary to the Medical School, St. Thomas's Hospital, S.E., before June 30th.

SALTERS' COMPANY.—Research Fellowship in Chemistry. Annual value of £100, tenable in the Research Laboratory of the Pharmaceutical Society. Applications to Professor Dunstan, F.R.S., Director of the Research Laboratory of the Pharmaceutical Society, 17, Bloomsbury Square, W.C., before June 30th.

SUNDERLAND BOROUGH LUNATIC ASYLUM.—Medical Superintendent, doubly qualified. Salary, £350 per annum, with furnished house, board for self and wife (if married), washing, coals, light, two servants, and use of garden. Applications, endorsed "Medical Superintendent," to Fras. M. Bowey, Clerk to the Visiting Committee, Town Hall, Sunderland, by June 30th.

TIPPERARY COUNTY INFIRMARY.—Surgeon. Salary, £100 per annum. Candidates must be Fellows of the Royal College of Surgeons in Ireland. Applications to Mr. James J. Chadwick, Secretary. Election on June 22nd.

UNIVERSITY OF EDINBURGH.—Chemical Assistant to Professor of Physiology. Salary, £180 per annum. Applications to the Secretary of the University Court before July 1st.

WEST RIDING ASYLUM, Wakefield.—Two Resident Clinical Assistants. Appointment for six months. No salary, but board, residence and attendance. Applications and testimonials to the Medical Director.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—Resident Assistant. Appointment for six months. Applications, inscribed "Application for Resident Assistant," to the Chairman of the Medical Committee by June 25th.

MEDICAL APPOINTMENTS.

BOWLAN, Marcus Marwood, M.B.Durh., B.S., D.P.H.Camb., Med. Psych. Cert., appointed Medical Superintendent to St. George-in-the-East Infirmary.

CASS, E. E., M.B., B.S.Durh., appointed Medical Officer for the Muncaster District of the Bootle Union.

COOPER, James, M.R.C.S.Eng., L.R.C.P.Lond., appointed Casualty Officer and Registrar to the Great Northern Central Hospital.

FRANKLAND, Dr. Percy, F.R.S., appointed Professor of Chemistry in the Mason College, Birmingham, *vice* Dr. Tilden, F.R.S., resigned.

GLASSINGTON, Charles W., M.R.C.S., L.D.S.Edin., appointed Dental Surgeon to Westminster Hospital, *vice* E. Lloyd Williams, M.R.C.S., L.R.C.P., L.D.S.Eng., resigned.

GUILDING, Lansdown M., M.A.Oxon., M.B., B.Ch., M.R.C.S.Eng., appointed Medical Officer to the Workhouse of the Reading Union.

HAMILTON, Dr. W. M., appointed Medical Officer for the Barton District of the Barton-upon-Irwell Union.

HARRISON, Richard Charlton, L.R.C.P.Lond., M.R.C.S.Eng., L.S.A.Lond., appointed Honorary Medical Officer to the Ealing Cottage Hospital.

HERBERT, A. W. C., L.S.A., appointed Medical Officer for the Sixth District of the Blything Union.

HOOD, Dr., appointed Medical Officer to the Rattery Parochial Board.

NORTON, J., M.D., M.R.C.S., appointed Medical Officer of Health to the Vestry of St. Margaret and St. John, Westminster.

PALMER, A. M., L.R.C.P.Edin., M.R.C.S.Eng., reappointed Medical Officer of Health to the Whittington Urban Sanitary District.

PALMER, H. L., M.R.C.S.Eng., reappointed Medical Officer of Health to the Newtown Urban Sanitary District.

PENNY, E. J., M.D.Brux., M.R.C.S.Eng., appointed Medical Officer for the First District of the Tonbridge Union.

PRATT, W. Sutton, M.D., L.R.C.P.Lond., M.R.C.S., appointed Certifying Factory Surgeon for Rugby and District, *vice* F. W. D.. McGachen, resigned.

ROBERTSON, W. J., M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Physician to Charing Cross Hospital.

STANWELL, St. John, M.B., C.M.Edin., M.R.C.S.Eng., appointed House-Surgeon to the Stamford, Rutland, and General Infirmary, *vice* Donald Macaulay, M.A., M.B., C.M.Edin., resigned.

STEELE, Jon., L.R.C.P. and S.Edin., reappointed Medical Officer of Health to the Kidsgrove Local Board.

SYMONS, T. H., M.R.C.S.Eng., L.R.C.P.Lond., appointed House-Surgeon to Charing Cross Hospital.

THOMSON, Dr. William, appointed Surgeon and Physician to the British Hospital at Monte Video, South America.

DIARY FOR NEXT WEEK.

MONDAY.

ROYAL COLLEGE OF SURGEONS, 5 P.M.—Mr. T. Pickering Pick's Lectures on Diseases of the Ends of the Long Bones in Children. Lecture I.

LONDON POST-GRADUATE COURSE, Bacteriological Laboratory, King's College, W.C., 3 to 5 P.M.—Lecture: Typhoid Fever and Diphtheria. Practical Work: Staining Sections and Cultivations. London Throat Hospital, Great Portland Street, 8 P.M.—Dr. Whistler: Atrophic Rhinitis, Ozæna.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr Percy Smith: Insanity with Syphilis and Organic Brain Disease.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. Pavy: The Croonian Lectures on a New Departure in connection with Diabetes. Lecture I.

THE CLINICAL MUSEUM, 211, Great Portland Street.—Open at 2, Lecture at 4.

WEDNESDAY.

ROYAL COLLEGE OF SURGEONS, 5 P.M.—Mr. T. Pickering Pick's Lectures on Diseases of the Ends of the Long Bones in Children. Lecture II.

POST-GRADUATE LECTURES, Metropolitan Hospital, N.E., 5 P.M.—Dr. Risien Russell: Cerebral Localisation.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 1 P.M.—Dr. Payne: Syphilodermia.

ROYAL METEOROLOGICAL SOCIETY, 25, Great George Street, Westminster 8 P.M.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed, and Epileptic, Queen Square, 2 P.M.—Dr. Taylor: Electrical Testing and Treatment. Hospital for Sick Children, Great Ormond Street, 3.30 P.M.—Mr. Bernard Pitts: Treatment of Certain Acquired Deformities in Children. Central London Sick Asylum, Cleveland Street, W., 5.30 P.M.—Mr. Stanley Boyd: Cases in the Wards.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. Pavy: The Croonian Lectures on a New Departure in connection with Diabetes. Lecture II.

FRIDAY.

ROYAL COLLEGE OF SURGEONS, 5 P.M.—Mr. T. Pickering Pick's Lectures on Diseases of the Ends of the Long Bones in Children. Lecture III.

SATURDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M.—Dr. Hyslop: Insanity with Cardiac Disease, Phthisis.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTHS.

KENT.—On the 13th inst., at 3, Minard Terrace, Partick Hill, Glasgow, the wife of R. T. Kent, M.A.Oxon., F.R.C.S., of a daughter.

SNOW.—On the 9th instant, at 6, Gloucester Place, Portman Square, the wife of Herbert Snow, M.D.Lond., of a son.

WILSON.—On June 6th, at 10, Frederika Terrace, Anlaby Road, Hull, the wife of Albert Wilson, M.R.C.S., L.R.C.P.Lond., of a daughter.

MARRIAGES.

ACKESON—READE.—On June 12th, at St. Oswald's, Chester, by the Rev. Canon Ackeson, M.A., All Souls, Langham Place, London, father of the bridegroom, assisted by the Rev. E. C. Lowndes, M.A., vicar of the parish, and the Rev. A. J. Jameson, M.A., Johnston Hamilton Ackeson, M.B.Edin., surgeon, R.N., to Bessie, elder and only surviving daughter of the late Albert Comberbach Reade, M.R.C.S., Chester.

CAIRD—RORIE.—At Westgreen House, Dundee, on the 5th inst., Francis Mitchel Caird, F.R.C.S.Ed., 21, Rutland Street, Edinburgh, to Jane Annie, elder daughter of the late G. L. Rorie, Secretary of the National Bank of Scotland, Limited.

COLLIER—YOUNG.—At St. Bartholomew's, Dublin, on the 12th inst., Horace Stansfield Collier, F.R.C.S., to Margaret Constance, daughter of the late Robert Young, Esq., of Clontarf, Dublin.

DEVEREUX—PHILLIPS.—On June 14th, at S. Nicholas Church, Kemerton, by the Ven. Hemming Robeson, archdeacon of Bristol, assisted by Rev. J. J. Mercier, rector of Kemerton, and Rev. H. Sheringham, vicar of Tewkesbury, William Charles Devereux, M.A., M.B.Cantab., of North House, Tewkesbury, son of the late Daniel Devereux, M.D., to Ethel Mary, second daughter of Thomas Phillips, of the Lower Court, Kemerton.

DWYER—KING.—On June 7th, at St. Peter's Church, Oughsrington, Cheshire, by the Rev. W. Geary Knocker, rector, assisted by the Rev. J. Edwards-Evans, Henry Hamilton Dwyer, L.R.C.P. and S.Irel., of Hoylake, Cheshire, second son of Henry Dwyer, Esq., formerly of Chesterfield, co. Dublin, to Amy Catherine, second daughter of the late John King, Foxley Lodge, Lymm, same county, Esq.

EDWARDS—PEDLEY.—On the 2nd inst., at Harborne Parish Church, by the Rev. W. J. Price, M.A., vicar, Philip Hugh Edwards, of Devoran, Cornwall, M.R.C.S., L.R.C.P., youngest son of Charles Hugh Edwards, of Birmingham, solicitor, to Jessie Ann Rogers, fourth daughter of William Charles Pedley, of Harborne.

GOODMAN—MARRIOTT.—On June 5th, at All Saints, Kensington Park, W., by the Rev. Hugh Stowell, assisted by Canon Trench, Roger Neville Goodman, M.D., M.R.C.S., B.Sc., of Elmside, Kingston-on-Thames, to Louie Harvey, second daughter of the late Hunt Marriott, Esq., of Calcutta, Bengal Presidency.

MACGREGOR—ACKROYD.—At St. Mary Abbott's, Kensington, on June 6th, by the Rev. Dr. Knox, of Birkenhead, Alexander Macgregor, M.D., Aberdeen, to Ethel Marie, elder daughter of George Ackroyd, M.D., the Mansions, South Kensington. At home Tuesdays in July and August.

DEATHS.

BANKS.—On June 8th, at 226, Mare Street, Hackney, N.E., Katie, wife of Henry Banks, L.R.C.P.I., L.R.C.S.I. Aged 26 years.

DAVISON.—On the 8th inst., at "Streate Place," Bournemouth, in her ninth year, Dorothy, youngest daughter of James Davison, M.D., M.R.C.P.London.

SANKEY.—On June 8th, at Boreatton Park, Baschurch, Salop, of uræmia, Herbert Richard Octavius Sankey, M.B.Lond., M.R.C.S.Eng., aged 44.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

MEMBER asks for advice in the treatment of obstinate constipation in a female child aged 18 months, in whom most of the ordinary modes of treatment, including massage and dieting, have failed.

SURGEON-LIEUTENANT-COLONEL describes the case of a boy, aged 9, born in India of European parents, but resident in England since the age of 5, who suffers from profuse perspirations on taking exercise and at night. The boy is otherwise apparently in perfect health. Our correspondent asks for suggestions as to cause and cure.

DISINFECTING APPARATUS.

MEMBER asks to be recommended a disinfecting chamber suitable for a large public school, where steam and gas are available, and the cost.

*** Washington Lyon's steam disinfecting apparatus, which would cost about £200, would probably meet our correspondent's requirements.

ANSWERS.

IATROS.—Everything depends upon the wording of the agreement; the matter is not one upon which we can give an opinion.

JUVENAL.—The Manchester Royal Lunatic Hospital might be available for the purpose desired.

PERPLEXED must *bonâ fide* conduct and supervise the branch practice himself or place a qualified assistant in charge.

"SOBEY" should send an account of the facts, with such evidence as he is able to adduce, to the President of the General Medical Council, 299, Oxford Street, London, W.

GENERAL PRACTITIONER.—If our correspondent can substantiate his statements by adducing to the President of the General Medical Council specific evidence as to the exact relations of the qualified man and the "quack," we have no doubt that the case would be deemed *primâ facie* one of "covering."

DR. PHILLIPS'S letter does not explain the distinctive features of his system of "Health Assurance," and we have not his pamphlet to refer to. We are therefore unable to form any opinion as to its eligibility as a substitute for provident dispensaries.

JOHN OF VIGO'S WORK ON SURGERY.

C. J. W.—It is very difficult to estimate the exact value of a book of this kind without seeing it, as so much depends upon condition. If in fair condition it would probably fetch about £2 2s.

STERILISATION OF CATHETERS.

MESSRS. DOWNS BROS. (5 and 7, St. Thomas's Street, Borough, S.E.) request us to state, in reply to the inquiry of "G. P." in the BRITISH MEDICAL JOURNAL of June 9th, that they make a sterilising apparatus for catheters which is very simple and inexpensive.

OXYGEN FOR INHALATION.

F. R. C.—Oxygen gas can be obtained from Brin's Oxygen Company at 34, Victoria Street, Westminster, S.W., during ordinary business hours (9.30 A.M. to 5.30 P.M.; on Saturdays to 12.30 P.M.). After these hours, and on Sundays, it can be obtained at the Company's Works, 69, Horseferry Road, Westminster.

JUVENILE FORESTERS' COURT.

G. P.—The charge per annum per member for a juvenile Foresters' court should be as much at least as for an adult member, but unfortunately the usual amount paid in London is about one-fourth less. We should strongly advise medical men to have as little as possible to do with courts of this description. Surgeons to the adult courts usually have these juvenile branches thrust upon them, as they are afraid to decline them for fear of exciting dissatisfaction in their court, and by allowing them to be taken by an unscrupulous rival, afford him a means of ousting them from the parent court.

CONSULTING ROOM CHAIR.

W. P., M. B. writes: In reply to "Lambda," I beg to recommend a chair, made by Maple and Co., London, and called a smoking one in their catalogue; hooks should be attached so that it may be fixed in horizontal position. Mr. Rushton Parker, of Liverpool, gave me the hint, and I have found it very useful for gynæcological and general consulting room purposes.

NOTES, LETTERS, Etc.

WE have received a copy of a testimonial, printed as a handbill, purporting to be given by Dr. H. Edward Brodrick, of Knayton, Thirsk, in favour of a certain kind of bitter beer. The testimonial appears to exceed the bounds of professional propriety.

THE GRIFFITHS FUND.

DRS. E. LE CRONIER LANCASTER (Winchester House, Swansea) and D. F. BROOK, Hon. Secretaries, desire to acknowledge the following subscriptions to the above fund received since our issue of June 9th:

	£	s.	d.
Amount already acknowledged	165	18	0
Thomas Jones, Manchester	2	2	0
J. Jenkin Lloyd, Llanelly	1	1	0
John J. Merriman, London	1	1	0
J. Raglan Thomas, Exeter	1	1	0
J. Morgan Evans, Llandrindod Wells	1	0	0

The Committee have decided to close the fund on June 20th. The Honorary Secretaries will therefore be obliged if intending subscribers will forward their subscriptions without delay.

NIGHT-BLINDNESS IN RUSSIA.

STATISTICS collected by Dr. Shchepotieff[1] seem to show that night-blindness (hemeralopia) is of very frequent occurrence in Russia. The subjects of his inquiry were recruits from different parts of the country. Altogether 17,866 men were examined, of whom 1,713 had at one time or other suffered from that disease, giving an average proportion of 9.5 per cent. The central manufacturing provinces, as well as the purely agricultural districts, gave the highest proportions (10.8 per cent. and 12.6 per cent.), whilst the so-called "steppe provinces" showed the lowest (3 per cent.). As far as the cause of the diseases is concerned the inquiry yielded no positive result; neither dampness of the soil nor moisture of the air, nor scarcity of food nor exhaustion by work, seems to play a preponderating part in the causation of the disease. It is noteworthy that night-blindness is found in the northern and north-eastern provinces much more often than in the sunny south.

TREATMENT OF NASAL POLYPI.

DR. A. C. DUTT (Whitby) writes: Regarding Dr. MacDougall Wilson's communication, I have not found an alcoholic spray give the same amount of relief as the local application of teucrium. The drug seems to control catarrhal processes in mucous membranes.

SEAFARERS' IMPERISHABLE FRESH FOOD.

MR. J. LAWRENCE-HAMILTON, M.R.C.S. (Brighton) writes: Vessels remaining at sea for three or more consecutive days should by law be compelled to carry complete refrigerator machinery and apparatus large enough to provide their crew and passengers daily with sufficient fresh animal and vegetable diet. In these days of cheap, healthy, imperishable fresh food no seafarer should be forced to live on salted or potted meats. As a mere matter of economy and efficiency the introduction of refrigerator machinery in the mercantile marine and navy would be financially advantageous to shipowners, including taxpayers who are practically proprietors of our warships.

QUALIFIED ASSISTANTS AND THE SANCTITY OF A BOND.

X. P., in a letter which we are unable to publish owing to its great length, writes: As a rule, the stage of qualified assistancy is a transitional one. When a young man leaves college, stamped, so to speak, with a qualification, his first experience is a disenchantment. He engages himself as an assistant, and for this purpose he has to sign a bond not to practise for a certain stated period within a certain distance under, oftentimes, most ridiculous penalties. In addition to this, the tiro has to work like a proverbial galley slave, do the most menial of duties (if he wants to keep in his master's good graces), from posting letters to posting accounts, keeping the surgery clean and tidy, dispensing, be subjected to perpetual snubs if he is incautious, and lodged with the coachman. From visiting club and parish cases he is in time sent to see an occasional pay patient, but as a social entity the qualified assistant does not exist. When a bond is being signed the principal knows well, as a man of the world, what he is about, and secures himself accordingly; his very selfishness in preparing the agreement often makes the deed invalid legally; but does the assistant-elect realise what he is doing? I doubt it in many cases. In cases where the assistant practises in opposition to his former employer, he does not as a rule make such a havoc among the patients as to cause appreciable injury to the practice of the principal unless the patients lose their confidence in the latter either through old age, incapacity, or some other vital fault, when, in such a case, some other doctor would inevitably have been called in. I have been in the profession for a great many years, and it is quite exceptional for an assistant to set up in opposition to his principal.

[1] *Vratch*, No. 9, 1894.

PREVENTION OF THE ENTRANCE OF BLOOD INTO THE TRACHEA.

DR. T. WHITEHEAD REID (Canterbury) writes: I endorse most fully the excellence of the position recommended by Dr. Murphy (with photograph) in the BRITISH MEDICAL JOURNAL of May 5th, p. 964. For the last sixteen years we have employed it at the Kent and Canterbury Hospital for such cases as he mentions, and, in addition, for tracheotomy and post-nasal growths, but we add a mackintosh bathing cap, which saves the patient's hair (especially females) from becoming soiled.

MR. ERNEST SOLLY, F.R.C.S. (Harrogate) writes: Dr. Murphy's note as to the value of having the head of the patient hanging downwards in any operation upon the respiratory passages suggests to me that it may be of interest to record an experience of my own on somewhat similar lines. I was recently called in to an urgent case of diphtheria in which tracheotomy had to be done at once. The child was on a large low bed in a small room, with practically no other furniture, and I had to operate, kneeling on the bed, by the light of two candles held by two friends, upon whom I had also to rely for assistance. I had no time, nor could I see to avoid vessels, except by going straight for the trachea; and bleeding was profuse at first, and did not immediately cease when the trachea was opened. To prevent the blood from getting into the lungs I had the child held up by the feet, its back lying along my left thigh as I knelt, until the tube was in and the hæmorrhage had ceased. Some blood certainly did get into the trachea, but it was discharged from the mouth and nose, and the child made a good recovery without any sign of blood having reached the lungs. I have no doubt that the downward position of the head helped the child to rally, for before the operation it was exhausted and almost pulseless.

A SEXLESS MONSTER.

DR. JOHN P. HENRY (Lewisham, S.E.) writes: The case recorded by Dr. Willett in the BRITISH MEDICAL JOURNAL of May 26th reminds me of a fœtus which I delivered a few years ago at St. Paul's Cray. It was born dead. The lower extremities were fused into one, and rotated completely backward. There were no external genitals, no anus, and no urethra. A careful dissection failed to discover the slightest trace of testicles, ovaries, uterus, bladder, ureters, kidneys, or rectum. The other abdominal and thoracic organs were normal. I sent the fœtus to Professor Cunningham, of Dublin, who kindly examined the brain, and informed me that corresponding deficiencies were to be found there.

AN OLD ADVERTISEMENT.

THE following curious advertisement of the well-known Martin van Butchell appeared in the *Morning Herald* for May 27th, 1789:

Fistula in Ano.
No Cure no Pay.

The teazing local Disease commonly called a Fistula in Ano, is radically cured, (sometimes in one week, always in two,) without cutting, dressing, medicine, cautery, injection, risk, confinement, loss of blood, or an atom [of] sound parts;

By Martin Van Butchell,
(many years a diligent pupil, to
John Hunter, Esq., F.R.S.,
Formerly of Jermyn-street; now of Leicester-Square, Surgeon
extraordinary to the King;
But many more, to his late Brother,
Doctor William Hunter, F.R.S.,
Next door to the Chimney-sweeper, in Windmill-street;
Physician Extraordinary to the Queen,
And Anatomical Lecturer to the Royal Academy.)
At his house, No. 56 Mount Street, Grosvenor-square;
From Ten o'Clock till Two.

Much successful practice, on a good principle, emboldens the author to say, that (for ample fees) he has no objection to cure, wealthy, liberal patients, at their own dwellings, (if not too far from his) even, under the inspection of eminent Physicians, Surgeons, and Licentiates in Midwifery; provided they, (as men of honor) will not describe, nor exercise his art.

Can refer to credible men, whom he has cured two years ago:—
One of them a neighbour, weighing twenty stone.
Does not visit from home, in the above hours; nor at all, unless a Guinea Fee is sent with the order.

Doctor James Ford, F.R.S.
Late of Old Bond-street, now in Wales;
Physician Extraordinary to her Majesty;

Having, most kindly (in confidence) attended to the particulars of a late cure; can favour his friends, with a decided opinion, of the method, and the man who causes

Each bit of the complaint to go away:
Leaving no trace behind—but gratitude.

UNQUALIFIED ASSISTANTS.

JUSTITIA sends a long letter "with reference to the determination of the Medical Council to exterminate the unqualified medical assistant, or at least so circumscribe his duties that it practically amounts to the same thing." He concludes by asking: Could not some practical examination be held the passing of which would give the candidate some professional status and enable him to hold either an in- or outdoor assistantship under proper supervision? By the adoption of some such plan and the strict application of the present rules in future the question of unqualified practice would gradually die out.

*** The warnings issued by the Council against the employment of unqualified assistants date from 1882-1883. Our correspondent therefore cannot complain of undue haste in their enforcement.

THE EARLY DIAGNOSIS OF CANCER OF THE UTERUS.

DR. G. ERNEST HERMAN (Harley Street, W.) writes: In reply to the criticisms of "F.R.C.S." in the BRITISH MEDICAL JOURNAL for May 19th, May I say that chancre of the cervix is so rare that I am not able to make any general statement as to its features. I have only seen one case, which I have published.[1] The differences between that sore and a cancer were (1) that it was an obviously inflamed condition; there was a greyish-yellow slough with an inflammatory areola round it; (2) that it coexisted with secondary syphilitic disease of the skin and throat; (3) that it quickly healed under mercury. Whether every chancre on the cervix looks like this, I cannot say.

I call an erosion on the cervix an "adenoma" because it is a new growth of gland tissue. But I do not propose to abolish the term "erosion," which is sanctioned by usage.

THE NURSING OF INFECTIOUS DISEASES IN COUNTRY DISTRICTS.

MISS ROSE MACBRIDE (Southend-on-Sea) writes: While delivering a course of lectures on nursing for a branch of the Essex County Council last autumn, my attention was drawn to a very bad case of typhoid in a crowded cottage. The doctor had not been called in until the patient was too bad to stand removal to the union infirmary some four or five miles away, and the mother of the girl was a willing but totally inexperienced nurse. When I saw her, the patient was lying in a dying state, her back one mass of sloughing bedsores and her mouth ulcerated.

To cope with such cases, I then suggested the following plan, which I think might be worthy of the attention of the various local authorities. That a hospital waggon properly fitted up for the accommodation of, say, one patient and a nurse, with all necessary cooking utensils and a small stove, water cask, and earth closet should be provided. An ambulance waggon such as I saw exhibited at the Health Exhibition would do if specially fitted up for infectious cases. The waggon could be drawn up to the cottage door, and left either in the garden or in a field until done with, when it could be readily disinfected, and all offensive matter could be burnt or buried. Of course this would be useful only for isolated cases, but I am quite sure the poor, and even the well-to-do, would readily avail themselves of and pay for the accommodation. There are many outlying parishes outside the reach of any hospital, and I could give many very sad details of cottage amateur nursing did space permit.

VACUOLATION OF NUCLEI IN CORTICAL NERVE CELLS.

DR. E. T. WYNNE (West Brighton) writes: Dr Skae[2] does not show much evidence as to the mode of production of this lesion, nor is it likely that a satisfactory statement could be made until the experimental production of vacuolation has been studied. Those who have had the opportunity of examining brains in asylums will not be surprised that 80 per cent. show vacuolation. From my own experience I should be inclined to say that in all cases of insanity of any duration (with the exception of melancholia) vacuolation will be found in some part of the brain. The fronto-parietal region seems, in the experience of most observers, to be its most frequent seat, but this is, perhaps, due to the fact that this is the region most frequently examined. In all my cases, when the cornu ammonis was examined, if the other regions showed vacuolation it was present in the cornu, and often more abundant.

Dr. Skae quotes Bevan Lewis as finding "vacuolation peculiarly common to the smaller cells of the upper layers." This, unless I have misread, is only meant to apply to epilepsy, and constitutes Bevan Lewis's lesion of idiopathic epilepsy. The lesion is by no means constant in epilepsy (in the second layer), and further, if vacuolation is present in the second layer, it is more abundant and wider in distribution in the deeper layers. Bevan Lewis supposes that vacuolation is missed in the small cells of the upper layers, owing to the minuteness of the lesion, but when searched for with a one-twelfth of a second immersion it can scarcely be overlooked, especially as the minute granules, fat drops, etc., are readily recognised in other cells.

Dr. Skae speaks of the absence of vacuolation in cases of great severity and duration. This is a statement difficult to justify, for in so many cases the observer is content to examine a few sections from one or two parts of the brain by the fresh methods. (The other methods are not to be relied upon for this purpose.) Vacuolation and spider-cell formation are frequently to be found in some sections and not in others. I have elsewhere expressed a suspicion that the lesion, even in epilepsy, was the result of a toxic substance. In any form of insanity, if there has been marked abuse of alcohol, vacuolation and changes in the lymph connective system will almost certainly be found.

I do not know of any account of the microscopical appearances of the brain in patients dying of cirrhosis of the liver or other marked alcohol condition, unaccompanied by insanity. Of course the absence of vacuolation in such cases would not prove that vacuolation in alcoholic insanity is not the result of the alcohol, but its occurrence would go some way towards solving the causation of this very common lesion.

In investigating the forms of insanity exhibiting vacuolation, the existence of dementia and alcoholism must be most carefully excluded. If this is done I think it will be found that vacuolation does not occur in simple melancholia.

RAPID CURE OF CYSTIC TUMOUR OF SKULL.

SURGEON-CAPTAIN H. AYLMER HAINES (Mooltan) writes: Early in 1893 a patient of mine asked me to look at her baby, which had a lump on his head, which she attributed to a push she received from a carriage wheel about three weeks before her confinement. The baby was four days old. Labour was natural. There was no doubt that the lump was there at birth. Family history good; four older children healthy. The infant appeared to be quite normal in every way but for this swelling, which was situated over the left parietal bone. It was 4½ by 1¾ inches in size, the long axis being nearly vertical, but the upper end was inclined very slightly forwards. It extended from the vertex to the ear, and was elevated about ¾ inch above the cranium. The hair was the same as over the rest of the head; the skin was freely movable and healthy except for a slight pink blush. The tumour fluctuated easily, and was not very tense; it was immovable, irreducible, and gentle pressure produced no symptoms. Around the edge, where attached to the bone, a hard ridge could be felt, forming a well-marked border;

[1] *Obstet. Trans.*, vol. xxvii, p. 252.
[2] BRITISH MEDICAL JOURNAL, May 19th 1894.

the tumour was quite smooth and even all over, nothing solid in it or its walls, and no pulsation.

No openings could be felt in the bones, the fontanelles were normal in position and size, the pupils were equal and responded to light; the nurse thought the lump larger and harder when the baby was cross. When the child was six weeks old the family went to the hills; the tumour was then thought to be a little larger. The hill station was over 7,000 feet, and the ascent occupied one night. I saw the child the third day after their arrival; the tumour was gone, the skull was exactly the same on both sides and no opening, unevenness, or ridge could be detected. Fontanelles as before. The mother said that it had nearly disappeared the first day after coming up. The child appears still quite healthy.

INSANITY AND OVERWORK AMONG OPERATIVES.

As an example of the effects of overwork and overstrain of the attention in an impure atmosphere in producing insanity, Dr. W. P. Spratling relates in the *New York Medical Journal* some particulars of 57 cases admitted during six years into the New Jersey State Hospital from the silk mills of a single city of 100,000 people. In 33 cases the breakdown was attributed directly to overwork, and in only 4 was there an hereditary history; 22 of the patients suffered from acute melancholia, 18 from acute mania; there was 1 case of acute delirious mania, and 3 of primary dementia, so that altogether the acute diseases constituted 79 per cent. of the entire number. The type of insanity was severe, as only 19 patients recovered or showed any improvement, and 6 died.

TREATMENT OF LYMPHADENOMA.

F.R.C.S. writes with reference to the letter of Dr. T. D. Cook in a recent issue: Towards the termination of a case of lymphadenoma, I, in conjunction with my partner, tried as a last resource the hypodermic injection of lymphatic gland, spleen, and marrow juice prepared by Chaix and Remy, Paris. Full doses were employed almost without intermission for nearly three weeks, and up to the date of the patient's death. No local irritation was produced, nor did any febrile reaction occur. I should have employed lymphatic juice only, but it was only to be obtained after considerable delay. Moreover, the patient had previously been fed on beef marrow and gravy prepared from the spleen of freshly killed sheep. Should another case of this most intractable disease occur in my practice I should at an earlier period try the effects of the lymphatic juice, as being from analogy the most hopeful remedy to cure or ameliorate. In the above case the treatment was at least harmless.

CÆSAREAN SECTION IN A LIONESS.

A LIONESS known by the name of Saïda, belonging to a small menagerie in Paris, died the other day "in the straw," as people used to say even of human queens in the days of Smollett. The poor beast suffered much, but submitted to the manipulations of no fewer than eight students of the Alfort Veterinary School, special selected for their obstetrical skill. Delivery could not, however, be effected, and Saïda uttered a piteous roar, and died, just as Cæsarean section was about to be performed. Two cubs were immediately extracted, but they were dead.

UMBILICAL HÆMORRHAGE.

DR. WALTER LATTEY (Southam, Warwickshire) writes: I reported a case of fatal umbilical hæmorrhage occurring in a newborn infant in the BRITISH MEDICAL JOURNAL for July 29th, 1876. Several letters appeared in consequence, the general drift of the comments conveying the idea that the accident in question was due to imperfect ligature of the cord. Mr. Lawson Tait, however, forwarded to me a copy of *Proceedings* of the Royal Society (No. 168, 1876, vol. 23, p. 498), describing the anatomy of the cord, in which he alludes to a central sinus without definite walls, arising from the lower intercostal arteries, which he states "occasionally, at least, passes very far into the cord, as the point where it was discovered was at least 45 millimetres from the dermal ring" (that is, close upon 2 inches). Having had my attention again called to the subject through a fatal case occurring in the practice of a midwife, I have studied several of the more recent works on midwifery, with the result of finding that in some cases directions are given to tie the ligature at the distances of 1½ and 2 inches from the child, which, from what I have stated, would appear to be dangerously short; and I am therefore anxious again to draw attention to the subject. I may state, in conclusion, that in my own fatal case the cord was the shortest I ever had to deal with, so that it was difficult to tie at all; and in the midwife's case the child was born on the floor of the room, giving rise to hurry.

LETTERS, COMMUNICATIONS, ETC., have been received from:

(**A**) Professor T. Clifford Allbutt, Cambridge. (**B**) Messrs. Burroughs, Wellcome, and Co., London; Dr. A. L. Benedict, Buffalo, U.S.; Mr. W. B. Brooks, Bootle; Mr. L. A. Bidwell, London; J. W. Batterham, M.B., St. Leonards-on-Sea; Mr. W. F. Brook, Swansea; Dr. J. B. Brierley, Manchester; Mr. G. G. Bullmore, Newquay; Dr. W. Bruce, Dingwall; Mr. D. Biddle, Kingston-on-Thames; Dr. H. C. Barnett, Freemantle. (**C**) T. Carwardine, M.B., London; Messrs. Collard and Co., London; Dr. W. M. Campbell, Liverpool; Mr. H. Caudwell, Woodstock; Critic; Mr. S. Craddock, Bath; Mr. G. G. Clarke, Bournemouth; Country Member; Mr. J. Cooper, London; Mr. J. Craig, Glasgow; Dr. W. W. Campbell, Duns; Dr. C. W. Chapman, London. (**D**) Dr. E. Deansley, Wolverhampton; L. Drage, M.B., Hatfield; Dr. S. Davies, Plumstead; Messrs. Down Brothers, London; A. C. Dutt, M.B., Whitby; Dr. A. Donald, Manchester; Domen Belt Co., London; Dr. L. Durno, London. (**E**) Mr. G. Edwards, Birmingham; Mr. C. R. Edmondson, Liverpool: Enquirens. (**F**) Professor P. Frankland, Bridge of Allan; Mr. H. A. Franklin, London. (**G**) Dr. H. W. Gardner, Shrewsbury; Mr. J. H. Gwynne, London; General Practitioner. (**H**) Dr. W. W. Hall, London; Mr. W. Henry, London; Mr. M. F. Hopson, London; Dr. J. Hamilton, London; Mr. T. G. Horder, Cardiff; G. E. Hale, M.B., Eton; Mr. N. Heygate, Cosham; Mr. J. Hamer, London; J. Hector, M.B., London; Mr. R. C. Harrison, London; Mr. H. Haynes, London. (**I**) Iatros. (**J**) Mr. F. W. Jordan, Heaton Norris. (**K**) Dr. J. Kerr, London; Dr. W. M. Kelly, Taunton; Messrs. W. J. Kenyon and Co., Leeds. (**L**) Dr. C. J. Lewis, Stirling; L.R.C.P.; Mr. H. K. Lewis, London; S. G. Littlejohn, M.B., London; Dr. T. Laffan, Cashel; Mr. J. Lawrence-Hamilton, Brighton. (**M**) Mr. T. Morris, Cardiff; Dr. E. P. Manby, Liverpool; Mr. T. D. Mann, London; Member; Milk; Dr. H. W. G. Mackenzie, London; Medicus Indicus; Dr. P. F. Moline, London; Mr. F. Mellor, London; Mr. C. W. Milner, Manchester; Mr. P. Morris, Buxton; Medicus; Mr. J. A. Marsden, Wigan; Messrs. Mullock and Sons, Newport; Dr. M. M. Moore, Coventry. (**O**) Dr. C. P. Oliver, Maidstone; Dr. L. H. Ormsby, Dublin; Occasional Vaccinator; Mr. W. H. O'Meara, Carlow, (**P**) Dr. E. J. Parry, Bridgend; Perplexed; Dr. C. Porter, Stockport; Dr. A. Paterson, Bridge of Allan; Dr. G. Philipson, Newcastle-on-Tyne; Mr. H. P. Pike, Gloucester; Mr. Y. J. Pentland, Edinburgh. (**R**) Royal Microscopical Society, Secretary, London; Dr. W. Royden, Great Yarmouth; Mr. W. Randall, Bridgend; Mr. R. G. Roberts, Penmaenmawr; Mr. L. Roberts, St. Asaph; Dr. J. Rorie, Dundee; R. Roberts, M.B., Lowestoft; R. O. B.; Mr. W. C. Rainsbury, Mansfield; Dr. R. Richmond, Braintree; Reference; Royal Surgeon; F. M. Rowland, M.B., Lichfield. (**S**) Mr. R. R. Sleman, London; Messrs. Souter, Mackenzie, and Co., London; Mr. E. Sergeant, Bolton; Mr. J. P. Spence, Burntwood; Sobey; Mr. T. J. Savage, London; Mr. J. E. Smith, London; Mr. G. W. Sequeira, London; B. Strachan, M.B., Sunderland; Dr. L. G. Smith, London; Messrs. Squire and Sons, London; Dr. E. W. Symes, Halifax; Mr. W. P. Swain, Plymouth. (**T**) G. J. K. Turner, M.B., Aysgarth; Mr. G. R. Tyler, London; Dr. T. W. Trend, Southampton; Mr. Lawson Tait, Birmingham; Mr. G. Tay, Dublin; Too Obliging; Mr. G. O. Tallerman, London. (**U**) Unmarried Officer. (**V**) Messrs. Vigoe and Co., London; *Veterinary Record*, Editor, London; Mr. C. W. Vickers, Paignton. (**W**) Mr. A. W. Wallis, Brentwood; Mr. A. Warren, Bristol; Mr. A. Wilson, Hull; Mr. J. H. Williams, London; Dr. C. T. Williams, London; G. E. Williamson, M.B., Newcastle-on-Tyne; G. A. Wright, M.B., Manchester; Mr. T. M. Watt, Hovingham; Dr. B. C. A. Windle, Birmingham; W. P., M. B.; Mr. W. R. Williams, Preston; etc.

BOOKS, ETC., RECEIVED.

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The Treatment of Chronic Diseases of the Heart by Baths and Exercises according to the Method of the Drs. Schott. By Dr. W. B. Thorne. London: J. and A. Churchill. 1894. 1s.

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Report on the Social Condition of the People; the Result of Fifteen Years' Researches. By J. Nyland. London: J. Davy and Sons. 1894. 6d.

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*** In forwarding books the publishers are requested to state their selling prices.

LECTURES
ON
THE SURGERY OF THE SPINAL CORD AND ITS APPENDAGES.

Delivered before the Royal College of Surgeons of England.

BY WILLIAM THORBURN, M.D., F.R.C.S.,
Assistant-Surgeon to the Manchester Royal Infirmary; Assistant Lecturer on Surgery at Owens College.

FIRST LECTURE.

IN these lectures it is my intention to discuss the present position and future prospects of the surgery of the spinal cord and its appendages—that is, its meninges and its nerve roots so far as they lie within the vertebral canal. The present is a suitable time for such a summary, because we are now in a position to estimate with considerable accuracy the true value of the operation of laminectomy. Practised from the early part of the century—not to go further back to such operations as that of Louis, and such suggestions as those of Paulus of Ægina and others—this operation gained but little in favour, so that from 1814 to 1885 we find but 50 formal operations undertaken for injuries of the spinal cord. During the last ten years, however, we have seen a great development of this branch of surgery.

TERMINOLOGY.

The term "laminectomy" is itself a creation of the last few years. Until recently it was customary to speak of this operation as "trephining the spine;" but not only is the trephine seldom used in laminectomy, but the analogy between this operation and that of trephining the skull is at best a distant one. The term "vertebral resection" is cumbrous and not by any means explicit, the latter objection holding also in the case of the name "rachiotomy"—introduced, I believe, by Mr. Davies-Colley—which, although convenient, includes such operations as that by which we attack the anterior aspect of carious vertebræ. Laminectomy, on the other hand, is perfectly explicit and at the same time convenient, and, as it has been generally adopted in this country, I shall use it throughout. The only objection to it is its bastard derivation, and the purer "lamnectomy" has therefore been substituted by Lloyd; but the latter term has not apparently found favour in England, although the fact that it is used in the recent elaborate work of Chipault probably indicates that in France at least it will now be generally adopted.

MORTALITY OF THE OPERATION.

At the present time we have extensive statistics, although these are not altogether easy of interpretation. Thus, in the admirable tables collected by Chipault, we find, after laminectomy for injuries, a mortality of about 48 per cent., or if we include only cases dating since 1885, 37 per cent., whereas in 1889 I estimated the mortality at 57 per cent., or if all cases in which the result was not stated were included as fatal, 67 per cent. In any case, this mortality compares favourably with that of cases not submitted to operation, which appears from the tables of Gurlt to amount to 80 per cent.; but it is so difficult to say how far the issue in each case was due to the operation and how far to the injury that these figures are of little real value. Their main interest lies in the fact that they demonstrate an improvement in the results, which is probably to be attributed partly to improvements in surgical methods, and partly to a more judicious selection of cases.

The operations for tuberculosis are a better test of the dangers of laminectomy, as the original lesion is here far less frequently fatal, and in this group of cases I believe that the true operation mortality is about 20 per cent, although here again it is often impossible to say how far the end was hastened by surgical interference. We shall probably obtain the fairest conclusions if we refer only to the statistics of a few surgeons, who have reported the whole of their cases, and for this purpose I have added together the cases of Macewen, Horsley, Lane, and myself in this country, and of Abbé, Chipault, and Schede from abroad. We thus find a record of 70 cases, with 12 deaths due to or hastened by the operation, yielding a percentage mortality of 17.1. This being so, I think I may repeat the conclusion to which I arrived in 1889, namely, "The dangers of the operation are not great, especially in view of the conditions which it is intended to relieve."

The cause of death in these selected cases is important, and in the very great majority we find it to have been shock; septic troubles are practically absent, and hæmorrhage, formerly so much feared, is rarely serious. This fact is again an encouraging one, as it is by no means impossible that an increasing experience and perhaps an improved *technique* may lessen the one serious risk—that of shock.

PENETRATING WOUNDS OF THE SPINAL CORD.

Believing that, owing to the comparative simplicity of the lesion, cases of this nature would throw an important light upon the more common and more complicated fractures and dislocations, I have collected and analysed 40 published records, mostly stabs with the sword, bayonet, knife, or chisel.

In all these cases the meninges were certainly wounded, by an instrument which was probably septic, and in spite of this, in 38 cases in which the result is stated, we find only 15 deaths, of which 9 only were due to septic infection. The usual form of septic disease has been a rapidly spreading meningitis, which in 2 of the cases extended to the cranial meninges, whereas in 1 case only was death due to a localised meningo-myelitis. Under these circumstances we can hardly regard the spinal meninges as peculiarly liable to septic inflammation. Again, there are 9 of the 40 cases in which there is a clear account of the discharge from the wound of cerebro-spinal fluid, which discharge was often profuse and prolonged, but this result gave no trouble save in one case, reported by Walshe, in which there ensued severe retching, readily arrested by closure of the wound, the patient making a good recovery. This being the case, it would appear to be good practice, in case of injury or suspected injury of the meninges, which is likely to be septic, to leave the wound open, and thus to allow of the escape of such discharges as may form.

The most important point, however, with regard to these penetrating wounds of the spinal cord, is the question of recovery of function after such a lesion, indicating, as it does, the power of repair of the human spinal cord. Of the 40 cases to which I have referred, 5 may be neglected, as there was evidence of injury of the meninges only, and one, that recorded by Parmentier, is, I believe, an example of section of the cauda equina. This leaves us 34 cases in which either the cord or the lower end of the medulla oblongata was wholly or partially divided. Many of these cases, it may be said in parenthesis, showed at first paraplegic symptoms, which rapidly cleared up to some extent, leaving as the more permanent or typical condition a spinal hemiplegia. Thus they are not only excellent examples of the so-called Brown-Séquard's paralysis, but they illustrate the readiness with which the minor compression lesion of the uncut side of the cord clears up, the one side being subject no doubt to the destroying lesion of section, the other to the mere pressure of hæmorrhage.

Of the 34 cases comparatively few died; we have 21 non-fatal examples in which the ultimate result is recorded. In these 21 cases the opportunities for recovery of structure and of function are the best possible. It is obvious that there can have been no great separation of the cut surfaces—nothing, probably, beyond a slight layer of clot—no persistent compression of any kind, and no septic infection. Despite these most favourable conditions complete recovery of function occurred in but 3 cases; 16 had certainly persistent paralysis or anæsthesia, or both; and two were said to be improving when lost sight of. Further, of the numerous cases with permanent symptoms, very few showed any amelioration of the earliest condition. These facts appear to to point strongly to there being little power of recovery of function after a destroying lesion of the human spinal cord, and although in a few cases such recovery was certainly

satisfactory, these are so few and so opposed to the general rule that we can hardly suppose that the original injury was of any serious extent.

The teachings of physiology upon the question of repair of the cord are, in spite of the number of researches into the subject, still uncertain. All the evidence is against the possibility of structural or anatomical repair in the higher animals—at least in adult life. On the other hand, numerous researches—as, for instance, the recent experiments of Turner—prove that section in the highest mammalia may be succeeded by recovery of function, provided that the section is not completely transverse; but the observations of Rossolymo, Mott, Turner, and many others show equally that such recovery is due to vicarious conduction by uninjured portions of the cord.

The general and most important conclusion is that in man we cannot hope for anatomical recovery: that vicarious conduction may allow of restoration of function to some extent, but that in the case of complete transverse lesions, in which vicarious conduction is manifestly impossible, no recovery whatever will take place. The basis of these conclusions appears to me to be so strong that in a case of reported recovery after section or a complete crush I should doubt the diagnosis of the lesion. For these reasons, also, I should regard as useless the operation of suture of the spinal cord, or rather of the pia mater, proposed by Chipault. This proceeding is certainly possible, and has been carried out by the French surgeon on the dead body; but I fail to see how it can be of any service, and it may be harmful, not only by necessitating some manipulation of the injured cord, but also by confining the effused blood and serum, and thus increasing the pressure upon such parts of the medulla as have escaped section.

The above remarks apply to the spinal cord only, but it is quite otherwise with its nerve roots after they have left its structure. These roots are now simply peripheral nerves, and nothing is more certain than that such nerves are capable of repair after section. Hence we may anticipate recovery of the nerve roots when divided within the vertebral canal. That such repair actually does occur in animals has been proved by Kahler and by Chipault, and, in man, Tuffier has sutured the first two lumbar roots after their division by a bullet wound, obtaining a perfect recovery. The importance of this distinction between the cord itself and its nerve roots arises only in the cauda equina, where we have only roots to deal with, and here we may expect a natural recovery if the ends be not too far separated, or if no mechanical obstacle intervene: and, failing this, we may hopefully cut down upon and suture these roots, as we should do in the case of any peripheral nerve.

Fractures and Dislocations.

In compound fractures, which are chiefly gunshot wounds, and are, therefore, rare in civil life, there can be no question of the advisability of removing all splinters and foreign bodies. No new danger of any kind is introduced by such an operation, which is merely of the nature of "wound toilet," and numerous cases, such as the classical one of Louis, illustrate the benefits which may be derived therefrom. Fractures of the transverse and articular processes are also of little interest from the present point of view; they are very rare, being due only to direct injuries such as gunshot wounds, and they do not involve the contents of the vertebral canal.

Fractures of the spinous processes alone are also rare, there being but 2 instances in Ashhurst's analysis of 394 cases, and 7 among Gurlt's 270 injuries of the spine. In the Manchester Royal Infirmary, where we meet with some 9,000 accidents yearly, I have found but 1 case in the last 10 years. On the other hand, I have been able to collect the records of 12 cases in which the diagnosis appeared to be beyond doubt, in 3 of which only was the cord injured. In such a case the removal of the depressed spinous process would be a simple operation, and one which should certainly be adopted, but, as yet, no operation of this nature has been recorded. The only difficulty will probably lie in the diagnosis, and for this purpose the most valuable indications will be the history of a direct blow, the mobility of the spinous process, and the fact that this is depressed below the level of its fellows, both above and below.

Fractures of the laminæ are more important than any of the above, and have always been regarded as suitable cases for surgical operation, although they also are by no means common. Ashhurst, for example, found less than 1 per cent. in his analysis of injuries of the spine. I have analysed 10 published cases, in which the diagnosis was not open to question, and they lead to the following conclusions:

(1) The cause of this injury has generally been stated to be direct violence to the spine, but in 4 of my 10 cases there was certainly no direct violence, and in only 3 is such distinctly described. Further the frequency of this injury in conjunction with a fracture of the bodies indicates a similarity in the mechanism of their production.

(2) The symptoms of fracture of the laminæ are by no means definite and the only case, in which we can be satisfied that the diagnosis was made before death, owed its detection to the distinct lateral mobility of a spinous process.

(3) The diagnosis is therefore difficult, and probably we can rely only on the following points: (*a*) The cause, if there be a clear history of direct violence; (*b*) the normal contour of the spine, and the presence of lateral mobility of one or more of the spinous processes, in conjunction with an obvious lesion of the spinal cord.

The treatment of these cases is very clearly indicated. We can hardly hesitate to perform laminectomy in such a case if there be any symptoms of pressure upon the cord. There is here no reason to anticipate a rebound of the bony fragment, such as that which we find in the case of fracture-dislocation of the bodies of the vertebræ. Then, again, the fragment is liable to be driven further inwards upon the cord, and to be moved about so as to plough up the soft structures beneath it. There is also at least a reasonable probability that the medullary lesion is not a complete crush, such as we are about to describe, but merely a more or less severe pressure. Lastly, the operation itself is in such a case of the simplest. In spite of this clear indication, which is generally accepted, I have found but three recorded operations in cases of this nature. The first, that of Péan, is briefly recorded, but appears to have been highly successful. The second, that of Mr. Allingham, was less satisfactory. The third case, reported by Schede, was one of complete paraplegia and anæsthesia with paralysis of the bladder and rectum. Sixteen hours after the accident the sixth dorsal arch was removed, and was found to have been broken off and depressed so as to press upon the theca. The patient made a steady recovery, and, eighteen months after the operation, he could walk for long distances without even requiring the assistance of a stick.

We may turn now to the far more common and more serious lesions of the bodies of the vertebræ. For our present purpose, we may treat fractures and dislocations together, and speak of them as fracture-dislocations: the commonest injury being a distinct luxation with but slight injury to bone.

It is only in unilateral dislocations that these injuries present any special peculiarities, but the latter undoubtedly form a distinct class of injuries. Their essential peculiarity is that, owing to the fact that but one articular process is displaced, there is often either no injury to the cord whatever, or such injury, if present, is but slight; and again reduction is frequently possible and successful. In one case of this nature the patient made a good recovery, and lived for three years after his accident, at the end of which time he died of cancer of the liver, when I was able to obtain the specimen which I now show to you.

Leaving the less serious cases, we turn to the true dislocations, which are almost forwards and downwards. Indeed, the direction of this displacement is so common that all other forms may be regarded as pathological curiosities. In association with this lesion we may, however, note that it is probably not very rare to meet with diastases, that is to say, with dislocation in which the displaced bones have recoiled, so as to leave no permanent disturbance of their relations. In cases of this nature, despite the temporary displacement, the cord may be seriously injured, as in this case in which the disc between the second and third cervical vertebræ is torn across, and in which there was fatal hæmorrhage into the brachial enlargement at the level of the fifth cervical segment.

Fractures, on the other hand, may be oblique, transverse, or vertical; but here again they are by far most commonly oblique, from behind and above downwards and forwards, and, even if the broken vertebra be comminuted, the tendency to this obliquity of direction still remains.

Analogous to the distinction between a true dislocation and a diastasis is the distinction between those fractures in which the bony displacement remains and those in which it is succeeded by the recoil of the vertebræ, due either to the falling back of the head or to the elasticity of muscles and ligaments, and the question as to the relative frequency of such recoil has been much discussed.

Thirty years ago Mr. Jonathan Hutchinson wrote: "Permanent compression of the cord, or of any part of it, is a very rare event;" and, again, "nothing is more rare than to find any degree of permanent compression." I have also expressed less strongly a similar view, based upon *post-mortem* experience, but Chipault, in his recent work, questions the conclusion, although certain experiments which he made on the dead body are in agreement therewith.

Under these circumstances I have re-examined the specimens which are now in my possession, and I find that in the cervical region I have 12 cases in which there is no permanent displacement and 6 in which there is such displacement, thus giving a 2 to 1 majority in favour of temporary compression of the cord. In the lumbar region, on the other hand, I find that in the whole of 10 cases there is more or less permanent displacement of the injured vertebræ, but it is by no means certain that the amount of this displacement was sufficient to cause serious pressure upon the spinal cord.

It is, however, to be remembered that the cases of permanent displacement, or of permanent pressure upon the cord, are naturally more serious than those of temporary crushing, and that therefore they will appear in greater number among our pathological preparations. This is probably the reason for the universal presence of permanent compression in lumbar cases, inasmuch as only the worst of these cases come under the hands of the pathologist.

NATURE OF INJURY TO THE CORD.

Such being the main varieties of injury to the spine, we may now ask ourselves what are the various methods in which the cord itself suffers, and we find these to be as follows:

1. By far most commonly there is approximation of the laminæ of the vertebræ above to the body of that below, causing crushing of the cord. Such crushing may be associated on the one hand with permanent pressure, as in true dislocation and in fractures which do not recoil; or, on the other, with temporary compression, as in diastases and in fractures which do recoil.

2. A fragment of bone may be driven back upon the spinal cord, but such a condition is exceedingly rare.

3. Equally rare, if not more so, is a condition which I show to you in these two specimens, in which an intervertebral disc is, as it were, squeezed out from between the adjacent bones, so as to form a projecting shelf which compresses the theca.

4. And, lastly, the medullary symptoms may be mainly due to the pressure of hæmorrhage.

We have next to ask whether we can distinguish these varied lesions the one from the other. In the first place the strong presumption is that the injury is a crush by approximation of the affected bones; but whether such be associated with permanent or with temporary compression, we can as a rule judge only by our somewhat unreliable statistics, although the presence of a marked angular curvature would indicate the persistency of displacement.

Pressure by a displaced fragment of bone we cannot recognise, although asymmetry in the level of the nerve symptoms would be suggestive of such a condition, as in a case which came under my observation. With regard to hæmorrhage we might expect that the onset of symptoms after accident would be less immediate than in the case of true crushing of the cord; and this view is to a slight extent borne out by a case which came under my notice some few years ago.

The patient was a man who, for a few minutes after an injury to the neck, noticed only local pain. His legs then began to feel weak, and he lay down. Ten minutes later he was totally paralysed. After his admission to hospital there was slight but continuous improvement both in paralysis and anæsthesia for about a month, at the end of which time the man died from pneumonia. At the *post-mortem* examination we found a very slight displacement forwards of the fifth cervical vertebra, with no permanent pressure upon the cord, but with more clot round the theca than is usually present in cases of this nature. The cord itself was flat and pale.

On these grounds I was again led to make the diagnosis of hæmorrhage in the case of a woman who was admitted to hospital under my care two days after the accident. She had fallen downstairs, and then, getting up unaided, had walked into an adjoining room, when she became paralysed and again fell to the ground, remaining paralysed from that time. There were no local signs of injury to the neck, but she had complete paralysis and anæsthesia. I operated, hoping to find a blood clot, but without success, and the patient died 16 days later.

I fear, therefore, that the diagnosis of these various forms of injury to the spinal cord is as yet impracticable.

In two recorded instances there have, however, been excellent results from operation for hæmorrhage into the spinal canal. The first of these is recorded by Church and Eisendrath, there being a fracture-dislocation of the tenth dorsal vertebra with complete paraplegia, and laminectomy revealing the fact that the spinal canal was filled with a firm extradural blood clot, which was easily broken down, and which had arisen from tearing of the anterior and posterior longitudinal spinal veins. The clot having been removed by the finger and by irrigation, and all hæmorrhage having been controlled, the displaced vertebræ were reduced, and the patient recovered almost completely. The second case, published by Wagner, was one of hæmorrhage at the level of the ninth dorsal vertebra, due to a bullet wound, and causing paraplegia. Three months after the accident there was removed a firm fibrous tissue which had formed in the clot, there being again an excellent recovery.

There is, however, one unusual lesion which can be recognised, and which, perhaps, we may call "gravitating hæmorrhage." A case of this nature, of which I have no detailed notes, was admitted to the Manchester Infirmary some ten years ago, the patient having sustained an injury to the neck, followed by paralysis, which spread rapidly up the body from the lower limbs onwards, until in an hour or two he died from respiratory failure. The diagnosis then made was that of hæmorrhage into the theca or perithecal tissue, the blood finding its way to the lower part of the vertebral canal, and thus causing ascending symptoms. A similar case, with full details, has recently been recorded by Mr. Bennett; and Lidell reports another example, with a *post-mortem* examination, in which there was found a tear in the theca in the cervical region, the dura mater being full of, and distended with, blood. In such cases the diagnosis is comparatively obvious, and, although we have as yet no facts upon which to build, we are surely justified in hoping for benefit from operation.

As to what operation is most likely to be successful there may be some difference of opinion; but I should be inclined, did I again meet with such a case, to perform laminectomy at the seat of injury and endeavour to arrest the hæmorrhage, or at least to give exit to the blood, combining this procedure in the first instance with paracentesis of the meninges in the lumbar region after Quincke's method, or, if the result were not satisfactory, a secondary laminectomy at the lower part of the spine.

For all practical purposes we have, however, three varieties of injury which call for treatment, namely, permanent pressure upon the cord, temporary crushing of the cord, and hæmorrhage. The latter is so rare and so little likely to be diagnosed that we are almost justified in neglecting it. As regards the two former, it is clear that in cases of temporary compression—which constitute the majority—laminectomy is necessarily useless. The crush is over; the cord has already sustained its maximum of injury, and it lies in the best possible position for recovery, if such be possible. In cases of permanent compression, on the other hand, we may certainly restore the normal lumen of the vertebral canal, but we can hardly hope to do much, if any, good to our patient; in the first place because, as we have already seen, the injured cord will not be capable of regeneration, and in the second place because the extreme mortality—or at least persistency of symptoms—in the cases of temporary compression is such that we can hardly hope for benefit in the more severe cases in which the compression has been permanent.

So much being premised, I will now relate the details of 7 cases in which I have performed or assisted at laminectomy for injuries of the cord, 5 of these cases having been under the care of my colleagues and 2 only being my own operations:

CASE I (under the care of Mr. Hardie).—Total paraplegia and paranæsthesia below fifth cervical roots, with loss of reflexes. Operation twenty-four hours after accident; removal of fifth and sixth cervical arches: theca appeared perfectly normal. Death in twenty-four hours; no compression, but cord flattened.

CASE II (under the care of Mr. Hardie).—Similar symptoms and operation at same level. Death forty-eight hours later. Complete smash of fifth cervical vertebra, cord crushed. The specimen shows that no good would have been done by removal of anterior prominence.

CASE III (under the care of Mr. Jones).—Incomplete paralysis and anæsthesia below sixth segment. Improvement for some weeks, which then ceased. Patient was going down hill. On fifty-sixth day removal of fifth and sixth cervical laminæ; dura appeared slightly distended, but was not opened. Death in eight days. Specimen showed diastasis higher than level of cord lesion, and no pressure.

CASE IV.—History of delay in onset of paralysis; no local signs; diagnosis hæmorrhage. Symptoms: Total paraplegia and paranæsthesia below sixth cervical segment, with loss of reflexes. Patient first seen forty-eight hours after accident. Removal of fifth and sixth laminæ *nil*. Slight improvement; primary union; renal hæmorrhage, which was apparently the direct cause of death. Death fourteenth day (sixteenth from accident).

CASE V.—Young man with symptoms of total crush in mid-dorsal region. Not at first under my care. After seven weeks removal of sixth and seventh dorsal arches. Cord reduced to a cicatrical mass of the thickness of a goose quill. Good recovery of wound, none of function.

CASE VI (under the care of Mr. Jones).—Last dorsal; complete paralysis and anæsthesia. On day of admission extension; slight improvement in sensation during succeeding weeks. After four months and a half removal of last dorsal and first lumbar arches, between which was a thick cicatrix, compressing theca and almost cutting it across. Good healing of wound, but very slight further recovery of sensation.

CASE VII (under the care of Mr. Hardie).—Injury at dorso-lumbar junction. Unrelieved.

Looking at these seven cases collectively, we find that in the first, third, and fifth there was no permanent pressure, and that the operation met no indication whatever. In the second and fourth cases there was pressure upon the cord, but this was not removed by laminectomy, and even had it been removed by chiselling away the bony prominence on the anterior aspect of the theca, the injury done to the cord was such that the operation would probably have been useless. In the sixth and seventh cases the extent of the dissection does not allow us to say with absolute certainty what the pathological condition really was. In none of the cases did any real benefit result; all those in which the injury was in the cervical region died; all those in which it was below the cervical lived, but did not recover from paralysis. And, lastly, in all those cases in which death did not cut short its progress the wound healed readily.

The published cases, of which there are about 200, show to my mind no better results, if we exclude injuries of the laminæ, hæmorrhage, and operations upon the cauda equina. I have, indeed, not satisfied myself that there have been any successes as regards recovery of function, save such as may be attributed to the regeneration of nerve roots only, or to the natural recovery of a cord which was but very slightly injured. This, I am aware, is a broad statement, but an analysis of the recorded cases would occupy far too much of our time. And, further, if it were shown that in one or two instances among the 200 published cases there had been a definite improvement or recovery, I should be inclined to regard such as the sequel of some error in the original diagnosis, rather than to allow a single instance to invalidate a rule based upon such extensive premises.

The only question, therefore, which remains to us is, Are we justified in expecting in future any better results than those which we have met with in the past? There appear but two directions in which we may hope to improve the operation. The first is by operating at an earlier period—immediately after the accident; the second is, by extending our laminectomy to the chiselling away of the bony projection on the anterior aspect of the theca, as is so strongly urged by Urban and Chipault. On the *a priori* grounds which I have already mentioned, I fear, however, that we have little to hope for in either direction, and that we are not yet able to treat with success the common injuries of the spinal cord.

INJURIES OF THE CAUDA EQUINA.

In 1888 I advocated operation in intractable injuries of the cauda equina, mainly upon two grounds, namely: (1) that we may here expect a regeneration of the nerve roots, the physiological evidence being strongly in favour of such regeneration and not against it, as in the case of the cord; (2) that the absence of spontaneous recovery in such cases in itself indicates the presence of a mechanical obstacle, such as permanent compression by bone, blood clot, or cicatrix; otherwise we should expect the roots of the cauda equina to recover as other peripheral nerves after severe bruises. In the following year I was able to show that the cases published up to that date confirm this view, and many other cases since recorded have placed it beyond question.

The only point which we need now discuss is that of the most suitable time for operation. We must remember that some cases will recover spontaneously—cases probably in which there has been no extensive tearing of the roots or intervention of tissue between their ends. Hence, then, we must not operate too early. On the other hand, should we delay too long, secondary degenerations will render the ultimate prognosis bad. Between these two difficulties we can hardly dogmatise as to the most suitable time for interference. Personally I have taken as a rough rule that we should operate at the end of six weeks, if there has been little or no recovery, or if recovery has ceased to progress. Other surgeons would, however, limit the period to a month, and the point is one which we are hardly likely to carry further at the present time.

In conclusion, I may mention two cases illustrative of the benefits of operation in injuries of the cauda equina which have come under my observation, although I have not personally been called upon to deal with any such cases.

CASE VIII (under the care of Mr. Jones).—A lad injured four months before admission to hospital; at first quite paralysed and anæsthetic in lower limbs. On admission prominence of third lumbar sp. proc.; complete paralysis of muscles moving ankle and foot, weakness of other muscles of lower limb, of cauda equina type; marked atrophy, especially of gluteal and leg muscles; obtuse sensation over genitals, gluteal region, back of thighs, back and, to a less extent, front of legs, and whole of feet; cystitis. This condition proved to be stationary. Then removal of second lumbar arch, which was pressing firmly on the theca. Steady recovery. In three months could walk, and in about eighteen months again at work as a collier, and could walk several miles. The only permanent trouble was some contraction of hamstrings and paralysis of muscles moving the toes.

CASE IX (under the care of Mr. Southam).—Admitted for fracture of the lumbar spine. Had prominence of second and third lumbar spinal processes; complete paralysis of lower limbs, but no loss of sensation and no vesical or rectal trouble. No improvement during eight weeks; then removal of third and fourth lumbar arches, which showed that the theca was pushed backwards by the angle formed by the bodies of these two vertebræ; pulsation was, however, quite distinct, and there appeared to be no further pressure. On fourth day slight movements in feet; on sixth, at ankle and knee. Then very slow progress; after six weeks could only raise legs from the bed. Two months after the operation he could still not stand, and was sent home. Returned a few months later able to walk (hearsay).

CONCLUSIONS.

I may summarise this long discussion in a few words. In compound fractures operate. In fractures of the spinous processes and laminæ, with injury to the cord, we also operate. In simple fractures and dislocations of the bodies of the vertebræ, if there is a reasonable probability that the injury is due to hæmorrhage, operation is advisable; but in all other cases of this nature we cannot hope to do good save where the injury is below the level of the first lumbar vertebra. In such cases, however, laminectomy is an eminently valuable surgical procedure.

THE GERMAN ASSOCIATION OF SCIENTISTS AND MEDICAL MEN.—Preparations are in active progress in Vienna for the sixty-sixth annual meeting of the German Association of Scientists and Medical Practitioners which is to be held in the Imperial city in September next (24th to 30th). Professors von Helmholtz and Leyden, of Berlin; Forel, of Zurich, and other leading representatives of German medicine have intimated their intention of taking part in the proceedings. The Austrian Government has granted a subvention of 10,000 florins, and a ladies' committee, with Frau Rosa von Gerold at its head, has been formed to make arrangements for the entertainment of the scientific visitors and ladies accompanying them.

DONATIONS AND BEQUESTS.—The Ironmongers' Company have sent a donation of ten guineas to the North-Eastern Hospital for Children, Hackney Road.

THE CROONIAN LECTURES

ON

A NEW DEPARTURE IN DIABETES.

Delivered before the Royal College of Physicians of London.

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[*Special Abstract Report.*]

LECTURE I.

Dr. PAVY, in commencing his course of lectures, observed that diabetes had been known by its symptoms from the most remote antiquity. The essential point in its pathology was the undue and improper elimination of sugar in the urine. To this all the symptoms of the disease could be traced. Carbo-hydrate food taken by a healthy person was retained and utilised in the system contributing to its service, and maintaining the life of the individual. In diabetes it ran off and was not turned to account. All the symptoms of the disease depended on this unnatural exit of the sugar. The excessive quantity of urine passed was due directly to the elimination of the sugar, which in its exit carried with it an undue quantity of water. Diminution of the amount of sugar excreted was immediately attended by a diminution in the flow of urine, which was in direct proportion to the amount of sugar. The wasting so characteristic of the disease was traceable to the non-utilisation of the carbo-hydrate elements of the food. In a similar way the loss of power was due to this non-utilisation of carbo-hydrate food. Further, to meet the increased egress of water there must be an increased ingress of water. Patients might often be heard to say that they drank much more water, and in consequence passed much more. This was to invert the real order of events, for the first link in the chain was the increased outflow of water.

THE PHYSIOLOGY OF THE CARBO-HYDRATES.

The problem to be solved in arriving at a true comprehension of the pathology of diabetes was how it was that in the healthy person carbo-hydrate food was applied to the benefit of the individual, and how it was that in diabetes it was allowed to run to waste without utilisation. Here a right understanding of the physiology of carbo-hydrate utilisation in the economy must precede an understanding of the pathological condition in which this utilisation was not affected.

A study of the physiology of the carbo-hydrates involved in the first place certain preliminary considerations with regard to the part played by the carbo-hydrates in living Nature generally. The carbo-hydrates formed a well-defined group in Nature consisting of carbon united with hydrogen and oxygen in the proportions to form water, not that the carbo-hydrates were to be looked upon as hydrates of carbon, but that their molecular composition was such that the proportion of hydrogen and oxygen in a molecule was that which would form water.

AMYLOSES ($C_6H_{10}O_5$)	FATS
Starch	Stearin ($C_{57}H_{110}O_6$)
Cellulose	Palmitin ($C_{51}H_{98}O_6$)
Glycogen, etc.	Olein ($C_{57}H_{104}O_6$)
SACCHAROSES ($C_{12}H_{22}O_{11}$)	
Maltose	
Cane Sugar	
Lactose, etc.	
GLUCOSES ($C_6H_{12}O_6$)	
Dextrose	
Lævulose	
Galactose, etc.	

A comparison of the table of carbo-hydrates and fats brought out a striking contrast between these two classes of bodies, namely, that the carbo-hydrates contained much more oxygen than the fats.

THE CARBO-HYDRATES IN THE VEGETABLE KINGDOM.

Carbo-hydrates were so extensively distributed in living Nature that they might be estimated to make up at least eight-tenths of the organic matter existing. Nowhere in the vegetable kingdom was there a structure in which they were not present. Every stem, every branch, every leaf, contained them or was formed of them, under the form of cellulose, lignose, and starch. They constituted also the source of organic matter: starch was the primordial organic product from which all other organic products proceeded. Its mode of origin deserved study. The chlorophyll corpuscles of the leaves and growing parts of plants were little masses of protoplasm. This protoplasm was endowed with the power, under the influence of the sun's rays, of fixing the carbon of the carbonic acid of the air, of unlocking, as it were, the combination of the oxygen with the carbon. The force thus evolved was rendered latent in the product formed. Starch, which made its appearance in the chlorophyll corpuscles, was the first visible organic product. Possibly there were intermediate products, but starch was the first product which could be recognised with certainty. As carbo-hydrates were formed in the leaves, mineral matters and nitrogen-containing compounds entered by the roots, and, coming in relation with the carbo-hydrates in the leaves, formed the various organic compounds produced by vegetables.

Referring again to the table of carbo-hydrates, Dr. Pavy said that the list was not complete, since others were known, but that it contained those which were of chief physiological importance. The carbo-hydrates passed from one group to another group under the influence of different agencies. Such passages were brought about by hydration or dehydration, the addition or the subtraction of the elements of water. Thus an amylose might be hydrated into a saccharose, and a saccharose into a glucose. This hydration was effected readily in the laboratory under the eyes of the observer by certain chemical agents and by ferments. For instance, by boiling with dilute acid, amyloses and saccharoses were converted into glucoses. So ferments, such as the diastase of the vegetable kingdom, and the saliva and pancreatic juice, had a similar power of causing increased hydration.

DEHYDRATION OF CARBO-HYDRATES BY PHYSIOLOGICAL ACTION.

Dehydration stood in a different position. It was true that in a few instances it could be effected in the laboratory: for instance, dextrose at a temperature of 170° C. gave off H_2O, and was reduced to a member of the amylose group—dextrosan. In the same way lævulose could be reduced to lævulosan, and these two bodies—dextrosan and lævulosan—were again reconvertible into bodies of the glucose group.

Dehydration, which could thus be produced exceptionally in the laboratory, was a process which took place habitually in Nature. It was brought about by protoplasmic action, which was the converse, in its results, of ferment action. That this process of dehydration did take place was shown very simply and conclusively by a consideration of the growth of yeast cells in a solution of sugar. In the process of the growth of these cells cellulose and glycogen, which were constituents of yeast cells, were formed. Incidentally, Dr. Pavy remarked that it was an interesting fact that the amylose which existed in fungi was not starch, the characteristic body of the vegetable kingdom, but glycogen, the amylose of animals. The growth of yeast cells was a simple illustration of dehydration, but a similar process was taking place largely throughout the vegetable kingdom in the formation of fabric cellulose and storage starch.

THE DESTINATION OF STARCH IN THE PLANT.

The destination of starch in the plant deserved careful consideration. It was converted into sugar, and, carried by the sap, reached the part of the plant where growth was taking place, and was converted there into cellulose or lignose, bodies in a lower state of hydration. This change was brought about by protoplasmic action. During the growth of the seed, also, dehydration took place by the action of living protoplasm. This point was illustrated by a reference to the germination of wheat. The seed consisted of the embryo or germ formed of living protoplasm and the storage starch; under the influence of warmth and moisture the embryo developed a ferment which acted upon the starch and converted it into sugar, which sugar was, by protoplasmic action, utilised by the embryo for the production of the cellulose needed in its development.

These facts were of service in unravelling the processes

which occurred in the growth and nutrition of animals. By looking closely at the phenomena of life, it would be seen that it involved a balance and alternation of protoplasmic and ferment action. In man the starch taken as food was converted into sugar by the saliva and pancreatic juice, absorbed, and carried to the liver, where it was brought under the protoplasmic action of the liver cells, which reduced it to glycogen—a process of dehydration. In the vegetable kingdom transmutation in the direction of dehydration might be observed in the production of cellulose and starch, which were end-products. In the animal kingdom an instance might be given of the production of a carbo-hydrate as an end-product, since it was present in the texture basis of the test or outer investment of the tunicata. But in the animal kingdom this was an exception; as a rule, carbo-hydrates were not end-products, but were utilised in the production of fat or proteid. That carbo-hydrates were thus utilised for the production of proteids was proved by the fact that the yeast plant could grow in Pasteur's liquid.

Pasteur's Liquid.

Ammonium tartrate $(NH_4)_2C_4H_4O_6$	1 part
Cane sugar $C_{12}H_{22}O_{11}$	10 parts
Ash of yeast	1 part
Water	100 parts

The Origin of Proteids by Incorporation of Carbo-hydrates.

In the multiplication of the yeast plant there was a production of fresh protoplasm, and therefore of fresh proteid which, under the special conditions of the growth of the yeast plant in Pasteur's liquid, must be derived from the incorporation of the sugar with the nitrogen of the tartrate. If it were objected that the carbon of the newly-formed proteid might be derived from the tartrate, the answer could be made that the tartrate in the fluid might be replaced by ammonium nitrate (NH_4NO_3), and the yeast would still grow. This afforded a demonstration that the carbo-hydrate (sugar) was used in the construction of the proteid.

The current opinion among vegetable physiologists was that in the deposition of cellulose and starch there was, first, an incorporation of the sugar with a proteid, and that then from this newly-formed body starch and cellulose were cleaved off. The proteid body with which this incorporation took place was probably asparagin ($C_4H_8N_2O_3$)—a crystallisable and therefore diffusible principle, which existed largely in the vegetable kingdom. This body, under the influence of protoplasmic activity, was caused to become incorporated with the sugar as a new complex proteid body, from which the starch was cleaved off.

Carbo-hydrate derived from Animal Proteids.

Dr. Pavy then proceeded to sketch the steps by which he had been led to the conclusion that a carbo-hydrate could be obtained from the cleavage of a proteid body by chemical means available in the laboratory. Finally, he arrived at a method of treating egg albumen which yielded a carbo-hydrate body readily soluble in water, yielding no coloration with iodine, and possessing no cupric-oxide reducing power.

This was obtained by whipping white of egg, and pouring it by degrees into a large capsule of boiling water acidulated with acetic acid. The coagulum thus obtained was washed, squeezed, and placed in a flask with a solution of potash. (For the whites of 12 eggs 20 grammes.) It was then kept on the water bath for two or three hours, or set aside till the following day, with, in either case, an occasional shaking. To the liquid thus obtained potash was added to bring up the proportion of potash to 10 per cent. The flask, fitted to an inverted receiver, was then boiled for half an hour. The liquid was rendered faintly acid with acetic acid, filtered, concentrated by evaporation, and poured slowly into alcohol (85 to 90 per cent.). The material separated out in a finely divided form, and on the following day was found to have settled into a gummy mass. (*The Physiology of the Carbo-hydrates.* London: 1894. Pp. 33 34.)

This body, which in its physical and certain of its chemical properties resembled the "animal gum" described by Landwehr, was by the action of mineral acids converted into a material which reduced cupric oxide. Emil Fischer, during the past decade, had prosecuted valuable researches founded upon the observation that with phenyl-hydrazine cupric-oxide reducing sugars formed osazones—compounds possessing definite crystalline characters. Dr. Pavy exhibited several of these osazones, and also a series of photo-micrographs shown with the lantern. He pointed out some of the differences observed in the characters of the crystals, and observed that the nearer the sugar from which the osazone was derived was to glucose the more acicular were the crystals. Finally, he exhibited the osazone obtained from the cleavage product of egg albumen, and demonstrated its crystalline character in a lantern slide.

A FURTHER NOTE ON THE RETURN OF THE KNEE JERK IN A TABETIC PATIENT AFTER AN ATTACK OF HEMIPLEGIA.

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AND
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Through the kindness of Dr. D. M. Taylor, at present in charge of the infirmary attached to Stepney Union, one of us (J. T.) had recently (February 6th, 1894) the opportunity of making a new examination of the patient B., whose case we described in the British Medical Journal of July 11th, 1891. This was a case of return of both knee jerks in a tabetic patient after an attack of right hemiplegia. The following is the note made at this recent examination.

B., aged 55. The patient is almost constantly in bed. He occasionally gets up, and with the help of another patient is able to walk somewhat feebly, but without any one-sided weakness, and without ataxy. He is almost totally blind. Psychically he is dazed, and cannot be got to answer questions intelligently. He keeps repeating that he is paralysed. There are no signs pointing to "general paralysis."

As he lies in bed it is seen that he has external strabismus of the left eye. The ocular movements, however, seem to be unimpaired. The pupils are unequal, the left being the larger, and no response either to light or on convergence is made out in either. With the ophthalmoscope distinct waxy atrophy of the right optic disc and patches of choroidal atrophy in the right fundus are visible. In the left eye there is a similar condition of atrophy of the optic nerve, but the choroidal changes are much more extensive and distinct. There seems to be no perception of light by the left eye, and but little by the right. In the limbs there is no paralysis, but all movements are weak. He is able to stand, even with his eyes closed, and also to walk, but his gait is feeble although not markedly unsteady. The right knee-jerk is still present, but it is very slight, and is only obtained with great difficulty by Jendrassik's method. No knee-jerk can be obtained on the left side after repeated and persistent trials to elicit it. The testing of sensibility is unsatisfactory and inconclusive on account of the dazed psychical condition of the patient and the untrustworthy character of his answers.

In our former paper (July, 1891) we wrote as follows:

"Before the hemiplegia or before the lateral sclerosis was well established, it may be that from the sclerosis of the posterior columns, there were too few fibres left intact in those columns for strong enough or sufficiently numerous impulses to act on the anterior horns concerned, so as to produce the jerk. Upon the ensuing of lateral sclerosis, according to current doctrine, the anterior horns become more excitable. Thus it may be that after this change in the horns the few fibres left intact in the posterior columns were sufficient for action on the horns, so that the jerk could be elicited. If this be so, and if the posterior sclerosis increases, the presumption is that the jerks will be once more lost. It is not likely that the lateral sclerosis will increase, at any rate so far as the lesion causing the hemiplegia is concerned with it."

As will be seen on reference to the report of the present (1894) state of this patient, what we predicted has to a certain extent taken place. On one side (the left), on which the knee-jerk could at one time be elicited, none now can be obtained, whilst on the right side—the hemiplegic one—where it was formerly obtained with facility, it can now only be obtained with difficulty, and is very slight. It thus seems that

the posterior sclerosis has progressed whilst the lateral sclerosis consecutive to the cerebral lesion which caused the hemiplegia had already, when the case was first published, reached its maximum. Presumably the posterior sclerosis will continue slowly to increase, and it seems more than likely that the knee-jerk on the hemiplegic side also will in course of time again disappear.

Since the publication of our paper already referred to dealing with this case, several observations of interest with reference to the state of the knee-jerks in hemiplegia, more especially when that paralysis is complicated with tabes or other conditions in which the phenomenon is usually absent, have come under our notice. A short time before our paper appeared Goldflam gave an account[1] of two cases illustrating the same state of things as we subsequently described. The first case was that of a man, aged 34, who had suffered from tabes for three years, and in whom both knee-jerks were absent. The patient then had an attack of right hemiplegia, and the knee-jerk returned on the paralysed side; it is not stated how soon. It remained present during the three or four months that elapsed before his death. The patient committed suicide; there was no *post-mortem* examination. The second case was that of a man, aged 57, who had suffered from tabes with loss of knee-jerks for some years. He then had an attack of loss of power affecting the left side of the body and the right arm, with unconsciousness. There was then—it is not stated how soon after the attack—great excess of all reflexes, and both knee-jerks were noted as very active.

Dr. John Ferguson, of Toronto, Canada,[2] has recorded two most interesting and important cases illustrating peculiarities of the knee-jerk. The first case was the converse of ours and is very valuable because of the *post-mortem* examination which was made and the changes of the cord which were found. It was that of a man who at the age of 36 had an attack of right hemiplegia. In the course of the next five years he had two more attacks, the paralysis affecting the same side. It was when suffering from his third attack that he was first seen by Dr. Ferguson. At this time his right knee-jerk was much exaggerated while the left one was only slightly more active than usual. On the right side there was also foot clonus, but this was not present on the left side. For six years after this he remained under Dr. Ferguson's observation. Soon after the third attack of hemiplegia he began to complain of paræsthesia in the feet and legs, while the knee-jerk, especially that on the left leg, gradually became weaker. In course of time there were lightning pains, ptosis and Argyll Robertson pupils, and the patient died in a laryngeal crisis. Before death the knee-jerk had entirely disappeared from the left leg and could only just be elicited in the right. The *post-mortem* examination revealed, besides a condition of local cerebral softening due to thrombosis, distinct degeneration in the right lateral and left anterior tracts of the cord and a few bundles of degeneration in the left lateral tract. In the posterior columns was the sclerosis characteristic of tabes dorsalis. This case, a case of tabes developing in a patient already hemiplegic, is, as we have said, the converse of that of our patient B. In the early condition of Dr. Ferguson's patient the state of the knee-jerks was that which is usual in hemiplegia, namely, exaggeration of both, but more especially of that on the paralysed side. But the subsequent development of sclerosis in the posterior columns presumably rendered functionless fibres in these columns which transmit impulses from the patella tendons to those anterior horn cells subserving the extensor muscles of the thighs and so abolished the knee-jerk. The condition of the cord was actually in Dr. Ferguson's patient that which we surmised to be probably present in our patient, namely, one of combined posterior and lateral sclerosis, although in his patient the lateral sclerosis was no doubt present before the posterior, whilst in our patient the posterior sclerosis was no doubt the first to occur in point of time.

The other case mentioned by Dr. Ferguson is somewhat analogous to that of our patient, although the original disease was not tabes but diabetes, in which also, as was first pointed out by Dr. Buzzard in this country,[3] the knee-jerk is sometimes lost. The patient was a man who began to suffer from diabetes in his forty-first year. During the next eighteen months the knee-jerk could not be detected with the most careful search. At the end of this time he had an attack of left hemiplegia, which is said to have developed slowly. By the end of a week a knee-jerk could be obtained on the left side, and it remained present up to the time of his death, but no jerk could ever be obtained on the right side. In this case it is to be assumed, according to current theories, that the lateral sclerosis produced by the lesion of the right side of the brain cut off the inhibitory influences passing down to cells of the left half of the lumbar enlargement which subserve the knee-jerk, thus permitting those cells to be acted on by fewer impulses from the patella tendon.

Of course knee-jerks lost in cases of diabetes may return when there is no hemiplegia, but in the case of Dr. Ferguson's patient the knee-jerk returned on the paralysed side alone. Whether in diabetes an abnormal condition exists in the nerves or whether it exists in the posterior columns of the cord is doubtful. However, Dr. Williamson[4] has lately found sclerosis in the posterior columns of the cord in several cases of diabetes, a most important observation.

In connection with the subject of the knee-jerk in hemiplegia, we may also refer to a case recently published by Dr. Ormerod[5] in which hemiplegia due to arterial occlusion was present. At first no knee-jerk could be obtained on either side. Some days after the onset of the hemiplegia, however, the jerk could be elicited on the paralysed side but it was never elicited on the sound side. The patient died of ulcerative endocarditis. This case is to some extent inconclusive, as it cannot be asserted that the knee-jerk was present before the hemiplegia, and the cord does not seem to have been examined. In such a case it is, of course, possible that the blood state indicated by the ulcerative endocarditis may have been such as to lead to abolition of the jerks. A careful examination of the cells of the lumbar region of the cord might have thrown some light on this point.

[1] *Berlin. klin. Wochenschr.*, 1891, No. 8.
[2] *Alienist and Neurologist*, January, 1892.
[3] *Lancet*, vol. ii, 1885.
[4] BRITISH MEDICAL JOURNAL, February 24th, 1894.
[5] *St. Bartholomew's Hospital Reports*, vol. xxvii.

A CASE OF VIRCHOW'S PSAMMOMA OF THE PITUITARY BODY, WITH REMARKS AS TO THE FUNCTION OF THAT STRUCTURE.

By WALTER L. WOOLLCOMBE, F.R.C.S.E.,
Assistant Surgeon, South Devon and East Cornwall Hospital, Plymouth.

IN the BRITISH MEDICAL JOURNAL of January 13th, 1894, a paper appeared on the Evolution of Function of the Pituitary Body and its Relation to the Central Nervous System, by Dr. W. Lloyd Andriezen, who, after an exhaustive series of experiments showing the important trophic influence of the pituitary gland on the central nervous system, drew certain conclusions as to what symptoms should be produced by ablation or destruction (by disease or new growth) of the pituitary gland.

Since the publication of this paper, a case has come under my observation, of which I append brief notes, which bears out in such a striking way many of the conclusions at which Dr. Andriezen arrives, that I venture to publish it.

M. C., female, aged 11, was a bright and particularly intelligent child till within five months of her death she was far above others of her age at school, and very fond of reading at night.

The family history was unimportant; some members of the family were strumous, but not markedly so. Five months before death she first complained of vertical headache and dimness of vision. In three weeks she had to leave school, and was taken to the eye infirmary, when the following note was made: "Nearly blind; pupils unequal; left larger than right; both act to light, but very sluggishly; no reaction to accommodation; right eye failed first, and now has only perception of light; ophthalmoscopically nothing abnormal save a deep pigment layer outside the disc."

One week later she was brought to me in a state of great depression and apathy; her expression was vacant, and unless spoken to and bothered to answer, she would sit or lie about, taking no interest in anything. She could walk without any difficulty or unsteadiness, but was very quickly tired, and did not care to move at all unless compelled to do so. She was very thin, weighing 3 st., 12 lbs.; this loss of flesh I was told was recent. The lungs and heart were normal. The temperature was subnormal. There was complete loss of appetite. No areas of anæs-

thesia and no paralysis beyond that of accommodation were found. The knee reflex was completely absent even when reinforced.

From this time till her death she was under my occasional observation, and developed no fresh symptoms beyond those referable to some pressure on the optic commissure, for example, optic atrophy, complete loss of sight, and eventually ptosis of the right lid. The emaciation was very rapid, so that for a week previous to death she was a mere skeleton, but her dislike for all food, and the consequent difficulty in feeding her would partly account for this. Her temperature remained subnormal throughout. There were no epileptiform convulsions and no muscular twitchings, nor, so far as I discovered, were there any attacks of dyspnœa.

I at first regarded this as a case of tuberculous meningitis, confined to a limited portion of the base, with probably a collection of fluid pressing on the optic commissure. The *post-mortem* examination (which was made under some difficulty in a cottage) showed the following condition: Convolu-



Fig. 1.



Fig. 2.

tions not markedly flattened, but vessels on surface injected. On lifting out the brain a growth was found filling the sella turcica from which it projected, pushing aside, but not invading, the cerebral hemisphere. It was about the size of an ordinary's hen's egg, and could with difficulty be separated from the walls of the sella turcica, it being necessary to scoop it out with a periosteal elevator. No trace of the optic commissure was to be seen. The consistence of the growth was in part soft and brain-like, in part fibrous, and contained calcareous particles.

The photo-micrographs, reproduced in Figs. 1 and 2, as well as the original sections, are by A. A. Carnell, Plymouth, and show very well the microscopic appearances, which Mr. H. T. Butlin pronounces to be those of "Virchow's psammoma," a growth whose seat of election is the pituitary gland.

Now this is a particularly good case for testing the accuracy of Dr. Andriezen's deductions as to the probable effects of ablation or destruction of the pituitary body in man, for the following reasons:

1. The nature of the growth is such that any symptoms which it produced must be due to its pressure on and destruction of those tissues in which it originated, or with which it came in contact during its growth, for a psammoma has no special malignancy in the sense of infectivity or metastases. Thus the disturbing factors which are present in all malignant infective growths, such as carcinomata and sarcomata, are absent. These disturbing factors are briefly:

(*a*) Toxic effects from the products of their growth and morbid activity.

(*b*) Increase of intracranial pressure (mechanical effect) from the size of the tumour. (This cannot be altogether excluded in the above case, although neither symptoms nor *post-mortem* appearances indicated much increase.)

(*c*) An absorption of nutritive proteids by the rapidly growing tumour, and a consequent deprivation of such proteids, (lymph, etc.), which would otherwise go to the nourishing of the surrounding tissues.

(*d*) Effects of local irritation first pointed out by Hughlings Jackson passing on to epileptiform convulsions, post-epileptic stupor, repetition of fits, and consequent dementia. These four factors, which so vitiate legitimate deductions that such tumours, even if starting in the pituitary body, would afford evidence of little value, are entirely absent in this case with the exception, perhaps, of some increase of intracranial pressure. The growth being practically limited to the pituitary gland without secondary infective foci and metastases, not producing epileptiform convulsions, and not absorbing fluid which would otherwise go to supply the nutrition of the brain, the conditions are singularly comparable to experimental destruction of the pituitary. The symptoms were precise and definite, and were passed through in the comparatively short space of five months.

After reading Dr. Andriezen's paper, and the eight symptoms which he tabulates as being those one would expect to get from experimental ablation of the pituitary, one cannot help being at once struck by the similarity between them and the symptoms in the case recorded above. He concludes that the symptoms should be (1) depression and apathy (the commencing failure of activity in the nerve centres); (2) muscular weakness (the first peripheral effect); (3) the loss of fine co-ordination and equilibration (correlated to 1 and 2); (4) the development of twitchings and irregular contractions (spasms) of the muscles in relation to the further progress of nutritive failure of the nerve centres; (5) a want of sufficient heat production and subnormal temperature; (6) a wasting of the body tissues in relation to the more rapid failure of nutrition of the central nervous system; (7) a probable compensatory polypnœa, or attacks of dyspnœa, the peripheral indication of the failure of the nerve centres to assimilate oxygen; and (8) a rapid progress towards death.

Now, all but the fourth and seventh of these symptoms were not only present but very marked, and it is quite possible that attacks of dyspnœa may have occurred without my knowledge, as my opportunities of seeing the patient were not frequent enough for very close observation.

I have no doubt that Dr. Andriezen would have found the symptoms definite enough to make a diagnosis of pituitary destruction, and in making it the evidence of pressure on the optic commissure would no doubt have been of assistance as a localising sign; but, besides this, the following points occur to me as distinguishing it from a growth in any other part of the brain:

1. The "depression and apathy" were such as do not occur with a growth of this size in other parts of the brain, and there are many instances of much larger growths existing in, say, the frontal lobe; in fact, any part except the sensori-motor localisable areas of the cortex and their nerve roots for years without producing the same symptoms as this pituitary growth.

2. The muscular weakness was at an early stage quite out of proportion to what one would expect from a small, simple tumour growing from the walls of the cranium, and not invading the brain substance, nor producing much increase of intracranial pressure. But if Dr. Andriezen's theory as to the function of the pituitary is adopted, the above symptoms would be fully accounted for by its destruction, and the consequent profound failure of nutrition of the brain and nervous system.

3. Subnormal temperature throughout is a valuable sign, and if it is found to be a constant accompaniment of lesions of the pituitary would be a great aid in diagnosis, as well as another link in the chain of similarity between the pituitary and the thyroid; for, in myxœdema, where the thyroid is involved, subnormal temperature is a constant feature, as is loss of knee-jerk, which was observed at an early stage of this case.

I will not attempt in this short paper to follow Dr. Andriezen's argument for regarding the pituitary body as exercising an important trophic influence on the brain and nervous system, but simply record the case as an instance of destruction of the pituitary body, not complicated by so many of those conditions as are usually met with in cases of new growth at the base of the brain, which tend to confuse and vitiate any legitimate deductions as to the share which the destruction of the pituitary body bears to the whole train of symptoms.

CASTRATION FOR HYPERTROPHY OF THE PROSTATE.

BY J. WILLIAM WHITE, M.D.,

Professor of Clinical Surgery in the University of Pennsylvania; Surgeon to the University and German Hospitals, Philadelphia.

MAY I ask the privilege of putting on record in your columns a statement as to a matter which may some day be of more or less surgical interest?

In December, 1892, I requested one of my assistants, Dr. Kirby, to make a series of experiments on dogs with a view to determining whether or not castration would be followed by notable atrophy of the prostate. The thought that this was possible had been suggested to me by the comparison long ago made by Velpeau and afterwards by Sir Henry Thompson between the prostatic and the uterine fibro-myomata.

Control observations as to the weight of the normal prostate in dogs were begun at once. The first castration was done January 27th, 1893; the others followed at intervals of a few days. The results, showing atrophy first of the glandular and then of the muscular elements, were so decisive, that I embodied in a paper I was then writing the suggestion that castration might be a valuable therapeutic measure in many cases of hypertrophied prostate. So far as I know the suggestion had never before been laid before the profession.

I subsequently learned of the observations of John Hunter and Owen, and the confirmatory investigations of Mr. Griffiths, as to the changes in and out of the rutting season in the prostate of the mole, hedgehog, and other animals, and as to the effect of castration in various species. Griffiths's observations appear to have been confined to animals already castrated for other reasons; no definite series of experiments is mentioned. He maintained, moreover, that the enlargements of the gland were not to be classed with the uterine fibro-myomata. His paper, which was written to demonstrate that the prostate is in its essential significance a sexual and not a urinary organ (a subject which has long been under discussion), contained a few illustrations, taken from various sources, of atrophy of the prostate in eunuchs. I found in addition a note by Harrison, that in cases of sterility in the male the prostate had been shown to be atrophied.

No reference existed in surgical literature to any possible application of these facts to the treatment of cases of hypertrophied prostate, but they strengthened me in my decision to bring the matter up for consideration.

I read the paper in Buffalo, New York, on June 1st, 1893, before the American Surgical Association. Abstracts were published during June in most of the medical journals of this country. On August 1st it was published in its entirety in the *Annals of Surgery*, and on September 9th a full abstract appeared in the BRITISH MEDICAL JOURNAL, that part of it relating to castration being unabridged. Since June, 1893, the following communications relating to the subject have appeared:

Centralblatt für Chirurgie, No. 35, September 2nd, 1893. Ramm of Christiania reported two cases operated on earlier in the year with marked improvement.

Ibid., No. 17, April 28th, 1894. The same writer gives the dates of his operations as April 3rd and April 25th, 1893, and reports a practical cure in each case.

BRITISH MEDICAL JOURNAL, September 16th, 1893. Mr. C. Mansell Moullin wrote that "the question of castration as a means for procuring involution of the enlarged prostate raised by Professor J. W. White in his address to the American Surgical Association deserves more than passing consideration," and stated that he had discussed it with a patient in November, 1892. He adds that "one single instance in which definite reduction in size was proved to have taken place would be of incalculable value."

Ibid., September 23rd, 1893. Mr. Reginald Harrison wrote, "as bearing upon the correspondence that has followed Dr. White's remarks on castration in preventing growth of the prostate," that the suggestion had been made to him by a patient some years ago, and that as a compromise he had subcutaneously divided the vasa deferentia. He knew no more of the course of the case than that the patient was alive and well six or seven years later.

(In the discussion that followed the reading of my paper in Buffalo, Dr. Mears asked if division of the vasa deferentia might not accomplish the same result as castration).

Ibid., September 23rd, 1893. Mr. MacMunn suggested that the sexual history past and present of the subjects of enlarged prostate be more freely studied, as well as the conditions of the gland in different races of men and the lower animals.

Ibid., September 30th. Mr. Moullin again called attention to the importance of getting definite information as to the effect of castration upon the abnormally enlarged gland in aged persons, as, he says, it must now be regarded as an established fact not only for animals but for man that "castration in early life prevents the full development of the prostate, and in adult life causes the normally developed gland to atrophy."

Ibid., September 30th. Mr. Griffiths called attention to Ramm's cases, and added, without allusion to my paper, that "this method of treatment is no doubt likely to suggest itself to anyone who has studied the nature and function of the prostate in its relation to the sexual function." He said further that it may in some cases prove an effectual remedy, but went on to call attention to the lack of proof that prostatic enlargement depends on sexual excitement.

Ibid., May 12th, 1894. The same writer called attention to his own letter of September 30th, and sent a translation of Ramm's latest reports of his two cases already alluded to.

Ibid., November 18th, 1893. Mr. Arthur Powell described a case which he said might "be of interest in connection with Professor White's recent address," and in which a patient with retention of urine from enlarged prostate, having undergone removal of the right testicle for a nodule and having a small left testicle, became impotent, and obtained relief from all his urinary symptoms. Rectal examination showed "marked diminution in the size of the prostate."

Medical News, Philadelphia, December 30th, 1893. Dr. Francis L. Haynes, of Los Angeles, California, announced his first operation. This was followed by two others. In the *Buffalo Medical and Surgical Journal* (March, 1894) he thus describes his cases:

"*White's Operation: Orchectomy for Hypertrophy of the Prostate.*—Following the suggestion of Professor White, of Philadelphia, I have three times made double castrations in old men afflicted with prostatic hypertrophy. (1) Operation eighty-four days ago in a case of two years' standing of moderate severity. The patient is practically cured. (2) Operation forty-seven days ago in a desperate case, requiring catheterisation every two hours, complicated by intense cystitis and by morphinism acquired as a result of frightful suffering. With the most devoted nursing this old man has improved wonderfully. Cystitis has disappeared: one-third of the urine is passed spontaneously; catheter is used about four or five hours; morphinism has been cured; general condition good. (3) Operation fourteen days ago. Incipient case; catheterisation almost impossible because of the peculiar development of the prostate."

In a fourth case section of the vas deferens gave no definite results.

During Christmas week, 1893, I saw, in consultation with Dr. F. Fremont Smith, at St. Augustine, Florida, an apparently hopeless case of hypertrophied prostate with marked sepsis, cystitis, beginning uræmia, etc. I advised a trial of castration, as the condition forbade any direct attack upon the prostate. Dr. Fremont Smith has just reported the case in a paper read before the Genito-urinary Section of the New York Academy of Medicine. The patient fifteen weeks after operation had gained 45 lbs., and has no symptoms of cystitis or other urinary trouble. He urinates freely and normally.

On January 31st, 1894, I operated on a medical man, aged 69 years, who had a very large prostate, about half the size of an

orange; who had passed no urine except by catheter for years, whose urine was loaded with mucus, was offensive, and at short intervals was filled with blood. At this time—fourteen weeks later—while he has not yet urinated spontaneously, rectal examination shows a reduction of the size of the prostate to about its normal dimensions. The catheter, which was formerly introduced for 9½ inches before reaching urine, now goes in only 8 inches, when urine begins to flow. Its introduction is easy and painless, instead of difficult and very painful. No blood has appeared in the urine for two months. The urine itself is entirely normal in appearance, odour, and in all other respects. I have during this time suggested the operation to three other patients, all of whom have declined it on account of my frank statement that it was yet in the experimental stage, and that no promise of benefit could be given.

The idea seems to have occurred vaguely to several persons, but certainly no one had made it public, or even formulated any distinct suggestion in regard to the matter, prior to my paper. Ramm's cases, though not published until between three and four months after my paper, appear to give him the operative priority in Europe, while Haynes undoubtedly did the first operation of the kind in the United States.

This, so far as I know, is the evidence existing on this subject up to this date. It would certainly seem to establish the claim of the operation to further and much more extended trial, and it shows, I think, that even on a basis of experiment and theory alone I was justified in suggesting it to the profession.

A CASE OF CHLOROSIS AND AMENORRHŒA WITH SYMPTOMS OF BRAIN DISEASE.

By F. W. BURTON-FANNING, M.B., M.R.C.P.,
Norwich.

DR. G. CRAWFORD THOMSON'S interesting communication in the BRITISH MEDICAL JOURNAL of May 19th induces me to record briefly two cases which strongly suggested to my mind that the brain might be affected in those cases of chlorosis that manifest optic neuritis.

S. G., aged 14, domestic servant, was admitted into Addenbrooke's Hospital in December, 1890, as a case of cerebellar tumour. There was no history of syphilis or phthisis, and her previous health had been very good. Menstruation occurred for the first time in September, but had not reappeared. For a month she had had severe pain in the occiput, neck, and shoulder of the right side. On admission the headache was intense—"as if the head was being cut open"—and gave her an oppressed and dazed appearance. She had frequent vomiting, which bore no necessary relation to food. She complained of "pins and needles" in both legs and in the trunk as high as the axillæ. There was no anæsthesia or paralysis, and the reflexes were normal. Double optic neuritis of moderate intensity was present. She was distinctly chlorotic, and her bowels were constipated; under treatment with iron and aperients she lost all her symptoms in a few weeks.

Last June I saw with Mr. Everett a case that reminded me forcibly of the above. A seamstress, aged 19, presenting a moderate degree of chlorosis, had not menstruated for three months. Somewhat suddenly she was attacked by severe headache and vomiting. When I saw her ten days later she had intense and persistent pain in the right frontal and occipital regions, whence it shot into the neck and down the posterior surface of the right arm and forearm, which felt numb. The headache was unbearable; she bored her head into the pillow, and was unable to attend to any questions. Antipyrin and croton chloral gave her no relief, and subcutaneous injections of morphine alone gave her any respite. Ophthalmoscopic examination revealed blurred margins to each disc, with full and tortuous veins, and in the left fundus obscuration of the vessels by inflammatory tissue.

On the following day Mr. Everett found her in a "delirious, semi-conscious condition," but after a few days' administration of citrate of iron and ammonium she began to improve, and in a month was well.

In both these cases the intensity of the headache was much in excess of what one ordinarily meets with in chlorosis, besides which there were vomiting, giddiness, and sensory disturbances in addition to the optic neuritis. Both patients complained of pain in the neck, which was also noticed in a case recorded by Dr. Stephen Mackenzie.[1] The absence of paralysis of any cranial nerve and of fever was a little opposed to the diagnosis of basic meningitis in my cases, and I inclined rather to the theory that there was increased intracranial tension from œdema of the brain, which again was caused by the condition of the blood

Dr. Gowers[2] holds that amenorrhœa is certainly not the cause of optic neuritis but an associated symptom, which is supported by a third case that I have lately seen with Dr. Johnson Taylor.

A chlorotic girl, whose loss had certainly been scanty but who had never missed a period, developed slight optic neuritis on the left side, her vision with this eye was reduced to ⅝ and 18 Jaeger, but it improved rapidly under iron, with aperients.

A CASE OF AMENORRHŒA WITH BRAIN SYMPTOMS.

By F. W. JOLLYE, M.R.C.S., L.R.C.P.LOND., D.P.H.,
Medical Officer of Health to the Alresford Sanitary Authority.

THE following history—notes of which I took while with Mr. Willcox, Warminster, in whose practice I saw the case—may be of interest when taken in conjunction with the one recorded by Dr. Crawford Thomson in the BRITISH MEDICAL JOURNAL of May 19th:

E. D., a girl, aged 17 years, whose family history was good, complained on December 5th, 1888, of occipital and temporal headache, with stiffness of the neck. These symptoms increasing, she had to take to her bed on December 12th. On December 16th she suffered from diplopia, with nausea, constipation, and insomnia. When seen on December 19th she was rather anæmic and had not menstruated for three months. She complained of the above-mentioned symptoms, of tenderness of the muscles at the back of the neck and in the dorsal region of the spine, and of a feeling of soreness down the arms, and she had occasional attacks of vomiting; there was no retraction of the head or loss of power or incoordination in the limbs, face, or tongue. The knee jerks were exaggerated on both sides, and there was double ankle clonus and front tap contraction; the plantar reflexes were abolished, but the abdominal ones were slightly marked. Tactile sensation and the functions of the bladder and rectum were normal. Homonymous diplopia on looking to the right was present owing to partial paralysis of the right external rectus; the right pupil was larger than the left, and both reacted sluggishly to light and accommodation; there was no limitation of the field of vision or colour blindness, but there was advanced double optic neuritis, the discs being twice their normal size, and there were white spots near the margins. The temperature was 99.2° and the pulse 100; the urine, specific gravity 1022, contained no sugar or albumen, but deposited phosphates. The treatment consisted of keeping her quiet in a dark room with blisters applied to the temporal regions, and she was given a mixture of quinine and arsenic, and antipyrin occasionally to relieve the headache. Under this treatment improvement set in and continued gradually, so that by the end of January, 1889, the diplopia and headache had ceased, but ankle clonus was unobtainable.

The following notes show the subsequent course of the disease. February 20th, 1889. Patient has occasional headache; optic discs swollen and edges indistinct, arteries obscured, and veins dilated and tortuous. V. = $\frac{4}{5}$. July 16th, 1889. Menses regular (for how long is not stated in the notes). Discs pale and vessels very small. February 12th, 1890. V. = ⅝ with both eyes. February 5th, 1891. Was rather chlorotic, otherwise is very well, but the knee-jerks are still very brisk, and the optic discs are pale and the vessels very small. The tem-

[1] BRITISH MEDICAL JOURNAL, 1885, p. 328.
[2] BRITISH MEDICAL JOURNAL, 1881, p 797

perature was never above the normal after the first day, and the pulse was generally between 80 and 90 per minute.

The paralysis of the sixth nerve in this case made the diagnosis rather uncertain, the lesion being either a basal meningitis of limited extent, or a tuberculous tumour which afterwards became quiescent. If the latter, the amenorrhœa was, perhaps, purely accidental, or, if the former, had they any relation to one another as cause and effect?

RUPTURED INTESTINE FROM ACCIDENT: LAPAROTOMY: SUTURE OF GUT: RECOVERY.

By W. THELWALL THOMAS, F.R.C.S.,
Honorary Assistant Surgeon, Royal Infirmary Liverpool; Assistant Lecturer on Anatomy, University College.

History.

E. G., single, aged 55, was admitted into the infirmary on April 3rd complaining of abdominal pain and vomiting. Twenty-four hours previously she was returning from her garden into the house carrying a chair before her, which inadvertently struck the doorpost, bringing her abdomen into violent contact with the other side of the chair. This caused her severe pain, and she vomited immediately afterwards; the pain continued, increased, and with difficulty she managed in a doubled-up condition to reach her bed, when she again vomited.

Dr. Pitts, of West Derby, was sent for. She was unable to pass flatus, although feeling a great desire to do so. Four years previously Mr. Mitchell Banks operated on a left femoral hernia, strangulated, since which time she had worn a light truss.

Dr. Pitts examined her, and considered that a small knuckle of bowel had become constricted at the old hernial site. He did not attempt taxis, but advised immediate operation. She vomited again next morning, and the abdomen continued to distend.

Owing to the absence of Mr. Banks, she came under my care. The patient, a thin woman, walked across the casualty room, and without assistance climbed on to a couch for examination. She was in good general condition; the tongue moist, pulse about 80 and strong. The abdomen was distended, and very tender on palpation; the recti muscles were rigid, and standing prominently on the thin walls. In the left Scarpa's triangle could be felt an irregular nodule, the size of a walnut; firmly adherent to a linear cicatrix, and very tender. A recurrence of the hernia was diagnosed.

Operation.

Half an hour after admission the swelling in the groin was explored and found to be the old femoral sac firmly adherent to the femoral vein; in the centre was a narrow canal through which the little finger was forced; no bowel was discovered, but there rushed out a few ounces of putrid serum containing flakes of yellowish lymph. It was now clear that the intestine was ruptured. The femoral sac was ligatured, the wound thoroughly carbolised, and a temporary dressing was applied and held in position by a dresser.

The abdominal wall was rapidly cleansed with a nail brush, using soap first, then 1 in 20 carbolic lotion. An incision 2½ inches in length was made below the umbilicus when half a pint or so of putrid serum with large yellowish flakes of puriform lymph escaped. The intestines were all distended, no collapsed coils could be found, so the small intestine was withdrawn. After 2 feet had been examined a perforation was found situated opposite the mesentery, oval in shape, measuring ¾ inch by ¼ inch, from which oozed liquid fæcal matter; the long axis of the aperture was parallel to the long axis of the intestine, and the mucous membrane was everted. The intestines were congested and glued together by yellow lymph. The gut was clamped above and below by finger and thumb, and the segment thus isolated washed out with 1 in 100 carbolic lotion, two rows of continuous Lembert sutures were applied, the mucous membrane being carefully tucked in. Subsequently two interrupted Lembert sutures were used where the union was considered weak. Green catgut was employed. On relieving the bowel no leakage took place, so after thoroughly irrigating the abdomen with 1 in 100 carbolic lotion, the fingers agitating the intestines and liberating pocketed serum, the sutured portion was reintroduced. The wound was closed by four silkworm gut sutures and a small glass drainage tube inserted.

The groin wound was again cleansed and sutured. The dressings used were wood wool tissue over cyanide gauze. At the end of the operation, which lasted 35 minutes, the patient was in good condition.

Subsequent History.

No opium was given; sips of warm water or weak tea were ordered if asked for. If any collapse occurred small doses of brandy were ordered, but this was not required. Next morning at 3 A.M. the patient vomited some milk, which had been taken before admission. On the third day redness was noticed around the groin wound. The stitches were removed, some cellular tissue sloughs (probably caused by the putrid serum) removed, and the surface swabbed with pure carbolic acid. This ended the cellulitis. Flatus passed, and the abdomen much less distended.

On the fourth day, the glass tube was removed; 5 ounces of milk were allowed in twenty-four hours. On the sixth day half a pint of beef-tea was added to the diet. On the tenth day the bowels were well moved by enema. On the eleventh day fish was added to the diet. From this day recovery was uninterrupted. She was kept in bed for a month, then allowed up wearing an abdominal belt, to which was attached a firm horsehair pad covered with leather, and buckling around the thigh as a femoral truss.

Temperature.

On the night of operation the temperature was 100.2° F., next night 99.6°, subsequently it was only once above 99°: this was on the sixth day, when it was 99.2°.

Remarks.

The case presents some interesting features: 1. The slight accident. 2. The opportunity it presented for examining a case of radical cure. 3. The absence of symptoms in so severe a case of septic peritonitis, only distension and tenderness being present. 4. The intense fæcal odour of the serum that escaped from the femoral wound made the diagnosis of ruptured intestine certain. 5. The use of carbolic lotion, on account of the great septicity, without any untoward result. 6. The bowel being normal around the aperture made the suggested tearing away of bowel adherent to site of radical cure improbable.

For assistance at the operation I am indebted to Mr. Agnew, and for the notes to Mr. F. E. Marshall, surgical dresser.

DRS. MICHAUX and De Marbaix of Brussels have started for the Congo. Dr. De Marbaix's mission is purely scientific: he is to be at the head of the laboratory of bacteriology and experimental pathology which the Belgian Government is about to establish at Boma.

RESIDENT MEDICAL OFFICER FOR THE CITY HOSPITAL, ABERDEEN.—The Public Health Committee have agreed to recommend the Town Council to appoint as the resident medical officer at the City Hospital a graduate in medicine at a salary of £50 per annum, with board and lodging. The gentleman appointed will have to devote his whole time to the duties of the office, Dr. Matthew Hay being recognised as the head of the hospital. It cannot be said that the salary recommended is at all extravagant.

MEDICAL MISSIONARIES.—At a meeting of the guild of St. Luke held in St. James's Hall a paper was read by the Rev. Watson King Ormsby on Medical Missions, in which he strongly supported the necessity of sending out only fully qualified persons as medical missionaries. He thought also that they should not be asked or expected to give a lifelong service; it would be wiser, he said, to encourage our young men, after completing their studies and obtaining their diplomas, to go out, say, for five, three, or even two years to a foreign station, and then return to practise at home. Evidently there was a lack of recruits, and he thought their difficulty would be best met by raising the standard, and stamping out the unqualified so-called medical missionary. This is an interesting corroboration of the view we have always held on the subject.

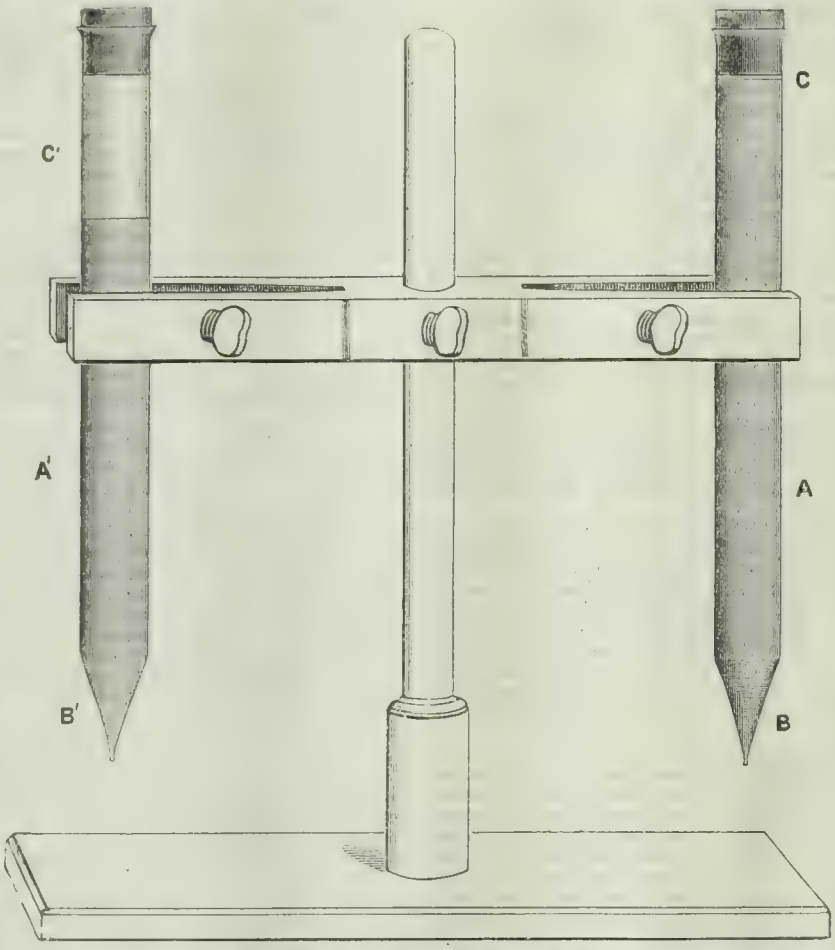
A METHOD OF COLLECTING AND PRESERVING URINARY CASTS AND OTHER ORGANIC URINARY SEDIMENTS.

By THOMAS HARRIS, M.D.Lond., F.R.C.P.,

Physician to the Manchester Royal Infirmary; and Lecturer on Diseases of the Respiratory Organs in the Owens College.

It is often desirable to preserve and retain for future reference and for teaching purposes renal casts or other organic urinary sediments. The reason why such permanent preparations are not more frequently made is probably partly due to the time such work requires, but chiefly, I think, to the failures which many have experienced in attempting to preserve organic urinary sediments in a condition in which they retain the appearances presented when seen in recently passed urine.

About ten years ago I was interested in this subject, but was so disappointed with the way the microscopical specimens kept, or rather did not keep, that I ceased to attempt to preserve organic urinary sediments. Between two and three years ago I again began to work at the subject, and after several unsuccessful efforts obtained a method which has given very satisfactory results. I have used the method regularly now for over two years, and as all my specimens have retained the characters which they presented when they were mounted. I think the method will not cause disappointment on the score of the deterioration of the specimens. The principle of the method is the same as that which has been usually adopted and recommended for the preservation of organic urinary sediments. The deposit is taken from the urine and mixed with a preservative fluid, and subsequently hermetically sealed on a glass slide.



B, A, C, represents a tube which has been properly filled so that only a small air space has been left at C; the sediment is seen to have collected at B. B', A', C', represents a tube which has not been sufficientlyfilled, too much air space having been left at C'; the consequence has been that through the alternate expansion and contraction of the column of air at C' above the fluid, the sediment has been driven out and lost.

The preservative fluid is a solution of potassium acetate saturated with chloroform, and is prepared as follows: Potassium acetate, 60 grammes; chloroform, 10 c.c.; distilled water 1,000 c.c.

The potassium acetate is dissolved in a small quantity of the water and the solution filtered; the chloroform is then added to the filtrate, which is then placed in a stoppered bottle of at least a litre capacity, with about half the remaining quantity of water, and thoroughly shaken for one or two minutes. The remaining portion of the water is then added and the solution again thoroughly shaken and allowed to stand twelve hours. At the end of that time the solution will be perfectly clear, the undissolved portion of the chloroform will have settled to the bottom, and the clear supernatant potassium acetate and chloroform solution is ready for use. It is advisable to leave the portion of chloroform which is undissolved in the bottle so as to maintain the strength of the chloroform solution. The specific gravity of this solution will be found to be about 1030.[1]

The urinary sediment is obtained in the usual way, by allowing the urine to stand in a urine glass having a conical bottom for twelve to twenty-four hours. When the sediment has collected at the bottom of the glass, about 1 to 2 cubic centimetres of it are withdrawn by means of a pipette and placed in some of the preservative fluid which has been placed in a glass tube similar to those represented in the accompanying illustration. The deposit in the course of six to twelve hours gradually sinks through the fluid to the lower tapered extremity of the tube, and then by means of pressure on the india-rubber cork one or two drops are forced out and mounted in a cell on a microscopical glass slide.

The tube employed for this purpose is made of ordinary glass tubing about $\frac{5}{8}$ inch in diameter, which is drawn out to a point so that the lower opening is about $\frac{1}{16}$ inch in diameter, the length of the tube when so drawn out being about 13 inches and its capacity about 60 c.c. The tube is fitted with an india-rubber cork $1\frac{1}{4}$ inch long, it being an advantage to have a long cork, as the tube is then less liable to leak. These tubes and corks can be obtained from Mr. R. Kanthack, 21, Golden Square, London, or from Messrs. Woolley, Sons, and Co., Victoria Bridge, Manchester. Such a tube is a convenient means of passing the urinary sediment through a large volume of the preservative fluid and of subsequently easily obtaining the sediment for microscopical purposes, as pressure upon the india-rubber cork readily drives out a small portion of the washed sediment when it has collected in the lower part of the tube.

The above is the summary of the method employed, but as much of the success in obtaining good and clean preparations of organic urinary sediments depends upon attention

[1] Dr. E. S. Wood, in a reviser's note at page 335 of Neubauer and Vogel's work, *Analysis of Urine*, states that a solution of acetate of potassium, to which a little carbolic acid has been added, is an excellent preservative fluid for organised urinary sediments, and that the acetate of potassium solution should have a specific gravity of between 1050 and 1060. A solution of so high a density is unnecessary and inconvenient if the method here described is employed.

to small details, I may perhaps be allowed to describe the various steps which should be taken.

The vessel into which the urine is passed should not only be thoroughly cleansed by being scalded out, but it should not be dried or wiped out with any towel or other material before the urine is passed into it. If the vessel has been so treated it should be rinsed out with cold water immediately before the patient uses it. The object of this is to obtain a sediment free from all dirt, cotton fibres, etc., which cannot be done if the urine is passed into a vessel which has been dried with an ordinary towel, or left standing some time in the bedroom or a hospital ward. The urine having been passed into a vessel so prepared, is poured into an ordinary urine glass of about four ounce capacity with a conical bottom; the urine glass having been as carefully prepared as the first vessel into which the urine was passed. If the patient is a male it is advisable that he should pass the urine directly into the urine glass. The urine is covered to prevent the entrance of dust, and allowed to stand about twelve hours.[2] At the end of that time some of the sediment is withdrawn by means of a glass pipette, from 1 to 2 c.c. of the sediment being an ample quantity, and placed in one of the drawn-out tubes containing the preservative fluid.

To carry this out the tube is filled with the preservative fluid to within about one inch of the top, the tube being held in the left hand, and the tip of the first finger placed beneath the lower opening whilst the tube is being filled.

The sediment is then withdrawn from the bottom of the urine glass by means of a pipette, and at once placed in the glass tube at the upper part of the preservative fluid. The india-rubber cork is then firmly inserted, the finger being withdrawn from the lower opening as this is being done, and a little of the fluid will escape from the lower opening until equilibrium is established. The tube is then placed in a vertical position in a burette holder, and allowed to stand about twelve hours. At the end of this time the sediment will have gradually passed from the top of the tube through the preservative fluid, and collected in the tapered lower extremity, and is ready for mounting. (See illustration B.A.C.)

When the sediment has subsided a small portion of it is readily obtained by pressure upon the india-rubber cork, which is made to act as a piston. At the time pressure is being made upon the cork a glass microscopical slide, on which a shallow cell has been previously made with some cement, is held beneath the pointed lower extremity of the tube, and the drops, as they are pressed out, are received on to the glass slide. A cover slip is then placed over the cell, and the excess of fluid having been removed by filter paper, the cover glass is made firm and hermetically sealed by ringing it with cement.

The actual time spent in performing these manipulations is extremely short. A few further precautions are necessary, however, in some cases.

In collecting urine deposits it is usually sufficient to employ the ordinary sized urine glasses of 3 or 4 ounce capacity, but if the casts are not numerous a glass having double the usual capacity but still having the conically-shaped bottom may be advantageously employed. I do not think much advantage is gained by setting aside a larger quantity of urine than this to deposit. In some weather and in all cases where the urine has a tendency to become the seat of bacterial growth after being passed a piece of camphor may be placed in the urine. As the camphor will float on the top it will not interfere with the subsequent collection of the deposit and it will retard considerably the decomposition of the urine.[3] It is also advantageous to place a piece of camphor in the chamber when the urine is passed only in small quantities and some delay ensues before sufficient urine is obtained to place in the urine glass to sediment.

Where the urine is very concentrated and deposits urates on cooling great difficulty is experienced in finding casts among the uratic deposit. In such cases the urine immediately on being passed should be diluted with equal parts of the potassium acetate and chloroform solution, and then put aside in the usual way to sediment. The dilution with the potassium acetate solution usually prevents the deposition of urates, and this plan will be found more satisfactory than to attempt to keep the urine warm, and by that means to prevent the formation of the urates.

Leucorrhœal discharge is one of the frequent causes which prevent good preparations or urinary casts being obtained in cases of Bright's disease in the female. The only efficient method which I know of in such cases is to have the vagina syringed out before the specimen of urine is collected.

When a urinary sediment has been put into the preservative fluid the glass tube should be as nearly as possible full after the sediment has been introduced, only a very small air space remaining between the cork and the top of the fluid (see tube B A C in the illustration). A large air space, such as is represented as occurring in tube B′ A′ C′ must not be left, because the alteration in the temperature of the room or laboratory acts upon the column of air above the fluid and gradually drives out the sediment when it has collected below.

It all depends upon the amount and the thickness of the sediment whether it is or is not necessary to add any preservative fluid from the stock bottle to the sediment after it is placed upon the slide. If the sediment is not a large nor a dense one, it is simply necessary to proceed in the manner above described, and to put the cover-glass immediately on the sediment when it has been pressed out on to the slide. If, on the other hand, the sediment is copious and very dense, it is advisable to press out only one drop of the sediment from the tube and to dilute it with about two drops of the preservative fluid, to mix the sediment with the added fluid gently by means of a needle, and then to place the cover-glass on it and seal it up as before.

It is, of course, necessary to use a reliable cement for making the cell on the slide and for sealing on the cover-glass. Some cements readily crack when they dry, and the preparation, not being hermetically sealed, spoils.

The method will be found simple of manipulation, and the specimens so prepared will keep. Urinary casts and other organic urinary sediments undergo extremely little alteration during the process. Of course passing some forms of casts through such a solution must occasion some slight change in the cast. Casts composed largely of blood corpuscles or of blood-colouring matter become slightly paler in consequence of a portion of the blood-colouring matter being unavoidably dissolved during the passage of the cast through the fluid, but such a change is slight. Some granules, fat droplets, or cells on casts may also be lost, but not to any material extent, if there has been no undue shaking of the tube or other roughness in the manipulations.

It is very rare to obtain urinary sediments which will not have sunk to the bottom of the tube at the end of twelve hours; I have, however, occasionally met with sediments which at the end of twelve hours had only sunk a short distance through the fluid. In such cases it is advisable to press the india-rubber cork forcibly and drive out one or two drops of fluid, and then to allow the tube to stand for another six to twelve hours, by which time it will usually be found that the sediment has sunk to the bottom of the tube and is ready for mounting. Usually it is not advisable to leave the sediment longer than twelve hours in the tube; when it has sunk to the bottom of the tube it is best to mount some of it at once.

It will be understood that the above method is not suitable for the preservation of crystals and inorganic deposits generally. Usually, however, oxalate of lime crystals can be well preserved by it, whilst phosphatic crystals, and crystals or uric acid are partially or completely dissolved by the potassium acetate solution.

[2] I have not found it necessary to employ a centrifugal machine for the separation of urinary deposits; of course if such a machine is available, time can be saved.

[3] The employment of a centrifugal machine, as is frequently recommended, would render this procedure and the delay unnecessary.

UNIVERSITY COLLEGE HOSPITAL.—The annual dinner in aid of the funds of this hospital was held on June 13th at the Criterion. Mr. Justice Charles, who occupied the chair, said that the hospital had been in existence sixty years, and that it had recently passed through a trying financial period. It had received £15,000 as compensation for the removal of the bar at the top of Gower Street, but far more was required before the task of reconstructing the hospital on modern principles could be undertaken. The Treasurer announced donations of £4,440 and a subscription list increased by £21.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

IS CANCER CONTAGIOUS?

THE very able and interesting paper by Mr. D'Arcy Power on the subject of "Cancer Houses and their Victims" induces me to send you some brief particulars of apparent contagion which have come within my own knowledge. They may have been "mere coincidences," to quote Mr. Power's words, but yet seem worthy of being placed on record.

About twenty-two years ago a very distinguished hospital surgeon in Manchester, at the urgent request of a lady patient, attended daily to dress her cancerous breast until her death, which occurred at the end of about twelve months. He himself died within two years of cancer of the bladder. An intimate friend of my own, well known as an ophthalmic surgeon, personally attended his own wife, who had long been the subject of cancerous disease. She died in February, 1888, and her husband developed similar disease in the stomach, and died in August of the same year.

However difficult of explanation such cases may be, they are well worthy of our most serious attention.

J. WRIGHT BAKER,
Buxton. Consulting Surgeon to the Derbyshire Royal Infirmary.

THE HEREDITY OF CANCER.

UNDOUBTEDLY one of the most important of the unsolved pathological problems is cancer. How, why, where, whence comes it? My experience of cancer has been rather opposed to the hereditary origin in the majority of cases, but occasionally you come across such a string of cases in one family, that you are compelled to admit the existence of a something more active than mere coincidence.

A young girl was brought by her grandmother to me: the family history was as follows. The girl's mother died of rapid cancer of the womb, aged 30. She was only ill six months, and previously the very type of robust health. Of the six children of this woman one only is living, the delicate girl above mentioned. The grandmother, aged 63, is healthy, but one of her brothers died of cancer of the lip, aged 35. Her father had a cancer taken out of his lip five years before he died of another complaint, aged 70. Another of his brothers died of cancer of the lip, and yet another of cancer of the hand. The father of these three died of cancer. Mrs. H., the grandmother of my patient, well remembers him dying. His father also died of cancer, so that we here have it in five generations. They all lived in different houses.

Blackpool. WILLIAM HARDMAN.

CASE OF PHTHISICAL CONSOLIDATION OF RIGHT LUNG WITH PARALYSIS OF RIGHT ARM.

L. D., aged 14, has suffered from phthisis for some months. There is consolidation of the upper half of the right lung. About two months ago she complained of severe pain in the right arm, chiefly down the inner side. In a week or two the arm and fingers became completely paralysed, and remained so till about a week ago, when movement began to return, the severe pain having ceased somewhat earlier. Movement returned first at the elbow-joint, then at the shoulder, and now she can move the thumb and wrist, but all the fingers still remain paralysed. It seemed to me that the brachial plexus was implicated in an inflammation of the cellular tissue consequent on the irritation caused by the pleurisy over the right apex. I painted the region of the brachial plexus and right apex with iodine, and had the arm wrapped in cotton wool, expecting that movement would gradually return.

Gamlingay, Cambridgeshire. W. S. SYME, M.B., C.M.

"EPILEPSY IN OLD AGE."

DR. MANSEL SYMPSON'S very interesting cases of Epilepsy in Old Age recall to my memory some results which I arrived at some time ago whilst inquiring into the specific gravity of the blood of the insane, and the present seems an opportune moment for mentioning some of them.

I noticed that in those afflicted with epilepsy a distinct increase of one, two, or three degrees occurred at the time of the epileptic seizure.

The observations, conducted by a modification of Professor Roy's method, were somewhat protracted, 63 patients in all being taken for observation. Observations were made in 60 of these—once during freedom from fits and once during a seizure. The observations on the remaining 3 were made on thirty consecutive days, the patients being fed on a similar diet during the time. From the results so obtained[1] I had no doubt that a rise in the specific gravity occurred during the time of the seizure.

In old age, as in early youth, the blood increases in density. May not the epilepsy of old age be a display of the want of harmony of the nerve cells with their altered environment in the particular cases in which the disease supervenes?

W. JOHNSON SMYTH, M.D.,
Guards' Hospital, S.W. Surgeon-Lieutenant A.M.D.

PERSISTENT THYREO-GLOSSAL DUCT.

IN connection with Mr. Morton's case of persistent thyreo-glossal duct, the following may be of interest.

A boy, aged 12, rejected by the army surgeons on account of a sinus in the neck, came to me in September, 1891. He complained of a hole in his neck "weeping" fluid like uncooked white of egg, and wished it cured so that he might enlist. Seven years earlier he noticed a lump the size of a marble in the front of the neck; a year later it was lanced, and "blood and matter" let out. The sinus had wept ever since. I found a transverse fold of skin projecting downwards just at the angle between the chin and the pomum Adami. On raising this fold a small hole, admitting a probe upwards for 1¼ inch, was seen. On pinching up the skin about the orifice a thickened cord could be felt running upwards, which became pulled upon during deglutition. Nothing was to be seen or felt from the mouth; the thyroid gland was undoubtedly enlarged, the isthmus markedly so.

The duct was dissected and scraped out, but ineffectually, and as curdy pus continued to exude and the orifice was everted, in November, 1891, I dissected out the cord up to the thyro-hyoid membrane, and found it ended in the periosteum over the body of the hyoid bone. The cord was $\frac{1}{16}$th of an inch in diameter and 1 inch long, with a canal $\frac{1}{4}$ inch long. During November the wound broke down and secreted stringy muco-pus till July, 1892, when the condition resembled a tuberculous sinus. The unhealthy area was included in an elliptical incision, which was extended down to the deep fascia covering the thyroid gland, and the diseased tissue completely extirpated. The wound healed soundly, and has remained so.

Three operations were required to cure this case, and why the second failed is curious, for, apparently, then the disease was thoroughly eradicated.

REGINALD H. LUCY, F.R.C.S.,
Plymouth. Assistant-Surgeon, South Devon Hospital.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

VICTORIA HOSPITAL, HULL.

CASE OF THYREO-GLOSSAL CYST TREATED BY EXCISION.

(Under the care of Mr. ALFRED PARKIN.)

J. S., aged 2 years and 9 months, was admitted on May 4th, 1894, for a small lump in the middle line of the neck. It was first noticed when the child was 6 months old, but since then had gradually increased in size.

On admission there was a globular median swelling, apparently about the size of a small cherry, situated over the thyroid cartilage, and extending deeply between the thyroid and the hyoid bone. It fluctuated readily and was obviously beneath the deep fascia. There was no pain on manipula-

[1] *Vide Journal of Mental Science*, 1891.

tion, but pressure upon it caused interference with respiration.

Under chloroform the swelling was explored, and found to be a very thin-walled cyst, full of colourless, glairy fluid. It lay on the right ala of the thyroid cartilage, and thence passed upwards beneath the hyoid bone. Below it was firmly connected with a well-marked central lobe of the thyroid gland. The size of the cyst and the amount of fluid contained in it were both greater than imagined before the operation. The fluid itself was exactly like that found in many thyroid cysts. The whole of the cyst wall was carefully excised, and the vertical incision sewn up with a continuous suture. Union was complete at the end of six days, and there was no rise of temperature. Since the operation there has been no return of the swelling.

REMARKS.—The diagnosis in this case was obvious before operation, on account of the central position of the swelling, its relation to the thyroid cartilage, and its deep attachment behind the hyoid bone. At the time of operation the relation of the swelling to a large pyramidal lobe of the thyroid was very evident. The only difficulty experienced was in removing the part of the cyst behind the hyoid bone, on account of the depth of this portion.

The case resembles closely that described in the BRITISH MEDICAL JOURNAL for May 12th, by Mr. C. A. Morton, and those described by Mr. Durham, Mr. Raymond Johnson, and Mr. Bland Sutton.

GOVERNMENT CIVIL HOSPITAL, HONG KONG.

COMPOUND DEPRESSED FRACTURE OF FRONTAL BONE: WOUNDS OF URETHRA AND SCROTUM: RECOVERY.[1]

(By J. M. ATKINSON, M.D., Superintendent of the Hospital, and President of the Hong Kong and China Branch of the British Medical Association.)

LIN A LIN, aged 36, a coolie, was admitted on March 23rd, 1893, at 8 P.M., with a police order stating that he had attempted to commit suicide. He was very much exhausted from loss of blood, and quite insensible. The forehead was covered with the usual Chinese tobacco (native styptic), on removing which I found a large hole in the frontal bone, 2 ins. in length by about 1½ in. in width, and 1½ in. to 2 ins. in depth, situated some 3 ins. above the root of the nose, just to the right of the median line; the skin in front of this had been simply slashed to pieces. On reflecting the remains of this it was seen that the dura mater had been torn by the depressed pieces of bone, and through the rent brain matter was protruding.

Several small vessels were twisted, some seven or eight pieces of bone removed which were pressing on the dura mater, and the wound carefully syringed out with a solution of corrosive sublimate, 1 in 1,000. The skin was drawn together as far as possible, and sutured, and a pad of carbolic oiled lint applied. The scrotum was slashed about in an indescribable way, the urethra was cut across in three or four different places, the torn and lacerated scrotum had so contracted that there seemed to be no skin left. The left testicle was hanging out of the wound, and half the right testicle had been removed; the rest of this was removed, and the skin was brought together by means of some fifteen sutures. It was found quite impossible to restore the urethra. Accordingly a No. 7 silver catheter was passed through the proximal end into the bladder, the edges of this opening being attached to the skin.

Brandy in the meantime had been given, and by this time the patient had slightly regained consciousness; half a grain of morphine was injected, and he was put to bed. The pulse was 140, and the temperature 101° F.

On the following morning the patient, much to my astonishment, was much better; the pulse was quieter, he was quite conscious, and there were no signs of any paralysis; the temperature was 102° F., and the pulse 96.

For the next few days he was in a critical condition, and the temperature remained high, with morning remissions until April 5th, after which the evening temperature did not exceed 99.8°.

April 2nd, about 3 P.M., the wardmaster reported that the patient had had a sort of fit, the whole of the body being convulsed and the patient being quite insensible; this lasted for a few minutes, Dr. Lowson was called to see him, and by the time he arrived the patient was conscious, though somewhat dazed. The wardmaster did not notice where the convulsions originated. He was ordered a grain of hyd. c. creta every four hours, and this was continued for some time.

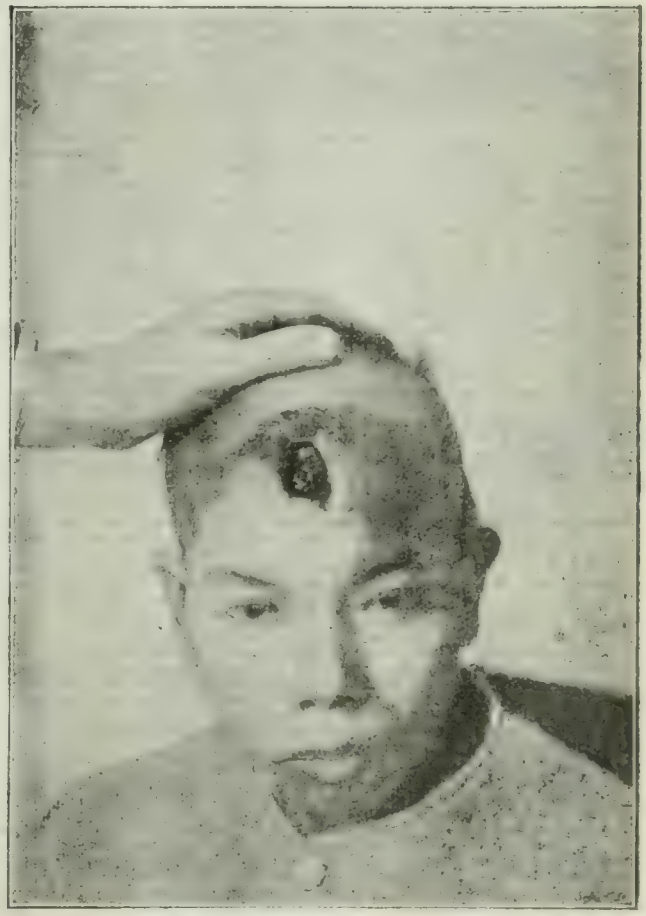
On April 4th, in the evening, he complained of pain in the left leg; this continued for some time.

The catheter was removed on April 5th, and not reinserted, as it was found that he could control his urine.

On April 16th a note was made to the effect that there was a large hole in the frontal region the size of a dollar, about 1½ ins. to 2 in. in depth, at the bottom of which cerebral pulsation could be plainly seen, covered with slight granulations.

From this date he steadily improved. He was detained in the hospital on account of the urethral trouble, but there were no further head symptoms.

The following note was made on July 31st: "Wound on forehead only some one-third of an inch deep, the skin has grown over the base of the whole, starting from the edges, two-thirds of the area by this time being covered. Dynamometer, R. 60, L. 60."



No signs of any paresis, sensation perfect, eyesight and memory good. He now stated that the reason why he inflicted these injuries was that his sweetheart had just died, and having spent all his dollars in paying for medical attendance during his *fiancée's* long illness, he had no money to pay for her funeral expenses, as was expected of him. Out of shame he determined to kill himself, and he had inflicted all these injuries with a Chinese chopper.

On August 14th, and again on September 1st, operations were performed on the urethral fistula with complete success

[1] The report of this case was read at a meeting of the Hong Kong and China Branch of the British Medical Association.

the channel of the urethra being restored; and he was discharged, passing his urine naturally, on October 7th.

The photograph of this man was kindly taken in May by Surgeon-Captain James. It shows the appearance of the wound then.

REMARKS.—This is another case showing that extensive injuries may occur to the greater part of the frontal lobe without paralysis ensuing. The injury in this case to the right motor area was evidently irritative and not destructive, hence the convulsions on April 2nd. The sensation not being affected proves that the injury did not extend deeper than the cortex.

REPORTS OF SOCIETIES.

THE OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

GEORGE LAWSON, F.R.C.S., Vice-President, in the Chair.

Thursday, June 14th, 1894.

OPTIC NEURITIS IN ITS RELATION TO CEREBRAL TUMOUR AND TREPHINING.

DR. JAMES TAYLOR read this paper. He alluded to the fact to which Mr. Horsley had some time ago called attention—namely, the subsidence of optic neuritis after operation undertaken with a view to the removal of cerebral tumour, even when the tumour was not removed. Similar observations had been recorded by Bruns and Erb, and in this paper it was intended to emphasise the fact that not only in cases in which a tumour was removed from the brain did the optic neuritis subside and the discs resume a normal appearance, but even in other cases of tumour in which the skull was opened, but the tumour not removed or interfered with further, a similar subsidence of the swelling of the discs took place. Three cases of optic neuritis associated with intracranial tumour were first related, in which the tumour was removed and the optic neuritis subsided. Another group of three cases was next detailed. In all of these there were the usual symptoms of intracranial tumour. All were trephined, and in two of them the tumour was visible at the operation, but was not removed or even incised. Yet the neuritis in one entirely disappeared, although the patient subsequently died, and tumour was present; in the second the swelling had diminished by 1 millimetre, although the tumour, as was apparent from the symptoms, continued to grow, and the patient died soon after passing from observation. In the third case of this group the symptoms pointed to cerebellar growth, probably tuberculous, but no tumour could be found at the operation. But the swelling of the discs which was present disappeared, although slight impairment of vision remained in one eye. A third group of cases was next described, consisting also of three. The first was that of a patient from whom a cerebral tumour was removed, and the neuritis, which was present in only one eye, disappeared. He subsequently died, and a cyst was found occupying the site of the tumour which had been removed. There was no recurrence of the neuritis when he was last seen, three weeks before his death. The second case was that of a boy, who was trephined on account of right-sided fits and weakness. Optic neuritis was present. A cyst was tapped, and a drainage tube kept in intermittently during two years. Finally, large masses of tumour were removed, but the boy died later, and sarcomatous masses were found *post mortem* in the brain. The neuritis subsided after the first trephining and drainage, and never recurred during the subsequent two years, although there was little doubt that the original cyst tapped was a cyst in the tumour. The last case was that of a man at present in hospital from whose brain a sarcoma was removed. The optic neuritis which was present disappeared, and had never recurred, although at a subsequent operation, undertaken on account of symptoms of recurrence of the tumour, it was found impossible to remove it all. It was urged, in conclusion, that, even taking account of the facts that a large cerebral tumour might be present without producing optic neuritis, and that optic neuritis might be present without cerebral tumour, as was long ago pointed out by Dr. Hughlings Jackson and Dr. Gowers, such facts and observations as were related in this paper made it evident that in certain cases, at least, of intracranial tumour the pressure inside the skull was the effective agent in producing what was known as optic neuritis.

DR. HUGHLINGS JACKSON considered Dr. James Taylor's paper to be an exceedingly valuable contribution both to ophthalmology and neurology. Mr. Horsley had certainly shown that raised intracranial pressure was a most important factor in the production of optic neuritis in some cases of intracranial tumours. Dr. Jackson had, however, found double optic neuritis both in cases of small and of large intracranial tumours. Optic neuritis might be absent in cases of large cerebral tumours which had existed for several years. Again, double optic neuritis was sometimes found in cases of brain disease in which there was no tumour or any other kind of adventitious product within the cranium, and no renal disease. Cases of uniocular optic neuritis had to be considered; he had seen but three cases with necropsies, and in them the tumour was of the opposite cerebral hemisphere; these cases were difficult of interpretation on any hypothesis. He then referred to rapid death in some cases of patients who had double optic neuritis from intracranial tumour. In some of them death occurred by failure of respiration (a mode of dying in these cases first pointed out by the late Hilton Fagge). When the tumour was of the cerebellum the failure of the respiratory (medulla) centre might easily be attributed to transmitted pressure. Dr. Jackson mentioned the case of a patient, the subject of optic neuritis, who died by respiratory failure where the tumour was of one occipital lobe; the patient was taken fatally ill when at work at the docks. Dr. Jackson referred to an important paper by Mr. Horsley and Mr. Walter Spencer[1] dealing experimentally with the general question of raised intracranial pressure. Dr. Buzzard had put forward the hypothesis that rapid death in some cases of intracranial tumour with optic neuritis might be due to changes in the vagus nerves, changes analogous to those of optic neuritis. Possibly Dr. Jackson thought, in the cases of death by failure of respiration, there was induction of such changes in the respiratory centre.

MR. VICTOR HORSLEY thought that the removal of pressure was certainly one factor in the reduction of optic neuritis in cerebral tumour, but only one of several; it was enough to remove the bony covering in many cases to reduce the pressure and remove the optic neuritis, but pressure was not enough to explain all cases of optic neuritis, such as occurred, for instance, in anæmia. From his experience, the operation was only good in removing neuritis; it was useless in removing any atrophy which might have supervened. When a tumour recurred after removal there was no recurrence of optic neuritis; this put out of court the inflammatory explanation of the neuritis.

MR. BALLANCE did not agree that pressure was the essential factor in producing optic neuritis; around every foreign body or tumour there was an area of inflammation larger or smaller according to the disturbance exerted by it on the tissues around, and he thought that the inflammatory theory of optic neuritis, as supported by the observations of Messrs. Edmunds and Lawford, should not be rejected without a microscopic examination of the meninges for basal meningitis.

DR. BEEVOR had lately seen one of the cases in which the tumour was removed; there was no recurrence of the optic neuritis, and the headache was less.

DR. HILL GRIFFITH thought that the complete recovery after sudden attacks of blindness with optic neuritis could only be explained on the pressure theory, as the vision was absolutely unimpaired after recovery.

SOME POINTS IN THE HISTOLOGY OF TRACHOMA.

MR. N. C. RIDLEY read this paper. Specimens of conjunctiva had been obtained from cases of trachoma, follicular conjunctivitis, and from normal eyes. In the normal conjunctiva the epithelium on the globe and lids was stratified, and in the fornices consisted of two or three rows of columnar cells, with goblet cells; there was a variable amount of lymphoid tissue in the subconjunctival layer. This lymphoid tissue, called sentinel tissue by physiologists, was found beneath all mucous membranes; it increased in amount when more work was thrown on it, and was evidence of the reaction of the organism to the attacks of deleterious agents. In trachoma this increase took the form of rounded elevations covered by delicate epithelium, and without a fibrous investment as had been described by some authors. These follicles were to be considered infective granulomata, but contained healthy blood vessels and no giant cells. There was probably a specific cause of trachoma; many kinds of micro-organism had been described, but none had satisfied inoculation tests. The changes begun in the fornices with the proliferation of cells, formation of crypts, increase of goblet cells, and the formation of ovoid bodies; in a late stage the epithelium was shed. The globular bodies described by Reid and Mütermilch were probably not goblet cells; they resembled the oval bodies of molluscum contagiosum, which were supposed to be parasitic.

OSTEOMA OF ORBIT.

MR. SIMEON SNELL (Sheffield) narrated this case. The patient was a married woman, aged 25. The history dated back at least four years, recurring suppurations pointing above the left upper eyelid. When seen in September, 1890, there was a swelling in the situation of the frontal sinus, and the eye was somewhat displaced downwards and outwards. In situation and appearance it resembled a distended frontal sinus. She at times suffered great pain. The left nostril was plugged by a hard osteoma. On October 14th, 1890, the growth was removed; it was about the size of a pigeon's egg. On the supposition that a distended frontal sinus had to be dealt with, an incision was made at the inner angle below the orbital ridge, and whilst chipping away some bone from this region the bony mass was found to be detached, and was readily removed by forceps. It was irregular and undulated, of bony hardness, but at the part by which it had been attached it consisted of thin spongy substance. A large roughened cavity was left, which corresponded to the inner wall of the orbit, and to the situation of the ethmoidal sinuses and the back part of the frontal sinus.

CONGENITAL SEROUS CYSTS OF THE EYELIDS ASSOCIATED WITH ANOPHTHALMOS OR MICROPHTHALMOS.

This paper was read by MR. SIMEON SNELL. Five cases had come under his observation. They had all been seen when young babies. Two of those now related involved the lower eyelid—one the right, the other the left. One was situated in the left upper eyelid, and Mr. Snell remarked on this as being peculiar: most, if not all, on record being in the lower eyelid. They all gave a bluish appearance to the part affected, and were associated in two with anophthalmos, and in one with microphthalmos. Mr. Snell thought if the orbit was carefully searched a rudimentary eye would often be found. He remarked that in the diagnosis of these cysts the chief affection from which they should be distinguished was meningocele. Before proceeding to dissect out the cyst, if this was thought necessary, it was well to tap and draw off some of the fluid for examination.

CARD SPECIMENS.

The following were the card specimens:—MR. MACKINLAY: Congenital Symmetrical Dislocation of both Lenses, upwards and inwards, in a brother and sister, not twins.—MR. JULER: Peculiar Symmetrical Changes in the Choroids in a case of High Myopia.—MR. HOLMES SPICER: A case of Retinitis Circinata.—DR. SYDNEY STEPHENSON: A case of Coloboma of the Lens (double).—MR. H. WORK DODD: A case of Binocular Polycoria.—DR. BEEVOR and MR. LANG: A case of Binasal Hemianopia.

[1] *Trans. Royal Soc.*, B., 1891.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

CLINICAL MEETING.

DONALD HOOD, M.D., President, in the Chair.

Friday, June 1st, 1894.

TREATMENT OF FŒTID SUPPURATION OF THE NOSE.

DR. SCANES SPICER showed a case illustrating the radical cure of fœtid suppuration of the nose by free opening, curetting, and drainage of the maxillary antrum. Some polypi were removed from the right nostril in July, 1890, the diagnosis of antral disease being made at the same time, and the antrum opened through the alveolar ridge on December 27th. In May, 1892, it was found necessary to open and curette the cavity through the canine fossa, and in April, 1893, the opening last made was opened up, the cavity again curetted, and a counter opening made into the inferior meatus. The discharge had entirely ceased for one year.

MR. LANE referred to a similar procedure adopted abroad.

DEPOSIT OF URATE OF SODA IN THE SCROTUM.

MR. MCADAM ECCLES showed a case of probable deposit of urate of soda in the scrotum. The patient had suffered from repeated attacks of gout, and had tophi in the ears. The disease of the scrotum had been present and progressive for three and a-half months. There were two ulcers with undermined edges, and firm, hard, fixed, and insensitive bases. The patient had been treated without antisyphilitic remedies, but would be put on them after having been exhibited.

DR. CLEMOW referred to a similar case cured by antisyphilitic treatment; and DR. LLOYD and MESSRS. BIDWELL and ATKINSON made some remarks.

MISCELLANEOUS CASES.

MR. ECCLES also showed two cases of Subcutaneous Nodules in rheumatic subjects.—MR. BIDWELL showed a man exhibited to the Society last November with a large Syphilitic Node of the Humerus. Since then he had a spontaneous fracture, which was explored by free incision; no evidence of sarcoma was found, the wound was cleaned out, and the subsequent course was uninterrupted recovery. Mr. Bidwell also showed a girl of 17, suffering with Ulceration of the Ankles due to congenital syphilis.—DR. MORGAN DOCKRELL showed a case of Rodent Ulcer of twenty years' duration markedly improved by applications of resorcin. DR. ABRAHAM and MR. BIDWELL both alluded to cases cured by simple ointment.—DR. DOCKRELL also showed a case of Mycosis Fungoides. The disease had existed eight years, but was now showing marked improvement under internal and external administration of resorcin.

PAPER.

MR. T. R. ATKINSON read the notes of a case of Multiple Lipomata.—DR. ABRAHAM showed some cases of Skin Disease.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

PATHOLOGICAL AND CLINICAL SECTION.

BENNETT MAY, M.B., F.R.C.S., in the Chair.

Friday, April 27th, 1894.

CASES.

MR. EALES showed (1) a man, aged 21, suffering from Vernal Catarrh, in which the "skimmed milk" appearance on the tarsal conjunctiva was well marked; the disease had persisted for four years. (2) A woman, aged 20, the subject of Multiple Ocular Paralyses; though there was no history of syphilis, he suspected the cause to be gumma, as the disease improved under iodide of potassium. (3) A man, aged 74, suffering from Bi-Nasal Hemianopsia, together with charts of the F. V. The optic discs were partially atrophic, as if from old neuritis; his sight had been failing for eighteen months; there was contraction also of the rest of the F. V. in each eye; R. V. = $\frac{6}{9}$, L. V. = $\frac{6}{12}$. This was the only case in which Mr. Eales remembered to have seen charts of this nature, which were exceedingly rare.—MR. F. MARSH showed a case of Traumatic Gangrene of Hand. The whole of the little and ring fingers and the tips of the two other fingers and thumb had been removed at the line of demarcation. Sensation was now perfect over the rest of the hand, the movements at the wrist-joint were normal, and the boy was gaining power in the two fingers and thumb.

MYXŒDEMA TREATED BY THYROID EXTRACT.

DR. E. N. NASON showed photographs of a case of myxœdema in a man, aged 60, treated by tabloids of dried thyroid extract. The effects of treatment (six weeks) might be summarised as follows:—(1) Rise in temperature from 96° to 98°; (2) quickening of pulse-rate from 60 to 90; (3) desquamation of skin of whole surface of body; (4) increased flow of urine; (5) growth of hair; (6) loss of mental hebetude with return of intellectual and vital energies; (7) general thinning of the body, especially of face, hands, and feet.

CASES OF AORTIC ANEURYSM.

DR. FOXWELL showed a specimen of aortic aneurysm involving the lower part of the thoracic aorta and reaching to the cœliac axis. It had opened, by an aperture one inch in diameter, into the base of the left lung; the lower lobe of this, and also part of the upper lobe, being quite solid and black with effused blood. The patient had died after two days' hæmoptysis of black blood. No opening into a bronchus could be discovered. The condition seemed more allied to that resulting from infarct.

MR. CHRISTOPHER MARTIN showed for DR. MCCARTHY (St. George's, Salop) a specimen of aortic aneurysm removed *post mortem* from a miner, aged 51. The patient was under treatment eight months. The clinical history was one of bronchitis of a semi-acute character with accessions of acute bronchitis accompanied by severe dyspnœa. It was suspected to be aneurysm. The patient recollected that in lifting a piece of rock with a lever he had felt as if something had given way in his chest. There was no history of syphilis. The specimen showed a large aneurysm of the transverse aortic arch lined with atheromatous patches; aortic valves thickened but otherwise healthy.

HERMAPHRODITE.

MR. CHRISTOPHER MARTIN showed a testis removed from a case of hermaphroditism. The patient was 20 years of age, and had been brought up as a female. She came to the Women's Hospital complaining of a painful lump in the left groin. She had never menstruated. There was no development of hair either on the face or the pubes. The breasts were flat and undeveloped. The external genitals resembled in every particular those of a woman, but the vagina was a *cul-de-sac*, three quarters of an inch long, easily admitting the tip of the forefinger. There was no trace of a uterus. The urethra was about one inch long, and there was no trace of a prostate. When a sound was passed into the bladder it could be distinctly felt *per rectum*, no solid body (uterus or prostate) intervening. The "lump in the groin" was situated in the left inguinal canal, and contained an oval solid tender body a little larger than a pigeon's egg. It had no impulse on coughing, and could not be reduced into the abdomen. An oblique incision was made over it, and opened a serous sac (the tunica vaginalis testis) which did not communicate with the peritoneal cavity. A well-formed testicle was now exposed. It was freed from its adhesions, the cord ligatured, and the organ removed. The peritoneal cavity was then opened at the upper end of the incision and the pelvis explored, but no trace of a uterus was discovered. The pillars of the ring were sutured with silkworm gut, and the cutaneous wound closed. The patient made an excellent recovery, and was now in service as a nurse girl. Professor Allen made a series of microscopic sections of the organ, which demonstrated conclusively that it was a testicle.

PYONEPHROSIS.

MR. MARTIN also showed a suppurating kidney removed from a patient who had been suffering from "movable kidney" and attacks of intermittent hydronephrosis. Acute symptoms coming on, he made an anterior lateral vertical incision over the mass and exposed the right kidney distended with offensive pus. As it was evident that the organ contained numerous abscess cavities, he performed nephrectomy. The patient made an uninterrupted recovery and was now convalescent. The other kidney seemed to be quite sound, and was secreting from 40 to 60 ounces of urine daily. In addition to the large abscess cavities referred to, the cortex of the kidney removed was crowded with minute suppurating foci.

ACUTE PRIMARY MYOCARDITIS.

DR. DOUGLAS STANLEY showed a specimen and drawings of a case of acute primary myocarditis. The case was that of a labourer, aged 28, who was admitted complaining of dyspnœa and palpitation. He presented a collapsed condition, with a very weak, rapid, and irregular pulse. There was a history of alcohol and exposure. The patient died somewhat suddenly. *Post mortem* the pericardial sac contained some opaque fluid, and on the epicardial surface was a slight granular layer of lymph. The heart muscle was of a yellow-red colour, and very soft. This change was most marked in the middle of the ventricular walls. Both ventricles showed the same condition. Microscopic examination showed intense leucocytic infiltration. There was no endocarditis. There was nothing suggestive of pyæmia to be found anywhere.

MISCELLANEOUS.

MR. LEEDHAM-GREEN showed and demonstrated a Becker's Microtome.—MR. HASLAM showed sections of a Firm Nævoid Tumour of the Orbit.—MR. JORDAN LLOYD showed a Fatty Tumour, weighing 25½ pounds, removed by lumbar incision from the body of a man, aged 45. It appeared to have grown from the fatty tissue in front of the left kidney, and completely filled the patient's abdomen, and resembled in many of the physical signs an ordinary case of ascites. Five days after the operation the patient was progressing favourably.

REVIEWS.

A DICTIONARY OF MEDICINE, INCLUDING GENERAL PATHOLOGY, GENERAL THERAPEUTICS, HYGIENE, AND THE DISEASES OF WOMEN AND CHILDREN, BY VARIOUS WRITERS. Edited by RICHARD QUAIN, Bart., M.D.Lond., LL.D.Ed., F.R.S., President of the General Council of Medical Education, etc.; assisted by FREDK. T. ROBERTS, M.D.Lond., Professor of Materia Medica and Therapeutics, University College, etc.; and J. MITCHELL BRUCE, M.A.Aberd., M.D. Lond., Physician and Lecturer on the Principles and Practice of Medicine, Charing Cross Hospital, etc. NEW EDITION. Revised throughout and Enlarged. In two volumes. Vol. I: Abdomen—Lysis. Vol. II: Macrocheilia Zyme. London: Longmans, Green, and Co. 1894. (Roy. 8vo, pp. 2,518. 40s. nett.)

[FIRST NOTICE.]

No medical work published in this country ever, we believe, attained the same measure of success as the first edition of QUAIN'S *Dictionary of Medicine*, published nearly twelve years ago. The original purpose which actuated the preparation of the original edition was, to quote the words of the preface which the editor has written for the new edition, "a desire to place in the hands of the practitioner, the teacher, and the student a means of ready reference to the accumulated know-

ledge which we possessed of scientific and practical medicine, rapid as was its progress, and difficult of access as were its scattered records."

The scheme of the work was so comprehensive, the selection of writers so judicious, that this end was attained more completely than the most sanguine expectations of the editor and his able assistants—Dr. Frederick Roberts and Dr. Mitchell Bruce—could have anticipated. The work very soon became the standard and representative work of English medicine, and this position will, we venture to prophesy, not be forfeited, but rather will be confirmed by this new edition.

In preparing a new edition the fact had to be faced that never in the history of medicine had progress been so rapid as in the last twelve years. New facts have been ascertained, and new ways of looking at old facts have come to be recognised as true. The task of revision was by no means an easy one, but as far as practicable the old articles have been revised by the original writers; when death had unfortunately made gaps in their ranks, the articles were committed to the hands of the most competent successors, who made such additions as the progress of knowledge appeared to require. Finally, for new articles Sir Richard Quain has had no difficulty in securing the services of the best authorities. The bulk of the *Dictionary* has necessarily been increased, and it is now issued in two volumes, containing together 2,518 pages, and 181 illustrations, as compared with 1,834 pages and 138 illustrations. Some part of this increase of size must, however, be set down to the use of larger print, by which the appearance of the open page is materially improved.

The revision which the work has undergone has been of the most thorough and judicious character, and the editor in his new preface gracefully acknowledges his indebtedness in the accomplishment of this gigantic task not only to Dr. Frederick Roberts and Dr. Mitchell Bruce, whose names appear on the title page, but also to Mr. John Harold, medical registrar of Charing Cross Hospital, who has assisted in the revision of the proofs, and in the task of seeing the work through the press. While able thus to command the most competent assistance, the editor is careful to say that "he is personally responsible for the work, of which no portion has been issued without being carefully revised by him."

Among the new articles written for this edition, mention may be made of those on Micro-organisms, by Professor Greenfield and Dr. Muir, of Edinburgh; on Immunity and Phagocytosis, by Dr. Sidney Martin; on Negro Lethargy, by Dr. Patrick Manson, who has revised his former article on Filaria Sanguinis Hominis; various articles on skin diseases by Dr. T. Colcott Fox, Dr. Mapother, Dr. Radcliffe Crocker, Dr. Pringle, Dr. Robert Liveing; and on Psilosis by Dr. Thin. Sir John Banks, of Dublin, has contributed a new article on Typhus Fever, and a new article on Sanitary Law has been written by Mr. William A. Casson, barrister-at-law, of the Local Government Board. Dr. A. S. Currie has contributed a note on Hypodermic Medication. The article on Intestinal Obstruction has been confided to Mr. Arthur Durham and Mr. Jacobson. The task of dealing with the subject of Perityphlitis, as to the nature of which so much has been accumulated in recent years, has been shared by Dr. Allchin and Mr. Frederick Treves. A subject, the full importance of which has only come to be realised in recent years, namely, the poisonous action of foods under certain conditions, has been treated by Dr. Arthur Luff.

The *Dictionary* also contains an article on Raynaud's Disease, from the pen of the late Dr. J. E. Morgan, of Manchester, and Dr. MacMunn, of Wolverhampton, has contributed an article on The Use of the Spectroscope in Medicine. An important article on Physical Education has been written by Mr. Frederick Treves, and Dr. Whitelegge, Medical Officer of Health to the West Riding County Council, has written an essay on Vital Statistics. A number of articles on public health subjects have been contributed by Mr. Shirley Murphy. Dr. Mott has written a new article on Pernicious Anæmia. Dr. Samuel Fenwick, with the co-operation of Dr. W. S. Fenwick, has entirely rewritten his article on Diseases of the Stomach, and an article on Life Assurance from the pen of Dr. J. E. Pollock, the President of the Life Assurance Medical Officers' Association has been added to this edition. The articles on Entozoa, which formerly appeared under separate alphabetical headings, have now been brought together under one continuous article which has been entrusted to Mr. Bland Sutton. This article is well illustrated by drawings of typical forms.

The progress made in our knowledge of diseases of the brain and spinal cord has been so great as to necessitate the complete rewriting of the articles upon these subjects, and this onerous task has again been carried out with conspicuous success by Dr. H. C. Bastian, and Dr. W. R. Gowers. The articles on Diseases of the Eye have been divided among Mr. Nettleship, Mr. Tweedy, and Mr. Brudenell Carter.

The list of new writers numbers fifty, and among them are to be found the names of those who are leading authorities upon the subjects which have been committed to their care.

A Textbook of Nervous Diseases; being a Compendium for the Use of Students and Practitioners. By Charles L. Dana, A.M., M.D. Second Edition, with 210 Illustrations. New York: William Wood and Co. 1893. (Cr. 8vo, pp. 564. 13s. 6d.)

The author divides his work into four parts, of which the first gives a general description of the nervous system, its anatomy and diseases. After an explanation of the technical terms commonly used in neurology, the actual subject is introduced in a chapter upon diagnosis and methods of examination. Systematic methods are advocated, and a practical scheme of examination is given. A special feature of this chapter is an account of the methods of craniologists, added to which is a list of the stigmata of degeneracy and a table of cranial measurements. The section closes with a chapter upon hydrotherapy, massage, and electricity in their application to nervous disorders.

Part II treats of the diseases of the cerebro-spinal nerves. The subject is very fully considered; in fact, what may be termed the faults of the section—which, indeed, are few—arise out of the desire for comprehensiveness. This perhaps explains the observations upon the causation, symptoms, and treatment of such conditions as hyperæmia and anæmia of nerves, observations which we may be permitted to regard with scepticism. Useful tables are appended to this section, showing the types, main causes, and chief symptoms of peripheral nerve disorders.

Parts III and IV deal with the diseases of the spinal cord and brain. The various inflammations, degenerations, scleroses, and morbid growths occurring in the central nervous system, with the resulting symptoms, are fully described. The statements bearing upon hyperæmia and anæmia, as they occur in cord and brain, are open to criticism. A feature of this part of the work is an excellent chapter upon syphilis.

Part V is concerned with functional nervous disorders. In addition to the disorders ordinarily so described, a number of functional conditions, such as neurasthenia and the neuroses generally, insomnia, somnambulistic and allied states, are considered. Critical readers will again cavil at the occasional resort to free theory, as, for instance, when the existence of "vascular changes" (now cerebral hyperæmia, now anæmia) in neurasthenia is stated. The final chapters are devoted to cranio-cerebral topography and neurological therapeutics.

The book presents a great amount of information in a comparatively small space, a result largely due to the author's evident predilection for classification. Throughout great attention is paid to therapeutics. The practical nature of the work is its distinguishing feature. The critical discussion of theories has formed no part of the author's scheme; this he has left to the larger treatises. A too concise and absolute statement of pathological theories is occasionally noticeable; we may instance the observations upon the pathology of epilepsy (p. 410), some of which are much in need of confirmation. Undoubtedly, however, the author has attained his object, which (as stated in the preface) has been to present the science of neurology in a concise yet, as far as possible, complete form for the purposes especially of the student and practitioner. The figures and diagrams are numerous, and for the most part good.

PSYCHIATRIE FÜR AERZTE UND STUDIERENDE. Von Dr. MED. TH. ZIEHEN, Professor an der Universität Jena. London: Williams and Norgate. 1894. (Roy. 8vo, pp. 482. 9s. 9d.)

As might be expected from the author of the *Elements of Physiological Psychology*, the groundwork of this treatise is laid down with much attention to method, and matured knowledge. The chapters in which general psychology is brought to deal with the disordered mental states show great philosophical power. He considers the derangement of perception, hallucinations and delusions, losses and falsifications of memory, and alterations in the tone of the mental faculty, met with in insanity, and the disorders of the association of ideas.

The author then shows how these several derangements influence conduct, and describes the somatic symptoms which accompany lunacy. In a compact and thoughtful chapter he explains the causes of insanity, its general diagnosis and prognosis, and reviews the resources of therapeutics in mental disorders. In this country a handbook which has three-fifths of its space occupied with such generalities will scarcely be in as great request with physicians and students as a thoroughly practical work which introduces the reader at once to the clinical symptoms and forms of insanity. Dr. ZIEHEN leaves himself too little room to consider these special forms. In his classification paranoia gets a good deal of attention, and katatonia very little. Though the book shows proof of careful reading and inquiry, there are no references. There are ten excellent plates at the end of the book illustrating the characteristic forms of expression and pose in insanity.

LEGAL HANDBOOK FOR THE USE OF HOSPITAL AUTHORITIES. By L. S. BRISTOWE. London: Reeves and Turner. 1894. (Cr. 8vo, pp. 163. 3s. 6d.)

MR. BRISTOWE'S *Handbook* fills a want and fills it well. Hospital authorities are constantly called upon to deal with a great variety of legal questions, and it is neither to be expected nor desired that they should always have a lawyer on the premises. Handbooks intended for the use of laymen are dangerous in every profession. Perhaps in the law they are more dangerous than in any other case, because the law as it is understood in England is so little dominated by general principles logically carried through that even the best statement, if it be concise, is apt to be misleading. No one, however, could be more competent than Mr. Bristowe to steer an even course between the danger of allowing a handbook to become so technical that no one could use it except those who did not require it, and the danger of making it so popular and easy to the lay reader that he would walk with an assurance of knowledge into dangers worse than those which he bought the *Handbook* to escape. It would be out place to attempt to follow the author through the various topics of corporations and trusts and investments, or into the intricacies of the relation of a hospital to its patients and its officials, its births and its deaths. All of these are dealt with in a surprisingly satisfactory way in the short compass of 125 pages.

As an instance of the care with which the author has carried out his task of providing at least some measure of guidance for all the cases which arise we may refer to the concise but excellent section on the conduct of meetings, in which Mr. Bristowe has provided an admirable little code of rules for the use of anyone who may have to preside over a meeting, large or small. Only those whose fate it is to attend many meetings can realise how badly the duties of the chair can be performed and how easily, by the observance of the elementary rules of order, even the most difficult debate might be kept within intelligent control. Mr. Bristowe would have done his readers a further service if he had referred them to Sir Reginald Palgrave's admirable little manual known as the *Chairman's Handbook*, of which Mr. Bristowe's rules are practically a rough summary. Equally useful in their way are the notes on by-laws, and the very simple and lucid account of the nature of a corporation.

The text of the Mortmain and Charitable Uses Act, 1891, is printed in the appendix, as is also the Anatomy Act of 1832, and the list of investments authorised by statute is inserted amongst a number of very useful general directions bearing on the management of property. The index, that most vital portion of a handbook, is not perfect, but it is at least much better than the ordinary legal index, which is proverbially as bad as it can be. As a specimen of the way in which the subjects treated of are dealt with, it may be worth while to close our notice of this welcome little book with the following extract, which in a short compass puts the matter treated with an admirable clearness:

> The consent to treatment which a patient implicitly gives by entering a hospital cannot safely be treated as extending to a surgical operation. No operation ought to be performed without the express consent of the patient, or, if he is not in a position to give such consent, of his nearest relatives; nor ought it to be carried farther than is warranted by such consent; and although the precise extent of an operation must often be left to the discretion of the operator, yet the consent of the patient should be founded on full knowledge of what the nature and possible extent of the operation will be, and of the consequences which it may involve. Disregard of these rules may, apart from any question whether the operation has been skilfully or unskilfully performed, entail responsibility to the operator.

We trust that this manual may soon find its way into a second edition, as to which we will only make one suggestion, and that is that, with a better index, a slightly larger manual on the same lines would be probably even more useful to the profession and the public.

AN AMERICAN TEXTBOOK OF GYNÆCOLOGY, MEDICAL AND SURGICAL, FOR PRACTITIONERS AND STUDENTS. Edited by J. M. BALDY, M.D. With 360 Illustrations in Text, and 37 Coloured and Half-tone Plates. Philadelphia: W. B. Saunders; London: F. J. Rebman. (Imp. 8vo, pp. 713. 34s.)

THIS work has been prepared, under the direction of Dr. J. M. BALDY, by Drs. Byford, Cragin, Etheridge, Goodell, Howard Kelly, Florian Krug, Montgomery, Prior, and Tuttle. Their own original work, already well known to the readers of American books on gynæcology, is here to be found in a collected and condensed form.

In several respects this addition to an already encumbered branch of medical literature deserves favourable comment. It is very well indexed, an important feature in a work essentially intended for reference. The text is not overburdened with quotations; even the authorship of second-hand illustrations is only given in the list of drawings. The work is very freely illustrated, and many of the woodcuts and plates are of high excellence. Thus Dr. Baldy's illustrations of the stages of vaginal and supravaginal hysterectomy are artistic, and at the same time instructive. On the other hand, the drawings of the stages of the opening of the abdominal wall in ovariotomy, etc., are not very successful, and not likely to prove of much service to a beginner. Plate XXXV, though coarsely coloured, is a happier attempt to explain abdominal section by the aid of pictorial art. The process of enucleation of a broad-ligament cyst is at least made comprehensible. The drawings representing the preparation of the operating room, after Dr. Howard Kelly's well-known principles, are sure to be serviceable. On the other hand, many readers will object to the numerous illustrations of the position in which the patient is placed for examination. They teach little or nothing.

The nature of the text may be judged from its authorship: the distinguished American authorities who have compiled this publication have done their work well. No undue importance is given to major operations, pessaries, or eccentric therapeutic measures. In the treatment of fibroids electricity is considered "purely experimental," and inferior to ergot. The *Textbook* forms a very handsome volume, and the type is excellent.

TRAITÉ PRATIQUE DE GYNÉCOLOGIE. Par le Dr. A. AUVARD, Accoucheur des Hôpitaux de Paris. Deuxième edition revue et augmentée. Avec 655 figures dans le texte, et 12 planches en couleur hors texte. Paris: Octave Doin. 1894. (Royal 8vo, pp. 870. 18 frcs.)

IN a notice of the first edition of this work in December, 1891, we observed that its author evidently possessed the gift of teaching. From this second edition we learn yet more than

from the first, since Dr. AUVARD has added much information on recent discoveries. There are 78 more pages, and the only change to be regretted is the print, which the publishers have made smaller. One of the best features of the work is the clearness of the diagrams, prepared by an experienced demonstrator. Even many of the semi-diagrammatic illustrations, such as Fig. 294, representing the position of the sutures in Emmet's operation, are superior to the average of textbook art, whilst the engraving showing lineæ albicantes on the abdomen is a most successful representation of an appearance difficult to pourtray in such a manner as to serve as a guide to the student.

Amongst the additions the author's graduated uterine explorers (Figs. 609, 610) deserve notice; they are employed in order to test with precision stenosis of the cervix in cases of sterility. Much more important is Dr. Auvard's "intermittent compression," which he employs for chronic disease of the appendages. A large flannel or chamois-leather bag is filled with a certain amount of small shot. It is then tied in the middle so as to assume the hour-glass form of an old-fashioned purse, and is laid on the abdomen with the constricted middle portion close to the umbilicus, each half being bent downwards so as to press on the corresponding iliac fossa. The bag is applied night and morning for two hours before rising and after going to bed. Ten ounces of shot will be sufficient at first, and the weight must be gradually increased till it reaches eight pounds on each side. The pressure may be applied for from one to three months continuously, the weight to be lightened during the period. This "intermittent compression" has effected the cure of cases in which removal of the appendages had been recommended; its employment is explained by three illustrations.

Dr. Auvard is usually very correct in his anatomy. Perhaps it is to be regretted that he does not lay more stress on His and Kölliker's important discovery as to the true relation of the tube to the ovary (Fig. 232). The reference coming in the next page is wrongly given as "Fig. 233," which represents not so much the normal relation of the fimbriæ to the ovary, which must first be learnt, as the secondary or consequent fact that the fimbriæ follow the ovary when that organ is displaced.

ELECTRICITY IN DISEASES OF WOMEN AND OBSTETRICS. By FRANKLIN H. MARTIN, M.D., Professor of Gynæcology, Post-Graduate Medical School of Chicago. With Illustrations. 2nd Edition. Chicago: The W. T. Keener Co. (Imp. 8vo, pp. 292. 2.00 dols.)

THE chief merit of this work is the large proportion of its pages which is devoted to elementary teaching of the science of electricity, not excluding a description of instruments and apparatus in general use. All manuals of this kind teach that the physician or surgeon should know the elements of the science before he applies it to medicine, but few include any good elementary sketches. On the other hand, scientific manuals on electricity do not enter sufficiently into details of special apparatus. In Dr. MARTIN'S work the necessary technical details and the necessary medical information are included within the same cover. Over 100 pages treat of science pure and simple, and many more of special instruments. Thus this treatise will help the reader to learn how to know his tools and how to use them. As electricity is assuredly of some service, Dr. Martin's work is decidedly useful. On the other hand, though the author is not bigoted, the medical portion of the work hardly establishes a high claim for electricity as an agent in the treatment of women's diseases. Fibroids are strange things, and the cause of their diminution or disappearance is often hard to determine; the same is true of inflammatory exudations, which may certainly vanish after the application of electricity, but as surely may disappear in spite of no treatment, or even bad treatment.

DER NYSTAGMUS DER BERGLEUTE. [Miners' Nystagmus.] Von Dr. A. NIEDEN, Bochum. Wiesbaden: J. F. Bergmann. 1894. (Roy. 8vo, pp. 140.)

DR. NIEDEN has already written upon the subject of the monograph now before us, in several of the medical journals in Germany, and his name has become familiar in connection with the nystagmus of coal miners. In the present work he has gone very fully into the subject, not only in relation to the facts observed by himself, but also by careful consideration of the investigations of others, especially those of Snell, in this country, and Dransart, in Belgium. The book begins with a chapter on the history of the disease; this is followed by a long discussion of the symptomatology and course of the affection. The third chapter deals with the pathogenesis and etiology; and the concluding chapter is devoted to treatment. As the subject is one of very special interest, we have not done more than indicate the scope of Nieden's work, but those who are interested will find therein a great deal of valuable information, and a very fair summary of our present day knowledge of this still somewhat obscure affection. The book is illustrated by reproductions of photographs of miners at work, under varying conditions.

NOTES ON BOOKS.

The Johns Hopkins Hospital Reports. Vol. III, Nos. 7, 8, 9. Report in Gynæcology II. Baltimore, Md., U.S.A.: The Johns Hopkins Press. (Demy 4to, pp. 462. 3 dollars.) The British reader must be struck with admiration at the very sight of this colossal fasciculus of a publication, made up of solid treatises composed by able American authorities. The separate communications are treatises or small books rather than papers or articles, whilst of their solidity, in the good sense of the word, there can be no doubt; they all represent intelligent research rather than mere industrious compilation. These *Reports* will do for medicine what the serial issued by the Smithsonian Institution has done for geology and other sciences. It is useless to attempt to review this issue of the *Reports*, each paper in which deserves special and lengthy criticism. There are the usual hospital reports, and the lion's share of the pages falls to Dr. Howard Kelly; his tabulation of operations at the Johns Hopkins Hospital is admirable. He has also, in conjunction with Dr. Mary Sherwood, prepared a valuable communication on One Hundred Cases of Ovariotomy performed on Women over 70 years of age. Only 12 out of the 100 cases were fatal. An honourable mention is due to his papers on an External Direct Method of measuring the Conjugata Vera, and on Deviations of the Rectum and Sigmoid Flexure associated with Constipation, a source of Error in Gynæcological Diagnosis. Dr. Hunter Robb writes on Anæsthesia in Diagnosis of Pelvic Disease. Mr. A. S. Murray's article on Photography applied to Surgery is interesting; but questions other than scientific must not be overlooked when the science in question is applied to gynæcology. Mr. Murray's photogravures are admirably executed. A particularly commendable feature in the *Reports* is the very complete record of deaths in the Johns Hopkins Hospital during the two past years. These *Reports* are a model that might well be imitated in this country, for they are far more complete and systematic than the meritorious publications bearing the same name which are issued by several of the metropolitan hospitals.

Transactions of the American Gynecological Society, Vol. 18, for 1893. (Philadelphia: W. J. Dorman. 1893. Demy 8vo, pp. 542.)—As is usual with such volumes, this one contains papers on various subjects and of different degrees of interest and merit. Among the most important are papers by Dr. B. F. Baer, Dr. J. Riddle Goffe, Dr. S. C. Gordon, Dr. Matthew D. Mann, Dr. H. J. Boldt, Dr. Stansbury Sutton, and Dr. Archibald Maclaren, all of them dealing with the operative removal of large uterine fibroids. In these papers the reader will find evidence of the remarkable success which has recently attended hysterectomy in America, and also descriptions and criticisms of the methods which the most skilful American operators adopt. Dr. Cullingworth, of London, contributes a valuable paper on retention of menstrual fluid in cases of bicornate uterus from unilateral atresia of uterus or vagina. There is a paper by Dr. Harry Marion Sims on hystero-epilepsy, and one by Polk on operations upon the uterine appendages with a view to preserving the functions of ovulation and menstruation. From these it

appears as if in America the danger to life attending the abdominal surgery of the pelvic organs was now regarded as hardly great enough to be considered; but as to the results of these operations, the divergence of opinion (each side appealing to facts) seems to be as great or greater than in this country. Dr. Cushing contributes a useful paper on the operative treatment of backward displacements of the uterus. Among the other papers of interest mention must be made of the address of the President, Dr. Parvin.

Formulaire des Eaux Minérales de la Balneothérapie et de l'Hydrothérapie. Par le Docteur de la Harpe. Introduction par A. DUJARDIN-BEAUMETZ. (Paris: J. B. Baillière et Fils. 1894. Cr. 8vo, pp. 308. 3 francs.)—This neat and handy little volume is divided into three parts. The first contains a brief sketch of general balneotherapy, a description of the characters and indications of the different classes of mineral waters, and chapters on sea bathing and on hydrotherapy; the second contains a description, in alphabetical order, of the principal bathing stations and mineral springs, and, although the descriptions are necessarily brief in the case of all but those of chief importance, they present the principal facts that it is essential to know. The third part is devoted to an examination of the application of mineral waters in different diseases. The plan and execution of this little work are, in many respects, most commendable, and it is therefore all the more to be regretted that so many serious omissions are discoverable on careful examination of its pages. Of English baths, Bath, Buxton, and Cheltenham only are mentioned, and there is no mention of such important springs as those of Harrogate, Leamington, Droitwich, Woodhall, and Tunbridge Wells. The French baths are treated of very fully, but, amongst other Continental spas, we notice the omission of any reference to Aussee, Alveneu, Badenweiler, Elster, Lucca, Rippoldseau, San Bernardin, Santa Catarina, and others. A work of reference, however small and concise in its plan, loses much of its value if it is not complete. The very places that are omitted may be precisely those about which the buyer of the book may be seeking for information.

On Failure of Brain Power (Encephalasthenia): its Nature and Treatment. By JULIUS ALTHAUS, M.D., M.R.C.P. Fourth Edition, with 12 Engravings. London: Longmans and Co., Paternoster Row. 1894. (Cr. 8vo, pp. 200. 3s. 6d.)—The fact that this book has reached the fourth edition shows that it meets a want; and, indeed, a perusal of it gives many useful hints. We, however, do not admire the term "encephalasthenia," which the author has coined as an equivalent international term for the English "failure of brain power." The physiological part of the book has been revised in accordance with present views of the localisation of faculties in the brain, and the chapter on the subject is well illustrated by diagrams representing the centres which are supposed to have to do with intellect, speech, motion, and the special senses. Dr. Althaus discusses the influence of heredity as a cause, and mentions the principal laws of inheritance as formulated by Darwin, Haeckel, Wallace, and others. The symptoms of the disease are given at length, and the nature of the neurosis, the diagnosis, prognosis, and treatment are fully considered. Illustrative cases add considerably to the merit of the book, which is well got up, and will be useful to all those who have to deal with this steadily increasing malady.

Myxœdème et Goitre Exophtalmique. Par le Dr. CHARLES CAUTER. (Liége: Alfred Faust. 1894. Demy 8vo, pp. 16.)—Dr. Cauter maintains that exophthalmic goitre is due to the absorption of a gastro-intestinal toxic agent, and he quotes cases in point. He believes that the toxic agent in question directly or indirectly induces oversecretion on the part of the thyroid gland. He takes the goitre and exophthalmos as evidence of this, and he points out that the whole group of symptoms, including tachycardia, tremors, excessive perspiration, and insomnia, are known to occur when the treatment of myxœdema by means of thyroid extract is pushed too far. Observing next that it is a general pathological law that organs which for a time have exhibited undue functional activity afterwards undergo atrophy and degeneration, he finds that this obtains also in Graves's disease. Sooner or later the heart's overaction subsides, and the special characters of the disease give place to those of myxœdema. There is a general infiltration of the skin, most marked in the lower parts, as the abdomen and legs. The author suggests that the product of thyroid secretion is complex in character, like the intestinal juice. He forgets that the latter is complex because it is furnished by glands of different kinds, and that histologically their nature is well known. He makes the assumption apparently to enable him to account for the coincidence of tachycardia—in his view a symptom of excessive secretion—with skin infiltration, which he regards as due to defective secretion. He does this by supposing that certain elements may be secreted in excess, while others are wanting.

Index Pathologicus, for the Registration of the Lesions recorded in Pathological Records or Casebbooks of Hospitals and Asylums. By JAMES C. HOWDEN, M.D. (London: J. and A. Churchill. 1894. Foolscap 8vo, pp. 94. 6s.)—Dr. Howden informs us that the object of the *Index* is to lessen the labour of research by affording a ready means of reference to the gross pathological lesions stored up in the casebooks kept in hospitals. No less a pathologist than Dr. Joseph Coats has aided in its preparation. The *Index* is a kind of ledger, with spaces ruled off under headings "Respiratory System," "Nervous System," etc., and subheadings relating to matters of importance associated with the subjects of the headings. The spaces are to be filled with references to the ward books and *post-mortem* books of the institution where the *Index* is used. Dr. Howden's publication will be of much use to hospital registrars.

REPORTS AND ANALYSES
AND
DESCRIPTIONS OF NEW INVENTIONS
IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

VINESTAL.

THIS is a well aërated beverage of agreeable character and free from alcohol. It contains rather more than 8 per cent. of solid contents and has a slight acidity equal to about 10 grains of citric acid per pint. It is also stated that a small proportion of aromatic spirit of ammonia is introduced in the manufacture and it contains ammonia nearly equal to 10 minims of that preparation in the pint. The manufacturers are Messrs. Souter, Mackenzie and Co., of the Mineral Water Works, Dover and Folkestone.

PHENOSALYL.

PHENOSALYL is a new antiseptic combination in which has been utilised the idea that mixtures of different antiseptic substances possess advantages over the individual constituents as regards antiseptic power, solubility, etc.: it consists of a mixture of carbolic, salicylic, and benzoic acids melted together and dissolved in lactic acid. Bacteriological experiments, it is stated, have shown that this mixture is superior to phenol in antiseptic power. A 1 per cent. solution of phenosalyl is sufficient to kill streptococcus albus and staphylococcus pyogenes aureus, while to produce the same effect with carbolic acid a 2½ per cent. solution is required, and the contact must be continued for a longer period. Phenosalyl is a clear syrupy liquid, with a not unpleasant odour, easily soluble in warm water, but to a less extent in cold, and very soluble in alcohol and ether. It has been used for the sterilisation of instruments, of gauze, etc. The watery solution does not irritate the skin, and has no corrosive action upon instruments. The sample of phenosalyl has been sent by Messrs. Burroughs, Wellcome and Co., Snow Hill Buildings, E.C.

A NEW VACCINATOR.

Dr. T. W. A. Napier sends us a specimen of a vaccinator which he has devised. The instrument is made of a single piece of steel nickel plated. The principal advantages claimed for this over other vaccinators is the ease with which it can be rendered perfectly pure and aseptic by passing it through the flame of a candle or dipping it in boiling water, in either case without any fear of injury. Besides this it possesses facilities for great rapidity in use and of making most regular and precise scarifications. Dr. Napier states that he has now used this instrument over 300 times with uniform success in both public and private vaccination. In public vaccination he suggests that two of the vaccinators be employed alternately to admit of maintaining the aseptic condition. The vaccinator is made by Messrs. Ferris and Co., Bristol.



STERILISED MILK AND CREAM.

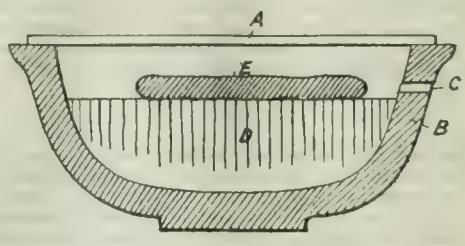
The Bernese-Alps Milk Company is introducing into this country milk and cream from the Emmenthal in Switzerland sterilised and in pint glass bottles fitted with air-tight stoppers. It is claimed that in this condition the milk or cream can be kept for months without deterioration, and as nothing whatever is added the disadvantages attaching to condensed milk are entirely avoided. Some bottles of the milk received on April 30th were examined after having been kept for several days, and when opened the contents were found to be perfectly sweet and sound, showing that sterilisation had been very efficiently carried out. Both the milk and cream are of high quality, and will probably be found very serviceable under conditions which do not admit of fresh cow's milk being obtained. The milk is particularly adapted for feeding infants, and has been used for that purpose in Switzerland and France with great success. Dr. Dick, of Berne, certifies from his personal observation that catarrh of the stomach and bowels has become much less frequent since its introduction, and that the summer diarrhœa so fatal to infants has been reduced to a minimum. The same company also prepares food for children consisting of milk solids, wheaten flour, and a small proportion of sugar. This is in the form of a dry powder, and when dissolved in ten times its weight of boiling water is suitable for use. As compared with the various kinds of condensed milk, it contains little more than half as much sugar. The representative of the company in this country is Mr. E. de Sinner, 102, Fenchurch Street, E.C. A bottle of the milk opened one month after receipt was perfectly good, and the milk was used in *café au lait*, without the difference from fresh milk being observed.

A NEW, CHEAP, AND EFFECTIVE BASIN FOR MOUNTING AND EMBEDDING IN PLASTER-OF-PARIS SPECIMEN DISSECTIONS OF THE HUMAN BODY.

Mr. Edward Fawcett, M.B., Professor of Anatomy, University College, Bristol, writes that the cost of basins or jars for the purpose of mounting and embedding in plaster-of-paris specimen dissections of the human body has always been a serious drawback, and after consideration and several experiments, which have in every way proved satisfactory, he has thought that a short description of the basins he has adopted would be of interest to various anatomists. The form of basin generally used is that approaching the ordinary washing basin with a flat ground top, made of white porcelain, and having a hole at the side for letting out the spirit. The dissection having been embedded in plaster-of-paris in the basin, a glass top is fixed on this by some form of cement, the one in general use being a mixture of gold size and red lead, or gold size and litharge.

From his own experience, and from what he knows from that of others, this is at best an unsatisfactory method, for sooner or later the cement yields to the spirit, with which the jar has been filled, and the basin leaks, and the whole process has to be repeated.

The figure here is a section of the basin most commonly used.

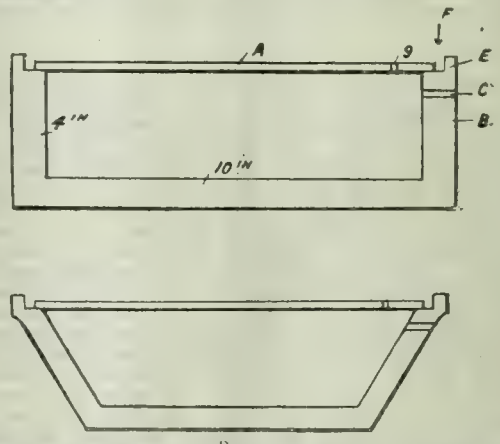


A. Glass top. B. Basin. C. Hole for filling basin by. D. Plaster-of-paris. E. Dissection and chamber filled with spirit.

The glass A is fixed to the basin B by the aforesaid cement, and has to be left on under pressure for a considerable time before the spirit can be poured into the basin through the side hole C, as the cement takes some time to dry, and any movement of the glass during this period is fatal to an ultimate success, as leakage is sure to occur.

The cost of such a basin, so far as his experience goes—and it is considerable—is anything over 12s. 6d., the smallest basin, say, for a brain costing about that figure. The basins that he has had made, which are suitable for mounting dissections of the brain, the hand, foot, bend of the elbow, in fact, any part under 10 inches in greatest length, cost 1s. 6d. if of the following dimensions: Diameter 10 inches, depth 4 inches. They are made of light stoneware, and the top of the wall of the basin is provided with a narrow flange which serves the double purpose of preventing side slipping of the glass cover and of affording a good space between it and the glass for filling in the cement.

The subjoined figures will explain, and two shapes of basin will be noticed:



A. Glass top ⅛ inch thick. B. Basin. C. Hole. E. Flange ⅛ inch high. F. Space between edge of glass and flange to be filled with cement. G. Hole in glass top for filling by.

The glass top is simply laid flat on the top of the basin, and the interval between it and the flange is filled in with any cement that may be thought desirable. Gold size and litharge cement works well enough, though it requires careful handling afterwards as it is so fragile. It may be supplemented by another covering of great tenacity, a mixture of Stockholm tar and litharge. This mixture was first devised, so far as he knew, by R. J. Gawler, anatomical attendant at the Leeds Medical School, and is a very valuable one. It soon sets, and is very tenacious and becomes very hard.

The best cement Professor Fawcett has ever used, and the one he has now adopted, is one manufactured by Claude Henry, 1, Brandon Terrace, Edinburgh. This, Professor Fawcett says, is absolutely spirit proof, sets like glass, and is very easily worked, and it looks very well. It was recom-

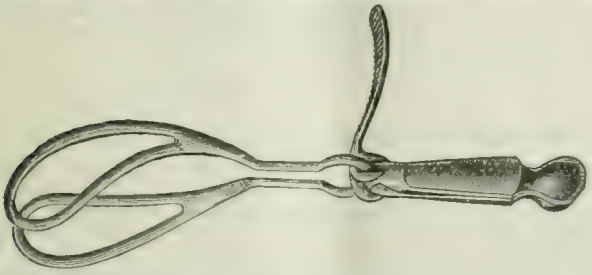
mended to him by Mr. C. W. Cathcart, of Edinburgh, and is most valuable. The glass top is drilled, the hole acting as a safety valve in hot weather, when the spirit expands; it may be plugged lightly with a cork, the usual expedient. The hole at the side enables one to let out the spirit when required. The advantages of this system, he thinks, are obvious. The basins are manufactured for him by Messrs. Powell, of Temple Gate Pottery, Bristol.

UMBILICAL CORD CLIP.

WE have received from Mr. Gerald W. Adams an umbilical cord clip invented by him. Its purpose is immediately to secure the cord, so that it may be cut and afterwards tied at leisure, in a good light, and therefore securely and well. It is a sort of large serre-pin, and is well adapted for its purpose. It can be boiled and thus kept aseptic. It is made by Messrs. Philip Harris and Co., Edmund Street, Birmingham.

AN AXIS TRACTOR.

DR. JOHN F. LE PAGE, of Salford, sends us the following description of an invention, protected by patent, which is designed to supply a handy, effective, and uncomplicated adjunct to the forceps, which will render traction in any direction possible and easy. The tractor is so constructed that it can be attached to any ordinary long forceps when *in situ*, and with facility removed at any moment. When in position, as seen in the illustration, it is at a right



angle with the handle, and, although rigid, does not interfere with the play of the lock, so that continuous pressure is avoided. By using the handle of the forceps as a guide, the whole of the traction force can be expended in the true axis, and so pressure on the anterior brain is avoided, and the force required for delivery reduced by fully one-half. Traction can practically be made up to an angle of 90° from the handle, an extreme which is of use when it is requisite to lift the head off or over the pelvic brim. With the handle of the forceps in the right hand and the tractor in the left there is perfect control over the instrument, and any desired movement can be effected with precision, whilst under force would simply press the head into the sacral concave. More freedom and play for the adjustment of diameters are afforded than with the forceps alone, and the dangers incidental to forcible traction are obviated. The instrument is made by Messrs. Sumner and Co., 50A, Lord Street, Liverpool.

WIGAN MEDICAL SOCIETY.—A meeting of the Wigan Medical Society was held on June 7th; Mr. E. H. Monks, jun., President, in the chair. Dr. W. Permewan read a paper on the treatment of asthma and respiratory diseases, in which special reference was made to the large proportion of cases of such disorders in which the nasal passages were the seat of lesions of some kind. Notes of a case of typhus, with complications, were read by Mr. Angior; Messrs. Barnish, Parker, Benson, Brady, R. P. White, Jones, Rees, Lowe, and the President took part in the discussion. The result of a debate on the registration of midwives will be found on p. 1384.

A RUSSIAN LEPER COLONY.—The St. Petersburg correspondent of the *Daily Chronicle* states that the General Governor of the Amoor Province is arranging in the vicinity of Nikolaivsk for a colony of lepers, which will be surrounded by a stockade, to prevent the patients leaving the place. Land is being set apart within the enclosure for gardens and the necessary buildings. Only Russian lepers will be received there.

REPORTS
ON
THE NURSING AND ADMINISTRATION OF PROVINCIAL WORKHOUSES AND INFIRMARIES.

SPECIALLY REPORTED TO THE "BRITISH MEDICAL JOURNAL.

IV.
BISHOP STORTFORD.

BISHOP STORTFORD is a country town of average size and standing, and is the centre of a large agricultural population: the union receives its inmates from a large number of hamlets, over a wide area. There is no hospital nearer than London or Cambridge, so that the sick among the working class must come into the infirmary if they require nursing, unless the case is so grave as to be sent to either of these places.

BUILDINGS.

The workhouse stands well on a slight rise, and is open on all sides. The infirmary is a separate building, and contains 44 beds on the male side, and 35 on the female side: to these must be added 33 beds in the fever hospital, making a total of 112. On one side the infirmary is open to a wide expanse of country; the wards are of varying size, the largest holding 11 beds; they are cheerful, airy, and well ventilated, having cross lights, and hit-or-miss ventilators in the cornice. The beds are wide, and the bedding is flock, feathers, or straw according to the nature of the case. Water and air mattresses are used in the infirmary for special cases.

CLASS OF PATIENTS.

The master and matron took us into every part of the buildings, and afforded every facility for a minute inspection. On the male side there were at least 8 patients who required careful nursing. There was a man with cancer of the jaw which had been operated on. The wardsman seemed to be responsible for his feeding and cleanliness, indeed he took quite a professional interest in his patient. In the larger ward a man was lying with spinal disease who had no control over the sphincters; in the day he could be efficiently attended to, but at night, being dependent on pauper help, it was impossible that the wardsman single-handed could keep him clean. The matron said that on the bed being opened in the morning it was always in an unwholesome condition: this was inevitable under the conditions, and it spoke well for the care that the man received that he was free from bedsore; but his condition through the night is sad to think of. In the same ward was a patient recovering from bronchitis, and another crippled with rheumatism, a case of senile debility, and a case of dementia: to these add the aged and infirm in the smaller wards and we have a fair idea of the class of patients under the care of the nurse on the male side. On the female side the work was not so heavy, but as the midwifery patients are attended to by the same nurse, at times her hands are over full. The infirmary is always light as the warmer season comes on, but in the winter every bed is full, and often with acute cases.

LYING-IN WARD.

This ward opens out of one of the infirm wards. It contains 4 beds, and is attended to by an inmate who was midwife before the trained nurse was appointed: it has no separate offices, and the number of confinements is not great.

CLASSIFICATION.

There were no lock cases in the infirmary at the time of our visit: but there is provision for their isolation. We saw a few imbeciles scattered about among the other patients; there is a separate ward for the insane, with a padded room into which a violent patient can be put by the doctor's order, the more harmless are watched by the inmates until removal.

ISOLATION HOSPITAL.

The infectious hospital is a wooden building quite apart, but it is under the charge of the workhouse master, and its

expenses chargeable to the workhouse. The wards are a series of huts suitable for their purpose, but otherwise it is crowded. We saw no place for the storage of the food but the bathrooms; the absence of such conveniences hampers the working and is quite unnecessary since the guardians were not limited in the space at their disposal. There is a small cottage holding 8 beds and this cottage takes in such patients as cannot be admitted into the wards; it is in the charge of a pauper and his wife. In this department there is the oven for disinfection; it is provided with a pyrometer, and the porter is responsible for bringing the apparatus to the right heat, but the pauper resident in the cottage places the clothing in the receptacle; we could not ascertain that the distribution of the articles inside the oven was supervised, and this important detail seemed to us of too much moment to be entrusted to a pauper. The old man toddled out with much pride to exhibit the oven. Another thing that struck us as being faulty was an open trough running behind the infectious block within a few yards; along this trough the sewage was pumped on to the land.

System of Nursing.

The fever hospital has a permanent nurse responsible for its cleanliness and preparedness, and as occasion requires other nurses are engaged for temporary work; as there were only a few cases of scarlet fever in the ward when we visited, the one nurse was working single handed. This nurse is fully trained; she is assisted by an inmate. In the infirmary there is one nurse responsible for the entire nursing of the sick; she is trained as a midwife, and has otherwise gained experience in general nursing; there is no night nurse, and all the service that the nurse cannot give is done by the paupers. In reply to our question as to the course pursued when a patient was too ill to be left untended at night, the matron informed us that some of the inmates were told off to sit up at night, or the nurse had to take the night watching. The nurse's quarters are in the infirmary, and there is a bell for use at night to the master's room.

Pauper Help.

Pauper help is very largely used in this house, for there are very few officers, and indeed considering the size of the building and the number of the inmates (455), it was a wonder that the order was so excellent; a good spirit pervaded all departments, hence the officers had willing workers; but the matron told us that the supply of able-bodied women was so small that she did not know where to turn for inmates for the service of the house. This difficulty is increasing every year, and at the time we were going through the house all the available workers were taken up by the sick department.

The utmost was made of the inmates by keeping them to the work to which they were most accustomed. For instance we saw in the wards men and women who had served them for several years, and knew the routine, but taken at their best paupers can never be made responsible, and there is no margin for contingencies.

Receiving Wards.

These are on each side of the hall close to the main entrance, and receive patients before they are seen by the doctor and classified; that for the women is attended to by an inmate, and that for the men by the porter. We saw a tramp in bed in the receiving ward; he was supposed to be resting, but he looked as though he would have been the better for regular nursing.

Diets.

The sick are given such extras as the doctor orders, and on casting our eyes over the bed cards, we saw that extra milk was frequently ordered; the extras are fish, milk puddings, beef tea, and stimulants, and the matron informed us that milk, and beef tea, are served out for the night to the feeble ones. The "full diet" in the infirmary is 7 oz. of bread, ½ oz. of butter, and 1 pint of tea, for breakfast, and the same for tea; for dinner 5 oz. of meat—it does not state whether roast or boiled, or of what nature—and 12 oz. of potatoes, vegetables, rice or pudding; the "low diet" is the same for breakfast and supper, with 4 oz. of meat, 1 pint of broth, 12 oz. of potatoes, and 4 oz. of bread; arrowroot, broth or rice-milk may be substituted for meat in this diet. In this diet there is a deficiency of the material necessary for the repair of the body; the nitrogenous element is small, compared with the carbo-hydrates and the hydro-carbons. The same defect was in the children's diet, there is a large proportion of porridge, and very little milk.

Water Supply.

The water supply seemed to be ample; there was a good flush in the closets, and hot and cold water was laid on to the bathrooms. Each ward was provided with a closet near at hand for use at night; these were all sweet and clean at the time of our visit.

Grounds.

There are cheerful airing courts attached to each side of the infirmary, and besides the use of these courts, the infirm were allowed to walk in the extensive fields and gardens that surround the house.

Recommendations.

We were much struck with the efficiency of the management of this house, but at the same time we were convinced that the number of officers was too small, and we recommend that a paid attendant be put on at night in the infirmary, and that the receiving wards be under the care of a responsible officer, and that increased space be provided in the infectious block for the service of the same; that the sewage trough be diverted from the immediate neighbourhood of the block; that the disinfecting apparatus be put under the entire charge of a responsible officer.

DIPHTHERIA AS A NOTIFIABLE DISEASE.

Dr. Talbot, in reporting on public health matters in Poplar, refers to the exceptional prevalence last year of diphtheria in the Bow district of that sanitary division of London. The population of Bow is as 1 in 104 to that of London, but the notified cases of diphtheria were as 1 in 27 of all the cases in London as a whole. And on this he raises the question as to what should be notified as diphtheria. Medical practitioners may, according to Dr. Talbot, be divided into two classes on this point. Those belonging to one class never notify a case as diphtheria unless the case is typical of that disease; the other class notify in advance of any such development of local signs as would constitute typical diphtheria. And having regard to the intentions of modern legislation, which has for its object the protection of the public health, Dr. Talbot considers that those who give the earliest and surest information are those to whom the thanks of the community are most due. Dr. Talbot here raises a most difficult question, and it is made the more difficult by reason of his using two adjectives which, in connection with diphtheria prevention, are in one sense almost antagonistic.

The earliest information has often to be given before a medical practitioner is sure of his diagnosis, the surest information can often only be given after delay. But whilst this is the case, we fully appreciate the aim which Dr. Talbot, with many others, has in view, and this is that notification should supply such information as will enable sanitary authorities and medical officers of health to hold the disease notified in check. Comparison of two single years does not go for much as regards the incidence and amount of any disease such as diphtheria, for it is well known that, under conditions which we are unable to distinguish, infectious diseases differ enormously in their power for spread. But it is noteworthy that whereas the notified cases and deaths (uncorrected) from diphtheria in the metropolis in 1892 were 7,783 and 1,885 respectively, they reached 12,976 and 3,265 respectively in 1893. And we know, further, that one of the most fertile sources of diphtheria lies in the comparatively trivial and unrecognised attacks which, making their way into the elementary schools, find there precisely the conditions for spread, and by no means infrequently the conditions for the development of a more potent form of the disease, both in point of severity and as regards power for spread.

This mild form of diphtheritic throat is, indeed, the one above all others which calls for administrative measures of

prevention, and it may well be asked whether the system of compulsory notification aids to this end, whether all is done under the system that can and ought to be done to cope with the disease, and if not how the matter can be amended. Section 3 of the Infectious Disease (Notification) Act, 1889, only admits of notification by the medical practitioner on his "becoming aware" of the nature of the disease, and the whole question lies in the interpretation to be put upon these words. This point may be judged of from two different aspects—first, that of the medical practitioner; secondly, that of the sanitary authority. The first is the more difficult, for it may at times involve the conscientious objection to claim a fee under circumstances which make it doubtful to some minds whether the fee, however insignificant, has been really earned; and hence it is that some practitioners refuse to notify the existence of diphtheria in an individual patient unless they are completely satisfied that diphtheria itself is in question. But the same section materially helps in the definition of the words we have quoted, for it adds later on that it is "the opinion" of the certifier that is really in question, and on which his action must be based. This may probably supply the solution of the difficulty.

When diphtheria is not prevalent in a house, locality, or district, it could not be regarded as justifiable that every case of suspicious or even infective sore throat should be notified as diphtheria; and under these circumstances medical practitioners are entitled to hold that it is their duty, before notifying that they are aware of existence of diphtheria, to be convinced in their mind that diphtheria itself is in question. But when diphtheria is prevalent it is notorious that it is commonly associated with a number of affections of the throat which, if they stood alone, would not be clinically regarded as diphtheria, but which, notwithstanding, have been shown again and again to serve as means for communicating the genuine and typical disease to others, and notably to school-fellows. When, therefore, such cases arise in a house in which true diphtheria has been recognised, or even in a locality where the disease is known to prevail, there can surely be no straining of the conscience to hold "the opinion" that these mild cases are of the same type as the major malady which has already been recognised; indeed failure to adopt this attitude would mean failure to protect individuals, and failure to supply the local authority with the information necessary to the protection of public health.

And this brings us to the second aspect of the question—namely, that of the sanitary authority. There must always be cases on the border-line, and if sanitary authorities make a difficulty about paying the notification fees because certain medical practitioners supply them with information at a time and under circumstances when it can be profitably utilised, instead of waiting until it is well-nigh useless, we cannot suggest to the medical men concerned that they should go beyond their strictly legal duty, and run risk of exposing themselves to obloquy. But, happily, sanitary authorities are coming—slowly, perhaps—to understand what are their real duties in this respect, and what are the true interests of the public whose health they have the statutory duty to protect. This was well shown when cholera prevailed in certain of our sanitary districts last year. A number of sanitary authorities immediately applied to have "diarrhœa" added to the notifiable diseases. It was not that they wanted on all occasions to know of every case of diarrhœa in their districts; it was simply because they recognised the fact that the line of division between cholera and diarrhœa was an imperceptible one; that "diarrhœa" was a common accompaniment of cholera prevalences; and that if they ignored the ailment which was classed as the minor one, they would run risk of finding themselves face to face with the major disease after it had assumed proportions which rendered it difficult of control. Sanitary authorities who are desirous of controlling the diffusion of that increasingly fatal disease diphtheria should apply the same principles to that disease—that is to say, they should welcome information which would give them early indications that the disease was spreading, and not cavil at certificates which in their judgment were given before the clinical features of true diphtheria had become fully developed. Short of action on such lines the medical profession can hardly help authorities in this matter.

SMALL-POX AND VACCINATION IN 1893.

VII.

DERBY.

THERE were 46 cases of small-pox treated in hospital in Derby last year, the deaths numbering 7, or a rate of 15.2 per cent. Of the 14 cases showing no marks of vaccination 5, or 35.7 per cent. died, whilst of the 32 primarily vaccinated persons attacked only 2 died, or 6.2 per cent. Of 16 cases in persons vaccinated in three or four places not one proved fatal. No revaccinated patient was admitted, and the whole of the hospital staff, having been revaccinated, escaped infection.

SOUTHAMPTON.

The Cost of Epidemics.

Dr. Wellesley Harris, Health Officer for Southampton, has made an excellent report on the small-pox epidemic which visited his borough last year. Tramps appear to have done much in the way of spread of the disease, and their movements entailed a great deal of labour on the sanitary staff in attempts to discover all infected persons in an early stage of disease. All tramps coming to the casual wards were examined on arrival, and common lodging houses were visited at frequent intervals during the day. In spite of some opposition, no case of necessity for a magistrate's order for removal to hospital was come across. The prevention of the entry into infected houses or exit therefrom of healthy persons was effected, the first by police, the second by warning of action for exposure of infected clothing, and under these conditions removal of patients was frequently sought. All infected clothing and bedding was destroyed until the steam disinfector was established, and all infected houses were gratuitously disinfected. Dr. Harris points out that the outbreak did not subside until all the cases were isolated on the hospital ship, right away from dwellings.

In regard of the expenditure called for by reason of the epidemic, some items of interest are given showing the expensive character of hurried preparation, the items amounting to nearly £2,600 on isolation accommodation, maintenance of patients, compensation for bedding destroyed, nursing staff, etc. The number of cases catered for was 152. Only one person was not removed, he dying before removal could be effected.

As to the relation of vaccination to the disease, we learn that all the fatal cases, 8 in number, occurred in the unvaccinated. Five revaccinated persons were attacked, but of 100 persons revaccinated during the outbreak only 2 contracted the disease, and they only mildly. Several persons, after refusing revaccination, were attacked by small-pox, one example being that of two constables who had been exposed to infection. One accepted the offer of revaccination, the other refused, and he and he alone was attacked. The hospital staff, all revaccinated, entirely escaped infection. The death-rate among the unvaccinated seems to have been 50 per cent. of cases.

EPIDEMIC INFLUENZA IN EGYPT.

THE Sanitary Administration of Egypt has published an account of the two recent epidemics of influenza in that country. The volume is the work of Dr. Engel Bey, the head of the statistical branch, and contains much interesting matter, supplemented by tables and numerous diagrams.[1] The second outbreak, though of shorter duration than the first, seems nevertheless to have been attended by graver consequences. If we are to judge by the death returns this was certainly the case, but on the other hand it is probable that the fatal nature of the disease was more generally recognised on the occasion of its reappearance.

When the influenza first appeared in Egypt the symptoms were so mild that the complaint was mistaken for ordinary catarrh, an affection which is common enough in the country, being known amongst the natives by the name of *nasle-el-wafde*, or "humoral flow." This failure to appreciate the importance of the new epidemic was not peculiar to Egypt.

During the Egyptian epidemic of 1892 fever, as a rule, was more accentuated than on the former occasion, and rigors

[1] *L'Epidémie d'Influenza en Egypte pendant l'Hiver 1889-1890*, avec un appendice sur l'épidémie de 1891-1890. Le Caire: Imprimerie Nationale. 1894.

were of more frequent occurrence. The temperature usually went up to 104° F., and often to 106°, in uncomplicated attacks. Simple cases generally lasted from four to eight days, and convalescence was, as a rule, protracted, extending over three or four weeks. Relapses were not only more frequently noted, but, in many instances, were attended with greater disturbance than the original attacks. Slight cases were relatively less numerous, and severe bronchitis, or broncho-pneumonia, was a common complication. Pneumonia aggravated by hæmoptysis was observed with comparative frequency, and where lysis was prolonged there was often a tendency to the deposit of tubercle. Pleurisy also, with or without effusion and empyema, was sometimes met with, and altogether the epidemic of 1892 was far more dangerous than its predecessor to people with a consumptive tendency. In spite of this, however, strangers wintering in Egypt on account of lung trouble were only slightly affected by the influenza.

Having alluded to cerebral symptoms of various kinds observed during the outbreak of 1892, and also to the attendant heart weakness and general adynamia, Dr. Engel says: "Far above all other complications, affections of the kidney imparted a special character to this epidemic. I have already mentioned albuminuria in connection with pneumonia. Sometimes it was relatively slight, and even transitory; but, on the other hand, many practitioners of Cairo, Alexandria, and other towns, met with cases of nephritis and hæmaturia, and several deaths were attributed to uræmia. This last-named complication claimed an illustrious victim—His Highness the Khedive Tewfik—whose noble character and goodness of heart will long remain present in the memories of his people. He was suffering from slight bronchitis; after an apparent improvement broncho-pneumonia declared itself, and the following day uræmia carried him off. The nephritis, as a matter of fact, was not recognised till a few hours before death, and while the patient was already in a state of coma. This event was all the more terrifying to the population from its utter unexpectedness. The case was one of the first in which this disastrous complication of the new epidemic was verified. Subsequently it appears with relative frequency among the 442 deaths attributed to influenza."

FRIENDLY SOCIETIES IN NEW ZEALAND.

We have received a report of a conference of friendly societies at Oamaru, where some proposals were submitted from the medical practitioners of the colony suggesting certain alterations in the rules governing the relations of these bodies with their medical officers. The proposals were seven in number:

1. That the members of each Branch or district should agree upon a uniform price per year per club member, and that individual tendering be abolished.
2. That club attendance means ordinary medical attendance, exclusive of consultations, operations requiring extra medical aid, dentistry, parturition, and miscarriage.
3. That none but benefit members can subscribe to the medical fund, and that so-called honorary members be not placed on the doctor's list.
4. That no encouragement be given to men who are in receipt of an income of more than £200 per annum to become benefit members of societies.
5. That the age of children allowed to receive free medical attendance shall not exceed 16 years.
6. That the distance for medical attendance shall not exceed three miles by the nearest road from the lodge, and that there shall be no contract for extra mileage unless the society make itself responsible for payment.
7. That the wives of members be examined.

That these proposals are reasonable enough few could deny, and the chief argument against them seems to have been that they are "entirely in favour of the medical profession." We are not, however, surprised to find that although one or two slight modifications in the direction of these alterations were sanctioned the proposals, as a whole, were rejected.

If there was any effective union in the profession changes such as these, and more extensive ones, might be easily demanded. To the public outside the profession the matter is simply one of supply and demand. If medical men can be found to catch eagerly at appointments of this kind in spite of the beggarly remuneration too frequently offered it is not surprising that these bodies refuse to surrender advantages which they possess or to pay one penny more than they consider to be the market value of their medical officers. It is surely irrational to expect that the public will value professional men at a higher rate than they value themselves.

It is worthy of notice that most of the points raised by our colonial brethren with regard to club practice are such as form a cause of dispute not infrequently here.

In two respects we are better off than colonial practitioners: 1. Court surgeons are never compelled to take honorary members on to their list although they may have the option of so doing. 2. The age of children allowed to receive free medical attendance never exceeds 16 years; we know of no instance where it exceeds 14 years.

With regard to the last question we find it stated at the conference "that boys under the age of 18 are very rarely in receipt of wages, while girls of a like age are incapable altogether of making a provision of any kind for their medical attendance."

Is this the case in the colonies? Are we to believe that there the labour of the youthful members of the community is valueless, where we have always been taught that there is an almost unlimited scope for labour of all kinds? It is certainly the exception over here not to find the youth of both sexes earning wages at that age. We certainly think our colonial countrymen might pay their club surgeons better if they can afford to allow their children of 18 years of age to live in idleness.

THE LONDON AND COUNTIES MEDICAL PROTECTION SOCIETY.

The annual meeting of the above Society was held on June 19th; Dr. Cleveland presided. The election was ratified of Dr. Bowlby as Auditor, in place of Dr. Foulerton, who had been appointed Financial Secretary. On the agenda paper was a notice for the appointment of a new Honorary Secretary, but the meeting was gratified to find itself relieved of this duty by the consent of Dr. Hugh Woods to continue in the office for a further period. It was unanimously agreed that in future the financial year of the Society should begin on January 1st instead of May 1st, the alteration in no way affecting the payment of subscriptions. A balance sheet covering the whole of the preceding eighteen months will therefore be submitted by the Council in January, 1895.

Dr. Heron, the Treasurer, presented a financial statement for the twelve months ending April 30th last, which showed receipts amounting to £473 1s. The expenses, £313 15s. 8d., included £120 17s. for organisation and secretarial charges, £128 3s. 2d. for printing, stationery, and stamps, £34 2s. 6d. for rent, £29 0s. 6d. for law, and £1 12s. 6d. for sundries. A balance was thus left of £159 5s. 4d., against which there had now been delivered the taxed bill of costs, amounting to £187 1s. 10d., incurred in the prosecution of the Indian oculists. An estimate of receipts and expenditure for the current year, calculated as to April 30th, 1895, showed a balance of £281 7s. 4d. With this sum, said Dr. Heron, speaking on behalf of the Council, it was impossible to carry on the Society without leaving out its duties as a medical defence society. The annual subscription was 10s., and there was a guarantee of £1, which might be called up in case of the liquidation of the Society. The Council now proposed to insert in the articles of association words providing that:

The Council may from time to time call on the members *pari passu* to contribute funds for the purposes of the Society, or any of them, and each member shall pay every call so made to the Treasurer at the times and places appointed by the Council, but no member shall be called on to pay more than 10s. in addition to his subscription in any one year, except in the case of the winding-up of the company, when he may be called on to pay also and in addition the amount of his guarantee mentioned in Section 4 of the memorandum of association.

Dr. Baines seconded the resolution, which was adopted unanimously after some discussion, in the course of which Dr. Heron announced that it was not the intention of the Society to prosecute quacks any further until its funds were in a stronger position.

A lengthy debate arose on the application of Dr. Maxwell for the payment by the Society of his costs in the recent action of Logie *v.* Maxwell, which application had been referred by the Council to the general meeting for decision. The Society had taken no part in the action, considering that Dr. Maxwell had made a technical error, though substan-

tially he was in the right. It may be remembered that the action, which was one for slander and libel, resulted in a verdict for the plaintiff for a farthing, without costs. After several suggestions had been well weighed, it was unanimously agreed to grant £86 to Dr. Maxwell—namely, half the amount of his bill of costs. A vote of thanks to the Chairman closed the business.

In the evening the members and a number of guests dined together at Frascati's Restaurant, Oxford Street, under the Chairmanship of Mr. JONATHAN HUTCHINSON, F.R.S., the President of the Society. In proposing the toast of the evening, Mr. Hutchinson observed that in prosecuting the persons called Indian oculists the Society had discharged an important public duty, and discharged it successfully, since the incompetence of these persons had been thoroughly exposed. At the same time, in undertaking such work, the Society had perhaps travelled out of its special sphere. In future it was proposed to confine their activity to their essential field of duty, which was mutual defence. He approved thoroughly the decision to modify the conditions of subscription, since it was the fact that the Society had been attempting to work on a too economical basis. He regretted that the project for amalgamation with their sister Society had fallen through; in the meanwhile, they could only go on as friendly but not rival organisations, doing similar work.

THE ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS, ENGLAND.

A MEETING of the Committee of the Association of Fellows of the Royal College of Surgeons of England was held on June 18th for the purpose of arranging the agenda for the annual meeting of the Association, as well as for other business.

The HONORARY SECRETARY (Mr. Percy Dunn) reported that Mr. Victor Horsley had undertaken to propose, and Mr. A. T. Norton to second, the following resolution at the meeting of the following resolution at the meeting of the Fellows on July 5th next, namely: "That, in the opinion of this meeting, the concessions granted by the Council, and such other changes as the body of Fellows may desire, should be embodied in a new charter." Of this resolution due notice had been given to the Secretary at the College. The Honorary Secretary further reported that he had issued last week a circular to the members of the Association convening the annual general meeting, and applying for the annual subscriptions. So far, out of a considerable number of replies, there had been two resignations and three or four notices of death; the general response showing the satisfactory position which the Association continued to maintain.

Mr. A. T. NORTON was present, and explained to the Committee the circumstances under which his application as a candidate for a seat on the Council at the forthcoming election failed to reach the Secretary of the College within the legal period.

A discussion then took place with respect to the candidates whom it would be desirable for the members of the Association to support. The general expression of opinion was in favour of suggesting that the support of the Association should be accorded to the retiring members of Council, namely, Messrs. Harrison and Marsh, leaving the confirmation of this suggestion, as well as the selection of the third candidate, to be determined at the annual meeting.

The business of the agenda for the annual meeting was then considered, and occupied the attention of the Committee for some time.

THE Medical Students' Association of the University of Brussels is organising a series of festal celebrations to be held in November next in honour of the inauguration of the new scientific institutes now in course of erection in the Parc Léopold.

M. D'ARSONVAL has been elected a member of the Académie des Sciences in the Section of Medicine and Physiology in succession to the late M. Brown-Séquard. Professor Ollier of Lyons was also a candidate.

A NEW BRITISH EPILEPTIC COLONY.

WE are glad to be able to announce that the National Society for the Employment of Epileptics will in a few weeks open their Industrial Colony for Epileptics at Chalfont St. Peter's, in Buckinghamshire. We recently gave the welcome intelligence that a Bill had been passed in the State of New York providing for the establishment in that State of an industrial colony for epileptics. The passing of this measure is, we believe, mainly due to Dr. Peterson's strenuous and able advocacy of the cause, and we heartily congratulate him on the success which crowns his labours. We have on previous occasions discussed and advocated this movement.

In considering the American and the English schemes, one cannot fail to be impressed by the contrast between our own methods and those prevailing on the other side of the Atlantic. Here we incline to institutions promoted by private effort. The best of our charitable enterprises are often small in their origin, and their full growth is the slow result of time. But in America the tendency is towards institutions originating under the auspices of public authority, created rather than evolved, and often more indebted for the excellence of their organisation to the counsels of forethought than to the possibly even safer lessons of experience. Such institutions are naturally more splendid in their inception than our own, and in reading the elaborate scheme of the New York colony, one is reminded of the old myth of the genesis of Pallas Athene, the mature goddess of wisdom, who burst into life, full-armed, from the brain of Zeus. Our National Society will open its colony with 135 acres of land and about a score of patients. The German colony at Bielefeld, now so famous, originated in a still smaller way. Remarkable as the subsequent development of this epileptic settlement has been, the New York colony will at its opening next year in some respects surpass the Bielefeld of to-day. It will have an ample domain in the Genesee Valley, about three square miles in extent, to be purchased at a cost of 12,500 dollars, and consisting of woodland, fields, and orchards, well watered with numerous brooks. A gulf will be fixed between the sexes by the steep banks and rapid stream of the Carhaqua Creek, which flows through the middle of the colony. The soil is light and easily tilled; the hygienic conditions are all that could be wished. The site is, indeed, almost an ideal one for the purpose, and its only drawbacks appear to be its remoteness from the centre of population and its situation in the northern part of the State, which renders the climate somewhat cold for outdoor work during the winter season. The valley was formerly the site of the Indian village Sonyea, or Sunshine. In recent years it has been a settlement of the Shakers, who erected upon it thirty-five buildings. These, though less picturesque than their surroundings, are in other respects excellently adapted to form a colony on the village plan, and will, independently of other buildings to be erected hereafter, afford accommodation for about 300 patients. It is estimated that there are in New York State about 1,200 epileptics, and it is expected that eventually the colony will give shelter to 1,500 or 2,000. This will doubtless be ample to meet all the requirements of the State, as the experience of Germany shows that not more than 15 per cent. of the total number are likely to seek admission. The scheme for the organisation of the colony, based chiefly upon the recommendations of Dr. Peterson, omits nothing which prudence and foresight could suggest. Provision is made for the education of children, the employment of adults, and the general welfare of the community. The opportunity which such a colony affords for scientific investigation is not forgotten. Considering the magnitude of the New York undertaking, it would hardly have been a matter for surprise if its promoters had been disposed to look down upon the small beginnings of private charity; but so far is this from being the case that Mr. Letchworth, of the State Board of Charities, in an interesting paper on the subject, recognises that it is an open question "whether, as satisfactory results will be obtained under a State and official system as under one directed by a spirit of pure benevolence." The question is one which must be left to the future to decide.

In the meantime, though the English colony begins on a small scale, we see no reason to doubt that its expansion

will equal if it does not surpass that of Bielefeld in rapidity and completeness. It may reasonably be hoped that, without seriously impairing the flexibility of unofficial management, the movement may eventually be aided by funds from private sources. The powers lately conferred upon the School Board in the care of the blind and the deaf and dumb might usefully be extended to meet the needs of other afflicted children, and, if so extended, would enable the school boards to provide for the maintenance as well as for the education of children on the Epileptic Colony. The Poor-law guardians will doubtless contribute in suitable cases towards the maintenance of patients, and we fully concur in the opinion of the recent Special Committee of the Charity Organisation Society that the county councils should be empowered to make grants towards the establishment of epileptic colonies.

It has, indeed, been suggested that the county councils already have this power; but the point, we think, is a very doubtful one, and for the present the National Society will probably have to rely mainly upon the voluntary contributions of individuals. Happily in this country charitable institutions, provided their administration is above suspicion and their purpose unquestionably beneficial, seldom appeal in vain to the generosity of the public.

The importance of congenial occupation as a therapeutic agent in the case of epileptics is now generally admitted, and it is well known that under ordinary conditions the lot of the epileptic is one of enforced idleness, detrimental to the interests of himself and his friends. Except by the establishment and adequate development of the colony this evil is not likely to be mitigated; on the contrary, in case the Employers' Liability Bill, lately abandoned by the Government, should at a future time become law, the difficulties of the epileptic in finding employment would probably be much intensified. Both on medical and social grounds the movement of the National Society may with confidence be commended to the support of the charitable public.

LEAD IN PUBLIC WATER SUPPLIES.

The Danger of Lead Poisoning.—Difficulties in the way of doing away with Lead Pipes and Fittings.—Treatment before or Filtration after Delivery.

We are from time to time only too forcibly reminded of the grave danger to the public health resulting from the presence, in certain localities, of appreciable quantities of lead in drinking water. Since attention was first called, in the pages of the British Medical Journal, to the extraordinary prevalence of disease in one form or another induced by the drinking of lead-contaminated water, more particularly in Yorkshire, attempts have been made in various ways, and with more or less success, to obviate the danger, but, unfortunately, much difference of opinion still exists as to what constitutes the most efficient method of dealing with the matter.

The waters chiefly concerned are for the most part of a peaty nature, being derived from moorlands, and have the property of taking up lead from service pipes of this metal through which they pass, or from cisterns in which they may be stored.

This being so, the obvious remedy would appear to be to do away entirely with lead pipes or fittings, and it is to this point that attention has specially been directed of late in letters addressed to some of the Yorkshire newspapers. Thus in one place we find the assertion that "lead pipes must be discarded," and that "they are condemned by the highest authorities in the land as an unsuitable medium for conducting water;" and, in another, "every ratepayer ought to demand their removal, and ask for some more hygienic pipe in their place."

Unfortunately the matter is not quite so simple. It will, indeed, be obvious that, although tin- or glass-lined pipes, for instance, might be fitted in new dwellings, the cost of removing and replacing the lead fittings at present existing in large towns would be well-nigh prohibitive.

As alternative measures, the water may either be treated in such a way as to remove its tendency to take up lead, as has been done with great success at Dessau and since then at Sheffield and other places, or the water may be filtered after delivery through animal charcoal, which possesses in a marvellous degree the property of removing from water the greater proportion of any lead which it may contain either in suspension or solution.

Much misconception evidently exists as to the cause of the plumbo-solvent properties of the water and as to the nature of the results which have been found to follow from the employment of such methods. It has been pretty conclusively proved that those waters which act most powerfully on lead are those which possess an acid reaction, especially if at the same time they are supplied at high pressure. Such water, when treated prior to distribution with powdered chalk or lime, loses its acid reaction and at the same time its power of dissolving lead. A general idea appears, however, to have become current to the effect that it is necessary to "harden" the water to such an extent as to cause great inconvenience and loss to manufacturers and private individuals using the water. In addition to the waste of soap, for instance, supposed to result from such treatment, it has been seriously suggested that the ingestion of the "treated" water would bring about an increase of calculous diseases.

On this point Professor Wanklyn's report to the Corporation of Sheffield in 1881 is of great value, as it conclusively shows that such fears are altogether without foundation. The amount of lime or chalk usually necessary for the neutralisation of the acid water is, in point of fact, not capable of increasing the hardness by more than one degree at most. Such slight increase of hardness can make no appreciable difference in manufacturing processes, while for dietetic use it is of value rather than the reverse, there being, indeed, reason to believe that the continued ingestion of too soft a water may have some causal relationship to the known prevalence of rickets among children, which is very noticeable in certain parts of Yorkshire.

Where no treatment of the water is carried out prior to its distribution individual householders can protect themselves in large measure by the use of filters of animal charcoal, provided that such filters are properly attended to and renovated from time to time, as otherwise they are liable to become an actual source of danger rather than a safeguard. Filters, however, are quite out of the question for the poorer classes, and, therefore, where lead pipes are in use, it is most important that, pending further knowledge, trial should be made of neutralisation of the water before it is delivered.

For some time past the Local Government Board have had the whole matter of lead poisoning from drinking water under consideration. Numerous local inquiries has been held, and an exhaustive series of experiments have been undertaken with the object of determining if possible not only the various circumstances under which drinking waters become possessed of plumbo-solvent properties, but also the methods which in each case are best adapted for obviating the well-recognised danger to health. Up to the present, however, no official pronouncement has been made on the subject, and there is, we believe, no intention of making public the results of such inquiry before time and opportunity have been afforded for an absolutely thorough investigation of the matter in all its bearings. For this very reason we shall await with much interest the issue of what cannot fail to be a contribution of incalculable value to the subject of preventive medicine.

Presentations.—Dr. Croucher, J.P., Ex-Mayor of Hastings, was, on June 1st, presented with an illuminated vote of thanks, passed to him by the Hastings Town Council. The vote of thanks was embodied in a beautifully-illuminated address, mounted in a handsome gilt frame.—On May 29th, on the termination of the ambulance session held at the Northfleet Board School, the ladies who had attended Dr. Flood's class presented him with a handsome clock as a mark of esteem.—At the last meeting of the Marylebone Vestry, Dr. Alexander Wynter Blyth, medical officer of health, was presented with a handsome illuminated framed address on vellum on behalf of the vestry, in appreciation of his services rendered in connection with the temporary fever hospital opened by the vestry during the period when scarlet fever was so prevalent in the metropolis.

BRITISH MEDICAL ASSOCIATION.
SUBSCRIPTIONS FOR 1894.

SUBSCRIPTIONS to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office Orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, JUNE 23RD, 1894.

THE FUTURE OF THE BARRACK SCHOOLS.

WE need not make any apology for returning this week to the vitally important subject of the barrack schools. In addition to our editorial remarks, our readers will have observed in a recent issue the very instructive letter of the Chairman of the Board of Managers of the Central London School District. That letter only deals with one phase of the evils of these great establishments, but it indicates sufficiently the disastrous history of the barrack schools of London. As regards the prevalence of ophthalmia during the past fifteen years, we entirely agree with Mr. Searle that some central receiving house, to which cases of ophthalmia in all Poor-law establishments can be at once transferred, is a necessary addition to the public hospitals of the metropolis; but his own letter sufficiently shows that such a reform will not avoid the mischief. The accident of the existence, in a temporary form, of such an establishment at Hanwell, has enabled better arrangements than usual to be made of late: and yet we are in the midst of an exceptionally violent outbreak of the disease in several quarters at once.

The statistics of the pauper district schools, together with the kindred history of the industrial and reformatory establishments and other barracks of the like kind, prove distinctly that so long as great masses of children are herded together in buildings of what the Local Government Board politely calls the "associated" type, it is perfectly inevitable that there will be a constant percentage of ophthalmia, which involves at the best a serious mischief, and that there will be recurrent outbreaks in which that disease will reach a dangerous frequency and virulence.

The letter which we published from Mr. Elliott, formerly the superintendent of the receiving ward at Forest Gate School and the report which we were able to furnish of the prevalent ophthalmia at the Hackney Union School at Brentwood, only emphasise a most disgraceful and discreditable state of things evidently widely prevalent.

At the same time the public investigation of the painful scandals at Hackney and at Newton Abbot is undoubtedly creating a state of public feeling which cannot be ignored. If the outspoken indignation which finds expression in all sections of the press were a mere outbreak of sentimental excitement, this JOURNAL would be foremost in protesting, as it has often done before, against any ignorant or hasty judgment. But the present storm is a very different matter. It means merely that the accidental coincidence of several disasters that cannot be hushed up, has brought to a head the hostility, which has been gathering strength for years, against the whole pernicious system of "barrack" organisation. The conviction that the system was both inhuman and inefficient existed widely enough already, but it needed an object lesson or two to bring that opinion into practical effect. Nothing could have done this so effectively as the dramatic story which the miserable mites of the Hackney School have been reciting to the magistrates about the nettle thrashing and the "basket drill." The system which makes these things obviously possible and easy is past argument.

The only remedy for the evils is to break up the barracks themselves. There is really no reason why the Local Government Board should dally any longer with a matter of such urgency as this question has become. We are sorry to say that Mr. Shaw Lefevre's answers in the House convey no distinct impression to us whatever, except one, and that is a conviction of his weakness. It is always easy to put off even the most specific question with an ambiguous official reply; but it is high time that the Local Government Board directed its attention to more important matters than the smooth running of the official machine. There is a widespread complaint both of the policy and the practice of the officials of the Board, and, if we have a weak President, the officials are of necessity omnipotent. Nothing was so prominently insisted on at the recent Poor-law Conference convened by the London Reform Union as the complaint that the Poor-law inspectors were entirely out of sympathy with all efforts to alter or humanise the existing official system. The truth is that, with the exception perhaps of the medical inspectors, these officers are always on the side of the officials. If a specific complaint is absolutely brought home, no doubt they will report it; but in practice they make it very difficult to find out even such serious irregularities as those which have been disclosed at Forest Gate.

Under all the circumstances of the case we feel bound to say that it is the duty of all who are interested in Poor-law reform to put immediate pressure upon the Government, in order that some effective step may be taken at once. If Mr. Shaw Lefevre showed any inclination to go into the matter seriously, and take up a strong line in favour of the reform of the barrack schools, that would have been the easiest solution, seeing that he can at any time amend the orders of the Board in such a way as to make these overgrown institutions practically impossible in the future, and to provide for the speedy reformation of those which now exist. In view of his answers in the House, however, we have not much hope that Mr. Shaw Lefevre means to deal seriously with the question at all. If so, there is only one thing to be done. All Poor-law reformers must combine at once to put pressure on the Government for the appointment of a Commission to inquire into the Poor-law schools. We do not mean to say that this is by any means the only matter which demands inquiry; but in the presence of the scandals at Forest Gate and Hackney, it is a matter of immediate urgency. The Commission need not be large, and its labours need not occupy much time. Upon its decision the Local Government Board will no doubt be content to act. Before the end of the year we shall have in office new boards of guardians,

which may in many ways be different from the old. This question, among many others, will demand their attention, and it is of great importance that they should have the guidance of the best opinion of the time.

THE NEW TREATMENT OF DIPHTHERIA.

It seems likely that yet a new boon to humanity may ere long be anticipated from recent knowledge gained by experimental research. Sir Henry Roscoe's interesting and able speech at the recent meeting af the National Health Society at Grosvenor House, directed public attention to the remarkable results obtained by Ehrlich, Kossel, and Wassermann in the treatment of diphtheria. A full summary of these was given in the Epitome of May 5th.[1] They deserve to be put to the test in this country as soon as possible. Various investigations have recently been made, especially by Behring and Kitasato, on the antitoxins of tetanus and diphtheria, and they found that a substance was present in the blood serum of immune animals which had the power of conferring a certain degree of immunity in other animals, and even of arresting the disease when it had begun. These facts were applied by Tizzoni and Cattani to the treatment of tetanus in man, but with only imperfect results. The authors have followed the same lines in applying the method in the treatment of diphtheria, but they have taken special measures to obtain a particularly powerful antitoxin for the purpose. They began with producing immunity in goats by injecting increasing quantities of boiled cultivations of diphtheria bacilli, and the degree of immunity was subsequently further increased by injecting larger and larger quantities of extremely virulent cultivations of diphtheria bacilli. The serum of these animals thus contained large quantities of the antitoxin, and before going further they devised a method of measuring accurately the exact amount present. It had been found by Behring and Kitasato that if the poison and the serum antipoison were mixed together in a test tube in proper proportions they neutralised each other, and that the mixture when subsequently injected into an animal was inert. They took as a standard of the poison a material of which 0.3 g. per 1,000 g. of the body weight was a certainly fatal dose. For animals of 200 g. to 300 g. weight they used ten times this amount, namely, 8 c.cm., and then added to this 2, 3, 4 g. etc., of the serum to be tested. The mixtures were then immediately injected into a series of guinea-pigs, and if the poison had had not been completely neutralised this was evidenced in 24 or 48 hours by local infiltration at the seat of injection, and by loss of body weight. In this way the exact amount of any given serum required to neutralise 0.8 g. of poison was ascertained. As the unit of immunity they take serum of which 1.5 mg. neutralises 0.8 g. of poison, and in the treatment of children they employed a quantity of serum containing an amount of antitoxin representing 130 to 200 immunity units.

The investigations were carried out on 220 children suffering from diphtheria (proved by bacteriological examination) at all stages and in various hospitals in Berlin. The rough result is that of these 220 cases, of which 67 had already required tracheotomy before the treatment was commenced, 52 died and 168 recovered. Of the 153 cases in which tracheotomy was not performed only 22 or 14.3 per cent. died, the cause of death in these instances being in 8 sepsis, in 7 pneumonia, in 6 complications, such as paralysis and nephritis, and in 1 acute tuberculosis. Of the 67 cases in which tracheotomy was done 30, or 44.9 per cent., died, the causes of death being in 4 sepsis, in 23 pneumonia, in 2 of sequelæ and in 1 of acute tuberculosis. Many of these cases were, however, admitted several days after the disease had commenced and when there was hardly any hope of saving them. The results are very striking if they are considered in relation to the duration of the disease. Six cases were admitted during the first [24] hours, and all recovered; 66 were admitted on the second day and only 2 died. Thus of 72 cases admitted during the first forty-eight hours only 2 died. Of these 72 cases tracheotomy was necessary in 9, and the 2 which died were 2 of those in which tracheotomy was performed. On the third day 29 cases were admitted, and of these 4 died; on the fourth day 39, of which 9 died; on the fifth day 23, of which 10 died. The percentages of recovery according to the day of admission after the disease commenced were therefore 100 per cent., 97 per cent., 86 per cent., 77 per cent., 56.5 per cent., etc.

In most of these cases only a single injection was made, but subsequently in bad cases several injections were employed, and the authors think that they might have saved some of those which died, especially from sequelæ (paralysis, etc.), if they had used repeated injections.

Before using the material it was first ascertained that it was quite innocuous and produced no effect when injected into a healthy individual. When injected in cases of diphtheria it was only when large amounts were employed that any immediate effect on the pulse or temperature was observed, but in a certain number of cases there was an almost critical fall of temperature and pulse on the day after the injection. The authors explain the fact that, as a rule, the temperature does not immediately fall, because it is only in the very early stage that the disease is pure, and it very soon becomes complicated with septic bacteria, which keep up the temperature, although the diphtheritic poison has been neutralised. The authors' conclusions are as follows: 1. The fate of the patients depends on the treatment during the first three days of the disease; hence the serum should be injected as soon as possible after its commencement. 2. In mild cases the amount introduced should be at least 200 immunity units; in severe cases and in those where tracheotomy is necessary, 400 units. 3. The injections should be repeated on the same or the following day, according to the general and local symptoms; the total amount varying according to the severity of the case, from 500 to 1,500 immunity units. In 30 cases where repeated injections were employed, some of them very severe cases, 16 of them requiring tracheotomy, only 4 died. These four having had tracheotomy done, with little or no relief to the breathing.

Full details of the methods and cases will be published as soon as possible, and it is to be hoped that this method will be put to the test elsewhere as soon as possible. Already it is being tried in Paris with most satisfactory results.

[1] See also Epitome of May 27th, 1893, par. 441.

Sir William Broadbent delivered the Cavendish Lecture before the West London Medico-Chirurgical Society on June 14th, taking for his subject "Some Points in the Treatment of Typhoid Fever."

THE SOLDIER'S FOOT AND BOOT.

WE recently referred to a lecture given at the Royal United Service Institution by Surgeon-Captain Beevor, of the Scots Guards, upon the subject of the "Soldier's Sore Foot." In that address attention was drawn to the need of careful supervision on the part of officers, not only as to the manner in which the soldier is actually shod, but also to various points of detail in personal cleanliness, the neglect of which conduces to what is known as the "soldier's sore foot." Although this is a subject in military hygiene which has in years gone by been well discussed, still the ever-present tendency in military circles to cultivate smartness of attire and appearance at the expense of comfort and efficiency demands an occasional note of warning and advice from those whose business it is to supervise the soldier's health.

Probably no army in the world is so well equipped as to its boots as our own. Like all boots strongly made and intended for rough wear, the initial hardness and stiffness of the British soldier's ankle-boot make it at first often uncomfortable; but, once softened and moulded to the shape of the foot, it leaves little to be desired. Experienced observers have noted of late years a tendency to make these boots too much after a so-called fashionable type with narrow toes. How far this is an indirect effect of the desire of every soldier to conform when possible to the prevailing style of the day is difficult to determine. Whatever the cause, there is undoubtedly a tendency to make all boots, whether for the civilian or the soldier, of a shape largely in violation of the anatomical structure of the foot. This being so, it is the primary duty of every army surgeon to point out such errors, and, in the interests of the service, to avail himself of every opportunity to inculcate true ideas concerning the morphology and hygiene of the human foot, not only amongst his brother officers but amongst the men in his care. The foot, in the act of walking, assumes many forms which, owing to their transitory nature, cannot be accurately recorded; but when at rest or in a position of fixity, such as during standing, it presents features of sufficient regularity on which to base a rational kind of boot.

If we examine the plantar surface of the feet of persons unaccustomed to wear shoes or boots, we at once note that its general contour is triangular, and that the shorter side of the triangle corresponding to the line of the toe extremities is more or less straight, and not curvilinear, as so frequently found among those accustomed to wear shoes. Of course, owing to the great mobility of the toes, this side of the plantar triangle is liable to innumerable variations in form. This fact plays a very prominent part in the construction of boots and shoes, because it renders it possible to give them in this part at least the particular shape which the individual or fashion demands; but it does so only at the sacrifice of stability and the natural play of movement which the toes in a state of freedom have. No boot or shoe can be said to be satisfactorily planned or constructed which fails to give the toes full room for their complete elongation without modifying their normal direction, especially that of the little toe; and it is mainly in the want of sufficient length and breadth that most contract-made boots fail. If the company officer of a regiment fully appreciates the importance of his men wearing boots made with wide welts, broad toes, of good length, and with low broad heels, he will take care that those which do not conform to these conditions are not issued to them. The soldier himself, being largely compelled by circumstances to wear what is issued to him, can only rely upon individual care and cleanliness to guard against the evil effects of ill-fitting boots. Many officers think that it is no one else's duty to see that the private soldier keeps his person clean and his foot sweet but the doctors. Against this narrow view we offer the strongest protest, holding that the primary responsibility as to the observance of habits of cleanliness by the individual soldier rests with his company officer; and we venture to express an opinion that did the soldier but appreciate that his own immediate officer took an intelligent interest in his personal cleanliness, there would be less frequent need for the medical officers to treat minor causes of inefficiency than exists at present.

Surgeon-Captain Beevor, in his lecture, not only discussed the causes of sore feet among soldiers as due to the boot itself, but also those indirectly traceable to the poultice-like action of impermeable or waterproof leggings. These garments make the leg and ankle hot, and by impeding the circulation favour swelling and chafing of the foot. We have long wondered at the retention of the regulation gaiter; the more frequent use of *puttis*, as employed in India, would be a distinct advance, particularly if combined with the introduction of well-designed trousers or even knee breeches. Many cases of sore foot among soldiers are due to the regulation sock as much as to the boot. The soldier's sock, on the whole, is well made, but often badly finished on the inside. A good rule is that of at once turning the sock inside out the moment discomfort is felt. The regulation ankle boot needs to be well rubbed with grease to make it thoroughly soft and pliable, and if so treated is most comfortable to wear. We question the wisdom of introducing low shoes and spats into the army as suggested by Surgeon-Captain Beevor. In muddy districts the spats rapidly soil and work up dirt behind the heel, while if the mud be at all deep, shoes, unless remarkably well-shaped and fastened to the foot, readily come off. It is to be hoped that the demonstration of the hurtful influence of the present gaiter may take root and produce good fruit in the minds of those mainly responsible for army dress and equipment, but doubtless this will take time.

SIR GEORGE MURRAY HUMPHRY will distribute the medals and prizes to the successful students of Guy's Hospital on July 4th, at 3 P.M.

PROFESSOR BERTRAM WINDLE, the Honorary Secretary of the Anthropometric Committee of the British Association, asks us to state that he has received so many applications for the Anthropometric Suggestions issued by that Committee, that he finds himself unable to send out any more.

AT an extra meeting of the Royal Medical and Chirurgical Society, to be held on Tuesday, July 3rd, at 8.30 P.M., Surgeon-Lieutenant-Colonel Lawrie will make a communication as to the results of the Hyderabad Chloroform Commission. He proposes to demonstrate, by tracings and otherwise, that chloroform has no effect upon the heart, and that the examination of the pulse is useless in chloroform anæsthesia. A discussion will follow, which it is expected will be of exceptional value and interest.

The Town Council of Bath are, says the *Torquay Times* of June 15th, wise in their generation, and realise the advantage of a visit from a representative body of medical men. At a meeting on Tuesday they unanimously resolved to invite the President, Council, and members of the British Medical Association (during the Congress at the neighbouring city of Bristol) to come to Bath, and voted a sum of £150 to defray the cost of entertaining their visitors at luncheon. Several Councillors bore testimony to the great benefit which had accrued to the city, as a result of a previous visit from the British Medical Association. Can anyone doubt that a similar visit would be of great value to Torquay?

HOSPITAL SUNDAY FUND.

The total amount received at the Mansion House on behalf of this fund up to Thursday evening was £26,000. The amount received during the first nine days last year was £25,600.

THE MOHAMMEDAN HADJ.

A Reuter's telegram from Jeddah, dated June 16th, states that the annual pilgrimage to Mecca is now concluded. The public health is declared to be satisfactory.

MEDICAL SCALE FOR MERCHANT SHIPS.

The scales of medicines, medical stores, and instruments for merchant vessels, prepared under the provisions of the Merchant Shipping Act, 1867, have just been revised by the Board of Trade. Separate medical scales for merchant ships, for North Atlantic steamships, and for passenger ships have been prepared. All persons interested in the subject can obtain copies of the circulars of the Superintendent, Mercantile Marine Office, Dundee.

THE MEDICAL BATTERY COMPANY.

Meetings of the debenture holders, creditors, and contributories of this company were held at the Inns of Court Hotel, to consider a scheme of arrangement which has been formulated. Mr. Warley, Assistant Official Receiver, presided, and the scheme was explained by Mr. Jerome. It provided for the incorporation of a new company, with a capital of £75,000 to carry on the business. The scheme was approved at each of the three meetings. The further proceedings will be of public interest.

BILLROTH'S SUCCESSOR.

Professor Karl Gussenbauer, whose appointment as successor to Billroth in the Chair of Surgery at Vienna was signed by the Emperor of Austria on June 11th, was born at Over-Vellach, in the Austrian province of Carniola, and is now in his 52nd year. He studied at Vienna where he was one of Billroth's assistants. He was appointed Professor of Surgery in the University of Liége in 1875, and in 1878 was invited to fill the corresponding chair in the German University of Prague. He is the author of numerous and valuable contributions to surgical literature.

VACCINATION A LIFE SAVER.

Dr. Sutherland informed the North Brierley Joint Hospital Board recently that during a period of eighteen months, ended December last, fifty small-pox patients had been admitted to the hospital. Forty-four of them had been vaccinated at some period of their lives, and these were all eventually discharged cured. The six remaining patients had not been vaccinated, and three of them (or 50 per cent.) had died.

SICKNESS RETURNS.

It is satisfactory to find that the system of interchange of information as to prevalence of infectious diseases among neighbouring sanitary districts is steadily gaining ground. Apart from the weekly returns issued by the Local Government Board, which deal only with the larger towns, several county councils have now instituted weekly, monthly, or quarterly abstracts for the local areas under their jurisdiction. It has been decided, apparently at the instance of the East Kent Joint Committee, to establish a similar arrangement among the authorities of East Kent, and we are glad to see that the Broadstairs Local Board have set an example to other watering places by joining in the scheme, on condition that the information is not to be made public.

THE LIFE-SAVING VALUE OF ABSTINENCE.

The annual report of the United Kingdom Temperance and General Provident Institution has just been issued, and there is the same striking difference between the abstaining and non-abstaining sections as in every one of the previous twenty-five years. The actuary reports that the mortality on whole-life policies was as follows: In the General Section the expected claims were 390 for £93,722, and the actual 385 for £88,195. On the other hand, in the Temperance Section the expected claims were 337 for £86,204, and the actual claims only 228 for £68,115. The latter are only about 63 per cent., and this is below the average for the whole period, which is about 70 per cent. The conclusion to be drawn is so obvious that we need not enlarge upon it. We are indebted for these figures to Dr. J. J. Ridge, of Enfield.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

The election, we may remind our readers, is fixed for July 5th—that is to say, next Thursday week, at 1.30 P.M. We further make note, for the benefit of provincial Fellows and surgeons in London who are likely to be too pressed by professional engagements to make sure that they can vote in person, that no application for a voting paper which has not been received by the Secretary of the College before 1.30 P.M. on Monday next, June 25th, will be valid. It is much to be regretted that Mr. Norton's application was received too late. His candidature would have been an excellent stimulus, counteracting the tendency to stagnation common to all corporate bodies. We understand that Mr. Hardie will be actively supported, at least by Manchester Fellows. The retiring members, Mr. Harrison and Mr. Marsh, are deservedly popular, and will doubtless be returned unless their supporters are over-confident and neglect the facilities for voting. Mr. Davies-Colley, as a Fellow of twenty-four years' standing, a well-known surgeon, and a teacher in a great school, has, of course, very good chances. Mr. Herbert Page, another surgeon of repute, is but one year younger as a Fellow than Mr. Davies-Colley, and will certainly be supported by those who wish St. Mary's Hospital to be represented on the Council. The impartial observer must admit that there is relatively not much excitement about this year's Council elections.

DEATH UNDER CHLOROFORM.

Dr. H. Willoughby Lyle, House-Surgeon to King's College Hospital, has favoured us with the following report of a case of death under chloroform which occurred recently in that institution. The patient was a man, aged 20, of no occupation, suffering from marked exophthalmic goitre, with very considerable enlargement of the thyroid gland, much palpitation, and postnasal growths. The proposed operation was for the removal of half the thyroid gland. The anæsthetic used was chloroform, which was administered on a towel. The patient was placed on his back. Death took place before the operation was commenced. The patient took the anæsthetic very well, and there was no struggling. When put under the influence of the chloroform the pupils suddenly dilated and the breathing ceased, the heart continuing to beat. The tongue was pulled forward, the head lowered, and artificial respiration commenced, the air passing in and out of the lungs readily. The heart beat

could be heard for fully three minutes after respiration had stopped, although no pulse could be felt. The colour of the face remained good for a considerable time. Ether and strychnine were subcutaneously injected, the battery employed, and artificial respiration persevered in for fully one hour and three quarters. The patient never made any attempt to breathe. The *post-mortem* examination revealed nothing definite; the cavities of the heart were dilated. Up to the time the breathing stopped the patient had been breathing quietly and without difficulty.

THE CHELSEA HOSPITAL FOR WOMEN.

In the absence of Earl Cadogan, Mr. Dyer Edwardes presided at the annual meeting of the governors of this hospital on June 18th. He referred to the fact that serious charges had been made against the medical staff and board of management. Those charges had been fully investigated by a committee of inquiry, of which Lord Balfour, Lord Sandhurst, and Sir Charles Dilke were members; and the hospital authorities awaited their report with the utmost confidence. Sir Algernon Borthwick, M.P., said that every institution that was closely inquired into was liable to have some defect exposed, but he should be grievously disappointed if the result of the present inquiry did not ensure to the hospital a better and more prosperous future. Dr. Fancourt Barnes said there was no doubt that the hospital was to a certain extent under a cloud, but in his opinion it was not a very dark or extensive cloud, and would soon roll away. Speeches were also made by Mr. Oppenheim and other supporters of the hospital, and the annual report was unanimously adopted. Hopes were expressed that the festival dinner, to be held under the presidency of Sir A. Borthwick on June 26th, would be a great success, and so enable the hospital to tide over an emergency which has arisen in consequence of large expenditure on new drainage works.

PHYSICAL DISABILITIES AND THE PUBLIC SERVICES.

The regulations as to the physical defects which disqualify candidates for admission into the civil or military services, which have hitherto been accessible only in Sir Joseph Fayrer's work, are now republished in a separate and more popular form by Messrs. Churchill, under the editorship of Mr. Macnamara, surgeon to the Westminster Hospital, by whom, in association with Mr. J. Couper, the existing rules as to the standard of vision were originally drawn up. Under present arrangements the medical examination for the army takes place after a lad has passed the literary examination, which many boys have to begin working for when they are about fifteen years of age, or, in the case of the navy, still earlier. It is obviously important, therefore, to determine if possible whether a lad at an early age may commence a special course of education without running the serious risk of being rejected at its termination by the Medical Board. Mr. Macnamara's pamphlet includes the official instructions for conducting the examination for the army.

DUAL NOTIFICATION AND THE DEATH-RATE.

We have received a further lengthy letter from Mr. Biddle on this subject, and regret that the demands on our space do not warrant our printing it *in extenso*. Mr. Biddle, in very apt language, states that he and his friends are not alone in "throwing stones" at the Notification Act. Besides referring to the epidemicity of notifiable diseases in London last year, he lays stress on the prevalence of scarlet fever and diphtheria in one parish, Marylebone, in the first four months of the present year. Mr. Biddle refers to the matter of mistaken diagnosis as though harm could arise alone to the patients concerned by reason of their being placed with persons suffering from infectious disease. But it must be understood that wrong diagnosis is not concerned with non-infectious disease only. Equally great good can arise by reason of the establishment of the true nature of a malady, even later than could have been desired, in numerous cases. Indeed, it must ever be the aim of medical men to arrive at the correct diagnosis and treatment of sickness. It is notification that leads to this correct diagnosis. And it will be well when every sanitary authority possesses a hospital which has attached to it an "observation ward," wherein doubtful cases can be for a time isolated. Mr. Biddle again refers to his tables in the *Medical Press and Circular* of May 23rd, wherein are shown the risings of death-rates from notifiable diseases in sixteen towns out of the twenty-six towns which were under the dual system in the last of his four-year periods. Mr. Biddle never seems to think that other elements beside notification may be in operation. This attitude appears to us to be absurd. We have no desire to add to our observations on the whole matter, being content to let the subject rest where it does, and confident that the past working of the dual system gives ample evidence of its great utility.

THE POSITION OF JUDGES BEFORE THE LAW.

In response to the invitation of the Earl of Stamford, the Chairman of the Civil Rights Defence Committee, the Council of the Royal College of Surgeons has nominated Mr. Macnamara, junior Vice-President, and Mr. John Tweedy, a member of the Council, to act as members of the Committee. This Committee has been formed to carry through the appeal in the case of Mr. R. B. Anderson, F.R.C.S., from a judgment of the Supreme Court of Trinidad and Tobago. It will be remembered that a jury recently found in favour of the appellant, but the judge entered judgment for the defendant on the ground that no action will lie against a judge. We have already pointed out the wide principles involved, and we are glad to find that Mr. Anderson has been able to command so much support in his determination to carry the matter further. Among the public bodies represented on the Civil Rights Defence Committee, in addition to the Royal College of Surgeons, are the British and West Indian Alliance, the British Medical Association, the London and Counties Medical Protection Society, and the West Indian Union. We understand that it is the intention of the Committee shortly to make an appeal for funds to defray the necessary legal expenses.

THE JUBILEE OF THE ROYAL COLLEGE OF VETERINARY SURGEONS.

The systematic teaching of veterinary science in Great Britain was initiated by a French refugee, Viat St. Bel, through whose exertions the Royal Veterinary College was established at Camden Town in 1791. After a brief rule as Principal of this College, his work fell on the shoulders of a young surgeon, Edward Coleman. The cause of veterinary medicine and surgery was warmly espoused by Sir Astley Cooper, who up to the time of his death took a keen interest in all matters relating to it. In the list of examiners such names as those of Hunter, Sharpey, Brodie, and Alfred Taylor are prominent. Three years since the Royal Veterinary College celebrated its centenary, but until the year 1844 the veterinary profession had no corporate existence. In this year, however, a charter was granted to the Royal College of Veterinary Surgeons, which during the present month has been celebrating its jubilee. At a dinner given in honour of the occasion, human medicine was represented by the President of the Royal College of Surgeons, the President of the Conjoint Board, Professor Victor Horsley, Mr. Bland Sutton, Dr. W. J. Collins, and many other members of the profession. The President of the Royal College of Veterinary Surgeons, in proposing the health of the sister profession, expressed the indebtedness of the junior to the senior branch of the profession, and the

hope that it might be in the power of veterinary science to reciprocate some of the benefits received. Mr. Hulke and Dr. Ord replied in suitable terms to the toast, which had been most enthusiastically received. On the days following the College dinner, the National Veterinary Association held a series of meetings at the Society of Arts Rooms for discussion of the matter of two papers, one on Animal Vaccines, by Mr. J. Dollar, and the other on Pain, its Indications and Significance in the Domesticated Animals, by Professor Penberthy. The President, Mr. William Hunting, F.R.C.V.S., in an elaborate introductory address, reviewed the work and progress of the veterinary profession during the past half century. In reply to the self-imposed question, "What has the veterinary profession contributed to the national progress and public welfare during the past fifty years?" Mr. Hunting instanced the stamping out of cattle plague, foot and mouth disease, and pleuro-pneumonia, the check of such diseases as glanders, and the dissemination of sound ideas as to the nature and spread of tuberculosis, anthrax, rabies, etc. As indicating fields for future useful work in this direction, other contagious diseases as parasitic mange should be subjects of legislative action. It was claimed that by the intimate study of the diseases of the lower animals, the public health had been protected, and that the veterinary surgeon was "now in a position to assist the medical officer in this direction to an extent quite unappreciated by the public, but now handsomely admitted by the medical profession." Speaking of diseases of animals transmitted to man, Mr. Hunting said: "The study of disease embraces the morbid conditions found in man, in animals, and in plants....Every advance in veterinary science which lessens the prevalence of these transmissible diseases is a further protection to human life. During over fifty years of corporate existence we have done much to control and limit this source of danger to human life. We have lifted out science from the rut of appropriation. We no longer follow at a distance the work of medical research. We have struck out for ourselves, and are independent pioneers in the field of comparative pathology, and indispensable guides in the sciences of hygiene and preventive medicine."

POPULAR AND UNPOPULAR DRUGS.

THE relative frequency with which different drugs are used is a curious subject, upon which it is not easy to obtain trustworthy information. There is a general impression that while certain drugs are prescribed by everybody, and prescribed often, others are seldom used by anybody, and some which still figure in the *Pharmacopœia* not at all. The question has a practical bearing, since the answer to it must, to some extent, guide the revisers of the *British Pharmacopœia* when that difficult task is shortly undertaken. A debt of gratitude is therefore due to Mr. Martindale, who has collected and analysed 12,000 prescriptions dispensed at six pharmacies—2,000 at each.[1] The records are from Aberdeen, Bournemouth, Carlisle, Cork, Oxford, and the author's pharmacy in London. The object of these statistics is to show the frequency or infrequency of the appearance of various drugs and preparations in the prescriptions of medical practitioners, and thus to assist the compilers of our national *Pharmacopœia* in their undoubtely difficult task of making a selection of drugs and preparations for omission from the next edition. It appears that the highest score for frequency of use is gained by spirits of chloroform, tincture of nux vomica coming next. Extract of cannabis indica, ammoniated mercury, and lemon juice are at the bottom of the list. Bicarbonate of sodium occurs about twice as often as bicarbonate of potassium. Liquor arsenicalis has been dispensed 352 times, liquor arsenici hydrochlorici only 39. Ipecacuanha wine figures 504 times, antimonial wine 39. There are 126 official articles which have never been once ordered; these include most of the cataplasmata, a number of plasters, enemas, extracts, infusions, and liquors. These statistics afford valuable evidence; the ground covered, however, is too limited, for the prescriptions dispensed in six pharmacies in different parts of the kingdom cannot give sufficient data from which to draw accurate conclusions. It is only by extending the work which Mr. Martindale has begun that any reliable results can be obtained, and not only should prescriptions be taken, but also medicines in general use for which it is well to have an authoritative standard of strength or purity.

[1] *Analyses of Twelve Thousand Prescriptions*, compiled by W. Martindale, F.C.S. London: H. K. Lewis. 1884. Fcap. 4to. 2s. 6d.

THE HACKNEY BARRACK SCHOOL SCANDAL.

MR. JUSTICE DAY, in charging the grand jury at the Essex Assizes on June 18th, referred to the case against Ella Gillespie of ill-treating children at the Hackney Training School. He said the fact that those responsible for the good government of the institution should have failed to protect the poor children from such injuries being inflicted upon them showed that, unless those persons who undertook the management of such institutions exercised constant diligence, abuses were apt to creep in. He feared that this was not altogether an isolated instance of negligence in public institutions. He believed that too often persons undertook responsibility without going to the trouble of discharging conscientiously and strictly the duty which devolved upon them. The grand jury having found a true bill, the prisoner was placed upon her trial on June 20th, and pleaded guilty. Mr. Avory, who prosecuted for the Hackney Guardians, gave several instances of prisoner's cruelty to children and babies. The cruelty had been going on since 1886, whereupon the judge remarked, "Then it took eight years to discover this systematic brutality." The judge added that it was difficult to believe that such systematic cruelty should have gone on without not only the officials seeing it, but also the authorities over the institution, who had full opportunities of becoming acquainted with the facts. He hoped that the revelations would tend to induce those in authority in public institutions to exercise some little care, conscientiousness, and diligence in the discharge of the extremely important duties they so lightly assumed and so slothfully discharged. He trusted that a thorough and most searching inquiry would be made into the whole of the melancholy business. He sentenced the prisoner to five years' penal servitude.

THE SICK POOR IN PROVINCIAL WORKHOUSES: BISHOP STORTFORD.

IT will be seen from the report of our Commissioner on the Bishop Stortford Workhouse, published at page 1367, that attention was particularly directed towards the part called the infirmary, the wards for the infirm and sick, for these helpless inmates may safely appeal to the sympathies of all visitors, their condition is so sad, and so much may be done to alleviate the hardships of their lives. The sick are treated with humanity and consideration; the wards are bright with sunshine, pictures, and plants, and it was a pleasant sight to see the old people seated round the fire in comfortable armchairs; the women with soft bright-coloured shawls on their shoulders, some working, knitting, or mending, and the men spelling their slow way through a magazine or newspaper. In bed were some sad cases of helplessness—complete paralysis, spinal disease, cancer, bronchitis—such illnesses as overtake the aged poor when their day's work is over; but we felt sorry to see that the nursing staff was so inadequate to cope with these old and sick people; kindness and thoughtful care they had, but it is quite beyond the power of one nurse, however capable, to do all that could be done for over seventy patients more or less ailing, more or less

helpless; and though some of the inmates were able to help in the attendance in the wards, still it was not nursing. At night there is no one to wait on them, or to help them in their necessities, but an inmate sleeping in the same ward. We have no reason to think that they are not kind and helpful, but it is a makeshift for skilled attention, and the night must be dreary and painful to many a bedridden inmate in the dark silence of the ward. A small hospital in the grounds is used for the infectious cases. It is a nice little building, but it was a pity that when it was built a little more space was not allowed for offices, etc. Here was a trained nurse, and at the time of the visit she was in charge of some scarlet fever patients. In "the cottage"—a little house planned to take the overflow from the hospital—was an old man and woman who are responsible for keeping it ready for patients; the old man also puts the clothing into the oven and attends to the ambulance. The guardians may well be proud of the ambulance—it is so well found and fitted for its work; but the old gentleman looked hardly competent to be entrusted with the important duty of disinfecting clothing. Altogether our Commissioner was much pleased; still, we would recommend a larger staff of officers, a night nurse, an assistant by day, a responsible officer over the infants and children, and a responsible man for the infectious department; indeed, it seems that the whole of the isolation department should be taken over by the rural sanitary authority, as it is impossible to carry out all the details of disinfection with the aid of paupers. Also we would recommend that the channel conveying the sewage to the land should be diverted from the immediate neighbourhood of the isolation hospital.

ABERDEENSHIRE BREAD AND WATER.

DR. WATT, the medical officer for the county of Aberdeen, in his annual report, states that he caused 36 waters to be analysed by Mr. Jones, F.I.C., who found that 18 were bad, 13 suspicious or unsatisfactory, 2 were fair, 2 good, 1 excellent. He states that too great carelessness has hitherto been displayed in rural districts in the collection and protection of water supplies, and asks for speedy reform in this essential need of life. He inspected 40 bakehouses during the year; 27 were satisfactory, 13 were faulty generally in respect of cleanliness, ventilation, and cubic space. He found children employed in some, and at once notified the factory inspector of the district. No women were employed in any of the bakehouses of the county. This lack of cleanliness in the bakehouses of Aberdeenshire does not reflect much credit on those who supply the staff of life to their customers, and a speedy adoption of the Food and Drugs Act is suggested by the medical officer.

SPREAD OF SMALL-POX BY TRAMPS.

THE conference of sanitary authorities which has been convened by the London County Council for next month, in reference to the question of the spread of disease, and especially of small-pox, by means of tramps, is one of great import at the present time. The statement that disease is spread by the nomadic classes of our country is one of undeniable truth. When one hears of invasion of towns on nearly a score of distinct occasions in the matter of small-pox by the medium of tramps, it seems high time to consider whether such wholesale dissemination of infection cannot be prevented from repeating itself. In the course of recent epidemics small-pox was carried into Warrington 13 times, into Salford 17 times, into Keighley 15 times, into Blackburn 18 times, and into Nottingham no less than 25 times. Evidence of a like sort is forthcoming from numerous other quarters. Indeed, it is estimated that 50 per cent., or more, of the primary invasions of districts by small-pox are the result of tramp-spread infection. The difficulty of finding a means of meeting this danger to the public health is no light one. Much has been written concerning the methods best suited to the case, but no one yet suggested has met with any unanimous approval. The Incorporated Society of Medical Officers of Health has had the subject under discussion, and has formulated recommendations as to examination, disinfection, and detention of vagrants under certain circumstances; dealing not only with casual wards but also with common lodging houses. Many are the suggestions that have been made by one person and another for securing that tramps shall no longer be allowed to remain disease disseminators. The ticket system has been thought of. But it seems very doubtful if it would work in practice. So many modes of evading it present themselves: for example, transfer. Tramps could, moreover, hardly be expected to keep a slip of paper for production if it in any way told against them; and to refuse to receive them without it would no doubt come to be found impracticable. For our own part, we regard any action that does not aim at securing the vaccination of our nomadic classes as falling short of that which is required to prevent the recurrence of those scandalous invasions by small-pox from which so many towns are still suffering in this country. To speak of interference with the liberty of the subject in this direction savours to our mind of the ridiculous. What is that compared with the misery and death caused by the evil referred to? And, moreover, it must be held in mind that the class that thus calls for some remedy for its harmful potency is not one that has any special claims on public sympathy in the matter of "personal interference." Far otherwise. The sympathy of the public is for the community as a whole, and the fact that society is suffering by reason of the perambulations of its most useless section, and one that is dependent on society in a large degree for support, is an additional argument for the exercise of any moderate curtailment of personal liberty such as will have for its result the reduction of a recognised national danger to the smallest possible dimensions. The measures adopted to this end need not be other than such as will be of benefit alike to the community imposing them and the class to which they will be applied. The amount of small-pox spread by men who are not themselves suffering from the malady will always be small; it is those mild cases in the once vaccinated that do so much mischief. The primary vaccination of to-day is doing much to make the age of liability to the disease much later than in pre-vaccination days; and thus our adult tramp section of the community is now much more prone to small-pox than in a time when the age most hit by the malady was childhood. It is efficient vaccination, where this has not been performed, and efficient revaccination, where not performed, that are needed to curtail the means of mischief of our perambulating people. In these circumstances we cannot see why there could not be, say, a fortnight set apart every six or twelve months, at any rate in times of small-pox prevalence, during which the vaccination of every tramp presenting himself for admission to our casual wards and common lodging houses should be effected where deemed necessary, examination showing those who had within the fortnight had the operation performed. The devices for evasion of the requirement could hardly be such as to frustrate the general usefulness of the procedure; and the least successful of operations would in general show some signs of the operator's lancet for the fortnight so set apart. If the fortnight in question were named by order of the Local Government Board as one to be observed everywhere, the tramps remaining undealt with would not be relatively numerous, and discretion as to these when met with might still be left to the union medical officer. Such a fortnight of detention on a universal plan at set seasons would be a further and important step towards detection of disease. Daily medical examination of the inmates of our casual wards and of common lodging houses would also be an invaluable safeguard; the former should certainly be made.

But we have yet another suggestion to offer, one that appears to us to be capable of easy adoption, at least in every district in which there is a separate police force. We refer to the examination of tramps by the police at the stations, to which all tramps could be directed to apply for orders of admission either to casual wards or to common lodging houses. This requirement could easily be enforced, and its attempted evasion at once checked in urban districts. No objection need be taken to the aggregation of tramps at a police station for the necessary few minutes, seeing that much more harm is likely to arise from the present method of treatment in our casual wards and lodging houses. The constabulary could soon be taught to recognise the early symptoms indicative of small-pox, and no little good might come of calling medical attention to suspected individuals. In this way a useful check could be kept on all our nomadic tribe, and infection be detected in its initial stages. We commend these suggestions to the consideration of the conference.

MEMORIAL WING OF THE LEEDS CONVALESCENT HOME.

When two years ago Leeds lost one of its best beloved citizens by the death of the Rev. Canon Jackson, a feeling prevailed that some memorial should be raised that should express in a tangible form something of the deep reverence of his noble character and his heroic life of self-sacrifice. In due time that feeling found expression in the promotion of a scheme which aims at the further extension of a philanthropic work which he had himself done much to encourage, namely, the work of the Cookridge Convalescent Hospital. In recent years the demand for admission has been greater than could possibly be met, and it was to supply such a want that the memorial took the form it did. The new wing of the hospital was erected from designs by Mr. W. A. Hobson, architect of Leeds, and harmonises with the Gothic building to which it has been added. It consists largely of additional sleeping accommodation, but on the ground floor there are in addition two dormitories, dining and day rooms, and a recreation room. The extension will give accommodation to an extra fifteen patients. On June 20th the new building was formally opened by Alderman Ward, the Chairman of the Memorial Fund, who stated that already £3,600 of the amount required has been subscribed, but an additional £1,000 would be yet needed to complete the furnishing, etc. Mr. R. Benson Jowith, on behalf of the committee and trustees, accepted the gift, and spoke of the affection, love, and sympathy which the late Canon Jackson had always shown towards those with whom he came in contact.

THE EDUCATIONAL EFFECTS OF EPIDEMICS.

If civilisation sometimes goes forward on a powder cart, sanitary progress is often accelerated by epidemics. The reviving activity of small-pox, otherwise ominous enough, has already done much to increase the appreciation of the value of isolation hospitals, and probably at no previous time has there been anything like the present multiplication of hospital schemes. Vaccination, too, is stimulated by local opportunity of observing the hollowness of antivaccination figments by the light of actual small-pox. A third effect is the conversion of local authorities to the view that it is after all desirable to learn as early as possible of the existence of infectious cases. Persuasion of this forcible kind has brought about a sudden change of front among the Leith Town Council, who, after four times rejecting the Notification Act, have now accepted it, and unanimously. In this respect, the position of Leith as a Scottish bulwark of non-notification has been somewhat akin to that of Leeds on this side of the border, and their almost simultaneous collapse is not without significance. Yet another result of a small-pox epidemic, in Bristol at all events, has been to remind the public of the extent to which their safety as regards infection is dependent upon the unceasing watchfulness of the medical profession in general and the health officer in particular. The *Bristol Mercury*, in announcing the disappearance of the late small-pox epidemic in that city, takes advantage of the opportunity to express in the most cordial terms the indebtedness of the public to Dr. Davies and his staff. The compliment is as well deserved as it is timely, and the plea for more adequate hospital accommodation forms a fitting corollary.

THE HON. ROBERT GRIEVE, C.M.G.

At the last meeting of the British Guiana Branch of the British Medical Association the members had the sorrowful duty of bidding farewell to Dr. Robert Grieve, C.M.G., the Surgeon-General of the Colony. Dr. Grieve has been President of the Branch since its reformation in 1886, and under his guidance, and with the cordial co-operation of medical officers of the Colonial Service, this has been rendered one of the most successful of our Colonial Branches. Dr. Rowland, the Secretary, who recalled how years ago the then Governor of the Colony had called Dr. Grieve the Apostle of Science, added that it was with great grief that it would be recognised that Dr. Grieve had fallen a martyr to the dangerous duties of the profession. He said they might claim that men like Dr. Grieve, who were sacrificed in the endeavour to remove human suffering, were no less worthy of honour from their fellow countrymen than those who fell on the field of battle. An address was presented to Dr. Grieve on behalf of the medical profession of British Guiana expressing their regret at his retirement from the office of Surgeon-General, and adding that their regret was increased by the fact that his retirement had been hastened by illness contracted in the discharge of his professional duties as consulting surgeon of public hospitals. The address congratulated Dr. Grieve on having been afforded the opportunity of representing the profession in the Legislative Assembly of the Colony and on the success which had attended his efforts to improve the public health of the Colony, especially with regard to the sanitation of villages and the performance of vaccination. Subsequently addresses were presented to him on behalf of the dispensers, nurses, and servants of the public hospitals. We can only conclude by expressing the hope that upon his return to this country Dr. Grieve's health may shortly be restored.

DEFECTIVE SCHOOL BOARD CHILDREN.

In an interim report to the Bradford School Board, Dr. James Kerr has published particulars of 1,232 children selected by him out of 10,759 presented for inspection as defective in one or more ways. Of these, 6.1 per cent presented usual defect, generally due to error of refraction, but only 1 per cent. were provided with glasses. Defective hearing was present in 2.2 per cent., generally in connection with throat affection, and remediable by treatment; 117 children were undoubtedly deficient in mental capacity, and 113 showed defects of speech, varying from a slight stammer to a defect which rendered their speech unintelligible.

A WARNING, NOT A PRECEDENT.

There were brave men before Agamemnon, and there were eminent physicians at St. George's Hospital before Dr. Dickinson, and he probably will find in the fulness of time not altogether unworthy successors, but none before him have been subjected to such bold advertisement of their retirement and services, and we trust that for those who come after him the precedent will be shunned. For the dozenth time at least we have had circulars—preliminary, collateral, and what, we hope, is now the final—as to the presentation to him on the occasion of his retirement from the acting staff of St. George's Hospital. On Tuesday a Royal Duke presided at the meeting at Grosvenor House, supported by other dukes and earls whom the St. George's Hospital is so fortunate as to have amongst its governors, which, as the

Duke of Cambridge announced, was to do honour to a great man who has been for years connected with the hospital. He observed that there were many other persons with more knowledge of the subject than he could pretend to, but, under the circumstances, he could not hesitate to undertake the task. He recited Dr. Dickinson's various works, embodying the result of researches in pathology and medicine, the most important being his standard work on renal and urinary affections. He then presented Dr. Dickinson with an illuminated address, his portrait, a service of plate, and an autotype reproduction of the portrait, of which a copy was also presented to the Duke of Westminster. All this we learn from some twenty or thirty newspaper notices of the event. We have preferred not to comment earlier upon some violations of ordinary professional custom in connection with this testimonial, for we felt unwilling to criticise and possibly check the course of a proceeding evidently kindly meant towards a result in itself becoming and well deserved, and we felt certain, as we still feel assured, that Dr. Dickinson in this matter only needed to be saved from his friends. We do not care either to ask who was the ill-advised person or persons responsible for the character of the methods adopted. We feel sure that the natural modesty, innate delicacy of mind, and high standard of dignity which are characteristic of Dr. Dickinson must have revolted from the continuous puffery which has gone on now for some months, to an extent of which he is no doubt imperfectly aware; but it is impossible to allow the termination of these proceedings to pass without a word of strong warning. If this sort of thing is to be held admissible in connection with the hospital which stands in the very front rank and has traditions of the most conservative character, under the auspices of a committee which includes a long string of honoured names, and in the case of a physician who may be accepted in his personal character and conduct as an excellent type of professional dignity, what may not be looked for at institutions of less repute and from men less bound to scrupulous observance of professional tradition? As Dr. Dickinson himself said, he is essentially a hospital physician and not a public man. His record is that of an able officer of his hospital and his college; and as such he well deserved the honour spontaneously conferred upon him.

A REVIVAL OF HINDU MEDICINE.

THE educated natives of India intermittently advocate, through the native press, the resuscitation of indigenous and time-honoured methods of treating disease which have fallen into disrepute and disuse. The merits of ancient drugs and of primitive practices and practitioners are on such occasions vaunted as being better in themselves and better adapted to the people and circumstances of Hindustan than exotic systems and medicines. It appears that dispensaries have been established in the native States of Travancore and Mysore for the purpose of giving the natives of these territories the benefits of Hindu medicines, which are considered more congenial, cheap, and efficacious than foreign medicines. Foreign surgery is allowed to be infinitely superior to native, and no attempt is made to compete with that. It is recognised that native doctors are, with few exceptions, ignorant and uneducated, and it is proposed to teach them "chemistry, physiology, hygiene, and other kindred subjects." Here arises a difficulty. The Hindu system is empirical and traditional, depending on a few crude and fantastic principles, a few hard-and-fast rules, and a few Sanskrit *slocas*. "Chemistry, physiology," etc., are part of the foundation of a rational system which is entirely inconsistent with a system of transmitted formulæ. The only possible means of utilising any good methods of treatment or any useful preparation appertaining to the Hindu system of medicines is to bring these to trial under rational principles and according to rational methods in the hands of persons taught and trained in the schools of inductive science. Any attempt to combine an effete empiricism with a rational and progressive science cannot fail to prove disappointing and futile.

THE TESTIMONIAL TO DR. ANDREW.

A MEETING of the subscribers and other friends of Dr. Andrew will be held on Thursday, June 28th, at 3 P.M., in the Library of St. Bartholomew's Hospital, when Sir James Paget will present to the Treasurer and Governors of the hospital the testimonial portrait which has been painted by the Hon. John Collier.

THE NEW ENDOWED PROFESSORSHIPS AT LIVERPOOL.

THE Council of University College, Liverpool, on June 20th, appointed Professor A. M. Paterson, M.D.Edin., to the Derby Professorship of Anatomy, and Professor R. W. Boyce, M.B.Lond., to the Holt Professorship of Pathology. The first-named chair was founded and endowed by the Earl of Derby, the second by Mr. George Holt, who has in addition recently given £5,000 to the College as an endowment fund for the maintenance of the pathological and bacteriological laboratories. Professor Paterson, who has occupied the chair of Anatomy at University College, Dundee, was at one time a student of Owens College, and was formerly senior demonstrator of Anatomy there and lecturer on Anatomy in the Victoria University. He has made numerous contributions to the literature of anatomy, his most important works being a study of the development of the Sympathetic System in Mammals and of the Human Sacrum. Professor Boyce, who was a student of University College, London, has been for some years Assistant-Professor of Pathology there. He is the author of a textbook of Morbid Histology, and has made some valuable contributions to pathology, especially on the subject of Madura foot and on the etiology and histology of cancer.

THE HYGIENIC ADVANTAGES OF NEW BREAD.

NEW bread and the hot morning roll have been condemned as injurious and difficult of digestion. However true this charge may be the use of new bread appears, even from the hygienic point of view, to have some compensating advantages. Dr. Troïtzki, writing in the Russian medical periodical *Vratch*, states that he has found that new and uncut bread contains no micro-organisms, as the heat necessary to bake the bread is sufficient to kill them all. As soon, however, as the bread is cut and is allowed to lie about uncovered not only harmless but also pathogenic microbes find in it an excellent nutrient medium. White or wheatmeal bread is a better medium than black or rye bread, as the latter contains a greater percentage of acidity. Dr. Troïtzki's experiments with pathogenic bacteria gave the following results: Streptococcus pyogenes aureus retains its vitality on the crumb of wheatmeal bread for twenty-eight to thirty-one days, on the crust for twenty to twenty-three days; the bacillus of anthrax (without spores) remains alive on the crumb for thirty to thirty-seven days, and on the crust for thirty-one to thirty-three days; the typhoid bacillus remains active twenty-five to thirty days on the crumb, and twenty-six to twenty-eight on the crust; whilst the bacillus of cholera lives twenty-three to twenty-five or twenty-seven days on both. Of special interest is the fact that if the bread is placed before the experiment for fifteen minutes in the disinfecting oven (at a temperature of 115° C.) all the above-named pathogenic bacteria retain their vitality for several (four to eight) days longer. The author explains this fact by the acidity of the bread being lessened by the heat and the bread becoming a better nutrient medium.

THE WATER SUPPLY OF PARIS.

The Dual Supply.—The Sources of the Potable Water.—Municipal Uses for River Water.—The Question of Purity.

The report on the water supply of Paris, recently made by Mr. Binnie to the London County Council, contains much information which is of interest in view of the questions now pending in regard to similar matters in London. Paris, like London, stands within easy reach of a plentiful but impure supply. While, however, we have tried to manufacture drinking water out of the drainage of the much inhabited Thames basin with the result of providing for all purposes, for drinking, washing, and swilling the streets, one single water, which in fine weather is good and in stormy seasons is of varying degrees of badness, Paris has not only had the boldness to adopt a system of dual supply, using the waters of the Seine and Marne and of the Ourcq Canal for trade and municipal purposes and providing a pure supply for domestic use, but has gone far afield in search for the latter, fetching it by gravitation from elevated springs near the sources of the Dhuis, the Vanne, and the Avre, an aggregate distance of 250 miles.

The Dhuis is a tributary of the Marne, situate at a distance of 80 miles from Paris, and provides 4,400,000 gallons of water daily, delivered in Paris by gravitation at an elevation of 354 feet above the sea level.

The Vanne supply, including that of Cochepies, comes from the head waters of the river over 100 miles from Paris, and gives 26,400,000 gallons daily, but is of a lower pressure, being delivered at nearly 100 feet less elevation than the Dhuis water, and even then not entirely by gravitation, some of it being pumped; and the new supply from the Avre, only opened last year, comes from the borders of Normandy, sixty-two miles from Paris, giving 26,000,000 gallons a day at an elevation of 334 feet above the sea level. From a spring at St. Maur about 1,100,000 gallons are also obtained by pumping. From one or other of these sources all quarters of Paris, according to their different levels, are supplied with potable water, most of it being distributed by means of gravitation, pumping stations, however, being employed for the comparatively small portion of the city which lies above the level of the service reservoirs. In all cases the supply is constant. A much larger quantity is available than is at present used; for, unfortunately, notwithstanding the encouragement offered by the municipality, many householders decline to introduce the water into their houses, probably because, the cesspool system being still in vogue, they fear the expense which would arise from the increased frequency with which these would have to be emptied were the water supply improved.

For manufacturing purposes, street washing, fountains, etc., the river water from the Seine, the Marne, and the Ourcq Canal is employed, together with that derived from the artesian wells, all of which is raised by pumping. The supply of water from these sources is very copious, and a considerable quantity is used for flushing the sewers, there being 1,500 flush tanks holding 2,000 gallons apiece situate in various parts of the city for this purpose. The main roads and avenues are watered very copiously by hose and jet, and in all the streets of Paris the gutters and channels are thoroughly cleansed twice a day, the water being allowed to flow for a considerable period of time, as every visitor must have observed. Many fountains also are kept constantly playing, so that when we hear that the water supply of Paris is at the rate of 65 gallons per head per day, it is well to bear in mind that only 14 gallons of this is domestic, potable water, the rest being derived from the rivers, etc., of which about 30,000,000 gallons a day are used in trade, and 44,000,000 for sanitary and other public purposes.

The question of the purity of the potable water is one of great interest. As to its physical condition, clarity, coolness, etc., it seems to be all that can be wished, and bacteriologically it is said to compare favourably with that of London. In regard to this, however, one would be glad to hear some explanation of the recent outbreak of enteric fever in Paris which should exonerate the Vanne water, which, according to the earlier evidence, seemed to be chiefly incriminated.

It is certainly to be regretted that the report before us does not give more definite information as to the character of the sources from which the domestic water supply of Paris is derived, whether merely from young rivers or from deep springs; and, if the former, what is the nature of the gathering ground from which they flow. Clearly if Paris has been able, by its aqueducts, to reach pure springs, undefiled and undefilable, her example is one to follow at almost any cost; but if, after all, it is merely a question of gathering ground, if even after setting up hundreds of miles of aqueducts purity still can only be ensured by filtration, the matter assumes a very different aspect, and on this—the very central point at issue—the report contains but little information. The point of interest which is brought out is that, notwithstanding the distance from which the drinking water is brought, it is supplied to the Parisians at a much lower price than Londoners have to pay. This, of course, gives food for thought to sanitarians and municipal politicians; but this is not everything. If a water is to be judged, not by its reaction to tests, but by its pedigree and origin—a position strongly taken up by the County Council in the memorandum recently issued on the London water supply, this report clearly fails to give us the bases on which an opinion regarding the water supply of Paris can properly be formed.

ARCHÆOLOGICA MEDICA.

IX.—THE GREAT PESTILENCE (1348-9).

The details of the Great Pestilence of 1348-9 were chiefly known until lately from Hecker's work; recently, however, it has been considered by Dr. Creighton as one instance of a great epidemic, whilst its effects in East Anglia have been traced out by the Rev. Dr. Jessopp. It has been left to Dom Gasquet,[1] however, to gather up the accounts of various contemporary writers into a single volume, and to present it to the reader enriched with his great historical knowledge. The resulting volume is of very great interest, and will especially appeal to the student of epidemic diseases from the manner in which the medical facts are set out.

It has appeared hitherto as if the genius of Boccaccio had invested with undue importance a pestilence which claimed Petrarch's Laura as one of its victims. Dom Gasquet, however, shows that the eye witnesses of its horrors speak of it in identical terms. And when these eye witnesses are so far removed from each other in nationality and rank as John Cantacuzene, the Greek Emperor of Constantinople, and Friar John Clyn, of Kilkenny, in Ireland, who to his "writing added parchment to continue it if by chance anyone may be left in the future and any child of Adam may escape this pestilence," we cannot but feel that their testimony is substantially correct.

The origin of the pestilence can no longer be traced; it entered Europe through the Crimea the year after the battle of Crécy, passed along the great trade routes to Constantinople and Italy, spread thence to France, passing through Marseilles and Avignon, and from Sicily to Spain. It gained access to Switzerland, and thence invaded Prussia, and extended to Sweden. England was infected through Jersey and Guernsey, the first cases appearing at Weymouth. It long raged in the West of England before it pursued its devastating course northwards to Scotland, and across to Ireland. The accounts of the contemporary writers lead us to suppose that this scourge was an infective lymphadenitis, which in the earlier cases seems to have had a special affinity for the bronchial glands. It was contagious by the breath, and by the exhalations of the skin in the living, and by the emanations from the dead body. There is little doubt that it was microbic in origin, and that the micro-organism was very tenacious of life, preferred a damp soil, and flourished best in the crowded and ill-ventilated religious houses of the time. When it had once gained access to England it remained endemic until that final explosion in 1665 which became known as the Plague, thus usurping the name of its greater forerunner, which then became known in contradistinction as the Black Death.

[1] *The Great Pestilence* (A.D. 1348-9), now commonly known as the Black Death. By Francis Aidan Gasquet, D.D., O.S.B. London: Simpkin, Marshall, Hamilton, Kent, and Co. 1893. (Demy 8vo, pp. 264. 7s. 6d.)

The social results of this terrific outbreak of pestilence were of the greatest interest, and have been carefully considered by Dom Gasquet. To it we must date the importance of the middle class in England; to it, too, we owe the great school of Winchester and the noble foundation of New College in Oxford. The very site of New College was determined by this pestilence, for when William of Wykeham bought it for his College it appears to have been one which had previously been populous, but was deserted some thirty years before during the Plague, and was apparently made a burial ground by the survivors, so that the present mound in the gardens may represent the earth turned out of the plague pit. The dearth of labour was so great after the pestilence that many countries of Europe passed through as great a democratic change as that we are now enduring, and the system of farming was radically and permanently altered in this country, for a third of the land had fallen out of cultivation.

We leave the work with regret, but we would point out that the otherwise excellent index is marred by thirty-three errors, due apparently to the introduction having been indexed either from slip or proof.

THE PLAGUE AT HONG KONG.

WE have received detailed notes by telegrams of this date (June 21st) from our special correspondents in Hong Kong, Canton, and Pakhoi. It appears that, although the plague began in Hong Kong only in May, it had been prevalent in Canton and Pakhoi throughout the months of March and April. The symptoms of the Hong Kong epidemic have been marked by high fever from the very onset with vomiting; upon this followed buboes, chiefly in the armpits and the front of the thigh, the swelling being exquisitely tender, and suppurating later. The brain symptoms have been unusually severe, being commonly marked by convulsions and stupor, going on to coma and severe delirium. Many of the patients have died quite suddenly and instantaneously from heart failure. The blood disintegrates, the hæmoglobin being notably diminished. The results of numerous *post-mortem* examinations have been to show enlargement of the spleen, meningeal hæmorrhage, extreme congestion of the kidney and liver. The glands also are infiltrated with blood, and bathed with a serous fluid, causing a widespread œdema. At the beginning of the outbreak the mortality was intense, amounting to 85 per cent. of those attacked. It has now fallen not only in numbers but in severity of type, the mortality of the later cases being only 60 per cent. Eighty thousand Chinese have left the city, so that the epidemic, which has now been diminishing, will, it is hoped, shortly die out. Death generally occurs on the fifth day, but in severe cases often after twenty-four hours. If the patient survives to the tenth day recovery usually follows. Panic has subsided, and the energetic steps taken by the health authorities of Canton have enabled them to make head against the outbreak and to restore confidence. Trade has been much less interfered with than was feared, and great credit, our correspondents agree, is due both to the Imperial and the local authorities for the courage and calm intelligence which they have shown in meeting this crisis. The conduct of the soldiers and of the municipal police in entering the houses, assisting to remove the dead, and thoroughly disinfecting the dwellings attacked, is beyond all praise. A few of them have been attacked, and two deaths have occurred, but there is reason to hope that these mortalities will not be multiplied. A rigid supervision is being kept over arrivals from Pakhoi, where, however, the epidemic is not on the increase. On the other hand Canton is severely infected. No returns are at present obtainable, but it is feared that the plague may spread considerably there and in the surrounding Chinese villages and provinces. British assistance has been offered to the native authorities to assist in combating the diffusion of the plague, but it is uncertain whether it will be accepted. The Chinese doctors are wholly incapable of dealing with the disease, and the authorities are very supine.

LITERARY NOTES.

WE understand that Dr. Pavy's recent work on *The Physiology of the Carbo-hydrates* has been translated into German by Dr. Grube, and will be published shortly by Deuticke, of Vienna.

Dr. Albert Rosenau, of Kissingen, has published a German translation of Professor Auvard's beautifully illustrated *Formulaire Gynécologique*, and has added numerous notes and an appendix on diseases of the breast and on the diagnosis of abdominal tumours. Professor F. von Winckel, of Munich, contributes a preface.

Dr. Francis J. Shepherd, surgeon to the Montreal General Hospital, has reprinted from the *Montreal Medical Journal* a "Retrospect of Surgery, January, 1890, to January, 1894," which constitutes a fairly adequate record of surgical progress during the period which it is intended to cover. We note with satisfaction that a large proportion of Dr. Shepherd's British material is abstracted from our original columns, while our EPITOME has been of considerable use as a source of foreign references.

The late Dr. Mary Sawtelle, who was the first female graduate in Medicine on the Pacific Slope, was the author of *A Heroine of '91* and a *Story of the Pacific Coast*. The latter of these books was a strong protest against early marriages.

A French translation of Professor Ramon y Cajal's chief work on the nervous system has recently appeared, under the title of *Les Nouvelles Idées sur la Structure du Système Nerveux chez l'Homme et chez les Vertébrés* (Paris: C. Reinwald et Cie). The translation, which is from the pen of Dr. L. Azoulay, has been revised by the author, who has made additions which make the French edition more complete than the original. Professor Mathias-Duval contributes a preface.

The fifth annual volume of Dr. Arnold Pollatschek's *Therapeutischen Leistungen* (for the year 1893), which has just been issued, shares the general tendency of all medical periodical publications to increase in bulk, and is somewhat larger than its predecessors. It contains numerous articles, arranged alphabetically, on new drugs and new or improved therapeutic methods. It is a most convenient work of reference, and will save much time to those who wish to consult recent German literature in particular, though the selections are not confined to articles originally published in that language.

A report recently presented to the French Minister of Public Instruction shows that the Bibliothèque Nationale at present possesses copies of 85,000 theses presented to one or other of the French faculties for the degree of Doctor of Medicine. The other printed books and pamphlets relating to the medical sciences form the subject of a special catalogue, which contains 42,000 entries. The printing of this catalogue was begun in 1857, and was not finished till 1889.

The *Tribune Médicale* has unearthed from the *Chronique* of Jean de Troyes (1475) an interesting record of what must be one of the earliest, if not the very first, exploratory laparotomy ever performed. The following is a translation of the passage:

> In the said month of January, 1474, it came to pass that a *franc-archer*, of Meudon, near Paris.....was condemned to be hanged and strangled on the scaffold in Paris known as Montfaucon..... On that same day it was represented to the king by the physicians and surgeons of the said city that several and divers persons were in grievous travail and suffering by reason of stone, colic, pain, and disease of the side, from which symptoms the archer had also suffered.....and that it would be very advantageous to see the places where the said diseases are engendered within human bodies, which thing could not be better ascertained than by cutting open the body of a living man; which might well be done on the person of the *franc-archer* aforesaid, who, in any case, was about to suffer death. The cutting open was duly carried out on the body of the said archer, and the site of the said diseases within his body sought for and inspected; and, after the parts had been looked at, he was stitched up and his entrails replaced inside his body. And, by command of the king, he was well dressed; so that within fifteen days he was quite cured; and he received a full pardon without cost; indeed, money was given him.

The report is clearly imperfect from the surgical point of view, but there can be no doubt about the fact of a successful laparotomy having been performed. We are not told, however, whether the knowledge thus gained was applied to the relief of the *plusieurs et diverses Personnes* whose sufferings furnished the occasion for this *experimentum in corpore vili*. In Portal's *Histoire de l'Anatomie et de la Chirurgie* (Paris, 1770) it is stated that Praxagoras, an Alexandrian surgeon, performed laparotomy for ileus.

In the *Independencia Medica* of Barcelona, Dr. J. Tarruella gives an interesting account of Dr. Bartolomé Hidalgo de Aguero, a Spanish surgeon of the sixteenth century, whose fame was so great that the swashbucklers of the time before fighting a duel used to commend themselves "to God and Dr. Hidalgo." He was a native of Seville, and was surgeon to the Hospital del Cardenal of that city. He practised his profession for nearly forty years, dying in Seville in 1597 at the age of 66. He was buried in the Church of San Juan de la Palma. There is a portrait of him in the gallery of Spanish medical celebrities in the Faculty of Medicine of the University of Madrid. Hidalgo's method appears to have been to some extent an anticipation of aseptic surgery. His great aim always was to obtain union of wounds by the first intention. He spared neither knife nor trephine, but was much gentler in his surgical ways than his contemporaries, making a large use of "purifying" or "preservative" substances, and in particular of a certain "blessed oil" (*olio benedito*) with which he healed wounds which his colleagues declined to deal with. His biographer, Francisco Pacheco, gives many instances of his phenomenal skill—or good luck. Of 110 cases of serious head injury treated by him in the Hospital del Cardenal 107 were cured, and he is said to have been equally successful in all his cases. Such an impression did he make on those who saw his work that the adoption of his method of treatment was for a long time imposed on all candidates for the post of surgeon to the Hospital del Cardenal as an indispensable condition of their appointment. Hidalgo made no secret of his system, which he set forth in a book entitled *Tesoro de la Verdadera Cirugia*. Whether any copy of this work is in existence we are unable to say. Dr. Tarruella mentions it on the authority of Pacheco, and from his manner of alluding to it we gather that he knows nothing of it at first hand.

REGISTRATION OF MIDWIVES.

South-Eastern Branch: East Sussex District.

At a meeting of this District, held at Hastings on May 31st, several communications for and against the proposed scheme for registration of midwives were presented to the meeting. Lack of time forbade their discussion, but it was resolved:

That this meeting regards the question of midwives' registration as one of great importance, and trusts that it will hold a prominent place among the subjects for discussion at the annual meeting of the Branch.

Midland Branch.

At a meeting of the Midland Branch, held at Lincoln on June 14th, a circular from the Honorary Secretary of the Lancashire and Cheshire Branch, containing a report adopted by that Branch; a circular signed by over seventy members of the same Branch dissenting from the report; a circular and a draft scheme from the Honorary Secretaries of the Midwives' Registration Association; and a circular and book from Dr. R. R. Rentoul were brought before the meeting; and it was decided, with regard to the last, "that communications sent from other Branches, except through the officials of the Branch, being impossible of consideration, cannot be entertained;" and with regard to the first three, "that the confidence of the Branch in its representatives on the Council of the Association leads us to defer the consideration of the other communications to them."

Staffordshire Branch.

At a general meeting of the Staffordshire Branch at Wolverhampton on May 31st, a communication from the Midwives' Registration Association was considered, and it was decided that it should lie on the table, and that the Secretary should simply acknowledge its receipt.

Wigan Medical Society.

At a meeting of the Wigan Medical Society, on June 7th, 1894, the Secretary read circulars from (1) Dr. Rentoul, of Liverpool; (2) Dr. Barr, Secretary of the Lancashire and Cheshire Branch of the British Medical Association; (3) the protest of the Committee of the Lancashire and Cheshire Branch. After discussion, the following resolution was passed, with only two dissentients, who objected to the Society passing any resolution before a Midwives' Bill was before the country, as at present there is no Bill before the profession:

That this meeting of the Wigan Medical Society, recognising the existence of midwives, which it would be difficult to dispense with, is of opinion that their training should be improved, and their practice should be under medical control.

Bath and Bristol Branch.

At a meeting of the Bath and Bristol Branch on May 30th a communication from the Lancashire and Cheshire Branch on the registration of midwives was considered, and it was resolved that the subject should be discussed at the annual meeting.

South-Eastern Branch.

At the jubilee meeting of the South-Eastern Branch, held at the Crystal Palace on June 13th, reference was made in the report of Council to the registration of midwives, and, though no opinion was expressed, it was pointed out that efforts would be made continuously to obtain the definite support of the Branch to the proposal.

THE CHOLERA.

Turkey.

Cholera still exists in the southern parts of Anatolia, at Sivas, Tokat, and in the province of Zeila. From May 15th to 26th the town of Sivas lost about 600 out of a population of 30,000. It still ravages with intensity the little town of Iskulip, where from May 5th to the 23rd 103 deaths were registered. Cases are also reported from the district of Trebizond.

The information recently received as to the condition of the Red Sea is favourable, up to May 25th 21,000 pilgrims are reported to have passed the quarantine establishment. Up to the same date 34,000 pilgrims were reported to have disembarked at Jeddah, bound for the sacred towns of the Hedjaz. Their sanitary condition was satisfactory.

Russia.

At Warsaw from May 16th to the 31st there were 52 cases and 26 deaths; at Plock 86 cases and 50 deaths; and in the whole of Poland 215 cases and 120 deaths.

Germany.

Several cases have been noticed in Silesia since May 24th; 7 persons inhabitating the same house were attacked, 6 of whom died. As the result of a bacteriological examination of the waters of the Przemsa, this river has been declared infected, and placards have been placed on the banks of the river to warn the inhabitants of the danger of using the water.

At Shisso, on the Vistula, 3 cases and 3 deaths are reported. At Danzig several suspected cases have occurred amongst the Russian sailors.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A meeting of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 11th day of July next, at 2 o'clock in the afternoon.

June 14th, 1894. Francis Fowke, *General Secretary*.

NOTICE OF QUARTERLY MEETINGS FOR 1894. ELECTION OF MEMBERS.

Meetings of the Council will be held on July 11th and October 24th, 1894. Candidates for election by the Council of the Association must send in their forms of application to the General Secretary not later than twenty-one days before each meeting—namely, October 3rd, 1894.

Any qualified medical practitioner, not disqualified by any by-law of the Association, who shall be recommended as eligible by any three members, may be elected a member by the Council or by any recognised Branch Council.

Candidates seeking election by a Branch Council should apply to the Secretary of the Branch. No member can be elected by a Branch Council unless his name has been inserted in the circular summoning the meeting at which he seeks election. Francis Fowke, *General Secretary*.

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

Members are reminded that the Library and Writing Rooms of the Association are now fitted up for the accommodation of the Members in commodious apartments, at the offices of

the Association, 429, Strand. The rooms are open from 10 A.M. to 5 P.M. Members can have their letters addressed to them at the Office.

BRANCH MEETINGS TO BE HELD.

STIRLING, KINROSS, AND CLACKMANNAN BRANCH.—The annual meeting of this Branch will be held in the Crown Hotel, Tillicoultry, on Friday, June 29th, at 3.30 P.M. Dr. Currie will take the chair, and deliver his Presidential Address. The annual dinner will be served in the hotel after the meeting. Members who desire to exhibit cases or specimens will kindly intimate their intention to the Honorary Secretary, C. J. LEWIS, Sutherland House, Stirling.

SHROPSHIRE AND MID-WALES BRANCH.—The annual meeting will be held at the Salop Infirmary, on Tuesday, June 26th, at 3 P.M.—H. WILLOUGHBY GARDNER, Honorary Secretary.

WEST SOMERSET BRANCH.—The annual meeting will be held at the Railway Hotel, Taunton, on Thursday, June 28th, under the presidency of Mr. A. D. Willcocks, who will deliver an address on "Alexander Popham, M.P. for Taunton, and the Bill for the Prevention of Gaol Distemper 1774." Members wishing to read papers or bring forward cases, and also those proposing to be present at dinner are requested to give notice to the Honorary Secretary, WM. KELLY, M.D., Taunton.

SOUTH-WESTERN BRANCH.—The annual meeting will be held at Liskeard, under the presidency of Dr. Nettle, on Wednesday, June 27th. The Honorary Secretary will be glad, as early as possible, to receive intimations from members of their probable intention to attend the meeting, also of short notes of cases to be shown, specimens to be exhibited, etc. —WM. GORDON, Honorary Secretary, Barnfield Lodge, Exeter.

METROPOLITAN COUNTIES BRANCH.—The annual meeting will take place at Limmer's Hotel, George Street, Hanover Square, on Tuesday, June 26th, at 5.30 P.M.—ANDREW CLARK, ISAMBARD OWEN, Honorary Secretaries.

SOUTH WALES AND MONMOUTHSHIRE BRANCH.—The twenty-fourth annual meeting of this Branch will be held at the Infirmary, Cardiff, on June 28th. Mr. Victor Horsley will give a lecture on Gunshot Wounds. Further particulars in circular convening the meeting.—A. SHEEN, M.D., D. ARTHUR DAVIES, M.B., Honorary Secretaries.

EDINBURGH BRANCH.—The adjourned annual meeting of this Branch will be held in the Royal College of Physicians, Edinburgh, on Thursday, June 28th, at 5 P.M. The summer meeting will take place at Culross on Friday afternoon, July 13th. Train to Dumfermline, and thence by carriage to Culross.—R. W. PHILIP, Honorary Secretary.

BATH AND BRISTOL BRANCH.—The annual meeting of this Branch will be held on Wednesday, June 27th, in the Medical Library of University College, Bristol, at 4.30 P.M., when Dr. R. Shingleton Smith will resign the chair to Mr. Nelson C. Dobson, F.R.C.S., President-elect. The business of the meeting will be to receive the report of the Council; to elect the officers of the Branch; to transact the necessary business; and to discuss such subjects connected with the interests of the Branch and of the profession as may be brought before it. Mr. J. Paul Bush will propose to alter Rule XII by the addition of the following words: "A majority of two-thirds of the members present shall be necessary to the passing of any such proposed alteration." Mr. W. H. Harsant will propose the following alterations in the rules: "II. That any gentleman wishing to join this Branch shall be proposed and seconded at any ordinary meeting; his christian and surname, residence, and professional title being given in writing to the Secretaries. The circular convening the subsequent meeting, at which the election shall take place, shall contain the above particulars, together with the names and residences of his proposer and seconder, and shall be circulated at least ten clear days before such meeting. The voting shall be by show of hands, one adverse vote in ten to disqualify the candidate. For 'gentleman' to read 'person'; for 'his' (line 2) to read 'the candidate's'; for 'his' (line 7) to read 'the.' VII. and VIII. For 'him' to read 'the President.' XI. For 'he will' to read 'to.'" Mr. C. E. S. Flemming will call attention to the subject of the registration of midwives. There are three vacancies in the Local Council for the Bath District, and three for the Bristol District, the retiring members being ineligible for re-election for one year. The dinner will be held at the Clifton Down Hotel, at 7 P.M. Dinner tickets, including ice and dessert, 7s. 6d. each. The wines will be served at moderate charges. The Bristol Secretary particularly requests that members will inform him by Monday, June 25th, whether it is their intention to be present at the dinner. By so doing they will greatly facilitate the satisfactory completion of the necessary arrangments.—E. MARKHAM SKERRITT, Honorary Secretary of the Bristol District, Thornton House, Richmond Hill, Clifton: W. M. BEAUMONT, Honorary Secretary of the Bath District, 4, Gay Street, Bath.

LANCASHIRE AND CHESHIRE BRANCH.—The fifty-eighth annual meeting of this Branch will be held in the Pendlebury Memorial Hall at Stockport, on Wednesday, June 27th, at 2.30 P.M. The President, Dr. E. Rayner, will give an inaugural address, report of Council and financial statement will be submitted, office-bearers and new Council will be elected, the place in which the next annual meeting shall be held, and the President-elect will be chosen. A protest against, and reasons for dissent from, the report of the Committee on the question of Midwives Registration by a number of the members of the Branch will be submitted. Dr. W. Macfie Campbell will move, and Dr. A. C. E. Harris will second, certain additions to the rules, the one enacting that no new member shall take part in the business of the Branch unless he have paid his first subscription, and the other providing that no grant of money for any purpose shall be valid unless passed by a majority of two-thirds of those present. Dr. R. R. Rentoul will move a resolution with regard to an increase in the number of direct representatives on the General Medical Council to eight in England, to two in Scotland, and to two in Ireland. Dr. Rentoul will also move a resolution suggesting that each Branch should have one representative on the Parliamentary Bills Committee of the Association, and an additional representative for every 300 members, thus reducing the number of members from 77 to 40. Dr. Rentoul will move, and Dr. Thornley will second, a resolution providing that the first-class travelling expenses of representatives attending meetings of the Parliamentary Bills Committee should be defrayed out of the funds of the Branch. Dr. W. Hugh Hughes will move, and Dr. Joseph Thornley will second, a resolution calling upon members of the Branch to regard as guilty of infamous conduct in a professional respect the sanctioning of the issue to any midwife or other person who has not passed a qualifying examination, as provided by the Medical Act (1886), of a certificate or diploma implying a qualification to practise midwifery. Drs. Wm. H. Hughes and J. B. Brierley will move a resolution on the same subject; and Dr. Sinclair will move a resolution expressing the opinion that the Legislature should take in hand the midwives question. Dr. R. H. Quinn will move, and Mr. Staunore Bishop will second resolutions embodying conditions which should govern any scheme for providing better attendance on lying-in women. Papers will be read by Dr. William Armstrong on the Electric Bath, by Mr. Thomas Jones on Traumatic Stricture treated by Urethrectomy, by Dr. Berry on Contract Club and Dispensary Practice: and Dr. Stopford Taylor will show drawings of Skin Disease. The members of the Branch at Stockport will provide lunch at 1 P.M. in the Pendlebury Memorial Hall. Dinner will be served at the Warren Bulkley Arms at 5.30. This notice is issued by the Honorary Secretary of the Branch, Dr. JAMES BARR, 72, Rodney Street, Liverpool.

MIDLAND BRANCH.

THE annual meeting of this Branch was held at the Guildhall, Lincoln, on June 14th, under the presidency of Dr. J. WEST WALKER. About thirty members were present.

Officers and Council.—The following were elected: *Representatives of the Branch on the Council of the Association:* Drs. Handford and Pope. *Parliamentary Bills Committee:* Dr. Charles Harrison. *Vice-President* for Nottinghamshire: Dr. Cattle. *Vice-President* for Leicestershire: Mr. F. Grant. *Branch Council:* Dr. Wright and Dr. Tate, Nottinghamshire; Dr. Greaves and Mr. Hough, Derbyshire; Dr. Harrison and Mr. Cant, Lincolnshire; Dr. Neale and Mr. Douglas, Leicestershire. *President Elect:* Dr. W. Moxon, Matlock Bridge.

Amendment of Medical Acts.—The report of the Chairman of the Parliamentary Bills Committee on the proposed amendment of the penal clauses of the Medical Acts was approved.

Payment of Railway Fares of Representatives on Parliamentary Bills Committee.—It was decided that the report on the question of the payment of the expenses of the Parliamentary Bills Committee do lie on the table.

President's Address.—Dr. WALKER delivered an address on the Spirit of Quackery.

The Association and the Suppression of Unqualified Practice.—Dr. NEWMAN called attention to some of the more pressing difficulties which the members of the medical profession have now to face, and proposed the following resolution:

That this Branch considers that it will be to the advantage of both the medical profession and the public that the Council of the British Medical Association should take power and authority to proceed against unqualified practice, and in other ways to protect the interests of the medical profession: also to decide questions which affect medical men *inter se*. This Branch requests the Council to take such steps as are necessary to carry these suggestions into effect, and to do what may be possible to promote union and combination among medical men.

The resolution was carried.

Communications.—The following communications were presented:—Mr. BOND: The Treatment of Vesico-vaginal Fistula by Operation from within the Bladder.—Mr. STEWART: On General Paralysis.—Dr. POPE: Ulcerative Endocarditis with a case of Recovery.—Dr. SYMPSON: Notes on the Treatment of Chronic Muscular Rheumatism by Arsenic. Dr. Sympson also showed Microscopical Sections of a Congenital Fatty Tumour from a child 8 months old.—Mr. CANT: On the Radical Cure of Hernia, with Cases.—Mr. C. J. WILLIAMS: A Case of Contracted Tendons and Nodular Deposits in a boy aged 12.

Luncheon and Dinner.—The PRESIDENT entertained the members at luncheon at the Saracen's Head Hotel, and after the meeting the dinner was held at the same place.

New Members.—At the meeting of the Branch Council held

on the same day, the following members were elected to the Branch: Mr. J. H. Pim, Mr. H. Davison, Mr. W. R. M. Beveridge: Mr. S. R. Dean was elected to the Association and Branch.

[The views of the meeting with regard to the Registration of Midwives will be found at p. 1384.]

BATH AND BRISTOL BRANCH.

THE seventh ordinary meeting of the session was held at Bristol on May 30th, Dr. SHINGLETON SMITH, President, in the chair. Forty-five members were present.

Amendment of the Medical Acts.—The report from the Chairman of the Parliamentary Bills Committee on the proposed amendment of the penal clauses of the Medical Acts was laid on the table.

Communications.—Mr. C. A. MORTON related a case of Suprapubic Lithotomy with primary union of the bladder after suturing, on which Dr. RATTRAY and Mr. HARSANT made some observations.—Dr. MICHELL CLARKE read a paper on a case of Hemiplegia and Aphasia without Organic Lesions, which was discussed by Drs. COOMBS, MARKHAM SKERRITT, BONVILLE FOX, the PRESIDENT, Drs. ROGERS, SHAW, and PARKER.—Dr. F. H. EDGWORTH related four cases of Septicæmia in Brothers.

[The result of the discussion on the Registration of Midwives will be found at page 1384.]

SOUTH-EASTERN BRANCH.

THE jubilee of this Branch was celebrated at the Crystal Palace on June 13th.

Luncheon.—By invitation of the President-Elect (Mr. Sidney Turner), members and their friends lunched at his house before the meeting.

In the absence of the retiring President (Dr. Parsons), who was unavoidably prevented from attending, Mr. HUMPHREY presided; and, on the motion of Dr. WITHERS MOORE, a resolution was passed regretting the absence of the President, and alluding to his long services to the Branch culminating in this his year of office. Thanks were voted to the retiring President and Vice-Presidents.

President's Address.—Mr. TURNER delivered an address on the cycle of life, or, as he termed it, "Dust to Dust," dwelling on the synthetic and destructive processes in Nature, and on the relations to one another of the animal, vegetable, and mineral kingdoms.—Dr. GALTON moved a vote of thanks to Mr. Turner for his address; this was seconded by Dr. ALLFREY, and carried.

Report of Council.—The report described the progress of the Branch up to this its fiftieth year, and alluded to its satisfactory condition both in numbers and in finance. Mention was made of the combined correspondence and discussion on the out-patient question, and to the newer topic of the registration of midwives. In the former matter the Council impressed on the members of the Branch the necessity of care and watchfulness in the management of any institution with which they might be connected. The Council had approved the action of the Parliamentary Bills Committee in recommending an alteration of the penal clauses of the Medical Act. The typhoid epidemic at Worthing, which had now happily ceased, caused the only change in the officers of the district, Dr. Van Buren, who was for a short time secretary for West Sussex, having been one of the victims. The vacancy had been filled by the appointment of Dr. Hinds. Three prominent members were lost to the Branch during the year—Mr. W. J. Harris, of Worthing, who was at one time secretary of his district, and president in 1886, died after a long period of ill-health. Mr. G. F. Hodgson and Mr. A. Napper had resigned; both were very old members of the Association, and had done good service on its behalf. To the former was largely due the reorganisation of their financial condition at a perilous time. In conclusion, the Council congratulated the Branch on its first fifty years of existence, and trusted that its centenary would find it still growing and prosperous. [The reference made in the report to the registration of midwives will be found at p. 1384.]

Financial Report.—The balance in hand was £194 13s. 11d., as against £179 17s. 5d. at the audit of 1893. The accounts, which had been audited, were duly passed.

Officers and Council.—The scrutineers reported the following list for the coming year:—*Representatives of the Branch on the Association Council:* Dr. Galton, Dr. Parsons, and Mr. Verrall. *Branch Council:* Dr. Adeney, Tunbridge Wells; Dr. Allfrey, St. Leonards; Dr. Bagshawe, St. Leonards; Dr. Bowles, London; Dr. Buchanan, Chatham; Dr. L. Buckell, Chichester; Mr. C. W. Chaldecott, Dorking; Dr. T. Eastes, Folkestone; Mr. E. H. Galton, Brixton Hill; Mr. F. Hallowes, Redhill; Mr. A. H. B. Hallowes, Maidstone; Dr. Hayman, Eastbourne; Dr. Hoar, Maidstone; Dr. C. Holman, London; Surgeon-General Jeffcoat, Surbiton; Dr. Johnson, Tunbridge Wells; Mr. E. Kaye-Smith, St. Leonards; Dr. Withers Moore, Burgess Hill; Dr. Oldman, Blechingley; Mr. J. Rand, Lordship Lane; Mr. E. Reynolds Ray, Dulwich; Mr. T. Whitehead Reid, Canterbury; Dr. J. H. Stowers, London; Mr. J. Sidney Turner, Norwood; and Dr. Tyson, Folkestone. *Honorary Secretary:* Mr. Verrall. *Honorary Secretary for West Surrey:* Dr. Gabb having expressed his wish to be relieved of the duties of the post Mr. A. Hope Walker, of Cranleigh, was appointed to succeed him.

Votes of Thanks were accorded to the retiring Council and to the auditors and secretaries.

Next Annual Meeting.—It was decided that this should be held at Hastings, and that Dr. B. H. Allen should be asked to preside.

Grants of Money.—Sums of 20 guineas were voted to the Epsom Medical College and to the British Medical Benevolent Fund.

Recommendation to Increase the Disciplinary Powers of the Association Council.—Dr. WELSFORD moved the resolution to the effect of which due notice was given in the BRITISH MEDICAL JOURNAL. He maintained that the object of the Association should be threefold: (1) To prevent unqualified practice, (2) to check underselling by members of the profession, (3) to promote scientific research and social gathering among its members. He admitted that the last was done well, but the first two objects were neglected.—Mr. RAVEN (Honorary Secretary East Kent District) seconded, urging the Council to consider more fully the interests of medical men.—The motion was supported by Mr. THORNTON (Margate), Mr. T. W. REID, Mr. CLARKE, Dr. NICHOL, and Dr. TYSON, who laid greatest stress on a comparison between the medical and legal professions, and alluded to the discipline maintained by the Incorporate Law Society, which, though now possessing a charter, commenced in two small joint stock associations.—Dr. MOORE and Dr. GALTON opposed, the former contending that, in the existence of the General Medical Council, a body created with great difficulty and after much opposition, there lay the most insuperable obstacle to increasing the power of the Association Council as a rival governing body.—Dr. BOWLES also doubted the wisdom or possibility of the proposed change, and suggested an adjournment of the discussion.—Mr. NOBLE SMITH thought, although the particular demands of the mover might not be feasible, a report of the feeling among some members should be made to the Council.—After remarks by Mr. GANDY and Mr. CHALDECOTT, Mr. VERRALL expressed his sympathy with the desire for some check on the evils complained of, but deprecated any intention to force the hand of the Council. If it were understood that no immediate action was demanded, and the Council were to be left to discuss the proposal on its merits, he would not oppose the motion.—The PRESIDENT expressed his doubt of the practicability of the scheme, but sympathised with the anxiety for improved restraints.—Eventually, after Dr. WELSFORD had replied, the resolution was carried with the reservations sketched out by Mr. Verrall and others.

Dinner.—The members and guests dined in the saloon dining rooms at the Palace, sixty-nine being present. Mr. J. SIDNEY TURNER presided. Among the guests were: Dr. Ward Cousins (President of Council), Professor Rhys Davids, Mr. Davies-Colley, M. Forestier, Dr. Armand Ruffer, Dr. Goodhart, and Dr. Herman (President of the Obstetrical Society). The usual loyal toasts were followed by those of "The Royal Colleges of Physicians and Surgeons," "The Association," "The South-Eastern Branch," "Literature, Art, and Science," "The Guests," "The Vice-Presidents," and others.

SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.

A MEETING of this District was held at Hastings on May 31st, Dr. BAGSHAWE in the chair.

September Meeting.—After confirmation of the minutes it was resolved that the September meeting be held at Hayward's Heath.

Communications.—The SECRETARY showed (1) for Mr. W. J. HARRIS a girl, aged 4, with Congenital Deformity of Knee-joints ("elbow knees"); (2) for Mr. TICEHURST, a boy aged 16, whose Femoral Artery and Vein had been successfully ligatured for diffuse traumatic aneurysm following a punctured wound of the thigh.—Dr. SIDNEY PHILLIPS read a paper on Syphilitic Heart Affections, with notes of a fatal case of Angina Pectoris; and exhibited a specimen of a Syphilitic Heart. Dr. LEE DICKINSON showed a Heart with Gummatous Cavity in Ventricular Wall, also microscopic specimens of Syphilitic Fibrosis of the Heart.—Dr. WILLS, of Bexhill, read notes of a case in which he had performed Gastrostomy for Malignant Disease of the Œsophagus. The patient survived tne operation fifty-one days.

[The result of the debate on the Registration of Midwives will be found at page 1384.]

NORTHERN COUNTIES OF SCOTLAND BRANCH.

INSTEAD of the ordinary meeting for discussion of medical subjects, the annual gathering took the form of a reunion of the members and their friends on board Mr. MacBrayne's steamship *Glengarry*, starting from Inverness on June 14th, at 11.30 A.M., for Foyers and Fort Augustus. The party numbered over seventy, and greatly enjoyed the day's outing.

Election of Office Bearers.—A business meeting of members of the Branch was held on board, when the office bearers for the year were appointed—Dr. Cruickshank, of Nairn, President; Dr. Sutherland, of Invergordon, President-Elect: Dr. Mackay, of Elgin, Secretary and Treasurer; and Dr. Ogilvie Grant, Representative to the Council and to Parliamentary Bills Committee. *Members of Council:* Drs. Bruce, Duguid, A. W. Mackay, Fyfe, Gallesby, and Geddes.

Jubilee of Dr. Vass.—A minute was passed expressing the congratulations of the Branch to Dr. Vass, late of Tain, who had attained this year his professional jubilee, having graduated in 1844 in Edinburgh and M.R.C.S. in 1845. Dr. Vass, one of the earliest members of the Branch, most regularly attended the meetings, on many occasions contributing papers, and at all times greatly adding to the enjoyment of all. He was President for the year 1875-76, and until he gave up his professional work in Tain took the greatest interest in all the Branch's doings. He was for many years Provost of the Burgh of Tain, and no man was ever more respected and beloved by his fellow-citizens.

Excursion.—The business proceedings over, the party set themselves to enjoy the pleasures of the trip, and visited the Falls of Foyers, which after the rain of the early part of the week were magnificent, the verdure of spring and the foliage of the birches surrounding the falls lending an indescribable enchantment to the scene.

Dinner.—The party dined together on board, under the presidency of Dr. CRUICKSHANK, and returned from Fort Augustus in time to catch the last trains north and east, many having travelled sixty miles to meet and enjoy for a day the society of their professional brethren and friends.

Next Meeting.—The next meeting was arranged to be held at Nairn in October next, and the annual meeting of 1895 in Elgin.

STAFFORDSHIRE BRANCH.

THE third general meeting of the session was held at Wolverhampton on May 31st, 1894.

Amendment of the Medical Acts.—A report to the Parliamentary Bills Committee on the proposed amendment of the penal clauses of the Medical Acts was considered, and the following resolution was passed:

That this Branch approves of the general principles contained in the report, and would further suggest that the Parliamentary Bills Committee should endeavour to introduce a clause making it compulsory on coroners to hold inquests in all cases of death not certified by a registered medical practitioner.

Cases and Specimens.—Mr. VINCENT JACKSON exhibited: (1) A Hernial Sac containing an Ovary too adherent to be separated for replacement in the abdomen, and which had been removed during an operation for the radical cure of a large inguinal hernia of the left side in a girl aged 6 years. (2) A collier, who was incapacitated by a true Aneurysm of the Superficial Arch of the Palm of the Left Hand, and who completely recovered his ability to follow his employment after it was excised. (3) A girl, 13 years old, who was admitted into the hospital on account of severe and neglected Talipes Varus of both feet. The left foot had been completely rectified in position by the removal of the astragalus, scaphoid, and a portion of the calcaneum, which had been accomplished through an incision on the outer and upper side of the foot 2½ inches in extent. No incision was made on the inner side.—Dr. F. EDGE exhibited a Broad Ligament Cyst with thick fleshy walls and pectinated interior, and mentioned a point in the enucleation of these cysts.—Mr. F. BOLDERO showed a patient who had been under his treatment for upwards of two years suffering from Paralysis of the Lower Limbs, with incontinence of urine and fæces. No definite cause of the paralysis could be ascertained, and the patient made a complete recovery. Treatment: counter-irritation, massage, electricity, and nerve tonics.

Papers.—Dr. DEANESLY read a paper on the Operative Treatment of Ruptured Urethra, and showed a patient whom he had treated for this condition twelve months ago by primary urethrorrhaphy. He was quite free from the slightest stricture, and a full-sized metal dilator was passed into the bladder with ease.—Dr. ALFRED CARTER read a paper on the Antipyretic Effects of the External Application of Guaiacol, which will be published shortly.

[The proceedings relative to the Registration of Midwives will be found at p. 1384.]

BRITISH GUIANA BRANCH.

THE usual quarterly meeting of this Branch was held at the Public Hospital, Georgetown, on April 19th: The Honourable R. GRIEVE, M.D., President, in the chair. There were present Drs. J. G. Wallbridge, Anderson, Barnes, Neal, Rohleher, Castor, Teixeira, Snell, Shannon, London, Bezbaroa, Daniels, Kennedy, Kennard, Von Winckler, Williams, Veendam, Leary, Gomes, Ferguson, Hill, and E. D. Rowland, the Secretary: and Drs. Knott, Master, Waddell, as visitors.

New Member.—The CHAIRMAN announced the election to the Branch of Dr. J. H. Ross.

Resignation of the President.—The SECRETARY moved the postponement of the business in order to say "Good-bye" to the President, who was leaving that day by mail, having resigned his office of Surgeon-General for grave ill-health.—The Senior VICE-PRESIDENT moved the following resolution:

That this Branch wishes to record its sincere regret at your compulsory retirement through illness acquired in the performance of your professional duties; and, in wishing you good-bye on your leaving the colony and vacating the office of President of this Branch, desires to testify to the very high esteem in which you are held, not only for your skill and ability in the practice of your profession, but also for your high scientific attainments. We are conscious that the Branch, as resuscitated by you in 1886, has developed into one of the most important tropical Colonial Branches, and that the work done at the meetings compares not unfavourably with that done at local Branch meetings in England. We feel that this success has been due to you, and earnestly hope that, though you are leaving us, the scientific and professional work so ably fostered by you may continue. The Branch wishes you a safe and speedy voyage, and hopes that your health will be materially benefited by the change to your native land.

Dr. ROWLAND seconded the resolution, and shortly outlined the career of the President.—Drs. FERGUSON, LONDON, SHANNON, LAW, BEZBAROA, VON WINCKLER, and HILL all spoke in kindly terms in support of the resolution, and expressed their deep regret that Dr. Grieve should be compelled to retire.—The VICE-PRESIDENT then put the resolution, which was carried by acclamation.—The PRESIDENT, in reply, expressed his heartfelt thanks to all for their kindness. He went on to say: "To-day I sever my connection with the Colony as far as active work is concerned; and in doing so all I claim is that during the nineteen years I have served here I have endeavoured to the best of my humble powers to advance the true interests of the Colony and of the people at large. I also to-day feel that I am bidding adieu to the active work of my profession, I am severing a union which has existed for thirty-three years, a union in which I may say I have done my very best to love, honour, and obey the profession to which I have been wedded." The President

concluded by wishing all engaged in the professional work of the Colony a happy and prosperous career.—The meeting was then closed, and several addresses were presented to Dr. Grieve—one from the profession of the Colony signed by all the medical men in the Colony save four, and others from the nurses and dispensers of the Public Hospital, Georgetown.

NEW SOUTH WALES BRANCH.

THE 114th general meeting of this Branch was held at Sydney on March 6th; Dr. W. H. CRAGO, President, in the chair. There were present Drs. Jamieson, Fiaschi, Shand, Jarvie Hood, Kenna, McSwinney, Norrie, West, Hinder, Hetherington, O'Reilly, Morgan, Martin, Twynam, Clubbe, Sydney Jones, W. Chisholm, Hall, Gill, Worrall, F. H. Quaife, Kingsbury, Faithful, Wright, Thomas, Angel Money, Ellis, Cohen Tidswell, Pockley, Newmarsh, T. M. Kendall, Thring, Knaggs, Lloyd, Jenkins, Maher, Marshall, Abbott, Lennhoff, Milford, Armstrong, Chenhall, Dowdell, McKay, Todd, Coutie, Collins, Bennet, Foreman, M. J. Clune, Marano, Clay, Crabbe, Edwards, A. Parker, Huxtable, Jas. Dick, Hankins, the Hon. Dr. Renwick, M.L.C., the Hon. Dr. MacLaurin, M.L.C.; with Dr. Connolly (Brisbane), Dr. Murray (Armidale), and Dr. Meeks as visitors.

Confirmation of Minutes.—The minutes of the previous meeting were read and confirmed.

President's Address.—Dr. CRAGO said he had to thank the members for the high honor done to him in electing him President of this important Branch. He would do his very best to carry out the duties of the office in a proper manner, and to the advancement of the Branch and the profession generally.

Proposed Medical Dinner.—A letter from Dr. Wood, of Ashfield, had been received relative to a medical dinner to be held in May. The PRESIDENT announced that he had been elected delegate by the Council to the committee for carrying out the dinner.

The Annual Meeting.—A letter was read from Dr. Edward Long Fox, President-Elect of the British Medical Association, intimating that the annual meeting of the Association would be held in August at Bristol, and asking that representatives from the New South Wales Branch be appointed.

New Members.—The PRESIDENT announced the election of the following new members: Drs. Pickburn, P. T. Thane, R. R. Harvey, A. J. Harwood, R. M. Russell, Joseph English, A. A. O'Hara, Eric Sinclair, F. W. Hall, R. J. Allen, F. G. Failes, J. T. Wilson, C. L. Dasson, F. B. Whalley, H. L. Harris, George Armstrong, A. G. Henry, Schwartzbach, Van Someren, Kinross, and Leahy.

Communications.—Dr. JAMIESON read notes on a case of Pseudo-Hypertrophic Paralysis, and exhibited the patient.—Dr. J. FOREMAN exhibited a fresh specimen of Pyosalpinx.—Dr. MCKAY read a paper on Abdominal Section. Dr. WORRALL moved the adjournment of the discussion until the next night of meeting. Carried.

Aims and Policy of the Branch.—Dr. L. R. HUXTABLE read a paper on the aims and policy of the New South Wales Branch of the British Medical Association.—In the discussion on this paper the Hon. Dr. RENWICK, M.L.C., the Hon. Dr. H. MACLAURIN, M.L.C., Drs. MILFORD, FOREMAN, WORRALL, SYDNEY JONES, QUAIFE, and ELLIS took part.—Dr. SYDNEY JONES proposed that it be an instruction to the Council of the New South Wales Branch to approach the Council of the British Medical Association with a view to obtaining the concessions mentioned by Dr. Huxtable.—Dr. KNAGGS moved the adjournment of the discussion until the next meeting. This was carried.

FIRE AT A WORKHOUSE SCHOOL.—A fire was discovered on June 18th in the upper part of one of the dormitories at the South Metropolitan District School at Sutton, Surrey, which provides accommodation for 1,700 workhouse children from the parish of Camberwell. With an excellent supply of water the flames were prevented from spreading to the main building. In the result the whole of the dormitory, with its tower, was burnt out. The terrible results of a similar conflagration at the Forest Gate Schools will be well remembered.

SPECIAL CORRESPONDENCE.

PARIS.

Vaccination and Revaccination.—Typhus in Paris.—Prevention of Epizoötic Disease.—Paris Lycéens as Volunteer Bearers.—Hospital Internes.—Versailles Water Supply.

M. LAYDET, director of the Bordeaux Vaccine Institution, has met with two cases of spontaneous horse-pox. Heifers were vaccinated with the matter taken from the pustules in the mouth, which produced a fine crop of vaccinal pustules. The two horses which were the subjects of the disease were revaccinated from the heifers without result, but on another horse vaccinated from the heifers vaccine pustules appeared. M. Laydet has studied the results of revaccination, and has observed that the mortality among the non-vaccinated attacked with small-pox is, up to the age of 10, five times greater than among the vaccinated. From 10 to 20 two-thirds of the small-pox patients are persons who have not been revaccinated. The mortality among those not revaccinated is almost equal to that of those who have never been vaccinated. Thus it appears that the prophylactic influence of vaccination in infancy has disappeared long before adult age. The proportion of small-pox patients between the ages of 20 and 50 who have been vaccinated increases, but the proportion among them is less than among the nonvaccinated. From 50 and upwards the mortality among small-pox patients not vaccinated is greater than among younger small-pox patients. Therefore the popular belief that age is a safeguard is without foundation.

Typhus threatens to become endemic in Paris. At the Tenon, Beaujon, and Necker hospitals there are at present cases under treatment. Sporadic cases have appeared throughout the North of France, in Normandy, and in the Vosges. Dr. Chantemesse considers the diagnosis of typhus difficult, and believes that many cases are mistaken for other diseases. The Prefect of the Somme Department, in accordance with Dr. Chantemesse's suggestions, has every tramp who is ill kept under observation, and at once treated if symptoms of typhus show themselves. If such precautions were generally adopted typhus would soon cease to be a danger.

It is proposed by a deputy to raise a fund to defray the cost of slaughtering oxen, sheep, and pigs attacked with contagious diseases which render them unfit for food. Experimental research is also to be encouraged in veterinary laboratories, in order to arrive at the necessary measures for the prevention of epizoötic diseases.

The pupils of some of the Paris *lycées* met at the "Association des Dames Françaises" the other day for the "voluntary bearer practice." They performed all the duties that would be required from them in time of war, removing the wounded, lifting them over walls, ditches, etc. Army doctors inspected the material for an auxiliary hospital of 100 beds, two field hospitals ready to be sent off, and thousands of shirts, etc.

It is suggested that hospital *internes* be no longer lodged within the hospital walls; their vacant rooms are to be occupied by nurses and superintendents, who now receive a certain sum by way of indemnity. This sum will henceforth be handed over to the *internes*, who will thus enjoy their liberty without infringing hospital rules or incurring any extra expense.

Versailles is without water, and has begged permission of the Paris municipal authorities to draw water from the Avre aqueduct, which runs through Versailles. The Conseil has granted permission until October 1st. The Versailles Corporation will pay 1½d. per cubic metre.

PRESENTATION.—Dr. F. S. Toogood, who has recently been appointed Medical Superintendent of the new infirmary at Lewisham, was on June 16th presented by the matron and staff of the infirmary of St. George-in-the-East, with a handsome set of brass accessories for the writing table. Dr. Toogood is succeeded at St. George's by Dr. M. M. Bowlan, who has held the post of Assistant Superintendent there for hree years past.

MELBOURNE.

Some Interesting Surgical Cases: Multiple Hydatid of the Liver; Fracture of the Orbital Plate: Nephrolithotomy; Post-nasal Growths.—Reorganisation of the Government Health Department.—Distribution of the Parliamentary Charitable Grant, and the Creation of District and Municipal Funds.

MR. STIRLING has reported a very interesting case of multiple suppurating hydatids of the liver in a girl, aged 11 years, in which he operated on five cysts, each entirely distinct, by means of free incision, good drainage and lavage, with strict antiseptic precautions. He further described a case of fracture of the orbital plate of the frontal bone caused by the patient being thrown on the head. The symptoms indicated an injury to the brain, and it was decided, as the patient began to take a turn for the worse, falling into a semi-comatose condition, to trephine over the middle meningeal artery. This was accordingly done, and dark blood and clots oozed out. He made a rapid recovery. Mr. G. A. Syme read a paper on notes of some cases of renal surgery on which he had recently operated. He said that Mr. O'Hara's three cases of nephrolithotomy were the first cases of the kind recorded in Melbourne. He himself had three cases of renal calculus in which he had performed lumbar nephrolithotomy. The first case was that of a mounted constable who, in consequence of pains in the loins extending to the groins and testicles, was unable to continue on duty. His urine contained albumen, oxalate of lime, and blood. In this case the kidney was brought out on to the loin and punctured through its convex border with a hare-lip pin. An incision was made partly through the pelvis and partly through the renal substance, and the stone extracted. The patient did well. The second case was that of a labourer. In this case the kidney was also brought on to the loin. The stone was extracted from the pelvis of the kidney. The third case was in a single woman, aged 23, who exhibited the symptoms of renal calculus. The kidney was explored, and it was brought out as in the other operations. After probing it nothing abnormal was found. A tenotome was then passed from the convex surface into the pelvis, a small sound introduced and passed down the ureter: the result was negative. The next day alarming hæmorrhage occurred and the patient collapsed, dying shortly afterwards. In the discussion which followed the reading of this paper, Dr. Gardner observed that he did not approve of the turning out of the kidney on to the loin. It materially increased the risks to the patient. Mr. O'Hara objected to turning the kidney out. He approached a stone lying in the kidney only through the cortical substance.—Dr. Snowball, in a paper on post-nasal growths, expressed the opinion that they were an exaggeration of the ordinary adenoid tissue, or a hyperplasia of pre-existing tissue, of low vitality though excessively vascular. There is generally defective nutrition, and the growth of the patient being retarded, there may be retrogression, and the child grows lighter. He believes that there is a great flow of muco-pus which becomes a drain on the system, also probably a mild hectic from absorption of the secretion is established. Many of these cases are assumed to be phthisical, but after treatment they grow quite fat and well again. The stupidity in these cases he accounts for by defective hearing *plus* a debilitated condition of health. There may be reflex conditions such as ensure asthma, twitching, etc. After the exanthems these cases are prone to be initiated and to recur. He operates in the usual way.

It has been decided by the Government, in continuance of their scheme of general retrenchment in the public service, to abolish the special department of health. At present the staff of the department of health occupies a building to itself in a prominent part of the city, and it has now been decided to merge the functions of this board into that of the Chief Secretary's department. It is, however, intended that the Board of Health shall be continued, as it is found to be a most useful body in carrying out sanitary reforms. The present Chairman of the Board, Mr. Topp, is to be appointed as Under-Secretary, and the present medical officer of the Board, Dr. Gresswell, to whose zeal the present activity in sanitary matters is largely due, is to be appointed by the Government as Chairman of the Board.

It is proposed by the present treasurer, Mr. G. Downes Carter, to vest the power of the distribution of the charitable grant annually voted by Parliament in a central council. The present method of distributing it by each successive treasurer is, considering the political influence invariably brought to bear, regarded as disagreeable and unsatisfactory. Last year the vote amounted to £120,000, this year it is £110,000. It is proposed that the colony shall be divided into districts, each district to have a local board. A central council will receive the annual grant, the contribution given to charities by municipalities, and a percentage of all takings from sports and entertainments held on land that has been granted by the Crown for recreation purposes. The question of compelling relatives to contribute towards the support of a patient in any charitable institution is also under contemplation. Municipalities will be induced to vote annually a certain minimum percentage of their rates to the charitable council for distribution among the charities. It is felt that this will cause a wealthy corporation like the Melbourne City Council, which has hitherto never expended any money in assisting charitable institutions, to do so in future.

CORRESPONDENCE.

THE NILE RESERVOIRS.

SIR,—Referring to your note entitled "The Nile Reservoirs and French Obstruction," may I beg you to observe that the objection to the Wady Raiyan scheme as stated by you is a grave charge against the competence of the British officials in the Public Works Ministry? The proposal to utilise the depression, discovered by me in 1882, was submitted to the Egyptian Government in that year, and its possible value recognised by Lieutenant-General Stone, Chief of Staff, Chief of the Cadastral Department (land survey), and President of a Commission, then sitting, for the better distribution of the summer supply in the Delta. At Lieutenant-General Stone's request, an offer was made to me by Arabi Pasha of the money necessary to make further preliminary surveys. I refused the money on the ground that my observations were not sufficiently advanced to justify my encouraging the Egyptian Government to spend the money of the taxpayers on them, and I made all my expeditions at my own expense down to 1886-7. But, in 1883, Ali Pasha Mubarekh, the Minister of Public Works, and M. Rousseau, the Director-General of Public Works, ordered the chief engineer of the Fayum to accompany me into the Raiyan depression. The Minister of the Interior and the President of the Council of Ministers directed the Governor of the province to extend to me their protection, and offer me every facility. This was done.

In 1886-7-8 a sum of money, amounting to about £1,200, was expended out of the loan guaranteed by Austria-Hungary, France, Germany, and Russia, as well as England, in order to obtain more detailed information. Two reports by Colonel Western, from notes by Sir C. Scott-Moncrieff; a note by Nubar Pasha, President of the Council of Ministers in 1887-8: an elaborate, if in some respects faulty, discussion by Mr. Willcocks (*Egyptian Immigration*, pp. 301 to 322, 1 map, 6 diagrams), with the reports of Sir C. Scott-Moncrieff and Lieutenant-Colonel Ross, *Nile Reservoirs* (1891), and the volume, *The Fayum and Lake Moeris* (110 pages and 27 plates), by Major Browne, Inspector-General of Immigration, represent a very large amount of administrative work. It certainly is not too much to say that, including the work done by the Reservoir Department since 1891, and the expense incurred for the technical Commission in their visit to the Raiyan Basin in February, not less than £10,000 has been drawn from the Egyptian Treasury for this Raiyan project.

Your note says that: "The Commission is of opinion that the acceptance of the Wady Raiyan scheme might lead to the formation of marshes and the outburst of springs in the lower lands of the province of the Fayum, which would necessitate special drainage;" and that it is "in general unfavourable to the Wady Raiyan project."

But neither M. Boule nor M. Torricelli had ever seen the

Nile before February, 1894. It seems to me that this dilemma is unavoidable: Either the majority of the Commission was in error, or Her Majesty's Government have compelled the Egyptian Government to employ a staff so deficient in experience and sound judgment, that the moment an intelligent Frenchman and an Italian Professor of engineering at Naples glanced at the Fayum and Raiyan depressions, they were able to pronounce that the Raiyan scheme was not feasible.

Naturally anyone must ask: "Why were they not consulted in 1884?" "The Raiyan project has been examined and found feasible for £1,500,000," writes Lord Cromer in 1891, 1892, and 1893 (Parliamentary Reports). True in substance, says (the BRITISH MEDICAL JOURNAL), "but as soon as a Frenchman and an Italian examined it, they found it impracticable." "Why not then?" naturally say the Powers whose guaranteed loan has been uselessly expended, "have an international board of engineers to arrive at trustworthy results, and put a stop to the 'busy idleness' of the British officials?" I believed that Colonel Western's opinion was trustworthy. I have lavished life, time, labour, and money, relying upon his approval of my plans. As for the Raiyan Canal, as draughted by Mr. Wilcocks, I protested in the strongest possible manner against its adoption. The detailed plans rejected by the Commission were his, not mine.

In regard to the quality of the water, I have taken great pains to ascertain the opinion of experts. Had the Silsileh scheme been adopted there could have been no doubt of its deleterious character. If the reservoir were made at the Kaybar cataract, 400 miles south of Halfa, the deterioration would be so materially reduced that ponding up might even be an advantage. At Assuan, however, it could be poisoned by cholera and typhoid germs, which would find in the alongshore reaches of this stagnant pool, with only the slight movement of the central current, a most suitable home. The poison would then work northward, with fresh pollution, until it had reached the seaports. The Assuan project is pestilential from the financial, political, archæological, military, as well as sanitary point of view. Kayhun is the only place for a dam. Victoria Nyanza and Isana for equatorial regulation, and Raiyan depression for the Delta reservoir.—I am, etc,,

Cleveland Row, St. James's, June 20th. COPE WHITEHOUSE.

UNQUALIFIED PRACTICE AND THE BRITISH MEDICAL ASSOCIATION.

SIR,—It is a source of satisfaction that the resolution of Dr. Welsford was passed *nemine contradicente* at a largely-attended annual meeting of the South-Eastern Branch, held at the Crystal Palace on June 13th. The main object of this resolution was to invite the Council of the Association to take powers to prosecute unqualified persons, and to deal with other professional matters of importance. The proposal is a somewhat novel one, involving, as it does, a large extension of the energies of the Association, and at first it naturally met with criticism from some of the members of the Council who were present. These gentlemen, for the most part, dwelt upon the impossibility of the Council being able to carry out the proposal (if adopted) under the present constitution of the Association. The resolution was carefully drafted to meet this obvious objection. If the Council possessed the power to act against the enemies of the profession no debate on the subject would have been necessary. We cannot believe that a few energetic members of the Council could not solve the difficulty of dealing with the extra work thrown upon themselves and their colleagues.

It is for the members of the Association as a whole to express their wishes on this subject, and their representatives on the Council will doubtless carry their wishes into effect to the best of their ability.

The debate on the resolution was interesting and animated, but the time for the discussion was not adequate to the importance of the subject. It would be more satisfactory if at these meetings so much time were not frittered away in ornamental and congratulatory resolutions and speeches. Opportunities for medical men to discuss vital questions of policy are necessarily rare, and it is much to be deprecated that these meetings should be hurried over in a perfunctory manner with a view of hastening on to the more festive part of the day's programme. Two hours in the year should not be too much for members to devote to business and the various questions of medical policy, especially as under the present methods of voting for representatives on the Council, members of the Association are under great practical difficulties in bringing their views before the Council.

If the British Medical Association is not the appropriate body to grapple with this and similar questions, it would be interesting to know what existing association can take the initiative. It is with the view of strengthening the hands of our representatives that this resolution was drafted, and we venture to trust that it will be received in a sympathetic spirit by the Council, and that other Branches will agree with our action, and adopt similar resolutions.—We are, etc.,

ROBT. H. CLARKE,
FREDK. EASTES,
F. E. NICHOL,
W. G. TYSON,
BERTRAM THORNTON,
THOS. WHITEHEAD REID,
A. G. WELSFORD,
THOS. F. RAVEN, Honorary District Secretary,
Members of the East Kent District, South-Eastern Branch.

June 19th.

DYSENTERY AND "TROPICAL" LIVER ABSCESS.

SIR,—In the BRITISH MEDICAL JOURNAL of June 16th Drs. Yeates and Younge, of Mandalay, criticise a paper of mine in the BRITISH MEDICAL JOURNAL of March 31st on the Relationship of Liver Abscess to Dysentery. Dr. Yeates makes the often-repeated statement that the association is one merely of coincidence. Is it not a little curious, to say the least of it, that the coincidence is with dysentery alone? Why not with other diseases of the same region? Dr. Yeates asks: Why is it if the association is not one of coincidence that only 1 out of 135 natives admitted to his hospital for dysentery in three years only one of these had hepatic abscess? The question would have been more to the point if that solitary case had not had dysentery. My contention is not that a particular proportion of cases of dysentery have liver abscess, but that practically every case of tropical liver abscess is associated with dysentery. Dr. Younge states that "in many of the cases that occur in India *post-mortem* examination shows that the patients have never suffered from dysenteric or any other form of intestinal ulceration." Too often no mention is made of the state of the gut in such records of hepatic abscess, and these cases cannot with justice be reckoned against the view upheld in my paper. If Dr. Younge will take the trouble to go over again the records of such *post-mortem* examinations I venture to assert that he will find (if he will eliminate all those cases in which no mention is made of the condition of the gut) that a very large majority presents evidence of dysenteric disturbance. My own experience has been that every case has furnished such evidence, and that even when the patient had assured me that he had never had dysentery.

In the recently published and admirable book, *Hygiene and Diseases of Warm Climates*, edited by Dr. Davidson, Sir Joseph Fayrer quotes 49 cases of undoubted liver abscess, and Professor Cayley 4, in all 53. They are not recorded, it is to be premised, as in any way illustrating the connection with dysentery, for we find that in 15 cases there is no mention of the condition of the bowel either before or during treatment; 12 of these recovered, 3 died, but were not examined after death, so these cases do not bear on the question at issue. In 18 cases there is no statement as to dysentery, or of the previous history of the bowel function, but all had diarrhœa, and one blood and pus, in the stools while under observation. Nine of these recovered; 1 probably, and 8 certainly, died. Of the latter 5 were not, 3 were, examined after death; but no observation whatever is recorded as to the condition of the gut. Probably a number of these had dysentery, but, to be quite fair to both sides of the question, I shall pass over them, and consider the remaining 20 cases where dysentery is distinctly referred to. Of these 15 are said to have had dysentery, 5 are distinctly stated not to have had it; but one of these 5 died, and examination after death showed that he had dysenteric ulcers, a test that could not be applied to the

4 that recovered. Hence 16 out of 20 were certainly associated with dysentery, and the absence of its history in the 4 cases, as illustrated in the one that died and in the cases referred to in my paper, proves that it is not justifiable to accept here even the 4 out of 20 as against that association.

It is interesting further to note that of these 20 cases, 2 were multiple, 18 were single, abscesses. Now it is held by nearly all physicians who have to do with these cases that there is a necessary relation between dysentery and multiple abscess. It has yet to be shown on what grounds multiple but not single liver abscess is caused by dysentery; the evidence seems to me to be the same for both. I purpose soon discussing why it is that dysenteric ulceration of the intestine is thus associated with dysentery, while typhoid ulceration is not—a most interesting problem, which I venture to think throws much light on this long-contested question.—I am, etc.,

NEIL MACLEOD, M.D.Edin.

Cromwell Houses, S.W., June 18th.

"THE ABUSE OF HOSPITALS AND THE CHEAP DOCTOR."

SIR,—I have read with interest Dr. Bruce's contribution to this discussion in the BRITISH MEDICAL JOURNAL of June 16th, and all the correspondence prior to this. Much of the confusion and the conflicting opinions arising in this connection would, in my opinion, instantly vanish if it were honestly and openly avowed that hospitals and all similar institutions exist really to further the interests of medical men, and are founded by them for this purpose, whilst ostensibly and pharisaically proclaimed to subserve the purposes of Christian philanthrophy. It is to the scandalous abuse of hospitals that clubs, medical aid societies, and "sixpenny doctoring" are entirely due, and I, for my part, have every sympathy, in common, I am glad to notice, with Dr. Bruce, for the man who is compelled by the *dii majores* of the profession to accept the paltry and undignified fee of sixpence! If the physicians and surgeons of Guy's can afford to give their advice and medicine for threepence, why blame the poor practitioner who cannot afford to give the same for less than sixpence? Dr. Bruce sees no remedy for medical aid associations but the "limitation of the number of registrations through the stress of over-production." Doubtless this would be a remedy, but it is Utopian to expect any such limitation so long as universities and corporations derive large incomes from the process of overcrowding the profession—too frequently, I agree again with Dr. Bruce, with "men who are not safe to be trusted with the lives of their patients." There is nothing more difficult than to reform out of existence corrupt and rich monopolies; and so far as I can see, the labours of the Universities Commission will tend only to perpetuate a system and gross abuses which are indefensible and are anachronisms. The true solution of the whole question is the one-portal system—an examination by the State—qualifying for the *Medical Register*, and no matter how interested parties will fight to postpone it, it will yet replace the mediæval system of the present time.—I am, etc.,

D. CAMPBELL BLACK, M.D.,
Professor of Physiology, Anderson's College.

Glasgow, June 16th.

THE MEDICAL SCHOOLS OF SCOTLAND.

SIR,—An accurate and admirable notice of the Medical Schools of Scotland appeared in the January number of the *Scottish Review*, and in the April number of the same magazine there is a brief article by "Gnomon," essaying to correct the former article. Some of "Gnomon's" statements are misleading or inaccurate, or both.

"Gnomon" complains that the January writer "has been inadvertently a little unjust to the 'triple' qualification of the Scottish bodies," because he had said that the three colleges give a "combined license to students who do not desire or *cannot obtain a university degree*. The words in italics are specially grievous to "Gnomon." But they are perfectly true as regards the past. It is notorious that after several attempts for a university degree men have had, to their eternal regret, to content themselves with the licence.

Doubtless the licence examination "is of a very high class indeed," but it is not, and never has been, "practically the same examination as the University." Even when one remembers that botany, zoology, and pathology *were* not required for the licence, one has not by any means stated the whole case for the University. I say "were not required" because in the regulations for the "triple" qualification applicable to students who began their medical studies after January 1st, 1892, there is a much closer approximation to the University course. Whether men will yet be able to take the triple qualification after they have failed to take a degree remains to be seen. That will be known with certainty in or after the year 1897—scarcely before.

"Gnomon" protests that "all candidates are now required to pass a full examination in physics and elementary biology, both vegetable and animal." The word "full" requires definition. But let that pass. Look for a moment at what is required under the head of elementary biology. It will simplify the issue if I give the official syllabus for the licence *in extenso*:

> Candidates will be examined on the properties of protoplasm; the characteristics of unicellular organisms, and their relation to multicellular organisms, the main distinctions between animals and plants; the characters of the sub kingdoms of the animal kingdom. Candidates will also be expected to have a practical knowledge of the main points in the structure of the following forms:
>
> 1. Amœba, paramœcium, hydra, lobster, or crayfish, frog, pigeon.
> 2. Yeast, bacterium, penicillium, fern, rose; and to possess an elementary knowledge of the functions of the various structures in the higher animals and plants enumerated.

Well, will "Gnomon" turn to pp. 417, 418 of the Edinburgh University Calendar, and read the corresponding syllabus for the first professional examination? And having done so, will he still adhere to his assertion that "in all respects the triple licence is now abreast of that of the University?" To take a much broader view of the question, will he tell us how a man nurtured on this stinted biological fare of the triple qualification is going to read with profit such a book, for example, as Metchnikoff's "Lectures on the Comparative Pathology of Inflammation?" Or when his licentiate is fully fledged, and has become a "man of light and leading" in his town or village, how shall he follow, much less expound, the latest would-be apostle of evolution when he traces the beggarly elements of ethics in the division by fission of unicellular organisms, and sees altruism grow and amplify through the various gradations of animal life?

"Gnomon's" next assertion is even more hopelessly and inexcusably inaccurate. "It seems reasonable to suppose," he goes on, "that a university degree, obtainable in the same unrestricted manner as this licence—*which actually costs as much as any degree*—would be even more highly appreciated." The italics are mine. The total minimum cost in class and examination fees for the degrees of M.B. and C.M. of the University of Edinburgh is about £150, while the total minimum cost for the conjoint diploma is £105 10s.

There are several other points in "Gnomon's" article which call for comment and correction, but these may be returned to on another occasion.—I am, etc.,

May 29th. FABIUS CUNCTATOR.

DIPHTHERIA AND DEFECTIVE DRAINAGE.

SIR,—Last December, under the above heading, a number of letters appeared in the BRITISH MEDICAL JOURNAL, in which opinions were divided upon the question whether defective drainage caused diphtheria or not. We know beyond dispute that it is an infectious disease, that it appears to acquire progressive virulence, that the most susceptible ages are those below puberty, and that, consequently, the great extensions of the disease occur in places where children are congregated together. It is also generally admitted that air polluted by sewage effluvia may cause sore throat, and predispose to diphtheria. But it is disputed whether the sore throat caused by sewage effluvia may be infectious, and whether it may be true diphtheria.

Unfortunately, there is as yet no general agreement as to the definition of diphtheria. Is it to be limited to the definition attached to it by the pathologist, who judges it according to whether or not he finds the Klebs-Loeffler bacillus, or is it rightly extended also to the throat affection recognised by the clinician as an infectious and often fatal form of sore throat, and certified as diphtheria under the Infectious Disease Notification Act and the Births and Deaths Registration Act? For the practical purposes of the health officer

he cannot but accept the clinician's definition, and that being so, it would materially increase our knowledge if authenticated cases of infectious sore throat that appear to have arisen from sewage effluvia were recorded in the medical journals. The following case is of some interest in this connection.

To a boarding house in the southern part of St. Pancras, in the neighbourhood of the squares, a male child, L. G., aged 10 years, was sent by its mother on Easter Monday, March 26th, and a fortnight later a brother, V. G., aged 4 years, arrived at the same house. The younger child, V. G., was not robust, and towards the end of a week he fell ill. On Monday, April 16th, he was removed to hospital and certified to be suffering from diphtheria. On April 18th the brother, L. G., fell ill, was removed to the same hospital, and was subsequently certified to be also suffering from diphtheria. Inquiry at the house brought to light the following facts: Both the children were placed to sleep upon a bath in a ground floor back additional room. They slept there from the first, and in no other room. The bath waste-pipe was effectually cut off, and discharged into the open air. In one corner of the room a watercloset was found covered over with a pile of clothing, and the trap of the watercloset was ascertained to be quite dry. On April 19th a young girl, aged 17 years, who played with the children, was removed to another hospital suffering from sore-throat; she is since stated to have returned home well, and the sore-throat to have been regarded as benign. I have since been informed by the authorities of the hospital to which the children were removed that they both died of an extremely virulent form of diphtheria. Beyond the facts as stated no source of infection has been discovered.—I am, etc.,

St. Pancras, N.W., May 28th. JOHN F. J. SYKES.

PUBLIC MEDICAL SERVICE, COVENTRY.

SIR,—In reference to your notice of the first annual meeting of the above may I be allowed to state that any medical man practising in the city is eligible for election to serve on the medical staff, thus differing from the local provident dispensary? The management is under the control of the medical staff, which is divided into a committee and sub-committee. The dispensing of drugs is performed by the chemists of the city, most of whom have joined the movement.—I am, etc.,

Coventry, June 19th. F. L. HARMAN BROWN, M.B., Honorary Secretary.

NAVAL AND MILITARY MEDICAL SERVICES.

ARMY MEDICAL OFFICERS AND SUBSTANTIVE RANK.

ONE of the most important rulings in respect of the rank of medical officers and the rights it carried with it on duty has recently been promulgated by as high an authority as his Excellency the Commander-in-Chief in India. It is well, therefore, to make the ruling public for the information of all medical officers serving at home and abroad, as it equally affects both.

The circumstances leading up to the decision in favour of the Medical Department were shortly as follows:

In a large Indian garrison a British Infantry regiment was paraded by the adjutant for medical inspection. On arrival of the medical officer (a surgeon-major) detailed to carry out the duty the adjutant not only failed to call the men to "attention" and report them "present" but also (apparently intentionally) neglected to salute the medical officer. Naturally such a grave and unusual irregularity brought about a report to the general officer commanding the district, who referred the case to his Excellency the Commander-in-Chief for an authoritative ruling. Why, however, the general officer commanding himself did not courageously deal with the matter according to the Queen's Regulations is not clear, for the medical inspection being an official act, and the adjutant of the regiment junior to the surgeon-major, the salute due to the latter should have been given. The plea of the adjutant for refusing to do so—namely, that he did not consider that the medical officer was entitled to any salute on the regimental parade ground—is so feeble and puerile as to be incredible, if the adjutant had any length of service and was conversant with the regulations of the service. However, out of this regrettable incident much good has flowed, inasmuch as, once for all, the substantive rank of medical officers has received a recognition which can never now, it may be hoped, be justly set aside. The ruling is such as might well have been expected from his Excellency the Commander-in-Chief, Sir George White, who is above all a just and wide-minded soldier free from petty prejudices against the medical department.

The following is a copy of the district order issued by the major-general commanding the district:

DISTRICT ORDERS BY ..... COMMANDING ..... DISTRICT.
May ....., 1893.

Salutes.—A question having lately arisen regarding the right of a senior departmental (medical) officer to be saluted by a junior combatant officer when addressing him on a matter of duty, the following authoritative ruling, received from army headquarters, is published for the information and guidance of all concerned:[1]

"That as the body of troops was paraded for medical inspection the medical officer in question had a distinct duty to perform on parade, and that on his arrival the men should have been called to attention, and the officer in command being junior to the surgeon-major should have reported them 'present' or 'ready for inspection,' saluting as he did so." (Section 3, para. 13, Queen's Regulations.) By order, Assistant Adjutant-General, ... District.

THE NAVY.

FLEET-SURGEON RICHARD J. SWEETNAM has been placed on the retired list at his own request, with the rank of Deputy Inspector-General, June 12th. He was appointed Surgeon February 29th, 1864, Staff Surgeon March 17th, 1878, and Fleet-Surgeon May 30th, 1884. He was present at the battle of Ikorudu in the Lagos Lagoons, March, 1865; attended the military wounded on the field (the military medical officer being disabled through sunstroke); was mentioned in despatches, and received the thanks of the Secretary of State for War. He served for three years in the *Investigator* in Lagos Lagoons, and was in medical charge of the Niger expeditions in 1864, 1865, and 1866; and author of the Rules and Regulations for Preserving the Health of Ships' Companies in Lagos Lagoons and the Niger, as at present embodied *verbatim* in the North-East Africa *Station Order Book*.

Staff-Surgeon CHARLES F. NEWLAND has been appointed to the *Dædalus*, June 15th.

ARMY MEDICAL STAFF.

SURGEON-MAJOR J. E. VAUGHAN FOSS, M.D., retires on retired pay, June 20th. He was appointed Surgeon March 31st, 1874, and became Surgeon-Major twelve years thereafter. He was engaged in the Egyptian war of 1882, receiving the medal and Khedive's bronze star.

Surgeon-Captain J. G. DEACON, M.D., who was appointed July 28th, 1886, now retires from the service with a gratuity, June 20th.

INDIAN MEDICAL SERVICE.

SURGEON-LIEUTENANT-COLONEL J. C. FULLERTON, M.B., Agency Surgeon and Administrative Medical Officer, Beloochistan, is granted furlough out of India for one year and 102 days.

Surgeon-Colonel D. O'C. RAYE, Bengal Establishment, is appointed Principal Medical Officer, Bundelcund and Nerbudda District, *vice* Surgeon-Colonel E. O. Taudy, retired.

Her Majesty's Government have conferred good service pensions on the undermentioned officers, with effect from the dates specified: Surgeon-Colonel GEORGE COCHET CHESNAYE, Bengal Establishment, in place of Surgeon-Colonel C. P. Costello, Indian Medical Department, Bengal, retired with the special additional pension of £250, January 1st, 1894; Surgeon-Colonel EDWARD ORD TANDY, Bengal Establishment, in place of Surgeon-Colonel A. H. Hilson (retired), deceased, January 5th, 1894; Surgeon-Colonel ROBERT HARVEY, M.D., D.S.O., Bengal Establishment, in place of Surgeon-Colonel G. C. Chesnaye, Indian Medical Service, retired with the special additional pension of £250, January 17th, 1894.

THE VOLUNTEERS.

THE undermentioned gentlemen are appointed Surgeon-Lieutenants to the corps specified, dated June 16th: WILLIAM MABSON GABRIEL, 3rd Volunteer Battalion the Duke of Wellington's West Riding Regiment; WILLIAM ARTHUR GRIFFITHS, 1st Volunteer Battalion the Hampshire Regiment; HENRY AUGUSTUS COLLINSON, M.B., 4th Volunteer Battalion the Durham Light Infantry; JOHN MCDONALD NICOLL, M.B., 5th Volunteer Battalion the Durham Light Infantry.

VOLUNTEER MEDICAL STAFF CORPS.

SURGEON-LIEUTENANT C. O. HAWTHORNE, M.B., of the Glasgow Companies, has resigned his commission, which was dated July 4th, 1891.

THE SUB-MEDICAL DEPARTMENT IN INDIA.

THE Secretary of State for India has sanctioned the change of designation from "apothecary" to "assistant-surgeon." The honorary rank and titles of surgeon-major, surgeon-captain, and surgeon-lieutenant will henceforward be the designations of the different grades of senior apothecaries. This concession to the hard-working warrant officers is gratefully accepted by them.

[1] See Royal Warrant, 1893, Article 269.

THE CASE OF SURGEON-MAJOR H. G. GARDNER, MEDICAL STAFF.

IN 1890 Surgeon-Major H. G. Gardner, then stationed in India, was refused leave home on urgent family affairs, but we have not before us the grounds of the refusal; the result, however, was that he felt compelled to retire on a gratuity after sixteen years of good service. He now finds himself debarred from further employment on the active list, although still retained on the list of those "liable to recall" to service in emergency. We would assume *a priori* that retirement by gratuity meant a clean severance, and did not involve liability to recall to service; but such does not seem to be the case, and retirement on gratuity is treated the same as on pension. We question the equity of this rule. As to reinstatement on full pay, which this officer desires, it is compassed about with many, and probably insuperable, difficulties. Even if it were allowed, we presume the first step would be refunding the gratuity. There have been instances in war time of officers who had resigned their commissions being reinstated, but these were prior to the days of retirement by gratuity with liability to recall. Commissions have often been resigned under private stress, and the step afterwards regretted. The case of Surgeon-Major Gardner, we fear, is one in point, but though the case is undoubtedly a hard one, we cannot suggest a remedy unless through the special grace of the authorities.

THE PRESIDENCY OF MIXED BOARDS IN INDIA.

THE Government of India have issued a reconstruction of the regulation as to Boards of Survey on hospital equipment, diets, etc. These will be composed of medical officers, but when the number of medical officers present at a station will not admit of this being carried out the Board may, at the discretion of the officer commanding the station, be composed of military and medical officers with a medical officer as President, or solely of military officers with the medical officer in attendance. It is something achieved that a military medical officer may be the President of a mixed board.

A MEDICAL STAFF CORPS OF EURASIANS.

AN article is devoted, in an Indian contemporary, to the needs of an Indian Medical Staff Corps, for efficient nursing in hospitals. The recruiting for this corps from domiciled Anglo-Indians and Eurasians is advocated, the recruits passing through the ranks to the subordinate medical department after becoming corporals and sergeants. If our memory serves us right some such scheme was long since advocated by Brigade-Surgeon-Lieutenant-Colonel Evatt, who supported the claims of Eurasians for this purpose.

MEDICO-LEGAL AND MEDICO-ETHICAL.

EMPLOYERS' LIABILITY.

A CORRESPONDENT sends us a report of a case in the county court in which he was plaintiff. He stated in evidence that a partner in defendant's firm brought a man to his surgery to be attended to. The man was in defendant's employ, and he had very severely cut his finger at his work. The finger had to be amputated, and the man was laid up for two months. He sent the bill into the senior partner. He said he would not pay it, and plaintiff then said he would sue the firm. Defendant's counsel submitted that no liability had been made out. The partner appeared to have done what any man would have done; he took the injured man to the nearest doctor, but that did not make him liable. The judge gave judgment for the defendants, without costs. The fact that the man's employer had personally taken him to the surgery not unreasonably gave rise to the presumption that he would be responsible for the doctor's charges, in the absence of an express statement by him to the contrary. Indeed, it has been held that if a mere stranger directs a surgeon's attention to a poor man, he is liable to pay the surgeon's bill, but we doubt if this principle would now be upheld. It would always be desirable to have an express contract in cases like that of our correspondent (at any rate before entering on a continued attendance), unless it was intended to look to the patient only.

NEWSPAPER PUFFS AND [ADVERTS.].

FROM time to time, and with more frequency recently, advertisements may be seen in the agony columns of the newspapers in which Mrs. So-and-so expresses her thanks to numerous friends for their kind inquiries during her recent illness. The *Herts Advertiser and St. Albans Times* of May 26th shows that this custom may become a method of advertisement. Thus:

"Mrs. Spriggins, Park Street, thanks the many friends for their kindness during her late operation, performed most successfully by Dr. Wells of St. Albans.—[Advt.]"

It would be surprising if any medical man could suppose that so naive an announcement could increase his reputation with even the most guileless of the public. Mr. Wells will doubtless have the sympathy of his professional brethren, the more as the issue of this same paper on the next Saturday (June 2nd) contains another puff, this time without the addition "Advt." We would recommend Mr. Wells to use his influence with his patients and with the editor of the newspaper in question to prevent the future publication of "Advts." and paragraphs of this kind, for they do not contribute to enhance the honour and dignity of the individual or of the profession to which he belongs.

Mr. Wells has a companion in misfortune in "Dr. Alexander, the specialist in diseases of the ear, throat, and nose," who finds the steps of his medical education described with some detail in a recent issue of the *Sun*. The paragraph referred to states the street in the City in which Dr. Alexander has consulting rooms, and adds that "in conjunction with a few others he has lately started an ear and throat hospital in the East End." We hear of this new hospital for the first time, and the names of the other members of the medical staff, and of the committee of management, are not mentioned. It appears, however, according to the *Sun*, that "the poor will be treated gratis on presenting a letter of recommendation from a subscriber, while those who can afford to pay will be charged a small fee."

OBJECTION TO VACCINATION—A NOVEL PLEA.

AT the Cambridge Police Court on June 15th Walter George Bell, assistant tutor of Trinity Hall, Cambridge, was summoned for non-compliance with a vaccination order. He set up a novel defence—that vaccination was inoculation, and by Section 32 of the Act of 1867 anyone is liable to one month's imprisonment for inoculation. Dr. Cooper said by that contention every medical man vaccinating was liable to imprisonment. The Bench inflicted a fine.

A CARD AND AN APOLOGY.

A CORRESPONDENT sent us recently a card containing an announcement as to a surgery, at which attendance was made at certain hours, and also the private residence of the practitioner. He stated that this card had been delivered personally from house to house. Under the circumstances we thought it well to communicate with the practitioner whose name appears on the card. In reply he informs us that the card was given to a few people in the neighbourhood of the surgery (now closed). He expresses regret at having taken the course mentioned, and adds that it will not be continued.

AN UNREMUNERATIVE ASSISTANTSHIP.

TOO OBLIGING.—As the unqualified assistant on appealing to his qualified friend A. was left to infer that no salary was attached to the "unqualified" assistantship, any attempt to enforce such a claim now would probably be unsuccessful. On receiving the indefinite intimation from A., the unqualified assistant should have addressed the principal B. on the subject, and if the reply were unsatisfactory should have arranged to retire from the unremunerated post at once.

MIDWIFERY ENGAGEMENTS AND FEES.

H. G. M. writes: Mrs. J. was confined earlier than she expected. Dr. N., the usual medical attendant, was sent for but was from home. Dr. H. was sent for and attended her. He had everything right and was preparing to leave the house when N. arrived. H. then handed over the case to N. There is a question between N. and H. as to how the fee is to be settled; is it to be divided or each to put in a different claim to Mr. J.? N. and H. are on friendly terms and each live five Irish miles from the case.

*** Dr. N. and Dr. H. should be guided in the obstetric case referred to by the following rule: "When a practitioner is called in or otherwise requested to attend at an accouchement for another and completes the delivery or is detained for a considerable time he is entitled by custom (except in the case of illness, etc., provided for by Rule 3) to one half of the fee, but on the completion of the delivery or on the arrival of the pre-engaged accoucheur he should resign the further management of the case. In a case, however, which gives rise to unusual fatigue, anxiety, and responsibility, it is right that the accoucheur in attendance should receive the entire fee. Note.—In either event when the officiating accoucheur is a stranger or a non-acquaintance of the family doctor the full fee should be tendered to him."—*Code*, chap. ii, sec. 5, rule 12.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF CAMBRIDGE.

DEGREES.—At the Congregation on June 11th the following degrees in Medicine and Surgery were conferred:

M.D.: D. W. Samways, M.A., late Fellow of St. John's; C. A. R. Sutton, M.A., Clare.

M.B. and B.C.: F. E. A. Colby, B.A., King's; W. G. Peck, B.A., Trinity; H. M. Tickell, B.A., Trinity; H. B. Hewitt, B.A., Clare; C. C. Webb, B.A., Clare; F. N. Day, B.A., Caius; W. J. Harris, B.A., Caius; C. E. Sparks, B.A., Caius.

FIRST EXAMINATION FOR MEDICAL AND SURGICAL DEGREES, Easter Term, 1894. *Part II: Elementary Biology.*—Alder, Pemb.; Barnicot, Pemb.; Bates, T. W., M.A., Queens'; Bentley, Joh.; Blyth, Trin. H.; Bond, G. W., Cla.; Braddon, W. V., Trin. H.; Brailey, Queens'; Brenan, Trin.; Briscoe, Pemb.; Bull, B.A., Gonv. and Cai.; Burfield, non-coll.; Burnand, Jes.; Chapman, Cla.; Child, Chr.; Clarke, J. S., Gonv. and Cai.; Coleman, Trin.; Davies, Gonv. and Cai.; Dunne, B.A., Queens'; Evans, W., Cla.; Foster, King's; Frend, Trin.; Fryer, Chr.; Gaitskell, Cla.; Greig, A. W., Jes.; Henderson, Gonv. and Cai.; Hopper, Gonv. and Cai.; Howitt, Joh.; Izard, Trin.; Jackson, Gonv. and Cai.; Killick, Trin.; Killick, Down.; Langton, J. M. E., Trin.; Lock, J. L., Gonv. and Cai.; Lock, P. G., Gonv. and Cai.; Lucas, Pemb.; McBryde, King's; McCaskie, Gonv. and Cai.; Martin, A. E., Down; Martineau, Emm.; Maxwell, Trin.; Morgan, Joh.; Mummery, Gonv. and Cai.; Nixon, Gonv. and Cai.; Parker, Emm.; Pearson, Emm.; Pearson, Sid. Suss.; Pennington, Gonv. and Cai.; Percival, Joh.; Philbrick, Trin.; Ross, non-coll.; Rudman, King's; Salaman, Trin. H.; Sedgwick, R. E., Gonv. and Cai.; Shufflebotham, Trin.; Slack, Pemb.; Staynes, Chr.; Susmann, Gonv. and Cai.; Taylor, J. G., King's; Taylor, E. C., Joh.; Thomas, T. P., Gonv. and Cai.; Ticehurst, Cla.; Tyler, Joh.; Topham, Chr.; Walker, King's; Walker, Cla.; Watson, D. P., Trin.; West, Chr.; Wilkin, B.A., Pemb.; Wilson, G. R., Trin.; Wisdom, Emm.; Worthington, Trin.

SECOND EXAMINATION FOR MEDICAL AND SURGICAL DEGREES, Easter Term, 1894. *Part I: Pharmaceutical Chemistry.*—Barham, Gonv. and Cai.; Boucher, Trin.; Brincker, Joh.; Browse, Cla.; Coleman, E. H., Joh.; Elliott, H. St. C., Trin.; Elliott, W. R., B.A. Joh. Ellis, Pet.;

Fraser, Gonv. and Cai.; Green, B.A., Down.; Gutch, B.A., Chr.; Harwood, Trin.; Home, Trin.; Horne, B.A., Trin.; Jones, H. G. T., Joh.; Keeling, Gonv. and Cai.; Letchworth, Emm.; Mayo, H. R., Gon. and Cai.; Mills, B.A., Cla.; Mullings, Chr.; Naish, B.A., Trin.; Nelson, B.A., Cla.; Nicholson, G. B., Cla.; Orton, Trin.; Perkins, B.A., Joh.; Reissmann, Joh.; Rowland, Down.; Sanderson, B.A., Cla.; Slade, B.A., Trin.; Stabb, Down.; Stanham, B.A., Trin.; Stawell, B.A., Trin. H.; Studd, Trin.; Sugden, Gonv. and Cai.; Thompson, A., B.A., Trin.; Turnbull, B.A., Gonv. and Cai.; Wingate-Saul, Trin.

Part II: Human Anatomy and Physiology.—Barraclough, B.A., Chr.; Bedford, B.A., Trin.; Blatchford, B.A., Sid. Suss.; Briggs, B.A., Joh.; Brown, B.A., Pemb.; Butler, Joh.; Carter, A. B., B.A., Jes.; Elliott, A. E., B.A., Joh.; Green, B.A., Down.; Jephcott, B.A., Gonv. and Cai.; Kirk, B.A., Chr.; McCleary, B.A., Trin. H.; Moritz, B.A., Gonv. and Cai.; Ogilvie, B.A., Chr.; Paterson, B.A., Emm.; Roe, Pemb.; Rowland, B.A., Down.; Saudilands, B.A., Trin.; Stabb, B.A., Down.; Tebbs, B. N., Queens'; Tyrrell, B.A., Cla.; Wakefield, M.A., Trin.; Weaver, F. K., B.A., Trin.; Williamson, B.A., Joh.; Woolley, E. J., B.A., Gonv. and Cai.

FIRST EXAMINATION FOR M.B. AND B.C., Easter Term, 1894. *Chemistry and Physics.*—Alder, Pemb.; S. Bennett, Down.; Bentley, Emm.; W. V. Braddon, Trin. H.; W. P. S. Branson, Trin.; Brenan, Trin.; Brooke, Pemb.; Bull, B.A., Cai; Burfield, non-coll.; Burnand, Jes.; Cheadle, Cai.; E. M. Clark, Trin.; Coleman, Trin.; J. G. Cooke, Sid. Suss.; Davies, Cai.; W. Evans, Cla.; Foster, King's; Fox, Emm.; Fraser, Jes.; Fryer, Chr.; Fuge, B.A., Sel.; Glenn, Pemb.; Greig, Jes.; Hawkins, Emm.; Hay, Cai.; Howitt, Joh.; Izard, Trin.; Killick, Down.; P. G. Lock, Cai.; McCaskie, Cai.; Martineau, Emm.; Marwell, Trin.; Micklethwait, Trin.; Murison, B.A.; Trin.; Nixon, Cai.; Orme, Cai.; Paterson, Cai.; Pearson, Sid. Suss.; Philbrick, Trin.; Pitkin, Ayerst's; Reynolds, Trin.; Roberts, Cla., Ross, non-coll.; Rudman, King's; Saloman, Trin. H.; Schreiner, Down.; R. E. Sedgwick, Cai.; Seyfang, Pet.; Sharples, Cai.; Shufflebotham, Trin.; Style, Emm.; Susmann, Cai.; T. P. Thomas, Cai.; Tyler, Joh.; Walker, Cla., Ware, Pemb.; D. P. Watson, Trin.; A. G. Wilson, Cai.; T. Wood, Cai.

ST. JOHN'S COLLEGE.—Mr. F. Villy, B.A., scholar of St. John's College, has been elected to the Hutchinson Studentship for Research in Pathology.

APPOINTMENTS.—The following appointments in the department of Natural Science and Medicine are announced: Mr. A. E. Shipley, Christ's, to be University Lecturer in Invertebrate Morphology; Mr. S. Ruhemann, Caius, to be University Lecturer in Organic Chemistry; Mr. J. J. Lister, St. John's, to be University Demonstrator of Comparative Anatomy.

UNIVERSITY OF LONDON.

OPPOSITION TO THE NEW RECONSTRUCTION SCHEME.—The London University Defence Committee, of which Mr. H. M. Bompas, Q.C., is Chairman, has issued an appeal to graduates of the University asking them to express an opinion, on a postcard, against the scheme of reconstruction proposed by the Royal Commission, and approved as to its general principles by the Senate and Convocation of the University. The main grounds of objection mentioned are: (1) That an Imperial examining board is desirable, and that (2) it is impracticable to blend satisfactorily an Imperial examining board with a local teaching university, but that (3) a separate local and teaching university would not necessarily be objectionable; (4) that the University of London is discharging its present functions in an eminently successful and satisfactory manner; and that (5) unnecessary change of a fundamental character is likely to be unjust to graduates, discouraging to those in course of graduation or contemplating matriculation, and generally prejudicial to the reputation and usefulness of the University. In support of the last objection it is boldly alleged that "graduates have a kind of vested interest in the reputation of the University." Upon the points mentioned under (1), (2), and (3) it is pointed out that three members of the first Commission and two of the second arrived at the opinion that it is impossible to combine in one university two functions so inconsistent as an Imperial examining and a local teaching university.

UNIVERSITY OF ABERDEEN.

UNIVERSITY COURT.—At a meeting of the Aberdeen University Court, held last week, Colonel Ramsay, of Barra, presiding, the reasons of dissent by Principal Sir William Geddes against the repeal of the ordinance fixing the site of the classes, were answered by Lord Provost Stewart, Dr. Angus Fraser, and Mr. C. B. Davidson, to whom the matter was remitted. Professor MacWilliam was granted leave of absence from the July professorial examination owing to ill-health. Professor J. T. Cash had consented to act as his substitute, and the Court agreed. The Court concurred in the view entertained by the Commissioners: "That the preliminary as well as all the other University examinations in each case be held at the seat of the University."

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following gentlemen were, at the ordinary meeting of the Council on Thursday, June 14th, elected examiners for the ensuing year in the subjects indicated.

First Examination:

Elementary Anatomy: L. A. Dunn, M.B., B.S.Lond., F.R.C.S.Eng., Guy's Hospital; W. H. H. Jessop, M.B.Cantab., F.R.C.S.Eng., St. Bartholomew's Hospital; J. E. Lane, F.R.C.S.Eng., St. Mary's Hospital; H. F. Waterhouse, M.D., C.M.Edin., F.R.C.S.Eng., Charing Cross Hospital.

Elementary Physiology: J. R. Bradford, M.D., D.Sc.Lond., M.R.C.S.Eng., University College Hospital.

Elementary Biology: H. P. Dean, M.B., B.S.Lond., F.R.C.S.Eng., London Hospital; T. W. Shore, M.D., B.Sc.Lond., M.R.C.S.Eng., St. Bartholomew's Hospital.

Second Examination:

Anatomy: R. C. Lucas, M.B., B.S.Lond., F.R.C.S.Eng., Guy's Hospital; G. H. Makins, F.R.C.S.Eng., St. Thomas's Hospital; W. J. Walsham, F.R.C.S.Eng., St. Bartholomew's Hospital; A. H. Young, M.B., C.M. Edin., F.R.C.S.Eng., Owens College, Manchester.

Physiology: W. D. Halliburton, M.D., B.Sc.Lond., M.R.C.S.Eng., King's College Hospital; D'A. Power, M.B.Oxon., F.R.C.S.Eng., St. Bartholomew's; W. G. Spencer, M.B., M.S.Lond., F.R.C.S.Eng., Westminster Hospital.

First Professional Examination for the Fellowship:

Anatomy.—W. Anderson, F.R.C.S.Eng., St. Thomas's Hospital; W. F. Haslam, F.R.C.S.Eng., Mason College, Birmingham; W. H. A. Jacobson, M.B., M.Ch.Oxon., F.R.C.S.Eng., Guy's Hospital; C. B. Lockwood, F.R.C.S.Eng., St. Bartholomew's Hospital.

Physiology.—J. Barlow, F.R.C.S.Eng., St. Mungo's College, Glasgow; C. H. Golding-Bird, M.B.Lond., F.R.C.S.Eng., Guy's Hospital; B. T. Lowne, F.R.C.S.Eng., Middlesex Hospital; W. Stirling, M.D., C.M.Edin., Owens College, Manchester.

Final Examination:

Midwifery.—W. Duncan, M.D.Brux., M.R.C.P.Lond., F.R.C.S.Eng., Middlesex Hospital; M. Handfield-Jones, M.D.Lond., M.R.C.P.Lond., M.R.C.S., St. Mary's Hospital; G. E. Herman, M.B.Lond., F.R.C.P.Lond., F.R.C.S.Eng., London Hospital; A. J. McC. Routh, M.D.Lond., M.R.C.P.Lond., M.R.C.S.Eng., Charing Cross Hospital.

Diploma in Public Health:

Part I.—G. Turner, M.B.Cantab., M.R.C.S.Eng., L.R.C.P.Lond., Guy's Hospital.

Part II.—Sir G. Buchanan, M.D.Lond., F.R.C.P.Lond., London Fever Hospital.

And Mr. H. Morris, F.R.C.S.Eng., Middlesex Hospital, was elected a Member of the Court of Examiners for a period of five years.

The following gentlemen, having passed the necessary examinations, and having conformed to the By-laws and Regulations, have been admitted Fellows of the College:

Hamerton, G. A., M.D.Brux., L.R.C.P.Lond.
Clarke, E., M.D.Lond.
Cadman, A. W., L.K.Q.C.P.I.
Howse, P. W. M., L.R.C.P.Lond.
Green, C. D., M.D.Lond.
Griffith, J., L.R.C.P.Lond.
Westmacott, F. H., L.R.C.P.Lond.
Littler, R. M., L.R.C.P.Lond.
Mahood, A. E., M.B.R.U.I.
Hall, J. M., M.D.R.U.I.
Hogarth, R. G., L.R.C.P.Lond.
Ouston, T. G., L.R.C.P.Lond.
Purvis, W. P., M.B.Lond., L.R.C.P. Lond.
Rutter, H. L., M.D.Durh., L.R.C.P. Lond.
Armstead, H.W., M.B.Lond., L.R.C.P. Lond.
Sichel, G. T. S., L.R.C.P.Lond.
Henry, E., L.R.C.P.Lond.
Jones, G. D. E., L.R.C.P.Lond.
Lister, T. D., L.R.C.P.Lond.
Christie, W. L., M.D.New Zealand
Beben, F., M.B.Cantab., L.R.C.P. Lond.
Boyd, T. H., M.B.Melb.
Buchanan, J. S., M.B.Glasg., L.R.C.P. Lond.
Wilkinson, G., M.B.Cantab., L.R.C.P. Lond.
Grimsdale, H. B., M.B.Cantab., L.R.C.P.Lond.
Keith, A., M.D.Aberd.
Leathes, J. B., M.B.Oxon, L.R.C.P. Lond.
Rigby, G. O., M.B.Melb.
Barrington, F., M.B.Edin.

Seven other candidates passed the examination, but not having yet complied with the by-laws, will received their diplomas at future meetings of the Council, and twenty-three candidates were referred.

The following gentlemen having previously passed the necessary examinations, and having now attained the legal age of 25 years, were admitted Fellows of the College:

Adams, E. W., L.R.C.P.Lond.
Weir, A. N., L.R.C.P.Lond.
Rutter, F. B., M.B.Durh., L.R.C.P. Lond.

The following gentleman having passed the necessary examinations was admitted a Member of the College:

Delve, A., L.S.A., University College Hospital.

The following gentlemen having passed the necessary examinations were admitted Licentiates in Dental Surgery:

Allworth, A. L., M.R.C.S.Eng., Guy's Hospital and National Dental Hospital
Barrett, C., Charing Cross and National Dental Hospitals
Britten, A., Mason College and Dental Hospital, Birmingham
Constant, F. C., Guy's Hospital
Davison, T. S., Guy's Hospital
Dodson, A. R., Charing Cross and Dental Hospitals
Farmer, F. M., Middlesex and National Dental Hospitals
Flintan, F. R., Charing Cross and Dental Hospitals
Halliday, H. D., Middlesex and Dental Hospitals
Harding, H. P., Royal Infirmary and Dental Hospital, Liverpool
Henry, P. F., Guy's Hospital
Holden, A., Owens College and Victoria Dental Hospital, Manchester
Hills, W. E., Guy's Hospital
Huckle, A. H. H., Guy's Hospital
Humphreys, H. F., Guy's and Dental Hospitals
Jones, G. W., Guy's Hospital
Lees, J. A., Owens College and Victoria Dental Hospital, Manchester
McFarlane, J. S., Charing Cross and National Dental Hospitals
Mackley, E. H. A., Middlesex and Dental Hospitals
Miller, Q. H., Charing Cross and Dental Hospitals
Moore, G. P., M.B.Dub., Trinity College, Dental Hospital, Dublin, and National Dental Hospital
Musgrave, G. M., Guy's Hospital
Nicholls, R. E., Charing Cross and National Dental Hospitals
Nichol, J. M., M.R.C.S.Eng., Yorkshire College, Leeds, and Dental Hospital
Pare, J. W., M.D.Edin., Edinburgh University and Guy's Hospital
Park, W. H., Charing Cross and Dental Hospitals
Peake, G. A., M.R.C.S.Eng., Royal Infirmary, Dental Department, Bristol
Pilcher, W. H. Guy's Hospital
Prideaux, H. S., Charing Cross and Dental Hospitals
Reeve, H. G. C., Middlesex and Dental Hospitals
Rispin, W., Charing Cross and Dental Hospitals
Robinson, G. E. J. A., University and Dental Hospital, Dublin
Sibson, A. B., Owens College and Victoria Dental Hospital, Manchester
Snape, J. University College and Dental Hospital, Liverpool
Soper, F. A., Middlesex and Dental Hospitals
Taylor, E. H. P., Middlesex and Dental Hospitals
Thornton, R., Guy's Hospital
Trewby, H. W., Middlesex and Dental Hospitals
Tyrrell, A. J., Guy's Hospital
Van der Pant, H. W., Charing Cross and Dental Hospitals
Willis, G. N., Guy's Hospital
Young, E. E., Charing Cross and Dental Hospitals.

Twenty-four candidates were referred back to their professiona studies.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.

Charitable Trusts Acts Amendment Bill.—This Bill was read a third time and passed.

Cholera and Inoculation.—Mr. H. FOWLER, in answer to Mr. S. SMITH, said it was true that M. Haffkine had, with the consent of the Government of India, inoculated a large number of persons in that country with a view to the prevention of cholera. He was not aware of the precise nature of the substance which he used, but, before he commenced operations, the details of his process were submitted to the medical advisers of the Government of India, who, being satisfied that it was absolutely harmless, and recognising the benefit which would accrue to India if the experiment succeeded, recommended that it should be allowed to be tried. No person, native or European, had been inoculated except with his consent or by his wish. The permission of the Secretary of State for India was neither given nor asked. M. Haffkine was a Russian subject, and was recommended as a distinguished man of science by the Russian Ambassador to the good offices of the Government. He had no information as to whether the Russian Government refused to allow him to inoculate people in Russia.

OBITUARY.

SAMUEL WILLIAM NORTH, M.R.C.S.ENG., L.S.A.,

Medical Officer of Health, York.

IT is with deep regret that we record the death of Mr. S. W. North, of York, which took place on June 16th. The deceased never seemed really well since he had an attack of influenza in the spring of 1891. His later illness dates from December, 1892, since which time he has been constantly under medical treatment. Mr. North, who was in his 69th year, was born at Birstwith, near Knaresborough, and went to York as a young man. He studied at the old York School of Medicine, which ceased to exist a number of years since. In his earlier days the system of apprenticeship to the practice of medicine was not extinct, and he was apprenticed to Dr. Gibson. Subsequently Mr. North established himself in practice in York, and in March, 1873, was appointed medical officer to the York Corporation, and on the Public Health Act coming into force he was appointed medical officer of health to the city of York, a post he held up to the time of his death. For some years the deceased was secretary to the York Medical Society, and was four times its president. Mr. North became L.S.A. in 1850, M.R.C.S.Eng. two years later, and L.M. in 1853. He was president of the Yorkshire Association of Medical Officers of Health, senior surgeon to the York Dispensary, surgeon to the York Union Workhouse and Fever Hospital, medical officer of health for the York Urban District, medical visitor to private lunatic asylums in the North Riding of Yorkshire, and in 1873-74 was president of the Yorkshire Branch of the British Medical Association. The funeral took place on June 19th.

THE death is reported of Dr. ROBERT BOWES MALCOLM, of Edinburgh. He was educated at Edinburgh University, where he took the degree of M.D. in 1831; he became F.R.C.P.Edin. in 1840. He was a Fellow of the Royal Society of Edinburgh. The deceased, who had attained the ripe age of 86, retired from the active duties of his profession seven years ago owing to failing health. The funeral took place on June 9th.

DEATHS IN THE PROFESSION ABROAD.—Among the members of the medical profession in foreign countries who have recently died are Dr. William B. Dodson, of Philadelphia, the oldest graduate of Jefferson Medical College, aged 93; Dr. C. A. Mercier, of New Orleans, a physician distinguished for his literary gifts and attainments; and Dr. Samuel T. Hubbard, physician to the Presbyterian Hospital, New York, one of the original members of the New York Academy of Medicine (founded in 1847), and at different times secretary, trustee, and vice-president of that body, aged 85.

THE LATE DR. JOLLY.—The interment of the remains of the late Dr. Jolly, of Birmingham, took place at Kingswood Chapel, Hollywood, on June 13th, in the presence of a large gathering of professional and other friends.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns, including London, 6,088 births and 3,183 deaths were registered during the week ending Saturday, June 16th. The annual rate of mortality in these towns, which had declined from 17.7 to 16.9 per 1,000 in the preceding three weeks, further fell to 15.9 last week. The rates in the several towns ranged from 10.2 in Leicester and 10.6 in Derby to 20.5 in Nottingham and 22.1 in Wolverhampton. In the thirty-two provincial towns the mean death-rate was 15.8 per 1,000, and was slightly below the rate recorded in London, which was 16.0 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.2 per 1,000; in London the rate was equal to 2.8 per 1,000, while it averaged only 1.8 per 1,000 in the thirty-two provincial towns, and was highest in Birmingham, Liverpool, Nottingham and Salford. Measles caused a death-rate of 2.0 in West Ham and 2.8 in Nottingham; scarlet fever of 1.8 in Wolverhampton; and whooping-cough of 1.1 in Sunderland and 1.4 in Cardiff. The 60 deaths from diphtheria in the thirty-three towns included 43 in London, 4 in Liverpool, and 2 each in West Ham and in Manchester. Six fatal cases of small-pox were registered in Manchester and 5 in Birmingham, but not one in London or in any other of the thirty-three large towns. There were 204 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, June 16th, against 236, 244, and 227 at the end of the preceding three weeks; 40 new cases were admitted during the week, against 69, 58, and 42 in the preceding three weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,190, against 2,271, 2,277, and 2,232 at the end of the preceding three weeks; 238 new cases were admitted during the week, against 218 and 264 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday last, June 16th, 874 births and 509 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had been 20.3 and 19.3 per 1,000 in the preceding two weeks, further declined to 17.9 last week, but exceeded by 2.0 per 1,000 the mean rate during the same period in the large English towns. Among these Scotch towns the death-rates ranged from 12.0 in Perth to 20.1 in Aberdeen. The zymotic death-rate in these towns averaged 2.2 per 1,000, the highest rates being recorded in Aberdeen and Leith. The 256 deaths registered in Glasgow included 13 from whooping-cough, 7 from measles, and 2 from diphtheria. Five fatal cases of small-pox were recorded in Leith, 1 in Dundee, and 1 in Aberdeen. Four deaths from diphtheria occurred in Edinburgh.

THE VENTILATION OF SEWERS.

A SHORT article which appeared in the BRITISH MEDICAL JOURNAL of May 19th, on this subject has brought upon us a certain amount of correspondence, and among other communications one from Huddersfield, describing Riley's patent trap and system of sewer ventilation. This is an arrangement by which every fall spout is carried upwards above the level of the building and a water-sealed trap is interposed between the spout and the eaves trough which receives the water from the roof.

The intention is that the fall spouts, being directly connected with the drain, shall serve as ventilators to it, and that the trap shall prevent any sewer gases from escaping under the troughing, or entering beneath the slates or tiles. This is interesting as showing how many minds are working in the direction of sewer ventilation, but we need hardly point out how very different a proposal this is from that of using the soil pipe as a ventilator. If the soil pipe is to be used for sewer ventilation it is essential that the other drains of the house must either be a separate system, cut off from the sewer by an intercepting trap, or must enter the soil drain through such a trap. According to Riley's system, however, sewer air would be carried to every point where fall spouts go, and although, so long as the trap water in the traps does not dry up, the foul air might not escape under the eaves, every joint in the spouting which might leak would become a point of danger.

The risk attending every attempt to ventilate a sewer by means of a pipe carried up the side of a house is that the joints may be deficient. Even in the case of a single soil pipe being so used this is a difficulty; how much more so if every fall spout is to be made use of. Moreover, it must be borne in mind that even in our climate the occurrence of two or three weeks of dry weather is not unknown, and in that time even if the water in the trap did not dry up, it would become seriously contaminated. For these reasons we cannot recommend the adoption of this device. Whatever pipe is used to ventilate a sewer must be kept air tight, and whatever trap is used to keep sewer gases out of a house should, if possible, be charged by some source besides roof water, so that its contents may be changed even in dry weather.

WIMBLEDON HOSPITAL PROPOSALS: A DEADLOCK.

THE proposals of the Wimbledon Local Board to erect permanent hospital accommodation for infectious diseases out of borrowed money has come to a strange and unsatisfactory conclusion. The scheme was to provide a hospital at a cost of some £8,000, small-pox being excluded. Just as the whole affair had the appearance of finality about it, a member of the local board very properly took exception to the plan which his colleagues were about to adopt in regard of the isolation of small-pox cases—namely, to use an iron structure only some 100 feet from the permanent hospital site. In response to a request from headquarters for a map of the site and its surroundings in relation to adjacent houses, the

Wimbledon Board, according to the local press, were going to content themselves with saying nothing about the iron structure. To this Mr. Nellor objected, and on his writing to the Local Government Board as to the small-pox building proposed to be used, that Board, of course, desired to know the truth of the allegation. The columns of the *Surrey Independent* supply the last chapter to the story. On learning that the Local Government Board could not sanction a loan for a scheme which would embody the use for small-pox of the iron building in question, the Sanitary Committee have reported in favour of taking no further action under loan sanction, and their recommendation has been adopted. With the evidence which is being daily chronicled to the effect that small-pox when isolated in proximity to other diseases tends largely to spread to the sufferers from those other diseases, it is difficult to see how the local board could have contemplated the use of a building for small-pox purposes so close to a hospital for other infections. Clearly, the central board could not sanction such a scheme. Dr. Seaton is reported to have said that no small-pox hospital should be erected within half a mile of one for other diseases. We would certainly say that it should not be erected within that distance from any large aggregation of people, even in health. At least this is the lesson which we have been learning these two years past. Under these circumstances we are sorry to see that the Wimbledon authority have not agreed to meet the Croydon authorities in an attempt to find a suitable site for small-pox hospital purposes.

PROPOSED NEW INFECTIOUS HOSPITAL FOR BRIGHTON.

Eleven years ago a temporary sanatorium for the treatment and isolation of infectious diseases was erected at Brighton to meet a pressing emergency. The necessity for a permanent building is now admitted, and at a recent meeting of the Town Council the Sanitary Committee submitted a scheme for the enlargement of the present site by the purchase of ten acres of ground. Unfortunately, the Council did not at once accept this very reasonable report, but we trust that the delay which has thus been caused may not be of long duration. The possession of an adequate infectious hospital accommodation is an essential part of the provision against infectious disease which every town ought to make; in no town does the urgency for such provision appear greater than in one to which invalids resort in search of health.

SANITARY CONDITION OF SUTHERLANDSHIRE.

The annual report of the medical officer of health for Sutherlandshire states that in some points the condition of that county is behind many others. He writes that no isolation hospital of any kind exists in the county; there is no place where the county council could invite any medical man to place his patients if he thought it right to isolate them. Only Helmsdale is able to boast of having a scavenger. The report states that last year there was a large increase in the number of cases of infectious disease, and in the opinion of the medical officer the death-rate is far too high for a wholly rural county.

SMALL-POX IN SCOTLAND.

During last week 25 new cases of small-pox were reported in Edinburgh, against 17 in the previous week. There were no deaths. Since June 16th at least 28 more cases have been notified. There are now 85 patients in the Small-Pox Hospital, 72 adults and 13 children.

At a meeting of the Public Health Committee of the Edinburgh Town Council, held on June 19th, it was reported that an application had been made to Her Majesty's Board of Works for permission to erect a temporary small-pox hospital or hospitals in the Queen's Park. Meanwhile temporary wards are being built and furnished in one of the City public playgrounds.

The first Edinburgh case of small-pox, the starting point of the present epidemic, occurred on January 17th, and the infection in this case, as in several subsequent cases, undoubtedly came from Leith.

In Leith last week 20 new cases were reported and 5 deaths. We have no report subsequent to mid-day of Saturday.

A case of small-pox is reported from East Lothian.

In addition to the small-pox epidemic Edinburgh appears to be threatened with an outburst of scarlet fever, 51 cases having been reported last week.

A motion has been brought before the Town Council of Leith, and withdrawn in connection with the health officering of the borough. The motion had for its object the securing of the whole time of the health officer; but, far from meeting with support it fell very flat, and its proposer voluntarily withdrew it. Leith has a population of some 70,000 persons, and now that compulsory notification is in force there would be a distinct gain in having as health officer a medical man free from the trammels of private practice. Such an officer would secure in larger degree than is at present possible the confidence of his professional brethren. Besides, there are other public duties which might well be entrusted to him as they fell vacant, and it would be feasible to obtain efficient services for, say, a salary of £500 per annum. Such a sum would not be extravagant.

SMALL-POX SPREAD BY A BOOK.

In his annual report for 1893, Dr. McNicoll, health officer of St. Helen's, has drawn attention to a case showing the extreme diffusibility of small-pox. A building society's book was kept under the pillow of a small-pox patient until his death. It was then taken in charge by his son, who lived in another part of the town, and was kept without disinfection for four weeks in his house. Being a saleable article, it was taken and offered to an artisan, who kept it overnight. While there this artisan's wife perused the book, with a result that, fourteen days later, she developed the rash of small-pox.

Medical Magistrate.—Dr. James Davison, of Ballinakill, has, on the recommendation of Viscount de Vesci, been appointed to the Commission of the Peace for the Queen's County.

INDIA AND THE COLONIES.

INDIA.

Waterborne Typhoid.—The *Times of India* reports that there has been an outbreak of typhoid fever among the garrison at Nowshera, seven cases altogether having ended fatally. On the cause of the epidemic being inquired into, it was found that out of ten wells from which water was being taken for drinking purposes, seven were more or less contaminated with impurities. These were forthwith shut down, and since then there has been a marked amelioration in the condition of the troops, pointing to the water being the source of the infection.

NATAL.

Legislation for Inebriates.—A Bill, drafted on the lines of our Inebriates Acts, 1879 and 1888, has just passed a first reading in the Legislative Assembly of Natal. In this measure provisions are incorporated for the carrying out of the proposals of our Association Inebriates Legislation Committee. *Inter alia*, the Governor and Council have power to establish and maintain a retreat at the public cost; any judge or resident magistrate can commit to the retreat, for a period of not less than six months or more than two years, any person found to be an inebriate according to the terms of the Act, on application from a relative or friend of the alleged inebriate, or from a Natal constable. In addition, of his own motion, a resident magistrate can so commit to a retreat anyone who may have been convicted of drunkenness several times before him, whom he may deem to be an inebriate as defined by the Act. Persons convicted of drunkenness and sentenced to imprisonment may also be transferred to a retreat, on a certificate from the Colonial Secretary after receiving medical evidence that the convicted person is a proper subject for treatment in an institution for inebriates. In the case of voluntary applicants a declaration before one magistrate is valid.

MEDICAL NEWS.

The Goldsmiths' Company have made a further donation of £100 to the Royal Hospital for Incurables.

The University of Halle will celebrate the second centenary of its foundation on August 2nd, 3rd, and 4th of the present year.

Successful Vaccinations.—Mr. Henry Caudwell, Public Vaccinator for the Nos. 1 and 2 Districts of the Woodstock Union has been awarded the grant for successful vaccination.

The Accademia dei Lincei of Rome has divided the prize of £400 offered by the King of Italy between Professor Guido Tizzoni, of Bologna, and Professor Luciani, of Rome, for their researches in the domains of experimental pathology and physiology.

We are glad to hear that Sir Richard Quain and other leading members of the profession are making an appeal to the Government for a pension for the widow of Dr. A. H. Hassall, whose services in the prevention of adulteration and as the founder of the National Hospital for Consumption at Ventnor were so conspicuous and valuable.

Glanders.—At the Westminster Police Court on June 12th the Shrewsbury and Talbot Cab Company were summoned at the instance of the London County Council for not giving timely notice of an outbreak among their stud of glanders and farcy, and were fined £40, half the penalty to go to the County Council.

On behalf of the building fund of the Dental Hospital of London, Leicester Square, an exhibition of pictures by prominent artists is to be held from June 25th to Monday, July 2nd, in the Royal Institute of Painters in Water Colours, Princes Hall, Piccadilly. Many well-known vocalists and musicians will appear during the week.

Donations and Bequests.—The Goldsmiths' Company have made a grant of £100 to the Royal Westminster Ophthalmic Hospital. An anonymous donor has contributed £2,000 for the cost of one house at the Royal National Hospital for Consumption, Ventnor, in memory of two daughters who died from consumption. The late Miss Ann Green Gertrude Rolleston has by her will bequeathed, among other charitable gifts, £1,000 each to the Royal Sea Bathing Infirmary at Margate, the General Hospital (Birmingham), St. Marylebone Home for Incurables, the Hospital for Diseases of the Throat (Golden Square), and the Samaritan Free Hospital for Women and Children (Marylebone Road), and £500 to the Birmingham and Midland Eye Hospital.

PROPOSED FLOATING HOSPITAL ON THE MEDWAY.—An inquiry was held by Dr. H. T. Bulstrode, one of the medical inspectors of the Local Government Board, at Rochester, on June 13th, with regard to the application of the Rochester Town Council (the port sanitary authority for the river Medway) for authority to raise a loan to purchase a ship to serve as a hospital for the isolation of cases of cholera and other infectious diseases occurring in shipping. The inspector will report to the Board.

THE Chapter of the Grand Priory of the Order of the Hospital of St. John of Jerusalem in England has, with the approval of His Royal Highness, the Prince of Wales, Grand Prior of the Order, selected the undermentioned as Honorary Associates or Honorary Serving Brothers of the Order, in recognition of services rendered to the Order in connection with its ambulance department, the St. John Ambulance Association, and the selection has received the approval and sanction of Her Majesty the Queen, the Sovereign Head and Patron of the Order: *Honorary Associates:* Fleming Mant Sandwith, M.D., Cairo; Matthew Baines, M.D., London; William John Stephens, L.R.C.P., and Henry Algernon Hodson, L.R.C.P., Brighton Centre, St. John Ambulance Association; Edmond West Symes, M.D., Halifax; Henry Hammond Smith, M.R.C.S., Stourbridge; Robert John Collie, M.D., Metropolitan; William Duncan, L.R.C.P., Bristol; George Middlemiss, M.D., Darlington; Harry Pennington Hallows, M.D., Doncaster; Mrs. Walter Rowley, Honorary Secretary Ladies' Classes, Leeds Centre. *Honorary Serving Brothers:* Henry Charles Dring, St. John Ambulance Brigade, Metropolitan Corps; John Harrison Buckley, St. John Ambulance Brigade, Leicester Corps.

"HARMLESS" MEDICINES.—An inquest held recently at Darlington upon a child 4 years old illustrated in a very shocking manner the fallacy of regarding medicinal preparations containing opium or morphine as being harmless. The mother of the child procured from a chemist some cough medicine, of which she administered a dose to the child, who, finding it agreeable, took from the bottle a further quantity equal to four or five additional doses. The consequence was the child died of morphine poisoning, and, as the bottle of cough mixture was not labelled poison, some question arose as to whether proper precautions had been taken by the chemist who sold it. A juror expressed the opinion that all the labels in the world would not have stopped the child from taking too large a dose; but the warning of a poison label might have induced the child's mother to keep the bottle out of his reach, and it would certainly have saved the chemist from any suspicion of negligence. In giving the usual verdict of death by misadventure, the jury very properly desired a recommendation to be made to all chemists that no mixture containing morphine should be sold without a label setting forth the fact being attached to the bottle. The duty of observing that precaution is incumbent on every chemist, and its neglect is a punishable offence, which ought more frequently to engage the attention of the police authorities than it does.

AMERICAN JOTTINGS.—The widow of the late Dr. Hayes Agnew has given 25,000 dollars to the University Hospital of the University of Pennsylvania in honour of her late husband. —According to the *Boston Medical and Surgical Journal*, a man was shot in the chest recently at Erie, Pennsylvania, and lived seventy hours after the infliction of the wound. The *post-mortem* examination showed that the bullet had passed through the left ventricle.—At the request of the Senators and Representatives from Louisiana, the United States Secretary of War has given New Orleans and the State of Louisiana the right to use the Government military reservation at Fort Pike as a hospital for lepers.—The following notice has been issued by an American Medical Society to its members: "Members are respectfully reminded that in the discussion of papers each speaker is limited to five minutes, and will confer a favour by sending their names to the President." The meaning is so excellent as to more than atone for the slight deviation from strict grammatical propriety. The practice of the Chicago hospitals of giving indiscriminate surgical aid has led to such serious abuses that the La Salle County Medical Society lately passed resolutions calling the attention of the authorities of the hospitals to the existing abuse, and requesting that no patient be admitted without a statement from some local practitioner of good repute, setting forth his financial condition, and if it shall appear that he is able to pay a legitimate fee that he be required to do so.—Free and independent citizens in some parts of the United States seem to be inclined to deal strenuously with the small-pox question. According to the Chicago *Medical Standard*, a negro suffering from that disease was not long ago lynched near El Dorado, Arkansas, as a prophylactic measure. The same paper states that at Chicago a policeman asked for a permit to shoot a delirious small-pox patient, apparently supposing that the principle applicable to mad dogs was the right way of dealing with the subjects of variola. On the other hand, antivaccinationists at New York have been urging forcible resistance to vaccination. In this they are supported by a recent judicial decision that the compulsory vaccination ordinance (under which more than 5,000 persons were not long ago vaccinated in one quarter of Brooklyn in a single evening) is unconstitutional.

MEDICAL VACANCIES.

The following vacancies are announced:

BALROTHERY UNION.—Medical Officer to the Workhouse. Salary, £30 per annum, together with £10 yearly as Consulting Medical Officer of the Union. Applications to Mr. James Stack, Clerk of Union. Election on June 27th.

BRIGHTON, HOVE, AND PRESTON DISPENSARY.—House-Surgeon for the parent establishment. Salary, £140 per annum, with furnished apartments, coal, gas, and attendance, but no board. Applications and testimonials to J. W. Stride, Assistant Secretary, before July 10th.

CHELTENHAM GENERAL HOSPITAL.—Junior House-Surgeon, unmarried, doubly qualified. Salary, £40 per annum, with board and apartments. Applications to Mr. F. W. Hayward Butt, Honorary Secretary and Treasurer, by June 23rd.

COUNTY ASYLUM, Rainhill, near Liverpool.—Assistant Medical Officer, to act as *Locum Tenens* for about two months. Salary, £2 2s. per week, with board, lodging, etc. Applications to the Medical Superintendent.

COUNTY ASYLUM, Whittingham, Preston.—Assistant Medical Officer. Salary, £100 a year, with apartments, board, and washing. Applications and testimonials to the Superintendent before June 27th.

CROYDON GENERAL HOSPITAL.—House-Surgeon. Appointment for two years. Salary, £100 per annum, increasing £10 per annum up to £120. Applications and testimonials to the Secretary, J. Jones, by July 6th.

DARENTH SCHOOLS FOR IMBECILES, near Dartford, Kent.—First Assistant Medical Officer, doubly qualified. Salary, £160 per annum, rising £20 annually to £200, with board, furnished attendance, and washing. Applications, on forms to be obtained at the office of the Board, Norfolk House, Norfolk Street, Strand, W.C., to T. Duncombe Mann, Clerk to the Board, at the offices, by June 23rd.

EDENDERRY UNION, EDENDERRY DISPENSARY.—Medical Officer. Salary, £120 per annum, with £25 yearly as Medical Officer of Health, together with vaccination and registration fees. Applications to G. C. Tyrrell, J.P., Honorary Secretary. Election on June 26th.

GENERAL INFIRMARY, GLOUCESTER AND GLOUCESTERSHIRE EYE INFIRMARY.—Assistant House-Surgeon. Appointment for six months, eligible for re-election. No salary, but board, residence, and washing provided. Applications to H. P. Pike, Secretary, by June 27th.

METROPOLITAN ASYLUMS BOARD WESTERN HOSPITAL FOR FEVER PATIENTS, Seagrave Road, Fulham, S.W.—Assistant Medical Officer. Salary, £15 per month, with board, lodging, attendance, and washing. Forms of application may be obtained at the offices of the Board, Norfolk House, Norfolk Street, Strand, W.C., which must be accompanied by testimonials, and sent to T. Duncombe Mann, Clerk to the Board, on or before Thursday, June 28th.

NEWPORT AND MONMOUTHSHIRE INFIRMARY, Newport, Mon.—House-Surgeon, doubly qualified. Salary, £100 per annum, with board and residence. Applications to the Secretary by June 23rd.

ROYAL ALBERT EDWARD INFIRMARY, Wigan.—Junior House-Surgeon. Salary, £80 per annum, with apartments, rations, and washing. Applications and testimonials to Will. Taberner, General Superintendent and Secretary, before June 27th.

ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields.—Curator, non-resident. Appointment for one year; renewable. Salary, £120 per annum. Applications to the Secretary by June 30th.

ST. LUKE'S HOSPITAL, London, E.C.—Clinical Assistant. Appointment for six months. Board and residence provided. Applications to Percy de Bathe, M.A., Secretary.

SALTERS' COMPANY.—Research Fellowship in Experimental Pharmacology. Annual value of £100, and is tenable in the Medical School of St. Thomas's Hospital. Applications to the Secretary to the Medical School, St. Thomas's Hospital, S.E., before June 30th.

SALTERS' COMPANY.—Research Fellowship in Chemistry. Annual value of £100, tenable in the Research Laboratory of the Pharmaceutical Society. Applications to Professor Dunstan, F.R.S., Director of the Research Laboratory of the Pharmaceutical Society, 17, Bloomsbury Square, W.C., before June 30th.

SUNDERLAND BOROUGH LUNATIC ASYLUM.—Medical Superintendent, doubly qualified. Salary, £350 per annum, with furnished house, board for self and wife (if married), washing, coals, light, two servants, and use of garden. Applications, endorsed "Medical Superintendent," to Fras. M. Bowey, Clerk to the Visiting Committee, Town Hall, Sunderland, by June 30th.

UNIVERSITY COLLEGE, DUNDEE, St. Andrews University.—Professor of Chemistry. Applications to R. N. Kerr, Secretary, by July 7th.

UNIVERSITY OF ABERDEEN.—Examiners in Medicine. Applications and testimonials to Robert Walker, Secretary of the University Court, on or before July 4th.

UNIVERSITY OF EDINBURGH.—Chemical Assistant to Professor of Physiology. Salary, £180 per annum. Applications to the Secretary of the University Court before July 1st.

WESTMINSTER HOSPITAL MEDICAL SCHOOL.—Demonstrator of Anatomy. Applications to Mr. Spencer, the Dean, before July 10th.

WEST NORFOLK HOSPITAL, King's Lynn.—House-Surgeon, who will also act as Secretary to the Weekly Board. Salary, £80, rising £10 annually to £100, with board, residence, and washing. Applications and copies of testimonials to S. R. Lister, Secretary, by July 7th.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—Resident Assistant. Appointment for six months. Applications, inscribed "Application for Resident Assistant," to the Chairman of the Medical Committee by June 25th.

MEDICAL APPOINTMENTS.

ADAMS, A. M., L.F.P.S.Glasg., L.R.C.P.Lond., appointed Medical Officer to the Lanark Poorhouse.

ARLIDGE, Mr. J., appointed Honorary Assistant Ophthalmic Surgeon to the North Staffordshire Infirmary.

ATKINSON, G. C., M.R.C.S.Eng., appointed Medical Officer and Public Vaccinator for the Long Clawson District of the Melton Union, *vice* Dr. Swain, resigned.

BULLOCK, Charles Penry, M.A.Oxon., L.R.C.P.Lond., M.R.C.S.Eng., appointed Deputy Coroner for Oswestry.

COWAN, Mr. John J., appointed Medical Officer of the Knightwick District of the Martley Union.

DALZIEL, T. Kennedy, M.B., C.M.Edin., F.F.P.S.Glasg. appointed Honorary Surgeon to the Glasgow Royal Hospital for Sick Children.

DEANS, William, M.B., C.M.Aberd., reappointed Medical Officer of Health to the Ramsbottom Local Board.

DICKSON, J. W., M.B., B.C.Cantab., appointed Anæsthetist to the Grosvenor Hospital for Women and Children, Vincent Square, S.W.

EGLINTON, George W., L.R.C.P.Edin, L.F.P.S.Glasg., reappointed Medical Officer of Health to the Street Local Board.

GALE, Arthur Knight, L.R.C.P.Lond., M.R.C.S.Eng., reappointed Medical Officer of Health to the Ecclesall Bierlow Rural Sanitary Authority.

HAMILTON, W. Crosbie, M.B., C.M.Edin., appointed Junior House-Surgeon to the Blackburn and East Lancashire Infirmary.

HOLT, H. Mainwaring, M.R.C.S., L.S.A., D.P.H., reappointed Medical Officer of Health to the Malton Urban Sanitary Authority.

HOPSON, Montagu F., L.D.S.Eng., appointed Dental Surgeon to the Hampstead Hospital.

KENDALL, N. F., M.R.C.S.Eng., L.R.C.P.Lond., appointed Assistant Medical Officer of the Workhouse and Infirmary of the Woolwich Union.

KEYWORTH, Arthur F., M.R.C.S., L.R.C.P.I., appointed Certifying Factory Surgeon for the Marple District, *vice* J. Johnson Bailey, M.D.Giessen, F.R.C.S.Edin., resigned.

LIVESAY, A. W. B., M.B., C.M.Edin., appointed House Surgeon to the Royal Victoria Hospital, Bournemouth, *vice* G. G. Clarke, M.R.C.S., resigned.

MCALLUM, S. G., M.D.Edin., C.M., appointed Medical Officer for the Ford District of the Glendale Union.

MALONEY, Mr. P. J., appointed Medical Officer for the Wickham District of the Fareham Union.

MATTHEWS, Mr. S. P., appointed Medical Officer for the Southwark District of the Fareham Union.

MAUDE, Charles E., M.B., C.M.Edin., appointed Senior House-Surgeon to the Blackburn and East Lancashire Infirmary, *vice* W. Briant, M.B., C.M., resigned.

NICOLL, J. M., M.B., C.M.Edin., appointed Medical Officer of Health for the Borough of Jarrow, and Medical Superintendent to the Borough Hospital.

PARSEY, Mr. E. W., appointed Assistant Medical Officer of the Workhouse and Infirmary of the Parish of Paddington.

PERCIVAL, T., M.R.C.S.Eng., appointed Medical Officer for the Knottingley District of the Pontefract Union.

PHILLPOTTS, Herbert, M.D., L.R.C.P.Lond., M.R.C.S.Eng., appointed Surgeon to the Ealing Cottage Hospital.

POTTER, James C., L.R.C.P., L.R.C.S.Eng., appointed Medical Officer of the No. 7 District of the Tendring Union.

POWELL, A. F. M., M.B., C.M.Edin., appointed Medical Officer and Public Vaccinator to the No. 1 District of the Parish of Sedgley, in the Dudley Union, *vice* Dr. Ballenden, resigned.

ROBERTSON, D. W., L.R.C.P.Edin., L.M., M.R.C.S.Eng., reappointed Medical Officer of Health to the Pickering Local Board.

SHEEN, A. W., M.D., B.S.Lond., F.R.C.S.Eng., appointed Senior Resident Medical Officer to the Glamorgan and Monmouthshire Infirmary, Cardiff.

STOREY, J. A., L.R.C.P.Edin. and L.R.C.S.I., appointed Medical Officer for the Dunstable and Tatternhoe Districts of the Luton Union, and Medical Officer of Health to the Dunstable Town Council, *vice* E. T. Thompson, resigned.

TOOGOOD, Frederick S., M.D.Lond., M.R.C.S.Eng., appointed Medical Superintendent of the Infirmary of the Lewisham Union.

WEBB, William Henry, M.D.Durh., L.R.C.P.Lond., M.R.C.S.Eng., appointed Medical Officer of Health to the Kingsbridge Rural Sanitary Authority.

WELDON, W. Jephson, M.B.Dub., M.Ch., appointed Medical Officer to the Workhouse of the Gorey Union.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Bacteriological Laboratory, King's College, W.C., 3 to 5 P.M.—Lecture. Practical Work: Erysipelas and Suppuration. Cultivations of Streptococci. London Throat Hospital, Great Portland Street, 8 P.M.—Mr. George Stoker: Impaired Movements of the Vocal Cords.

TUESDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 2 P.M.—Dr. Corner: Gout, etc.

THE CLINICAL MUSEUM, 211, Great Portland Street.—Open at 2, Lecture at 4.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. Pavy: The Croonian Lectures on a New Departure in connection with Diabetes. Lecture III.

WEDNESDAY.

POST-GRADUATE LECTURES, Metropolitan Hospital, N.E., 5 P.M.—Mr. Wallis: Some Diseases of the Testis and Scrotum.

POST-GRADUATE COURSE, West London Hospital, Hammersmith Road, W., 5 P.M. Mr. Paget: Surgical Cases.

LONDON POST-GRADUATE COURSE, Hospital for Diseases of the Skin, Blackfriars, 1 P.M.—Dr. Payne: Affections produced by Animal Parasites.

THURSDAY.

LONDON POST-GRADUATE COURSE, National Hospital for the Paralysed, and Epileptic, Queen Square, 2 P.M.—Mr. Victor Horsley: Surgery of the Nervous System. Hospital for Sick Children, Great Ormond Street, 3.30 P.M.—Mr. Edmund Owen: Cases in the Wards. Central London Sick Asylum, Cleveland Street, W., 5.30 P.M.—Mr. John Hopkins: Cases in the Wards.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, 5 P.M.—Dr. Pavy: The Croonian Lectures on a New Departure in connection with Diabetes. Lecture IV.

SATURDAY.

LONDON POST-GRADUATE COURSE, Bethlem Royal Hospital, 11 A.M.—Dr. Percy Smith: Lunacy Law.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 3s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTHS.

BRYDEN.—On June 15th, at 21, Harmer Street, Milton-next-Gravesend, the wife of Richard J. Bryden, M.R.C.S.Eng., L.S.A.Lond., of a daughter.

LAWSON.—At Jamimaville Resolis, Ross-shire, N.B., on the 14th inst., the wife of L. Gordon Lawson, L.R.C.P.Edin., L.R.C.S.Edin., of a daughter.

MANN.—On 15th inst., at 19, Newgate Street, Chester, the wife of Alfred Mann, M.D., of a son.

SANDWITH.—On the 19th inst., at Cairo, the wife of Dr. F. M. Sandwith, of a son.

WHITTINGDALE.—June 14th, at Brecon House, Sherborne, Dorset, the wife of J. F. L. Whittingdale, B.A., M.B.Cantab., M.R.C.S., of a son.

MARRIAGES.

HARDING—HAWKINS.—At East Finchley Congregational Church, by the Rev. L. G. Hassé, Moravian Minister, J. A. Harding, L.R.C.P., M.R.C.S., L.S.A., to Elizabeth Phoebe, elder daughter of C. H. Hawkins, Esq., of Harwell House, Fortis Green, N.

ROLLESTON—OGILVY.—June 18th, at Christ Church, Lancaster Gate, W., by the Rev. Hugh Hanmer, B.A., Humphry Davy Rolleston, M.D., F.R.C.P., Fellow of St. John's College, Cambridge, eldest son of the late Professor Rolleston, M.D., F.R.S., of Oxford, to Lisette Eila, daughter of F. M. Ogilvy, Esq., of 62, Queen's Gardens, Hyde Park, W.

SANKEY—MIÉVILLE.—On the 12th inst., at All Soul's, South Hampstead, by the Rev. Richard King and the Rev. Canon Floyd, Julius Ivor Sankey, M.R.C.S., L.R.C.P., etc., of Brenchley, Kent, second son of the late George Sankey, M.R.C.S., L.S.A., of Maidstone, to Violet, youngest daughter of Frederic L. Miéville, of 36, Albion Road, South Hampstead.

DEATH.

WILSON.—On June 7th, at Ashville, Mid-Calder, Edinburgh, Alexander Wilson, M.A., M.D., aged 45.

HOURS OF ATTENDANCE AND OPERATION DAYS AT THE LONDON HOSPITALS.

CANCER, Brompton (Free). *Hours of Attendance.*—Daily, 2. *Operation Days.*—Tu. S., 2.

CENTRAL LONDON OPHTHALMIC. *Operation Days.*—Daily, 2.

CHARING CROSS. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. F., 1.30; Skin, M., 1.30; Dental, M. W. F., 9; Throat and Ear, F., 9.30 *Operation Days.*—W. Th. F., 3.

CHELSEA HOSPITAL FOR WOMEN. *Hours of Attendance.*—Daily, 1.30 *Operation Days.*—M. Th., 2.

EAST LONDON HOSPITAL FOR CHILDREN. *Operation Day.*—F., 2.

GREAT NORTHERN CENTRAL. *Hours of Attendance.*—Medical and Surgical, M. Tu. W. Th. F., 2.30; Obstetric, W., 2.30; Eye, M. Th., 2.30; Ear, Tu. F., 2.30; Diseases of the Skin, W., 2.30; Diseases of the Throat, Th., 2.30; Dental Cases, W., 2. *Operation Day.*—W., 2.

GUY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Tu. F., 1.30; Eye, M. Tu. Th. F., 1.30; Ear, Tu., 1; Skin, Tu., 1; Dental, daily, 9; Throat, F., 1. *Operation Days.*—(Ophthalmic), M. Th., 1.30; Tu. F., 1.30.

HOSPITAL FOR WOMEN, Soho. *Hours of Attendance.*—Daily, 10. *Operation Days.*—M. Th., 2.

KING'S COLLEGE. *Hours of Attendance.*—Medical, daily, 2; Surgical, daily, 1.30; Obstetric, daily, 1.30; o.p., Tu. W. F. S., 1.30; Eye, M. Th., 1.30; Ophthalmic Department, W., 2; Ear, Th., 2; Skin, F., 1.30; Throat, F., 1.30; Dental, Tu. Th., 9.30. *Operation Days.*—M. F. S., 2.

LONDON. *Hours of Attendance.*—Medical, daily, exc. S., 2; Surgical, daily, 1.30 and 2; Obstetric, M. Th., 1.30; o.p., W. S., 1.30; Eye, Tu. S., 9; Ear, S., 9.30; Skin, Th., 9, Dental, Tu., 9. *Operation Days*—M. Tu. W. Th. S., 2.

LONDON TEMPERANCE HOSPITAL. *Hours of Attendance.*—Medical, M. Tu. F. 2; Surgical, M. Th., 2. *Operation Days.*—M. Th., 4.30.

METROPOLITAN. *Hours of Attendance.*—Medical and Surgical, daily, 9; Obstetric, W., 2. *Operation Day.*—F., 9.

MIDDLESEX. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, M. Th., 1.30; o.p., M. F., 9, W., 1.30; Eye, Tu. F., 9; Ear and Throat, Tu., 9; Skin, Tu., 4, Th., 9.30; Dental, M. W. F., 9.30. *Operation Days.*—W., 1.30, S., 2; (Obstetrical), Th., 2.

NATIONAL ORTHOPÆDIC. *Hours of Attendance.*—M. Tu. Th. F., 2. *Operation Day.*—W., 10.

NORTH-WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Obstetric, W., 2; Eye, W., 9; Skin, F., 2; Dental, F., 9. *Operation Day.*—Th., 2.30.

ROYAL EYE HOSPITAL, Southwark. *Hours of Attendance.*—Daily, 2. *Operation Days.*—Daily.

ROYAL FREE. *Hours of Attendance.*—Medical and Surgical, daily, 2; Diseases of Women, Tu. S., 9; Eye, M. F., 9; Dental, Th., 9. *Operation Days.*—W. S., 2; (Ophthalmic), M. F., 10.30; (Diseases of Women), S., 9.

ROYAL LONDON OPHTHALMIC. *Hours of Attendance.*—Daily, 9. *Operation Days.*—Daily, 10.

ROYAL ORTHOPÆDIC. *Hours of Attendance.*—Daily, 1. *Operation Day.*—M., 2.

ROYAL WESTMINSTER OPHTHALMIC. *Hours of Attendance.*—Daily, 1. *Operation Days.*—Daily.

ST. BARTHOLOMEW'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.30; Obstetric, Tu. Th. S., 2; o.p., W. S., 9; Eye, W. Th. S., 2.30; Ear, Tu. F., 2; Skin, F., 1.30; Larynx, F., 2.30; Orthopædic, M., 2.30; Dental, Tu. F., 9. *Operation Days.*—M. Tu. W. S., 1.30; (Ophthalmic), Tu. Th., 2.

ST. GEORGE'S. *Hours of Attendance.*—Medical and Surgical, M. Tu. F. S., 12; Obstetric, Th., 2; o.p., Eye, W. S., 2; Ear, Tu., 2; Skin, W., 2; Throat, Th., 2; Orthopædic, W., 2; Dental, Tu. S., 9. *Operation Days.*—Th., 1.

ST. MARK'S. *Hours of Attendance.*—Fistula and Diseases of the Rectum, males, S., 3; females, W., 9.45. *Operation Days.*—M., 2., Tu. 2.30.

ST. MARY'S. *Hours of Attendance.*—Medical and Surgical, daily, 1.45; o.p., 1.30; Obstetric, Tu. F., 1.45; Eye, Tu. F. S., 9; Ear, M. Th., 3; Orthopædic, W., 10; Throat, Tu. F., 1.30; Skin, M. Th., 9.30; Electro-therapeutics, Tu. F., 2; Dental, W. S., 9.30; Consultations, M., 2.30. *Operation Days.*—Tu., 1.30; (Orthopædic), W., 11; (Ophthalmic), F., 9.

ST. PETER'S. *Hours of Attendance.*—M., 2 and 5, Tu., 2, W., 5, Th., 2, F. (Women and Children), 2, S., 4. *Operation Days.*—W. and F., 2.

ST. THOMAS'S. *Hours of Attendance.*—Medical and Surgical, daily, exc. W. and S., 2; Obstetric, Tu. F., 2; o.p., W. S., 1.30; Eye, Tu., 2; o.p., daily, exc. S., 1.30; Ear, M., 1.30; Skin, F., 1.30; Throat, Tu. F., 1.30; Children, S., 1.30; Dental, Tu. F., 10 *Operation Days.*—W. S., 1.30; (Ophthalmic), M., 2.30, F., 2; (Gynæcological), Th., 2.

SAMARITAN FREE FOR WOMEN AND CHILDREN. *Hours of Attendance.*—Daily, 1.30. *Operation Day.*—W., 2.30.

THROAT, Golden Square. *Hours of Attendance.*—Daily, 1.30; Tu. and F., 6.30; *Operation Day.*—Th., 2.

UNIVERSITY COLLEGE. *Hours of Attendance.*—Medical and Surgical daily, 1.30; Obstetrics, M. W. F., 1.30; Eye, M. Th., 2; Ear, M. Th., 9; Skin, W., 1.45, S., 9.15; Throat, M. Th., 9; Dental, W., 9.30; *Operation Days.*—W. Th 1.30; S., 2.

WEST LONDON. *Hours of Attendance.*—Medical and Surgical, daily, 2; Dental, Tu. F., 9.30; Eye, Tu. Th. S., 2; Ear, Tu., 10; Orthopædic; W., 2; Diseases of Women, W. S., 2; Electric, Tu., 10. F., 4; Skin, F., 2; Throat and Nose, S., 10. *Operation Days.*—Tu. F., 2.30.

WESTMINSTER. *Hours of Attendance.*—Medical and Surgical, daily, 1; Obstetric, Tu. F., 1; Eye, Tu. F., 9.30; Ear, M., 9; Skin, W., 1; Dental, W. S., 9.15. *Operation Days.*—Tu. W., 2.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies.*

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

QUERIES.

R. A. writes: "I am desirous of placing in an asylum or other home an imbecile boy, aged 19, for whom £30 a year could be paid.

THE DUTIES OF UNQUALIFIED ASSISTANTS.

M.R.C.S.ENG. asks: What are the duties that an unqualified assistant can legally perform for his principal?

*** An unqualified assistant may dispense and keep books, but he must not treat patients "as if he were duly qualified."

A COVERING QUESTION.

IN DOUBT writes: Supposing that a registered medical practitioner sold his practice to a non-medical man, would it be legal or illegal for me to continue the management of the practice for the purchaser?

*** Several cases analogous to that described have come before the General Medical Council, and have been decided adversely to the qualified practitioner involved.

OPERATION FEES IN CLUB CASES.

A COUNTRY MEMBER writes: What is the customary fee for removing an injured eye in the case of a member of a well-to-do club under chloroform? Is £2 2s. (the amount allowed) sufficient for such an operation?

*** It can scarcely be said there is any customary fee for operations under the circumstances mentioned by our correspondent. Members of sick benefit societies can usually claim the personal services of their surgeon without any extra remuneration. A fee of two guineas would be a reasonable allowance for an anæsthetist, as a surgeon could not be expected to operate and give chloroform simultaneously. If any club allowed an extra fee for operations, we think the principle of "not looking a gift horse in the mouth" would apply, and that it would be inadvisable to criticise the amount.

ANSWERS.

REFERENCE.—We cannot undertake the invidious task of selecting the best modern works on the subjects named, which comprise a majority of the subjects of the medical curriculum.

MEDICUS.—A practitioner who certifies that a child has been vaccinated by him, when in fact it has been vaccinated by someone else, is liable to be prosecuted for the offence.

W. H.—The following works on biology will be found useful by a first year's student preparing for the first examination of the Conjoint Board: *Textbook of Elementary Biology.* By Dr. H. J. Campbell. London: Swan Sonneschein and Co. 6s. Or, *A Course of Practical Elementary Biology.* By John Bidgood, B.Sc., F.L.S. London: Longmans, Green and Co. 4s. 6d.

ASTHMA.

T. M. writes in reply to "E. S." to recommend for true paroxysmal asthma residence in London or Paris.

WEAK-MINDED CHILDREN.

G. P., W.P.M.B.—If a child is not an idiot, we fear there is no institution where it would be received.

DEODORISING CATHETERS.

IN reply to our correspondent's question as to the best method of cleaning catheters, a "Hospital Surgeon" recommends the use of a stilette fitted with a metal point, with flat ends, and a quarter of an inch in length. The metal point is made to fit exactly the bore of the tube, and the

catheter is manufactured solid from the second perforation to the point of the beak. Daily friction with this form of stilette and constant immersion in some antiseptic solution will prove of great value with all instruments in constant use. Catheters of this description can be obtained of Messrs. Maw, Son, and Thompson, of London.

TREATMENT OF HYPERIDROSIS.

W. P., M.B., writes: In reply to "Surgeon-Lieutenant-Colonel," I beg to suggest that the cause is atony of the vasomotor nerves, and to recommend that either arsenic or phosphorus be given for six weeks.

NOTES, LETTERS, Etc.

CORRECTION.

THE chart published on p. 1294 to illustrate Dr. John Gordon's paper on piperazine should have been described as being designed to illustrate the action of 1.25 per cent., 2.5 per cent., and 5 per cent. solution of piperazine on uric acid.

ANSELL v. TAIT FUND.

DR. G. T. KEELE, Treasurer (81, St. Paul's Road, Highbury), desires to acknowledge the following subscriptions received for this fund:

	£ s. d.		£ s. d.
Dr. R. W. Burnett ...	1 1 0	Dr. J. Raglan Thomas ...	1 1 0
Dr. Frank Hewkley ...	1 1 0	Dr. James Crabb	0 10 6
Dr. R. A. Ironside ...	1 1 0	Dr. A. D. Ducat	0 10 6

The Committee have decided to close the subscription list on June 26th.

A SURVIVOR OF THE GRANDE ARMÉE.

THE *St. Petersburger medicinische Wochenschrift* states that in the town of Ssaratoff there is now living a man who on April 29th celebrated his 126th birthday. He is a Frenchman, named Nicolas Savin, who was a lieutenant in the Grande Armée in the Russian campaign of 1812, and who was taken prisoner at the crossing of the Beresina. Being imprisoned at Ssaratoff he has never cared to leave it, but has remained there ever since as a teacher of French. M. Savin is said to be remarkably vigorous considering his patriarchal age.

CANCER AND VACCINATION.

IN these latter days we have heard of cancer being ascribed to tomatoes, hypophosphites, pork, monogamy, and many equally improbable causes. A writer in a recent number of the *Weekly Dispatch* now alleges that it is due to vaccination. The cancer mortality has increased, he thinks, because vaccination has been made compulsory. This reasoning is in strict accord with the good old rule of *post hoc, ergo propter hoc*, than which the writer can adduce no more conclusive argument.

AIRTHREY MINERAL WELLS.

DR. PATERSON (Fernfield, Bridge of Allan) writes as follows about the Airthrey mineral waters: After fifty years' experience and study of the therapeutic action of the waters, I am in a position to say that I have found them almost unsurpassed as a remedy for dyspepsia, habitual constipation, certain liver and kidney complaints, as also rheumatism and gout. I have known of cases where a cure was effected by the Bridge of Allan waters and baths after those of Buxton and Bath had each been tried without beneficial result. As a rule they ought to be tried for fourteen days to one month, and in some cases even a longer time than this might be necessary. The water ought to be taken every morning before breakfast, the patient going personally to the well-house, not having the water brought to him as is too often the case. This course should be aided by a bath taken every second or third day, the best time being about an hour before breakfast or dinner. The quantity of water should be gradually diminished, so that at the end of a course one-third of the original quantity taken will have the desired effect.

Before beginning a course it is very necessary that the intending water drinker should consult a properly qualified medical practitioner, as it is a very essential part of the treatment that the system should be prepared beforehand to accept as well as possible the full benefit of the waters. The action is in the first instance an aperient one, then diuretic, alterative, and tonic, and, after the course is once properly gone through, does not—as is sometimes the case with other waters—necessitate a continuance more or less long of some other laxative medicine. After my long experience, I have come to the conclusion that there is no better saline mineral water in the world than this of Bridge of Allan, and I thoroughly believe that I owe my long life and good health to the judicious use of this water. In the truest sense it is a product of Nature's own laboratory.

LONG RETENTION OF HALFPENNY IN STOMACH.

MR. OSWALD F. ROWLEY, M.R.C.S.Eng., L.R.C.P.Lond. (Barnsley), writes: Some time ago I was called to see J. M., aged 10 years, who was reported to have swallowed a halfpenny. The parents were much more alarmed than the patient, who seemed to suffer but little from what she had done. Emetics were freely administered without causing the expulsion of the foreign body. The usual dietary was then prescribed, and the motions carefully watched. By lapse of time this was neglected, and the coin was supposed to have been passed. Six months afterwards the child was seen to vomit a substance coated with mucus, which on examination turned out to be the missing halfpenny. It is a curious fact that, though the copper was retained in the child's stomach for so long a period as six months, none of the symptoms of copper poisoning appeared.

LETTERS, COMMUNICATIONS, ETC., have been received from:

(**A**) Mr. T. Allen, Dudley; Mr. T. E. Akeson, Chester; Dr. J. T. Arlidge, Newcastle-under-Lyme; Mr. A. H. Allen, Sheffield; Dr. C. H. Allfrey, St. Leonard's-on-Sea. (**B**) Mrs. Brock, Blackpool; Mr. J. W. Baker, Derby; Dr. K. A. Bahadhurji, Bombay; Dr. D. C. Black, Glasgow; Mr. J. P. Bush, Clifton; Mr. R. J. Bryden, Gravesend Mr. H. L. Browne, West Bromwich; J. L. H. Browne, M.B., Coventry. (**C**) Mr. L. J. G. Carré, London; Chelsea Hospital for Women, Secretary, London; Dr. M. Copeman, London; Mr. H. Cuthbertson, Aberdeen; Dr. W. A. Carline, Lincoln; Caution; Mr. H. Cooper, Salford; Lady Clark, Essendon. (**D**) The Derbyshire Royal Infirmary, Secretary, Derby; Mr. W. Dalton, Blackpool; Mr. A. J. De Butts, Folkestone; Mr. J. Davison, Abberley; W. F. R. De Watteville, M.B., Kingussie; Mr. H. P. Dunn, London; Dr. H. M. Duncan, London. (**E**) Mr. J. Ewart, Brighton; Mr. G. Edgar, London; Dr. C. R. Elgood, Battle; E. H. H.; Mr. J. A. Eyton-Jones, Wrexham. (**F**) Dr. T. Fisher, Clifton. F. S. (**G**) Mr. S. Garcili, London; Gresham Life Assurance Company, Secretary, London; Mr. C. W. Glassington, London; Dr. A. H. Goslett, New York; Dr. A. C. Godfrey, Southampton; Dr. H. R. Greene, Knaphill. (**H**) Dr. W. Hardman, Blackpool; Mr. W. F. Haslam, Birmingham; Hants; Hon. Secretary; Mr. H. E. Haynes, Evesham; Capt. F. Handley, London. (**I**) Dr. C. R. Illingworth, London; Inquirens. (**K**) Mr. C. Kingzett, London; Mr. R. T. Kent, Glasgow; Kertesz; Dr. R. Kirk, Glasgow; Mr. G. T. Keele, London. (**L**) Messrs. A. Leney and Co., Dover; Mr. J. W. Lowe, Brighton; Messrs. Ledger Smith and Co., London; Mr. W. Lory, London; Rev. J. Lawrence, York; Dr. J. F. Le Page, Manchester; H. W. Lyle, M.B., London; Mr. L. G. Lawson, Invergordon; Mr. F. H. Lewis, Brighton. (**M**) M.R.C.S.Eng.; Dr. G. Y. Mackay, Glasgow; Dr. N. J. McKie, Newton Stewart; Member; Mr. C. A. Morton, Clifton; Mr. J. C. P. Muir, London; M.R.C.S., L.S.A.; Mr. W. Mackeith, London; Medicus; Mr. A. E. MacBride, Glasgow. (**N**) Mrs. L. F. Nash, London; T. E. Nichol, M.B., Margate; J. M. Nicoll, M.B., Jarrow-on-Tyne. (**O**) One of the Profession in Doubt; Old Boy. (**P**) Dr. A. Paterson, Dundee; Miss N. Paul, London; Dr. H. Philpotts, London; Dr. H. Page, Redditch; Professor Penberthy, London. (**R**) Dr. D. Rosenau, Bad Kissingen; Mr. E. Robbins, London; Mr. E. D. Rowland, New Amsterdam; Messrs. Raphael Tuck and Sons, London; Mr. S. Regan, London; Mr. O. F. Rowley, Barnsley; Mr. T. F. Raven, Broadstairs; Mr. D. B. Ross, Newtown; Dr. J. J. Ridge, Enfield; Mrs. Ralph-Hall, Buxton. (**S**) Dr. J. F. Sykes, London; Mr. F. A. Southam, Manchester; Mrs. G. M. Sibley, London; Mr. H. Strachan, London; Mr. C. T. Snedekor, London; Mr. G. W. Sidebotham, Hyde; Miss Sandwith, Haslemere; Dr. A. W. Sheen, Cardiff; Dr. E. M. Skerritt, Bristol; Dr. W. H. Sturge, Ivybridge; Mr. A. Sutcliffe, Burnley; Mr. J. A. Storey, Dunstable. (**T**) T. M.; R. Thorburn, M.B., Sedbergh; S. J. Taylor, M.B., Norwich; Mr. C. B. Turner, Gt. Grimsby; Dr. T. S. Toogood, London; Mr. B. Thornton, Margate. (**V**) Variola; Dr. Van Niessen, Wiesbaden; Mr. S. G. Vinter, Devonport; Mr. T. G. Verrall, Brighton. (**W**) Mr. W. R. Williams, Preston; Messrs. Williams and Norgate, London; W. P., M.B.; J. D. Wardale, M.B., Bridgwater; Mr. C. F. Wardley, Buxton; Dr. C. T. Williams, London; Professor C. G. Wheeler, London; Dr. A. E. Wright, Netley; Dr. J. F. Whittingdale, Sherborne; Dr. P. W. Williams, Clifton; Mr. W. B. Winckworth, London; J. Walters, M.B., Reigate; West London Medico-Chirurgical Society, Secretary, London; Mr. R. Willson, Oxford; etc.

BOOKS, ETC., RECEIVED.

Lehrbuch der Nervenkrankheiten. Von Professor H. Oppenheim. London: Williams and Norgate. 1894. M. 20.

Gout and its Relations to Diseases of the Liver and Kidneys. By Dr. R. Roose. 7th Edition. London: H. K. Lewis. 1894. 4s. 6d.

Schnitte durch das erkrankte Rückenmark des Menschen. Von Dr. P. Kronthal. London: Williams and Norgate. 1894. 25s.

Textbook of Abdominal Surgery. By S. Keith, assisted by G. E. Keith. Edinburgh and London: Young J. Pentland. 1894.

Zeit-und Streitfragen der Biologie. Von Dr. O. Hertwig. Heft I. Jena: Gustav Fischer. 1894. M. 3.

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LECTURES
ON
THE SURGERY OF THE SPINAL CORD AND ITS APPENDAGES.

Delivered before the Royal College of Surgeons of England.

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CONCLUDING LECTURE.

PATHOLOGY OF PARAPLEGIA IN VERTEBRAL CARIES.

CARIES of the spine may affect either the bodies of the vertebræ or their arches, the former being very much the commoner of the two conditions; and here we find that paraplegia may be produced in one or other of the following different ways:

1. That mere kyphosis is not usually competent to produce paraplegia is indicated, on the one hand, by the total want of clinical relationship between the extent of spinal deformity and the presence or absence of paralysis, and, on the other, by the *post-mortem* evidence that in these cases the spinal canal is frequently not narrowed but actually widened. Nevertheless, in a few rare cases the angular curvature has been found to cause compression of the cord, an example of this nature being recorded by Chipault.

2. Sudden paraplegia may result from fracture of carious vertebræ, examples being recorded by Park, Chipault, Kraske, and others; but this also is not a common condition, Kraske estimating cases of this nature to form but 2 per cent. of the total number of paraplegias depending upon vertebral caries. These cases also stand apart in their pathology, the essential lesion being here a fracture-dislocation; and, as Kraske—who has specially investigated the point—also suggests, laminectomy can here only do harm, in so far as it further weakens the already fragile spine, whereas the cord lesion is not due to simple pressure but to an irreparable crush, such as those to which we referred in the first lecture. Probably, therefore, the most suitable treatment of cases of this nature will be by extension and fixation of the spine.

3. Rare causes of paraplegia—causes so rare that we need not refer to them further—are the bursting of abscesses into the spinal canal, hæmorrhage into the canal, and the displacement of bony sequestra, which press upon the cord.

4. Charcot and others have shown clearly that the most usual cause of paraplegia is pressure by granulation tissue, which may or may not be caseous; this pressure being accompanied by irritative non-tuberculous pachymeningitis. The exact *modus operandi* of this pressure is, however, still open to question. The school of Charcot attributes the mischief to myelitis spreading from the point of pressure across the cord, but most recent observers do not accept this view, and it is certain that pressure alone (without myelitis) may cause paraplegia. The simplest explanation of such a condition would be that the pressure causes anæmia and subsequent degeneration of the cord, and in some cases we find the latter thinned and firm in texture, as if this were the true explanation. Kahler, Schmaus, and others, however, find that œdema and swelling of the cord is more common than constriction, and this condition is generally attributed to an extramedullary compression of veins and lymphatics, causing congestion and lymph stasis. Schmaus, somewhat hypothetically, attributes the œdema to irritation by the circulation of chemical products of the tubercle bacilli.

5. Lastly, in a few cases true tuberculous periarteritis is found within the cord, generally in association with tuberculous leptomeningitis, due to the perforation of the theca by the diseased process.

The condition usually found, both after death and during operation, is, however, certainly that of pressure by granulation tissue or abscess (that is, granulation tissue which has softened) accompanied by non-tuberculous pachymeningitis and with either a small firm cord or a swollen œdematous cord. Local degeneration with secondary degenerative changes in the ascending and descending tracts follow. The pressure, it should be added, may be either directly backwards or lateralised, or, in cases of posterior caries, from behind forwards. Further, in a few cases no anatomical changes have been found, and in one of my operations the condition revealed appeared hardly sufficient to have given rise to the symptoms which were present although the latter rapidly recovered after laminectomy.

PROGNOSIS.

It is common clinical experience that recovery will usually occur after prolonged rest with fixation of the spine, but the limitations of ordinary hospital experience render it difficult to estimate in figures the frequency of this result. My own experience is that nearly all cases will recover if kept fixed in the recumbent position for a sufficiently long time, but the time required may be very prolonged, and I have at present under observation two patients who were totally paralysed for more than eighteen months, both of whom can now walk. In fact, of all the cases which I have met with, other than those submitted to operation, I know of only one in which the patient did not recover, or was not manifestly recovering when lost sight of. Myers has the most extensive statistics upon this subject with which I am acquainted, recording 218 cases of paraplegia due to caries, of which 3½ per cent. died of intercurrent diseases, 55 per cent. recovered under observation, and the remainder were either lost sight of, or had not recovered while under treatment, which, however, was not sufficiently prolonged to prove their incurability. It is, however, the less necessary to labour this point, as it is generally recognised that recovery is the rule in cases of this nature. On the other hand relapses are unquestionably common, and recovery is rarely, if ever, absolutely perfect, there being at least some exaggeration of the deep reflexes which, persisting through life, indicates the previous existence of the paralysis.

Cases in which the paraplegia is due to intramedullary tuberculous periarteritis can hardly be expected to get well, and those in which pressure has arisen from fracture of the carious bones are not likely to improve to any great extent. So also in some of the other rare varieties of paraplegia we have little to hope for, but, unfortunately, these are just the cases in which we can hardly expect any benefit from operative treatment.

INDICATIONS FOR OPERATION.

Assuming the prognosis to be thus favourable we are never called upon to perform laminectomy save under certain special conditions. It will not be argued that the recovery after laminectomy is more complete than that produced by Nature, and experience shows that relapses also are only too common after operation. The indications which appear to me to point to the necessity for operation are then as follows:

1. A steady increase in symptoms in spite of favourable conditions and treatment, as in the first and third cases which I am about to mention to you.

2. The presence of symptoms which directly threaten life. Thus, in my second case the secondary chest troubles were very grave. Intractable cystitis would fall into this category, but it is by no means common, and we can hardly agree with those who hold that the condition is in itself incapable of spontaneous recovery.

3. The persistence of symptoms in spite of complete rest is the indication which has been most commonly adopted, but, as we have already seen, such symptoms may persist for very long periods and then yield to absolute rest. It is, however, not improbable that, in a few cases, cicatricial pachymeningitis or, rather, peri-pachymeningitis may remain after the original pressure lesion has ceased to act, and may thus keep up paraplegia until the constricting tissue is removed. To this category Macewen's cases and my third case appear to belong.

4. In posterior caries (that is, in caries of the arches of the vertebræ), operation is clearly indicated, as here we can readily both treat the paraplegia and remove the whole of

the tuberculous tissue. Two cases of this nature are recorded by Abbe and by Chipault respectively, and both proved highly successful.

5. In my fifth case, the existence of severe pain, which was rapidly exhausting the patient, was regarded as an indication for surgical interference.

6. Lastly, children as a rule yield better results than do adults, so that, other things being equal, childhood may also be regarded as an indication for operation.

CONTRAINDICATIONS.

On the other hand, there are certain definite contraindications, such as the presence of active tuberculous changes in other organs. Macewen holds that we should not operate when there is pyrexia, which is almost tantamount to saying that we should not operate in presence of active tuberculosis. If, however, the pyrexia were clearly due to cystitis, then we might regard it as an indication for, rather than against, interference. Again, general meningitis (although fortunately very rare) will at times obviously be present, and will probably prove fatal whether we operate or not. To cases of fracture following upon caries we have already referred as unsuitable for laminectomy, and most paraplegias of sudden onset will fall into this category.

PERSONAL CASES.

Placing upon myself the limitations to which I have above referred, I have naturally but few cases of laminectomy in spinal caries to present to you, and these cases having been generally serious ones the results are by no means good, there being two deaths, one in which no improvement followed the operation, one of temporary improvement, and only one of perfect recovery. I can, however, hardly regret these statistics as I have had the satisfaction of seeing a very large number of cases recover without operation.

CASE I.—In the first case, to which I have to refer, the indication which led us to operate was the steady increase of symptoms in spite of the favourable conditions to which the patient was exposed. The latter was a lad, aged 20, admitted to the Manchester Infirmary for tuberculous disease of the radius and of the cervical glands, and suffering also from otitis media, besides which he gave us the history of a previous attack of pleurisy. While in hospital he developed weakness of the lower limbs and pain at the back of the neck; and at our convalescent hospital this rapidly progressed until he was totally paralysed. He was kept in bed with fixation of the head for a period of three months, during which time his symptoms were steadily aggravated. In August, 1893, the condition was briefly as follows: The lower limbs were absolutely paralytic and spastic. The trunk was paralysed, as were the hands. Extension of the wrist-joints was very feeble. The movements of the elbow were fairly good, with the exception of extension, and the shoulder-joints were normal. Sensation was very defective on the ulnar side of both upper limbs and in the trunk and lower limbs there was complete anæsthesia, except over the genitals and a part of the feet. Urine could be retained for about half an hour only, and the bowels were very constipated. In the neck there was slight rigidity and some pain. At the operation I exposed, before opening the vertebral canal, a soft tuberculous granulation tissue, projecting between the fifth and sixth cervical laminæ on the left side. These two laminæ, as also the arch of the fourth cervical vertebra, were removed and the theca thereby fully exposed, it being pushed backwards and to the right by the granulation tissue, which projected from the junction of the fifth and sixth vertebræ. On removal of this granulation tissue, we discovered a carious focus extending forwards, which was carefully scraped out. The wound healed by first intention. Sensation was restored throughout the body within the course of a few days; motor power returning more slowly. Five months after the operation there was little, if any, anæsthesia, and all muscular movements in the upper limbs were practicable, although those of the hands remained weak. The patient could, however, feed and dress himself, and wrote for me, as a sample, the letter which I now show to you. In the lower limbs the improvement was much less marked. Slight movements were possible at the feet and ankles. The knees hardly recovered at all, and the hip-joints remained paralysed. Urine could now be retained for from one and a-half to three hours. Unfortunately no further improvement occurred up to April, 1894, when a sero-purulent discharge appeared at the centre of the operation scar, leading obviously to a fresh growth of tuberculous tissue.

CASE II.—In my second case the patient was a boy, aged 8 years, who had suffered from cervical caries for at least a year, and had been under treatment in hospital during the greater part of that time. Paralysis took the form of a right-sided hemiplegia of nine months' duration. This had improved slightly after its first development, but had now been stationary for six months, during which time the patient had with difficulty recovered from an attack of broncho-pneumonia. The symptoms were rigidity of the neck with deflection of the face to the right; absolute paralysis of the right upper limb, except in the hand and fingers, which retained some slight power; loss of movement of the right side of the chest, with bronchial *râles* throughout; and weakness of the right lower limb, sufficient to make walking very difficult. He had no anæsthesia, and no vesical or rectal trouble. The general condition was bad, the patient looking thin and ill. A further period of three weeks' absolute fixation of the head and trunk in bed being followed by no improvement, laminectomy was determined upon. I removed the laminæ of the axis, and third and fourth cervical vertebræ from the right side, but discovered no abnormality, except a thin layer of lymph over the theca and slight adhesions of the latter to the bone. This layer was scraped away, the theca freed, and the wound closed. The latter healed by first intention and recovery was rapid, paralysis having practically disappeared at the end of two months. In November, 1893 (eighteen months after operation) the lad was at school, could walk and run well, and assist his father in the work of a carpenter; and with his previously paralysed arm he wrote for me the words which I show you upon this piece of paper.

CASE III.—A man, aged 25, had suffered from girdle pains for twelve months, paralytic symptoms for nine months, and total paraplegia for nine weeks. During the latter period he had been totally recumbent, but was getting steadily worse. He presented angular curvature at the sixth dorsal vertebra, total paraplegia with spasm, and almost total anæsthesia, exaggeration of the superficial and deep reflexes, and difficulty of micturition and defæcation. The general health was good. The fifth, sixth, and seventh dorsal arches having been removed, there was revealed over the theca a tough membrane of about the thickness of a sheet of blotting paper, and the theca here presented a slight depression. The membrane was removed and the wound closed. Although the latter healed rapidly no improvement occurred during the next five months, at the end of which time the patient was lost sight of.

CASE IV.—My fourth case is that of a little girl, who had suffered from paraplegia due to dorsal caries, with occasional remissions, for some three years. The symptoms were those of almost total paralysis and anæsthesia, with incontinence of urine. The curvature was diffused, and occupied the middle dorsal region. Laminectomy revealed extensive softening of several vertebræ, and led into a very large abscess cavity, occupying the anterior aspect of the spine. The theca was obviously compressed. We tried to remove the tuberculous tissue but found that the patient was sinking, and were obliged to desist. She died in the evening of the same day from shock.

CASE V.—The fifth case was that of a man 40 years of age, also suffering from dorsal caries which was of nine months' duration. He had absolute paraplegia with spasm; anæsthesia, which was complete in the lower limbs, but had a fading upper margin; and total loss of control over the bladder and rectum. He suffered also from intense girdle pains, which, in spite of all medical treatment, were obviously wearing out his strength. After several weeks of rest and treatment I removed the arches of the sixth, seventh, and eighth dorsal vertebræ, which were adherent to a mass of firm cicatricial tissue surrounding the theca. To the left side we found a puriform focus. The cicatricial tissue was excised, and the roots of the sixth and seventh dorsal nerves were divided, in order to relieve pain. The theca being now gently drawn to the right an attempt was made to scrape away the caseous material situated on the anterior aspect of the vertebræ, and we thought that we had cleared out the whole of this abscess cavity. A drainage tube was left in the tuberculous focus, passing out by the side of the theca so as not to press upon it. After the operation there was no more pain, but the patient was very restless, removed his dressings the first night, and died apparently of exhaustion on the third day. At the *post-mortem* examination we removed the specimen which I now show to you, and which shows that we had by no means got rid of the whole of the tuberculous tissue, but that there is a large abscess in front of the vertebral column, opened by our posterior incision.

These cases, then, illustrate most of the conditions which are met with in the paraplegia of caries, as well as the dangers and some of the benefits of laminectomy, and I must now deal very shortly with published cases.

RECORDED CASES.

It is difficult to estimate the mortality of these cases; that is to say, how far the mortality is due to the operation itself, but I think that from 17 to 20 per cent. of deaths is not far from an accurate estimate. By far the most common cause of death has been shock or syncope; in a few cases myelitis or meningitis has proved fatal; in one the result was due to hæmorrhage into the cord; and in one to hæmorrhage from the vertebral artery at the time of operation.

As regards cure of the paraplegia, the immediate result has often been good, the symptoms improving even if they do not entirely disappear; but, unfortunately, recurrence is not uncommon, and in not a few cases a tuberculous sinus forms in the healed wound. This simply means that we have not fully cleared out the tuberculous tissue, and hence we are met by the usual difficulty in the surgery of tuberculosis, the difficulty of removing the disease by any conservative operation.

In the earlier cases no attempt was made at complete elimination of the tuberculous tissue, but in the modern and bolder operation, so strongly urged by Urban and Chipault, we may hope occasionally to succeed, although the probabilities of failure must remain considerable. The most satisfactory results have been those obtained in cases of peripachymeningitis in which the original tuberculous disease has ceased.

Lastly, it is to be remembered that, in some at least of the apparently successful operations, it is probable that the associated rest and fixation of the spine would alone have sufficed to produce the fortunate result. Thus, in a series of cases

such as those recorded by Mr. Lane, we can hardly doubt, having regard to our general clinical experience, that no small proportion would have recovered without laminectomy.

OTHER DISEASES.

With most of the other pressure lesions of the spinal cord which have been, or may be submitted to operation, I must deal very briefly. On this diagram I have placed a list of such diseases, and shall refer only to a few points in connection with each.

Diseases arising externally to the spine:
- Hydatids
- Aneurysms
- Sarcoma and other growths

Diseases of the vertebræ:
- Carcinoma
- Sarcoma
- Osteoma
- Syphilitic deposits
- Osteo-arthritis
- Spondylolisthesis

Diseases of meninges or peri-meningeal tissue:
- Tumours
- Pachymeningitis
- Hæmorrhage
- Meningitis
- Spina bifida
- Spina bifida occulta

Diseases of the spinal cord:
- Tumours
- Syringomyelia

A few cases of hydatids have been submitted to operation, which has uniformly proved fatal, but the mortality has generally been due to sepsis, and there is no reason why in such cases we should abandon surgical treatment.

Aneurysms penetrating the vertebral canal are obviously utterly unsuited for operation.

Several cases are reported of tumours arising externally to the spine and penetrating to the vertebral canal. Thus, in 1889, I recorded a case of my colleague Mr. Wright, in which great relief was given by scraping out the intraspinal prolongation of a fibro-sarcoma of the neck. Five years later recurrence had occurred with return of paralysis, and laminectomy revealed a general infiltration of the vertebral arches, no benefit being derived. So far back, indeed, as 1856, Athol Johnstone successfully removed a lipoma situated over the sacrum, which had penetrated into the vertebral canal. Possibly, however, this may have been one of those cases of spina bifida occulta to which I shall refer immediately.

Growths of the spine itself have also been submitted to operation, there being several such cases in which the primary lesion was a sarcoma of the laminæ. Of these Mr. Davies-Colley's case resulted in recovery from the cord symptoms, but in all the growths have recurred.

The only rule, then, that we can adopt in cases of this class—that is, in cases of pressure lesions arising externally to the spine, or arising in the vertebræ themselves—is that pressure on the cord does not *per se* contraindicate operation, and we must be guided in our practice by the general rules of surgery.

With respect to tumours of the meninges I have nothing to add to the classical paper of Gowers and Horsley, except that there are now eight recorded cases, with four deaths, three complete recoveries, and one in which no benefit resulted, the latter, however, being a case in which symptoms had existed for twelve years at the time of operation. With these figures we can only conclude that laminectomy has here saved from certain death more than one-third of the cases.

As regards meningitis, I know of no operation in the form known as hypertrophic cervical pachymeningitis, but it seems not improbable that good results may be here obtained. White and Dercum operated in the cervical region in a case of complete paraplegia of rapid onset, finding only adhesions between the dura and pia mater. These being separated, complete recovery followed, but the true nature of the case is somewhat doubtful.

In a case of my own a man sustained an injury to the lower part of the spine at the age of 21, being then paralysed for a few weeks, after which he recovered completely, and worked as a collier for twenty years. He then began to suffer from increasing paresis and anæsthesia of the lower limbs, which resisted all treatment for two years. At the end of this time I removed the ninth, tenth, and eleventh dorsal laminæ, which were prominent and united by cicatricial tissue, revealing a dense felt-like tissue around the theca, the latter presenting no pulsation. This felt-like tissue was carefully removed and pulsation restored to the theca, which was freed from all adhesions. There was no improvement in the paresis, but sensation rapidly recovered. At this date, two years after the operation, the paresis is as much as before, but the patient can walk for about half a mile, and is able to be on his legs the whole of the day, attending to a shop.

In two cases only do we find the records of operative interference for disease situated within the spinal cord. Church and Eisendrath report a case of removal of a sarcoma, which was situated in the posterior fibres, the patient dying from septicæmia. The growth was readily enucleated, but *post-mortem* examination revealed a blood clot extending almost transversely across the cord. It is unfortunate that in this case the septic accident did not allow us to judge of the ultimate possible result. Abbe has also punctured a syringomyelia without benefit.

SPINA BIFIDA AND SPINA BIFIDA OCCULTA.

I now wish particularly to call attention to an interesting group of cases which had hitherto received but little attention from the surgeon.

In 1876 Ogston reported a case of old spina bifida accompanied by perforating ulcer of the left foot, anæsthesia of the outer side of the leg and of the dorsal and plantar aspects of the foot, and diminished faradic contractility of the foot muscles, all on the same side; that is to say, slight motor and sensory paralysis with a trophic lesion in the region which we have assigned to the lower lumbar and upper sacral nerve roots on the left side.

Some few years ago I recorded a similar case of cured spina bifida, with symptoms of much more extensive pressure upon the roots of the cauda equina, this pressure being in my case bilaterally symmetrical.

The following is a further example of the same nature. A man, aged 32, attended at my out-patient clinic, stating that seven or eight years previously he began to experience difficulty in passing water, this difficulty gradually increasing and being accompanied by constipation. Five years later a feeling of coldness and numbness commenced in the left great toe, and extended gradually to the outer side of the dorsum of the foot, and thence to the leg. A similar course of events followed in the right lower limb, and, later on, numbness was noticed on the back and inner sides of the thighs. Fifteen months before I saw him the man began to feel slight numbness in the penis and scrotum. A so-called "corn" then developed on the outer side of the right little toe, and this ulcerated and continued to discharge. Three years before my examination a swelling was detected over the lower part of the back, which swelling since had gradually increased in size. Over the lower part of the spine we found a soft elastic lenticular projection some 3 inches in diameter, extending rather more to the left than to the right of the middle line and having its upper border on a level with the fourth lumbar vertebra. This swelling was very slightly prominent; it had no hairy covering, and firm pressure upon it caused a vague feeling of discomfort, but no other symptoms. The gluteal muscles were flat and clearly atrophied, but presented no distinct paralysis. Anæsthesia was well marked, but far from complete, on the outer side of the legs and feet in the region of the distribution of the musculo-cutaneous nerve, especially on the left side. The back and inner sides of the thighs were much less sensitive than the front and outer sides, and the penis and scrotum presented distinct blunting of sensibility. On the outer side of the ball of the right little toe was an ulcer which had resisted treatment for more than a year. The commencement of micturition was difficult and delayed, and the act required much straining. The bowels were moved only with the aid of enemata. The sexual functions were unaffected. Unfortunately, this patient did not return to hospital, and we know nothing further of his condition.

In these three cases there can be no question that the nervous symptoms were due to pressure upon the cauda equina, and in the two first this pressure was doubtless due to cicatricial changes in the meningeal sac of a true spina bifida—a condition which also explains the not very rare association with the latter deformity of talipes varus, which arises from paralysis of the peroneal muscles. In the case last recorded it is, however, more probable that the swelling was due to a spina bifida occulta than to cicatricial changes in a meningeal sac.

The rare affection known as spina bifida occulta was described by Virchow in 1875 as a cleft of the vertebral canal, which had not gone on to the formation of a sac, but was limited to cleft of the spinous processes with separation of the laminæ, and since that time several cases have been reported by Fischer, Sonnenburg, Lücke, Recklinghausen, Brunner, Bergmann, Bland Sutton, Joachimsthal and others, so that the condition is now well recognised clinically. It is common in these cases to find a marked hairy growth over the affected region, together with some paralysis and anæsthesia, of the cauda equina type, which I have already described. Trophic lesions especially appear to be common, perforating ulcer being described by Brunner, Recklinghausen, and Bland Sutton; and chronic osteitis of the metatarsus being present in Fischer's case. In Lücke's case, as in Joachimsthal's, there was luxation of the hip, which the former

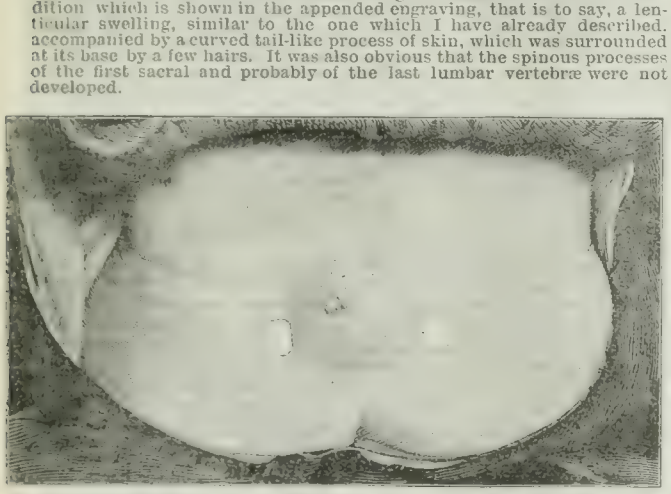
regarded as being secondary to paralysis of the gluteal muscles.

The pathology appears to consist in the coexistence of a vertebral cleft with a hypertrophic condition of the adjacent soft parts, giving rise to pressure upon the cauda equina. Thus Sonnenburg found a deposit of fat beneath the area of hypertrichosis; and Recklinghausen found the cord surrounded and compressed by a myofibrolipoma. In the case which I have just described to you it is probable that the lenticular swelling was of similar nature, and the hypertrichosis usually met with may also be regarded as evidence of the local tendency to hypertrophy.

It remains to be added that there are also recorded examples of sacro-lumbar hypertrichosis in which no other symptoms of spina bifida occulta were present, but that in three such cases of Recklinghausen's a *post-mortem* examination revealed a slight fissure of the subjacent vertebral arches. In Fischer's case, again, a patch of hypertrichosis in the cervical region accompanied the typical sacro-lumbar spina bifida occulta, but no cleft was detected by palpation in the upper area.

Yet another example of this rare disease, which I met with in 1893, illustrates many of its peculiarities:

The patient was a gentleman, 57 years of age, who stated that sixteen years previously he had an abscess of the left foot, from which there came away some bony sequestra. Pain in this foot had continued ever since, occasionally with eruptions on the left great toe. Six months before I saw him two bullæ developed on the outer side of the left foot, being accompanied by great pain. The left leg below the knee was distinctly smaller than the right, the calf measuring an inch less in circumference, in spite of previous treatment by massage. The thighs were equally developed upon both sides, and no distinct paresis could be detected anywhere, nor were the rectal, vesical, or sexual functions affected. On the outer side of the sole of the left foot was a healthy scar, with a smaller one situated internally to it. Sensation was markedly diminished in the left leg as compared with the right, and the outer side of the leg was also distinctly more anæsthetic than the inner side. To a much slighter extent the left thigh was less sensitive than that of the right side, and here I was able to satisfy myself that the inner side of the upper part of the thigh was the most anæsthetic. Nowhere was anæsthesia nearly complete, but on the outer side of the left leg there was absolute analgesia to all ordinary stimuli, such as pinching, deep pricking, and the like. Pain was very great on the dorsum of the foot and the back of the leg and thigh, and it was for this pain that the patient sought advice. So far, then, the case resembled one of sciatic neuritis on the left side, but on examining the back we found the condition which is shown in the appended engraving, that is to say, a lenticular swelling, similar to the one which I have already described, accompanied by a curved tail-like process of skin, which was surrounded at its base by a few hairs. It was also obvious that the spinous processes of the first sacral and probably of the last lumbar vertebræ were not developed.



Case of spina bifida occulta, from a photograph, showing the lenticular prominence over the sacral vertebræ, with a tail-like process of soft tissue about three quarters of an inch in length; at the base of this process were a few fine hairs, some two inches in length. The posterior superior spinous processes of the ilia are indicated by pieces of paper.

That cases of this nature—that is to say, either the cicatrices of old spina bifida or the analogous spina bifida occulta—should be amenable to surgical treatment appeared *primâ facie* probable, and an excellent result was obtained in a case of old spina bifida, which I saw several times with my friend the late Dr. Ross, and which was operated upon and recorded by my colleague Mr. Jones some three years ago.

It appears to me not improbable that the cases mentioned by Athol Johnstone and Holmes as lipomata penetrating to the spinal canal may have been of similar nature; and Témoin also records the successful removal, from the lumbar region of a child, of a congenital lipoma, which, although it penetrated to the spinal canal, had caused no nervous symptoms.

Chipault records yet another case of Zavaleta's, in which a similar lipoma had penetrated the dura mater, but in which removal was followed by fatal meningo-myelitis.

Lastly, Dr. Shaw and Mr. Bush, of Bristol, have reported recently a most interesting case in which they remained in doubt as to the true nature of the disease, but which not improbably falls into the same category of spina bifida occulta.

The history given by this patient was that, eleven years before being seen, he sustained a wrench of the lower part of the back, from which he dated his illness, although he also stated that *for two or three years before the accident* he had felt slight dull pains in the popliteal spaces and on the outer sides of the legs and heels. His condition, when seen by Dr. Shaw, was typically that of a pressure lesion of the cauda equina. The lower limbs were weak, especially as regards the hamstring muscles and those of the leg and foot. A perforating ulcer was situated on the ball of the right great toe. Anæsthesia was of the cauda equina type, but presented the peculiarity that the penis and scrotum were analgesic, but not anæsthetic. The muscles except the quadriceps extensor and sartorius showed the electrical reaction of degeneration. Further, there was severe pain in the backs of the thighs and legs, all the symptoms being progressive. The fourth or fifth lumbar spine appeared to be prominent, and at this point there was tenderness on percussion or on the application of heat. An operation performed by Mr. Bush with considerable benefit revealed "a swelling in the middle line, over the lower lumbar spine, which was freely incised, when a rounded cavity covered in with a thin shell of bone came into view. The fifth lumbar spine and laminæ had disappeared, and the cavity, which proved to be the dilated spinal canal, contained a solid mass, which was removed. The cauda could not be clearly defined as it was pressed forwards." Microscopically the mass from the spinal canal showed a well-organised blood clot with some fibrous tissue, but no other distinctive structure. My suggestion is that in this case also there had not improbably been either a spina bifida occulta or a true obsolete spina bifida, which had sustained some injury giving rise to hæmorrhage at the time of the accident to which the patient ascribed his symptoms.

THE CROONIAN LECTURES

ON

A NEW DEPARTURE IN DIABETES.

Delivered before the Royal College of Physicians of London.

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[*Special Abstract Report.*]

LECTURE II.

THE GLUCOSIDE CONSTITUTION OF PROTEID MATTER.

AFTER a few preliminary observations, Dr. Pavy observed that the molecule of unchanged starch was extremely complex, and that in the process of hydration this complexity was greatly diminished. This was sufficiently indicated by the fact that while the molecular weight of starch was represented by figures between 20,000 and 30,000, that of maltose was 342, and of glucose 180. In the dehydration of sugar into starch in the vegetable kingdom there was not only a subtraction of the elements of water, but a molecular synthesis, leading to the formation of the very complex molecule of the amylose. In the animal kingdom a parallel process occurred with proteid matter. In either case there was, in the process of growth and maintenance of the individual organism, first of all a breaking up by ferment action and chemical action, and then a synthesis by protoplasmic action.

In the first lecture it had been pointed out that from the proteid molecule could be cleaved off a carbo-hydrate molecule. This was equivalent to affirming the glucoside constitution of proteid matter. The group of glucosides comprised bodies of very variable composition; in some, of which salicin might be taken as an example, only the three elements—carbon, hydrogen, and oxygen—were present. In others—of which amygdalin was an instance—nitrogen existed in addition; while in others again, of which myronic acid, obtained from black mustard, was an example, sulphur was also a constituent of the molecule. Another step in the direction of increasing complexity carried us to a body standing in close proximity to the proteids—namely, mucin—

which, as a constituent of connective tissue as well as of mucus, existed extensively diffused throughout the animal system. The researches of Landwehr had shown that, under certain treatment, mucin yielded a non-reducing carbo-hydrate, which he had described under the name of "animal gum," possessing the formula $(C_6H_{10}O_5)n$, and that this was convertible into a cupric oxide reducing but non-fermentable sugar, having the composition of glucose ($C_6H_{12}O_6$), which he called "gummose."

This observation of Landwehr's was of the utmost importance to the subject in hand, since he had thus afforded independent evidence that one complex nitrogenous body, widely present in the organism, was a glucoside. Quite independently Dr. Pavy had, by a long series of researches, been brought to the conclusion that proteid matter had a glucoside constitution. The researches which had led him to this opinion had been carried on in the laboratories founded and maintained by the Royal Colleges of Physicians and Surgeons, and Dr. Pavy expressed in graceful terms his obligation to the wise liberality which had placed laboratories so admirably fitted at the disposal of scientific investigators.

At an early stage of his experiments he had made use of a process for separating glycogen from the liver, which consisted in boiling with potash, pouring into alcohol, and collecting the precipitate. This precipitate, which was considered to be glycogen, was treated with dilute sulphuric

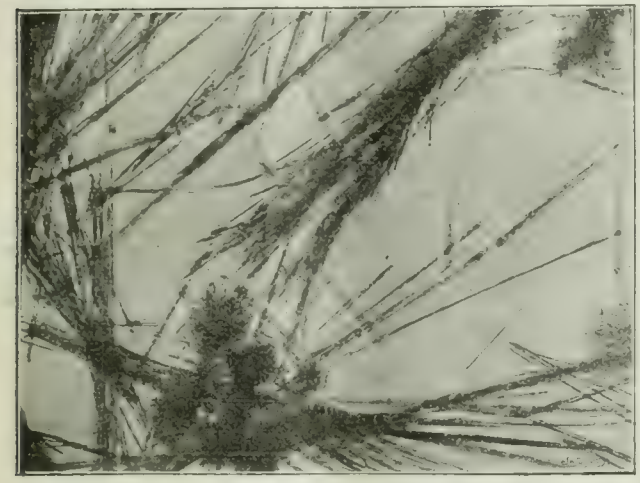


Fig. 1.—Osazone crystals from glucose, showing their acicular structure. (From a photomicrograph.)

acid, which converted it into glucose, and the determination of the amount of glucose gave by calculation the amount of glycogen. The results thus obtained were concordant as long as small quantities of material were used, but from a large bulk of material the quantity of glucose obtained in the final stage was always less than the quantity calculated. The first clue to the explanation of these discordant results was given by the observation that when the action of the potash solution was allowed to continue longer, the amount of carbo-hydrate eventually obtained was larger. Investigation pursued on these lines showed that the effect was constant, and that the amount of carbo-hydrate obtained depended upon the strength of the potash solution used as well as upon the duration of its action. Now, if free glycogen or starch had been the source of the cupric-oxide reducing body obtained in the final stage, the treatment of the original material with potash would have produced no effect beyond dissolving the associated nitrogenous material, and no difference in the amount of carbo-hydrate could have resulted from varying the amount or strength of the potash solution. The conclusion, therefore, was inevitable that the cupric-oxide reducing body took its origin from some other source, and that this was the proteid matter disrupted by the continued action of the potash, with the separation of a carbo-hydrate body. The mode of preparation of this cleavage product, which was of the nature of an amylose, had been given at the conclusion of the first lecture (see page 1350), and it had been stated that it was in its chemical and physical properties closely allied to, if not identical with, Landwehr's animal gum obtained from mucin; it had also been stated that under the action of sulphuric acid it yielded a cupric-oxide reducing body. This body could also be obtained from proteid by the direct action of sulphuric acid, as was to have been anticipated from the fact that glucosides are capable of being split up by acids. Dr. Pavy thought it certain that the discovery would have been made long ago but for one fact. This was that the peptone produced at the same time by the splitting of the proteid obscured the reaction of the copper test. The employment of Fischer's phenyl-hydrazine method overcame entirely this source of difficulty. This method applied, with proper precautions, after the splitting action of sulphuric acid had been exerted gave a copious precipitate of an osazone. The form of osazone crystal varied with the degree of action of the sulphuric acid, which could be varied by varying the strength of the acid used and the time for which it was permitted to operate. The less complete the action the more ball-like the form of the crystals and the less speedy was the precipitation. The different forms of crystal probably corre-



Fig. 2.—Osazone crystals from cleavage sugar obtained from egg albumen by direct action of sulphuric acid. × 400. (From a photomicrograph.)

sponded with different forms of sugar. The initial product cleaved off from proteid by the action of sulphuric acid, was more or less widely removed from glucose, but was carried towards it progressively by prolongation of the action. From this osazone the sugar could be separated again by a method devised by Fischer.

Carbo-hydrate Obtained by Ferment Action.

The carbo-hydrate could also be cleaved off from the proteid by ferment action: by the agency of proteolytic ferment action the same effect could be produced as by sulphuric acid, the carbo-hydrate liberated being in the form of a reducing sugar. Purified egg albumen, from which all trace of sugar had been removed, was found to yield under pepsin digestion, a product which gave characteristic crystals with phenylhydrazine.

These results were in full accord, it was pointed out, with the view held as correct on other grounds that in the process of digestion and assimilation the proteid of the food was

not absorbed as such, but that every animal formed its own proteid.

The sugar obtained either by chemical action or ferment action was not fermentable by yeast. This was true also of Landwehr's gummose, obtained from mucin, but, nevertheless, all physiological chemists admitted that gummose was a sugar. It should also be noted that neither gummose nor the sugar from proteid produced optical rotation.

The Part Played by the Proteids in Nutrition.

Dr. Pavy observed that proof had now been afforded of the incorporation of carbo-hydrates to form proteids, and of the possibility of dissociating the carbo-hydrates again. This dissociation of the carbo-hydrate—its cleavage off from the proteid molecule—must alter the view held of the part played by proteids in nutrition. Liebig's sharp line of demarcation between the flesh formers—the nitrogenous bodies—and the heat producers—the fats and carbohydrates—could no longer be absolutely maintained, since, if the carbo-hydrates were incorporated into proteids, as Dr. Pavy had shown they were, they must be ranked as flesh formers.

Conversion of Carbo-Hydates into Fat.

Further, carbo-hydrates were convertible into fat. This, again, was easily proved by the facts connected with the growth of yeast in Pasteur's liquid, and in that modification of it in which the tartrate was replaced by nitrate of ammonium. Yeast contained at least 1 to 2 per cent. of fat, and since it could grow in a solution containing no other source of carbon than a carbo-hydrate (sugar) it followed of necessity that fat could be produced from carbo-hydrate by protoplasmic action. Again, proof that fat was produced from carbo-hydrates was afforded by the phenomena observed in the ripening and growth of oily seeds. Before maturity such seeds contained starch and sugar, but no fat; if detached from the plant and preserved in moist air they underwent a process of ripening with the result that starch disappeared and was replaced by an oily fat. Further, to quote the words of Sachs: "There is not the slightest doubt that fat is formed in ripening seeds from carbo-hydrates, particularly starch, since this transformation takes place in the nearly ripe seed, even when taken out of the fruit, when no other material is available under the circumstances for the formation of fat."

Conclusions.

The conclusions reached so far were to be summed up in the following propositions: (1) Not only can carbo-hydrate matter be hydrated by ferment and chemical action, but when in these conditions of increased hydration can be transmuted by dehydration under the influence of protoplasmic action to substances having more complex molecules—amyloses: (2) in both the vegetable and animal kingdom carbo hydrates take part in the synthesis of proteids; and (3) carbo-hydrates are, under the influence of protoplasmic action, transformed into fat.

The Fallacy of the Glycogenic Doctrine.

The acceptance of this position involved the abandonment of the glycogenic doctrine. This doctrine taught that carbo-hydrate matter rendered soluble by hydration in the alimentary canal was carried by the portal vein to the liver, there to be in part stored, and eventually permitted to escape from the liver into the hepatic vein, from which it reached the general circulation, and through it the systemic capillaries, for disposal in the tissues in some unknown manner. The theory was supported by the following contentions: (1) That the liver is more saccharine than other organs; (2) that the blood leaving it contains more sugar than the portal veins; (3) that the blood on the venous side of the systemic capillaries contains less sugar than on the arterial side. All these statements had now been shown to be incorrect. It might indeed be affirmed not only that there was no support for the glycogenic theory, but that it was incompatible with the observed order of things in the animal economy.

The Amount of Sugar in Various Organs.

Practically the condition of the liver as to the amount of sugar it contained was the same as that of other organs of the body; indeed, the amount of sugar present in muscle might be in excess of that present in the liver.

Liver.

Amount and Nature of Sugar at the Moment of Death and at Subsequent Periods.

I. Amount and Nature of Sugar at the Moment of Death (Liver removed promptly and frozen).

	Sugar per 1,000 expressed as Glucose.		Cupric-Oxide reducing Power of the Sugar present in Relation to that of Glucose at 100.
	Before Sulphuric Acid.	After Sulphuric Acid.	
Rabbit A	1.601	2.142	75
,, B	2.344	3.248	72
,, C	1.946	2.828	69
,, D	1.664	2.400	69

II. Amount and Nature of Sugar in the Liver at the Moment of Death and at Subsequent Periods.

Rabbit E:			
Liver, frozen	2.000	2.260	88
,, a few minutes after death	12.940	12.940	Glucose.
,, next day	34.340	36.820	93
Rabbit F:			
Liver, frozen	0.980	1.060	92
,, a few minutes after death	11.550	12.130	95
,, next day	33.280	32.530	Glucose.

III. Amount and Nature of Sugar in Livers of Cold-Blooded Animals.

Reptile:			
Tortoise A	1.250	2.170	57
,, B	0.852	1.437	59
Amphibian:			
Frogs	1.316	1.724	76

Other Organs.

Amount and Nature of Sugar in Various Organs of the Body in Various Animals.

	Sugar per 1,000 expressed as Glucose.		Cupric-Oxide reducing Power of the Sugar present in Relation to that of Glucose at 100.
	Before Sulphuric Acid.	After Sulphuric Acid.	
I. Muscle.			
Dog—Tongue	2.458	3.727	66
Diaphragm	1.662	2.259	74
Heart	2.855	4.700	61
Hind leg	6.502	9.292	70
Tortoise	1.220	1.810	67
Frog	0.975	2.330	42
II. Spleen.			
Horse	1.320	1.684	81
Sheep	1.984	2.777	71
Dog (No. 1)	1.587	1.827	87
,, (No. 2)	2.032	2.777	73
III. Kidney.			
Horse	1.572	2.575	61
sheep	0.960	1.380	70
Dog	1.685	2.220	76
IV. Pancreas.			
Horse	1.463	2.688	54
Sheep	0.731	1.388	53
Dog	0.812	1.433	57
V. Lung.			
Horse	1.545	2.183	71
Dog	3.186	4.870	65
Fœtal pups	1.631	1.725	95
VI. Brain.			
Dog (a)	0.780	1.500	52
,, (b)	1.318	1.705	77
,, (c)	0.720	1.216	59

Sugar in reality existed as a normal constituent of all the tissues and organs of the body. It was true that in the liver, taken without any precautions to prevent *post mortem* change, glucose was the kind of sugar met with, but the sugar present at the moment of death, as was shown by the table, had a cupric-oxide reducing power below that of glucose, as was the case with the sugar present in the other structures of the body. In making all such estimations the nature as well as

the amount of the sugar present must be taken into account. The fluid obtained from the organ must be titrated before and after hydration with sulphuric acid. In making such an estimation the organ was extracted with alcohol, and the extract divided into two parts: the sugar in one half was estimated at once with the ammonio-cupric test; the other half was treated with sulphuric acid, and titrated again. If the second estimation gave a higher figure, it was a proof that the sugar in the organ was a sugar differing from glucose, and approaching nearer to maltose. Experiments with cold blooded animals, in whom *post-mortem* changes were slow, gave, as might be seen from the tables, exactly similar results, that is to say, the amount of sugar in the liver and other structures was practically the same.

At the conclusion of his lectures, Dr. Pavy demonstrated lantern slides of ozazones from various sources, among others from certain organs, from beef tea, and from peptonised meat.

REMARKS ON CIRRHOSIS OF THE LIVER, WITH ESPECIAL REFERENCE TO ITS OCCURRENCE IN CHILDREN, AND TO THE MODE OF DEATH IN CIRRHOSIS WITH JAUNDICE.

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I PROPOSE in this paper to narrate certain cases of cirrhosis of the liver in children, in which careful microscopical examinations were made, and to describe and discuss the pathological changes observed.

CASE I.—F. H., aged 7 months, was brought to the hospital as an outpatient in August, suffering from jaundice. The mother said the jaundice had first appeared about two weeks previously, and, except for this, the child seemed in good health. The child was deeply and universally jaundiced, but otherwise was fat and well nourished, looked lively, and was easily induced to crow and laugh. There was no sign of rachitis; the thoracic and abdominal viscera were normal; the pulse, respiration-rate, temperature, also normal. For the last few days there had been slight diarrhœa, with the passage of green, watery stools. There was no vomiting. The child had always been fed at the breast. A few days later the condition was about the same, except that the diarrhœa had ceased; the urine was found to contain much bile pigment and a little albumen. For the next two or three weeks the symptoms were unaltered, but towards the end of that time the child became rapidly worse. When brought up to the hospital, on September 3rd, an alarming change had taken place. The pulse was hardly to be felt, rate 140; respiration rate 40. There was great œdema of the legs, and marked general anasarca. No ascites. There were purpuric spots in various situations, the largest the size of a threepenny piece on the left anterior axillary fold, and others on the right thigh, on the abdomen, and left foot. The infant lay in a listless state, uttering a feeble cry from time to time; the anterior fontanelle was depressed; there had been almost entire suppression of urine during the previous 24 hours, and a little blood had been passed *per anum*. The mother now consented for the child to be admitted. When lying in bed the little patient became very restless, often cried as if in pain, and drew the legs up on the abdomen; when the mother came to her she took the breast eagerly. The edge of the liver could be felt to be rounded and to come a little way below the ribs. She passed into a semi-conscious state, in which she remained till death, on the following morning, September 4th, at 6 A.M. The respiration and pulse rates became quicker and quicker, the former being 60 to 80, and the latter 160 when last counted. The temperature began to rise at 6 P.M., and steadily rose till it reached 101.2° at death; previous to this there had been no elevation of temperature. A little urine was passed during the night, which contained albumen, bile pigment, and reacted readily to Pettenkofer's test for the bile acids. Careful questioning elicited no history of syphilis in the child's parents; there were no signs of it in either the mother or child, and the latter had never suffered from any symptoms of congenital syphilis. She had never had measles or scarlet fever. The home was a healthy one, and the parents were temperate.

At the necropsy the body was well nourished; there was extreme anasarca, with rather a waxy appearance of the skin; the conjunctivæ were deeply jaundiced, the skin less so except over the thorax; *rigor mortis* absent; lungs very bloodless but otherwise healthy; heart muscle substance very pale, but the valves were normal. On opening the abdomen it was found to contain a considerable quantity of dark fluid blood, which was also contained between the layers of the great omentum. In the hilum of the left kidney and in the perirenal connective tissue was a large extravasation of blood; that in the hilum had clotted, a dark clot closely surrounding the renal vein; at one spot the lining membrane of this vessel was dark and blood-stained, and looked softened. As far as I could ascertain this had been the seat of hæmorrhage around the kidneys; the blood did not come from the kidney itself. The aorta, the inferior vena cava, and their large branches were found to be healthy. The portal vessels were large, but I could not discover any other seat of origin for the hæmorrhage, which might, however, easily have been overlooked. The liver weighed 4⅛ ozs. and came about to lower border of ribs. Capsule appeared normal, surface smooth and pale. On section it was studded with granules or nodules, the granules being dirty yellow in colour, raised, consisting of the liver lobules, massed together in groups, and separated from each other by pale fibrous tissue which surrounded them. The portal vessels were dilated; the gall bladder was contracted and empty, the bile ducts not obstructed; there was no lardaceous change in the liver. The spleen (1 oz.) was congested and enlarged, and Malpighian bodies somewhat large and translucent; no iodine reaction was obtained. Each kidney weighed 2½ ozs. Capsules stripped easily, leaving a smooth, pale surface. On section the surface was smooth, the cortex was broad (1-3) in relation to medulla, pale yellow in colour, with a streaky appearance. Vasa recta rather full; pyramids pale. The boundary zone was deeply congested, contrasting with pallor of other parts of kidney. The kidneys showed a beautiful example of a more or less general cloudy swelling of the epithelium of the convoluted tubes; otherwise they were normal (Fig. 6). Except that the other organs were rather bloodless, the brain soft, and the dura mater adherent to the cranial bones, no other morbid changes were noted.

To return to the liver. The central parts and the right lobe contained less connective tissue, were softer and more brilliantly coloured; the peripheral parts, and the left lobe were paler and firmer, with more connective tissue. Sections were taken from all parts, and stained in eosin and logwood, methylene blue, picro-carmine, and osmic acid, fuchsine, and methylene blue. In all parts the ordinary structure of the liver and its arrangement into lobules could no longer be distinguished. In the softer parts the field of the microscope is occupied by a finely granular, almost homogeneous material, arranged in a more or less reticular fashion, amongst which lie the remains of the degenerated liver cells, containing pigment granules, minute oil droplets, and often vacuolated. In some fields there are very many, in others very few of these liver cells. In very thin sections the liver cells have almost entirely disappeared, probably partly dropped out in preparing the section, and the character of the intracellular connective tissue appears as a fine soft granular reticulated stroma (Fig. 2). In most parts there is scanty round-celled infiltration, and in a few minute hæmorrhages. In the firmer parts (left lobe and for a depth of about ½-inch under the capsule) the liver substance was composed of much more fully formed and firmly set connective tissue, with greater infiltration of round cells. In this tissue the remains of the hepatic cells were embedded. The capsule itself was quite thin and of healthy appearance. In the firmer connective tissue close to the older vessels can be seen a few newly formed blood capillaries. In most sections the connective tissue is richly nucleated; these nuclei are irregular in shape but mostly small, as if they had recently divided, and the discovery of a spot under the liver capsule, in which were a number of liver cells whose nuclei were actively dividing, suggests this source for the origin of some at least of the nuclei. Throughout the liver there is an overgrowth of firm connective tissue in the portal areas, and in parts trabeculæ extend from them into the liver. There are no newly formed bile canaliculi, the arteries, large and small, everywhere show signs of endarteritis; their lumen being choked by a structureless material containing very numerous large elongated nuclei with prominent nucleoli, evidently arising from proliferation of the endothelial cells. The internal coat appeared to be more or less disorganised, and the elastic membrane of Henle often broken up or unrecognisable. The muscular coat was thickened and its nuclei very abundant, the external coat normal. (See Figs. 3 and 5.) Similar changes were found in the bile ducts, medium sized and small, their lumen being in most cases choked by the products of the disintegrated and proliferated epithelium and their coats thickened. (Fig. 4.) The portal veins were dilated. There were neither micrococci nor crystals of leucin or tyrosin present.

The condition in the liver seemed to consist of an inflammatory exudation of the vessels, with a rapid formation of fine connective tissue throughout the organ, attended with atrophy of the liver cells; the process being more advanced and the connective tissue more completely developed in some parts than in others. The connective tissue appeared to take its origin from the connective tissue of the portal areas and to spread throughout the lobules between the rows of cells from the periphery to the centre; the process being, in short, an acute diffuse cirrhosis accompanied by a very rapid destruction of liver cells. A powerful agent in accomplishing the latter change would be the proliferation of the endothelium in the arteries, which by choking their lumen would

quickly and seriously diminish the supply of blood to the organ, and thus induce necrosis of the liver cells. No doubt the pressure of the newly formed connective tissue would also aid in the destruction of the cells. I do not think it likely that endarteritis was the primary change in the organ and the sole cause of the growth of connective tissue and of the cellular atrophy. Rather is it probable that the endarteritis and inflammation of the duct epithelium accompanied the acute cirrhotic process, and that both endarteritis and cirrhosis were due to a common cause, namely, to the intense irritative changes taking place in the liver during the rapid formation of connective tissue and destruction of cells. At the same time, the endarteritis must have secondarily helped to bring about the destruction of liver cells. Knowing the frequency with which endarteritis occurs in syphilitic new formations, have we to do here with syphilitic interstitial hepatitis? Almost the only argument in favour of syphilis being the cause of the condition lies in the presence of endarteritis. But the changes in the vessels in this case do not correspond with those of syphilitic endarteritis. In this disease there is a round-celled infiltration and growth of connective tissue in the internal coat of the arteries, while in my case there was no such change, but an active proliferation of the endothelium only.

If the figures are compared with the drawings of syphilitic endarteritis in Cornil and Ranvier,[1] or with those of Dr. Sharkey[2] in the *Pathological Transactions*, the difference between the two is at once apparent. The changes in the liver do not correspond to those described in published cases of congenital syphilis of the liver. Stress is always laid on the presence of miliary gummata, which are visible to the naked eye, and the growth in syphilitic disease shows no relation to the portal canals.[3] There were no syphilitic changes in the other viscera; no symptoms during life, though the child was aged 7 months; no history of syphilis in the parents; and I gather from records of such cases that where interstitial hepatitis forms one of the lesions of congenital syphilis the child generally dies in the first few weeks of life. Further, the epithelium of the biliary ducts showed precisely the same changes as the arterial endothelium, and was presumably due to the same cause. I cannot find, however, that such a lesion of the ducts has ever been described in congenital or acquired syphilis. Endarteritis is, finally, sometimes found in interstitial inflammations of organs.

On these grounds, then, I conclude that the morbid process in the liver was not due to syphilis, and that it was an acute diffused cirrhosis, accompanied by a rapid destruction of the liver cells, the latter being, at any rate in part, due to a widely-spread endarteritis.

The distinction from acute yellow atrophy lies in the presence of the connective tissue, in the changes in the vessels and ducts, and in the almost complete destruction of the liver cells, whereas in acute yellow atrophy some healthy lobules can generally be found. It is, perhaps, worth while incidentally to point out the relations of the change in this case with the conditions found in the parts of the liver affected with so-called "red atrophy" in those who die of acute yellow atrophy.

Wilks and Moxon say that here "an inflammatory condition is proved to exist not only by these pus-like cells in certain cases, but also by the thickening of the vascular stroma, which resembles the thickening of it in cirrhosis, differing from this chiefly in two points, (1) that it extends more uniformly throughout the lobules, instead of being limited to the tracks of the portal vein, as in cirrhosis: (2) in the destruction of the liver cells being greatly beyond what the pressure of this thickening will explain."[4] The morbid changes in this infant's liver seem to form a connecting link between acute atrophy on the one hand and an acute cirrhosis on the other. I have been able to find two similar cases, both in young children. Dr. Ormerod[5] reports on the liver of a child aged 6 months: "The hepatic cells appeared as scattered irregularly-shaped bodies, embedded in finely fibrillated connective tissue, the latter uniformly distributed, and not limited to area of portal veins. The liver was pale, firm, and smooth, and on section of a uniform lemon-yellow colour, with no trace of proper structure; it was enlarged, reaching half way between umbilicus and pubes. There was no history of syphilis or struma in parents. The child was suckled, and died of progressive asthenia, with enlargement of abdomen of two months' duration." The difference from my case appears to lie in the larger size of the liver and absence of arterial changes.

The other case described by Dr. Goodhart corresponds more closely.[6] A female child, aged 23 months, suffered from jaundice for one week; after a few days fever and vomiting came on, and she died in convulsions with a temperature of 102° F. on the thirteenth day from the onset of the jaundice. The child was well nourished, the liver extended half way to the umbilicus. There was no syphilis. The liver weighed 14 ozs., was large, hard, dirty yellow, or purple; liver cells fatty, cystic duct obliterated, others pervious. Microscopically the "liver sections were crowded with nuclei which studded a small-meshed connective tissue. The hepatic cells were clamped in masses between this new growth, and were greatly diminished in number; many of them contained fat globules, but their nuclei were for the most part distinct, though they often appeared increased in number; no connection could be traced between them and the nucleated tissues outside them. The lobules were affected throughout with remarkable uniformity from periphery to centre, although in some parts there was some slight excess of growth in the portal area, but the smaller hepatic ducts .....were conspicuously absent." This case differs from that of F. H., chiefly in the greater destruction of the liver cells in the latter; otherwise they closely correspond.

Dr. Goodhart thinks that the changes must be regarded as cirrhotic rather then atrophic. Both these cases are distinguished from mine by the absence of lesions of the lining membranes of the arteries and ducts, but the general changes throughout the liver and the clinical course and symptoms of Dr. Goodhart's case show a close resemblance.

I should be inclined to consider the early occurrence of jaundice in the above case partly to the obliteration of the minute biliary canaliculi by the newly-formed connective tissue, partly to the proliferation of the epithelium of the ducts.

The character of the extensive destructive changes in the liver in my case suggests the action of some intense poison, either organised or chemical. In the sections stained with methyl blue, fuchsin, etc., no micrococci or other organisms were observed.

Case II.—A. J. C., aged 12, was admitted into the Bristol General Hospital on June 8th. The history given by his mother was that, twelve days before, the boy had had some febrile symptoms, with pain in the head and sore throat, and on this account he stayed in bed for two days; after this he got up and went about his ordinary work. He soon noticed, however, that his abdomen, feet, and legs were beginning to swell; the swelling was most marked in the abdomen and never affected the thighs. There was no rash with the sore throat. He had always enjoyed good health until about a month before admission, since which time he had suffered from pains in the abdomen, with occasional attacks of nausea and retching. He had always been a teetotaller. His parents were healthy and temperate; there was no syphilitic history. The abdominal swelling rapidly increased and he came to the hospital. The only symptoms complained of on admission besides the swelling of the legs and abdomen were a little pain in the head and some abdominal tenderness.

On admission, the heart and lungs were normal: the abdomen was tense, the umbilicus protruded, but the surface veins were not prominent. There was shifting dulness in the flanks and a wave of fluctuation. There was some tenderness in the right hypochondriac region, and on "dipping for the liver," its edge could be felt to come below the ribs. The legs, feet, and ankles were œdematous, but there was no œdema in any part of the body above the knees. There was no jaundice at this time. The urine was acid, and contained a good deal of bile pigment but no albumen. At first it was very scanty, and for twenty hours he passed none at all.

Two days after admission it was seen that his skin was beginning to peel about the chest, face, neck, arms, and thighs, and he was consequently placed in an isolated ward. The desquamation was of a fine branny character, and not like that following scarlet fever. There he went on very well at first, except that on June 11th there was a slight rise of temperature; it came down at once, however, and did not rise subsequently. The bowels were freely acted on by saline aperients; the quantity of urine became normal and was non-albuminous, and the swelling of the abdomen decreased. After a few days' rest in bed the œdema of the lower extremities entirely disappeared. After the slight rise of temperature on June 11th jaundice was first noticed. The boy grew steadily worse after the first few days. The ascites again increased, but not sufficiently to form an indication for paracentesis of the abdomen until a few days before his death, when he was obviously too ill for it to be done. The jaundice steadily and gradually increased in intensity. The œdema of the legs remained slight or absent.

For the last five days he was practically unconscious and was delirious; he seemed in a great deal of pain over the abdomen, and shouted "Nurse" from time to time. There was diarrhœa during this time, and

he passed all his water into the bed. The last two days of his life he was completely unconscious and silent. The urine contained a little albumen before the onset of coma; it was scanty and contained much bile pigment. During the latter part of his life none could be obtained for examination.

Necropsy 22½ hours after death. The body was deeply jaundiced, all the thoracic and abdominal organs being bile stained. The epidermis peeled off very easily. With the exception of some congestion of posterior borders and bases the lungs were normal. At the root of the lungs there were a few enlarged bronchial glands, one or two being caseous and one or two converted into hard white calcareous matter. Each pleura contained about 6 ounces of bile-stained serum. The cavities of the heart were dilated and contained much white and dark clot; its walls were flabby, but otherwise it was healthy.

The abdomen was prominent, especially at the umbilicus. On opening the abdominal cavity it contained about 8 pints of bile-stained serum. The liver did not come into view, but lay concealed beneath the ribs; it was small, weighing 26 ounces. The shape was normal, borders sharp, not prolonged into a thin edge or rim. Its surface was studded over with numerous rounded, raised, firm nodules of a dull yellowish green colour. On section it was finely nodular or granular; the granules were of varying size, round, raised, formed of larger or smaller aggregations of liver cells. For the most part they were of a bright ochre colour, but some were green, and these were especially numerous in the left lobe. Between these granules was a smooth, firm, pale, somewhat translucent-looking tissue in places of a delicate pink colour. General consistence of liver tough. The portal veins were distended. The gall-bladder was full of light-coloured bile. The bile ducts were normal and patent. The spleen weighed 11 ounces, and was large, dark, and soft. Kidneys, right, 3½ ounces, left, 4½ ounces; smooth on surface and on section; cortex was deeply congested in places, but as a whole the kidneys were pale; the cortex bore the normal relation to the medulla, and there were no other naked-eye changes. The mucous membrane of the stomach showed two or three large ecchymosed patches. No varices of œsophageal veins. Other organs all normal, and there was no evidence of tubercle or syphilis.

Under the microscope the liver showed much newly-formed connective tissue in wide tracts which surrounded and enclosed lobules of greater or smaller size, and invaded the lobules themselves from within outwards. Speaking generally, the connective tissue was of loose texture, richly enucleated, and made up of fine fibres and branching cells. It contained numerous thin-walled vessels, but no newly-formed biliary canaliculi were observed. In parts the connective tissue was firmer and more closely fibrillated; this was especially the case in the portal areas; the branches of the portal vein were as a rule flattened as if compressed by the growth.

Where the process was least advanced the liver lobules were large and the cells fairly healthy, but even these lobules were invaded by fine connective tissue running from the periphery to the centre between the cells, which latter contained a little fat. Other lobules showed more infiltrating connective tissue and greater changes in the cells, most marked at the periphery. In parts more altered the lobules were almost entirely replaced by connective tissue, consisting of fine fibrils and branching cells; in this small, shapeless, granular, or pigmented liver cells, destroyed by pressure, were still recognisable.

Where the changes were most advanced the proper liver structure was replaced by connective tissue containing a few isolated, degenerated, hepatic cells. No conversion of liver into connective tissue cells was traced. In parts of the liver where the morbid change was greatest, when the remains of the cells were removed, a fine reticular connective tissue stroma was seen to run through it. Bile ducts normal. No leucin or tyrosin crystals. In kidneys the glomeruli were opaque, and in a few cases some increase of nuclei of pavement epithelium. The cells of the convoluted, straight, and spiral tubes of cortex were swollen, finely granular, and encroached on the lumen. This change, though widely spread, was not universal.

The pathological changes in this liver, as in the first case, consisted of a new formation of connective tissue, most marked along the course of the portal vessels, but also extending through the lobules themselves throughout the organ, and accompanied by more or less degeneration of the hepatic cells. The chief points of difference from the first case are (1) that the liver cells were not so extensively nor so completely destroyed, there being lobules which presented a fairly healthy appearance, briefly a less degree of destruction of hepatic cells; (2) that the newly-formed connective tissue was firmer and more distinctly fibrous, and that there was a greater development of it in the portal areas; and (3) absence of endarteritis and proliferation of epithelium of bile ducts.

The development of the new tissue in this case might be considered to be more chronic, that is, more gradually produced, and the cell degeneration also more gradual and more partial in distribution. The more chronic development of the disease than in the first case would entail a greater formation of connective tissue, and less destruction of the hepatic cells. In the first patient death, probably arising from the rapid destruction of the liver cells, brought about as suggested above by the presence of endarteritis, occurred early. Consequently there was not sufficient time for the formation of connective tissue to the extent found in the second case. The minute changes in the liver of this boy differ then from the first case and from cases of acute atrophy of liver in the large amount of connective tissue formed, and from the so-called "biliary" or hypertrophic cirrhosis in the greater destruction of liver cells and in the absence of the new formation of biliary canaliculi. Too much stress must not be laid on this last point, however, as it has been shown that it is not typical of any form of cirrhosis."

The presence of ascites, a rare symptom in such cases, in the later stages of this patient's illness can be explained by the slow course of the disease allowing the newly-formed connective tissue time to contract.

Undoubtedly ordinary atrophic cirrhosis occurs occasionally in children just as in adults from the abuse of alcohol. In addition a diffused form of cirrhosis or interstitial hepatitis with miliary gummata is found as a consequence of congenital syphilis, and a form of cirrhosis, generally of partial distribution, is sometimes found in connection with tubercle. Putting aside altogether cases of this kind, there is evidence that cirrhosis may occur in infancy and childhood independently of the above causes or of any well-defined etiological factor. On this question Henoch[3] says: "I have, however, often observed in children interstitial hepatitis with increase in size and a granular surface of the organ, the so-called hypertrophic cirrhosis.....Much more common are the cases in which clinical symptoms are either quite or nearly quite absent during life, and it is not till after death that we discover hypertrophy of the interstitial connective tissue along with fatty degeneration of the liver cells." He also states that most frequently interstitial hepatitis is due to hereditary syphilis, and in some to tuberculosis, but that in a few cases the cause of the interstitial hepatitis remains unknown, and he regards the opinion expressed by Barthélemy, that these cases are due to syphilis tarda, as quite unproved.

In my second case the desquamation of the skin noted was rather like that following measles than scarlet fever; the mother emphatically denied the existence of a rash during the preceding slight attack of fever. Whatever the illness was, it could not have acted as the cause of the liver changes, for these were obviously of very much longer standing. It may, however, have hastened the fatal termination by interfering with the renal functions. In both cases the influence of syphilis and alcohol could be excluded, nor was there any sign of tubercle in any organ, with the exception of the old caseated glands at the root of the lung in the boy's case. We must, I think, conclude that cirrhosis of the liver may occur in children from causes at present unknown. On the analogy of alcoholic cirrhosis it would seem most likely that some poison—of the nature, perhaps, of a ptomaine—is formed by the occurrence of abnormal changes during the process of intestinal digestion, is carried to the liver, acts as a direct irritant to it, inducing interstitial hepatitis with destruction of liver cells. In connection with this it may be stated that the infant's mother had not been taking any medicine, so that the infant could not have been affected through the milk by any means of this kind.

More observations are required to show what is the clinical course and what are the most frequent morbid changes in these cases of cirrhosis in children. Possibly their course is more acute than in the adult, and the cirrhotic process is more widely diffused through the liver and accompanied earlier by degeneration of the hepatic cells.

With the above cases I will narrate the following case of atrophic cirrhosis, which ran a very unusual course:

CASE III.—A. J., aged 46, a labourer, had never had syphilis nor any bad illness until the present one began, but up to this time had been in the habit of drinking 10 to 12 pints of beer daily. He first began to feel weak and to have a yellow tinge about the conjunctivæ in September, 1886. Three months later marked jaundice came on rather suddenly, and he left off work. He was admitted into the Bristol General Hospital, under

Dr. Markham Skerritt, in February, 1887. The notes state that there was at this time marked jaundice; no ascites; liver enlarged, dulness in nipple line beginning at fifth rib above and extending to about 2 inches above the umbilicus, where its lower edge could be felt to be rounded, hard, and smooth. No albumen, but bile pigment, in urine. Spleen not stated to be enlarged. He had severe attacks of epistaxis; they ceased, however, and he remained well except for persistent jaundice until August, 1889, when he was again admitted, and I first saw him. He was a well-nourished deeply-jaundiced man. Temperature normal; pulse rate 66; skin moist; a moderate degree of pulmonary emphysema and a blowing murmur at the apex, conducted into axilla; no ascites. Liver dulness began above at sixth rib, and its edge could be felt a little more than half an inch below the ribs; the surface was rough. Spleen considerably enlarged. Urine acid, 1015, no albumen, much bile pigment. He had suffered from frequent attacks of epistaxis, and a few times from hæmatemesis. He had had a mild febrile attack, with pains in left side of abdomen, after which the jaundice deepened. Besides jaundice and hæmorrhage, he suffered from heavy sweats, nausea, and constant disagreeable bitter taste. He went out slightly improved. During the next twelve months he remained at home, growing steadily weaker, and occasionally taking to bed for two or three days; jaundice persisted.

He was admitted on September 16th, 1890, with violent pains in the abdomen, diarrhœa, and vomiting. He had now lost flesh, looked much worse than the year before, and the jaundice had deepened in tint. The attacks of epistaxis had continued, and he had gradually become deaf. No ascites. Liver dulness in nipple line began at the sixth rib above and extended downwards only 2¾ inches. Spleen enlarged. Urine 1020, no albumen, acid; quantity in twenty-four hours 58 ounces; urea 1½ per cent. Pulse rate 78 to 84. Temperature normal. He continually expectorated small quantities of blood-stained sputum, and there was occasional epistaxis. On September 22nd he passed a large quantity of blood from the bowels. On September 26th the quantity of urine diminished to 35 to 40 ounces daily; it contained no albumen nor deposit. In the beginning of October he had a severe attack of diarrhœa and vomiting, with melæna. The quantity of urine diminished to 30 ounces. He grew rapidly worse, and died on October 9th. He was dull and heavy, being roused with difficulty, and was occasionally delirious for three or four days before his death, which took place in coma, the coma gradually deepening and the pulse and respiration failing. The temperature was 100° just before death. There were no convulsions.

At the necropsy, on October 10th, the body was deeply jaundiced; no cutaneous hæmorrhages; the diaphragm lay at the level of the fifth rib on the right, of the eighth on the left side. The upper lobes of the lungs were emphysematous, the lower œdematous and congested. The segments of the mitral valve were thickened and its aperture dilated. The liver weighed 40 ounces, and came nearly to lower border of ribs; its surface was granular. On section it was very tough, hard and nodular, the nodules being raised, varying in size, the larger a bright orange, the smaller a dull yellow in colour. These nodules evidently corresponded to groups of liver cells, and were separated from each other by pale connective tissue. The section was also thickly studded with hæmorrhagic points, the size of a pin's head or larger. The branches of the portal and hepatic veins in the liver were about the normal size. Those of the portal vein traced from its fissure were also of natural size. The gall bladder contained a little dark bile; bile ducts patent. The spleen weighed 19½ ounces, was dark in colour, and soft. The right kidney weighed 8 ounces, the left 8½ ounces. They were smooth on surface and on section; the capsule stripped easily; the cortex bore the normal relation to the medulla; the cortical epithelium had an opaque appearance and was of a deep red colour. The mucous membrane of the stomach was thin and atrophic, and showed numerous small hæmorrhagic areas, and in one situation small pale spots, probably due to degeneration of epithelium. Intestines and other organs normal.

Microscopical examination showed that the liver presented the ordinary changes of atrophic cirrhosis. The connective tissue formed was firm, fibrillated, with but few cellular or nuclear elements; it was interlobular, and did not penetrate within the lobules. These latter showed much diversity in degree of morbid change; some were almost healthy, except that the peripheral cells contained a little fat; in others the cells were highly granular, fatty, or actively proliferating, and in still others there was complete atrophy, apparently from pressure. There was in some places formation of minute bile ducts in the interlobular connective tissue, but they were not at all numerous, not approaching the number very commonly seen in cirrhotic livers. In a few places there was proliferation of the epithelium of the medium-sized bile ducts. The small hæmorrhagic points noted above corresponded to minute extravasations of blood corpuscles in the interlobular connective tissue. In the kidneys the cortical vessels were intensely injected, the epithelium of the convoluted tubes swollen and granular, and their nuclei obscured; in some tubes there were epithelial casts. Glomeruli injected and opaque. No crystals of leucin or tyrosin were found in the liver.

The persistence of jaundice for such a long time, the frequency of hæmorrhages from the mucous membranes, the absence of ascites, the enlargement of the liver in the early stages of the illness, and its contraction in the later led me to the diagnosis of hypertrophic or biliary cirrhosis running a protracted course with progressive decrease in the size of the liver. It is said that cases of hypertrophic cirrhosis which have lasted a long time have presented a contracted liver, and Strümpell states that in such cases the characteristic appearances in the liver disappear, and it cannot be distinguished from the liver of alcoholic cirrhosis. But in these cases the much more general distribution of the connective tissue growth in "biliary" cirrhosis, extending as it does right through the lobules from the periphery to the centre will still afford a ground of distinction from alcoholic cirrhosis, as in a case of contracted cirrhotic liver which I have previously described.[1] Both the naked-eye and the microscopical appearances, however, were those of an ordinary alcoholic or atrophic cirrhosis, and afforded no explanation of the unusual clinical course, and in particular of the absence of ascites. The hæmorrhages may be attributed to alterations in the composition of the blood consequent upon the long continued jaundice. The long duration of symptoms is also unusual, as cirrhosis, with jaundice, generally runs a more rapid course than cirrhosis without this complication. The absence of new formation of biliary canaliculi does not explain the occurrence of jaundice, for this has been a prominent symptom in cases where they have occurred abundantly.

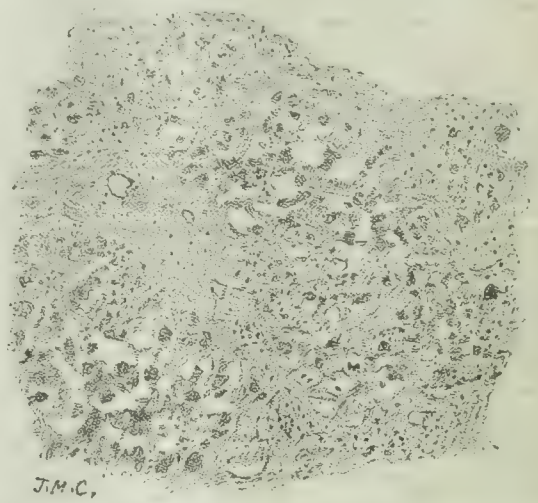


Fig. 1.—To show the general appearance of the liver in Case 1; increase of connective tissue in portal area; invasion of lobules by intracellular new connective tissue; atrophy of liver cells. × A Zeiss, oc. 3.

In all three cases the mode of death presents considerable resemblance. This termination with delirium, coma, or convulsions has long been known to occur in cirrhosis, particularly in those cases which are attended with jaundice. Frerichs's view of the cause of these symptoms seems to be the most satisfactory one, namely, that they are due to the injurious influence of those substances which, under ordinary circumstances, are converted by the liver into bile, but which in such cases accumulate in the blood and in the tissues. Further, the liver fails to perform its due share in the work of disassimilation, in the manufacture of the nitrogenous waste material into a form suited for renal elimination, and its "protective" action in destroying poisonous material absorbed from the intestines, is also probably in abeyance.

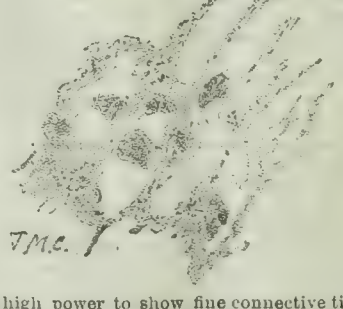


Fig. 2.—Under high power to show fine connective tissue, stroma of lobules, the cells being mostly removed. × D Zeiss, oc. 3.

In the above three cases, with symptoms in some respects dissimilar, there is common to all a diseased condition of the renal cortex. In the first case the morbid change consists in cloudy swelling of the epithelium of the convoluted

tubes; an acute change probably excited by the rapidity with which the disorganisation of the liver was taking place. In the second a similar change, but of more advanced type, had occurred, and it is at least very likely that the slight attack of fever of doubtful nature from which this patient suffered three weeks before his death caused rapid changes in a kidney already irritated by abnormal excrementitious products reaching it on account of the cirrhosis of the liver, and may thus have directly induced the final phenomena of the disease, which ended in speedy death. In the third patient acute congestion of the cortex supervened as the culminating change on older inflammatory changes produced by the irritation of the long-continued jaundice.

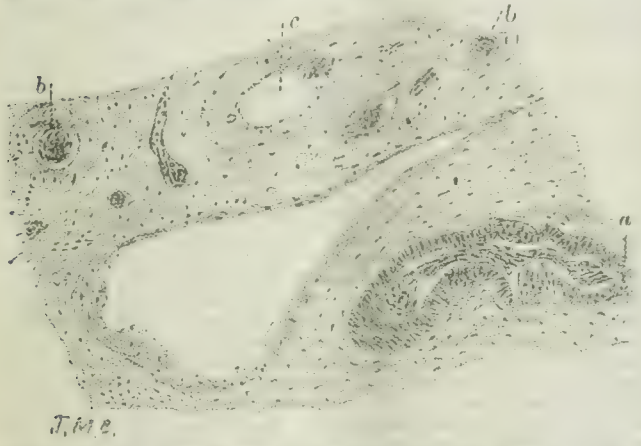


Fig. 3.—Case 1; a portal area; increase of connective tissue; endarteritis; *a*, artery cut obliquely, its lumen choked and muscular coat thickened; *b*, *b*, other arteries; *c*, hepatic duct. × A Zeiss, oc. 3.

In each case the pathological change in the kidneys must, I think, be regarded as the precursor of the fatal termination, and probably the direct cause of it. The grave prognostic import of renal disease in cases of jaundice has for a long time been recognised; provided the kidneys act well, the symptom of jaundice is *per se* not a very serious one. If we take catarrhal jaundice as the best example because the cause producing it is one easily capable of removal, it is not a very grave affection, but if there is at the same time renal disease, this slight ailment may at any time take on the threatening symptoms of the so-called pernicious jaundice or icterus gravis.

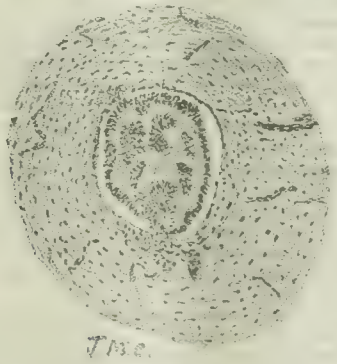


Fig. 4.—Case 1; section of bile duct, its lumen is occupied by a mass of desquamated epithelial cells the nuclei of which have enormously increased in number. × D Zeiss, oc. 3.

Professor Bouchard[10] has some interesting observations on this head. He shows that the most toxic components of the bile are the colouring matters—corresponding to one-third of its total toxicity—and the bile salts. He regards the symptoms of jaundice resulting from the staining of the connective tissue as an effort on the part of Nature to shield the higher tissues of the organism from damage by the retained bile. This is accomplished by the fixing of the poisonous colouring matters by the indifferent connective tissues. He further shows that the maintenance of the renal function is all-important. So long as the kidneys act well they are able, in jaundice, constantly to excrete a portion of the biliary salts and of the colouring matters, and so remove them from the body. If the kidneys fail, then there is the gravest danger, for the noxious material is retained in the blood.

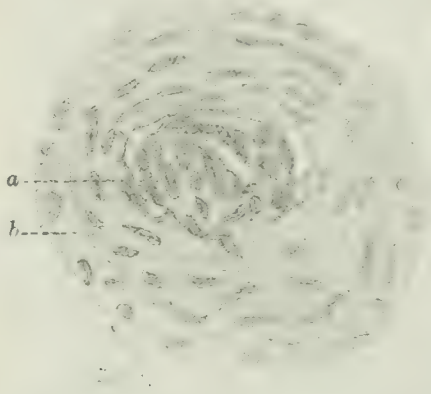


Fig. 5.—Case 1; Endarteritis: *a*, lumen of small artery obstructed by inflammatory products from internal coat; *b*, thickening of middle coat. × $\frac{1}{12}$ oil immersion, oc. 3.

The bile salts have a tendency to irritate both the hepatic cells and the epithelium of the renal cortex. In persistent jaundice the renal cells may remain unaffected, and discharge their functions for a long time. The liver cells are first involved; their functions, other than bile-forming, are after a time interfered with, that is to say, they no longer efficiently convert the nitrogenous and other waste matters reaching the liver from the tissues into the final forms that are suited for elimination by the kidneys. The products of dissimilation, imperfectly elaborated, will accumulate in the circulation, and cause irritation of the renal epithelium in attempts at elimination of them. These morbid changes once started continually increase, and lead to the retention within the body of a constantly increasing amount of effete and hurtful matter.

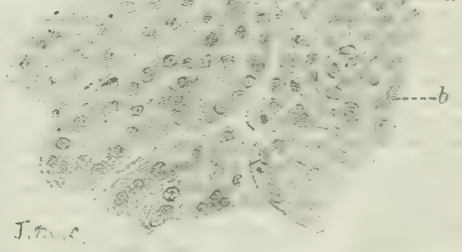


Fig. 6.—Case 1; cloudy swelling of epithelium of convoluted tubes of the kidney, lumen absent in most; outlines of cells and nuclei obscured; *a*, protoplasm of cells highly granular in this tube, nuclei proliferated. × D Zeiss, oc. 3.

As a further factor tending to add still more to the quantity of retained excrementitious material, the retained bile salts will gradually injure the renal cells. In those cases where—as in the first two which form the subject of this paper—there is, besides jaundice, a rapid and extensive destruction of the hepatic cells, these processes will take place all the more rapidly. Finally, we reach the stage in which the kidneys can no longer meet the excessive labour thrown upon them; they become the seat of inflammatory changes, and, to the failure of the liver, failure of the kidneys and uræmia, with their consequences, are added.

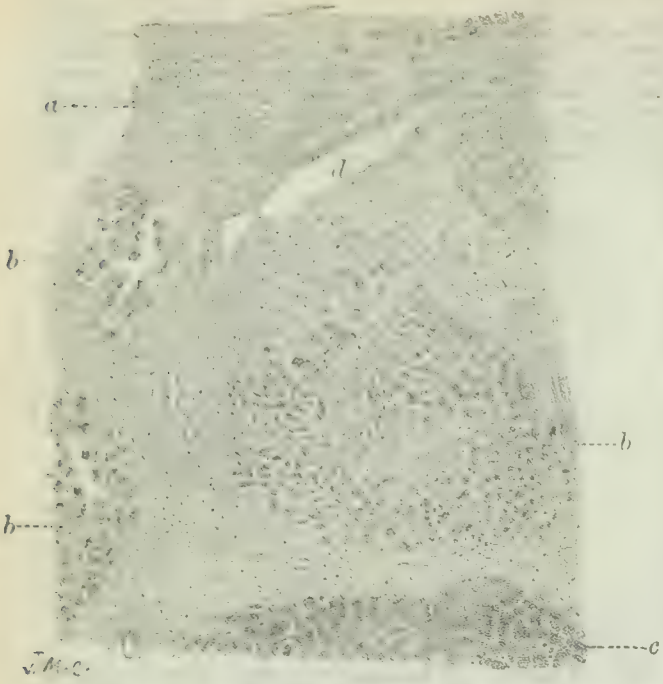


Fig. 7.—Case II: biliary cirrhosis; *a*, remains of lobule replaced by connective tissue; *b*, lobules infiltrated with fine connective tissue and cells becoming atrophied; *c*, more healthy lobule, but even in this one there is fine connective tissue between the cells; *d*, vessel compressed by contracting new growth. A Zeiss oc. 3.

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[1] American Edition. [2] Vol. xxxviii, p. 121. [3] See again Cornil and Ranvier, p. 515; and cases by Dr. Symonds (*Path. Soc. Trans.*, vol. xxxvii), and Dr. Penrose; *ibid.*, vol. xxxix. [4] Wilks and Moxon, *Lectures on Pathological Anatomy*, Third Edition. [5] *Transactions of Pathological Society*, vol. xl, p. 137. [6] *Atlas of Pathology*, New Syd. Soc., Fasc. iv, pp. 18, 19. [7] Saundby, *Path. Soc. Trans.*, vol. xxx. [8] *Lectures on Children's Diseases*, New Syd. Soc. Trans., vol. ii, p. 114. [9] BRITISH MEDICAL JOURNAL, 1890, vol. i, p. 1090. [10] *Leçons sur les auto-intoxications dans les maladies.*

HAGAR'S WELL AT MECCA.

By E. H. HANKIN,

Fellow of St. John's College, Cambridge; Chemical Examiner to the North-West Provinces and Oude, India.

[From the Government Laboratory, Agra.]

IN view of the widespread attention that has been conferred on Mr. Ernest Hart's recent articles on waterborne cholera, and the great importance of the Meccan infection as a source of the extension of cholera, I think the following analysis of water from the holy well at Mecca may be of interest to the readers of the BRITISH MEDICAL JOURNAL.

I was enabled to make this analysis by the kindness of Dr. George Ranking, the well-known Arabic scholar, who placed a sample of this water at my disposal. It had been given him by a "hadji" of repute and position, who brought it himself from Mecca. The water was contained in a vessel made of tin known as a "dibia," and was hermetically soldered up. The vessel was shaped like a watch, and held about 200 c.c. of water. Owing to the small quantity of the water at my disposal, the analysis was only carried out with difficulty, and the results are no doubt somewhat inaccurate. They are as follows:—

Total solids in grains per gallon	259
Chlorine grains per gallon	51.21
Free ammonia parts per million	0.93
Albuminoid ammonia parts per million	0.45

The figures for ammonia are no doubt without value owing to the very good reason that at least eight months elapsed between the collection of the sample and its coming into my possession. The amount of chlorides is not necessarily an indication of pollution, as it would generally be regarded in England. In India, at all events, chlorides in well water are I believe more often an indication of the presence of saline matter in the soil than of contamination with organic matter. The quantity of total solids is, however, far greater than I have ever found in any well water reputed to be fit for potable purposes.

I learn that it is a universal custom for the pilgrims to bring away with them these tin vessels, or dibias, of Zem-Zem water. Rich pilgrims may bring away one or two hundred of these dibias to distribute to their friends on their return to their native country. Poor pilgrims are, however, content with one or two. The Zem-Zem water is put into the dibias by the Mecca traders during the time of the year when no, or few, pilgrims are present: and it is very probable that the Zem-Zem water is often diluted, as this does not diminish its sanctity, and the supply of water in the well is by no means equal to the demand.

RESEARCHES ON VACCINIA AND VARIOLA.

By M. ARMAND RUFFER, M.D.,

AND

H. G. PLIMMER, M.R.C.S.

THE literature of research which has appeared during the last ten years contains numerous references to the etiology of vaccinia and variola. Many observers have thought that the two diseases were caused by a micro-organism belonging to the vegetable kingdom, whilst others—Renault, Pfeiffer, Van der Loeff, Guarnieri, Monti, Ruffer and Plimmer—have described protozoa in vaccinia and variola pustules. It is not to be denied, however, that many of these so-called protozoa were nothing but anatomical elements more and less altered, and Renault was the first to show that the epithelium cells, covering the vaccinia and variola pustules, often contained a peculiar body which he regarded as parasitic, whilst Guarnieri demonstrated the fact that, when vaccinia was inoculated, this body again appeared in the fresh pustules. Thus, on inoculating vaccinia on the cornea, these protozoa appeared in the epithelium cells covering the cornea. Monti, as well as Ruffer and Plimmer, confirmed some of Guarnieri's results, and at the International Medical Congress at Rome one of us compared some of our specimens with some kindly exhibited by Professors Guarnieri and Monti, and established the identity of the bodies described as protozoa by Guarnieri, Monti, and ourselves.

During the last year we have studied a fair number of vaccinia pustules taken from man, the cow, monkey, and rabbit; and in all, provided the disease was not too far advanced, we found this peculiar parasitic structure. The fresh tissue was placed in a saturated solution of sublimate and then hardened in 30 per cent., 60 per cent., 90 per cent., and absolute alcohol. After embedding in paraffin, the sections were passed through tincture of iodine, in order to remove the excess of sublimate, and stained with hæmatoxylin or with carmine and lichtgrün, or with the Biondi-Ehrlich mixture, or with some other staining reagents.

The parasite in question is a small round body, which sometimes appears to have a more darkly-staining centre. It is about four times the size of an ordinary staphylococcus and generally lies in a clear vacuole in the protoplasm of the epithelial cell. It occasionally indents the nucleus, though we have never seen it enclosed in the latter structure. It appears to multiply by simple division into two or multiples of two, but we have not yet satisfied ourselves as to the formation of spores.

When examined fresh it shows slight amœboid movements, and may be observed in tissues which have been kept for several days or weeks, even though no antiseptic precautions have been taken.

It stains easily with both nuclear and protoplasmic dyes, but it appears to have a preference for the latter class, as it retains them after the nuclei of the cells of the body have yielded them to alcohol or other reagents. With Biondi's reagent, for instance, it stains red with the acid fuchsine, often exhibiting a central green part. Carmine stains it intensely, but if lichtgrün or indulin be used as a counter stain it retains these stains after all traces of them have left the

nuclei of the cells, and in this way a very beautiful differential coloration is obtained.

When vaccinia is inoculated on the skin, these parasitic bodies occur in the stratum of Malpighi, and after a few days are found at the edge of the pustule only, though they are probably present in the interior of the pustule also. Owing to the number of leucocytes and degenerated epithelium cells which obscure the picture in that situation, they are extremely difficult to recognise with certainty, whereas they stand out with extreme clearness in the protoplasm of the cell. The epithelium cells in their neighbourhood not only undergo marked degenerative changes, but also invade the connective tissue below, the whole picture greatly resembling some of the early stages of cancer. The epithelium cells, moreover, present certain inflammatory alterations which are identical with those already described by others and ourselves in cancer. One may see, for instance, all the cell inclusions, vacuolisations, etc., so often present in cancer, and which have been erroneously described as parasites by so many observers. And it may be added that appearances similar to these may be experimentally produced in epithelium cells without the intervention of any living micro-organism whatever.

We have found the same organisms in sections of skin of small-pox patients and in the pustules of the larynx and trachea. Owing to want of material, however, we have not studied them in the fresh epithelium cells of such patients, as this will require a stay in a small-pox hospital. In both diseases the leucocytes may be seen to penetrate into the epithelium cells and to take these parasitic bodies into their interior.

No conclusion can be drawn from our observations at present, and we simply wish to draw attention to the fact that in all cases of vaccinia and variola in man and in three distinct species of animals, the same parasite is met with in all; and that it differs in many particulars from the parasite of cancer.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

RHEUMATIC PERITYPHLITIS AND GOUT OF THE INTESTINES.

I SHOULD like to point out, with reference to Dr. Burney Yeo's very interesting case of rheumatic perityphlitis,[1] that I have recorded several very similar cases under the name of gout of the intestines,[2] and have drawn special attention to the fact that they at once clear up under salicylate of soda. Further, my experience differs very greatly from that of the authors quoted by Dr. Yeo, as it has led me to believe that gouty perityphlitis is extremely common, or, in other words, that nearly all perityphlitis owns this origin, and that if all cases were at once treated by salicylates further troubles requiring surgical procedures would be rare.

Since I first wrote on the subject I have heard from many people of similar cases, and have seen several more myself. I have also recorded in my book a case in which salicylates cured completely in a few days a peritonitis which had been under other treatment for months with the only result that a morphine habit was added.

I have also extended the same reasoning to explain inflammations of other fibrous structures in the abdomen and pelvis, as well as to lead colic and other forms of colic, all of which react in the same way to salicylates; and in a case of pelvic cellulitis, recently under the care of one of my colleagues at the Royal Hospital for Children and Women, salicylates produced a change in the temperature chart almost identical with that in Dr. Yeo's case.

Brook Street, W. ALEXANDER HAIG.

[1] BRITISH MEDICAL JOURNAL, June 16th.
[2] *Practitioner*, January, 1893; and *Uric Acid*, 2nd Edition, 1894.

A PASTEUR Institute was opened at Tunis on June 19th, by Dr. Loir, a nephew of M. Pasteur.

AN OVARIAN TUMOUR GROWING WITH GREAT RAPIDITY.

IT is well known that tumours of the ovary sometimes grow with great rapidity, but it is seldom that increase is so rapid as was the case in a patient seen with Dr. Simpson at Tunbridge Wells on February 10th. The patient was aged 54, and, although she had not been in good health for about a year, she had noticed that the abdomen was enlarging for only two or three months. Dr. Simpson was sent for partly on account of the swelling, but principally because there was great discomfort and abdominal pain. An ovarian tumour was diagnosed, and a few days afterwards I saw the case in consultation. On that day the tumour, composed chiefly of a single cyst, extended into the abdomen to within 1 inch of the umbilicus. On vaginal examination the uterus was found to be fairly movable and in its normal position, the tumour being felt posteriorly.

The operation was performed as soon as it was convenient to the patient, on February 25th, fifteen days after the examination. Instead of barely reaching to the umbilicus, the tumour now filled the abdomen, raising the ribs on both sides. After separating parietal adhesions from the whole of the anterior surface and emptying the large cyst with the trocar, it was found that the right broad ligament was extensively opened up, and that the uterus had been drawn entirely out of the pelvis, being closely incorporated with the left side of the tumour. The enucleation was easily and rapidly effected, and a drainage tube was left in. Convalescence could not have been more easy, and Dr. Simpson removed the drainage tube at the end of forty-eight hours. The tumour weighed with its contents 27 lbs. If 5 lbs. be deducted—and this is a liberal allowance for the tumour as first seen—we find that the increase in fifteen days was 22 lbs., or almost 1½ lb. a-day.

Charles Street, W. GEORGE E. KEITH, M.B., C.M.Edin.

SEPTIC CATHETERS.

As is well known, one of the troubles after all abdominal sections used to be the occurrence of acute suppurative inflammation of the bladder in cases where the catheter had to be employed. I have seen it so bad as to be nearly fatal.

It occurs so rarely now that it may be said to be banished, and the simple method of success has been to use catheters with no receptacle beyond the eye, and to keep the catheter always under water save when in use. I also have the understanding on the part of all my nurses that this complication means culpable neglect on their part, and involves summary dismissal.

Birmingham. LAWSON TAIT.

SCARLET RASH AFTER ENEMATA.

IN the BRITISH MEDICAL JOURNAL of June 2nd Dr. Suckling draws attention to the importance of excluding the possibility of a rash resembling scarlet fever being due to an aperient enema. I think this rash is often met with, not only after an enema, but after a brisk aperient has been given by the mouth in cases of chronic constipation, and also in the later stages of acute intestinal catarrh when peristalsis of the paralysed gut is again established. In all these cases indican is present in the urine, and may be separated from it in the form of indigo by Jaffé's method, that is, by adding an equal quantity of strong hydrochloric acid (free from chlorine) to the urine and then one drop of a solution of chlorinated lime.

Many theories have been advanced as to the signification of indican in the urine, but apparently all we can at present take for granted is that it does point to some intestinal irritation being present and that the absorption of some fæcal constituent is going on. I regard the presence of indican as a valuable aid in the diagnosis of these doubtful rashes. Indican is rarely present in early cases of scarlet fever, and then only when the patient has been previously troubled with intestinal irritation. Another important point is that there is rarely much itching during the onset of scarlet fever rash, but the eruption in these intestinal cases is attended with intense tingling and itching, even when its character is by no means urticarial.

South Eaton Place, S.W. W. H. C. STAVELEY, F.F.C.S.

REPORTS

ON

MEDICAL & SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN, IRELAND, AND THE COLONIES.

SOUTHPORT INFIRMARY.

CASE OF FOREIGN BODY IN THE TRACHEA: TRACHEOTOMY AND SUCCESSFUL REMOVAL.

(Under the care of F. J. Baildon, M.B., C.M.)

[Reported by H. Brunton Angus, House-Surgeon.]

E. L., a girl aged 6, was admitted into this infirmary on the night of November 11th, 1893, with a history of having had a piece of lead pencil in her mouth, which had disappeared and the child had nearly suffocated.

On admission, the patient was cyanosed, the breathing difficult and stertorous, and there were intermittent fits of short and paroxysmal cough. The child looked distressed and was tossing herself about. She vomited two or three times, but this was probably caused by some emetic given outside. Inspection of the chest showed that during inspiration the right intercostal spaces were drawn in whilst those on the left side expanded. There was dulness on the right side of the chest; all over the left side was clear. Air entered freely into the left lung, but breath sounds were nearly absent on the right side. Over the trachea, in the suprasternal space, a peculiar rushing sound somewhat masked by mucous *râles* was heard. The diagnosis was foreign body impacted in the right bronchus.

Treatment.—Under chloroform tracheotomy was performed below the isthmus of the thyroid, and a probe passed down into the right bronchus. Nothing was felt. The physical signs remaining the same, inversion was just about to be performed when a piston-like sound was heard and a spasm of the glottis took place. On separating the edges of the wound in the trachea, a black body was seen to be forced up during expiration and sucked down with inspiration. An attempt was made to seize it, when the object again slipped down and became impacted in the right bronchus. A pair of cholecystotomy forceps (crocodile blades) were introduced and the foreign body seized and withdrawn. It proved to be a piece of ordinary lead pencil an inch and seven-eighths long, with sharpened end upwards and a ragged blunt end downwards. It was coated with mucus.

After-Treatment.—A tracheotomy tube was tied in and the usual precautions followed out. For the first three days there was bronchitis and œdema of the glottis with a copious muco-purulent discharge. The temperature ranged between 99° and 100° F.; the pulse between 132 and 120. The child took liquid nourishment well. On the fourth day after tracheotomy the sputum was much diminished and the voice was returning; the tube was removed. On the fifth and sixth days the pulse fell to 96, and the temperature to 99°. On the seventh day the temperature rose to 102°, the pulse to 120, and the respirations to 40, and little dulness and fine crepitations were found at the base of the left lung. Brandy, milk, and a stimulating expectorant were given, and linseed and mustard poultices applied. On the eighth day the child was much better, and from this time rapidly recovered. She was discharged on December 6th, 1893, the wound soundly healed and the patient in excellent health.

Remarks.—It is necessary to tie in a tube after such irritation, even in a healthy subject. The tube was removed on the second day after the operation, but was replaced as threatening spasm of the glottis appeared. Easy breathing and return of the voice are the best indications as to when it is advisable to remove the tube.

At the June meeting of the East Sussex Medico-Chirurgical Society at Hastings, Dr. George Murray, of Newcastle-on-Tyne, read a paper on myxœdema illustrated by a series of lantern slides demonstrating the morbid anatomy of the atrophied thyroid gland, myxœdema produced artificially in animals, and the striking results of the treatment of myxœdema and cretinism by thyroid extract.

REVIEWS.

A Textbook of the Physiological Chemistry of the Animal Body: including an Account of the Chemical Changes occurring in Disease. By Arthur Gamgee, M.D., F.R.S., Emeritus Professor of Physiology in the Owens College, Manchester, etc. Vol. II, the Physiological Chemistry of Digestion. London: Macmillan and Co. 1893. (Demy 8vo, pp. 548. 18s.)

Professor Gamgee is to be congratulated on the appearance of the second volume of his textbook on *Physiological Chemistry*. The first volume, which dealt with the chemistry of the tissues—chiefly the blood, lymph, and chyle—appeared in 1880, and has been of very great service not only to students, but to those engaged in research in physiological chemistry. The second volume, which is now under consideration, and which deals with the chemistry of digestion, is of the same high standard as the first, and will prove of inestimable value to the student, to the practitioner, and to the investigator.

Physiological chemistry has made great strides during the past fifteen years, and the study of the chemical processes, both in health and disease, is becoming of more and more importance, and is engaging the attention of numerous observers in all parts of the civilised world. To become acquainted with the mass of literature bearing on physiological and pathological chemistry is by no means an easy task, or one which many writers would feel equal to attempting. Dr. Gamgee has in this work succeeded in presenting this difficult and complicated subject in a clear and concise manner to the student. It is necessarily highly technical, since the value of such a book lies in the clear statement of ascertained facts and of their bearing on the physiological processes in the body.

The chemical processes of digestion are treated *seriatim*: the first chapter dealing with saliva and its action on food, the second with gastric digestion, the third with pancreatic digestion, and so on. The chapters need not be considered in detail; the matter is good, and full references are given to the authorities quoted.

There are, however, one or two features of the book which render it especially valuable. Details are given of the methods of performing the experiments described. In some works the details of methods given are wanting in clearness and precision; in Dr. Gamgee's book the details are clearly given, and by one who has not only been a teacher, but is a past master in the methods of experimentation. This feature of the book will alone render it invaluable to the original investigator. Moreover, the relation of chemical physiological to pathological processes are discussed at the end of each chapter. This portion of the book is perhaps not so complete as might be wished, owing in part, no doubt, to the incompleteness of our knowledge of pathological chemical processes; but what is written is clear and concise, and will be found useful for reference. The index is capable of great improvement. Professor Gamgee promises a second edition of the first volume, and a third volume completing the work. It is to be hoped, for the benefit of medical science, that both promises will be fulfilled.

Précis d'Obstétrique. Par MM. A. Ribemont-Dessaignes (Agrégé de la Faculté de Médecine, Accoucheur de l'Hôpital Beaujon) et G. Lepage (Chef de Clinique Obstétricale à la Faculté de Médecine). Avec 476 figures dans le texte, dont 422 dessinées par M. Ribemont-Dessaignes. Paris: G. Masson. 1894. (Royal 8vo, pp. 1324. Fr. 30.)

This modest title heads a bulky volume, which is an important addition to medical literature, were it only for the large number of original drawings published for the first time in it. It owes its inception to Professor Tarnier, who suggested to the authors that they should write a book which should be "more than a manual, but less than a treatise."

The first part of the book deals with anatomy and physiology, and contains some statements to which exception may be taken. The second part discusses the physiology of pre-

gnancy; the third part obstetrical antisepsis. The authors print in bold type the axiom: "All the knowledge of the accoucheur is worth nothing if it is not imbued with the antiseptic method." They claim for France, represented by Tarnier and Lucas-Championnière, the credit of having applied Listerian principles to midwifery. They discuss the question of asepsis *versus* antisepsis, that is, whether the accoucheur should use germicides to the patient or content himself with simple cleanliness. Their conclusion is, that it is as yet premature to abandon antiseptics; that in midwifery asepsis is not sufficient. The different antiseptics that have been used are described and compared, experimental investigations into their relative power being quoted; and the result of both clinical experience and laboratory experiments is to place corrosive sublimate at the head of the list. The toxic symptoms liable to be produced by each antiseptic are well depicted. The different forms of apparatus used in antiseptic midwifery—douche tins, injection tubes, etc.—are figured and their special points indicated. The authors' concluding remark about them is a happy one: it is that none are perfect, but that each physician likes that which he is in the habit of using, and "especially that which he has invented." This part of the work occupies 50 pages.

Part IV deals with delivery, and extends over 316 pages. Especial stress is laid on the part taken by the soft parts in the construction of the pelvic canal. The obstetrical anatomy of the fœtus and the phenomena of dilatation are put before the student very systematically, and made clearer by many excellent drawings by Dr. RIBEMONT-DESSAIGNES. We notice that the authors have not thought it necessary to instruct the student in the different mechanical effects of uterine contraction which German writers have distinguished by the names of "general contents pressure" and "fœtal axis pressure." They discuss fully the question of Naegele obliquity, and reject both this obliquity and synclitism as a part of normal labour, coming back to the view of Smellie, and holding that the head enters the pelvis in natural labour in a position of posterior obliquity—that is, with the sagittal suture rather nearer the pubes than the sacrum. They base this view upon the evidence of frozen sections.

They reject the supposed influence of the ischial spines in causing internal rotation, and they describe the head as emerging in a position of extension, Dr. Berry Hart notwithstanding. The original drawings which accompany this part are good, some—notably those showing face presentations—being remarkable for truth to Nature rather than for artistic beauty. In occipito-posterior positions they recommend manual rotation of the occiput forwards, a proceeding the credit of which they give to Tarnier, although Ramsbotham had taught it long before. They insist that to prevent rupture of the perineum the vital point is to see that the head emerges slowly. The different modes of rupture of the perineum are described and illustrated by drawings from Nature. In difficult breech labours they advocate forceps or bringing down a leg, and advise against either the fillet or the blunt hook. The mechanism of the third stage of labour is fully discussed. This chapter and that on the lying-in period are good.

The fifth part of the book treats well of the newly-born infant, and the sixth part is devoted to the pathology of pregnancy. The authors divide the maladies to which the pregnant woman is liable into two main groups: (1) pathology during pregnancy, that is to say, disease existing before the pregnancy, or accidentally intercurrent with it; and (2) diseases peculiar to the pregnant woman. The latter they subdivide into six groups, the first of which is headed Pathological Phenomena due to "Auto-intoxication," and includes ptyalism, uncontrollable vomiting and diarrhœa, œdema, albuminuria, eclampsia, and some cutaneous diseases. This, however, is a case in which naming has preceded knowing. We know nothing about the poisons, if such there be, that produce these diseases. Till we do it is better not to mask our ignorance by labelling a group with an inclusive full-sounding name which may prove to have been misapplied. The authors are premature, we think, in their dogmatism as to the importance of milk diet in albuminuria. In eclampsia suddenly coming on (without previous symptoms of renal disease) during pregnancy, the authors, we think rightly, advise against the induction of labour.

The section relating to accidental hæmorrhage is poor, and that on placenta prævia by no means the best in the book. The different conditions to which the name "intrauterine rickets" has been applied are carefully differentiated. The section on abortion is carefully done, and the directions for the bringing up of prematurely-born children are clear and full. On extrauterine pregnancy, however, we venture to think this work behindhand. Ovarian pregnancy and primary abdominal pregnancy are described as varieties actually met with, notwithstanding modern criticism.

Part VII contains an excellent account of multiple pregnancies.

The eighth part is entitled "dystocia." The chapters on pelvic contraction are unequal. The amount of space allotted to the various deformities is not always in proportion to their importance, and there is much difference in fulness and clearness among the accounts of pelvic deformities. The part relating to anomalies of the pains is not up to present knowledge, because the authors have either not seen or not digested the classical papers of Dr. Braxton Hicks on the subject. A capital account is given of the events which may happen from the complication of pregnancy and labour with tumours. The diseases of the fœtus which may cause difficulty in delivery are also well and carefully described.

Part IX deals with obstetric operations. Space forbids us to criticise in detail. The directions given are methodical, clear, and very detailed, but in some points the practice differs from that taught in most London schools.

Part X is allotted to the diseases of the infant. It contains a concise and yet full account of the rarer maladies to which the infant is liable during the first few days of life.

The last part describes puerperal diseases. Obstetric physicians who now write on puerperal fever are in the strange position of having to describe diseases which in their own practice they try to prevent, and do prevent, and therefore do not see; their knowledge of them other than that gained from books is derived from moribund cases occasionally seen in consultation with others. Hence it is not surprising that the descriptions of it should seem theoretical; and this remark applies to the work before us. It only remains to be said that the work is provided with a good index.

Although the work is unequal, yet, on the whole, it is one of great merit, which no teacher of midwifery should omit to study. Many modern advances in treatment and changes in opinion are represented in it more fully and faithfully than in any work we know of.

A SHORT GUIDE TO THE EXAMINATION OF LYING-IN WOMEN. With five woodcuts. By Professor CREDÉ (Leipzig) and Professor LEOPOLD (Dresden). Translated by WILLIAM H. WILSON, M.A., M.B.Oxon., Radcliffe Travelling Fellow. London: Henry Kimpton. 1894. (Cr. 8vo, pp. 48. 1s. 6d.)

THIS is a small book in large type, which can be read through in a quarter of an hour; but we know of hardly a book of its size so valuable. It is an extract from the author's treatise on Obstetrics for Midwives, issued by order of the Saxon Government. In that country midwives are obliged by law to follow the rules given in it, and are punishable by fine and disqualification if they depart from them. If midwives in this country also could be got to follow its instructions, much puerperal fever would be prevented; it is even possible that some medical men might learn from it how to improve their practice. The object of the translation of this extract from Credé's work is to spread in England the knowledge of the great value of external examination of the abdomen. The book also emphasises the harm that may be done by needless vaginal manipulations. Finally it describes in detail the methods of disinfection.

As to the first point, the methods of finding out the position of the child by palpation of the abdomen are systematised and illustrated. From the pages dealing with the second point we may quote the following, which we wish were imprinted on the memories of all who attend labour: "There are still midwives who are accustomed to tell the patient and her friends that they can hasten the process of birth, and whose habit it is to examine frequently *per vaginam*, to stretch and oil the cervix, or to rupture the membranes when the os

is still incompletely dilated, in order to bring on or strengthen the pains. Such a proceeding is as thoughtless as it is dangerous."

The rules for disinfection advise carbolic acid to be used. Midwives in Saxony are not allowed to carry sublimate on account of its poisonous properties. The rules are detailed; they err, we think, on the side of excessive care. The midwife is told to cut the hair of the pudenda short with scissors, to clean the whole region with a soft brush for five minutes by the clock with warm water and soap, followed by brushing for three minutes with a 2½ per cent. solution of carbolic acid, care being taken to go well into the folds between the labia minora and majora. During a prolonged labour, the above washing should be repeated at least once every three hours. Such prolonged and frequent scrubbing as this is not usual in English practice: in our lying-in hospitals good results have been attained without it. Its disagreeableness to the patient is likely to hinder the adoption of a system of which it forms part.

Lehmann's Medicin Hand-Atlanden. Band II. Geburtshilfe II, Theil. Anatomischer Atlas der geburtshilflichen Diagnostik und Therapie. [Anatomical Atlas of Obstetrical Diagnosis and Therapeutics.] Mit 145 Abbildungen, von Dr. Oscar Schaefer. München: J. F. Lehmann. 1894. (Cr. 8vo, pp. 220. 8 marks.)

This little book is a marvel of cheapness. Nearly half the pictures in it are printed in several colours. It may be described as consisting of three distinct parts. First, the plates, which are mostly diagrammatic, but, regarded as diagrams, very good indeed; the publication of a work containing so many, at such a low price, helps us to understand how it is that the inscription "printed in Germany" so often comes under our eyes. Next come the descriptions of the plates. These are printed on the upper part of the page opposite each plate, and separated by a line from the letterpress below. The descriptions are short, but adequately explanatory. Thirdly there is the letterpress. This is devoted to the anatomical and physiological basis of midwifery practice. It is supplementary to a previous volume in the same series, in which labour is described from a practical point of view. In this book the aim is not to give detailed directions as to practice, but to explain the principles on which the details of practice are based. It is short, condensed, but very good; and after each chapter references are given to the chief German authorities in the matter which has been epitomised. Hence the learner who wants to know more than this book tells him will find direction where to go for it.

The Fauna of the Deep Sea. By S. J. Hickson, M.A., D.Sc., Fellow of Downing College, Cambridge. London: Kegan Paul, Trench, Trübner, and Co. 1894. (Pp. 169, 23 illustrations. 2s. 6d.)

This, the latest addition to the Modern Science Series, now appearing under the editorship of Sir John Lubbock, fully maintains the high standard of excellence already attained by the published volumes of the series, and amply fulfils the object with which its publication was undertaken. Dr. Hickson deserves great praise for the admirable manner in which he has collected and condensed a very laborious and difficult literature in a handy little volume, both interesting to the lay reader and of the greatest use to the student. The volume embraces almost all the results of the many expeditions that have attempted the difficult task of investigating the fauna of the deep sea. The description of the physical conditions of the abyss, which occupies the second chapter, although well known to investigators, reads like a fairy tale. A region where the inhabitants live under a normal pressure of 2½ tons on the square inch, that is to say, a pressure many times greater than that exerted by the steam upon the piston of our most powerful engines and where the most common danger is that of falling upwards, cannot fail to interest the most sceptical. In the next chapter, which deals with the origin and relations of the fauna of the abysmal zone, the student will find much to arouse speculations. Dr. Hickson embraces the view that the fauna of the deep sea has been derived from successive immigrations of the animals from the shallow water—the view which is now most generally adopted and which was originally put forward by Mosely. The general character of the deep sea fauna occupies the next chapter, and the remaining four are devoted to the consideration of these characters as shown by each class of animals in particular, embracing the whole kingdom, from protozoa to fishes. We cannot speak too highly of this little volume: it is clearly and lucidly written, and, considering it deals with a subject in which the amount of detail is enormous and generalisations few and uncertain, it is remarkable how small a proportion of the volume is purely descriptive or dry reading.

On the Features which distinguish Epidemic Roseola (Rose Rash) from Measles and from Scarlet Fever. By Clement Dukes, M.D., B.S.Lond., M.R.C.P.Lond., Physician to Rugby School and to Rugby Hospital. London: J. and A. Churchill. 1894. (Cr. 8vo, pp. 40. 1s.)

The diagnosis of the disease commonly called German measles is one of the most serious difficulties of the medical officers of schools. The question is complicated by the fact that the existence of such a distinct disease is denied, or at any rate not readily admitted, by some. Hence there is a tendency to make an unqualified diagnosis of measles or scarlet fever. A boy may go to school with the entry in his "medical report" that he has had one or other disease, whereas he has in reality suffered from rötheln. Then at a later date, when he may have been exposed to measles, or when he presents suspicious premonitory symptoms, it is assumed that he has been rendered immune by a previous attack and is not isolated, with the result that an epidemic is started. Some part of the confusion is due to the term German measles. The adjective is apt to disappear in time, and Dr. Clement Dukes is well advised in urging that a distinct name should be employed both in scientific and popular speech. The terms suggested by him, "epidemic roseola" for the former and "rose rash" for the latter, would answer the purpose, though the need to employ the adjective "epidemic" might lead to some confusion; nor is it quite certain that the term rose rash without the qualifying adjective "epidemic" would be quite free from sources of confusion. Probably "rubella" is the best term yet suggested.

Dr. Dukes gives elaborate tables showing the distinguishing characters between epidemic roseola and measles, and between the first-named disease and scarlet fever. Nothing can replace accurate observation, but these tables are well worthy of study, and will make the observer alive to the criteria to be sought for. Even the most experienced are liable to error, but careful study of all the circumstances and clinical features of the cases will undoubtedly reduce the number of mistakes to a very small proportion. Dr. Dukes appears to attach most importance to the rosy colour of the rash, and to the tenderness and enlargement of lymphatic glands throughout the body, but especially in the cervical, axillary, and inguinal regions.

Clinical Lectures on Medicine and Surgery. By various German authors. Third Series. London: New Sydenham Society. 1894. (Demy 8vo, pp. 398.)

The opening lecture by Professor Billroth on the mutual action of living vegetable and animal cells has, perhaps, even an increased interest now that its lamented author is no longer with us. It is almost exclusively concerned with the relation of micro-organisms to disease, and the author gives in his complete adherence to the causal connection between them. The discussion upon formative stimuli as produced by various factors, including the less virulent micro-organisms, is set forth with much clearness. The many-sided character of the distinguished Vienna observer is abundantly obvious in this review, which is to some extent retrospective. Von Ziemssen contributes lectures on neurasthenia and its treatment, the causes of tuberculosis and syphilis of the nervous system, all well worthy of careful perusal. The subject of tuberculosis is still one of burning interest. Although the direct cause of this widespread dis-

ease is known, the exact conditions under which the tubercle bacillus gains a footing in the tissues are mostly obscure, notwithstanding the numerous investigations made of recent times. Among other things the important subject of heredity, including congenital tuberculosis, will be found discussed here. Professor Erb gives a most interesting and lucid exposition upon muscular dystrophy, in which he expresses his belief in the unity of its various forms. Dr. Peyer contributes lectures on (1) asthma and diseases of the generative organs, and (2) noctural incontinence. It may be open to some question whether the endeavour to connect the so-called paroxysmal neuroses with peripheral lesions mostly of an irritative kind, has not been somewhat overdone of recent times, yet some of the cases brought forward by the author are certainly striking. The traumatic neuroses are well treated by Professor Strümpell, the distinguished Erlangen clinician. Dr. Hoffmeister contributes a very interesting and thorough account of diabetes; and Dr. Salzer describes the healing in of foreign bodies. Dr. Löwenfeld's lecture on the treatment of chronic nervous disease can be heartily recommended. This collection of lectures is a very interesting and readable one, and although at least three of them were delivered four to six years ago, it is not obvious that they suffer on that account, notwithstanding the rapid progress made at the present time. The work of translation has been very fortunately entrusted to Drs. Stalher, v. Langegg, Barendt, and McWeeney.

NOTES ON BOOKS.

An Introduction to Midwifery: a Handbook for Medical Students and Midwives. By ARCHIBALD DONALD, M.A., M.D., C.M. Edin., M.R.C.P.Lond., Surgeon to St. Mary's Hospital for Women and Children, Manchester, etc. (With numerous illustrations. London: Chas. Griffin and Co. Demy 8vo, pp. 188. 5s.)—The object of this little book is described in its title. The author has endeavoured to write a work not too elementary for the student, and not too advanced for the midwife. He has produced a work which very fairly meets the wants of those for whom it is intended. The style is clear. The author has been content to follow the current teaching of the day, and has not used his pages to air any pet crotchets of his own. The information as a whole is accurate. From the point of view of the student, the book, as its title indicates, supplies only part of what he has to learn. From that of the midwife it errs rather in containing more than she requires to know than in deficiency. The work may justly be described as one of the best of its class.

Grundriss der Kinderheilkunde mit besonderer Berücksichtigung der Diätetik. [Elements of the Treatment of Children's Diseases, with special reference to Dietetics.] Von Dr. OTTO HAUSER, I Assistent der Universitäts Kinderpoliklinik in der Kgl. Charité zu Berlin. Berlin: Fischer's Medicin Buchhandlung. 1894. (Cr. 8vo, pp. 330, M. 7.)—Every writer on disease in children insists on the importance of errors in diet as a cause of disease in infants. Dr. Hauser introduces a reference to the subject into the title of his handbook, and devotes some of the earliest pages to its discussion. In his observations on the artificial feeding of infants, and on the quality and preparation of cow's milk, he gives a good summary of recent investigations and recommendations. Throughout the book, indeed, this is the main feature to be noted. The author hardly pretends to originality, seldom advances his own opinions, or founds his conclusions on his own observations, but gives a remarkably clear and concise sketch of views generally held. Regarded from this point of view, the book is one of considerable value.

The Johns Hopkins Hospital Reports. Vol. iv, No. 1. Report on Typhoid Fever. (Baltimore: The Johns Hopkins Press. 1894. Pp. 168, six charts.)—For the greater part of this fasciculus of the *Johns Hopkins Hospital Reports* Dr. William Osler is responsible, and the reader is glad to recognise in the articles on the treatment of typhoid fever, on the fatal cases, on special features and complications, and on the so-called "typhoid spine," his great experience, wide reading, and sober judgment. Dr. Thayer contributes an elaborate clinical study of post-typhoid anæmia; Dr. Hewetson an article on the urine and on renal complications. We forbear here to enter on any analysis of the articles, as these will best find place in the EPITOME.

Methods of Pathological Histology.—By C. VON KAHLDEN. Translated and edited by H. MORLEY FLETCHER, M.A., M.D., M.R.C.P. With an introduction by G. SIMS WOODHEAD. London: Macmillan and Co. 1894. (Demy 8vo, pp. 184. 6s.)—This book will prove most valuable to all pathologists. It puts in a short space, and in a clear and lucid form, the principal histological methods at present in use, including those which have been recently introduced. Dr. Woodhead says in the introduction that Dr. Morley Fletcher has conferred a real boon on the busy student of morbid histology by translating this well known and highly valued work of Professor von Kahlden. With this we entirely agree. The translation is well done, and the editor's footnotes, many of which are inspired by Professor Sherrington, give additional hints and information which will render the book more valuable than a bare translation would have been.

Local Government Act, 1894; A Practical Ready Reference Guide to Parish Councils and Parish Meetings. By J. HARRIS STONE, M.A., and J. G. PEARSE, B.A., Barristers-at-Law. (London: George Philip and Son. 1894. Cr. 8vo, pp. 214. 2s. 6d.)—This is yet another exposition of the much-explained Local Government Act of 1894, and a very straightforward, intelligible, and useful one. The full text of the Act is given in an appendix, while in the body of the work each subject is treated *seriatim*, in alphabetical order, an arrangement which enables the authors to set forth the occasionally complex details in a form easy of comprehension to those who have occasion to refer to it; explanations and hints are given where necessary. The printer and binder have done their best to make this neat little handbook a success.

Traité Pratique d'Accouchements. Par le Dr. A. AUVARD, Accoucheur des Hôpitaux de Paris. Avec 558 figures dans le texte. Troisième edition, revue et corrigée. (Paris: Octave Doin, editeur. 1894. London: Baillière, Tindall, and Cox. (Roy. 8vo, pp. 826, fr. 15).—As this work has reached its third eddition it is unnecessary for us to describe its contents and character at any length. It is an original work, stamped with the individuality of its author. It is thoroughly French; the author is familiar with the teaching and work of the French school, and is most loyal in his admiration of his compatriots, and zealous to do justice to their claims to recognition and remembrance. Dr. Auvard has a very systematic mind. Everything is divided, subdivided, and classified; and the classifications aim not merely at scientific exactness, but at being aids to memory. Thus, for instance, the reader is helped to remember what should be the characters of the lochia, as follows: The flow should last 9 days: 3 × 3. First 3 days blood; second 3 days bloodstained; third 3 days serous. We might quote other easily-recollected epitomes of clinical facts. It is this feature that forms the distinctive merit, and special utility to teachers, of the volume.

Defects in Plumbing and Drainage Work described. By FRANCIS VACHER. (Manchester: John Heywood. Cr. 8vo, pp. 83, 103 woodcuts. 1s.)—This is a reproduction of the experience of a medical officer of health in a series of diagrams. Jerry work, ignorant and unskilful jointing of pipes, faulty manufacture, have all their appropriate illustration: the text is subsidiary; the book may be profitably studied by simply interpreting the woodcuts. As an example of the kind of information the author in this way imparts, we need only mention the unexpected method of polluting water, given at Fig. 57. The leaden trap of a closet leaks, and it is so situated as to be exactly over a tap supplying the drinking water, so that foul matter may fall directly into jugs or pails held beneath the tap. This little work may be cordially recommended; it is useful both to householders and to those engaged officially in preserving the health of the community.

REPORTS AND ANALYSES

A NEW FORM OF LINKED TRUSS.

THE Link Shell Truss Company (171, Wardour Street, Oxford Street) have devised a new form of linked truss made with a special kind of steel rivet, by means of which its flexibility and the direction of the pad pressure can be varied according to circumstances. By this contrivance, in addition to the substitution of a series of linked segments for a single spring, much has seemingly been done to overcome the difficulty of providing a comfortable and secure truss which will remain *in situ* during sudden and twisting movements of the body.

UNIVERSAL POISON LABELS.

UNDER this title a small pamphlet has been published by Major G. F. Gamble of Dublin, in which he deals with the occurrence of death by poison, both accidental and suicidal, and suggests as a precautionary measure likely to prevail against the ignorance and carelessness which are undoubtedly the chief, although not the only, causes of the deplorable occurrences, the use of a label in which the skull and cross bones of the pirates' flag are depicted upon a red ground, with the word "poison" underneath. He considers that the striking appearance of this label would be imperative in its demand upon attention, impossible to be misunderstood, and a more certain warning against danger than the directions "Not to be taken," or "For outward application only." In support of the argument that the use of such a label should be made compulsory, he quotes from the *Essay on Liberty*, by John Stuart Mill, the statements that "it is a proper office of public authority to guard against accidents," and that such a precaution as "labelling a drug with some word expressive of its dangerous character may be enforced without violation of liberty." Major Gamble would make the obligation to use this label apply not only to the seller of poison, but also to everyone who has poison in his possession, and he considers the neglect of that precaution should be made a punishable offence.

EUCALYPTUS DISINFECTOR.

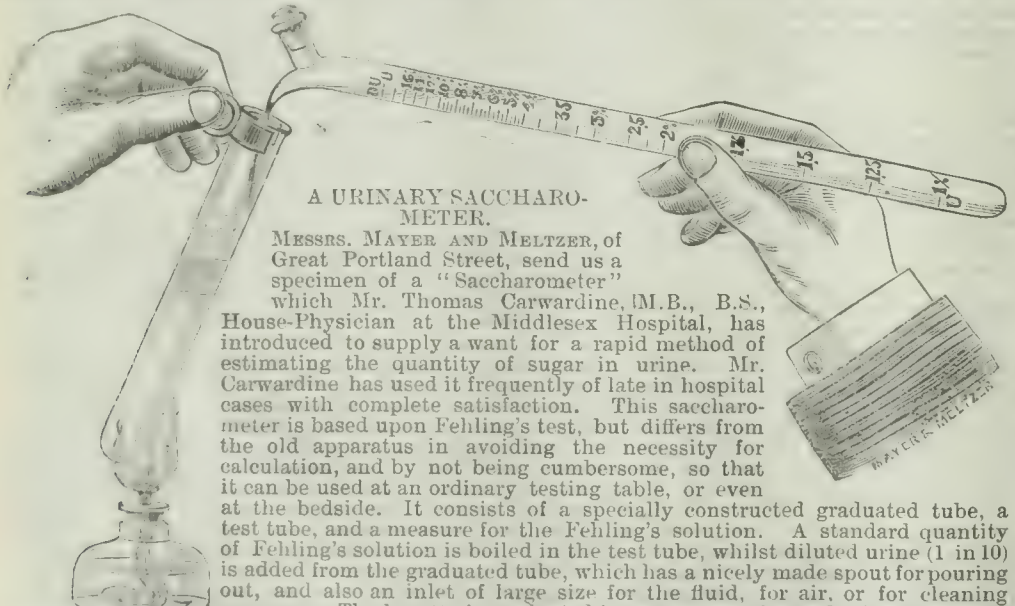
THIS is an ingenious contrivance for maintaining a continuous and regular evaporation of a volatile oil like that of eucalyptus or turpentine for the purpose of disinfection. Within a cylindrical jar of porous clay is placed a bottle of the oil, and by means of a cotton wick passing through the cork the oil is gradually conveyed to the porous clay cylinder, by which it is absorbed and diffused through the surrounding atmosphere. The whole is enclosed in a perforated tin cylinder. This "Reservoir Pattern Disinfector" is automatic in its action so long as any of the oil remains, and when that is exhausted the bottle can be replenished. The patentees and makers are the Sanitas Company, Three Colt Lane, Bethnal Green.

KINGZETT'S "SULPHUGATORS."

THIS device consists of rolls or bandages coated with sulphur. When a light is applied to either end of the sulphugator they immediately take fire, and burn with a long blue flame until all the sulphur is consumed. They may be burned to best advantage in the small perforated metal cages which are specially constructed for the purpose, one of which is enclosed in each box of sulphugators. Any suitable vessel, such as an old tin box, however, will suffice. As an extra precaution against fire, the vessel in which the sulphugators are burnt may be stood in another shallow vessel of water, or a little water may be even placed in the vessel in which the sulphugator is burned. The sulphugators are prepared by the Sanitas Company, and are put up in shilling boxes.

SANITOR.

THIS is a preparation which claims to be a genuinely antiseptic disinfectant superior to all others. At the International Health Exhibition, held at Havre last year, it was awarded the highest distinction granted. The preparation is of a compound character, containing zinc sulphate, ferrous sulphate, borax, mercuric chloride with sulphuric, hydrochloric, and nitric acids in a free state, and the advantage of this composite character is said to be based upon the principle that when several antiseptic agents are combined their efficiency is increased. The total solid contents amount to about 7 per cent., and the free acid to nearly 4 per cent., expressed in terms of sulphuric acid. The considerable acidity would limit the applicability of the preparation as a disinfectant for many domestic purposes, but in cases where the free acid would be unobjectionable this preparation would no doubt be effectual. Sanitor is to be obtained from Messrs. Audibert and Co., Paris.



A URINARY SACCHAROMETER.

MESSRS. MAYER AND MELTZER, of Great Portland Street, send us a specimen of a "Saccharometer" which Mr. Thomas Carwardine, M.B., B.S., House-Physician at the Middlesex Hospital, has introduced to supply a want for a rapid method of estimating the quantity of sugar in urine. Mr. Carwardine has used it frequently of late in hospital cases with complete satisfaction. This saccharometer is based upon Fehling's test, but differs from the old apparatus in avoiding the necessity for calculation, and by not being cumbersome, so that it can be used at an ordinary testing table, or even at the bedside. It consists of a specially constructed graduated tube, a test tube, and a measure for the Fehling's solution. A standard quantity of Fehling's solution is boiled in the test tube, whilst diluted urine (1 in 10) is added from the graduated tube, which has a nicely made spout for pouring out, and also an inlet of large size for the fluid, for air, or for cleaning purposes. The burette is graduated in percentages instead of cubic centimetres, so that no calculations are required. The process is extremely simple, and is a great saving of time, since an estimate can be made in two or three minutes. The apparatus costs 7s. 6d. and Messrs. Mayer and Meltzer fit up a useful box containing the saccharometer, also an Esbach's tube for albumen, and a small apparatus for urea.

DIASTISED MEAL BISCUITS.

THESE biscuits are made of a brown wheatmeal, subjected to treatment by which a considerable portion of the starch is converted into a soluble form. They are therefore easily digested and nutritious. By the addition of hops an aromatic bitter flavour is given which is both agreeable and appetising. It is claimed that the biscuits are thus specially adapted for invalids and persons subject to indigestion, and examination of them shows that their composition and general character justify their recommendation for those purposes.

The makers are Messrs. Callard and Co., of 65, Regent Street, who are well known as manufacturers of diabetic and other kinds of food for invalids.

BRITISH MEDICAL ASSOCIATION.

SIXTY-SECOND ANNUAL MEETING.

THE sixty-second Annual Meeting of the British Medical Association will be held at Bristol on Tuesday, Wednesday, Thursday, and Friday, July 31st, August 1st, 2nd, and 3rd, 1894.

President: GEORGE HARE PHILIPSON, M.D.Cantab., D.C.L., F.R.C.P., Professor of Medicine in the University of Durham.

President-Elect: E. LONG FOX, M.D.Oxon., Consulting Physician to the Bristol Royal Infirmary.

President of the Council: J. WARD COUSINS, M.D.Lond., F.R.C.S., Senior Surgeon to the Royal Portsmouth Hospital.

Treasurer: HENRY TRENTHAM BUTLIN, F.R.C.S., D.C.L., Surgeon to St. Bartholomew's Hospital, E.C.

An Address in Medicine will be delivered by Sir THOMAS GRAINGER STEWART, M.D.Edin., Professor of the Practice of Physic and Clinical Medicine in the University of Edinburgh.

An Address in Surgery will be delivered by JAMES GREIG SMITH, M.B., F.R.S.E., Surgeon to the Bristol Royal Infirmary.

An Address in Public Medicine will be delivered by Sir CHARLES CAMERON, M.D., Medical Officer of Health, Dublin.

A. MEDICINE.

Library of Medical School.

President: FREDERICK T. ROBERTS, M.D. *Vice-Presidents:* E. MARKHAM SKERRITT, M.D.; R. SHINGLETON SMITH, M.D. *Honorary Secretaries:* W. T. BROOKS, M.A., M.B., 32, Holywell, Oxford; J. MICHELL CLARKE, M.D., 28, Pembroke Road, Clifton, Bristol.

Wednesday, August 1st.—I. Discussion on Functional Diseases of the Heart, introduced by Douglas Powell, M.D. The following gentlemen have announced their attention of taking part in the discussion: Sir Frederic Bateman, Paul Chapman, M.D., W. Soltau Fenwick, M.D., James A. Lindsay, M.D., G. A. Gibson, M.D., E. Markham Skerritt, M.D., R. Shingleton Smith, M.D., A. Ernest Sansom, M.D., P. Watson Williams, M.D., Harry Campbell, M.D., and Francis Hawkins, M.B.

Thursday, August 2nd.—II. Discussion on Pyrexia and its Treatment, introduced by W. Hale White, M.D. The following gentlemen will take part in the discussion: E. Markham Skerritt, M.D., Shingleton Smith, M.D., James Barr, M.D., James A. Lindsay, M.D., J. E. Shaw, M.D., and W. Soltau Fenwick, M.D.

Friday, August 3rd.—III. Ataxia and the Diseases of which it is a Symptom, introduced by J. A. Ormerod, M.D. The following gentlemen will take part in the discussion: James Cagney, M.D., L. Andriezen, M.D., F. W. Mott, M.D., Henry Waldo, M.D., and Michell Clarke, M.D.

The following papers have been announced:

ALTHAUS, Julius, M.D. The Differential Diagnosis of Nosophobia and Hypochondriasis.
BENTLEY, A. J. M., M.D. A Few Practical Hints for Invalids on the Maintainance of Health in the Climate of Egypt.
CAMPBELL, Harry, M.D. The Mechanical Treatment of Heart Disease.
FENWICK, W. Soltau, M.D. Dyspepsia of Strumous Origin.
FISHER, Theodore, M.D. Diastolic and Presystolic Murmurs in Dilated Hearts without Valvular Disease.
GIBSON, G. A., M.D. The Conduction of Cardiac Murmurs.
GRIFFITHS, P. Rhys, M.B. 1. The Remote Effects of Spinal Injuries in Miners. 2. Sporadic Cretinism and Thyroid Feeding.
HAWKINS, Francis, M.B. The Treatment of Croupous Pneumonia.
MOTT, F. W., M.D. Pernicious anæmia.
ROSS, J. Carne. Some Notes on a Series of Cases of Cancer.
SANSOM, A. Ernest, M.D. Disturbances of the Cardiac Rhythm, subsequent to Influenza.
SHARP, Gordon, M.B. Cactus Grandiflorus, its Literature, Chemistry, Pharmacology, and Therapeutics.
WHITBY, C. J., M.D. Modern Hydropathy; its Relation to General Therapeutics.
WILLIAMS, P. Watson, M.D. A case of Pancreatic Diabetes, treated by Grafts of Sheep's Pancreas.

B. SURGERY.

Physical Science Lecture Room—University College.

President: W. MITCHELL BANKS, M.D. *Vice-Presidents:* NELSON C. DOBSON, F.R.C.S.; Professor VICTOR HORSLEY, F.R.S. *Honorary Secretaries:* G. A. WRIGHT, M.B., 8A, St. John Street, Manchester; JAMES SWAIN, M.D., 14, Buckingham Place, Clifton, Bristol.

The following subjects have been selected for discussion in the Section:

1. The Operative Treatment of Perforative Ulcer of the Stomach and Intestines. To be introduced by A. Pearce Gould, M.B., F.R.C.S. The following gentlemen will take part in the discussion: G. H. Hopkins, F.R.C.S. (Swansea), R. Maclaren, M.D. (Carlisle), Mayo Robson, F.R.C.S. (Leeds), J. Ward Cousins, M.D., F.R.C.S. (Portsmouth), Rutherford Morison, F.R.C.S. (Newcastle-on-Tyne), Gilbert Barling, F.R.C.S. (Birmingham), and W. F. Haslam, F.R.C.S. (Birmingham).

2. The Surgical Treatment of Injuries of the Spine and Spinal Cord. To be introduced by William Thorburn, M.D., F.R.C.S. The following gentlemen will take part in the discussion: G. H. Hopkins, F.R.C.S. (Swansea), W. M. Barclay, F.R.C.S. (Bristol), C. B. Keetley, F.R.C.S. (London), H. Langley Browne, F.R.C.S. (West Bromwich), Gilbert Barling, F.R.C.S. (Birmingham).

3. The Treatment of Injuries of the Lower End of the Humerus. To be introduced by Jonathan Hutchinson, jun., F.R.C.S. The following gentlemen will take part in the discussion: G. H. Hopkins, F.R.C.S. (Swansea), Professor Landerer (Stuttgart), R. Jones, F.R.C.S.Edin. (Liverpool), J. Ward Cousins, M.D., F.R.C.S. (Portsmouth).

The following papers have been announced:

HARRISSON, Damer, F.R.C.S. (Liverpool). Note on the Treatment of Traumatic Delirium Tremens.
JONES, R., F.R.C.S.Edin. (Liverpool). On Amputation and Shock and Amputation through Shoulder-joint for Diffuse Spreading Traumatic Gangrene.
MAYO ROBSON, F.R.C.S. (Leeds). On a Consecutive Series of Ovariotomies performed in the Surgical Clinic at a General Hospital.
MORISON, Rutherford, F.R.C.S. (Newcastle-on-Tyne). On Some Points in the Anatomy of the Right Hypochondriac Region relating especially to Operaton for Gall Stones.
MURPHY, James, M.D. (Sunderland). 1. Splenectomy, with Notes of a Successful Case. 2. Notes of a Case of Rupture of the Bladder treated by Abdominal Section, Suture, Recovery.
SNOW, H., M.D. (London). The "Dispersible" Tumours of the Mamma.

C. OBSTETRIC MEDICINE AND GYNÆCOLOGY.

Lecture Room No. 2—University College.

President: Professor J. G. SWAYNE, M.D. *Vice-Presidents:* E. MALINS, M.D.; A. E. AUST-LAWRENCE, M.D. *Honorary Secretaries:* R. BOXALL, M.D., 29, Weymouth Street, London, W.; WALTER C. SWAYNE, M.B., 8, Leicester Place, St. Paul's Road, Clifton, Bristol.

The following subjects have been selected for discussion in the Section:

1. The Necessity of Inducing Labour in Certain Conditions of the Mother not Obstructing Delivery. To be opened by Robert Barnes, M.D., Consulting Physician-Accoucheur to St. George's Hospital, London. The following gentlemen will take part in the discussion: Fancourt Barnes, M.D., R. Bell, M.D., T. More Madden, M.D., J. Murphy, M.D., W. H. C. Newnham, M.A., M.B., J. Inglis Parsons, M.D., A. J. Smith, M.D., and John Campbell, M.D.

2. The Treatment of Hæmorrhage during the Last Two Months of Pregnancy. To be opened by W. J. Symly, M.D., Master of the Rotunda Hospital, Dublin. The following gentlemen will take part in the discussion: Fancourt Barnes, M.D., R. Bell, M.D., J. W. Byers, M.D., T. More Madden, M.D., J. Murphy, M.D., W. H. C. Newnham, M.A., M.B., J. Inglis Parsons, M.D., E. Stanmore Bishop, F.R.C.S., and A. J. Smith, M.D.

The following papers have been announced:

AUST-LAWRENCE, A. E., M.D. On Abdominal Section as Part of the Treatment in Certain Cases of Menstrual Retention due to Atresia of the Genital Tract.
BARNES, Fancourt, M.D. Selection of Cases for Hysterectomy.
BELL, Robert, M.D. On Ovariotomy.
BISHOP, E. Stanmore, F.R.C.S. The *Technique* of Vaginal Hysterectomy.
COLLINS, E. T., F.R.C.S. The Nervous Impulses Controlling Menstruation and Uterine Hæmorrhage.
CULLINGWORTH, C. J., M.D. On a Case of Advanced Extrauterine Gestation in which a Living Child was Removed, the Placenta left undisturbed, and the Abdominal Wound entirely closed.
HARRISSON, Damer, F.R.C.S.E. On Paresis of the Intestines following Abdominal Operation.
JESSETT, F. B., F.R.C.S. On Thirty Cases of Vaginal Hysterectomy for Carcinoma Uteri with Two Deaths.
KEITH, George E. The Operative Treatment of a Form of Dysmenorrhœa and Sterility.
MADDEN, T. More, M.D. On Pruritus and other Hyperæsthetic Conditions of the Vulva and Vagina.
MURPHY, James, M.D. Notes of a Case of Hæmatometra successfully Treated by Hysterectomy.

Nairne, J. Stuart, F.R.C.S. On Resection of the Uterus for Fibroid Tumours and other Diseases.
Newnham, W. H. C., M.B. Successful Treatment of Sterility.
Purslow, C. E., M.D. An Account of Four Cases in which Separation of the After-coming Head had occurred during Delivery, and of the Means used to Extract the Head.
Rabagliati, A., M.D. Some Obscure Ailments which simulate Ovarian Disease, their Causes and Treatment.
Reid, W. L., M.D. A Case of Simple Entrocele Vaginalis Posterior with an Operation for its Relief.
Scharlieb, Mary A. D., M.D. Treatment of Uterine Myomata.
Smyly, W. J., M.D. Total Extirpation of the Myomatous Uterus.
Taylor, John, F.R.C.S. On Doubling of the Uterus and Vagina and Allied Malformations.
Walter, W., M.D. Ovarian Dermoid containing 3,940 Pea-like Bodies.

D. Public Medicine.

Museum Theatre.

President: Professor W. H. Corfield, M.D. *Vice-Presidents:* J. Lane Notter, M.D.; D. S. Davies, M.D. *Honorary Secretaries:* B. H. Mumby, M.D., Town Hall, Portsmouth; J. C. Heaven, M.R.C.S., 2, Queen Square, Bristol.

The following papers have been announced:

Allan, F. J., M.D. The Prevention of Phthisis.
Anderson, A. Jasper, M.D. (Blackpool). Ventilation of Sewers.
Browne, Lennox, F.R.C.S.Edin. The Etiology of Diphtheria in Relation to Insanitation.
Cameron, J. Spottiswoode, M.D. Diarrhœa in the Autumn of 1893.
Davies, Sidney, M.D. (Plumstead). Ventilation of Sewers.
Evans, W. Arundel, M.D., D.P.H. On the Aërial Convection of Small-pox.
Kenwood, H. E., M.D, D.P.H. Notes upon the Origin and Spread of Enteric Fever.
Notter, J. L., Brigade-Surgeon-Lieutenant-Colonel, M.D. Filtration of Potable Waters.
Priestley, J., M.D. (Leicester). Some Lessons to be Learnt from an Epidemic of Small-pox in an Unvaccinated Community.
Pringle, R., Brigade-Surgeon-Lieutenant-Colonel, M.D. Seasons and Sites of Hindu Pilgrimages in Bengal and their Bearing on Epidemic Cholera.
Stephens — (Chard). On Cremation.
Waldo, F. J., M.D. and Walsh, David, M.B. 1. Does Baking Sterilise Bread? 2. Does Cooking Sterilise a Meat Pie? (To be illustrated by cultivations, slides, etc.).

The following gentlemen will take part in the discussions: J. Spottiswoode Cameron, M.D., Walter Dowson, M.D. Sydney Davies, M.D., Herbert Jones, L.R.C.S.I. (Crewe), Jasper Anderson, M.B. (Blackpool), A. Robinson, M.D. (Rotherham).

E. Psychology.

Lecture Room No 4—University College.

President: G. F. Blandford, M.D. *Vice-Presidents:* S. R. Philipps, M.D.; Fletcher Beach, M.B. *Honorary Secretaries:* C. S. W. Cobbold, M.D., Bailbrook House Asylum, Bath; R. S. Stewart, M.D., Glamorgan County Asylum, Bridgend.

On August 1st the President will open the work of the Section by giving an address upon the "Prevention of Insanity," and a discussion is specially invited upon this subject.

On August 2nd it is proposed to hold a discussion upon "The Law in Relation to the Criminal Responsibility of the Insane;" L. A. Weatherly, M.D., has promised to open it, and members of the legal profession will be invited to join (as visitors) in the debate.

The following additional discussions have been promised: The Treatment of Neurasthenia, to be opened by G. H. Savage, M.D. The Status of Assistant Medical Officers in Lunatic Asylums, to be opened by C. Mercier, M.B. Points Connected with the Education of Feeble Minded Children, to be opened by G. E. Shuttleworth, M.D.

The following papers have been announced:

Andriezen, W. Lloyd, M.D. Contributions and Suggestions towards a Pathological Classification of the Insanities (with Microscopic Demonstration of Specimens).
Blake, Henry, M.B. (Great Yarmouth). Four Cases Illustrating the Origin and Possible Prevention of Different Types of Insanity.
Bullen, F. St. J., M.R.C.S. The Influence of Reflex and Toxic Agencies in Insanity and Epilepsy.
Campbell, Harry, M.D. Train Panic.
Fox, B. B., M.D. A Case for Diagnosis.
Kerr, Norman, M.D. Probationary Curative Restraint of the Alleged Insane.
Shaw, James, M.D. (Liverpool). The Early Treatment of Mental Cases in Private Practice.
Smith, Telford, M.A., M.D. Cases of Sporadic Cretinism Treated by Thyroid Extract.
Stewart, R. S., M.D. The Spastic and Tabetic Types of General Paralysis.

Members attending the Section will be invited to inspect the Bristol City and County Asylum at Fishponds, near Bristol.

F. Pathology.

Chemical Lecture Theatre—University College.

President: G. Sims Woodhead, M.D. *Vice-Presidents:* Joseph Frank Payne, M.D.; M. A. Ruffer, M.D. *Honorary Secretaries:* Norman Dalton, M.D., 4, Mansfield Street, London, W.; C. A. Morton, F.R.C.S., 24, St. Paul's Road, Clifton, Bristol.

On Wednesday, August 1st, a discussion on the Pathology of Vaccinia, to be introduced by S. M. Copeman, M.D., of the Local Government Board. M. A. Ruffer, M.D., H. G. Plimmer, M.R.C.S., and R. W. Boyce, M.B., will take part in the discussion.

Professor E. M. Crookshank, S. Coupland, M.D., A. P. Luff, M.D., and T. W. Hime, M.D., are expected to be present and will speak.

The following papers have been announced:

Campbell, Alfred W., M.D. Degenerations Consequent on Destructive Lesions of the Human Cerebellum.
Fyffe, W. Kington, M.B. The Influence of Creasote on the Virulence of the Tubercle Bacillus.
Harrison, Reginald, F.R.C.S. The Pathology of Enlarged Prostate.
Hutchinson, Jonathan J., F.R.C.S. Tertiary Syphilitic Disease of Lymphatic Glands, with specimens.
Kent, A. F. Stanley. Histology of the Vaccine Vesicle.
Murray, George, M.D. The Effects of Thyroidectomy in Rabbits.
Power, D'Arcy, M.B. An Experimental Investigation into the Causation of Cancer.
Ritchie, James, M.B. Relation between Chemical Composition and Antiseptic Action.
Russell, J. S. Risien, M.B. Degenerations consequent on Lesions of the Cerebellum.
Snow, Herbert, M.D. Cancer and Phagocytosis.

J. H. Targett, F.R.C.S., has promised a Pathological Demonstration.

J. Galloway, M.D., Vaughan Harley, M.D., and C. G. Brodie, F.R.C.S., have each promised papers, titles of which are uncommunicated.

There will be an exhibition of specimens, bacteriological cultures, instruments for pathological research, etc., in the museum attached to the Section.

Pathological Museum.

Rare and interesting specimens will be gladly received for the Pathological Museum. They should be forwarded addressed to the Secretary of the Pathological Museum, British Medical Association, University College, Bristol, before July 15th, and a brief description for insertion in the Museum Catalogue must be in the hands of the Secretary by July 7th.

G. Ophthalmology.

Medical Lecture Theatre, Medical School.

President: F. R. Cross, M.B. *Vice-Presidents:* H. E. Juler, F.R.C.S.; Simeon Snell, F.R.C.S. *Honorary Secretaries:* C. H. Walker, M.B., 3, Leicester Villas, St. Paul's Road, Clifton, Bristol; J. Tatham Thompson, M.B., 24, Windsor Place, Cardiff.

The following papers have been announced:

Beaumont, W. M., M.R.C.S. The Soldier's Red Coat as a cause of Retinal Hyperæsthesia.
Chisholm, J. J., M.D. (Baltimore). On the Good Effects of Dressing one Eye only after Cataract Extractions.
Da Gama, Dr. (Bombay). Some remarks on Subjunctival Mercurial Injections in Syphilitic and other Diseases of the Eye.
Doyne, R. W., F.R.C.S. The Influence of Education as a Cause of Eye Disease.
Edridge-Green, F. W., M.D. A New Spectroscope for the Quantitative Estimation of Defects of Colour Perception.
Griffith, John, F.R.C.S. Criticism concerning Recent Views as to the Secretory Function of the Ciliary Body.
Hewetson, H. B., M.R.C.S. 1. Blepharitis and Asthenopia in German Jew Tailors in Leeds. 2. Asthenopia and Headaches in Girl Machinists in Leeds. 3. The effects of Electric Welding Operations upon the Eyes.
Johnson, G. Lindsay, M.D. The Influence of Prolonged Excessive Light on Vision.
Juler, H., F.R.C.S. On the Diagnosis and Treatment of the Three Chief Forms of Contagious Ophthalmia, namely, the Catarrhal, the Purulent, and the Granular Varieties.
Landolt, Professor E. (Paris). Some Rules to Simplify the Diagnosis of Ocular Paralysis.
McGillivray, A., M.B. The Therapeutic Value of Ice in Ophthalmic Surgery.
Russell, J. S. R., M.B. Experimental Investigation of Eye Movements.
Ruttle, Robert, L.M.Dub. Report on Three Cases of Orbital Tumour.
Scott, Kenneth, M.B. The Treatment of Granular Conjunctivitis or Trachoma.

SNELL, Simeon, F.R.C.S. On the Relations of Occupation to Eyesight.
STEPHENSON, Sydney H. A., F.R.C.S. Cellulitis following Mules's Operation.
STEVENS, Dr. G. T. (New York). The Maintenance of Equal Rotation of the Eyes after Operations on the Ocular Muscles.
TAYLOR, S. J., M.B. A case of Probable Disease of the Lenticular Ganglion.
THOMPSON, J. L., M.D. (Indianopolis). Observations on some Phases of Opacity and Luxation of the Crystalline Lens.
THOMPSON, J. Tatham, M.B. Keratomalacia in Acute Infantile Jaundice.
WRAY, C., F.R.C.S. Mixed Astigmatism.

Papers have also been promised by Messrs. Jonathan Hutchinson, F.R.S.; Hermann Snellen; T. J. Bokenham, L.R.C.P.; and Ernest Clarke, M.D.

H. LARYNGOLOGY AND OTOLOGY.

Physiology Lecture Theatre, Medical School.

President: P. MCBRIDE, M.D. *Vice-Presidents:* W. H. HARSANT, F.R.C.S.; BARCLAY J. BARON, M.B. *Honorary Secretaries:* P. WATSON WILLIAMS, M.D., 2, Lansdown Place, Victoria Square, Clifton, Bristol; W. MILLIGAN, M.D., 28, St. John Street, Deansgate, Manchester.

The following subjects have been proposed for formal discussion:

August 1st.—The Treatment of Acute and Chronic Laryngeal Stenosis, to be opened by David Newman, M.D., Glasgow, and William P. Northrup, M.D., New York.

August 2nd.—The Prognosis of Non-Suppurative Otitis Media (with Imperforate Membrane), to be opened by G. P. Field, M.R.C.S., London, Thomas Barr, M.D., Glasgow, and Dr. J. Ward Cousins, Portsmouth.

August 3rd.—The Diagnosis and Treatment of Empyema of the Nasal Accessory Sinuses, to be opened by Greville Macdonald, M.D., London; Charters Symonds, M.S.Lond., F.R.C.S.

Urban Pritchard, M.D.; Dundas Grant, M.D.; Wyatt Wingrave, M.R.C.S.; R. Fullerton, M.D.; R. Mackenzie Johnston, M.D., J. B. Ball, M.D.; Scanes Spicer, M.D.; T. Mark Hovell, F.R.C.S.Ed.; H. B. Hewetson, M.R.C.S.; G. W. Hill, M.D.; C. W. Waden, M.D.; John Bark, M.R.C.P.I.; Dr. Birkett (New York); and J. W. Downie, M.B, have intimated their intention to take part in the discussions.

Time will also be allowed for the reading and discussion of special papers.

The following papers have been announced:

BRONNER, H., M.D. 1. On Intratympanic Injections in the Treatment of, *a*, Chronic Dry Catarrh of the Middle Ear; *b*, Chronic Purulent Catarrh of the Middle Ear. 2. On the Use of the Curette in the Treatment of Tuberculous Laryngitis.
DOWNIE, J. Walker, M.B. The Care of the Ear during the Course of the Exanthemata.
GRANT, Dundas, M.D. A More Exact Appreciation of Rinne's Test.
HARSANT, W. H., F.R.C.S. The Hearing Power of Deaf Mutes.
HILL, G. W., M.D. Otitis Media Acuta, a Personal Experience.
LOVE, J. Kerr, M.D. Deafmutism as a Clinical Study.
MCBRIDE, P., M.D. Coryza Caseosa.
MILLIGAN, W., M.D. Observation upon Excision of the Ossicula Auditus in Chronic Suppurative Otitis Media.
PERMEWAN, W., M.D. 1. Laryngeal Paralysis in Chronic Nervous Disease. 2. Deafness and Stupidity in School Children.
SPICER, Scanes, M.D. Title uncommunicated.
WINGRAVE, V. H. Wyatt, M.R.C.S. Turbinal Varix: its Pathology, Symptomatology, Diagnosis, and Treatment.

I. DERMATOLOGY.

Lecture Room No. 3—University College.

President: A. J. HARRISON, M.B. *Vice-Presidents:* STEPHEN MACKENZIE, M.D.; H. WALDO, M.D. *Honorary Secretaries:* J. HANCOCKE WATHEN, M.R.C.S., 16, York Place, Clifton, Bristol; H. LESLIE ROBERTS, M.D., 46, Rodney Street, Liverpool.

Wednesday, August 1st, 10 A.M.—Lupus: its Etiology, Pathology, and Relations to Other Forms of Cutaneous Tuberculosis, introduced by Professor Leloir. H. G. Brooke, M.B.; Norman Walker, M.B.; Henry Waldo, M.D.; G. W. Potter, M.D.; James Startin, M.R.C.S.; and Dale James, M.R.C.S., have promised to take part in the discussion.

Thursday, August 2nd, 10 A.M.—Management of Eczema, introduced by Malcolm Morris, F.R.C.S.Edin. E. D. Mapother, M.D. (London), A. S. Myrtle, M.D. (Harrogate), T. D. Savill, M.D., James Startin, M.R.C.S., David Walsh, M.B., and G. W. Potter, M.D., will take part in the discussion.

Etiology and Treatment of Acne, introduced by Stephen Mackenzie, M.D. Phin. S. Abraham, M.D., A. Eddowes, M.D., James Startin, M.R.C.S., and Leslie Roberts, B.A., M.D., have promised to take part in the discussion.

Friday, August 3rd, 9.30 A.M.—The Nervous Origin of Diseases of the Skin and its Importance in Treatment, introduced by J. J. Pringle, M.B. Radcliffe Crocker, M.D., T. Colcott Fox, M.B., Stephen Mackenzie, M.D., T. D. Savill, M.D., and G. W. Potter, M.D. have promised to take part in the discussion.

The following papers have been announced:

ANDERSON, Professor McCall. On the Necessity on the Part of the Student for the Clinical Study of Dermatology.
BOWLES, R. L., M.D. Observations on the Scientific Aspect of the Influence of Solar Rays on the Skin.
BROOKE, H. G., M.B. Trade Eczema or Dermatitis.
DUNBAR, Eliza L. W., M.D. The Use of Belladonna in Allaying Irritation and Healing Certain Skin Diseases.
EDDOWES, A., M.D. The Ways of Infections: their Importance as regards Treatment of Skin Affections and the Prevention of Relapses.
FOX, T. Colcott, M.B. Remarks on a Case of Acne Necrotica.
HUTCHINSON, Jonathan, F.R.C.S., F.R.S. On Certain Diseases of the Skin induced by Exposure to Sun.
JAMES, Dale, M.R.C.S. Some Relations between Psoriasis and Eczema.
ROBERTS, H. Leslie, M.D. The Present Position of the Question of Vegetable Hair Parasites.
STARTIN, James, M.R.C.S. Treatment of Psoriasis by Tar and Chrysophanic Acid.
TAYLOR, Stopford, M.D. Remarks on a Case of Mycosis Fungoides.
WALDO, Henry, M.D. Treatment of Favus of Scalp and Nails.
WALKER, Norman, M.B. Note on Pigmented Tumours of the Skin.
WALSH, David, M.B. A Case of Symmetrical Lupus in Seton Scars.

J. DISEASES OF CHILDREN.

Lecture Room No. 5—University College.

President: W. HOWSHIP DICKINSON, M.D. *Vice-Presidents:* JOHN EDWARD SHAW, M.B.; FREDERIC S. EVE, F.R.C.S. *Honorary Secretaries:* R. W. MURRAY, F.R.C.S., 15, Rodney Street, Liverpool; BERTRAM M. H. ROGERS, M.D., 11, York Place, Clifton, Bristol.

On Wednesday, August 1st, a discussion on the Treatment and Complications of Whooping-Cough. To be opened by J. Carmichael, M.D. The following gentlemen have signified their intention to take part in the discussion: W. B. Cheadle, M.D., C. Elliott, M.D.

August 2nd.—Diphtheria: Its Diagnosis and Treatment. To be opened by H. R. Hutton, M.D. The following gentlemen have signified their intention to take part in the discussion: W. B. Cheadle, M.D., J. Dacre, L.R.C.P., W. G. Black, F.R.C.S., W. P. Northrup, M.D. (New York), E. M. Simpson, M.D., A. Murray Gray, L.R.C.P., J. E. Shaw, M.B., F. Wethered, M.D., and T. Pagan Lowe, L.R.C.P.

August 3rd.—The Treatment of Tuberculous Disease of Joints. To be opened by Frederick S. Eve, F.R.C.S. The following gentlemen have signified their intention to take part in the discussion: J. Ewens, L.R.C.P., A. E. Barker, F.R.C.S., Noble Smith, F.R.C.S. Edin., D'Arcy Power, M.B., W. G. Black, F.R.C.S., A. Parkin, M.D., C. H. Milburn, M.B., R. Jones, F.R.C.S., E. L. Freer, M.R.C.S.

The following papers have been announced:

CHAPLIN, HENRY D., M.D. (New York). A System of Infantile Measurements.
EWENS, J., L.R.C.S., and L.R.C.P. Deformities of the Lower Extremities (with Exhibition of Cases).
FREER, E. LUKE, M.R.C.S. 1. Some Notes on the Orthopædic Treatment of Deformities, with Illustrative Cases. 2. An Effective and Inexpensive Instrument for the after-treatment of Talipes.
JONES, H. R., M.D. How the Health of Infants is Influenced by their Food.
JONES, ROBERT, F.R.C.S. 1. The Treatment of Paralytic Joints. 2. The Treatment of Injuries about the Elbow-joint in Children.
MACKEY, E., M.D. A Case of Multiple Neuritis in a Child, with Remarks.
MORGAN, GEORGE, L.R.C.P. Varicella Bullosa.
MILBURN, C. H., M.B. Osteotomy for Genu Valgum.
MURRAY, R. W., F.R.C.S. The Treatment of Rickety Deformities by means of Osteoclasis.
PARKIN, ALFRED, M.D. The Treatment of Spinal Caries and its Results by Laminectomy.
POWER, D'Arcy, M.B. The Value of Bursal Enlargements as Indications of Incipient Tuberculous Arthritis.
ROUÉ, BARRETT, M.D. The Study of Diseases of Children and its Place in the Medical Curriculum.

Honorary Local Treasurer: W. JOHNSTONE FYFFE, M.D., Rodney Place, Clifton.

Honorary Local Secretary: E. MARKHAM SKERRITT, M.D., Edgecumbe House, Richmond Hill, Clifton.

PROGRAMME OF PROCEEDINGS.

TUESDAY, JULY 31ST.

9.30 A.M.—Meeting of 1893-94 Council.
11 A.M.—First General Meeting, Large Hall, Victoria Rooms.

[illegible] of Council. Reports of Committees and other business.
3 P.M.—Sermon.
8.30 P.M.—Adjourned General Meeting from 11 A.M. President's Address.

WEDNESDAY, AUGUST 1ST.
[illegible] Council.
10 A.M. [illegible] Meeting, Large Hall, Victoria Rooms Address in Medicine.

THURSDAY, AUGUST 2ND.
9.30 A.M. Meeting of Council.
10 A.M. to 2 P.M.—Sectional Meetings.
3 P.M.—[illegible] Meeting, Room of Victoria Chapel (opposite Reception Room). Address in Surgery.
7 P.M.—Public Dinner of the Association.

FRIDAY, AUGUST 3RD.
9.30 to 11 A.M. Sectional Meetings.
11 A.M.—Concluding General Meeting, Large Hall, Victoria Rooms. Address in Public Medicine.

SATURDAY, AUGUST 4TH.
Excursions.

THE ANNUAL MUSEUM.

THE Annual Museum in connection with the sixty-second meeting of the British Medical Association will be arranged in the following sections:

SECTION A.—Food and Drugs, including Prepared Foods, Chemical and Pharmaceutical Preparations, etc. (Honorary Secretary, Dr. Parker, 14, Pembroke Road, Clifton.)

SECTION B.—Instruments, comprising Medical and Surgical Instruments and Appliances, Electrical Instruments, Microscopes, etc. (Honorary Secretary, Mr. W. M. Barclay, Queen's Road, Clifton.)

SECTION C.—Books, including Diagrams, Charts, etc. (Honorary Secretary, Mr. Hedley Hill, 1, Redcliff Hill, Bristol.

SECTION D.—Sanitary and Ambulance Appliances. (Honorary Secretary, Dr. Davies, 60, Oakfield Road, Clifton.)

An exceptionally fine and well-lighted hall will this year be utilised for the purposes of the Museum. This room is 150 feet in length and 90 feet in width, and immediately adjoins the University College, where the sectional meetings will be held.

Exhibitors (other than members of the medical profession) will be charged for table, floor, and wall space as follows: In Sections A, B, and C, table space from 3s. 6d. to 2s. 6d. per square foot, depending on the position of the table; tables 3 feet and 3 feet 6 inches wide being provided. In Section D, 6d. per square foot for floor space (all fittings to be provided by the exhibitor). Wall space (where available) will be charged for advertisements at 6d. per square foot.

Advertisements in Museum Catalogue.—A catalogue will be printed, and from 1,200 to 1,500 distributed gratis to members of the Association. Prepaid advertisements, to be sent before July 1st, will be inserted. Further particulars will be sent on application.

The plans of the hall and forms for application for space will be ready early in May.

Regulations.

1. All communications on general matters connected with the Museum, and all applications for space, should be addressed to Mr. John Dacre, 14, Eaton Crescent, Clifton, Bristol, before June 20th. N.B.—No space will be allotted before that date.

2. A brief description of each exhibit for insertion in the Museum Catalogue must be in the hands of the respective Secretaries before July 1st.

3. Space will, as far as possible, be allotted in the order of application and in proportion to the amount applied for, the Committee reserving power to give preference to *bonâ fide* inventions and improvements not previously exhibited, and also to refuse any exhibit they may consider unsuitable.

4. In the event of more space being applied for than is actually available, the allotment will be made at the discretion of the Committee.

5. The Committee reserve to themselves the power to utilise any of the floor space set apart for Section D (if it is not all required for sanitary exhibits) for the erection of additional tables or for any other purpose they may think fit.

6. All exhibits should be addressed to "The Secretaries of the Museum, British Medical Association, Drill Hall, Queen's Road, Clifton, Bristol," with the name of the Section for which they are intended. Packages should not be addresses to a firm's representative at the Museum.

7. All exhibits must be delivered between July 23rd and July 28th, and each package must bear a card showing the name and address of the exhibitor.

8. All exhibits must be placed in the allotted space by 2 P.M. on July 30th.

9. The Committee will exercise every care regarding the exhibits submitted to them, but all risks and expenses must be borne by the exhibitor.

10. No signs or placards will be allowed in the hall which may interfere with neighbouring exhibits. No exhibit or placard on the central tables must reach higher than 2 feet 6 inches from the table. The arrangement of signs, placards, exhibits, etc., will in every case be subject to the approval of the Committee.

11. Intimation of the space allotted to each exhibitor will be sent as promptly as possible after June 20th, marked upon a plan. On receipt of cheque for the cost of such space, a card for the admission of the exhibit will be sent.

12. All cheques to be made payable to Mr. John Dacre, 14, Eaton Crescent, Clifton.

13. No exhibits will be received except on the understanding that the above regulations are strictly complied with.

Mr. L. M. GRIFFITHS, Chairman, 9, Gordon Road, Clifton.
Dr. J. E. SHAW, Vice-Chairman, Caledonia Place, Clifton.
Mr. JOHN DACRE, Secretary, 14, Eaton Crescent, Clifton.
} Annual Museum Subcommittee.

REPORTS
ON
THE NURSING AND ADMINISTRATION OF PROVINCIAL WORKHOUSES AND INFIRMARIES.

SPECIAL COMMISSION OF THE "BRITISH MEDICAL JOURNAL."

V.
HAVERFORDWEST, SOUTH WALES.

IT has rarely been our lot to visit a workhouse infirmary more unsuited for its purpose, or more ill-provided with all that is necessary for the comfort of the sick. The master readily acceded to the request of Dr. Williams, the medical officer, to show us the infirmary; but we must confess to a feeling of surprise that the matron, whom we only saw for a brief moment, did not respond to the master's suggestion that she should accompany us through the female department.

This union embraces a large extent of country, and takes paupers from sixty-six parishes; the town is the centre of a wide district.

BUILDINGS AND WARDS.

The workhouse is well situated on a hill, and has extensive grounds around it; it is an old house, and in every part is quite behind the times. It is built round four courts, which form the airing courts of the various departments.

There is accommodation for thirty-two sick, and there is besides a fever ward placed at the top of the house, at the present time empty. The wards are of variable size, and are distributed on the ground and first floors; the largest is for eleven beds, and the smaller wards hold two or three beds; the arrangement on the male and female side is the same. The wards are dreary places, the walls dirty, washed over with dingy yellow colouring, windows on one side, only one fireplace at one end, looking bare of furniture for the sick.

The iron bedsteads are low and on them are three planks held by a crosspiece, not always laid close, and on this a chaff mattress about three inches thick. We saw the helpless bedridden old people lying on these beds, and they must have found them a sorry rest for their weary bones. There are about four spring beds distributed in the wards, but they have only the chaff mattress over the springs. There is no

means of ventilation but by the windows, and, as the fireplace in some of the wards is small it is hardly probable that the atmosphere is changed in the night.

The system of warming is peculiar to this part of the country. "Culm," which is clay and anthracite slack kneaded into balls, is used in the grates; when quite alight it is red hot and must throw out a good heat, but it is slow in kindling and can hardly be of service for obtaining a fire quickly.

Class of Patients.

These are of the usual description found in the workhouses. On one of the spring beds there was an old woman with hemiplegia, helpless all but one hand and unable to turn herself; in the male ward was a fine man with erysipelas in his leg. On inquiring as to the treatment the "nurse" told us that he washed it for himself twice a day with Condy's fluid, but that otherwise no dressing was used. We could not but think what a pity it was that more vigorous measures were not tried, since by a speedy curing of the leg the rates would be relieved of that man's keep. He was too long for his bed.

There were eight patients in bed in all in this part of the infirmary, including senile debility, rheumatism, paralysis, chest complaints, and old age, and several very infirm men and women up in the wards. We were shown a small ward with four beds in it, all occupied; it opened immediately from one of the yards, it was without a fireplace, and was lighted by one small window. This is the tramps' sick ward. We could not ascertain that any one person was responsible for attendance in this ward, and, if assistance was wanted in the night, the most able-bodied of the tramps would have to go some little distance before he could obtain it, as there is no communication bell.

Sanitary Arrangements.

The sanitary appliances are quite rudimentary: there is no water laid on to the upper floors; the only conveniences for the wards are commodes, of which there are a few in each ward; one is placed outside on each landing, intended for use at night, that for the men being enclosed within a screen, that for the women being open. It can hardly be expected that these poor infirm folk will go outside the wards on a cold night, nor is it well that they should. The commodes in the wards are emptied after 6 in the morning. On going round the wards we saw some ordinary utensils about, some of which were unemptied. The closets are all outside; they are simply cesspools, and some were very unpleasant.

The water supply is ample, and is obtained from wells in the courts. The pumps in each court discharge over troughs down which the refuse water is emptied.

There is only one fixed bath, and that is in the tramps' room; it is a small one, sunk in the floor, with a tap to supply hot water, but the cold has to be carried in from the yard. We saw no baths which could be used for the sick, and, as every drop of water must be carried up or down, it is probable that bathing is not largely practised in this infirmary; indeed, the patients and their linen did not look particularly clean at the time of our visit.

System of Nursing.

The "nurse" is untrained; she is solely responsible for the care of the sick and of midwifery cases; there is no night nurse nor regular pauper help at night. On inquiring how the helpless patients were attended to during the night, we were informed that they had to obtain such assistance as they could from the more able-bodied paupers who slept in the ward. As we found that bedsores were recognised as one of the usual ailments in the infirmary, it can be imagined how much help these paupers are able to render to each other. We pictured to ourselves the sad condition of these helpless old people, passing the long hours of the dark nights on their comfortless beds, uncared for, uncleansed, unfed. We say "dark night" because we have ascertained that all lights were removed from the wards after the patients are in bed, nor did we see any appliances for lighting the staircases or passages.

The labour ward is for two beds; it has no separate offices, and all refuse must be carried downstairs.

Classification of Patients.

There is no system of classification; we saw the imbeciles and "harmless lunatics" among the patients in the wards; one half-witted boy was busy serving the dinners. There were no lock cases in the infirmary, and we were informed that there were no isolation wards for offensive cases. The "harmless lunatics" appeared to be straying about where they pleased.

Nursery.

On our way round the house we passed through the "nursery," a large ill-furnished room, the floor laid down with paving stones; there was a large table, two benches, two wooden cradles, a few chairs, the latter round a fireplace which was most insufficient to warm the room in the winter. In this room the infants stay with their mothers until they are 2 years old. There was a baby in each cradle, one looking very ill; its mother thought it was "sickening for something." There was no rug, or even a bit of sacking on which the infants might crawl; a more dreary place to be called a nursery can hardly be imagined. Though not properly coming within the scope of this inquiry, we mention this room as indicating the lack of a kindly and sympathetic spirit on the part of those responsible for the management of the house.

Diet.

The dinners were being served at the time of our visit. It was "broth day"; the broth, made of mutton and vegetables, both looked and smelt good, but it was served in wooden bowls which were black with age and grease. We tasted the bread and butter, both of which were good. We saw no bed cards in the wards, but the master informed us that the medical officer has a free hand in ordering extras, and that milk and beef tea are taken into the wards for the sick at night. As the last meal is given at 6 o'clock, and the first at 8 in the morning, it is necessary that the old people should have something to take in the night.

Day Rooms.

The day room on the men's side is used for sleeping purposes; there were four beds in it; it is also the tailor's shop where the male clothing is looked over and mended. It is a very small room, with one window, and at the time of our visit the floor was piled with clothing, and the air of the room was quite unwholesome. On the women's side the day room is not used for a sleeping room: it had one large settle in it, but no comfortable chairs or anything to make it homely.

On passing through one of the courts we were shown the disinfecting apparatus. It is a small galvanised iron box, like a good-sized tank, the lid broken at the edges, and having underneath it a tray for the fire; this was standing in a shed close to the closets.

Recommendations.

It seems hopeless to make any recommendation in the case of this infirmary. The building is unsuitable for its purpose, and the system on which it is worked is faulty in every particular.

THE APPEAL OF THE CIVIL RIGHTS DEFENCE COMMITTEE.

The Case of Mr. R. B. Anderson.—Its Bearing on the General Rights of Citizens, and of the Medical Profession in Particular.

The Civil Rights Defence Committee, to the formation of which, under the presidency of Lord Stamford, we referred last week—has now issued an appeal to raise a fund to enable Mr. R. B. Anderson, F.R.C.S.Eng., to bring to decision, by appeal to the Judicial Committee of the Privy Council, judgments and orders of Court involving civil rights of high and general public interest, as well as certain rights especially of interest to the medical profession.

It is now, we believe, recognised on all hands that a serious miscarriage of justice occurred, involving a grievous private wrong to Mr. Anderson. The details of the case have already been fully stated in the British Medical Journal, and when the matter was recently submitted to a special jury in this country, the jury found that "the defendant Cook oppressively and with malice overstrained his judicial powers

to the prejudice of the plaintiff and the wilful perversion of justice. The late Lord Chief Justice, however, entered judgment for the defendant on the ground that no action would lie against a judge for an act done in his judicial capacity. This judgment is under appeal by Mr. Anderson to the Court of Appeal. Meanwhile certain judgments remain legally in force against him, and, while they stand, affect the ordinary rights of the medical profession in certain particulars. This renders it very desirable that a final decision should be obtained in due legal form.

Chief among these rights is the right of medical men, as of all other men, to control the disposal of their services, and to make terms for them. A second point—really involved in the first—is the right of a medical man, not having undertaken any particular obligation, to discontinue attendance on a patient should circumstances appear to render such a course advisable. Other points of general public interest are also involved, namely, the right to freedom from the illegal institution of vexatious suits, the right of an individual to give evidence in his own behalf, to freedom from illegal arrest and immoderate bail in civil suits, the right to the writ of *habeas corpus*, and the right to prompt decisions in cases involving the liberty of the subject. In order that these points may be settled absolutely upon their merits it is proposed to provide, if necessary, the respondents who hold judgments against Mr. Anderson with means to obtain competent legal advice and assistance.

The desire to appeal to the Privy Council is founded, therefore, upon a wish to vindicate rights possessed by all citizens, rights never seriously questioned before this in courts of law, or by competent lawyers, and rights which, in certain of their applications, touch very nearly the special interests of the medical profession. A decision, which may in future be made a precedent, to the effect that a medical man cannot bargain as to the rate of remuneration for his services, and cannot legally withdraw from the charge of a case which he has once undertaken, might be in the future disastrous to the interests of the profession. It may be said that such cases can but seldom occur; this is no doubt true, but they have occurred, even in this country, and—the question having been raised by a legal decision—ought to be set at rest once and for all. Nothing more is claimed for a medical man than for any other citizen. If a person seeking the assistance of a medical practitioner has a right to agree as to the rate of remuneration and to dispense at his own choice and time with the services of the practitioner the right ought clearly to be reciprocal.

Upon the Civil Rights Committee the British Medical Association is represented by Dr. J. Ward Cousins, President of the Council, and Mr. H. T. Butlin, Treasurer of the Association, and we trust that an adequate response may be made to the appeal for the funds necessary to defray the expense of the appeal to the Privy Council. The Committee have decided that the amount of individual subscriptions shall not exceed one guinea, in order that the number of subscriptions may indicate the importance attached by medical men to the rights involved. Cheques and post office orders should be crossed and made payable to the Anderson Appeal Fund Account, and forwarded to the Manager of the Chancery Lane branch of the Union Bank, Chancery Lane, London, E.C.

LITERARY NOTES.

The fifth edition of Mr. G. P. Field's *Manual of Diseases of the Ear* has just been issued. The fourth edition was sold out in eight months. The author has added in the form of an appendix the most important part of what he said on the subject of suppurative diseases in his Harveian Lectures in 1893. A feature of special interest and importance in this appendix is that it embodies Mr. Field's experience as to the influence of sewer gas in causing aural suppuration.

Drs. Orakhovatz and Vateff, of Lovetch, in Bulgaria, are the editors of a new medical journal, the full title of which is as follows—*Meditzïna: Mesetchno Naütchno-Meditzinsko Spisanïe* (Medicine: A Monthly Scientific Medical Journal).

The first number of an Italian medical journal, the *Bolletino Medico-Chirurgico* has just appeared at Tunis. The aim of the new periodical, which is to be issued monthly, under the auspices of the medical staff of the Ospedale Coloniale Italiano of Tunis, will be to publish the experience of colonial surgeons, Italian and foreign, on the diseases indigenous to the locality, climatology, etc. The editors are Drs. P. Brignone, E. Busacca, E. S. Camilleri, and G. Funaro.

The current number of Hoppe-Seyler's *Zeitschrift für physiologische Chemie* contains the following papers: (1) On the oxidation of proteids by potassium permanganate, by Bondzynski and Zoja. (2) Chemical composition of bone in osteomalacia, by M. Levy; here it is shown that the decalcification cannot be produced by any free acid like lactic acid, because free acids dissolve more carbonate than phosphate of lime; these salts are diminished in quantity but retain their normal ratio to each other. (3) The influence of cold baths on metabolism, by E. Formanck; the most marked effect appears to be an increase in nitrogenous metabolism. (4) The influence of ferments occurring in vegetables on the nutrition of animals, by H. Weiske. (5) On cholalic acid, by K. Landsteiner. (6) On the specific rotatory power of fibrinogen, by F. Mittelbach.

A report recently presented by M. Brouardel to the Academic Council shows that in the academic year 1892 93 the total number of readers in the library of the Paris Medical Faculty was 140,600. The number of books given out to readers in the library was 300,000; 1,325 books were lent to 1,070 borrowers, and 58 were lent to provincial faculties. The number of tickets of admission to the reserved rooms given out was 310.

A journal entitled *The Indian Journal of Pharmacy* has recently begun to appear in Calcutta, under the editorship of Dr. Roger S. Chew. The new periodical can hardly fail to be specially interesting to medical practitioners as well as to pharmacists, as it is to be largely devoted to the drugs and chemical products of the East.

Dr. S. Weir Mitchell has issued an analytical catalogue of his writings. The dates of publication range from 1852 to the present year. The books and papers are arranged in chronological order, and a short note is appended to each, giving a summary of its contents.

We receive so many inquiries as to the new French Medical Law that it may be interesting to a number of readers to state that a book entitled *La Nouvelle Législation Médicale*, by MM. Lechopié, avocat à la cour de Paris, and Dr. Floquet, licencié en droit and physician to the Paris Palais de Justice and to the Tribunal of Commerce, and author of the *Code des Médecins*, has just been published by G. Masson (120, Boulevard St. Germain, Paris). The work contains the text of the new law of November 30th, 1892, with full explanatory commentaries. It is intended for the use of medical practitioners and students, French and foreign.

M. Paquelin's name is familiar to medical mankind in connection with his thermo-cautery; he is, perhaps, less known as the possessor of a mental heat-producing apparatus which manifests its working by an occasional outpouring of verse, glowing, as might be expected, with "words that burn." The French journals have recently published a poetic effusion of his, in which the origin of percussion is told in classic style as an accidental discovery (Have not most great discoveries in medicine been more or less accidental?) of Bacchus. When Semele was dying, with the future god of wine still in her womb, Vulcan performed Cæsarean section, and delivered the child, whom he incontinently inserted into his father's thigh. Here the lusty youngster kicked about so vigorously that he gave his parent sciatica. On escaping from his prison he was naturally thirsty, and he soon began to suffer from alcoholic tremor. When sitting on his favourite seat, a wine cask, he was constantly drumming on it with his fingers, and hammering it with his restless feet. The difference of resonance attracted his attention, and he soon learnt—

> du son dit aérique
> A discerner le sens de celui dit hydrique;
> Il sut en même temps tracer sur son tonneau
> Exactement la ligne où siégeait le niveau.

Man, we gather, soon learnt by Bacchus's example to diagnose the internal condition of a wine cask, and Hippocrates by-and-by bettered the instruction by determining the limits of the spleen by percussion. Is it too much to hope that M. Paquelin's centre of poetic thermogenesis may hold out till he has found a divine origin for auscultation, inspection of the tongue, and the other esoteric mysteries of the medical art?

BRITISH MEDICAL ASSOCIATION, SUBSCRIPTIONS FOR 1894.

SUBSCRIPTIONS to the Association for 1894 became due on January 1st. Members of Branches are requested to pay the same to their respective secretaries. Members of the Association not belonging to Branches are requested to forward their remittances to the General Secretary, 429, Strand, London. Post-office Orders should be made payable at the West Central District Office, High Holborn.

British Medical Journal.

SATURDAY, JUNE 30TH, 1894.

WORKHOUSE MANAGEMENT AND INSPECTION.

IT is greatly to be hoped that the state of public feeling aroused by the revelations respecting the Newton Abbot Workhouse will not be permitted to subside until some permanent improvement has been brought about in our system of workhouse management and inspection. It shall not do so if we can help it and we shall be glad to have assistance in keeping public attention directed to the matter. As a further branch of the subject we are now publishing a series of reports on the nursing arrangements and administration of some workhouse infirmaries. Writing to the *Western Morning News*, the Rev. Mr. Paul says truly: "It may be safely stated that the general public holds it proved that unpardonable neglect and even gross barbarities have prevailed in the institution in question." It may also perhaps be taken for granted that the Guardians of the Poor for the Newton Abbot Union are not a more callous or a less conscientious body of men than the average of boards of guardians of the poor nor more neglectful of the trust committed to them. "What guarantee, then," asks he, "is there under the present system of workhouse management and inspection that the horrors of Newton Abbot have not got their parallel in many other workhouses throughout the land?" If the present system affords no such guarantee, surely the time has come for the establishment of a system which may be relied on to do so. He then proceeds to offer suggestions, some of which we consider are most valuable.

The first and most important of these is that women should be appointed to seats on every board of guardians or district council. Judging by the results of the appointment of women to sit on the Board of Management of the Metropolitan Asylums and Hospitals, we have no hesitation in expressing our most emphatic opinion in favour of an extension of the system. The influence exercised by the female members of the board, whether on committees or within the walls of the hospitals and asylums, has been for the public benefit in the widest sense. As evidence of this it is only necessary to mention the names of three members—Miss Baker, the Hon. Miss Stanley, and Mrs. Lawrie—ladies whose public work is so well known. The example they afford shows that the existence of the female element on Poor-law boards of management must henceforth be regarded as indispensable, unless we are to rest satisfied with a less perfect system of administration than that which experience has shown to be attainable.

It must not, however, be forgotten that the three lady members above mentioned have been appointed on a system of nomination which does not necessitate their passing through the ordeal of "contested election." Such an ordeal would, it is feared, in some cases deter the most capable women from entering a sphere of public life for which their special gifts may befit them in a remarkable degree. It would appear, indeed, that in order to secure and retain the invaluable aid of women in administrative departments, which will most surely suffer by their absence, it will become necessary to maintain and extend the principle of nomination by the Local Government Board, which has already worked so admirably in practice.

There is another point raised in Mr. Paul's letter to which we may advert on the present occasion. In discussing the best arrangements for inspection, he offers several suggestions which are worthy of careful consideration. We are entirely in agreement with him when he says that inspections, by whomsoever they are made, should be at short intervals, and that, moreover, they should be in the nature of "surprise visits." We would add that to be efficient they should obviously be made, not by amateurs, but by those who have had special experience in the management of workhouses, and who are well acquainted with the difficulties which often have to be encountered at such establishments in maintaining a proper standard of cleanliness and other hygienic arrangements.

We refrain from making observations at present as to the position of the general inspectors of the Local Government Board in relation to workhouse management and supervision. But without waiting for any reply that may be forthcoming to the very pertinent questions recently asked in the BRITISH MEDICAL JOURNAL by an eminent and experienced person writing under the initials "F.R.C.P.," we may safely observe that no system of inspection can possibly prove satisfactory whilst there remains doubt and mystery as to the essential point, namely, the nature of the functions of the general inspectors of Her Majesty's Local Government Board. This must be made clear before we are able to discuss fully any plan for permanent improvement in the management and supervision of our workhouses. That such improvement is urgently needed the revelations at Newton Abbot only too clearly show.

THE MEDICAL SERVICES IN WAR.

SINCE the article in the BRITISH MEDICAL JOURNAL of November 11th last on the Care of our Wounded in War was published, various communications have reached us from trustworthy sources confirming the grave misgivings on medical field efficiency then expressed, and offering remedial suggestions to be applied both at home and in India. That our medical services are unfortunately not only unprepared but insufficient for field duties in a campaign with a first class Power can hardly, we imagine, be gainsaid, after recent exposures, even by the most optimist or obdurate army administrator. The points of inefficiency can be fixed as follows:—The Medical Staff Corps is deficient both in numbers and physique; between it and its officers no organic cohesion exists; officers and men have no practical training together in peace; medical transport under the Geneva Convention has ceased to exist, since the Army Service Corps, who is supposed to supply it, has been made a combatant

body. It is open to doubt whether the medical field equipment is what it ought to be, as it is never seen or handled, but carefully locked away in stores.

Each or all of these matters are sufficiently serious, viewing the army as a mere fighting machine; irrespective of considerations of humanity and duty towards our soldiers. Our philanthropy is perhaps rather diffuse, and apt to dissipate itself in unlimited radiation: it would be well if we could concentrate it a little more at home, on such problems, say, as the relief of our soldiers stricken in battle.

The inferior physique of the men of the Medical Staff Corps, on whom primarily falls the succour of the wounded on the battlefield, dates from an order a few years back, lowering the standard of height to 5 feet 3 inches, and limiting it, unless in exceptional cases, to 5 feet 5 inches. Within these limits sturdy men can of course be got, but the majority are merely stunted, and not tall enough or strong enough to carry heavy men on stretchers out of the zone of fire. The ostensible ground for lowering the standard was to force big men enlisting into the combatant ranks, but the best men usually decline to be coerced, and are simply lost to the service altogether. It is an open secret, however, that the fine appearance of the medical as well as some other departmental corps in past years offended military susceptibilities, and this is suspected to have had something to do with the lowering of the physical standard. Whatever the explanation, it is high time the order was cancelled, as plenty of good men can be got between the military mean of 5 feet 4 and 5 feet 8 inches.

The want of organic union and cohesion between the officers and men of the medical service will nowhere be more disastrously felt than in the field; and if there were no other reasons, that alone ought to hasten the formation of a consolidated corps.

The absence of all organisation and facilities for training officers and men together in field hospital and bearer company units is really an army scandal; yet our military authorities seem absolutely indifferent, although field medical inefficiency must entail untold suffering on all combatants. The present War Minister has, indeed, somewhat tentatively promised to mobilise certain medical units this year, but, as it will cost money, our fear is it may be carried out in a parsimonious, and therefore perfunctory, manner. It is suggested that sufficient equipment be kept at central places, so that officers and men of districts can be organised into definite units, and undergo a short course of instruction annually. By this means some pre-existing cohesion could be secured for units suddenly mobilised for active service; as it is, bearer companies and field hospitals are made up of officers and men drafted indiscriminately from stations all over the kingdom, who may meet for the first time at the point of embarkation, or perhaps only at the seat of war. Imagine such a preposterous system applied to, say, a battery of artillery or a pontoon troop! It is setting a premium on breakdown and disaster.

As regards medical transport, it has simply ceased to exist in the United Kingdom, since the Transport Staff has been transformed into the combatant Army Service Corps, which is ineligible to work under the Red Cross. We are more than surprised that this extraordinary state of things has not, since it was discovered, been more pressed on the attention of the Secretary of State for War. Our sick and wounded will find themselves in a bad way, with their transport no longer under the protection of the Red Cross, but liable to capture or destruction as combatants.

It is suggested that special medical transport companies of drivers permitted to volunteer from the Army Reserve should be formed; the men should wear departmental uniform, receive departmental pay when mobilised, wear the Red Cross, and, in short, cease to be combatants. They could be mobilised during summer manœuvres, and drive wagons horsed by hired animals from the Reserve. In addition, a permanent nucleus of regular medical transport might be formed at Aldershot for purposes of instruction, which could be utilised for all medical work in the camp, and so relieve the Army Service Corps in proportion.

In this matter the Indian is perhaps in more evil case than the home service; indeed, we fail to find any organised field medical service in that country that could possibly cope with a big campaign. The "two men per company" in each regiment, trained in ambulance work and first aid, as has been forcibly pointed out, can hardly ever be available in the field; they are far too valuable in the fighting line, and no general could permit their withdrawal on the day of battle for non-combatant duties.

The Native Army Hospital Corps is not organised for field duties, and the elements which at present compose it are totally unsuited for any such organisation. Of the four classes which compose it—ward servants, cooks, water carriers, and sweepers—the first alone corresponds to the men of the Medical Staff Corps at home; but, recruited as they are from the dregs of the bazaars, they are so wretched in morals and physique that, it is asserted, not 5 per cent. of them would be enlisted into any native regiment in India, It is suggested that a higher class should be enlisted, placed on the footing of sepoys, better paid, clothed, and drilled, and organised for duties in the field.

The removal of wounded from the field in India has hitherto been largely effected by the well-known "dhoolie" or military palanquin; but with long-range weapons of precision it is idle to calculate upon this means in the future; besides the dhoolie-bearer class, or caste, is fast dying out before railways and wheeled road conveyances.

It is suggested that in addition to a native field hospital corps four men per regimental company should be trained in first aid, stretcher drill, and primary hospital duties. In the event of war the regiments going to the front could retain all their trained men in the fighting ranks until an action was over; but each regiment remaining in reserve in India should send to the front half of its trained men, from which bearer companies could be formed, and who, armed with a carbine, could also be available for hospital escort duties on the line of march in a hostile or uncivilised country.

Finally, it is urged there are far too few medical officers for war duties in India, and there may be very great difficulty in supplementing the numbers in the hour of need. If the country were simultaneously involved in a struggle in Europe and India, then the latter could not draw on supposed reserves at home. The medical officers in civil employ, which constitute the only military reserve in India, are in many cases not available; besides, it is unfair to suppose that officers withdrawn, probably for many years from the army, can at a moment's notice successfully take

up the details of military duty, especially administration; taking them from important civil appointments would, moreover, cause dire confusion and dislocation in the civil administration of the country.

From all of these considerations it is perfectly clear that the days of *laissez faire* are over, and something must speedily be done to render our medical services thoroughly efficient in war.

PROFESSOR THADDAUS, the present Dean of the Medical Faculty of the University of Krakau, has just been elected by the Academic Senate Rector of the University for 1894-95.

DR. FELIX SEMON, Physician for Diseases of the Throat, St. Thomas's Hospital, has had the title of "Professor" conferred on him by the Prussian Government.

THE Boylston Prize for 1894 has been awarded by the University of Harvard to Dr. Norman Walker, of Edinburgh, for an essay on the Histological Varieties of Cancer of the Skin.

SIR WALTER FOSTER, M.D., M.P., has been elected by the Organising Committee Honorary President of the Fourteenth Section of the International Congress of Hygiene and Demography to be opened at Buda-Pesth on September 1st next.

MR. STONE, the late Clerk of the Royal College of Surgeons of England, by his will, left the sum of £1,000 to Epsom College, to found a "Stone Scholarship," the conditions upon which the scholarship is to be granted to be determined by the Council of Epsom College.

AT a meeting of the Neurological Society of London to be held at the Medical Society's Rooms, Chandos Street, W., on Thursday, July 12th, at 8.30 P.M., Dr. Head will read a paper entitled "Disturbances of Sensation with Especial Reference to the Pain of Visceral Disease. Part ii, Head and Neck."

A MEETING of delegates of the various schools and institutions concerned in the scheme of the Gresham Commissioners will be held, at Professor Ramsay's request, in the Royal College of Physicians, on Saturday, at 4 P.M., to consider the possibility of common action being taken with respect to the scheme.

AT the London School of Medicine for Women, Brunswick Square, on June 26th, the Marchioness of Lansdowne distributed the scholarships, prizes, and certificates gained by the students in the summer session, 1893, and winter session 1893-94.

SIR JOSEPH LISTER.

THE Council of the Society of Arts has, with the approval and sanction of the President, His Royal Highness the Prince of Wales, awarded the Albert Medal to Sir Joseph Lister "for the discovery and establishment of the antiseptic method of treating wounds and injuries, by which not only has the art of surgery been greatly promoted and human life saved in all parts of the world, but extensive industries have been created for the supply of materials for carrying the treatment into effect."

SIR GEORGE HUMPHRY.

WE are very glad to be able to state that Sir George Humphry, who has been seriously ill, is now much better. Professor Humphry has been overworking himself in connection with the medical examinations, and was suffering from slight bronchitis when he became once more the subject of femoral phlebitis, a condition from which he has before suffered. These complications are happily subsiding.

THE CHAIR OF PATHOLOGY AT GLASGOW.

THE Curators of the Chair of Pathology in Glasgow University, constituted by ordinance of the University Commissioners, and consisting of three members appointed by the University Court and three by the Western Infirmary, at a meeting held on June 26th, appointed Dr. Joseph Coats to be Professor of Pathology in the University. Arrangements have been made by the Western Infirmary satisfactory to the Court for affording the professor due facilities for the practical teaching of the subject.

GERMANY AND THE PROPOSED MEMORIAL TO CHARCOT.

A COMMITTEE has been formed in Germany to assist in the erection of a monument to Charcot in the Salpêtrière. The invitation for subscriptions is issued in the names of Professors Erb, of Heidelberg, and Jolly, of Berlin, and the Committee includes, among many other well-known names, those of Professors Curchsmann, of Leipzig; Binswanger, of Jena; Grashey, of Munich; Kussmaul, of Heidelberg; Leyden and Mendel, of Berlin; Von Recklinghausen, of Strassburg; Schultz, of Bonn; Von Strümpell, of Erlangen; Wernicke, of Breslau; and Von Ziemssen, of Munich.

HAGAR'S WELL AT MECCA.

WE publish in another column a note from Mr. Hankin, Chemical Examiner to the North-West Provinces and Oudh, India, about Hagar's Well at Mecca, and although the analysis is, as he himself says, very incomplete, still it points to the water being of bad character. This is a matter of importance, as there have, we believe, been several attempts to whitewash the water of Zem-Zem, by asserting that the bad samples previously analysed did not really come from the holy well at Mecca at all. Whether the water comes from the particular well in Mecca or not is, in our opinion, a matter of secondary importance, for both this analysis, as well as the previous ones which have been latterly challenged, clearly show that very highly polluted water purporting to come from Mecca is sent about in the East, and it is this traffic in foul water which it is important to stop, irrespective of where it comes from. The fact that this water is often kept stored in these tins for months before being sold, or distributed, as Mr. Hankin says, must of course greatly diminish the risk of its conveying any bacterial infection.

STREET ICES.

AN ice cream which contained four fat lice and numerous coloured hairs shaken out of carpet is not exactly an appetising dainty. These, however, were among the ingredients of an ice purchased recently by Mr. Albert Smith, analytical chemist, in Islington. In another sample he found traces of lead and antimony. It appears that some of these ice creams are made of boiled corn flour, water, and sugar, with a little tartaric acid to give tartness, and a little aniline dye to impart a colour pleasing to the youthful eye. The presence of lead and antimony is to be accounted for by the action of the tartaric acid on the metallic compound of which the freezing cans are made. But Mr. Smith is probably right that the risk of infection is still more serious than the liability to poisoning by lead or antimony or the arsenic which may be present in the aniline dyes. He relates how he watched a little girl, whose face, hands, and ears were covered with sores, purchase an ice cream, and lick out the glass in the customary fashion. The vendor did not wash or even wipe the glass,

but at once filled it and handed it to another young customer, who repeated the process of sucking and licking. Last summer a case occurred in which it was proved that milk used in the making of cheap ices was from a source responsible for the dissemination of typhoid fever. It is clear that an industry which consists in the vending of an article of food which, under present circumstances, may contain anything from a louse to a typhoid bacillus needs to be brought under the most careful surveillance of sanitary authorities.

THE UNIVERSITY FETES AT CAEN.

The ceremony of the inauguration of the Faculties at Caen was held on June 3rd with much pomp and circumstance. The students with banners unfurled were massed in the main quadrangle, and a goodly array of academic, political, and civic notabilities occupied a kind of grand stand erected for their accommodation. There was a copious stream of oratory from the Rector, M. Zevost, the Minister of Public Instruction, and other dignitaries. Paris, Rennes, Marseilles, Montpellier, Rouen, Nancy, Poitiers, Lille, Toulouse, Nantes, and Aix were represented at the ceremony; and among the foreign seats of learning which were represented were Oxford and Cambridge, each of which sent three delegates; the University of Pavia, which sent two; the University of Upsala, which sent two; Lausanne, which sent three; Liége, which sent three; Ghent, which sent two; and the University of Cairo, which sent four. The University of Leyden was also represented by its rector, Dr. Fockema, and by Professor Van der Lith, and the University of Aberdeen by Professor Harrower. On the day after the ceremony there was an excursion to Havre, where the visitors were entertained at dinner at the Hôtel de Ville by the Mayor. The old University of Caen, now happily restored, was founded in 1432 by a charter granted by the Duke of Bedford in the name of Henry VI of England.

SCHOOL BOARDS AND BLIND AND DEAF CHILDREN.

The Elementary Education Act (Blind and Deaf Children), 1893, now renders school boards responsible for the provision of suitable elementary education of all blind and deaf children within its district, and full power is given to boards for providing such education. It now becomes necessary that school boards should ascertain the number of children in their area too blind to be able to read the ordinary school books, or too deaf to be taught in a class of hearing children in an elementary school; this should form part of the work of the school visitors who visit the homes of the children. It would greatly assist the establishing of suitable classes if public notice as to these children were sent to the medical men in the district, as well as to ministers of religion and others who are much among the poorer classes; forms on postcards for reporting such cases might be supplied to save trouble. All will be glad to see the new Act worked efficiently and to the benefit of all afflicted children. It is to be hoped that shortly this Act may be extended to the care of all afflicted children, including the crippled, epileptic, and those mentally weak, according to the recommendation of the Royal Commission, and that medical officers be appointed to all the larger school boards. The School Board of Oxford have issued a circular letter to the medical profession asking names and addresses of all blind and dumb children. The supplying of such information should be made as easy as possible, and asked as a privilege, as it can in no way be demanded as a right.

THE CHELSEA HOSPITAL FOR WOMEN.

The festival dinner of this hospital took place at the Whitehall Rooms on June 26th, the chair being taken by Sir Algernon Borthwick, Bart., M.P. There was a large gathering of ladies and gentlemen interested in the charity. In the various speeches allusion was made to the crisis through which the hospital had lately passed, and strong confidence was expressed in the position of the institution, and in the good work which it was doing in its department of medicine. The chairman thought that certain accusations which had been brought forward had been ventilated somewhat too freely by the press, but he was sure that as to the earlier charges connected with drainage and scarlet fever the hospital had done its duty as rapidly as any institution could; on all other points the fullest inquiry had been courted, and a commission of able men had been appointed which would soon report. Whatever that report might be, he was sure it would not be prejudicial to the hospital, and might even be beneficial. Dr. Robert Barnes paid a high tribute to the utility of the work which was being done, and to the importance of the advances which, by aid of such institutions, were being made in the treatment of the class of cases dealt with at the hospital. The number both of in-patients and out-patients was increasing. The treasurer announced donations and subscriptions amounting to over £1,700, being the largest amount as yet received on such an occasion.

THE HEALTHIEST CAPITAL IN THE WORLD.

Judged by its death-rate the health of London compares most favourably with that of any other large city, at home or abroad. The recent weekly statistics of the Registrar-General show that the metropolis is now remarkably healthy, and the death-rate almost the lowest on record. During the last four weeks for which returns are available the London mortality has been equal to an annual rate of only 16.3 per 1,000 persons living, while in Paris it was 20.5, in Berlin 18.2, in Vienna 22.5, and in New York 19.6. The death-rate in London is now considerably lower than in any foreign city containing a population of half a million or upwards; and, with one or two exceptions, actually lower than in any other of the thirty-one large colonial and foreign cities for which returns are published by the Registrar-General. On only three previous occasions on record has the London death-rate been so low as during the current month, and in every week since January last the deaths have been considerably below the average. Although during the quarter just ended the mortality from the principal zymotic diseases in London has exceeded the average, owing to the prevalence of measles and diphtheria, the meteorological conditions have generally been unusually favourable to the public health. The mortality from diseases of the respiratory organs has been considerably below the average each week throughout the quarter, and the cool weather has delayed the appearance of summer diarrhœa, which invariably causes a rapid rise in the death-rate about this period of the year.

SUPERVISING THE SUPERVISORS.

It ought to be a matter of concern to many, as it certainly is of amusement to some, that the sanitary machinery of this country after all the years it has been in existence is still of so feeble a nature that it cannot be trusted to go by itself and that its tottering footsteps should still require the guidance of voluntary associations like the Mansion House Council on the Dwellings of the Poor. We understand that this Council does its best to impress on the Legislature the importance of public measures for the improvement of the dwellings of the poor; nevertheless, to judge from its report, its greatest triumphs have been gained in its efforts to stir up sanitary authorities to use powers which they already possess: and people may well ask what is the use of passing fresh laws while those we have are not enforced. We have an elaborate system of sanitary authorities, provided with inspectors and medical officers, and furnished with wide and elastic legal powers, we have a County Council provided with certain powers of initiation

in case the local authorities are remiss; and over all we have a Local Government Board with an admirable staff and great authority, and yet the law doses placidly in presence of abuses which are remedied at once, as soon as officialism is wakened up by the insistence of a voluntary association. Dirty streets, defective scavenging, insanitary properties are allowed to go on to such an extent that within the past year almost every conceivable description of nuisance has in one district or another of the metropolis been brought to light by the action of the Council or its local committees. And yet in most cases the evils, when once their presence is made clear and when action has been insisted on, have been quickly remedied, showing that even now there is no lack of power on the part of the sanitary authorities if they can but be roused to action. There is no doubt that the Public Health Acts provide the country with a complete sanitary supervision, but who is to supervise the supervisors?

THE RECONSTITUTION OF THE UNIVERSITY OF LONDON.

AT a recent meeting of the Annual Committee of Convocation, a letter was read from five of the original members chosen by last year's Annual Committee to represent Convocation on the Joint Consultative Committee of Senate and Convocation, in which they resigned their position, not having been reappointed by Convocation to the Annual Committee of this year. The five who resigned were Dr. M. Baines, Mr. H. A. Nesbitt, Mr. W. G. Lemon, Mr. R. M. Stephenson, and Dr. T. B. Napier. Three others—Dr. S. P. Thompson, Dr. A. E. Sansom, and the Rev. Dr. A. Cave—likewise tendered their resignations at the meeting. The committee was then reconstituted, and now consists of the following members: Dr. W. H. Allchin, Rev. Dr. A. Cave, Mr. H. H. Cozens-Hardy, M.P., Mr. W. T. Thiselton Dyer, Mr. M. J. M. Hill, Mr. A. Bassett Hopkins, Mr. H. G. Howse, Mr. W. J. Spratling, and Dr. S. P. Thompson. We understand that the committee appointed by the Senate has invited the above committee to a joint consultation, to be held on June 29th. In order apparently to obtain the views of all parties in Convocation, the Senate's committee has also intimated a wish to see at another meeting the members of the former Committee of Convocation who resigned, as stated above, and any other members of the present annual Committee of Convocation who may desire to attend.

THE SICK POOR IN PROVINCIAL WORKHOUSES: HAVERFORDWEST.

HAVERFORDWEST is not rich in public institutions nor in amusements for passing the time, hence it came about that our Commissioner found himself one day asking permission of the master to visit the union under his care. As the house stands close to the town and occupies a commanding position, it must be familiar to all acquainted with the locality. On one side there is a beautiful view over the river with a wide expanse of country beyond, and if lovely scenery be a joy to the old who are resting on the bank of the dark river waiting their turn to cross, the aged paupers of the Haverfordwest workhouse are to be envied for their privileges in this respect. But our representative left the beauty outside, and as he went from room to room he was pained to think that quarters so dreary and desolate should be deemed sufficient for the aged, the sick, and the little children. The sick, that is, those paupers who are placed in the infirmary, are lying on plank beds, with chaff mattresses about three inches thick between their weary bodies and the hard uneven planks. One paralysed woman had a spring bed with the chaff mattress over the springs; there was also a case of rheumatism, a man with a bad leg, and some cases of senile debility; some idiots and imbeciles shared the wards with these patients. The infants occupy a dark stonepaved room, bare of furniture, with no rug for the babies to crawl or lie upon, and no responsible person to see to their feeding or their cleanliness. The infants are in charge of their mothers, and theoretically a mother ought to be her child's best guardian; but the theory does not hold good in practice here, in the case of these poor women and their children, who are nearly all illegitimate. There were about six infants in this "nursery" when our Commissioner went round the building; the sight of the uncared-for little ones was enough to make anyone's heart ache. One poor child in a cradle looked very sickly and wanted skilled attention; not one of them had the child-like look; there was no happiness, no brightness on their faces, no life nor vitality in their movements. The same dreariness and absence of the simplest comforts reigned throughout the building: no means of bathing, no lights among the sick at night, no provision for attendance at night other than one sick pauper could render to another, no cheerful rooms for use by day when the aged were able to leave their beds, no gardens or courts for them to sun themselves in. Is this all that Haverfordwest can do for the aged, the sick, and the infants? Picture a long dark winter's night in the unlit ward, on the comfortless bed, the wearied occupant unable to change from one position to another, no ready hand to give the welcome or turn the pillow, no one to help in or out of bed; helplessness intensified and embittered by the knowledge that it must be endured: what have they done to deserve so cruel a fate? Will not the ratepayers see for themselves and demand that this state of things shall last no longer? The sick, the aged, and the infants ask our help, be they paupers or princes. It seems almost hopeless to recommend any changes which would cure existing evils; a new infirmary should be built, with modern appliances. With the new building should come the trained nurse; she could hardly be found to work under the present rule, but if a pioneer could be discovered she could do much to ameliorate the condition of the sick, if given a free hand. Besides these we would suggest a paid attendant to look after the infants; a new nursery with bathroom and lavatory accommodation; entire remodelling of the sanitary and drainage work; isolation and receiving wards to be built; means of communication at night with the responsible officials; and improved airing courts.

MR. SHAW LEFEVRE AND A GENERAL INQUIRY INTO PAUPER SCHOOLS.

MR. SHAW LEFEVRE, in replying to Mr. Samuel Smith, did not agree to institute an inquiry into the conduct of workhouse schools generally, but neither did he refuse to do so. He played the game of delay, a game that is most annoying to those onlookers who feel that the education and upbringing of each individual among the children of the State are matters of deep importance. The waiting position, too, can do no good to that large body of worthy Poor-law officials who, struggling with adverse circumstances, are most anxious that the conditions under which they labour should be reviewed and, if possible, amended; nor yet to that still larger body of officers who, dealing with "nobody's children," are ready to copy what they see in their official superiors, and accept placidly a lower standard of morals, health, education, and physique than the humblest of them would allow as suitable for his own child. We are at a loss to imagine the object of delaying an inquiry into the whole question of barrack education until after the investigation into the management of the Hackney Union Schools has taken place, while there are many reasons why the inquiry into the whole system should be undertaken simultaneously. Mr. Shaw Lefevre promises that the Hackney inquiry shall be a public one. We do not wish to attribute direct mismanagement to any board of managers, but there can be little doubt, after the recent disclosures of the cruelty at Hackney and the "errors of book-keeping" discovered owing to the scandal at Forest Gate, that the boards of management are not able to know much of what is going on in the schools under their care. If the Hackney

inquiry is a public one it will allow other institutions to put their houses in order—and thus the inquiry into the whole matter will be to a certain extent rendered useful. To illustrate this point, we learned from an official of one such school—who, however, had not the courage to risk his future as Henry Elliott did by stating it to his board of management—that the soup in that school was never made of the authorised quantity of meat until the Forest Gate disclosures, but that since that date the proper weight has been regularly supplied and used. What we would again urge is that, in the face of the facts that are already known about these monster schools, there is and can be no ground for delay in appointing a commission to inquire further into the matter—a commission that would no doubt extend its questions until they embraced the conditions of these hapless waifs when assisted by their guardians to find them homes (?) beyond the sea. The welfare of the class that most calls for protection is not one about which a Liberal Government can afford to show indifference, and the attitude that all classes of journals have taken up in regard to these recent disclosures indicates no national apathy.

SMALL-POX IN SCOTLAND.

Thirty-five fresh cases of small-pox occurred in Edinburgh last week, and there was 1 death. In Leith the record for the same period was 7 new cases, and 3 deaths. In this town a pretty quarrel has arisen between the medical officer and the sanitary inspector. The latter appears to be charged with inefficiency and neglect of his duties, among other things in relation to the small-pox epidemic. The matter is *sub judice*, and the sanitary inspector was allowed till June 28th to prepare his answers to the charges of the medical officer, which runs to the extent of three pages of print. A case of small-pox is reported from Ayrshire (Kilmarnock) and 1 from Perthshire (Dunkeld). The Edinburgh Street Tramways Company has decided that the members of their staff desiring revaccination shall have this done at the company's cost. And while they do not make it compulsory, they express the hope that all the men in the service will take advantage of the privilege offered. The Edinburgh authorities have applied to Her Majesty's Board of Works for leave to erect one or more temporary hospitals in the Queen's Park.

DEATH OF MR. JOHN CLAY, OF BIRMINGHAM.

We regret to have to announce the death, on June 26th, of Mr. John Clay, in his 74th year. Mr. Clay, who was for many years Professor of Midwifery in Queen's College, Birmingham, had an important place in the early history of ovariotomy, and in 1866 obtained the Jacksonian Prize for an essay on Ovariotomy. Mr. Clay had been in bad health for some time, never having really recovered from an attack of influenza two years ago. Ten days ago symptoms of heart failure became alarming, and he gradually sank.

ANTICHOLERA INOCULATION.

An Indo-European telegram to the *Times* states that within the previous few days three further remarkable instances of the success of M. Haffkine's system of anticholera inoculation had occurred at Calcutta. In the first case, four out of the six members of a family were inoculated last March. The cholera appeared in the neighbourhood lately, and the disease attacked one of the two who had not been inoculated, while the inoculated remained free. In the second case, five members of a family consisting of eleven persons were inoculated in March. The cholera lately attacked one of the six who had not been inoculated. In the third case, six out of a family of nine were inoculated. When the cholera prevailed in the neighbourhood a few days later the disease attacked one of the three not inoculated. The Corporation of Madras have passed a resolution inviting M. Haffkine to visit that city and introduce his system.

THE METROPOLITAN COUNTIES BRANCH.

The annual general meeting of the Metropolitan Counties Branch was held at Limmer's Hotel on Tuesday, June 26th, at 5.30 p.m., Mr. Henry Power, President, taking the chair. The annual report of the Council having been received and adopted, and the usual complimentary votes passed, it was resolved to invite the Association to hold its annual meeting in London in 1895, and to propose the President of the Royal College of Physicians (Dr. Russell Reynolds) as President. Mr. Power then resigned the chair to his successor, Dr. Leonard Sedgwick, who proceeded to deliver an address on the Personal Element as a Factor in Disease. The adjourned discussion on a report upon the means of suppressing unqualified practice was then resumed, and the report as adopted ordered to be presented to the Parliamentary Bills Committee of the Association. In the course of the meeting the result of the ballot for officers and Council was announced, from which it appeared that the nominations of the Council had been accepted, Sir William Priestley being the President-elect for 1895-96. The members subsequently dined together under Dr. Leonard Sedgwick's presidency. Dr. Ward Cousins, President of the Council, and Director-General Dick were present as guests, and responded to two of the toasts. Dr. Farquharson replied to the toast of the Houses of Parliament, and the President of the College of Physicians to that of the Medical Corporations.

"THE SANITARY OATH."

A correspondent, who writes from Lowestoft, informs us that when attending the Bury Assizes he desired to be sworn with uplifted hand. On claiming his undoubted right "not to kiss the book." Mr. Justice Day thought fit to remark: "By all means, if you consider the New Testament a dangerous book." The insult was not only gratuitous but perverse. We have too high an opinion of Mr. Justice Day's discernment to suppose that he did not know he was insinuating an unfounded imputation. He afterwards turned to the jury, and explained that "the gentleman merely wished to take the sanitary oath." It may be that Mr. Justice Day intended both these jibes to be in the nature of judicial wit. Assizes are dull, and a humorist must have his relaxations; but it ought not to be difficult to persuade the learned judge that the reform which has allowed the "sanitary oath" is not a matter for derision, and that the feelings and the character of a medical witness who chooses to set a rational example are entitled to the respect of even a judge. The Bench is fenced in against punishment, even for graver faults than this, but we should be curious to know what Mr. Justice Day would do if a professional man, being so insulted, told him to his face that his remark was offensive and unwarranted. It is quite certain that he dare not propose to commit a witness for contempt when the breach of duty and decorum is his own.

A WORD IN SEASON TO BATHERS.

Owing to the inclemency of the season bathing machines, even on the south coast, are yet few and strange, like early swallows in spring. The postponement of the bathing season, however, is not without compensating advantages. A series of observations recently made at Peterhead by the Scottish Meteorological Society every day during a period of four years and nine months show that the summer warmth penetrates the sea very gradually. The sea water attains its maximum warmth only at the end of August. From that times it becomes warmer than the air. The water also cools more slowly than the atmosphere, so that in November the average temperature of the water is 6°, and in December 7°, higher than that of the air. The moral is that bathing is more dangerous on the warm days of early summer than on chilly days in the late autumn. The sea is as warm at the end of October as it is in the middle of June, and the period between these dates may be

taken as the normal bathing season. In the case of persons of average health there is little fear of harm being done by bathing, if the precautions dictated by common sense and ratified by common experience are observed. One thing, however, which even experienced bathers often fail to realise is that swimming in the open sea is really a violent form of exercise. At the beginning of the season, therefore, it is well to acclimatise oneself by degrees just as mountain climbers go through a little preliminary training before they get to business. It is in the early dips of the season that "cramp" is most to be dreaded. There is a good deal of misconception as to the nature of "cramp" which has led some persons, who, like the Homeric heroes, rejoice in their strength, to laugh at it as a "bogey." It may be admitted that ordinary cramp in the calf of the leg, though likely enough to give a timid person the notion that he is in the grip of some monster of the deep, is not a very formidable matter to anyone in whom familiarity with the water has bred confidence. This is not, however, the "cramp" which makes a strong swimmer suddenly throw up his hands and sink at once to a watery grave. It is impossible to say with certainty what takes place in these circumstances. The accident is probably due to failure of the heart's action, perhaps the result of spasm of the cardiac muscle—"cramp" of the heart. Another view is that the cause of drowning is perforation of the drum of the ear by the pressure of the water, followed by vertigo and sudden unconsciousness. However this may be, there can be no doubt that among the dangers of bathing a prominent place must be given to the possibility of mischief being done to the delicate structures of the ear. Dr. Laurence Turnbull, the well-known otologist of Philadelphia, has recently pointed out that if the water which enters the ears in bathing is not removed (by leaning the head on one side and drawing the external ear forcibly outwards, at the same time shaking the head and opening the mouth, also striking the ear with the palm of the hand) it is apt, as the water decomposes, to cause inflammation followed by perforation of the membrana tympani; or the suppurative process, if neglected, may pass inwards to the middle ear, cochlea, and labyrinth, destroying the organ of hearing, and finally implicating the brain. Dr. Turnbull gives a formidable list of diseases of the ear traceable to the abuse of sea bathing—that is, bathing too frequently and remaining too long in the water. These range from impaction of wax to exostosis of the meatus, an affection which is especially common in those who indulge in the fierce delight of the "header." Dr. Turnbull advises that the ears, especially if they are at all tender or diseased, should always be protected in bathing. For this purpose, ladies should wear an oilskin cap covering the ears, and men should close the aperture of the ear with a piece of cotton wool or other simple plug, which can be taken out on leaving the water. For surf bathing especially, and for those who like to float on their backs such protection of the ears is a necessary measure of precaution.

EPIDEMIC SKIN DISEASE.

AT the meeting of the Dermatological Society of Great Britain on June 14th Dr. Savill showed 11 cases of a dermatitis which had attacked nearly 500 children in a day school where the average daily attendance was about 1,000. It was thought by the teachers to be ringworm of the face, and the cases were taken to a neighbouring hospital as such, but it was shown not to be ringworm because the scalp had not been attacked by the disease in any case and no characteristic spores or mycelium could be found after careful search. Moreover the diseased resembled a dry eczema occurring in patches, not healing in the centre as ringworm does, and not having the raised border. The patches were chiefly on the face, though some of the children had patches on the arms and legs. In the discussion which followed Dr. Stephen Mackenzie regarded the condition as a common and comparatively trivial affection, but Dr. Savill pointed out in reply that the cases of these children very closely resembled the youngest of the cases of epidemic skin disease described in 1891. Many of the cases of this disease he had subsequently seen (such as those at the Bethnal Green Workhouse in 1893) had been very much milder than the 1891 cases, and it would be a matter for subsequent inquiry and research whether the cases of these school children belonged to the same category or not. At any rate there seemed evidence to show that the disease, whatever it might be, was a contagious one, spreading as it had done so extensively in this school among children who, when not at the school, must live under such varying conditions of environment that it would be hard to find a local cause in operation common to them all.

ANOTHER HUMAN OSTRICH.

AN inquest was held last week at the County Asylum, Lancaster, respecting the death of William Fitzgerald, aged 44. Dr. Gemmell, of the asylum staff, gave evidence as to the deceased being brought to him. He put him to bed, and found a foreign body occupying the upper portion of the abdomen. After consultation he decided to operate, as there was a remote chance of saving his life. He found 192 flooring nails, varying from 3 ins. to 1½ in. in length, the smallest being a tack. There was also a half-screw nail, two buttons, a piece of wire, and a mass of matted hair. The operation was completed about 7 o'clock, and the patient sank and died about 11 o'clock. The cause of death was shock, consequent on the operation. The mucous membrane of the stomach was lacerated by nails. The nails weighed 1 lb. 9½ ozs., and must have been in the stomach twenty-four hours.

CORONERS' COURTS.

IT appears from recent statements in the Manchester press that Councillor Dr. Sinclair made some remarks three weeks ago in the City Council on the present system of obtaining evidence by *post-mortem* examination in certain cases where serious investigations requiring exact medico-legal knowledge had to be undertaken. Mr. Smelt, the deputy coroner, made a reply in his court, making reference to the particular case on which Dr. Sinclair had based his observations, and stating the practice of ordering *post-mortem* examinations as pursued in his court. Dr. Sinclair, in his reply, makes it clear that his remarks had reference to the system, and not to individuals, and that what he aimed at was if possible to obtain some reform of the system, and to show by one remarkable illustration how badly in his opinion the system might sometimes work. On the other hand, Mr. Smelt does not consider that the present system works badly, and invites suggestions as to any methods by which the system could be improved.

COUNTY MEDICAL OFFICERS OF HEALTH.

THE select minority of county councils who have addressed themselves in earnest to sanitary work have by this time sufficiently justified their action. It is not surprising to find other counties preparing to fall into line, and appointing experienced medical officers to advise them. The appointment of Dr. Williams in Glamorgan has been followed by that of Dr. Hembrough in Northumberland, and now Leicestershire and Cornwall are meditating action of the same kind, while many others, including Essex and East Suffolk, have at all events got so far as to discuss it. The position of Cornwall in this respect is peculiar. Although no medical officer has been appointed, a sustained and really admirable effort has been made by the indefatigable chairman of the county Sanitary Committee, Mr. Trevail, to bring about some measure of sanitary reform in a county which assuredly needs it. The council, in the person of Mr. Trevail, have tabulated and abstracted the local health

reports, and organised a system of county returns—of course with the voluntary help of the local medical officers of health. They have waged not unsuccessful war against some of the defaulting local authorities in reports and in the newspapers, and have instituted legal proceedings and lodged official complaints with the Local Government Board. In certain cases they have deputed a medical expert to visit and report upon the sanitary condition of towns and villages. Now a new stage has been reached. One of the local authorities—the Newquay Local Board—has formulated a demand for the appointment of a county medical officer for Cornwall. The reasons for this step are marshalled in a printed memorandum evidently intended for circulation among the members of local authorities and the county council. In brief, the argument is that, however much the council may have succeeded in doing unaided, their duty as a county sanitary authority cannot be fully discharged without the advice and assistance of a medical expert, armed with power of prompt initiative, and always in touch with the several parts of the county. It is plainly hinted that such an appointment would lessen the danger of friction between the council and the constituent boards, as the recommendations of a competent professional authority would be more acceptable than those of a committee. It seems clear, from the experience of the pioneer counties, that the Newquay Board are in the right. The case is even stronger now than it was a year ago, when the Chairman of the Parliamentary Bills Committee of the British Medical Association summarised the position in a report,[1] which, we are glad to see, has been studied by the present petitioners. The responsibilities of county councils have been greatly increased by the passing of the Isolation Hospitals Act and the Local Government Act of 1894. The status of county medical officers may not be well defined as yet, but that matters little. Much good, and nothing but good, is to be anticipated from placing the sanitary interests of the county as a whole in the hands of an officer of known experience and ability, whose advice would obviate the risk of either oversight or injudicious action on the part of the county council, and whose special knowledge would always be at the disposal of local authorities and their immediate advisers.

THE MORTALITY OF CHILDREN.

As regards races, it has been remarked that a smaller number of children die amongst the Jews than amongst Christians in proportion to the number of births; thus we learn from Uffelmann that at Bade out of 1,000 Christian children 270 die before the end of their first year; out of 1,000 Jewish children 184. At Erfurt, out of 1,000 Christian children, 409 die before attaining their fourth year, or in the course of their second infancy, whilst amongst the Jews the deaths do not number more than 198. At Munich the mortality of children amongst the Catholics is 41 per cent., amongst the Protestants 27 per cent., and amongst the Jews 15 to 16 per cent. Do these figures point to a greater vitality in the Jewish race? In countries where the Jewish population shows the lowest infantile mortality it may be remarked that the conditions of existence are more favourable to these little beings; that the mothers make it their duty to nourish them themselves, and surround them with the most tender care; that besides there are fewer natural children, fewer deserted children, and that when the children are indisposed or ill the mothers hasten to procure medical assistance. Consequently that which might seem to appertain to the race may be rather the result of the attention which is given to their well-being.

LEAD POISONING AND CARELESS WORKPEOPLE.

The difficulty of inducing workpeople to take necessary precautions is illustrated by the following case. At the Wolverhampton Police-court, on June 15th, Charlotte Lees and Annie Ralph, two young women, were summoned at the instance of the inspector of factories (Mr. Hoare) for neglecting to wear respirators whilst employed in the process of brushing in the enamel trade. The defendants are in the service of Messrs. Orme, Evans, and Co., of Wolverhampton, and were engaged in the department in which enamelled iron plates are brushed. Respirators are supplied to the workpeople by the firm, and, according to the Act, should be worn owing to a lead-laden dust been given off during brushing. The women had been warned to wear the respirators, but they had broken the rules, notwithstanding that the last woman who died from lead poisoning was employed at those works. The stipendiary said nothing could have been a more serious warning to the defendants than the death of the woman referred to. If they did not value their lives he could not persuade them to do so. A fine of 10s. 6d. each, including costs, was imposed,

[1] British Medical Journal, July 15th and 22nd, 1893.

DOCTORS' SHOPS.

The question raised as to the extent to which legally qualified medical practitioners keeping open shop for the sale, compounding, or dispensing of poisons are exempt from the provisions of the Pharmacy Act, 1868, has just been decided in the Justiciary Appeal Court of Edinburgh. The statute requires that chemists should have a suitable qualification and be duly registered, so as to show that they possess a competent practical knowledge of their business. This is not required in the case of medical men, as their qualification in that capacity is assumed to be sufficient to enable them to sell, compound, or dispense poisons with due regard for public safety. But in some parts of the country it has been the practice for medical men to keep chemists' shops, and, while attending their patients, to leave the shop in the charge of an assistant. In Glasgow and the West of Scotland this practice has been very general, and the assistants in such shops are frequently mere boys without any qualification. Prosecutions in such cases have therefore been instituted by the Pharmaceutical Society, the sale, compounding, or dispensing of poison by such unqualified assistants being regarded as a breach of the Pharmacy Act. In several instances the penalty incurred has been paid, but in one case the magistrate's decision has been made the subject of appeal as a test case. After long argument of the case before six judges last March in the Scotch Appeal Court, judgment was reserved on account of the technical difficulty experienced in the construction of the Act. The decision now given is not unanimous, but those judges who dissented from it in some respects expressed their satisfaction that the majority had been able to support the magisterial decision appealed against. The principle on which this result was arrived at was that poison should not be supplied to the public except through the hands of a person possessing proper statutory qualification. That was the principle recognised in the judgment relating to the keeping of chemists' shops by limited companies, and the fact that the actual sale of poison referred to in that case was made by a qualified person was of great influence in leading to the conclusion that while a company of unqualified proprietors could keep open shop for the sale, compounding, and dispensing of poisons, the safety of the public was not endangered if the persons actually conducting that work were duly qualified. The present decision is to the effect that a medical man keeping a chemist's shop in virtue of his medical qualification is in precisely the same position as a registered chemist and druggist. Both are qualified to sell, compound, and dispense poisons, but neither can delegate to unqualified assistants the duty of carrying out that work on their behalf. If that were not the case, as the Lord Justice Clerk remarked in his judgment, the purpose of the Act would be defeated.

The next Anatomical Congress will be held at Basel on April 17th, 18th, and 19th, 1895.

THE INDIAN MEDICAL CONGRESS.

The Date and Objects of the Congress.—The Sectional Arrangements.—Social Entertainments.—Medical Education in India.

IT has now been definitively settled that a Medical Congress will be held in Calcutta from December 24th to 29th, 1894. The Viceroy has accepted the office of patron, and Surgeon-Colonel Harvey, M.D., D.S.O., that of President of the Congress. An influential list of office-bearers has been selected, and preparations are now in active progress, in order to make the gathering as successful and useful as possible. The objects of the Congress are "to bring together medical men from all parts of the Indian Empire, and to discuss medical subjects connected with Indian diseases, and to place on permanent record some of the work which is now lost to science for want of proper publication." It is also pointed out that "the Congress will afford an opportunity never before presented for medical men who are in isolated but important positions in the different provinces of the Indian Empire meeting and comparing notes with their fellow workers in subjects of mutual interest. Former friendships could be renewed, and men who might never otherwise meet would become acquainted."

The work of the Congress will be distributed according to the following Sections: (1) Medicine and Pathology; (2) Surgery, including Ophthalmology; (3) Obstetrics and Diseases of Women and Children; (4) Public Health; (5) Medico-Legal Medicine and Insanity; (6) Pharmacology, specially indigenous drugs. Papers and discussions under each of these heads are being arranged for, of which a detailed programme will in due time be issued.

Nor has the important subject of preparing for the comfortable accommodation and entertainment of members of the Congress been neglected. A special committee has been appointed for this purpose. There is a unanimity and earnestness among all classes and sections of the medical profession in India connected with this undertaking which gives the best augury of success. Whatever gains may accrue to medical science from such assemblages, their social advantages are unquestionable. They revive and cement the feelings of brotherhood and co-operation to noble ends which ought to animate the profession of healing. And there is a special need of organisation and union among medical men in India at the present time. The old order of things is rapidly passing away. The Vedic and Yunani systems are practically defunct, and Western science is advancing with rapid strides. The medical colleges and schools are yearly pouring out increasing numbers of graduates and licentiates. Time was when medical work in India was done solely by the medical officers entertained and trained by Government, and the earlier departures in medical education were devised and intended for recruiting the ranks of the medical service of India. Now the educational movement has gone far beyond the demands of the public service, and numbers of medical men educated and qualified in India and in Great Britain must look to private practice as their sphere of work and source of livelihood. Many of them have admirably succeeded in this, and as the people of India come to appreciate the advantages of rational methods of studying and treating disease, the field will become wider and more remunerative.

Still there are many who experience difficulties in following this line of life, and it is not surprising that they are apt to look with envy on their more fortunate brethren who enjoy the comfort of official employment and escape the harass and uncertainty of general practice. The Congress should aid in mitigating or extinguishing jealousies such as these, natural but unreasonable. It may also be a means of opening out new and honourable and useful paths of medical effort connected more especially with local self-government and sanitation. The organisation of a public health service is inevitable in India in the near future, and better ministers of such a department cannot be found than the graduates and licentiates of the Indian medical colleges and schools. The need of a well-ordered scheme of medical registration may also fitly engage the attention of the Congress, and the formation of an association embracing and binding together all qualified medical men would be a very appropriate sequel and outcome of the gathering.

This Congress will no doubt attract many medical men from this and other countries to India. It meets in the capital of India at the height of the season, in the Christmas week, when Calcutta is at its very best. The climate at this time of year is lovely, and the Calcutta meeting may well be made the commencement or the end of an Indian tour, which can in these days be accomplished with great ease and comfort, and at a not very ruinous expense. Drs. W. J. Simpson and D. M. Moir, the Central Secretaries of the Congress, will willingly furnish intending visitors with information; and Dr. K. Macleod, 39, Clanricarde Gardens, Bayswater, who has been appointed Local Secretary for London, will be glad to reply to any inquiries addressed to him regarding the arrangements and business of the Congress. Several English medical men have already signified their intention of visiting Calcutta on this occasion, and the opportunity is an excellent one of at once seeing India under pleasant circumstances, and contributing to the success of an important movement.

THE MORTALITY OF ARTISANS' DWELLINGS.

Dr. Farr's Formula as to Density of Population and Mortality.—Is it Applicable to Model Dwellings?—Dr. Loane's Statistics from Whitechapel.—The Mortality of the English and of the Irish in London.—Mortality in Model Dwellings.

IF the late Dr. Farr's final formula as to the relation between the rate of mortality and the density of population is even approximately correct, namely, that the mortality of districts is as the eighth root of their densities, then the tendency to house the artisan in unlovely blocks of so-called "model dwellings," and the richer folk in residential flats must be checked; if, on the other hand, the formula based upon the old condition of things is not applicable to the new, then this class of building must be encouraged, for the increase of the various kinds of "flats" will go far to solve the question of dwellings for all classes at reasonable rates.

Crude rates of mortality are often misleading: when it is considered that the death-rate of an institution for the care of healthy infants under 5 years of age may reach close on 70 per mille; a school for children from 10 to 15 years of age may be just under 4 per mille, and an almshouse for the aged be 79 per mille; and that all these rates are strictly normal; and farther, that at certain ages there is a difference between the male and female mortality of 10 per mille: then it is obvious that the first examination of a population whose mortality is to be considered is to ascertain the distribution of sex and age, and to correct the rate for those disturbing influences.

The only scientific attempt to study the mortality of Artisans' Dwellings is that of Dr. Newsholme,[1] published in the *Journal of the Statistical Society*, in which he dealt with a population of some 49,000 living in Peabody dwellings, in dwellings of the Improved Industrial Dwellings Company, and in the dwellings of the Metropolitan Association for Improving the Dwellings of the Industrious Classes. Dr. Newsholme was furnished with the requisite data to get a standard death-rate, and therefore to correct the crude death-rate for Peabody dwellings. Some of the conclusions deduced from this important paper were: That in the year 1889, contrary to expectation, the age-distribution of Peabody dwellings was less favourable to a low mortality than that of London as a whole; that the death-rate averaged about 2 per 1,000 lower than that of London for the twelve years ending 1885; that the infantile mortality was lower than for all London; that the diseases due to direct infection, such as scarlet fever, diphtheria, whooping cough, and measles were more fatal and probably more prevalent, and, lastly, that Farr's formula had no application to Peabody dwellings.

In order to see how far more recent statistics of a somewhat differently constituted population compare with those of Dr. Newsholme we have studied the recent annual report of the Medical Officer of Health for Whitechapel (Dr. Joseph Loane), which contains information as to the population in 1893, the deaths and the manner of death of the inhabitants of thirty-one model dwellings. The information published

[1] The Vital Statistics of Peabody's Buildings and other Artisans and Labourers' Block Dwellings, *Proceedings of the Roya Statistical Society*, March, 1891.

in the report has been kindly supplemented by Dr. Loane, who has industriously, for the purpose of the BRITISH MEDICAL JOURNAL, given us a census of the population, dividing the 13,000 inhabitants into males and females, and into seven-age groups. Eight of the model dwellings in question are inhabited by foreign Jews of the alien type—population 3,034, and the crude mortality-rate in 1893 of this class was equal to 19.7 per 1,000; three of the model dwellings are inhabited by Jews and English, population 3,574, mortality 16.7 per 1,000; three other dwellings are inhabited by 1,353 Irish Roman Catholics, mortality 26.6 per 1,000; the remaining sixteen buildings, population 5,299, are inhabited by a class which must be considered, more or less, selected, namely, English artisans, with policemen, postmen, and others. The uncorrected death-rate of these blocks is 16.2 per 1,000. The death-rate of the whole 13,260 comes out (uncorrected) about 19.0 per 1,000. In the above calculations, of course, the deaths occurring in hospitals and other institutions have been included.

The age and sex distribution, as compared with that of London, of the whole population of these buildings, is found to be more favourable to a low mortality than that of London, and the factor for correction is 0.9; in other words, the corrected rate is 19.0×0.9, or 17.8; but with regard to the three buildings in which an Irish population is lodged, according to the age and sex distribution, the theoretical number of deaths, as compared with London for three years ending 1892, should have been about 31, and they were actually 36. Hence, so far as small numbers can be trusted, these buildings had a high mortality; this agrees with other statistics in reference to the Irish in London; the mortality is probably that of race, intensified, it may be, by habits and customs not conducive to long life.

So far then the facts given, save those with regard to the Irish, show that the model dwellings of Whitechapel are not unhealthy, and that the mortality as a whole is lower than the average mortality of the metropolis; and, further, the exception with regard to the particular three blocks with a high mortality may be accounted for in other ways than by accusing the conditions of the structure of the habitations. On the other hand, zymotic disease was unduly rife, as shown by the zymotic rate, which attained 4.1 per 1,000; and this is what is to be expected wherever you get a number of children and young persons massed in fairly close proximity, using the same staircases, exposed to the same atmosphere, and frequenting the same drying ground and playground, the facilities for personal contact and for the spread of subtle infections are obvious, and the lesson to be drawn from such facts is that, given a large population housed in model dwellings, hospital accommodation, not only for the infectious fevers the Asylums Board receives, but for all fatal infectious fevers, is a necessity.

Some astonishing figures have appeared in the daily press with regard to certain artisans' dwellings; they have been said to have a death-rate of 11 per 1,000, but all such statements are misleading, for either they are based upon small populations or for too short a period of time, or, as is commonly the case, the deaths do not include those in public institutions, hospitals, and the like.

POWERS FOR DEALING WITH REFRACTORY LOCAL AUTHORITIES IN SCOTLAND.

THE Council of the Dundee and District Branch of the British Medical Association have done good service in directing attention to something of the nature of an omission in the Local Government (Scotland) Bill. They have forwarded a memorial to the Secretary for Scotland and the local members of Parliament, the gist of which is indicated in the following words: "The Council is strongly of opinion that the new Local Government Board should be possessed of powers enabling it to deal effectively with refractory or negligent local authorities, whenever occasion arises, either on its own initiative, or at the instance of other local authorities." The powers of the Board of Supervision in dealing with recalcitrant local authorities have been exceedingly limited. In the event of a local authority refusing or neglecting to do what is "required" of it by the Public Health Acts, the Board is invested with no greater power than is possessed by any individual who may consider himself aggrieved—namely, to institute proceedings in a court of law.

There is no reason why the new Board should not be endowed with the same powers as the Local Government Board in England in the like case, of issuing an "order," enforceable by writ of *mandamus*, or appointing a person to carry out works at the expense of the local authority concerned. Indeed, still further powers are required, the lack of which in England has rendered the action of the Local Government Board, in certain directions, singularly ineffective. The Board ought to have power to compel defaulting local authorities to provide suitable and sufficient hospital accommodation for the isolation of cases of infectious disease, and to appoint a sufficient sanitary staff, with suitable remuneration.

It is whispered, however, that so far from contemplating any further amendment of the Local Government Bill, the Government is disposed, in the phrase of the day, "to lighten the Bill" by dropping the few public health provisions which it contains. If this course is adopted, it will undoubtedly provoke a widespread feeling of resentment in Scotland, where the public health interests of the rural districts have been shamefully neglected. The Bill occupies itself with many matters which have no great interest for the people of Scotland; and if the public health provisions, which have so long been waited for and so eagerly expected, are dropped, the abandonment of the Bill will be received in public health circles with tolerable equanimity.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

THE fifty-third annual meeting was held at the College of Physicians, Kildare Street, Dublin, on June 12th and three following days. At 11 o'clock the general meeting for the election of officers and council and the transaction of routine business took place.

The first of the public meetings was held in the afternoon at 5 o'clock in the College of Physicians, and was attended by a large number of members and visitors. Much interest was evinced, not only in the inaugural address of the new President (Dr. Conolly Norman) but in the series of fine lantern demonstrations given by Professor Frazer of a case of porencephaly.

The PRESIDENT, in his address, referred to the fact that thirty-three years ago the Association held an annual meeting in Dublin for the first time, under the presidency of Dr. Lalor, and that nineteen years ago another meeting took place in Dublin under the presidency of Dr. Duncan. Since the first meeting in Dublin the number of members had quadrupled, and there are now nearly 480, a large population for a specialist society. He remarked that the spirit of advance was active in the Association, which had not feared to rearrange the rules so as to meet the altering conditions of the time. Clinical instruction in mental disease, too, was now, owing to the Association having directed public opinion to it, a necessary portion of the medical curriculum throughout the United Kingdom. He was of opinion that no medical officer should be permanently appointed to an assistancy in an asylum who had not, within a limited period of probationary service, passed a special qualifying examination in psychiatry, and further, that no step should be given to an asylum officer who had not passed a special qualifying examination in psychiatry. In this way inefficient men who had got into the service would be weeded out, and promotion would be made a question of capacity, and not of chance. One of the most remarkable advances which had taken place in the practice of the speciality during the last nineteen years had been the increasing interest in pathological work. Nineteen years ago the somato-etiological school held the field, and in those days too much attention was paid to the diseases related to insanity, and too little to an attempt to investigate the pathological basis of insanity itself. He drew attention to the great asylum of Alt Scherbitz, near Leipzig, in which the modern principles of dealing with an asylum population are carried out to the fullest extent. Instead of vast buildings, modelled on a prison or a barrack or mona-

stery, the institution consists of groups of houses entirely detached and surrounded by its own garden. The family care of the insane had been the subject of a remarkable and very successful experiment during the last eight years in the Berlin district. Owing to the asylum at Daldorf having been overcrowded, it was determined to board out a number of patients who were still held to require specialist care. At the end of 1893, 209 patients were thus provided for. The method was superior to the Scotch system, and excellent results had been obtained, showing that in the management of insanity, as in everything else, almost anything is possible which is undertaken with intelligence and earnestness.

On Wednesday, June 13th, Dr. René Semelaigne read a paper on "The Forms of Delusion in Persecutory Insanity." He pointed out that in many cases the difference between anxious melancholia and delusion of persecution is well marked, but that nearly all the "persecuted" may at a given moment become persecutors. Delusions of persecution at the change of life present a rapid evolution.

Drs. Nicolson, Clouston, Atkins, and the President discussed the paper, the latter referring to a book by Dr. M. Nordan, who described all writers, novelists, poets, musicians, and painters as "degenerate."

Dr. Drapes contributed a paper on the Alleged Increase of Insanity in Ireland. The statistics, he said, showed that the increase was apparent rather than real, and could to a great extent be accounted for by the fact that the death-rate for lunatics was lower in Ireland than in England, and therefore was a greater accumulation of inmates in the asylums; another factor was the constant political agitation.

Dr. Hack Tuke read a paper on the same subject. He said that undoubtedly the great mental worry and excitement arising out of the number of evictions which had occurred in Ireland had increased the amount of insanity in the country. On the whole, he believed that there had been an actual increase of insanity in some districts only, but not in all parts of Ireland.

Dr. Woods, Atkins, Clouston, and the President discussed the paper.

In the afternoon a meeting took place at the School of Physic, when Dr. Andriezen gave a very able demonstration of some of the Newer Aspects of the Pathology of Insanity, and Professor Cunningham gave demonstrations of the Development of the Cerebral Sulci in the Human Brain.

On Thursday, June 14th, Dr. Bond, in the unavoidable absence of the author, read Dr. Claye Shaw's paper on Cerebral Pressure. He discussed the advisability of surgical operations on the skull, and said the great question to decide was "Is there pressure in the earlier stages of insanity and general paralysis?" If there were, could any more direct means be taken to relieve it than the opening of the skull. In the failure of all other measures he recommended the operation before dementia had actually set in.

Dr. Macpherson, who also contributed a paper on the same subject, defined generally cerebral pressure and its symptoms. He unhesitatingly asserted that many cases presenting such symptoms had derived great benefit from this form of treatment, and maintained that such operations were quite justifiable on the ground that they were perfectly safe. Drs. Thornley Stoker, Andriezen, Fletcher Beach, Mercier, Swanzy, Robertson, and Professor Benedikt, discussed the paper.

Dr. Nolan read a paper on The Insane in Workhouses. The existing system, he said, permitted the transmission from the ward to the lunatic department of individuals without certificate or official notification. A scarcely less evil was the want of classification. The inspectors of lunatics had noticed, amongst other things, the want of sanitary lavatory accommodation, of classification, of nursing, not to speak of ordinary care. He recommended that the idiots should be provided for in one or more suitable establishments, and that the ordinary and the epileptic lunatics should be removed to district asylums. A prolonged discussion followed, in which Dr. Kenny, M.P., Drs. Eustace, Woods, Atkins, Hack Tuke, Clouston, and Urquhart, took part.

Dr. Andriezen contributed an exceedingly able paper on Insanity and Race Decay. He pointed out that in England alone, in the year 1893, out of 26,000,000 of people, there were no fewer than 3,000,000 who could not live on their earnings for a single week, and these were quite exclusive of the inmates of gaols and workhouses. Discussing the question whether natural selection would operate in cases of this sort by extinction of the class, he expressed the opinion that while it would in time extinguish individuals it would not stamp out this class. Dealing with the question of heredity in the production of insanity and crime, he mentioned the history of the great Duke family of New York. They numbered several hundred thieves, degraded women, and imbeciles, and had cost the State more than a million dollars. He then dealt with the medical aspect of the case, discussing the question of curability and the question of prevention. In the afternoon the members attended at the School of Physic, when interesting demonstrations were given by Drs. Clouston, Batty Tuke, Telford Smith, and Professor Cunningham.

On Friday, June 15th, Dr. Curwen read as a paper a portion of his annual address to the sister society in America, of which he was ex-president. It dealt with the treatment of the insane and with the education of the young. Referring to the latter, he pointed out that the importance of dealing with obedience, emotion, and the passions at the earliest dawn of intelligence.

Dr. Jules Morel, Inspector of Asylums in Belgium, contributed a paper on the Need of Special Accommodation for the Degenerate. He mentioned that many prisoners are mentally depreciated if not degenerate; that short sentences cannot cure or make them better: that as long as they are under 30 years they ought to be put in special institutions where they should receive a special education: and that in these institutions should be received, but in other sections, abandoned and neglected children. A threefold object will be secured: (1) Self-preservation and reduction of criminality, (2) protection for the degenerate, and (3) marked diminution of defects. Drs. Hack Tuke, Fletcher Beach, Carswell, Telford Smith, and Professor Benedikt discussed the paper.

Professor Benedikt read an able paper on Moral Insanity. It was, he said, a great progress in psychology to recognise that many criminal and vicious acts have their offspring from congenital qualities. One must, however, distinguish cases of immoral and criminal conduct, the result of moral organisation, from those which appear as a symptom of sickness in which intellectual perversities are combined. The President and Drs. Burke, Mercier, Woods, and McDowall discussed the paper.

This concluded the business of a most successful meeting. Thanks were voted to the President and Fellows of the College of Physicians for the use of the hall, to the President for having promoted the meeting in Dublin, to the General Secretary, and also to Professors Frazer and Cunningham for the preparations which they had placed at the service of the members.

THE ASSOCIATION OF FELLOWS OF THE THE ROYAL COLLEGE OF SURGEONS, ENGLAND.

THE ANNUAL MEETING.

THE annual meeting of the Association of Fellows of the Royal College of Surgeons, England, was held at the Medical Society's Rooms, London, on June 19th, 1894, Mr. GEORGE POLLOCK, President, in the chair.

The CHAIRMAN called upon the HONORARY SECRETARY (Mr. Percy Dunn) to read the annual report, which was as follows:

The general position of the Association continues to be satisfactory. A notable success was secured by the Association at the election in July, 1893, when Mr. Mayo Robson and Mr. N. C. Macnamara, two of the three candidates supported by the Association, were returned respectively first and second on the poll, and all of the four Fellows elected on to the Council were more or less in accord with the views on collegiate politics advocated by the Association. The Committee had hoped to secure another success this year by the return of Mr. A. T. Norton. He was only two votes behind Mr. Morris, who was the fourth on the list of elected candidates and who owed his success largely to votes given to him in common with Mr. Norton by members of the Association. An unfortunate mistake as regards the date of sending in his application for admission as a candidate at the election has deprived the Association of a representative. But the views advocated by the Association have been so generally adopted by the Fellows and enforced by the Council of the College that this accident is not likely to interfere with the progress of the

cause which the Association has at heart. At the instance of the Association and its representatives the Council of the College has framed rules on the conduct of the meetings of the Fellows. It has agreed to summon the Fellows twice a year, and has adopted an amendment of the by-law relating to the issue and collection of voting papers, so as to remove the existing restrictions. In view of these concessions, for which the Fellows are indebted to the untiring advocacy of the Association, the members of the Association must have shared in the surprise of the Committee at the foundation of a Society of Fellows of the College. After careful consideration, the Committee regards this step as rendering it more desirable than ever to maintain the organisation of the Association. The Committee regrets to record the loss of several members of the Association by death, and two or three resignations only have been received, but these losses have been more than repaired by the accession of new members. With regard to finances, the Committee has to report that, owing to special recent expenditure, there is a small sum owing to the Treasurer, and, under these circumstances, the Committee would take this opportunity of suggesting that all the members of the Association who have not as yet paid their subscriptions should do so without delay. The great object of the Association is now to obtain a new charter embodying the recent concessions granted by the Council of the Fellows and such other reforms as the Fellows as a body may desire. When this charter has been secured the Fellows of the College will occupy their proper position in the corporation and the Association will have done its work.

The auditor's report was read and adopted.

The following officers for the year 1894-95 were elected unanimously: *President:* Mr. George Pollock. *Vice-Presidents:* Mr. T. Holmes, Mr. W. Rivington. *Auditor:* Mr. A. T. Norton. *Honorary Secretary:* Mr. H. Percy Dunn. *Committee:* Mr. W. Allingham, Mr. H. Allingham, Dr. Robert Barnes, Mr. Wickham Barnes, Mr. Bruce Clarke, Mr. John Couper, Dr. Ward Cousins, Mr. Alban Doran, Mr. Gant, Mr. Victor Horsley, Mr. Jordan Lloyd, Mr. Mayo Robson, Mr. Manley Sims, Dr. C. Steele, Mr. George Jackson, Mr. C. B. Keetley, Mr. George Helm, Mr. J. J. Parnell, Mr. Vincent Bell.

Mr. NORTON then proposed the following resolution:

That Mr. Harrison, Mr. Marsh, and Mr. Davies-Colley are deserving of the support of the members of the Association at the College election on July 5th, and that a postcard to this effect be forwarded by the Honorary Secretary to each member of the Association.

In the course of his remarks Mr. Norton expressed his extreme regret at the inconvenience to which he had subjected the Association by his misapprehension of the legal date for returning his application as an intending candidate at the forthcoming election to the Secretary of the College.

Mr. POTTS seconded the resolution, and it was unanimously passed.

The motion in favour of the new charter, to the following effect, was proposed by Mr. HOLMES:

That, in the opinion of this meeting, the concessions granted by the Council, and such other changes as the body of Fellows may desire, should be embodied in a new charter.

This was seconded by Mr. RIVINGTON, and unanimously adopted.

The following resolutions were also adopted:

1. That the Association of Fellows of the Royal College of Surgeons of England will welcome the formation of branches of the Association in large provincial centres.

2. That a composition subscription of ten shillings, in lieu of the annual subscription of two shillings and sixpence, may be paid by any member of the Association who prefers it.

A cordial vote of thanks to Mr. Pollock, Chairman and President of the Association, brought the proceedings to a termination.

REGISTRATION OF MIDWIVES.

SOUTH MIDLAND BRANCH.

AT a meeting of this Branch at Bedford on June 21st, Mr. Hemming read a letter and accompanying protest against, and reasons for dissent from, the report of the Committee on the question of Midwives' Registration, signed by a number of members of the Lancashire and Cheshire Branch.

A discussion took place, and it was proposed and carried:

That this Branch enters its protest against the Registration of Midwives.

This resolution was in accordance with others passed by the Committee, and at other meetings of the Branch.

CAMBS AND HUNTS BRANCH.

AT a meeting of this Branch at Bedford on June 21st, Mr. Syme, of Gamlingay, opposed, and Dr. McRitchie, of Huntingdon, seconded, the following:

That in the opinion of the members of this Branch it is at present inadvisable to take any action in promoting a Bill for the registration of midwives.

THE PLAGUE AT HONG KONG.

OUR special correspondent at Hong Kong telegraphs to-day, June 28th: The plague maintains its hold. I regret to say that the infected area continues to widen. Yesterday an Englishman was attacked. The Chinese leave this colony whenever seized with symptoms of plague, and the present returns are therefore worthless. The intensity of the disease is, however, by no means diminished, and the death-rate of the cases attacked is at present at the rate of 75 per cent. The whole province of Canton is widely infected. The hospital accommodation is quite adequate to meet local needs, and both the doctors and nurses are plentiful and active. Trade is paralysed.

ASSOCIATION INTELLIGENCE.

COUNCIL.

NOTICE OF MEETING.

A MEETING of the Council will be held in the Council Room of the Association, at No. 429, Strand (corner of Agar Street), London, on Wednesday, the 11th day of July next, at o'clock in the afternoon.

June 14th, 1894. FRANCIS FOWKE, *General Secretary.*

LIBRARY OF THE BRITISH MEDICAL ASSOCIATION.

THE Library will be closed on Saturday, June 30th, and on Monday and Tuesday, July 2nd and 3rd, for the purpose of cleaning.

BRANCH MEETINGS TO BE HELD.

BORDER COUNTIES BRANCH.—The annual meeting will be held at the County Hotel, Carlisle, on Friday, July 20th, at 2 P.M. Business: Election of officers for the ensuing year. President's Address, to be delivered by Dr. Connel of Peebles. Notices of motion to be sent to the Secretary ten days before date of meeting.—J. ALTHAM, M.B., Penrith.

OXFORD AND DISTRICT BRANCH.—The annual meeting will be held at Chipping Norton under the presidency of Dr. Hutchinson (who kindly invites the members to lunch), on Thursday, July 19th. Further details will be sent to each member of the Branch. Notice of any motion, etc., should be sent as soon as possible to the Honorary Secretary, W. LEWIS MORGAN, 37, Broad Street, Oxford.

DORSET AND WEST HANTS BRANCH.—The next meeting will be held at Bournemouth on Wednesday, July 4th. The business meeting will be held at the Royal Bath Hotel at 3.15 P.M. Agenda: Election of new members of the Branch. Place of the autumn meeting. Communication from the Lancashire and Cheshire Branch of the Association. Discussion: Some Points in the Diagnosis of Locomotor Ataxy. Communication: Dr. MacDonald: A case of Perforative Peritonitis, with specimen. Dinner at the hotel at 6 P.M.: charge, 6s. each, without wine.—WILLIAM VAWDREY LUSH, M.D. (Weymouth), C. H. WATTS PARKINSON (Wimborne), Honorary Secretaries.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE annual meeting of this Branch was held on June 14th, 1894.

Installation of New President.—The chair was taken by the PRESIDENT (Dr. Rickards), who inducted his successor, Mr. H. Langley Browne (President-elect) to the chair. There were forty-three members present.

New Members.—The following were elected members of the Branch: Mr. H. J. Hannen, Codsall; Dr. J. A. Ball, Bromsgrove; Dr. W. Kirkpatrick, Stourbridge; Mr. C. A. Gaskin, Small Heath, Birmingham; and Dr. Philip Hicks, Leamington.

Amendment of Medical Acts.—A communication having been read from the Parliamentary Bills Committee on pro-

posed amendments to the penal clauses of the Medical Act, it was resolved that;

I. This Branch approves of the proposed amendments to the penal clauses of the Medical Act adopted by the Parliamentary Bills Committee, but would respectfully suggest to the Committee to consider whether the Exemption Clause A is drawn with sufficient care to exclude improper persons.

II. That this Branch urges upon the Parliamentary Bills Committee the desirability of taking steps to strengthen the existing laws against unqualified practice, or the machinery by which it is put in action.

Report of Council.—The Report of the Council stated that six ordinary meetings of the Branch had been held at which the average attendance had been 43, showing that the work of the session had proved attractive to the members. The list of members now stood at 458. During the session 14 new members had been elected.

Pathological and Clinical Section.—The Report of the Pathological and Clinical Section stated that six meetings had been held during the session. The average attendance of members had been 16, as compared with 17 last session. Dr. Malins had been elected Chairman, and Messrs. Haslam and Morrison Honorary Secretaries of the Section for the session 1894-95.

Statement of Accounts.—The Treasurer's report showed a balance standing to the credit of the Branch on December 31st, 1893, of £28 6s. 5d.

Votes of Thanks.—Votes of thanks were passed to the retiring President, to the Officers and Council, and to the Representatives of the Branch on the Council of the Association, and on the Parliamentary Bills Committee.

Election of Officers and Council.—The following were elected to fill the various offices and to form the Council of the Branch: *President-elect:* A. H. Carter, M.D. *Treasurer:* F. W. Underhill, M.D. *Honorary Secretaries:* Gilbert Barling, F.R.C.S.; Frank Marsh, F.R.C.S. *Representatives on the Council of Association:* Robert Saundby, M.D.; H. Langley Browne, F.R.C.S.Ed.; Jordan Lloyd, F.R.C.S. *Representative on Parliamentary Bills Committee:* Dr. S. H. Agar. *Council:* Country Members: Dr. T. W. Thursfield, Mr. M. Messiter, Dr. Holmes Ivy, Mr. Vincent Jackson, Dr. W. Douglas, Dr. E. N. Nason, Dr. E. Underhill, Dr. H. Malet. Town Members: Mr. H. Eales, Mr. W. F. Haslam, Mr. Bennett May, Dr. Foxwell, Mr. Priestley Smith, Mr. J. W. Taylor, Dr. Savage, and Mr. Lloyd Owen.

President's Address.—The PRESIDENT delivered an able and interesting address on the Germ Theory of Disease, and a cordial vote of thanks was passed to him.

Annual Dinner.—In the evening the annual dinner was held at the Grand Hotel under the Presidency of Mr. H. LANGLEY BROWNE, and about fifty members and guests attended. Amongst the guests were the Mayor of Birmingham, who responded for the Corporation; Dr. Paul Chapman, of Hereford, who proposed "The School of Medicine;" the Rev. R. Hodgson, the Mayor of Wednesbury, Mr. W. R. Hughes, Treasurer City of Birmingham; and Mr. Francis Fowke. Some excellent music was provided by guests and members.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

THE third meeting of the session was held at Gravesend on Thursday, May 24th, C. FIRTH, M.D., of Gravesend, being in the chair. Fifteen members were present.

Confirmation of Minutes.—The minutes of the last meeting were read and confirmed.

Next Meeting.—The place of the next meeting in October was not settled, but left to the Honorary Secretary to arrange.

Re-election of Honorary Secretary.—The Honorary Secretary, Dr. Ground, of Maidstone, was elected for the ensuing year.

Communications.—Mr. HUGH SMITH read notes of three cases of Brain Syphilis. The history of primary syphilis was absent in each case. Pain in the left side of the head, the locality affected by spasm and paralysis, together with some interference with speech, pointed to the fronto-parietal region as the seat of the lesion in each case. In the patient who died the necropsy revealed the existence of a gumma in the ascending frontal convolution. The remaining two were living: one following an active occupation, the other leading a quiet life, not having lost all symptoms. The treatment in each case was by the administration of mercury and iodide of potassium.—Mr. KEETLEY read a paper on the treatment of Club-foot and Flat-foot. He advocated the early treatment of all cases in newly-born children, and the advantage of manipulation and massage in suitable cases, and appliances in the form of shoes, especially Reeves's, and splints of plaster-of-paris and poroplastic materials. The various operations necessary in advanced cases were exhaustively considered.—Mr. R. J. BRYDEN read a paper on Delirium Tremens and its Treatment. He recommended frequent subcutaneous injections of morphine. He mentioned four severe cases, three of which recovered, the patient receiving the large amount of 18 gr. of morphine subcutaneously in rather less than five days, a second 7½ gr. in three days, and the third, a very severe case, 18 grs. within the space of four days. The fourth case died, whilst under treatment by morphine, of epileptiform convulsions, attacks of which he had suffered from some time previously. The result of Mr. Bryden's treatment, as far as he had got, showed a mortality of 25 per cent. In the discussion which followed the advantage of chloral hydrate in the treatment of delirium tremens, as being less dangerous and more reliable than morphine, was alluded to by some of the members.

Dinner.—Thirteen members and friends afterwards dined together at the Old Falcon Hotel.

SOUTH MIDLAND AND CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCHES.

A COMBINED meeting of the above Branches was held at Bedford on June 21st, 1894, under the presidency of ROWLAND H. COOMBS, M.D., of Bedford. Upwards of fifty members assembled, and were, previously to the meeting, entertained at luncheon by the President.

President's Address.—The PRESIDENT delivered a brief address, expressing his high appreciation of the honour conferred on him by being called to preside over a combined meeting, and cordially welcoming the members of both Branches. His remarks were confined to a review of the advantages possessed by the medical student of to-day, and to an estimate of some of the therapeutical methods at present in vogue.

Treatment of Hernia.—Mr. G. E. WHERRY (Cambridge) opened a discussion on this subject. He particularly emphasised the advantages of the use of the taxis—the coughing taxis as recommended by him—in early cases. He summarised his remarks as follows: 1. That all cases in which the signs of strangulated hernia had existed less than twenty-four hours ought to be relieved by coughing taxis, especially with inguinal herniæ which have been previously reducible. 2. If failure occurred with the taxis, chloroform should be given without delay, and herniotomy should be combined with an attempt at radical cure. 3. That in cases where taxis had relieved strangulated hernia, an operation for radical cure should be urged upon the patient before active life was resumed.—Mr. MILLIGAN and others took part in the discussion which followed, and Mr. WHERRY replied.

Treatment of Acute Febrile Disease.—Dr. BUSZARD (Northampton) introduced a discussion on this subject. He referred to the eruptions sometimes produced by antipyrin and its allies, and to their occasional dangerous effects. He dealt with his subject under three heads: How shall we treat fever? Why should it be treated at all? Has modern treatment materially modified it? He spoke of the value of the application of external cold in hyperpyrexia, but combined with the internal administration of stimulants.—Dr. BRADBURY (Cambridge) spoke of the mischief often done by antifebrile drugs, except in the pneumonia of old people and in influenza, in which they were most useful.—Dr. JONES (Northampton), Mr. SWORDER (Luton), and others continued the discussion; and Dr. BUSZARD replied.

Treatment of Wounds.—A paper by Sir G. M. HUMPHRY, on the treatment of wounds, was, in his absence, taken as read.

The Arrest of Hæmorrhage in Hæmophilia.—Dr. A. H. JONES (Northampton) read a paper on this subject. He first referred to the chemical action of drugs used in the disease, specially urging the value of chloride of calcium in doses of 30 to 40

grains. Believing that the bleeding was local, from a diseased condition of the vessels, he at the same time was of opinion that the treatment should be general through the blood. Dr. HARTLEY (Bedford), Dr. BUSZARD (Northampton), Mr. HEMMING (Kimbolton), and others joined in the discussion which ensued; and Dr. JONES replied.

Thrombosis of Lateral Sinus.—Mr. W. GIFFORD NASH (Bedford) read a case of subdural abscess and septic thrombosis of lateral sinus following middle-ear disease. He entered into the details of the operation, which he considered fully justified in such a case, the question of operation, however, being taken up Dr. BUSZARD and Mr. MILLIGAN (Northampton), Mr. WINSEY (Bedford), and others.

Chronic Mastitis.—Dr. JOSEPH GRIFFITHS (Cambridge) gave a short account of the effects of non-suppurative mastitis upon the mammary gland, and illustrated his remarks by several specimens which he had prepared within the last few years.

Votes of Thanks.—Votes of thanks were passed to the President for his address, and for his conduct in the chair, and to the readers of papers.

PRELIMINARY MEETING OF CAMBS AND HUNTS BRANCH.

In the absence of the President (Dr. Walker, Peterborough), Dr. BRADBURY was elected to the chair.

Place of Meeting.—Bishop Stortford was elected as the place for the next annual meeting, and Dr. Morris was elected President for the year 1895.

Officers and Council.—The following were elected members of Council for 1895: Dr. Bradbury (Cambridge), Mr. Hough (Cambridge), Mr. Gray (Newmarket). *Representative of Branch on Council of Association:* Mr. Henry Stear (Saffron Walden). *Representative on Parliamentary Bills Committee:* Mr. D. B. Balding (Royston). *Honorary Secretary:* Dr. Joseph Griffiths.

New Members.—The following were elected members of the Branch—namely: B. E. Fordyce, M.B. (Chesterton); G. O. Jacobsen, M.R.C.S. (Ashwells).

[The resolution passed on the subject of the registration of midwives will be found at p. 1436.]

PRELIMINARY MEETING OF SOUTH MIDLAND BRANCH.

Minutes.—The HONORARY SECRETARY read the minutes of the last (Committee) meeting, which were confirmed.

New Members.—Mr. H. Hollis (Northampton Infirmary) was elected a member of the Branch: also (at the previous meeting) Mr. J. A. Stoney (Dunstable) and Mr. W. B. Mason (Floore). The following were elected to the Association and Branch, namely: Mr. A. O. Honnywill (Bletchley), Mr. G. W. Buxton (Fenny Stratford), and Mr. A. L. Chigwell (Northampton).

Election of Officers.—The following were elected officers for 1895-96:—*President:* Dr. A. H. Jones (Northampton). *Representative on General Council and Parliamentary Bills Committee:* Mr. J. Hughes Hemming (Kimbolton). *Honorary Treasurer:* Mr. G. H. Perceval. *Honorary Secretary:* Mr. C. I. Evans. *Committee of Management:* Dr. Buszard, Mr. Milligan, Mr. Crewe, Dr. Walker, Dr. Goldsmith, Mr. Kinsey, Mr. Rogers, and Mr. De'Ath.

Votes of Thanks.—Votes of thanks were passed to the retiring President (Mr. Cogan) for his services during the past year, and to the Committee of Management.

Autumnal Meeting.—It was resolved that the autumnal meeting be held at Peterborough on October 4th.

[The resolution passed on the subject of the registration of midwives will be found at p. 1436.

EAST ANGLIAN BRANCH.

THE annual meeting of this Branch was held at Yarmouth on June 21st. The proceedings commenced with a brief meeting of the Council of the Branch, followed at noon by a meeting of the Branch for business, Dr. BEVERLEY occupying the chair.

Report of Council.—The minutes of the last meeting having been adopted, the report of the Council of the Branch was presented by Dr. ELLISTON. It set forth that nineteen new members were elected at the jubilee meeting at Stowmarket last year, and a further twenty had been elected that morning. After deducting unavoidable losses by death and resignation, the total number of members in the Branch was 264, a greater number than there had hitherto been. The East Anglian Branch was established in 1836, and was the first Branch of the British Medical Association. The Council recommended that an autumnal meeting should be held at Harwich during September, the date to be fixed by the President-elect, and that the annual meeting of 1895 should be held at Framlingham, Mr. George Jeafferson to be elected president-elect. Dr. Elliston and Dr. Beverley were recommended for appointment on the Council of the Association, and Dr. Manby as representative on the Parliamentary Bills Committee. In compliance with a request received from the Council of the Association, a code of by-laws had been prepared, and would be submitted to the consideration of the meeting.—The report was unanimously adopted.

Election of Council.—Mr. F. W. CLARKE moved that the Branch Council be re-elected, with the substitution of Dr. Barton, of Norwich, Mr. Harper, of Stowmarket, and Mr. M. E. Ling, of Saxmundham, with Mr. Jeafferson, and Dr. Manby, who become *ex-officio* members.—The resolution was adopted.

By-Laws.—The by-laws were then presented to the meeting, and after one or two slight amendments had been made in them they were, on the motion of Mr. VINCENT, seconded by Mr. COMBE, adopted.—Dr. ELLISTON moved that Dr. Barnes be authorised to submit the by-laws to the Council of the Association for approval, and when approved that a copy be sent to each member of the Branch, he to be further authorised to take such steps as might be necessary for the arrangement of the business of the Branch for 1895 being conducted in accordance with the by-laws.—Dr. LING seconded the resolution, which was carried unanimously.

Vote of Thanks to Dr. Durrant.—Dr. BEVERLEY moved that the best thanks of the East Anglian Branch be accorded to Dr. Durrant for kindly consenting to preside at the jubilee meeting of the Branch held at Stowmarket. He was sure all of them who were present at the meeting would pass very heartily that vote of thanks to the venerable gentleman who, after an interval of fifty years, again presided over their Branch.—Dr. ELLISTON second the resolution, which was unanimously carried, and this concluded the proceedings of the morning.

Luncheon.—The members of the Branch reassembled in large numbers shortly before 1 to partake of the hospitality of Mr. A. C. Mayo, the President-elect, who entertained them at luncheon. At the conclusion of the luncheon Mr. MAYO gave the toast of "The Queen, Prince and Princess of Wales, and Royal Family," which was loyally received and honoured.—The MAYOR OF YARMOUTH submitted the toast of "The East Anglian Branch of the British Medical Association," which was responded to by Dr. BEVERLEY.—Sir PETER EADE proposed "The Health of Mr. A. C. Mayo." He had especial pleasure in coming there as Mayor of Norwich to propose the toast. Mr. MAYO briefly returned thanks.

President's Address.—The majority of the company then adjourned to the Quarter Sessions Court, when Mr. Mayo was formally introduced to the company as their President by Dr. BEVERLEY, in the absence of Dr. Durrant. Mr. MAYO, on taking the chair, welcomed the members to Yarmouth, a town rich in historical and archæological reminiscences, and in some parts absolutely unique in the arrangement of its buildings. Fortunately among his guests that day were two gentlemen not only well versed in divine and civil law, but also archæologists, who had kindly consented to direct the footsteps and instruct the minds of those who so desired. The water supply of the town, which was derived from the Ormesby and neighbouring broads, was very good, and the supply plentiful and constant. The method of filtration was through sand and gravel. The town itself was situate on a sand bank and had from time immemorial been celebrated as a health resort. The death-rate last year was 19.6 per 1,000; but, excluding the deaths of visitors, of whom they had at least 100,000, and those brought in from sea, by no means few, and those in public institutions, the death-rate became 17 per 1,000, which they must admit was very low for a town with a population of 50,000.

Communications.—Papers on medical and surgical science were then read by Professor CLIFFORD ALLBUTT, Professor WILLIAM ROSE, of King's College, London; Dr. W. S. A.

GRIFFITH, Assistant Obstetric Physician, St. Bartholomew's Hospital, London; Mr. A. H. TUBBY, Surgeon to the Evelina Hospital; Mr. CHARLES WILLIAMS; Mr. S. H. BURTON; Dr. SINCLAIR HOLDEN, Dr. W. B. WEDGEWOOD, Dr. RYLEY, Dr. H. BLAKE, and the PRESIDENT.

Angina Pectoris.—Professor CLIFFORD ALLBUTT pointed out that angina pectoris signifies, not pain, but a strangling or compression of the breast; moreover, that to set up "types" by which diseases were to be measured, led to neglect of those underlying similarities upon which classification depended. For example, pain was by no means essential in angina pectoris, nor even the chief symptom—the chief symptom, or that which was allied to the process of death, being the sense of impending death. The author related cases in which there was no pain, but in which the agony of death was well marked, and in all of which sudden death did soon occur in the usual way. As regards the pathology of angina pectoris, the alleged increase of blood pressure was not ordinary or even usual, and when present might be the result of pain; indeed, during the attacks the pulse showed no constant alteration, if any. To call the disease a neuralgia explained nothing; moreover, neuralgia, unlike angina, was common rather in women than in men; it was not usually curable by nitrites, and in the cardiac plexus would be more likely to arise in the course of aneurysms. Doubtful exceptions apart, in angina impairment of the heart's muscle was found. This might give rise to "intermittent claudication" with or without cramp, but if such processes were at work during a paroxysm the pulse should betray them. He believed that the sense of impending death was an organic sensation like hunger or dyspnœa, a call upon the heart for more work. Syncope, on the contrary, was not of systemic origin; a systemic call would rather arouse the heart, and the increased effort may be attended by intense pain. Sooner or later the effort was too much for the organ; it responded or failed in the attempt. Nitrites gave relief by supplying the system with the blood they called for. As organic sensations and impulses were stronger in men so was angina more frequent in them. Finally, he distinguished the symptoms of angina pectoris from those of over-blood-pressure in old persons and others.

Yarmouth as a Health Resort.—A paper on this subject, prepared by Dr. JOHN BATELY, was not read owing to the length of the proceedings.

Visit to the Town.—The Rev. Canon J. J. Raven, D.D. and Mr. F. Danby-Palmer conducted parties interested in archæology round the more interesting old parts of Yarmouth. Mr. Charles Diver showed the historic old church of St. Nicholas. Drs. Wilson and Underhill took those interested round the Royal Naval Hospital, while others visited the hospital.

Dinner.—In the evening the members dined at the Royal Hotel.

WORCESTERSHIRE AND HEREFORDSHIRE BRANCH.

THE annual meeting of this Branch was held at the Infirmary, Hereford, on June 22nd.

Election of President.—Mr. G. E. Fosbroke, Medical Officer of Health for Worcestershire, was elected President, and Mr. H. Cecil Moore (Hereford) President-elect.

Communications.—The PRESIDENT read a paper on Some Points of Interest in the Etiology of Small-pox, Diphtheria, and Cancer.—Mr. VEVERS read notes of a case of a Rare Form of Hæmorrhage, namely, hidden *ante-partum*, with the literature of the subject.—Dr. P. M. CHAPMAN showed an improved Clinical Manometer which he had devised, and a new Chronograph.

Dinner.—The members afterwards dined at the Green Dragon.

SYDNEY AND NEW SOUTH WALES BRANCH.

A GENERAL meeting of this Branch was held at Sydney on May 4th; Dr. CRAGO, President, in the chair. There were present: Drs. Fiaschi, W. Chisholm, Worrall, Sydney Jones, O. McNeil, Traill, Warren, Thomas Dixon, Hankins, Faithful, Pockley, J. A. Gill, O'Reilly, Foreman, Collins, Arthur Cohen, Quaife, A. Parker, Clarke, Newmarch, Thring, G. A. Marshall, Wood, Scot Skirving, C. J. Martin, Clay, Milford, Langhorne, Morgan Martin, McKay, Davis, Twynam, Kingsbury, Abbot, Lennhoff, McCulloch, Coutie, MacSwinney, Neill, Tidswell, and Huxtable.

Confirmation of Minutes.—The minutes of the previous meeting were read and confirmed.

New Members.—The PRESIDENT announced the election of the following new members: Drs. W. P. Bassett, Jackson, J. B. Moore, James McLeod, R. B. Huxtable, J. McAllister, G. Hurst, Thomas Harrison, R. G. Alcorn, W. M. Helsham, S. Gavin Morton, Maguire, P. Blackall, and W. Murray.

Medical Advertising.—The HONORARY SECRETARY read some correspondence from Drs. Devlin, Lamrock, and Eichler relative to medical advertising, which had been dealt with by the Council during the month.

Aims and Policy of the Branch.—The PRESIDENT said that, as Dr. Knaggs was unavoidably absent, he would call upon Dr. Collins, who had seconded the resolution for the adjournment of the debate on Dr. Huxtable's paper, to continue the discussion.—A discussion ensued in which Drs. COLLINS, FOREMAN, WORRALL, O'REILLY, CRAGO, SYDNEY JONES, C. J. MARTIN, QUAIFE, MILFORD, HUXTABLE, and ARTHUR took part.—The PRESIDENT then put the first part of the resolution: "That it be an instruction to the Council of this Branch to approach the Council of the British Medical Association with a view to obtain the concession mentioned by Dr. Huxtable." The resolution was carried. After some further discussion, the PRESIDENT submitted the second part of Dr. Sydney Jones's resolution as follows: "That it be an instruction to the Council of this Branch to take such measures as may seem to them fitting to ascertain the desirableness or otherwise of purchasing the *Australian Medical Gazette*, and report to a further meeting of the Branch for approval or otherwise."—Carried.

Proposed Alteration of Rules.—Dr. NEWMARCH moved the following rule in place of Rule 4: "The Council shall consist of a president, vice-president, honorary secretary, honorary treasurer, and twelve ordinary members, four at least being suburban or country members, who shall be elected annually by ballot, and shall be eligible for re-election, provided that the offices of president or vice-president be not held consecutively for more than one year by one person. Candidates for these offices must be nominated in writing to the Secretary fourteen days before the annual meeting. A circular shall be sent to each member four weeks before the annual meeting, intimating the date upon which nominations shall close, and one week before the annual meeting a list of those nominated, and a ballot paper shall be sent to each member. No member shall be supplied with a second ballot paper." After considerable discussion, in which Drs. FOREMAN, WORRALL, MCKAY, QUAIFE, POCKLEY, CRAGO, DAGNALL CLARK, HUXTABLE, and THOMAS DIXON took part, Dr. THRING moved an amendment that Rule 4 be added to as follows: "That presidents of recognised medical societies be *ex-officio* members of the Council, provided that they are also members of the Branch." After further discussion, Dr. THRING withdrew his amendment, and Dr. W. E. WARREN proposed that Rule 4 be altered to read "Twelve members instead of eight." This amendment was then put to the meeting and carried.

CORRESPONDENCE.

SCURVY IN INFANTS.

SIR,—There is no doubt that this affection, described by Drs. Northrup and Crandall, is by no means uncommon owing to the free use of prepared foods of late years. Since my attention was first drawn to it, by reading a paper by Mr. Owen on the subject, several well-marked instances have come under my notice; it is frequently mistaken for other affections, such as purpura or rheumatism, etc., as unless the child has cut some of its teeth there will be no sponginess of the gums. The practical lesson is that no artificial or oversterilised food should be exclusively used for infants' food for more than a few weeks at a time.—I am, etc.,

Reigate, June 25th. J. WALTERS, M.B.

SPECIAL CORRESPONDENCE.

PARIS.

The Death of President Carnot: the Post-mortem Examination.—Report of the Seine Sanitation Committee.—Hygiene of Paris Hospitals.—Typhus in Algiers.—Opening of an Anatomical Institute at Nancy.—The Gironde Medical Association.—Accidents from the Electric Light.—The Boucicault Hospital.—General News.

The necropsy made on the body of M. Carnot, the late President of the French Republic, revealed a wound in the liver, 12 centimetres in depth. The portal vein was divided in two places. A rib was broken. The dagger had made a wound of 18 centimetres in length. Two litres of blood were found in the abdominal cavity.

Professor Cornil has reported to the Senate the result of the Seine Sanitation Commission. The aim is to supply Paris with the largest possible quantity of pure water. Each house is to be provided with pipes carrying sewage into the sewers, whence by a perfected system of pipes the sewage is to run on to land, which will then be utilised for agricultural purposes. According to a clause in the Bill the city of Paris must undertake to assure the dispersion of the sewage on tilled land five years after the law has been passed. The expense will be 177 million francs (£7,080,000). M. Proust, during the debate on the Seine Sanitation Bill, stated that it is impossible to attribute the cholera epidemic to the sewage irrigation of the Gennevilliers fields. During the last epidemics of typhoid fever and cholera no cases were notified at Gennevilliers.

The Agricultural Society of France has distributed among the members of the Senate a pamphlet full of arguments against the system of sewers, and in favour of using sewage for irrigation.

Dr. Noir, professor of hygiene at the École d'Ambulancèires et d'Ambulanciers, attached to the Paris Policlinique, gives lectures on hospital hygiene to a large audience. Dr. Peyron was present at the first lecture. There is enough to say on the absence of hygiene in many of the Paris hospitals to make a dumb man eloquent. It is to be hoped that Dr. Noir's lecture will have this effect on M. Peyron, and that all the sights and smells that shock foreign visitors will disappear. The whole staff of the Maison de Retraite de la Rochefoucauld has petitioned the director of the Assistance Publique to enlarge the building or provide them with another. It seems the inmates and medical staff are nearly choked by the heat resulting from overcrowding, and the patients cannot be properly examined for want of space.

The typhus epidemic at Algiers has caused many deaths among the hospital staffs: eight male nurses have died at the Mustapha Hospital. M. Jean Philipon, a dresser at the Civil Hospital, has also fallen a victim to the epidemic in the performance of his medical duties.

The Minister of Instruction and the Minister of Commerce will go to Nancy and be present at the opening of the Anatomical Institute. The ministers are to visit the Brewery School, an annexe to the Chemical Institution forming part of the Science Faculty School. This is intended to teach the scientific processes in brewing hitherto monopolised by Germany.

The Gironde Medical Association has held its annual meeting at Pauillac. More than 160 medical men were present. MM. Lannelongue and Lereboullet, the President and Secretary of the French Medical Association, attended the meeting. The banquet given in honour of the occasion was in true southern style. The medical body was received by the playing of trumpets and salvos of cannon greeted the appearance of the Mayor, Dr. Pèrier, formerly professor at the Bordeaux Medical Faculty. The Sanatorium, ably directed by Dr. Armaingaud, was visited and admired. Dr. Armaingaud by his own personal efforts has collected sufficient funds to organise and carry on the sanatorium. The first year he received twenty children, the second fifty. Now the sanatorium consists of several pavilions, in which more than 100 can be accommodated. A "Patronage Committee" is now in existence, and public support is assured.

M. Jules Rochard, the well-known sanitarian, states in the *Union Médicale* that since electric light has been used in France there have not been more than fifteen deaths from accident. In America, according to statistics published by the *Daily News* in 1890, there had been, since 1880, 116 deaths. M. Rochard attributes this startling difference to a want of superintendence and neglect in adopting necessary precautions, a condition of things intimately connected with the absolute liberty of the individual enjoyed by American citizens.

The Municipal Council is showing signs that French patience and *laissez faire* has its limit. It protests against the inertia of the Assistance Publique, and calls upon the director to have the first stone of the Boucicault Hospital laid immediately. This hospital appears too likely to be sacrificed to procrastination.

The Senatorial Army Commission has approved of the report drawn up by Dr. Labbé, proposing that the age limit for medical students should be 27 years of age instead of 26.

The Municipal Council has authorised Dr. Bergeron to organise private mortuary chambers, where bodies will be deposited awaiting burial.

Dr. Hanriot has been elected a member of the Paris Medical Academy in succession to the late Dr. Quinquaud.

BERLIN.

The Title of Professor.—The Pathological Institute.

In German universities the teaching body is divided into three classes. The aspirant to a professorship receives the *venia legendi* under the name of *Privatdocent*. Above him is the professor extraordinarius, and on the highest rung of the ladder there is the professor ordinarius, who is eligible for the deanship of his faculty and for the rectorship of the university. The title of professor being a much-coveted one in Germany, the Government has from time to time bestowed it on men of special merit; either *Privatdocenten*, for whom no professorship could at the moment be found, or other distinguished men not connected with the university. This Government favour, by the way, has the additional merit of cheapness, as in such cases the title is purely honorary, no remuneration being attached to it. Of late, quite a shower of these titular professorships has fallen. The Prussian Cultus Minister has bestowed it on a number of *Privatdocenten* —doctors of medicine for the most part—without first consulting the Faculty (the body corporate of university teachers). No wonder that a certain amount of discontent is felt in university circles. There is every reason to believe that, had the Faculty been asked, they would have advised the promotion to a real professorship in some cases, and in others would have considered the scientific work of the claimants hardly such as could justify the preference.

In the chronicle of the Berlin University for the year 1893-94 Professor Virchow complains of the neglected state of his Pathological Institute. He says: "During the last year, the internal arrangements of the institute, though gradually growing worse and worse, have known no improvement."

ST. PETERSBURG.

The Epidemic in Hong Kong.—Awards in the Hygienic Exhibition.—New Chairs in the Army Medical Academy.—Conference of Livonian Physicians.

The outbreak of plague in China is naturally watched with interest and some disquietude by the Russian authorities. Special measures have been in force, since the commencement of the outbreak, in the Russian ports on the Pacific to prevent the introduction of the infection from Hong Kong. The last recurrence of plague upon Russian soil was in the autumn of 1878, when it appeared in Vetlianka, a Cossack *stanitza* in the government of Astrakhan, and thence spread to Selitrennaia, and one or two other places near the Volga. Fortunately the disease was confined to this district, and although it caused some 500 or 600 deaths, and created something like a panic all over the country, this localised epidemic was stamped out in rather less than three months. One of the worst outbreaks of plague that ever occurred in Russia was that of 1770-72. The disease was introduced by

the Russian troops returning from the Turkish wars; it raged in Kieff, Podolia, Tchernigoff, and other places in Little Russia, but its greatest ravages were reserved for Moscow. In October, 1770, some Turkish prisoners died of the disease in Moscow. In November an army officer died of it, and was secretly buried; then the doctor who had attended him succumbed. The infection rapidly spread to the hospital attendants, thence to the adjacent cloth market, and in March, 1771, was widely epidemic in the capital. In April 778 persons died there from plague, and the number of deaths rapidly rose, until in September there were no fewer than 21,401 recorded deaths, besides many which undoubtedly escaped record. On September 26th the Empress Catherine sent Count Gregory Orloff to Moscow with instructions to stamp out the epidemic at whatever cost. The most energetic measures were taken, and it is certain that from that time the epidemic began to abate. Whether this result was solely due to the wisdom of Orloff or no, it was placed entirely to his credit at the time, and he became the hero of the hour. Catharine raised a triumphal arch to commemorate the event in Tsarskoé Selo, bearing the inscription: "In honour of the man who delivered Moscow from the plague."

On May 29th (June 10th) the Russian National Health Society held a special meeting, at which the prizes gained in last year's Pan-Russian Hygienic Exhibition were awarded. Dr. Zdekauer presided, and made an eloquent speech. It was announced that the exhibition was visited by 500,000 people, of whom 400,000 were admitted without payment. This large number of free admissions was mostly made up of the pupils and teachers in schools and of men belonging to the services. It certainly bears witness to the liberal policy of the management.

Certain changes are imminent in the Army Medical Academy of St. Petersburg. The vacant chair of Aural Diseases will cease to exist separately, its functions being added to those of the chair of Diseases of the Throat and Nose. An opportunity is thus afforded to found a new professorship, the subject of whose teaching will be Infectious Diseases with systematic and practical courses upon bacteriology. In like manner the two chairs of Dermatology (Professor Polotebnoff) and Syphilitic Diseases (Professor Tarnovski) are to become one, and a new chair, devoted to Historical and Encyclopædic Medicine, will be founded.

The sixth annual conference of Livonian Physicians will be held this year at Volmar between September 5th and 7th.

NAVAL AND MILITARY MEDICAL SERVICES.

THE NAVY.

SURGEON ALFRED TOM RIMELL has been placed on the Retired List, June 8th. His commission was dated August 20th, 1886.

The following appointments have been made at the Admiralty:—ERNEST E. P. TINDALL, Surgeon to the *Raven*, undated; WILLIAM BETT, Surgeon to the *Victory*, June 18th; A. W. S. MCCONISKEY to be Surgeon and Agent at Ardglass, etc., June 18th; R. G. NAYLOR to be Surgeon and Agent at West Mersea, June 18th; ROBERT BENTHAM, Staff-Surgeon, and FREDERICK W. PARKER, Surgeon, to the *Bonaventure*, July 5th.

Deputy-Inspector-General GEORGE FREDERICK AUGUSTUS DREW died at Plymouth on June 22nd, aged 66. He was appointed Surgeon, February 21st, 1851; Staff Surgeon, September 29th, 1855; Fleet-Surgeon, December 13th, 1873; and Deputy-Inspector-General on retirement, December 22nd, 1882.

ARMY MEDICAL STAFF.

SURGEON-MAJOR JOHN COOTE-OVENS died at Ramilton, co. Donegal, on May 29th, aged 61 years. He was appointed Assistant-Surgeon, December 15th, 1855; Surgeon, June 12th, 1863; Surgeon-Major, without date; and retired from the service February 4th, 1877. He served in the Crimea with the 9th Regiment from November 13th, 1854, including the siege and fall of Sebastopol and the assault of the batteries on June 18th (medal with clasp, and Turkish medal).

ARMY MEDICAL RESERVE.

SURGEON-CAPTAIN ARTHUR B. WADE, M.B., and Surgeon-Captain ALEXANDER J. BOYD, M.D., whose appointment to the Army Medical Reserve of officers was notified in the *Gazette* of June 12th, should have been described as of the 2nd Volunteer Battalion the Hampshire Regiment and the 1st Volunteer Battalion the Bedfordshire Regiment respectively.

INDIAN MEDICAL SERVICE.

THE following promotions, all of which have been already announced in the BRITISH MEDICAL JOURNAL, have received the approval of the Queen: *Bengal:* Brigade-Surgeon-Lieutenant-Colonel D. O'C. RAYE, M.D., to be Surgeon-Colonel, April 2nd; Surgeon-Majors S. H. BROWNE, M.D., EDWARD MAIR, JAMES ARMSTRONG, H. P. YELD, J. C. FULLERTON, and C. J. H. WARDEN to be Surgeon-Lieutenant-Colonels, March 31st: Surgeon-Captains R. H. CHARLES, M.D., GEORGE DUNCAN, and W. A. SYKES, D.S.O., to be Surgeon-Majors, April 1st. *Madras:* Surgeon-Majors P. H. BENSON, JOHN LANCASTER, and W. G. KING to be Surgeon-Lieutenant-Colonels, March 31st; Surgeon-Captains E. W. REILLY and JAMES SCOTT to be Surgeon-Majors, April 1st. *Bombay:* Surgeon-Majors J. S. WILKINS, D.S.O., and W. A. BARREN to be Surgeon-Lieutenant-Colonels, March 31st: Surgeon-Captains R. W. S. LYONS, M.D., J. P. BARRY, and A. V. ANDERSON to be Surgeon-Majors, April 1st.

The retirement from the service of Surgeon-Colonel E. O. TANDY and Brigade-Surgeon-Lieutenant-Colonel D. F. KEEGAN, M.D., of the Bengal Establishment, and of Brigade-Surgeon-Lieutenant-Colonel J. F. KEITH, of the Bombay Establishment, which have also been already announced in the BRITISH MEDICAL JOURNAL, have likewise been approved by Her Majesty.

Brigade-Surgeon-Lieutenant-Colonel A. STEPHEN, M.B., Bengal Establishment, is promoted to be Surgeon-Colonel from May 19th. His first commission dates from September 30th, 1867. He was in the Abyssinian war in 1868, and has the medal granted for that campaign.

Brigade-Surgeon-Lieutenant Colonel F. H. BLENKINSOP, Madras Establishment, is appointed officiating Principal Medical Officer, Secunderabad District.

THE VOLUNTEERS.

SURGEON-LIEUTENANT D. DURRAN, M.B., 1st Caithness Artillery, is promoted to be Surgeon-Captain, June 23rd.

Mr. HENRY GEORGE FALKNER is appointed Surgeon-Lieutenant to the 1st Volunteer Battalion the East Yorkshire Regiment, June 23rd.

Surgeon-Major A. K. RICKARDS, 3rd (Duke of Connaught's Own Volunteer Battalion the Hampshire Regiment (late the 3rd Hampshire), has resigned his commission, with permission to retain his rank and uniform.

Mr. JOHN SUTHERLAND MACKAY, M.D., is appointed Surgeon-Lieutenant to the 6th (Fifeshire) Volunteer Battalion the Royal Highlanders, June 23rd.

Surgeon-Lieutenant R. KOETTLITZ, 2nd Volunteer Battalion the Durham Light Infantry (late the 2nd Durham), has resigned his commission, which was dated June 27th, 1891.

Surgeon-Lieutenant G. T. BEATSON, M.D., Glasgow Companies Volunteer Medical Staff Corps, is promoted to be Surgeon-Captain June 23rd.

Surgeon-Major T. E. UNDERHILL, 2nd Volunteer Battalion the Worcestershire Regiment (late the 2nd Worcestershire) has resigned his commission, with permission to retain his rank and uniform.

Surgeon-Lieutenant R. E. WILLIAMSON, M.B., 3rd Volunteer Battalion the Duke of Wellington's West Riding Regiment (late the 9th West Riding of Yorkshire), is promoted to be Surgeon-Captain, June 27th.

Surgeon-Major H. M. KEMMIS, 2nd Volunteer Battalion the Somerset Light Infantry, is appointed Brigade-Surgeon-Lieutenant-Colonel to the Severn Brigade Volunteer Infantry, June 27th.

EXAMINATIONS FOR PROMOTION (VOLUNTEERS).

SURGEON-LIEUTENANT OF VOLUNTEERS wishes to know what it is necessary to read for Promotion (Surgeon-Captain) Examination.

*** *Regulations for Army Medical Services*, 1894; *for Encampments*, 1889: *Manual for the Medical Staff Corps; Infantry Drill*; Parkes's *Practical Hygiene*, Notter, 8th edition; Surgeon-Major Porter's *Surgeon's Pocket Book*. The standard and subjects of the examination vary considerably in each district.

MEDICO-LEGAL AND MEDICO-ETHICAL.

UNQUALIFIED ASSISTANTS.

AT an inquest held recently as to the death of a lad, the mother stated in evidence that she supposed that a Mr. Pearce, who attended in place of Dr. Newbery, of 7, Beresford Street, Walworth, was a fully qualified man. The coroner is reported to have stated that Mr. Pearce was not a qualified practitioner, and did not appear to have known what the deceased was suffering from; he ordered turpentine to be rubbed on his chest, but *post-mortem* examination showed that death was due to the rupture of an abscess on the brain. In reply to a juryman, who asked whether medical men were allowed to send their unqualified assistants to visit patients, the coroner said it was done, but that in his opinion it was "nothing less than a fraud on the public."

The case is another example of the extremely disagreeable position in which qualified practitioners may be placed if they entrust to unqualified assistants duties which can be legally discharged only by qualified men.

AN EASY SHAVE.

A HAIRDRESSER'S assistant was last week fined 20s. and costs for exposing himself in a public street whilst suffering from small-pox. It appeared that he was told by a doctor that he was suffering from small-pox, and ordered to remain at home, notwithstanding which he elected next day to travel from Stretford to Manchester, where he carried out his duties as a hairdresser's assistant, until becoming worse in the course of the day he had to return home. All this occurred a long time ago, and a warrant was issued for his arrest last year, but could not be put in force until recently.

Certainly the perils of the barber's shop assume a much wider range than the mere risk of ringworm and sycosis, with which they are usually associated in the public mind, when we consider the maladies which may be brewing within the artist who so deftly trims our locks or softly rubs in the lather on our chins. To go "easy over the pimples" assumes a new importance to unvaccinated man when the operator is suffering from small-pox, and an abrasion may produce inoculation. It is always interesting to find punishment overtaking the transgressor, although

sometimes amusing to see the excuse on which it is inflicted; and to those who daily indulge in an "easy shave" it may appear an inversion of the importance of his crimes that the barber in question was punished, not for the sins he had committed against his customers, but merely for exposing himself in the public street.

ACTION FOR SLANDER AGAINST A MEDICAL MAN.

The action of Susan Nabb *v.* Bowker, heard in the Manchester Court of Record before Mr. H. G. Shee, Q.C., judge, was an action for slander, Mr. Woodburne for the plaintiff, Mr. Bryne for the defendant. The plaintiff is a midwife, and the defendant a medical man practising at Bury. Mr. Woodburne having opened the case, the plaintiff, according to the report in the *Manchester Courier*, said that from the time the defendant became a qualified medical man she attended many of his cases as midwife. Mr. Baguley became his assistant in 1889, and after that Mr. Baguley attended many of the defendant's cases, and she assisted him. Some time afterwards Mr. Baguley left Mr. Bowker and joined Mr. Gordon, another medical man. Mr. Bowker then sent for her (witness), and in answer to a question she told him that she followed all doctors. The defendant then said: "If you follow Mr. Baguley I'll do my worst for you." Since then she had not done anything to take Mr. Bowker's cases away from him. On August 1st she attended a Mrs. Higson. She sent for Mr. Bowker, who came, but on the second occasion refused to meet the plaintiff. On telling him she had done nothing to injure him, he replied: "You are following an unqualified man, and you are an unqualified woman; I will do what I said I would, I will put you as low as I can; I'll take your living from you, and I'll scandalise you in every place I go to." She answered: "You can't." The defendant then said: "Yes I can, and what I can't do I'll make my collector do." The plaintiff said she had been in practice twenty years, and had attended 1,300 cases. She had had nine unfortunate cases, but never without a doctor. She had worked with nearly all the doctors in Bury. She attended St. Mary's Hospital, Manchester, three years, but admitted that she failed to pass her examination, and she did not get a certificate. Corroborative evidence of the alleged slander was given. Mr. Gordon said he considered Mrs. Nabb a competent woman. Mr. Baguley also gave the plaintiff a high character, and said Mr. Bowker undoubtedly knew that the plaintiff was an uncertified midwife. The plaintiff said her business had suffered by what the defendant had done. Since August she had only had eleven cases, but previously in the same period the number was fifty. The defendant said when he called upon the plaintiff he closed the door, and when they were both in the street he said: "I only want to tell you about Mrs. Higson; I have come to tell you that I have made up my mind that I won't attend any cases of midwifery that you are in attendance upon." She said: "For why? He replied: "Well, you are an unqualified midwife, practising as a hospital or certified midwife; you have recommended a patient of mine to an unqualified man as a doctor, and it is my object to put these things as low as possible; you have maintained your reputation as a trailer." Mr. Woodburne: "What is that?" Witness: "She is an undertaker. She has the reputation of rushing off to a house when a patient is very poorly." The Judge: "She is looking after business, I suppose." Witness: "After washing and laying out a body she generally gets the undertaking." The Judge: "Were you going to put that down as low as possible?" Witness: "It did not interfere with me." Mr. Bryne: "Not until the people were past your help." In reply to a question the defendant said no other person heard the words he used to Mrs. Nabb but the woman herself. The Judge: "The horse did not hear it?" The defendant: "No, nor the coachman." The defendant further said that his practice had increased since he had ceased to act with the plaintiff. He did not consider that he had slandered the plaintiff. Mr. Baguley was not a qualified doctor and not entitled to practise. When assisting him Mr. Baguley wished to become his partner, upon which he discharged him. The jury gave a verdict for the plaintiff, damages £15. Judgment accordingly.

JOHANNIS WATER.

In the Chancery Division on June 22nd, before Mr. Justice Kekewich, the case of the Apollinaris Company *v.* Daly, the proprietor and manager of Daly's Theatre, came on for hearing. Mr. John Cutler, who appeared for the plaintiff, said that it was a motion for an injunction restraining the defendant from publishing in his programmes a misleading advertisement which was calculated to lead to the belief that Johannis water was the only water that could be obtained at the Midland, Great Western, and other of the principal railway stations and hotels. This, counsel said, was perfectly untrue, seeing that the Apollinaris Company had a contract with these particular railway companies to supply them with their water, and they also supplied the best known hotels. Upon the notice of motion being served, certain correspondence had taken place between the solicitors of the parties. The defendant was not present, he (Mr. Cutler) understanding that he was abroad. His lordship asked if Mr. Daly were not a gentleman who was very well known. Mr. Cutler replied Yes. What had been agreed to was a consent order for an injunction restraining the further publication complained of, and Mr. Daly undertook to pay a sum beyond the costs. Twenty pounds had been agreed to, and he asked his lordship to treat this as the trial of the action, and to grant a perpetual injunction on the terms agreed to on production of the consent agreement. His lordship replied in the affirmative, and an order was made accordingly.

THE TITLE OF "DR."

M.R.C.S. and L.S.A.—We believe it to be not an infrequent occurrence for a medical practitioner (although not entitled to the degree of M.D.) to prefix the title "Dr." to his name on door plate or card simply, we think, as being the popular appellation of the medical man. Speaking however in the light of not remote decisions, it may be that legal proceedings would lie against such practitioner, under Section 40 of the Medical Act for so doing; we cannot say with what measure of success. The question is a somewhat vexed one, and has been much discussed in our columns.

FEES TO MEDICAL WITNESSES.

M.B., C.M.—The county court scale allows a professional witness from 15s. to £1 1s. per diem, and such sum, not exceeding sixpence per mile, as shall have been reasonably paid for travelling expenses. The witness should secure his fee before giving evidence.

OBITUARY.

WILLIAM LEES UNDERHILL, F.R.C.S.,

Tipton.

For more than a hundred and fifty years the name of Underhill has been associated with a family of doctors in the district of South Staffordshire, where it has been held as the synonym of all that is upright and honourable. One link of this long past was broken on June 18th by the death of Mr. W. L. Underhill, at the ripe age of 80 years. Succeeding his father in practice, Mr. Underhill spent the greater part of his career in the midst of an active and laborious life, carried on with unremitting energy and heartiness until a few years ago, when he retired from the more pressing work, without ceasing his connection with the scenes of his former duties.

In the public work of the district Mr. Underhill always took a prominent part. For many years he was chairman of the local board of health, one of the founders of the Guest Hospital, an active supporter of the volunteer corps, in which he held a commission as surgeon for many years, and a liberal contributor to all charitable and philanthropic objects of the locality. He discharged the duties of a Justice of the Peace for Staffordshire with assiduity, firmness, and impartiality. In the conduct of his profession his judgment was reliable and sound; his kindness and humanity were associated with a robust and fearless expression of opinion which commanded respect.

Beloved as a friend and esteemed as a high-principled citizen, the attachment of the poor and rich is the highest testimony of his worth. The presence of a large representative gathering at his funeral, which took place at Tipton cemetery on June 23rd, showed the regard in which he was held. He was borne to his grave by six of his sons, leaving the memory of a life of honour and integrity.

DAVID TAYLOR, M.R.C.S.Eng., L.S.A.

We regret to report the death, on June 16th, of Mr. David Taylor, a well-known, busy, and highly respected practitioner. He was born at Heybridge, Essex, on March 23rd, 1809, and was consequently in his 86th year at the time of his death. He entered the United Borough Hospitals of St. Thomas's and Guy's in 1831, and became M.R.C.S. and L.S.A. in 1833. He attended Dr. Alfred Swayne Taylor's first course of lectures on Medical Jurisprudence. He commenced practice at Bungay, Suffolk, and in 1835 succeeded Mr. John James Taylor, at Harleyford Place, Kennington. In 1851 he moved to Kennington Park Road, where he continued to practise until October, 1884, when he retired, in the 50th year of his practice in that neighbourhood. He afterwards resided in Clapham Road. He was a regular attendant at all Guy's Hospital celebrations; was a staunch and liberal supporter of Epsom Medical College, and of the British Medical Benevolent Fund, of which he was recently elected a Vice-President; he was an early member of the Obstetrical Society, and was at one time on its Council. He had worked under Blundell, Aston Key, and Addison; and took a keen interest to the last in all professional matters. He enjoyed robust health, was of placid temperament, and loved the society of his friends, who were many. He had the satisfaction of training three sons to his own profession which he loved well, all of whom became graduates of the University of London. The eldest, Arthur, died some years since, beloved of all who enjoyed his friendship. The second, Dr. Frederick Taylor, Physician to Guy's Hospital, has achieved for himself a wide reputation; and the third, Dr. Herbert Taylor, has succeeded his father in practice at Kennington.

Dr. Frederick Taylor was to have taken the chair at the Guy's Hospital biennial dinner, at the Hotel Métropole, on Wednesday next, but the death of his father prevents him from fulfilling that engagement.

PROCTER SELBY HUTCHINSON, M.R.C.S.

PROCTER SELBY HUTCHINSON, whose death occurred on June 26th, at Haslemere, was born on February 4th, 1863. He was the second son of Mr. Jonathan Hutchinson, and on his mother's side the grandson of the late William West, F.R.S., of Leeds. He received his professional education at the London Hospital, and after taking his diplomas in 1884 held the post of house-surgeon there under Mr. Rivington. At the expiration of his term of office he made a year's voyage in charge of a patient, but in part also for the establishment of his own health. Having visited Australia, New Zealand, and the North American States, he returned much pleased with what he had seen but at the same time much more willing than previously to settle in practice at home. He accordingly devoted his attention to diseases of the throat, and was elected upon the staff of the Golden Square Hospital. Whilst thus engaged he wrote, in addition to several pathological papers published in the journals, a short *Manual for Students*. The latter was prepared at the request of Mr. Lewis, and formed one of his series.

He became a skilful operator on the throat and larynx, and success in practice seemed to be opening to him, when, possibly in connection with excess in hospital work, his health gave way. In the hope of restoration he abandoned his London prospects, and went out to the Western States of Canada. The first winter there was a success, and he gained considerably. Subsequently, however, whilst residing in Winnipeg, he again lost ground, and his wife's reports were such as to induce his father to beg him to return home. He reached England in the early spring of the present year, and until the last few weeks hopes were entertained that he was again on the way to recovery. The debility and emaciation which from the first had been his prominent symptoms again, however, returned, and about a fortnight ago he was obliged to take to his bed. His end came at last somewhat unexpectedly to his nurses, and probably to himself, for he had been working a spray inhaler with his own hand not five minutes before he peacefully ceased to breathe.

Procter Selby Hutchinson was a man of very considerable promise. He was proud of his profession and diligent in its cultivation. He was of a very affectionate disposition, and, although his retiring habits much narrowed his circle of friends, those who knew him loved him. He was skilful with both pen and pencil, and he possessed a fund of genial humour which made him a very pleasant companion. He bore his long illness and the disappointments it brought him with uncomplaining fortitude. He was thoughtful for others, but he had an aversion to all forms of waste, which was sometimes carried almost to excess. Those who knew him well will recognise a characteristic trait in the fact that almost the last words he spoke were half in joke to remonstrate with his nurse, who was about to light another candle, and tell her that she had but to draw the window curtains and she would see that the day had dawned. So in another sense it had for him, for within a few minutes the night which had fallen on his life was over.

DR. ALEXANDER WILSON, of Mid-Calder, who recently died of pneumonia, was born in the parish of Rayne, in Aberdeenshire, and educated at the Grammar School and University of Aberdeen. He took the degrees of M.B. and C.M. with the highest honours in 1871, and that of M.D. in 1888. For the last twenty-two years he practised in Mid-Calder and the surrounding district. His professional skill was recognised by an extensive circle of patients, and his integrity of character and kindness of heart made him respected and beloved by all with whom he was brought in contact.

WE regret to announce the death of Dr. GUNDELACH, assistant-physician to the Fondation Pereire, Paris, who has just fallen a victim to professional duty. In opening an abscess in a child he pricked his finger, and died within a few days of septicæmia. Dr. Gundelach, who was 42 years of age, was a pupil of Professor Terrier, in whose clinic he had made interesting researches. He was a strenuous worker and a practitioner devoted to his patients.

MR. E. J. WORTH, M.R.C.S.Eng., died at his residence at Millbrook, Cornwall, on June 21st, in his 60th year. The deceased had been ailing for some time, but continued his practice up to June 19th, when he suddenly became worse. He qualified as L.S.A. and M.R.C.S.Eng. in 1856, and had been in practice in Millbrook for nearly forty years.

DEATHS IN THE PROFESSION ABROAD.—Among the members of the medical profession in foreign countries who have recently passed away are Dr. Chouppe, of the editorial staff of the *Bulletin Médical*, and well-known for his researches on curare, strychnine, and other poisons, aged 46; Dr. José Sanchez y Sanchez, of Madrid, one of the authors of the *Farmacopea-Formulario Universal* and *De Los Medicamentos Modernos*, aged 53; Dr. Plymmon S. Hayes, Professor of Electro-Therapeutics in the Chicago Policlinic, and author of several works on the subject which have been translated into German and French, aged 43; and Dr. John F. Monmonnier, formerly President of the Medical and Chirurgical Society of Maryland, and Professor of Physiology in the Washington University, Baltimore, aged 81.

UNIVERSITIES AND COLLEGES.

UNIVERSITY OF EDINBURGH.

A MEETING of the Edinburgh University Court was held last week, but there was no business of medical interest, save that the Court agreed to exercise the power conferred on them by Ordinance No. 18, Section 1, for graduation of women in medicine.

SOCIETY OF APOTHECARIES OF LONDON.

THE following gentlemen were appointed examiners, on Tuesday, June 19th, for the year 1894-95: J. C. Thorowgood, M.D. Lond., F.R.C.P.Lond.; F. Warner, M.D.Lond., F.R.C.P.Lond.; A. H. N. Lewers, M.D.Lond., M.R.C.P.Lond.; H. R. Crocker, M.D.Lond., F.R.C.P.Lond.; Sir H. R. Beevor, Bart., M.D.Lond., M.R.C.P.Lond.; A. P. Luff, M.D.Lond., M.R.C.P.Lond.; T. V. Dickinson, M.D.Lond., L.R.C.P.Lond.; C. Y. Biss, M.D. Cantab., F.R.C.P.Lond.; A. J. Richardson, M.D.Cantab., M.R.C.P.Lond.; C. B. Lockwood, F.R.C.S.Eng.; F. G. Parsons, F.R.C.S.Eng.; P. T. B. Beale, F.R.C.S.Eng.; E. Cautley, M.D.Cantab., M.R.C.P.Lond.; H. F. Morley, D.Sc.Lond.; F. J. M. Page, B.Sc.Lond.; James Galloway, M.D.Aberd., M.R.C.P.Lond.; Harrington Sainsbury, M.D.Lond., F.R.C.P.Lond.; Andrew Clark, F.R.C.S.Eng.; W. A. Lane, F.R.C.S.Eng.; W. A. Frost, F.R.C.S.Eng.; A. T. Norton, F.R.C.S.Eng.; B. Pitts, F.R.C.S.Eng.; and B. Pollard, F.R.C.S.Eng.

PASS LIST, June, 1894. The following candidates passed in

Surgery.—T. S. Biggs, Guy's Hospital; F. L. Blenkinsop, University College; M. S. Loewenthal, Wurzburg; C. A. Marrett, Charing Cross Hospital; J. P. Rerrie, New York, Bellevue; and O. O. Williams, London Hospital.

Medicine, Forensic Medicine, and Midwifery.—F. L. Blenkinsop, University College; E. Gill, St. Bartholomew's Hospital; R. H. Hayes, Guy's Hospital; M. S. Loewenthal, Wurzburg; M. H. C. Palmer, London Hospital; W. H. Richards, London Hospital; and O. O. Williams, London Hospital.

Medicine and Forensic Medicine.—F. A. M. Flegg, St. Thomas's Hospital, and H. J. L. Wales, Guy's Hospital.

Medicine.—E. A. Tudman, University College.

Forensic Medicine and Midwifery.—H. Roberts, St. Mary's Hospital, and A. L. Saunders, St Bartholomew's Hospital.

Forensic Medicine.—F. H. Le G. Best, St. Bartholomew's Hospital; F. Clarke, St. Bartholomew's Hospital; G. G. B. Hein, St. Thomas's Hospital; and J. M. Ritchie, Birmingham.

Midwifery.—E. B. Barber, London Hospital; W. D. Macdonald, Guy's Hospital; E. Ransome, Guy's Hospital; D. F. Roberts, Guy's Hospital; and A. P. Woolright, St. Bartholomew's Hospital.

To Messrs. Blenkinsop, Clarke, Gill, Loewenthal, Marrett, Palmer, Rerrie, Richards, and O. O. Williams was granted the diploma of the Society entitling them to practise Medicine, Surgery, and Midwifery.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.

Precautions Against Cholera.—The EARL OF STRAFFORD said that last year, when there was a danger of cholera visiting the ports of this country, the President of the Local Government Board thought it advisable to secure the services of four experienced medical gentlemen to supplement the good work done by the permanent medical officer of the Local Government Board, Dr. Thorne Thorne, and, owing to the judicious manner in which these gentlemen applied themselves to the task, the danger of invasion was minimised and the threatened danger almost passed away. It was possible that Europe might again be visited by cholera this year, and, remembering the services previously rendered by the medical experts to whom he referred, he begged to ask whether the President of the Local Government Board had decided to retain the services for another year of the four temporary medical inspectors who were appointed in January, 1893, and whether the cholera survey of ports and inland districts successfully conducted during the past twelve months would be maintained for the present year.—Lord HAWKESBURY

thanked the noble lord for his appreciation of the work performed in this matter by the Local Government Board, and was happy to state that the Board had retained the services of the four gentlemen alluded to for a second year, and had also decided to maintain during the present year the cholera survey of ports and inland districts so successfully conducted during the past twelve months.

HOUSE OF COMMONS.

The Brentwood School Scandal.—Major RASCH asked the President of the Local Government Board whether his attention had been called to the statement of Mr. Justice Day at the Essex Assizes, in sentencing Nurse Gillespie for torturing little children, in which he expressed a hope that the Government would institute a thorough and searching inquiry.—Mr. SHAW LEFEVRE said he had, prior to the conviction of the Nurse Gillespie, determined that a thorough investigation should be instituted into the management of the school, and pending this inquiry, the superintendent had been suspended from the performance of his duties. He could not express any opinion as to the extent to which responsibility might attach to others until after this inquiry had been held.—Major RASCH asked whether the right honourable gentleman was aware that the expenses of the committee of the guardians who were supposed to inspect this institution fortnightly were paid by the ratepayers.—Mr. SHAW LEFEVRE said he was not aware of the fact.—In answer to Mr. S. SMITH and Sir J. GORST, Mr. SHAW LEFEVRE said, as he had previously stated, his attention had been called to the conviction of Nurse Gillespie at the schools of the Hackney Union at Brentwood, and he had determined that there should be a full investigation into the management of the schools. The inquiry would be a public one, and the evidence would be taken on oath. With regard to the question as to general inquiry by a Committee of the House of Commons by a Commission, the subject would receive his consideration, but he would defer any decision until after the inquiry which he proposed would now be held in the case of the Hackney Schools. As to the questions which were raised as to the boarding out of children or providing for their emigration, he must point out that in the case of a very large proportion of the children in these schools neither of these systems could be available, but every facility was afforded to guardians by the Local Government Board for the adoption of either plan.

PUBLIC HEALTH
AND
POOR-LAW MEDICAL SERVICES.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns, including London, 5,860 births and 3,152 deaths were registered during the week ending Saturday, June 23rd. The annual rate of mortality in these towns, which had declined from 17.7 to 15.9 per 1,000 in the preceding four weeks, further fell to 15.7 last week. The rates in the several towns ranged from 8.3 in Leicester and 9.3 in Croydon to 20.7 in Sunderland and 21.7 in Liverpool. In the thirty-two provincial towns the mean death-rate was 15.6 per 1,000, and was slightly below the rate recorded in London, which was 16.0 per 1,000. The zymotic death-rate in the thirty-three towns averaged 2.2 per 1,000; in London the rate was equal to 2.5, while it averaged 2.0 per 1,000 in the thirty-two provincial towns, and was highest in Salford, Wolverhampton, and Nottingham. Measles caused a death-rate of 1.3 in West Ham and 2.3 in Nottingham; scarlet fever of 2.5 in Wolverhampton; and whooping-cough of 1.4 in Nottingham and 1.5 in Sunderland. The 69 deaths from diphtheria in the thirty-three towns included 44 in London, 4 in Cardiff, and 3 each in Birmingham, Leeds, and Hull. Five fatal cases of small-pox were registered in London, 3 in Birmingham, and 1 each in West Ham, Wolverhampton, Manchester, and Salford, but not one in any other of the thirty-three large towns. There were 170 small-pox patients under treatment in the Metropolitan Asylums Hospitals and in the Highgate Small-pox Hospital on Saturday last, June 23rd, against 244, 227, and 204 at the end of the preceding three weeks; 21 new cases were admitted during the week, against 58, 42, and 40 in the preceding three weeks. The number of scarlet fever patients in the Metropolitan Asylums Hospitals and in the London Fever Hospital on Saturday last was 2,153, against 2,277, 2,232, and 2,195 at the end of the preceding three weeks; 231 new cases were admitted during the week, against 264 and 238 in the preceding two weeks.

HEALTH OF SCOTCH TOWNS.

DURING the week ending Saturday last, June 23rd, 947 births and 472 deaths were registered in eight of the principal Scotch towns. The annual rate of mortality in these towns, which had declined from 20.3 to 17.9 per 1,000 in the preceding three weeks, further fell to 16.6 last week, but exceeded by 0.9 per 1,000 the mean rate during the same period in the large English towns. Among these Scotch towns the death-rates ranged from 10.3 in Perth to 19.2 in Greenock. The zymotic death-rate in these towns averaged 2.0 per 1,000, the highest rates being recorded in Paisley, Leith, and Edinburgh. The 226 deaths registered in Glasgow included 11 from whooping-cough, 4 from diphtheria, and 4 from scarlet fever. Three fatal cases of small-pox occurred in Leith and 2 in Edinburgh.

SMALL-POX IN SCOTLAND.

FROM mid-day of Saturday to mid-day of Tuesday last 2 cases of small-pox have been notified in the city of Edinburgh, as against 26 for the period in the previous week. Seventy-five cases remain under treatment in the hospital, as against 85 at the same time last week.

Three cases have been reported in Dunfermline (Fifeshire), in one family, the ages of the patients being 16, 12, and 2½ years respectively.

SMALL-POX AT LEITH.

THE following resolution has been adopted by the Town Council: "That with a view to checking the spread of small-pox in the burgh, the medical officer be instructed to prosecute a house-to house visitation for the purpose of vaccinating or revaccinating all persons, if deemed expedient, beginning with the districts more immediately affected with small-pox; and that the medical officer be empowered to employ medical students and other suitable persons for the purpose, with the approval of the Provost or the Committee; further, that this system should supersede the present arrangement of free vaccination, etc."

A second resolution instructs the sanitary inspector to proceed at once to a special survey of the whole burgh, beginning with the districts affected, or liable to be affected, with small-pox, for the purpose of detecting and preventing all nuisances, whether as regards drainage, overcrowding, water supply, dwelling houses, stairs and passages, ventilation, or streets and closes, and all accumulation of deleterious matter.

The wonder of course is that such resolutions were not adopted many months ago. Their appearance now is very much like "barring the field gate with a boiled carrot." But then Leith is in all things different, and is a law unto itself.

EPIDEMIC SMALL-POX AT WILLENHALL.

A SMALL-POX epidemic of serious dimensions has been present at Willenhall for some three months or more. There have been about 400 attacks with 20 deaths; as many as 137 cases came to light in a fortnight, and on one occasion over 80 in a single week. The local board has provided a hospital, but it has been got ready for the isolation of patients at such a late stage of the epidemic that it is difficult to see how it can have any great effect on the disease for some time, and this the more seeing how many cases are not under treatment within its wards. Much vaccination and revaccination have also been carried out, and in other ways the local authority have bestirred themselves with a view of stamping out the disease. In order that it might be quite certain that no stone was being left unturned, a small deputation recently attended at the Local Government Board offices to see if anything else could be suggested, and it would appear that the central authority were of opinion that all was being done that could be done. The medical officer of health, Mr. Hartill, had resigned, feeling his office to be untenable on account of the past inaction of his board, but he has been requested by the local authority to reconsider his decision, and it is to be hoped that he will do so.

THE SMALL-POX ISOLATION QUESTION.

THE elements of the pauper small-pox case at Rawtenstall are not so simple as at first sight appeared. A tailor on tramp was found at a common lodging house to be suffering from small-pox, and the relieving officer having been communicated with, the keeper of the house doubtless thought that he had got rid of an undesirable inmate. But not so, since the patient was refused isolation by the guardians, and was turned out of doors by the keeper of the common lodging house at 5 o'clock in the afternoon, after warning given to the relieving officer that this would happen if the man were not removed previously. Hereupon the man presented himself at the workhouse for admission, which was refused him. Then he seems to have wandered about as he pleased, and to have been found drinking in the bar of a public house later in the day. Inquiry into this serious state of things by an inspector of the Local Government Board has elicited the fact that the Rawtenstall Corporation has a bill outstanding against the Haslingden Guardians of some £250 for the maintenance of pauper cases of infectious disease in past times, and that until this account has been squared they did not feel called upon to pay further out of the rates for pauper cases. Now the guardians have come to terms, provisionally, with the other constituent sanitary bodies in the union as to the isolation of pauper cases, but had not been able to arrange with the Rawtenstall Corporation. The Government inspector advocated the meeting of the bill half way by both parties concerned; but this expedient did not fall in with the views of the Poor-law authority. However, an arrangement was come to by which the guardians were to meet the several sanitary authorities in the union and settle for future guidance what shall be the money payment to be paid by the guardians to those bodies in respect of the isolation of all pauper cases. Rawtenstall has not seen its way to accept the 25s. per week, which has satisfied the remaining health authorities. It is sincerely to be wished that amicable terms will be settled upon, so that the country may be spared a repetition of such occurrences as that which has raised so much ill feeling at Rawtenstall and the neighbourhood. Sanitarians will hail the day when all infectious cases are, whether by statute or otherwise, compulsorily looked after by the sanitary authorities, and when such as require isolation are isolated perforce by these health authorities, the guardians merely paying a sum to be determined in respect of those cases which, because of destitution, come within the category of paupers. Our workhouse infirmaries should be freed from the necessity of harbouring any infectious sickness.

THE TINNING AND HOLLOW-WARE TRADE.

THE *London Gazette* of June 22nd states that, under the provisions of the Factory and Workshops Act, the Home Secretary has certified that the processes carried on in the tinning and enamelling of metal hollow-ware and cooking utensils are dangerous and injurious to health.

DUTIES OF HEALTH OFFICERS.

VARIOLA.—(1) It is, we believe, the custom in many districts to slaughter calves for human food in the first week of life. (2) The order of the Local Government Board as to the tenure of health officerships lays down the rule that every officer shall continue to hold office for such period as the sanitary authority may, subject to the approval of the Board, determine at the time of his appointment, or until he die or resign, or be removed by such authority, with the consent of the Board. (3) The only duties under the Contagious Diseases (Animals) Acts laid upon a health officer seem to be those of Section 31 of the Act of 1878, as to cowsheds, dairies, etc., this section having been given over to sanitary authorities by the Act of 1886. Then, again, health officers are in-

formed of all outbreaks of anthrax under the order of 1892, and where the Infectious Diseases (Prevention) Act of 1890 has been adopted the health officer has the further duties, named in Section 4, as to milk supplies in relation to the public health. But apart from these, a health officer will doubtless find it his duty to have regard to any disease of the animal kingdom which can have reference to analogous disease in the human, and to this extent we should feel inclined to think that he had a real duty to perform, seeing that it is an essential portion of his office to keep himself informed of all matters threatening to affect injuriously the health of his district.

FEES FOR PREMATURE CONFINEMENTS IN POOR-LAW PRACTICE.

F. S. writes: A district medical officer attends a woman on an order received from the relieving officer. She is six months' pregnant, has felt fœtal movements, and is suffering from uterine hæmorrhage. After being attended for a fortnight labour sets in, and she is delivered of a dead child. Can the medical officer under these circumstances claim the fee which, under his contract with the guardians, he is allowed for attending midwifery cases?

*** If our correspondent considers that this patient was delivered at a viable period of pregnancy, or, in other words, at a time when the child either was or might have been born alive, he is entitled to the usual midwifery fee. Delivery having taken place at or about the sixth month makes this a somewhat difficult question to decide, but as so much attendance was necessary in this case we consider the medical officer to be fairly entitled to the benefit of any doubt.

FEES FOR FRACTURES.

H. E. F., a district medical officer, writes to say that, in obedience to an order given by an overseer, he attended a child with fractured arm, and on applying to the guardians for the usual fee of £1, he was informed by their clerk that they knew nothing of the case, it not having been reported to them by the overseer, and that he (the overseer) should be applied to for the fee. The medical officer referred this question to the Local Government Board, which, after very long delay, decided as follows: "That if the circumstances of the case were such as to justify the giving of the order, the guardians must pay the fee, in the same way as if the order had been given by the relieving officer."

*** It is very satisfactory to have this point, so often previously disputed, once more decided in favour of the medical officer. The guardians, since the decision of the Local Government Board, have paid the fee in question.

INDIA AND THE COLONIES.

INDIA.

The *Medical Reporter* of Calcutta states that the Bacteriological Laboratory at Mukhtea, near Almorah, is making fair headway. Professor Lingard, the Government bacteriologist, and Mr. Bamber, the chemical assistant, are both there. The building is expected to cost rather under a lakh of rupees.

VICTORIA.

HEALTH DEPARTMENT.—The Health Department has been abolished, and has been merged in the Chief Secretary's Department in order to reduce the expenditure of the State. The Board of Health will still (according to the *Australasian Medical Gazette*) be continued, as it is found to be a most useful body in carrying out sanitary reforms. Dr. Greswell, the medical officer of the Board, will act as its chairman in the place of Mr. Topp, who has been appointed principal Under-Secretary.

NEW SOUTH WALES.

THE UNIVERSITY OF SYDNEY.—The number of graduates in medicine turned out by the University of Sydney since the foundation of its medical school to the end of 1893 was seventy-one. During the latter year 101 matriculated students, including five women, attended lectures in the medical school.

VACCINATION.—During 1893 the number of vaccinations performed in New South Wales was 2,214, of which 2,206 were successful. Of the total number, 838 were performed in Sydney and its suburbs and 1,368 in country districts. Vaccinations were performed in only sixteen country districts. In 89 districts in which there are Government vaccinators, no vaccinations were reported. The number of births registered in the Colony during 1893 was 40,212, and the vaccinations give a percentage of 5.48 of this number. In addition to the vaccinations performed by Government vaccinators, a number were performed by private practitioners, but of these no returns are submitted. The Hon. Dr. MacLaurin, in reply to the Hon. Mr. Stewart, stated in the Legislative Council on April 18th that it was not deemed advisable by the Government to deal with the subject of compulsory vaccination till the Royal Commission on Vaccination had presented its report.

Dr. I. Ashburton Thompson has been appointed Chief Medical Inspector to the New South Wales Board of Health in lieu of the position formerly held by him of Inspector to the Board of Health, now abolished.

An Anti-Opium League has been formed in Sydney.

A MONUMENT to Villemin, whose name must for ever remain associated with the establishment of the contagious nature of tuberculosis as a scientific truth, will be formally unveiled on September 3rd, at Bruyères, in the Vosges. The monument is now on view in one of the Paris Salons.

MEDICAL NEWS.

THE next Congress of the French Scientific Societies will be held in Paris on April 16th, 1895, and following days.

HOSPITAL SUNDAY FUND.—The amount of money received by the Metropolitan Hospital Sunday Fund up to Thursday evening was £35,500.

DR. JOSEPH FÓDÓR, Professor of Hygiene in the University of Buda-Pesth, has been elected Rector Magnificus of that seat of learning.

PRESENTATION.—Dr. Neech, of Tyldesley, has been presented with a handsome marble timepiece by the members of the Nook and Ginpits Ambulance Class in recognition of his services.

A NEW HOSPITAL FOR CORK.—A sum of £25,000 has been left by the late Mr. Honan, of Cork, for the purpose of founding a home for aged and infirm men, who must be of good character and Roman Catholics. The home is to be called Honan's Hospital.

DR. SIGMUND EXNER, Professor of Physiology in the University of Vienna, has been appointed Medical Referee to the Austrian Ministry of Worship and Education. Since the death of Professor Carl Langer, the anatomist, the post has been vacant. Before him it was held by the distinguished pathologist Rokitansky.

ITALIAN DERMATOLOGICAL SOCIETY.—The Italian Society of Dermatology and Syphilography will hold its annual meeting in Rome in the latter part of October. The subjects proposed for discussion are (1) Mycological Morphology: Clinical Study and Treatment of Tricophytic Diseases; (2) Hereditary Syphilis.

THE first division of the Court of Session at Edinburgh on June 27th set aside the verdict of a jury which had found Dr. Allan, Lasswade, liable in £50 damages to a Dalkeith labourer, and ordered a new trial, on the ground that the verdict was against the weight of evidence. Lord Adam, who was the judge at the original trial, now gave the opinion that the then verdict was a most illogical one, and added that from first to last he saw no evidence that Dr. Allan undertook to attend the pursuers professionally.

SHORTHAND IN MEDICINE.—We have been asked by Dr Gowers to state that, in order to promote the use of short-hand by medical students and practitioners, by enabling them to increase their knowledge at the same time of the art and of their profession, a small sheet of clinical teaching in lithographed phonetic shorthand has been printed. It can be obtained—price 6d., post free—from Messrs. Sir I. Pitman and Sons, 1, Amen Corner; and is also sold by Mr. H. K. Lewis, of Gower Street.

MILNES MARSHALL MEMORIAL FUND.—At a meeting of the subscribers to this fund, held at Owens College on June 25th, the Treasurer intimated that about £770 had been subscribed. It was resolved that of this sum £100 be set apart to bear interest, in order that a gold medal may be presented annually at the College athletic sports, in memory of the late Professor Marshall. The remainder of the sum will be set apart for the purchase of books to be added to the Marshall Library which has been presented to the College.

THE LATE DR. KEARNEY, OF SKIBBEREEN.—At a recent meeting of the Skibbereen guardians the following resolution was unanimously adopted: "That we adjourn this meeting of the board as a slight tribute of respect to the memory of the late Dr. W. B. Kearney, an able and worthy official of this union and a gentleman of refined feeling and charitable sentiments. Though taken away at an early age and at the beginning of a bright and prosperous career, his numerous good actions and kindly disposition towards all with whom he came in contact compensate, we are glad to say, for length of years denied him. It will, therefore, we hope, be a consolation to his family to know that our feelings on this melancholy occasion are those of the most sincere regret and heartfelt sympathy with them in their sad affliction."

American Jottings.—During the last few weeks there have been three successful cases of Cæsarean section in New York, the operators being Drs. Boldt, Coe, and Dudley. In two of the cases the operation was performed for the second time. All the mothers and children were doing well at the time of report.—Nearly 400 women in the United States are graduates of schools of pharmacy, and a majority of them have charge of hospital drug rooms, or are engaged as dispensing clerks in large drug stores.—The United States Marine Hospital Service has instituted an inspection of every vessel that leaves the port of Chicago. This action is taken to prevent the spread of small-pox so prevalent in Chicago.—The new law in the District of Columbia requires the druggist to sell whisky or other liquors only on the prescription of a physician. It is said by an American paper that forgeries for obtaining drinks are becoming frequent.—At a recent meeting of the Illinois State Medical Society a resolution was adopted endorsing a proposition for an epileptic colony for the State on the Bielefeld plan. The resolution was referred to the Committee on Legislative Action, with instructions to bring the matter before the next General Assembly, and to use all proper means to have such a colony established.—In an action brought to recover damages against a physician or surgeon for malpraxis, the Appellate Court of Indiana held, in the case of Merrill *v.* Pepperdine, decided March 30th, 1894, the plaintiff may show, by himself or other witnesses, the condition of the physician or surgeon as to being intoxicated, and as to his appearance at the time the professional services were being performed.

The Clinical Museum.—Mr. Jonathan Hutchinson has issued, as a supplement to his *Archives of Surgery*, a descriptive *Catalogue* of the Clinical Museum which he has established. In an introductory note he says that the museum is to some extent an experiment, designed to show that pictorial representations of disease may be of great use in advancing our knowledge of it. A subsidiary question, which at once arose, and as to which he hopes to obtain valuable information by the experiment, is the best method of arranging the drawings. The main requirements were that the drawings should be displayed, not hidden away in portfolios; that they should be easily moved about to allow a fresh grouping when necessary; and that they should be provided with descriptions and histories, available for immediate reference. How far he has succeeded in achieving these objects can be best judged by a visit to the museum, which it is announced is open every Tuesday from 2 to 6. It is a matter of regret—a regret shared by Mr. Hutchinson himself—that an undertaking of this character is not in the hands of a public body, for there can be no question as to its utility. The Royal College of Surgeons, however, did not see its way to devote sufficient space to the adequate display of such drawings, and we must, therefore, be thankful to Mr. Hutchinson for the public spirit which he has shown in entering upon an enterprise of so great extent. It should be added that Mr. Hutchinson expresses his readiness to facilitate the copying of any drawings that he may possess. The catalogue now issued is not classified systematically, owing to difficulties found insurmountable at the present stage of the enterprise, but it will be found very useful by visitors to the museum.

MEDICAL VACANCIES.

The following vacancies are announced:

BOROUGH OF ILKESTON.—Medical Officer of Health. Salary, £100 per annum. Applications and testimonials to Wright Lissett, Town Clerk, by July 5th.

BRIGHTON, HOVE, AND PRESTON DISPENSARY.—House-Surgeon for the parent establishment. Salary, £140 per annum, with furnished apartments, coal, gas, and attendance, but no board. Applications and testimonials to J. W. Stride, Assistant Secretary, before July 10th.

CROYDON GENERAL HOSPITAL.—House Surgeon. Appointment for two years. Salary, £100 per annum, increasing £10 per annum up to £120. Applications and testimonials to the Secretary, J. Jones, by July 6th.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Anæsthetist; must be duly registered medical practitioner. Applications and testimonials to Francis Pink, Secretary, before July 9th.

EAST LONDON HOSPITAL FOR CHILDREN AND DISPENSARY FOR WOMEN, Glamis Road, Shadwell, E.—Resident Medical Officer; must be registered practitioner in medicine and surgery. Salary, £80 per annum, with board and residence. Applications and testimonials to Thomas Hayes, Secretary, by July 23rd.

LONDON HOSPITAL MEDICAL COLLEGE, Mile End.—Senior Demonstrator of Physiology and Lecturer on Biology. Salary for the former, £150 per annum, and a proportion of fees paid for classes; and for the latter £100 per annum and class fees. Applications to Munro Scott, Warden, by July 7th.

LONDON THROAT HOSPITAL, 204, Great Portland Street, W.—Secretary. Salary, £55 per annum. Applications to the Chairman, Executive Committee.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney Road, N.E.—Junior House-Physician. For six months, commencing August 1st. Applications and testimonials to T. Glenton-Kerr, Secretary, 27, Clement's Lane, E.C., by July 12th.

NORTH LONDON CONSUMPTION HOSPITAL.—Clinical Clerks, both for In-patient and Out-patient Departments. Applications to the Secretary, Lionel F. Hill, M.A., 41, Fitzroy Square, W.

NORTH STAFFORDSHIRE INFIRMARY AND EYE HOSPITAL, Hartshill, Stoke-upon-Trent.—House-Physician. Salary, £100 per annum, increasing £10 per annum at the discretion of the Committee, with furnished apartments, board, and washing. Applications to the Secretary by July 23rd.

QUEEN CHARLOTTE'S HOSPITAL, Marylebone Road, N.W.—Resident Medical Officer. Appointment for four months. Salary at the rate of £60 per annum, with board and residence. Applications and testimonials to Arthur Watts by July 7th.

ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields.—Curator, non-resident. Appointment for one year; renewable. Salary, £120 per annum. Applications to the Secretary by June 30th.

SUNDERLAND BOROUGH LUNATIC ASYLUM.—Medical Superintendent, doubly qualified. Salary, £350 per annum, with furnished house, board for self and wife (if married), washing, coals, light, two servants, and use of garden. Applications, endorsed "Medical Superintendent," to Fras. M. Bowey, Clerk to the Visiting Committee, Town Hall, Sunderland, by June 30th.

UNIVERSITY COLLEGE, DUNDEE, St. Andrews University.—Professor of Chemistry. Applications to R. N. Kerr, Secretary, by July 7th.

UNIVERSITY OF ABERDEEN.—Examiners in Medicine. Applications and testimonials to Robert Walker, Secretary of the University Court, on or before July 4th.

UNIVERSITY OF EDINBURGH.—Chemical Assistant to Professor of Physiology. Salary, £180 per annum. Applications to the Secretary of the University Court before July 1st.

WEST DERBY UNION.—Resident Assistant Medical Officer at Mill Road Infirmary. Salary, £100 per annum, with rations. Applications and testimonials to Harris P. Cleaver, Clerk to the Guardians, by July 10th.

WESTMINSTER HOSPITAL, Broad Sanctuary.—Second Dental Surgeon. Candidates must attend the House Committee on Tuesday, July 10th, with testimonials.

WESTMINSTER HOSPITAL MEDICAL SCHOOL.—Demonstrator of Anatomy. Applications to Mr. Spencer, the Dean, before July 10th.

WEST NORFOLK HOSPITAL, King's Lynn.—House-Surgeon, who will also act as Secretary to the Weekly Board. Salary, £80, rising £10 annually to £100, with board, residence, and washing. Applications and copies of testimonials to S. R. Lister, Secretary, by July 7th.

WEST RIDING ASYLUM, Wakefield.—Two Resident Clinical Assistants. Board, furnished apartments, and attendance provided, but no salary. Appointment for six months. Applications to the Medical Director.

MEDICAL APPOINTMENTS.

Bell, Theodore, M.D., B.A.Dubl., M.B., B.Ch., appointed Medical Officer of the Warrenpoint Dispensary District, *vice* A. E. Douglas, M.D.St. And., F.R.C.S.I., deceased.

Blamey, J., M.R.C.S.Eng., L.S.A., reappointed Medical Officer to the Workhouse of the Falmouth Union.

Constant, Frederick Charles, L.D.S.R.C.S.Eng., appointed Dental House-Surgeon to Guy's Hospital.

Cope, Albert E., M.D.Durh., M.B.Lond., appointed Medical Officer No. 3 District, St. George's Hanover Square Union, *vice* Dr. Hunt, deceased.

Coupland, W. H., L.R.C.P., L.R.C.S.Edin., appointed Medical Officer to the Workhouse of the Stoke-on-Trent Union.

Garner, J., L.R.C.P., L.R.C.S.Edin., L.F.P. & S.Glasg., appointed Registrar and Assistant to the Surgeon of the Down County Infirmary, Downpatrick.

Harnett, Alfred, L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health to the Eastleigh Local Board.

Haydon, Arthur George, M.D., M.R.C.S., L.R.C.P.Lond., appointed Physician in charge of the Electric Department of the National Hospital for Paralysis and Diseases of the Heart, Soho Square, W.

Hind, W., M.D., appointed Medical Officer to the Workhouse of the Stoke-on-Trent Union.

Holloway, W. G., M.D., B.A.Cantab, M.R.C.S.Eng., appointed Assistant Surgeon to the Central London Throat and Ear Hospital, Gray's Inn Road.

Mackenzie, W. S., L.R.C.P., L.R.C.S.Edin., reappointed Medical Officer of Health to the Normanton Local Board.

McWeir, Dr. A., appointed Medical Officer for the Mortlake District of the Richmond (Surrey) Union.

Matthews, Sidney Philip, M.R.C.S.Eng., L.R.C.P.Lond., appointed Medical Officer to the Southwick Division of the Fareham Union and Public Vaccinator to the combined districts of Wickham and Southwick.

MILLS, Thomas Ingham, M.R.C.S.Eng., L.R.C.P.Lond., appointed Third House Surgeon to the Huddersfield Infirmary.

MOORE, E. H., L.R.C.S.Edin., L.S.A., reappointed Medical Officer to the Workhouse of the Falmouth Union.

PERCIVAL, Thomas, M.R.C.S.Eng., L.S.A., appointed Medical Officer for the Knottingley District of the Pontefract Union, *vice* T. Johnson, L.R.C.P.Edin., L.F.P.S.Glasg., resigned.

POGSON, W., F.R.C.S.Eng., reappointed Medical Officer of Health for the Leeds Rural Sanitary Authority.

POWELL, A. F. M., M.B., C.M.Edin., appointed Medical Officer for the First Sedgeley District of the Dudley Union.

STORRS, C. S., B.A., M.B., B.C.Cantab, appointed House-Physician to the North Eastern Hospital for Children, Hackney Road, N.E.

DIARY FOR NEXT WEEK.

MONDAY.

LONDON POST-GRADUATE COURSE, Bacteriological Laboratory, King's College, W.C., 3 to 5 P.M.—Lecture. Tetanus, Rabies, and Cholera. Practical Work: Examination of Comma Bacilli, Chemical and other Tests. London Throat Hospital, Great Portland Street, 8 P.M.—Dr. Edward Woakes: Ear Diseases in Infancy and Childhood.

TUESDAY.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8.30 P.M.—Surgeon-Lieutenant Colonel Lawrie: On the Results of the Hyderabad Chloroform Commission.

THE CLINICAL MUSEUM, 211, Great Portland Street.—Open at 2, Lecture at 4.

WEDNESDAY.

POST-GRADUATE LECTURES, Metropolitan Hospital, N.E., 5 P.M.—Dr. Haig: Anæmia.

OBSTETRICAL SOCIETY OF LONDON, 8 P.M.—Mr. Heape (Balfour Student at the University of Cambridge) will give a demonstration of microscopical specimens illustrating the Menstruation of Semnopithecus Entellus. Specimens will be shown by Dr. Remfry, Dr. Lea, and others. Dr. Remfry: Remarks on Fœtal Retroflexion; reports on a specimen showing origin of Gluteus Maximus from Occipital Bone. Dr. Giles: The Temperature after Delivery in Relation to the Duration of Labour. Dr. Herman: On the Change in Size of the Cervical Canal during Menstruation.

POST-GRADUATE COURSE, West London Hospital, Hammersmith Road W., 5 P.M.—Dr. Seymour Taylor: Cases of Chlorosis, etc.

FRIDAY.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY, West London Hospital, 8.30 P.M.—Annual general meeting. Presentation of annual report and balance-sheet. Election of officers and Council for session 1894-95. President's Valedictory Address.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM, 8 P.M.—Mr. Spencer Watson: A New Operation for Trichiasis and Distichiasis. Mr. Arthur H. Benson: A Case of Asteroid Hyalitis. Dr. A. Bronner: Notes on a Case of Sympathetic Ophthalmia after Concussion of Eyeball, with no Visible External Wound. Mr. Walter Jessop: Complete Closure of Lids after (?) Diphtheritic Ophthalmia. Mr. Lawford: A Short Note on the Use of Liquor Chlori in Ocular Therapeutics.

BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths is 2s. 6d., which sum should be forwarded in post-office order or stamps with the notice not later than Wednesday morning, in order to insure insertion in the current issue.

BIRTHS.

EAST.—On June 20th, at Enderley, Great Malvern, the wife of C. H. East, M.D., of a son.

WRIGHT.—On June 23rd, at 4, Full Street, Derby, the wife of J. Lister Wright, M.R.C.S., L.R.C.P., of a daughter.

MARRIAGES.

BERWICK—PENNEY.—On June 26th, at St. John's Episcopal Church, Dumfries, by the Rev. J. R. Denham, George Berwick, M.D., of Sedbergh, Yorks, to Marion Alice, elder daughter of the Rev. Canon Penney, D.C.L., of Rothesay.

LONG—CLARKE.—On June 19th, at Duntesbourne Rous, Gloucestershire, by the Rev. D. Long, of Broadwey, Dorset, and the Rev. F. A. Clarke, David Sanderson Long, M.D.Cantab., to Isabel Dashwood, the youngest daughter of the late Frederick Ricketts Clarke, of Taunton.

TROUT—ABELL.—On June 19th, at Edgbaston Old Church, Birmingham, by the Rev. F. Edwards, M.A., Joseph Henry Ensor Trout, L.R.C.P., L.R.C.S., etc., of Monument Road, Birmingham, to Helen Elizabeth, second daughter of the late John Abell, of Barton-under-Needwood, formerly of Norbury Manor, Salop.

DEATH.

SCOTT.—On June 14th, at 1, St. Chad's Gardens, Headingley, Leeds, George Reynolds Schofield Scott, L.R.C.P.Lond. (late of Ripley Lodge, Wortley), eldest son of the late William Scott, M.R.C.S.E., Holbeck, Leeds.

IN MEMORIAM.

POULAIN.—In gracious memory of Victor Poulain, M.D.Heild., M.R.C.S. Eng., late of 124, Fulham Road, South Kensington, June 29th, 1893.

LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

COMMUNICATIONS FOR THE CURRENT WEEK'S JOURNAL SHOULD REACH THE OFFICE NOT LATER THAN MIDDAY POST ON WEDNESDAY. TELEGRAMS CAN BE RECEIVED ON THURSDAY MORNING.

COMMUNICATIONS respecting Editorial matters should be addressed to the Editor, 429, Strand, W.C., London; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the Manager, at the Office, 429, Strand, W.C., London.

In order to avoid delay, it is particularly requested that all letters on the editorial business of the JOURNAL be addressed to the Editor at the Office of the JOURNAL, and not to his private house.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the Manager, 429, Strand, W.C.

CORRESPONDENTS who wish notice to be taken of their communications should authenticate them with their names—of course not necessarily for publication.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

MANUSCRIPTS FORWARDED TO THE OFFICE OF THIS JOURNAL CANNOT UNDER ANY CIRCUMSTANCES BE RETURNED.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *duplicate copies*.

☞ *Queries, answers, and communications relating to subjects to which special departments of the* BRITISH MEDICAL JOURNAL *are devoted will be found under their respective headings.*

ANSWERS.

A. DE B.—This is a matter of excise, upon which we cannot offer an opinion.

F. W. C. AND S. E. J.—The giving of such testimonials is contrary to professional usage, but *de mortuis nil nisi bonum.*

CRITIC.—We are informed that the words "palatinoid" and "bipalatinoid" were coined for purposes of registration only. The origin of the term "palatinoid" is merely that the product practically resembles the palate in shape, and is thus easily swallowed. The "bipalatinoid" is a double palatinoid, being divided by a septum of jujube for the purpose of separating two incompatible ingredients which become liberated when the envelope is dissolved in the stomach.

THE ELECTION OF MEDICAL OFFICERS OF DISPENSARIES.

W. J. L.—All the dispensaries and institutions supported by voluntary contributions with which we are acquainted are governed by a regular committee and have established rules and regulations, and it is by the authority of these alone that such a question as that propounded by our correspondent could be answered correctly. It is a very usual procedure to re-elect retiring officers; but some institutions specially forbid this by their rules, so that it is quite impossible to give reliable information on this subject without knowledge of the rules of this particular dispensary.

CONSULTING-ROOM CHAIR.

DR. R. M. FRASER (Belfast) writes: In reply to "Lambda's" query in the BRITISH MEDICAL JOURNAL of June 9th, after experience and observation of several varieties of couches, I can recommend the following form: A plain couch with four stout legs, length 4 ft. 4 in., breadth 2 ft. 1 in., height 2 ft. 7 in., well stuffed with hair and covered with best American cloth. From the foot two parallel boards with depressions for heels at the end can be drawn out, and the head should not be more than 5 inches higher than the rest of the couch. The heel rest permits the tallest patient to stretch on it as well as a gynæcological examination in dorsal position, and by the low head examination in the lateral-prone position can be accomplished. The couch can be modified by a drawer at the side, divergent rests, etc. The work should be entrusted to an honest and practical tradesman. My own was made to my satisfaction by T. M'Gimpsey and Co., Albertbridge Road, Belfast.

NOTES, LETTERS, Etc.

ERRATA.

IN the description of Dr. Le Page's axis tractor published in the BRITISH MEDICAL JOURNAL of June 23rd, p. 1367, there are two obvious printer's errors. In the thirteenth line from the end of the article read "and so pressure on the anterior brim is avoided," and in the sixth line from the end read "whilst undue force would," etc.

In the article on a new British Epileptic Colony published in the BRITISH MEDICAL JOURNAL of June 16th, p. 1371, the cost of the site for the New York Colony in the Genesee Valley should have been stated as 125,000 dollars, and the number of epileptics in New York State as 12,000. It should also have been stated that it was hoped that the British Epileptic Colony would eventually be aided by funds from public sources.

SUICIDE IN PORTUGAL.

STATISTICS published by the *Jornal das Sciencias Medicas* of Lisbon show that the number of suicides in Portugal is steadily increasing. Taking only the cases registered as suicide, it is found that in 1886 the number of such cases was 16; in 1887, 29; in 1888, 27; in 1889, 39; in 1890, 45; in 1891, 32; in 1892, 42; and in 1893, 62.

The Griffiths Fund.

Drs. E. Le Cronier Lancaster (Winchester House, Swansea), and W. F. Brook, Hon. Secretaries, desire to acknowledge the following additional subscriptions. As the Committee has finally decided that the presentation to Dr. Griffiths shall not take place until the end of July next, the subscription list will remain open for another three weeks.

	£	s.	d.
Amount already acknowledged	172	3	0
Wm. Bowen Davies, Llandrindod Wells	2	2	0
D. Ll. Davies, Neath	2	2	0
E. Picton Phillips, Haverfordwest	1	1	0
George Griffith, Milford Haven	1	1	0
D. Riordan, Walsall	1	1	0
W. H. Lloyd, Llandilo	1	1	0
Rees Morgan, Llandilo	1	1	0
D. Thomas, Ystalyfera	1	0	0
E. Hopkins, Llandilo	1	0	0

The Local Application of Hot Air.

Deputy Surgeon-General Geo. Mackay, M.D. (Edinburgh) writes: The description of an apparatus for the local application of dry heat in the British Medical Journal of June 16th, reminds me of a very simple contrivance for that purpose which I saw used some years ago by a medical friend with great benefit in his own person. It consisted of a tin vessel shaped like a large sugarloaf; the bottom was perforated to admit air, to the top a flexible tube was attached, at the further end of which there was a funnel. Through an accurately fitted door a lighted spirit lamp was introduced into the tin vessel. My friend was a martyr to sudden attacks of gout, generally affecting a hand, foot, ankle, or other joint; by applying the flannel over the affected part and enveloping it with flannel the hot air was found to give speedy relief.

Gleet and Marriage.

Dr. James MacMunn (Crouch End) writes: Two cases which lately occurred in my practice might be given as illustrations of gleet, and of the ideas which I am anxious to communicate as to the question of marriage. A. B. suffered from slight muco-purulent gleet, the result of gonorrhœa contracted years ago. It was aggravated by sexual congress and less markedly so by alcohol. Examination revealed that its seat was in the bulb, and that the discharge depended on slight coarctation and granular change. The patient was advised not to marry till treatment was carried out. He married, however, and the accentuation of his gleet into purulent urethritis showed him that he acted unwisely.

W. T. had suffered from gleet also for four years. It was never distinctly purulent though milky sometimes, thick and starchy at other times. It was almost constant. Examination showed it to be prostatic, with sympathetic congestion of the whole urethra. Every treatment failed to cure the discharge entirely, and marriage was allowed. Some months afterwards he was well. In both these cases of gleet there were, of course, flakes and threads in the urine. To summarise this subject we might say:

1. No hard and fast line of advice can be laid down in some of these instances, the acumen of the experienced surgeon guiding him aright usually.

2. The inveteracy of some gleets is such that if a man wait for perfect cure before marriage this latter may never take place, and especially so if one wait for flakes and threads to disappear from the urine, which may be only epithelial, and may indeed last for life.

3. This inveteracy applies especially to prostatic gleet, which, contrary to the views of authors, is, I think, very common, may be constant in appearance, and may greatly vary in character.

4. One chief reason of this obstinacy of prostatic gleet is that it springs most often from the follicles (folliculitis) of the gland, which are so replete with their own secretion, so small and sinuous in calibre, that injections never reach the true seat of trouble.

5. Normal exercise of the prostate often cures (in later stages) when therapeutics fail by emptying these follicles and by energising the almost passive circulation of the gland and modifying its altered nerve tone.

6. None should marry whilst gleet is (*a*) distinctly purulent, this usually pointing to granulations or stricture curable by topical means, although even in such cases the disorder may not be infective; (*b*) whilst gonococci are present, of course; (*c*) in the presence of stricture till this is conditionally cured; (*d*) in the presence of any discharge whatever wakening into purulency or urethritis from trivial causes, though a gleet aggravated by irritation, as long as not purulent, need not *per se* contraindicate marriage in a large number of cases; (*e*) in the presence of shreds, flakes, or threads which under the microscope present many pus cells.

7. Marriage should be agreed to only after a thorough examination of the urethra, after the expiration of a certain time, and if possible after treatment has been tried.

8. To generalise in these matters is to mystify, the word gleet having a wide meaning and a wide pathology.

Medical Students in Austria.

The total number of students in the medical faculties of the various universities of Austria-Hungary in the winter semester of 1893-94 was 4,691, exclusive of 339 who only entered for special courses. Vienna heads the list with 1,899 "ordinary" and 215 "extraordinary" students; then come the others in the following order: the Bohemian University of Prague, with 1,001 ordinary and 18 extraordinary students; the German University of Prague, with 596 ordinary and 15 extraordinary; Graz, with 510 ordinary and 32 extraordinary; Krakau, with 415 ordinary and 41 extraordinary; and Innsbruck, with 270 ordinary and 18 extraordinary. The total number shows a falling off, as compared with the winter semester of 1892-93, of 421, or nearly 8 per cent.

LETTERS, COMMUNICATIONS, Etc., have been received from:

(**A**) A. H. F.; Dr. J. A. Austin, London; Dr. C. J. Allfrey, St. Leonards-on-Sea; Dr. A. M. Anderson, Dundee; Dr. J. G. Adams, Montreal; Dr. B. H. Allen, Hastings; Asmodeus. (**B**) Mr. L. A. Bidwell, London; Dr. A. T. Brett, Watford; Mr. H. D. Bishop, London; Mr. T. Bryant, London; Mr. J. B. Bunny, Newbury. (**C**) F. Cadell, M.B., Edinburgh; Mr. F. Constant, London; Mr. C. C. Chidell, Birmingham; Mr. T. R. Collings, Harrogate; Dr. A. H. W. Clemow, London. (**D**) Mr. W. Dalton, Blackpool; Dr. C. R. Drysdale, London; Mr. F. Dabbs, Folkestone; Dun; Dr. A. Davy, Sheffield; Dr. J. T. R. Davison, Buenos Ayres. (**E**) Mr. S. Edgar, London; Enquiro. (**F**) R. M. Fraser, M.B., Belfast; Mr. A. Foulerton, London. (**G**) Dr. W. R. Gowers, London; Dr. H. G. Gardner, Cheltenham; Mr. J. Garner, Downpatrick; Dr. A. O. Grosvenor, London; Mr. W. Gandy, Manchester. (**H**) Mr. R. Hordley, Stoke-upon-Trent; Mr. W. Henry, London; A. H. Holmes, M.B., Oxford; Mr. H. W. Hubbard, London; Dr. S. Hillier, Northampton; Mr. M. T. Hewat, Cape Town; Dr. E. Hanley, Buenos Ayres; Mr. F. R. Humphreys, London; Mr. W. M. Hocker, Liverpool; W. K. Hughes, M.B., London; Miss M. E. Hutchinson, Claybrook; G. E. Helme, M.B., West Bromwich. (**J**) Mr. G. H. Jones, Deddington; Mr. C. M. Jessop, Redhill; Dr. J. Johnston, Bolton. (**K**) Dr. W. M. Kelly, Taunton. (**L**) Lancashire and Cheshire Branch of the British Medical Association, The Secretary of the, Liverpool; Mr. J. Lawrence-Hamilton, Brighton; Mr. H. Lucas, London; Dr. W. Little, Dumbarton; Dr. E. Long, Grasmere; Mr. G. W. Lowe, Worcester; Dr. J. F. Le Page, Salford; Mr. W. Lissett, Ilkeston. (**M**) Mr. J. Y. W. MacAlister, London; Mr. W. Martindale, London; Dr. J. H. Murray-Aynsley, Christchurch, New Zealand; Mr. W. Marriott, London; J. MacMunn, M.B., London; Mr. S. P. Mathews, Southwick; Mr. W. McMash, Tyldesley; Dr. J. M. Martin, Blackburn; Midwives' Registration Association, The Secretary of the, London; M.O H.; J. D. Menzies, M.B., Greenock; M.B., C.M.; Dr. B. H. Mumby, Portsmouth; Dr. E. Malins, Birmingham; Mimo; Mr. F. Medwin, London; Mr. F. W. Maddox, London; M.B., M.A. (**N**) Mr. W. North, York; Neurological Society of London, The Secretary of the, London. (**O**) Mr. J. Oliver, Maidstone; Old Member. (**P**) Persevere; W. F. Phillipo, M.B., St. Austell; Mr. W. Pogson, Leeds; Mr. D. Prince, Bexhill. (**R**) Mr. J. Robinson, Stockton-on-Tees; Dr. T. Redmayne, Hastings. (**S**) Mr. T. J. Savage, London; Mr. J. H. Spitzly, London; Surgeon-Lieutenant; Mr. C. Simpson, Tunbridge Wells; Mr. R. R. Sleman, London; Dr. A. Swann, Batley; Dr. W. J. Simpson, Calcutta; Mr. C. S. Storr, London; Messrs. Stalwell and Co., London. (**T**) Mr. J. S. Turner, London; Mr. C. E. A. Temple, London. (**U**) Ut Prosim. (**V**) Veritas. (**W**) J. W. Walker, M.B., Spilsby; Dr. B. C. A. Windle, Birmingham; A. Walker, M.B., Edinburgh; W.P., M.B.; Mr. G. Washington Isaac, London; W.P.; C. H. Walker, M.B., Clifton; J. Walters, M.B., Reigate; Mr. J. H. Wathen, Clifton; J. R. Williams, M.B., Penmaenmawr. (**Y**) Young Member; etc.

BOOKS, Etc., RECEIVED.

A Practical Treatise on Medical Diagnosis. By Dr. J. H. Musser. Edinburgh and London: Young J. Pentland. 1894.

Vorlesungen über die Zelle und die einfachen Gewebe des thierischen Körpers. Von Dr. R. S. Bergh. Wiesbaden: C. W. Kreidel's Verlag. 1894.

The Graphic Temperance Reader: a Series of Lessons on Drink and Strong Drink. By Sir B. W. Richardson, M.D. Collins's School Series. London and Glasgow: William Collins, Sons and Co. 1s.

Nature, Mind, and Will: being Three Addresses to Science Classes, with an Introductory Address on the Educational Uses of a Church Institute. By J. Oliver. London: E. Marlborough and Co.

Practical Points on the Hygiene of Ships and Quarantine. By Dr. W. Collingridge. London: Printed for the Shipmasters' Society. 1894. 6d.

Domestic Hygiene. By Dr. T. Dutton. London: Hirschfeld Brothers. 1894.

The World's Fisheries Congress, Chicago, 1893. Foul Fish and Filthy Fevers. By J. Lawrence-Hamilton. Washington: Government Printing Office. 1894.

Transactions of the American Orthopedic Association. Vol. VI. Philadelphia: Published by the Association. 1894.

Transactions of the Fifteenth Annual Meeting of the American Laryngological Association. New York: D. Appleton and Co. 1894.

Practical Photo-Micrography. By A. Pringle, F.R.M.S. London: Iliffe and Son. 5s.

On Blinding of the Retina by Direct Sunlight. By Dr. G. Mackay. London: J. and A. Churchill. 1894. 1s.

Neurasthenia and its Treatment by Hypodermic Transfusions (according to the method of Dr. J. Chéron). By Ralph Browne. London: J. and A. Churchill. 1894. 1s.

A Treatise on Diseases of the Skin. By Dr. T. M'Call Anderson. Second edition. London: Charles Griffin and Co. 1894. 25s.

La Lèpre: Observations et Expériences Personnelles. Par Dr. J. Gold schmidt. Paris: Société Ed'itions Scientifiques. 1894. Fr. 3.

*** In forwarding books the publishers are requested to state their selling prices.

AN EPITOME OF CURRENT MEDICAL LITERATURE.

MEDICINE.

(1) The Presence of Lead in the Brain and Lead Poisoning.

EBSTEIN (*Virchow's Arch.*, vol. 134, part 3, xxvi) gives the case of a man, aged 43, a lacquerer by trade, who died shortly after coming under observation. According to the history, he had suffered for some time with the symptoms of chronic interstitial nephritis, and had had lead colic eight years previously. At the necropsy contracted kidneys, with hypertrophied left ventricle of the heart, were discovered, as well as pneumonia and œdema in both lungs. Copper was found in the muscles and brain, probably due to the man's trade (bronzing, etc.). It is not rarely found in human organs, and seems in this case to have produced no symptoms during life. There was no blue line on the gums, and no lead was found in the muscles, but it was detected in the brain. Ebstein points out the interest of this observation in relation to the etiology of encephalopathia saturnina. This has been attributed to the presence of lead in the brain. In the present case lead was detected in the brain, though there was no history of any encephalopathia saturnina, whilst in one of Oliver's cases of this affection no lead could be detected after death in the brain.

(2) The Temperature in General Paralysis of the Insane.

AFTER reviewing the discordant assertions of previous writers on this subject, Peterson and Langdon (*Journ. of Nerv. and Ment. Dis.*, November, 1893) give details of a series of thermometric observations made by them in 25 cases of general paralysis. In each case the axillary temperature was taken every two hours for a week. In 10 of the cases the temperature of both axillæ was simultaneously ascertained. The conclusions they deduce are (1) that the average bodily temperature of general paralytics does not differ from the normal; the statements of previous observers as to supernormal and subnormal averages cannot be sustained; (2) the diurnal oscillations of temperature in paralysis also correspond to the normal; assertions as to extraordinary daily variations being frequent in these cases are absolutely erroneous; (3) differences between the temperature of each axilla are so slight that they cannot be considered abnormal, nor have they any diagnostic value; (4) when unusual variations of temperature occur in general paretics, the cause thereof must be sought for in complications such as pneumonia or bedsore. The authors admit that thermal variations may occur in connection with the convulsive, and so-called congestive, seizures of these cases; but their researches have not extended to those conditions.

(3) Carbolic Acid Poisoning.

LANGERHANS (*Deut. med. Woch.*, November 30th, 1893) discusses the changes found in the air passages and lungs in this condition. A girl, aged 20, poisoned herself with carbolic acid. On admission she was cyanosed, and the heart's action was irregular. Later the urine became dark coloured. She died within twenty-four hours. At the necropsy there was found, in addition to the changes in the alimentary canal, recent myocarditis and parenchymatous nephritis, as well as severe parenchymatous myositis. Throughout the lungs also the central portions of the lobules were extensively hepatised. In the larger and smaller bronchi the mucous membrane was reddened, swollen, but not dulled. There was no evidence of any corrosive action of the carbolic acid on the mucous membrane of the air passages. It would appear as if the smallest bronchi were affected certainly not later than the larger ones, and that by extension downwards the central portions of the lobules became affected. Clinically there was no reason to suppose an aspiration or deglutition broncho-pneumonia. The author does not think the time too short for the development of the pulmonary lesion, but that the morbid changes in the lungs were proportionate to those found elsewhere. A diplococcus very like Fraenkel's, and often the staphylococcus, was found in the exudation in the lungs. After referring to other cases seen by himself or recorded by others, the author expresses the opinion that the bronchitis is due to an indirect action of the carbolic acid after absorption.

(4) Etiology of Chorea.

DANA (*Amer. Jl. Med. Sc.*, January, 1894) records a case which he maintains affords support to the theory that the specific agent producing chorea is a microbe. The patient, a male, had acute rheumatism in his 10th year, chorea in his 14th year, and repeated attacks every two or three years. He came under observation when 34, and had then been suffering from an attack of chorea for eight months; general violent choreic movements affected the face, tongue, and neck especially, but also the arms, trunk, and legs; there were tonic spasms of the head and neck, and rhythmical movements of the head and arms at times. There was no paralysis, no anæsthesia, and no endocarditis. Mental development was good, and the movements ceased during sleep. The patient died of exhaustion. *Post mortem* there was found meningitis of the cortex extending to, and in places involving, the cortex. It was characterised by active connective tissue proliferation, and by the presence of diplococci (probably diplococcus lanceolatus) in the membranes and cortex. There was evidence (hyaline bodies) of degenerative change in the cortex, extending in diminishing intensity to the deeper parts of the brain, to the capsule and lenticular nucleus. There was also meningitis with active vascular changes in the upper part of the cord, affecting particularly the nerve roots. About the seventh and sixth cranial nerves, also, there was much meningeal thickening with marked periarteritis. One root of the vagus contained some degenerated fibres. Periarteritis was marked in the neighbourhood of the anterior pyramids.

SURGERY.

(5) Gaseous Cellulitis.

DUNGERN (*Münch. med. Woch.*, No. 40, 1893) records a case of gaseous cellulitis which followed the removal of the rectum, and was apparently due to the bacterium coli commune. The patient was a woman, aged 50, who suffered from a cancer of the rectum, which was situated about 4 inches above the anus. This growth was removed by the sacro-coccygeal method. The peritoneal cavity was opened, and the bowel divided in a circular manner above the cancerous mass. The proximal end of the rectum then disappeared in the abdominal cavity, necessitating the performance of a left inguinal colotomy, which was done, and the free end of the rectum sewn in the abdominal wound. On the third day after the operation the temperature became raised, and there appeared on the left side of the body, extending from the sixth rib to the iliac crest, a subcutaneous emphysema. Death occurred two days afterwards. *Post mortem* a gaseous cellulitis was seen in the region occupied by the emphysema, and there was also present a sero-purulent peritonitis. In the fluid in the cellulitic tissues and the peritoneal cavity there were found streptococci and numerous bacilli coli communes. Two varieties of the bacillus were separated, one of which produced gas during its growth. Dungern considers that these gas-producing bacilli were the cause of the cellulitis, and that they had not penetrated into the tissues after death.

(6) Acute Osteomyelitis.

MÜLLER (*Münch. med. Woch.*, 1893, Nos. 47 and 48) refers to some of the more unusual forms of this disease. It may occur not only as a suppurative process, but also in the various grades of acute inflammation. It has been shown that in some cases with multiple manifestations some foci display a distinctly subacute character. The author then refers to the relapsing form of the disease. He thinks that here the micro-organisms have remained quiescent for some time and then wake up to new activity. He cites a case of abscess in bone of four years' duration in which a pure culture of the staphylococcus was found. He refers to simple periostitis (P. albuminosa) in which the exudation, although due to the staphylococcus, remains serous, and to the sclerosing form of osteomyelitis, which, in a certain degree, is only a parenchymatous inflammation without suppuration or fistula formation. The author then relates a fatal case of the acute hæmorrhagic septic form in a boy, aged 4. In

all these cases of varying severity the staphylococcus, in varying virulence, is found. It was shown long ago that severe inflammation of bone might occur in the acute infective diseases. At first it was looked upon as a mixed infection, but later it was proved that the pneumococcus, the typhoid bacillus, the streptococcus really caused these bone lesions. He quotes a case operated upon by v. Bramann, in which a periosteal abscess was found over the lower femur containing the streptococcus in pure culture. In all these cases, however, the morbid process is limited to the periosteum, or, at any rate, involves only the adjacent bony surface: they thus form a group by themselves. The author maintains that all cases of osteomyelitis proper are the work of the staphylococcus alone. The infection is brought by the blood. If it gains access through the intact skin or mucous membrane it remains localised. The author thinks that the micro-organisms in these cases find entry by small wounds and cracks, which pass almost unobserved. They are deposited in organs where the circulation is slowest, such as the liver, spleen, and cancellous bone. The liver and spleen, however, have special means of fighting against these morbific agents, and primary suppuration is very rare in them; but with cancellous bone, which is much less resistant, it is different. A further proof of this blood infection lies in the multiplicity of the lesions.

(7) Recurrent Paralysis of the Third Pair of Nerves.

Darquier (*Annales d'Oculist.*, October, 1893) describes a case belonging to this category, which was singular in the fact of its onset. The patient, a woman, aged 65 had been subject to attacks of periodically recurring migraine, accompanied by vomiting and diarrhœa. Two years ago she had pains in the left frontal region, followed after a few days by complete paralysis of the third nerve; the paralysis had begun to pass off after about ten days, when the right third nerve became similarly paralysed. After about three months complete recovery ensued. Two years afterwards she had a similar attack, with ptosis, dilatation of the pupil, and divergent strabismus; there was also a slight paresis of one side of the face, and some deviation on protruding the tongue. There was no other defect of muscular power or sensibility. The attack lasted a month, and complete recovery followed.

(8) Purpura in Relation to Intussusception.

Vierhuff (*St. Petersburger med. Woch.*, No. 41. 1893), after dealing with intussusception, its frequency, age of patients, etc., describes a case in his practice which occurred in an adult attacked four days previously with purpura hæmorrhagica. Blood was said to have been passed with the stools, and when first seen all the typical symptoms of invagination of a portion of intestine were present. Treatment failed to reduce the intussusception, but the patient recovered after passing the affected portion of bowel, which had separated in course of time. The author believes he has found in purpura hæmorrhagica a new cause of this intestinal affection, and assumes that a hæmorrhage occurred in one locality, leading to paralysis with dilatation, and consequent descent of the upper healthy and contracting segment of bowel.

(9) Treatment of Gonorrhœal Ophthalmia.

Burchardt (*Centralbl. f. prakt. Augenheilk.*, November, 1893) describes the treatment he has found most successful in acute purulent ophthalmia of gonorrhœal origin in children and adults. He formerly carried out the classical treatment of leeching, scarification of the conjunctiva, cauterisation with nitrate of silver, and ice compresses. He has gradually omitted all these methods in consequence of some ill effect they had or because they appeared to him irrational, and he now confines himself to a very free irrigation of the conjunctival sac with a 5 per cent. solution of chlorine water, followed by a $\frac{1}{10}$ per cent. solution of nitrate of silver. The head of the patient is thrown back so that he looks directly upwards; an assistant then allows the solutions to fall upon the inner canthus drop by drop, while the surgeon moves the lower lid up and down very freely with the thumbs, and the upper lid more slowly with one of the fingers. By this means he is able to clear out the conjunctival sac very completely. The success of the treatment appears to lie in the very free movement imparted to the lids, whereby the fluids gain access to all the folds of the conjunctiva. Shreds or membranes are removed from the conjunctiva after everting the lids.

MIDWIFERY AND DISEASES OF WOMEN.

(10) Gastro-intestinal Disturbance in Diseases of Women.

Theilhaber (*Münch. med. Woch.*, 1893, Nos. 47 and 48) bases his views on 45 cases. In all these instances gastro-intestinal symptoms were present, and had mostly been treated for some time without effect. In 25 there was nervous dyspepsia (Leube), in 12 gastric atony, in 2 gastric catarrh, in 2 anacidity, and in 3 hyperchlorhydria, ulcer, and enteroptosis respectively. In 4 cases there was no uterine disease, in 19 catarrhal and in 4 hæmorrhagic endometritis, in 10 retroflexion, in 3 oöphoritis, in 3 parametritis, in 1 anteflexion, and in 1 a small ovarian tumour. (1) The uterine disease has no connection with the gastro-intestinal troubles. The following facts are in favour of this: *(a)* presence of etiological factors likely to produce such a neurosis: *(b)* its existence before puberty: *(c)* its being called forth or its disappearance owing to emotions; *(d)* its persistence in spite of suitable treatment directed to the uterus, etc. Former good health, appearance at the time of the local trouble (menorrhagia, etc.), aggravation before or after menstruation or after profuse menorrhagia, disappearance during menstruation, or the appearance of the pain when the organ is handled are in favour of a reflex neurosis. (2) The gynæcological trouble is secondary to the gastro-intestinal disorder, as in constipation, etc. (3) The gynæcological trouble produces the derangement in the gastro-intestinal functions. In the above cases of gastric ulcer, catarrh of the stomach and intestines, the uterine disease was a coincidence. The patient with enteroptosis had also retroflexion due to the same cause. In the other cases the gastro-intestinal symptoms may with reason be suspected to be due to the uterine disorder. Constipation caused by uterine disease is then discussed. Of the cases of nervous dyspepsia, 6 had retroflexion, and 4 of these were relieved by gynæcological treatment. In 11 there was endometritis, and in 8 of these the gastric symptoms disappeared after curetting. In 3 cases of prolapsed and tender ovary the connection between the conditions could not be determined. In 2 cases the uterus was normal. In the cases of gastric atony 1 was greatly improved, but the others had not been under treatment long enough to say. The cases of anacidity and hyperchlorhydria were both improved. Thus the author would reject the idea that such neuroses are always of central origin. There is, however, no true uterine dyspepsia. These reflex troubles need not necessarily be present. In certain cases of gastro-intestinal disorder where ordinary treatment has failed, gynæcological treatment may be useful. Also in gynæcological cases it may be necessary to investigate and treat the conditions of the stomach and intestines. The nervous system in these cases is often unstable, and thus frequent local uterine treatment is, as a rule, unsuitable. Intestinal atony may need massage, electrical treatment, etc. Hydrotherapy and residence in country or mountain resorts may be necessary.

(11) Pregnancy and Valvular Disease.

Vinay (*Arch. de Tocol. et de Gynéc.*, November, 1893) endeavours to prove that the early stages of valvular cardiac disease do not seriously complicate pregnancy, which, on the other hand, does not aggravate the heart affection. He publishes instructive tables of 29 cases, with full clinical histories. The cardiac lesions were—mitral incompetence 6 cases, mitral obstruction 11, mitral incompetence, with obstruction, 7; aortic incompetence 1, tricuspid incompetence 1, complex (aortic and mitral) lesions 3; thus in 18 out of 29 cases there was mitral obstruction, uncomplicated in 11. Out of the 29 cases the pregnancy involved no further mischief in 18. In 2 patients influenza occurred, yet both were delivered at term. One patient had symptoms of melancholia, and was delivered prematurely. In 4 there was marked œdema of the legs. Nearly all the 29 had varicose veins.

In only 4 was the complication serious, yet all recovered. In the first there was mitral obstruction, hæmoptysis, and dyspnœa; in the second twin pregnancy, obstruction, and great distress from weight of uterus, yet live twins were born at term, and one survived; the third was troubled with palpitations and loss of breath on exertion; she was delivered at term. In the fourth there was also twin pregnancy as in the second, with much dyspnœa and asystolism, due to mitral incompetence and obstruction. The twins were delivered prematurely. The mother was weak and feverish during the puerperium, yet she recovered. In only 5 of the whole 29 cases was labour premature; 2 of the 5 were twin pregnancies.

(12) Malignant Myoma of Uterus.

LANGERHANS (*Berl. klin. Woch.*, No. 14, 1893) discovered at a necropsy a true malignant uterine tumour, although microscopically the uterine and also the metastatic growths were alike made up of plain muscle cells and fibrous tissue, as in a common innocent "fibroid." The lungs were infected with secondary growths, varying in size from that of a hempseed to the proportions of a fœtal head. The pleura was also infected. The masses of growth in and on the uterus were of different consistency. Those which had grown partly outside the uterus, breaking through their capsule, were soft and in consistence exactly like the deposits in the lungs. The others, still in the uterine walls, were firm fibromyomata, with a strong tendency to calcify.

(13) Acute Leukæmia in Pregnancy.

HILBERT (*Deut. med. Woch.*, No. 36, 1893) read notes of a fatal case before a medical society in Königsberg. The patient was aged 37, and had been in good health until the eighth month of her eighth pregnancy. Then headache, fever, diarrhœa, and gingivitis set in. Leukæmia was diagnosed on examination of the blood. Two lumps of the size of hazel nuts developed in the tongue. Rhinitis and petechiæ were observed. A slightly macerated child, almost at term, was delivered; the uterine contractions were very feeble. The mother died ten hours after labour. On *post-mortem* examination the lymphadenoid form of leukæmic disease of the red marrow was discovered. Only 4 cases of leukæmia complicating pregnancy have been recorded.

(14) Cancer Complicating Pregnancy.

PAQUY (*Arch. de Tocol. et de Gynéc.*, November, 1893) reports two cases. A woman passed through two natural pregnancies; in the course of the third she had six attacks of hæmorrhage. Porak detected cauliflower growths on the cervix. The anterior lip felt tough as wood; the vagina was not involved. On October 29th, 1892, labour occurred. The child and placenta were expelled spontaneously in fifteen hours. The cervix was not lacerated; the patient recovered from her confinement. The second patient had previously undergone scraping on account of hæmorrhages due to epithelioma of the cervix. Pregnancy afterwards occurred. The cervix then formed a mass like a large fungus. More flooding set in; the curette was used once more, the cervix being nearly scraped or torn away. In the course of this operation one lateral fornix was opened and the broad ligament wounded. The wound cicatrised. Labour set in and was over, spontaneously, within seven hours, the right side only of the remains of the cervix dilated, and the presentation was occipito-posterior, yet the cervix was not torn. The patient recovered from the labour.

(15) Should Two Ligatures be placed on the Cord?

TRÉPANT (*Gaz. des Hôp. de Toulouse*, August 12th, 1893) objects to ligature of the cord on the placental side. He believes that it favours retention of the placenta. In 68 cases of double ligature he observed 4 retentions: in 146 where one ligature was applied, the cord being divided on the placental side, only 2 retentions followed. Besides, Trépant found that the placenta was not so quickly expelled when two ligatures were applied. He maintains that the hæmorrhage which occurs when the cord is divided after single ligature diminishes the volume of the placenta, and thus aids in its expulsion: the uterus is also stimulated to contract. De Roselle confirmed Trépant's experience. Fournier noted that Budin observed in 1875 that the placenta was more readily expelled when the placental side of the cord was not tied. Bernard, on the other hand, distrusted this practice, as the hæmorrhage might be dangerous.

THERAPEUTICS.

(16) Pyoktanin in Diphtheria.

C. HÖRING (*Memorabilien*, October 19th, 1893) refers to the treatment he adopted early last year in 27 cases of diphtheria, the results of which were published in the *Aerztl. Memorabilien*, vi and ix, 1892. Since then, Höring has continued to use pyoktanin, and claims excellent results. The practice was to apply a 3 per cent. solution two or three times daily to the pharynx and downwards to the epiglottis, the retention of the liquid in young children being secured by immediately placing their heads low, thus aiding the swallowing of the liquid. Otherwise the drug was not administered internally, nor was it directly introduced into the affected tonsil. Simultaneously the patients are syringed with lime water, or are allowed to use it as a gargle or inhalation, while salicylate of soda is given internally. When the nose is affected, a tampon soaked with the solution is retained in the cavity, and in milder cases the application of pyoktanin to the pharynx, etc., is the only treatment followed. In support of his practice, Höring says he has found even a 1 in 1,000 solution to destroy the Klebs-Loeffler bacillus, as also the more active streptococcus, the latter in the course of half a minute. In practice, the local effects are antiseptic, healing, and destructive to the false membrane, the general results being diminution of pain and pyrexia without the production of toxic symptoms. The present cases enumerated are 112, two of which succumbed for reasons explained; the remaining 110 cured cases included many serious cases which had been despaired of. The symptoms, spread of contagion, and sequelæ, are quoted in support of the diagnosis. The author, in view of his experience, supported by that of others, regards pyoktanin as a specific against diphtheria.

(17) Treatment of Alopecia Areata.

FERRATON some time ago showed before the Lyons Société des Sciences Médicales (*Lyon Méd.*, No. 15, 1893) a soldier who had been treated for parasitic alopecia with iodised collodion with the result that he was completely cured in three months. The method consists in applying the substance to the patches after the hair has been cut very close. After three or four applications, made at intervals of four or five days, it is observed that when the collodion is stripped off some lanugo hairs are brought away with it. The patient need be seen only once in four or five days. According to the author the collodion imprisons the parasite and prevents the contamination of neighbouring parts and the transmission of the disease to other persons. It excludes the air, and possibly the iodine acts as a parasiticide and as a stimulant of the scalp. Moreover, the collodion acts as an epilatory.

(18) Dangers of Subcutaneous Injections of Pilocarpin.

RÉMY (*Rec. d'Ophtal.*, October, 1893) relates a case of white atrophy of the optic nerves in which pilocarpin had been ordered for subcutaneous injection. The effect of the injection was most alarming to the patient, but treatment was continued, and the number of injections was increased. Finally, shortly after one injection, the patient fell back dead. In another case pilocarpin was given subcutaneously to hasten recovery from a cerebral embolism; after its use the patient was seized with a series of epileptic attacks, which passed off when the drug was discontinued. The author relates other cases which have come to his knowledge of dangerous symptoms following the subcutaneous use of pilocarpin.

(19) Saline Injections in Acute Anæmia.

OSTERMANN (*Therap. Monatsh.*, October, 1893) while dwelling on the recognised advantages of saline infusions in cases where acute anæmia results from sudden and severe loss of blood, refers to the objections to the rectal method of administration, and to the advantages of injecting the fluid subcutaneously. For this purpose he chooses exclusively

the cellular tissue around the mamma, preferably the infraclavicular region. The author usually employs an irrigator, and, to facilitate rapid distribution, applies gentle massage to the area around. One drachm and a-half of salt constitutes a dose, and the quantity of fluid injected at one place is from 6 to 9 ounces, though even 30 may be introduced through one opening if sufficient time be taken. The author relates the history of a patient thus treated—a woman, who, as the result of a laparotomy, had several secondary hæmorrhages during the course of seven hours. She received four injections, each of considerable quantity, about 3½ pints being used in all. The supposed disadvantages of this method are the excessive work imposed on the heart, (which can be minimised by injecting slowly) and the presumed consequent liability to recurrence of the hæmorrhage. In order to quench excessive thirst after laparotomies, as a preliminary step to certain operations in obstetric practice, such as version in placenta prævia, and also when other indications of threatening collapse appear, the author strongly recommends the subcutaneous injections in sufficient quantities.

(20) Treatment of Hirsutics.

MORISON (*Philadelphia Med. News*, September 30th, 1893) has given up electrolysis for the removal of superfluous hairs. He finds that the proper application of a good depilatory answers the purpose much better. If a preparation of equal parts of yellow sulphate of arsenic and quicklime made into a paste with hot water, be allowed to dry on the affected part, the hair is removed for a period of ten to twenty days, and sometimes permanently. Nothing however can take the place of electrolysis when there are a few strong hairs growing from moles.

(21) Atropine in Morphine Poisoning.

CRUSE (*Archiv für Kinderheilk.*, xvii, 1-2 1893) describes the case of an infant a week old, who was accidentally poisoned by a grain of morphine administered as a lotion. The comatose condition which resulted was left untreated at first, and then for several hours remained unaffected by various treatments. Eventually the author administered atropine solution, giving ¼ of a grain on two successive occasions at an interval of half an hour. Recovery immediately ensued, and was complete in 36 hours, other suitable treatment being also employed. The author calls attention to the relatively large doses which were administered without causing unpleasant symptoms.

(22) Treatment of Membranous Colitis.

REVILLIOD (*Lyon Méd.*, December 24th, 1893) has had good results in the treatment of membranous colitis by the use of copious injections containing bismuth. The injection he uses is as follows:—Subnitrate of bismuth, 10 parts; salicylate of sodium, 10 parts; mucilage, 500 parts. The quantity prescribed is half a litre. The colon is first of all cleaned out with an enema containing castor-oil or ipecacuanha, followed if necessary by an injection of a solution of boric acid. When the bismuth injection is to be given, the patient is placed on his back with the buttocks a little raised, and is directed to retain the injection for twenty four hours if possible; if this cannot be done a smaller quantity must be used for the injection. As a rule, the bismuth is not to be seen in the first stools passed. It appears after a few days as earthy lumps, and the stool in which it is contains no mucous scraps. In some cases of several months' standing a single injection was sufficient to ensure recovery, in others the injection had to be repeated after the bismuth had been expelled. Slight constipation is produced by the treatment but no other inconvenience. The treatment was also successful in chronic dysentery, and in other conditions in which there was reason to suspect ulceration of the large intestine. The mucilage prescribed is "de pépins de coing," quince pips.

(23) Blood Changes in Hydrotherapeutic Treatment.

IN the *Centralbl. f. klin. Med.*, December 9th, 1893, Winternitz describes his investigations made upon 56 cases, either in health or with slight ailments and particularly anæmia. In a general application of cold to the body in varying ways the red cells in the blood of the finger and ear showed considerable increase as well as the white cells. The hæmoglobin was also present in larger quantity. This increase does not take place immediately, and often an hour was found to intervene. It was often recognised two hours afterwards, but usually by this time it had commenced to decline. The white cells are less constant in their behaviour. Muscular exertion has a similar but less marked effect. The effect of the application of warmth has not been sufficiently investigated. Local application of cold, as to the feet, produces a diminution in the red and white cells examined as above. The increase in the blood cells can hardly be due to augmented production, but rather to changes in the circulation, heart's action, tone of vessels, etc. The author thinks the effect as regards metabolism is virtually the same as if the cells were actually increased. He has shown that more oxygen is taken up and more carbon dioxide given off as a result of the application of cold. By methodical repetition the above changes should become permanent. He refers to the good results thus obtained in anæmia and chlorosis, and thinks that in this way the beneficial effects of hydrotherapeutic measures receive a scientific explanation.

PATHOLOGY.

(24) The Mechanism of Choked Disc.

ADAMKIEWICZ (*Neurol. Centralbl.*, December 1st, 1893) has made an experimental study of this subject in rabbits. He finds that encroachment on the intracranial space by the introduction of an otherwise indifferent body does not produce any perceptible change in the circulation of the fundus oculi. If a coloured but otherwise indifferent fluid be injected into the cranial cavity under high pressure, the choroidal veins are seen distended up to the edge of the papilla, whereas none of the papillary vessels are involved in the engorgement. The production of artificial encephalitis, as well as excision of various parts of the brain, in order to test their trophic influence upon the optic nerves led to no positive conclusions; on the other hand, severe compression of one cerebral hemisphere sometimes induced panophthalmitis in the eye of the opposite side. The author draws the conclusion from his experimental study of the subject that choked disc is not due to the mechanical action of increased intracranial pressure.

(25) Examination of the Blood in Sepsis.

CANON (*Deut. med. Woch.*, October 26th, 1893) has examined bacteriologcially the blood taken from the finger, with all precautions, in many of the acute infective fevers. His results were negative. In cases of suspected sepsis, agar tubes were inoculated. The results were controlled by frequent examinations, and in cases of local suppuration the pus was also examined. When death occurred the blood was examined as soon as possible, and in this way positive results were obtained in scarlet fever, diphtheria, and phthisis. In death from sepsis the streptococcus was found in 8 cases, the S. albus in 2, and the S. aureus in 6. The pneumococcus was present in a case of peritonitis due to cancer of the uterus, and also in one of suppurative puerperal oöphoritis. The B. coli communis was found in 2 cases of peritonitis, and Friedländer's bacillus in a case of gall stones with secondary abscess. During life microorganisms were found in the blood in 14 cases of sepsis: namely, S. albus in 3, S. aureus in 2, streptococcus in 7, pneumococcus in 1, and a bacillus resembling that of Friedländer in 1. The S. albus was found in three cases of phlegmon, which were all fatal, and the S. aureus in two cases of osteomyelitis, of which one died. The streptococcus cases were all fatal. The pneumococcus was present in a case of gall stones with secondary abscess. A bacillus like Friedländer's was found in a case of suppurative meningitis, in which no starting point could be discovered after death. Against these positive results there were many negative ones. Thus, in most cases of sepsis, microorganisms are present in the blood, and in a certain number they may be found during life. This latter fact may be useful in (1) diagnosis as between enteric fever and sepsis; (2) in prognosis, for their presence in the blood is unfavourable; and, perhaps (3) in treatment, as it may indicate amputation in severe phlegmon.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(26) Transitory Aphasia in Pneumonia.

CHANTEMESSE (*Bull. et Mém. de la Soc. Méd.*. December 22nd, 1893) has observed more or less persistent aphasic phenomena in pneumonia, as in many infectious or toxic diseases. Some are due to structural lesions easily detectable—meningitis, softening, etc., while others cannot be ascribed to any such structural defects of the nerve centres. The latter class have a distinct clinical physiognomy, and usually occur at the end of the second or third day of the pneumonia. The aphasia is sudden in onset, but is often preceded by certain abnormal sensations in the head. Consciousness may not be lost, and the intellect may not be completely blunted; but at other times the attack is a regular apoplectiform one. The aphasia is identical in character with that which results from lesions of the third frontal convolution, and in the course of a few hours intelligence is sufficiently restored for the patient to indicate by gestures what he wishes to say. The lower part of the right side of the face is always paralysed, and the tongue deviates to the right; the right hemiplegia may be complete, but more often the paralysis is limited to the face, tongue, and superior extremity. Sensibility and the tendon reflexes are usually little altered, but vasomotor phenomena, consisting in redness, œdema, and often elevation of the temperature of the paralysed limbs, may be present. The paralytic accidents do not appear to modify the course of the pneumonia, nor has their disappearance any prognostic value as regards the termination of the pneumonia. The duration of aphasia is short, sometimes a few hours, sometimes four or five days or more. Sometimes twenty-four hours after the onset of complete aphasia speech is entirely recovered; the facial paralysis usually disappears with the aphasia, but complete hemiplegia, which is rare, is more persistent, and may be of several weeks' duration. Reasons for not considering the attacks hysterical are given, and they are contrasted with attacks of hysterical aphasia. In addition to other evidence against the structural nature of the lesion, a case is cited in which Berger found no changes in the brain of a patient with pneumonia who died five days after the onset of aphasia. Two hypotheses are considered as possibly accounting for the attacks; one is that they are due to the direct action of toxic microbes on the nerve centres, and the other is that contraction of the Sylvian artery and its branches is induced, with consequent disturbance of the circulation in connection with the nerve centres which this artery supplies. The author inclines to the latter view as being the probable explanation of the phenomena.

(27) Idiopathic Hæmorrhage of Septic Origin in Infants.

E. v. DUNGERN (*Centralbl. f. Bakt.*, October 28th, 1893) describes a case of this nature. He alludes to previous work upon this subject, which goes to show that idiopathic hæmorrhage occurring in newborn children is frequently to be traced to bacterial influence. The organisms hitherto found are streptococcus pyogenes, B. pyocyaneus, and certain undescribed bacilli. The extravasation of blood has been explained on a theory of embolism. In the case now described, v. Dungern isolated an organism which produced hæmorrhagic septicæmia in certain animals. The case was that of an infant without any family history of a nature to throw light upon the condition manifested. It died six days after birth, having exhibited the following symptoms—great emaciation, slight rise of temperature, scattered petechiæ, hæmorrhage from one ear, and from the mouth, nose, and bowel. At the necropsy blood extravasations were found in accordance with the clinical symptoms, and there was also thrombosis of the umbilical arteries, the connective tissue about which was infiltrated with effused blood. In clot taken from these vessels there was found a bacillus with the following characteristics—length 1 to 2 μ, breadth one-half the length; a well-marked capsule present; no movement seen; unstained by Gram; no spore formation; growth at the room temperature, in presence of oxygen, upon the ordinary media, with gas formation. The bacilli often occur in twos. They are pathogenic for mice, guinea-pigs, and rabbits. In animals of the last two classes, in which death followed rapidly upon subcutaneous injection of a broth culture of the bacillus, blood extravasations, some containing the organisms, were found scattered extensively about the various organs. Von Dungern is unable to decide whether the capsule bacillus now described is a virulent form of the pneumobacillus (Friedländer) or a distinct organism. He regards it as the cause of the disease under consideration. The proximate cause of the blood extravasation is probably the damage done to the walls of the blood vessels by the toxic products of the bacillus.

(28) Hysterical Œdema.

WL. GAJKEVICZ (*Gaz. lekarska*, No. 39, 1893) reports the following case: A girl, aged 18, previously quite healthy, suddenly noticed a swelling of her right upper extremity, but, as no pain or redness or rise of temperature was present, she paid no attention to it. After three weeks, pain of a localised character set in in the swollen extremity; the right leg also became painful, and after a short time the patient lost her voice. She was well nourished, and the organs of circulation and respiration, and the kidneys were normal. The right arm was 2 to 4 centimetres thicker than the left; not painful; no "pitting" on pressure, pale, with a temperature of 33° C. (as against 35° C. on the left), and greatly increased secretion of sweat. Pricking with a needle did not cause bleeding in the right arm, but was followed by a rather obstinate urticaria. During the seven months she stayed in the hospital the right breast and right leg down to the knee also became œdematous. The absence of any disease of the heart and kidneys, and the presence of nervous disturbance, determined the diagnosis of "hysterical œdema."

SURGERY.

(29) Acute Vertebral Osteomyelitis.

MORIAN (*Deut. med. Woch.*, November 30th, 1893) relates two cases of this very rare disease. An important complication consists in the spread of the inflammation and suppuration into the spinal canal. From the front the pus could not so easily penetrate into the canal owing to the ligament, but behind there is a space between the dura and the arches filled with a loose and vascular tissue to which the suppuration has ready access. The membranes and the cord itself may also become involved. In one case pus escaped from the situation named above when the spinous process and arch were removed, and in the second case the abscess extended from the third cervical to the twelfth dorsal, and from here again down to the third lumbar vertebra. The pleura or peritoneum may also become involved. The suppuration is more likely to remain localised behind the peritoneum than behind the pleura. Osteomyelitis of the spongy bones is likely, according to the author's experience, to run a more unfavourable course than when the long bones are affected. As to the symptoms, the onset was rapid, with fever and pain in the part of the vertebral column involved. The column was held rigid. At first the second case resembled epidemic cerebro-spinal meningitis; the head was drawn back, the neck and back muscles rigid, and the pupils unequal. Later, however, the pain became more localised, and a swelling appeared. In the acutest cases death may occur before the site of the disease can be localised. Prevertebral suppuration may cause diagnostic difficulties. Acute rheumatism very rarely affects the vertebral column, and then other of its manifestations are present. Acute pneumonia or lumbago might be confounded with it. The prognosis depends on the severity of the toxic symptoms. It is more serious if the dorsal vertebræ are involved, owing to danger of spread to the pleura. The abscess should be opened as soon as possible, and the focus of disease, if it can be got at, scraped away, or better still, as in the case of the arches, removed. The first case occurred in a boy, aged 10. He had pain in the loins, headache, and fever. He kept his back rigid. Some ten days or so later a swelling was found along each side of the lumbar spinous processes. This was incised, and the

spinous process of the fourth lumbar vertebra and a part of the arch on either side were removed, pus escaping from outside the dura. A swelling over the foot had also to be incised, and subsequently another one over the humerus. The boy eventually made a good recovery. In the second case of a lad, aged 17, a swelling appeared in the region of the eleventh and twelfth vertebræ about seventeen days after the onset. This was incised, and the vertebra found bare. There was some improvement, but the pleuræ became involved, and the patient died. The body of the vertebra showed foci of pus. A communication was traced between the pleural cavities and the disease. The outer surface of the dura was altered. Small abscesses were present in the kidneys. The staphylococcus was cultivated from each case.

(30) Treatment of Wound of the Common Femoral Vein.

Niebergall (*Deutsche Zeitschr. f. Chir.*, Band 37, Hefte 3 and 6) objects to the practice of tying both the common femoral artery and its accompanying vein in cases of complete or partial division of the latter vessel. By applying ligatures to both artery and vein the blood pressure necessary for dilating the collateral veins is prevented. The cyanosis and œdema observed in the lower limb after ligature of the vein alone are the results of this blood pressure, and usually disappear in the course of a few hours, after the collateral venous circulation has become freely established. Gangrene did not occur in any one of 25 collected cases of ligature of the common femoral vein for wound of this vessel caused in the removal of large growths from the upper part of the thigh. Of 10 cases of ligature of this vein for non-surgical wound, gangrene was observed in only one, which occurred long before the antiseptic era. On the other hand, the results of simultaneous ligature of both artery and vein have hitherto been very unfavourable, gangrene having resulted in 62.5 per cent. of the cases in which one or both vessels had been wounded during the removal of a tumour, and in 50 per cent. of the cases in which either the vein alone or both artery and vein had been opened by non-surgical injury. The prognosis in these latter instances, though very unfavourable, does not absolutely indicate primary amputation. The limb should not be removed until after the appearance of gangrene. The following are regarded as the causes of the frequent occurrence of gangrene from ligature of both artery and vein: local anæmia of the peripheral parts of the limb which are thus rendered liable to become necrosed; infiltration of blood in the soft parts and vascular sheaths, which hinders the flow of blood along the small arteries and its return by the collateral veins; as a consequence of the presence of blood clot in the tissues there is a tendency to the absorption of fibrin ferment through the walls of the veins, and to coagulation of the blood contained within these vessels. Compression of the vein, when partially divided, by antiseptic plugging is not likely to be of service except in cases of small external wound, and therefore is contraindicated when the vessel has been wounded during the removal of a large tumour. Lateral ligature or suture of the injured vein is indicated in cases of small and longitudinal wounds through its wall. In instances of total or almost total division of the vein circular or complete ligature is always necessary. In cases in which the vein is so involved in a malignant growth that its walls are infiltrated with morbid structure the affected portion of the vessel should be excised after the application of two or more ligatures.

(31) Division of the Cervical Sympathetic in Epilepsy.

Bogdanik (*Vratch*, No. 32, 1893) shares the belief of Alexander, Baracz, and Laksch that the effects of ligature of the vertebral artery depend on lesions of the sympathetic; he therefore resolved to divide the sympathetic without touching the vertebral artery. The operation was performed on a lad, aged 16, who had been subject to epilepsy for two years. After exposing the middle or thyroid ganglion, which is close to the inferior thyroid artery, he cut it away with scissors. Before the operation the patient had fits every day, in spite of bromide of potassium, whereas he was free from attacks three weeks after the operation. The author does not wish to rely too much on so limited an experience; but he considers that the operation is indicated only in cases of idiopathic epilepsy, that is, when no other cause is known.

(32) Four Cases of Cerebral Tumour.

Keen (*Amer. Journ. Med. Sci.*, January, 1894) reports four cases of tumour of the brain, three of which were treated by operation. Relief was given in two cases, but death occurred after a time in all. The first case was one of intracranial tumour, probably of the occipital lobe, in a man, aged 31. The skull was trephined over the left occipital lobe. No tumour was exposed to view, but, after careful exploration with a grooved director, the author came to the conclusion that there was one lying an inch and a half below the cortex, but that it was too large to be removed. The operation afforded much relief to distressing headache and to mental hallucinations. The patient died after four months and a-half. In the second case, which was one of glio-sarcoma of the upper part of the motor area, the tumour could be almost precisely localised, but on account of its probable size and position, and of the condition of the patient, it was decided not to operate. Fuller details of the third and fourth cases are reserved for future publication. In one the tumour was erroneously diagnosed, and the operation for its removal proved fatal. In the last case the tumour could not be recognised at the operation, though it was found at the suspected site at the necropsy. The operation, it is stated, while it could not have afforded relief, did no harm.

(33) Gummatous Episcleritis.

Fromaget (*Ann. d'Oculistique*, October, 1893) contributes two cases of this disease, with remarks. It occurs generally among the late secondary or early tertiary manifestations of syphilis, and appears in the form of small disseminated tumours, resembling phlyctenulæ, sometimes preceded by iritis or iridochoroiditis. If not treated, the growths increased rapidly, and became ulcerated, laying bare the sclerotic, or even the choroid. In rare cases the separate tumours unite, forming a wound surrounding the cornea. They yield very readily to treatment, and disappear, leaving barely a trace of induration; mercury given internally or by inunction gives the best results, and acts much more quickly than iodide of potassium.

MIDWIFERY AND DISEASES OF WOMEN.

(34) The Treatment of Rupture of the Uterus.

Merz (*Archiv f. Gynäk.*, vol. xlv, Part ii, 1893) has just published a monograph on this question; it includes tables of 230 cases. The results are as follows: (1) Without treatment, 70 cases of complete rupture, 10 recovered; 21 incomplete rupture, 4 recovered; 3 doubtful as to completeness of rupture, all fatal. (2) Compression of abdomen by bandages, 3 complete, 1 recovered; 2 incomplete, both recovered. (3) Tampon applied to uterine cavity: 15 complete, 6 recovered; 10 incomplete, 3 recovered. (4) Drainage by tube: 14 complete, 8 recovered; 5 incomplete, 4 recovered. (5) Drainage by skein of iodised thread: 7 complete, 6 recovered; 1 incomplete, recovered. (6) Simple drainage, washing-out, or irrigation, etc., being practised: 6 complete, 4 recovered; 1 incomplete, recovered. (7) Laparotomy: (*a*) With suturing of uterus — 24 complete, 10 recovered; (*b*) without sutures—15 complete, 8 recovered; (*c*) Porro's operation—15 complete, 8 recovered. No incomplete ruptures are numbered under this head. (8) A unique case, which recovered, where the placenta was extracted through the laceration, and drawn out of the peritoneal cavity through the uterus and delivered; prolapse of omentum occurred. (9) Another successful unique case, complete laceration; the edges of the wound were rubbed with a solution of perchloride of iron. (10) Treatment not clearly indicated in original reports; 10 complete, all fatal; 5 incomplete, 3 recovered. Merz recommends that when the fœtal head is still in the pelvis, the body lying in the peritoneum, the child should be delivered with instruments. When the head, or the whole fœtus lies in the peritoneum, laparotomy is needed at once; the laceration must be well

sutured. When the child has been delivered naturally, laparotomy and suturing of the laceration must be done directly after birth. Where this is not practicable, drainage, without preliminary irrigation, must be carried out. Porro's operation is called for when the uterus is fatty, or when septic endometritis has set in.

(35) A New Indication for Supravaginal Hysterectomy.

UNDER this title, Lauro (*Rif. Med.*, October 23rd, 24th 1893), describes a case occurring in his own practice, and takes the opportunity of reviewing the indications for operative interference in displacements of the uterus. His conclusions are as follows: (1) In sexually active women, affected with retrodeviation of the uterus without any adhesions to the walls of the pelvis posteriorly, the intense suffering in such cases can often be relieved by Alexander's operation, the severer operation of hysterectomy being thus unnecessary. (2) During reproductive life, in a woman afflicted with retroflexion or retroversion complicated by adhesions, the organ should be freed from its adhesions, and the round ligaments shortened intraperitoneally. This gives better results than ventrofixation of the organ. (3) In case of failure of these measures, recourse should be had to hysteropexy, by which means the organ can be more solidly fixed, without in general interfering with normal involution in future gestations. (4) Supposing laparotomy to have failed to prevent the return of the retrodeviation, and life to be in consequence a burden to the patient, one is then justified in suggesting extirpation of the reproductive organs. But this should never be done without a previous consultation. (5) In such cases the operation to be preferred is an abdominal hysterectomy so that adhesions contracted, as a result perhaps of former operations, with the abdominal organs may be better dealt with. Such adhesions are often missed even by the most careful examiner before the operation. (6) If the menopause is past, there need be less hesitation in proceeding to hysterectomy. (7) The two operations, abdominal and vaginal hysterectomy, seem to differ but little on the score of danger to the patient, as in both cases the peritoneal sac has to be opened.

(36) Marriage, Dysmenorrhœa, and Hysteria.

WYTHE COOK (*Amer. Journ. of Obstet.*, December, 1893) finds from experience that in most cases of dysmenorrhœa and hysteria amongst single women marriage aggravates the disease. Hysteria is by no means cured by marriage, dysmenorrhœa often returns after pregnancy. One patient suffered from very severe dysmenorrhœa. She married, on advice, but the disease was aggravated by coitus. Conception occurred, and she fully believed that pregnancy would cure her but the menstrual pain returned immediately after weaning. Another patient, subject to dysmenorrhœa, married when 20, and became pregnant when over 23. She bore a healthy child, and then took to the morphine habit. Her husband died a few months after her confinement. The period was suppressed for five years. After she ceased to take morphine it reappeared, at first irregularly, and at length in due season, but in both cases there was severe pain. She married again, and has remained eighteen months sterile; the dysmenorrhœa continues. A young woman subject to headaches and hysterical manifestations attended with hallucinations and depression got married. The neuroses were not improved by marriage. A robust young lady free from hysteria married, and bore two children within twenty-one months after marriage. Hysterical swoonings occurred during the pregnancies. A patient subject to dysmenorrhœa and hysterical fits married and bore five children. The menstrual pain never reappeared after the first pregnancy, but the fits still occur.

(37) Cyst or "Hydrocele" of Nuck's Canal.

FORTIN (*Rép. Univ. d'Obstét. et de Gynéc.*, November, 1893) describes a case of labial cyst not arising from the vulvo-vaginal glands. The patient was a married woman, aged 26, strong and accustomed to bicycle riding. In April, 1892, she noticed a swelling in the right labium majus, not painful but inconvenient. It lay in the anterior part of the labium, and projected inwards. In diameter it measured four-fifths of an inch. It was irreducible, and, on account of its connections, it could not be entirely grasped between the finger and thumb. In April, 1892, shortly after its discovery, the cyst was punctured, glairy fluid escaped, and a 2½ per cent. solution of chloride of zinc was injected; no inflammation followed. In October, 1892, the cyst was tapped again, and creasote glycerine was injected. In January, 1893, it was dissected out. The detachment of its wall proved difficult. It extended above into the inguinal canal, ending in a cord-like pedicle. When removed it measured over 2 inches in length. No ligatures were required; there was much general oozing. Salol and absorbent gauze were used for dressings, without drainage.

(38) Albuminuria of Pregnancy Fatal to Fœtus.

OUI, of Bordeaux (*Archiv. de Tocol. et de Gyn.*, December, 1893) observed 12 cases of albuminuria developed during pregnancy. In 11 of these cases the placenta was examined, and in 6 that structure was found diseased. Six out of the 12 children died, and no cause for their death besides the albuminuria and the placental lesions could be detected. In 2 cases where the mothers were submitted to strict treatment the children were saved; the 6 children who died were born of the remaining 10 mothers. Three mothers died; the others were subjected in time to more or less careful dieting. Oui believes that when this treatment—milk diet—does not improve the patient's condition it is advisable to induce premature labour to save the child. Chaleix advocates the promotion of diuresis to eliminate toxic elements. He obtained excellent results in a case where there was extreme anæmia by subcutaneous injections of salt water, and the mother was cured. Lefour suggests that in Oui's cases the placental disease was probably the immediate cause of fœtal death.

(39) Lysol in Obstetric Practice.

ISRAELSON (*St. Petersburg. med. Woch.*, No. 47, 1893) urges the use in obstetric practice of lysol as having greater antiseptic properties and a less poisonous action than any coal-tar derivative hitherto known. He uses a 1 per cent. solution for the skin, etc., and a 2 per cent. solution for instruments, this preparation being less milky than the former. No pains, but only slight burning sensations are produced by the use of either, and it has no irritant action on the skin. Owing to lysol forming a "lather" with water it is a substitute for soap, rendering unnecessary the inunction of the hands and the application of soap and water prior to operations. The author has tried lysol extensively during one year and a half with satisfactory results.

THERAPEUTICS.

(40) Intravenous Injection of Salt Solution in Asiatic Cholera.

KARL DEHIO (*St. Peters. med. Wochensch.*, November, 1893) tried the effect of intravenous injection of salt solution in Asiatic cholera. He considers this intravenous injection to be much preferable to the subcutaneous injection as practised by Samuel and Cantani. He has performed thirty injections upon eighteen cholera patients, with varying success. He classifies his results under four heads. Under the first he mentions five patients, who were admitted pulseless, collapsed, comatose, and almost moribund. However, even here the injection invariably raised the blood pressure considerably and restored some degree of consciousness. But this improvement only lasted for from three to six hours, the patients relapsing again into their comatose condition, from which a second injection was unable to restore them. Death soon occurred. Better results were obtained with the second group, who were also completely collapsed when they were admitted. After the salt solution had been injected, and even during the operation, the heart began to beat more forcibly, and frequently the cyanosis decreased, whilst the extremities became warmer. The improvement was again only temporary; after from eight to twelve hours the pulse again became imperceptible, whilst the collapsed and cyanotic condition returned. A repetition of the operation produced a second temporary improvement, but this was less marked, and finally the patients died during the algid stage. In all

these cases anuria persisted. Dehio thinks the five cases which compose the third group were kept alive during the algid stage by the injection. They succumbed, however, later on to the sequelæ. Here the symptoms of the algid stage did not return, and generally great hopes would have been entertained of complete recovery had it not been for renal and intestinal complications. Some slight improvement was seen as regards the anuria. Finally he refers to three cases where complete recovery was effected. In one case 800 c.cm. of normal salt solution were injected, in the second 1,200 c.cm., and in the third 950. In Dehio's opinion, death was caused in the first three groups by the noxious toxins which are reabsorbed into the system from the intestine. The salt solution has no effect upon these toxins, either as rendering them innocuous or in helping the system to get rid of them. Only where the toxin poisoning is not sufficiently severe to cause death, and where the heart failure is not too marked, can the injection of salt solution save life.

(41) The Ultimate Fate of Arsenious Acid in the Animal Organism.

Severi (*Rif. Med.*, November 9-10th, 1893) has dealt with this question in a series of experiments, the results of which he now details. His conclusions are as follows: (1) Arsenious acid administered hypodermically to the dog in such doses as to produce acute poisoning is eliminated for the most part unchanged in the urine. (2) The elimination of arsenites begins immediately after the injection, is greatest during the first few hours, and continues for three or four days at the most. (3) Even in cases in which small doses are given daily no traces of arsenites are discoverable in the urine. (4) In cases in which rather large doses are given daily for ten or twelve days the elimination of arsenites goes on for somewhat longer than stated in the second conclusion.

(42) Iodrubidium.

Leo Leistikow (*Monatsh. f. prakt. Dermatologie*, No. 10, 1893) describes his experience with iodrubidium, a substance resembling iodide of potassium in being odourless, somewhat bitter and saline in taste, easily soluble, and stable in composition. It was used as a 5 per cent. aqueous solution, of which 3 tablespoonfuls were given daily to eight patients, six of whom suffered from various tertiary syphilitic lesions. In one of these treatment had to be suspended owing to the appearance of conjunctivitis. The remaining cases were (*a*) acute gonorrhœal polyarthritis and (*b*) a gumma of the tongue; in this case coryza, produced by iodide of potassium, disappeared under the new treatment. All cases, with the one exception referred to, were apparently completely cured in from two to four weeks. No gastric disturbances were caused, and the drug was well borne by a patient suffering from valvular disease.

(43) Europhen.

Gilbert (*Separatabdruck Balneologisch. Centralbl.*, ii, 13) states that, as a sceptic, he resolved to test the claims of europhen to replace iodoform. He used it as a 1 to 5 per cent. ointment, which prevents its forming into troublesome scales. His cases comprised varicose and other ulcers, scrofulodermia, a severe burn, and wounds causing loss of substance. The cases of varicose ulcer were very advanced, and under alternate treatment with the dry powder and a 2 per cent. ointment a cure was effected in about three weeks. In the case of scrofulodermia numerous deep ulcers existed around the neck and the angles of the lower jaw. These, where practicable, were incised and treated in the same way, the ulcers healing in a few weeks, though they had previously remained unaffected by iodoform, nitrate of silver, etc. In conclusion the author strongly recommends further trials with europhen, which, moreover, has not been found to possess any marked poisonous properties, and he advocates the alternate use of the powder and the ointment, this method having given the best results in his cases.

PATHOLOGY.

(44) Pathology of Scarlet Fever.

Bergé (*Union Méd.*, December 30th, 1893) considers scarlet fever a local infection due to the streptococcus. These organisms are cultivated in the crypts of the tonsils, and there secrete a toxin, the diffusion of which throughout the organism produces the cutaneous and mucous eruptions. Puerperal and traumatic scarlet fever result from local infection of the uterine surface, or various other mucous or cutaneous surfaces, by the streptococcus. These conclusions were based on the following facts: The scarlet fever eruption follows the affection of the tonsils; the existence of scarlet fever with eruption in which the tonsillitis and its specific complications are the only affections; the constancy of the streptococcus in the tonsillitis of scarlet fever; the streptococcal nature of the complications of scarlet fever; the relation of scarlet fever to puerperal infection; and, lastly, the ease with which the erythema-producing properties of the streptococcus can be demonstrated.

(45) The Effect of Urine, Normal and Pathological, on the Heart.

Lusini (*Arch. di Farmacol. e Terap.* Fasc 19, 20, 21, 1893) has studied the effects of normal urine when applied direct to the heart of the frog or toad, comparing it with that produced by the urine of jaundice, tuberculosis, nephritis, scarlatina, measles, and pneumonia. He concludes as follows: (1) Normal urine always causes an increase in the extent of the individual heart beats. (2) The urine passed in disease produces peculiar toxic effects directly proportional to the increase of urea, salts, colouring matter, extractives, etc., as well as to the abnormal matters contained in such urine. (3) The urine of infective disease is far more toxic than that of other common maladies: this appears to be due to the amount of leucomaines found in such urines.

(46) The Venom of Naja Haje.

The bite of this serpent (otherwise known as Cleopatra's asp) is so fatal, that in Ceylon alone it is estimated that no fewer than 20,000 persons succumb annually to this cause. Graziani (*Rif. Med.*, October 7th, 1893) has undertaken a physiological study of the venom, which has already received attention at the hands of Calmette, Wall and Armstrong, Weir Mitchell, Reichardt, and others. The venom, when dried, appears as transparent scales, easily soluble in water, very slightly so in alcohol, ether, or chloroform; its aqueous solution has an unpleasant odour, and is neutral to test paper. Chemically it gives all the tests described by Weir Mitchell and others as characteristic of the venom of naja tripudians. The physiological effects of this dried venom were tried on guinea-pigs, rabbits, and frogs, to all of which it proved fatal in extremely minute doses. The guinea-pig, a few seconds after injection, becomes paralysed in its hind limbs, it foams at the mouth, and makes violent attempts at vomiting. The eyes are half closed, but occasionally for short periods there is a partial disappearance of the paralysis, and the animal makes feeble attempts to support itself. Respiratory embarrassment is soon added to the foregoing symptoms, and the animal lies perfectly prone, devoting all its attention to breathing, which is rendered still more difficult by the vomiting and frothy saliva which is secreted in abundance. Finally death ensues from asphyxia. The *post-mortem* examination reveals the heart still feebly beating, the lungs pallid, and the blood in the organs very dark. The liver and kidneys are hyperæmic, but the brain and cord, with their coverings, are anæmic. In the rabbit the course of the poisoning is practically identical with that described above. Histologically, the following facts are made out in addition to the foregoing. The red blood corpuscles are in great measure broken down, and there are also effusions into the muscular tissues. The kidneys are very hyperæmic, and there is marked degeneration of the epithelium lining the glomeruli and convoluted tubules. The glomerular capsules are much distended, and numerous leucocytes are discernible throughout the organ. The liver, also, is hyperæmic, and shows numerous broken-down blood corpuscles, and partial necrosis of many of the liver cells. Examination of the central nervous system reveals no particular changes. With regard to the nature of the venom, the author seems inclined to suspect, with Calmette, that it is an albumose, perhaps produced as the result of bacterial growth, but he adduces nothing new in support of this view.

AN EPITOME OF CURRENT MEDICAL LITERATURE.

MEDICINE.

(47) Cerebellar Sclerosis.

ROYET and COLLET (*Arch. de Neurol.*, November, 1893) report a case the clinical history of which was lately published by Collet as presenting an instance of tremor of the vocal cords in disseminated sclerosis. The patient, a man, aged 50, on admission into hospital in 1886, exhibited defective equilibration when attempting to stand. Closure of the eyes did not perceptibly influence the inco-ordination. Knee-jerk was increased on each side, especially the right: there was occasional tonic spasm in the muscles of the lower limbs; plantar and cremaster reflexes were almost normal. Slight intention tremor was noticed in the upper limbs: nystagmus accompanied all voluntary movements of the eyes: speech was slow and embarrassed, though the component syllables were clearly pronounced. Cutaneous sensibility and bladder function unimpaired. The illness had commenced eighteen months previously with severe pains in the right upper limb; motor symptoms dated back fifteen days. There was no history of syphilis, alcoholism, or neuropathic heredity. In 1888 phonic paralysis was observed. The glottis vocalis remained elliptical during efforts at phonation. In 1891 tremulous oscillations of the vocal cords were seen to be almost constant; attempts to utter sounds produced intermittent asynchronous action of the adductors. Tremor of the upper limbs had greatly increased, and foot clonus and incontinence of urine developed. Early in 1892 the patient succumbed to influenza. At the necropsy the cerebrum appeared to be quite free from pathological change: the cerebellum throughout was yellowish and sclerosed (microscopical examination of it was omitted); the antero-posterior thickness of the pons was reduced one-third by atrophy of the middle cerebellar peduncles, a thin layer of dense sclerous tissue forming the only vestige of those tracts. The inferior and accessory olives were completely degenerated, and presented entire absence of nerve cells. All the cells of the ventral portion of the pons had disappeared. The interolivary layer and superior olives were intact. Nothing abnormal was found in the spinal cord or the hypoglossal root fibres and nuclei. The authors point out the close similarity of the symptoms in the above case to those of multiple cerebro-spinal sclerosis. There was no differential characteristic in the tremor, nystagmus, or speech defect.

(48) The Relation of Syphilis to General Paralysis.

PETERSON (*Med. Record*, December 9th, 1893) in dealing with this subject refers to the great attention that has been directed to it in recent years, and quotes a list of 22 writers with the percentage frequency of syphilis found by them in their cases of general paresis. The numbers therein stated range from 17 per cent. (Kaes), to 70 (Savage), 76 (Mendel), and 88 per cent. (Bannister). The author's own investigations in 40 recent cases of general paresis showed that 10 of the patients were definitely syphilitic, 12 were non-syphititic; in the remaining 18 the point was not determined. From examination of all the available data he concludes that a history of syphilis is found in about 65 per cent. of general paralytics; he notes further that antecedent syphilis is about eight times more frequent in paralytic dementia than in other forms of insanity. As to the etiological relationship between the two diseases, Peterson considers that syphilis does not act as a direct cause in the production of general paresis, but by its pernicious constitutional effects it renders the nervous system more vulnerable to the operation of alcoholic and other excesses. He mentions that among the native Egyptians syphilis is one of the most widespread disorders, yet no case of general paresis has hitherto been reported, nor was there any case in the asylum at Cairo when visited by him a few years ago—an immunity that he thinks may be attributable to the prevailing abstinence from alcohol.

(49) Syphilis and Disease of the Spinal Cord.

GERHARDT (*Berl. klin. Woch.*, 1893, No. 50) says that syphilitic disease of the spinal cord may follow in from three months to twenty years after primary syphilis. He advocates thorough and continued antisyphilitic treatment as soon as the diagnosis is made. In syphilis of the spinal cord the meninges and vessels are chiefly affected. Amongst the clinical varieties a certain irregularity in the symptoms, with paraplegic symptoms which are predominant on one side, tending to the form of paralysis described by Brown-Séquard, should direct the attention to syphilis. Cerebral symptoms are frequently associated with the spinal symptoms, and Gerhardt regards what may be termed a "triplegia" as characteristic of a syphilitic origin. This triplegia is due to the combination of a paraplegia of spinal origin with a hemiplegia of encephalic origin. Vascular disease associated with disease of the meninges may show itself by sudden exacerbation of the spinal symptoms, or by a sort of spinal apoplexy, with sudden onset of complete paraplegia. To illustrate this he mentions the case of a tabetic man who denied syphilis, but in whom later on a definite history of syphilis was obtained: this man, in the course of an hour, developed complete paraplegia, and his sphincters were affected. Under energetic antisyphilitic treatment these symptoms completely disappeared, and only his earlier tabetic symptoms remained. Speaking of other clinical forms, Gerhardt expresses the opinion that various symptoms, such as partial anæsthesia of the trunk, paralyses of rarely affected trunk muscles, and herpes zoster when associated with other symptoms may be attributed to the nerve roots being affected. He mentions also two rare cases in which the spinal cord was affected by syphilitic disease of the vertebral column, and thinks that in such cases the cervical vertebræ are the ones most usually affected. As regards the connection between syphilis and tabes, Gerhardt states that his cases of tabes in the last eight years number 102, and that in exactly 50 per cent. a history of previous syphilis could be obtained. This accords with his previous experience at Würzburg. A few cases of tabes he thinks are really benefited by antisyphilitic treatment, and this is more likely to occur if the patient is well nourished, if comparatively little time has elapsed since the primary syphilis, if the patient still shows signs of undoubted syphilis, and especially in the so-called "atypical cases of tabes." Of the latter class, however, he allows that some may be termed cases of "pseudo-tabes," and be due to a true syphilitic lesion in the posterior columns of the spinal cord.

SURGERY.

(50) Thiersch's Skin Grafting in Cases of Avulsion of the Scalp.

RIEGNER (*Centralbl. f. Chir.*, No. 50, 1893) reports a case of almost total avulsion of the scalp in a girl aged 16, in which Thiersch's transplantation method was practised with very good results. The cranial vault covered by the pericranium was exposed from the root of the nose and from the eyebrows, to the external occipital protuberance, and laterally as far as the insertions of both pinnæ. The front, upper, and lateral regions of this enormous wound were covered with strips of skin taken from the patient's thighs, and subsequently the remaining raw surface behind was similarly covered with skin from the arms. The extensive defect which, the author states, could not have been so completely and speedily closed by any other plastic procedure, was covered in every part in the course of four months by a smooth, supple, but insensitive scalp, which though it contrasted very strongly at first with uninjured surfaces of the neck and face has gradually acquired more and more of the appearance and character of normal integument.—In the *Medical Record* of December 16th, Pond reports a case of denuded cranium, treated by perforation of the external table of the exposed cranial bones, and skin grafting by Thiersch's method. The patient, a girl aged 8, came under the author's notice ten days after an accident in which the scalp had been torn away through the hair being caught in the main shaft of a water wheel. Most of the frontal and parietal bones, and part of the occipital had been left bare. The pericranium where present was dry as parchment.

The surface of the exposed bones was of a dull greyish colour, and bathed in pus from the surrounding granulations. After thorough cleansing of the wound and the surrounding skin, and removal of the granulation tissue, twenty-five perforations were made with a hand awl, through the outer table of the skull to the diploë. A few strips of skin were then taken from the patient's left thigh and placed over the forehead and left temporal muscle. Five days later fifty more perforations were made in the outer table of the skull, and grafts taken from the thigh of another subject were applied over the right temporal muscle and the frontal and occipital regions. Each of these operations was followed by a rapid pulse and fever. The operation was frequently repeated during the next three months with unsatisfactory results. The patient remained for some time in an enfeebled condition, and suffered from attacks of fever. Most of the grafts, particularly those taken from other subjects, either failed to grow or soon ulcerated. After an interval of three months the patient's health was much improved, and then, the author states, the condition of the head became excellent, one-third of its area being covered by healthy grafts which were extending rapidly. At this time, however, the patient contracted diphtheria of the pharynx and mouth, which proved fatal on the fourth day.

(51) Pancreatic Cyst.

Barnett (*New Zealand Med. Journ.*, October, 1893) puts on record a case to serve, first, as a typical example of difficulty and error in the diagnosis of pancreatic cyst; secondly, as an instance of diagnosis before actual laparotomy; and thirdly, as a demonstration of the inefficiency of tapping and the efficiency of incision and drainage. The patient was a farm labourer, aged 24, who, after a serious accident, in which he had been caught between the wheel of a dray and a gate-post, became thin, weak, and dyspeptic. Nine weeks after the accident, as there was evidence of thoracic effusion reaching as high as the eighth rib on the left side, the author aspirated the infra-axillary region and drew off 8 ounces of dark turbid fluid, which was regarded as fairly typical pleuritic fluid. As the sequel showed, the diaphragm had been pierced and the fluid drawn off from the abdominal cavity. About a week later a slight rounded prominence was observed in the epigastric region, which was elastic to the feel and dull on percussion. This increased rapidly in extent, and, three days after it had been first noted, was aspirated. Exit was thus given to 300 ounces of turbid fluid, with alkaline reaction and albuminous. The swelling speedily returned, and in the course of six weeks it was found necessary to repeat the aspiration twice. After the last aspiration chemical investigation was made of the fluid and evidence obtained of the presence of a starch-converting ferment. Laparotomy was then performed and a large cyst exposed below and to the right of the stomach. After removal of the contained fluid, the author, on introducing his finger into the cavity, found that it extended away back to the vertebral column, and to the left further than he could reach. Above could be felt the stomach and liver, and below the intestines. It corresponded exactly to a huge cyst springing from the pancreas and distending the lesser peritoneal sac. The peritoneal coat of the cyst was fixed to the parietal peritoneum by sutures, and the edges of the opening in the cyst wall stitched to the external wound. The cavity was drained by a No. 20 tube. The patient made a good recovery, and after an interval of five months was in good health and doing the ordinary heavy work of his farm.

(52) Spontaneous Fracture of Ribs in a Syphilitic Subject.

Raynaud, of Algiers (*Journ. des Mal. Cut. et Syph.*, No. 9, 1893), reports a case of spontaneous fracture of the ninth and tenth ribs in the right axillary line, which occurred whilst the patient was turning over in bed. The author found that there was acute pain both on pressure and during movement, and could make out crepitus very distinctly both by auscultation and palpation. The patient, a vigorous man, aged 44, had suffered four years previously from a very severe attack of secondary syphilis, and had since been the subject, from time to time, of hysteria, pulmonary congestion, and very severe nocturnal headache. It is mentioned that, though free from any other constitutional disorder, this man showed a tendency to obesity, and indulged freely in absinthe. Although syphilis is, perhaps, the most frequent cause of a tendency to spontaneous fracture, this accident usually occurs in syphilitic subjects in one of the long bones of a limb, and has rarely been noted in any of the ribs. Two other cases only of fracture of these bones without violence have been collected by the author. In the case recorded in this paper there was no swelling at the seat of fracture, but the patient had previously felt some tenderness during inspiration on the affected side of the chest. The injury is regarded as the result of gummatous infiltration of the broken ribs.

(53) Subconjunctival Injections in Interstitial Keratitis.

Félix Lagrange (*Arch. Cliniques*, December, 1893) considers that subconjunctival injections of corrosive sublimate (1 in 1,000) constitute a valuable method of treatment for syphilitic affections of the eye. In his opinion it can no longer be denied that injected fluids make their way into the ocular cavity, and penetrate throughout the media and into the humours. Thus the cells of the cornea, of the iris, and of all the other membranes become bathed with an extremely weak solution of the sublimate; for instance, if 5 drops of a solution of 1 in 1,000 be used, only $\frac{1}{4}$ mg. is introduced under the conjunctiva. Further, the operation is very easily accomplished, and if the parts are carefully anæsthetised with cocaine beforehand, is almost painless; in addition, it may be repeated two or three times without inconvenience. These injections, however, only produce a local result, and in consequence their exclusive use is not to be recommended; for if it is desired to counteract the local manifestations of the diathesis, the diathesis itself must be attacked, and the drug must be caused to penetrate throughout the whole system. Hence general treatment must also be employed, and the good results produced must be ascribed to both the local and general treatment. Lagrange quotes 4 cases, which he considers to have been helped by this therapeutical method. The first was a case of interstitial keratitis; here recovery was complete and rapid. In two other cases of the same disease, there was marked improvement. The last case was one of specific retinitis: here also marked improvement was observed. With all these patients general treatment was also employed, but in the author's opinion the improvement in sight was largely due to the subconjunctival injections.

MIDWIFERY AND DISEASES OF WOMEN.

(54) Placenta Prævia.

Townsend (*Boston Med. and Surg. Journ.*, December 21st, 1893) states that, among the 6,700 deliveries in the Boston Lying-in Hospital in the past twenty years, 28 cases of placenta prævia were recorded. Of these, 5 were central, 15 marginal, and 8 partial, the placenta overlapping the os to a greater or less extent. The proportion of multiparæ to primiparæ was 17 to 11, or much less than the textbook standard. The patient was a multipara in 4 of the 5 cases where the attachment was central; 12 of the 28 mothers were delivered at term. The following statistics as to result and treatment are of great interest:

	Lateral Placenta Prævia (15).	Partial Placenta Prævia (8).	Central Placenta Prævia (5).
Delivery natural ...	13	3	0
Tampon used ...	1	2	2
Delivery by version	2	5	5
Mothers recovered	15	8	2
,, died ...	0	0	3
Infants lived ...	12	4	1
,, died ...	2	0	3
,, stillborn ...	1	4	1

Townsend notes, in respect of the high mortality of the central cases, that all the 5 entered hospital blanched from loss of blood, 2 of the 3 fatal cases being almost moribund. One of the patients that recovered had septic symptoms, due, it appears, to a sponge which, supported by a colpeurynter

had been used as a plug by the physician who sent her to the hospital.

(55) Typhoid Fever in Pregnancy and Childbed.

VINAY (*Lyon Méd.*, December 3rd, 1893) urges the value of the cold bath in cases of typhoid fever in pregnancy. It greatly lessens the maternal mortality, which is only 6 per cent., being 17 per cent. when the cold bath is not used. On the other hand, it does not greatly counteract the tendency to abortion, which occurs in 65 per cent. where the bath is not used, and in 55 per cent. where the patient is placed in the bath. The combined statistics of Brand and Vinay relating to the use of the cold bath in pregnant women include 52 cases. Of these, 28 aborted and 3 died. Of the 5 cases collected by Vinay at Lyons—that is very recently under the most advanced improvements in obstetrics—none died, but 3 aborted. In typhoid fever of mild or medium type, abortion seldom increases the patient's danger appreciably; the contrary is the case in variola, pneumonia, cholera, and severe typhoid during the adynamic stage. Abortion is generally preceded by a rigor, a rise of temperature, and flooding, followed by a fall of temperature and labour pains. The flooding is serious if considerable: the temperature may fall to 95°, with dangerous collapse, even if no more blood is lost. The cold bath must be continued after abortion as long as the temperature keeps up. Typhoid fever is also little aggravated by delivery at term, but it is very dangerous when it actually develops in the puerperium. Out of 18 cases collected by Vinay, 9, or 50 per cent., died. Brand explains the mortality by delayed treatment owing to difficulties in diagnosis. Vinay maintains that the exhaustion, hæmorrhages, and traumatism inevitable at delivery greatly influence for evil the incubation of the disease in these cases. The cold bath is here necessary, being contraindicated only when there is general peritonitis.

(56) "Uterine Calculus" and Uterine Cancer.

THORN (*Zeitschr. f. Geburtsh. u. Gynäk.*, vol. xxviii, pt. 1, 1893) discusses how far it may be assumed that uterine "calculi" are necessarily calcified fibroids. A patient, aged 55, bore her last child (the fifth) twenty years ago. The menopause came on thirteen years ater. At 54, suspicious hæmorrhages, with severe pain, set in. She was examined a year later, on July 15th, 1892. She appeared anæmic, and emaciated, and there was much sanious purulent discharge. The uterus was as large as in the third month of pregnancy; there were all the signs of cancer of its body. The cervix was dilated, and a calcified mass, as big as a fist, removed in pieces. At the point where it was attached to the wall of the uterus, there was an indurated deposit. This was scraped, but the scrapings did not appear to be cancerous. A month later, however, a deep cancerous ulcer occupied the site of the deposit. The uterus was therefore removed entire; the vagina had to be divided by incision on both sides in order to gain room. The patient made a good recovery. Thorn mentions calcification of placental relics and lithopædion as coming within the category of uterine calculi described by various writers. An interstitial fibroid may also calcify, project into the uterine cavity, and be associated with cancer of the adjacent endometrium. The irritation may be an exciting cause of of malignant disease. Cancer and calcification of fibroids are most common, it is noted, at about the same age.

(57) Puerperal Neuritis.

LAMY (*Arch. de Tocol. et de Gynéc.*, November, 1893) observes that three distinct forms of neuritis follow childbirth. First comes traumatic neuritis, the earliest recognised. It is, nevertheless, the rarest form. In nearly every case the forceps was used. Lamy describes one example in his own experience. It was a difficult breech labour; the forceps was repeatedly applied; the patient felt severe "pins-and-needles" in the left leg; paraplegia, most marked on the left side, followed. The second form is puerperal neuritis by extension, that is, pelvic inflammation extending to nerves. The pathology of this variety is simple. The third form is very interesting and more subtle in character; the nerves of the upper as well as the lower extremity became involved. The disease is infectious; Möbius and Tuilant have recently shown that it is the homologue of the neuritis which follows erysipelas, typhoid, small-pox, and other diseases. It is a parenchymatous peripheral neuritis of infectious nature. There is much clinical resemblance between infectious polyneuritis and acute central myelitis. When the upper extremity is attacked the median and ulnar nerves suffer most. Severe pain, which soon subsides, is an early symptom. The lower extremity suffers very much as in alcoholic paralysis. Treatment must be left to the neurologist; puerperal neuritis usually ends in recovery of the affected muscles, but even when electricity is properly applied cure may not be complete till the end of two years.

(58) Cavernous Tumour of the Vulva.

EICHHOLZ (*Der Frauenarzt*, December, 1892) was consulted by a single woman, aged 30, for a tumour of the vulva, which had been observed when she was three years old as a small blue spot. It had grown very slowly, yet very steadily, till it caused the patient great inconvenience. The left labium majus was converted into a tumour over 4 inches long and two broad; it extended to the perineum and anus, and the posterior part of the right labium. At first sight the tumour looked like a mass of varicose veins, much engorged; it was easily reduced in size for a time by pressure. On the other hand, pressure with the fingers led to the detection of a very tough stroma. As partial ligature did not reduce the tumour, it was extirpated. A stout needle was passed through its base, which was ligatured in both directions. Then the tumour was cut away. Some very large vessels were divided and required ligature; the skin over the wound was united by suture. Notwithstanding all precautions a considerable amount of blood was lost. The wound, however, healed by first intention. The tumour bore the pathological characters of a cavernous fibroma. The operation was performed in May, 1890; since then the patient married and aborted three times. There was no sign of recurrence in the autumn of 1893.

THERAPEUTICS.

(59) Infant Feeding.

BUDIN (*Rev. Gén. des Sciences*, Nos. 21, 23, 1893) insists on the value of systematic weighing of infants as the best test of the condition of nutrition, and the relative value of different modes of feeding. Under any circumstances there is a loss of weight during the first two or three days of life, and this should be regarded as physiological, since the secretion of milk does not become established as a rule until the third day. It may be lessened by giving sterilised milk, and in weakly infants it may be desirable to do this. Contrasting the increase of weight in infants (1) suckled, (2) partly suckled and partly fed artificially, and (3) fed artificially, it was found that during the first ten to twelve days of life the average daily gain in weight was approximately twice as great in the first class (432 grains) as in the third (218 grains), while with the mixed diet the rate of increase was intermediate (278 grains). The number of infants in the third class, however, was very small as compared with the other two, and there was the further fallacy that with the third class there was some delay in beginning the artificial feeding owing to the expectation that the secretion of milk would ultimately begin. When the first year of life is taken as the period of comparison, it is quite possible to get as rapid and steady an augmentation of weight with sterilised cow's milk as with human milk. The increase in weight may even be above the average. The quantity of milk given should be adjusted so as to lead to such a steady increase of weight as, speaking in round numbers, will lead to a doubling of the weight in the first five months, and its trebling in the first year. Failure in the quantity of the mother's milk will be shown by an arrest in the increment of weight, or by an actual decrease. This may be converted into an increment by giving sterilised milk. Loss of weight accompanied by vomiting may, however, be an indication that the quantity of milk given is too large; thus an infant, 3 weeks old, taking 24½ fluid ounces of milk, began to suffer from gastric disturbance; the quantity was reduced to 17½ fluid ounces, the vomiting ceased in two days, and the weight began to increase again on the third day. After first em-

ploying sterilised milk diluted with water, Budin was led to employ sterilised milk undiluted, and with such good results that he now employs it exclusively. He sterilises the milk by raising it to 212° F. in what is, practically, a steam bath.

(60) Two New Antipyretics.

T. von Mering (*Therap. Monatsh.*, December, 1893) describes two substances possessing marked antipyretic and antineuralgic properties. One has been named "neurodin," the chemical name being acetyl-p-oxyphenylurethan, and the formula as follows:

$$C_6H_4 \begin{cases} OC\,OC\,H_3 \\ N\,HCOOC_2\,H_5. \end{cases}$$

This substance forms colourless, odourless, and very slightly soluble crystals which produced no effects when given to rabbits in doses of 45 grains. After further experiments on animals it was administered as an antipyretic in 24 cases, and as an antineuralgic in 30 cases. In the former the dose was 7½ grains, and the temperature always fell 2.5 to 3° C., sometimes gradually and occasionally rapidly, with considerable perspiration. The temperature then rose again, this being sometimes accompanied by a rigor. Various neuralgic cases are referred to in which 15 grains were given, the first or second dose always proving efficacious. Sciatica and pains due to cerebral tumours remained unaffected. No ill effects were produced. Occasionally neurodin proved more efficacious than phenacetin, and it could therefore be given alternately or in combination with the latter. Owing to its antipyretic action being occasionally too rapid, a new product, p-aethoxyphenylurethan, was formed which, however, though perfect as a pure antipyretic, was unsuitable in other respects, and therefore acetylised, the formula then being:

$$C_6H_4 \begin{cases} OC_2H_5 \\ NCOCH_3\,COOC_2H_5. \end{cases}$$

This substance was named "thermodin." Like neurodin, it is a colourless and almost tasteless crystalline substance. Seven and a-half grain doses were given in 50 enumerated febrile diseases, showing how the temperature fell from 2.0 to 2.5° C., the fall being very gradual and unaccompanied by unpleasant symptoms. Smaller doses are recommended for phthisical patients.

(61) Hot Sand Baths in Rheumatism.

Ssolontzew (*St. Petersburg med. Woch.*, 38, 1893) advocates the use of ordinary river sand in cases of rheumatism with slight pyrexia, or pyrexia easily reducible by salicylic acid preparations, and also in cases of chronic articular rheumatism. If great fever is present salicylic acid should first be given, and then about 16 to 32 kilos. of sand are heated to 65 to 70° C., spread on a blanket, stirred until a uniform temperature of 60° is arrived at, when the patient is completely enveloped and covered with another blanket, remaining thus for 30 to 60 minutes. The loss of temperature in the sand is about 6°, but the patient's temperature is slightly raised during the bath, afterwards falling to a variable extent. The author found a considerable shortening in the course of the disease when thus treated, but considers the bath inadvisable with cachectic patients on account of the profuse perspiration induced, in those cases complicated with hyperpyrexia, and with patients subject to palpitations or arterio-sclerosis.

(62) Injection of Chlorine Gas in Pulmonary Cavities.

After referring to the difficulty of localising and determining the size of these cavities, Shurley (*Jour. Amer. Med. Assoc.*, August 26th, 1893) discusses their treatment by the insertion of rubber tube and injection of chlorine gas. There are two chief dangers in incising these cavities: (1) hæmorrhage, and (2) infection of the freshly incised surfaces. Chlorine is capable of destroying the virulence of tubercle and caseous material. The diluted chlorine was obtained by pumping air with a common rubber bulb through a Wolff's bottle previously filled with the gas and connected with the drainage tube which had been inserted into the cavity. Twelve to fifteen bulbsful may be thus introduced, and this may be repeated every two to four hours. There was very little uneasiness, and little or no cough after it: in fact, it exercised a soothing influence. The author refers to a case successfully treated in this way, which he describes as croupous pneumonia with empyema. Tubercle bacilli were present in the sputum, and a communication existed between the lung and the pleural cavity. He afterwards relates in detail two cases of advanced phthisis also treated with chlorine in this way. Both died, the one from a copious hæmorrhage eight days, and the other from exhaustion a little over three weeks after the operation. Although he admits that these cases do not seem to speak much in favour of this treatment, yet they were hopeless from the first. Early phthisis, he says, may be successfully treated by subcutaneous injections of iodine and gold chloride, but in advanced cases it should be ascertained whether the progress of the disease can be arrested by operative procedures. He draws attention to the following points: (1) the cavity should be opened near the apex without resecting ribs and by using the galvano-cautery in cutting through the lung, and (2) an antiseptic gas should be used instead of a fluid. If the layers of the pleura are not adherent it is inadvisable to proceed further.

(63) Gallanol in Psoriasis and Eczema.

Joannes Gonnon (*Thèse de Lyon*, 1893; *Ann. de Derm. et de Syph.*, November, 1893) has used gallanol (see Epitome, December 16th, 1893, par. 197) in twenty cases of eczema and psoriasis. All the cases of the former were cured in a relatively short period of time. The first effect of the treatment was cessation or diminution of the itching, and this was speedily followed by drying up of the exudation. Sometimes a little irritation was caused at first, but Gonnon thinks this may be an advantage as hastening the cure. In eczema he prefers to use the drug in the form of a pommade (grs. vii, xv, or even xxx in ℥j). In psoriasis gallanol is most effective in cases of moderate severity. It is especially valuable when the scalp, the face, or the neck is the seat of the disease. It is best used in the form of a pommade (grs. xv to ℥iiss in ℥j), or mixed with traumaticin. In old obstinate cases gallanol acts less rapidly than chrysarobin, but it is free from the drawbacks which attend the use of that drug.

PATHOLOGY.

(64) Experiments as to Cholera Immunity.

Sobernheim (*Hygien. Rundschau*, No. 22, 1893) has published some experiments which go to confirm views advanced by Klein (*Cent. f. Bakt. u. Parasit.*, No. 13, xiii). Sobernheim injected into the peritoneal cavity, in a series of guinea-pigs, stated quantities of cultivations, mixed with bouillon, of the following bacteria: proteus vulgaris, micrococcus prodigiosus, bacillus of typhoid fever, bacillus coli communis, the bacillus of Finkler, and the hay bacillus. He found that all could produce death with depression of temperature, and other symptoms closely resembling those observed after injection of the cholera vibrio, but that, as Klein had stated, the typhus bacillus and M. prodigiosus had the highest pathogenic power. Three animals which had survived small doses of the proteus, the B. coli communis, and Finkler's bacillus, together with a fourth untreated (control) animal, were submitted to intraperitoneal injections of lethal doses of cultivations of the comma bacillus. The three animals previously inoculated with the micro-organisms mentioned did not suffer any illness, while the control animal died after presenting the usual symptoms. Subsequently guinea-pigs were inoculated with cultivations of all the six micro-organisms enumerated, in which the living organisms had been killed by raising the cultivations to 65° C. for twenty minutes. Three days afterwards all six together, with a seventh (control) animal, were given injections of cholera cultivations of sufficient quantity to kill an untreated animal. The control animal died in less than eighteen hours after presenting the usual depression of temperature. The other animals did not show any signs of illness. It would appear, therefore, that they had been rendered immune, and it must be concluded that guinea-pigs may be rendered immune to the intraperitoneal injection of cultivations of the cholera vibrio by the previous intraperitoneal injection of cultivations of certain other bacilli, and that therefore the conclusions drawn from the experiments with the cholera vibrio as to immunity must be received with caution.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(65) Cirrhosis of the Liver.

SENATOR (*Berl. klin. Woch.*, December 18th, 1893) refers to differences of opinion as regards the various forms of this disease and sketches the history of our knowledge of it. The irritation may start (1) from the portal vein, a peri-portal cirrhosis resulting; (2) from the bile channels when it is due to biliary stagnation or, in addition, to the presence of inflammatory factors, such as micro-organisms; (3) from the hepatic vein, as in uncompensated cardiac lesions. This cyanotic induration is with difficulty, or not all, distinguishable from other interstitial cirrhoses, and (4) from a perihepatitis, the inflammation spreading to the intralobular connective tissue. Some of these conditions may be combined. Anatomically it may be difficult to make out the starting point of these changes. It is almost universally admitted that in hypertrophic cirrhosis with icterus (Hanot) the intralobular connective tissue is chiefly involved, and that the liver cells are more or less maintained. Later, owing to biliary stagnation, the cells perish, and blood changes occur which cause death. The author then discusses the size of the liver, the presence or absence of icterus, ascites, and splenic enlargement. (1) The size of the liver depends on the amount and condition of the newly-formed tissue and upon the behaviour of the hepatic parenchyma. In Laennec's cirrhosis the connective tissue tends to shrink and the cells perish, hence the diminution in size. In Hanot's cirrhosis there is no destruction of the minute portal channels or of capillaries, and the connective tissue does not tend to shrink. These conditions are not always present in like degree, and fatty infiltration may occur, leading to enlargement of the organ. Thus mixed forms of cirrhosis exist. (2) Icterus depends on the integrity of the liver cells and the escape of the bile. Another necessary condition is that there should be no obstruction to the lymphatics. In Laennec's cirrhosis the conditions are not favourable to jaundice, since the hepatic cells perish, the outflow to the bile is unhindered and the lymph channels are obstructed. In Hanot's cirrhosis the opposite conditions prevail; it is difficult, however, to understand the biliary obstruction, unless it lie in the medium-sized bile channels (angiocholitis). (3) As regards ascites and venous engorgement, a chronic mesenteric periphlebitis often exists. (4) The splenic enlargement is difficult to explain as vascular engorgement cannot alone account for it. Probably the same cause produces hyperplasia in the spleen as in the liver. The author would adopt the following classification: (1) Granular atrophy. He would add here, as subgroups, those cases in which (*a*) the liver is not diminished in size, but may be enlarged—atrophy may certainly occur subsequently; (*b*) icterus is present; this may be a chance complication. (2) Biliary cirrhosis with subsequent atrophy. The enlargement is due to biliary retention, and there is no splenic enlargement or portal obstruction, and it is more common in women. In a subgroup placed here the spleen may be found enlarged. (3) Hanot's hypertrophic cirrhosis, the rarest of all the forms. The whole course of the disease reminds one of a series of attacks of catarrhal jaundice. The enlarged spleen is important here. There are always cases which will not fall into any of these groups. The prognosis is more serious in cases with diminution in the size of the liver or with enlargement of the spleen. Perhaps it is less serious if the cause can be removed, such as obstruction by gall stones. In portal cirrhosis milk diet and potassic iodide have been recommended. Early puncture should be practised in ascites. In forms (2) and (3) high injections of oil, soap and water, or solutions of salicylates, together with massage of the liver and the occasional administration of cholagogue purgatives should be tried. Prolonged warm baths with massage, a Carlsbad course and suitable diet appear to be not without effect on the outflow of the bile.

(66) Acute Rhinitis in Infants.

TISSIER (*Rev. des Mal. de l'Enf.*, January, 1894) observes that as the infant breathes only through the nose, obstruction of the nasal passages may give rise to serious symptoms, not only to peevishness and failure of nutrition owing to the difficulty the infant experiences in obtaining sufficient nutriment by sucking, but also to suffocative attacks coming on at the moment of going to sleep. Such attacks are liable to be confounded with croup, the symptoms being cyanosis of the face, movements of the alæ nasi, nasal *râles*, violent action of respiratory muscles, leading sometimes to complete temporary arrest of respiration, and ending, perhaps, in convulsions. While sucking, the respiratory need may become suddenly so great that the infant throws back its head and makes an inspiratory movement, which may lead to milk being drawn into the larynx. Leaving on one side diphtheria and syphilis, three varieties of acute rhinitis may be recognised: (1) simple rhinitis commonly attributed to exposure to cold; the secretion, at first transparent, becomes muco-purulent, and crusts form about the nostrils, but the upper lip is not excoriated; pulmonary and aural complications are frequent, but the prognosis is, as a rule, good; (2) membranous coryza, due to infection with streptococci derived from the maternal passages, and generally associated with septic fever in the mother; (3) purulent coryza, strictly analogous to purulent ophthalmia neonatorum, and probably due, like it, to infection with gonococci derived from the maternal passages. This form appears soon after birth, and is purulent from the first: the pus quickly excoriates the upper lip, and the whole nose swells and becomes red, glistening, and tender. Purulent inflammations of the pharynx and nose are common complications, and, the nasal obstruction being very complete, the asphyxial attacks above mentioned are very apt to be severe. The prognosis, for this reason, is bad; in any event the inflammation is likely to continue for two months or more, and is probably one of the causes of ozæna. There may be at first some difficulty in distinguishing this condition from diphtheria and from abscess of the nose, but the history as to infection and the after-course of the cases differ. There is a milder form of this type of rhinitis associated with a more chronic (white) discharge from the maternal passages. Tissier recommends that if the mother has suffered from a vaginal discharge shortly before delivery, the nose should be cleansed with some antiseptic application; in purulent rhinitis coming on soon after birth, and therefore probably gonorrhœal, recourse should be had at once to applications of nitrate of silver; a solution of 1 in 20, or even 1 in 10, may be applied on a cotton wool swab. Injections (1 in 200) may also be used twice a day. When the most acute stage is passed, antiseptic powders may be insufflated. In simple rhinitis, boric acid lotions and the insufflation of powdered boric acid are sufficient.

(67) Tuberculosis in Childhood.

GOLDSCHMIDT (*Münch. med. Woch.*, December 26th, 1893) reports cases in which the infection was probably of intrauterine origin. (1) In the lungs of a child, aged 16 months, there were numerous broncho-pneumonic foci and many miliary tubercles. The bronchial, mediastinal, and mesenteric glands were enlarged and the last named caseous. The other organs were intact. On the under surface of the liver and shining through the peritoneum covering the longitudinal fissure at the entrance of the lig. teres there was a mass of the size of a pea, proved both microscopically and bacteriologically to be tuberculous. (2) In the lungs of a child, aged 7 months, there were numerous tuberculous nodules, some of which were partly caseous, as well as cavities varying from the size of a pea to that of a hazel nut. In one as large as a walnut, with thinly purulent contents, tubercle bacilli were demonstrated. There were also numerous intestinal ulcers. At the entrance of the lig. teres there was also a tuberculous mass, and no other tuberculous foci were found in the liver. (3) The infant of a woman subsequently dead of advanced tuberculosis was removed from its mother immediately after birth. It died, when 9 weeks old, of atrophy. Numerous large tuberculous nodules, here and there caseating, were found in both lungs, and miliary tubercles in the bronchial glands, in the liver,

spleen, and kidneys. The mesenteric glands were caseous. The tuberculous lesions were here unquestionably of longer duration than the infant's extra-uterine life.

SURGERY.

(68) Present Status of Enterorrhaphy.

Senn (reprint from the *Journal of the American Medical Association*, 1893) states that notwithstanding the attention and the careful and prolonged study that have been directed to enterorrhaphy, perfection has not yet been reached. The search for new sutures and for substitutes for sutures at the present time is a sufficient proof of this assertion. Genuine progress, it is held, has been retarded by recent neglect of the principles established by Lembert, and by the employment, as means of approximation, of foreign substances in the intestinal canal that are liable to produce gangrene, and to constitute from their size an intrinsic source of danger. The author states that in the longitudinal and incomplete transverse wounds of the intestine the Czerny-Lembert suture yields the best results. If time be an important factor, a single row of Lembert's sutures will answer the purpose. About six sutures to the inch are required. The inner row of sutures should include all the coats of the bowel except the peritoneum; the outer row all except the mucous membrane. Extravasation during the application of the sutures is best prevented by digital or elastic compression on each side of the wound. In cases of complete division the continuity of the bowel may be restored with the greatest degree of safety either by circular enterorrhaphy or by invagination by the author's well-known method. The latter, however, is not applicable in cases of intestinal obstruction, as in these instances the upper end of the bowel is larger than the lower, into which the invagination must be made. Before the sutures are applied each end of the bowel should be bevelled at the expense of the convex side. The tendency to a dangerous degree of stenosis may thus be reduced, and there is less risk of marginal gangrene on the convex side. If the separated ends of the bowel are unequal in diameter, the obliquity should be greater in the smaller end. Omental grafting is regarded as a valuable aid in circular suturing. This additional protection against perforation and peritonitis is especially indicated when the tissues at the seat of suturing have undergone pathological changes in consequence of intestinal obstruction or inflammation. A strip of omentum about an inch wide, and long enough to cover the entire circumference of the bowel, is used for this purpose. Prior to planting the graft the serous surface of the bowel half an inch from the line of sutures on each side is scarified, and the under surface of the graft is dealt with in the same way. The graft becomes firmly adherent within a few hours. The author regards internal mechanical supports made of metal as dangerous in enterorrhaphy. The objections to metallic aids do not apply with equal force to tubes, buttons, and plates of decalcified bones. These appliances, he states, merit a trial, and will undoubtedly be improved in the future. Lateral anastomosis has, it is thought, a great future. In this surgical procedure the author still remains partial to the use of his bone plates, which bring into accurate contact large serous surfaces, and serve at the same time as splints for the injured part. They thus serve the double purpose of sutures and splints. In none of the other appliances of decalcified bone that have been hitherto devised can the pressure to which the included margins of the visceral wounds are subjected be regulated with the same degree of certainty, and none of them fulfil so well the function of splints. Senn has no doubt that future experiments will result in the discovery of other and safer appliances which will prove vastly superior, and, if they do not abolish, will at least greatly limit the present field of the intestinal suture.

(69) Resection of the Cæcum.

Sendler (*Münch. med. Woch.*, January 2nd, 1894, reports the following case: A girl, aged 22, had suffered from constipation for some time past. Five months ago she was suddenly seized with severe pain in the right iliac fossa. She had to keep her bed for three weeks, but there was no fever or vomiting. Four weeks later she had a second attack, and later two more. A tolerably hard swelling was felt in the right iliac fossa, which under an anæsthetic was found to have a smooth surface, and seemed to be adherent to the abdominal wall. The diagnosis lay between malignant disease, perityphlitis, intestinal tuberculosis, or some disease connected with the uterine appendages. The first named appeared the most probable, but the age and good condition of the patient were against carcinoma. A vertical incision was made over the swelling. The cæcum, obviously transformed into new growth, was found adherent to the abdominal wall. It also involved a portion of the colon, ileum, and adjacent mesentery. The whole growth was extirpated, the ileum being implanted into the colon after the manner of pylorectomy. The parietal peritoneum was so stitched as to make the site where the tumour was adherent extraperitoneal. The subsequent course was very satisfactory; she was up in three weeks, and left the hospital a week later. Four and a half months afterwards she was in perfect health, the bowels acting once or twice a day. The growth had started in the ileo-cæcal valve, and was a carcinoma.

(70) Jejunostomy.

Albert (*Wien. med. Woch.*, No. 2, 1894) describes a new method of jejunostomy which he has recently practised in a case of carcinoma of the pylorus, the conditions having been found unfavourable both to resection of the growth and to gastro-enterostomy. After the abdominal cavity had been opened by a transverse incision on the right side, the portion of jejunum which first presented itself was drawn through the opening. This incision was then closed along the greater part of its extent by provisional suture. An anastomosis was established at the base of the loop of jejunum between its proximal and distal portions, in order to permit a direct flow of bile and pancreatic secretion from the upper to the lower part of the intestinal canal. A second short incision was next made in the abdominal wall parallel with and about 1½ inch above the first incision. The skin between the two openings having been detached from the subjacent structures, the free portion of the loop of jejunum was drawn under the bridge thus formed, and fixed by sutures to the edges of the upper wound. The lower and original wound was afterwards completely closed. The intestinal loop was so disposed that the part corresponding to the anastomosis lay just within the parietal peritoneum, whilst the main and free portion of the loop followed a straight and subcutaneous course to the outer surface of the abdomen. By this plan, as in certain recent modifications of gastrostomy, the author hoped to prevent any subsequent regurgitation of intestinal contents. The attached fundus of the loop was opened by the application of Paquelin's cautery on the fourth day. The patient progressed favourably for a short time after the operation, and was fed through the fistula with abundance of milk, soup, wine, and eggs. The malignant disease, however, extended very rapidly, and death occurred from exhaustion at the end of the eighth week. A second case is recorded in which this operation was performed for the relief of extreme prostration and hunger caused by extensive ulceration of the stomach and œsophagus from the action of caustic. Surgical intervention in this instance seems to have been too long delayed, as the patient died from collapse in the course of a few hours.

MIDWIFERY AND DISEASES OF WOMEN.

(71) Endometritis in Pregnancy.

Tarnier (*Journ. des Sages-Femmes*, January 1st, 1894) lays great stress on the complications which endometritis may set up in a patient who becomes pregnant. The acute form is generally secondary. Chronic endometritis attacks the decidua vera, which becomes thickened and abnormally vascular. Before pregnancy the patient has usually suffered from free uterine leucorrhœa. The cause of the endometritis is usually gonorrhœa, contracted from the husband. Syphilitic endometritis is probable, but Tarnier does not speak decidedly on this matter. Endometritis, a fertile source of abortion, is difficult to recognise during pregnancy. There is abdominal pain, as in many

other complications of pregnancy. It is only when endometritis has already been diagnosed before gestation that this pain can be taken as a symptom of its continuance. Occasional losses of blood are characteristic. Tarnier's opinion on treatment is gloomy, for he holds that endometritis cannot be treated as long as the pregnancy lasts, so that the risk of abortion cannot be entirely counteracted. Only when syphilis is suspected can benefit be derived from drugs. After delivery or abortion the endometritis can be treated by the free use of the curette. The increased vascularity of the decidua vera explains the frequency of hæmorrhages during pregnancy. The decidua reflexa is rarely attacked, hence the placenta is usually found healthy, and the child may be delivered alive, and even reared.

(72) Radical Cure of Prolapsus Uteri.

RICHELOT (*Union Médicale*, January 6th, 1894), in reference to the recent discussion on vaginal hysterectomy in the treatment of prolapse, maintains that colporrhaphy is essentially radical. It is efficacious and not difficult. Operations for fixing the vagina high up in the pelvis are based on illusion. They do not prevent future prolapse, and, as sutures have to be passed through the pelvic connective tissue, they are not without danger. Richelot has seen an unsuccessful case, he performed colporrhaphy and cured the prolapse at once. It must be remembered, he observes, that it is not the uterus that pushes down the vagina. The prolapsed vagina drags down the uterus. Sometimes a bulky, bleeding, painful uterus requires removal when prolapsed, though supravaginal amputation of the cervix is often sufficient. Even after recovery from hysterectomy, the vagina is apt to prolapse and draw down the bladder and rectum, so that colporrhaphy is rendered necessary. Such complications, which Richelot has known to occur, only show that, as he maintains, colporrhaphy is alone the true radical operation in prolapse. Hegar's colporrhaphy is the best of its kind. A triangular piece of the posterior, and an elliptical piece of the anterior, vaginal wall are dissected up. Interrupted silkworm gut sutures are passed from above downwards under both the raw surfaces. Richelot has seen recurrence of the prolapse in patients with extremely lax tissues, but in such cases he has operated a second time, always with success. The needles must be passed well into the prorectal connective tissue.

(73) Drawing Down Foot in Breech Presentations.

POTOCKI (*Ann. de Gynéc. et d'Obstét.*, November, 1893) strongly advocates this practice. Not only is it often imperative in difficult breech cases, but it should always be practised to anticipate any of the difficulties which so often arise. The breech and thigh are badly shaped for the forceps or fillet, and inguinal traction with the fingers is sometimes impracticable. When the foot is drawn down it can be pulled forcibly, yet without danger, whenever necessary. The manœuvre is practicable at any stage of a breech labour after dilatation; of course it is most difficult when the breech is deeply engaged. Yet even when the buttocks press on the maternal perineum, Potocki declares that the foot can be drawn down. On no account must the foot be meddled with during the period of dilatation. The best time to choose is directly after the rupture of the membranes. The anterior foot is to be preferred; external manipulation often assists the operator. After the foot has been drawn down on prophylactic principles, the labour may be left to itself unless any complication arises.

(74) Stricture of the Female Urethra.

KLEINWÄCHTER (*Zeitschr. f. Geburtsh. u. Gynäk.*, vol. xxviii, Pt. I. 1894) adds three cases of this rare condition to medical literature. The first patient was a multipara, aged 53; her youngest child was 10 years old. For seven years she had been subject to dysuria with symptoms of catarrh of the bladder. An extensive stricture of the urethra was discovered; it was very tight. The patient did not submit to treatment. Kleinwächter also records an instance of senile stricture, an affection first defined by Herman. The patient was 56. She was obliged to press the hypogastrium in order to empty the bladder completely, and slight pain on micturition set in after the trouble had lasted some time. The stricture was considerable but not nearly complete; the thickening and hardening of the urethra were very marked. No. 6 was the largest sized instrument (Hegar's dilator) that could be passed. This is the ninth recorded case of senile urethral stricture. In Kleinwächter's third case the cause of stricture was damage to the urethra during labour. The pathology of such cases is, of course, easy to understand. The commonest cause of stricture of the female urethra is undoubtedly gonorrhœa. As the tract is short and kept well dilated by the stream of urine passed during micturition, stricture after that disease is less frequent than in man.

(75) Pregnancy and Hepatic Abscess.

CHAMBRELENT (*Arch. de Tocol. et de Gynéc.*, December, 1893) relates a case in which a patient was delivered of her first child four years ago. There was central placenta prævia and fever in the puerperium. The temperature rose and fell very irregularly between 102° and 104°; but the patient was discharged "cured" on the seventeenth day. On December 14th, 1892, she was admitted into the Bordeaux Lying-in Hospital, pregnant nearly to term. The temperature was over 103°. The patient complained of severe pains in the right side of the chest, which bulged, and resonance was diminished. Chambrelent diagnosed pneumonia. On December 15th a healthy child was born spontaneously. The mother died on the 17th. The liver was in a universally suppurating condition, looking like a dark broth. Chambrelent traced the liver complication to the first confinement, when phlebitis must have occurred and affected the liver. At the second labour germs remaining in the liver had been disturbed, and fatal complications resulted. Though the liver was almost destroyed, no uræmic convulsions were observed. Coyne related a case, during a discussion on Chambrelent's clinical report, in which a man had pain in the right side of the thorax after a gunshot fracture of the arm. Three years later he died, and four abscesses were found in the liver and a suppurating area in the lung. Uræmia is often absent in very rapid attacks of hepatic abscess. Several other obstetricians doubted whether the abscess was chronic in Chambrelent's case.

THERAPEUTICS.

(76) Diaphtol.

GUINARD (*Lyon Méd.*, January 7th, 1894) made a communication on this substance at the December sitting of the Lyons Society of Medical Sciences. It is the substance named "quinaseptol" by Merck, the correct name of which is orthoquinalinmetasulfonic acid; the term "diaphtol" has been proposed owing to its analogy with oxyquinaseptol, which is called diaphtherin. Its characters, and the chemical tests by which it may be recognised, were described. The bactericidal action of the substance is not great; but when dissolved in alkaline solutions it is transformed into a diaphtolate, which is more active. A solution of diaphtolate of soda is yellow and clear; after thirty-five to fifty minutes' contact with the bacillus pyogenes fœtidus, or staphylococcus pyogenes, it kills the organism. A 0 g. 0.05 per cent. solution attenuated a culture of anthrax, and when the strength was increased to 0 g. 10 per cent. it destroyed the culture. The toxic effects of diaphtol are slight; a dog of 16 kilogrammes took 3 g. without being inconvenienced otherwise than by slight lowering of its temperature. The urine contained a large quantity of the drug; it was yellow, and not at all acid. Such urine keeps for several days without putrefying, and rarely undergoes ammoniacal fermentation; fermentation is produced with great difficulty, even when the urine is mixed with the micrococcus of ammoniacal fermentation, putrefaction occurring without the ammoniacal odour being evolved. The lethal dose in a rabbit was 450 c.c. of a 2 per cent. solution administered by intravenous injection, which is equal to 10 g. 80 c. of the drug, or 3 g. 10 c. per kilogramme of the rabbit. The liver of the rabbit kept in a stove, at 35°, for four or five days without decomposing, and the carcass of the animal kept still longer at the ordinary temperature. Diaphtol is easily tolerated by the gastric and intestinal mucous membrane, and is

probably destined to play an important part as an agent in the production of internal antisepsis, especially of the genito-urinary tract, since it is so little toxic, possesses sufficiently great antifermentative properties, and is eliminated *en masse*, and without decomposition, by the urine.

(77) Electricity in Chronic Rheumatism.

Massy (*Arch. d'Electricité Méd.*, November 15th, 1893) speaks very favourably of this mode of treatment, if carried out patiently and systematically. Treatment must be both general and local—the former by means of the alternating dynamo current in the electric bath, or else by means of statical machines; the latter by the continuous current applied to the joints. The mode of procedure is as follows: When the joints are tender and painful, a current of 10 to 30 milliampères is made to traverse them in various directions for a period of from ten to twenty minutes at a time. If movements of the joint are difficult, or if muscular wasting be present, the treatment is to be further extended to the surrounding nerves and muscles, using the negative pole chiefly for them, and interrupting the current frequently to throw the muscles into contraction. Any tender points may be touched with the faradic brush for two or three minutes, or with the positive pole and constant current. The progress is slow, but effectual. A useful table of references terminates the paper.

(78) Treatment of Gastric Neuritis in Childhood.

The *Archives of Pediatrics* (December, 1893) contain the report of a discussion at the American Pediatric Society on gastric neurosis in children presenting symptoms resembling meningitis. It was raised by Irving Snow, who related the case of a girl of neurotic parentage, who, from the age of 19 months, was liable to attacks of illness characterised by gastric distress and vomiting of acrid fluid, and accompanied during the first two years and a half by convulsions at the onset. In an attack at the age of 8 she was found on the tenth day to be apathetic, refusing all food, and lay in bed with the knees drawn up. The abdomen was boat-shaped, but not tender. The face was ashy, the tongue coated, the temperature was 101.5° F., the pulse 126, but there were no physical signs of visceral disease. At intervals of from one to three hours she would complain of burning in the stomach, would swallow some water and then vomit a very acrid fluid. There was constipation, but its relief by enema produced no change in the symptoms. The patient got better suddenly on the fourteenth day. In another attack the vomited matter was found to contain a great excess of hydrochloric acid. Alkalies were followed after a short time by vomiting of more acid fluid. Large doses of chloral and bromide were then given by the rectum. The child slept for nearly twenty-nine hours, and awoke well. Holt stated that in a similar case the ratio of uric acid to urea in the urine sank during the attacks to about one-third of that present in the intervals, and Christopher reported a similar observation in the adult. Rotch said that he had called attention to the condition in children about eight years ago, and that Leyden had made similar observations in adults. The symptoms were to be attributed to reflex disturbance, and were not influenced by diet. An attack might be determined by a blow on the epigastrium. The best treatment was the withdrawal of all food for twenty-four to thirty-six hours and the administration of nerve sedatives by the rectum.

(79) Treatment of Chronic Gastric Ulcer.

Stepp (*Therap. Monatsh.*, November, 1893) describes a method which he has successfully followed during the last four years, the object of which has been to prevent fermentative changes in the organ with their damaging influence on the gastric walls, and, further, to exert a beneficial and tonic action on the damaged surface. This he has effected by the frequent use of a $\frac{5}{8}$ per cent. aqueous solution of chloroform, with the addition of subnitrate of bismuth, the latter, however, being of secondary importance. The water is given in quantities of 1 to 2 bottles daily. The author says chloroform has no anodyne or narcotic properties when administered internally, its effects being more those of an astringent, a tonic, and an antiseptic. A few cases are recorded showing how early the patients became convalescent under this treatment. When vomiting or hæmatemesis complicated the affection the author found the chloroform acted effectually in quenching thirst, and arrested nausea and hæmorrhage. A burning sensation, probably at the seat of the ulcer, is always produced at first, but disappears completely in eight to ten days. No unpleasant consequences occurred, but indirectly a clean tongue and improved appetite seemed to be produced. At the end of the second week beef-tea could be administered, during the third eggs, and afterwards selected meats could generally be added to the preceding foods.

PATHOLOGY.

(80) The Duration of Life of the Diphtheria Bacillus.

In a case of diphtheria occurring in a child, Abel (*Centralbl. f. Bakt.*, December 9th, 1893) had an opportunity of examining bacteriologically the article (a wooden toy) suspected of harbouring the contagium. Portions of the article were washed in sterilised broth, and from this serum and agar tubes were inoculated, and guinea-pigs injected subcutaneously. The tubes showed, in addition to various organisms, bacilli which in all respects resembled those of diphtheria. The animals died with all the symptoms of that disease, and diphtheria bacilli were found at the seat of inoculation. This is the first time, as far as Abel is aware, that the specific organism has been found in the object suspected of conveying diphtherial contagion. Circumstances proved that the article could have been infected only on two occasions, nine years and six months respectively before the investigation. A review of published observations on the subject shows that the former is far too long a period for the duration of infection in diphtheria. Especially valuable in this respect is the experience of Norwegian physicians, since in Norway, with its scattered population and limited traffic, the sources of error which obtain in more densely populated countries can be in large measure excluded. Norwegian records bear out the most reliable observations made elsewhere in fixing one year as the longest period during which the contagium of diphtheria can exist in fomites. Abel observes that the fact, pointed out by Loeffler and others, that virulent diphtheria bacilli are to be found in the fauces of patients during the first month of convalescence from the disease, points to the possibility of infection of objects some time after the subsidence of the actual malady. In conclusion, he emphasises the necessity for thorough disinfection of the patient's secretions and excretions, and of all objects which have come into contact with him.

(81) Urine Agar in the Cultivation of the Diphtheria Bacillus.

In view of the fact that the presence of the Klebs-Loeffler bacillus in diphtheritic membranes cannot always be determined by mere microscopic examination, cultivation experiments being often—according to many, in all cases—necessary, Schloffer (*Centralbl. f. Bakt.*, Bd. xiv, No. 20) remarks that it is desirable to have for this purpose a culture medium at once suitable and easily prepared. The bacillus grows but indifferently on the ordinary media, and the serum recommended by Loeffler and others is somewhat difficult to prepare and therefore unsuitable for general purposes. Schloffer finds that by adding urine to agar broth a nutrient medium is obtained which, whilst it does not give such consistently good results as Loeffler's serum, is thoroughly satisfactory for practical purposes, permitting quick and sure diagnosis. Urine agar has an advantage over serum, in that much less skill and apparatus are needed in its preparation. The medium employed by Schloffer is a mixture of peptonised broth agar (2 per cent.) 2 parts, sterilised urine 1 part. The latter is obtained direct from the body after washing the external meatus with sublimate. The urine first passed is rejected, the rest is received into sterilised vessels. This may either be used at once or after subjection to a temperature of 70° to 80° C. for half an hour as an additional precaution. The addition of glycerine (6 per cent.) improves the nutrient quality of this medium.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(82) Pancreatic Cirrhosis and Diabetes.
Fleiner (*Berl. klin. Woch.*, January 1st and 8th, 1894) discusses the relation of diabetes to pancreatic cirrhosis of calculous and arterio-sclerotic origin. He emphasises Minkowski's statement that diminished function on the part of the pancreas may produce slighter forms of diabetes. He then relates a case of severe diabetes in a man, aged 40, in whom the cirrhosis of the pancreas was secondary to calculi. Some years previously the patient had suffered from severe cardialgia, which was subsequently looked upon as pancreatic colic. Up to a month before admission he seemed to be quite well, and for the past few days only had suffered from excessive thirst and hunger. After an attack of diarrhœa, four months after admission, he died of gangrenous pneumonia. The pancreas was hard and the duct filled with calculi. The microscope showed the presence of abundant fibrous tissue. Here and there a few gland alveoli were seen lined with small cells still retaining their nuclei. The minute ducts were dilated. The small arteries showed thickening of the intima. There was no necrosis, thrombosis, nor hæmorrhage. The diabetes occurred long after the pancreatic colic, when a large part of the gland had atrophied. Small abscesses were found in the liver, probably due to extension of the inflammation upwards from the intestine, and the gangrene of the lung was of embolic origin. A second case is also recorded in a well-nourished woman of 57, in whom the pancreatic disease seemed to be due to arterio-sclerosis. During the past six years she had suffered from occasional attacks of pain supposed to be caused by gall stones. Five months ago she began to feel weak and her appetite became excessive. The second aortic sound was accentuated. Deep pressure in the epigastrium caused pain. A few days after admission she was seized with collapse, from which she rallied. Later dyspnœa appeared and then fatal coma. Healthy gland tissue was only found in the head of the pancreas. The splenic vein was thrombosed and the pancreatic tissue near it completely necrotic. The arteries showed advanced obliterative endarteritis, and the necrotic and cirrhotic changes in the pancreas appeared to start from them. The thrombosis in the splenic vein was due to a septic infection. The diabetes in this case had remained latent. Arterio-sclerotic changes can induce in the pancreas, as in other organs, cirrhosis, and when a large part of the pancreas has disappeared diabetes may be produced. An absolute distinction between diabetes with or without wasting as due to pancreatic disease cannot be maintained. For many cases of slight diabetes, described as senile, etc., the term arterio-sclerotic diabetes would appear correct. The intermittent course, the presence of cardiac or renal disease, gangrene, sudden death owing to cardiac failure would fit in with the idea of arterio-sclerosis. Hitherto pancreatic preparations have been used without effect in diabetes. It must remain to be determined whether the diminution of sugar excretion by rigid diet or the improvement in the effects of the arterio-sclerotic disease by a departure from such diet is the wiser course.

(83) Tuberculous Vegetative Endocarditis.
Londe and Petit (*Arch. Gén. de Méd.*, January, 1894) say that tuberculous lesions of the endocardium have been classed as (1) those with tuberculous granulations, (2) the caseous, and (3) the vegetative. In the vegetative form there may be some doubt as to its nature, as bacilli have been but rarely found in it. The following case would lead the authors to suppose that some of these undetermined forms are brought about through the agency of the toxins excreted by the bacilli. A woman, aged 25, had infantile hemiplegia when she was 2 years old, and subsequently epilepsy. On admission, besides the hemiplegia with wasting, there was athetosis and hyperæsthesia of the paralysed side. The present illness began with phlebitis in the left leg. Three weeks later there was more or less generalised œdema and albuminuria. A systolic murmur was heard over the apex, and another, but distinct from the first, over the xyphoid cartilage. There was no fever. Death occurred in an attack of dyspnœa. The lungs contained old tuberculous lesions as well as grey granulations. There was a sero-fibrinous pleurisy and pericarditis. The myocardium was pale and slightly yellowish. Three or four soft vegetations were found on the mitral cusps, the largest being of the size of a lentil. The tricuspid orifice was functionally incompetent. There were no clots in the iliac or femoral veins. During life the clinical picture was that of cardiac disease with asystole. There was nothing resembling infective endocarditis, except perhaps the phlebitis. The asystole was due to (1) the trouble in the pulmonary circulation owing to the extensive tuberculous disease, and (2) the myocarditis as well as to the mitral lesion. One of the vegetations inoculated into a guinea-pig produced generalised tuberculosis. A minute vegetation crushed showed no tubercle bacilli. In only one of many sections were one or two bacilli found near the base of the vegetation. None of the characteristic structure of tubercle could be seen. The presence of the bacillus about the vegetation is in favour of the tuberculous nature of the vegetation, which to all appearance was non-tuberculous. The authors refer to Tripier's case, in which a tuberculous granulation was found at the base of the vegetation. Inoculation in the above reported case would seem to prove the tuberculous nature of the lesion. The authors would think that the vegetation without tubercle bacilli in its tissue had arisen under the influence of the toxins.

(84) Brown-Sequard's Paralysis.
Herhold (*Deut. med. Woch.*, January 4th, 1894) reports a case in a man, aged 47. Twenty-five years ago he was stabbed in the neck, and this was followed, according to his own account, by paralysis affecting the arms, legs, and bladder. The paralysis passed off in a few weeks, except in the right leg, which did not improve for a year and is still weak. On admission a scar 1 cm. long and ½ cm. broad was seen 1 cm. to the right of the sixth cervical spine. The right leg was dragged, and Romberg's symptom was present. When the right leg was flexed involuntary spasm appeared. The tendon reflexes were increased, but the superficial diminished on the right side. The reaction to faradism was lessened, and that to galvanism increased in the right leg. The muscular sense was also diminished here. From the third rib downwards sensation to touch, pain, and temperature was lost on the left, whereas there was hyperæsthesia on the right side. The case is remarkable owing to its long duration. The left leg sweated more readily than the right—an unusual occurrence, since the vasomotor impulses do not cross in the cord. Although the scar was opposite the sixth cervical, the injury to the cord must have been on a level with the third dorsal vertebra, the knife having entered obliquely from above downwards. The more extensive paralysis at first must have been caused by inflammation. The exaggerated reflexes in the right arm are said to be due to secondary degeneration.

(85) The Diagnosis of Croupous Pneumonia in Infants.
Federici (*Arch. Ital. di Clin. Med.*, September 30th, 1893) states that the urine should be examined in all cases of obscure febrile affections in children with the view of determining the presence or absence of chlorides and peptone. The presence of peptones and the absence of chlorides justify, he states, the diagnosis of croupous pneumonia.

SURGERY.

(86) Intracranial Neurectomy.
Louis Tiffany (*Annals of Surgery*, January, 1894) reports four cases of intracranial neurectomy and removal of the Gasserian ganglion, which he had performed for the cure of intractable trigeminal neuralgia. The operation in all cases was similar to the one described by Hartley in 1892. The trigeminal neuralgia in all the cases was said not to be due to disease of the brain. In two of the four cases the middle meningeal artery was divided whilst making the bone flap, and was tied by passing a single silk ligature

through the dura proximal to the tear by means of a curved needle. On first opening the head it was observed that the brain seemed to fill the cranial cavity, and the dura appeared tense; this was due to the presence of cerebro-spinal fluid. In order to give more room the dura mater was incised and the cerebro-spinal fluid allowed to come away. After this procedure the brain was found to lie away from the field of operation, the dura lying wrinkled upon its surface. In this way ample room was afforded for uncovering the nerves and exposing the ganglion. In uncovering the parts of the nerve the second portion was first laid bare and a ligature passed around it with a curved aneurysm needle. The dura was then separated from it backwards, and thus the third division and ganglion were exposed. A ligature was passed around the division with the needle. Gentle traction was then made on the ligatures, and with a long, sharp curette the nerves were separated and the adjacent portion of the ganglion removed; next the second and third portions of the nerve were divided at their foramina of exit from the skull. The first division was exposed, but in no way interfered with. In none of the four cases reported was any disturbance of nutrition or function of the eye apparent. This result is attributed to the method adopted for isolating the nerves and the ganglion, and confining the operation exclusively to them. The operation in each case was lengthy, but complete recovery rapidly followed in each case. Three of the cases healed at once, the fourth was infected by the patient scratching it. In one case, fourteen months after the operation, sensation had returned to a certain extent. The sense of taste was preserved. In one case the author thought that he isolated and recognised the motor portion before dividing it, but not having the means of proving this by electric stimulation the whole was divided. By leaving the motor branch intact, the collection of food in the cheek of the paralysed side would be obviated; and on this account it is suggested that in future operations an effort should be made to leave this portion undisturbed.

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(87) Omphalectomy.

Bruns (*Centralbl. f. Chir.*, No. 1, 1894), in reporting a case of operation for the radical cure of umbilical hernia, states that the name "omphalectomy" has been given by Keen to a procedure in which the margins of the hernial orifice are cut away. By removing the fibrous tissue of the umbilical ring the surgeon, it is held, can more effectually close this opening and ensure, through direct adhesion of the raw edges, its permanent obliteration. The operation performed by the author is one devised by Condamin as a modification and extension of Keen's method. A curved incision about 6 inches in length was commenced in the middle line, just above a large umbilical hernia of the size of a child's head, and carried along the base of the tumour on the right side as far as a corresponding point in the middle line below. In the line of this incision the whole thickness of the abdominal wall, including the peritoneum, was divided. On raising the inner edge of this wound, the inner opening of the hernial sac, through which the tips of two fingers could be passed, was freely exposed. The neck of the sac was now excised and a short transverse incision made from the middle of the outer edges of the long wound. The sac contained large masses of adherent omentum, which could now be readily detached and returned into the abdominal cavity. The two ends of the curved incision were next joined by a similar curved incision made through the abdominal wall on the left side of the hernia. The sac with its covering and the soft parts around the hernial ring were then removed. The large wound thus formed was carefully closed by two rows of sutures, one row including the deeper layers of the abdominal wall together with the peritoneum, the other and superficial row bringing together the edges of the skin. The patient, a very stout woman, aged 26, made a rapid recovery; the wound healed by first intention, and the large hernial tumour was replaced by a delicate linear cicatrix. Bruns claims for this operation the following advantages: the most difficult stage of an operation for radical cure of hernia—that of returning the contents of the sac—is rendered easier and shorter, and the duration of the patient's stay on the table—an important element in intraperitoneal operation—is thus lessened; the conditions for primary healing of the wound are more favourable, as not only all parts of the hernial tumour but also the fibrous structures of the ring, which are apt to become gangrenous, are wholly removed; there is less risk of relapse, as the hernial orifice, together with the adjacent linea alba, is completely obliterated.

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(88) Early Operation for Ileus.

Dörfler (*Münch. med. Woch.*, December 26th, 1893) reports four cases, three of which recovered after operation. (1) A woman, aged 40, was seized with violent abdominal pain, vomiting, and constipation. Operation was not allowed till the sixth day. When the abdomen was opened distended gut presented itself, a portion of which, as big as a pfennig piece, was greenish-black in colour. An artificial anus was made, but the patient died five days later. This case was operated upon late. (2) A woman, with an umbilical hernia as big as a goose's egg, was seized with pain and vomiting. On the second day the abdomen was opened. The umbilical hernia contained mesentery only. In the rapid examination the intestines had to be partially turned out of the abdomen. A portion was at length reached which was twisted several times on itself. This was liberated, and the patient made a good recovery. (3) A woman, aged 42, was operated upon by C. Koch on the third day, when a thick constricting band was found, ligatured, and divided. The bowels acted on the fifth day, and the patient recovered. (4) A man, aged 35, was suddenly seized with pain, etc. He said he had a double inguinal hernia, but the rings were found free. In the region of the cæcum a resistance was felt, which became more distinct on the following day. Operation was decided on, and a small knuckle of intestine was found in the right internal ring, but the strangulation was not here. When the abdomen was opened a distended coil appeared. The obstruction was found to be due to a band, but as the intestine was in one place of a dark reddish-brown colour, it was attached to the abdominal wall. Three days later 15 cubic centimetres of the gut were resected. The patient recovered. The author says that the gut had become gangrenous in twenty-eight hours. If with the signs of obstruction, namely, vomiting, pain, absolute constipation, absence of fever, a local cause can be made out, immediate operation is indicated. If nothing can be found, a purgative (preferably castor oil, or senna infusion), combined with large enemata, may be given in quite early stages, and the best results are sometimes seen. The absence of a recognisable local cause for the obstruction should not be allowed undue weight. By early operation the author understands a period before symptoms of heart failure and peritonitis supervene. In very acute cases only twelve to fifteen hours, and in subacute cases at most three days should be allowed for other treatment. With the patient in good condition a large incision can be made. The author draws attention to the success obtained in the above cases, even in unfavourable surroundings. Asepsis must be strictly attended to.

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(89) Mastoid Operations.

Bishop (*Med. News*, Philadelphia, November 11th, 1893) says the mastoid process should be opened under the following conditions: (1) When there is acute inflammation of the bone which resists palliative treatment; (2) when repeated swellings and abscesses occur; (3) when there is bulging of the posterior and superior wall of the meatus with suppuration of the middle ear; (4) when there is a fistula; (5) when there are severe pains on the same side of the head as the diseased ear, and resisting all other methods of treatment; and (6) when a foul otorrhœa cannot be cured by any other means. The author has adopted two methods of procedure; in the majority of cases Schwartze's operation was performed; in a few cases Stacke's method was followed. Good results were obtained in both sets of cases. In order to illuminate the parts during the operation, it is recommended that a mirror be placed upon the operator's forehead, from which the light is reflected. It is best to allow the wound to granulate and close up from the bottom, and not to close it at the time of the operation. As a dressing, Bishop advises the use of dithymol di-odide, which is sprinkled over the

wound surfaces, iodoform gauze being laid on afterwards so as to keep the wound open.

MIDWIFERY AND DISEASES OF WOMEN.

(90) Presentations of the Pelvis or Lower Extremities and the Etiology of Congenital Torticollis.

Koettnitz (*Volkmann's Samml. kl. Vorträge*, No. 88) speaks of the causes of these presentations, and besides those generally mentioned in textbooks, insists on there being a special tendency to their occurrence in particular individuals and sometimes in various members of the same family. He mentions a case of breech presentation in a primipara, whose eldest sister and mother had likewise breech presentations at their first confinements; the birth of one of these three women was itself a case of breech presentation. As another example he mentions the case of a woman who had been confined four times; two of these confinements were instances of breech presentation, and her sister and mother had each had one breech presentation. In such presentations the mother runs no more risk than in ordinary ones, but Koettnitz contrasts this with the extra danger to the child from the chance of asphyxia and accidents, such as fracture of the arm or clavicle, or separation of an epiphysis. In such cases the injuries to bones, etc., are very likely due to forcible delivery by the doctor or midwife, but he points out that injuries to the sterno-cleido-mastoid muscle may occur even when there has been no interference at all, and in these cases he attributes the injuries to the sudden and violent movements which may occur in the spontaneous delivery of the aftercoming head. After mentioning various theories of the etiology of congenital torticollis, he criticises Golding-Bird's view that it is always associated with some degree of facial hemiatrophy, that it is right-sided, and due to a brain lesion, such as the "acute primary polioencephalitis" described by Strümpell. In respect of Golding-Bird's view Koettnitz mentions a case of transverse presentation, where the child was extracted after podalic version, and soon after birth had left torticollis, facial hemiatrophy, and divergent strabismus. Another child was born spontaneously (head presentation), and in this case the head was asymmetrical: the left side of the face was the smaller, though the neck was bent to the right. Petersen thought that congenital torticollis was due to amniotic adhesions causing faulty intrauterine position of the fœtus, and the view that faulty intrauterine position may cause contractures gains support from the experiment on a young rabbit, where contracture takes place after the origin and insertion of the gastrocnemius have been kept somewhat approximated for four weeks. Bohn and others have recorded cases of sterno-mastoid hæmatoma, not followed by contracture; but in these cases the hæmatoma was noticed at once, and treatment was probably employed to prevent the contracture from taking place. It is suggested that the continued approximation of the ends of the sterno-mastoid, induced by the presence of a hæmatoma, may be the cause of ultimate true contracture in this muscle, just as in the experiment with a young rabbit's gastrocnemius. Koettnitz sums up as follows: hæmatoma of the sterno-cleido-mastoid muscle may follow spontaneous breech delivery; torticollis more often follows breech delivery; the torticollis may appear at birth when due to intrauterine causes, or may be noticed only after some time when due to sterno-mastoid lesions produced during birth.

(91) Primary Tuberculous Disease of the Fallopian Tube.

Menge (*Centralbl. f. Gynäk.*, No. 1, 1894) operated on a patient with a strong family history of tubercle; the local disease was certainly developed shortly after marriage, but notwithstanding the patient's own antecedents, and the fact that the husband was not examined, Menge held that the disease was due to infection during coitus. The patient was 20. Her father died of pulmonary phthisis; five sisters died young, and were all reported to be "scrofulous." The patient had swollen glands when young, and when 6 was laid up for three months with ascites and nephritis. The period was regular. She married a year before the operation. Six weeks after marriage abdominal pain set in, and about a month later a swelling was noticed in the right iliac fossa. Menge detected a large tense cyst in the pelvis to the right of the uterus, and a smaller cyst to the left. He operated, removing both tubes, which were dilated and full of pus. Small tuberculous deposits studded the peritoneum. By cultivation and experiment it was found that the pus was tuberculous. The operation was performed on May 10th last year. In August she was in perfect health, and had gained weight. Menge concluded that as the tuberculous disease was in an advanced stage in the tubes, and in an early stage in the peritoneum, the tubes were the original seat of the disease. Bumm explains the disappearance of peritoneal tubercle after exploratory operations. Ascitic fluid prevents the escape of white corpuscles. During operation the fluid is allowed to escape. The corpuscles afterwards exude, and destroy the tubercle bacilli.

(92) Placenta Prævia.

Rueder (*Münch. med. Woch.*, No. 33, 1893), after experience of twelve cases in the Erlangen Lying-in Hospital, agrees with Hofmeier, that Braxton Hicks's combined internal and external version is the best treatment, directly the os has dilated till it can admit two fingers. Every practitioner who is already used to obstetric manipulations should follow that rule. A young or inexperienced doctor should first employ the iodoform gauze tampon: then he can safely wait until the cervix is sufficiently dilated to render combined version easy. In three of Rueder's cases there was central placenta prævia; all the children died, but the mothers recovered and the puerperium was always normal. In the four cases of placenta prævia lateralis all the children as well as all the mothers were saved. In the remaining five cases of placenta prævia, the variety was marginal, and the mothers were all saved; but in three there was rise of temperature during childbed.

(93) The Bimanual Signs of Early Pregnancy.

Robert Dickinson (*N. Y. Journal of Gynec. and Obstet.*, November, 1893) lays great stress on bimanual exploration for the diagnosis of early pregnancy. Bimanual examination, he observes, sometimes reveals a longitudinal furrow or fold on the body of the uterus. A well-marked variation in density or resistance is found in the body of the uterus in some cases, as though a small almond were lodged in the cavity at the point where the resistance is felt. This dense spot probably denotes the location of the ovum. The longitudinal fold or furrow has been found most commonly between five and eight weeks after the beginning of the last menstruation, and the dense spot from the fifth to the fourteenth week. Dickinson gives six bimanual signs of early pregnancy: (1) Bulging of the body of the uterus; (2), elasticity of the body of the uterus; (3) compressibility of the lower uterine segment (Hegar's sign); (4) a transverse fold above the lower segment. These four signs appear between the fourth and sixth weeks. Between the sixth and eighth appear the two signs above mentioned, namely, (5) the longitudinal fold, and (6) the denser spot. Dickinson believes that compressibility of the isthmus and the change in consistency of the body are probably the most important signs.

THERAPEUTICS.

(94) Salol in Phthisis.

Lutz (*Fortschritte d. Medizin*, No. 23, December, 1893) refers to the frequent failures after the adoption of new remedies for the treatment of phthisis, and proceeds to describe a method he has now successfully employed during more than two years. It consists in giving the patient about 1½ drachm of salol daily, the single doses being 20 to 30 gr. Latterly it was found that 6 to 7 gr. per diem sometimes suffice to give similar results, and the powder is recommended to be given in capsules or wafers. The reactions of salol were found in the urine eight days after discontinuance of the drug. Care is required at first, and renal disease contra-indicates its use. Occasionally nausea, aural symptoms, etc., are produced. The action of the drug is most obvious in phthisis florida, and details of some twenty cases are given. Cases with high fever and much expectora-

tion at first show no amelioration; later, however, pyrexia and night sweats disappear totally, this occurring in from several days to one or two weeks. The relative proportion of bacilli is not changed, but the sputum, as remarked by the patients, becomes less, many having difficulty in expectorating a sufficiency for examination purposes. The cough also diminishes. Salol, in the author's opinion, appears to lessen disintegration of tuberculous material, but he does not attribute to the drug an antituberculous action, thinking that the antibacterial complications only are influenced, and that a mixed infection is thus converted into a slower and purer tuberculous process. For instance, increase of local pleurisies and consequently probably extending infiltration continued, while actual destruction appeared to diminish. Even in severe cases the drug is of use and should be tried; in one patient where death appeared imminent life was prolonged for more than a year, showing that salol is most useful in ameliorating the patient's condition.

(95) Quinine in Malaria.

Binz (*Centralbl. f. d. med. Wiss.*, 1894, No. 2) reviews our present knowledge of the curative action of quinine in malaria. From his experiments about 1,867—he concluded that its curative action in this disease was due not to any essential action, as previously supposed, on the nervous system or on the circulation, but to a direct action on the cause of the disease; that quinine was far less a poison for the cells of the human body than for the cause of disease. This was probably some low form of organism, and by removal of which, through the action of quinine, the intermittent crises — swelling of the spleen, the malarious anæmia, etc.— also disappeared. In 1880 Laveran discovered the amœba of malaria. This was found to be affected by quinine, just as the experiments of Binz had shown that the larger infusoria of vegetable juice were by the same drug. It is only when ague gets well without quinine that, according to Mannaberg, phagocytosis can be considered as playing any part, for phagocytosis is hindered by the taking of quinine. The explanation why quinine fails in some forms of ague is that the parasites remain in the blood unaffected by the drug, and even in some such cases, according to Baccelli, the parasites may be affected if the drug be injected directly into a vein, a good result being sometimes possible by this method when administration of the drug by the mouth has failed.

(96) The Action of Sheep's Brain Extract on Adults and Children.

Moncorvo (*Bull. Gén. de Thérap.*, November 29th, 1893), during the last year has used extract of sheep's brain in thirteen children from 2 to 10 years of age and in five adults at variable periods of life. In the case of the former 187 1-g. injections, and in the case of the latter 196 injections (generally 3 to 5 at one sitting) were made almost invariably into the intrascapular region, the interval of time being two to four days. Owing to the precautions taken no local ill effect attended any of the operations. The cases comprised various forms of syphilis, tuberculosis, hysteria, and nervous lesions. The result was most satisfactory, the improvement manifesting itself in increase of appetite and strength, restoration of sleep, healthy complexion, and normal body weight. Slight excitement sometimes occurred at first, lasting a day only. The preparation was always previously examined with care for the absence of bacteria. In order to exclude the possibility of suggestion in the achievement of the above results, an adult patient was left in ignorance of the nature and object of the injection; moreover, the age of several of the children excluded such a possibility. In conclusion, the author regards this extract as a valuable aid in the treatment even of weakly children.

(97) Atropine and Morphinism.

Koch (*Therap. Monatsh.*, November, 1893) records the case of a patient who frequently indulged in morphine, and to whom on five occasions he administered subcutaneous doses of atropine as an antidote. It always quickly arrested the profuse secretion from the skin, air passages, and intestine; also considerably diminishing unpleasant results due to the abstinence from morphine, and thereby assisting gradual discontinuance of the narcotic. One three-hundredth part of a grain of the sulphate should be given at first, the patient being watched for several hours. A second dose may be administered if necessary.

(98) The Subcutaneous Injection of Arsenic.

Popoff (*Berl. klin. Woch.*, January 8th, 1894) enumerates as advantages the exact dosage and more rapid action, the possible use of the drug when the stomach or intestine would otherwise not tolerate it, and the possibility of treating at the same time this irritable state of the alimentary canal. He relates two cases in which arsenic was thus used with the best results: (1) A man, aged 65, had severe malaria, and was intolerant of quinine. At first there was some difficulty in diagnosis in the case, as it was complicated with gall stones. The liver was enlarged and there was slight icterus, but the spleen could not be felt. Later typical attacks of ague were seen. The improvement under arsenic, given subcutaneously, was rapid and striking. (2) A girl, aged 18, who suffered from malaria and anæmia, also showed rapid improvement under this treatment. Undiluted Fowler's solution was used, but the author makes some mention of its being prepared without spirit for this purpose. All antiseptic precautions are necessary. Four divisions of the Pravaz syringe (8 to 9 drops) were given in the day at first, and increased gradually, if necessary, up to a syringeful on alternate days. Not more than 20 to 24 successive injections were made, owing to the possibility of any poisoning.

(99) Lilac in Malarial Fever.

Mesiatzeff (*Vestnik Ohshtchestvennoi Highieny*, etc., December, 1893) successfully treats malarial fevers by an infusion made of about six fresh leaves of the ordinary lilac (*Syringa vulgaris*) to a cupful of hot water. Two cupfuls should be given daily until the cessation of paroxysms, and one cupful for two or three days afterwards.

PATHOLOGY.

(100) Use of Formalin in the Diagnosis of the Typhoid Bacillus.

Schild (*Centralbl. f. Bakt.*, xiv B., No. 22) finds that by means of formalin the growth of the typhoid bacillus is checked far more readily than that of bacterium coli. Whereas formalin in the proportion of 1:15000, effectually prevented the growth of typhoid bacilli in broth, B. coli continued to multiply in the same medium containing the disinfectant in the proportion of 1:3000. Upon these results Schild bases the following method of discriminating between the bacteria mentioned. Test tubes are filled each with 7 c.cm. of neutralised broth, which is then sterilised. To each is added by sterilised pipette 0.1 c.cm. of 1 per cent. sol. formalin; the proportion of the latter in the broth is then 1:7000. Further sterilisation is avoided. The tubes are now inoculated with some of the pure culture under examination, and placed in the incubator. In the case of the typhoid bacillus the broth remains perfectly clear; in that of B. coli it becomes turbid in twenty-four hours.

(101) The Poison of Tetanus.

Fermi and Celli (*Gazz. d. Osp.* No. 129, 1893), record the results of some researches made by them on this subject. They confirm the observation of Kitasato that the serum of different animals has no action on the poison. Egg albumen is also devoid of action, and so are extracts made from the organs of animals, whether susceptible or not to tetanus. Bile, too, has no destructive action, and the poison may remain in the urine for several days without losing its power. It is unaffected by saliva, but is destroyed by the acid of the gastric juice. Pancreatic juice does not affect it, neither do a number of microbes, such as the B. prodigiosus, B. subtilis, etc. The poison may remain active in the body of a fowl for seven days, and in meat dried or preserved in glycerine as long as two months. It has no action on the economy even when introduced in large amounts by the mouth or rectum. It is not absorbed either by the skin, the conjunctiva, or the nasal mucosa if these are intact. It is destroyed by about eight hours' exposure to direct solar light.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(102) The Compensation of Combined Valvular Lesions.

Baccelli (*Deut. med. Woch.*, January 11th, 1894) remarks that the general condition of the patient may be no worse where more than one valve is involved than in a lesion of a single valve. He relates two cases in illustration: (1) A man, aged 45, had acute rheumatism five years previously, but only complained of symptoms for a year past. Although physical examination showed the heart much enlarged, and both mitral and aortic orifices incompetent, yet when at rest the patient gave little evidence of anything being the matter with him. The pulse presented nothing characteristic. Disturbance of compensation in valvular lesions is a much more complicated problem than is usually believed. Thus a patient after influenza exhibits symptoms of a cardiac lesion previously silent, or in another accustomed to hard work the compensation suddenly breaks down without apparent sufficient cause. The anatomico-pathological defect does not constitute the whole clinical picture. Murmurs at times disappear, or a fully compensated mitral stenosis may apparently present signs which should be looked upon as of ill omen, and yet they do not prove to be so. The worst damage done to the heart is when two lesions of opposite characters, such as aortic stenosis and mitral regurgitation, exist. When the lesion affecting the valves is similar, the outlook is much less serious. But because the trouble caused by the double lesion is less, it does not necessarily follow that the danger is less. Sudden syncope may occur. The real danger lies in a material and dynamic disproportion. The prognosis must be very reserved, since the capacity of compensation may cease to exist. Prophylactic measures, including the avoidance of mental excitement, too apt to be forgotten nowadays, must be attended to. Digitalis purpurea is the sovereign remedy among cardiac tonics, caffein and strophanthus being some distance behind it. Caffein, unlike digitalis, increases the heart's action. Strophanthus is used when the others fail or have to be discontinued. (2) A man, aged 51, with no history of rheumatism, and always in good health, was seized with dimness of vision, nausea, and vomiting. He showed the physical signs of mitral and aortic stenosis. Only slight symptoms existed; he had no cough or bronchial catarrh. Here a paradox might seem to exist—namely, that a stenosis of one valve was a more serious lesion than that of two.

(103) Rachialgia after Typhoid Fever.

Osler (*Amer. Jl. Med. Sc.*, January, 1894) observes that Gibney had described the occurrence, as an occasional sequela of typhoid fever, of a condition in which there was acute pain on the slightest movement involving the spinal column and absence of any marked febrile disturbance or neuralgia. He proposed to call the condition "typhoid spine," and believed that it was due to perispondylitis—that is, an acute inflammation of the periosteum and the fibrous structures which hold the spinal column together. Osler relates two cases in which the chief complaint was of the same nature as in Gibney's cases, and points out that in one of his cases and in 2 out of 3 of Gibney's there was a history of a slight blow or jar some time before the symptoms appeared. In all the cases convalescence was in progress or completely established when the pain was complained of. Osler considers that in one of his cases the condition was analogous to that known as "railway spine" or "hysterical spine," and that in the other the general character of the symptoms was distinctly hysterical. In a third case there was no pain in the back, only a sensation of extreme weakness and some disturbance of sensation in the feet and legs. Osler expresses the opinion that under the name "typhoid spine" Gibney has probably described several distinct affections, and does not admit that in any of his cases there was periostitis.

(104) Muscular Rheumatism.

Leube (*Deutsche med. Woch.*, January 4th, 1894) argues that muscular rheumatism is not a local disease, but a general infective disorder with special localisations in the muscular system. The mode of onset of the disorder varies, but is sometimes marked by shivering and prodromal fever, and by *malaise* of some duration. In some cases the muscular pains may be widespread, and occasionally endocarditis is observed. Taking a series of about 200 cases, he found that fever was present in about one-third; it was seldom higher than 102° F., and generally fell after two days in hospital either rapidly or after some irregular fluctuations. In one-sixth of the cases there was a cardiac murmur at the time of admission; it is generally supposed that endocarditis, which is so common a "complication" of joint rheumatism, scarcely ever occurs in relation with muscular rheumatism. It is not possible to say in how many of the cases in which a murmur was observed this was present before the onset of the muscular rheumatism, but it was noticed that in half the cases the murmur grew fainter or disappeared while the patient was under treatment, and that whereas in all the cases together fever was observed in one-third only, it was present in two-thirds of those in which there was a murmur. Moreover, in a few cases the murmur was observed to appear after the onset of the muscular rheumatism. Three such cases are related by Leube, but in one there was at a later stage muscular rheumatism, and in another the patient at the time the muscular rheumatism came on was under treatment for gonorrhœal urethritis, vaginitis, and cervical endometritis. Leube states that he has seen joint rheumatism come on after muscular rheumatism in several cases, and points out that muscular rheumatism is frequently observed after affection of the joints. Pleurisy was in a few rare cases observed as a complication of muscular rheumatism, but albuminuria only once. Leube concludes that it is highly probable that the infective material in muscular rheumatism is an attenuated form of the virus of acute rheumatic arthritis. In Würzburg, where his observations were made, the cases of muscular rheumatism coming to the clinic were, as a rule, few in number and isolated, but at one time recently a large number of cases applied, so that half a ward was filled with them; this would appear to indicate an epidemic influence. He only mentions the question of treatment incidentally, but would seem to have relied on salicylate of sodium.

(105) Cortical Localisation of Facial Movements.

Brissaud (*Prog. Méd.*, December 30th, 1893) alludes to the generally accepted notion that the inferior facial alone suffers in hemiplegia of cortical origin. In the large majority of cases the orbicularis palpebarum is sluggish, the descent of the lid in winking is slower than on the sound side, and the palpebral slit is narrower instead of being wider, as in facial paralysis of peripheral origin. He considers that this is due to the levator having lost its fixed point from which to act owing to paralysis of the orbicularis, a condition of things analogous to the weak action of the flexors of the forearm when the extensors are paralysed. Only one explanation is considered tenable as regards the integrity of the superior facial, and that is that all these muscles receive their innervation approximately equally from the cortical centres of the two hemispheres. The synergic and simultaneous contractions of these muscles on the two sides are mentioned in support of this. The orbicularis, on the other hand, is more in the nature of a muscle supplied by a single hemisphere; but cases are often met with in which normal subjects are unable to close one eye without the other, so that Revilliod's sign has only a relative value in hemiplegia. Brissaud then quotes a case in which there was a patch of softening in the left cerebral hemisphere, limited to the operculum, the superficial part of the patch being situated just behind the inferior extremity of the fissure of Rolando, and in which there had been complete paralysis of the right side of the face during life. The case was of further interest in that at the onset there was complete right hemiplegia with aphasia. Speech and motor power in the limbs were recovered, but the facial paralysis were permanent. The patient suffered from heart failure consequent on myocarditis following catarrhal emphysema, and with each re-

lapse of the cardiac condition there was a corresponding return of the paralytic phenomena in the extremities of the right side, and also transitory aphasia. Brissaud believes that insufficient circulatory compensation following partial obstruction in the Sylvian territory sufficed to explain the paralytic troubles, and insists on the temporary exaggerations of the hemiplegia of the extremities, which were coincident with the crises of asystoly, as supporting this view. With a brain already poorly irrigated, the cardiac insufficiency could not fail to exaggerate the circulatory trouble already badly compensated.

SURGERY.

(106) Gastro-enterostomy in Cicatricial Narrowing of the Pylorus.

DUNIN (*Berl. klin. Woch.*, January 15th and 22nd, 1894) describes four cases from the point of view of investigations carried out before and after the operation, which was performed either by Ciechomski or Krajewski. All the cases occurred in men who had been under careful hospital treatment most of them on several occasions. They all presented signs of gastric dilatation caused almost certainly by an old gastric ulcer. The contraction was found to be extreme in one case, the tip of the little finger being introduced with difficulty, but in another the index finger could be passed through the pylorus, whilst in a third, besides the contraction there were almost cartilaginous adhesions about the pylorus. The gastric chemistry was investigated both before and after the operation, except in one case in which the patient died some weeks later of enteritis purulenta. The subjective symptoms disappeared in the remaining cases, one patient being perfectly well two years and a half later. The patients gained strength, and the greatly dilated stomach returned almost to its normal size. The motor functions of the stomach also improved. The excessive gastric secretion diminished, but never entirely ceased, in the fasting stomach. The total acidity also diminished, and abnormal fermentation disappeared. On no occasion was there any considerable amount of bile present in the stomach contents, and in no case was there obstinate constipation. The stomach could be distended by gas, showing that the artificial opening acted like the pylorus. The author discusses the statistics of reported cases of operation done for the above condition, namely, pyloric resection, gastro-enterostomy, pyloroplasty, etc. The percentage of successes is about 68. It is desirable to know the further history of such patients in order to decide which operation is the best. Cicatricial stenosis of the pylorus, if left to itself, must ultimately kill the patient. The author discusses the possibility of a narrowing of the pylorus, of course less permanent in character, due to muscular contraction in these cases: and whilst he does not, with Eichhorst, deny it, he thinks it must be very uncommon. He is of opinion that in obstinate recurrent hæmorrhage due to ulcer, gastro-enterostomy may be useful even in the absence of stenosis. The passage of the food by another route than the pylorus, which is the favourite seat of ulcer, and perhaps the diminished acidity of the gastric juice, would be beneficial.

(107) Tuberculous Ulceration of the Anus.

HARTMANN (*Rev. de Chir.*, January, 1894) says that tuberculous ulceration of the anus is much less common than fistulæ and tuberculous abscess. He has seen 10 cases under his own care, and to these he has added 17 published cases, and two others communicated to him. Among these 29 cases there were 22 men, 6 women, and 1 child. From this the affection appears to be much more common in the male sex. In 12 cases diarrhœa was a prominent symptom. According to Hartmann the disease commences insidiously, and is first recognised owing to the presence of slight pain during defæcation. In the majority of cases the ulceration extends upwards as far as the level of the inferior extremity of the rectum; in 2 cases only out of the 29 cited was it entirely cutaneous. In nearly half of the cases enlargement of the inguinal lymphatic glands was observed. The growth of the ulcerations is very slow. After having attained a certain size they remain stationary if not treated. Hartmann recommends, ablation of the ulcer with the thermo-cautery or with the galvano-cautery if the condition of the patient will admit of it. In some cases much good has followed the use of iodoform ointment after the greater part of the ulcer has been removed. If the general condition of the patient does not admit of these procedures, it is recommended that general treatment for tuberculosis should be carried out. Lastly pain may be relieved by the use of opium suppositories, the application of chloral 1 per cent. or of a mixture of subnitrate of bismuth and iodoform. In one case success was obtained by applying a $\frac{1}{5}$ per cent. solution of nitrate of silver regularly for sixteen months.

(108) Abscess of the Pancreas: Operation.

WALSH (*Med. News*, December 30th, 1893) reports the case of a married woman, aged 47, who for six months had suffered from sharp burning pains and tenderness in the epigastrium. On examination her abdomen was distended and tender; there was an area of dulness extending from the ensiform cartilage half way to the umbilicus, and reaching to the left costal arch. She was extremely emaciated, and for a month had suffered from diarrhœa and vomiting, latterly the calls to stool being very frequent. Her temperature was normal; the pulse was small, rapid, and wiry; the tongue was dry and thickly coated; the stools were watery, yellowish-grey, and offensive; the vomited matter was greenish and offensive. An exploratory operation was undertaken, with a view to assist the diagnosis, and on passing the hand into the abdominal cavity a fluctuating mass could be felt behind the greater curvature of the stomach. This was exposed and opened, a pint of pus, together with portions of the pancreas and a curd-like substance being evacuated; at the bottom of the abscess cavity softened remains of the body and tail of the pancreas were found and removed; this was followed by pretty free hæmorrhage, so the cavity was firmly packed with iodoform gauze. The wound was dressed in the usual way, and a bandage firmly applied. During the first four days the patient was fed by the bowel: on the fifth day the gauze packing was removed; on the eighth day the stitches were removed; the fistulous track was now well established, and the abscess cavity was reduced to about one-fourth of its former size. On the eleventh day the patient left the hospital.

(109) Chronic Empyema.

DELORME (*Sem. Méd.*, January 24th) describes a new method of treating chronic empyema when pleurotomy had not produced a cure. The author makes a large opening in the thoracic wall in the form of a shutter, and then removes the false membrane which surrounds the lung and fixes it to the vertebral region. By this means the lung is set free, the shutter-shaped flap is closed, and the patient soon gets well, usually with no more complication than is the case with fractured ribs. Delorme relates a case which he treated in this way. The patient was a man who had been unsuccessfully treated for pleurisy by pleurotomy. The false membrane was $1\frac{1}{2}$ centimetre in thickness, and its surface was covered with fungous masses. These were scraped off and the membrane dissected from the surface of the lung. The underlying lung was healthy in appearance, and when set free protruded through the wound. This pleural cavity was then washed out with a solution of perchloride of mercury, and then the flap turned back into its original position and fixed with sutures. The patient quickly recovered. Delorme considers this method more rational and useful than the one adopted by Estlander, since, when successful, it allows the lung to expand and resume its functions.

MIDWIFERY AND DISEASES OF WOMEN.

(110) Ovarian Cystoma and Pregnancy.

CONDAMIN (*Lyon Méd.*, January 28th, 1894) relates two original cases. He operated upon a patient, aged 33, in the fifth month of her fourth pregnancy. The pedicle was thin and long, but not twisted. A few adhesions to omentum were found. The patient recovered without any symptom of abortion. Laroyenne operated on a grave case. The patient was delivered in May, 1893. The pedicle seems to have become twisted shortly after delivery, when the

patient fainted, with no sign of flooding. Severe pains were felt in the left thigh, with painful contraction of the sartorius. On August 1st, 1893, ovariotomy was performed. A large cyst was found, universally, but not firmly, adherent to the abdominal walls. It was becoming sloughy, and the pedicle was tightly twisted six to eight times on itself. There was sero-sanguineous effusion in the abdominal cavity. The cyst was on the left side. On the twelfth day the temperature rose, and abscess of the pedicle was detected, forming a swelling as large as a fist, which began to disappear five days later, when pus came away with the motions. Thenceforward the patient steadily recovered. These two cases, Condamin observes, accord with the experience of Aust-Lawrence recorded in the JOURNAL, September, 1893. The surgeon should not hesitate to perform ovariotomy in a pregnant woman. Early in pregnancy the operation is safe and easy, and the chance of abortion very slight, if ordinary care be taken. Later the risk is less than when the operation is deferred till after the puerperium. Labour and childbed tend to cause more or less acute torsion of the pedicle, adhesions, and very grave puerperal peritonitis.

(111) Ovarian Cysts: Import of Ascites as a Complication.

ORRILLARD (*Bulletins de la Société Anatomique de Paris*, November-December, 1893, Part 24) describes a tumour removed from a patient whose abdomen was further distended with ascitic effusion. She was 47, the period had completely ceased for one year; the menopause was associated with steady deterioration of health, and emaciation. The abdomen at the same time began to swell. Six months before operation the distension suddenly increased and œdema of the legs set in. When admitted into hospital, the ascites was very marked, causing dyspnœa. There was no diarrhœa nor constipation. The urine was normal in quality and quantity. The patient could not walk, on account of the extreme œdema of the legs. A well-defined tumour could not be distinguished on abdominal palpation, but on vaginal exploration a vegetating tumour of the ovary was diagnosed. Périer operated. Sixty-eight pints of a brownish serum full of colloid masses came away. A cyst of the right ovary, open at several points, was discovered and removed. The patient sank within a few hours from shock. The peritoneum of the parietes, viscera, and omentum was found to bear secondary colloid growths. The ovarian tumour was a multilocular cyst, one cavity containing hair and fat; the others bore solid colloid glandular growths, some of which perforated the outer wall of the tumour. The case was of a kind which confirms Terrillon's theory that when there is an ovarian cystoma, and ascites develops without any evidence of visceral disease to explain it, there must be some change in the cyst wall. Sometimes vegetations will be found on the surface of the wall or perforating it from within; at others simple sloughing or calcareous or fatty degeneration of the wall itself will account for the ascites.

(112) Labour and Heart Disease.

TARNIER (*Journ. des Sages-Femmes*, January 16th, 1894) notes that in heart disease all great and sudden efforts put the patient in peril, and labour is no exception to the rule. Running upstairs, racing to catch an omnibus or train, and sexual intercourse may all cause fatal syncope. The danger of labour is not special in this sense; it is dangerous in heart disease simply because it involves much effort. Tarnier induced premature labour in a lady who was subject to advanced heart disease. Notwithstanding all precautions, she became moribund in the course of the labour. Directly she died, he turned and delivered a live child, which survived. A woman was brought into Tarnier's wards in January, 1894, in labour, with advanced heart disease and asystolism; she was apparently dying. Immediately about 300 grammes of blood were withdrawn, and the symptoms of suffocation diminished. The patient grew calmer. As it was extremely advisable to bring on labour quickly, as the forceps is apt to fatigue the patient, and as, in particular, the child was dead, the basiotribe was applied and delivery effected. A few days later the mother was doing very well.

(113) Gonorrhœa in Women.

CARRY (*Lyon Médical*, January 28th, 1894) has made extensive researches amongst prostitutes and fallen women of other classes, suffering from vaginal discharge. In only one-third of the number was the gonococcus of Neisser detected. Carry insists that the gonococcus is absolutely specific of gonorrhœa. It is very easy to recognise, being quite different in form from any other microbe. In 4 out of 5 cases its seat was found to be the urethra, in 1 in 5 the cervix. The periurethral follicles, the vulvo-vaginal (Cowper's) glands, the vagina, and anus are exceptional seats of the gonococcus. Gonorrhœal urethritis in women is the almost exclusive source of gonorrhœa in man, and the absence of discharge, pain, and local tenderness all tend to hide the source of contagion.

(114) Molluscum Pendulum of Vulva.

MAUCLAIRE (*Ann. de Gynéc. et d'Obstét.*, December, 1893) has recently published an important monograph on the well-known pedunculated "polypus" of the vulva. The disease is true "molluscum," a fibroma of the dermis. In molluscum the elements of the dermis at the affected spot hypertrophy in due proportion. Thus, in the skin of the thigh, where fibrous tissue is abundant, molluscum tumours contain much fibrous tissue. When the labium majus is affected, since it bears a layer of dartos, much muscular tissue is found in the new growth. Mauclaire notes the important fact that while the pendulous vulvar tumour is often solitary, it is not rarely associated with the most characteristic sessile molluscum either in the neighbourhood or diffused over the entire body. One of the largest of these vulvar tumours reached as low as the inner condyle of the femur, being 13 inches in vertical measurement, and 25½ in circumference. Though known to be essentially innocent as a rule, these pendulous tumours may become sarcomatous. Recurrence after removal of an apparently benign tumour has been reported in one case. Removal is the sole treatment for pendulous tumours. The tumour may extend far upwards, the pedicle being no limit to the morbid growth. In Demoulin's case the growth extended through the pedicle (which itself reached as far back as the perineum) to the walls of the vagina and rectum, and to the ischium. Dissection was very difficult. This tumour, however, which weighed 11 pounds, seemed to have been a myxoma.

THERAPEUTICS.

(115) Peroxide of Hydrogen in Stomatitis.

BOENNECKEN, in a paper on stomatitis (*Deut. med. Woch.*, January 11th, 1894), insists upon the importance of paying attention to the mouth during acute febrile or wasting disease; stomatitis originating in neglect of attention to the cleanliness of the teeth, gums, etc., may have a serious influence in retarding convalescence. The value of antiseptic applications is generally accepted, but the solutions of chlorate of potassium and permanganate of potassium commonly used are not sufficiently concentrated to have an antiseptic action, especially when the short time they can remain in contact with the mucous membrane is taken into consideration. Moreover, these strong solutions are apt to be painful. Boennecken strongly recommended solution of peroxide of hydrogen; it is not poisonous; does not cause pain; and has an effective antiseptic action even in solutions so weak as 2 per cent., or even less. He states that by its use fœtor is corrected in a few minutes, and that its continued use was followed by a marked improvement in the condition of the epithelium in twenty-four hours, and complete cure of even severe cases in five or six days. Leo, in the discussion which followed the reading of the paper, stated that he had also obtained very good results, but that in chronic stomatitis a solution stronger than 2 per cent. acted better. Wolters had found the peroxide in 5 to 10 per cent. solution very useful in mercurial stomatitis. Binz, however, regarded chlorate of potassium as equally effective, and observed that it probably acted in the same way as the peroxide, namely, by liberation of nascent oxygen.

(116) Petroleum in Diphtheria.

P. I. KOSTENKO (*Vratch*, No. 50, 1893, p. 1383) fully confirms Flahaut's high opinion of petroleum as a remedy for diphtheria (see EPITOME, 1893, vol. 1,

par. 331). The author's experience includes seven consecutive cases, all of which were treated by painting the fauces with cotton wool soaked in pure petroleum, the procedure being repeated thrice daily. Rapid recovery invariably ensued, the false membranes disappearing within three days. It appears that the Russian peasantry successfully treat severe cases of diphtheria by the internal administration of petroleum. The substance is perfectly innocuous, even when swallowed in large doses (400 grammes at a time). It never causes local pain or burning.

(117) Bismuth in Gastric Disease.

Matthes (*Centralbl. f. inn. Med.*, January 6th, 1894) has investigated, both experimentally and clinically, Fleiner's method of treating irritative diseases of the stomach with large doses of bismuth. The results of the treatment were very successful, especially in lessening pain. From experiments on dogs, the author shows that 10 to 20 minutes after ingestion the bismuth sinks to the lowest part of the stomach, whereas several hours later it is found spread over and fixed to the stomach wall, being intimately mixed with mucus. Even with a full stomach a large part is also found similarly deposited. Against the action of chemical agents on the stomach wall this deposit of bismuth is most resistant. In men shortly after the ingestion of bismuth, the water used for washing out the stomach returns clear, but if later the stomach contents be expressed, bismuth with mucus is removed. Experimentally bismuth is shown to increase the secretion of mucus. To determine the action of bismuth in cases of erosion, etc., of the stomach, defects were made experimentally in dogs in the stomach mucous membrane and bismuth was then administered. In some experiments nothing particular in regard to the defect could be made out. In two experiments, however, positive results were obtained. In one an adherent crust was found acting as a protection to the defect. Sections taken from both cases showed healing ulcers. In the case of the crust, crystals were found in the granulation tissue, and proved both morphologically and by a colour test to be bismuth crystals. No symptoms of bismuth poisoning occurred. Experiments thus show that bismuth adheres to the defect in the stomach wall, and that healing may take place under a crust so formed. This crust is not always found, but its occurrence once shows the possibility of it. Comparison with control animals showed that in those treated with bismuth the defects healed more rapidly. Digestion can go on while the bismuth deposit is present. If an artificial digestion, however, be shaken up with bismuth, pepsin will be carried down by the bismuth and digestion is thus hindered. The author says that both experimentally and clinically Fleiner's method of treatment is practically and theoretically correct with the exception of the question of position (in reference to the site of the ulcer), which he shows to have no influence in regard to the subsequent deposition of the bismuth.

(118) Treatment of Erysipelas.

Felsenthal (*Zeitschrift f. Kinderheilk.*, vols. iii iv, December, 1893) states that his usual treatment in cases of erysipelas is scarification, which he formerly followed by dusting with iodoform. He now prefers using ichthyol, which not only is a powerful reducing and deoxidising agent, but which also appears to exert a specific influence on streptococci. While a 3 to 4 per cent. solution of ichthyol will actually destroy them, their growth is arrested by a 1 per cent. solution, which also, as compared with perchloride of mercury, is non-poisonous, and does not irritate as iodoform does. The treatment by incisions is strongly advocated by the author, and was practised in thirty cases. The patient having been anæsthetised, all fluid is, as far as possible, expressed by massage, and a 60 per cent. ointment or solution rubbed into the wounds by the hand. Another layer of the ointment is then used as a covering, gauze and wool applied, and the limb suspended vertically. The inunction is continued with during several days, and the dressing, when possible, changed twice daily. The cases described show a very rapid defervescence and arrest of the affection. With the facilities this treatment afforded for bacteriological research the streptococcus was found in fourteen out of fifteen cases, coexisting four times with the staphylococcus pyogenes aureus.

PATHOLOGY.

(119) The Bacillus of Influenza.

Borchardt (*Berlin. klin. Woch.*, January 8th) has succeeded in detecting Pfeiffer's bacillus in the sputa in thirty-five out of fifty cases of influenza. In some it was associated with other microbes, but in others it existed as an almost pure culture. In good preparations the bacilli were either scattered over the whole field of view or in the form of small shoals, as it were, in the filaments of mucus, or in regularly disposed colonies of a characteristic appearance. In the rusty sputum of pneumonic cases diplococci were most commonly found, but Pfeiffer's bacillus occurred as an almost pure culture in one such case. The bacilli were present throughout the attack, and in one case so late as the twenty-eighth day. They may be generally recognised by their small size, and the ends usually stain more deeply than the central portion, bearing out Pfeiffer's suggestion that the microbe may be in reality a small diplococcus. The author succeeded in obtaining cultures in fifteen cases. He failed to detect the bacillus in the blood, and he attributes the general symptoms to the absorption of toxins from the affected portions of the respiratory tract. In the case of one patient the diagnosis was uncertain, and lay between influenza and typhoid fever. On the ninth day of the patient's stay in hospital she coughed up a portion of mucus, which was found to be an almost pure culture of Pfeiffer's bacillus, the diagnosis being at once made clear. Borchardt promises another paper, and for the present he concludes that Pfeiffer's bacillus is almost constantly found in the expectoration in cases of influenza, and that in doubtful ones its recognition may prove of service in clearing up the diagnosis. — Huber (*Zeits. f. Hygiene*, 1893, H. 3) reports his bacteriological investigations during two epidemics of influenza. He states that even when it is impossible to see the bacilli in the sputum with the aid of the microscope, cultivation experiments will still give positive results. Inoculation of tubes of agar blood mixture with the sputum gave rise to the characteristic colonies appearing like separate drops of water. He was never successful, like Bruschettini, in obtaining cultivations from the blood. A very interesting statement is the fact that the influenza bacillus does not require Pfeiffer's mixture of blood and agar for its nutrition, but will grow excellently on a mixture in which a commercial substance called "hæmatogen" is present instead of blood. This discovery greatly facilitates the bacteriological investigation of the disease, as the preparation of blood-agar tubes is always difficult, and the hæmatogen can be readily obtained.

(120) Staining of Flagella in Cholera Bacilli.

In more than thirty cases of cholera Klein (*Centralbl. f. Bakt.*, xiv. B., No. 19), has been uniformly successful in staining the flagella of the cholera bacilli found in flocculent matter from the bowel, after the following method: A flocculus from the rice-water stool or bowel contents is placed for five to ten minutes in a mixture of equal parts of absolute alcohol and anilin-water-gentian-violet (anilin-water, sat. sol. 100 c.cm, sat. alc. sol. gentian-violet 11 c.cm.). Wash well in distilled water, changing often until excess of stain is removed. Then press out a small portion of the tissue between two cover slips, separate these, allow the film on each to dry, and mount in balsam. If preferred cover-slip preparations may be made as usual, dried, and then stained as above. The bacilli appear deep violet, the flagella a lighter violet The latter are sufficiently stained to photograph well. This method fails to show flagella in preparations from cultures, and Klein therefore concludes that the bowel contents and stools contain some substance which acts as a mordant upon the bacilli, and thus permits of staining, In many places the flagella occur free, in tufts and plexuses, and obviously greatly outnumber the bacilli present. The conclusion is therefore justified that an individual bacillus has more than one flagellum. Loeffler and others have shown that this is not the case with organisms from a pure culture.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(121) Tumour of the Restiform Body.

Brissaud (*Progrès Méd.*, January 20th), in a lecture recently delivered at the Salpêtrière, discussed a case in which the diagnosis of tumour of the restiform body had been confirmed by a necropsy. A woman, aged 45, had for eight years suffered from general feebleness, headache, rachialgia, vertigo, and incapacity for work, and was at first mistaken to be a case of neurasthenia. In 1885 slowly progressive deafness on the left side commenced; a year later her sight began to be indistinct on both sides, but chiefly on the right, and a year later still she became the subject of paroxysmal non-painful attacks of facial spasm on the left side. In 1891 vague symptoms of asthenia presented themselves, with weakness in the legs, stiffness and pain in the neck, and complete loss of the sense of smell. Last year the headache, which had been relatively tolerable before, became excessively violent; in July œdema of the legs and inability to pass water were noticed, and in August she commenced to have difficulty in walking, the attitude and gait being characteristic of a person the subject of cerebellar disease. Sensibility to touch, pain, and temperature was intact. The amblyopia was due to double optic neuritis. There was an excessive secretion of saliva. The tumour was localised as situated in the region of the left restiform body, at the point where the external root of the auditory nerve would be seriously altered or destroyed, while the internal root would be relatively free, in which position it was found at the necropsy.

(122) Ehrlich's Diazo-reaction.

The test solutions for this are prepared as follows:—Solution 1: 2 gr. of sulphanilic acid with 50 c.c. of hydrochloric acid are dissolved in 1,000 c.c. of distilled water. Solution 2: a ½ per cent. solution of nitrate of soda. Five parts of the first are mixed with one of the second; to this is added an equal quantity of the urine to be tested, saturated with ammonia. In the case of a positive reaction the liquid assumes a carmine colour, and if shaken the foam is also red. On being left for twenty-four hours a greenish precipitate falls. Ehrlich's own conclusions were: (1) That the reaction was nearly always seen in cases of typhoid after the middle of the first week; the absence of the reaction throws doubt on the diagnosis. (2) Cases of typhoid in which the reaction is feeble and of short duration run a mild course. (3) In phthisis the occurrence of the reaction is of serious import; the reaction is very rarely seen in measles, miliary tuberculosis, pyæmia, scarlatina, and erysipelas. (4) In diseases unaccompanied by fever the reaction is wanting. These conclusions also represent the views of a large number of competent observers who have employed the test. Friedenwald (*New York Medical Journal*, December 23rd, 1893) reports his own conclusions based on the examination of no fewer than 3,000 specimens of urine. They are as follows: (1) The reaction is almost without exception present in cases of typhoid. (2) It appears generally during the first week. (3) It gradually disappears between the end of the second week and the commencement of the third. (4) In pneumonia the diazo-reaction is a symptom of grave import. (5) The reaction is wanting in cases of febrile gastro-intestinal catarrh. (6) In typhoid its presence does not necessarily indicate a bad prognosis. (7) In phthisis its persistence for two or more months justifies a gloomy prognosis.

(123) Mucous Stools in Newborn Children.

Ullmann (*Deutsche med. Woch.*, January 11th, 1894) recently exhibited before a Berlin society some large mucous concretions passed by a healthy infant about six hours after birth. When the napkin was removed, the child having shown no sign of pain, much meconium was found, and also a body shaped like a gherkin, soft, semi-transparent, and evidently made up of mucus. Strings of mucus were also passed. The child remained in perfect health and passed no more mucous concretions. Longuet described a similar case where an infant passed, twenty-six hours after birth, a pear-shaped mass of mucus and also mucous strings, just as in Ullmann's case, but they were brought away by an enema. Max Rothmann related a case of membranous enteritis in an infant, where the cause was evident and proved fatal to the patient. Soon after birth the infant vomited meconium. An enema was administered, and balls of meconium covered with mucus came away. Nothing more passed from the anus, and the fæcal vomiting continued. The stomach was washed out, but the infant became worse. Colotomy was performed. On the tenth day the infant passed masses of mucus from the anus. On the twelfth day it died. Intussusception was discovered in the lower part of the ileum. Much membrane was found hanging to the mucous membrane of the colon, which was much inflamed.

(124) Abductor Paralysis of the Larynx.

Max Laehr (*Deut. med. Woch.*, November 9th, 1893) relates five cases of this disease, three of peripheral, and two of central origin. (1) A man, aged 69, had malignant disease of the œsophagus, the obstruction being at 30 cm. from the teeth. Both cords moved outwards very slightly during inspiration, but they closed satisfactorily on phonation. On deep inspiration the cords travelled inwards and were somewhat flaccid. (2) A woman, aged 50, had, shortly after influenza, attacks of difficulty of breathing, which gradually became less frequent, and eventually disappeared. When seen she had double abductor paralysis, the cords standing rather nearer the middle line than the cadaveric position. (3) A man, aged 23, had faucial diphtheria. Later he complained of shortness of breath and regurgitation of fluids through the nose. There was no outward movement of the left cord during inspiration, and very little of the right. He improved very considerably, fluids ceased to regurgitate, and some abduction of the cords was possible. (4) A man, aged 66, had total recurrent paralysis on one side. He was thought to have multiple sclerosis, intention tremor, etc., being present. (5) A man, aged 24, with undoubted multiple sclerosis, had double abductor paralysis, with secondary contracture of the adductors. In three of the five cases there were no laryngeal symptoms. In many peripheral and central affections of the recurrent laryngeal nerve there is not only abductor, but also a total paralysis of the larynx, the cords being in the cadaveric position. The inspiratory stridor with perfect voice is looked upon as due to secondary contracture of the adductors. The author shows how these cases further confirm Semon's views as against the theory of primary contracture of all the laryngeal muscles, the adductors predominating. Post-diphtherial abductor paralysis is uncommon, only a few cases having been recorded. The slight abducens paralysis in this case, the double-sided pharyngeal and laryngeal paralysis, and the rapid improvement are against a central lesion. In Case 2 there was no reason to assume a central lesion: the condition was probably due to a neuritis following influenza. Abductor paralysis is very rare in multiple sclerosis, but perhaps it will be more frequently found when the larynx is systematically examined. The comparative frequency of laryngeal paralysis in tabes has been distinctly demonstrated of recent times.

SURGERY.

(125) Trephining in Spinal Caries.

Binaud and Crozet (*Arch. Clin. de Bordeaux*, January, 1894) report two cases treated by Pitres, in which trephining was performed for paraplegia due to Pott's disease of the spine. Both patients, one of whom was a woman, aged 25, the other a male, aged 20, were submitted to operation on the same day. In the case of the woman there was well-marked and serious impairment of sensibility. The spines and posterior arches of the fifth, sixth, and seventh dorsal vertebræ were cut away, and exit was thus given to a large collection of pus. The dura mater was thickened and in a fungoid condition, but the cord itself was apparently quite healthy. The operation failed to bring about any improvement, and the patient succumbed two months later to pulmonary tuberculosis. The second case was one of complete paraplegia, with but slight impairment of sensibility.

The spines and posterior laminæ of the ninth and two following dorsal vertebræ were resected, and extradural masses of tuberculous deposit scraped away. The results in this case were good, as the operation was followed by a gradual return of the functions of the lower limbs, and the patient at the end of twelve months was able to spend most of the day out of bed and to move about on crutches. Notwithstanding the number of cases that have been reported of trephining for Pott's disease, it is still difficult, the authors state, to formulate any conclusions as to the value of this treatment. There can be no doubt that there are conditions favourable to the operation, whilst there are others which constitute decided contra-indications. The best results have been met with in instances of paraplegia due to sclerous perimeningitis, to fungous compression of the medulla, and to intraspinal collections of pus. On the other hand, extensive osseous lesions and intrameningeal tuberculous infection are most unfavourable conditions. It is pointed out by the authors, however, that there are serious diagnostic difficulties to be considered, as the special clinical indications of each of the above-mentioned lesions have not yet been clearly established.

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(126) Congenital Defect in the Diaphragm.

Abel (*Berl. klin. Woch.*, 1894, Nos. 4 and 5) gives a case of congenital left-sided defect in the diaphragm with protrusion through it into the pleural cavity of the stomach, great omentum, and part of the colon and duodenum. The patient was a woman, aged 33, who had had seven children. Some years previously she had had occasional attacks of pain in the left side accompanied by vomiting, but these used to pass off quickly. On January 16th, 1893, after a great indiscretion in diet, she was seized with vomiting and abdominal pain, and developed symptoms resembling those of acute intestinal obstruction. An attempt to wash out the stomach was made, but an obstacle was met with at the cardiac orifice, the patient vomited violently, cried out with pain, and became cyanosed. To spare the patient all unnecessary movement the thorax had not been thoroughly examined at first, though the heart sounds had been heard at their normal site. Later on a more careful examination was made. The cardiac dulness and apex beat were found both to the right of the sternum, the lower left part of the chest was bulged, breath sounds were absent on the left side, and there was a tympanitic note to percussion over the left front. The diagnosis was then made with certainty, and on January 22nd laparotomy was performed; an incision, 10 cm. long, was made parallel to and three finger-breadths below the left costal margin, but it was found impossible to pull back all the protruding parts through the hole in the diaphragm. The patient died three and a half hours after the operation. At the necropsy a circular aperture, 7 cm. in diameter, was found in the left part of the centrum tendineum of the diaphragm, the edge of which around the aperture was partly sharp and partly thickened. Through the aperture the whole of the stomach had passed, and this organ was found distended to over the size of a man's head, filling up the left pleural cavity. The left lung was found lying collapsed and quite airless against the vertebral column. In the question of diagnosis the following are important points: Results of physical examination of the thoracic organs, symptoms like those of intestinal obstruction, collapsed abdominal walls, and distension on one side of the thorax. Abel points out that further evidence might be obtained by filling the stomach with fluid and noting the change in the position of the cardiac apex beat, but rapid distension of the stomach in such cases might cause sudden death. Some good might be done if the stomach could be emptied of its contents with a tube, but in the present case a tube could not be passed into the stomach. Abel finally discusses what might be done if at the operation abdominal organs were found adherent in the pleural cavity. After an operation the upper part of the body ought probably to be kept raised and cardiac stimulants administered.

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(127) Compression of Aorta.

Macewen (*Annals of Surgery*, vol. xix, No. 1, January, 1894) describes a mode of controlling the circulation through the abdominal aorta, which he has employed for over fifteen years, and found simple, always ready, easily applied, and efficient. As the patient lies on his back on the table, the assistant stands on the left side on a line with the umbilicus, and facing the feet of the patient. He then places his closed right hand on the patient's abdomen a little to the left of the middle line, the knuckles of the index finger just touching the upper border of the umbilicus. The assistant stands on his left foot (his right foot crossing the left and resting on the toes), and leans upon his right hand, thus exercising the necessary amount of pressure. This can easily be tested by the assistant placing his left index finger on the common femoral. When the flow of blood through the femorals is arrested no further weight should be applied to the aorta.

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(128) Extirpation of Aneurysms.

Ransohoff, of Cincinnati, records (*Annals of Surgery*, January, 1894) two cases of aneurysm which had been treated by extirpation. In the first case, a patient aged 22, the aneurysm affected the radial artery of the left side, two inches above the wrist, and was caused by a fall and fracture of the thumb. An incision three inches long was made over the tumour, and the sac completely removed. In order to do this a portion of the tendon of the flexor carpi radialis had to be removed. Union by first intention followed, and the functions of the limb were unimpaired. The second patient, aged 12, suffered from a traumatic aneurysm over the left ankle, which had followed a wound caused by an ice pick. Measures similar to those adopted in the previous case were carried out, and a like result followed. From a critical study of these two cases, together with other published cases, the author formulates the following conclusions: (1) Extirpation is the ideal method of treatment; it should be resorted to unless there are weighty reasons against it. (2) In aneurysms of the forearm and of the leg no other treatment should be adopted. (3) Aneurysms which have suddenly grown large from subcutaneous rupture of the sac, and those in which rupture is impending should be subjected to extirpation. (4) In recent traumatic aneurysms the injured vessel should be divided between two ligatures; when a sac has formed it should be excised. (5) When other methods have failed, extirpation should be tried before recourse is had to amputation. (6) In arterio-venous aneurysms extirpation should be practised if any operation is indicated. (7) Proximal ligation should be reserved for cases of idiopathic or spontaneous aneurysms, in which the age of the patient or an enfeebled condition from other causes would make a prolonged operation hazardous, and for other cases in which the position of the tumour precludes the possibility of extirpation.

MIDWIFERY AND DISEASES OF WOMEN.

(129) Chronic Metritis of the Cervix.

Tillaux (*Progrès Méd.*, February 3rd, 1894) insists that chronic metritis of the cervix begins as the affection known as laceration of the cervix, and ends as the affection known as acquired elongation of the cervix. He reports a case of the earlier, and a case of the later, condition. In the first, the patient was 34, and had suffered from local pains since her first confinement, thirteen years ago; two more labours occurred, the last five years since. There was a deep laceration, with slight ectropion. Trachelorrhaphy was successfully performed. In the second case the patient was 48, and had borne four children to term; she never kept her bed long after her confinements. A year or two after her last confinement, seventeen years ago, the uterus felt heavy, and the patient noticed that it presented at the vulva. For over fifteen years it remained so; at the end of that term she felt increased weight and discomfort after taking a very hot hip-bath. Henceforward she was obliged to wear a bandage. On exploration it was evident that there was no prolapse, but inflammatory hypertrophy of the cervix. There was extreme ectropion, exposing the mucous membrane of the cervical canal to constant irritation. A conical amputation of the cervix was performed. In shaping out the cone the posterior fornix was

opened, the opposed layers of vagina being adherent, and the peritoneal cavity was exposed. The wound was closed by suture. Posterior colporrhaphy was also performed, the posterior vaginal wall being lax, so that true uterine prolapse after the operation was probable. The hypertrophy of the cervix is easily explained. The irritation of the everted mucosa aggravates the frequent infection to which that surface is exposed. The cervical glands become surrounded with inflammatory tissue, the arteries sclerose, the veins dilate, and the musculo-connective tissue of the cervix, naturally soft, becomes tough. The everted mucosa, subject to well-known changes in its epithelium, is prone to ulceration, which greatly increases the chance of infective inflammation. From the above it is clear that early trachelorrhaphy is indicated in fissure of the cervix.

(130) Puerperalism and Pre-existing Microbism.

Prioleau (*Arch. de Tocol. et de Gynéc.*, January, 1894) concludes an important memoir on this subject by insisting that there are certainly inevitable forms of puerperal infection which defy rigorous antisepsis during labour and the puerperium. Infection is observed when the labour occurs in an infected or mephitic neighbourhood, when labour coincides with the development of an infectious disease, or when the patient has had old-standing lesions in or near the genital tract. The mechanism of this kind of infection is explained. Air, charged with noxious principles, enters the genital tract. The infected blood of the patient may bring germs to the placental wound in the uterus. Phagocytosis is weak when the blood is already infected, hence the germs develop rapidly on the wound. The primary infection is thus stimulated; an old genital lesion, abscess, etc., may be awakened, or an old wound or lesion outside the vulva may set up infection in the uterine wound, just as a blood lesion does when pre-existing. The practical inference from Prioleau's conclusions is that the genital tract must be kept thoroughly disinfected in all suspected cases where a source of inevitable infection is present.

(131) Disorders of Pregnancy after Abdominal Section.

Chandler (*Boston Med. and Surgical Journ.*, January 25th, 1894) attended a woman, aged 36, in October, 1892. In November, 1883, a cyst of the broad ligament was removed. She remained weak and sickly for three years. At the end of 1887 she became pregnant for the first time. A mucous polypus was removed from the cervix in April, 1888. At the fifth month she miscarried. There had been morning sickness, but not of a severe type. At the end of August, 1892, she conceived again. Another mucous polypus was removed in September. Hyperemesis set in, and Chandler was consulted; it proved obstinate, but ceased by the end of November. She was kept in bed till January 1st, 1893, as Chandler thought that the previous miscarriage might have been due to adhesions developed after the operation, and preventing the uterus from rising. On the morning of April 2nd the patient was in great pain, and the uterus was found to contract during each pain. The uterus was high in the pelvis, the cervix was not taken up, and the os had not dilated. The fœtal heart was audible. Morphine was given; nausea and vomiting set in. On April 25th, the end of the eighth month, the patient's health being very bad, labour was induced by manual dilatation and turning. The child, though in good condition at birth, died of convulsions on the third day. The mother made a perfect recovery; the vomiting ceased immediately after labour. Green, who also attended the case, noted that the fœtal head descended low in the pelvis early in the pregnancy, apparently because the tension of the abdominal wall, made more rigid by the cicatrix, afforded more resistance to the enlarging uterus than the girdle of contact at the pelvic brim. The aggravated nausea and vomiting recurring in April was attributed to the pressure of the fœtal head on the nerve trunks in the pelvis and the nerves of the cervix. Homans, who had operated, remarked, when the case was read at a Boston Society, that the operation was free from any complication. The ovary was removed with the broad ligament cyst. There were no adhesions.

(132) High Temperature after Labour.

Tournay (*Journal d'Accouchements*, February 4th, 1894) publishes the statistics of the Brussels Maternity for 1893. The total number of labours was 440. Amongst numerous subjects of interest, Tournay notes that in only 28 cases was there rise of temperature over 38° C. (100.4° F.). The causes of the rise were: various affections of the breasts, 6 cases; acute endocarditis, 3; uterine congestion, 3; septicæmia, 3; obstinate constipation, 2; traumatism, 2; neuralgias, 2; enteritis, 2; bronchitis, 1; eclampsia, 1; tuberculosis, 1; cardiac disease, not precisely defined, 1; cause of rise of temperature unknown, 1.

(133) Dysmenorrhœa from Caries of the Coccyx.

Grandin (*N. Y. Journ. of Gynec. and Obstet.*, November, 1893) reported a case before the New York Obstetrical Society. The patient, aged 23, suffered from severe dysmenorrhœa. The curette and other therapeutic measures proved unavailing. The uterus, tubes, and ovaries were normal. On pressing backwards during exploration the coccyx was found to be movable. Much pain, referred to the uterus, was produced when the bone was pressed between the fingers. The patient had acquired the morphine habit. Grandin operated; he found the coccyx carious. Since the operation menstruation has been painless. There was a history of a fall on the bone two years previously. After the reading of Grandin's paper, an instructive discussion followed. Harry Sims described a similar case of dysmenorrhœa due to an unreduced dislocation of the coccyx. The patient's troubles were due to a schoolfellow who pulled away her chair when she was about to sit down. The coccyx was removed twelve years ago. The dysmenorrhœa never recurred.

THERAPEUTICS.

(134) Pental.

Phillip (*Zeitschrift f. Kinderheilk.*, Bd. iii-iv, 1893) states that during the preceding twelve months chloroform and pental were the only anæsthetics used in the Kaiser Friedrich Children's Hospital, Berlin, local anodynes having been found impracticable in the case of children. The following were found to be the principal advantages of pental: Extraordinarily rapid narcosis, rarity of a period of excitement, which, if present, ceased with absolute narcosis; immediate recovery of consciousness after removal of the mask; and absence of any unpleasant after-effects, such as are caused by chloroform. No action on the heart was ever observed, but in some patients arrest of respiration and cyanosis occasionally appeared, when removal of the mask sufficed to restore the natural colour. The author attributes the cyanosis, not to any toxic action on the respiratory centre, but to tonic contractions of the diaphragm and glottis. In 21 cases the urine was subsequently examined for albumen, but only once a trace was found, which disappeared on the third day; this occurred in a tuberculous child after a prolonged operation. The majority of the operations lasted from ten to thirty minutes, from 30 to 60 ccm. of pental being required. In conclusion, judging by 1,000 narcoses, pental is, with certain exceptions, always able to replace chloroform, being, moreover, less dangerous and without after-effects. In the above-named hospital pental is now looked upon as an indispensible drug, but, during its use, all precautions should be taken, as when administering chloroform.

(135) Absorption of Guaiacol by the Skin.

Linossier and Lannois (*Sem. Méd.*, February 7th) have studied the absorption of guaiacol by the skin and its elimination by the urine after application to the skin. Their experiments prove that the drug is really absorbed by the skin, as the effect takes place with equal intensity when the patient breathes through a tube opening outside the room in which he is. After the application of 2 grammes of guaiacol, elimination by the kidney was already manifest at the end of a quarter of an hour. The proportion of guaiacol contained in the urine reaches its maximum from one hour and a-half to four hours after the application. It decreases rapidly after from six to seven hours; in twenty-four hours only traces of the substance can be found in the

urine. The quantity of guaiacol eliminated in the urine may amount to 1 gramme 11 centigrammes, or 55.5 per cent. of the quantity applied to the skin. These researches seem to show that applications of guaiacol may be used to supplement the ingestion or subcutaneous injection of this substance. To quicken the absorptive process the surface to which the drug has been applied should be covered with some impenetrable material.

(136) Ferratin.

BANHOLZER, of Professor Eichhorst's clinic, relates (*Centralbl. f. inn. Med.*, January 27th, 1894) his clinical investigations with this preparation introduced by Schmiedeberg (EPITOME, December 2nd, 1893, par. 461). In the cases in question the amount of hæmoglobin in most instances, and the number of red cells were estimated. In anæmia following acute disease the hæmoglobin was quickly increased (over 5 per cent. in eight days) as also the number of red cells. In chlorosis the same results were visible even in a more marked degree. The general condition was improved and the increase in weight in most cases considerable. The good effects on the appetite were obvious. When compared with Blaud's pills, which also give good results, ferratin was found to lead to a greater increase in the hæmoglobin. The results of these investigations are set forth in tabular form. The author concludes that ferratin is a prompt, useful, and harmless remedy in chlorosis and anæmia following past disease, and is well deserving of further trial.

(137) Migraline.

UNDER this name Overlach (*Deutsche med. Woch.*, No. 47, 1893) describes the properties of a combination of antipyrin with caffeine and citric acid. He considers it a chemical combination of the three substances, and, after five years' experience of its action in cases of migraine and other forms of headache, he has come to regard it as an almost infallible cure, even in the most obstinate cases. It is useful whether given in the premonitory stage or after the headache has fully developed, and it is seldom that more than one dose is required. The dose is 1.1 g., to be taken dissolved in water. This quantity contains only 0.09 g. of caffeine, or one-sixth of the maximal dose of this substance. It is recommended that the patient rest awhile after taking the drug, especially in cases of severe migraine.

(138) Exclusion of Daylight in the Treatment of Small-Pox.

FINSEN (*Hosp. Tid.*, No. 27, 1893) has made some observations on the effect of light on the skin. He referred to the good results obtained by Black and others by the exclusion of daylight in the treatment of small-pox, but argued that as Widmark has shown that it is the ultra-violet rays which have the strong chemical action, it is not necessary to exclude the daylight, but by using red curtains tightly drawn, or red window panes, the injurious effects of the light can be prevented. The correctness of this hypothesis was proved by Svendsen, of Bergen, who last summer treated four cases of small-pox in unvaccinated patients by covering the windows with thick red woollen curtains. The patients escaped the suppurative stage; there was no rise of temperature, no œdema. The patients passed from the vesicular stage, which was slightly prolonged, into convalescence, and escaped scarring.

(139) Lactophenin.

LANDOWSKY (*Sem. Méd.*, February 7th) has tried the effect in several cases of lactophenin, a substance very closely allied chemically to phenacetin. This drug has antineuralgic properties analogous to those of antipyrin, and has besides a genuine hypnotic effect. The amount given daily was from 60 centigrammes to 3 grammes, divided into several doses. The only disagreeable by-effects caused by the drug seemed to be diaphoresis and slight giddiness in a few of the patients.

PATHOLOGY.

(140) Dropsy of Bacterial Origin.

H. J. HAMBURGER (*Weekblad van het Nederlandsit Tydschrift voor Geneeskunde*, December 23rd, 1893), found in ascitic fluid taken from a dropsical patient a micro-organism, hitherto unknown, which he calls bacterium lymphagogon. To the pathogenic action of this organism on the capillary endothelium he ascribes the excessive increase of lymph which produces the ascites. This power is destroyed in the organisms by exposing them for two hours to a temperature of 56.° In form the microbes resemble micrococci; they are only moderately motile; the average size is from 0.5 to 0.8 μ. They are easily coloured by the usual methods, and require a large amount of oxygen. Cultures in beef, veal, and horseflesh broth were unsuccessful. The growth of the organisms is exceedingly rapid in liquid human serum and in sterilised ascitic fluid. Hamburger points out the fallacy of relying on the liquefaction of gelatine as a distinctive feature of special kinds of bacteria. In his cultures he found this to vary in accordance with the use of fresh-made gelatine or of such as had been in stock for some time. He opposes the view of Cohnheim (*Vorlesungen über allgemeine Pathologie*, 2nd Aufl. Th. I, p. 494), who maintains that every form of dropsy is caused either by excessive venous hyperæmia, or by the increased permeability of the walls of the capillaries. Hamburger points to a third form—stimulation of the capillary endothelium by a substance produced by bacteria.

(141) The Influenza Bacillus.

NEISSER (*Deutsche med. Woch.*, No. 4, 1894) examined the bronchial sputum from twenty patients suffering from influenza. The sputum was received in a dry sterile vessel, and a small quantity diluted with sterile bouillon used for inoculating blood-agar tubes. In every case a growth was obtained which corresponded with the microscopical and cultural characters described by Pfeiffer. Secondary cultivations could not be obtained. In bouillon to which a drop of pigeon's blood had been added, the bacillus grew freely, reaching its maximum on the second day, and causing a slight cloudiness. Inoculation of animals was without result. The sputum of nine patients suffering from tuberculosis or bronchial catarrh was also examined with a negative result, except in the case of one phthisical patient, who was in the same ward as the influenza patients; in this case two colonies of the influenza bacillus developed. One patient who at first presented symptoms of influenza, and whose sputum yielded pure cultures of the influenza bacillus, subsequently developed mild typhoid fever. In her case cultivations of the influenza bacillus were obtained eight days after the first experiment. One case of aortic aneurysm died. At the *post-mortem* examination a small pneumonic area was found; the bronchi were everywhere filled with thick pus, which contained enormous numbers of influenza bacilli, and yielded on cultivation the influenza bacillus almost alone.

(142) Sulphuretted Hydrogen as a Bacterial Product.

A. A. ORLOVSKY (*Vratch*, No. 48, 1893, p. 1324), continuing Fromme's interesting researches on the subject (*Inaugural Dissertation*, Erlangen, 1893) has made a very large number of elaborate experiments on the following bacteria: Typhoid bacillus, B. coli communis, Emmerich's bacillus, cholera vibrio, Finkler-Prior's vibrio, Deneke's vibrio, Mueller's vibrio, glanders bacillus, B. anthracis, microbe of malignant œdema, B. megatherius, B. fluorescens, B. dendroideus, B. prodigiosus, Friedlaender's microbe, microbe of rhinoscleroma, micrococcus tetragenes, and staphylococcus aureus and albus. In each instance a pure culture was taken and inoculated in gelatine or agar, containing either nitro-prusside of sodium or lactate of iron, sulphate of copper, iodide of lead, and such like compounds employed as reagents for H_2S. Of all the bacterial species examined, only four—typhoid bacillus, B. coli communis, Emmerich's rod, and the microbe of malignant œdema—proved to elaborate the sulphide, the typhoid bacillus and B. coli communis being the most energetic producers of the four, and Emmerich's microbe the weakest. The author emphasises the fact that typhoid bacillus develops the S most abundantly when growing in the presence of Fe and Pb salts, while bacillus coli communis is most active in media containing nitro-prusside of sodium, which biological difference is thought to settle the question concerning identity of the two bacterial species.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(143) Movable Liver.

Leube (*Münch. med. Woch.*, January 23rd, 1894) remarks on the rarity of this condition. The ligaments attaching the liver to the diaphragm must become loosened. Pendulous belly due to repeated pregnancies, chronic ascites, etc., predispose. He records a case in a lad, aged 17, with heart disease and general dropsy. The abdomen had to be tapped, a fine trocar being used, and 10, 16, and 10 litres were drawn off at different times. On admission the umbilicus bulged, a fluctuation thrill could be easily felt, and the abdomen was dull all over, except in the region of the stomach. The liver reached 10 cm. below the ribs in the mammary line; the surface was smooth, the consistency hard, and the organ pulsating. Behind, pulmonary resonance extended on both sides down to the eleventh vertebra. After tapping, a depression was noted in the upper part of the right abdomen, and lower down a projection. This tumour measured 10 to 11 cm. in the middle line, and 15 cm. in the right mammary line, and over it the percussion note was dull. The lower border could be followed from left to right, and the convex upper surface of the liver felt. Between the liver and diaphragm fluctuation could be made out, and the surface of the liver could be dipped upon. The liver could be readily pushed up, the pulmonary resonance behind being then raised 1 cm. The fluid seemed to remain between the liver and the diaphragm, whether the patient was lying down or sitting up. This was also proved at the necropsy, the lad dying some months later. The liver was very movable, enlarged, and of the nutmeg variety, with consequent induration. The suspensory ligament was 7½ cm. long. The pulmonary resonance behind was raised when the liver was pushed up, owing to the displacement of the fluid backwards. An additional cause of the mobility of the liver may lie in the loosening of its posterior attachment, for usually the vena cava is firmly bound with the liver and vertebral column. This case, as well as another seen by the author, occurred in men; hitherto movable liver has been exclusively seen in women.

(144) Weil's Disease.

Freyhan (*Berl. Klinik*, February, 1894) discusses this subject after relating the following typical case. A man, aged 32, was suddenly seized with shivering, fever, headache, followed by semi-coma. On the next day jaundice was noticed. On admission the tongue was dry and coated, the temperature 38.9° C., and the pulse 100. The urine was dark in colour, contained bile pigment and a trace of albumen, some hyaline casts, and a few red and white cells. The liver and spleen were both enlarged. The stools were loose and passed unconsciously. The fever terminated by lysis in a few days, the other symptoms disappearing at the same time. Severe pains in the calves were noted, especially at this time. Men, says the author, are more often attacked than women. Sometimes relapses occur, the former symptoms reappearing, but rarely in such a severe form. The pulse rate is usually high, but during convalescence it is infrequent, probably owing to the presence of bile constituents in the blood. Severe cerebral symptoms are rarely absent. Jaundice is the most constant symptom. The hepatic enlargement is not always present, the spleen being more often affected. The nephritis is to be looked upon as toxic in nature as in the other infective processes. Muscular pains, supposed to be due to a myositis, are almost always present. The prognosis is good. Neither morbid anatomy nor bacteriology has as yet given definite information as to the exact nature of the disease. It may be difficult to distinguish it from enteric fever in the first few days, and it has been looked upon as abortive enteric fever with jaundice, but the typical lesions of this latter disease have never been found. The resemblance to acute yellow atrophy is quite superficial, and it differs from septicæmia in several ways. From infective jaundice the difficulties of diagnosis may be great. The author then refers to the infective theory of simple jaundice with special reference to epidemics, but he does not believe that a single cause can account for all such cases. Those believing exclusively in the infective origin of jaundice look upon Weil's disease as only a severe form of this affection. The clinical picture of catarrhal jaundice, even when accompanied by fever, is very different from that of Weil's disease. The relation of Weil's disease to typhus biliosus, endemic in Egypt, is then discussed. Some have looked upon it as the sporadic form of this disease. Only the discovery of the specific agent will settle the question.

(145) Chronic Progressive Hereditary Chorea.

Oppenheim and Hoppe (*Arch. für Psych.*, xxv. p. 617) give the results of the microscopic examination in two cases of Huntington's chorea. The first patient was a woman, aged 56, who died of influenza and bronchitis; the other was a man, aged 75, who died in a sort of apoplectiform attack. The hereditary character of the affection was well marked in both cases. In the case of the man, it is remarkable that he himself, his mother and two sisters were between 60 and 70 years of age when first affected by the disease. In neither of the two cases was there any paralysis or essential psychical disturbance. In both cases there was a certain amount of atrophy of the cerebral convolutions, associated in the woman's case with a certain degree of external hydrocephalus, doubtless passive in nature. In the man's case there was some membranous and hæmorrhagic inflammation of the inner surface of the cerebral dura mater. Many microscopic alterations in the nervous system were found, but the authors consider that the most essential of these was a miliary disseminated encephalitis of the cortical and subcortical regions, especially in the motor zones. They think that this may possibly be regarded as the substratum of the disease. The inflammation may go on to sclerosis and lead to cortical atrophy, and sometimes to external hydrocephalus. A few foci of inflammation were found also in other parts of the encephalon, as the pons and medulla oblongata. Some comparatively trivial (irregular and diffuse) changes, which originated in the neuroglia and vessels, were found in the spinal cord. They consider that degeneration in nerves and changes in muscles are not necessary features in the disease.

(146) The Relation of the Density of the Blood to Various Morphological Conditions.

Romano (*Gazz. degli Ospitali*, January 2nd, 1894), from numerous clinical observations, has arrived at the following conclusions: (1) The density of the blood is generally greater in individuals with well-developed thorax and circulatory organs, especially if the right ventricle and the venous system are well developed. (2) A constant relation appears to exist between the specific gravity of the blood and of the serum only in healthy individuals, the mean difference being from 25 to 30 centigrammes less in the case of the serum. The relation in convalescents is less constant, and is very variable in case of disease, in which the density of the serum is greater as that of the blood is diminished. (3) The density of the blood is in direct relation with the amount of hæmoglobin, not with the number of red corpuscles. (4) The density is less in those who by ill development of the thorax are especially prone to pulmonary affections. (5) Among individuals with excessive development of the abdomen, the specific gravity of the blood tends to be greater in those who have a tendency to cardiac disease than in those liable to pulmonary affections.

SURGERY.

(147) Congenital Luxation of the Patella.

Schon (*Ugeskrift for Laeger*, November 17th, 1893) reports the case of a girl, aged 13, with congenital dislocation of the left patella. The patient's mother and one sister (both deceased) had had similar deformities of both knees. The patient suffered no inconvenience from the deformity, but on walking the left knee was kept more stiff than the other, and was also in a position of slight genu valgum. Complete flexion and extension, active as well as passive, were possible. On active movement some

crepitation was felt, probably due to the movements of the patella. In complete extension the patella rested on the fore part of the external condyle, thus more laterally than normal. On flexion it glided down on the outer edge of the external condyle, at the same time turning so that its two flat surfaces pointed outwards and inwards. On further flexion it glided lower and lower down; and in complete flexion covered the line of articulation between femur and tibia, where it could be felt as an abnormal prominence, increasing the breadth diameter of the joint. The empty fossa patellaris could be felt immediately under the integuments, and appeared of normal size; there was no flattening of the edges of the condyles. Except for the slight genu valgum, the femur and tibia were in normal relations; there was no rotation outwards of the tibia. There was no lateral mobility, and no other pathological condition of the joint. The author has collected twenty-six cases of this deformity, of which three were hereditary.

(148) Turnip as a Substitute for Decalcified Bone in Intestinal Surgery.

R. BARAÇZ (*Pamietnik. Tow. Lek. War.*, No. 2, 1893—*Przeglad Chirurgiczny*, Tom. 1, Zeszyt 11, 1893), with the view of finding some substitute for decalcified bone plates, which take too long to prepare, examined various vegetable substances—apple, carrot, potato, beetroot, etc., and came to the conclusion that turnip is the best material for the purpose. He performed a series of experimental operations on dogs, including 5 gastro-enterostomies and 3 resections of intestine with entero-anastomosis. Among the 5 gastro-enterostomies there were five recoveries; the remaining dog died of peritonitis caused by the escape of the contents of the stomach into the peritoneal cavity at the time of the operation. Among the 3 cases of resection of the intestine there was one death due to intestinal occlusion consequent on the anastomosis being made too far from the sutured end. The author considers that the failures had nothing to do with the turnip plates which he used. In the case of gastro-enterostomy which proved fatal he examined the seat of anastomosis two days after the operation. The plates were found at the points where they had been applied fixed by sutures around the fistula; the stomach plate was soft like boiled carrot, the intestinal plate was somewhat harder. Two dogs were killed fifteen to twenty days after the gastro-enterostomy, and the plates were found neither at the seat of anastomosis nor in the intestinal canal; the sutures had also disappeared. Neither was any trace of plates found in cases where the dogs were sacrified at a later period—namely, thirty-eight to fifty days after the operation.

(149) Etiology of Appendicitis.

HODENPYL (*N. Y. Med. Jour.*, December 30th, 1893), holds that there are two classes of factors in the causation of acute appendicitis: predisposing, which may vary in different cases; and more active factors, of which there seem to be two distinct but intimately associated elements: (*a*) bacterial, of which the bacillus coli communis is very probably the most important; and (*b*) the less well-defined and less understood chemical factors associated with the fæcal contents of the intestines. Of the predisposing causes of acute exudative appendicitis, stricture of the appendix is one of the most frequent. This condition, though sometimes probably the result of previous inflammatory processes, is in a large proportion of instances the result of partial retrograde evolution, the cæcal opening, which is much dilated in the infant, gradually contracting until adult age, when it is smaller than the rest of the lumen, and sometimes much constricted. The vermiform process, like other organs which undergo retrograde evolution, is very prone to become inflamed Again, the longer the appendix the more liable it becomes to inflammatory changes. Other predisposing causes are adhesions drawing the appendix into abnormal positions, atrophy of the mucous membrane, and concretions. The last mentioned cause, though formerly regarded as the usual one, does not exist in more than 10 per cent. of the cases of appendicitis. The author, though led at one time by the results of his own investigations to regard the bacillus coli communis as a most important factor in the causation of acute appendicitis, acknowledges that the recent observations of Barbacci have proved the necessity of caution in attributing a too exclusive *rôle* to this bacterium. Barbacci has shown that perforative peritonitis is not due to the introduction of the bacillus coli communis alone, but is the result of (1) the escape of fæces and intestinal gases into the peritoneal cavity; (2) the development of other forms of bacteria therein; and of (3) the constant irritation arising from the continued escape of intestinal contents.

(150) Prevention of Infection of the Wound after Cataract Operations.

PANAS (*Arch. d'Ophtal.*, October, 1893) found that cultures taken from the edges of the eyelids in ten healthy subjects with normal eyes, in every case produced colonies of staphylococcus albus or aureus: these, inoculated into the cornea of rabbits, produced abscess of the cornea, and in one case suppuration of the eye. The same experiments, performed after the lids had been washed with a watery solution of biniodide of mercury, gave the same results after some delay. Painting the lids with biniodide in oil much reduced the number of infective cultures. The best results were obtained by prolonged application of the biniodide; all cataract patients, the night before operation, had their lids carefully washed with a solution of bicarbonate of soda to remove the fat; the conjunctival sac was next washed out with a solution of the biniodide; biniodide of mercury in oil, 4 parts in 1 000, was then carefully brushed upon the edge of the lids; the eye was kept tied up till the time of the operation. The results of the method have been excellent, and no case of infection has taken place.

MIDWIFERY AND DISEASES OF WOMEN.

(151) Symphysiotomy and Narrow Pelvis.

PINARD (*Annales de Gynéc.*, January, 1894) relates his experiences in a public institution in Paris during 1893. In that year 13 symphysiotomies were performed there, 9 having been undertaken by Pinard himself. In 9 cases out of the 13 the patients were multiparæ, in 4 primiparæ. In 10 the operation was performed where the pelvis was rickety, but more or less symmetrical; in 3 the pelvis was unsymmetrical. Twelve out of the 13 mothers and 13 children were saved. No accidents occurred during the division of the symphysis and stretching of the pelvis. During the extraction of the fœtus, the anterior vaginal wall was twice torn. The patients were both primiparæ. No sutures were applied; the vagina was simply plugged with iodoform gauze, and the wound united by first intention. Vesico-vaginal fistula developed in 1 case, and hysterical incontinence of urine in 1 case, which was cured by electricity. In the fatal case, the patient had been long in labour, and the liquor amnii was fœtid when the patient was admitted into hospital. She died of septicæmia on the ninth day; the child, however, was saved. In the same institution no embryotomy was performed nor labour induced during 1893. Pinard urges the total rejection of embryotomy on live children; of the forceps when the obstruction is due to the bone in any part of the pelvis; and of induced premature labour in all cases where symphysiotomy can allow of the passage of the head at term. In cases of absolute contraction of the pelvis, utero-ovarian amputation is indicated. Lastly, there is a large class of cases where there is osseous resistance not to be overcome by uterine contractions. Then, if the presentation of the fœtal head is well detected, and if, on calculation, it is clear that section of the pelvis will allow the head to pass, symphysiotomy, pubiotomy, ischio-pubiotomy, or coccygotomy are indicated.

(152) Pregnancy in a Uterine Cornu.

WEHLE (*Centralbl f. Gynäk.*, No. 4, 1894) recently demonstrated at a Dresden Society a specimen of pregnancy, advanced to the fifth month, in a rudimentary left cornu. The patient was 35 years of age, and had been four times delivered normally. The last period occurred in March, 1893. On August 28th, after a fall, hæmorrhage set in and continued till nine days before the operation, which was performed on October 26th. The right side of the uterus was enlarged and pushed to the right; the right appendages were normal. At the level of the os internum

was a pedicle as broad as two fingers, with which the left cornu was connected. The left tube and the ovary, which contained a corpus luteum, were normal. The broad ligament was secured, an elastic ligature passed round the cornu, and the pedicle, after division, treated after Leopold's plan in hysterectomy. The cornu measured 8 inches in its long diameter. As the sac was divided the amnion was exposed, and a fœtal foot could be seen through it. The cornu, with the fœtus and placenta, were exhibited. The patient made a good recovery.

(153) Treatment of Eclampsia.

Tarnier (*Journ. des Sages-Femmes*, February 1st, 1894) maintains that eclampsia represents a true poisoning of the blood. It is not caused by retention of urea or carbonate of ammonia in the blood. In eclampsia the blood is absolutely poisonous, as experiment has shown. On this account Tarnier holds that blood must be abstracted in a case of puerperal eclampsia. But then the patient would have less blood (and loss of blood is a great evil under the circumstances), and that blood would be as poisonous from the first as the blood removed. Hence the advantage of milk diet, which is, to a great extent, absorbed, so that the blood becomes diluted, increasing in bulk, with diminution of the proportion of poisonous material. Free purgation is also desirable for ensuring elimination of poison; Tarnier gives croton oil. Inhalations of chloroform are also beneficial; they calm the nerve centres, which are excited by the circulation of poisonous blood, and thus check, in a direct manner, the tendency to convulsions.

(154) Acute Uræmia in a Case of Uterine Fibroid.

Tuffier (*Gaz. des Hôp. de Paris*, October 17th, 1893) publishes a case in which a woman suffered from uræmia, the ureters being pressed by a uterine fibroid as large as an adult head. The condition being urgent, he performed abdominal hysterectomy, and the renal symptoms ceased at once. The patient made a good recovery.

(155) Myoma Simulating Retroflexion of Gravid Uterus: Hysterectomy.

Koffer (*Centrabl. f. Gynäk.*, No. 4, 1894) was called in to see a pregnant woman said to be suffering from retroflexion of the gravid uterus. For several days she had been subject to obstinate intestinal obstruction, which did not yield either to drugs or to enemata. The patient was hiccoughing and vomiting. The period had been absent over three months. The fundus was found to lie rather higher than the level of the umbilicus. On digital exploration, a big irregular tumour was found in Douglas's pouch; it almost filled the pelvis. The cervix was pushed up as high as the upper border of the symphysis, yet there was no retention of urine. After an enema free evacuation of the bowels occurred, but on the next day the patient was found to be worse. The condition was diagnosed as pregnancy with myoma at the back of the uterus, filling the pelvis and causing obstruction. As there seemed to be no prospect of the case getting better Koffer amputated the uterus, treating the stump extraperitoneally. During extraction the amnion burst and the uterus contracted, expelling the ovum.

(156) Sloughing of Cervix after Labour: Recovery.

Magnaux (*Archives de Tocol. et de Gynéc.*, December, 1893) observed this grave complication in a woman, aged 38, who had been twenty times pregnant—twelve labours at term, one in the middle of the sixth month, and six miscarriages, whilst the twentieth pregnancy began at the end of November, 1892. She was seen at the Hôpital Tenon in April, when no morbid history could be traced. On August 26th, 1893, labour set in at 10 P.M. She was delivered at 9 A.M. the next morning, having been admitted into the same hospital. The cervix, it was noticed, was never entirely effaced, and during the efforts at expulsion, the anterior lip projected at the vulva, and appeared œdematous and deep violet in colour. The child was very big, and there was some trouble in delivering the shoulders; the head had presented in the first position. The left arm was damaged, but the child was saved. The cervix uteri of the mother was found next day lacerated on both sides. A part of the posterior lip was found partly detached. The anterior lip, over 3 inches long, projected at the vulva; it was sloughy. The vagina was syringed daily with lysol, and the cervix painted with iodine and iodoform gauze passed into the cervical and vaginal canals. Within a week the sloughy tissues had separated. By September 12th, no trace of any anterior lip remained, the posterior lip was very thin, and about half an inch long. The child's left arm remains partially paralysed.

THERAPEUTICS.

(157) Treatment of Enteric Fever.

Maillart (*Rev. de Méd.*, November, 1893), begins a study of cases of enteric fever treated by the internal administration of large quantities of water. The first object of treatment is to destroy the micro-organisms, but failing this the action of their products must be neutralised. These toxalbumins are excreted by the kidneys. In enteric fever the urine is diminished in quantity, and the skin does not act, hence the object should be to encourage these emunctories. In order that a large quantity of water should be excreted, a large quantity must be provided. Subcutaneous infusion may be adopted if the patient is unconscious, or in severe hæmorrhage. Water can also be supplied by rectal injections, but the simplest way is to make the patient drink copiously. The author endeavours to ascertain the effect of this treatment on the different symptoms in fourteen cases of enteric fever minutely studied. Only one case died. The patients take to this treatment readily. Exceptionally as much as 16 litres were taken in the day. The mouth became moist, and the trouble in swallowing owing to dryness of the pharynx disappeared. Thus antisepsis of the mouth is more easily effected. The stomach tolerates this treatment; in exceptional cases vomiting occurred at first, but this soon ceased. The diarrhœa was not increased. The water was excreted by the kidneys and skin, the quantity of urine being greatly increased.

(158) Digitalis in the Treatment of Chilblains.

Pilatte (*Sem. Méd.*, December 20th, 1893) says that in those subject to chilblains there is always arterial hypotension with peripheral vaso-dilatation. The chief indication, therefore, is to improve the circulation. For this purpose Pilatte gives digitalis internally, from 50 centigrammes to 1 gramme 50 centigrammes of a maceration of the leaves being administered on two days a week. Caffeine and kola are sometimes substituted for the digitalis. He also uses digitalis as a local application as follows: R, tincture of digitalis, 6 grammes; crystallised thymol, 3 grammes; alcohol at 70° C., glycerine āā, 150 grammes. Careful drying of the hands and feet, followed by friction with eau de cologne or camphorated alcohol, is enjoined. For the relief of the itching tincture of iodine lightly painted on every three or four days is particularly useful. Fatty substances, including vaseline, should never be applied.

(159) Vinegar in Chloroform Sickness.

Warholm (*Hygiea*, October, 1893) accidentally discovered that vinegar is an excellent remedy for the after-effects of chloroform. He has used it in 30 cases. Not only were the nausea and vomiting relieved, but also the distressing headache. Only in 1 case, that of an alcoholic patient who had had a large dose of chloroform, the vinegar had no effect. Ten patients had been under chloroform more than an hour; 3 of them had had chloroform previously, and had suffered greatly from after-effects. On the patient's being brought back to bed, and before he came round, a compress saturated with vinegar was placed over his nose and left there till he came round, or longer if necessary. A bottle of vinegar was placed at the bedside to be used by the patient as required. Some of the patients were able to drink, and even to take small quantities of food soon after recovering from the narcosis.

(160) Iodides in Locomotor Ataxy.

Weiss (*Centralbl. f. d. ges. Therap.*, February) refers to a case of tabes dorsalis, which, as reported in the *Neurol. Centralbl.*, December, 1893, was treated with large doses of iodide of potassium, and then proceeds to describe a case similarly treated by himself with iodide of sodium. The patient had ten years

previously been treated for primary and secondary syphilis, the first symptoms of ataxy manifesting themselves three years subsequently. All the usual symptoms were present when the patient first came under observation in 1893, and some months later the iodine treatment was commenced. Seventy-five grains of the sodium salt were given daily during two weeks, and, no unpleasant symptoms being produced, the daily quantity was increased first by 30, and then by 45 grains. At the end of three or four weeks the gastric crises, which until then had been of daily occurrence during the preceding years, suddenly ceased, and did not return. During the following month the disturbances of co-ordination diminished, and disappeared altogether a few weeks later, at which time the patient was taking 2 drachms of iodide daily, the total consumption having been 16 ounces. Similarly the other symptoms gradually disappeared, while the appetite and body weight increased. The urethral crises and weakness of sphincters persisted longest, and had to be treated by galvanism. At no time were any unpleasant symptoms observed as the result of the iodine.

(161) Guaiacol.

Stolzenburg (*Berl. klin. Woch.*, January 29th, 1894) has tried in Senator's clinic the external use of guaiacol as an antipyretic in the way recommended by Sciolla. Most cases were instances of the pyrexia of phthisis, and only two or three of acute disease. The guaiacol was rapidly painted on a part of the body, generally an extremity, and an impervious bandage applied. Two c.cm. were found to be sufficient for the purpose, and in feeble patients 1 c.cm. should be used at first. In the course of the next few hours the temperature fell, with copious sweating but it soon rose again, often with shivering, attaining a greater height than before. In most cases the treatment had to be discontinued, owing to objection on the part of the patients; the smell is also unpleasant. No real influence on the disease could be made out. Its continued use cannot be recommended. Larger doses may produce collapse. The absorption through the skin is remarkable, but beyond question.

(162) Theobromine in Mitral Disease.

Hallopeau (*Union Méd.*, January 30th) has obtained good results with this drug in the case of a woman with mitral disease of many years' standing, who presented œdema of the inferior extremities which resisted all other treatment. The medicine was prescribed in doses of 50 g. every six hours. She was so much relieved by the first two doses that after four the amount was reduced to 3 g. every twelve hours. In a few hours the swelling of the legs was completely relieved, and there was abundant desquamation subsequently. During the few hours which followed the administration of the medicine the patient had a profound feeling of *malaise*, with a tendency to faint and a threatening of impending death, but these accidents were fleeting. The œdema was only reproduced slowly, and several months after it had not increased to the amount which existed formerly. The drug is supposed to have a greater action on the heart and vessels than on the kidneys.

(163) Lysol in Dysentery.

N. K. Rüdneff (*Meditzinskoïe Obozrenie*, No. 20, 1893, p. 747), obtained very good results in sixteen recent cases of dysentery by the use of lysol enemata. A 1 per cent. aqueous solution was always used, one pint being injected three times daily until the disappearance of blood from the stools. This occurred in eleven cases on the second day, in three on the fourth, and in the remainder on the sixth and eighth. A marked general improvement (including the subsidence of abdominal pain) invariably commenced on the second or third day, all the patients making a rapid and permanent recovery.

PATHOLOGY.

(164) The Demonstration of Protozoa and Spirilla in Drinking Water.

Beyerinck (*Centralbl. f. Bakt.*, xv B., No. 1), after commenting on the fact that the conditions of life of most protozoa and spirilla differ considerably from those necessary to the growth of bacteria, yeasts, and moulds, so that the former organisms are but seldom shown by the ordinary bacteriological methods, recommends a special method for their study. This he recently described, and advocated for the study of bacteria, in the same periodical (Bd. xiv, 1893, p. 827). The principle of the method is that the organisms develop at a certain level in the (fluid) nutrient medium ("Bakterienniveau"), which varies in accordance with the conditions of nutrition, as will shortly be apparent. The method, as originally described, is as follows: An ordinary brown bean is placed at the bottom of a test tube, which is then almost filled with distilled water, and kept upright at the temperature of the room, as free from currents of air as possible. Water, with the oxygen it contains, is taken up by bean, and certain soluble substances (including sugar and phosphates) diffuse from the latter into the water, serving as nutriment for bacteria. In the first place, the organisms upon the surface of the bean develop, producing a cloudiness over its surface. This cloud of developing organisms soon rises, however, owing to the rapid removal of oxygen from the neighbourhood of the bean. The level attained by the dense mass depends on the time which has elapsed since the experiment began, and upon the temperature. In the case now quoted, in forty-eight hours, at 20° C., the collection of organisms was seen at a point 2 to 3 cm. above the bean, as a thin opaque layer (the "bacterial level"), which appeared as a sharp white line when viewed from the side. Above and below this the water was clear. The "level" is that point at which the oxygen from above and the nutrient stream from below meet, and afford suitable conditions of growth for the bacteria. In place of the bean sterilised nutrient agar or gelatine can be used. This, after setting, is inoculated with the material to be examined, and sterilised water is then poured over it. The water may be thickened with agar (1 per cent.). The bacterial level forms as before, with certain distinctions. The special advantage of this method is that it realises all possible conditions in respect of concentration of nutrient material and oxygen. Hence it is very suitable for the study of protozoa and spirilla. Some of the water to be examined is poured into a tube, at the bottom of which is the solid gelatine or agar. A "level" presently forms, containing various bacteria. The water above this is suitable for the development of protozoa, owing to a combination of the following conditions: a low proportion of organic material (which has been largely filtered off at the bacterial level), a high proportion of bacteria (which serve as food), and variations within wide limits of the amount of contained oxygen. In samples of this water the protozoa can be well studied. Presently the surface of the water becomes covered with a thick layer of bacteria and monads, and the entry of oxygen is consequently much hindered. Spirilla now develop, forming a "level." Beyerinck gives the results of examination of a specimen of drinking water by this method. He shows that the protozoa and spirilla therein contained existed in the water at the time of collection, and had not merely gained access to it from the air of the laboratory. In conclusion, certain modifications are pointed out by which the method may be adapted for wide application.

(165) Bacteriological Examination of the Blood of Phthisical Patients in the Hectic Condition.

Jakowski (*Centralbl. f. Bakt.*, December 9th, 1893) observes that the opinion has been widely held that the hectic fever seen in phthisical cases is due to circulation of the products of pyogenic organisms; that the condition is, in fact, one of septicæmia. The occurrence of these organisms in the blood has not, however, as far as he is aware, been reported. Jakowski has examined blood from the finger in 9 phthisical patients in the hectic state, and in 7 of these he has found pyogenic cocci. In detail the results are as follows: Staphylococcus p. aureus occurred alone twice, with staph. p. albus twice, and with streptococci once. Streptococcus pyogenes occurred alone twice, with staph. p. aureus once. In 3 of the above cases the cocci were found in the sputum also. In 1 case, in which no cocci were found in the blood on the first examination, at a date at which the disease was limited to one apex, and appeared to be stationary, they were obtained readily some weeks later, contemporaneously with evidence of further destruction of lung tissue.

AN EPITOME OF CURRENT MEDICAL LITERATURE.

MEDICINE.

(166) Indicanuria and Tuberculosis.

FAHM (*Jahrbuch f. Kinderheilk.*, 1894, xxxvii. No. 12) wished to find out if the indican reaction in the urine of tuberculous children was sufficiently constantly increased to give the reaction a diagnostic value in cases where the tuberculous nature of the disease was doubtful. His observations are confined to children, of whom he examined a series with undoubtedly tuberculous affections, as well as a series with other complaints. In the case of tuberculous children the result of his observations was (much as that of Kahane) that 38.9 per cent. had on the average a normal, whilst 61.1 per cent. had an increased, indican reaction. He then wished to see if, as stated by Hochsinger, the intensity of the reaction increased with the gravity of the disease. The following case shows that this is not necessarily the fact. A boy with suppurating tuberculous disease of the spinal column was terribly emaciated; 28 examinations of his urine were made, and the indican reaction was found 13 times normal and only 15 times increased above the normal. Amongst the non-tuberculous cases Fahm found the average indican reaction to be normal in 60 per cent. and increased in 40 per cent., a result almost exactly converse to that obtained in the tuberculous cases. The average indican reaction must be obtained by examining the patient's urine on many different occasions. Fahm thinks that in non-tuberculous affections the indican reaction may be, and is not rarely, considerably increased, but not so frequently as in tuberculous affections.

(167) Systemic Effects of Severe Hæmorrhage.

PEMBREY AND GURBER (*Journ. of Phys.*, January, 1894) give the results observed in rabbits after bleeding from the carotid artery until the pressure became so low that the flow ceased; at this stage the animal was in a state of marked asphyxia. In those cases in which transfusion was performed an amount of solution equivalent to that of the blood removed was injected under low pressure. The rabbit recovered its breathing quickly, and at the end of the operation was generally able to run about. Tables are given of observations on the respiratory exchange, and the authors draw the following conclusions: Severe bleeding, whether followed by transfusion or not, causes no decrease in the respiratory exchange, provided that the animal's nutrition does not suffer from the operation. The respiratory quotient shows variations, but these are apparently not greater than those observed in the normal animal. The animal, after a great loss of blood, no longer has so great a reserve store of energy. Although the loss of blood does not prevent the so-called "vegetative" processes from going on, yet the animal is unable to undergo any great muscular exertion. The animal, when it is at rest, is able to accommodate itself even to a loss of one-half of its hæmoglobin, and the exchange of material represented by respiration is as great as that of a normal animal when it also is at rest; the cells are able to obtain an adequate supply of oxygen notwithstanding the great loss of hæmoglobin. The transfusion with saline solutions after bleeding does not appear to have any special effect upon the respiratory exchange; without doubt it enables the animal to bear a greater loss of blood than it could otherwise do, but it appears to owe its beneficial effects chiefly to the mechanical assistance which it gives to the circulation by filling the blood vessels. The solution also probably economises the fluids in the tissues and removes the thirst which is often a marked symptom of a great loss of blood. No marked effect upon the respiratory exchange is shown.

(168) Catarrhal Eruptions.

HUTCHINSON (*Archives of Surgery*, January) proposes the recognition of a group of diseases of the skin due to catarrhal causes, for example, exposure to cold and damp. If there are any affections of the skin which may be properly called "catarrhal" they ought, he says, to show a definite tendency to apparently spontaneous recurrence, and should be capable of spontaneous decline. They ought, further, to have symmetrical manifestations and to be attended by a certain slight amount of disturbance of the general health. The diseases which he proposes thus to group together have not by any means been overlooked, but they have not been ascribed to any special cause. Among them he places erythema multiforme, cheiropompholyx, and some cases of erythema iris, hydroa, and thrombotic purpura. For him the terms "rheumatic" and "catarrhal" are almost synonymous.

(169) Hydatid in the Vertebral Canal.

AFTER referring to similar recorded cases, and especially to the one by Ransom and Anderson (BRIT. MED. JOURN., 1893, No. 1613), Friedeberg (*Centralbl. f. klin. Med.*, December 23rd, 1893) records the following case in a man, aged 31. The patient had suffered for three years from pain along the right sciatic nerve, and lately had lost control over the bladder. In December, 1889, he had pain in the right hypochondrium, and also in the right leg, with occasional numbness in the foot. The reflexes were present, but the gait was uncertain. A little later he had radiating pain from the spine round the right side. The thoracic and lumbar vertebræ were tender. Walking, and even standing, was impossible. In February, 1890, the motor loss was complete in the lower extremities, and sensation was impaired as high up as three finger-breadths above the umbilicus. Constipation was marked, and catheterisation necessary. The left patellar reflex was almost gone, whereas the right was still exaggerated. Œdema of the legs and scrotum appeared shortly afterwards, as well as bedsores. The reaction to galvanism and faradism could no longer be obtained. In May, 1891, a tumour was felt for the first time just above the right anterior superior spine, and another smaller one above the pubes. A couple of months later a third tumour was recognised in the mesogastrium. The patient died in the following October. When the vertebral column was laid open the sacrum was found to be destroyed, small hydatid cysts being embedded in the broken down mass. Small cysts were also found in the vertebral canal, as high as the second dorsal vertebra, compressing the spinal cord, but not breaking through the dura. The cord itself was atrophied. The sciatica was due to pressure of the tumour on the nerve. The motor and sensory paralysis, the paralysis of the rectum and bladder, the trophic changes, the lost electric reactions, and the reflexes, at first exaggerated and then lost, completed the picture of a total compression myelitis. The diagnosis of hydatid was only possible when the tumours could be felt in the abdomen. Any operation was obviously out of the question.

SURGERY.

(170) Surgical Treatment of Pulmonary Cavities.

DISCUSSING the propriety of operative interference in these cases, Dandridge (*Annals of Surgery*, February, 1894) concludes that a certain number of lung cavities can be successfully dealt with by incision and drainage. Tuberculous cavities in the lower portions of the lungs—if single and superficial, and the general condition of the patient permits—should always be opened. Cavities at the apex should be opened only where free and persistent fœtid expectoration is present, and has resisted treatment, and the rest of the lung is not involved. Abscess, gangrene, and hydatid cysts, should be opened and drained whenever they can be localised. Closure of the pleura should be present before excavation of a cavity is attempted. In cases of pyopneumothorax the fistulous track should be explored and any cavity freely laid open by the cautery. Cavities that have been opened are best treated by packing with iodoform gauze. The means of localising such cavities, and of determining their size and the exact character of the tissue that overlies them, require to be further perfected by the physician for the further extension of surgical interference in pulmonary cavities.

(171) Traumatic Cyst of the Stomach Wall.

ZIEGLER (*Münch. med. Woch.*, February 6th, 1894) relates the following rare case. A man, aged 23, recieved a severe in-

jury in the region of the stomach as the consequence of a buffer accident. This was followed by passing hæmoptysis and hæmaturia. The abdomen was distended, but no tumour was felt. A couple of weeks later, when the patient began to get up, he had pain in the epigastrium, and a swelling could then be made out beneath the costal arch. Symptoms of intestinal obstruction appeared from time to time, but yielded to large enemata. Three-fourths of a litre of dark blood was drawn off from the swelling. The symptoms and the tumour disappeared, but both returned in a few days. On admission an elastic, fluctuating, and tender swelling was felt between the umbilicus and the left hypochondrium. It appeared to be immovable, and could not be marked off from the liver and spleen. The colon lay below it. When the stomach was inflated the swelling became more obvious. An exploratory puncture gave a blackish-brown fluid, slightly alkaline, with red and white cells and granular bodies. Possible conditions were an encapsuled blood effusion into the peritoneal cavity, rupture of the stomach or intestine, with consequent adhesions, pancreatic cyst, cyst of omentum or mesentery, or less probably a cyst of the liver, spleen, kidney, etc. It was almost impossible to make the differential diagnosis. Five months after the injury the abdomen was opened, when a large cyst, covered with peritoneum, presented. It occupied the anterior stomach wall, stretching from the pylorus until it was lost over the left end of the stomach. The omentum was inserted into its lower border. A trocar was introduced, and three litres of fluid removed. The swelling collapsed, and apparently could be moved on the stomach wall. The abdomen was closed, and a month later, when the patient was discharged, there was still a little resistance in the epigastrium. Later still this had disappeared, and the patient was well. Two explanations are possible: (1) Owing to the crush a blood effusion had taken place within the stomach wall, which produced the separation of its coats; or (2) an extravasation of lymph mixed with blood had occurred ("décollement traumatique"). The absence of clots, the character of the contents, the gradual appearance of the fluid, the re-collection after the first tapping, and the absence of any marks of injury on the sac wall were in favour of the latter view.

(172) Sigmoid Thrombosis of Aural Origin.

THE *Centrabl. f. Chir.*., No. 3, 1894, in a notice of a recent work by A. Af. Forselles, of Helsingfors, states that, according to this author, thrombosis of the lateral sinus, even when uncomplicated, is not always characterised by the formulated series of symptoms. The fact that of six cases in which the author operated three were fatal shows that surgical interference, though alone capable of doing good, is not always very promising. Trephining of the mastoid antrum and cells is regarded as useful only as a prophylactic measure, and as a means of removing infective material. In well established thrombosis the author would advocate opening of the sinus and removal of its contents, and, at the same time, ligature of the internal jugular vein. The position of the knee or anterior curvature of the sigmoid sinus may be marked on the surface of the skull by a point 9 centimetres in front of the inion, in a line drawn from this protuberance to the upper margin of the orbit. The author would trephine at this point in those cases, which, however, must be very rare, in which it is not found necessary to explore the mastoid process. As is pointed out in the review, it would very rarely, if ever, be necessary to trephine here, inasmuch as when the mastoid antrum has been exposed, the sinus can be readily laid bare by extending the original opening in the bone. In operating for sigmoid thrombosis, the author prefers the trephine and bone forceps to other instruments, with the use of which there is less risk of concussion at the seat of operation, and of separation of the clot. The expediency of securing the internal jugular vein by ligature is proved by the author's statistics. In 13 cases in which the vein had not been tied the mortality was 40 and the recoveries 53.8 per cent.; in 16 cases in which this part of the operation had been carried out the mortality was 37.5 and the recoveries 62.5 per cent. Körner, whose recent work on intracranial affections of otitic origin is noticed in the same number of the *Centralblatt*, also advocates surgical intervention in cases of sigmoid phlebitis as soon as the diagnosis has been made, This author has collected 20 cases of operation; of these 13 were successful—4 out of 8 in which the jugular vein had not, and 9 out of 12 in which it had been tied. In only 4 of these cases had the vein been secured before the exposure and clearing out of the sinuses; in all of these the patients recovered.

(173) Treatment of Hydrocele.

NEUMANN (*Arch. de Méd. Belges*, December, 1893) has adopted the following method of treating hydrocele in six cases, with a successful result in all. The hydrocele is punctured with a trocar, the needle is withdrawn, and, while the liquid is escaping, the cannula is drawn slightly out, and fixed in position by means of a slightly compressive dressing of wool. This is left alone for two days. In all the cases the opposed inner surfaces of the sac became agglutinated without inflammation or suppuration. The duration of the treatment varied from seven to nine days. Once the cannula came out, when Neumann contented himself with applying cold to the scrotum. It is claimed that this method of treatment is less complicated, less painful, more certain, and of shorter duration than those commonly employed. The agglutination of the internal surfaces of the sac is probably obtained by means of a diapedesis of leucocytes, provoked by the contact of the trocar, and the coagulating action exercised by the white cells.

MIDWIFERY AND DISEASES OF WOMEN.

(174) Obstruction of Intestine after Ovariotomy.

TUJA (*Lyon Méd.*, February 18th, 1894) exhibited specimens from a subject in whom intestinal obstruction had followed ovariotomy, though the mechanism was not evident. Gouillaud had observed similar cases in which the upper part of the small intestine was distended, the lower flaccid and empty. Peritoneal adhesions existed. When the obstruction is incomplete or not strongly marked, death is attributed by some to secondary peritoneal infection, but Gouillaud believes that the obstruction plays the chief share in the mischief. Adenot, on the ground of observations on the cadaver, found that if air be passed into the stomach or any part of the intestine, the small intestine always became distended first, and tended to press into the angle formed by the transverse and descending colon. When the distension was great the transverse colon became extremely distended and the descending colon remained empty.

(175) Foreign Body in the Uterus.

MORESTIN (*Bull. de la Soc. Anatom. de Paris*, December, 1893) attended a young woman, aged 25, who admitted that a hairpin had been introduced into the uterus, its rounded extremity forward. The entire pin slipped into the uterus and could not be extracted. On careful examination no trace of any foreign body could be detected, either by palpation or even by the sound. The cervix was dilated and the hairpin, nearly 2½ inches in length, was found and extracted. The uterus was swabbed with carbolic lotion and the vagina plugged with iodoform gauze. The local pains from which the patient suffered soon ceased and recovery was rapid.

(176) Puerperal Erythema not Scarlatinal.

LIPINSKY (*Centralbl. f. Gynäk.*, No. 6, 1894) discusses the case of a patient who was attacked by puerperal erythema during two consecutive labours. Guéniot's scarlatinoid puerperal rash seems to be a mild form of true scarlatina, but Simpson has described a puerperal erythema where no sore throat and but trifling fever exists. Lipinsky believes that his case was of the type described by Simpson. The patient was 30. Her first labour had been normal. A year later she was delivered a second time; labour was lingering. The parts were washed with a 2 per cent. carbolic solution. All went well till the fourth day, when an ill-circumscribed redness appeared around the vulva, which was slightly swollen. There was intolerable itching. The temperature was normal, the lochia free from fœtor, the urine did not contain albumen, nor was there any

sore throat. These symptoms all disappeared on the fifth and reappeared on the seventh day; the rash then extended to the umbilicus and to the knees. On the ninth day it once more vanished. On the tenth the patient got up; next day the rash reappeared and spread all over the body and face, disappearing as rapidly as before. A year later the same patient was delivered at 4 A.M., after pains had lasted but two hours. The parts were washed with sublimate. The rash appeared at noon, with the itching, whilst the negative symptoms were the same as before. It disappeared next day. The patient had never had any rash before her second confinement.

(177) Pedunculated Fibroid of the Broad Ligament.

Demons, of Bordeaux (*Arch. de Tocol. et de Gynéc.*, November, 1893) removed a tumour of this kind from a very hysterical woman, aged 23. In July, 1891, a tumour of the size of a walnut was detected in the hypogastrium, to the right. It was perfectly separate from the uterus. By the end of 1891 it was as large as a man's fist; the right ovary could not be distinguished separately from it; the left ovary was extremely tender. There was dysmenorrhœa, and never menorrhagia. The tumour was removed in January, 1892. It was found attached to the upper border of the right broad ligament by a thin pedicle "a finger's breadth in length." This was ligatured and divided. The corresponding appendages were healthy, and were therefore left alone. The tender left ovary was removed, with its tube; it was sclerotic and strongly adherent. After recovery the hysterical symptoms continued. In February, 1893, the patient had a nervous cough, with convulsive "tic." An instructive review of seven similar cases, the only authentic examples of pedunculated fibroid of the broad ligament absolutely distinct from the uterus, is added. In one the pedicle sprang from the ovarian ligament, and in another from the infundibulo-pelvic ligament.

(178) Hydrorrhœa Gravidarum and Hydrops Amnii.

Chazan (*Centralbl. f. Gynäk.*, No. 5, 1894) is inclined to the belief that the fluid which pours from the pregnant uterus in this disease is often derived from the amnion. Many obstetricians appear to think that the escape of liquor amnii must necessarily cause abortion, but Chazan is of a different opinion. He publishes a case in which hydrorrhœa was simply the leakage of a hydrops amnii. The patient was 23. Her last period was at the end of July, 1890, shortly after marriage. Chazan first saw her in January, 1891. Her abdomen was very large, and she suffered from thirst. On February 23rd uterine contractions set in, a great quantity of liquor amnii escaped, then the pains ceased, and the fœtus could be felt through the walls of the uterus, now much diminished in size. The pains set in again a few hours later, and ceased at the end of five hours. On March 9th pains set in during the night, and a little fluid escaped. This phenomenon recurred on April 11th. Severe sacral pain set in. On May 3rd the patient fell in labour, this time in earnest, and was delivered of a well-formed female child, which cried lustily at birth. Besides the hole in the amnion through which the head passed there was another aperture of the size of a shilling, with distinctly thickened edges.

THERAPEUTICS.

(179) "Antidiphtherin."

V. G. Grigorieff (*Vratch*, No. 2, 1894, p. 567), of Professor N. T. Filatoff's clinic in Moscow, used Klebs's specific (see British Medical Journal, November 11th, 1893, p. 1070, and Epitome, December 30th, par. 536) in 4 cases of diphtheria in children, and came to the conclusion that the remedy is worthless. In spite of the paintings, repeated thrice daily, false membranes continued to spread steadily, fever remained high or even increased, etc. Two children—one of whom, aged 8, had been admitted on the third day of the disease, and the other, aged 15 months, on the second—died in forty-eight and twenty-four hours respectively. In a third patient, aged 4 years and 7 months, admitted on the fourth day of illness, who had been getting worse during a four days' treatment by "antidiphtherin," local applications of a 1 per mille solution of corrosive sublimate were substituted, with the result that the faucial deposits began to disappear, and the child ultimately made good recovery. Exactly the same course of events was observed in a boy aged 4 years and 7 months, in whom the "antidiphtherin" treatment was commenced on the second day of symptoms, but given up in about twenty-four hours, on account of a considerable aggravation of fever and local condition. The bichloride paintings cleared the child's throat in about four days. A set of elaborate experiments, undertaken by the author in order to test the bactericidal effects of Klebs's preparation, proved that (1) the latter does not in the least inhibit the development of diphtheria bacilli even after twenty-four hours' continuous contact; (2) a 1 per mille solution of $HgCl_2$ destroys the microbes even after a two minutes' contact; and (3) $HgCl_2$ has an additional advantage over "antidiphtherin," inasmuch as it kills any species of bacteria which happen to be present in a diphtheria patient's throat.

(180) Teucrin in Cold Abscesses.

Kahane (*Wien. med. Presse*, No. 1, 1894) describes the use of teucrin (see Epitome, February 25th, 1893, par. 165) in a case of chronic abscess of the back of more than nine weeks' standing. The abscess cavity extended from the lower cervical vertebræ right down to the sacrum, and gave a marked fluctuation. Teucrin was given in three injections of a gramme each. After each injection there was a rise of temperature and some constitutional disturbance. Three days after the last injection the abscess wall was incised and about 2 litres of pus were evacuated. The abscess then steadily healed, and after about a month the cavity had become almost entirely obliterated, the only trace of it being a sinus about an inch deep, secreting a serous fluid. The tuberculous character of the abscess had entirely disappeared.

(181) Spermin.

Poehl (*Vratch*, No. 3, 1894) draws attention to the beneficial effects of spermin in neurasthenia, anæmia, and certain cachexias. The explanation of its action in such conditions may, perhaps, be found in the fact that the substance is a natural ferment of tissue "oxidation processes" which destroy leucomaines arising on decomposition of proteids and causing various forms of auto-intoxication. Weber points out (*ibid.*) that recently he administered spermin in a case of poisoning by oysters with satisfactory results.

(182) Salophen.

Köster (*Therap. Monatsh.*, January, 1894) has used salophen in 30 cases of acute rheumatism, a few 15-grain powders often sufficing to remove all pain; exudation into the joints also disappeared as a rule. The administration was usually continued during four days, 4 to 6 doses per diem being given. The only unpleasant symptoms noticed were vertigo on three occasions, and drowsiness and excessive perspiration four times. No gastric disturbances were observed. Extension of the disease took place twice and relapses also occurred twice; these, however, were at once relieved by a repetition of the treatment. Salophen is not a powerful antipyretic, but is more effectual in neuralgic and similar affections. One case of severe brachial neuralgia is quoted which had resisted all other known antineuralgic remedies, and which was cured by 1 drachm of salophen given on four successive days.

(183) Immunity to Infections Produced by Establishment of Tolerance to Certain Drugs.

Rummo (*Rif. Med.*, January 10th, 1894) gives some information on this point, having special regard to the antagonism between a tolerance to strychnine and susceptibility to tetanus. Tolerance to nearly all poisons can in a greater or less degree be set up in animals, and also in the human subject, as witness the indifference of the Styrian peasants to large doses of arsenic, which is even transmitted to their offspring. In the same manner, Tizzoni and Cattani have demonstrated that immunity to tetanus toxins is in a measure capable of hereditary transmission; and Ehrlich has established similar facts with regard to several less-known poisons, such as abrin, robin, ricin, and other substances of vegetable origin. It is also generally admitted that immunity to the action of

bacteria following preventive inoculation is due, principally at least, to a protective action of the corresponding toxins. Starting from these accepted facts, Rummo has sought, by establishing a tolerance to strychnine, a substance producing physiological effects much resembling those of tetanus, to protect animals against that disease. With considerable difficulty the author was able to produce a fair amount of tolerance to strychnine in a small series of guinea-pigs, so that they resisted a dose of 3½ millig. when introduced into the stomach. All these, as well as several controls, were then inoculated with a culture of tetanus. The controls all died in from six to ten days; some of the less saturated guinea-pigs developed slight symptoms of tetanus, from which, however, they recovered; those in which a maximum degree of tolerance had been set up did not develop any sign of the disease. "Mithridatism," therefore, as it is called, must also be added to the means available for producing immunity against certain diseases.

(184) Saprol.

Scheurlen (*Arch. f. Hygiene*, Bd. iv, 1893) states that of all disinfectants advocated for rendering infected stools and cesspools innocuous, saprol most nearly answers all requirements. Saprol forms no inefficacious compound on admixture, and readily diffuses itself among the excreta. Lime and crude carbolic acid have hitherto been the two principal agents employed, but the disadvantage of the former is that it is apt to descend to the bottom of the receptacle without having achieved its object, and admixture is impossible, owing to the poisonous gases which arise. As regards cresol, it is not sufficiently destructive to germs. Saprol, on the other hand, is readily soluble in water, a solution being possible which contains 2.18 per cent. of cresol. However, even a 0.4 per cent. solution suffices for all practical purposes. The alleged inflammability of saprol is put to one side by the author. In order to prepare a 0.4 per cent. solution, one part of saprol should be added to 80 of water, when during twenty-four hours the strength will gradually increase. A column of liquid is thereby rendered sterile in six to twenty-four hours, and bacteria added at the end of that period are destroyed in one hour. A further advantage of saprol lies in the simplicity of its use.

(185) Europhen.

Oefelein and Neuberger (*Monatsh. f. prakt. Dermatologie*, 11, 1893) have used europhen in soft sores and other conditions, their cases numbering 200 in all. They found all kinds of wounds heal quickly under it. Great drying powers without local irritation and absence of smell are the principal advantages of europhen as compared with iodoform, and it proved most valuable in erosions and fissures. In 40 cases of balanitis, burns, etc., and in 4 cases of suppurative lupus the secretion diminished considerably. In soft sores the powder was applied three times daily from the first. It adheres better than iodoform, and smaller quantities are required. Europhen was more satisfactory than aristol in phagedænic soft ulcers, but in tertiary syphilitic conditions it was inferior to calomel. In these affections a 1 per cent. oil emulsion was also successfully injected subcutaneously without unpleasant results, iodide of potassium being simultaneously administered. Externally europhen was used as a dusting powder or as a 3 to 5 per cent. vaseline ointment.

(186) Treatment of Alopecia Areata.

Leistikow (*Monatsh. f. prakt. Dermat.*, January, 1894) for the last four years has used chrysarobin almost exclusively in alopecia areata. The results in total alopecia were satisfactory though not reliable; in the partial affection the cures were 58 per cent., but among these, relapses occurred in 30 per cent.; of these patients two-thirds were lost sight of, but the remainder were again cured and remained free. Formerly he only used the chrysarobin as a 5 to 10 per cent. ointment applied once or twice daily, but now he prepares a stick composed of chrysarobin 30, colophonium 5, cera flava 35, olive oil 30 parts, the application thus being more simple. Every evening the stick is rubbed over the affected part, which is washed clean with olive oil in the morning. In some days the skin often becomes irritable and red, when zinc ointment is substituted for a time. The author considers chrysarobin the best remedy in this affection.

PATHOLOGY.

(187) Microbes in the Sputum of Pertussis.

Cohn and Neumann (*Arch. f. Kinderheilk.*, vol. xvii, p. 24) have examined the sputum in cases of whooping-cough with the view of ascertaining whether any of the microbes present in it might be regarded as probable causes of the disease. Their subjects were 24 children, between 1 and 10 years old, all typical cases of pertussis, mostly at the commencement of the convulsive stage; three of them also had pneumonia. By microscopical examination of specimens, the microbes, which appeared most frequent, were small cocci, usually arranged as diplococci; short chains of small cocci were also seen, but much less frequently; a few bacilli were met with, some of them probably being proper to the mouth. By cultivations a streptococcus seemed to be most frequent; it was met with in 20 examinations out of 25 (the sputum of one child was examined twice), and sometimes formed almost pure cultivations. These streptococci appeared not to be all of the same species. A streptococcus "brevis" grew in short chains throughout the bouillon, and was not pathogenic to mice, whereas a streptococcus "longus" formed long chains and grew at the bottom of the bouillon tubes. The latter, when 1 c.cm. of a bouillon culture was injected, often killed mice in twenty-four hours; it was found plentifully in the animal's spleen and less plentifully in the blood of the heart. When in the animal's body it formed diplococci, but, when reinoculated on to agar, it formed long chains again. The other kinds of microbes found in cultivations from the children's sputum were not found constantly enough to justify any pathological importance being attached to them. The sputum of a woman, aged 25, suffering from pertussis, was also examined (obtained in this case direct from the larynx), and a streptococcus "brevis" was found to abound in the cultivations; some colonies of yellow cocci and some of bacilli were also obtained. The authors think that the diplococci of their stained preparations may have appeared as streptococci in their cultures. They are very cautious about drawing any certain conclusion in regard to the part played by the streptococci in whooping-cough, and think that, as in scarlatina, diphtheria, and tuberculosis, so in whooping-cough streptococci may possibly be regarded as often accompanying the disease without being its actual cause.

(188) Plate Cultivation of Anaerobic Bacteria.

Arens (*Centralbl. f. Bakt.*, January 3rd, 1894) has devised the following method of obtaining plate cultivations of anaërobic organisms. In principle it is the same as Buchner's method for preparing a roll culture of the anaërobes. The floor of an ordinary exsiccator of suitable size is well covered with quartz sand (not too fine), with which some dry pyrogallic acid (no specific quantity) has been mixed. The nutrient material, already inoculated, is poured into one or more of Petri's dishes, and these are placed uncovered in the exsiccator. They may be arranged one on top of the other, provided each remains open above. Just before arranging the dishes a 10 per cent. solution of caustic potash is poured rather freely over the sand and pyrogallic mixture. The cover of the exsiccator is then sealed down with paraffin or other medium. Developing colonies can be better observed if, before introducing the Petri dishes, the sand mixture is covered with a layer of black paper. The oxygen present in the exsiccator is rapidly taken up by the pyrogallic potash mixture, especially if, as is permissible after the nutrient medium has set, the vessel is slightly agitated. Sterilisation of this apparatus is not necessary. The incubator may of course be used if desired. The efficacy of the plan, as regards the absorption of oxygen, may be shown by exposing agar plates to the air of the laboratory, and subsequently enclosing some of them in the exsiccator as described, whilst the rest are simply covered and left where they are. Whereas no growth occurs on the former, on the latter numerous moulds and bacteria develop. Arens has employed his method with very good results for the cultivation of anaërobic bacteria.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(189) Cerebral Tumour without Headache or Optic Neuritis.

Pel (*Berl. klin. Woch.*, January 29th, 1894) narrates the case of a woman, aged 46, who complained of weakness of the right arm, difficulty in walking, and some loss of memory. The symptoms were of not much more than one year's duration and commenced with a feeling of numbness in the tips of the right fingers. Latterly on one occasion she had had a nervous attack with convulsive movements on the right side of the body and partial loss of consciousness, and since then some impairment in her speech had been noticed. On examination no tenderness of the skull to percussion was found. Sight good. No optic neuritis. Paralysis of the right upper limb, with some degree of muscular atrophy and slight contracture of the elbow-joint was found, but sensation and muscle sense appeared to be normal. The skin of the right hand was cold, cyanotic, swollen, and inclined to sweat. There was paresis of the right lower limb and right half of the face with slight atrophy in the leg. Some degree of incomplete aphasia and alexia was observed. No headache, vertigo, or nausea. Whilst in the hospital the patient was seized at different times with epileptiform attacks without loss of consciousness or of the pupil reaction. They began usually with movements of the right thumb and fingers, which spread to the right arm and side of the face; the eyes looked to the left; the attacks lasted two or three minutes. Only later on, when she was asked about it, did the patient complain of a little headache and slight tenderness to percussion over the left part of the top of the head. Antisyphilitic treatment failed, and the patient got worse. The symptoms of Jacksonian epilepsy being well marked, an operation was decided on, and a chestnut-shaped circumscribed tumour was found lying on the upper and middle portions of the Rolandic area and the posterior portion of the superior frontal convolution. The tumour appeared to be a flattish, benign, soft fibroma, containing big lymph spaces, and growing from the pia mater so as to compress the brain cortex. The patient died, soon after the operation, as if from cardiac weakness. The absence of pain, vomiting, and optic neuritis may, perhaps, be explained by the slow growth and non-malignant nature of the tumour, whose many lymph spaces also probably helped to compensate for increased supply of blood. The epileptiform attacks, however, which were late to appear, were probably due to occasional congestion of the tumour. Pel calls attention to the complete preservation of sensation (including muscle sense) although paræsthesia was the first symptom noticed. He remarks also that muscular atrophy appeared fairly rapidly in the right leg, although this limb was only very incompletely paralysed.

(190) Acute Yellow Atrophy in Childhood.

After referring to the rarity of this disease in childhood, Merkel (*Münch. med. Woch.*, January 23rd, 1894) records a case in a boy, aged 6¼ years. Seventeen days before his death he complained of loss of appetite and *malaise*, and shortly afterwards he became jaundiced. When he was seen the pulse was infrequent, the temperature 37.4° C., and the tongue coated. The liver extended two fingers' breadth below the ribs. The urine was bile-stained, but contained no albumen. Eight days later the liver could not be felt, and the spleen was enlarged. Later he was seized with convulsions. He then became unconscious, with clonic and tonic spasms. The icterus was more marked. The temperature fell to 36.8° C., the pulse being 116. Death occurred in deep coma. Hæmorrhages were found beneath the serous membranes. The lungs were œdematous. The mucous membrane of the stomach and duodenum was covered with mucus. A little bile could be squeezed out of the gall bladder into the intestine. The liver was very small, and on section presented a pale yellowish brown colour, with red spots, the marking of the lobules having disappeared. There were ecchymoses in the kidney, and the renal cells showed cloudy swelling, with some fat drops. The liver cells were filled with fat, and round-celled infiltration was seen here and there. The cardiac muscle was also slightly involved. The etiology, as usual, was quite obscure. The author particularly noticed the soothing effects of large rectal injections.

(191) Idiopathic Gangrene.

Zeller (*Berl. klin. Woch.*, December 25th, 1893) reports the case of an anæmic young woman, aged 20. Her parents and brothers and sisters were living and healthy. She had since the age of 12 been subject to attacks of headache and vertigo, supposed to be connected with her anæmia. In October, 1892, she began to suffer from weakness and joint pains in the right upper extremity, and occasionally simultaneously with a sensation of formication in the right hand; the fingers of that hand turned bluish at the tips. On admission into the hospital in December, 1892, the right arm was considerably atrophied and the five fingers were gangrenous up to the middle of the second phalanges. On the following day the gangrenous parts were removed by amputation; the wounds healed slowly by granulation. At the operation it was remarked that the arteries did not spurt, but there was considerable general oozing of blood. No sugar or albumen was found in the patient's urine. It appeared unlikely that she had voluntarily, by some artifice, produced the gangrene for purposes of deception. There was no history of a recent infectious disease, nor anything to lead one to suspect a toxic origin (as ergotism). Zeller negatives the presence of any neuritis or endarteritis proliferans, and inclines to the view that the case is one of Raynaud's disease, the chlorosis possibly acting as a predisposing cause. To account for the asymmetry in an affection described as symmetrical, he suggests that the arteries of the right arm may have been originally of inferior calibre, possibly in connection with a deformity which he observed in the patient's thorax.

(192) Studies in Surface Temperatures.

Weir Mitchell (*Med. News*, January 6th), in the course of a clinical lecture, formulated his conclusions on the subject of surface temperatures as follows: The temperature of the dorsum and sole of the foot is on an average from 4° C. to 1° C. less when standing erect than when lying horizontally. All things being equal, the morning surface temperature is less than the evening surface temperature on the dorsum or sole of the foot. The mouth temperature varies little as between lying down and standing: or if it changes there is a very slight rise. The nearer the trunk the less do the surface temperatures vary in different portions of the body. The palms of the hands are the warmest parts of the extremities; their surface becomes less warm as the extremity is moved from a resting horizontal position to one of hanging down loosely, and finally to being held up in a vertical position. The foregoing obtains whether the body lies supine or is held erect. The two hands or the two feet vary somewhat in temperature in the same person under equality of conditions. At times the right member is the warmer, at others the left.

SURGERY.

(193) Radical Cure of Femoral Hernia.

Fabricius (*Centralbl. f. Chir.*, No. 6, 1894) holds that in order to prevent recurrence the following conditions must be fulfilled in operating for the radical cure of femoral hernia: (1) complete closure and obliteration of the crural funnel: and (2) the establishing of a close and firm attachment of Poupart's ligament to the horizontal ramus of the pubes. These conditions, the author holds, are fulfilled in a new operation which he has recently devised and practised in cases of femoral hernia in which the neck of the sac is large and capable of admitting at least one finger. An incision about four inches in length is made through the skin and superficial fascia, above and parallel with Poupart's ligament, and ending or beginning at the spine of the pubes. After section of its coverings, the sac is opened, and its contents are returned into the abdominal cavity. If there be any difficulty in returning the contents in consequence of close contraction of the neck of the sac, Poupart's

ligament should be incised near its inner attachment to the spine of the pubes. The neck of the sac is then ligatured, and, after removal of the body of the sac by scissors, is thrust into the abdominal cavity. The crural canal is now freely exposed by division of the superficial layer of deep fascia, and its loose cellular tissue is removed. The femoral artery and veins are now displaced towards the ilio-pectineal eminence, in which position these vessels are held by a blunt hook, whilst Poupart's ligament, which has been relaxed by a further and free incision of its internal attachment, is stitched to the pectineal fascia, the fibres of origin of the pectineus muscle, and the periosteum covering the horizontal ramus of the pubes. The first stitch should be applied near the main vessels, which are thus prevented from returning to their normal position. Poupart's ligament should be transfixed about half an inch or a little less (1 centimetre) from its margin, and in this part of the operation care should be taken to avoid the epigastric vessels. With the view of closing completely the opening into the abdominal cavity, the author recommends, though not regarding it as absolutely necessary, stitching of the superficial layer of deep fascia along the inner side of the femoral vein to the pectineal fascia. The author has been convinced by experiments on the cadaver, and also by the results of his operation on the living subject, that no serious disturbance of the circulation of the lower limb is likely to follow the displacement of the femoral vessels and the compression of the vein. It is held advisable at the end of this operation to bring together by two or three stitches the margins of the external inguinal opening, as an inguinal protrusion may follow a successful operation for the radical cure of femoral hernia.

(194) A Bloodless Operation for Hæmorrhoids.

Manley (*Boston Med. and Surg. Journ.*, February 1st, 1894) has examined the rectum in a considerable number of cases, both dead and living, where the gut was supposed to be healthy, and has found in more than 50 per cent. venous varices of the rectum. He considers that the hæmorrhoidal dilatation in man is a physiologically degenerate condition, which in late life is a source of no inconvenience, but which at middle age is often attended by or associated with such complications as to render it a distinct pathological lesion. He says that this view is supported by the fact that cutting out, injecting, or ligating off sundry hæmorrhoidal masses will not in all cases cure the disease. When an operation is requisite he recommends that the following be performed: First the bowel is emptied by a purgative given the evening before, and on the morning of the operation the parts are thoroughly cleansed and made aseptic. Then a solution of cocaine is injected subcutaneously so as to render the anal region anæsthetic. The sphincter is then dilated in the usual way and the hæmorrhoidal masses carefully dried. Each hæmorrhoid is seized separately, close to its base, firmly between the tips of the thumb, index, and middle fingers, first put on a moderate but full stretch, then twisted, and finally so completely crushed that it is reduced to a pulp and none of the investing tunics remain except the mucous membrane and its under stratum of fibrous tissue. When this has been completed the entire mass is pressed up inside the sphincter, a suppository of opium introduced, a pad and bandage applied, and the patient returned to bed. An active but painless inflammation follows, and in two or three weeks atrophy and absorption have so reduced the vascular masses that nothing remains but their shrunken stems. Thirty-two cases have been treated in this way, all with very satisfactory results, recurrence apparently not taking place. For this operation the author claims the following advantages: (1) The operation may be performed with a less number of assistants and is very simple in its *technique*. (2) As there is no division of the tissues the dangers of infection of abscess, ulceration, and fistula are eliminated. (3) There is no danger from the immediate loss of blood during operation or of serious secondary hæmorrhage.

(195) Brain Localisation in Epilepsy.

Hadra (*Annals of Surgery*, February, 1894) proposes for consideration a method which promises to make localisation of the diseased brain focus in cases of epilepsy safe and extremely simple. A great number of brain foci are still undiscovered, and sufficient attention not having been paid to the more hidden signals, the commencement of the convulsion may easily be ascribed to a better known and more exposed group of muscles, which may have become excited only secondarily by the dissemination of the epileptic wave started somewhere else, and thus a wrong brain focus may be singled out and perhaps operated upon. Hadra concludes that topographical or electrical localisation alone may lead us astray. He advises the use of the induced current, not solely to find the physiological focus belonging to the muscles giving the initial signal, but to find the spot from where an epileptic attack of the same nature the patient is accustomed to suffer from can be started, independently of the fact whether those two points coincide or not. Three cases are cited in support of these views.

(196) Diagnosis of Chancre of the Eye.

Galezowski (*Rec. d'Ophtal.*, December, 1893), from the observation of a number of cases, is enabled to give the differences between primary and later syphilitic affections of the lids. The two kinds are at first very much alike, and consist of an ulcerated surface with sharply cut edge and induration; in the chancre, however, there is a much more abundant secretion of pus from the surface of the ulcer than in the gummatous ulcer. The chancre is usually seated at the inner angle of the eye, the gumma at the outer; this seat of the chancre is owing to the finger which carries the infection being more frequently applied to the inner canthus than the outer; the gummatous ulcer too is often not an isolated one. Another sign of gummatous ulcer is the presence of keratitis punctata or of old iritis, or of post-choroidal affection; the presence of gummatous scleritis seated over the motor muscles is not uncommon. All these signs are absent in the primary affection.

MIDWIFERY AND DISEASES OF WOMEN.

(197) Alleged Ovarian Pregnancy; Recovery after Operation.

Larsen (*Bibliotek for Laeger*, vol. vi, Part 1, 1894) reports an alleged case of primary ovarian pregnancy. A patient, aged 33, saw her last period in August, 1891. On October 18th she had a sudden attack of retention of urine. The uterus was found enlarged, and there was a tender body to the right of the cervix. She recovered after rest. On April 10th, 1892, labour pains set in, and a large clot was expelled; the fœtal movements ceased. A large fœtus could be felt in the right side of the abdomen, forming a tumour which moved with the cervix. The patient's health remained good till the following September, then the tumour became a burden to her. The period had returned; the uterine cavity was found empty. On September, 1892, abdominal section was performed. The fœtal sac, adherent, though not strongly, to some coils of intestine, was well pedunculated, the tube and part of the broad ligament forming the pedicle, which was ligatured, and then divided by the thermocautery. The left tube and ovary were normal. The patient rapidly recovered. On August 26th, 1893, when last seen, the patient was well, and menstruated regularly. Dahl examined the tumour in the Anatomico-Pathological Museum, Copenhagen. The cyst contained a macerated male nine months' fœtus. The Fallopian tube was partly adherent to the wall, and its fimbriated end strongly adhered to the surface of the cyst. No trace of ovary was visible. On microscopic section the anterior (or thickest) part of the wall was found to contain true follicles, some bearing ova. The possibility of tubo-ovarian cyst is not noted.

(198) Tuberculosis of the Cervix.

Meyer (*Archiv f. Gynäk.*, vol. xlv, part iii, 1894) observed this condition in a woman aged 30. In 1887 she suffered from some pulmonary affection, and the following year from perityphlitis. As long ago as 1879 a patch of lupus on the cheek was treated by scraping; in 1889 this process had to be repeated. She had borne three children; one died of meningitis, and none survived over a

year. She was subject, from 1886 to 1892, to menorrhagia, with free, but never fœtid, discharge in the short intervals between the periods. A bright red patch was seen on the surface of the cervix. It did not bleed when touched. The uterus and appendages seemed to be normal. Palliative and local treatment was tried in January, 1892, but the hæmorrhages continued. On February 2nd a piece of the red tissue was excised and examined under the microscope. It did not show any evidence of cancer. On March 3rd a wedge-shaped piece of the cervix, including all the diseased tissue, was excised. The result was excellent and the period became regular without any excessive show; the free discharge disappeared. The cicatrix on the cervix remains healthy. On microscopical examination the diseased portion of the cervix showed the appearances of tuberculosis. The patient's nephew, like herself, suffered from lupus of the cheek.

(199) Myoma of the Female Urethra.

Büttner (*Zeitschrift f. Geburtsh. u. Gynäk.*, vol. xxviii, pt. 1, 1894) observed this condition in a woman, aged 40, married nine years, and sterile. For a year she had been subject to a feeling of weight in the region of the meatus urinarius, from which a swelling protruded for over a month. This swelling had grown rapidly, and caused incontinence of urine and much suffering. Büttner detected a tumour as big as a hen's egg protruding from the vulva. Its pedicle was attached to the anterior part of the urethra at the meatus, and that orifice was in consequence greatly distorted, forming a semilunar slit nearly 2 inches wide, with the concavity formed by the back of the tumour, directed forwards. The tumour was tough like an ordinary fibroid, and beginning to ulcerate. Ahlfeld operated. His aim was to avoid cutting away any of the musculature of the urethra. The tumour was pulled forward with forceps, and then a circular incision was made through the fibrous capsule round the pedicle, or rather base, of the tumour. Enucleation of the myoma proved even easier than was expected. Hardly a drop of blood was lost. The meatus at once contracted, a small depression in its anterior border representing the site of enucleation. The tumour proved to be a true myoma. On the day after the operation the patient was able to hold her urine without difficulty. A month later she reported herself as perfectly free from any discomfort.

(200) Fibroid Uterus and Cancer of the Omentum.

Pick (*Berl. klin. Wochenschr.*, January 1st, 1894) recently demonstrated the following case. The patient who was 46, had only once been pregnant, and then aborted. For over two years she had been subject to profuse hæmorrhage and great abdominal pain. The uterine tumour was diagnosed early, the pain and hæmorrhage increased rapidly, the abdomen became greatly distended, and the patient suffered badly from dyspnœa. There was evidence of effusion into both pleuræ, ascites, and œdema of the legs. Besides an evident fibroid, several hard masses, as big as a fist, lay above the umbilicus to the right and below it to the left. Abdominal section was performed, much dark red ascitic fluid came away, and then cancer of the omentum was detected. The cancerous masses were removed, and more were found in Douglas's pouch. The fibromatous uterus, converted into a mass of spherical tumours, was removed entire; then the growths in Douglas's pouch were removed. When the case was reported, six days after the formidable operation, the patient was in a favourable condition. Virchow examined the omental growths; they were true cancers, and he discussed the question whether they were primary "endothelial cancer," or secondary to cancer of the stomach or intestine. They were perfectly independent of the uterine tumour.

(201) Infant with Absence of both Radii.

Krönig (*Centralbl. f. Gynäk*, February 17th, 1894) exhibited before the Leipzig Obstetrical Society a child, aged 14 days, with congenital absence of both radii. There was a moderate amount of hydrocephalus, but no other disease or deformity beyond the forearms. The most remarkable feature in the case was the presence of the thumbs and the perfect development of the hands. The supinator longus was powerfully developed and inserted into the middle of the ulna. The carpal bones seemed to be perfect. The ulna was strongly bent to the radial side. There are 45 recorded cases of congenital absence of the radius, and in 21 the defect was bilateral. In only 2 were the thumb and first metacarpal bone well developed. In the great majority of cases the child was both premature and stillborn, and it seldom lived many weeks. Nearly always other defects were present in different parts of the body. In Krönig's case, contrary to the rule, the elbow and carpal articulations were freely movable.

THERAPEUTICS.

(202) Resorbin, a New Excipient.

Ledermann (*Rif. Med.*, January 29th, 1894) gives the following details as to "resorbin" a new excipient introduced by himself. It is composed of purest almond oil, emulsified in a special apparatus with distilled water, with the addition of a small quantity of yellow wax, gelatine, and soap. The final consistence is given to the preparation by the addition of a little lanolin. Being in a state of very fine molecular subdivision, it is claimed that it is specially adapted for penetration through the skin without the necessity of hard rubbing. A very slight friction suffices to complete the absorption of quite a large quantity, and with it any drug which may have been incorporated. It is indicated: (1) In those forms of dermatosis in which it is desired to get a large quantity of fat to penetrate through the epidermis, such as ichthyosis, the various forms of pityriasis, psoriasis, and seborrhœic eczema, in sclerodermia and sclerema neonatorum; also in artificial forms of dermatitis, especially those due to changes of temperature, with a tendency to œdema, ulceration, and the formation of fissures. (2) As a vehicle it is indicated in the treatment of psoriasis with pyrogallol or chrysarobin, in that of lichen ruber with chrysarobin, in that of chronic eczema with tar, of prurigo with naphthol, and especially in that of scabies with naphthol and balsam of Peru. (3) As a means of introducing drugs into the organism, and especially in the application of mercury by the endermic method. Used as a 33½ per cent. mercurial emulsion, the drug is very rapidly absorbed by simply spreading a thin layer over the skin and making slight pressure for a short time. It is free from the unpleasant smell of other mercurial applications, but must be used with care owing to the extreme rapidity with which the drug is absorbed.

(203) Chloralose.

J. Ohmjelewski (*Medicinskoje Obosrenje*, No. 24, 1893) has tried chloralose in seventeen cases of mental disease, including simple and periodical mania, senile dementia, paranoia, melancholia agitata, etc. The drug was given in doses of from 3 to 6 centigrammes. Sleep was induced, as a rule, in about forty minutes after administration, and lasted from four to ten hours. In three cases transient tremor of the upper limbs was observed before the patient fell asleep. In five cases considerable perspiration occurred. No ill-effects as regards the gastro-intestinal canal were noticed. In two cases considerable excitement followed the administration of the drug. On the whole, the author looks upon chloralose as a valuable remedy in cases of mental disease, and one especially likely to be useful where chloral and sulphonal are contraindicated.

(204) Massage in Prurigo.

Murray, of Stockholm, found (*Hygiea*, 1889) that massage had a good effect in a case of prurigo in a boy aged 11: the procedure had no effect on the process, but relieved the distressing itching. Hatschek (*Arch. f. Derm. u. Syph.*, xxv, Jahrg. 1893, Heft vi, p. 931) had the opportunity of trying the method in Kaposi's clinic in 11 cases (9 males, 2 females). Of these 7 were suffering from prurigo ferox, 4 from prurigo mitis. Most of them were young (14 to 21 years of age), but one was aged 62. Nine were treated exclusively by massage; in 2 cases this was for a time supplemented by carbolic acid pills. To exclude sources of fallacy dry massage was used in the form of simple effleurage. Stroking was moderately firm, and was made in a centripetal direction. The duration of each sitting was at first ten to fifteen minutes; after a time this was shortened to five, and later to three minutes. In all the cases itching

was markedly relieved; in some after two or three sittings, in others not till after some weeks. It is pointed out that the rapidity of the effect bore no relation to the severity of the symptoms. The treatment is more effectual if vaseline is used than when dry massage is employed. The method has no direct effect on the disease process, but it was noticed that new nodules, developing while the patient was under treatment, itched less than had formerly been the rule, and rapidly disappeared. In some cases recurrence of the pruritus took place. To prevent this, massage must be continued to a greater or less extent throughout the patient's life. In other conditions, such as urticaria, psoriasis, etc., massage did no good, and sometimes seemed to do harm.

(205) Death under Ethyl Bromide.

KOCHLER (*Centralbl. f. Chir.*, No. 2, 1894) reports an instance of death during the administration of ethyl bromide. The patient, a weak though otherwise apparently healthy woman, aged 21, was about to be submitted to an operation for rectal fistula. The anæsthetic was given in small quantities with a mask. After a very transient and mild stage of excitement the heart's action suddenly ceased. The breathing continued for about half an hour, but, notwithstanding galvanism of the phrenic nerves, subcutaneous injections of ether, and injections of saline solution into the median basilic vein, the patient never rallied. There can be no doubt, the author thinks, that the fatal result in this case was due to cardiac paralysis. The air passages remained quite free, and breathing persisted for some time after the cessation of the cardiac movements. There was no indication of any respiratory disturbance. The phrenic nerves ceased to react to the electric current between four and five minutes after the arrest of the heart's action. The anæsthetic, on careful examination, was found to be pure. Ethyl bromide, it is held, cannot be regarded as an absolutely safe anæsthetic. No fewer than five cases have been recorded in which death was the result of a careful administration of a pure preparation of ethyl bromide. The result of the necropsy in the author's case confirmed the suspicions that had been suggested by the very sudden arrest of the circulation. The left side of the heart was contracted and empty; the right cavities also were empty, and their walls collapsed. The muscular structure showed signs of extreme fatty degeneration, being speckled and studded with white patches. The surface of the heart was covered with a thick layer of fat, extensions of which could be traced in the very thin muscular walls of the ventricles.

(206) Valerianate of Amyl.

BLANC (*Rev. de Thérap. Méd.-Chir.*, December, 1893) describes valerianate of amyl, which is the odoriferous principle of the apple, that is, the essence extracted by distillation together with alcohol. Cider has long been believed by the laity to have some effect on calculous formations, and this seems to be borne out by the fact that valerianate of amyl really has some solvent action on cholesterin. It is a colourless liquid, of pleasant taste when taken in small quantities, and can be prepared in the laboratory by the action of valerianic acid on amyl alcohol; 1 g. of cholesterin is dissolved by 4½ g. of valerianate at 37° C., and by 3 g. at 40° C. Physiologically the action resembles that of ether, but the special qualities lie in its being a stimulant and sedative to the liver in cases of hepatic colic. It not only immediately subdues the attack but it prevents recurrences. If the stomach is irritable, it may be necessary first to employ sulphuric ether, following this with two to three capsules of 15 centigrammes each, given every half hour until the crisis is past, and continued at longer intervals during the following days. In nephritic colic the drug acts as an antispasmodic and general stimulant only, but no effect is produced on the renal calculi. Muscular rheumatism is frequently relieved, and much benefit is also derived from its use during menstrual uterine contractions. As a sedative, it is of value in hysterical manifestations. Its toxic properties being very slight, as many as five to six capsules can be taken daily, but it is necessary to guard against gastric disturbance.

(207) Injections of Brown-Sequard's Fluid in Ocular Therapeutics.

DE WECKER (*Ann. d'Oculistique*, November, 1893) says the negative results which he obtained from this method of treatment made him question the purity of the liquid employed; he accordingly obtained a supply from M. d'Arsonval, Brown-Séquard's collaborator, but the results were entirely negative with one exception. In this case vision had been reduced to counting fingers; after treatment perfect vision was restored in one eye, and in the other vision was restored to two-thirds of the normal. This was a case of retro-bulbar neuritis after influenza, which, as is well known, may recover spontaneously. Ataxic cases remained quite stationary for months during treatment by this fluid. In the same number of the *Ann. d'Oculistique*, Bourgon gives the results of treatment in four cases of optic atrophy of different kinds; in no case did benefit result from the injections.

PATHOLOGY.

(208) Estimation of Bacteria.

FERMI (*Centralbl. f. Bakt.*, xiv B, No. 19) recommends the following plan of estimating the number of bacteria present in solid substances, such as cheese, decomposing organs, fæces, butter. A straight platinum needle is marked with a file at a point a certain distance from the extremity. After sterilisation it is dipped into the substance to be investigated as far as the mark, withdrawn, and plunged as far as the mark into solid gelatine (contained in a tube in the ordinary way) at about ten different spots. Three tubes are thus inoculated, and the gelatine is then liquefied and poured into dishes as usual. The colonies which develop on the three plates are then counted, and the mean of the three figures obtained is taken. As the colonies lie densely on each plate it is sufficient to count them in five separate fields of the microscope, and extract the mean of these figures. It is claimed that more precise results are furnished by this method than by any other in use. Attention must be paid in conducting it to the following points: (1) The needle must be straight, smooth, and clean; (2) it must be thoroughly cooled after sterilisation; (3) it should be inserted exactly as far as the mark in all cases; (4) each tube must contain gelatine in the same quantity and of the same quality and consistence; (5) the dishes used must have the same diameter.

(209) The Influence of Thymus and Testicle Juice on Anthrax Infection.

GRAMATCHIKOFF (*Annales de l'Institut Pasteur*, December, 1893) has studied this subject, following in the footsteps of Wooldridge, Wright, and others. From the earlier researches of Wright, Brieger, and Kitasato, it has appeared that not only the products of the metabolism of certain bacteria, but also extracts of cellular organs like the thymus and testicle have a vaccinating influence on animals which are inoculated with anthrax. Gramatchikoff has made fifty-seven experiments of this kind, using both ordinary spore-forming and asporogene anthrax, under conditions identical with those of Wooldridge and Wright. A completely negative result as regards immunising effect was in every case obtained.

(210) Destruction of Anthrax Virus under the Skin of Susceptible Animals.

SANARELLI (*Annales de l'Institut Pasteur*, December, 1893) combats the views of Pekelharing on this question. The latter holds that the blood has a bactericidal power over anthrax spores, and not only the blood, but even the subcutaneous lymph. Sanarelli's method has been to introduce small collodion tubes containing anthrax spores under the skin of rabbits, observing that the lymph gradually penetrates through their walls and bathes the spores. These latter germinate, and form a rich culture of asporogene bacilli, possessed of great virulence. After a few days, however, whether through failure of nutritive material or from excess of metabolic products, the development of the bacilli ceases, and they gradually degenerate and die, as they would do in any other nutritive medium. The author maintains that on the whole his views are consistent with those held by Metchnikoff.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(211) The Diagnosis between Tumours of the Cerebellum and the Corpora Quadrigemina.

At a recent meeting of a medical society in Berlin two illustrative cases were reported by Bruns (*Neurol. Centralbl.*, No. 1, 1894). The first patient, when 9 months old, had measles, followed by purulent discharge from the left ear. Fourteen months later—in October, 1892—drooping of the left eyelid was noticed. During the next few weeks the opposite levator and both the inner recti became paralysed. In May, 1893, palsy had extended to other muscles supplied by the third nerves, including the internal ocular. Neither external rectus was involved. There were intention tremor in the upper limbs, static ataxy, and scanning articulation. Reflexes were moderately brisk. At this date the symptoms were considered to indicate tuberculous affection of the corpora quadrigemina. Optic neuritis, vomiting, and pyrexia developed in the following months, and death occurred in August. Headache was absent throughout. The necropsy confirmed the topical diagnosis. The second patient was a boy, aged 9, who began to suffer from headache, vomiting, and ataxy in November, 1891. In February, 1892, he showed paralysis of the right external rectus, paresis of the left, and bilateral ptosis; ataxy was so great that standing was impossible; each knee-jerk was very feeble. The ophthalmoplegia progressed until nearly all the muscles of the right eye were affected; rigidity of the neck set in, and the patient sank rapidly. The diagnosis—cerebellar tumour—was verified by the necropsy. In opening a discussion on the subject, Bruns remarked that, while Case I gave support to Nothnagel's teaching that the combination of ataxy and incomplete ophthalmoplegia was diagnostic of quadrigeminal tumour, Case II detracted from the exclusive significance of that syndrome. He suggested that the order in which the symptoms appeared might prove to be a differential characteristic; the precedence of oculomotor palsy, as in Case I, might be in favour of quadrigeminal disease; ataxy developing before ophthalmoplegia, as in Case II, might indicate cerebellar affection.

(212) Pneumonomycosis Aspergillana.

Kohn (*Deut. med. Woch.*, December 14th, 1893) reports a case in a man aged 58. He had suffered from cough and expectoration for some years, and six months previously he had a severe hæmoptysis. Three weeks before admission he became acutely ill with pain in both sides, apparently after a chill. There was considerable emphysema present as well as diffuse bronchitis, and over the left apex the percussion was impaired and the breathing bronchial. There were severe attacks of dyspnœa, in one of which the patient died. Besides arterio-sclerotic kidneys and a large polypoid adenoma of the stomach, the lungs were emphysematous and œdematous. There was a focus in the left apex, in which the lung tissue was particularly rarefied and œdematous. This was surrounded by a zone of yellowish grey infiltration. In the periphery of this focus there were many thrombosed vessels. Another similar focus of disease was found in the middle lobe. The corresponding pleura was inflamed. Polynucleated cells and hyphal threads were found in the alveoli, the latter having also made their way through the alveolar walls. In some parts spore-bearing hyphæ were seen. The fungus in places projected free into the lumen of the vessels. It corresponded to the aspergillus fumigatus. At first it was thought that aspergillary pneumonomycosis was always a secondary disease, but now it is known to be at times primary. It was shown that those connected with the artificial feeding of pigeons might contract the disease. Popoff recorded a case which lasted twelve years. A piece of membrane came away from the above-named patient's nose some time before admission, and the author would look upon this as consisting of the fungus, as a chronic rhinitis may be caused by the aspergillus. The last illness was caused by the aspiration of some pieces of fungus membrane and its development in the lung. The author does not think that there was any question of infarct with secondary growth of the aspergillus. The vascular thrombosis was due to the invasion by the fungus. The bronchitis and emphysema might prepare the lung tissue for the aspergillus. The lesion in this case consisted of a limited necrosis surrounded by an inflammatory zone. It is pointed out as a possible explanation that the patient had to do with canaries, which birds are very liable to aspergillary mycosis.

(213) Ocular Troubles in Paralytic Vertigo (Gerlier's Disease).

Salzer (*Ann. d'Oculistique*, January, 1894) gives an account of the eye affections in this disease. The attacks began with a sharp pain in the back of the neck extending down the back, the vision became cloudy, there was more or less complete paralysis of the upper lid, and muscular weakness in the limbs. The paralytic symptoms passed off in about ten minutes, but tended to recur, while some of the visual disturbance was permanent. The patients had a diminution of visual acuity for distance, and sometimes a failure of accommodation. In some of the cases there was pronounced hyperæmia of the optic nerves, blurring of the edge of the discs, and radial striation of the surrounding retina. There were also in one case patches of choroido-retinal atrophy, probably consecutive to peripapillary hæmorrhages. The visual fields were occasionally contracted, and the field for colours diminished; diplopia was commonly present, but in the interval between the attacks no defect in the range of ocular movements could be detected. The changes in the optic nerve and retina, and the symmetrical defects in the visual fields, can be explained only by a cortical lesion affecting the visual centres.

(214) Diabetic Neuritis.

Davies Pryce (*Brain*, Autumn Number, 1893) would distinguish two forms of this disease: (1) The motor or paralytic, and (2) the sensory or ataxic, the latter including Leyden's neuralgic group. He relates 3 cases of diabetic pseudo-tabes. In all three cases, besides the ataxy, the knee-jerk was absent. In Cases II and III the pupils reacted normally to light and accommodation, but in Case I the reaction to light was sluggish. In Cases I and II sensation was affected in the feet and lower part of the legs, but in Case III the feet only were involved. (1) A man, aged 56, with diabetes and perforating ulcers of the feet, died in coma. The peripheral nerves of the right leg were examined and found diseased, especially the posterior tibial nerve, the lower part of which was thickened and embedded along with the atheromatous tibial artery in a mass of inflammatory tissue. Changes were also reported in the large anterior cells in the lumbar cord. (2) A man, aged 72, had diabetes and gangrene. He had suffered from sciatica for ten years. A peculiar erythematous œdema of the feet was present at times. Changes were found in the anterior and posterior tibial as well as the sciatic nerves. Arterial disease was marked. (3) A diabetic man, aged 62, also died of gangrene. The nerves and vessels were here also found diseased. In respect to the vascular disease, there was no evidence of rheumatism, alcoholism, or syphilis in the two last cases. The chronic course, the presence of ataxy, the absence of paralysis, the age (beyond middle life), the preponderance of sensory, vasomotor, and trophic symptoms, and the existence of arterial disease were the chief points in these cases. No relationship was apparent between the severity of the nerve symptoms and the amount of sugar present except that the erythematous œdema coincided with increased sugar excretion. The author does not think diabetic neuritis solely due to a specific toxic agent, but mainly to vascular disease and malnutrition. The posterior tibial artery is especially prone to degeneration, and the posterior tibial nerve supplied by this artery was chiefly implicated. Morphine and antipyrin were useful in allaying the pain. Operative procedure would, in the author's opinion, only have accelerated death.

(215) Partial Recovery from Aphasia of Nine Years' Duration.

Küchler (*Neurol. Centralbl.*, January st, 1894) reports this case. The pa-

tient had an apoplectic stroke when aged 18. On recovering consciousness his right side was paralysed, and he was unable to speak, but could understand spoken language. Nine years later he still showed cortical motor aphasia with alexia and right hemiparesis; speech was reduced to a very few simple words: he understood what was said, though he was unable to repeat it; he was able to write single letters, but not words, and could copy. The patient was then taught to observe and imitate speech and movements of the lips and tongue, with the result that when he left the clinic, six weeks later, he had acquired the use (not always correct) of more than a hundred words.

SURGERY.

(216) Nephrectomy for Congenital Hydronephrosis.

In the *Deut. med. Woch.*, February 15th, 1894, Adler records the following case in a child, aged 3½ years. The enormous swelling of the abdomen was due to a fluid tumour which occupied nearly the whole of the abdomen. This tumour had been previously stitched to the abdominal wall and incised, the microscopic examination of a piece of the excised cyst wall showing renal structure; 650 c.cm. of bright clear fluid with a moderate amount of urea in it, but hardly any albumen, was let off at the same time. A fistulous opening persisted. Some six or seven months after the first operation the patient was admitted under Israel. From the fistulous passage midway between the navel and the symphysis a slightly turbid yellow fluid could be squeezed out. The right kidney seemed to be in every respect healthy. The boy passed per urethram 20 c.cm of absolutely clear fluid, acid, 1025 specific gravity, and containing no abnormal constituents. From the fistula at least 2,000 to 3,000 c.cm. turbid fluid, specific gravity 1004-7, and containing albumen, pus, blood, came away in the day. Thus it was concluded that the other kidney was healthy; nephrectomy was therefore decided upon. The cyst was found to be exclusively intraperitoneal, the colon could not be found owing to an abnormal position, and a further difficulty lay in separating the tumour from the abdominal wall. This was eventually done, a piece of the abdominal wall with the fistula in it being excised, and the resulting cavity plugged. The cavity soon became less, and four weeks later only a small granulating surface remained. The small amount of urine excreted by the sound kidney before the operation was accounted for by the amount excreted by the other kidney. After the nephrectomy 600 c.cm. of healthy urine of 1017 specific gravity were passed daily. For several reasons the hydronephrosis was thought to be congenital.

(217) Surgical Treatment of Rupture of the Bladder.

Sieur (*Rev. de Chir.*, March, 1894) shows by statistics that, as a result of surgical intervention, the mortality from traumatic rupture of the bladder has, during the past fifteen years, been reduced from 90 to about 54 per cent. Of eighteen cases of extraperitoneal rupture treated by operation, ten ended in recovery and eight in death. Of thirty-four patients in whom the peritoneal covering of the bladder had been involved in the injury, fourteen recovered after operation, and twenty died. The results, it is stated, would very probably have been much better had the operation been performed at an earlier period. The author's tables show that the most serious cases are those in which the rupture of the bladder is associated with fracture of the pelvis. It is concluded from these results that surgical intervention should be practised in every case of vesical rupture, whatever the form of the injury may be, unless there be either very intense nervous shock, or the patient has been reduced to an evidently hopeless condition by urinary infiltration and general poisoning. This intervention should be prompt, particularly if the rupture be an intraperitoneal one and complicated with fracture of the pelvis. Diagnostic difficulties, it is held, could alone justify any delay. The short stage in the course of which the surgeon can intervene with fair prospects of success, with the aim of removing the dangers of hæmorrhage and of serious urinary poisoning, is apt to be marked only by symptoms of simple contusion. The following are regarded as the most important signs of vesical rupture: a peculiar pain felt at the time of the injury; chilling of the surface of the body, which persists for some time; an urgent desire to micturate, which the patient cannot satisfy; the absence of any vesical swelling above and behind the pubes, and also the absence or the presence, but in very small quantity, of urine in the bladder. Catheterising, though a valuable detail of investigation for determining the existence and the seat of rupture, ought not to be practised except with very great caution. If the symptoms point clearly to intraperitoneal rupture, median laparotomy should be performed, the bladder hermetically closed by sutures, and, if it be found necessary, the abdominal cavity drained. In cases of extraperitoneal rupture the surgeon has the choice of suprapubic incision, of the incisions of Trendelenburg and Helferich, and of symphysiotomy. In cases in which there is doubt as to the seat of the rupture, the surgeon should begin by making a vertical incision of the abdominal wall. In every case he ought to respect as far as possible the peritoneum, which membrane should not be opened unless there be good grounds for doubt as to the integrity of the abdominal viscera. Even in cases of extraperitoneal rupture suture of the vesical wound should be attempted in preference to drainage. For purposes of drainage the surgeon should confine himself in most instances to an incision above the pubes, and incise the perineum only in cases of extravasation and of injury near the neck of the bladder. If the vesical wound cannot be closed by stitches, the bladder should be drained by a siphon tube and by a retained catheter. Retention of an instrument in the bladder ought always to be preferred to intermittent catheterism.

(218) Thyroidectomy in Graves's Disease.

Putnam (*Journ. of Nerv. and Ment. Dis.*, December, 1893) discusses this subject and relates a case. His patient, a weakly female, aged 29, for many years had been subject to prolonged attacks of vomiting. Enlargement of the thyroid was first noticed in April, 1892, when the patient was convalescing from influenza followed by a period of gastric derangement; exophthalmos and palpitation developed a few months later. In the ensuing autumn nervous agitation, tremor, choreiform twitching, and dyspnœa were superadded; there was a mitral systolic *bruit* with accentuation of the pulmonary second sound; the bronchocele extended downwards to the sternum and laterally to the middle of each sterno-mastoid. In February, 1893, the isthmus was ligatured and the right lobe excised. The amount of bleeding was considerable; during the operation the pulse ran up to 180° F. and prostration was extreme; a few hours after there was great dyspnœa; pulse 185, temperature 104°. For several days the patient's state was critical; she then began to improve; nervous twitching disappeared, the pulse fell to 100. Paralysis of the right recurrent nerve was discovered soon after the operation, but now is scarcely apparent; the thyroid stump is smaller; the patient, though anæmic, is gaining ground slowly; pulse 108. Putnam gives a tabulated summary of 51 cases in which thyroidectomy was performed; in most of the cases improvement or substantial cure is stated to have resulted; four deaths were attributable to the operation.

MIDWIFERY AND DISEASES OF WOMEN.

(219) Ovariotomy during Pregnancy.

Gordon (*Vratch*, No. 1, 1894) has collected 204 cases of ovariotomy during pregnancy, of which 28 were operated upon in Russia. As regards the result, only 176 cases of the series are deemed to be suitable for analytical purposes, since in 21 the after-course of gestation remained unknown, while in 7 (with 2 deaths) the uterus was wounded during the operation. Of the 176 cases, 164 (93.2 per cent.) recovered and 12 (6.8 per cent.) died; in 122 (69 per cent.) labour occurred at full term, while in 49 (22 per cent.) abortion ensued. The author draws the following general conclusions: (1) The last decennium (1884 to 1893) shows a considerable increase in the percentage of recoveries (97) and normal labours (78). (2) As far as the mother's life is concerned, the most favourable results are given by ovariotomy per-

formed in the second, third, and fourth months of gestation, while, as regards the age of the fœtus, the third and fourth are the most favourable. (3) Of 12 cases of double ovariotomies, in 5 (42 per cent.) abortion occurred, but in 7 (58 per cent.) pregnancy terminated normally; all the women recovered. (4) In 7 cases (3 per cent.) malignant tumours were present, 2 ending in death and 5 recovering after the operation; in 3 of the latter labour took place at full term. (5) In 10 cases cysts of broad ligaments were removed, with 1 death and 6 abortions. (6) In 17 (9 per cent.) twisting of pedicle and in 48 (24 per cent.) adhesions were present. In several cases of the latter category the operation was accompanied with profuse hæmorrhage. (7) Of 28 Russian cases, 25 (89 per cent.) ended in recovery and 3 (11 per cent.) died; in 11 pregnancy was interrupted by the operation, but in 16 terminated in due time.

(220) The Stump of the Funis in the Newborn Child.

DOKTOR (*Archiv f. Gynäk.*, vol. xlv, Part 3, 1894) notes three factors which render the wound made by the division of the cord a source of infection. In the first place, the little wound involves not only the skin, subcutaneous tissue, and muscular layers of the abdominal wall, but also the peritoneum. Then three large vessels are included in the ligature. Lastly, a great quantity of dead tissue must lie for awhile in the wound. The Whartonian jelly is likened by Doktor to gelatine employed for cultivating germs. There is a great tendency to the formation of exuberant granulations and, hence a weak cicatrix. In some cases the skin extends for some distance up the cord in the form of a tongue-shaped process. When this anomaly exists the wound is slow to heal. Extension of the attachment of the amnion beyond its normal limits is serious, as it leaves the umbilical region very weak. The "fungus umbilici" is the result of the deeper tissues invading the Whartonian groove and growing upwards in the middle of the cord; they remain as a conical protuberance when the stump falls. In 462 newborn children, rise of temperature was observed in 107. In 42 of these cases the fever was traced by Doktor to infection from the umbilical wound. He objects to changing of the dressing of the stump, which should be cut as short as possible, and he thinks that it is better to omit the daily bath for a short time than to disturb the dressings.

(221) Significance of "Urobilinuria" in Obstetrics and Gynæcology.

MANDRY (*Archiv. f Gynäk.*, vol. xlv, Part 3, 1894) cannot substantiate Dick's theory (*ibid.*, vol. xxiii, 1884) that the appearance of excess of urobilin in the urine of women is diagnostic of internal hæmorrhage. Dick observed this phenomenon in two cases of ruptured extrauterine fœtal sac, and in one instance of retrouterine hæmatocele. Mandry finds that urobilinuria is not seen in the healthy puerperium, and is exceptional in cases of fever and hæmorrhage associated with childbed. Nor is this affection of the urine common after operations on the perineum and vagina, or after removal of the ovaries for the cure of fibroid disease. On the other hand, urobilinuria is frequent after severe abdominal sections. In two marked cases of hæmatocele the condition in question was absent. Mandry concludes that urobilinuria is a morbid phenomenon of but little if any diagnostic value.

(222) Hip-joint Disease and Marriage.

BONNAIRE (*Presse Médicale*, January 6th, 1894) was consulted about a girl aged 19 who, subject to hip-joint disease, intended to marry. He was asked to decide if she were capable of becoming pregnant, if she could be delivered at term without danger to herself or her infant, and if pregnancy, parturition, and childbed would have any serious influence on her health. He therefore set to work to determine (1) the cause of her lameness, (2) the influence of the primary disease on the conformation of the pelvis, (3) the development of the genital tract, and (4) the patient's general health. He found that she was lame through inflammation of the right hip-joint, which began when she was 12. Her father had died of phthisis, and she had strumous cervical and inguinal glands. The thigh was half flexed, adducted, and rotated inwards. There had been repeated suppuration. There was tenderness in the joint and in the right sacro-iliac articulation. The vagina and uterus were normal. There was distinct arrest of development on the right side of the pelvis, but the amount of pelvic contraction was not sufficient to allow a middle-sized fœtus to be delivered at term. The last attack of subacute inflammation took place a year previously; pus was then discharged through old fistulous tracts. Under the circumstances Bonnaire decided that marriage should at least be postponed. The patient was capable of bearing children, but maternity in her present condition would react prejudicially on her general health.

(223) Unconscious Delivery.

MAURICE LAUGIER (*Journ. des Sages-femmes*, March 1st, 1894) relates a very authentic case, similar to others recently reported, but it occurred in a woman who had already borne a child. She entered a hospital on January 9th, in company with her little boy who had whooping-cough. She was about eight months pregnant. On the morning of February 18th, she had colicky pains, whih she attributed to five days' constipation. An enema was given, and directly afterwards she sprang out of bed. The enema with fæces was at once expelled, and at the same time the child was delivered, being shot into the chamber vessel, falling over a foot downwards, as the mother had not had time to sit fairly on the vessel. The mother did not cry out when the child was thus suddenly delivered. The child was saved; the placenta was expelled a quarter of an hour later without difficulty. The mother recovered perfectly. She had not the slightest idea that labour was coming on, though she knew that term was at hand, and remembered that her first child had been delivered just as rapidly and as painlessly three years previously. This case, where the patient was above suspicion, throws some light on other instances where a fœtus has been expelled during defæcation, the mother declaring that she did not know that she was in labour till the fœtus was expelled.

THERAPEUTICS.

(224) Treatment of Tetanus by the Serum of Immunised Animals.

REMESOFF AND FEDOROFF (*Centralbl. f. Bakt.*, January 23rd, 1894) report a case of traumatic tetanus which, in their opinion, was cured by the administration of the serum of an immunised animal. The patient had well-marked symptoms of the disease when he was injected subcutaneously with 50 c.cm. of the serum of a dog which had been rendered immune to tetanus. The curative value of the serum was estimated at 1:300,000. On the following day there was already considerable improvement. During the next three days three further injections of this serum in the same amount were given. The patient's condition steadily improved, and he was discharged well on the fourteenth day from the commencement of treatment. The authors arrange in the four following groups all the recorded cases of treatment of tetanus by immunised serum: (*a*) Cases in which the symptoms commenced to abate immediately after injection, and then steadily disappeared; (*b*) those which remained *in statu quo* for a short time after injection, and then gradually improved; (*c*) those in which no further muscles became involved in spasm after commencement of treatment, though occasionally an aggravation of certain other symptoms (as trismus, difficulty in swallowing) occurred: (*d*) those ending fatally, notwithstanding treatment. A survey of cases so treated brings out the following notable facts: The duration of the disorder is decidedly diminished by the treatment: the temperature is reduced; sleep is restored; the attacks of spasm grow weaker and rarer; the pulse frequency is diminished; lastly, there is great improvement in the general condition.

(225) Ichthyol.

VICTOR CEBRIÁN (*Siglo Medico*, December 17th, 1893) has for more than a year treated every case of erysipelas, whether idiopathic or surgical, which has come under his care with ichthyol, without any other treatment, external or internal. He paints the affected parts morning and evening with collodion, to which ichthyol has been added in the

strength of 10 per cent., the application being made so as to cover the healthy skin for an extent of 3 centimetres around the affected patch; the application is always made from healthy to diseased skin. The effect is to relieve tension, reduce temperature, and generally to subdue the symptoms of the disease. In 80 cases in which the author has used this method it has not failed once. When the varnish comes away the skin is left in a healthy condition, desquamation being trifling or none, and no roughness of surface being left. No bad effects of the treatment have been observed.—G. Colosanti (*Rif. Med.*, January 27th) has tried ichthyol in catarrhal conditions of the urethra and bladder. In cases of gonorrhœal urethritis he used the drug in the form of injections of a watery solution (2 to 5 per cent.). The following is a summary of his conclusions: (1) In cases of simple and gonorrhœal urethritis ichthyol injections are very useful, inasmuch as by this means a remedy which easily and speedily destroys the vitality of the specific organisms of the disease is brought into contact with the urethral mucous membrane; (2) in addition to its bactericidal action the drug has an "antiphlogistic" and resolvent effect; (3) its mode of action leaves no tendency to stricture; (4) it causes no pain, but, on the contrary, relieves any there may be, and is particularly valuable as preventing chordee and scalding in passing water. In cases of primary and secondary catarrh of the bladder Colosanti washed out the viscus with $\frac{1}{2}$ to 1 per cent. solutions of ichthyol. He found that by this means pain was relieved, micro-organisms were destroyed, and ammoniacal fermentation prevented. Further, the catarrhal condition of the mucous membrane was modified, and urinary troubles relieved.

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(226) Thyroidin in Psoriasis.

A. TSCHERNOGUBOFF (*Medicinskoje Obosrenje*, No. 22, 1893) has tried thyroidin (what preparation is not stated) in doses of 6 centigrammes twice a day. One patient, in the course of seventeen days, took 20 grammes of the substance. The medicament undoubtedly had an effect on the process, infiltration being rapidly absorbed and active desquamation taking place. On the other hand, the remedy produced such severe systemic effects—weakness of the heart's action, pains over the whole body, and giddiness—as to make the utmost caution necessary in the use of it.

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(227) Galvanisation of the Brain.

IT has been claimed that great improvement can be produced in the paralysis characteristic of the post-apoplectic state by the application of a galvanic current from the occiput to the forehead, the idea being that in this way the current passed from pole to pole through the brain substance, and favourably modified nutrition. Hare (*Therap. Gaz.*, December, 1893) is directly opposed to this view, and while he by no means denies that improvement is often seen after such galvanisation, he maintains that it is an indirect effect, and not due to the direct passage of the current through the brain substance. He supports this view by some experimental observations, which seem to him to indicate that when a current is passed between electrodes in the manner above described, it does not pass through the brain substance at all, but in the direction of least resistance—namely, the scalp. This was proved experimentally by placing electrodes, one on the occiput and the other on the forehead of a large dog, and arranging a milliampère meter in the circuit. The amount of current indicated in one experiment was $5\frac{3}{4}$ milliampères. The same dog was then trephined, and a needle connected with one pole of the circuit was plunged into the brain substance, the other terminal being placed as before. It was now observed that the amount of current passing was only $3\frac{3}{4}$ milliampères. In other words, the resistance, according to Hare, is less in the circuit formed by the two wet-sponge-coated electrodes and the scalp than in the circuit formed by the needle, brain substance, bones, and two layers of scalp with the other sponge coated electrode.

PATHOLOGY.

(228) Degeneration of the Cord in Experimental Phosphorus Poisoning.

GURRIERI (Reprint from *Riv. Sperim. di Freniatria e di Medicina Legale*, Fasc. II-III, 1893) describes researches made by him into the minute histology of the organs and spinal cord of a dog which had been gradually poisoned with phosphorus. The sections were for the most part stained in either osmic acid or with Vassale's hæmatoxylin, the formula for which is for the first time published by him (Hæmatoxylin and orange, of each 20 centig.; 10 per cent. chrome alum solution, 50 c.c.; 2 per cent. arsenious acid solution 50 c.c.) The liquid should be at least two months old, and is stated to give results far exceeding those obtainable with other formulæ. The author's actual observations were as follows:—*Stomach*: nuclei of gastric glands stain badly, cell protoplasm fatty. *Pancreas*: nuclei stain badly, cell bodies often fatty. *Liver*: general fatty degeneration, nuclei will not stain, degeneration least advanced towards the centres of the acini. *Heart*: fatty degeneration of many fibres, general loss of striæ. *Kidneys*: granular and fatty degeneration of epithelium of the convoluted tubules, and especially of Henle's loops. Epithelium lining Bowman's capsules does not stain. Frequently there were masses of granular *débris* between the capsule and the capillary tufts. The other organs were normal. In sections of the cord, hardened with Müller's fluid, the crossed pyramidal fasciculi appeared less coloured by the liquid than in the normal cord, along the whole of their course. Commencing at the lower third of the dorsal region, there was also evident degeneration in the columns of Goll and Burdach. These degenerations were confirmed on microscopic examination. The author calls attention, however, to the fact that the degenerated tracts did not take on the characteristic coloration of degenerated nerve fibres with osmic acid. He points out that this difference serves to distinguish primary slow degenerations, resulting from the gradual action of a poison from secondary rapid degenerations, the result of central mischief, these latter staining well with osmic acid. He suggests that the difference thus observed may be of importance in medico-legal examinations.

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(229) The Influence of Tobacco upon the Tubercle Bacillus.

KEREZ (*Centralbl. f. Bakt.*, January 16th) comments upon the possibility of transmission of tuberculosis through the medium of cigars. He points out that the hygienic conditions of many cigar factories are extremely bad, and that many of the workmen suffer from phthisis, as shown in the official report of the German factory inspectors (1885). In fixing down the tobacco leaves, in the process of rolling the cigar, the workmen frequently employ their own saliva, and thus the contagium may be conveyed. The moisture is sometimes applied indirectly by the finger, sometimes directly by the tongue and lips. In addition, infection may be conveyed to the tobacco through the air, since sputum is expectorated about the floor and allowed to dry. Kerez has made experiments with a view to ascertaining the probabilities of transmission of tuberculosis through cigars. Sputum rich in tubercle bacilli was introduced between the leaves before rolling, and, as a control, similar sputum was spread upon paper, which was then placed in a sterilised tube. Cigars and paper were kept at a certain temperature (28°-30° C., as is customary in factories) for periods varying from ten days to five weeks. The former were next unrolled, and they and the paper washed with sterilised water and well scraped, in order to remove the infectious material. From the washings of tobacco leaves and paper respectively intraperitoneal injections were made in guinea-pigs. The experiments showed that tuberculosis was produced in these animals by inoculations with the washings of infected cigars which had lain not more than ten days after infection, at the temperature stated. No tuberculosis resulted in animals inoculated with material more than ten days old. On the other hand, the sputum dried on paper retained its virulence up to the fourth week. The conclusion is that tobacco has a germicidal action in respect of tubercle bacilli, albeit a slow one, under the conditions specified. Since, however, cigars are commonly kept for a period considerably over ten days before they are supplied to the consumer, for practical purposes the disinfecting power of tobacco is quite sufficient.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(230) Acute Dilatation of the Stomach.
Boas (*Deut. med. Woch.*, February 22nd, 1894) records the following case. A patient, aged 20, with previously good digestive functions, was seized after an error in diet with eructations and loss of appetite, but no nausea or vomiting. Three days later a passing diarrhœa appeared; then vomiting occurred about every other day, and especially in the evening. Thirst and marked constipation followed. Four weeks later the lower margin of the stomach lay at four finger's breadths below the umbilicus. The dilatation seemed to increase during the next day. A considerable amount of SH_2 was present, as is frequently the case in dilatations not due to malignant disease. Free hydrochloric acid was present slightly in excess. Sarcinæ, bacteria, etc., were found. By regular lavage of the stomach the condition improved, the vomiting and eructations ceasing, and the appetite improving; but yet in spite of careful feeding the stomach (in the fasting condition) was not empty. This case of dilatation unquestionably coming on acutely shows that an ordinary error in diet producing acute dyspepsia may act as an exciting cause. No vomiting occurred, hence the gastric contents stagnated; thus solid and gaseous products were formed which acted injuriously on the stomach wall. The prognosis, as regards absolute restoration, is not altogether favourable. The above shows the importance of rational treatment even in so harmless an affection as acute dyspepsia usually is. An emetic would have here prevented the gastric dilatation.

(231) Tachycardia in Pulmonary Tuberculosis.
Bezançon (*Rev. de Méd.*, January, 1894) seeks an explanation of the tachycardia occasionally observed in pulmonary tuberculosis. It is always a grave phenomenon; after it has persisted for a short period the heart begins to fail, the pulse becomes so feeble as to be uncountable at the wrist, and the patient suffers from dyspnœa, cyanosis, and œdema of the lower limbs. In some cases the tachycardia may be due to pressure on the pneumogastric, by enlarged mediastinal glands, but this explanation will hardly apply to any cases except those in which the pressure is so great as to suspend completely the functions of the nerve. Slighter pressure might rather be expected to produce a slow pulse. Other cases may be explained by supposing a diminution in the calibre of the air passages, since Marey has shown that by breathing through a narrow tube respiration becomes slower and the heart faster. But ese explanations leave many cases unexplained. Bezançon suggests that in them the hurried action of the heart may be due to certain toxins produced either by the bacillus tuberculosis or by the microbes (staphylococci, streptococci) of the secondary purulent infections so common in phthisis. Bouchard obtained from tuberculin a substance, to which he gave the name of "ectasine," which produced dilatation of the vessels, and toxins with a similar property have been obtained from the products of the bacillus pyocyaneus by Charrin and Gley, and from those of the staphylococcus by Arloing. By acting as vasodilators these substances would tend to produce tachycardia, since the heart tends to act more rapidly as the peripheral friction diminishes. In other cases it is possible that toxins may cause tachycardia by producing a neuritis of the vagus. In the case of a phthisical girl with polyneuritis, in whom the pulse reached 150, Vierordt found a neuritis of the vagus evidenced by atrophy of a great number of fibres.

(232) Etiology of Chlorosis.
Meinert (*Verhandl. d. zehnten Versamml. d. Gesellsch. f. Kinderheilk. in Nürnberg*, 1893, pp. 43-84) has examined the condition and relations of the stomach in cases of chlorosis after distending the organ to its utmost capacity by artificial means. His paper is illustrated by a series of photographs showing the limits of the fully distended stomach in some seventy cases, and in nearly all of these the pylorus is seen to occupy the normal position, while the lower border reaches a considerable distance below the umbilicus. This position of the stomach, termed gastroptosis by its discoverer, Glénard, is exceedingly common in women, and Meinert believes that the frequency of its occurrence has so far protected it from the suspicion of being of pathological import. He finds that the stomachs of chlorotics exhibit the signs of gastroptosis, together with a remarkable extensibility which explains both why it is not always evident to the eye after death, and why during life it so readily returns to its former position after being artificially blown out. The condition is not, according to Meinert, real dilatation, for it disappears after the stomach has been emptied, and moreover the classical symptoms of dilatation are wanting. He believes that gastroptosis always precedes the onset of chlorosis, and that, with a few exceptions, it persists after the condition of the blood has been improved. Out of 31 young girls who were received into the training school for maidservants at Dresden, 28 had gastroptosis; 12 of these had never worn corsets, but their clothing was too tight fitting; 15 came wearing them, and in only 1 case the clothing was not responsible for the condition of the stomach. Of the 28 girls, Meinert describes 17 as chlorotic, and 3 as suffering from anæmia of a non-chlorotic character. He believes that gastroptosis is induced by downward displacement of the liver, generally in consequence of compression of the lower part of the thorax by corsets. It also occurs in persons who have enlarged livers, and in those who are phthisical or who have long, small, or flat rachitic chests. It is often noticeable in young children, but most commonly sets in during the later school years, when girls adopt the conventional dress of the adult woman; and, according to Meinert, half a year of tight lacing will ensure its appearance. In a young woman with a well developed elastic thorax chlorosis may result, if gastroptosis exists, from any of the exciting causes of the disease, but in such cases the condition is readily improved by the administration of iron. At the same time he believes that the blood condition is never completely cured. Gastroptosis is, in Meinert's view, the *fons et origo* of chlorosis, and if treatment is undertaken with only the blood state in view, he believes that we treat a symptom, and do not consider sufficiently the real disease. The poverty of the blood in hæmoglobin is to him but a secondary phenomenon, and he neglects it as an inconstant symptom, and recognises in the concomitant nervous disturbances the symptomatic basis for diagnosing chlorosis. He refers to the fact, to which attention was drawn by Hirsch, that chlorosis was unknown in the early and middle ages. It is unknown in Japan, except among those who have adopted European dress, and he believes that the only sound prophylactic and curative measure is to modify the dress so as to ensure perfect freedom of the lower thorax. He claims to have cured chlorosis by adopting this simple hygienic means, and without administering any drug. The author believes that stretching of the sympathetic nerve fibres which extend from the solar plexus to the lesser curvature of the stomach, plays a part in the causation of chlorosis, and of the nervous disturbances which accompany it. Predisposition to chlorosis, Meinert believes, depends upon the abnormal position of the stomach, and immunity from the disease depends upon the abdominal organs retaining their natural relations.

SURGERY.

(233) Resection for Pyloric Carcinoma.
Zawadzki and Solman (*Deut. med. Woch.*, February 22nd, 1894) first refer to the causes of want of success. Resection is indicated only when the tumour is small, well defined, movable, and with no adhesions to adjacent organs, when there are no metastases, and when the cachexia is due to the pyloric obstruction rather than to the malignant disease itself. They draw attention to the degree of dilatation. If this is very great, the food could hardly get through the new opening after the removal of the pylorus, hence a gastro-enterostomy at the lowest point should be performed. The authors relate the following successful case in a man, aged 30. In the summer of 1891 dyspeptic symptoms appeared. In December there was dysphagia and a desire to vomit. A tumour

of the size of a pigeon's egg was found 1¾ cm. to the right of the navel. The lower limit of the stomach lay ½ cm. below the navel. The healthy appearance of the patient seemed almost to negative the idea of malignant disease. He improved under treatment, and was not seen for six months. At this time the tumour was of the size of an apple, and the lower limit of the stomach four finger's breadths below the navel. No free hydrochloric acid was present. The tumour was still movable, so that operation was suggested. When the abdomen was opened Solman found no adhesions, and was able, although the disease was extensive, to resect the pylorus. The duodenum was sewn into the stomach, and six lymphatic glands were removed. The operation lasted nearly three hours. Two or three days later 200 c.cm. of sero-purulent fluid were drawn off from the right chest. Later an abscess appeared at the site of the incision, and as a consequence a gastric fistularesulted. This eventually closed up some seven weeks after the opera- tion, and then the patient rapidly improved, increasing in weight from 45 to 69 kg. The growth was carcinoma fibrosum. The examination of the stomach functions was then made by Zawadzki. The lower border of the stomach stood at two finger's breadths above the umbilicus. The mechanical functions of the stomach had returned almost to the normal, but not so with the other functions, as has been previously observed. Thus no free hydrochloric acid was present. Most of the albuminous matters passed over into the intestine unchanged. Digestion, however, went on very satisfactorily in the intestine. Nine months after the operation the patient was perfectly well. The authors think the prognosis here comparatively favourable.

(234) Surgery of the Trifacial Nerve.

KEINEKING (*Internat. Med. Mag.*, No. 1, 1894) reports a case of very severe and intractable neuralgia of some of the branches of the ophthalmic and superior maxillary divisions of the trifacial nerve, accompanied by less severe but equally obstinate neuralgia of the great occipital nerve. The patient was a robust and otherwise healthy farmer, aged 63. An incision about 1½ inch in length was made by the author through the eyebrow along the supraorbital ridge, the centre corresponding to the supraorbital foramen. The nerve was exposed at its emergence from the supraorbital foramen, and thoroughly liberated by chiselling away a small portion of the ridge, and separated from its surroundings as far back as possible. A thick thread was next tied around the nerve for the purpose of making traction, and the branches of distribution to the muscles and skin of the forehead were followed up by dissection. Some of the finer branches were thus removed for over 1½ inch. The trunk was afterwards isolated as far back as possible, seized with forceps having slender and slightly serrated branches, and slowly twisted upon itself until it gave way on slight traction. The part removed must, it is stated, have included nearly all the orbital portion of the nerve. At the same sitting the infraorbital nerve was exposed. After dissection and division of its branches the roof of the infraorbital canal was removed with the chisel, and the trunk of the nerve isolated, grasped, and twisted away. For about three days after the operation the patient complained of pain in the parts previously affected. Subsequently all pain, including that in the occipital region, disappeared entirely, and has not returned since the date of operation —April, 1892. The author, in the surgical treatment of cases of this kind, lays special stress on the dissection and extraction of the peripheral branches, and on slow torsion and gentle stretching of the central stump until it gives way. This, he holds, will certainly destroy the function of the nerve for some distance beyond the point where it is grasped, and will leave the stump in an unfavourable condition for regeneration, and sometimes be the means of extracting it up to its point of exit from the skull.

(235) Neurectomy of the Sympathetic in Epilepsy.

S. BOGDANIK (*Vratch*, No. 32, 1893, p. 897) relates the case of a boy of 16 with idiopathic epilepsy of two years' standing, in whom, after the usual treatment by bromides had failed, he tried neurectomy of the sympathetic. This operation he regards as a substitute for ligature of the vertebral artery, since, in common with Alexander, Baracz, and Jaksch, he believes that the good effects obtained from the procedure in certain cases of epilepsy should be attributed to a consecutive degeneration of the sympathetic nerve. Accordingly the left middle ganglion (stellatum vel thyreoideum) situated close to the inferior thyroid artery, was exposed and excised with scissors. The operation was followed by decided amelioration; by the end of three weeks the fits, which had previously been very severe and recurring daily, ceased altogether. Bogdanik draws no general conclusions from this solitary case, but he says the operation should be done only in idiopathic epilepsy.

(236) Thiersch's Method of Skin Transplantation.

SCHNITZLER AND EWALD (*Centralbl. für Chirurgie*, No. 7, 1894) assert that they have been thoroughly convinced by a number of observations in Albert's clinic that large skin grafts formed by Thiersch's method become fixed and grow just as readily on granulating as on raw surfaces. By applying the grafts directly to a granulating surface and by not scraping away the granulations much pain and bleeding are prevented. The authors attach no importance to the necessary neglect of antisepsis in Albert's method, and cite a case of large open surface near the mouth which was successfully closed by transplantation without any attempt having been made to protect the parts from infection. As the more painful stage of Thiersch's method—that of scraping away the granulations—is omitted, it is not necessary to administer a general anæsthetic. Before cutting away the large grafts the skin is frozen by ethyl chloride. The frozen skin, in consequence of its hardness and freedom from elasticity, can be cut more readily. The sections thus made are, however, somewhat thicker than those obtained from unaltered skin. By this modification all the advantages of Thiersch's method may be obtained, and the transplanted grafts adhere and grow more readily, and are more permanent than those formed after Reverdin's method.

MIDWIFERY AND DISEASES OF WOMEN.

(237) Lymphangioma of Fœtal Shoulder interfering with Delivery.

VON WOERZ (*Centralbl. f. Gynäk.*, No. 5, 1894) observed this case in Schauta's wards in Vienna. The patient was 28, and in labour, at term, for the second time. The pains began at 4 A.M., and she was admitted at 8 A.M. The uterus was very large, the presentation transverse; the os was nearly completely dilated. The membranes were very tense, and through them the left hand and a pulsating coil of funis could be felt. The pelvis was not contracted. Turning was at once practised, and the left foot easily brought down to the vulva. The left arm and cord had retreated into the uterus; the breech seemed to be fixed. As the fœtal heart sounds remained clear and strong, the labour was left for a while to Nature. By 9.30 there was no improvement, and the heart sounds became irregular. Delivery was then undertaken. Strong traction was found necessary in order to deliver the trunk as far as the umbilicus; then extreme resistance was encountered. After several minutes' traction the right shoulder was delivered and the right arm drawn down. Then a large tumour was detected in the left shoulder; it reached above the level of the maternal pubes, and blocked the pelvic inlet. By combined traction on the breech and pressure on the maternal abdomen the tumour and left arm were delivered. The head was extracted last. The child was dead. A cystic lymphangioma, as big as the fœtal head, occupied the left shoulder. Von Woerz observes that only one similar case of dystocia has been previously recorded; the lymphoma was also in the left shoulder.

(238) Alleged Primary Abdominal Pregnancy.

PINARD (*Gaz. des Hôp.*, February 22nd, 1894) read notes of this case before the Académie de Médecine in February. It occurred in the practice of Houzel. The patient was a multipara, aged 41. She seemed, when Houzel first saw her, to be in labour at term; the fœtal heart sounds were audible. Only the decidua was expelled, however, and the uterus

was found to be empty. The abdomen was opened, and a putrefied fœtus was found free in the abdominal cavity. The placenta adhered to intestine, and was discharged piecemeal from the abdominal wound during the days which succeeded the operation. The wound had been plugged with iodoform gauze. The perfect freedom of the fœtus in the abdominal cavity led Houzel to believe that this was a case of primary abdominal pregnancy. Pinard, however, could not accept this conclusion. Such a diagnosis was impossible unless the integrity of the uterus and appendages could be proved by careful examination, which was not made in this case. Pinard had frequently seen a fœtus free in the abdominal cavity, and discovered at the same time traces of a ruptured and healed tubal cyst, the primary seat of the pregnancy.

(239) Melæna Neonatorum.

Schütze (*Centralbl. f. Gynäk.*, No. 9, 1894) observed this disease in the infant of a girl of 16. The mother was pale and rather thin; there was no history of hæmophilia. The last period was at the end of March, 1893, and she was delivered on December 20th. The pains began at 11 P.M. on December 19th, the membranes broke at 10 A.M. next day, and one hour and a-half later a strong living male child was born. The cord was twisted once round its neck, but not tightly, and there were no signs of asphyxia. The left parietal bone was imperfectly ossified, one part crackling like parchment when pressed. On December 22nd, at 7 A.M., the baby passed blood freely from the rectum. Cold gruel enemata were thrown up, with a few minims of perchloride of iron. Next morning the child was very anæmic and cold; no more blood had been passed, and the abdomen was not swollen. At 10 A.M. blood was passed at stool, and also vomited. Collapse set in, and the child died at 11 A.M. The umbilicus and its vessels were healthy; the mouth was full of dark tea-coloured blood, which was also found in the pharynx, œsophagus, trachea, bronchi and larger bronchial tubes, the stomach, the lower part of the ileum, and the large intestine. No ulceration of the intestinal mucosa could be detected. The duodenum, jejunum, and upper part of the ileum were empty. The lungs were very emphysematous. There were ecchymoses in the dura mater. The child died on the second day, as in the majority of cases. Schütze refers to a valuable summary of cases of melæna neonatorum in Max Runge's *Krankheiten der ersten Lebenstage*, 1893.

(240) Ovariotomy after Childbed.

Le Roy des Barres (*Gazette des Hôpitaux*, February 22nd, 1894) recently operated on a patient, aged 29, who had been delivered two months previously and suffered ever since from infection, manifested by peritonitis, pleurisy, and phlegmasia alba. A large tumour filled the abdomen. The operator diagnosed suppurating ovarian cyst. The operation confirmed this diagnosis. He removed the tumour, which contained nearly 7 pints of pus. Immediately afterwards all the symptoms of infection disappeared. The patient left the hospital perfectly well on the twentieth day.

THERAPEUTICS.

(241) Antirabic Serum of High Immunising Power Applicable to Man.

Tizzoni and Centanni (*Rif. Med.*, December 27th, 1893), contribute a further note on this subject. By using large animals in place of small animals they have succeeded in reaching a very high grade of immunity, and the serum of these animals has a protective power when injected into others far exceeding that hitherto obtained by this or any other method. It is claimed for this serum that it possesses the following advantages over Pasteur's vaccines: It is efficacious at whatever period of incubation it may be used, and even if early symptoms have already appeared, it is almost instantaneously efficacious. It is absolutely non-virulent, and cannot possibly produce infection or any other evil. The treatment is rapid, and can be carried out by means of one or few injections, and a minimal quantity of vaccine. The vaccine itself is very soluble, and is absorbed with rapidity; it can be preserved apparently almost indefinitely if in the dry state. The authors do not at present advance their method as ready to replace that of Pasteur, but they recommend its trial in all cases in which there is reason to fear that Pasteur's method may be unsuccessful, whether from extreme virulence of the original disease, short incubation period, the existence of initial symptoms before the application of treatment, or from any other cause. The authors are still pursuing their researches at the Laboratorio di Patologia Generale, Bologna, and either are or will be prepared to place a supply of the vaccine at the disposal of others who may have occasion to use it.

(242) Strychnine as an Antidote to Chloroform Poisoning.

Washburn (*Therap. Gaz.*, February, 1894) records a case of a patient who had swallowed two ounces of chloroform with suicidal intent, being found in the street in a condition of profound narcosis. His pupils were widely dilated and inactive. His respiration was so shallow as to be almost imperceptible, and he had the weak irregular pulse of a dying man. One-twentieth of a grain of strychnine was injected hypodermically, and artificial respiration applied, with the result that after a few minutes the whole aspect of the case changed, the respirations becoming deep and full, and the pulse also improved. After an hour another injection of $\frac{1}{20}$ gr. of strychnine was given. Two hours after being called to the case the author was able to communicate with the patient, and to get him to confess the cause of his condition. Recovery was complete, the patient, however, passing through a severe attack of gastritis.

(243) "Hydrochloro-sulphate of Quinine."

At a meeting of the Real Academia de Medicina of Madrid, on February 10th, Hernandez Briz (*Rev. de Med. y Cir. Pract*, February 22nd), stated that during the whole of 1893 he had made trial of a new salt of quinine, for which he claims advantages which render it, in his opinion, superior to other quinine salts for purposes of hypodermic injection. The new salt, which is called hydrochloro-sulphate of quinine, was introduced to the notice of the French Académie de Médecine last year, details of the mode of preparation are promised at an early date. In the meantime all the information vouchsafed as to the preparation is that it is not a mere mixture of hydrochlorate and sulphate of quinine, but a genuine combination. The substance crystallises in prisms, and makes an amber-coloured solution with water. Its special advantage is said to be its remarkable solubility, one gramme of the substance dissolving in one gramme of water. Among more than 200 injections there was not one in which any ill-effect was produced, and the medicament was rapidly absorbed in every case. It is recommended that the injections should be made deeply with all antiseptic precautions. At first Hernandez Briz injected only half a Pravaz syringeful of the solution, that is to say, 50 centigrammes of the salt with half a gramme of water: afterwards he injected a whole syringeful without any untoward result. In all the cases in which he has used it—including various forms of malaria, particularly in children, whom it is difficult to get to take quinine in any form—the results have always been "admirable." The new salt, used hypodermically, also gives good results in rheumatic affections and in influenza.

(244) Poisoning by Lysol and Phenol.

Friedeberg (*Centralbl. f. inn. Med.*, March 3rd, 1894) refers to the non-toxic properties of lysol. Two cases of poisoning, however, have been recorded, and the author now adds a third. A 1 year old child is said to have drunk as much as 10 g. of lysol in solution. When admitted it was drowsy and its lips cyanosed. The uvula and pharynx were reddened; respiration 48, pulse 140. The stomach was washed out, masses smelling strongly of lysol being evacuated; vomiting then occurred. Magnesia was given in suspension through the tube. The child steadily improved, but a greyish white slough appeared on the pharyngeal wall. Complete recovery subsequently took place. The case represented an intoxication of medium severity. Only a trace of lysol could have been absorbed, as there was no carbolic reaction in the urine. Drowsiness, cyanosis, and rapid cardiac action were the chief symptoms noted. The author then records a case of carbolic acid poisoning in a woman who made use of a solution of carbolic acid as a rectal injection instead of a vaginal irrigation. She rapidly became unconscious, with twitching of the hands; 500 g. of lime water with 100 g. of hot

water were thrown up into the rectum. Camphor and also nat. sulfur. was in. jected subcutaneously. Three hours later she was better, and she subsequently made a good recovery. The urine was deep yellow in colour, becoming blackish green on standing. The large dose of 25 g. was taken, and probably the favourable termination was due to the prompt treatment.

(245) Pyoktanin in Cutaneous Tuberculosis. Klevtzoff (*Vratch.*, No. 30, 1893, p. 839) reports a very obstinate case of multiple tuberculous ulcers of the right shoulder, arm, and axilla, and the left leg, in a lad of 18, in which, after a number of remedies, old and new (including Koch's tuberculin), blue pyoktanin, in the form of a 1 in 500 aqueous lotion, was ultimately resorted to. In a month or so the largest ulcer, measuring 4.5 centimetres, and several others soundly healed, while all the remaining ones became covered with healthy granulations.

(246) Treatment of Anthrax in Man. Sestini (*Lo Sperimentale*, February 1st, 1894) reports a case of anthrax infection which was successfully treated by a method first adopted by Mafucci, namely, by the injection into the affected parts of rather large quantities of phenol solution. On the first day eight injections of 1 g. of a 3 per cent. solution of carbolic acid were made into the parts attacked. On the second day three injections of a 2 per cent. solution, and on the third day two more injections of 3 per cent. solution were made into the freshly œdematous parts. The lesions were covered with sublimate dressings, and phenate of quinine was given internally. Notwithstanding the large amount of quinine taken, there was at no time any sign of carbolic acid poisoning. One more interesting point about the case is the result of bacteriological investigations which showed that the anthrax bacilli did not get into the general circulation, but remained confined to the parts immediately surrounding the original point of infection.

PATHOLOGY.

(247) Examination of the Blood in Cases of Leucocytosis. Stanislaus Klein (*Volkmann's Samm. kl. Vorträge*, No. 87) lays great stress on exact estimation. For the hæmoglobin he prefers Gowers's hæmoglobinometer to that of Fleischel, as being easier to use and cheaper. In the dry coverslip preparations care should be taken to get the film of blood very thin, and it should dry almost immediately when the two coverslips are pulled apart. Under the microscope the preparation should appear evenly spread, and there should be no "rouleaux." The coverslips with their dry films should be placed in the warm chamber and slowly heated up to 115° to 120° C. This may take about half an hour, and the temperature should still be maintained about five or ten minutes and the flame then extinguished. After a further period of ten minutes, during which the temperature gradually sinks, the film will be properly fixed on to the coverslip and ready for staining. This whole process of fixing should last at most fifty minutes, and so is quicker than the older method. The preparation must be stained with Ehrlich's triple stain, which should have been carefully prepared and have stood six or ten weeks, so that any precipitate may be avoided. The staining solution should be applied to the preparation with a glass rod, and after a few seconds washed off again with distilled water. The coverslip can then be dried between filter papers and mounted in Canada balsam. For the exact estimation of the different kinds of leucocytes one must count at least 600, and, when there is much leucocytosis, even 1,000 to 1,500 leucocytes must be counted over. In order to get the true percentages of the different forms of leucocytes, it is essential that the total number in a cubic mm. be estimated. Klein hopes that exactness in the examination of the blood will add to our knowledge of the signs of disease. He appends a table showing the relative number of the different kinds of leucocytes in various diseases.

(248) Researches on the Hæmatozon of Birds. Sakharoff (*Annales de l'Institut Pasteur*, December, 1893) has found hæmatozoa in great numbers in the blood of young ravens taken direct from the nest. In order to demonstrate their characters, the author after fixing them stained them with a mixture of eosin and methyl blue for twenty-four hours. The parasites are flagellate, with a nucleus, which consists either of zones or of a more or less close mass of chromatic filaments, somewhat resembling karyokinetic figures. One constantly sees the nucleus separating into isolated filaments, some of which escape and constitute the flagella. This process accomplished, the parasite seems to have come to the end of its life processes. The escape of the filaments is explained as very probably due to some fault in karyokinesis caused by changes of temperature or other chemico-physiological conditions. The parasites within the leucocytes in the case of the raven present, besides the nucleus, numerous granules and minute vacuoles, which in the larger parasites become irregular clefts. Occasionally the formation of flagella is observed. This process commences with a movement of the granules, after which the parasite itself begins to move, and presents in its periphery one or more flagella, which soon separates from the parasite. After this the parasite again becomes stationary. The granular spheres represent the resting stage, analogous to the semilunar bodies found in malarial blood; they multiply by a process of karyokinesis. The nuclei of the leucocytes occupied by parasites become slender and surround them. In the blood of the raven other parasitic forms are also found. These are round but not granular. The formation of flagella also takes place in these, as well as fission processes and the consequent formation of mulberry-like masses. The parasites found in fledgling crows are in many respects similar to those just described, but in the larger parasites the nuclei are completely invisible. The "leucocytozoa" of crows destroy the leucocytes but leave the nuclei intact.

(249) Absorption by the Urinary Bladder Bazy (*Bull. Gén. de Thérap.*, February 8th, 1894) has come to the conclusion that the idea that the bladder is unable to absorb is erroneous. Injection of poisons into the bladder kill animals with as great certainty as if made into the rectum or subcutaneously. Chemical and microbic poisons were used in his experiments. Cocaine, strychnine, and hydrocyanic acid kill animals in a few minutes; belladonna, curare, and pilocarpin produce their effects much more slowly. Pneumococcus injected into the bladders of six rabbits produced a fatal result in five instances, three died in five to six days with pleural and peritoneal exudations and without renal lesions. Maceration of gangrenous muscle by the septic vibrio injected into the bladder of a rabbit, after being passed through a Chamberland's filter, killed the animal in twenty days. Water appeared to be absorbed by the bladder also. Absorption by the urethra appeared to be very active, while that by the ureter was less so; but when the toxic liquid reaches the level of the calices death depended on the dose.

(250) Elimination of Iron in Malaria. The following is a summary of the results obtained by the researches of Colosanti and Jacoangeli (*Rif. Med.*, January 5th, 1894) on this question:—(1) normal human urine constantly contains iron, the mean absolute quantity per diem being 0.0023 gr., and the mean per mille 0.0013; (2) in febrile conditions generally the quantity of iron is increased, the increase being proportional to the extent and duratiion of the elevation of temperature; (3) in malaria the quantity of iron lost is greater than in other febrile conditions, and is proportional also to the gravity and duration of the case, and to the amount of destruction caused by the parasites to the red blood corpuscles; (4) in malaria the daily quantity may reach as high as 0.016 gr., the mean daily amount per mille being 0.0093 gr.; (5) the increase is most marked after the termination of the febrile stage, and it lasts for several days after all parasites have disappeared from the blood; (6) the increase is most marked in cases of primary infection, and less so in the chronic and recurrent forms; (7) the quantity of iron eliminated is always proportional to the degree of malarial oligocythæmia; (8) as soon as the hæmoglobinometer and hæmocytometer show an increase of the hæmoglobin and red corpuscles respectively of the blood, the elimination of iron begins to diminish.

AN EPITOME OF CURRENT MEDICAL LITERATURE.

MEDICINE.

(251) Free Hydrochloric Acid in the Gastric Juice.

K. E. Wagner (*Vratch*, No. 1, 1894, p. 17), having examined successively 216 patients—90 men, 126 women with chronic gastro-intestinal affections, failed to detect any free HCl in the gastric juice in as many as 39, of whom only 6 were suffering from malignant disease of the stomach. In 12 of the 33 non-cancerous cases the secretion had either a neutral or an alkaline reaction and did not contain peptones, while in the remaining 21 the reaction was acid and the juice showed the presence of peptones. Most frequently the absence of HCl was observed in young people of from 20 to 30. The author concludes that (1) the absence of free HCl in the gastric juice cannot possibly be regarded as a pathognomonic symptom of cancer of the stomach; (2) its diagnostic value is limited solely to affording an additional evidence in favour of the disease suspected on some other grounds; and (3) the absence of free HCl appears to promote the development of gastric cancer.

(252) Influenza Pneumonia.

Albu, of Renvers's clinic, discusses (*Deut. med. Woch.*, February 15th, 1894) the questions whether there is a special form of pneumonia in influenza, and what relation there is between croupous pneumonia and influenza. Influenza pneumonia is really a broncho-pneumonia like that seen in other infective illnesses—diphtheria, enteric fever, etc. The clinical picture is not as definite as in croupous pneumonia. The following points are noted:—(1) evidence of a preceding attack of influenza is generally present; (2) percussion dulness may be absent or only present for a short time, shifting its position; bronchial breathing may be the only physical sign; moist sounds are most constantly present; (3) the sputum is never typically rusty; (4) the fever usually sets in without shivering, and the temperature rises gradually; (5) the course is less acute, the infiltration disappears slowly, and convalescence is retarded. The accompanying pleurisy has several peculiarities:—(1) it is more frequent than in croupous pneumonia; (2) absorption takes longer; (3) empyema is less frequent, only occurring when the streptococcus is present. This streptococcus empyema is comparatively unfavourable. The author says that the frequency of this streptococcus infection is characteristic of influenza; the infiltration affects single lobules but it may become confluent: it is softer, poorer in fibrin, richer in cells, and may have the character of a purulent fluid. The occurrence of abscess and gangrene has been noted. In one of the author's cases small abscesses were found in the right lower lobe. If such a necrotic focus abuts on the surface, it may produce a pneumothorax. The author relates such a case in a girl, aged 23. Influenza bacilli were found in almost pure culture in the sputum and no pneumococci. Signs of pericarditis appeared, and, about ten days from the onset of the disease, a right pneumothorax. Puncture revealed later a streptococcus empyema. Opening of the empyema had to be delayed owing to the critical condition of the patient; a good recovery ensued. At first a serous effusion was present, but the rupture of a necrotic focus made it become purulent. Croupous pneumonia is, in the author's opinion, a chance complication of influenza due to a secondary infection with the pneumococcus. A double infection with the influenza bacillus and Fraenkel's pneumococcus may occur. A confluent broncho-pneumonia may simulate croupous pneumonia.

(253) Hemiplegia in a Child.

Bloco (*Rev. de Neurolog.*, January, 1894) records the case of a boy, aged 6 years, the subject of hereditary syphilis, who, after a fall on to his right side, developed right hemiplegia, without aphasia and without losing consciousness. Sensibility was intact, as were the sphincters, and there was no elevation of temperature. The superficial reflexes were normal and the tendon reflexes almost equal, the right being only a little increased. There was considerable improvement four days after the onset, and very great improvement in a fortnight. Four months after the accident there was no trace of paralysis, and there had been no relapse up to the time of publication, eight months after the accident. The differential diagnosis is discussed and reasons given for not considering the case one of hysterical hemiplegia or of infantile paralysis, but one due to an organic lesion of the internal capsule, the nature of which is further discussed. After excluding polio-encephalitis and neoplasms, reasons are given for attributing the paralysis to a hæmorrhage into the anterior part of the posterior segment of the internal capsule of the right hemisphere.

(254) Lead Poisoning.

Pässler (*Münch. med. Woch.*), January 30th, 1894) relates the case of an infant, aged 1¾ year, with general eczema, which was treated on the extremities with diachylon ointment. Three days later stomatitis, ptyalism, and acute hæmorrhagic nephritis appeared. The treatment was discontinued, and the child got well of these symptoms. It is possible that the eczema played some part in the causation of the nephritis. The chances of nephritis as a complication of eczema are very small indeed: there are only a few cases on record. Before it is looked upon as a complication all other possible causes must be excluded. Very minute doses of lead, especially in young subjects, may be sufficient to set up acute poisoning. This acute poisoning is mostly characterised by severe colic, more rarely by nephritis (which, however, has been produced experimentally in animals) of stomatitis. Lead is not always found in the urine in such cases. A blue line, of course, need not be present. The above named infant must have been singularly susceptible.

SURGERY.

(255) Surgery of the Gall Bladder and Ducts.

Murphy (*Med. Record*, January 13th and 20th, 1894) says the various pathological conditions of the gall tracts which necessitate operative interference are (1) cholelithiasis: gall stones (*a*) in the gall bladder, (*b*) in the ductus choledochus, (*c*) in the ductus cysticus, (*d*) in the ductus hepaticus, (*e*) in the diverticula, (*f*) ulceration into the peritoneal cavity; (2) cholecystitis, empyema, hydrops; (3) cancer of the pancreas; (4) neoplasms involving the ducts; (5) carcinoma of the gall bladder; (6) traumatism. For the relief of these conditions after laparotomy has been performed, he discusses the following procedures: (1) Puncture of the gall bladder has been followed by fatal results in 25 per cent. of cases, and is not recommended, on account of the aperture made by the needle being liable to gape and fluid to escape into the peritoneal cavity. (2) Incision of the gall bladder without further operative interference should only be made use of in cases where the gall bladder has acquired extensive adhesions to the surrounding structures, which prevent either suture to the abdominal wall or approximation to any part of the intestinal canal; when it is compulsory to drain the cavity, a drainage tube is inserted, and is best fixed by the author's "button." Two cases were treated in this way with good results. (3) Suture of the gall bladder, with secondary incision, has been adopted successfully in many cases when drainage was required, but most operators now favour the next method. (4) Cholecystostomy in one sitting is best performed with the aid of the "Murphy anastomosis button" (Epitome, January 28th, 1893, par. 69), and has given good results. Instead of this operation, the author recommends the performance of cholecystenterostomy whenever it can be done. (5) Incision of the gall bladder, removing its contents, suturing it to the abdominal wall, with immediate extraperitoneal suture of the incision made in the gall bladder, has rarely been performed: out of four cases, three were successful. (6) Cholecystendysis: incision of the gall bladder with immediate suture and reposition into the abdominal cavity—ideal cholecystostomy. Out of thirty-five cases collected, eight terminated fatally: hence it is not recommended. (7) Cholecystenterostomy, or gall bladder

and intestinal anastomosis is indicated (*a*) in all cases where it is desirable to drain the gall bladder for accumulations therein; (*b*) in all cases of perforation of the choledochus into the abdominal cavity, when the duct must be obliterated by the reparative process; (*c*) in all cases of cholelithiasis when obstruction of the duct is present, or when the reflex disturbances of digestion are marked; (*d*) in all cases of cholecystitis, either with or without gall stones; and (*e*) in all profusely discharging fistulæ. The operation should be performed with the aid of the "anastomosis button." It is contraindicated (α) in all cases where the gall bladder is too small for the insertion of the button; (β) where the adhesions are so extensive that the bowel cannot be brought into contact with the gall bladder without kinking; (γ) if the ductus choledochus is occluded the gall bladder should be amputated just above its neck, leaving a sufficient portion in which the button can be inserted in the end, and the approximation made to the duodenum in the usual way. In this manner a channel is provided for the escape of the bile into the alimentary canal. (8) Cholecystectomy, or total extirpation of the gall bladder, is indicated in (*a*) hydrops and empyema of the gall bladder when it is already disconnected from the choledochus by occlusion of the ductus cysticus; (*b*) in severe diseases of the wall of the gall bladder itself, ulceration, gangrene, contraction, and carcinoma; (*c*) in severe chronic recurrent cholelithiasis vesicularis; (*d*) in internal rupture or wounding of the gall bladder when suture is difficult or impossible. It is contraindicated by strong adhesions to its surroundings by broad and close attachments to the liver in all permanent closures of the choledochus. (9) Choledocho-lithotripsy, or crushing of gallstone in the choledochus, is not recommended on account of the danger of injuring the walls of the duct so as subsequently to cause a perforation, whilst crushing the stones. (10) Choledocho-lithectomy, with subsequent suture of the duct, should be undertaken (*a*) when the stone is large and firmly impacted in the duct, and when the patient has symptoms of intermittent fever and chills; (*b*) when the stone is impacted in the duct and the ductus cysticus is obliterated, preventing the formation of a gall bladder and intestinal fistula for the escape of bile; and (*c*) when it has produced ulcerative perforation, and the wall at the opening is in a healthy condition, otherwise the gall duct should be excised at this point, both ends ligated, and a cholecystenterostomy performed. On reviewing the cases given and the results, the mortality is greatest in the operation of cholecystotomy at one sitting by means of suture, in which 30 per cent. terminated fatally. Next in point of mortality comes cholecystostomy at one sitting (which is the operation most frequently performed), with 19 per cent. In cholecystendysis the mortality was 23 per cent.; and in cholecystectomy 17 per cent. In cholecystostomy in two sittings the mortality was 10 per cent. In cholecystenterostomy with suture the mortality was 35 per cent.; whilst when performed by the author with his anastomosis button the recoveries were 100 per cent.

(256) Solitary Hydatid Cyst of the Spleen.

TRINKLER (*Rev. de Chir.*, February, 1894) reports a case of solitary hydatid cyst of the spleen which was successfully treated by Volkmann's operation. The patient, a female, aged 42, had suffered for over two years from debility, dyspeptic symptoms, and mental depression. The left hypochondrium presented an intra-abdominal tumour as large as an adult's head, and in which on even slight movement or gentle palpation a decided hydatid *bruit* was evinced. Laparotomy was performed on April 17th by an incision about $2\frac{3}{4}$ inches in length, made obliquely and in a line from the juncture of the external and middle thirds of the costal margin to a point one finger's breadth below the umbilicus. The cyst was incised twelve days later. The progress towards recovery was much retarded by prostration and high fever, and by occasional retention and putrefaction of the contents of the cyst. The author discusses at much length the diagnosis and operative treatment of hydatid cyst of the spleen, and supports his views by a large collection of recorded cases. He is much opposed to the practice of puncturing an abdominal hydatid cyst, and holds that, whether for diagnostic purposes or as a means of treatment, such practice is very dangerous; since in dealing thus with a fully distended cyst possessing elastic walls, it is almost impossible to avoid some discharge into the abdominal cavity of the contained fluid, a few drops of which may set up acute peritonitis. Several cases are referred to in which simple puncture was followed by fatal results. As a means of diagnosis, it is useless as well as dangerous, as the removed fluid seldom contains hooklets, and the absence of albumen and the presence of succinic acid are not specially characteristic indications of the fluid contents of a hydatid cyst.

(257) Intestinal Obstruction due to Gall Stones.

KÖRTE (*Deut. med. Woch.*, February 29th, 1894) reports a case successfully treated by operation. A man, aged 52, had suffered from several attacks of biliary colic, calculi having been found in the stools. Six days previous to admission he was seized with severe abdominal pain, after which no fæces or flatus were passed. Vomiting, fæcal during the past three days, then hiccough followed. On admission he was moderately collapsed. There was no hernia, and nothing abnormal was felt either in the cæcal region or in the rectum. The sudden onset with early fæcal vomiting and with but slight abdominal distension pointed to gall stones as the cause of the ileus. The abdomen was opened, and in some coils of intestine which had dropped down into the pelvis a gall stone was found at some 20 to 30 cm. above the ileo-cæcal valve. The stone was removed by a longitudinal incision. The intestinal wall was tightly stretched over it. There was no ulceration or invagination of the mucous membrane. The course was very satisfactory, the bowels acting on the fifth day. The stone was rounded and without facets. In addition to the above-named symptoms, the comparatively good condition of the patient is more or less characteristic of this form of ileus. A stone already present in the canal becomes arrested by a rapidly on-coming attack of colic. The bowel above becomes paralysed, hence early fæcal vomiting. Opium was useless here as in the author's other three cases, which were operated upon with two recoveries. The diagnosis may be very difficult, and, in the author's opinion, only to be based on probabilities. Operation must be decided upon in each case by the non-success of so-called expectant treatment and by the symptoms. The propriety of operating in the above recorded case after seven days of obstruction cannot be doubted.

MIDWIFERY AND DISEASES OF WOMEN.

(258) Inoculation and Contact Infection in Uterine Cancer.

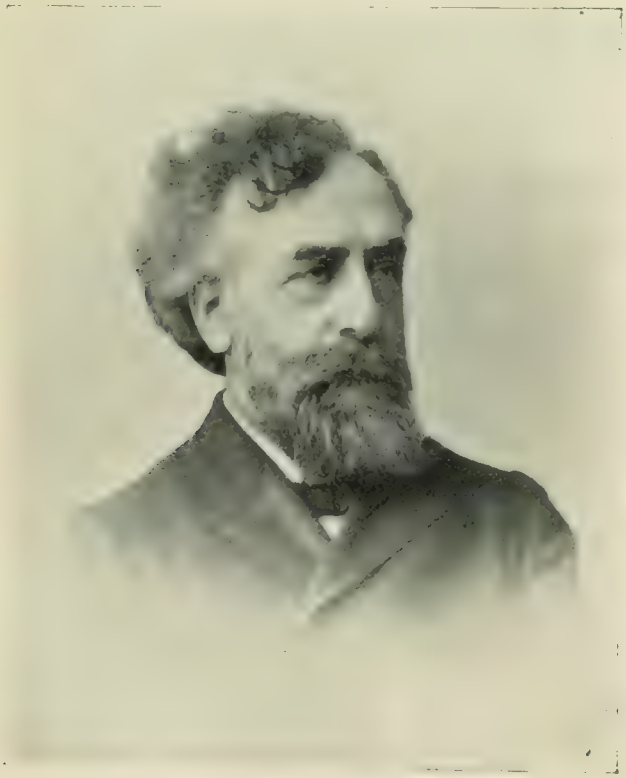
THORN (*Centralbl. f. Gynäk*, No. 10, 1894), in a paper on the infectiousness of cancer, describes 2 cases of infection by contact. An aged, demented virgin had cancer of the right labia. Over an area exactly corresponding to the diseased part which touched them the left labia were cancerous. A multipara, aged 46, had been subject to parametritis, which had drawn the body of the uterus to the right and fixed it in a faulty position. The cervix, abnormally long, pointed towards the left, constantly touching the left side of the vagina at a considerable distance from the fornices. The cervix bore a cauliflower growth, which fitted "like a saucepan lid" to a similar growth on the vagina at the point of contact. The vagina was elsewhere, both above and below, free from disease. Thorn describes 2 cases in which he believes that inoculation occurred. In the first, he had removed the uterus for cancer two years before, and as the vulva and vagina were very narrow, he made deep incisions on each side to facilitate extraction. The patient consulted Thorn on account of bleeding from the vulva. On examination the cicatrix at the top of the vagina was found perfectly healthy, and though there was evidence of deposit in the right parametrium, there was no ulceration there. The bleeding was seen to issue from a cockscomb-like growth on the scar of the deep vulvar incision on the right side. It extended deeply as far as the rectal mucous membrane, and all the infected tissues were therefore excised. This growth was histologically identical with the carcinoma removed two years previously. The patient survived the



S. E. Guido Baccelli, President of the Congress.



Professor E. Maragliano, of Genoa.



Professor Jacobi, of New York.



Professor Stokvis, of Amsterdam.



Professor Michael Foster, F.R.S., of Cambridge.



Professor Nothnagel, of Vienna.



Professor V. Babes, of Bucharest.



Dr. S. Laache, of Christiania.

second operation for three-quarters of a year; the cicatrix of the second wound remained healthy to the last. In the second case the middle of the vaginal cicatrix became cancerous six weeks after removal of the uterus for cancer of the canal of the cervix, which had not extended outside the os externum. This secondary growth was destroyed by the thermocautery. The patient was in good health three and a-half years after the operation.

(259) Prolonged Gestation and Fœtal Retention.

Marcopoulos (*Journal de Méd. et de Chirur. Pratiques*, February 10th, 1894), in a recent thesis, shows that there is no evidence of any case of physiological protraction of labour beyond 280 days. Protracted pregnancy is either extra-uterine or caused by an obstacle in the cervix. In one case, which Marcopoulos publishes, a fœtus died about the ninth month, probably from detachment of the placenta, and was retained through a mechanical obstacle, a fibroid tumour in the cervix. There are four conditions in relation to retained dead fœtus: (1) Ovum intact, no expulsive pains. In such cases expectant treatment is alone justifiable. Antiseptic vaginal injections are indicated. (2) Ovum intact, labour commenced. Then full antiseptic precautions are needed. Great care must be taken to delay the rupture of the membranes; hence digital exploration must be avoided as much as possible, and never practised during a pain. Directly the membranes rupture, an antiseptic vaginal injection must be given, and an antiseptic compress applied to the vulva. Warm irrigation of the vagina will hasten labour. If, however, the labour becomes very lingering, intrauterine injections must be administered hourly. These should be given at shorter intervals if the pains still remain weak. When the fœtus is delivered with only part of the placenta, more intrauterine injections will be required before it is advisable to deliver the remainder artificially. This last manœuvre is only justified if two or three injections fail to remove the retained products of conception. (3) Membranes ruptured, no expulsive pains. Under these circumstances, the induction of labour is urgent. After free antiseptic injections, a dilating bag must be passed into the uterus; a few hours later the labour may be conducted as in class 2. Lastly, in (4) the membranes are ruptured and labour has commenced. Labour must then be accelerated with hot vaginal injections or intrauterine injections; if these fail the dilating bag will be needed.

(260) A Simple Method of Plugging the Vagina.

Guéniot (*Nouv. Archives d'Obstét. et de Gynéc.*, February 25th, 1894) finds that applying tampons to the vagina is often painful to the patient and sometimes difficult for the operator. He refers to cases in which neither anæsthetics nor specula are called for, that is to say, the majority of cases in practice. Instead of a speculum, Guéniot employs a small instrument like a tongue depressor, but narrower, being 3½ inches long by less than 1 inch wide. It is bent at a right angle, so that a handle may be formed and the hand placed out of the way of the vulvar aperture. The instrument is held in the right hand, and the anterior vaginal wall raised by its blade. The posterior wall is then pressed down by the operator's left forefinger. The vulvar cleft and the vagina are thus sufficiently opened to allow the tampon to be applied. This method is particularly satisfactory when gauze is used. To push in gauze without any artificial widening of the vagina causes pain, the rough material rubbing the vaginal mucous membrane.

(261) Placenta Prævia: Turning: Death from Air in Veins.

Heuck (*Zeitschr. f. Gebürtsh. und Gynäk.*, vol. xxviii, Part I, 1893) relates the case of a primipara, aged 28, upon whom turning was performed for placenta prævia centralis. The placenta was partly detached, the membranes ruptured, and the foot brought down when the patient was under an anæsthetic. When the foot was grasped the anæsthetic was discontinued. A strong pain came on just as the foot was drawn out of the vulva, followed by the expulsion of a quantity of bloody amniotic fluid. The patient's pulse suddenly ceased, the face became cyanosed, the breathing continued for a minute or so. Within five minutes the patient died. There were no convulsions. As the fœtal heart sounds had ceased, *post-mortem* Cæsarean section was not attempted. Two hours later, at the necropsy, performed before rigor mortis had set in, the right jugular vein was found full of air. The great vessels being carefully ligatured, the heart was removed, and found to be tympanitic on percussion. When the organ was held up large air bubbles were seen rising upwards inside the dilated walls of the right ventricle. The heart was immersed in water, and on an incision being made into the right chambers bubbles of air freely escaped. There was fluid blood in the heart. The coronary veins were free from air. Air bubbles were plainly seen through the walls of the right ovarian vein.

(262) Complete Laceration of Vagina in Labour.

Everke (*Centralbl. f. Gynäk.*, No. 8, 1894) describes three cases in his own practice. The first, which ended fatally, occurred during version in a 3-para with contracted pelvis. The second was in a primipara, where the forceps was used, the patient recovered. The third, which also ended in recovery, occurred in a 7-para with contracted os, kypho-scoliosis, and cross presentation. The laceration was spontaneous, and the child and placenta slipped into the abdominal cavity, whence they were extracted. The treatment consisted in reducing the intestine, keeping the uterus well pressed down in the pelvis so as to prevent a second prolapse of the intestine, and applying sutures to the wound. The vagina was plugged with iodoform gauze.

THERAPEUTICS.

(263) Piperazin in Diabetes.

Hildebrandt (*Berl. klin. Woch.*, February 5th, 1894) suggests that piperazin be employed in cases of diabetes. After abandoning syzygium jambolanum on account of its instability, and after he had failed to lessen artificial diabetes by a sero-therapeutic method, he endeavoured to find a drug which would exert an inhibitory effect on the fermentative changes which produce sugar within the organism, without lessening the alkalinity of the body fluids. He found piperazin to be possessed of these properties. It is strongly alkaline in reaction, and is eliminated in the urine without being decomposed. When artificial fermentations were carried on by adding a little dog's serum to a solution of starch, the presence of 1 part of piperazin in 1,000 was found sufficient to diminish the production of sugar to a very marked extent. By a series of experiments he proved that piperazin does not destroy the amylolytic ferment, but merely diminishes its activity. In this respect the author finds that it surpasses all the drugs, such as salicylic acid, lactic acid, arsenic, syzygium jambolanum, extractum myrtilli, which have been employed in human diabetes. In the glycosuria induced by the administration of phloridzin to dogs, and which depends upon an increased production of sugar, he obtained exceedingly good results by the administration of piperazin. In one case after the ingestion of about 30 to 45 grains of piperazin, the quantity of sugar in the urine was diminished about 90 per cent. on the second day. In another case it sank from 20 to 1.2 g.; in another, from 21 to 1.75 g.; in another, from 9.16 to 0.1 g. After considering the probable mode of action of the drug in lessening glycosuria, Hildebrandt suggests its use in human diabetes, the dose being given half an hour before meals after the gastric juice has been neutralised by a dose of bicarbonate of soda.

(264) Dulcin.

Aldehoff (*Therap. Monatsh.*, February, 1894) refers to the new substance "dulcin," which, possessing 200 times the sweetness of sugar, has been recommended as a substitute for it. Chemically it is a paraphenetol carbamid, and, as compared with saccharin, the bitter after-taste is wanting. However, the author disputes the indifferent action ascribed to it by other authors. Having administered 15 grains daily to dogs, in order to test its innocuousness, he already, after a few days, observed constitutional disturbances, such as vomiting, anorexia, etc. The most remarkable change, however, appeared in the urine, which became dark and frothy as in icterus, no spectroscopic proof being, however, as yet present. Jaundice, nevertheless, set in com-

pletely in the mucous membrane, etc., the fæces, however, preserving their colour. Death occurred in three weeks with symptoms of acute jaundice, and the author advises the cautious use of dulcin. He considers its unfavourable action remarkable in view of the affinity to phenacetin.

(265) Ether Anæsthesia.

AFTER a death from chloroform, ether was generally adopted as the anæsthetic to be used in Sonnenburg's clinic. Tschmarke (*Deut. med. Woch.*, January 25th, 1894) relates his experiences in 500 cases of ether anæsthesia, which have led him to much the same conclusions as prevail in this country. Appended, however, is a death under this anæsthetic. A man, aged 35, sustained a fracture of the pelvis and a rupture of the urethra. He had to be put under ether on four different occasions, the anæsthesia lasting for two hours on the first occasion. He took the anæsthetic very well the first three times. Five days after the accident there was slight infiltration of urine about the neck of the bladder, and an abscess in the abdominal wall to the right of the umbilicus. It was in order to open this latter that ether was given. The pulse was 116, the temperature 38.7° C., and yet no septic manifestations were present. During the short anæsthesia (50 g. of ether being used) the patient looked blue. He vomited, and after this the cyanosis increased. It was difficult to get the vomited matter out of the mouth. Artificial respiration was had recourse to, but no air could be pressed out of the chest. A low tracheotomy was performed, and vomited fluid sponged out of the trachea. Notwithstanding the efforts made, the patient died. The lungs were not collapsed. There were no remains of food, mucus, or blood in the trachea or bronchi. In a very few medium-sized tubes there were some very small masses from the vomit, but no real obstruction could have been caused by them. Death occurred from asphyxia, due either to paralysis of the respiratory centres or to aspiration of the vomit into the lungs; the author thinks that the former was the cause of death. How far the repeated anæsthesia, the diminished strength of the patient owing to the complications about the wound, or the severity of the injury assisted or influenced the fatal results, it is not easy to say.

(266) Vinegar for the Removal of Fishbones from the Larynx.

SCHLIEP (*Therap. Monatsh.*, February, 1894) points out that fish and other bones are reputed to lose their hardness when acted on by vinegar. By experiment he found that already after fifteen or twenty minutes small fish bones are softened by vinegar at the body temperature. Fragments of bone require somewhat more time. An even more energetic action was obtained with a 1 to 5 per cent. solution of hydrochloric acid, and in practice he recommended its repeated application in a 2 per cent. strength by means of cotton wool tampons. When the foreign body is situated in the œsophagus, or appears to have reached the stomach, repeated swallowing of the solution is advised.

(267) The Influence of Alcohol, Glycerine, and Olive Oil on the Action of Disinfectants.

LENTI (*Ann. dell' Istituto d'Igiene sperim. della R. Università di Roma*, Vol. iii, Fasc. IV) summarises the results of a series of researches as follows: (1) Alcohol in the absence of water neutralises all bactericidal power on the part of sublimate or phenol with regard to anthrax spores, and the bactericidal action is not exercised until the dilution of the alcohol with water becomes greater than 2 per cent. in the case of 1 in 1,000 sublimate solution, or than 70 per cent in the case of carbolic acid. The length of time to which the spores were subjected to the action of the solutions was twenty-four hours in the case of sublimate, and forty-eight hours in that of phenol. (2) Glycerine has a similar impeding action, interfering with the action even of a 2 in 1,000 solution of sublimate, if the proportion of water be less than 40 per cent. In the case of phenol it is still more manifest. (3) Phenol and lysol dissolved in olive oil have no disinfectant action when tested as above. (4) In the preparation of a disinfecting fluid one ought, therefore, to avoid the addition either of alcohol, glycerine, or fats.

PATHOLOGY.

(268) Infection by Streptococci.

MONOD AND MACAIGNE (*Rev. de Chir.*, February, 1894), after a study of eighteen cases of infection by streptococci, conclude that general streptococcus infection is seen under two principal forms, which they call streptococcus septicæmia and streptococcus pyæmia. Streptococcus septicæmia can be demonstrated by bacteriological examinations of the body after death, and they show that their micro-organisms are not of *post mortem* origin. The affection is in some cases primary, but it is most often secondary. The primary cases occur in those general diseases which manifest themselves locally in the throat, such as diphtheria, scarlatina, variola, etc., and is in these cases one of the principal causes of death. The secondary cases are met with as complications of a local streptococcus affection, which affection in itself is usually curable, but when this complication of septicæmia occurs a fatal termination is to be anticipated. Bacteriological examination of the organs after death generally shows the existence of the affection. When the streptococcus is less virulent it is carried to different organs by the blood, when it causes localised foci of inflammation and suppuration, and in this manner is produced the pyæmic form. They maintain that the streptococcus infection in general appears to be due to the great virulence of the micro-organism. Experiments and clinical observation have shown them that the increase of the virulence of the streptococcus is due to its growth in association with putrefactive processes, or to its association with other microbes, especially the saprophytes. It is generally easy to determine the point of inoculation; it is either a wound of the skin, or a mucous membrane, or an inflammatory lesion of a mucous surface (angina, pneumonia). In some cases it remains undetermined. The prognosis of the disease is grave. In some cases a spontaneous cure occurs, in others it is due to surgical interference. The gravity of the prognosis depends on the virulence of the micro-organism, and upon the power of resistance possessed by the tissues of the affected individual.

(269) Effect of Faradic Excitation of the Cerebrum upon Respiration.

SPENCER, in a communication made to the Royal Society, December 15th, 1893, shows that by careful regulation of the anæsthetic state four constant effects can be obtained upon respiration by stimulation of the cortex cerebri in the monkey, dog, cat, and rabbit. These effects can be traced down, each in a course of its own, from cortex to medulla oblongata. They are as follows: (1) Slowing and arrest of the respiratory rhythm, obtained by stimulating the cortex just outside the olfactory tract in front of its point of junction with the temporo-sphenoidal lobe. On exposing successive vertical section of the hemisphere the same result was obtained by stimulation in the course of the strand of fibres known as the olfactory limb of the anterior commissure. The tract decussates at that commissure, and passes backwards on either side of the infundibulum, below and external to the aqueduct, into the red nucleus. (2) Acceleration of the rhythm; obtained by stimulation of the cortex at a point within the "sensori-motor" area. The effect may be followed back just below the lenticular nucleus; the strand runs first external and then ventral to the motor portion of the internal capsule to the tegmentum. (3) Hyperinspiratory clonus ("snuffing movements"); obtained by excitation at the junction of olfactory bulb and tract, and then carrying the stimulation backwards along the latter; also by stimulating the uncinate gyrus. Followed from the uncus this excitable region passes behind the optic tract to the crusta, lying then ventrally to that structure. The tracts from either side converge at the upper border of the pons. (4) Hyperinspiratory tonus; obtained in various ways—for example, excitation of the motor tract in the corona radiata and internal capsule; or of the fifth nerve and dura mater; or of the sciatic nerve, both before and after complete removal of the cerebrum. In vertical (frontal) sections of the brain the author finds medullated fibres running in the course indicated by stimulation conducted as described above.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(270) Paratyphlitis.

Therig (*Centralbl. f. inn. Med.*, February 3rd, 1894) records two cases in which rupture took place into the bladder, ending in the complete recovery of the patients. (1) A woman, aged 32, began with shivering pain in the head and abdomen. On admission, the abdomen was distended, but nothing could be made out by palpation. A few days afterwards a resistance, and later a swelling, could be felt in the ileo-cæcal region. Shortly afterwards pus appeared in the urine, which had a fæcal smell. The bladder was washed out. A fortnight later the urine became clear. The patient made an excellent recovery. (2) A girl, aged 17, was seized with pain in the abdomen a week ago. On admission, the tongue had a thick brownish-yellow coating. The abdomen was distended and very tender. There was difficulty in micturition. On the next day there was vomiting and retention of urine. The stomach was washed out, with the best results. Some three weeks after the onset, a swelling was felt in the ileo-cæcal region, which gradually became less. Some two months later pus was found in large quantity in the urine. The bladder was washed out. When she was seen some six months after the beginning of the illness, there was still a slight resistance in the ileo-cæcal region. The urine was acid, but still cloudy. The patient was seen some months later in perfect health. The author lays stress on the value of the subcutaneous injection of morphine in the treatment of typhlitis, and draws attention to the good results obtained in the vomiting of peritonitis complicating typhlitis by washing the stomach.

(271) Neurotic Reflex Eczema.

Holstein (*Monatsh. f. prakt. Dermatol.*, 1, 1894) describes an affection having all the features of ordinary eczema, but differing as regards the localities selected and certain combinations met with. The majority of the patients were infants from ½ to 2 years of age, and the principal features were marked symmetry of distribution, tendency to relapses, great refractoriness to treatment though yielding when the etiological factors were duly appreciated. In children the favourite seats are the face and scalp; next come the upper extremities on their extensor surfaces. In adults the distribution is similar, but the extremities are more frequently affected. As causes Holstein regards digestive troubles, these being in children the result of artificial or unsuitable food. He describes a few of 60 cases he has collected. Local treatment consisted in the use of ointments containing zinc, salicylic acid, or ichthyol, and, internally, the administration of laxatives, either directly or through the mother, together with careful attention to diet. In cases which resisted this treatment ergotin was given in doses gradually increasing from one-half drachm daily, an ointment containing progressively 2, 12, and 30 per cent. of the liquid extract of the ergot being applied externally.

(272) Influenza Typhosa.

Wörner (*Münch. med. Woch.*, February 13th and 20th, 1894) begins a study of an epidemic of fever with gastro-intestinal manifestations attacking some 61 soldiers. The patients, previously healthy, varied in age from 21 to 23. Details are given of 13 illustrative cases, including one fatal one, in which death occurred from epistaxis in a subject of the hæmorrhagic diathesis. Strong healthy young men began quite suddenly with shivering, headache, debility, often amounting to severe prostration, sore throat, pains in the limbs and neck, and in some cases vomiting and diarrhœa. The disease lasted on an average some thirteen days, apart from complications. These complications were pneumonia once, middle-ear disease once; the sequelæ were pneumonia with pleurisy once and exudative pleurisy twice. The prostration was characteristic, and persisted in spite of the best care and the absence of fever for weeks. Diarrhœa often lasted several days, and was once combined with severe vomiting. The temperature rose rapidly, remained for some days about the same height, and then steadily fell to below normal.

(273) Cortical Blindness.

Magnus (*Deut. med. Woch.*, January 28th, 1894) relates the following case in a man, aged 52. Thirteen years ago he was suddenly seized with a left-sided hemiparesis, homonymous hemianopsia and loss of memory. He recovered from all these symptoms except the hemianopsia. Ten years afterwards he had a second attack with loss of consciousness. He was again perfectly well apart from the hemianopsia and tendency to headache. Three years later he suddenly became blind, with a passing loss of consciousness. There was no paralysis, but the memory was affected. When seen five weeks later he gave the impression of one totally blind; but on careful examination he was found to have a very limited central vision; it was impossible to take the field of vision. When the patient's finger was placed on his nose he was unable to fix it with his eyes, or when it was moved slowly away he was unable to follow it with his eyes. There was no ocular palsy. This is really a part of another symptom which under certain conditions is characteristic of cortical hemianopsia, namely, the loss of localisation (*Orientirung*) or topical memory. He could not find where the pieces of furniture were in the room to which he had been long accustomed, otherwise the optical memory was good. Colour perception was intact. The fundus oculi was healthy. There was a history of syphilis, but no evidence of arterio-sclerosis. Eleven weeks later some improvement had occurred. The cause of the second hemianopsia certainly lay in the cortex. The absence of paralysis, the condition of the pupil and the peculiar loss of localisation clearly pointed to the cortex. How the localisation trouble is caused by the double-sided hemianopsia defect is not as yet satisfactorily explained.

SURGERY.

(274) Entero-anastomosis.

Markoe (*Annals of Surgery*, February, 1894) gives the after-result and completed histories of two cases in which he had some time previously operated for the relief of symptoms due to malignant stricture of the digestive tract. The first case was one of carcinoma of the pylorus in a woman aged 31 years, for which gastro-jejunostomy was performed on September 25th, 1891. Eight weeks after the operation the patient went to a convalescent home, where she rapidly improved in health, and returned home about December 1st, 1891, and resumed her usual duties until June, 1893. During these eighteen months she had no vomiting, and but little discomfort of any kind, except that during the last three months she had been perceptibly growing thinner and weaker. By July 4th, 1893, her weight had fallen from 110lbs. to just over 77lbs., and she died from exhaustion July 31st, 1893, just over twenty-two months from the time of operation. The second case was one of malignant stricture of the sigmoid flexure in a man aged 57 years, for which Markoe performed colorectostomy, also with success, on February 17th, 1892. The patient was soon able to return to work, and from that time remained well until early in January, 1893, when he began to lose flesh and strength. He gradually became weaker, and died February 5th, 1893, nearly a year after the operation. These cases show the beneficial results of palliative operations, where radical measures are impossible. In addition to a detailed account of the necropsies in these cases, Markoe refers to certain facts which seem to have been placed rather in the background by most writers on this subject. He points out that in pyloric cancer the resulting gastrectasis depends not only on the pyloric stenosis, but secondarily, upon the atonicity of the muscular coat from chronic catarrh, with atrophy of the glandular elements, and upon the inhibition of the motor nerve fibres by elements of decomposition. There may, however, be a hypertrophic dilatation, due to interference with the normal peristalsis, even when there is no stenosis. On the other hand, marked pyloric stenosis may exist without dilatation. The gastric juice entirely loses its digestive property, and, as a rule in these cases, there is little or no free hydrochloric acid present to maintain

the asepticity of the ingesta. Emaciation in chronic disease of the stomach is due to starvation. But we know that the intestine is able vicariously to perform the work of the stomach in a complete manner, and hence the value of entero-anastomosis. A fistulous communication between the stomach and the bowel may be established, even in debilitated subjects, without great risk to life; and, although it does not cure, it affords relief from the torments of starvation and persistent vomiting, and in addition prolongs life. Markoe advises a large anastomotic opening, which should be as far as possible from the disease, and in the most favourable situation for the onward passage of the food. The jejunum, about thirty inches from the pylorus, should be selected, and approximated so that its peristaltic wave corresponds with that of the stomach. The tide of opinion seems to favour union of the different anatomical layers rather than through the medium of artificial aids.

(275) Cancer of the Testicle.

PONCET (*Lyon Méd.*, December 31st, 1893) reports two cases of cancer of the testicle, both of which were accompanied by malignant enlargement of the supraclavicular lymphatic glands on the left side. (1) A man, aged 37, had suffered from malignant disease of the right testicle for eight months. The supraclavicular glands on the left side were the size of an orange. No enlarged abdominal glands could be discovered. The swelling in the neck was punctured, and a few drops of blood exuded. No other sign of secondary growth could be discovered. Castration was performed on the right side, and an attempt made to remove the supraclavicular glands. These, however, were the seat of a soft vascular encephaloid growth, and only two small glands could be removed. The wounds healed well at first, but on the ninth day a raised temperature was recorded, and there followed all the signs of a general cancerous infection, death taking place on the twentieth day after operation. At the *post-mortem* examination there were found numerous secondary deposits. Some were in the root of the left lung, and from these there extended a thickened cord to the enlarged glands in the base of the neck, and along the posterior abdominal wall many masses were seen. On microscopic examination the tumour was seen to be a chondro-sarcoma. (2) A man, aged 20, had suffered from a round-celled sarcoma of the left testicle, which was removed at the age of 18. Fourteen months after this operation sarcomatous adenitis of the left supraclavicular glands appeared without any other neoplastic manifestation, and was quickly followed by generalisation, which caused death four months and a-half after the enlargement of the supraclavicular glands. Poncet thinks that in both these cases the mode of transmission of the sarcomatous material was by the thoracic duct, which receives the testicular lymphatics from both sides, and also those from the left supraclavicular glands. He advises that in all cases of malignant disease of the testicle which it is proposed should be submitted to a radical operation, a systematic examination of the supraclavicular glands of the left side should always be made.

(276) Lesions of the Bony Casing of the Auricular Portion of the Facial Nerve.

BY this GELLÉ (*Ann. des Mal., de l'Oreille*, January, 1894), means the wall of bone separaing the tympanum and external meatus on the one hand from the antrum and mastoid cells on the other. He describes three segments: An intratympanic internal to the sulcus for the membrane; a tympanic at the sulcus; an extratympanic and mastoid forming the posterior wall of the external meatus. In the tympanum its upper border is free, forming the lower boundary of the aditus to the antrum, and is three or four millimetres above the level of the upper border of the tympanic frame. The Fallopian aqueduct lies in this septum, running outwards and downwards in the posterior wall of the tympanum close under the antral aditus, then crossing the tympanic sulcus about the level of the umbo, and continuing for about five millimetres in the posterior wall of the external meatus at a depth of not more than three, and generally only two millimetres from the surface. The casing varies much in thickness, and lying between the two cavities is very liable to be affected by disease, with great risk of implication of the facial nerve. The possibility of this occurring in disease in the external meatus is obvious, and cases are narrated. As an important landmark Gellé takes a vertical transverse section through the posterior border of the tympanic sulcus. The attic can be satisfactorily opened in front of this line, four to five millimetres above the frame. The antrum can be reached through the postero-superior wall of the meatus at three millimetres behind this line, without injury to the facial, but it can only be sufficiently and usefully opened through the mastoid process. When chiselling away the posterior wall of the meatus care must be taken to work well upwards when within five millimetres distance of the membrane. Facial paralysis may arise from intramastoid suppuration without apparent osseous lesion. The possibility of the occurrence of facial paralysis after surgical intervention of even a very slight form in this region is illustrated by cases.

(277) Anastomosis of Ureter.

KELLY (*Annals of Surgery*, vol. xix, No. 1, January, 1894) describes a case of uretero-ureteral anastomosis. While performing hysteromyomectomy for myoma uteri in a mulatto, aged 25, a large flat vessel, 1 centimetre in diameter, resembling an engorged vein, was exposed on the anterior surface of the lower pelvic mass. On division this proved to be the right ureter, enlarged to about four times its normal diameter. The tumour, together with the body of the uterus, having been removed it was decided to attempt the anastomosis of the divided ends of this, the right ureter. Van Hook's method was followed, which consists in tying the lower end of the ureter, then making a slit into it below the ligature, and invaginating the upper end into the lower through this slit. The patient made an uninterrupted recovery.

MIDWIFERY AND DISEASES OF WOMEN.

(278) Psychoses of Lactation.

TOULOUSE (*Archives de Tocol. et de Gynéc.*, February, 1894), in a contribution on puerperal psychoses, treats of those which are associated with suckling. In rare cases they follow quickly on labour, but then they are hard to distinguish from simple puerperal psychoses. The majority occur after several months of suckling in poor and weakly women. A third form follows weaning. Slight mental disturbance may accompany abscess of the breast, but it is then due most probably to sepsis. Mental disturbance during lactation may begin in the form of slight delirium following mental shock or simply change of diet. As a rule, however, physical symptoms appear first. The patient becomes thin and pale, and palpitations, indigestion, and asomnia set in. In 25 cases noted by Marcé, there was melancholia in 11, mania in 11, and partial delirium in 3. Prognosis is favourable, 20 recoveries and only 2 deaths having been noted by the above-named writer. As in puerperal mania, auto-infection probably accounts for the phenomena of mental disturbance during lactation.

(279) Hydatidiform Mole.

KEHRER (*Archiv f. Gynäk.*, vol. xlv, Pt. 3, 1894), in a monograph on this disease, tabulates fifty unpublished cases. Previous abortions or local or general diseases seem to have no influence in these cases. In molar pregnancy vomiting is not specially frequent, but debility is very common; 20 of the cases had been obliged to keep in bed for some time; this is partly associated with the fact that hæmorrhages during pregnancy occurred in 41, severe in 14. In 20 there was abdominal pain, in 15 œdema of the legs. Abortion occurred at the fourth month in 15 cases, at the fifth in 13; only 2 were delivered at term and only 2 aborted at the second month. In 45 cases labour was completed within twenty-four hours, and two-thirds were delivered within six hours. The pains were noted as "strong" in 26 cases, as "moderate" or "regular" in 11: hence "weak" pains are the exception. In rather more than half the cases severe flooding occurred during labour, 16 of the patients fainting. In 34 cases expectant treatment proved sufficient. In two-thirds the puerperium was normal and recovery rapid. Amongst

the rest were cases of prolonged debility, fever, etc., and 1 became insane in the second week. There were no deaths. Sterility after molar pregnancy was by no means the rule in these 50 cases.

(280) Anæsthesia in Intrapelvic Gynæcology.

Hunter Robb (*Johns Hopkins Hospital Reports*, vol. iii, Nos. 7-9, 1894) insists that the great majority of gynæcological cases cannot be satisfactorily examined without the aid of an anæsthetic; and if the uterus and its appendages cannot be clearly defined by the ordinary preliminary examination, the surgeon should insist on a second and more thorough examination under anæsthesia. He relates three instructive cases at length. In the first and second, the clinical history and preliminary examination suggested pelvic inflammatory disease; no abnormality, however, could be detected in the uterus and appendages at the examination under anæsthesia. In the third, the clinical history did not clearly suggest inflammatory disease. On examination under anæsthetics, marked disease of the appendages was detected, and the parts were removed. Complete anæsthesia is always necessary; anæsthetics which have only a transitory effect should not be used. An instructive table of 240 cases is published by Hunter Robb. In all there are two columns for noting results of "Examination without Anæsthesia" and "Examination with Anæsthesia."

(281) Abdominal Section or Hysterectomy for Chronic Disease of Appendages.

Turgard (*Nouvelles Archives d'Obstét. et de Gynéc.*, February 25th, 1894) relates two cases of chronic disease of the appendages treated by different methods. The first patient was 24; she had contracted gonorrhœa six years before. The tubes and ovaries were found cystic and suppurating; they were removed. The patient was well at the end of three weeks, but took to irregular habits. Pains in the left iliac fossa set in, just as before the operation. A swelling developed around the left uterine cornu, and pus was discharged from the uterus, but the patient ceased to attend at the hospital. In the second case the patient was 44. She married when 18, and had been subject ever since to frequent attacks of pelvic inflammation. The appendages were evidently inflamed, and adherent deep down in the pelvis, so that hysterectomy, easy under the circumstances, was performed. The appendages had both suppurated. The stump of the left appendages was secured by ligature and by pressure forceps, but a forceps alone was applied to the right stump. Parametritis set in on the left side after operation, and during the fourth week the ligature placed on the left broad ligament was found hanging from the vaginal cicatrix. The pressure forceps on both sides had been removed forty-eight hours after operation. Similar comparative cases speak, in Turgard's opinion, in favour of vaginal hysterectomy and against the ligature in any case of removal of inflamed appendages.

(282) Ectopic Gestation: Thoracopagous Twins in Sac.

Kirchoff (*Centralbl. f. Gynäk.*, No. 10, 1894) observed this case and operated. The patient was aged 28. After her confinement—a year after marriage—she suffered from some severe puerperal inflammation. For six years she had various symptoms of chronic disease of the internal organs. The catamenia ceased after June, 1893; vomiting and hypogastric pains set in. In the middle of August she suddenly fainted, flooded profusely, and passed a decidua. A spherical slightly elastic tumour of the size of a fist was found on the right of the uterus, which was pushed forwards and to the left. On September 16th abdominal section was performed. The sac was adherent to intestine and omentum but easily separated. The right broad ligament was infiltrated with clot and so necrosed that the sac was easily separated without a single ligature being needed. The left tube being diseased was removed. Much old clot and necrosed fragments of tissue were removed. The wound was closed. The patient died on the fifth day; no necropsy was permitted. On opening the sac two embryos, 4⅓ inches long, were found immersed in thick blood. The integuments of the left side of the trunk of one fœtus passed continuously on to the same point on the right of the other, forming a thin broad band. The single funis divided into two branches and entered the bodies of the fœtuses just below the band.

THERAPEUTICS.

(283) Intravenous Injections of Sublimate Solution.

G. Baccelli (*Berl. klin. Woch.*, March 26th, 1894) first refers to the intravenous injection of quinine practised by him in malignant malaria. This intravenous injection is the most energetic and surest means at our disposal in some such serious diseases. After making numerous experiments on animals to establish its safety, the author resolved to try the sublimate injection in two cases of cerebral syphilis where other modes of treatment had remained unavailing. The results were very striking. The solution used is hyd. perchlor. gr.1, nat. chlorat. gr.3, aq. dest. gr.1,000. By suitable pressure the veins at the elbow are made to stand out, and a syringeful (1 c.cm.) of the fluid injected, strict asepsis being observed. The proof that the injection has been made into the vein is the absence of pain and of subcutaneous swelling. In five or six minutes some salivation occurs. 1 mgr. or 1 c.cm. of the above solution is injected daily, the dose being increased up to 8 mgr. In urgent cases 4 to 5 mgr. may be begun with. With 4 mgr. or above it may be well to use a 2 per 1,000 solution. The advantages are: (1) the small quantity of the drug used; (2) the possibility of combating rapidly the severe symptoms due to syphilitic blood poisoning; and (3) the prompt action on the vessel wall, the favourite site of syphilis. This intravenous method may prove useful in other diseases. Finally, the author speaks highly of the treatment of hydatid of the liver by injecting sublimate solution after drawing off 30 c.cm. of the fluid. Twenty grammes of a 1 per 1,000 solution is injected. After some five days the patient may be looked on as cured. The parasite is dead, and the symptoms steadily recede.

(284) Action of Strychnine on the Pancreas.

D. N. Agricolansky (*Vratch*, No. 44, 1893) made 12 experiments on four dogs with an artificial pancreatic fistula, which show that (1) when given in considerable doses (0.002 and more per 1 kilogramme of the animal's weight) nitrate of strychnine markedly inhibits the pancreatic secretion, the latter gradually ceasing altogether in from ten to thirty minutes after the administration; subsequently, however, the inhibitory effects slowly cease. (2) Smaller doses either produce no impression whatever, or may even slightly increase the secretion. (3) There is no definite correlation between a general physiological action of the drug and its inhibitory influence on the gland. (4) Qualitative changes of the juice are but slight and inconstant, and, when present, seem to be caused rather by alterations in the concentration of the juice than by the action of the drug on the formation and secretion of the pancreatic ferments. (5) In the presence of small quantities of strychnine in the juice, saccharification of starch proceeds more extensively than under the ordinary conditions, while the proteid digestion remains unaltered. When present in a large proportion the drug retards the digestion.

(285) Hæmatoporphyrinuria after Trional.

Schultze (*Deut. med. Woch.*, February 15th, 1894) first refers to the cases of hæmatoporphyrinuria after the use of the closely-allied sulphonal. From time to time unpleasant symptoms have appeared after the administration of trional, such as fatigue on waking, slight digestive troubles, very rarely ataxy or stupor, with marked cyanosis and vomiting. Koppers has warned against its use in cardiac disease. The author records the following case in a woman, aged 54, with melancholia. Other remedies against sleeplessness having been used in vain, trional was given in a single evening dose of ½ to 1½ g., and continued during four or five weeks, 24 to 25 g. having been taken in all. Towards the end of this time the patient became worse without any discoverable cause. She had to be artificially fed, and constipation was marked. The patient was taken out a few days after the drug was stopped, and she died a little later. A few days before her discharge the urine appeared of a dark red (almost black) colour, and was

proved both chemically and spectroscopically to contain hæmatoporphyrin. It is striking that so small a quantity of trional should have had so deleterious an effect. The loss of appetite and severe constipation are to be attributed to it. All the reported cases of hæmatoporphyrinuria after sulphonal, as also the above one, have occurred in women. Trional must be used continuously with caution, and stopped at once if a red colour appears in the urine. That this coloration of the urine may be one of the first symptoms of poisoning by sulphonal has been shown by Schaeffer (EPITOME, April 1st, 1893, par. 268).

(286) Electrical Treatment of Epididymitis.

SCHARFF (*Centralbl. f. Krankh. d. Harn- und Sex. Organe*, 1, 1894), who claims to have employed electricity successfully in different forms during three years in the treatment of scrotal and testicular affections, describes the method which proved most successful. In cases of epididymitis he did not wait until the affection had become chronic, but immediately and during the acute stage applied the anode to the lower part of the scrotum. The patient being in the dorsal position, an electrode of 50 to 60 c.m., and with a maximum current of $\frac{1}{2}$ m.a., is employed, the duration of the application being three minutes on the first occasion; this is afterwards increased to five and ten minutes, the increase being very gradual. The weak constant current thus employed should be carefully gauged with a sufficiently sensitive galvanometer, and the current closed insensibly with the aid of a rheostat. No unpleasant sensations should be thus produced, but the patient will subsequently on palpation be able to observe a considerable diminution or total disappearance of the tenderness which had previously existed, while in the same position a suitable suspender is applied, and the patient then allowed to walk about. Towards the seventh day the current can be increased to 3 m.a., the same electrode, however, being still used for a few days, when it can be somewhat increased in size. The swelling at first reappears to some extent after each application, but usually diminishes gradually in three or four days. The cathode is placed above the groin and on the abdominal wall. By this treatment rest in bed can usually be dispensed with, the other advantages over the older methods being rapid and marked relief of the pain from the first and greater rapidity in the disappearance of the swelling.

(287) Eucalyptus Inunction in Measles.

SHELLY (*Practitioner*, November, 1893) records the results of his experience with eucalyptol during an epidemic of measles. In conjunction with his colleague, H. Savory, inunction with "oleusaban," the special preparation of eucalyptol recommended for the purpose, was carried out in five cases not in any way selected. Inunction was begun directly they came under observation all over the body every night and morning for three days, and subsequently once a day for the first week; the eucalyptus emulsion was given internally, some of the fluid was placed in saucers about the room, and when the cough was troublesome eucalyptus inhalations were given. The immediate effect of the treatment appeared to be to produce great drowsiness; all five patients slept almost constantly, being roused with some difficulty to take their food; there was very little cough at first; they were not thirsty and suffered no discomfort; their tongues were thickly coated with white fur, and three of them had mucopurulent conjunctivitis. In one case the rash was coming out when treatment commenced, but in the other four its appearance seemed to be delayed, and when it did appear it was copious, much raised, and of a dusky tint. In four cases towards the end of the first week there was laryngeal and bronchial catarrh, and one patient had double pneumonia. Convalescence was in all cases more tardy than usual and desquamation much more profuse, so much so that in one case, at the end of six weeks, the peeling might easily have been mistaken for that of scarlet fever. The result of their experience was thus very unfavourable to this method of treatment.

(288) Electrical Treatment of Tabetic Optic Atrophy.

CAPRIATI (*Rif. Med.*, October 2nd-3rd, 1893) records eight observations. The method employed was that first used by Weiss, and consisted in the application of the current through two poles, one on the occiput, and the other over the closed lids. In each case a current of 2 milliampères was employed. The results may be briefly summarised as follows: (1) Electrical treatment is indicated in tabetic atrophy of the optic nerve, in cases in which the disease is not running a very rapid course, and before it has reached a very advanced stage; (2) if employed in the early stages, it appears to do good, and arrests, with certain limitations, the morbid process, apparently by acting on the nerve fibres still unaffected; (3) better results may be anticipated from the application of the current antero-posteriorly than transversely through the temples, although neither method has yielded results warranting great enthusiasm.

PATHOLOGY.

(289) The Preparation of a Nutrient Medium for Bacteria from Eggs.

WESENER (*Centralbl. f. allgem. Path.*) January 31st, 1894) gives a simple method of preparing from a hen's egg a solid, opaque nutrient medium for the cultivation of bacteria. Koch originally employed eggs for this purpose, directing that they should be boiled hard and then cut into two equal portions. The disadvantage of this plan is the want of uniformity in the composition of the medium (yolk in the centre, white of egg in the periphery). This Wesener overcomes by the simple expedient of mixing yolk and albumen by shaking the egg before boiling. At first a slight tap is experienced by the finger as the intact ball of yolk impinges against the shell, but presently this is no longer felt; it may, then, be concluded that the membrane investing the yolk has been ruptured. After a little further shaking, with the object of mixing the two constituents thoroughly, the egg is placed in water at 75° to 80° C. for $\frac{1}{2}$ to $\frac{3}{4}$ hour. It is then transferred to sublimate solution for cooling and for sterilisation of the surface; on removal, after drying with sterilised wool, the shell and membrane investing the white of the egg are removed. The contents of the egg are now seen to be solid, and of a uniform golden-yellow colour. Three or four slices are cut from the mass with a sterilised knife, placed in Esmarch's dishes, and sterilised as usual. Upon a nutrient medium so prepared almost all the well-known fission fungi and yeasts grow well, and often in a characteristic manner. Wesener describes the growth upon egg of cholera and Finkler-Prior bacilli, vibrio Metchnikovii, typhoid bacillus, B. coli communis, streptococcus pyogenes, B. diphtheriæ, and other organisms. By some of the latter the medium is liquefied. Pigment-producing organisms grow well upon it. The slices of egg dry very slowly. Further advantages presented by this medium are its alkaline reaction, its richness in albumen, and the fact that it is unfavourable to the growth of moulds.

(290) Thionin as a Stain for Amyloid Material.

KANTOROWICZ (*Centralb. f. allgem. Path.*, February 22nd, 1894) recommends thionin (a substance related to methylene blue) for staining tissues affected by amyloid changes. Hoyer has already shown that mucin is stained red or reddish-violet by this reagent. In a section treated by thionin the ordinary tissue elements—such as cells, nuclei, connective tissue—are stained blue or violet-blue, whilst amyloid material stains a light blue or lilac, and is readily distinguished. Preparations are hardened in alcohol or sublimate, and embedded in celloidin. Sections are cut into alcohol (80 per cent.), washed lightly in water, and placed for three to five minutes (no overstaining after several hours, but the shorter time is sufficient) in a saturated aqueous solution of thionin. Wash in distilled water. The tint may be preserved—notoriously a difficult task with such preparations—by proceeding as follows. Remove the section from water to a slide, dry with filter paper, and further dehydrate and clear by means of a mixture of aniline oil and xylol (2 to 1), or carbolic acid and xylol (1 to 3). Wash off the mixture with xylol, mount in dammar. In this plan alcohol, which has a strong decolorising action, is avoided. The stained amyloid material is, however, best shown in sections mounted direct from water.

AN EPITOME OF CURRENT MEDICAL LITERATURE.

MEDICINE.

(291) Enlargement of the Thymus.

Beneke (*Berl. klin. Woch.*, February 26th, 1894) discusses the relation of enlarged thymus to the sudden death of infants with or without laryngismus stridulus. Laryngismus may lead to death in the first attack. In these cases it was shown that the thymus was enlarged, but it is now generally admitted that the enlargement has no relation to laryngismus. The size of the thymus depends on the nutrition of the child, and especially upon the development of fatty tissue. A large thymus may not compress the air passages, and yet a smaller one may do so owing to the additional factor of the smallness of the space between the manubrium and the vertebral column. The author has seen two cases in which flattening of the bronchi was present and in which sudden death occurred. Evidence of bronchitis was present in one case but no laryngismus. Compression by the thymus should only be admitted when there is some additional cause for the total closure. This cause lies, according to the author, in the displacement of the trachea owing to the bending backwards of the head. The author draws attention to the importance of examining the parts with the head in the same position as it was when death occurred. The enlarged thymus prevents the trachea from moving forwards, hence total closure. Rickets is frequently present, and thus there is often also a disproportion between the weight of the head and the strength of the neck muscles. Attention is drawn to the importance of guarding against this falling back of the head in fat infants, especially if rickets is present. The medico-legal aspect of the subject is also dwelt upon.

(292) Mumps.

Martin (*Rev. de Méd.*, March, 1894) reports an epidemic in which 48 men out of a garrison of 450 to 500 were affected. The exact origin of the disease could not be traced. After a few hours of *malaise*, etc., and a slight rise of temperature, which rarely exceeded 38° C., and which was often absent, the characteristic swelling began. This was marked in many cases, and extended over the neck in four. The temperature mostly fell on the second day, but rose again if the other side became involved. If orchitis supervened, it rose to 40° or 41° C. Antiseptic mouth washes (boracic acid) were used in all cases. Antipyrin appeared to help in promoting resolution and lessening pain, and the results were better than with the so-called expectant treatment. Pilocarpin, of doubtful service in the attack itself, is of value in the orchitis. The average duration of treatment was fifteen days. Rigid disinfection was adopted when the patient was discharged. The complications were benign, epistaxis and gastro-intestinal disturbances being the most common. The author looks upon the orchitis as being the second degree of the poison rather than a complication; it was present in 9 cases, or 18 per cent., being once bilateral. Otitis externa was present once, a complication which the author has seen before. He has also seen slight albuminuria, but not in this epidemic. In other epidemics reported by him the application of camphorated oil or mercurial ointment was without effect, and jaborandi was inactive in some cases and harmful in many others. Tartar emetic seemed more useful. The exciting cause of the disease exists in the mouth and spreads to the glands along the ducts, hence the value of antiseptic washes. In one of the cases the nature of the orchitis might easily have been overlooked owing to the great mildness of the mumps. The use of sulphur as a disinfectant appears valuable, but it is not always possible. The sick must be isolated, their clothes, etc., disinfected, and buccal antisepsis may be used as a prophylactic.

(293) Perityphlitis.

Mannaberg (*Centralbl. f. inn. Med.*, March 10th, 1894) has frequently noticed, in some 100 cases of perityphlitis treated in Nothnagel's clinic, an accentuation of the second pulmonary sound. In upward displacement of the diaphragm owing to increased abdominal contents, meteorism, ascites, etc., this accentuation is well known. This, however, is not the explanation in perityphlitis, as frequently there was no distension to speak of. The cause of it is unknown at present.

(294) Disorders of Pantomime in Aphasics.

Mills (*Philadelphia Hosp. Rep.*, 1893) observes that pantomime is the representation of ideas by action and movements. Signs and motions may be disordered as well as words and sounds. There may be sensory or motor *amimia*. In 9 cases of aphasia notable differences in pantomime were present. If the lesion is in the central ganglia, pantomime is either not lost or is quickly recovered. The usual pantomimic method of expressing assent, etc., may have several interpretations, just like the "yes" and "no" of aphasics. The emotional manifestations of the patient must not be misunderstood. True amimia is an intellectual disorder. In aphasics with serious disturbances of pantomime, the losses shown on the emotional side are seen in meaningless continuations and repetitions, in slow transitions and undue excitement. The author records two cases (1) in a woman, aged 54, with right hemiplegia and aphasia, chiefly of the motor type: pantomime varied: she at times nodded "yes" when she meant "no": she would not use her sound arm to signify anything; (2) in a woman, aged 40, with right hemiplegia and aphasia of a mixed type, the amimia was almost complete; she was not word-deaf, or, at any rate, not completely so; her speech and pantomime might be summed up in her "la la" and laugh, and an expression of anger or displeasure when she covered her mouth with her hand; the facial expression was otherwise always the same; she never nodded her head for "yes" or "no." The medico-legal aspects of disorders of pantomime are emphasised by the author.

SURGERY.

(295) Abscess of the Spleen.

Nolen, in describing the following case (*Weekblad von het Ned. Tydschrift voor Geneeskunde*, March 10th), remarks on the difficulty of its diagnosis, and mentions that the cases recorded in medical literature, which resulted in recovery after operative treatment, only number five (G. Ledderhose, *Billroth u. Luecke's Deutsche Chirurgie*, Lieferung 45b., 1890; Th. Kölliker, *Centralbl. für Chirurgie*, 1892. No. 9; Paul Lendler, *Deutsche Zeitschrift für Chirurgie*, Bd. xxxvi. 1893, p. 536). The patient, a woman, 25 years of age, six weeks after confinement, began to feel ill and feverish. Typhoid fever was suspected. Suddenly she had an attack of acute pain in the left side, followed by difficulty in breathing. On examination it was found that a pleuritic effusion had taken place in that spot, and that the spleen was greatly enlarged. There was, however, no tenderness. The diagnosis was now altered to splenitis, perisplenitis, pleuritis, and an operation was decided on. On the outer side of the left rectus a long incision was made, extending from the arch of the ribs straight downward. A cavity was laid open, from which about a litre of pus of a dull brown colour and a faintly sweet smell escaped. The peritoneal cavity was not opened. After draining the wound was plugged with iodine gauze. Recovery was uninterrupted, and the pleuritic effusion was entirely absorbed. The entire absence of pain was a remarkable feature of the case. The question whether the patient had really been suffering from typhoid fever or whether the development of the abscess was connected with parturition is impossible to decide. In both cases the proximate cause must be looked for in an infectious embolus.

(296) Pyæmia Secondary to Ear Disease without Sinus Thrombosis.

Schwabach (*Deut. med. Woch.*, March 15th, 1894) says that in the great majority of cases the connecting link between otitis and pyæmia is thrombophlebitis. He refers to some recorded cases in which thrombophlebitis was absent, and relates the following case in a girl, aged 8 years, from Israel's clinic. Masses of granulations were removed from the mastoid antrum but no pus. In the transverse sinus the blood was fluid. The rigors persisted and the patient died. The sinuses were all healthy. A

cholesteatoma had burst through the anterior surface of the petrous bone in the neighbourhood of the tegmen antri mastoidei, and had given rise to the meningitis. In addition to such cases there are others in which symptoms of septico-pyæmia are present but which recover. In these cases the lesion is limited to the joints, muscles, subcutaneous tissues, etc., the lungs remaining unaffected. He records the following case in a girl, aged 6, with otitis media coming on after an operation for adenoids. When seen about a year later, there was in addition to double suppurative otitis, tenderness over the right mastoid process. The mastoid was trephined but no pus was found. The fever persisted though the pain was less. A few days later the left pectoral muscle was painful, and the muscles on the outer side of the left thigh also became involved. The patient eventually recovered. The author would look upon the muscular pain as due to an infective myositis, the infection starting from the ear. There was no evidence of sinus thrombosis. It is difficult to say whether some of the small sinuses were involved, or whether an osteophlebitis of the smaller vessels in the petrous bone existed, or whether the pus was absorbed directly by the lymph channels. The absence of sinus phlebitis is of importance on account of treatment because the question of paracentesis alone, or of trephining the mastoid, or, in addition, of opening the sinuses, depends on it.

(297) Laminectomy for Spinal Fracture.

ROBERTS (*Medical News*, March 10th, 1894) reports 4 cases in which laminectomy was performed for old spinal fracture, 3 treated by himself, and 1 by Steinbach. The results in all these cases were very unsatisfactory, and show, in the author's opinion, the hopelessness of the operation in old cases. It is held that only early intervention alone affords any prospect of relief, and that the surgeon should operate as promptly in spinal fracture as in cranial fracture. While it is true that the damage to the cord and its membranes usually occurs at the instant the bodies or vertebral arches are broken, it should be remembered that the possibility of restoring function and limiting secondary inflammations and degenerations rapidly decreases with time. The author believes that when there is doubt as to the existence of spinal fracture, it would be good surgery to make an exploratory incision. Such an operation, if performed antiseptically, will involve little risk to the patient's life, and if a fracture be found, prompt removal of pressure upon the cord would hold out the only chance for restoration of its function. The damage to the nervous structure will, it is acknowledged, often be irreparable, but the patient has at least been given a chance. The risk from hæmorrhage—always severe in laminectomy—and from shock, added to the shock of the injury, will nearly always be justified by the danger to life and physical usefulness caused by the original traumatism. The author advocates operation, even in cases of old fracture, because it offers the only possibility of effecting any benefit; and he hold that unless it is performed the surgeon has failed to give the patient the benefit of every possible chance. In each of the reported cases, although the operation was not fatal, it failed to bring about any improvement.

(298) Treatment of Torticollis by Open Incision of the Sterno-mastoid.

LEDIARD (reprint from *International Clinics*, vol. iv, 3rd series) reports a case of torticollis of traumatic origin and of eight years' duration, in a lad, aged 15. The sterno-mastoid was considerably contracted, and marked asymmetry of the features had been established. The author made a curved incision beneath the inner end of the clavicle, about three inches and a-half or four inches long, with the convexity downward. The flap was turned up, and the attachments of the muscle to the sternum and clavicle thoroughly exposed and divided. Much caution had to be used in dividing the clavicular fibres, as they lay immediately in contact with the subclavian vein. The head could be brought at once, and without difficulty, into the straight position, which it retained without the use of the apparatus save a simple leather collar. Twelve months later, though the asymmetry of the features had not been altered, there had been no return of the muscular contraction, and the head remained perfectly straight. It is suggested that though serious hæmorrhage and other accidents may very rarely occur after the subcutaneous method, the dread of wounding important vessels may lead to an imperfect division of the sterno-mastoid. The author, at the time when he devised and performed the above-described operation, was not aware that the open incision had been practised in America.

MIDWIFERY AND DISEASES OF WOMEN.

(299) Electricity in Amenorrhœa.

PANECKI (*Therap. Monatsh.*, March, 1894) has found electricity, and particularly the faradic current, the most successful means of dealing with amenorrhœa. It is necessary that the poles should be introduced into the uterus and be allowed to act there. This treatment is well borne, and the current can be increased at each sitting, the number of the latter required averaging from five to thirty, and their duration five to fifteen minutes during successive days. The author's experience includes 18 cases in which the cure of the condition was established a year or more ago, the patients still remaining well. One of these, a married woman aged 31, had never menstruated though she was subject to periodical affections (severe headache, etc.). The treatment on various lines had extended over six years, but with absolutely no success. The author at the expiration of one of these periods commenced the application of the faradic current, and after twenty-eight successive sittings a small flow became apparent. During the following interval six more applications were made, and the patient is now well and relieved of all symptoms.

(300) Induction of Labour in Tuberculosis and Uncontrollable Vomiting.

GUINSBOURGUE (*Arch. de Tocol. et de Gynéc.*, March, 1894), on clinical evidence, is strongly in favour of the artificial termination of labour in bad cases of the above-named complications. In two primiparæ tuberculosis developed during pregnancy, and proved fatal, one dying in the fourth month, the second succumbing within six weeks after delivery of twins at term. In a third case a woman, aged 27, predisposed to phthisis, became feverish during her fourth pregnancy; within a fortnight she aborted, during the fourth month. The fever continued, and she died three weeks later of acute pulmonary tuberculosis. Guinsbourgue agrees, on this evidence, with William Duncan, who has advocated induction of labour in cases of phthisis. As regards the question of the tendency of phthisis to increase in severity after delivery, Guinsbourgue notes that antisepsis and the curette neutralise the dangers of the puerperium. In a bad case, a multipara, aged 30, had been tuberculous for ten years. Eclampsia set in at the first labour, which was terminated by forceps. The eclampsia ceased, and the signs of tubercle disappeared, the latter reappearing at the second pregnancy, and vanishing again after spontaneous delivery. It recurred in an aggravated form in the third month of the third pregnancy. Labour was induced and the curette used freely. The patient recovered. In uncontrollable vomiting induction of labour is equally necessary.

(301) Induction of Labour in Albuminuria with Death of Fœtus.

CHARLES (*Journ. des Sages-Femmes*, December 1st, 1893) relates how a bad case of renal anasarca, with other grave symptoms, was saved, labour being induced as soon as it was evident that the fœtus was dead. The patient was 34; she married in January, 1893, and ceased to menstruate on February 15th. Morning sickness lasted from April till June; fœtal movements were first felt in July. In September the feet began to swell; on October 18th severe lumbar pain set in; then she applied for relief. There was universal anasarca, the vulva being very œdematous; ascites evidently existed, and also apparently hydramnion. The urine was full of albumen, the fœtal heart sounds indistinct. The patient was put in a bath at 104° F., and perspired freely afterwards; milk diet was prescribed. On October 21st a laminaria tent was introduced into the cervix and withdrawn after a few hours. Two days later the uterus was observed to be smaller than it was a week before. Though the milk once caused vomit-

ing, the diet proved beneficial; the œdema diminished. After October 21st no fœtal heart sounds could be heard; even on that date it was doubtful that the child yet lived. On October 28th slight pains were felt. A brownish pear-shaped pouch bulged from the os. Whether true labour was coming on or not, it was thought right to deliver the fœtus. A bag was introduced, and in a few hours a small macerated fœtus was delivered. The placenta came away naturally, but the membranes were adherent and had to be removed with the hands. The uterus contracted well; the perineum was not damaged. Milk diet was continued for a time. The œdema almost entirely disappeared when the patient left the lying-in hospital; the urine was still slightly albuminous.

(302) Repeated Tubal Gestation.

Dranitzin (*Répertoire Universel d'Obstét. et de Gynéc.*, March, 1894) writes of a case of tubal pregnancy which has been admitted eighteen months previously into a maternity hospital for pregnancy in the left tube, which did not require surgical interference. Metrorrhagia had recently set in, and abdominal section was performed. The right tube (full of clots) was removed; no embryo was detected in it, but chorionic villi were clearly seen under the microscope. The left appendages were surrounded by false membranes; the ostium of the left tube was sufficiently dilated to allow the introduction of the finger. The tube contained a body of the size of a large walnut, consisting, in the centre, of a clot, and externally of connective tissue infiltrated with calcareous salts. These appearances, in the author's opinion, confirmed the diagnosis of left tubal pregnancy eighteen months previously. The patient recovered.

(303) Hydramnion associated with Abdominal Distension in the Fœtus.

C. W. Townsend (*Boston Med. and Surg. Journ.*, February 8th, 1894) observed two cases of hydramnion. In both the mothers were uncomfortably distended at the seventh and eighth month, so as to be as large or larger than at term, and both were delivered prematurely (one at seven and a-half, the other at eight months). Labour was not difficult, excepting the extraction of the bulky trunk of the fœtus in one case. Both the fœtuses were females, that is, of the sex which predominates in cases of hydramnion. The 7½ months' fœtus weighed but 3 pounds. The abdomen was greatly distended by an extremely enlarged liver. The 8 months' fœtus weighed 9½ pounds. The peritoneum was full of fluid, there were evidences of peritonitis, and the vagina, closed at the vulva, formed a large cystic tumour. The fluid contents possibly came from the bladder.

(304) Objections to Hysterectomy for Prolapse.

Reclus (*Archives de Tocol. et de Gynéc.*, February, 1894) objects on principle to vaginal hysterectomy as a radical cure of prolapsus uteri. Reclus was one of the first to operate. He objected, from the first, to remove the uterus except in patients past the menopause. His first case was 73 years old. At the end of a fortnight she was well again, but she left hospital and caught cold and died shortly afterwards. The second patient was 59. She recovered, but returned a fortnight after discharge from hospital. Within that short space of time cystocele and rectocele developed. Colporrhaphy, anterior and posterior, was performed, and two years later the patient was still in perfect comfort, no further prolapse having developed. The third case was 52 years old; as in the second a vaginal prolapse developed very shortly after the removal of the uterus. A plastic operation was successfully performed on the vagina. Hence, after similar experiences, others have practised hysterectomy as an operation preliminary to colporrhaphy. Reclus insists that the former should be discarded. He notes Quénu's five cases; in four both operations were done, with good results. In the fifth hysterectomy was alone undertaken, and a slight cystocele developed.

THERAPEUTICS.

(305) Hydrochlorate of Scopolamine as a Mydriatic.

Pooley (*Therap. Gaz.*, March, 1894) gives the results of six months' experience with this drug. Scopolamine is obtained from scopolia atropoides, and belongs to to the group of tropeines. It was probably first described by Schmidt, of Marburg, who found that instillation of its watery solutions into the eye produced mydriasis and cycloplegia. It was investigated by Raehlmann who considered that it possessed all the properties of atropine, and was free from many of the drawbacks associated with that drug in ophthalmic medication. Scopolamine is said by him to act five times as powerfully as atropine. In cases of episcleritis, corneal ulcer, etc., instillation of the drug seems to exercise a favourable influence as regards repair, even when atropine can no longer be borne. It is also said not to raise intraocular tension. Now Pooley finds it necessary to moderate some of these statements, regarding them as in part the result of enthusiasm over a new drug. His opinion is as follows:—Used in a one-fifth per cent. solution, the hydrochlorate, instilled three times at intervals of a quarter of an hour, produces complete paralysis of accommodation and complete mydriasis. The duration of these phenomena was from twenty-four to forty-eight hours, much shorter, therefore, than in the case of atropine, and slightly longer than in the case of homatropine. The amblyopia thus produced in cases of ametropia soon passes off. In three cases, in each of which it was instilled several times by the patients themselves, it produced somewhat alarming symptoms of poisoning, which were, however, transitory in nature. Probably an overdose was given in these cases, but they are an indication that the drug is probably more toxic than homatropine. In cases of short attacks of corneal inflammation, especially in some of the suppurative type, the drug was found to be of special value, but in one or two instances its instillation was followed by a certain amount of irritation. The author thinks that while scopolamine is not likely to replace atropine in ophthalmic medicine, it will fill an important post among our available mydriatics.

(306) Sulphonal Poisoning.

Stern (*Deut. med. Woch.*), March 8th, 1894), discusses the renal lesions in this condition. An insane woman, aged 70, received 1 g. of sulphonal every evening, the dose having to be doubled in a month's time. This was continued for more than three months, with frequent intermissions amounting often to eight days. When the total amount taken was some 150 g. the urine showed a dark colour due to hæmatoporphyrin. The drug was omitted at once. Fatal coma, however, supervened in a week's time. The kidneys were of a pale red colour, with smooth surface, and contained deposits of lime salts. These changes were such as might be attributed to advanced age, but the microscope displayed a very extensive necrosis of epithelium, and also minute hæmorrhages. These minute changes represent a toxic nephritis, and were unquestionably due to the sulphonal. There was a large gall stone in the gall bladder, and small friable concretions in the scarred cystic duct. Very slight jaundice was present during life. The poisoning occurred here, as in other published cases, in a woman, and after the prolonged use of the drug. The obstinate constipation, the age of the patient, and the changes found in the myocardium no doubt accelerated the result. During the use of sulphonal the urine should be carefully examined for albumen or formed elements, as when once hæmatoporphyrinuria appears the prognosis is unfavourable. In the presence of renal disease the prolonged use of sulphonal should be had recourse to with great caution.

(307) Moisture to the Thorax in Diseases of the Respiratory Tract.

Gendre (*Union Méd.*, March 20th, 1894) speaks highly of this form of treatment in all acute diseases of the respiratory tract, and in certain phases of chronic diseases attended with active hyperæmia. The thorax is enveloped in a compress which has been soaked in cold water and squeezed so as to be only moist. This is changed every quarter of an hour, then every half hour, and every hour according to the effect obtained. This method of treatment is especially useful in children, may be employed in very young children, may be continued a long time, and may be returned to as often as necessary at each return of pulmonary congestion. It relieves the dyspnœa more rapidly than any other

measure by lessening the respiratory movements, and by making them deeper to combat the high temperature and the accompanying nervous troubles—agitation, insomnia, refusal of food. The author has always found the treatment harmless, and nearly always efficacious. In the discussion Rendu stated that he had obtained excellent results with this treatment, which he had employed since 1884. He wraps the whole body in a moist cloth, and leaves the patient in it for two or three hours. The peripheral temperature is at first raised, then there is abundant sweating and diuresis, the temperature falls 1° to 1½°, and the patient experiences great relief. He does not employ this measure more than once a day, and in grave cases he has recourse to cold baths. Gendre, in reply, said he had kept children as long as eight days with the thorax enveloped in compresses, which were renewed from time to time.

(308) The Effect of Statical Electricity upon Metabolism.

Truchot (*Arch. d'Electr. Méd.*, February, 1894) reports some experiments made upon his own person with the statical charge. He was charged from a Wimshurst machine to a potential estimated at 80,000 volts for fifteen minutes daily. The results observed were an increase in the frequency of the pulse, a rise in bodily temperature, and a diminution in muscular power; the appetite increased at first, but soon fell off, and he was conscious of a feeling of languor and weakness. The same results followed a second course of treatment. He concludes that the metabolism of the tissues in health is increased and unfavourably affected by statical charging. On the other hand, in patients whose metabolic processes are imperfectly performed, and especially in neurasthenic cases, this increased metabolic activity is useful and beneficial.

(309) The Therapeutic Effects of Hot Baths.

Topp (*Therap. Monatsh.*, January-February, 1894), with the view of testing the effects of hot baths, performed a number of experiments on himself, with the following results. In the first place the articles in the daily diet were carefully weighed and compared with the elimination of nitrogenous compounds. On the first and second occasions the author remained for a quarter of an hour in a bath at temperatures of 115° to 116° C. The body temperature at the same time rose to 105° C. In spite of the perspiration produced the amount of urine passed during the ensuing twenty four hours was increased, and more particularly the absolute weight of nitrogenous material. The body temperature sank gradually to the normal. For practical purposes three to four baths daily, at a temperature of 105° to 109°, are recommended when the individual can remain in the water about 40 to 45 minutes, and when the beneficial effects are even more marked. The author therefore agrees with Baelz in considering hot baths in the above form indicated in cases of capillary bronchitis and lobular pneumonia, also in rheumatism, nephritis, exudations, obstructive dysmenorrhœa, etc., but contra-indicated in cardiac affections.

PATHOLOGY.

(310) Toxicity of Scalded or Burnt Tissues.

In 1880 Lesser made some experiments to ascertain the effects of injecting the blood of a burnt animal into a healthy one. He seems, however, to have succeeded only in producing certain functional disturbances, never a fatal effect. Vassale and Sacchi (*Rif. Med.*, No. 271, 1893) followed a similar line of investigation, and studied the effect of extracts of parts actually burnt or scalded, and of the non-affected parts of the same animals, on healthy animals of the same or allied species. Their researches show clearly that the juice of parts burnt has a much more toxic effect on animals of the same species than that of the non-burnt parts of the same animal. This last juice in its turn has a toxicity much greater than that of the juice taken from corresponding parts of a healthy animal, which is, in fact, harmless. All the juices from a burnt animal are highly toxic, and generally produce lethal effects whether injected hypodermically or into the veins of normal animals. The chief pathological effects produced were marked subserous hæmorrhages, in one case especially marked in the duodenum. Filtration through porcelain somewhat diminishes but does not destroy the toxicity of the juices; boiling, however, renders them innocuous, which lends support to the view that the toxic principle is an albumose, or some substance coagulable by heat. These results are of considerable interest as bearing on the mode of production of the after-effects of burns, attributed by Foà, as early as 1881, to a process of auto-intoxication (*Riv. sper. di Freniatr.*, vol. 7). Not long ago Kianitzin (*Arm. di Chim. e di Farmacol*, 1892) examined the blood, organs, and urine of animals suffering from burns, and by Brieger's method obtained a substance from them which was not to be found in normal animals similarly treated. When injected into normal animals it produced torpor, somnolence, reduction of temperature, slow shallow respiration, diarrhœa, and death. The necropsy showed nothing but hyperæmia of the brain and kidneys. This substance was classed by its discoverer with muscarin, neurin, and peptoxin. More recently Reiss (*Archiv f. Dermat. u Syph.*, i. 1893) studied the effects of subcutaneous injection of the urine of patients suffering from burns. Such urine was very toxic, and it was found that it owed its properties to the presence of bases of the pyridin group. In cases of severe burn he recommended the speedy removal of the sloughed parts so as to minimise the absorption of poisons formed in the lesion. Vassale and Sacchi are of a similar opinion. They also recommend the employment of every possible means—such as keeping the burnt limb as low as possible, and the application of bandages—of preventing the too rapid absorption of the degeneration products, the toxicity of which they have so fully established.

(311) Invasion of the Body by Cocci from the Skin in Eczema.

Bernheim (*Centrabl. f. Bakt.*, February 5th, 1894), reports a case of very extensive eczema in a child, aged 4 months, which terminated fatally. He refers to cases observed by O. Wyss, as showing that a sudden (fatal) termination does sometimes occur in suckling children affected with eczema. In the present case the child died quite suddenly on the night of admission. The *post-mortem* summary was: acute enteritis, swelling of spleen, parenchymatous changes in liver, œdema of lungs, and (to the naked eye) degenerative changes of the cardiac muscle. A bacteriological examination was made of fluid from the cerebral ventricles, of the pericardial fluid, of blood, liver, and spleen pulp; with the exception of the last-named, cultures upon agar were obtained from all these parts. From the cultures three organisms were obtained: staphylococcus pyogenes albus, a yellow staphylococcus (probably S. citreus), and diplococcus albicans tardus. Microscopical sections were made from various organs, and showed: in the lung, evidence of inflammation, and diplococci; in the spleen, nothing special: in the liver, cloudy swelling, and fatty degeneration; in the kidney, vascular congestion, cloudy swelling, and necrotic changes of the renal epithelium; in small and large intestine, collections of round cells in the submucosa, localised necrotic changes in the mucosa, with rods and cocci. Bernheim supposes that the cocci present in the various parts had entered by the skin, since (*a*) one of the three varieties (diplococcus albicans) is only found on the skin, and (*b*) the path of invasion could be followed in sections of that tissue. At the point of entry the epithelium was lacking, and the corium exposed: the cocci could be traced through the cutis vera to the subcutaneous tissue and lymphatic clefts, in certain of which they lay in great numbers. Owing to the early death the blood was not examined in this case, but in a similar one Bernheim found S. pyogenes aureus in the blood during life. The author is of opinion that the fatal result in the present case was, in part, at any rate, due to septic intoxication by the products of the microbes which had penetrated from the surface. The state of the liver, spleen, and heart favoured this view. The sudden death is accounted for by the state of the heart muscle. He adds that, in view of such bacterial invasion, it is advisable that a suitable antiseptic (such as boracic acid 2 per cent.) should be applied to the eczematous surface in a similar case, before any ointment is prescribed.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(312) Cardiac Syphilis and Angina Pectoris.

A. Fraenkel (*Berl. klin. Woch.*, 1894, No. 12) showed at the Berlin Medical Society a specimen of cardiac syphilis from a woman, aged 36. When first seen last year, she had aortic regurgitation and suffered from frequent headaches, which were occasionally associated with fainting attacks. The heart disease was supposed to be consequent on acute rheumatism. The husband was syphilitic and the woman herself had suffered from swellings on the head, which had ulcerated and left scars. She improved at first and left the hospital, but was readmitted this year with severe attacks of angina pectoris, in one of which she died. At the necropsy the left coronary artery was found quite permeable, but the orifice of the right coronary was completely obliterated by a process of arterio-sclerosis (much in excess of the patient's years), and its proper position could only be determined by probing backwards along the lumen of the artery. There was a gummatous tumour, 4½ cm. long, in the septum ventriculorum, and Fraenkel thinks this shows that the arterial changes were really of syphilitic nature. The arterio-sclerotic changes in the aorta reached down to the bifurcation. Fraenkel, moreover, remarks on the part played by syphilis in the etiology of aneurysms. Walsh thought that 60 per cent. of true aneurysms were due to syphilis, others think still more. Fraenkel himself during the last four years has seen 19 cases of aneurysm of the thoracic aorta, in which there were necropsies; 3 cases were in women, 16 in men. Of the 19 patients, 9, that is, 47 per cent., had had syphilis, and these were all under 50 years of age. The case illustrates the relation of precocious arterio-sclerosis and syphilis.

(313) Peptonuria in the Insane.

Lailler (*Neurol. Centralbl.*, No. 5, 1894) has carried out researches as to the occurrence of peptonuria in healthy persons, in persons suffering from bodily disorders other than nervous, and in insane patients. He found that peptonuria occurs in a great number of diseases and transient bodily derangements; it may be met with in various forms of insanity, but cannot be regarded as a symptom of progressive paralysis, as claimed by Marro. The latter maintains that it is constant in that affection, and in doubtful cases the discovery of peptones in the urine is sufficient to justify the diagnosis of paralysis. Lailler, however, finds that although peptonuria is more frequent in progressive paralysis than in other mental diseases, it usually is absent in the early period of the affection, just when the diagnosis may be uncertain.

(314) Hemiplegia after Diphtheria.

Edgren (*Deutsch. med. Woch.*, 1893, No. 36), after alluding to the rarity of records of such cases, refers to Auerbach's case (*ibid.*, 1892, No. 8). This was one in which an apoplectic attack left atypical hemiplegia in a patient with acute nephritis following diphtheria. Apart from this the symptoms of ordinary diphtherial paralysis developed. The hemiplegia was looked on as the result of a hæmorrhage into the anterior two-thirds of the posterior arm of the capsule. The persistence of the motor paralysis made it almost certain that it was not the result of uræmia, and the mode of commencement excluded embolism. The hæmorrhage may be explained by the alteration in the vessel walls which results in all infectious diseases, or by the elevation of blood pressure consequent on the severe nephritis. Edgren records a similar case of his own. He is of opinion that the paralysis is of cerebral origin, and that the internal capsule of the opposite hemisphere is the seat of the lesion. Most probably it is a hæmorrhage which is so far related to the diphtheria that the vessels become degenerated and rupture through the infectious disease. As in the multiple neuritis of the ordinary postdiphtherial paralysis, so also in the rare hemiplegic form, changes occur in the blood vessel walls from the effects of the toxins circulating in the blood.

(315) Splenic Pulsation in Graves's Disease.

Gerhardt (*Neurol. Centralbl.*, No. 5, 1894) has previously noted splenic pulsation in aortic incompetence. In a woman, aged 32, the subject of Graves's disease of three months' duration, he observed the following conditions—exophthalmos, large pulsating bronchocele, dilatation and hypertrophy of the left ventricle with systolic *bruit* loudest at the apex, pulse seldom under 100, occasionally 200. During the attacks of tachycardia there was flushing of the face with capillary pulsation; the front end of the spleen was seen to pulsate strongly when the patient lay on her right side. Tracings of this pulsation showed modifications due to the respiratory movements. In four out of eight previously examined cases Gerhardt has detected splenic pulsation and he believes that the condition might be found more often if looked for. He thinks that in strong patients with compensated aortic insufficiency the spleen pulsates only when enlarged by acute infective disease; while, on the other hand, in Graves's disease splenic pulsation may exist for months without other affection being present.

(316) Pancreatic Colic.

Minnich (*Berl. klin. Woch.*, February 19th, 1894) relates a case in which a certain diagnosis was possible. When 40 years of age a man, now aged 68, had severe attacks of gall stones, the stones being found in the stools. He then had the best of health for ten years and a half, when the attacks recurred. One year ago he was seized with severe pain in the epigastrium, which he attributed to gall stones, and a further attack occurred eleven months later. He was a well-nourished man, and complained of pain, which became localised in a definite place under the left costal arch within the nipple line. The sclerotics were slightly yellow but the urine and skin were unchanged. The attacks were repeated from time to time. Concretions of irregularly rounded shape were found later in the stools. They could be crushed with the fingers, and presented a smooth surface of a slightly yellowish grey colour. The cut surface was dull white and not laminated; the diagnosis was obvious. Any complication such as carcinoma or abscess appeared to be quite excluded. Complete obstruction to the outflow of the pancreatic secretion must, in contrast to biliary obstruction, be rare owing to anatomical conditions. The cessation of the secretion may be due to atrophy of the gland. The evacuation of characteristic calculi, the presence of pancreatic colic and even jaundice (owing to the passage through or delay of the stone in the intestinal portion of the duct) are among early symptoms. One symptom will not suffice for the diagnosis.

SURGERY.

(317) Bier's Treatment of Articular Tuberculosis.

Mikulicz (*Centralbl. f. Chir.*, No. 12, 1894) reports at some length on Bier's method of treating articular tuberculosis in the limbs by artificially produced congestion and hyperæmia. It is now too early, he states, to give a decided opinion on the value and prospects of this plan, but there can be no doubt, it is held, that in some cases it has proved very effectual. A case is here recorded of white swelling of the knee, previously treated without success by injections of iodoform, in which, on the application of Bier's treatment, the tuberculous deposits disappeared in the course of eight weeks, the joint being freed from pain and active disease, but remaining much impaired in consequence of partial destruction and subsequent cicatrisation of the ligamentous structures. Three other cases, in two of which iodoform was not used, are referred to in which this method of treatment had very good results. In a fifth case—one of caries of the tarsus—although the progress of the tuberculous disease was arrested by Bier's treatment, it was found necessary to remove the foot, as much of its osseous structure had been destroyed by the disease. In three other cases the treatment did neither good nor harm. In his comments on these clinical reports the author states that the prospects of curing articular tuberculosis by any means short of radical removal depend on the intensity of the reaction of the diseased structures. In some subjects the reaction is so active as to be capable

of effecting cure without any therapeutical aid from without, whilst in other subjects there is so little resistance in the affected structures that any method of conservative treatment hitherto devised will be found quite useless. There can be no doubt, Mikuliez holds, that Bier's method aids and promotes this process of reaction in many cases in which, without such aid, such reaction would fail in its struggle with the tubercle bacillus. It still remains to be proved whether the good results of the method are to be attributed to simple hyperæmia, to the curative action of effused serum, or to a form of self-developed tuberculin action. In his practice Mikuliez varies the details of the treatment in different cases, adapting the strength and duration of the means of producing congestive hyperæmia to the amount of local reaction and to the tolerance of the patient. It is held to be advisable in most cases at first to apply the bandage lightly and to allow it to remain on the limb for only a few hours at a time. The treatment should be carefully and frequently supervised, particularly when the patient is very tolerant of the bandage and can wear it day and night without suffering pain or uneasiness. If the bandage be retained for a long period it is apt to cause muscular atrophy of the limb at and below the seat of constriction. The best indication of a beneficial working of Bier's method is cessation of pain in the diseased joint.—Miller (*Edin. Med. Journ.*, February, 1894) reports favourably of Bier's congestion treatment of tuberculous affections of the extremities. This method consists in placing a broad elastic band round the affected limb, a few inches above the diseased part, firmly enough to produce venous congestion. Bier recommends that this congestion should be kept up continuously, and that the patients should be permitted to use the limb. The elastic band should be broad and a layer of lint or wool should be placed under it to protect the skin. The distal portion of the limb is supported by a bandage up to the affected part, so that the congested area is limited to the immediate neighbourhood of the disease. Miller states that this method is a useful one, and deserves further trial. He prefers intermittent to continuous compression, as the former method is attended with less risk and is followed by equally good, if not better, results. It is now employed as part of his routine treatment for mild cases of strumous joint disease and skin affections of the extremities. The improvement effected by this treatment was more marked and striking in cases of skin disease than in those of joint disease, but the author acknowledges that in the latter class of cases the joints seemed to improve faster than they would have done had they been treated by mere rest. In regard to the joint affections, however, a full and extended trial of Bier's method was hindered by the pressure of time and want of accommodation in the author's wards.

(318) Surgery of the Chest.

Delagénière, in a paper on the surgery of the pleura and the inferior lobes of the lungs (extract from the *Archives Provinciales de Chirurgie*, 1894), advocates extensive resection of the ribs in cases of chronic empyema and of pulmonary affections abscess, gangrene, hydatid cyst causing purulent effusion into the pleural cavity. It is held that the persistence of a fistula after ordinary operations for fistula is usually due to collection of pus in a cavity, called the costo-diaphragmatic *cul-de-sac*, between the sixth and two following ribs on the one side and the vault of the diaphragm on the other. With the object of obliterating this space the author has practised with success almost complete removal of these three ribs. This practice is associated with free drainage of the cavity at its most dependent parts. After removal of the ribs and removal of all secretion the sides of the sac fall together and form adhesions, so that the cavity is completely obliterated. The author acknowledges that if the lung be so bound down by thickened membrane that it cannot expand, any operation on the chest wall would be quite useless, but he argues that this result is not so frequent as is generally supposed, and also that on free exposure of the confined lung much of the thickened membrane may be removed. Several interesting cases are related, and the treatment of localised gangrene and of hydatid cysts and tumours of the lung is discussed at full length.

(319) Treatment of Gangrenous Hernia.

At the meeting of the Société de Chirurgie, Paris, on March 14th (*Sem Méd.*, March 21st, 1894) Chaput related two cases of gangrenous hernia, which had been operated by Martinet. The first case was that of a woman aged 50, who suffered from an infra-umbilical hernia in the linea alba, which had been strangulated for five days. A long median incision was made over the hernia, when a portion of the omentum was laid bare. This was ligatured and removed, and the intestine separated from its adhesions. The diseased portion was then enclosed in a fold of intestine, the edges of the fold being stitched together with a catgut suture. The gangrenous piece was then left in the intestinal cavity in the hope that it would be eliminated. The sac was dressed and plugged with iodoform gauze, and the omentum fixed in the wound, after which the abdominal wound was closed by sutures. The second case was that of a woman aged 58, who had a femoral hernia, which had been strangulated for six days. Previous attempts at reduction by taxis had failed. An operation was at once performed, when the intestine was found to be gangrenous and perforated in several places. The strangulated part was detached, and the two ends of the intestine united by Lembert's suture. The peritoneal cavity was washed out with an antiseptic solution, and the wound left open. A few days afterwards a fæcal fistula formed, but this soon closed, and seventeen days after the operation the patient had quite recovered, the wound being entirely closed up. Chaput recommends that in cases of gangrenous hernia intestinal suture should be performed instead of making an artificial anus. The operation, he says, is less severe, and the patients are cured at once. An artificial anus, may be formed when there is much collapse or apparent peritonitis. In doubtful cases, when an entire loop of gut is involved, Richelot's operation of kelotomy without reduction should be adopted, and if the patient's state admits, reduction should be performed forty-eight hours afterwards. If there is a perforation this part should be buried by a double row of sero-serous sutures, and the intestine so placed that it can be observed for forty-eight hours. When the presence of gangrene is evident, and the lesion is small, it is enclosed in the intestine by a double row of sero-serous sutures, and if long it is enclosed by a fold of intestine held by sutures. When it is wide but does not involve the whole circumference of the bowel, Chaput advises that a diamond-shaped piece, which includes the gangrenous portion, should be cut out, and the margin of the orifice so formed should be united by sutures. By this method, he maintains, a sufficient channel of communication between the two ends of the intestine is left.

MIDWIFERY AND DISEASES OF WOMEN.

(320) Pregnancy after Ventrifixation.

Löhlein (*Dent. med. Woch.*, March 15th, 1894) says that ventrifixation has maintained its position as a method for maintaining the uterus in a forward position with moderate elevation which is at once reliable and unattended by unpleasant consequences. It is, however, indicated only when very considerable inconveniences are to be attributed to the abnormal position of the uterus. He reports two cases in which pregnancy occurred after ventrifixation: (1) A woman, aged 30, had ventrifixation performed in July, 1892, on account of prolapse; in December, 1893 she was delivered of a child; the involution of the uterus proceeded satisfactorily. (2) A woman, aged 35, had myomectomy performed in November, 1892; as the uterus was retroflexed, the bed of the tumour was stitched to the abdominal wall; five months later she had severe nausea and vomiting, and was found to be pregnant; the adhesions between the uterus and abdominal wall could be felt; subsequently she was delivered of a well-developed child, which, however, died shortly afterwards. The ventrifixation was undertaken here to guard against bleeding and the infection of the peritoneum, in addition to the above-named reason. This method has been of service to the author in cases of the enucleation of large myomata. He cites a case in which a rapid pulse and raised temperature led him to reopen the abdomen, and he stitched

the bed of the tumour to the abdominal wall with the best results. The indications for ventrifixation are thus not not to be limited by any fears in regard to conception and gestation. The bands of adhesions take part in the involution just as the utero sacral and broad ligaments do. Thus there is reason to believe that the fixation will still remain sufficient. In both cases there was marked nausea and vomiting during the early months of the pregnancy, severer than in previous pregnancies.

(321) Suppurating Tube: Subperitoneal Laparotomy: Fistula.

Picqué and Charrier (*Annales de Gynéc. et d'Obstét.*, December, 1893) in a paper on abdominal sections, describe a case in which the patient, aged 35, was subject to pyosalpinx. The suppurating tube was exposed by abdominal section, being reached underneath the parietal peritoneum. It formed a large pelvic abscess, however, and its walls could not be enucleated. A fistula developed in the wound, and the patient became extremely cachectic. The urine was loaded with albumen, and there were anæmic symptoms. A second operation was commenced; unfortunately the patient died under chloroform.

(322) Kraurosis Vulvæ.

Martin, of Berlin (*Centralbl. f. Gynäk.*, No. 13, 1894) adds 3 cases to the 5 described by Orthmann four years ago. In 1 of the 3, carcinomatous nodules were detected in the kraurotic tissue. In 6 out of the entire 8, the cure was effected by the operation devised by Martin himself in 1887. 1 healed after therapeutic measures had overcome the characteristic stenosis of the vulva, and 1 case refused treatment. Kraurosis seems to be a peculiar histological atrophy of the vulvar tissues, perhaps similar to the leucoplasic patches on mucous membrane described by Schwimmer. Martin does not agree with Sänger that kraurosis is a progressive presenile or senile atrophy of the vulva with pachydermia. The disease cannot be traced to any venereal or microbian influence. It may occur in young or old, virgins or multiparæ. The earliest stage of the disease at least is inflammatory. A feeling of tenseness is more frequent than itching. As fissures develop, irritation results, with consequent neurotic and other evil symptoms. The diagnosis depends less on the disappearance of the pigment in the parts than on the shrinking of the tissues, first in the posterior commissure and labia minora, and lastly in the clitoris and labia majora. An active discussion on the very uncertain dermatological nature of the disease followed the reading of Martin's communication.

(323) Vesico-Vaginal Fistula.

Malcolm McLean (*N. York Journ. of Gynæc. and Obstet.*, March, 1894) has devised a simple contrivance for steadying the wall of the bladder in the operation for vesico-vaginal fistula. It is particularly serviceable in cases where the upper vesical walls protrude through the fistula. Eight or ten inches of rubber tubing are attached by a short glass connecting tube to an ordinary toy balloon. The latter is passed, when collapsed, through the fistula into the bladder, and then distended with about five ounces of warm sterilised water or Thiersch's solution. The distended balloon is drawn down firmly into the fistula by means of the rubber tubing, which is clamped and held on one side or the other as the different steps of the operation proceed. By this means the edges of the fistula are held steadily in view, so that denudation is easily performed with accuracy. The hæmorrhage is well controlled by the pressure from within, and blood is prevented from entering the bladder. Before the sutures are tightened the balloon is permitted to collapse, and is then readily withdrawn.

(324) Early Appearance of Cancer of the Female Organs in Japan.

Grimm (*Centralbl. f. Gynäk.*, No. 12, 1894), notes that out of 13 cases of carcinoma uteri observed by him amongst natives in Japan, 1 occurred in a robust and healthy-looking woman, aged 25. In a woman, aged 40, cancer developed immediately after labour, and five months later the entire vagina, as far as the vulva, was invaded. The one case of carcinoma of the vagina under his care was in a girl, aged 18. There were metastatic deposits, and no evidence of syphilis. Carcinoma of the vulva and urethra was observed in a woman of 27; she had noticed it for five months.

THERAPEUTICS.

(325) The Influence of Electrical Stimulation upon the Nutrition of Muscle.

Debedat (*Arch. d'Electricité Médicale*, February and March, 1894), reports the results of experiments made on the muscles of young rabbits with the various kinds of electric stimulation used in medical treatment. The experiments were made on the group of hamstring muscles; those of the left side were stimulated in various ways daily for twenty days, four minutes a day; those of the right side were left for purposes of comparison. At the end of the period the animals were killed, and the muscles of the two sides carefully removed and weighed; portions were also hardened and examined microscopically. The modes of stimulation were as follows: (1) Induction coil current, groups of shocks lasting each for one second, and followed by one second of interval. (2) Galvanic battery current of 2 milliampères, with the same periods of stimulation and repose. (3) Static sparks of 2 to 3 millimetres repeated every two seconds. (4) Tetanisation of muscles for four minutes by means of an induction coil, without intervals of repose. (5) Steady galvanic battery current for four minutes without intervals of repose. The results showed a gain of 40 per cent. in weight on the stimulated side with (1) the rhythmic induction shocks, and of 18 per cent. with (2) the rhythmic battery current. The effect of (3) the static sparks was *nil*: the prolonged tetanisation (4) caused a loss of weight; the prolonged steady battery current (5) a slight increase in weight. Adhesions had been formed between the skin and the muscle at the points of application of the electrodes in this last (5). The gain in weight was due to a true growth of the muscle: the loss was accompanied by histological evidence of damage to the muscle fibres. The author concludes that the most advantageous mode of promoting the growth of muscle by electricity is to use an induction coil, and to arrange the periods of contraction and repose of the muscle so as to approximate to the conditions of a muscle during the performance of rhythmic gymnastic movements—namely, about thirty periods of contraction and thirty of rest per minute, prolonged tetanisation being distinctly hurtful.

(326) Local Treatment in Diphtheria.

Jacobi (*Therap. Gaz.*, March, 1894) says local treatment in diphtheria is applied either for the purpose of directly destroying the pseudo-membrane (drugs useful: silver nitrate, carbolic acid, or actual cautery); to dissolve them (alkaline carbonates, chlorides, steam, papayotin; to disinfect (potassium chloride, chloral hydrate, turpentine, carbolic acid, mercury, sulphur, bromine, iodine, iodoform, chlorine water, hydrogen peroxide). The methods of application have been either direct local administration by the attendant, or washes, gargles, sprays, inhalations, or injections. With regard to the local treatment of the mouth and pharynx, it is to be remembered that gargles reach only as far back as the interior pillars of the fauces; they are preventive rather than curative. Local applications should not be made in the forms of powders, for these are apt to nauseate and produce vomiting by their mere contact. Applications of substances with bad tastes such as chloral should be avoided for the same reason. With regard to the destruction of the diphtherial membranes, it is a matter of principle that these should be as far as possible destroyed, but in doing so great circumspection is necessary; the violent struggles of a child to defend itself from local applications may in many cases do a great deal more harm than is counterbalanced by the application itself. In order to be at all effectual, the application, whatever be its nature, must be thorough. Perhaps the best application is a 50 per cent. solution of carbolic acid in glycerine, or a 1 in 500 solution of mercuric chloride. For the same purpose, solutions—not powders—of the ferments, papayotin or trypsin, may be employed. For cervical lymphadenitis vigorous measures are recommended, and large incisions should be made laying bare the necrotic tissue, without waiting for signs of fluctuation. Such incisions should receive careful disinfection, but not with carbolic acid,

which is too apt to cause hæmorrhage. Hæmorrhage may generally be stopped by pressure under antiseptic gauze. The application of ferri-chloride must not be made, as it gives rise to thick crusts, which greatly favour the absorption of toxins.

(327) Injection of Saline Solution in Poisoning.

Max Gordon (*Deut. med. Woch.*, March 22nd, 1894) relates three cases, two of CO and one of coal gas poisoning, treated by the intravenous injection of saline solution after a preliminary bleeding. It is contended that thus (1) some of the poisonous material is got rid of, (2) the circulation is maintained, and (3) the nervous centres protected. Case I: A man, aged 22, was admitted unconscious, with stertorous and irregular breathing: 300 c.cm. of blood were withdrawn from the left arm, and 400 c.cm. of a 0.6 per cent. saline solution at 37° C. slowly injected with a syringe into the veins under strict antiseptic precautions. The breathing remained unchanged, but later seemed to be more easy. Ten hours afterwards he showed the first reaction, opening his eyes and sighing. During the next day he was unconscious. On the following day he became partly conscious, and from this time he steadily improved, and was discharged well four days later. Case II: A man, aged 22, was similarly treated. The pulse at once became more regular, but this only lasted for a short time. He did not show any reaction until the fourth day, when he answered if called to. From this time he steadily improved. Both these patients were treated in hospital, but a third from the same house died at home, no such treatment having been used. Case III: A woman, aged 34, was poisoned with coal gas, and admitted unconscious and cyanosed, with irregular breathing and tetanoid spasms in the arms and legs: 165 c.cm. of blood were abstracted, and 300 c.cm. salt solution injected as above. The pulse was tolerably strong after the injection. During the next day the unconsciousness persisted; the tetanoid spasms also continued. On the fifth day she could answer questions, and from this time she steadily got well.

(328) Trional.

K. Rychlinski (*Kronika Lekarska*, February, 1894) tried trional in fourteen cases of sleeplessness in neurotic or insane subjects, in doses varying from 0.5 to 4 grammes. The total number of observations amounted to 100. In several cases he carried out comparative experiments with other hypnotics (sulphonal, chloral hydrate, sulphate of duboisin). He found that: 1. Trional acts admirably, especially in cases of insomnia due to functional disturbances in the nerve system. 2. It does not affect in the least the cardiac action even when heart disease is present. 3. It has no bad taste and is easily soluble in hot tea or milk. 4. The patient awakens without any disagreeable sensations about the head. 5. The sleep-giving dose is smaller in comparison with other drugs of the kind. 6. On the whole trional should be preferred to all our ordinary hypnotic remedies.

(329) Chlorinated Lime in Pruritus Ani.

A. L. Berger (*Zemsky Vratch*, No. 13, 1893, p. 213) speaks well of the treatment of pruritus ani by inserting into the orifice (for about 1 inch) a piece of cotton wool soaked in liquor calcis chlorinatæ. When slight burning or smarting is felt, the plug should be extracted, and the anal region washed out with the same lotion, after which the parts should be left to dry spontaneously. The itching is said to vanish instantaneously, while after a few applications of the remedy any accompanying symptoms (such as swelling, eczematoid rash of the perineum and scrotum, etc.) also disappear.

(330) Treatment of Anasarca.

Ewald (*Deut. med. Woch.*, March 15th, 1894) recommends for this purpose the thickest trocar (2 to 2.5 mm.) used for drawing off a pleural effusion. He prefers the trocar without a side opening; the needle is then made to pierce one side of the end of the tubing, the latter being drawn over the end of the cannula. It is introduced with strict antiseptic precautions, and iodoform collodion is painted round about the cannula. The author has never seen inflammation or erysipelas follow. Two such trocars may be used in each leg. If after withdrawing the cannula, fluid still escapes in spite of iodoform, collodion, etc., a stitch must be passed through the site of puncture.

PATHOLOGY.

(331) A New Method for the Detection of Tubercle Bacilli in Sputum.

In the examination of sputum for tubercle bacilli, Ilkewitsch (*Centralbl. f. Bakt.*, February 5th, 1894) employs the centrifuge. The following preparatory measures are taken: Sputum ½ c.cm.; distilled water 20 c.cm.; and 8 to 12 drops of a 30 per cent. solution of caustic potash are well mixed with a glass rod in a porcelain capsule, and the mixture is heated until vapour forms. When the sputum is quite dissolved a little casein (no specific quantity) is added; under the combined influence of heat, stirring, and caustic potash (one or two drops of the above solution) this also dissolves, and the translucent fluid becomes of a milky colour. It is then poured into a test tube, and a few drops of acetic acid are added, until the first signs of clotting of the albumin appear. The mixture is now poured into a small brass cylinder (the simple apparatus used by the author is figured), and this is submitted to the action of the centrifuge for five to ten minutes. The deposit which has formed at the bottom of the cylinder is now collected, and rubbed between two slides. The two preparations, when dry, are fixed in the flame as usual, stained after Ziehl's method, and examined under an oil immersion lens without a cover slip. In this procedure all the bacilli present in the sputum are carried down with the clotted casein, and the entire solid material is deposited at the bottom of the cylinder by the action of the centrifuge. Compared with the ordinary method for the examination of tuberculous sputum, this plan has the advantage that a larger amount of material can be examined in a shorter time. The author refers to cases in which he has been enabled by this means to detect tubercle bacilli in the sputum when none could be found after repeated examination by the ordinary method, and when the clinical signs were insufficient to justify the diagnosis of phthisis.

(332) The Pathology of the Œdema which accompanies Passive Congestion.

Lazarus-Barlow (*Communication to the Royal Society*, December, 1893) considers that the view which explains the œdema accompanying passive congestion upon purely mechanical principles is not supported by facts. Upon this view the exudation from the blood vessels should be increased in amount synchronously with the increase of pressure, whereas no such exudation is found to take place during an hour after the pressure in the veins has been raised experimentally. The author estimates the occurrence or non-occurrence of œdema by the specific gravity of the blood and blood plasma, arterial and venous, of muscle and of skin, regarding these as more delicate tests of the presence or absence of that condition than the ordinary methods (inspection, pitting on pressure). Since all forms of œdema are accompanied by an insufficient supply of blood to the tissues, the author investigated the effect of different varieties of anæmia upon the occurrence of œdema. The varieties examined were (1) complete anæmia, lasting three hours; (2) hæmostasis, or cutting off of the limb, with its contained blood and lymph, from the rest of the circulation for one hour, by means of a ligature; (3) complete anæmia combined with stimulation of the sciatic nerve, and persistence, *in situ*, of the products of muscle metabolism, the whole lasting one hour. After each of these varieties of anæmia, the effects of active congestion and of venous obstruction were separately considered. It was found that œdema occurs, as shown by a fall in the specific gravity of the muscle and skin, and a rise in that of the blood, after all these conditions of anæmia. The conclusion is that starvation of the tissues plays an important part in the occurrence of œdema. The amount of œdema is greater in the cases of venous congestion, and varies directly with the duration of action of the venous blood. The author concludes that the products of metabolism play a part more important than starvation. The greatest amount of œdema was obtained with venous obstruction after anæmia and stimulation of the sciatic nerve.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(333) Gastric Crises.

Cathelineau (*Arch. gén. de Méd.*, April, 1894) has thoroughly investigated the gastric chemistry and the condition of the urine in a case of tabes dorsalis. A man, aged 33, had a chancre on his arm eleven years ago after vaccination. Three months later a roseola appeared. He was thoroughly treated from the beginning. Two years afterwards he lost consciousness, and this was followed by aphasia. Seven years later he had gastric crises, vertigo, lightning pains, and a year afterwards his sight became involved and he had diplopia. He was admitted with vomiting. He also suffered from involuntary micturition, and the knee-jerks were absent. There was slight hyperæsthesia in parts, but no anæsthesia. There was ptosis on the left side. When readmitted nine months later, he showed a total paralysis of the left third nerve. There was no ataxy. Gastric crises occurred several times in the month. He also had laryngeal crises. The urine was normal in amount except when there was vomiting. It was always alkaline in reaction. The urea and phosphoric acid followed similar curves to that of the quantity. The chlorides were very considerably diminished during the crises, reaching a minimum a few days after it. There was no albuminuria, peptonuria, or bile constituents present. The vomit varied from 800 to 2,600 c.c. in amount in the twenty-four hours. Günzburg's test always gave positive results, as also did the biuret test. After a test breakfast, arythrodextrin and peptones were present, as also free hydrochloric acid. Examined by Hayem and Winter's method, it showed the existence of quantitative hyperpepsia with acid fermentation. During the gastric crises the results were not so uniform. There was always acid fermentation and free hydrochloric present.

(334) Tetanus complicating Vaccinia.

Toms (*Medical News*, February 24th, 1894) relates the following case in a weakly girl, aged 5½, who had previously had measles, mumps, and strumous keratitis. Bovine virus was used with all possible antiseptic precautions. When seen on the eighteenth day, the child was ill, and the temperature was 100.5° Fahr. The ulcer at the site of the vaccination was deep, slightly indurated, and discharging a sanious pus. These appearances improved under treatment. Six days later the child had an aphthous stomatitis, and now for the first time, while the mouth was being examined, some trismus was noted. Some ragged decayed teeth were present, the removal of which was recommended, but not carried out. Two days afterwards there was some rigidity of the neck muscles and pain in the back. The next day there was slight tonic spasm of the jaws, which could not be opened more than 60 or 70 mm. Later the child was seen in a characteristic paroxysm with opisthotonos. Deep anæsthesia failed to separate the jaws, and she died of œdema of the lungs. Bromide and chloral were used along with nutrient enemata containing laudanum. In all, she had eleven convulsions. At the time of death, thirty-five days after the vaccination, the ulcer on the arm appeared healthy. The endeavour to cultivate the tetanus bacillus from the wound on the arm gave negative results. In view of the presence of the sore mouth at the same time as the wound on the arm, it may be open to doubt just how the secondary infection (tetanus) arose. The possible sources of infection of the arm were (1) the vaseline, (2) the sponge, and (3) the unsterilised dressings used by the patient's friends. Against the theory that it was due to the vaccination are (1) the presence of the sore mouth, (2) the length of the incubation period if counted from the vaccination, and (3) the mildness of the disease, death being due to an intercurrent affection in this weakly child, which might otherwise have recovered. Billings, who was referred to, was able to collect from medical writings as many as 6 cases of tetanus after vaccination, and another is mentioned by Oxford.

(335) Syphilitic Neuralgia.

Obolenski (*Berl. klin. Woch.*, February 12th, 1894), after relating a case of intercostal neuralgia in a patient, aged 36, with previous syphilis, discusses the etiology of neuralgia. Sometimes the cause may lie in the brain, the cord or its membranes, or in the tissues about the nerves. A neuritis is revealed by the reaction of degeneration, trophic changes in the muscle, disturbed sensation, etc. Some neuralgias are of reflex origin, but most of them are the so-called rheumatic neuralgias, and such as result from nutritional changes, as in the dyscrasia of malaria and syphilis or from changes in the blood-forming organs, as in chlorosis, etc., or such as occur in hysteria and neurasthenia. Malarial neuralgia is often accompanied by fever, shivering, feeling of heat, rise of temperature; it is more distinctly paroxysmal and is not limited to the night. Malarial attacks have usually preceded and the patient has lived in a malarious district. The spleen may be enlarged. Antimalarial remedies give good results, as also a change of climate. Intercostal neuralgia has rarely been attributed to syphilis. The following points sufficed for the diagnosis in the above-named case: (1) The history of syphilis; (2) general enlargement of glands; (3) increase of pain at night; (4) double-sided nature of the lesion; and (5) absence of R.D., in spite of the long duration of the disease. The author is of opinion that the diagnosis can be made even in the absence of a history of syphilis. The prognosis is good, as these neuralgias yield to antisyphilitic remedies. The author uses potassic iodide and calomel, the latter in the form of subcutaneous injection. After eighteen days the patient was greatly improved, and later he was well. Thermocautery, warm baths, and galvanism were used in addition, but as all these measures had previously been employed for a long time without effect the results must be attributed to the antisyphilitic treatment.

SURGERY.

(336) Several Abdominal Operations on the same Patient.

Rydygier (*Wien. klin. Woch.*, No. 10, 1894), in a lecture on gastro-intestinal surgery, reports a case in which a woman was relieved at one operation of two large pelvic cysts—one of these a dermoid cyst—and of an enlarged and carcinomatous right ovary. In extirpating the latter, which had contracted close adhesions to surrounding organs, it was found necessary to remove a small portion of the bladder, and about three inches of the sigmoid flexure. The rent in the wall of the bladder was closed by a double row of sutures, and enterorrhaphy was practised on the small intestine. The patient recovered from the immediate effects of the operation, but soon suffered from symptoms of obstruction attributed to an accumulation of fæcal matter in the colon above the sutured portion of the intestinal canal. As it was thought that the sutures might give way if this were treated by purgatives or enemata, an artificial anus was established in the ascending colon. Five weeks later, when it had been made out that the sigmoid flexure was permeable, and that there was no serious constriction at the seat of suture, the artificial anus was successfully closed. The patient finally made a complete recovery.

(337) Hernia of the Lung: Resection.

Lopez (*Siglo Medico*, April, 1894) relates a case of incised wound of the seventh left intercostal space, followed by pneumocele. After ineffectual attempts at reduction, and as symptoms of gangrene of the lung were imminent, it was decided to resect the portion of protruding viscus. Two ligatures were placed round its base, the part thus ligatured was removed on a level with the lips of the wound, and the pedicle returned within the thorax. The wound was then closed with sutures, drainage tubes were inserted, and an antiseptic dressing applied. Internally sulphate of quinine was administered, and a strict regimen enjoined. All went well till the second day, when local, with slight constitutional, disturbances manifested themselves, resulting from inflammatory processes in the wound itself. On the fifth day marked dyspnœa came on, which was found to be due to hæmopyo-thorax. The patient was accordingly

placed on his side with the wound in the most dependent position, a cannula having previously been inserted, when a quantity of sero-pus exuded from the wound. The ligatures were discharged next day. There was only slight constitutional disturbance. The wound cicatrised without adhesion of the lung to the chest wall, and the patient made a good recovery, and was discharged on the twenty-second day.

(338) Operative Treatment of Club-Foot.

Hartley (*Annals of Surgery*, March, 1894) reports 25 cases which show the great value of operation where mechanical means have failed. Whilst not believing in any routine operative treatment of club-foot, he holds that in the first and second degrees of deformity when treatment is begun shortly after birth, traction, stretching, massage, and proper fixation generally suffice. When these are found insufficient, tenotomy of the tendo Achillis, tibialis posticus, or Phelps's operation, with or without fasciotomy, or, in cases of the paralytic variety, arthrodesis of the ankle-joint, may be indicated. In the third degree of deformity operative treatment is always indicated. In the congenital club-foot of this variety complete extirpation of the astragalus is recommended. In the acquired variety of paralytic origin a cuneiform osteotomy including the prominent angle of the astragalus and adjoining surface of the tibia is indicated, as it corrects the deformity and produces a syndesmosis between the astragalus and the tibia. In inveterate cases where the ankle cannot be flexed to a right angle and the supination of the calcaneus is marked, the extirpation of the astragalus and the division of the calcaneo-fibular ligament is necessary in addition to the cuneiform osteotomy of the tarsus. Unless the equinus is completely removed and the supination in the calcaneus is corrected, every step made by the patient aids a return of his varus. It is imperative, if we wish to obtain a permanent and good result, to relieve all deformity completely and at once. This ought to be accomplished before the weight of the body is allowed to act upon the foot. The clearest evidence of an imperfect operation is the need of an apparatus and support after correction has been accomplished. A perfect operation implies six to ten weeks in plaster-of-paris splints, and an ordinary laced shoe with an elevated sole in particular cases.

(339) Congenital Fistula of the Neck.

Carl Beck, of New York (*Med. Rec.*, March 17th, 1894) says that in sixteen years he has only treated six cases of congenital fistula of the neck. Three of these (all lateral) were cured by repeated application of the galvano-cautery; two (one median and one lateral) by division of the fistula and removal of its lining membrane. The sixth case could be cured neither by galvano-cautery nor by excision, and on this account resection of the hyoid bone was performed. This patient was a woman, aged 45, who had suffered since birth from a small opening on the anterior margin of the right sterno-mastoid muscle, about 2 inches above the upper border of the sternum, and nearly in the median line of the thyroid cartilage. Occasionally a gelatinous fluid was discharged from the opening; whilst at intervals it closed up for a time. In January, 1893, the patient experienced a dry sensation in the pharynx and sublingual region; and at times suffered from hoarseness. On account of these symptoms, operation was resorted to. First the galvano-cautery was applied to the interior of the fistulous canal, but with no amelioration, even after repeated trial. In March, 1893, the lining wall of the track was excised as far as the periosteum of the hyoid bone, where it appeared to terminate, but in four weeks the original condition had returned. Inspection and palpation of the larynx, together with laryngoscopic examination, revealed nothing but some hyperæmia of the mucous membrane. At the wish of the patient a further attempt was made. The fistulous track was again slit up, and the neighbourhood of the hyoid bone carefully examined. On scraping away a portion of the periosteum, a cavity was discovered passing upwards behind the body of the bone. On removing a small portion of the bone, this cavity was seen to be of the size of a small nut; the fibrous walls were defined by the posterior surface of the hyoid bone and the mucous membrane of the root of the tongue. The whole hyoid bone on the right side, comprising the cornu majus, minus, and the middle portion, was removed, and the sac with its fibrous walls extirpated. The wound was then closed with catgut sutures, dressings applied, and the neck immovably fixed. At the end of seven days the wound was perfectly healed. No interference with deglutition, speech, or respiration was noticed. The hoarseness and dry sensation disappeared. On the result of this case the author feels justified in recommending resection of the hyoid bone in all cases of fistulæ where free exposure is required and a former excision has not proved satisfactory. If the operation is carried out periosteally, it is probable that the bone will be reproduced.

MIDWIFERY AND DISEASES OF WOMEN.

(340) Uterus Septus: Six Pregnancies.

Tarnier (*Journ. des Sages-Femmes*, March 16th, 1894) has under observation a case in her sixth pregnancy. The previous history was as follows: First pregnancy, live child delivered in seventh month; it died in a few minutes. Second delivery at beginning of seventh month; child lived three months. Third delivery in seventh month; child is living. Fourth delivery at term; child lived six months. Fifth pregnancy (twins), abortion in the fourth month. The patient was sent into Tarnier's wards in the sixth month of her sixth pregnancy. Flooding had set in, and placenta prævia had been diagnosed. Vertex presentation was discovered, and the fœtal heart sounds were audible. There was prolapsus vaginæ. A thick ridge ran down the anterior vaginal wall. A prominent swelling could be felt in the left fornix; it had been taken for placenta. On careful exploration a distinct opening was detected in it: the finger could pass nearly one inch up this orifice, which was separated by a distinct septum from the dilated os of the pregnant half of the uterus. Next day a clot was expelled from the non-pregnant cavity, and its os rapidly contracted. The pregnancy continues. In short, the flooding was simply menstruation continuing in the non-pregnant half of the uterus. Tarnier suspects that many cases of menstruation continuing during pregnancy can be explained in this way. When the vagina is double as well as the uterus, diagnosis may be difficult. Tarnier was once called in by a colleague to a patient in labour. The cervix seemed like that of a non-pregnant uterus. At the consultation the vagina was found to be double, and a well-dilated cervix was discovered. The same observer has seen pregnancy alternately in the right and left half of a double uterus. The non-pregnant uterus appeared like a cyst. Twin pregnancy in one cavity and simultaneous pregnancy in both cavities of a double uterus have been recorded.

(341) Aspiration of Distended Tubes.

Hofmokl (*Wiener med. Wochenschrift*, April 14th, 1894) practises aspiration largely in cases of chronic salpingitis. He publishes clinical notes of eight cases where the disease seems to have followed gonorrhœa, abortion, etc. Gonococci were detected in a case where the pus was carefully examined. In the majority of the cases the patients made excellent recoveries after puncture and aspiration of the diseased tubes. The swelling in the lateral fornix, corresponding to the dilated tube, disappeared permanently, and the patient's health became good. In one or two cases relapse occurred from contracting gonorrhœa, etc. There seemed to be no rise of temperature after aspiration.

(342) Uterus in a Labial Hernia in a Female Hermaphrodite.

Brohl (*Deut. med. Woch.*, April 12th, 1894) observed this condition in a woman, aged 36, who menstruated regularly, but seemed to have no sexual desire. Her male peculiarities were a short beard, a prominent larynx, a loud voice, and a well-formed penis, over 4 inches long when erect. The urethra, however, did not run through the penis, but opened below it; the hymen was normal, the vagina long, the nymphæ very small, the labia majora large, the left being the seat of a hernia. The hair of the scalp and the mammæ were of feminine type. The hernia appeared six years previously on the patient lifting a weight. It gave great trouble,

and she had to support it in her left hand when walking; it grew larger when she menstruated. The uterus and a tender ovary could easily be made out in the sac. The hernia was irreducible. Brohl therefore made a vertical incision, exposed the sac as high as up to the external ring, and made an opening in the sac wide enough to allow him to ascertain that it contained nothing besides the uterus and its appendages. The neck of the sac and the cervix uteri were cut through at the level of Poupart's ligament. The stump of the cervix was sewn to the inguinal canal, which it thus blocked. The wound was not completely closed by suture; it healed in five weeks. The amputated uterus bore a large left and a small right ovary, and dilated tubes; it was slightly bicornute. When examined previous to the operation, under chloroform, no prostate or vesiculæ seminales could be detected.

(343) Cæsarean Section: Obstruction Overcome by Washing out Stomach.

Tucker (*New York Polyclinic*, January, 1894) operated on a patient 4 feet 10 inches in height, and 7 st. 7 lbs. in weight. There was extreme contraction of the vagina, for which she had undergone an operation. When seen in the first stage of labour the head was not engaged. The distance between the tuberosities of the ischia was scarcely 2 inches, the external conjugate 5 inches. The vagina was handled as little as possible, and Cæsarean section was performed as soon as the os was dilated sufficiently to admit of drainage. The child weighed 8 lbs., and had a large head, but only gasped twice, though attempts to resuscitate it were made for nearly an hour. Symptoms of intestinal obstruction set in, the patient's abdomen becoming distended, the pulse increasing in frequency, and the temperature rising a little. The stomach was washed out with a solution of bicarbonate of soda; two hours later the bowels were opened. The patient recovered.

(344) Extramedian Incision in Laparotomy.

Flatau (*Centralbl. f. Gynäk.*, No. 12, 1894) has, since 1890, abandoned the practice of cutting in the median line in ovariotomy and other abdominal operations performed on women. Out of 33 cases where the incision was made outside the middle line, not one has been complicated by hernia of the cicatrix. He cuts 1 centimetre, or two-fifths of an inch, to the left of the linea alba, laying bare the rectus, the fibres of which are easily parted. In only three or four of the cases did he divide an artery that required ligature; pressure forceps were always sufficient to stop hæmorrhage from veins. After a little gentle pressure on the muscle all oozing ceased, and the wound was quite dry by the time the peritoneum was divided. Flatau objects to washing the edges of the wound with carbolic lotion, as the irritation thus set up may interfere with immediate union. He has never met with any difficulty in manipulating on the right side of the abdominal cavity, the incision being made on the left of the middle line. He uses braided silk, carefully boiled, for the sutures. He enters the suture close to the edge of the integument, includes as much muscle and peritoneum as possible, and brings the suture out close to the opposite edge of the skin. This method prevents the turning in of the edges of a wound made through thin atrophied parietes, so often seen where the tumour is of large size.

(345) The Placenta in Uterine and Tubal Abortion.

Pilliet (*Progrès Médical*, April 7th, 1894) has studied two distinct cases of tubal abortion and compared them with many other reported instances of this condition. The chief characteristic of tubal abortion is its incompleteness. After the destruction or expulsion of the fœtus portions of placenta remain attached to the tube and continue to develop. The same occurs in many cases of early uterine abortion, hence placental polypi or tumours—"placentoma" or "deciduoma"—develop. Dropsical hydatidiform chorionic villi, representing an abortion several years past, have been removed from the uterus with the curette. But the parasitic remains of the placenta are far more commonly seen, if not constant, after tubal abortion. In tubal gestation ending in abortion small hæmorrhages set in, then a free show, corresponding to the expulsion of part of the ovum. Slight oozing follows, then the tube fills gradually, and at last another considerable loss of blood occurs. The presence of a piece of placental tissue explains this phenomenon. When, therefore, after a loss of blood resembling in clinical history an abortion, a tube remains enlarged and tender, and, when uterine hæmorrhages continue, without complete return of the tube to its normal proportions, tubal gestation, and incomplete abortion may be diagnosed. Hence an operation is indicated to anticipate the risks of intraperitoneal rupture. The persistence of portions of placenta after abortion appears easy to explain. At term the blood sinuses of the uterine tissue have widened and coalesced so as to form a single layer of blood between the maternal and the fœtal structures. Hence complete detachment of the placenta is easily effected. In abortion the abovenamed condition has not developed, detachment becoming more difficult. In tubal abortion the placenta becomes closely united to the tubal wall, which cannot undergo the complicated changes that occur in the uterine tissue in normal pregnancy.

THERAPEUTICS.

(346) Effect of Mercurial Treatment on the Urine.

Welander (*Arch. f. Derm. u. Syph.*, xxvi, Part 3) says that great numbers of observations have shown that mercury is in large part eliminated by the kidneys. Does it irritate the kidneys? Welander made a number of observations on patients treated with different preparations of mercury; he found that there are seldom casts or albumen in the urine of patients in the early period of syphilis, but in a later period, at the same time as gummata, patients may suffer from a peculiar form of acute nephritis, with blood casts, fatty casts, etc., in the urine. This form of nephritis disappears, together with the other syphilitic manifestations, under specific treatment. Severe treatment with mercury often gives rise to casts, and sometimes albumen, in the urine, but neither the absence of these from the urine nor the absence of stomatitis shows that only little mercury is being absorbed; this can be determined only by examining the urine or fæces for mercury. The affection of the kidney dependent on mercurial treatment passes off fairly quickly, and as a rule leaves no tendency to nephritis behind it, but in cases of acute mercurial poisoning actual lesions can sometimes be made out in the kidneys. Nowadays, by the centrifugal apparatus, casts can easily be found in the fresh urine, and Welander, from a series of observations, thinks that the finding of one or two hyaline or finely granular casts in the urine is no proof of any actual morbid structural change in the kidneys. When, however, the number of these casts is observed to increase, and especially when epithelial and blood casts are also observed, it is certain that a more or less abnormal condition exists in the kidneys. These were Welander's former conclusions, and they are confirmed and extended by the following results of his recent observations. In a large number of cases he found that under mercurial treatment the number of casts was not increased in 23.2 per cent., but distinctly increased in 28.9 per cent., and considerably increased in 47.9 per cent. of the cases. In a few cases he was able to ascertain that the number of casts diminished or disappeared after cessation of the treatment, at least, after an interval, as might be expected, for the elimination of mercury by the kidneys lasts some time after cessation of the treatment. Mercury is more likely to give rise to urinary casts in old patients than in young ones, and Welander's observations seem to show that, apart from age, patients with tertiary syphilis are more likely than those with primary syphilis to get casts in the urine under mercurial treatment. It seems that the form in which the mercury is administered makes no difference in this respect, except in so far as concerns the quantity that is absorbed into the system and eliminated by the kidneys. The casts in the urine do not seem to be increased by the taking of iodide of potassium simultaneously with the mercury. When mercurial treatment in a strong young man with primary syphilis gives rise to casts in the urine this must be ascribed to idiosyncrasy, which indeed plays a great

part in the whole matter. A certain degree of albuminuria is sometimes, as well as the presence of casts, evidently caused by mercurial treatment, and albuminuria, when due to mercury, is always associated with an unusual proportion of casts. Welander has observed that mercurial treatment may also induce the presence of casts and albumen in the urine in non-syphilitic persons. The practical outcome of his observations is that mercury should be administered with great caution when there is disease of the kidneys, or when in the course of mercurial treatment albumen appears in the urine together with casts, more especially if some of the latter are epithelial. Moreover, when a patient is undergoing thorough treatment with mercury a watch should be kept on his urine as on the state of his gums, alimentary canal, and skin.

(347) Lactophenin in Enteric Fever.

Von Jaksch (*Cent. f. inn. Med.*, 1894, No. 11) has tried lactophenin in 18 cases of typhoid fever, and finds the result unexpectedly good. Some of the cases were severe with great prostration, hypostatic pneumonia, or other complications. The drug may be administered in ½ to 1-g. doses in starch capsules, up to 6 g. in the day if necessary, according to its antipyretic and sedative effect. No unpleasant symptoms were produced by the drug, except in one case, where the first ½-g. dose produced sickness and vomiting; but even here subsequent doses produced no bad effects. On two occasions the pulse was felt to be somewhat irregular whilst the drug was being administered. The drug lowered the temperature, and the subsequent reactionary rise of temperature was unaccompanied by shivering except in 1 case out of about 360 miscellaneous cases in which the drug was given. The great advantage claimed for lactophenin in typhoid fever, however, is its sedative action; delirium vanishes, the mind becomes clear, and the patients all experience a pleasant subjective feeling, such as is given by no previous method of treatment; appetite quickly appeared in all cases. To what extent chance played a part in the happy results obtained, and whether the drug really cuts short the course of the disease must be left as questions to be decided by further observations. No protection against hæmorrhage or relapses can be expected from this drug any more than from other methods of treatment.

(348) Ergot in Migraine.

Thomson (*Journ. of Nerv. and Ment. Dis.*, February, 1894) recommends large doses of ergot in migraine. His plan is to administer a drachm of the fluid extract with an equal quantity of the elixir of cinchona, in water, as soon as the premonitory symptoms of the headache are noticed; the patient at the same time is advised to lie down and remain quiet. The dose is repeated after one hour if the headache persist, and again an hour later if necessary. If either of the doses be vomited, a similar quantity should be given *per rectum*. In several cases of long standing, in which other remedies had failed, the author found ergot give prompt relief. The good effect was often permanent when intestinal antisepsis had been carried out in the intervals.

(349) Meat Peptone as a Cardiac Tonic.

Kemmerich (*Berlin klin. Woch.*, March 5th, 1894) examined a number of patients in Ewald's clinic who were being fed almost exclusively on meat peptone. He used v. Frey's sphygmograph. The effect of the meat peptone consists partly in action similar to digitalis, and it is eminently nutritious. It strengthens the pulse, this being brought about by a more vigorous contraction of the heart muscle, especially the left ventricle. The appetite also increases, and the general condition is improved. The meat peptone has in addition a slightly diuretic action.

(350) Walnut Leaves in Scrofula.

G. P. Rodionoff, of Moscow (*Meditzinskoie Obozrenie*, No. 2, 1894), on the ground of extensive observations of five years' duration, recommends the old-fashioned popular treatment of scrofula by a prolonged course of a decoction of walnut leaves (*folia nucis juglandis*), which should be used both internally and externally in the form of local washes and general baths, made two or three times weekly. Little children should be given half a cupful, older ones a cupful or even a "jugful" of the "tea" every morning and evening. The leaves prove especially beneficial in cases of itching, eruptions, and enlarged glands. In the author's hands the treatment, the duration of which varied from two months to two years, failed only in a few exceptionally refractory cases, and in impatient and unmanageable children who did not take the "tea" in a regular manner.

PATHOLOGY.

(351) Disinfection by the Solar Rays.

Von Esmarch (*Zeit. f. Hyg.*, vol. xvi, part 2) speaks of the difficulty in disinfecting articles, made in whole or part of substances, such as leather, which are damaged by moist heat. One must at present depend on gases, whose disinfecting power, with the exception, perhaps, of formalin, is uncertain, or one must wash or sprinkle the articles with carbolic or sublimate solutions. Duclaux, Arloing, Patella, etc., have drawn attention to the bactericidal action of the solar rays in the case of various microbes. Koch has pointed out that tubercle bacilli can only withstand the sun's rays for a short time. Nutall says that the sun's rays cannot be made of practical medical use as a disinfectant, because their action is confined to the uppermost layers of the substance to be disinfected. Boubnoff, however, showed that the chemical rays of the sun actually penetrated more or less deeply into stuffs. In the present experiments, pillows, skins, etc., were chosen, and impregnated with microbes out of pure cultivations, or with pus containing microbes; they were then at once, or after an interval, exposed for a certain time to the sun, and sample cultivations in gelatine or agar were taken from them before and after the sun's rays had acted on them. It was found that by exposure direct in sun's rays, without any glass covering, contamination by chance germs in the air did not take place sufficiently to spoil the experiments. From these experiments it appears that the sun's rays have a disinfectant action on the upper layers of the stuffs, but in no case, except with diphtheritic bacilli, did this action seem to be exerted on deeper layers, and in the case of dark objects was quite superficial. The cholera bacilli were certainly soon destroyed in the deeper layers, but this result must be attributed to the drying process; moreover, the diphtheritic bacilli were not quite dried on to the stuff when the experiment began. Considerable heat up to 52° C. did not much increase the disinfecting action of the sun's rays, neither was this action much increased when the sun's rays were allowed to act for more than one day, at least in the case of staphylococcus pyogenes albus, though diphtheritic bacilli were affected. These experiments show that disinfection by the sun's rays cannot take the place of the other means of disinfection at our present disposal. A further experiment showed that a spray of 5 per cent. carbolic solution failed to disinfect skins of rabbits and sheep. The outcome of the whole is, therefore, that a reliable method of disinfecting the articles in question without damaging them has still to be sought for.

(352) Examination of Sputum.

Zenoni (*Centralbl. f. inn. Med.*, March 24th, 1894), first recalls how mucus has been shown to stain with anilin dyes, and how this fact has been used to distinguish the sputum of pneumonia from that of bronchitis, as, for example, with Biondi's three-colour stain. The author, however, prefers saffranin. Bizzozero showed how the mucin in cells stains yellow or brownish yellow with saffranin, whereas the nucleus and rest of the cells stain red. The author spreads a thin layer of sputum on a cover glass, and allows it to remain under alcohol for a quarter of an hour or longer to coagulate. A half concentrated watery solution of pure saffranin is then applied. If examined against a white ground the bronchitic sputum appears yellow, whereas the pneumonic sputum looks red, the difference being due to the albuminous nature of the latter sputum. If these two kinds of sputum are mixed distinct traces of yellow are visible. The method is useful for distinguishing between them.

AN EPITOME OF CURRENT MEDICAL LITERATURE.

MEDICINE.

(353) Œdema Neonatorum.

Semet (*Thèse de Paris*, 1893; *Rev. des Mal. de l'Enf.*, April, 1894) observes that œdema neonatorum is sometimes confounded with sclerema neonatorum, though the pathology is quite distinct and the prognosis very different. The chief causes of the œdema appear to be feebleness of the right side of the heart and insufficient action of the respiratory muscles. Owing to the feeble inspiratory movements thoracic aspiration is diminished, and this increases the distension of the chief veins already produced by the feebleness of the right side of the heart. The œdema commonly begins and is most marked in the lower limbs, the genital organs, and the lower part of the abdomen; the upper limbs, the face, and the eyelids may be affected later, but occasionally they are the parts first attacked. The skin, at first pale, becomes red, and the face, if attacked, may even be cyanosed. The skin pits easily on pressure unless the œdema is very extreme, and when extreme the movements of the limbs may be embarrassed. The skin is cold, and the surface temperature may be very low, though the axillary temperature, according to A. Robin, is not lower than the rectal, which is subnormal. The œdema appears commonly during the first three or four days of life, but may be delayed until the third month. It will be found usually that the child was born before full term, and has been exposed to chills, or bad hygienic surroundings. Unless the œdema affects a very wide area the prognosis is good, and the chief points in treatment are warmth to the surface and good hygienic surroundings. In sclerema also there is feebleness, small pulse, low temperature, and an alteration in the elasticity of the cutaneous structures, but the parts first affected are the back and shoulders, and the skin is hard and tough, so that it cannot be pinched up and does not pit on pressure. Sclerema is steadily progressive, and movements of the affected parts are rendered impossible. When the face is affected the child cannot suck, and the only movement perceptible may be those of the thorax. The prognosis in sclerema is always bad.

(354) Propagation of Diphtherial Virus.

Under this heading Beliantì (*Rif. Med.*, March 23rd, 1894) describes a case of death from diphtheria in which examination of the pseudo-membranes revealed the presence of Loeffler's bacillus and of a streptococcus. The point of interest lies in the fact that the source of infection seems to have been traced to a brother who had had the disease, but was cured seven months before. Examination of the pharynx of this child revealed a chronic follicular tonsillitis, the glands in the neck being in a state of chronic indolent enlargement. The exudation from the tonsil on examination showed the presence of the same two microbes as were found in the fatal case, and luxuriant and extremely virulent cultivations of the diphtheria bacillus were obtained by inoculation on blood serum. It is suggested that the boy escaped infection in this instance by reason of the immunity conferred by the first attack, but that the bacilli had been in his pharynx in a greater or less state of virulence for a period of seven months. A second examination three months after the sister's death again disclosed the presence of Loeffler's bacilli, but they were evidently in a state of great attenuation, and gave rise only to transitory local inflammation when inoculated into animals. It is suggested that greater care should be exercised in allowing those convalescent from diphtheria to mix with healthy people or to come into intimate relations with them.

(355) Word Blindness with Right Homonymous Hemianopsia.

Bruns (*Neurol. Cent. abl.*, January 1st, 1894) records the case of a woman, aged 32, said to have had "inflammation of the lungs" and epistaxis in October, 1890; after this she suffered from headache, and in the summer of 1891 she had frequent vomiting, especially in the morning. The vomiting later on decreased but the headache increased. In February, 1891, her sight was affected: she suffered from vertigo, and complained of seeing several objects instead of one. On one occasion, in January, 1892, she had temporary blindness (half an hour) together with the vertigo. In the autumn of 1891 disturbance of speech was noticed for the first time, at first with names and then with substantives; from this time also she lost the power of reading. When admitted to the hospital in March, 1892, there was right homonymous hemianopsia. Ophthalmoscopic examination showed "choked disc" on both sides. Tenderness to percussion on left and occipital regions of skull; right facial paresis and slight paresis of right limbs; colours distinguished; speech most affected in reading but no true alexia, since the patient was evidently able to recognise letters and objects, although not to name them; sometimes she seemed to recognise short words, but could evidently neither read nor understand longer ones; sometimes she recognised numbers of one figure but never of several figures; no power of copying, though she could occasionally write single words spontaneously or from dictation; soon lost power of reading what she had written; easily fatigued, and at times the troubles in reading and writing seemed worse. At the apex of the left lung there was catarrh and some impairment of resonance; urine natural; no fever observed. The symptoms pointed to cerebral tumour; it was thought to be probably tuberculous. Treatment with iodide of potassium had no effect, and an operation was performed in April, 1892. Skull opened in left occipital region, but no tumour was found even on incising the cerebral cortex. Nevertheless, after the operation the appearance of the optic discs became more normal, the headache diminished, and the facial paresis became much less apparent. A considerable amount of cerebro-spinal fluid escaped into the dressings. In August, 1892, some word-deafness; stiffness of the neck noticed; patient became comatose, and died on August 27th. At the *post-mortem* examination the head only was examined: no meningitis; three very vascular glio-sarcomata of the brain were found; the first was at the base; the second, about the size of a chestnut, was on the convexity; the third, as large as a Tangerine orange was in the white substance of the left occipital lobe. The third was the largest, and also the most softened in the centre, and, therefore, the oldest; in front it reached into the parietal region; it probably caused the symptoms, and by its growth affected the hinder extremities of the two upper convolutions of the left temporal lobe, thus giving rise to the word-deafness at the end. Bruns remarks that the right facial paresis was hardly noticed on voluntary movements, such as showing the teeth; but, like that described by Nothnagel, it was more apparent on emotional movements, such as smiling. He thinks that the case supports the view that "choked discs" are due to increase of intracranial pressure, and he calls attention to the improvement in the patient's condition after the operation, although the latter was unsuccessful.

SURGERY.

(356) Enterectomy for Rupture of the Ileum.

Wiggin (*N. Y. Med. Journ.*, January 20th, 1894) reports a case of contusion and rupture of the ileum without external wound which was successfully treated by primary enterectomy and circular enterorrhaphy. The patient was a coloured boy, aged 15, who had received a kick from a horse in the right lumbar region. This injury was followed by symptoms of traumatic peritonitis. Laparotomy was performed after an interval of about thirty hours. On drawing out the small intestine inch by inch, the author found that a knuckle of ileum near the jejunum was so bruised that it was thought advisable to excise about 6 inches. After its removal a small perforation was found near the centre of the specimen near its mesenteric border. The vessels in the cut mesentery were tied separately, and the edges of the mesentery were united by a continuous suture of catgut. The divided ends of the ileum were then brought together, invaginated, and united by Maunsell's method. The general peritoneal cavity was disinfected by a 15 volume solution of hydrogen dioxide, and then filled by a hot sterilised solution of salt which was allowed to remain, the objects of this being to

lessen shock, to prevent the formation of adhesions, to aid in the readjustment of the intestines and omentum to their proper positions, to lessen the danger of septic peritonitis, and to aid by osmosis the action of the bowels. The wound in the abdominal wall was completely closed, no attempt being made to drain the peritoneal cavity. The patient made a good recovery, and on the ninth day was able to take ordinary diet. The chief causes of failure after surgical treatment in cases of this kind are delay, hæmorrhage, and failure of the suture and septic peritonitis. Delay, the author states, may be obviated by a fuller knowledge of the meaning of the symptoms of ruptured intestine, the important factors in the diagnosis being the history of injury, persistent nausea, hæmorrhage, prolonged shock, rise of temperature, increasing rapidity and weakness of the pulse, increased frequency of respiration, rigidity of the abdominal muscles, persistent pain with or without pressure, and the facial expression. Hæmorrhage, it is held, can be avoided after operation by greater care in tying the blood vessels in the mesentery, which should be secured singly and not *en masse*; failure of the suture by the employment of Maunsell's method for end-to-end union; septic peritonitis by the liberal use of hydrogen dioxide when infection is known to exist, and by leaving the abdominal cavity full of sterilised salt solution. It is expected that there is only one other recorded instance of successful primary enterectomy in a case of peritonitis without external evidence of injury.

(357) Hernia in Children.

WIRT (*Internat. Med. Mag.*, February, 1894) gives the following table of the relative frequency of the different forms of hernia as found in 19,756 cases treated in the Hospital for Ruptured and Crippled, New York City:

—	No. of Cases.	Male.	Female.	Under 14.	Right.	Left.	Double.
Inguinal ...	16,864	14,994	1,870	4,348	7,806	4,375	1,686
Umbilical ...	1,488	569	919	780	—	—	—
Femoral ...	1,135	418	717	26	700	379	56
Ventral ...	269	95	174	13	—	—	—
Total ...	19,756	16,076	3,680	5,176	8,506	4,754	4,742

He classifies treatment under three heads: (1) General treatment: (2) mechanical support; (3) operative measures. General treatment is directed toward the relief of the conditions causing the hernia, as vomiting, coughing, calculus, rectal polypus, or chronic diarrhœa, or, when necessary, to tonic treatment, outdoor exercise, etc. Mechanical treatment consists in using a steel spring truss for all reducible herniæ, except umbilical and ventral. Umbilical herniæ are treated by means of a wooden button held in place by rubber adhesive plaster. Operation for hernia requires strict antisepsis, and great care in dissecting out the sac and handling of the spermatic cord. The sac should be tied off well down in the wound, the external portion removed, and the stump returned into the abdominal cavity. The wound should be closed and dressed antiseptically, and over all a plaster-of-paris spica should be applied from ankle to umbilicus. The casing should be removed in eight days and the wound then dressed.

(358) Treatment of Tuberculosis of the Tonsils.

TUSSAU (*Lyon Méd.*, April 22nd, 1894) records three cases of tuberculosis of the tonsils. All three were men who used alcohol and tobacco to excess, and Tussau expresses the opinion that this abuse may be a predisposing cause of the tuberculous infection by producing a chronic inflammatory condition, which diminishes the resistance of the glands. He advocates strongly early resort to cauterisation, preferably with the galvano-cautery. The aim of the surgeon should be, not merely to cauterise the ulcers, but also the surrounding tissue, so as to obtain the sclerosing zone of fibrous tissue which Lannelongue seeks to obtain in articular tuberculosis. Tussau relates one case in which, after two months of treatment, the tonsillar lesions and the secondary glandular enlargement disappeared. During the treatment the patient suffered much from hectic fever, attributed to septic absorption from the ulcerations. The patient, an innkeeper, remained well for some time, but resumed his bad habits, was attacked by tuberculous peritonitis eighteen months after he had recovered from the tonsillar affection, and died of generalised tuberculosis. In another case, also, the local lesions disappeared, but the patient, a discharged soldier, continued to live a very irregular life, and died in a few months of general tuberculosis.

(359) Operative Treatment of Thrombosis of the Lateral Sinus.

CLEGHORN (*New Zealand Med. Journ.*, No. 1, 1894) puts on record a case of thrombosis of the lateral sinus from middle-ear disease, successfully treated by trephining and by ligature of the internal jugular vein. The patient was a female, aged 17, who had been treated for a purulent discharge from the left ear for four years. When first seen by the author she was suffering from high fever and vomiting, and was drowsy and very deaf. There was a small quantity of offensive pus in the left meatus, but no pain or redness behind the ear. The mastoid antrum was opened, scraped, and syringed out. As the bad symptoms still persisted, a 1-inch trephine was applied over the lateral sinus. As soon as the bone was perforated, about an ounce of pus welled up, and, after removal of the disc of bone, it was found that the external wall of the sinus had sloughed. The internal jugular vein was next divided between two ligatures applied at the level of the omo-hyoid. The sinus was plugged with iodoform gauze. A week later it was found necessary to enlarge the opening in the cranium, as the pus did not escape freely from the distal portion of the sinus. The dura over the exposed area was of an ashy-grey colour. The exposed portion of the sinus was slit up, and free exit given to about a drachm of pus. From this time the patient steadily improved. The author, in concluding, points out the advisability of opening the mastoid antrum and clearing out the tympanum in every case in which otorrhœa has persisted in spite of careful treatment for more than twelve months.

MIDWIFERY AND DISEASES OF WOMEN.

(360) Origin of Tubo-Ovarian Cysts.

ZEDEL (*Zeitschr. f. Geburtsh. u. Gynäk.*, vol. xxviii, part 2, 1894) describes a case which, he believes, throws some light on the origin of cysts which have the ostium of the tube opening into their interior. He attributes the common tubo-ovarian cyst to the fusion of a dilated tube with a cystic tumour of the ovary, and he does not make any mention of the English "ovarian hydrocele" theory. His patient was a woman, aged 21, who suffered from severe pelvic peritonitis after abortion. Abdominal section was performed and the appendages were removed. The left tube was dilated, but not completely obstructed. On the extremity of the right tube, and quite free from the ovary and broad ligament, lay a thin-walled cyst about 2 inches in diameter. It did not adhere to the neighbouring structures. The fimbriæ floated inside its cavity, into which the ostium opened freely. Zedel endeavours to explain this remarkable condition by one of two theories. On the one hand, it is always possible that Müller's duct may remain closed, the split which normally develops into the ostium not forming, or becoming obstructed. Zedel is inclined—especially on the grounds that the anomaly was not in this case bilateral—to reject this theory and to explain the cyst as a product of inflammation. Adhesions formed around the ostium; a cavity was thus developed and the adhesions, getting old and tough, separated from adjacent structures, but remained attached to the end of the tube, constituting a cyst wall. Should a cystic structure of this kind adhere to and open into an ovarian cyst, a tubo-ovarian cyst would thus be developed.

(361) Excision of the Mucous Membrane in Tubercle of the Female Bladder.

BARDENHEUER (*Centralblatt f. Gynäk.*, No. 14, 1894) has, for the third time, dissected away the entire mucous membrane of the bladder in a case of tuberculous disease of that organ. In a discussion on this case, Cahen ob-

served that before the stage of ulceration the diagnosis of the disease in question was not easy. Even after the opening of the bladder, in an operation, deposits of tubercle were not easily distinguishable from lymphomata and other multiple tumours. Total excision of the mucous membrane was necessarily followed by contraction of the bladder and incontinence of urine, even though the epithelium was renewed over small tracts near the ureters and urethra. Frank believed that the mucosa was much more thoroughly renewed; indeed, after so-called total excision small prolongations of the mucous membrane into the other layers of the bladder remained behind. Thus renewal of the membrane occurred, just as the endometrium was reproduced after delivery from the utricular glands of the uterus.

(362) Puerperal Septicæmia after Death of Fœtus: Protracted Sequelæ.

JACOBS (*Repertoire Univers. d'Obstét. et de Gynéc.*, January 25th, 1894) describes a case in which a woman, aged 23, was delivered of her second child about a fortnight before term. Labour was very slow; it commenced on the evening of April 15th, 1893; the membranes protruded from the vulvar cleft, and burst when the parts were first explored; the cervix was very long, and the fœtus too high to allow the presentation to be determined. The fœtal heart sounds were audible. The uterus was in a state of tetanic contraction. The labour did not advance for several days. On April 21st decapitation was performed; the breech presented. The fœtus, dead and beginning to putrefy, was then easily removed, head after trunk. The most strict antiseptic precautions were taken. A rigor occurred on the fourth day, and recurred very frequently; on May 12th grave pulmonary symptoms set in, and right parametritis was diagnosed. By July 12th a large parametric abscess had formed; expectoration was fœtid and puriform. The abscess was opened, washed out, and plugged with iodoform gauze. A second purulent cavity opened spontaneously a few hours later. At once the patient's condition improved greatly. By the end of July she complained of pain in the right flank. On August 3rd an incision was made below the ribs in the axillary line, and a quantity of pus escaped. Twelve days later the patient was able to walk. By October she was quite well. The pulmonary disease had disappeared, the uterus was movable, and menstruation had returned.

(363) Acute Infection in Pregnancy Simulating Acute Yellow Atrophy.

CROWDELL (*Boston Med. and Surg. Journal*, February 15th, 1894) describes a case of jaundice and sudden suppression of urine in a primipara, aged 42, at the sixth month. On the seventh day labour was induced by means of a bougie, the uterus acted, and a macerated fœtus was removed. For three days no urine had been passed. Next day five ounces were drawn off: convulsions and delirium occurred, ending in death. The jaundice was deep from first to last. The uterus was soft, and of a pale yellowish colour; some adherent clots lay on its inner surface. The liver seemed somewhat larger than usual; it was firm and smooth, and the gall bladder was not distended. None of the bile ducts were obstructed. Cultures made from the viscera gave, in all cases, pure colonies of streptococci. They were most abundant in the uterus and spleen. The cultures from the liver and kidney gave only a few colonies. There was clearly general infection proceeding from the uterus. Crowdell admits that the precise meaning of the jaundice remains uncertain. In spite of the anuria and jaundice the patient felt quite well two days before her death, a subjective symptom often serious in septic cases.

(364) Swallowing Meconium: Pneumonia and Erysipelas in the Newborn.

TARNIER (*Journal des Sages-Femmes*, April 1st, 1894) recently lectured on an infant, which was lying ill with erysipelas in his wards. The mother was delivered at term. The fœtal heart sounds were becoming irregular; the membranes ruptured spontaneously, and the liquor amnii was deeply coloured by the meconium. The forceps was applied, and a live child was delivered without difficulty. On the seventh day the child was seized with convulsions, and on the eighth pneumonia set in. This complication might have been due, Tarnier admits, to a chill. He notes that the child was born in foul liquor amnii; in making its first respiratory efforts some meconium might have found its way into the lungs. It is known that the absorption of meconium in amniotic fluid is a cause of pneumonia in infants. The pneumonia in this case was progressing favourably, but on the day before Tarnier gave the clinical lecture, a patch of erysipelas appeared on the right cheek. Once this disease was very common in the newborn, but thanks to antiseptics it is now rarely seen. It is a very grave complication, as not only may a mother with puerperal fever communicate the disease to her child in the form of erysipelas, but it is equally certain that erysipelas developed first in the infant may either be communicated to the mother as erysipelas or may set up a disease having all the characters of puerperal fever. Tarnier observes that whilst in adults the edge of an erysipelatous patch is sharply defined, slightly raised, and tender, in infants the tenderness cannot be so localised, whilst the edge of the patch is seldom raised or well defined.

THERAPEUTICS.

(365) Serum Treatment of Diphtheria.

EHRLICH, Kossel, and Wassermann (*Deut. med. Woch.*, April 19th, 1894) relate their experiences in continuation of the researches of Behring in Professor Koch's Institute. The serum was obtained from goats artificially made immune; the milk from these animals also contains the protective substances. The immunity was induced by giving them increasing doses of dead diphtheria cultures. The authors adopt the method of ascertaining the amount of antitoxins present by means of neutralisation, making use of a virus equivalent to 3 in 1,000 g. body weight. The immunity-producing unit is such that 0.1 c.cm. suffices to neutralise 0.8 of the virus. The authors have treated 220 unselected cases of diphtheria in children with the curative serum. The injections were never known to be harmful. At first a single injection equivalent to 130 to 200 immunity units was used, but later the dose was repeated in severe cases. Of the 220 cases, 67 were tracheotomised, the mortality being 44.9 per cent. Among the remaining 153, the mortality was only 23.6 per cent. In 6 treated on the first day, there was no death, and in 66 treated on the second day there were recoveries amounting to 97 per cent., whereas in 23 treated on the fifth day, the percentage of recoveries fell to 56.5 per cent. The steady decrease in the number of recoveries observed here according to the time when the patient was first treated is not seen under any method of treatment, whereas it is in keeping with the experimental evidence. In one-half the fatal cases, the disease was so advanced as to make recovery almost out of the question. In the other half perhaps several might have been saved if sufficient serum had been at hand to give several doses. Some children showed great improvement in the first two days, but eventually became slowly worse, and died ten to fourteen days later of nephritis, and especially of cardiac failure. With larger doses an effect on the temperature and pulse, critical in character, was mostly observed. Following their experience, the authors hope that the number of cases of nephritis and paralysis may be lessened. They conclude that (1) the serum should be used as soon as possible; (2) in slight cases 200 units, but in severe as well as tracheotomised cases 400 units should be given; and (3) the treatment should be repeated on the same or the following day according to the severity of the symptoms; the total amount given may be 500 to 1,000 or 1,500 units. These figures apply only to the serum used by the authors.

(366) A New Treatment for Diphtheria.

BIANCHINI (*Gazz. degli Ospitali*, March 20th, 1894) describes a method of treating diphtheria which consists in the local application to the neck of the patient of fomentations moistened with a 2 per cent. solution of carbolic acid in lead lotion, these being applied at as early a stage as possible, with the idea of acting on the micro-organisms of the local lesions, and thus preventing their further spread. Application in this way secures the absorption of the phenol, both through the skin, which appears to be easy in the case of children, and also in the form of vapour through the mouth. This has been supplemented in the most serious cases by painting

the pharynx, etc., with the following pigment: Salicylic acid, 3 grammes; absolute alcohol, 20 grammes; resorcin, 2 grammes; glycerine, 10 grammes; to be applied two or three times daily. The result has been very satisfactory: out of forty-five cases of varying severity, there were only two deaths, the duration of treatment varying from six to eighteen days on an average, but in one case being as long as thirty days. To these forty-five cases are appended notes of nine others treated by other practitioners in every case successfully.

(367) The Absorption of Iron.

Macallum (*Journ. of Phys.*, April, 1894) finds that inorganic iron is absorbed (in guinea-pigs) by the intestinal mucous membrane. Whatever iron salt was administered, whether the phosphate, chloride, sulphate, or "peptonate," when the dose was not very large, the evidence of its absorption was very plain in the villi of the upper end of the small intestine, but in them only. When the dose was large the presence of iron in the villi was observed far down the intestine, but the reaction for iron was less distinct the more remote the villus from the pylorus. With very large doses of the phosphate or "peptonate" the villi near the cæcum gave an intense reaction. It is suggested that the reason for this difference is that when the dose of iron is small, and when consequently the quantity of iron in the chyme is small, it is wholly precipitated by the alkaline, biliary, and pancreatic secretions; as these three fluids do not at once and completely mingle, the iron is not at once precipitated, and consequently absorption goes on in the first few inches of the intestine. The acidity of a larger dose of iron salt may be sufficiently great to destroy the alkalinity of the chyme after admixture with the bile and pancreatic juice, and, when this is the case, the unprecipitated excess of iron salt will go on down the intestine, and be absorbed lower down. When the oxide or the reduced metal is given a certain quantity of the acid of the chyme is taken up in effecting their solution, and therefore in the intestine the alkalinity of the bile and pancreatic juice must go further in the precipitation of the iron. Speaking generally the larger the amount of free acid in the chyme the greater must be the quantity of iron absorbed. Sulphides in the contents of the bowel will also precipitate the iron still in solution. On an ordinary diet, therefore, the extent of intestinal mucous membrane which absorbs iron must be, in proportion to that which does not, remarkably small. Macallum, however, thinks it possible that in anæmia there may be a diminution in the amount of the biliary and pancreatic secretions, a condition which, for the reason above stated, would prevent precipitation and thus favour absorption. His grounds for stating that iron salts are absorbed, a fact which has been denied, are drawn from microscopical examination of the mucous membrane under various conditions. In well-fed guinea-pigs taking iron the intestinal mucous membrane, after treatment with alcohol, assumes, when treated with ammonium sulphide, a more or less dark colour, due to the formation of sulphide of iron, which, under the microscope, is seen to be limited to the subepithelial portions of the tips of the villi. Here it is deposited in leucocytes which surround the end of the lacteal vessel. When the dose of iron is larger, or, apparently, when the administration is continued for a long time, the iron is present also in the epithelial cells themselves, and passes from them by a process of internal secretion into the plasma of the venules. These venules are the portal radicles, and leucocytes containing iron are found in capillaries of the liver, and the peripheral cells of the lobules contain iron. Similar leucocytes are found in the spleen. Beyond this point the iron was not traced, and the question whether it is ultimately assimilated and fixed as inorganic iron remains unsettled; but the research serves to prove that iron salts have not, as has been asserted, merely a stimulant action on the epithelial cells of the mucous membrane. Any stimulant action they may exert is a concomitant of their absorption. Though some of the subepithelial leucocytes of the villi appear thus to carry part of the absorbed iron into the general circulation, the more important agent in the transference of the inorganic iron from the villi to other parts of the body is the blood plasma.

(368) Electrical Treatment of Obesity.

Imbert de la Touche (*Rev. Internat. d'Electrothérapie*, August, 1893) has obtained favourable results from electrical treatment in certain cases of obesity in which the symptom had developed as part of a general disorder of nutrition, or neurasthenic state in women. Regulation of the diet, as usually prescribed for the diminution of stoutness, made the patients worse. Five cases are reported. The method employed was by insulation and the statical charge, daily or three times a week. Excellent results followed in every case the symptoms of debility disappeared, the abnormal stoutness disappearing also. The author writes enthusiastically of the efficacy of this mode of treatment.

PATHOLOGY.

(369) Influence of Light on Pyogenic Microbes.

P. A. Khmelevsky (*St. Petersburg Inaugural Dissertation*, 1893. No. 46, pp. 40) made a series of experiments to determine the effects of electrical and solar light on the staphylococcus pyogenes aureus and albus, bacillus pyocyaneus and streptococcus erysipelatis and pyogenes. The chief conclusions arrived are as follows: (1) Both electrical and solar light undoubtedly have an inhibitory influence on the growth of the microbes, the former retarding their development, while sunlight destroys their vitality within six hours or so; (2) the detrimental effects upon the bacteria are developed not only by chromatic and chemical rays of the spectra, but also by thermal ones; (3) except red and infra-red rays of the spectra, all portions of the latter prove to affect most powerfully the staphylococcus pyogenes albus and bacillus pyocyaneus; the growth of streptococcus erysipelatis and pyogenes is retarded to a relatively less extent, while staphylococcus pyogenes aureus proves to be the stablest of the five species. No difference in the action of various portions of the spectra can be observed in the case of the staphylococcus; (4) under the influence of ether light, the movements of bacillus pyocyaneus become markedly slower; after exposure to sunlight for six hours they cease altogether; (5) the elaboration of pigment by bacillus pyocyaneus, and—though to a less degree—by staphylococcus aureus, decreases; this is especially marked when the microbes are exposed to sunlight; (6) exposure of agar-agar and jelly to light makes the media less favourable for the growth of bacteria, while broth remains unaffected by light; (7) exposure of the microbes to sunlight seems to mitigate their virulence.

(370) The Resistance of Typhoid Bacilli to Drying and their Transmission by Air.

Uffelmann (*Centralbl. f. Bakt.*, February 5th, 1894) has investigated these points. Various materials, mentioned below, were impregnated, generally after sterilisation, with water and broth containing typhoid bacilli, and subsequently kept at 14° to 16° R. in the shade. Nutrient gelatine was then inoculated with small portions of the material at varying periods after impregnation of the latter, and in due course was examined for the bacilli. The experiments showed that these organisms resist drying and retain their power of development (1) in garden earth 21 days, (2) in white filter sand 82 days, (3) in sweepings from house and street over 30 days, (4) on linen 60 to 72 days, (5) on buckskin 80 to 85 days, and (6) on wood 32 days. In a moister atmosphere it is probable that the duration of life of the bacilli would be longer. Uffelmann's experiments further establish that typhoid bacilli are carried into the air with dust from street, floor, and clothing, and are thus enabled to infect food stuff, such as milk. The experiments, in fact, prove that these organisms are transmitted through air. In the demonstration of typhoid bacilli the author applies the following criteria: (*a*) The appearance of the colonies under ×100, (*b*) the shape and mobility of the organisms (in each case comparison with typical colonies and organisms), (*c*) the behaviour in 2 per cent. lactose gelatine (no fermentation), (*d*) the effect produced on milk (no clotting), (*e*) the mode of growth on methyl-violet gelatine (see *Berl. klin. Woch.*, 1891, No. 35, for description of this test). Instead of citric acid the author now uses pure carbolic acid, 0·1 c.cm. to 100 c.cm. of the nutrient gelatine).

AN EPITOME OF CURRENT MEDICAL LITERATURE.

MEDICINE.

(371) Perforative Ulcerative Enteritis.

MARAGLIANO (*Berl. klin. Woch.*, March 26th, 1894) reports three such cases with no evidence whatever of enteric fever or tubercle being present:—(1) A strong man took a purgative on account of constipation on April 23rd; later he had dyspeptic symptoms and abdominal pain; on May 5th there was vomiting, which had a fæcal odour; on admission three days later there was considerable abdominal distension; an exploratory puncture gave pus; the patient, desperately ill, died in two days; there was acute fibrino-purulent peritonitis with several ulcers in the small intestine, two of which had perforated. (2) A man, aged 33, had suffered from abdominal pain on and off for several years past; at the end of April the pain became intense; on May 14th there was in addition vomiting, which persisted; on admission the abdomen was distended; he died two days later; in addition to the peritonitis there was a perforating ulcer in the ileum; pseudo-membrane closed the opening so as to prevent the exit of fæces. (3) A young man, aged 23, was seized after an error in diet with vomiting and constipation; a week later the abdomen was distended; he was admitted twelve days after the onset with fæcal vomiting; an exploratory puncture yielded pus; the abdomen was opened by Caselli and 50 cm. of intestine (including the site of the perforating ulcer) resected, but the patient died five hours later. The author believes that these cases are examples of very acute enteritis with the rapid formation of several simple ulcers which may perforate. Bacteriological investigations revealed a micro-organism very like the B. coli communis. The author refers to other similar cases which occurred about the same time. He would divide the disease into three stages—(1) a functional stage, in which the soil became suitable to the growth of the micro-organism; (2) the stage of enteritis lasting about five or six days; (3) stage of ileus corresponding to the perforation. The diagnosis should be made by help of (*a*) exact history, (*b*) the presence of fever, and (*c*) purulent exudation into the abdomen. The diagnosis may be very difficult, and possible only in the third stage; exploratory puncture is harmless; the prognosis is necessarily very bad. As the diagnosis is unfortunately possible only after perforation, the condition of the patient makes any treatment hardly useful or possible.

(372) The Value of Sugar and the Effect of Smoking on Muscular Work.

As the result of a series of experimental researches in the Physiological Institute, Turin, as to the value of sugar and the effect of smoking on muscular work, Vaughan Harley (*Journ. of Phys.*, vol xvi, Nos. 1 and 2, March, 1894) has come to the following conclusions: (1) The periods of digestion as well as the kinds of food taken have a marked influence on voluntary muscular energy. (2) Irrespective of the influence of food, there is a periodical diurnal rise and fall in the power of performing muscular work. (3) More work can be done after than before midday. (4) The minimum amount of muscular power is in the morning about 9 A.M., the maximum about 3 in the afternoon. (5) Regular muscular exercise not only increases the size and power of the muscles, but has the effect of markedly delaying the approach of fatigue. (6) The amount of work performed on a diet of sugar alone is almost equal to that obtained on a full diet, fatigue, however, setting in sooner. (7) In fasting, large quantities of sugar (500 g.) can increase the power of doing muscular work during 30 voluntary contractions from 26 to 33 per cent., while the total gain in a day's work may be 61 to 76 per cent., the time before fatigue sets in being also lengthened. (8) The effect of sugar is so great that, when added to a small meal, it can increase the muscular power during 30 contractions from 9 to 12 per cent., while the total increase in work may be from 6 to 39 per cent., the approach of fatigue being at the same time retarded. (9) When added to a large mixed meal, sugar can increase the muscular power of 30 contractions 2 to 7 per cent., the increase in total work being 8 to 16 per cent., and a marked increase in the resistance to fatigue is shown. (10) Two hundred and fifty grammes of sugar taken in addition to a full diet increases the day's work; the work accomplished during 30 voluntary muscular contractions shows a gain of from 6 to 28 per cent., the total day's work giving an increase of power 9 to 36 per cent., and the time before fatigue sets in being lengthened. (11) Moderate smoking, although it may have a slight influence in diminishing the power of doing voluntary muscular work, neither stops the morning rise nor, when done early in the evening, hinders the evening fall. (12) Sugar taken early in the evening is capable of obliterating the diurnal fall in muscular power that occurs at this time, and increases the resistance to fatigue.

(373) Megalogastria and Gastrectasis.

RIEGEL (*Deut. med. Woch.* April 12th, 1894) first draws attention to the fact that all methods of examination, including that of gastric chemistry, should be used. He relates the following case in a man, aged 39, with slight aortic disease, who had a very large stomach and yet no gastric symptoms. When the stomach was distended with gas its lower margin stood at three fingers' breadth below the navel, while the upper limit was in the usual place. It was not an example of gastroptosis nor yet of vertical position of the stomach. The chemical and motor functions were absolutely normal. The examination in the morning showed the stomach to be empty. It was thus obviously not a case of gastrectasis. Distending the stomach with gas is the most reliable test as to size. The stomach may be much larger or smaller than usual yet functionally healthy. The determination of its functional capabilities may thus be much more important than any question of mere size. Generally speaking, in dilatation disturbed function is associated with motor loss. The motor power is best determined by the disappearance of the test breakfast within proper limits of time. The condition of large stomach (megalogastria) in this patient is more of an anatomical than a pathological condition. Cases may be divided as follows—(1) the stomach of normal size yet diminished motor power (simple atony); such insufficiency may lead to dilatation; (2) increased size with deficient motor power, the so-called atonic dilatation; and (3) increased size without change in the motor power, as in the above-named case. Megalogastria is frequently overlooked: simple atony or insufficiency may produce few symptoms. Gastric dilatation, independent of pyloric obstruction, is, in the author's opinion, hardly less frequent than that secondary to such obstruction. The earlier such gastric or atony insufficiency is treated, the more surely can the consequent dilatation be warded off. Among other things, the question of rest to the organ is important; this is effected by washing out the stomach and regulating the times of meals. An elastic belt, electrical treatment, massage are also useful.

SURGERY.

(374) Trephining in Gunshot Wounds of the Cranium.

QUÉNU (*Revue de Chir.*, April, 1894) for the last five years has advocated preventive trephining in cases of gunshot wound of the cranium, holding that subsequent mischief is always the result of infection. Trephining in itself is quite free from danger, and it would be useless and dangerous to refrain from this operation until after the appearance of meningo-encephalitis. It is possible that bullets are aseptic, but there is no proof of this, and certainly the fragments of clothing and the hairs which they traverse and carry with them are not so. At a recent meeting of the Société de Chirurgie Quénu reported 3 cases of gunshot wound of the head treated by trephining. In the first case the operation was not performed before the end of the third week, when pus had collected under the dura at the seat of injury. A fragment of lead was removed from the brain, and the suppurating cavity was drained. The patient, it was thought, had recovered, but six weeks after the operation he died in an attack of epileptiform convulsions. The second case, which was one of suicidal injury of the cranium by a revolver, was also treated

expectantly, but on the fourth day, as the patient complained much of headache, the author enlarged the external wound, trephined the skull, and exposed five balls—two fixed in the bone, two lying on the dura, and the fifth embedded in the brain. The subject of this case recovered. The third was a case of penetrating gunshot wound of the forehead. Notwithstanding the absence of bad symptoms, Quénu opened the skull and incised the dura. No bullet was found, but as there was a second wound at the back of the head, it was concluded that it had made its exit. This patient also recovered. Quénu holds that in cases of this kind it is advisable to explore without delay, and to render the seat of injury aseptic by trephining. The surgeon is thus enabled to extract the projectile, and any fragments of bone, together with hair and clothing. As bad results can be thus prevented, abstention in cases of penetrating gunshot wound of the head would be regarded by Quénu as faulty practice.

(375) Angina Ludovici.

HUGUET AND BOVIS (*Arch. Gén. de Méd.*, April, 1894) commence a study of this subject. Inflammations of the mouth play an important part in causation, dental affections being frequently present. Sometimes it appears after some general disease, or it may result from extension from adjacent parts. Albuminuria, alcoholism, diabetes have some influence in producing it Females are much less liable than males. The bacteriology still remains obscure. The authors believe that the situation of the pus is often intramuscular. The pus varies in character; frequently it is sanious, fœtid, or gangrenous. The extent of the disease also varies. The integuments are involved sooner or later. The authors would divide these sublingual phlegmons into (1) anterior, which may be submucous or deep, the latter being again subdivided into (*a*) the septic or gangrenous, and (*b*) the simple phlegmonous form; and (2) posterior, being situated in the glosso-thyro-epiglottic space. In the septico-gangrenous form there is fever, pain, and later swelling in the submaxillary region. By the third to the fifth day the characteristic symptoms have developed. The edge of the maxilla is not distinct, and the cervico-facial groove has disappeared or appears pushed down. The skin is movable over the swelling, or sometimes it is reddened and slightly œdematous. The swelling is hard and non-fluctuating. The mucous membrane of the floor of the mouth is pushed up by this hard swelling. The movements of the head are painful. The masseters are contracted to a variable degree. Deglutition is difficult. Salivation may be present. Dyspnœa often appears later. The pus tends to make its way to the surface, but death may occur before this from septic intoxication or asphyxia. In the septico-gangrenous form spontaneous recovery is almost impossible. In the simple phlegmonous form the pus is not gangrenous, and spontaneous recovery is possible. The authors know of only one example of the posterior variety of these phlegmons.

(376) Surgery of the Trifacial Nerve.

H. REINEKING (*Internat. Med. Mag.*, February, 1894), after briefly reviewing the literature of this subject, and considering some of the important modifications as made by Carnochan, Thiersch, Heuter, Koenig, Leuche, and Nussbaum, refers more especially to the removal of the Gasserian ganglion and to intracranial neurectomy as practised in the last three years by Horsley, Andrews, Rose, Hartley, and others. He then reports the following case: A farmer, aged 63, gave a history of pain in the right supraorbital region for ten years, and in the right infraorbital and right occipital regions for five or six years. Within the last two or three years the pain had extended to the upper molar teeth. The case was one of very severe chronic intractable neuralgia of some of the branches of the ophthalmic and superior maxillary divisions of the trifacial nerve, accompanied by less severe but equally obstinate neuralgia in the region of the great occipital nerve. Neurectomy of the frontal and infraorbital nerves was decided on. The supraorbital nerve was exposed at its point of emergence from the supraorbital foramen, liberated by chiselling away a small portion of the ridge, and separated as far back in the orbit as possible. By traction, twisting, and a little dissection of the nerves, nearly all the orbital portion and its branches were removed. The infraorbital was exposed by removal of the roof of the infraorbital canal, and grasped and twisted off in the same manner as before. A small opening into the antrum of Highmore was accidentally made, and was drained for three or four days. The wound healed by first intention, and all pain disappeared in about three days. The points in the treatment on which the writer lays special stress are: (1) Thorough following up, extracting, and dissecting out of the peripheral, muscular, and cutaneous branches; (2) slow torsion and general stretching of the central stump until it gives way.

(377) Gunshot Wound Penetrating the Brain: Spontaneous Cure.

E. ARCOLEO (*Gaz. Med. Lombarda*, March 24th, 1894) reports the following case. The patient received a bullet wound in the right frontal region near the supraorbital ridge. No wound of exit was discoverable, and on exploring with the sound no foreign body could be found. There was complete left hemiplegia, with some contracture of both limbs. The knee and ankle reflexes were exaggerated; the cutaneous reflexes were entirely absent on the left side, but tactile, thermal, pain, and electric sensation, and the muscular sense were normal in both limbs. The wound was enlarged and irrigated with corrosive sublimate (1 in 1,000), and dressed with iodoform. The patient recovered complete use of his limbs in six weeks. The author is of opinion that the bullet had lodged in a tract of cortical motor fibres in the anterior portion of the posterior segment of the internal capsule, producing a comparatively trifling lesion (hæmorrhage and limited destruction of tissue), so as to cause motor paralysis only. He concludes that the resorption of the extravasated blood may alone account for the patient's rapid recovery, and cautions the surgeon against interfering by exploration or otherwise in cases of this description, unless symptoms of inflammatory reaction, meningo-encephalitis, Jacksonian epilepsy, etc., set in.

MIDWIFERY AND DISEASES OF WOMEN.

(378) Senile Endometritis.

SKENE (*American Journ. of Obstet.*, April, 1894) has communicated to the Medical Society of the State of New York a monograph on this disease, interesting, on account of its resemblance to incipient carcinoma. Discharge was the first symptom, with pain and constitutional disturbance if the cervix were obstructed. Slight chronic sepsis sometimes was present; dyspepsia and a dry bronzed skin, suggestive of malignant disease, were often observed. The discharge was less tenacious than in leucorrhœa, and its colour indicated that it was sero-purulent. The microscope was needed to diagnose senile endometritis from specific discharges and malignant disease. In adenoma there was menorrhagia, which did not occur in senile endometritis. Astringent douches were sufficient when the disease was confined to the cervix. Iodoform freely applied to the interior of the uterus was very efficient when the disease extended high up. Skene laid stress on the fact that displacements, or more or less stricture of the cervix were often present, and in such cases must be corrected or cured. Gradual dilatation and drainage were needed for stricture; rapid dilatation was dangerous as an old uterus was easily torn.

(379) Fracture of Fœtal Bones during Delivery.

TARNIER (*Journal des Sages-Femmes*, April 16th, 1894) publishes a clinical lecture on a case of fracture of the clavicle. The mother had borne ten children; the pelvis was slightly contracted; the presentation was left occipito-transverse. After complete dilatation the head receded and the feet prolapsed. Demelin drew them down, and in so doing found that the cord was prolapsed, lying between the legs. He had first to protect it from pressure and then to slip it over one foot, else the body of the fœtus would have come down astride of the cord—an obviously dangerous complication. The legs were drawn down, but the arms slipped up during traction. The posterior arm was carefully brought down without much trouble. The anterior arm proved more difficult. In working his ring-finger cautiously up the outer side of

the arm the operator pressed that finger on the shoulder in order to get a firm but safe hold of the arm. Immediately a sensation as though a bone had cracked was felt. The child was delivered and a subperiosteal fracture of the femur was discovered. The corresponding arm was bandaged to the chest, and the child did very well. Tarnier notes that the humerus is the bone most frequently fractured during obstetric manipulations. It must be grasped very carefully between the thumb and the fore and middle fingers. A very little lateral pressure or traction is sufficient to snap a humerus. Tarnier found in delivering dead fœtuses that the bone is as brittle as a thin wooden match. He states that he has never broken a fœtal humerus involuntarily, the accident only occurring, in his experience, when he had to deal with a dead fœtus, so that no special care to save the arm was needed. Next to the humerus the femur is most frequently broken at birth. Fracture of the tibia and fibula are not so frequent; fracture of the clavicle is very rare. Tarnier knows of only one other in his own experience, and in that case the cause of the fracture, which was not detected till a few days after birth, remains a mystery.

(380) Cancer of the Ovary in a Child.

GUSSENBAUER (*Wiener med. Wochenschr.*, No. 17, 1894) operated last year on a little girl, aged 8. A tumour, double the size of a man's fist, occupied the right half of the abdomen, and had been diagnosed as a sarcoma or teratoma. It proved to be a carcinoma, and was successfully removed. Half a year after the operation the patient was in good health, and there was no sign of recurrence.

(381) Gastro-intestinal Hæmorrhages in the Newborn.

HERRGOTT of Nancy (*Arch. de Tocol. et d' Obstét.*, April, 1894) attributes these hæmorrhages to malformation of the left auricle and ventricle. Only 2 cases of primary hæmorrhage from the alimentary canal have been observed in 3,000 children born in Herrgott's obstetric department at Nancy. The second occurred recently. The mother was 42. Hydramnion complicated her tenth pregnancy, but labour occurred at term. The right shoulder presented, turning was performed, and the child delivered in a state of suspended animation; after insufflation it recovered. It was a male, weighing 6½ lbs. A few hours after birth it turned very pale and vomited blood; when but 10 hours old it died from recurrence of the hæmorrhage. The mother declared that she had lost two other children in the same way, but neither she nor her husband had been subject to hæmorrhages. The blood of the fœtus was found to be healthy; there was no evidence of syphilis either in the placenta or in the fœtal organs, nor were any ulcers detected in the mucous membrane of the stomach and intestines. The liver was hyperæmic, and there were ecchymoses under Glisson's capsule. The right chambers of the heart were dilated, but the walls and cavities of the left auricle and ventricle were imperfectly developed. Herrgott explains how this malformation involved pulmonary and systemic congestion and consequent hæmorrhage from the engorged veins of the intestinal mucous membrane, the left auricle being too small to receive all the blood issuing from the pulmonary veins.

(382) Child Crying in Utero during Version.

GRANDIN (*New York Journ. of Gyn. and Obst.*, April, 1894) observed this phenomenon during turning. The child was large and the pelvic brim contracted. As the foot appeared at the vulva, the child's head occupying the upper uterine segment, a distinct cry was heard resembling that of an angry child. With each traction of the foot the cry was repeated, being heard by Grandin, Marion Sims, and two nurses. With emergence of the trunk the crying ceased. The child was born asphyxiated, but speedily revived. The air passages contained no liquor amnii. M. McLean has recorded a similar case. The explanation was simple: air obtained entrance into the uterus during the first step in podalic version. S. Marx, in a case of contracted pelvis, attempted to deliver rapidly by introducing the hand and seizing the leg. The child cried during this manœuvre, as though smothered under a pillow. It was born asphyxiated, and could not be resuscitated. H. L. Collyer heard a child cry several times when traction was being made on its head with forceps. At once turning was performed, but the child was born dead.

(383) Puerperal Convulsions and True Epilepsy.

PAQUY (*Arch. de Tocol. et de Gynéc.*, April, 1894) recently read notes at a meeting of a society on a patient who was frequently attacked with epileptic fits. She became pregnant, and at delivery had 119 fits. The temperature rose to over 102°. The diagnosis between puerperal eclampsia and epilepsy depends on the history and on the absence of album inuria in simple epilepsy Charpentier observed a similar case. An epileptic patient had convulsions during her first labour, became pregnant again, and died after a succession of fits during the fourth month. He agrees with Paquy as to albuminuria as a diagnostic factor.

THERAPEUTICS.

(384) Malakin.

O. VON BAUER (*Wiener med. Blätter*, 1894, Nos. 11 and 12) gives cases from the wards of Professor Drasche at Vienna to illustrate the antirheumatic, antipyretic, and anodyne action of malakin. Malakin is a salicylic deritive, which, to judge from its chemical composition, should combine something of a salicylic action with that of phenacetin. It crystallises in fine yellow needles, which are insoluble in water and alcohol, but soluble in soda solution; it has a slightly bitter taste, and on account of its mild action has been named malakin. Jaquet's experiments (see EPITOME, December 2nd, 1893, par. 460) showed that rabbits could quite well bear a dose of 2 grammes, and no fall of blood pressure was observed. Bauer draws the following conclusions from his cases: (1) Malakin has an antirheumatic action, but a less certain one than salicylic acid, though it is free from the unpleasant symptoms, such as tinnitus, sometimes produced by the latter drug. (2) Malakin lowers the temperature and reduces the subjective symptoms of fever, though its antipyretic action is less than antipyrin and phenacetin. The object of an antipyretic is, however, to reduce high fever, and not necessarily to bring the temperature down to normal. Malakin may be sufficient, especially in the fever of consumptives, in whom strong antipyretics may induce grave symptoms of collapse. (3) As an antipyretic it is least useful, and only to be employed in preference to antipyrin and phenacetin when a special idiosyncrasy or weakness renders the employment of these drugs inadvisable. Malakin may be given in ½-gramme doses, repeated at intervals according to its effect and the result to be attained. In one case, however, after eight ½-gramme doses given with intervals of one hour, unpleasant symptoms of collapse followed. The temperature of this patient was, however, peculiarly easily affected, a cold water ablution early in the morning sending it up to 40° C. This sensitiveness may perhaps be explained by the presence of sclerotic patches in the medulla oblongata, and these were actually found at a subsequent necropsy.

(385) Peptonuria produced by Medicinal Substances.

PICCININI, in a preliminary paper (*Gazz. degli Ospitali*, March 15th, 1894), states that after administration of guaiacol, antifebrin, or salicylate of soda, peptone is to be found in the urine. The test applied is as follows: to 200 c.c. of urine are added 120 grammes of powdered ammonium sulphate, the resulting mixture being filtered when the salt has dissolved. The precipitate which remains on the paper is dissolved in from 15 to 20 c.c. of water, and the albumen and biuret tests applied.

(386) Thermal and Mechanical Stimulation of the Heart.

HEITLER (*Centralbl. f. d. ges. Therap.*, April, 1894) describes the effects he was able to produce on a dilated and hypertrophied heart by the application of warmth. Vapour baths and hot cloths were used. The applications led to a contraction of the area of dulness and increase in the fulness of the pulse. A more lasting effect was produced by rubbing the chest with warm cloths. The author then investigated the results of percussion of the cardiac area, his attention having incidentally been

directed to this variability during a prolonged examination of a heart. Direct percussion by means of finger and hand was practised energetically during several minutes in a case of hypertrophy and dilatation of heart associated with alcoholism, in 2 cases of atheroma, 1 of chronic myocarditis, 1 of dilatation caused by Bright's disease, and others. Two minutes sufficed to produce a change, which was maintained for ten to fifteen minutes, and in one case only no contraction was observed, owing, as the author believes, to the percussion having been continued with for too long a time. The description of the cases, treatment, and results follow.

(387) The Introduction of Drugs through the Skin by Electricity.

Aubert (*Rev. Internat. d'Electrothérapie*, September, 1893) reports a careful series of experiments upon electrical osmosis, or cataphoric medication. In many of the trials pilocarpin was used, as its action upon the sweat glands could be so easily recognised. The results show that drugs can be made to penetrate the skin by battery currents, and in a less degree by statical sparks, and by induction currents. The penetration occurs only at the positive pole, but with alternating currents the effects may be manifested at both electrodes. With a current of 10 to 20 milliampères for five minutes a thorough penetration of pilocarpin can be brought about; with stronger currents the time is shortened. No evidence of transference of the drug from the positive to the negative pole was observed.

(388) Scopolamine.

Gutmann (*Therap. Monatsh.*, March, 1894) has made numerous observations with scopolaminum hydrobromicum in solutions of 1 in 1.000, 2 in 1.000, and 4 in 1.000. In the normal eye the second solution produced mydriasis maxima in 10 to 13 minutes in the inflamed eye after 10 to 35 minutes, 4 to 7 days being required for the narrowing of the pupil, and 3 days for the return of pupillary reaction to light; 15 to 20 minutes produced some anæsthesia of the cornea. The accommodation became paralysed after three minutes, this condition reaching its height after 40 minutes, when it was more intense than after a 1 per cent. atropine solution. In practice it was very valuable in keratitis, parenchymatosis, and iritis, but even the 2 in 1,000 solution was no more effective than a 1 per cent. atropine preparation. Scopolamine, being non-poisonous, can be used every hour, and even under these conditions but rarely produced temporary dryness of the throat, which, however, required no treatment. It was thus most valuable in the case of children, in whom it can be used two or three times a day during long periods, and without unpleasant results.

(389) The Electric Light Bath.

Kühner (*Internat. klin. Rundschau*, April 18th, 1894) describes this bath, and to some extent its use. A chamber covering a square metre and 2½ metres high, such that a patient can sit in it, is provided with walls covered with looking glass. It is fitted up with forty to fifty electric lights, and the light thus falls on all sides of the patient. Ventilation is adequately provided for. In some cases the chamber is made so as not to include the patient's head. He remains in the bath from fifteen to thirty minutes. The chamber is evenly warmed by the electric light. The temperature may thus be raised to 35°, 45° C., or more; it thus constitutes a warm bath. It may also take the place of the sun bath. The author would attribute a specific effect to it.

PATHOLOGY.

(390) The Morbid Anatomy of Rabies.

Golgi (*Berl. klin. Woch.*, April 2nd, 1894) points out that his method is not only intended for the study of the normal structure of the nervous system, but is also useful in pathological investigation. He draws attention to the following morbid changes in rabies: (1) Changes in the structure of the nucleus. All the various phases of karyokinesis may be simulated, yet no true nuclear division may take place. (2) Changes in the body of the cell, such as vacuole formation, bladder-like transformation of the cells. Changes may also be recognised by methods directed to the study of the outer form of the cell. Here varicose appearances of the cell processes may be seen. Granular fatty changes may also be present. An important change lies in the displacement of the nucleus. The periphery of the cell becomes homogeneous. Granular fatty changes are also seen in the neuroglia cells. (3) Changes in the intervertebral ganglia. The author would look upon these anatomico-pathological changes found by him as characteristic, while here not only the sum total of the changes, but also their order of occurrence and mutual interdependence, are taken into consideration. The morbid process is a parenchymatous encephalo-myelitis of which the exact exciting cause is as yet unknown. The changes are thus grouped: (1) Appearance of nuclear chromatin, peculiar cell division (neuroglia cells and vascular endothelium), nuclear movement also in nerve cells, diffuse vascular distension, and leucocyte infiltration revealing a condition of irritation; (2) swelling, vacuolation, changes of form, granular appearance of nerve cells and neuroglia; and (3) more advanced changes in the nerve elements. The changes in the first group may be seen as early as five days after inoculation.

(391) Immunisation against the Cholera Bacillus.

Sabolotny (*Centralbl. f. Bakt.*, February 5th, 1894) reviews the experimental work done in the direction of infection and immunisation in reference to the cholera bacillus, and gives the result of his own investigations. He finds that a species of rodent (spermophilus guttatus), common in South Russia, is highly sensitive to the cholera bacillus. Inoculation and immunisation experiments with this animal lead to the following conclusions: (1) Infection takes place whether the cholera culture is introduced subcutaneously, intraperitoneally, or by the mouth, with or without preliminary treatment by soda and opium (in accordance with Koch's recommendation). The administration of the latter makes infection more certain. (2) The experiments furnish an additional proof of the etiological significance of the cholera vibrio. (3) After intraperitoneal and subcutaneous inoculation the microbes are to be found in the blood and abdominal organs. (4) The animals may be rendered immune by the preliminary administration of attenuated cholera cultures by the mouth. They then survive the fatal dose of cholera, even when given in conjunction with soda. Other methods of administration are less efficacious.

(392) Renewed Virulence of Staphylococci after a Long Period of Latency.

Schnitzler (*Centralbl. f. Bakt.*, March 2nd, 1894) relates the case of a patient who, at the age of 7 years, received a severe injury to the right leg, resulting in a localised osteomyelitis of the tibia. This subsided in about six months, after discharge of pus and sequestra. The patient had been quite free from symptoms, local or general, for thirty-five years, when he was suddenly attacked by severe pain at the former seat of disease, attended by much general febrile disturbance. The signs of localised osteitis quickly became manifest; there was no discharge. On chiselling through the dense and thickened bone at the seat of disease, a closed cavity, the size of a walnut, containing granulations and pus, was found. In the granulations staphylococcus p. aureus was present in a very virulent condition, as shown by inoculation of rabbits. Schnitzler adduces reasons for believing that the cocci had lain dormant in the cavity for the long period mentioned, being brought once more into activity by circumstances unknown. He rejects the supposition that a fresh supply of cocci had been received into the circulation and deposited at the diseased spot. He points out that staph. p. aureus is capable of existing upon nutrient media under unfavourable conditions for a very long period, and argues that a cavity containing granulation tissue well supplied with blood, such as was present in this case, offers a very favourable prospect for the prolonged existence of micro-organisms. There is frequent renewal of nutriment and removal of waste products. The case, in Schnitzler's opinion, shows that pyogenic cocci are capable of remaining latent in the human body for a great period of time, again becoming virulent on some chance disturbance of the normal processes of metabolism.

AN EPITOME OF CURRENT MEDICAL LITERATURE.

MEDICINE.

(393) The Thyroid Gland.

HÜRTHLE (*Deut. med. Woch.*, March 22nd, 1894) remarks that the view representing the gland as destroying or altering some substance dangerous to health, or more probably secreting some substance necessary to health, is the one most generally accepted. This chemical theory is supported by facts observed (1) on extirpating the gland, and (2) on administering thyroid extract in certain cases. The thyroid is a ductless gland connected with the rest of the body by blood and lymph vessels and nerves. Two questions must be answered: (1) as to the evidence of production of the above named substance; and (2) as to its absorption. Two kinds of cells have been described in the thyroid, namely, colloid and chief cells as well as transitional forms. The production of secretion may be observed along with the preservation or destruction of cells. The author's view is that the destruction of cells peculiar to itself furnishes a secretion different from that of the colloid material. In his experiments stimulation of the nerves supplying the gland revealed no change in the cells. In animals from which five-sixths of the gland had been removed, the remainder showed after ten days microscopical evidence of increased secreting activity. Drops of colloid material were present in the cells themselves. In a dog whose common bile duct had been ligatured the tying of the thoracic duct produced a marked filling of the lymph spaces as well as of the gland epithelium with colloid material, whereas with ligature of the thoracic duct alone no such appearance was evident; hence the biliary constituents probably stimulate the gland. As to how the secretion is carried off, the follicle wall often ruptures with the disappearance of the cells, and the colloid gets into the lymph spaces. This, however, is not the only way, since after ligature of the common bile duct no such rupture was evident, yet colloid was also present in the lymph spaces. By the intermittent injection of the lymph channels the injected material could be made to penetrate into the cavity of the follicle. Colloid material can also be seen between the cells. It cannot yet be decided whether the colloid is taken up by the lymph vessels or veins. Tying the thoracic duct, however, does not lead to an accumulation of colloid in the gland.

(394) Cerebellar Tumour in Children.

LÉON D'ASTROS (*Rev. des Mal. de l'Enf.*, May, 1894) relates a case of glioma of the cerebellum in a boy aged 8, and two cases of tuberculous tumour of the cerebellum in girls aged 8 and 5 years respectively. The duration of the case after the date of the first symptoms was much shorter—about seven months—in the tuberculous cases than in the glioma—about eighteen months. The mode of onset of symptoms—suddenly with fits, or insidiously with headache only—was not related to the nature of the growth. Headache was a marked symptom in all the cases: it was not continuous, but occurred in crises apparently corresponding to periods of active development of the growth. As is the rule in cerebellar tumour, vomiting without nausea was an early symptom. The unsteady gait was an early symptom, and in the case of glioma there was distinct inco-ordination in the movements of the lower limbs even when the patient was lying down. The position of the tumour ascertained *post mortem* supported Nothnagel's opinion that the staggering gait is associated with tumours which involve the middle lobe directly or indirectly. The symptom may, however, disappear at a comparatively early stage, owing to the patient being unable to maintain the erect posture. Optic neuritis was, as is usual, an early symptom, and in one case there was partial paralysis of the sixth pair producing convergent strabismus. Nothnagel has pointed out that the sixth is the cranial nerve most often affected in tumours of the cerebellum, a fact which ought to be borne in mind, since if it is forgotten, an error of diagnosis may be made. No explanation has been given of this association. The occurrence of hydrocephalus in a considerable proportion of the cases of cerebellar tumour in children is the point in which they differ most from the adult. The younger the child the more likely is this condition to be produced, and the greater the dimensions to which the cranium may attain. There appear to be three possible causes—direct compression of the veins of Galen or of the sinuses; extension of inflammatory irritation from the tumour in tuberculous cases: indirect compression of the veins and sinuses by a general rise of intracranial pressure. D'Astros thinks that the mental disturbance, hebetude, etc., observed in children suffering from cerebellar tumour should be attributed to the rise in intracranial pressure. When the sutures give way and the skull enlarges the mental symptoms may disappear not to recur, or to recur only in association with a fresh notable increase in the size of the head. Paraplegia, which is occasionally observed, may be attributed to the same cause, as also the still rarer occurrence of contractures.

(395) Poisoning by Benzine.

ROSENTHAL (*Centralbl. f. inn. Med.*, March 13th, 1894) reports a case in a girl aged 1½ year. The quantity taken was uncertain. When seen, ten to fifteen minutes afterwards, the child was in a condition of stupor, with half-open eyes. The radial pulse was small, frequent, and subsequently could not be felt. Respiration 60 to 70. A tube was passed through the nose and the stomach washed out. The water used for the washing smelt strongly of benzine and contained blood-stained masses of mucus. In about six hours the child had considerably improved, and subsequently recovered completely. Benzine produces a gastro-enteritis, as, indeed, it has been shown to do in animals. Treatment should consist in washing out the stomach as soon as possible, as benzine is rapidly absorbed. If the breathing fails artificial respiration should be practised. Benzine is not identical with benzol, but is a mixture of hydrocarbons, especially hexan and heptan. Sometimes benzine poisoning is caused by inhalation. The author refers to a case of an alcoholic who took to inhaling benzine in place of drinking. He also refers to some instances in glove cleaners, and observes that this fact should not be overlooked in such cases.

(396) Jaundice from Emotional Disturbance in Children.

COULON (*La Méd. Inf.*, April, 1894) records three cases in which jaundice supervened in children of nervous diathesis shortly after emotional excitement—in one case, a girl aged 9, after a fright; in two others, girls aged 10½ and 13½ years respectively, after a fit of anger produced by punishment at school. In addition to the icteric tint, the symptoms were loss of appetite and light-coloured stools. The appetite was quickly regained, and no other symptoms referable to the digestive system were noticed. In two cases, which were followed, recovery was rapid, and appeared to be hastened by a dose of calomel.

SURGERY.

(397) Operative Treatment of Non-Microcephalic Idiocy.

BINNIE (*Annals of Surgery*, April, 1894) reports two cases of operation—one fatal, the other not—for imbecility not accompanied by microcephalus. In the first case, which was one of imbecility following an attack of meningitis, craniotomy was followed by death after an interval of a few hours. No necropsy could be made, but the death is attributed by the author to hyperpyrexia due to injury of certain thermotaxic centres. In the second case, in which the imbecility was thought to be due to mal-development of the cortex, craniotomy was followed by much improvement. It is stated that the child, though remaining an imbecile, was not such a burden to his relations as he had formerly been, and that there were signs that a capability for education existed which had formerly been quite absent. In cases of imbecility due to atrophy, it is held that when the atrophic condition, which consists in destruction of cerebral tissue by fatty degeneration or formation of scar tissue, has once been fully developed a surgical operation will be useless. In cases of simple mal-development, on the other hand, craniotomy presents good prospects, as it may be capable of removing a something which

has hindered development or prevented the action of some parts of the brain which have already been more or less developed. In selecting cases for operation the patient's personal history, it is held, must be the main guide. Careful inquiries should be made as to the presence or absence in the part of symptoms which would lead to the suspicion that hæmorrhage, inflammation, or such-like troubles had been the original cause of the imbecility. In non-microcephalic cases, where, up to a certain time, mental development had progressed but subsequently became lost, it may be concluded that an atrophic process has been established, and that if it has lasted any considerable time little is to be expected from any surgical intervention. On the other hand, if when imbecility has been established, this degree of development has not been lost, it may be assumed that the trouble is due, not to atrophy, but to mal-development, and that an operation may afford the necessary conditions for proper progress. The author states that in performing craniotomy the surgeon ought to remove a wide strip of bone. A narrow defect is very soon obliterated by new formation of osseous structure.

(398) The Plaster Jacket.

Kölliker (*Münch. med. Woch.*, March 27th, 1894) relates his experiences in 502 cases thus treated. Scoliosis was present in 312 and spondylitis in 143. The latter number includes 85 boys and 58 girls. In 2 cases the jacket was used for scoliosis due to empyema. Sayre's suspension apparatus was used in applying the jacket; in scoliosis the patient was drawn up until the toes touched the ground, and in spondylitis only until the column was stretched, the soles of the feet being still on the ground. The jacket was divided in the middle line in scoliosis, but to one side in spondylitis. The jacket is used in scoliosis of the second degree with rotation, and is indicated when the scoliosis disappears on suspension. The scoliosis must not be above the lower angle of the scapula. If the upper dorsal or cervical region is affected, the jury mast must be used as well, but only in cases when by extension of the head the scoliosis disappears. A second indication is when the scoliosis is combined with neuralgia. The jacket is not to be used (1) in scoliosis of the first degree; (2) in stationary scoliosis rectified by the straight position of the pelvis; (3) in scoliosis in weakly subjects; and (4) in scoliosis of the third degree. In tuberculous spondylitis the jacket is used when the acute stage is over. If the upper dorsal or cervical region is involved, the jury mast is used in addition. A jacket is useful in double congenital dislocation of the hip; it should be worn for one or two years.

(399) Laminectomy for Fracture of the Spine.

Giles (*Austra'asian Med. Gaz.*, March 15th, 1894) reports an unsuccessful case of laminectomy for fracture of the seventh and eighth dorsal vertebræ. The operation was performed on the tenth day from the date of injury. The patient—a man, aged 42—improved at first, but on the ninth day after the date of the operation became delirious. He lingered until the thirty-fourth day, when he died from exhaustion, the delirium having persisted, and bed sores having formed and become very deep and extensive. This case, the author thinks, was one well suited for the operation if laminectomy is ever to be performed for the relief of fractured spine. If the original injury—a fall on to the back from a height of about 14 feet—had not caused such a severe concussion that the functions of the cord were permanently abolished, a different result, it is believed, might have been obtained. The cord was not crushed or lacerated; there was no intradural hæmorrhage or inflammatory sequelæ; there was no displacement of the bodies of the fractured vertebræ; and the only alteration in the normal lumen of the spinal canal was caused by depressed laminæ, which were removed at the operation.

(400) Primary Sarcoma of the Suprarenal Body.

Cohn (*Berl. klin. Woch.*, March 12th, 1894) reports the following case in an infant, aged 9 months. A rounded mass, separate from the enlarged liver, was felt in the right upper abdomen. The spleen was also enlarged. There was a swelling over the right temporal region, and the right eye protruded; there were, in addition, five isolated tumours about the size of cherries in the region behind the right ear. The child died a month later. The growth was shown to have arisen in the right suprarenal body and metastases were found in the skull, ribs, kidneys, ovaries, and (to a less extent) in the liver. It was shown by Virchow to be a medullary sarcoma. The author draws attention to the extraordinarily early age of the patient and the malignancy of the disease. The growth pushed the right kidney down, and a groove separated them. The metastases especially affected the bony system, and particularly that part of it in very active growth; the author thinks that this latter fact determined the site of the secondary deposits.

MIDWIFERY AND DISEASES OF WOMEN.

(401) Urethral Incontinence of Urine.

Schultze (*Centralbl. f. Gynäk.*, No. 17, 1894) uses this term to imply incontinence of urine due to insufficiency of the muscular apparatus which closes the bladder. A patient, aged 45, had borne a child twenty years before, and ever since had been unable to hold her water. Her health was much reduced. The urine contained pus, there was no evidence of renal disease. She had undergone various operative procedures. The meatus was lacerated, exposing a third of an inch of the urethral mucous membrane. Behind the meatus was a fistulous orifice, and from it ran upwards a long cicatrix with evidences of former sutures. The patient's health was first improved by appropriate treatment, then in July, 1892, the meatus, fistula, scar, and the neck of the bladder, immediately above the beginning of the urethra, were slit up and the edges of the incision thus made were vivified and sixteen silkworm gut sutures applied. A catheter was retained. After nine days the sutures were removed, as well as the catheter. The wound had united by first intention throughout, and the patient could hold her water perfectly. Schultze, with less success owing to the impatience of the patient, endeavoured afterwards to increase the retaining power of the bladder, which was small, on account of the long duration of the incontinence of urine. However she continues able to control the passage of urine though micturition is frequent.

(402) Electropathy and Development of Tumours.

Rendu (*Lyon Médical*, April 8th, 1894) relates that a woman, aged 40, married eighteen years, had never had a child nor a miscarriage. Irregular when young, the catamenia had disappeared over fifteen years. In April, 1893, electropathy was attempted to bring on the period. Copper and zinc plates were applied to the back or pelvis. A month later the period reappeared and remained regular for several months. The breasts became swollen and tender, and the abdomen grew large. The uterus was small and movable; a tumour developed on its right side. Then ascites and emaciation set in. On December 11th, 1893, Rendu operated and removed a proliferous cyst of the right ovary. The patient made a good recovery, and was quite well at the end of March, 1894. Rendu admits that we must not overlook coincidences, but the sudden reappearance of the period, suppressed so many years, directly electricity was applied, suggests local changes in nutrition so great as to render the development of a new growth probable.

(403) Amputation of Uterus as well as Appendages for Pelvic Inflammation.

Baldy, of Philadephia (*New York Journal of Gynec. and Obstet.*, December, 1893), having found that oöphorectomy for chronic inflammatory disease of the appendages often proves unsatisfactory, has freely practised removal of the uterus as well as the tubes and ovaries in such cases. He maintains that the uterus is the seat of the primary inflammation. Not only is the endometrium affected, but the uterine walls are invaded. The tubes and peritoneum are involved later. In many cases the uterus has thrown off the original disease, the appendages remaining inflamed; then the uterus can be saved and the tubes and ovaries removed. When, on the other hand, the womb is found large and diseased, especially if surrounded by extensive adhesions, so that much peritoneum is stripped

off in order to free the organ, hysterectomy should be the operation of choice. Baldy's hysterectomies now number over 80, with 7 deaths, "including accidents incident to acquiring the skill and perfecting the *technique*; in a similar series the results will be infinitely better." Several operators in the United States adopt the same practice.

(104) Asphyxia Neonatorum: Schultze's Method of Inducing Respiration.

PRAGER (*Frauenarzt*, March, April, and May, 1894), on scientific grounds and on the evidence of experience in private practice away from the conveniences of a hospital, concludes that Schultze's method is the best for resuscitating children born asphyxiated. The swinging of the child's body by the physician's hands properly placed on its shoulders is easily managed; it ensures thorough ventilation of the lungs, restores the sinking circulation, and is the best method for ridding the air passages of inspired mucus. He relates cases to show that the lungs can be filled even when the infant is lost. In the first case, a lingering neglected labour, the infant was too far gone to revive, yet the swinging (120 times) filled the lungs. In the second, where the child was probably dead at birth, the lungs were found well expanded. The third was certainly stillborn. It was swung an hour after birth. Not only were respiratory sounds heard but at the twentieth swing mucus escaped from the mouth. At the necropsy the lungs were found fully expanded though before the swinging there was universal dulness over the thorax. Two cases of revival are described. In the first the child was born deeply asphyxiated after extraction in breech labour. At the eighth swing mucus was expelled from the nostrils and mouth. Not till the seventeenth swing did inspiration begin, and as it was weak the swinging was continued till the child breathed naturally. It recovered completely. The second case occurred in a head presentation labour where the pelvis was narrow and turning performed. The head was delivered with difficulty and the child was born astride the funis deeply asphyxiated. At once Prager applied Schultze's method. Mucus was expelled at the eighteenth swing. At the twentieth the child gasped for breath, and after the twenty-eighth respiration became regular. The child was reared. Thus this swinging method insures the filling of the lungs with air and the emptying of mucus even in the dead infant, whilst it rapidly restores a partially asphyxiated child. Hence it must give the best chance to a subject just on the point of death.

THERAPEUTICS.

(105) Salol Coating for Pills.

OEDER (*Berl. klin. Woch.*, April 9th, 1894) has made a number of experiments with pills coated with salol, and containing a small quantity of methylene blue. For the purposes of coating the salol is gently heated to its melting point. He shows that the salol covering is impervious to water, and is not dissolved at a temperature of 15° to 39° C. by the gastric juice or such other substances as are likely to be present in the stomach. The pills were soluble in various oils in one to two hours, and in pancreatic extract in ten hours. One hundred and fifty-two such pills were given to patients, and in no case were they found in the stools. In another series of experiments carried out on himself and a volunteer, the author shows that the salol coating is first dissolved in the duodenum. A coating of 0.02 to 0.03 salol suffices to prevent the pill from being crushed by the pressure of the tongue against the palate. The pills must not be bitten. They should be kept in a cool place, and they should not be taken with substances such as oil or hot food stuffs which are likely to dissolve the coating. An hour after food is the best time for administration. If required in fever they may be given during an intermission, the melting point of the salol being 40° C. The disadvantages of heratin as a coating are referred to.

(106) Acoustic Exercises for the Improvement of Hearing and Speech.

AFTER referring to communications on this subject by Urbantschitsch, of Vienna, and Gutzmann, of Berlin, Coen (*Wien. med. Woch.*, No. 5, 1894) describes his own method. He does not employ it on those who are completely deaf and dumb, but only on those "who have suffered from more or less severe deafness and consecutive total or partial inability to speak, or from general stammering, and who have come under his treatment on account of their defect of speech." He places the patient in front of him, with his face turned away to avoid lip reading, and in a moderately loud voice speaks a single syllable, "ba," close into his ear, repeating it with variations of pitch and loudness till the patient can pronounce it perfectly. He then increases the distance till nearly the normal one is reached. When this is attained (which may require eight to twelve weeks) he starts a second syllable, "be," in the same way, and later all the various syllables, words, and simple sentences. He thus awakens the intellect, sharpens the hearing, and exercises the organs of speech. He has had over thirty cases.

(107) Therapeutic Value of Phenocol.

ARCHANGELO (*Rif. Med.*, March 29th, 1894), after drawing attention to the very numerous and conflicting statements which have been made about the value of phenocol, summarises his own opinion as follows: (1) Phenocol is a remedy worthy of an important position among the newer drugs. (2) It is a powerful antimalarial agent, a worthy supplement to quinine. (3) It is valuable in rheumatism of acute character, but useless in chronic rheumatism. (4) It is of great value in infantile therapeutics, especially in cases of malaria, typhoid, or rheumatism. (5) It is a good antiseptic; of especial service as an intestinal antiseptic. (6) It has but little value as an antineuralgic.

(108) Pilocarpin in Facial Erysipelas.

SALINGER (*Therap. Gaz.*, March, 1894), encouraged by the favourable reports of Da Costa as to the effects of the hypodermic injection of pilocarpin on such conditions, made trials of this drug in his clinic. The results have been so satisfactory as to induce him to become a warm advocate of the treatment. In all the cases treated (28) the disease was comparatively severe. In none did the treatment last longer than eight days; in many recovery took place after four days. Albuminuria was a constant symptom in 26 cases, very marked in those of greatest severity. Four of the patients exhibited retention of urine. In order to produce the best results it was found that pilocarpin had to be given until the production of the full physiological effect, indicated by profuse sweating, increased salivation, and diuresis. The advantage of administering pilocarpin hypodermically is to be found in its rapid action. The only contra-indications to its use would appear to be in cases of actual organic disease of the heart, when the drug might have too depressing an effect on the circulation. When erysipelas occurs as a complication of other affections pilocarpin has not been successful. In such cases the process appears to be of greater severity.

PATHOLOGY.

(109) Tumours of the Kidney and Suprarenals.

LUBARSCH (*Virchow's Arch.*, February 5th, 1894) discusses the question whether a large number of morbid growths in the kidney may not be traced back to the inclusion during development of some suprarenal tissue. He gives a detailed account of eight cases of kidney tumours, in all of which the presence of glycogen was demonstrated. This fact he considers of the greatest importance in showing the relationship of the tumours to embryonic structures. Further, in several cases the arrangement of the cells was very similar to that seen in the suprarenal capsules. In addition the tumours are always subcapsular in position: they are nearly always in the form of multiple nodules; they are very similar in appearance to the suprarenal cortex, varying in colour from greyish-yellow to sulphur-yellow; they are soft and lobulated, and they show a great tendency towards cyst formation, necrosis, and hæmorrhage. Metastatic growths frequently occur. Lubarsch employs three methods for the detention of glycogen—Langhans's method and two of his own. His gentian-violet method is a modification of one used by Weigert; the sections are treated for about two minutes with a strongly concentrated solution of aniline water gentian violet; they are then first quickly rinsed with water, and next

very rapidly with Gram's potassic iodide iodine solution; after they have been dried with tissue paper they are decolorised with aniline oil or aniline oil xylol (2 : 1); the aniline oil is then thoroughly removed with xylol and the sections mounted in Canada balsam. By this method the drops of glycogen are stained a deep blue or violet. In order to produce a contrast coloration of the nuclei, Mayer's hydrochloric acid carmine may be used for the first staining. By his second method Lubarsch treats the sections with a mixture of Delafield's hæmatoxylin solution with Gram's potassium iodide iodine solution. He has found the following proportions the most suitable: Delafield's solution, 10 c.cm.; Gram's potassium iodide iodine solution, 10 c.cm.; aq. dest., 5 c.cm. The mixture should be filtered and protected from sunlight. The sections are treated with it for five minutes, rinsed immediately with absolute alcohol, dried thoroughly with tissue paper, cleared with xylol, and mounted in Canada balsam. There are two drawbacks to this method: the double staining may not always succeed immediately, or the coloration may not be even: it may be necessary to treat the sections for a few seconds with Gram's solution after the staining with hæmatoxylin. Further, the form in which the glycogen is present in the cells may be altered. In some cases Lubarsch found the following formula useful: Concentrated alcoholic solution of iodine, 7 c.cm.; Delafield's solution, 4 c.cm.; aq. dest. 3 c.cm. The sections are treated as above.

(410) The Nuclei of Anthrax Spores.

Ilkewicz (*Centralbl. f. Bakt.*, March 2nd, 1894) has been enabled by the following method, the principle of which is due to Kolossoff, to stain structures which he regards as nuclei within the spores of anthrax bacilli. The method is also very suitable for staining bacteria for photographic purposes. It is as follows: Cover-slip preparations are made, with the precaution that none of the culture medium is removed with the bacterial growth, as it becomes stained in this process. The preparations are fixed in the flame, and stained in a watch glass with the following solution for one or two minutes, the fluid being warmed until steam rises: aq. sol. osmic acid ½ per cent., 7 c.cm.; formic acid, 3 c.cm. The coverslip is then transferred for one or two minutes to a "reducing fluid (*a* or *b*) for deoxidation of the osmic acid. The reducing agent is prepared as follows: Dissolve tannin, 30 g., in aq. dest., 100 c.cm.; allow to stand twenty-four hours in an open vessel; filter and add to the filtrate pyrogallic acid 30 g., dissolved in aq. dest. 100 c.cm. To this mixture add glycerine 50 g., alcohol (95 per cent.) 100 c.cm., aq. dest. 250 c.cm. Reducing fluid (*a*) consists of equal parts of the above solution and of the following mixture: pyrogallic acid 8 parts, citric acid 3 parts, sodium sulphite 17 parts, aq. dest. 150 parts. Fluid (*b*) is prepared by adding to 10 c.cm. of the last-mentioned mixture (that is, the second constituent of *a*) the following solution: alcohol 3 c.cm., tannin solution (tannin 20 parts, water 80 parts) 2 c.cm., glycerine 1 c.cm. Either of these reducing fluids may be used, one often succeeding where the other fails. For use, warm until steam rises. Wash in distilled water, and then repeat the whole process (passing through the osmic acid and the reducing fluid) to get intense staining. Wash again in water, dry, mount in balsam or glycerine. The protoplasm of B. anthracis is stained dark grey, showing a granular structure. The spores are either colourless or pale grey; they are seen to be of three sizes —large, medium, and small. Some are homogeneous, others contain the structures (stained black) which are regarded as nuclei. Some of the spores contain a single nucleus; these Ilkewicz regards as ripe. Others show no nucleus proper, but appear granular; they probably represent a stage of nuclear division. Others again show two nuclei separated by a thin septum, representing complete division of the nucleus, but incomplete division of the spore. A photomicrograph illustrating these points is furnished with the paper.

(411) Acetonuria.

Conti (*Rif. Med.*, December 7th, 1893) has studied acetonuria from three points of view: first, in its relation to the urotoxic coefficient; secondly, its occurrence as a sequel to operative measures; thirdly, its occurrence as a physiological phenomenon. The conclusions arrived at are as follows: (1) The urine in infective disease is generally highly toxic, and contains a large amount of acetone. (2) The acetone is not, however, a constant or a sure index of the toxicity of urine, inasmuch as urines containing much acetone may be comparatively non-toxic; there is, therefore, no direct relation between the toxicity of urine and the amount of acetone eliminated. (3) An operation is frequently followed by acetonuria. (4) Excessive acetonuria is not a necessary sequel either of opening the peritoneum or of the use of sublimate as a disinfectant of the wound. (5) Post-operative acetonuria may present itself without any appreciable reaction on the part of the patient. (6) Although the urine of some who must be considered normal individuals may contain traces of acetone, this is not a constant phenomenon, and acetone cannot be considered as a necessary product of metabolism.

(412) Pigmentation of the Epidermis.

Post (*Virchow's Arch.*, vol. v, part 3), from observations on the normal pigmentation of the skin and epidermic structures in man and animals draws the following conclusions: (1) Pigment is formed from a particular product of metabolism of the cutis, and varies in amount according to the race of the individual, particular structure of the part, and amount of cutaneous irritation: it is formed in the epithelium, both in ordinary cells and in branched cells, and also in connective tissue cells. (2) The connective tissue pigment cells are regulators of metabolism, inasmuch as they consume the surplus pigment-forming substance. (3) The branched pigment cells of the epidermis are products of a division of labour, supply the place of the connective tissue pigment cells, and carry pigment to the epidermal cells, undergoing a corneous change. Post then passes on to the consideration of pathological pigmentation. Freckles are the result of a localised superpigmentation of the skin of normal type. The discoloration of Addison's disease, he thinks, is due to increase of the normal pigmentation of the whole skin. In nævi, besides a superpigmentation of normal type, there is abnormal pigmentation both in the epidermis and in the connective tissue. Melanotic tumours can give rise to an abnormal pigment formation in the neighbouring epidermis. Immigration of pigmented and unpigmented connective tissue cells takes place: first, into mucous membranes (in which normally connective tissue cells pass through the epithelium) in cases where there is pathological superpigmentation of the connective tissue; secondly, in the neighbourhood of melanotic tumours in consequence of inflammatory irritation of the tissue. Post appends an extensive bibliography of the subject.

(413) Paget's Disease of the Nipple.

Banti, in a preliminary note (*Lo Sperimentale*, March 1st, 1894), describes the results of examination of a case of this affection. The mamma and also several enlarged axillary glands had been removed, but these latter had not been examined by him. The tissue, hardened by passage, first through sublimate and Flemming's liquid, and finally through alcohol, was stained in a variety of ways, the most successful of which seems on the whole to have been double staining with carmine and hæmatoxylin. Examined in this way the neoplasm had the texture of cancer, differing from ordinary cancer, however, in certain particulars. The cancer cells were found to contain in large numbers the bodies described as cancer parasites, some of which showed signs of multiplication by fission and gemmation. Concerning the significance of these bodies the author speaks very guardedly, but is on the whole inclined to consider them as true intracellular parasites, and not as cell inclusions. Whether they stand in any causal relation to the disease or are only secondary there is at present no means of deciding. The fact that they are most numerous in the older portions of the growth, and that it was easy to demonstrate also the existence of bacilli in the neighbouring alveoli, would leave room for the suspicion that the intracellular parasites were simply secondary visitors. One cannot, however, but be struck, says the author, by the resemblance between this growth and that resulting from psorospermosis in the rabbit's liver.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(414) Etiology of Graves's Disease.

GRUBE (*Neurol. Centralbl.*, 1894, No. 5) maintains the infectious nature of Graves's disease. He narrates a rapidly fatal case in a woman aged 50. Three of her four children had died; one of convulsions, two of "nervous fever." As a girl she was said to have been anæmic. Some years ago she began to suffer from nervous abdominal pains, and during the last half year she had had occasional asthmatic attacks, especially in the night. The patient herself attributed her illness to the shock caused by hearing that there was sugar in her urine (said to be about 9 per cent.) six weeks before her death. The asthmatic attacks became worse and a swelling appeared in her neck. The skin of her face appeared somewhat bronzed, as if by the sun. Exophthalmos was not much marked, but the signs of Stellwag and Gräfe were both present. The thyroid gland showed hypertrophy of the left lobe and isthmus. Many enlarged lymphatic glands could be felt in the neck. The heart was much dilated, but the heart sounds clear; the pulse was full, strong, and frequent (120 to 130). There was considerable dyspnœa, especially at night, so that the patient could not lie down in bed; some rhonchus. A certain amount of œdema in the legs. Urine (specific gravity 1030) showed trace of albumen and sugar two weeks after the supposed commencement of the disease. Some tremor in the upper extremities. Slight fever in the evenings. She died in about six weeks from the supposed commencement. Granting the infectious nature of the disease, the infective agent may act (1) on the thyroid gland, causing perversion of its function, which Möbius has suggested as the cause of Graves's disease, the nervous system being affected secondarily; or (2) on the thyroid gland and the nervous system; or (3), and more probably, the infective agent or its products might act on the nervous system directly. Against the nervous theory of Graves's disease it has been urged that the symptoms do not point to one part only of the nervous system being affected; this is, however, no argument against the infectious theory, for several different parts of the nervous system could be affected by a toxin, though the medulla oblongata might be especially susceptible or its rich network of blood vessels might facilitate the working of the infectious agent. The causes which are commonly invoked as starting points for Graves's disease—shock, excitement, overexertion, etc.—can hardly be considered as of first moment, except in so far that they may weaken the body generally and render it less able to resist infection. Grube adds that he can further adduce as arguments in favour of the infectious theory of Graves's disease: (1) That the disease may supervene in cases of endemic or hereditary goitre; (2) the occurrence of swelling in lymph glands, noticed by Müller and in this case; and (3) that a hereditary character of Graves's disease has been recognised.

(415) Hysterical Apoplexy.

BISCHOFF (*Wien. med. Woch.*, May 3rd, 1894) reports a case in a man, aged 28. Some fourteen days after severe mental anxiety, he suddenly became unconscious. On the next morning he regained consciousness, but was found to have complete left hemiplegia and hemianæsthesia including the conjunctiva. He was quite aphasic and innervated his face muscles imperfectly and slowly. There was no trace of spasm about the face. On the next day it was noted that the movements of the left eye were considerably limited when the right eye was covered up. He soon began to regain power in the leg. The plantar reflex was absent, and the left knee jerk less than the right. About the seventh day the patient again lapsed into a comatose condition lasting for two hours and a-half. Clonic spasm was noted on the next day in the platysma and sterno-mastoid muscles. He steadily recovered power, but the anæsthesia and eye symptoms persisted. A temporary weakness in the left arm again appeared, and the contraction of the field of vision became more marked. The patient ultimately recovered almost completely. The author remarks that the involvement of the face and tongue is rare in these cases, and that Charcot's statement that hysterical affections in the face region regularly appear in the form of spasm is not borne out here. The diagnosis was certain on the third day—the left hemiplegia, the deviation of the tongue to the right, the aphasia with perfect power of writing, the hemianæsthesia including the mucous membranes, the diminution in the field of vision all pointing to hysteria. The affection of speech in hysteria is mostly mutism; here the patient could phonate, but not articulate. Any anatomico-pathological explanation of the eye symptoms was hardly possible. The author maintains that the one-sided lesion was primary, and the unconsciousness secondary, and that it was not an example of hysterical stupor followed by paralysis; nor was it an instance of hysteria complicating organic disease.

(416) Meningitis Complicating Enteric Fever.

STÜHLEN (*Berl. klin. Woch.*, April 9th, 1894) remarks that besides the staphylococcus, streptococcus, and pneumococcus, other micro-organisms may occasionally set up meningitis. He relates the following case in a man whose wife and two children were already seized with enteric fever. After a few days of *malaise* he complained on July 28th of headache, shivering, and constipation. He was admitted three days later. On August 1st there was blood in the stools; stupor, with restlessness and delirium, supervened. On the next day sudden collapse appeared, from which he rallied, but the stupor persisted. On August 4th there was rigidity of the neck, and slight icterus was now observed. He died about the fourteenth day. Besides the lesions in the alimentary canal, there was a purulent cerebro-spinal meningitis. Plate cultures showed colonies having all the characters of those of the typhoid bacillus, and further investigation confirmed this view. The clinical appearances, the existence of enteric fever in the house, and the presence of the typhoid bacillus (in pure culture) in the meningeal pus made the diagnosis certain.

(417) Trophic Disturbances in Wasting Palsy.

PRAUTOIS AND ETIENNE (*Rev. de Méd.*, April, 1894) relate an exceptional case of osseous and articular trophic changes in a man, aged 48, affected with progressive muscular atrophy. The disease began some thirteen years ago. On admission, there was atrophy of the muscles of the hands and arms. The sterno-mastoid, trapezius, pectorales, infraspinatus, serratus magnus, and neck muscles were affected on both sides. The legs were much less involved. The right arm could not be lifted to the vertical position, and he had great difficulty in raising his head. On the right side the head of the humerus was dislocated upwards, and the sensation of rubbing two rough surfaces together could be obtained here. A large, irregular osteophyte grew from the scapula. There was in addition a bilateral carpo-radial subluxation. On the left side the outer end of the clavicle was mobile and dislocated, and creaking could be felt in the shoulder-joint. The patellar reflexes were present; there were no ankle clonus, pains, or inco-ordination. The reaction of degeneration was present in the affected muscles. The pupil reaction was normal. There was no evidence of previous rheumatic disease, and the articular affection was certainly comparable to that seen in locomotor ataxia. In all probability it was due to a spinal cord lesion similar to that producing the atrophy, but of hitherto undetermined site.

SURGERY.

(418) A New Method of Using Cocaine for Local Anæsthesia.

KROGIUS (*Centralbl. f. Chir.*, No. 11, 1894) describes a new method of producing cocaine analgesia, which is based on the fact that when a solution of this agent is injected into the subcutaneous tissue near to a nerve trunk it causes loss of sensation over a large zone corresponding to the peripheral distribution of this nerve. In order to reach the selected nerve trunk with certainty,

and to apply the cocaine to several of its branches at the same time, the author, in injecting the subcutaneous tissue, passes his needle across the long axis of the limb, and as the needle is thrust along, the solution is gradually discharged. An injection made in this way across the root of a finger will, in the course of ten minutes, result in analgesia of the whole digit, not of the skin only, but also of the tendons, the periosteum, and all the deep structures. If one or two injections be made transversely near the wrist, a considerable extent of the palm of the hand may be thus rendered analgesic. The sensibility of the ulnar side of the hand as far as the roots of the last two fingers may, it is stated, be abolished by injecting a solution of cocaine over the ulnar nerve at the back of the elbow. By injecting over both supraorbital notches, analgesia may be produced in the whole of the middle portion of the forehead. The analgesia caused by this method of using cocaine attains its greatest intensity and extent from five to ten minutes after the injection, and is maintained for a quarter of an hour or even longer. The author injects only a weak (2 per cent.) solution of cocaine, and keeps the patient recumbent for at least a quarter of an hour after the operation. This method has been practised with success at Helsingfors in 200 minor operations, such as amputation of the fingers and toes, excision of palmar fascia, and phimosis.

(419) Cicatricial Narrowing of the Œsophagus.

TIETZE (*Deut. med. Woch.*, 1894, Nos. 16 and 17) discusses the treatment of the narrowing consequent upon swallowing corrosives. He first records a case in a man, aged 26, coming under treatment early. A peri-œsophageal abscess developed, and gastrostomy had to be performed. The stricture was ultimately successfully treated by bougies, and the gastric fistula healed spontaneously. The principle of not passing a bougie for some time in such cases is very generally admitted. Gastrostomy must not be delayed too long. Any question of œsophagotomy can hardly arise here. The diagnosis of abscess cannot be made until pus is spat up. A second stricture was present lower down in this case, and probably another in the neighbourhood of the pylorus. In cases of long standing the bougie should be used, but it is not always successful. The lumen of the tube may be eccentric, or a diverticulum may exist above the stricture. In such cases, where fluids pass with difficulty and the nutrition of the patient is clearly suffering, gastrostomy should be done. An example is given of a fatal case in a child, aged 1¾ year, where delay precluded the idea of an operation. Again, in severe cases, where fluids are swallowed with difficulty, and even small bougies pass, yet gastrostomy may be the only means of successful treatment. Hitherto bougies have been the sovereign remedy here. The passing of bougies is not unattended with danger. A case is recorded in a boy, aged 16, in whom twelve days after gastrostomy a thread was passed with a sound through the whole length of the œsophagus, one end coming out through the nose, and the other through the gastric fistula. A drainage tube was eventually passed through the stricture and left. Dilatation was effected, and eventually the gastric fistula was allowed to close. In cases where fluids can still be swallowed, and yet no bougie can be passed, a shot, with a thread attached to it, may be swallowed (after gastrostomy), and a drainage tube thus be got through the stricture. If this procedure is not successful bougies may be passed up the œsophagus through the stomach. A case of a boy, aged 1¾ year, is recorded in which the dilatation of the stricture (opposite the upper limit of the thorax) could not be effected by way of the stomach. Œsophagotomy was performed, and a diverticulum was found above the stricture. A silk thread with a sound was passed through the œsophagus, and a drainage tube introduced in this way. Bougies were subsequently passed. The œsophagotomy wound closed in four weeks, and the gastric fistula in one year and three-quarters after its formation, the patient being eventually perfectly well. Another case is related in a girl, aged 22, in whom, after gastrostomy, attempts were made for some time to dilate the stricture from below, but a bougie could not be passed from above. Œsophagotomy was performed, a diverticulum found, and a communication made between this latter and the descending part of the curve into which the œsophagus had been thrown. A drainage tube was got through, and dilatation completed with bougies, the patient eventually recovering. The author draws attention to the value of gastrostomy in these cases in (1) finding out the site of, and treating the stricture, and (2) maintaining the nutrition of the patient. For these temporary gastric fistulæ Witzel's method is recommended. The author concludes that (1) gastrostomy should be done in severe cases more often than it has been in the past; (2) continuous dilatation with a drainage tube is more rapid and less dangerous than with bougies; and (3) combined gastrostomy and œsophagotomy may lead to success in some cases.

(420) Subluxation of the Vertebral Column.

BAUMÜLLER (*Münch. med. Woch.*, April 24th, 1894) relates the following case. A boy aged 13, after a severe injury to the back, together with a crushing of one foot, was admitted with pains in the back and legs, some degree of paraplegia and total loss of control over the bladder and rectum. The second lumbar vertebra was found to be displaced forwards, a depression existing between it and the one above. There was also swelling with discoloration of the skin at this place. On the next day the subluxation was reduced under chloroform. The boy was placed on the left side, and a jack towel passed round the back and crossed over the chest. Traction was made on the ends, towards the head, by two assistants, while a third steadied the legs bent at the knees. At the same time the author gently manipulated the parts. In less than a minute the parts fell back into position with a perceptible and audible snap. Crepitation could now be felt in places, due no doubt to the fractured processes. After a few days a plaster-of-paris belt was applied and kept on for five weeks. During this time the patient steadily improved, and seven weeks after the injury all paralysis had disappeared, except in the right extensor communis digitorum and the peronei muscles; there were no pains and the bladder and rectum acted normally. Ten days afterwards he left his bed. About a year later there was still some paresis in the right tibial region, but the boy could stand for some hours without fatigue. The author briefly refers to the recorded cases of luxation in the lumbar spine, some nine in all. In only one case was reduction attempted, and in this, as in the above described case, it was successful.

MIDWIFERY AND DISEASES OF WOMEN.

(421) Abortion: Death.

JACOBS, of Brussels (*Nouv. Archives d'Obstét. et de Gynéc.*, February 25th, 1894, *Supplement*), publishes a fatal case which for several reasons deserves serious consideration. On November 24th, 1893, a 4-para, aged 29, aborted in the middle of the third month, expelling the fœtus, but not the placenta. There had been difficulty in getting away the placenta at the three previous labours. The patient's husband had contracted gonorrhœa, and she had rigors during this fourth pregnancy. On November 27th the lochia were fœtid, on the 28th the placenta was extracted piecemeal, and the blunt curette used with all precautions. Shortly afterwards the temperature rose over 105°, but the fever slowly subsided. The patient got up on the tenth day. On December 8th severe pains in the left thigh set in, followed by an attack of parametritis, detected by pelvic exploration. There was no fever. On January 1st, 1894, she was suddenly taken ill, and appeared moribund. Abdominal section was performed next day. A quantity of purulent fluid escaped. A ruptured pyosalpinx was detected on the left side. It was too adherent to allow of removal of the appendages, so it was simply washed out; the bowels and uterus were protected by packing with gauze. Jacobs intended to open up the collection of pus through the vagina a few days later. The patient, however, died some hours after the operation. There was dense parametritic exudation around the suppurating left appendages. The uterus had very thick walls. The cavity was dilated at the left corner, the uterine end of the corresponding tube being dilated. The abnormal dilatation was occupied by placental tissue.

(422) Gonorrhœal Stomatitis and Ophthalmia in Newborn Child.

LEYDEN, of Breslau (*Centralbl. f. Gynäk.*, No. 8, 1894) writes that a single girl, aged 20, was recently delivered, a little before term, of her first child. There had been moderate vaginal discharge during the last months of pregnancy; on that account the vagina was freely washed out with lysol during the entire puerperium, so that the discharge steadily disappeared. The labour was normal. The child (a girl) was rather weakly. Directly the head was delivered the eyes were washed with a 1 in 7,000 solution of sublimate. Until the evening of the sixth day the child seemed fairly well; it took the breast, the motions were normal, and the eyelids did not stick together; but the skin became jaundiced, and on the morning of the seventh day there were all the signs of gonorrhœal ophthalmia in the right eye. A large pustule was found on the mucous membrane of the upper lip, close to the gum. The pus which it contained was found full of gonococci. Notwithstanding all precautions (the case was in the Breslau Lying-in Hospital) the left eye was attacked on the next day. The purulent inflammation of the mouth increased, and there was diarrhœa. The eyes, however, were saved, and after frequent washing of the buccal mucous membrane with the 1 in 7,000 sublimate lotion, the purulent crusts which had formed disappeared, and nine days after the first appearance of the pustule a desquamating area marked the seat of disease. The mother's nipples did not become sore; the child, however, was fed with the bottle directly the soreness of the lip was detected.

(423) Ovarian Tumour in Infancy.

MARCHAUD (*Centralbl. f. Gynäk.*, No. 17, 1894) adds a case of some importance to the interesting series of ovarian growths before puberty already collected. He recently exhibited, before the Medical Society of Marburg, a small-celled sarcoma of the ovary, which had infected the small intestine; the subject was a child aged 4. The clinical history is not given.

(424) Electricity and Fibroids: Fatal Embolism.

BRINDEL (*Répertoire Universelle d'Obstét. et de Gynéc.*, April 25th, 1894) recently made a necropsy on a woman, aged 45, who suddenly died of pulmonary embolism a few days after the application of electrolysis. The signs of pulmonary embolism were very marked, but unfortunately the thorax was not opened. The uterus contained subperitoneal and interstitial myomata and one fibroid polypus, the source of the bleeding for which the patient had sought treatment. The polypus was ulcerated probably from the effects of the electrical appliance introduced into the uterine cavity. The left tube and ovary had suppurated and adhered strongly to adjacent intestines. The left internal iliac vein was dilated and contained hard clots: the right hypogastric bore a softer clot. Pieces of the old clot in the internal iliac had possibly become detached and caused pulmonary embolism, though Brindel admits that the clot might have been *post mortem*. If *ante mortem*, the symptoms might have been set up by an attack of phlebitis, the result of the manœuvres carried out with a view of curing the fibroid.

(425) Treatment of Stump in Hysterectomy for Fibroids.

VON MEYER (*Zeitsch. f. Geburts. u. Gynäk.*, vol. xxviii, part 1, 1894), in answering the objections raised against supravaginal hysterectomy, says that the stump of the uterus need never become offensive. He soaks it thoroughly with collodion, and protects it with a mantle of collodion poured over its surface. In every case the stump remains absolutely dry, aseptic, and free from fœtor. The interior remains moist, looking and smelling like meat extract. The stump can then be left eight to ten days undisturbed, at the end of which time the peritoneum will be securely closed.

THERAPEUTICS.

(426) Treatment by Tissue Extracts.

GOLDSCHEIDER (*Deut. med. Woch.*, April 26th, 1894) relates the investigations into this subject carried out in Leyden's clinic. One early and somewhat doubtful case of myxœdema was treated with various preparations of thyroid gland, but without obvious benefit. Of course this case cannot militate against the thyroid treatment, which has in unquestioned cases yielded the best results. The thyroid treatment really constitutes the scientific basis upon which similar treatment in other diseases has been made to rest. Six cases of diabetes were treated with pancreatic extract without the least benefit. One case of exophthalmic goitre treated with thyroid extract showed no improvement. The treatment, however, did no harm; when such occurs the author believes it due to too rapid administration. A case of pernicious anæmia treated with marrow extract yielded no results. The author has not tried spermin nor yet extracts of nervous tissue. Attention is drawn to the composite nature of these extracts, which do not contain the supposed specific substance alone. As matters of curiosity a case of phthisis is cited, which was treated with marked benefit with splenic extract, and a case of Addison's disease treated two years ago with tuberculin with apparently the best results. The author thinks it open to serious doubt whether the general application of this new method of treatment has a future before it.

(427) Care of the Mouth in Sick Persons.

ROSENBACH (*Zeit. für Krankenpflege*, April, 1894) says that in many illnesses there is almost sure to be secondary trouble in the mouth if preventive measures be not taken. A warning sign is dryness and redness of the tongue and mucous membrane of the mouth, with difficulty in swallowing; further signs are an evil odour from the mouth, coated tongue and gums, bleeding of the gums, etc. Just as special care of the mouth is required in patients with carious teeth, smokers and chewers of tobacco, so it is also in the case of unconscious or paralysed persons; patients with fever or suffering from chronic digestive complaints; those taking medicines, such as mercury or iodides, or who, on account of general weakness, have to take strong alcoholic drinks; but, perhaps, the most important class of those in whom special care of the mouth must be taken are patients with fever. Parasites are always present in the mouth, but it is only when the tissues are weakened that they undergo invasion by these parasites, which become then really pathogenic. There is nothing which one can do for sick persons which is unimportant, and by neglect in the care of the mouth convalescence may be retarded. Rosenbach concludes with the following rules: (1) Patients with good digestive powers, free from fever, and with no loss of consciousness require no more than the ordinary care of the mouth. (2) In children and very old patients the less solid food taken the greater should be the care with the mouth. They should rinse the mouth out several times a day with lukewarm water containing a little common salt, tincture of myrrh or eau-de-Cologne added to stimulate secretion. When there is a tendency to bleeding of the gums or when the teeth are bad a pinch of powdered boric acid may be twice daily rubbed in between the lips and gums. Patients with false teeth should remove their false teeth when, owing to loss of appetite or chronic gastric disturbance, they cannot take solid food. (3) In patients with partial loss of consciousness the mouth should be examined several times a day for small sores, such as may arise from the pressure of the teeth on the lips, etc. Such sores should be powdered with a little boric acid or chlorate of potash, and the cracks at the corners of the lips heal quickly if dried with a clean towel and treated with boric acid or vaseline. The mucous membrane may be stimulated by wiping the tongue and mouth and pressing on the tongue with a moist towel every two or three hours; if necessary, the hinder part of the tongue should be cleaned with a wad of cotton wool fastened to a stem. If the patient sleep with the mouth open the air in the room must be kept moist; a moistened layer of muslin laid on the mouth may be of some service. (4) Patients with fever should have something to drink—cold water or weak lemonade—at least every hour; one must not wait until the patient asks for drink. Besides preventing dryness, the fluid maintains the activity of the glands and the whole function of the mucous membrane. Many patients are prevented from drinking by a painful, dry and cracked condition of the lips, and therefore all feverish patients should from the commencement of their illness have their

lips rubbed several times a day with vaseline or fat. In protracted cases of fever the mouth may also be swabbed out with oil, fat, or greatly diluted glycerine.

(428) Dulcin.

Kobert (*Centralbl. f. inn. Med.*, April 21st, 1894) says that pure saccharin is described by many as not being really sweet. Dulcin, discovered by Berlinerblau, has a pure sweet taste, and excels saccharin in sweetness some 200 to 250 times. In structure it is an aromatic urea derivative—paraphenetol carbamide—and is allied to phenacetin. It is soluble in 800 parts of water at 15° C., in 50 of hot water, and in 25 of 97 per cent. of alcohol. Experimentally dulcin has been shown to be harmless to rabbits, but in dogs, which are more susceptible to its action, the evidence is somewhat conflicting. From his own experiments on cats the author concludes that doses corresponding to such as would be used in man are harmless: with abnormally large doses the cats became ill, and eventually died with cerebral symptoms. In diabetes it must be used in relatively small doses. Ewald has given it in doses up to 1.5 g. in the day. The author concludes that dulcin in reasonable doses is, as far as we know at present, harmless, and is an advance upon the use of saccharin owing to its sweeter taste. It does not bring about any decomposition of the blood.

(429) Malakin.

F. Merkel (*Münch. med. Woch.*, April 24th, 1894) observes that this drug has been recommended as an antipyretic, antirheumatic, and antineuralgic. It is a salicylic derivative and contains about 50 per cent. of salicylaldehyde; thus 4 g. corresponds to a little more than 2 g. salicylic acid. The author has tried malakin in 18 cases, 15 of acute rheumatism, 2 of enteric fever, and 1 of neuralgic pains in typhlitis. Its action is very mild, and no unpleasant bye-effects are noted: at most the profuse perspirations generally following its administration might be looked upon as unpleasant. Perhaps the quality of the pulse suffered occasionally. The drug has a distinct antipyretic effect, but this is not permanent. As an antirheumatic it can produce a decided improvement in the articular manifestations. In 15 cases of acute rheumatism a favourable effect was noted in 9, and in 2 of these other remedies had been used without benefit. The author looks upon malakin as an addition to our resources where other remedies fail. Whether it can be given like the salicylates in larger and more frequent doses remains to be shown.

(430) Treatment of Atonic Gastric Dilatation.

Wegele (*Münch. med. Woch.*, March 28th, 1894) deals with the severer forms of this disease, and not with such as accompany any gastric affection lasting over any considerable time. For the practical distinction of mild from severe cases, the test breakfast is useful; in marked cases remains of food are found in the water used for washing out the stomach on the following morning, whereas in mild cases the stomach is able to deal with such moderate demands. Pronounced atonic dilatation is not, in the author's opinion, such a rare event as is sometimes represented. At first the dry diet was employed, and for slighter cases it sufficed; but a rigorous carrying out of this regimen was often of disadvantage. Washing out the stomach proved a great advance, as in this way the stomach was freed of very acid and fermenting contents. Here, however, a considerable amount of nourishment is withdrawn, and the patient's nutrition and weight may suffer. Rectal alimentation must in addition be had recourse to; either water alone or the desirable food stuffs may be thus used. The amount of urine passed is a practical measure of the gastric insufficiency. By a strict dry diet and supplying the necessary water by the rectum, the patient's condition may be very greatly improved. Clysters containing grape sugar are apt to ferment and to produce diarrhœa, and the same is true of those containing peptone frequently repeated. The diet must be suited to the condition of the gastric chemistry. If hyperacidity is present large doses of alkalies are indicated. Washing out the stomach is, according to the author, best done in the morning. Raising the foot of the bed is said to be useful in helping to empty the pyloric antrum. If fermentation is present, harmless antiseptics should be added to the water, and salicylic acid, creosote, bismuth, salicylate given internally. If the abdominal walls are lax, a belt should be used. The author says that the prognosis is considerably improved by the use of the dry diet, and supplying fluid by the rectum.

PATHOLOGY.

(431) The Parasites of Cancer.

Kurloff (*Centralbl. f. Bakt.*, B. xv, Nos. 10 and 11) considers it very desirable that those engaged in investigating the supposed organisms of cancer should furnish with each published case the history of the patient, and a clinical and pathologico-anatomical account of the cancer. Seeing that in all these respects cases differ greatly from each other, it is very probable that the parasites present also vary in different cases. Only by some such plan can we hope to systematise the results arrived at by various investigators. In the present article especial attention is drawn to the organism (*Rhopalocephalus canceromatosus*) described by Korotneff. Kurloff has found what appears to be the same body in a primary cancer of the dorsum of the hand in a male, aged 80 years. The supposed parasite lay in a vacuole within the epithelial cell. The tissue was prepared as follows: small pieces were fixed in Flemming's solution and cut in paraffin. Sections were stained in various ways, those treated by safranin being the most successful. The most notable feature of this parasite is its great size; it is readily seen under a magnification of 300 to 400. It presents well-marked pseudopodia, by which movement, with passage from cell to cell, appears to take place. Kurloff is satisfied of the parasitic nature of this body. Establishing itself within the epithelial cell of the carcinoma, it leads to hypertrophy of this cell, which results in the formation of epithelial "nests."

(432) Occurrence of Living Parasites in the Blood and Cancerous Cells in Cases of Carcinoma.

In patients suffering from carcinoma, Kahane (*Centralbl. f. Bakt.*, B. xv, No. 12) finds in blood from the fresh growth, and also from the finger tip, minute, irregular, amœboid, highly-refractile bodies, which he regards as parasites. These show very active rotatory and progressive movements. The small bodies lie free in the blood stream, and also within the red corpuscles. The movements are kept up for an appreciable time after penetration of the corpuscle. Kahane thinks that further investigation may show morphological and biological points of resemblance between these bodies and the plasmodia of malaria. Examination in the fresh state disclosed similar bodies within the cells of the cancer. The growths examined were epitheliomata situated upon the face, prepuce, and cervix.

(433) The Saliva and some Bacteria.

Grawitz and Steffen (*Berlin. klin. Woch.*, April 30th, 1894) first refer to the investigations of A. Schmidt (Epitome, August 26th, 1893, par. 178) in regard to the sputum as a cultivation medium. Steffen has himself shown that the sputum serves this purpose for the staphylococcus, streptococcus, and diphtheria bacillus. The authors have investigated the duration of life and question of virulence of the pneumococcus cultivated in pneumonic sputum. The duration of life is in this way considerably increased, and the pneumococcus, enfeebled by long cultivation, shows vigorous growth when transferred to such sputum. Like other authors they have found that pneumococcus present in the saliva soon loses its virulence, and in six or seven days is harmless. If injected into animals, however, in this attenuated form it protects them against the pneumococcus infection. Such pneumococci transferred to pneumonic sputum have their virulence considerably increased. This is quite unlike anything that happens in the case of other artificial cultivation media. For the purpose of regaining its original virulence the pneumococcus has hitherto been passed through a susceptible animal, but by these experiments it is shown that the same effect can be produced in the shortest time by transferring it to sterilised pneumonic sputum. The diplococcus in the saliva and that in the pneumonic sputum have a different degree of virulence.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(431) Oxaluria.

BOURSIER (*Ann. de la Soc. d'Hydr. Méd. de Paris*, 1894) gives notes of 66 cases treated at Contrexéville. Oxalate of lime is probably intimately allied to uric acid, and out of 450 patients suffering from gout or uric acid gravel Boursier found crystals of oxalate of lime in the urine of 150; Debout d'Estrées found it slightly less frequently. The high specific gravity, usual in the urine of oxaluria, is probably due to the presence of oxalates, and when these are replaced by uric acid the specific gravity of the urine usually falls. The renal pains in oxaluria vary much in intensity and situation; they may be accompanied by nausea, and take on the appearance of true nephritic colic, with or without the expulsion of oxalic gravel, but the intensity of the pain is in no relation to the size of the oxalic fragments. Hæmaturia was observed in more than a third of the 66 cases; it is usually very slight, and results, not from the presence of oxalic gravel, but from congestion of the kidneys due to the irritation by the oxalates. In one case hæmoglobinuria, like paroxysmal hæmoglobinuria, was observed. In oxaluria the bladder may be irritable, and the frequency of micturition, accompanied by intermittence in the stream and a sensation of burning in the urethra, may give rise to a suspicion of vesical calculus. Oxaluria may be, so to speak, physiological, that is, due to a diet with vegetables rich in oxalate of lime, or it may be pathological. In the latter case it forms part of a "syndroma" of symptoms, the chief of which are dyspepsia and nervous troubles. Dyspepsia was noted in half of the 66 cases; constipation was also frequent and often accompanied by hæmorrhoids; diarrhœa was noted in some cases. Owing to their nervous troubles many of the patients may be classed as neurasthenics. Boils and carbuncles frequently accompany oxaluria. Boursier has not noticed the spasmodic cough recorded by some English authors. In the etiology of oxaluria heredity plays a great part, especially hereditary predisposition to arthritism. As determining causes Boursier attaches most importance to dyspepsia and nervous troubles; he considers that oxaluria should be regarded rather as a form of dyspepsia than as a separate disease; he does not, like Begbie, think that the dyspepsia and nervous troubles are due to a sort of "oxalæmia." Boursier follows Hahn and Beneke in attributing oxaluria to an arrest in the catabolic changes normally undergone by nitrogenous material before excretion from the body; hence it is that oxaluria is induced by all the causes which lead to a disturbance in nutrition, the *ralentissement de la nutrition* of Bouchard, which prevents the proper oxidation in the tissues. Oxaluria may lead to the formation of oxalic gravel or calculus in the kidney or the bladder; these differ from those of uric acid, because in the case of oxalate of lime the frequency and intensity of nephritic colic are in general greater and hæmaturia is more frequent; another difference is that uric acid sand is more often expelled than oxalic sand. Oxalic calculi take longer to form than those of uric acid, and therefore relapses after their removal are less frequently observed. Treatment with Contrexéville water is better at the place itself than at home. More than eight glasses—about 2½ litres—a day is not recommended. To complete the treatment at Contrexéville it is sometimes advisable to continue taking the water at home.

(435) Nucleo-albuminuria.

PICHLER AND VOGT (*Centralbl. f. inn. Med.*, April 28th, 1894) observe that a more exact examination has shown that proteid substances in the urine do not only consist of serum, albumen, and globulin; nucleo-albumen is characterised by its solubility in acetic acid, its precipitation by magnesic sulphate, and by the separation on boiling with dilute mineral acids of no reducing substance. It must be distinguished from globulin and mucin. Nucleo-albuminuria seems to appear when any damage is done to tissue cells, or more seldom when secretions holding nucleo-albumen, such as bile, get into the blood. In experiments on dogs, the authors show that the injection of casein produces nucleo-albuminuria. The simplest way of damaging protoplasm is to limit the supply of oxygen, and in these cases lactic acid, etc., appears in the urine. The authors demonstrate by their experiments on animals that temporary obstruction of the femoral artery will give rise to nucleo-albuminuria. In four experiments on dogs in which the renal artery was temporarily obstructed nucleo-albumen appeared. Serum-albumen was absent in one case, and only present for a short time in the others. The only changes found in the kidney were fat in the cells, and some alteration in the protoplasm belonging to the cells of the convoluted tubes. Experiments thus show that the renal tissue may be the source of nucleo-albuminuria, and this source must be excluded before others are thought of. The so-called cyclical albuminuria is often nucleo-albuminuria. In some cases of temporary compression of the chest or limiting the blood supply to a limb in young people albuminuria may be produced, but nucleo-albumen is more the exception here than the rule. These researches show further reasons for separating nucleo-albumen from ordinary albumen. The authors' investigations in the case of disease yielded similar results to those of Obermayer.

(436) Renal Casts.

AUFRECHT (*Centralbl. f. inn. Med.*, May 12th, 1894) discusses the origin of these casts. They must either be due to an exudation from the blood, or be a product of the renal epithelium. In favour of the latter view the following facts are cited: (1) In experiments in which the author tied one ureter, the renal epithelium was seen to contain masses of a hyaline substance which latter subsequently made its way into the lumen of the tubules to form casts. (2) Albuminuria may exist without casts. (3) Casts may be present without albuminuria. (4) Casts may be seen in the collecting tubes of a different colour, and having such a calibre that would not have allowed them to pass through Henle's loops; the author has shown this undoubtedly local origin in the tubules in the cholera kidney and in scarlatinal nephritis.

(437) Elimination of Phosphates in the Urine in Malarial Fever.

REM-PICCI AND BERNASCONI (*Il Policlinico*, No. 8, 1894) find that there is often in malarial infection an increase in the elimination of phosphoric acid during the first twenty-four hours. This they attribute to the increased ingestion of food which is so commonly desired at the onset of the illness. Almost as soon as the temperature has risen distinctly above the normal there is a very notable diminution in the amount of phosphoric acid eliminated, in spite of the fact that the amount of urine passed is generally much increased. This diminution is independent of the amount of food taken, and occurs even if at the beginning of the access a large dose of phosphate of sodium is taken, or the same drug if given by subcutaneous injection. The diminution is not proportional to the degree or duration of the fever. Immediately after the access of fever ceases there is a remarkable "unloading" of phosphoric acid, which continues for several hours, and generally compensates for the retention observed during the febrile paroxysm. If the access is cut short by quinine, phosphaturia is usually observed. In chronic malarial cachexia the elimination of phosphoric acid did not appear to be affected.

SURGERY.

(438) Cranial Surgery.

LUCAS-CHAMPIONNIÈRE (*Revue de Chirurgie*, May, 1894), presented to the Medical Congress at Rome a review of 64 cases, in which, since 1874, he had trephined the skull. Of these, 10 were cases of recent injury, and 54 were cases of cerebral disease, either non-traumatic or consecutive to a very old injury. In trephining the author uses a large crown, and then, if it be necessary, enlarges the cranial opening by special bone forceps. This proceeding, it is held, is simple, and causes the least possible shaking, and no other is known which gives in a more satisfac-

tory or rapid way the desired dimensions in every direction. A large and single flap is preferred, as affording the best conditions for solid repair. The author has always practised his well-known method of determining the motor centres, and never failed to find the supposed seat of disease. He states that surgeons who have performed many serious operations on the head trust to large openings in the cranial wall, and take but little heed of slight differences in mensuration, which in practice cannot fail to embarrass. His own method of regarding the whole region rather than a single point, has always seemed to him to be more practical than other methods, pretending to an impossible precision, but possessing no real utility. Of the 10 cases of trephining for injury, 3 were fatal, the operation having been performed in each under most unfavourable conditions. The remaining cases, some of which, it is stated, seemed to be quite as hopeless, were successful, and one of the patients is still living after an interval of more than nineteen years. The results of the 54 non-traumatic cases prove in a still more striking manner the freedom of trephining, in itself, from any serious risk. The subjects of the 7 cases which proved fatal were all doomed to a speedy death, and in 2 of these cases the cerebral lesions were very extensive. Of the 54 operations, 14 were performed for essential epilepsy, 12 for partial Jacksonian epilepsy, 6 for epilepsy of traumatic origin, and the remaining 22 for various cerebral lesions. The author states that he has obtained good results from the operative treatment of epilepsy. Cure or decided improvement followed in more than half the number of cases, and one patient has remained well for two years. In two cases only were there no good results; and in none of the fourteen cases did the surgical treatment prove fatal. The cases of Jacksonian epilepsy were not satisfactory, as in one-half trephining was soon followed by death. Most of these cases, however, seem to have been complicated and very severe, as mention is made of cerebral tumours, hæmorrhages, and meningitis. In the last series of cases, one only of which was fatal, the operation was indicated by such affections as vertigo, pain in the head, intracranial *bruits*, and paralyses. In cases of this kind the aids to localisation, it is stated, are more satisfactory than those afforded by the phenomena of localised epilepsy. Pain stands before all other indications of trephining for disease. It is always relieved by this operation, and is sometimes completely cured. Vertigo presents itself under analogous conditions, and may be cured by extensive or repeated trephining. Monoplegias, whether alone or associated with epileptiform phenomena, are also good guides to the central disease. Trephining has been attended with very satisfactory results, in the author's practice, in cases of limited cerebral hæmorrhage, of syphilitic osseous growth, and of diffused peri-encephalitis of traumatic origin. The last mentioned cases are, in the author's opinion, especially interesting. Certain injuries of the brain may, it is stated, be followed by symptoms and lesions resembling in every respect those of general paralysis. These results of cerebral traumatism will certainly prove fatal if left to take their course; but, if treated early by free trephining, may be arrested and abolished. Reference is made to a case in which very serious symptoms, following a head injury after an interval of two months, disappeared after trephining, the patient being quite cured. The resemblance of the symptoms of diffused peri-encephalitis to those of general paralysis, and the good results of operative treatment in the former condition, favour the expectation that general paralysis in some of its forms may be made amenable to surgical treatment.

(439) Indications for Tracheotomy.

Cnopf (*Münch. med. Woch.*, May 8th, 1894) says that when membrane is present in the larynx, two factors have to be reckoned with: (1) irritation of the respiratory centres, and (2) narrowing of the larynx. Since the upper lobes of the lungs are under favourable conditions as regards inspiration, and the lower lobes as regards expiration, distension occurs in the former, atelectasis in the latter. The author's observations extend over 130 cases of laryngeal obstruction in children. On admission the position of the diaphragm was marked out on the chest behind, and subsequent variations noted. In 67 cases, the diaphragm stood at the tenth rib in 3 cases, at the eleventh in 13, under the eleventh in 13, and at the twelfth in 38. The deepest position of the diaphragm was thus observed in a majority of cases, and this at all ages. In 112 out of 126, the deep position was noted by the third day, and usually it was present on admission. In tracheotomised cases carefully observed the position of the diaphragm was rapidly raised one space in 12 cases, and two spaces in 13. In only 4 cases did the diaphragm remain at the same level after tracheotomy. The position of the diaphragm is thus a measure of the laryngeal stenosis. The question of vesicular breathing and of the pulse must be considered, but with the arrival of the diaphragm at its deepest position the time for tracheotomy has come.

(440) Herniotomy for Strangulation in Infants.

Notwithstanding the very rare occurrence of herniotomy on an infant in the practice of any single surgeon, Stern (*Centrablatt für Chirurgie*, No. 19, 1894) has been able to add to a collection of 99 such cases, made by Knobloch in 1890, no fewer than 54 fresh cases taken from journals and hospital reports. Of the total number, 138 were cases of inguinal, and 14 cases of umbilical hernia. The remaining case was one of femoral hernia. In 110 cases the patient's age was under 12 months. The mortality in the cases of operation for strangulated inguinal hernia was about 28 per cent. The two tables taken together show that the mortality after operation for this form of hernia has, since the introduction of the antiseptic method, been reduced rom 33 to about 21 per cent. The latter proportion, however, is regarded by Stern as too high, since in some cases the death could not be attributed to the results either of the strangulation or of its surgical treatment. He states that in his own list of cases the percentage of deaths from the hernia is not higher than 13.6. The prognosis of herniotomy for strangulated inguinal hernia therefore is less unfavourable in infants than in grown-up subjects, as in the latter the mortality under antiseptic conditions is about 19 per cent. In the total number (14) of cases of umbilical hernia the mortality was 50 per cent., and in those cases (11) which were treated antiseptically 36.3 per cent. In considering the difficulties of diagnosis in cases of strangulated hernia in young infants, the author remarks that in many of his collected cases the occurrence of urinary retention was noted. He holds that in doubtful cases the hernial rings should be explored, and that when the symptoms of strangulation are clear, herniotomy should not be delayed after a warm bath and taxis with the patient under an anæsthetic have proved useless.

MIDWIFERY AND DISEASES OF WOMEN.

(441) Tetany in Pregnancy: Relation to Mollities Ossium.

Neũmann and Braun (*Centralbl. f. Gynäk.*, No. 20, 1894) introduced a discussion on this subject at the March meeting of the Vienna Obstetrical and Gynæcological Society. One case of Braun's was unique. A 9-para, aged 39, had suffered for five years from mollities, bearing five children during the illness. The disease always advanced during pregnancy and halted after each labour. In her last pregnancy tetany set in; she had never suffered from it before. The bone disease making rapid progress, Porro's operation was performed. Although immediately afterwards the mollities began to cease its advance the tetany still remained, though it usually ceases after labour. It was slowly disappearing when the report was read. Braun's second case was in a woman, aged 28. In her second labour, at the seventh month, severe tetany occurred during each pain. The spasms were confined to the right arm. They ceased on the administration of morphine, and the labour ended normally. Neũmann's first case was 37 years old. In the second half of her fifth pregnancy tetany occurred in the hands, and recurred at every succeeding pregnancy when quickening was first noticed. During her eleventh pregnancy tetany attacked the hands, feet, and muscles of the neck. At delivery the convulsions became severe at each

pain, and also during the taking of a pain or massage of the uterus. Laryngeal spasm and cramps of the diaphragm and muscles of the abdomen occurred. The tetany became less frequent when the labour pains ceased. In Neümann's second case the patient was 30. Tetany occurred in the last month of her first pregnancy in the hands. It recurred during childbed after her third delivery; in the three following pregnancies and labours it was not observed. In the seventh pregnancy it set in two months before labour, and became very severe during labour pains. There was much pain in the hands; the feet and eyelids were involved. After expulsion of the child the convulsions became less. *Post-partum* internal hæmorrhage occurred. The uterus was emptied of blood and the tampon applied; these manipulations aggravated the tetany. The patient recovered, the tetany ceasing gradually during childbed. The patient had mitral incompetence.

(442) Cradle versus Couveuse.

GUÉNIOT (*Journ. des Sages-Femmes*, April 16th, 1894) restricts the use of the *couveuse*. The cradle, kept warm by bottles, is sufficient to rear a child who is simply rather feeble or only a few weeks premature. The body of the child can with a fair amount of care be surrounded by a temperature ranging from 95° to 98.5°, whilst the whole air of a well-ventilated room is at the disposal of the infant's lungs. The falls of temperature in the room are never likely to be great and sudden. Above all the infant can be taken out several times daily so that its limbs may be rubbed, this practice encouraging muscular contractions. Some slightly greasy application should be used to protect the skin against the dryness caused by heat. In the *couveuse* the child is too hot, its head as well as its body lying in a close atmosphere which it has to breathe. The skin gets too dry in spite of many precautions, nor can the child be taken out for friction of the limbs, as the difference in temperature inside and outside the apparatus is perilously high. The *couveuse* is only needed in the case of the infants of very poor persons where there is no warm and healthy room in their dwellings and in hospitals, and lastly in the case of very premature children or infants markedly weak and two or three pounds below average weight.

(443) Ovariotomy: Pregnancy: Childbed.

MANGIAGALLI (*Berl. klin. Woch.*, May 21st, 1894) is a strong advocate of ovariotomy during pregnancy, on the special plea that suppuration frequently occurs in ovarian cysts during childbed. In 150 ovariotomies performed by himself, 5 were done during pregnancy and 11 very soon after the puerperium. Of the 5 pregnant cases 1 died of shock, but suppurative peritonitis following suppuration of the cyst and tension of the pedicle had set in before operation. In the other 4 little or no difficulty was encountered; 2 were delivered at term, one at the eighth month, and in 1, where the operation was performed in the third month of pregnancy, labour was induced four weeks later on account of uncontrollable vomiting. The patient then recovered. Out of the 11 cases of ovariotomy shortly after delivery 2 died, in both cases from acute suppuration of the cyst. In all the 11 there were dangerous or troublesome complications, namely, torsion of the pedicle with peritonitis in 2, torsion and suppuration in 2, primary suppuration of the cyst in 5, rupture of the cyst in 1, and hæmorrhage into the cyst in 1. Mangiagalli notes than in all his 150 cases suppuration of the cyst was only seen in 16. In half of these cases the complication was due to childbed. Hence ovariotomy in pregnancy is less dangerous than expectant treatment and operation deferred till after delivery. The operation should be performed directly the tumour is diagnosed, preferably in the course of the first five months.

(444) Malformations of the Fallopian Tube.

KOSSMANN (*Zeitschr. f. Geburts. u. Gynäk.*, vol. xxix, 1894) has prepared a valuable monograph on accessory tubes and ostia. He has found that these abnormalities are really frequent, being found in from 4 to 10 per cent. of all female subjects. Accessory tubes may have no lumen; if they are not solid and bear a channel it never opens into the channel of the normal tube, but sometimes opens into the peritoneum. In this case fimbriæ are always present. On the other hand, fimbriæ may exist when the accessory tube has no lumen. Fimbriæ usually surround an accessory ostium; lastly, perfectly sessile accessory fimbriæ are sometimes found on the surface of a normal tube. When an accessory tube has a lumen which becomes obstructed, a cyst develops. This cyst may be taken for a parovarian cystic growth. Kossmann suggests that all parovarian cysts may be derived from accessory tubes. As the duct of Müller originally consists of two segments, the nature of the above-described anomalies is easy to understand.

(445) Hydatidiform Mole: Malignant Disease of Decidua.

NOVÉ-JOSSERAUD (*Lyon Médical*, February 25th, 1894) relates a case in which a woman, aged 26, had amenorrhœa four months and then suffered from flooding for eight weeks. At length a large hydatidiform mole was delivered. A few weeks later the floodings recurred. The uterine cavity was explored, and at one point it was found that the finger could be deeply plunged into the softened tissues, and some detached fragments were examined microscopically. Malignant deciduoma was diagnosed. On July 12th last year vaginal hysterectomy was performed by Fochier. Disseminated malignant changes arising in the decidua were detected in the uterus. In October the patient was in excellent health.—Löhlein (*Centralbl. f. Gynäk.*, No. 20, 1894) reports the further history of a case already published (*ibid.*, No. 14, 1893). After a hydatidiform mole had developed in the uterus and had been removed, symptoms of malignant disease set in. It was an example of the malignant degeneration of the decidua only recently recognised by pathologists. On August 8th, 1892, the uterus was extirpated. On August 31st, 1893, the patient died. She had recovered perfectly from the operation, and remained well till the beginning of July, 1893, when dyspnœa and hæmoptysis set in. She ultimately succumbed to pleuro-pneumonia, evidently, it was declared, due to metastatic deposits in the pulmonary tissues.

THERAPEUTICS.

(446) The Quantitative Estimation of Diphtheria Antitoxin Solutions.

BEHRING AND BOER (*Deut. med. Woch.*, May 24th, 1894) say that the method first employed for this purpose consisted in adding such a quantity of antitoxin as would render an absolutely fatal dose of the poison in question inert when injected. The terms normal antitoxin and normal poison were defined by Behring and Knorr in respect to tetanus. When diphtheria antitoxin was discovered, the mixture method referred to above was at first employed. The smaller the amount of the antitoxin-containing serum required the greater the amount of the antitoxin present. This method was, however, abandoned for some time. The relation between the degree of acquired immunity and the antitoxin present in the blood of the immune animals apparently permitted of a more convenient method, but subsequently this relation was shown not to be constant. Hence the direct estimation of antitoxin had again to be resorted to. Then it was ascertained (by Behring with others) that diphtheria antitoxin provides a protection against infection with living diphtheria cultures. Diphtheria normal serum was then defined as being such that when an amount was injected corresponding to the proportion of 1 in 5,000 body weight, it would save a guinea-pig after it had been injected with ten times the minimum fatal dose of a living diphtheria culture two days old. This method was adopted since diphtheria in man is produced by living micro-organisms. The dosage of the antitoxin for man should apparently be proportional to that required for animals infected not with the diphtheria poison but with living diphtheria cultures. However, it has been found that the estimation better corresponds to that obtained in experiments on animals when the ready-made poison is calculated from. Ten times the certainly fatal dose of the diphtheria poison has been chosen. The mixture method is not adopted, but the antitoxin has been injected at a different place to the serum. Only the life saving effect has been chosen as the end reaction. Fifty times the amount of

antitoxin was required for the cure of a guinea-pig injected with ten times the lethal dose of the diphtheria poison than when injected with ten times the minimum lethal dose of a living culture. After the harmlessness of this antitoxin was established, together with the protection against and cure of the disease produced in animals when injected with living cultures or the diphtheria poison, it was time to try it in man. It has been shown that diphtheria in man can be successfully treated with diphtheria antitoxin if 500 to 1,500 antitoxin normal units are rapidly injected beneath the skin. Only by means of experiments on animals could these results have been obtained. The authors then relate their investigations with the serum supplied by Schering, and compare it to the Behring-Ehrlich normal solution; they find that its strength has been miscalculated by more than 60 per cent.

(447) Treatment of Infantile Convulsions.

J. Simon (*Gaz. des Hôp.*, Feb., *La Méd. Inf.*, May, 1894), divides the treatment of infantile convulsions into four stages: (1) In the first place the digestive canal should be emptied, as in four-fifths of the cases the convulsions are due to indigestion, or obstinate constipation; a warm enema should be given with oil, glycerine, or salt. (2) To calm the nervous system, ether or a few drops of chloroform should be given by inhalation; after the enema has acted a clyster containing chloral and musk should be given (8 grains of chloral to an infant of three to six months, 11 grains to an infant of nine months, and 15 grains to one of a year, with 20 drops of tincture of musk) in three or four parts, to ensure its retention and absorption. In addition, a mixture containing small doses of bromide of potassium, and tincture of musk should be given every hour or every half hour. (3) In obstinate cases, cutaneous revulsives should be used, such as mustard baths (from one to three) or a blister to the back of the neck, left on for three hours. (4) In seeking the cause of the convulsions, if indigestion, constipation, and enteritis be absent, search should be made for burns and other sources of cutaneous irritation, foreign body in the nose or ear, hernia, undescended testicle, or retention of urine, but especially for evidence of uræmia. If there be reason to suspect that condition the treatment prescribed should be counter-irritation over the kidneys, hot-air baths, leeches to the mastoid process, or venesection. When the attack has passed off the infant should not be considered out of danger until it has passed water freely.

(448) The Action of Chloroform on the Cardiac Rhythm.

It was shown by the Hyderabad Chloroform Commission that the rapid temporary fall of blood pressure which often occurs when chloroform is suddenly administered is due to a reflex slowing or inhibition of the heart through the vagus nerves. J. G. MacWilliam (*Proc. Royal Soc.*, vol. 53) has worked out the way in which chloroform brings about this and other variations in the cardiac rhythm. He finds, in cats and rabbits, the same two stages in the effect of chloroform on the cardiac rhythm as is observed in man, namely, a stage of acceleration followed by a stage of slowing. These two stages are still manifest after the accelerator nerves are divided. The acceleration, therefore, is not due to impulses reaching the heart by the accelerator nerves. After the vagus nerves are divided, with or without the division of the accelerators as well, the rapid heart beat consequent on the removal of the restraining action of the vagi can still be slowed down by the action of chloroform, but this is not preceded by any further quickening. The stage of acceleration is, therefore, due to the chloroform more or less paralysing the inhibitory action of the vagi. That slowing is produced after the vagi are divided, although it is not so great as when they are intact, shows that the slowing is not entirely due to a stimulation, reflex or direct, of the cardio-inhibitory centre. It is further shown that the slowing is not due to the stimulation of the local inhibitory mechanism of the heart, for the administration of atropin which paralyses this mechanism does not prevent the slowing being produced by chloroform. MacWilliam's researches, therefore, give additional proof of the direct action of chloroform on the heart. He concludes this part of his work with these words: "It appears that chloroform acts on the heart and distinctly slows its rate of beat through a depressing or retarding influence exerted on the intrinsic rhythmic mechanism of the organ." In the remaining part of the paper the relation of the rate of beat to the blood pressure and the influence of the direct and reflex stimulation of the cardiac nerves is discussed. Reflex acceleration is not due to impulses reaching the heart by the accelerator nerves, for it may be readily obtained after they are divided provided that the vagus nerves are intact. Muscular exertion causes acceleration of the heart, partly by diminishing the influence of the vagi. Animals with great running and staying powers have a slow pulse, usually markedly restrained by the cardio-inhibitory centre, and so capable of rapid acceleration by inhibition of that centre. This is strikingly seen when the effects of the division of the vagi in the rabbit and the hare are compared. In the rabbit removal of vagus influence produces but little change in the rate of beat, while in the hare the pulse may rise from 64 to 264, showing the marked action of the cardio-inhibitory centre, and consequent power of rapid acceleration of the heart in the latter.

(449) Acute Poisoning by Creosote.

Zawadzki (*Centralbl. f. inn. Med.*, May 5th, 1894) reports a case due to the medicinal use of this remedy. A woman, aged 52, with pulmonary symptoms, was ordered 6 drops of creosote in milk thrice daily. After three doses she suffered from difficulty of swallowing, gastric pain, vomiting, diarrhœa, and a distressing tendency to cough. On admission twenty-four hours later the breath smelt of creosote. The skin and mucous membranes were pale, the lips blue, and the dysphagia marked. The mucous membrane of the mouth was of a dull white colour in parts. There was also present paralysis and anæsthesia of the palate, laryngeal paralysis, and analgesia of the left arm and of parts of the left leg. Later albumen and casts were found in the urine. Four days after taking the creosote there was some stupor present, and the weakness became more marked. On the next day collapse supervened, and the patient died. Two large erosions were found in the upper part of the œsophagus, and others about the pylorus. The stomach was also red and injected. The kidneys showed evidence of acute nephritis, and the liver of cloudy swelling. There was, in addition, chronic thickening of the mitral valve. The symptoms, together with the smell of creosote, made the diagnosis certain. Since the patient had certainly not taken more than 18 drops, an idiosyncrasy must have been present. The author has observed that creosote is best taken in pill; it does not mix with milk, hence the eroding action seen in this case. Small doses of 1 to 2 drops should be used at first, and increased if desirable.

PATHOLOGY.

(450) Putrefactive Gases as Predisposing Agents in Typhoid Infection.

Alessi (*Centralbl. f. Bakt.*, B. xv, No. 7) has made experiments which throw light upon this subject. Rats, guinea-pigs, and rabbits were confined in boxes with perforated bottoms, and these boxes were then placed over open privies or cesspools, or over receptacles containing the evacuations of the animals. Notwithstanding that they continued to eat well, the animals lost their liveliness, and gradually pined. They were inoculated in this state with a small dose of typhoid bacillus, with the result that they died in twelve to thirty-six hours. The examination showed signs of hæmorraghic enteritis, swollen Peyer's patches and spleen, and typhoid bacilli in the blood, liver, and spleen. The same dose had no effect upon the majority of the control animals; only a few showed slight symptoms of illness, and one died. These experiments go to show that animals are rendered highly sensitive to the typhoid bacillus by previous inhalation of the gases of putrefaction. Alessi next investigated the isolated action of the various gases produced in putrefaction, to ascertain if any one were capable of creating the predisposition referred to. The result was in each case negative. The same held good as regards certain mixtures of these substances.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(451) Acute Ascending Paralysis.

JOLLY (*Berl. klin. Woch.*, No. 12, 1894) gives the case of a restaurant keeper, aged 41, who, in September, 1893, suddenly developed a paresis of the lower extremities. This soon passed on to complete paralysis; the hands and arms became similarly affected, and some difficulty in speech and respiration followed together with a similar difficulty in the movements of the face and eyes; the pulse became increased in frequency. The trouble in respiration was due in part to acute bronchitis, but in part to paresis of the diaphragm. Turning the head became difficult owing to weakness of the musculature of the neck. As regards the eyes, bilateral paralysis of the external recti was noticed; the left pupil was larger than the right; both pupils reacted badly to light, and there was paralysis of accommodation; the ophthalmoscope showed well-marked double optic neuritis. In the hands and feet there was hyperæsthesia to pain, but ordinary tactile sensation and the perception of heat and cold were much blunted. In some of the affected muscles a modified reaction of degeneration was made out. The bladder was not affected. The patellar reflex was abolished. The patient soon began gradually to improve; power in the limbs increased, respiration became free and expectoration easy. The pulse frequently fell to the average, and the movements of the head could be made with more power; the temperature, which had been raised at first, became normal, and the dreams which had at first disturbed the patient became less frequent. The patient was a great beer drinker, and Jolly regards the case as one of acute alcoholic polyneuritis possibly likewise assisted by excessive tobacco smoking; he hopes that in some months the patient will have quite recovered. The extent of the cerebral nerve affection was somewhat unusually great. Optic neuritis has already been described in cases of polyneuritis by Eichhorst, Strümpell, etc. Jolly does not agree with Ross, who tried to establish the identity of Landry's paralysis with the acute idiopathic variety of peripheral neuritis. Jolly says that some cases of acute ascending (or descending) paralysis are, contrary to what was observed in the present case, not associated with any change in the faradic reactions, even after the paralysis has lasted for weeks, and that such cases can therefore not be ascribed to neuritis. In such cases—which are often fatal—there must be some harmful influence, usually of toxic or infectious nature, acting on the motor part of the nervous system as far up as the medulla oblongata. Whether in such cases life can be preserved for a considerable time without any anatomical, even histological, changes taking place in the nervous system must be left for further investigation to settle. Jolly calls attention to the occasional association of other nervous lesions with those proper to alcoholic polyneuritis, and concludes that the clinical forms of acute ascending (or descending) paralysis (1) belong usually to the class of polyneuritis, but (2) may be caused by acute diseases of the cord or metencephalon or by combination of these diseases, and (3) sometimes probably the cause of the disease may act without producing any lesions that can be made out with the microscope.

(452) Polyuria in Phthisis.

ROBIN (*Arch. Gén. de Méd.*, May, 1894) begins a study of the nutrition in phthisis with the investigation of the urine. In the early period of the disease the amount of urine tends to increase. In 32 cases the average daily amount was 1,200 to 2,000 c.c. In the second period the quantity is less, but is still above the normal, the average amount in 27 cases being 900 to 1,500 c.c. In the third period the diminution is more marked, though some patients still pass considerable quantities. Among 19 cases the average was 200 to 1,400 c.c. In senile phthisis polyuria is less frequent. The author agrees with Tessier in the simultaneous existence of phosphaturia and polyuria. On the other hand, in many patients the amount of phosphates present was about normal. Phosphaturia may be present without polyuria, and no parallelism seems to exist between the two conditions. Thus it is difficult to see any causal relation between them. Polyuria due to caseous (*sic*) nephritis is never considerable, and is sometimes intermittent: here the urine is said more usually to contain blood, pus, and caseous *débris*. If the polyuria is due to a mixed nephritis, two types must be distinguished: (1) the amount of urine being permanently increased, and (2) the amount being increased for a long time, but diminishing for some months before death. The tuberculous patient with parenchymatous nephritis has not always polyuria. Amyloid degeneration is a less common cause of polyuria, which exists only at the beginning, the amount of urine subsequently falling below the normal. Sometimes the polyuria is intermittent. The author has never seen azoturia with polyuria in these cases.

(453) Adenoid Vegetations and the Growth of Children.

CASTEX AND MALHERBE (*La Presse Méd.*, March 31st, 1894) report certain observations on the rate of growth of children after removal of adenoid vegetations of the naso-pharynx. Measurements were taken before operation and at varying intervals after. In all, 35 cases were traced for 3, 6, 9, or 12 months. The general conclusion drawn is that during some months after the operation the rate of growth, as estimated by increase of height, weight, and chest measurement, was thrice the average rate as given in the statistical tables of Quételet for height and weight, and of Pagliani for chest girth. This conclusion was reached from averages calculated on the assumption that an increase noted in half a year, would be half that which would occur in a year. Independent analysis of the tables given by Castex and Malherbe shows that there were great differences in the rates observed in different cases. Thus two boys aged respectively 12 and 13 were examined after a year. In the former the increase in chest girth was a little above the average, the increase in height practically the same as the average, and in weight a little below. In the other boy the increase in weight was slightly greater than the average, but in height thrice the average. In three girls the improvement was more distinct: in one aged 11, the increase in weight and chest girth was very considerably more than a third above the average, though the increase in height was less than the average. In a girl aged 12 the increase in all three dimensions was more than a third (in chest girth more than one-half) above the average. In a girl aged 15½ the increase in chest girth was more than four times the average (measurement made at mammary level), and the increase in height and in weight was about twice the average. In a girl aged 5½, the increase in weight was distinctly below, that in height slightly above, the average. In three boys aged 12, 13, and 17 respectively, measured six months after operation, the weight and chest girth had increased more in that period than in the average boy in a year. But in another boy aged 14½ the increase in weight was only slightly greater than the average, and the increase in height and in girth was distinctly below the average. In four girls aged respectively 10, 10, 12, and 17½, examined six months after the operation, the rate of increase in all three dimensions was very notably in excess of the average.

SURGERY.

(454) Craniectomy for Microcephalus.

JACOBI (*N. Y. Med. Rec.*, May 19th, 1894) gives statistics of 33 cases in which craniectomy was performed for idiocy or microcephalus. In all he made special inquiry of the operators as to the condition of the patient before operation, the result, and the opinion formed by the surgeons as to the value of the operation. In the 33 cases, 41 operations were performed; 14 patients died and 19 recovered. The deaths occurred at various ages from 1 to 6 years. Most of the deaths occurred soon after the operation, six within a day. The cause of death was not always given or known; in one it was attributed to the anæsthetic. Some patients developed a very high temperature which was not explained, inasmuch as not even the

dura was injured. Others died of shock a few hours after the operation. The final report as to their mental and general condition was as follows: No history obtained, 1; uncertain, 1; no improvement, 7; slight improvement, 7; "some," 1; much improvement, 2. Keen, from an experience of 14 cases, stated that the mortality was very high, and the gain moderate, though possibly worth the risk. Wyeth, who had operated on 8 cases, considered the operation so dangerous that it was justifiable only in very marked microcephalus with undoubted symptoms of compression. Jacobi confirms the statement of Bourneville that the operation may eventually lead to a reduction and not an enlargement of the cranial capacity. In one case in which death occurred after the second operation, the whole lower aspect of the first craniotomy wound was thickened by hard new tissue about half a centimetre thick, which pressed down upon the brain. In this case death occurred sixty-seven days after the first operation. While questioning whether the operation is justifiable at all Jacobi expresses the opinion that the only cases likely to be amenable to treatment are instances of uncomplicated premature ossification of the sutures and fontanelles. In a typical case of this kind, the development of the child is normal mentally and physically for the first few months of life. Closure of the cranium takes place between the fifth and the tenth month instead of the fifteenth, and the child becomes liable to convulsions, which may be fatal, to contraction of the extremities and other evidences of irritability. In many such cases the tendency to premature ossification may be observed in other bones. Such children may stand early, and the superior maxilla be especially affected, the teeth appearing early and in the upper jaw first.

(455) Early Operation in Osteomyelitis.

At the recent German Surgical Congress (*Deut. med. Woch.*, May 17th, 1894), Küster spoke on this subject. He included in it all inflammation of bone caused by micro-organisms, even when the disease does not begin in the medulla, but in the spongy or compact bone, or even in the periosteum. The direct cause of the disease can penetrate through the unwounded skin, but furuncles, etc., are stated to be apparently always intermediary. Scratching, etc., can give rise to the inoculation. The author would regard defective cleanliness of greater significance in the etiology than has previously been believed. Scraping away the disease is recommended as early as the diagnosis is made (the marrow only being scraped away in the severest cases). He refers to 24 cases. Of 14 operated on in the first and second weeks all recovered, 5 after a sinus; of 3 in the third week 2 died and 1 recovered after a sinus; of 3 in the fourth week all recovered, 1 after a sinus; of 4 in the fifth to seventh weeks 2 died, the others recovering, 1 after a sinus and the other with ankylosis of the joint. After a very severe onset the author repeatedly saw, when the focus of the disease was laid bare, a small hæmorrhagic infiltration, or a small centre of pus, and when this was scraped away the wound healed rapidly. The more extensive the purulent infiltration the more uncertain the result. With an extensive lesion the author carries out the osteoplastic operation after Lücke. In the discussion Nolden did not believe in any relation between defective cleanliness and the disease. Körte referred to 22 cases, 6 of which were fatal. Schede distinguished between the general infection and the more strictly local disease; in the former the surgeon is almost powerless. Linder drew attention to the variability of the disease in frequency and virulence. Sonnenburg thought that the nature of the case must determine the procedure to be adopted. Gussenbauer referred to some 400 to 500 cases. Necrosis occurred in the second stage, and only exceptionally in the first three days. He had no experience of operation in the first stage. Necrosis had not been prevented in his cases.

(456) Congenital Luxation of the Hip.

Kirmisson (*Revue d'Orthopédie*, No. 3, 1894) states that only in very exceptional cases is there any chance of reducing a congenital luxation of the hip by manipulation alone. The operative treatment of this deformity has not given many very good results, and is certainly not free from risk. Hoffa, who makes a new cavity for the head of the femur, has lost one patient, and of seven cases treated by the author by perforating the pelvic wall at the seat of the old cavity, two were fatal. A cutting operation for the reduction of a congenital luxation of the hip must necessarily be both difficult and severe. In order to place the head of the femur in the required position, prolonged efforts at traction and much manipulation must be practised, during which some failure in antisepsis is likely to occur. Moreover, the wound is a deep and irregular one, and the head of the femur will block the entrance to its new cavity, and prevent the escape of any septic products that may accumulate there. In two of the surviving patients treated by the author by operation, the results were unsatisfactory, whilst in the remaining three they are regarded as being very encouraging, as there has been in each, after a long interval, no tendency to a return of the luxation, and the shortening of the limb has not been more than half an inch. Operative treatment, it is generally acknowledged, is not applicable to patients beyond the age of ten years, and in very young patients, on the other hand, the shortening and deformity are too insignificant to justify the use of the knife. Between these two groups of cases—that of patients with marked deformity who are too old, and that of infants who present but slight deformity—there is another group in which a cutting operation might be considered justifiable. The author is of opinion that such treatment would be indicated in patients between the ages of 4 and 7 years. In patients above the latter age a cutting operation would be too difficult and too dangerous; in those under 4 a good result, and perhaps complete recovery, might be obtained by immobilisation and prolonged extension. In cases usually of bilateral luxation—of extreme deformity from adduction in patients over 10—infratrochanteric osteotomy would be indicated.

(457) Treatment of Chronic Laryngitis.

Krause (*Berl. klin. Woch.*, April 16th, 1894) refers to the want of success not infrequently met with in the treatment of chronic laryngitis in patients whose livelihood depends on their voice. He describes a method of treatment successfully employed by him for several years past, and illustrates it by three characteristic cases. Minute longitudinal incisions are made with a lancet-shaped laryngeal scarificator into the hyperplastic tissues of the cords. The bleeding is not considerable. This method of treatment is used only in obstinate cases which resist the ordinary modes of treatment, by astringents, inhalations, etc.

MIDWIFERY AND DISEASES OF WOMEN.

(458) Atony of the Uterus.

Klein, of Franzenbad (*Wiener med. Presse*, No. 22, 1894) distinguishes a purely atonic condition of the uterus which may be entirely independent of any other morbid pelvic condition or may be associated with another uterine disease or may be the result of the latter. There are three morbid conditions with which the patient may begin sexual life, namely, defective development of the uterus, subevolution, and developmental atony. The first condition, where uterus infantilis exists, is well known. In subevolution the uterus is anatomically well formed but histologically ill developed; this condition is common in weakly and phthisical subjects, and also occurs in fat though otherwise healthy girls. In developmental atony the uterus may be sound in form and structure, but the patient suffers from amenorrhœa or dysmenorrhœa, the sexual appetite is suppressed, and nervous symptoms, dyspepsia, etc., appear as the result of constitutional weakness, itself the cause of the atony. This same atony may follow any of the well-known inflammatory affections of the genital tract, and is a prominent result of superinvolution. It is important to diagnose atony from active disease, otherwise some more serious disorder may be set up by useless local surgical or therapeutical measures, and prolonged rest—including sexual rest in married women—increases both the atony and the constitutional debility which causes it. After tonic treatment the atony often disappears and the patient bears children.

(459) Effects of Removal of Ovaries on Uterine Tissue.

BUYS AND VANDERVELDE (*Archives Italiennes de Biologie*, vol. xxi, pt. 1, May, 1894) have published the results of a series of experiments made in order to throw light on the effects of castration on uterine tissue. They removed the ovaries of a rabbit, and at the same time amputated one uterine cornu. The animal was killed, in the first experiment ten days, and in the fifth and last sixty-seven days, after the operation. The remaining cornu was then examined in each case and compared with the amputated cornu. The appearances are carefully tabulated. No change could be detected in the endothelium of the serous coat nor in the subserous connective tissue. The muscular coat had undergone simple atrophy, most marked in the outer or longitudinal fibres. The muscle cells showed none of the changes seen in involution after pregnancy. The endometrium was much changed. The deeper tissue had lost all its well-known cellular elements, and was reduced to a cicatricial mass; the cylindrical epithelium of the uterine mucous glands at first undergoes degeneration, and finally necroses. The walls of the arterioles become much thickened. These changes correspond precisely with those observed by Steinhaus (*Menstruation and Ovulation*, 1890) in the endometrium of women at the menopause. Buys and Vandervelde attribute this degeneration to trophic changes caused by removal of the ovaries.

(460) Malignant Deciduoma: Cancer following Abortion or Childbed.

LABUSQUIÈRE (*Annales de Gynéc. et d'Obstét.*, April, 1894) has prepared an instructive summary of recent work on malignant degeneration of products of gestation left behind after the expulsion of the ovum. Gottschalk and Kœttnitz have carefully investigated the pathology of the disease. There is a distinct malignant change in the histological elements of the decidua left behind; in short, the disease does not start in unhealthy uterine tissue adjacent to dead or inert decidual relics. The new growth is a very malignant large-celled sarcoma. Metastases occur early, following the course of the blood vessels alone. Malignant deciduoma is recognised by distinct clinical evidence. Constant hæmorrhage, following abortion or normal delivery, is the first sign. After use of the curette, when small growths will be detected, these growths rapidly reappear; they are always very soft. The above symptoms demand total extirpation of the uterus. If the case be neglected, fever, rigors, and cough, with fœtid discharge, appear, and the parametrium and vagina become infected. These signs indicate hæmorrhagic infarcts, metastases, and local extension of the growth.—PAVIOT (*ibid.*) describes a remarkable case of coexistence of cystic adenoma and malignant deciduoma with metastases in a widow who had been subject to menorrhagia for years, and who denied ever having conceived. The menstrual decidua may undergo malignant degeneration and explain this case, but deciduoma in an undoubted virgin remains to be authenticated.

(461) Cancer after Ovariotomy.

PFANNENSTIEL (*Zeits. f. Geburtshülfe u. Gynäk.*, vol. xxviii, Part 2, 1894) lays down as a law to ovariotomists that when an ovarian tumour of any type which has a known tendency to bilateral development is removed, the opposite ovary should also be removed, even if it be quite small and apparently healthy. The types above referred to are carcinoma, sarcoma, endothelioma, and all papillomata. The above rule applies to any period of life. In other forms of tumour the opposite ovary should not be removed unless the patient has passed her 40th year, or other indications for the double amputation exist. Pfannenstiel's memoir is valuable both for statistics and pathology.

(462) Micturition in Childbed: The Catheter.

RECHT (*Journ. de Médecine et de Chirurgie Pratiques*, May 25th, 1894) shows that, on the evidence of repeated observations, micturition is almost always spontaneous. In 6,666 labours under Pinard's care in the course of the last four years, the catheter has been used only 20 times; and in the 1,920 labours last year only 3 times. Pinard objects very strongly to routine use of the catheter, which even in skilled hands often sets up cystitis. The practice in Paris lying-in hospitals is, however, very varied. At the School of Midwives, nearly every newly-delivered patient has the catheter passed. Maygrier, at the Pitié, delays the use of that instrument until twelve hours have elapsed after labour without the patient being able to pass water voluntarily. Bar allows a maximum of eighteen hours, Parak and Budin twenty-four, Tarnier thirty-six, Champetier de Ribes forty-eight. Ribemont-Dessaigues, at the Hôpital Beaujon, objects to the catheter as strongly as Pinard. Boissard finds that not only is there danger of cystitis when the catheter is passed after labour, but the patient is also liable to lose the power of voluntary micturition for many days through nervousness.

(463) Air in the Veins in Cases of Placenta Prævia.

FREUDENBERG (*Centralbl. f. Gynäk.*, No. 20, 1894) dwells upon Henck's case of fatal air embolism in the course of a placenta prævia labour, recently reported in the *Zeitschrift für Geburtshülfe*, Vol. xxviii, 1894. Freudenberg lays great stress on Henck's observation, that when an extensive area of placenta was separated in his case, an unusually large quantity of liquor amnii was discovered. In Kramer's similar case there was excess of liquor amnii. Air enters the veins, Freudenberg believes, when the abundant fluid rushes out so rapidly that the uterus cannot steadily contract on the speedily diminishing contents. Birnbaum always advised that in turning, in cases of placenta prævia, after the rupture of the membranes and the grasping of the foot, the operator's hand should be kept quiet in the vagina as a tampon, so as to prevent too rapid escape of the liquor amnii. Between the pains the operator's other hand should be kept on the abdomen, pressing the fundus, lest the uterine wall should, by its relaxation, leave a space in the uterine cavity, and thus allow air to enter the veins. Freudenberg always takes this precaution, and does not find that it in any way interferes with the manipulations required under the circumstances for delivery.

THERAPEUTICS.

(464) Chloralose.

CAPPELLETTI (*Mem. dell, Accad. delle Scienze Med. in Ferrara*, LXVI, No. 4) gives the results of experiments with chloralose. These are as follows: *General Action.*—In frogs small doses increase the reflex excitability. Medium doses cause diminution of voluntary movement, the power to perform which disappears after an amount varying between 5 and 10 millig. has been given. In mice a dose of 10 centig. per kilo produces exaggeration of reflexes, lessens sensibility to pain, and abolishes the power to perform voluntary movement. Tonic and clonic convulsions are also produced. Smaller doses produce similar but less marked symptoms. In rabbits chloralose produces first a stage of excitement, which gives place to sleep, with a diminution of voluntary movements and exaggeration of superficial reflexes. Convulsions are seen similar to those appearing in the rat. In dogs sleep is preceded by a period of excitement, during which the animal staggers about, and is insensible to his surroundings. The reflexes are exaggerated, and the sense of pain is abolished. When the sleep is not profound, convulsions are a prominent symptom. In dogs a dose of 15 centig. per kilo. is enough to induce sleep. In frogs the frequency and force of the heart beats is not altered by small doses; with large ones the beat becomes slower and less powerful. In rabbits and dogs the carotid pressure is not affected by small or medium doses, and it is only slightly lowered by large ones. The heart beats also are practically unaffected. The respiration is slowed, and in the case of large doses its rhythm is somewhat altered. In rabbits and dogs the temperature is lowered, often to a marked extent. *Action on Man.*—The action of the drug was tested only on asylum patients suffering from insomnia, the dose given at the commencement being about 3 grains. The sleep produced was as a rule calm and uncomplicated, the dose necessary varying according to the patient. In cases of slight insomnia 3 to 6 gr. are sufficient, but in severe insomnia 12 to 18 gr.

may be necessary. Sleep came on in about half an hour after taking the drug, and was preceded by a period of pleasant drowsiness. Hysterical patients were found particularly susceptible. The smallest doses mentioned produced a sleep of six or seven hours; large ones, on the other hand, often produced convulsive attacks, without sleep. As a hypnotic chloralose is particularly efficacious if given in the evening. *Action on reflexes, tactile sensibility, pulse, respiration, and temperature*: — During the sleep the reflexes are generally wanting, but in certain cases the contrary is seen. The appreciation of tactile and painful sensation remains unaltered, as do the pulse, respiration, and temperature. On the disease producing the insomnia chloralose does not as a rule produce much effect. Some cases, however, improved markedly under its influence, but this may be merely a coincidence. In most cases the sleep is indistinguishable from physiological sleep. However, in cases in which large doses have been given abnormal symptoms may arise, among which may be mentioned flushing of the face, epileptiform convulsions, tremors resembling those of paralysis agitans (during the sleep), and headache, uncertainty of speech, and urticaria (after return of consciousness). Care must therefore be taken to give only small doses to the feeble or hysterical. *Elimination.* — Chloralose, as such, does not appear in the urine.

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(465) Some New Methods of Treating Diseases of the Stomach and Intestine.

Rosenheim (*Berl. Klinik.* May, 1894) first discusses the stomach douche. He uses a tube with numerous side openings and one larger terminal opening. Under pressure the water issues from all these orifices, and in this way all parts of the stomach are acted upon. The douche is used morning and evening. By this method syringing with force against the stomach wall is avoided, and by using the douche when the stomach is empty, matters serving for nutrition are not abstracted. The douching is more easily done by the patient, and the tube does not get blocked. Besides warm douches, which are sedative and but slightly stimulating, water containing common salt, chloroform, silver nitrate (1 in 1,000) may be used. The douche is useful in nervous dyspepsia, chronic gastric catarrh of moderate severity, and in severe affections of the sensory and secreting apparatus of the stomach, as in gastralgia, hypersecretion. The addition of sodium chloride to the fluid is said by the author to increase the HCl production and that of silver nitrate to diminish it. After the stomach is washed out once or twice, the silver solution is run in and allowed to remain half a minute. The procedure is unattended with danger provided the pylorus be not incompetent. The pylorus is rarely incompetent, and this is readily ascertained by blowing the stomach up. As regards the electrical current, the exact indication as to the kind is still in doubt. For motor insufficiency, the value of electrical treatment is unquestionable. The author thinks it also allays sensory irritation symptoms; galvanism should be used here with the negative pole in the stomach. He then speaks of recto-abdominal galvanisation in cases of motor weakness of the intestine. A case is cited to show the value of electricity even when the irritation symptoms and pain in the stomach are due to organic disease, probably a cicatrised ulcer. The author then discusses the treatment of gastric ulcer with large doses of bismuth. He gives 10 g. of bismuth subnitrate in 200 g. water in the morning on an empty stomach, and 50 g. of water are drunk a little later. Finally, the author speaks of the treatment of spastic constipation by large oil clysters; 400 to 500 g. of pure oil are injected, and this is followed, if necessary, by a water enema later; the injections are given daily at first. Instances are given of the good results of these various methods of treatment.

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(466) Thioform.

Julius Schmidt (*Therap. Monatsh.*, April, 1894) states that thioform is a greyish yellow powder, which is a chemical combination of bismuth, sulphur, and salicylic acid. It is tasteless and odourless, insoluble, and was first prepared as a substitute for iodoform. This expectation has been verified in so far that surgically its value is equally great, but the specific action of iodine as required in tuberculous affections is not obtained. When applied to fresh wounds thioform produces rapid drying of the surface, leading to a more rapid cicatrisation than has been observed after the use of any other application; this was noticed even in extensive surface lesions, such as burns, weeping eczema, and gangrenous patches, the latter having healed in four days. The author tested the powder in 5 cases of ulcer of the leg which had resisted other treatment. The ulcer having been cleaned and disinfected, the thioform was thickly dusted over it, and covered with cotton wool and a bandage. Every fourth day the whole dressing was changed, and though the patient continued to walk during the treatment, the cure required two to three weeks only. Some pain was occasionally produced, but no sign of irritation could be seen. Similar results in the practice of other surgeons are given. Finally, the author used thioform internally after having satisfied himself as to its non-poisonous character and with daily long-continued doses of 15 grains, better, though similar, results were obtained than with salicylate of bismuth.

PATHOLOGY.

(467) Nature of the Germicidal Constituent of Blood Serum.

A review of recent researches on bactericidal substances contained in the living organism is at the present time a matter of some difficulty, owing to the great mass of matter which has to be dealt with. Vaughan and McClintock (reprint from *Medical News*, December, 1893), however, from a careful and critical study of the experimental evidence at their disposal, have arrived at the following conclusions: (1) The serum albumen is not the germicidal substance in blood serum, for Buchner has demonstrated that the germicidal action is not destroyed after subjection of the liquid to the action of pepsin. (2) The germicidal substance is probably a proteid, or it would be difficult to explain why a temperature of 55° C. destroys its activity. (3) The only proteid likely to be present in blood serum which is not destroyed by digestion is nuclein. Having arrived at these conclusions, they have next set about to see (*a*) whether there is a nuclein in blood serum; (*b*) and, if so, whether it has germicidal properties. Both these points they were able to settle. Blood was withdrawn under antiseptic precautions from healthy rabbits and dogs. It was allowed to clot, and the serum to separate, on ice. To the separated serum were added five volumes of absolute alcohol and five of ether. The voluminous white precipitate which fell was allowed to stand several hours under the mixture of alcohol and ether, which was frequently changed, and finally removed. The precipitate was then subjected to the action of pepsin in presence of hydrochloric acid, until no further digestion would take place. The undigested residue was collected, washed, first with dilute HCl, and then with alcohol, and finally dissolved in caustic potash solution (0.12 per cent.), containing 0.6 per cent. of sodium chloride. This solution was sterilised by filtration, and gave the reactions of nuclein. Bacterial cultivation experiments with this liquid seem to show that it has great germicidal power, as instanced by its effect on cholera spirilla, S. pyogenes aureus, and asporogene anthrax. The germicidal power is destroyed by heat, but not so readily as might have been expected. The authors think that the isolation of this nuclein has an important practical bearing on the serum-therapy of the future, and they suggest that the time is not far distant when "serum-therapy" will become "nuclein-therapy."

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(468) A New Method of Producing the Iodine Reaction in Amyloid Tissue.

Galeotti (*Lo Sperim.*, March 1st, 1894) describes a new method of demonstrating the extent of amyloid degeneration. It consists in soaking the sections in a solution of potassium iodide, then rapidly washing them in distilled water, and immersing them in chlorine water. The amyloid tissue alone retains the iodine salt, so that when this latter is attacked by the chlorine water, it is the altered part alone which is stained by the liberated iodine. The test is said to be extremely delicate.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(469) Scurvy in Infants.

NORTHRUP AND CRANDALL give particulars (*N. Y. Med. Journ.*, May 26th, 1894) of 36 cases of scurvy in infants and young children reported by various observers who were able to furnish detailed histories. As bearing upon the frequency of the affection, they state that at a meeting of the New York Academy of Medicine on February 15th, 1894, 106 cases were mentioned by various speakers. Among the 36 cases above mentioned there were representatives of every social grade, but the authors believe the disease to be more frequent in rich than in poor, especially very poor, families. This is due to the fact that the main cause of scurvy in infants is exclusive feeding on some proprietary food or sterilised milk or cream. The exact diet was known in 33 cases; of these, 12 were fed on proprietary food exclusively, 6 on condensed milk or evaporated cream, and 3 on a combination of these. It thus appears that 63 per cent. were fed upon proprietary food and condensed milk. Sterilised milk was the diet in 2 cases. Holt has stated that in three large institutions in New York, in which children are fed "almost exclusively" on sterilised milk, not a single case of scurvy has developed in five years, which seems to show that where the process is carried to a reasonable degree no danger is to be apprehended. The objection has never been made to Pasteurised milk. Moreover, over-dilution of milk may be a cause of scurvy, as is shown by the fact that it was the diet in 3 out of the 33 cases in which the diet was stated. Children suffering from scurvy present commonly the following symptoms: (1) Anæmia; (2) pain (often intense) on motion; (3) swelling and tenderness of the lower limbs, one or both, affecting the lower part of the thigh most commonly, and next to that, the leg: (4) spongy and bleeding gums if the teeth have been cut. If the eruption of the teeth has not occurred the gums may be little or not at all affected. The swelling of the limb is as a rule tense and shining, and often, but not always, purplish or livid. It does not pit on pressure. The characteristic lesion is subperiosteal hæmorrhage, which may be complicated by detachment of the epiphyses. Hæmorrhages into the muscles, skin ("purpura," "petechiæ," "ecchymoses"), and mucous membranes are of frequent occurrence. Many of the cases were ricketty, but there appeared to be no causal relation between the two diseases. Most if not all cases of "acute rickets" are, in the opinion of Northrup and Crandall, examples of rickets with intercurrent scurvy. The commonest age for scurvy in infants and children is between 9 and 14 months. The condition is liable to be diagnosed erroneously as rheumatism, stomatitis, rickets, sarcoma, osteitis, and, owing to the pseudo-paralysis produced by immobility of a lower limb due to the pain attending movement, as infantile paralysis. When untreated it is very fatal, but is cured rapidly by a diet of fresh milk, beef juice, and orange juice. Milk may, if necessary, be diluted with barley water, and in warm weather Pasteurised or sterilised for a short time.

(470) Early Diagnosis of Gastric Carcinoma.

IN the *Deut. med. Woch.*, May 17th, 1894, Cohnheim of Boas's Poliklinik contends that it is possible to make a fairly certain diagnosis in the absence of a tumour. The old idea that chronic gastritis is accompanied by lactic and fatty acid formation is disputed, but in cases of carcinoma an intense reaction to Uffelmann's test for lactic acid appears. For such an intense reaction stagnation of the gastric contents and a lasting absence of free hydrochloric acid are necessary. If only one of these conditions is present, as in chronic gastritis or dilatation of the stomach, such a reaction does not appear. The author relates a case in which a simple ulcer was suspected, and in which treatment had no lasting effect. When the stomach contents were at length examined no free hydrochloric acid was present, and Uffelmann's test gave a marked result. The stagnation of the gastric contents here was against chronic gastritis, where the food passes into the intestine within the usual time. Later, besides other symptoms, there was marked wasting, and yet no tumour could be felt. At the necropsy a limited growth was found at the pylorus. The author points out that in this case, in the absence of recognisable tumour, a correct diagnosis was made six months before death, chiefly from the constant and marked presence of lactic acid. Within eleven months ten such cases were seen without recognisable tumour, all of which gave a positive reaction with Uffelmann's test, and yet no such reaction was ever observed in cases of gastrectasis or of chronic gastritis with absence of free hydrochloric acid. The author lays stress on the importance of early diagnosis in regard to the question of possible removal. Lastly he refers to the new test proposed by Boas for lactic acid in the stomach contents (EPITOME, November 4th, 1893, par. 364).

(471) Early Symptoms of Mental Disease.

WERNER (*Berl. klin. Woch.*, May, 28th, 1894) draws attention to the importance of early diagnosis from the point of view of treatment. In early melancholia sleeplessness is marked, though the patient still continues to follow his occupation. A feeling of sadness and depression, with distaste for work, then supervenes. He may appear indolent, and weeps on the least occasion. Sometimes there is unreasoning irritability, followed by depression. The appetite is impaired and the patient may thus think himself the subject of some hopeless disease. He has præcordial anxiety and then develops diseased ideas, perhaps with hallucinations. The early stage of mania is often one of depression. Sleeplessness, irritability, dislike of work, self-accusation may also be present here. It is very characteristic of mania when the patient suddenly passes into the opposite extreme, the pleasure in life, etc., reawakening. One may make all kinds of purchases, another write verses, etc. If contradicted he may become incensed or even violent. Acute paranoia develops very rapidly and is characterised by hallucinations (hallucinatory form), numerous delusions, self-overestimation, mistrust, unrest, etc. In the chronic form the symptoms may date from some time back even from childhood. The child holds itself aloof, is sensitive, obstinate, etc. With years the peculiarities increase, ideas of persecution may occur, and large ideas, with or without hallucinations. To this group belongs the paranoia querulenta often appearing after the loss of a lawsuit. In paralytic dementia the initial symptoms are very varied. Bodily symptoms mostly prevail, such as pains in the limbs, head pressure, slight difficulty in speech, etc. There is sleeplessness, loss of appetite, constipation. Years may pass, the patient improving a little. Later the mental symptoms become more marked. The patient is abnormally irritable or indifferent. He may become extravagant. The impaired intelligence is obvious. Unequal pupils, speech troubles, facial paresis supervene. For oncoming melancholia or mania, removal to a suitable institution is best, and also for acute paranoia. The percentage of recoveries may thus be increased. Drugs should be given only under constant supervision. For chronic paranoia change of scene, hydrotherapy, etc., should be recommended, and removal to an institution only when the patient is unmanageable, or the home conditions unsatisfactory. An early general paralytic is treated in the same way, but the strictest supervision is required.

SURGERY.

(472) Osteoplastic Operation for Spina Bifida.

ZENENKO AND ROCHET some time ago suggested that the gap in spina bifida should be filled up by the laminæ of the vertebræ. But, as the laminæ themselves are often not sufficiently developed, Bobroff, of Moscow, has proposed the following method: When the meningocele is situated in the sacral or lower spinal region the sac is opened, the adherent spinal cord separated and replaced in the canal, or, if the tail is present and inseparable from the sac, it is divided, the superfluous part of the sac cut away,

and the gap filled up by separating a thin piece of bone from the posterior superior spine of the ilium and the adjoining part of the crest, preserving its connection with a part of muscles attached to them, and placing this flap in the cleft and sewing up the wound. Sklifassofski presented a report on this procedure to the last Russian Medical Congress (*Vratch*, No. 8, 1894). Of four cases, operated upon by different surgeons, only in one was healing by first intention obtained, although all of them were carried out antiseptically, but in none of them did the transplanted bone necrose. As to the results of the operation, Sklifassofski's patient had suffered from perforating ulcer of the foot, anæsthesia, and incontinence of fæces. After the operation the ulcer healed and the other symptoms improved considerably. From the discussion, however, it appeared that Sklifassofski himself was as yet doubtful as to what would become of the transplanted bone, and he did not exclude the possibility of its absorption. In this case the spinal cord had a bulbous ending, which, after separation from the sac, was easily replaced into the spinal canal. In another case (under Diakonoff) the spinal cord was replaced with difficulty. The incontinence of urine which followed soon passed off, but later on ulcers developed on the prepuce, the perineum, and the buttocks, the cause of which could not be made out. Bobroff's patient, a boy aged 8, who had suffered from hydrocephalus, and had been in a dying condition, recovered from the operation (the wound healing by first intention), and is looked upon as cured as far as the spina bifida is concerned. But as to the connection between hydrocephalus and meningocele, and the possible influence of the operation for the latter condition on the former, the number of observations was too small to warrant any definite conclusion. In cases of spina bifida, in the middle and upper regions of the spine, Bobroff suggests that some part of a rib, with adherent soft parts, should be used as a flap, and Sklifassofski recommends that part of the scapula should be taken for the same purpose. Neither of these procedures has yet been carried out on the living subject.

(473) Surgery of the Liver.

Tricomi (*Rev. de Chir.*, May, 1894) reported at the recent International Medical Congress a case of resection of the whole of the left lobe of the liver. The patient, a man aged 27, was treated for a painful tumour of the size of a man's fist in the epigastric region, which was diagnosed as an hepatic tumour. On making an exploratory incision the author exposed a well-defined hepatic growth. Before this could be brought out of the wound in the abdominal wall, it was found necessary to remove the ensiform cartilage, and to divide the oblique coronary and triangular ligaments. An elastic ligature was then tied round the base of the tumour, and the hepatic layer of peritoneum was dissected up around this ligature and stitched to the parietal peritoneum. The ligature was tightened from time to time. On the fourteenth day the ligature came away, but the tumour still remained fixed to the liver. The attached portion was then constricted by a wire ligature. This proving unsatisfactory an attempt was made to remove the growth by the thermocautery, but the author was compelled by hæmorrhage to desist. On the eighteenth day the growth was cut away, and the bleeding arrested by the thermocautery and perchloride of iron. The patient made a good recovery, and on the sixty-sixth day the wound was quite healed. The removed tumour proved to be a tubular adenoma that had originated in the biliary canaliculi. In the same section Ceccherelli and Bianchi described a new method of arresting hæmorrhage from the liver. The portion of liver that it is proposed to excise is circumscribed by two strips of whalebone, each perforated from end to end by several holes. A long needle armed with a doubled thread is passed through the hole at one end of one strip of whalebone, then through the liver structure, and finally through the hole at the corresponding end of the second strip. Other ligatures are passed through all the other holes in both strips, and through the intervening portions of liver. One of the ends of the first ligature is tied to the cut end on the opposite side, and then all the ends are closely tied together along the whole length of one strip of whalebone, and afterwards along the second strip. In this way the interposed liver tissue is closely constricted and gradually crushed. All the ligatures having been secured, the liver may be freely incised without dread of hæmorrhage. In order to avoid leaving a large raw surface exposed, and to guard against secondary hæmorrhage, it is recommended that the free ends of the ligatures attached to one strip of whalebone be passed across the divided pedicle and tied to those of the other strip. In this way the hepatic tissue may be compressed at the seat of section.

(474) Fracture of Dislocated Humerus.

McBurney (*Annals of Surgery*, April, 1894) describes a new method of reduction in cases of dislocation of the humerus, complicated by fracture at or near the surgical neck. In such cases it is clearly the proper practice to first reduce the dislocation if possible. The difficulty in making reduction is due to the small size of the upper fragment, and it is to overcome this difficulty that the following method was adopted. On June 17th, 1893, a gentleman, aged 45, tall and of heavy build, jumped from his carriage and fell, probably on his right hand. He arose with difficulty, and found that his right arm was disabled. The nature of the injury was at once recognised by the medical man called in, and vigorous and prolonged efforts at reduction were made by him without success. On the following day, further attempts at reduction having failed, it was decided to obtain union of the fracture before again endeavouring to replace the head of the bone. On June 26th, nine days after the injury, another thorough examination was made under ether, when the author saw the case for the first time. The head of the humerus could be distinctly felt beneath the coracoid process, and it was clear that fracture existed. As the dislocation could not be reduced by any method unaided by operation, McBurney proposed the following plan: An incision should be made down to the upper fragment, a hole drilled in it, a stout hook inserted, and direct traction made upon the upper fragment in the proper direction. This was done. The effort required was very considerable, and reduction accomplished at the first attempt. The patient recovered, with the limb as good as before the injury.

MIDWIFERY AND DISEASES OF WOMEN.

(475) Puerperal Eclampsia: Hepatic or Renal?

Massen (*Répertoire Univ. d'Obstét. et de Gynéc.*, May 25th, 1894) has observed five cases of puerperal convulsions. After analyses of the urine and consideration of anatomical and pathological lesions, Massen is inclined to believe that the affection is of hepatic origin. Leucomaines are not destroyed as they should be in the normal course of changes of effete products but accumulate and poison the system. Albuminuria in pregnancy is certainly a symptom of great import. It is always necessary to determine if it be due in any particular case to a primary nephritis or to a secondary lesion of the kidney of hepatic origin. In the latter case every means must be taken to avert the imminent danger of eclampsia. Milk diet and inhalations of oxygen should be prescribed. All moral and physical disturbance must be avoided as far as possible; chloroform should on this account be administered during labour.

(476) Development of Human Uterus.

Roesger (*Festschrift zur Feier des fünfzigjährigen Stiftungsfestes der Gesellsch. f. Geburtsh. u. Gynäk. zu Berlin*, 1894) in this monograph discusses the fœtal development of the human uterus and especially of its muscular system. The epithelial and the parenchymatous portions of the uterus are, he shows, developed separately, from different elements. Müller's ducts do not open into the sinus urogenitalis. The blind end of the united ducts, invested with epithelium, unites with the epithelium of the sinus to form the hymen. About the fourth month the primitive cylindrical epithelium of the utero-vaginal canal, remaining unchanged above, is converted below into stratified pavement epithelium. At the end of the fourth month a circular outgrowth of vaginal epithelium pushes upwards and then becomes hollow, forming the vault of the vagina. The portio vaginalis uteri is developed during the sixth

month by hypertrophy of the mesoblastic elements. There is no muscular coat to Müller's duct. When those structures have united to form the uterus and the vagina has already developed, the differentiation of the embryonic tissue into muscular fibres begins. Then the uterus consists of a muscular coat and an inner subepithelial or submucous layer, parent of the decidual cells. Very remarkable changes were observed by Roesger in the development of the arteries, closely associated with the direction of the layers of muscular fibres in the uterine wall. The arteries are simple epithelial tubes at first but receive investments of muscular tissue over and beyond the share which falls to arteries elsewhere. This observation may throw light on Kleinwächter's researches, where myomata were found to develop from a proliferation of muscular fibres around arterioles which they ultimately destroyed.

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(477) Ovariotomy in Pregnancy.

LEBEDEFF (*Répert. Univ. d'Obstét. et de Gynéc.*, May 25th, 1894) has operated five times on pregnant women, and Gordon reported the results at the recent Russian Medical Congress, comparing them with similar cases occurring in Russia. In Lebedeff's cases the cyst was multilocular in 1, unilocular in 2, bilateral dermoid in 1, and developed in the broad ligament in 1; all 5 recovered. In 2 pregnancy went on to term, 3 aborted between the fifth and fifteenth day. 204 cases of ovariotomy in pregnancy have been performed in Russia; 21 could not be followed up so as to ascertain the continuation of pregnancy; in 7 the uterus was wounded, 2 of these cases dying; of the remaining 176 cases, 164 recovered completely, pregnancy continuing to term in 122, whilst 12 died.

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(478) Treatment of Dysmenorrhœa.

NOLL (*Centralbl. f. Gynäk.*, No. 21, 1894) does not hesitate to divide the os internum in obstinate cases. He relates five instances of the common form of dysmenorrhœa where there was distinct and severe pain when the sound passed the os internum. Hegar's dilators, chloride of zinc, tincture of iodoform, and other treatment had proved unavailing. Noll, therefore, in each case thoroughly disinfected the uterine cavity and vagina. Then he dilated the obstruction with Hegar's instrument up to No. 9. Radiating incisions were then made around the seat of stenosis, which was afterwards wiped with sterilised gauze, and then touched with a Paquelin's knife corresponding in size to the No. 9 dilator. The dilated canal and the uterine cavity were stuffed with iodoform gauze for twenty-four hours. All five cases did well; the patients were kept six days in bed. Noll believes that the good results (for the cases here described were operated upon over a year ago) were due to destruction by the cautery knife of exposed nerve filaments subject to chronic inflammation.

(479) Inflamed Breast: Galactophoritis in Mother and Child.

MACÉ (*Bulletins et Mémoires de la Société Obstét. et Gynéc. de Paris*, March, 1894) states that a woman, aged 32, in her second pregnancy, was naturally delivered of a female child on January 28th. The nipples soon became sore. Compresses of one-fifth alcohol solution were applied, and the patient was directed to wash the nipples with boracic lotion after each act of suckling. The right nipple was partly retracted. On February 8th rigors and pain in the right breast occurred. Lymphangitis and galactophoritis of the right nipple were detected, and some of the outer and lower lobules of the gland were tender. Sublimate compresses were applied. The pain abated; nothing issued from the nipple on pressure. The patient persisted in suckling the child with the right breast; in consequence it lost weight, and passed unhealthy motions. On February 11th the mother took to nursing with the left, or healthy breast, only, and the child was further fed on sterilised milk. In the evening pus was pressed out of the right nipple; there was suspicious induration around the affected lobules. Sublimate compresses were applied, and the expression of pus continued; in consequence mastitis was averted, and the breast soon recovered. On February 13th, the infant's right breast was found to be swollen; the axillary glands were not enlarged. On gentle pressure, milk mixed with pus and then pure pus escaped from the nipple. Sublimate compresses were applied; the expression of pus was continued daily as in the mother's case; in two days the breast was well, but the compresses were continued for a few days longer. The disease in the child's case was probably due to direct infection by contact of pus from the mother's breast. In Arbel's case the woman who suckled the child had ophthalmia. Fournel believed that the breast might become infected when passing through the mother's vagina. Karlinsky, the author observes, has shown that an infant's breast has been known to become inflamed through ingestion of impure milk. In Macé's case the child was not so seriously ill as to raise suspicion of this indirect manner of infection.

THERAPEUTICS.

(480) Tetanus Treated with Antitoxic Serum.

GIUSTI AND BONAIUTI (*Gazz. degli Ospitali*, May 12th, 1894) describe a case of tetanus treated with antitoxic serum. The case is remarkable, on account of its clinical course, its successful issue, and the amount and power of antitoxin used. The patient, a robust man, received severe lacerated wounds on the face, one of these being deep and dividing the zygomatic process, in a railway accident. All the wounds were freely contaminated by earth, and the patient's leg was also the seat of a simple fracture. Notwithstanding prompt and careful cleansing with antiseptics, etc., some trismus and exalted sensibility made their appearance on the day after the occurrence, leading the observers to suspect the onset of tetanus. Nevertheless, the trouble disappeared, and the patient did well until January 7th—twenty-one days after the accident. Undoubted tetanus then made its appearance, characterised by great respiratory and cardiac difficulties and obstinate vomiting, in addition to the more usual symptoms of a severe case. After three days of unavailing application of the ordinary treatment—chloral, calomel, vapour baths, etc.—a consultation was held with Tizzoni, who at once instituted the treatment with antitoxic serum from a highly immunised horse (antitoxic equivalent 1: 10,000,000). On February 1st two injections of this serum (40 and 20 c.c.) were given. After these the patient experienced a period of calm, and got a little sleep. Next day, temperature being high and tetanic symptoms still prominent, two injections (20 and 10 c.c.) of serum from an immunised dog were given (relative power 1: 10,000 000). The tetanic symptoms then disappeared for a time, to reappear, however, in a very mild form during the night. On February 3rd an injection of dog's serum (10 c.c.) was given in the morning, and in the evening 50 centigrammes of alcohol precipitate of the horse serum, dissolved in water. On February 4th to 8th further injections of dried precipitate or of dog's serum were made, although the non-appearance of further tetanic symptoms probably rendered some of these superfluous. From this time the patient's condition improved steadily. He was at last discharged cured. The total amounts of protective material used were: horse serum, 60 c.c.: dog serum, 110 c.c.; dried alcoholic ppt. of immunised horse serum, 2 grammes, equivalent to about 20 c.c. of serum. Attention is drawn first to the early symptoms, appearing on the day after the accident, and due probably to absorption of a dose of ready-formed toxin from the contaminating earth; secondly, to the occurrence of a severe attack of "cephalic" tetanus after the long incubation period of twenty days; thirdly, to the complete failure of ordinary measures, and the rapid success of the specific treatment; lastly, it was suggested that the dog's serum had probably a more potent effect than the other variety in reducing temperature. The dried precipitate of serum was somewhat difficult to use, on account of its imperfect solubility, and the risk of contamination during the process of dissolving it.

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(481) Transfusion.

VON ZIEMSSEN (*Münch. med. Woch.*, May 1st, 1894) uses the following method of transfusion. Under very strict antiseptic precautions he withdraws, by means of a syringe holding 25 c.cm., blood from the median vein of the giver, and injects it directly into the corresponding vein of the receiver. Three assistants are required. Three

glass syringes with cannulæ and a large vessel containing sterilised salt solution and standing in a water bath are also needed. The salt solution serves the purpose of washing out the syringe before it is used anew. In this way 200 to 300 c.cm. blood may be injected without fever or local reaction. Unpleasant results never occurred. The destruction of the red cells cannot be considerable, as hæmoglobinuria was never present nor yet free hæmoglobin in the blood. According to the author's experience, the good effects of injecting blood in acute anæmia is beyond doubt. In severe progressive anæmia it is more questionable. He reports such a case in a woman, aged 38, to whom seven injections, amounting in all to 900 c.cm. of blood, were given with considerable benefit. Subcutaneous infusion is inferior to transfusion, but is recommended if proper assistance cannot be obtained. There may, however, be pain at the site of the infusion, and a moderate degree of fever may also occur.

(482) Treatment of Peripheral Neuritis.

Leyden (*Berl. klin. Woch.*, No. 20, 1894) discusses the treatment of multiple neuritis. He considers that in the case of neuritis following acute specific diseases, care during convalescence as to nourishment, rest in bed, and avoidance of over-exertion contribute to prevent its occurrence. "Etiological treatment" (removal of the cause) in neuritis due to alcohol or lead, and treatment of the primary malady as in diabetes is of the first importance. There is no specific remedy for multiple neuritis, and treatment by drugs does not play a very important part. Owing to the fact that rheumatism is not infrequently an element in the etiology, salicylate of sodium and other antirheumatic drugs had been used without producing any good results in the majority of cases. Iodide of potassium was of use only now and then, and mercury was of doubtful value. Antipyrin, phenacetin, exalgin, euphorbia, and methylene blue were sometimes of use for the relief of pain, but it was often necessary to resort to morphine, chloral, sulphonal, etc. Strychnine, formerly much used, but lately fallen into the background, deserved to be tried; by increasing the excitability of the affected muscles, it favoured the return to normal function and nutrition; it ought especially to be resorted to in progressive cases in which the respiratory movements were threatened. Leyden prefers to use it as a subcutaneous injection, gr. $\frac{1}{25}$ to gr. $\frac{1}{15}$ twice daily. Massage and baths were valuable auxiliaries which were indicated, especially the latter, in the later stages of the disease General hygienic treatment was of much importance. Rest—as a rule rest in bed—was of the first importance in the early stage; in the later stage, feeding. Finally, in the latest stages of all, moral suasion, rousing the patient's latent energies, was often of great value. Passive movements, and encouraging the patient to make active movements, were generally attended with better results than massage in this stage. Electricity, formerly used too much, was now used too little, but its usefulness was greatly limited by the fact that in many cases the pain caused was too great to permit the treatment to be continued.

(483) Ferratin.

Ferratin is prepared by exposing a mixture of certain proportions of white of egg and an iron salt to the action of slight heat in an alkaline medium. It is a red-brown powder, little soluble in distilled water, but soluble in presence of soda. Marfori (*Ann. di Chimica e di Farmacologia*, February 1st, 1894) has investigated this substance, and his conclusions are as follows: It contains from 7 to 8 per cent. of iron. It is absorbed in notable quantities from the intestines, and when injected directly into the blood stream it does not appear to be excreted either by the kidneys or the intestines save in minute quantities. This is a great contrast to what happens with the inorganic salts of iron, which are mainly excreted into the intestines. It is a remarkable fact that the liver of many animals examined is found to contain naturally a substance closely resembling the artificial ferratin, and in considerable abundance. It appears to be also identical with the "hæmatogen" isolated by Bunge from the egg. Bunge proved that this substance serves as material for the formation of hæmoglobin, so that ferratin should be a really valuable blood food. Clinical experience has proved it to act in this way, and without causing any constitutional disturbance. It may be given in doses of 15 to 30 g. daily, care being taken not to associate it too closely with acid materials.

PATHOLOGY.

(484) Infection by the Trichina Spiralis.

Askanazy (*Centralbl. f. Bakt.*, Bd. xv, No. 7) observes that two questions await solution in regard to the process of infection by the trichina spiralis: (1) how do the embryoes which, according to the general view, are deposited only in the lumen of the bowel, pass through its wall; (2) how do they reach the striated muscles? In the belief that an examination of the bowel wall in cases of trichinosis would assist in the decision of both questions Askanazy infected rabbits with the parasite; in seven to ten days the intestines were removed and placed for fixation in Flemming's fluid. Pieces were imbedded in celloidin, cut, and stained with safranin. The following facts were established: 1. The female parasite penetrates into the villi and mucous membrane generally, not deeper, however, than the muscularis mucosæ, and lies in that membrane or in a chyle vessel. 2. None of the specimens showed embryoes lying free in the tissues of the intestinal wall or in its bloodvessels. 3. Embryoes were found in the lumen of the chyle vessel of a villus. In one case a parasite filled with embryoes projected into the chyle vessel which also contained them, thus rendering it very probable that they had been deposited in the vessel. The investigation would appear to show that the young trichinæ are deposited in the lymphatics and are carried away by the lymph stream. The discovery of embryoes in the mesenteric glands (Virchow, Gerlach) is in accord with this opinion. The following considerations are against the old view that the embryoes are deposited in the lumen of the bowel and subsequently bore their way through its wall: 1. The uncertainty with which the embryoes are found in the bowel lumen, as shown by a review of the literature on trichinosis. 2. The author's examination of a great number of fresh specimens of intestinal mucus failed to show a single free embryo even when the female trichinæ were filled with young. 3. Embryoes were found only twice in the bowel lumen in a large number of sections whilst the adult parasites were plentiful there. 4. As the parasite deposits a large number of eggs, embryoes should be numerous in the bowel contents if the deposit took place in the lumen. Against the boring theory is the fact that nobody has yet seen an embryo lying free in the bowel wall. The rare occurrence of young parasites in the lymphatics in these sections is explained by the author on the theory that they had been rapidly carried away by the lymph stream.

(485) The Proteids of the Thyroid and the Spleen.

In view of the investigations recently carried out by Martin, Bokenham and Fenwick, and others, on substances extracted from the spleen under pathological conditions, a paper by Gourlay (*Journal of Physiology*, Vol. xvi, No. 1, 1894) is of much interest. His conclusions are as follows:—Proteids of the Thyroid: (1) The thyroid does not contain or yield any peptone or proteose; (2) its secretion is not mucin, as it yields no reducing sugar on treatment with dilute mineral acid; (3) the only proteid which can be obtained in any quantity from it is a nucleo-albumen; (4) this is derived, at any rate in part, from the colloid matter in the acini; (5) the gland was not found to contain a ferment capable of dissolving mucin: it is suggested that the nucleo-albumen is probably the active curative substance in myxœdema; (6) thyroid nucleo-albumen causes intravascular coagulation. Proteids of the Spleen: (1) Fresh spleen is alkaline: *post mortem* it turns acid; (2) fresh spleen contains neither proteose nor peptone; *post mortem*, proteose appears; (3) the proteids extracted from the spleen resemble those found in lymphoid tissues; the most important are a globulin and a nucleo-albumen; (4) the nucleo-albumen can be prepared by Halliburton's method, or by that of Wooldridge, and when injected into the circulation produces intravascular coagulation.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(486) Pancreatic Hæmorrhages.

NIMIER (*Rev. de Méd.*, May, 1894) discusses this subject with illustrative cases. He excludes cases in which the pancreatic lesion is of secondary importance, as in advanced cardiac disease, etc. By the term "pancreatic apoplexy" is understood a spontaneous effusion of blood into the gland with or without effusion into the neighbouring cellular tissue. Usually the patient, previously well, is suddenly seized with severe pain, chiefly in the epigastrium, more or less tympanites, nausea, vomiting, and generally constipation. Severe collapse supervenes, and death occurs in a few hours or after some days; occasionally the symptoms develop less rapidly, and the course of the disease is an interrupted one. The pain is the most prominent symptom; it may be accompanied by a sensation of heat in the epigastrium, especially when the stomach is empty, and by the eructation of a liquid similar to saliva. There may also be a dull pain just above the umbilicus, and referred deeply to the vertebral column. The richness of the nerves in the neighbourhood of the pancreas deserves attention in respect to the symptoms. The respiratory embarrassment cannot, however, be thus explained. Pancreatic hæmorrhage should be thought of if the symptoms of peritonitis develop without obvious cause, or where it simulates biliary colic, no hepatic symptoms having been previously noted. It usually occurs in fat persons, or in the subjects of arterio-sclerosis. The hæmorrhage due to arterio-sclerosis differs from that seen in the obese. The anatomy accounts for the diffuse infiltration of the gland. In some cases remains of old hæmorrhages are seen. The treatment cannot be very satisfactory; even local intervention must be quite empirical owing to difficulty of diagnosis and the want of knowledge of the physiological pathology. In traumatic hæmorrhage the blood usually collects in the lesser sac of the peritoneum; it is the direct consequence of the injury. A more or less considerable quantity of fluid is added owing to the tearing across of Wirsung's duct. Where the pancreas is already diseased a slight injury may suffice to cause the hæmorrhage. In Brown's case no ferments were at first found, but they appeared later. It has been denied by some that these cysts are really traumatic; according to them the injury has produced some alteration in the pancreas, and thence a true apoplexy of the gland. The interval seen in these cases might seem to favour this view. In these traumatic hæmorrhages the line of treatment is not open to doubt. The danger is not as a rule pressing; one can wait until a tumour appears. The cyst is then stitched to the abdominal wall and drained. Tapping should be avoided, as it is not without danger and is ineffectual.

(487) Diagnosis of Appendicitis.

EDEBOHLS (*Amer. Jl. Med. Sc.*, May, 1894) states that as a rule he has found it possible to palpate the vermiform appendix when not diseased, and in chronic inflammation to recognise distinctly the thickened appendix. He thinks that operation should not be undertaken in chronic cases unless the diseased appendix can be felt, nor in acute cases unless either the diseased appendix or the presence of a tumour can be detected. In acute appendicitis it may only be possible to localise precisely the appendix after anæsthesia, but information of much value as a guide to the point of incision may then be obtained. In searching for the appendix, the patient's knees are flexed slightly, and the fingers of the right hand are placed on the abdomen near the umbilicus. The fingers are then drawn from the umbilicus to the anterior superior iliac spine, firm pressure being exerted so that the resistant posterior abdominal wall and the pelvic brim can be perceived distinctly. The appendix is felt as a flattened ribbon-shaped structure when normal, as a more or less rounded and firm organ when thickened by past or present inflammation. The normal appendix exhibits no special sensitiveness, but when inflamed is more or less tender. The origin of the appendix lies generally an inch or half an inch outside the iliac artery, so that the line of the vessel (from the left of the umbilicus to the middle of Poupart's ligament) forms a useful guide to the appendix. Edebohl's observations were nearly all made in women. He found the cæcum empty in nearly every person examined. He has tested his method by observations made during laparotomy, in cases of both normal and inflamed appendix.

(488) Severe Hiccough.

HEIDENHAIN (*Berl. klin. Woch.*, June 11th, 1894) remarks that this clonic convulsion of the diaphragm may be caused by direct or reflex irritation of the phrenic nerves. Reflex hiccough may be produced by diseases of the peritoneum, stomach, etc. Sometimes it is due to severe cerebral disease. It is observed before death from malignant disease of the intestine. A patient, aged 72, had a severe attack of hiccough five years ago, lasting five days, for which no cause could be found. In the present attack cocaine was given, with the best results, after other remedies had entirely failed. A few days after the attack all the symptoms of intestinal obstruction, including faecal vomiting, appeared. Abdominal section was performed, and a large mass of growth was found arising from the tail of the pancreas, and surrounding the large intestine. An artificial anus was formed, but the patient soon died. In this case the patient seemed to be in the best of health until he had a slight attack of bronchitis. Five days later the hiccough supervened, and lasted eleven days. Seven days after the cessation of the hiccough intestinal obstruction manifested itself. The author thinks that the hiccough was the precursor of death from intestinal carcinoma. This disease could not, of course, account for the attack five years previously. Attention is drawn to the value of cocaine in this affection.

(489) Hysterical Muscular Atrophy.

HIRT (*Deut. med. Woch.*, May 24th, 1894) observes that hysteria may give rise to muscular wasting usually one-sided but occasionally limited to the area supplied by a single nerve. Sensation varies in these cases; sometimes the author has found it normal, more often altered, especially in regard to touch and temperature. Only twice was there hemianæsthesia. The author speaks of a general wasting in hysteria affecting all the voluntary muscles. All other causes of wasting must of course be excluded. In 3 such cases, all fatal, the patients were women. In the last one, reported in detail, the disease lasted only two months and produced almost a complete disappearance of the muscles. In an epidemic of hysterical spasm among girls in a school the patient in question, aged 15, had suffered severely but recovered apparently completely in a few months. Some three months later she began to suffer from bodily weakness, dulness, and desire to sleep. She was excited at times, did not wish to leave her bed, and refused food. There was no evidence whatever of organic disease, and she was at one time thought to be simulating. The wasting, however, was striking, and when seen by the author she presented the appearance of the most marked muscular wasting. There were no signs of tuberculosis, diabetes, etc. The R.D. was absent and the opening and closing contractions were very prompt. There were no fibrillary contractions. Death occurred shortly afterwards.

SURGERY.

(490) Trephining for Head Injuries.

MYNTER (*Annals of Surgery*, May, 1894) gives his experience after having had occasion to trephine twenty-seven times during the last two years. Fifteen cases were for fractures of the skull: four of these died, in all of which there was extensive fracture of the base. Five were for traumatic epilepsy, four being greatly improved. In one of these it was not until six years after the accident that the patient began to have nocturnal epileptic attacks. He gradually grew worse until, when the "status epilepticus" set in, he was operated upon. He rapidly recovered, and returned to work, and no attacks occurred for seventeen months, when they returned as bad as before. He was again operated upon, and again rapidly recovered, and, after six months' entire rest, returned to work apparently cured. In five cases linear craniectomy

was done for microcephalus with idiocy without any improvement. One case recovered after trephining for subdural hæmorrhage with aphasia and hemiplegia, and is of interest on account of the correct diagnosis, verified by prompt operation and the complete restoration of the patient to health. One case of abscess of the brain, which recovered after trephining, showed no sign of paralysis, although the abscess was near to, and must have exercised great pressure on, the motor area. The diagnosis was made on the symptoms of mental dulness and elevated temperature.

(491) Secondary Union of Drainage Holes.

Laroyenne (*Archives de Tocol. et de Gynéc.*, May, 1894) points to the great tendency to hernia when a drainage tube has been passed into an ovariotomy or other abdominal incision. To counteract this evil he passes threads through the edges of the wound at the time of the operation, and leaves them untied. Thus, when Mikulicz's drainage is employed, two silver sutures are passed through all the layers of the wound on each side. Silkworm gut sutures are also passed through the aponeurotic layer in the same manner. All are left untied. Later on, the free growth of granulations on the edges of the wound would render suturing of the separate layers almost impossible. When it is found that suppuration is likely to become chronic and the threads are likely to become absorbed, or to cut through the wound, it is best to tie the lowest suture and remove the others four or five days after the operation. It is precisely at the lower angle of the wound that hernial protrusion is most frequent. Laroyenne's practice is especially valuable in operations where the peritoneum is not divided, such as the opening of large abscesses in the abdominal wall or the removal of fibromata of the aponeurotic layer. Drainage is usually needed, whilst the operation always involves risk of weakening the parietes.

(492) Mechanical Treatment of Subcutaneous Phlegmon.

Trier (*Therap. Monatsh.*, April, 1894), in the first place, refers to Dietz's article (*ibid.*, October, 1893) on the mechanical treatment of erysipelas by means of circular strips of plaster, and reports on a case that occurred in his own experience, where phlegmonous inflammation of the lower extremity was thus treated. As the result of an injury to the skin covering the shin, the whole leg and lower part of the thigh had become intensely inflamed and swollen when the patient was first seen. As the affection threatened to extend, a bandage was wound so tightly round the thigh at a distance of 3 inches from the affected area that the little finger could barely be inserted between the skin and the ligature. The leg was raised considerably, and the wounds dressed antiseptically. During the succeeding few hours the leg had become greatly swollen up to the bandage, and during the next few days incisions were required through which a large quantity of pus and necrotic material escaped. Nevertheless, the limb above the bandage remained perfectly healthy, not even the inguinal glands becoming affected. During the surgical treatment the ligature required reapplication, and, with a view to observing the result, it was fixed 1 centimetre higher, and within twelve hours the hitherto healthy part had become similarly affected. On the tenth day the bandage was permanently removed.

(493) Strangulation of Testicle.

Johnson (*Annals of Surgery*, May, 1894) has been able to collect only 14 cases of this condition dependent on torsion of the cord, and as these have all occurred since 1885, it must often have been overlooked. Spasmodic contraction of the cremaster is in some cases probably the cause of the trouble. The symptoms simulate strangulated hernia in a marked degree, and the author gives the following points as valuable in differentiating strangulation of the testicle from strangulated hernia and bubo. In strangulated testicle shock is only moderate, there is the possibility of strain: the testicle is often undescended the external abdominal ring empty, and the cord twisted but not obscured. As to treatment, exploratory incision is the best. Taxis will only do harm, and untwisting a doubtful case might be more serious than operation if the case proved to be a hernia.

(494) Six Lithotomies Performed on One Patient.

Beck (*Amer. Med. Surg. Bull.*, May 1st, 1894) reports the case of a patient on whom lithotomy has been performed six times. The first operation was performed when he was an infant, the second two years later, the third at the age of 5, the fourth at the age of 9. In the first three cases the stone was removed by the perinenm, in the last by suprapubic lithotomy. Five years later a stone was extracted by lateral lithotomy. The sixth operation was performed by Beck when the patient was 19 years of age. Suprapubic operation and perineal section were performed at the same sitting. A large stone was extracted, and subsequent irrigation of the bladder brought away about sixty small pieces of stone.

MIDWIFERY AND DISEASES OF WOMEN.

(495) Tuberculous Disease of a Cancerous Uterus.

Otto von Franqué (*Sitztungsberichte der physikalisch-med. Gesellsch. zur Würzburg*, Nos. 3, 4, 1894), in a paper on the histogenesis of uterine tubercle, describes a case in which a woman, aged 45, underwent vaginal hysterectomy for cancer of the cervix, observed only five months previously. The cervix, when examined after removal, showed all the characters of ordinary cancer of the "portio," whilst the mucous membrane of the cervical canal was healthy. Half an inch above the os internum was a swelling as big as a cherry and soft as marrow. There were also small interstitial myomata. The swelling proved to be a collection of true tuberculous material. Von Franqué shows that tubercle can infect the uterus at a point where the epithelial layer of the cavity is healthy and intact. He thinks that the infection can rarely, if ever, arise from coitus; primary cancer of the vulva is very rare, the same disease of the vagina has never been authenticated as primary. How the tubercle reaches the tubes, its most frequent seat, if infection takes place through the vagina, seems inexplicable, especially as Hofmeier has shown that the cilia of the uterine epithelium wave centripetally and not towards the tubes—a fact which readily explains the frequency of secondary infection of the uterus from diseased tubes.

(496) Adherent Placenta.

Poitou-Duplessy (*Archives de Tocol. and de Gynéc.*, May, 1894) read a case at a meeting of a French society, which gave rise to an interesting discussion. The placenta adhered. Its removal was at once attempted, but as there was much resistance at the cervix and as all hæmorrhage had ceased, he did not persevere in his attempts until a few hours later, when the flooding reappeared. Guéniot said that adherent placenta was the most serious of all the more frequent complications in obstetrics. The degree and extent of the adhesion can never be absolutely determined. Poitou-Duplessy had done rightly under the circumstances. In one case, where Guéniot attempted to remove the adherent mass entire, the patient died. A piece of tissue was found, firmly adherent, and also a perforation through which the finger could be passed. Parak related two fatal cases of retraction of the cervix after delivery of the fœtus and before expulsion of the placenta. Charpentier insisted that, as a rule, the placenta should be delivered artificially directly the obstetrician finds that it is adherent. In two cases where he acted thus and a small piece of placenta remained, the uterine cavity and vagina were plugged with iodoform gauze. The plugs and the remains of the placenta were spontaneously discharged. Of course care must be taken lest fragments of membrane remain after the placenta has come away entire.

(497) Muco-Enteritis in Uterine Disease.

Germain Sée (*Revue Obstét. et Gynéc.*, May, 1894) lays down rules for the treatment of the troublesome mucous diarrhœa which complicates periuterine inflammation. The three indications are to empty the bowel, to allay the pain, and to check fermentation. In cases in which the complication is not very severe a tablespoonful of linseed should be taken three times a day before meals. The seed should first be soaked for a few minutes in a quarter

of a tumblerful of cold water. Sée has known this treatment answer in thousands of patients, and there seems to be no fear of impaction of the highly soluble seeds in the cæcum or appendix. Should the bowels fail to act, a pill, consisting of a grain or more of solid extract of hydrastis to three grains of powdered senna leaves, taken three times daily after meals, will prove a good aperient, which will not prevent the patient from attending to her social and domestic duties. Saline and mineral water purgatives are, in Sée's opinion, hurtful, being followed by obstinate constipation. Occasional doses of castor oil are needed, and the American practice of giving large doses of olive oil is often beneficial in muco-enteritis. For calming the pain morphine and atropine should be avoided, as they cause constipation and loss of appetite, the latter insuring invalidism by impairing nutrition. The bromides of potassium and sodium irritate the stomach and cause debility. Bromide of strontium or calcium in about 20-grain doses freely dissolved in water and taken during meals is very efficacious in the muco-enteritis of uterine disease. To avoid any chance of debility being caused by the bromine about 10 grains of chloride of calcium added to 10 of bromide of calcium should be substituted for the above prescription. Menthol dissolved in alcohol and water is the best remedy when very severe pains set in. As to the neutralising of fermentation, flatulence is best cured by phosphate of soda mixed with salicylate of soda or by doses of borax. Sée has little faith in benzonaphthol either for the muco-entetritis here considered or for any other kind of gastro-intestinal irritation.

(498) Pregnancy and Heart Disease.

SOLVIEFF (*Annales de Gynéc. et d'Obstét.*, April, 1894) read notes of five cases at a recent meeting of the Moscow Obstetrical Society. The patients were admitted in the fifth, sixth, eighth, eighth and a-half, and ninth month, respectively, with severe symptoms of mitral incompetence, with or without stenosis. The first patient was delivered of a dead child; abortion was induced in the second. In the third and fourth, dilatation of the cervix and podalic version without chloroform were practised. The fifth was delivered spontaneously after dilatation of the cervix. All the women rapidly recovered; three of the children were saved.

(499) Hæmophilia, Menstruation, and Operation.

OLIVIER (*Archives de Tocol. et de Gynéc.*, May, 1894), at the April meeting of the Paris Obstetrical and Gynæcological Society, asked the opinion of his colleagues concerning a patient with hæmophilia. She was 13 years old, and her period had just appeared. The flow of blood was excessive and continuous, putting life in danger. The tampon had been applied. Olivier had recommended electrolysis and the curette, and even thought of removal of the appendages. Guéniot advised the use of the tampon, with hot antiseptic injections every two or three days whenever the tampon was changed. He disapproved of electricity and the curette. Porak recommended hypodermic injections of hydrastinin. Petit observed that removal of the appendages in a hæmophiliac patient was a terrible undertaking. He was present when an able surgeon operated; the patient died in a few hours. Martin's ligature of the uterine artery might be attempted. Fraisse opposed even the latter suggestion. He once attempted a plastic operation on the cervix of a patient with hæmophilia. Every needle hole bled freely, and the more he sewed the more the hæmorrhage increased. A silk ligature was passed round the cervix and held there by a forceps for four days. Artificial serum was injected, and the patient recovered.

THERAPEUTICS.

(500) Vaccination of the Horse against Tetanus.

TIZZONI AND CATTANI have continued their researches on this subject, and now publish a second series of results (*Gazz. degli Ospitali*, April 21st, 1894). In this paper they first investigate a point raised by some experiments of Behring, who found that in the case of his own immunised animals, after about a year from their first immunisation, the blood serum contained only about one-hundredth the amount of antitoxin which it did at first, even though the immunity against tetanus had become more marked than ever. This immunity was found by him to be so great that the animals no longer reacted even to very active cultures of tetanus. If such an observation were found to hold, it would be an important obstacle in the way of the preparation of antitoxin. The authors have exercised the greatest care by allowing their immunised horses long periods of rest between the times at which the protective serum was abstracted from them to eliminate the effects of fatigue upon them. Before a fresh withdrawal of serum is made the animals are subjected to fresh "reinforcing" injections of virulent culture, these being made into the subcutaneous tissues—not into the blood vessels as practised by Brieger. With these precautions Tizzoni and Cattani have found, first, that their animals remain sensitive even to minute reinforcing injections, and secondly, that after these they furnish serum of very great antitoxic power. This differing result is attributed to the precautions above-mentioned, and, it is hinted, also to the smaller amount of the extremely virulent cultures possessed by them necessary to secure reinforcement. The phenomena of reaction observed after the practice of "reinforcing" injections may be classed as local and general. The local effects consist in the appearance of an elastic pasty swelling at and around the point of injection. This disappears after about a week, and appears to be due to the irritant effect of the volatile matters contained in the injected matter, being less if the fluid before injection be subjected to the vacuum pump. It may also be due to the presence of bacilli, as it does not follow the injection of filtered cultures. The general phenomena consist in a great excitement immediately following the injection, passing off after about half an hour, but necessitating great care in order to prevent the animal from hurting itself. This is followed by a period of exhaustion extending over another two days. With the excitement there is an increased frequency of respiration, which generally persists over the next day; this is often sufficiently marked as to be classed as dyspnœa. Another and less frequent phenomenon is the appearance of fibrillary twitchings of superficial muscles independent of any local stimulation, and even convulsive spasms of the muscles of the hind limbs. Trismus may also appear, and a more or less marked rise of temperature is almost always noticeable, accompanied by a loss of appetite. None of the above described symptoms extend beyond about a week. With regard to the amount of the reinforcing injections, it was not found necessary to exceed a maximum amount of 250 c.c. of culture, a quantity much less than that used by other observers. The greatest antitoxic power of the serum seemed to be reached in between twenty and twenty-three days from the "reinforcing" injections, and this time was selected for bleeding the animals. The last point dealt with is the best method of preserving the antitoxin. It was found that solutions are not to be relied upon, as they soon lose much of their power. Precipitation of the "antitoxin" by absolute alcohol, was both expensive and apt to interfere with the solubility of the resulting product. The best method of all was to dry carefully the whole of the serum at a low temperature *in vacuo*. The resulting scale preparation was completely soluble, perfectly stable, and possessed the additional advantage of being capable of solution in a bulk of water equal to half that of the original serum, thus furnishing, bulk for bulk, a solution of double antitoxic power.

(501) Sozoiodol in Aural and Rhinological Practice.

TEICHMANN (*Therap. Monatsh.*, April, 1894) has used sozoiodol, namely, the potassium salt, mainly in affections of the external ear, accompanied by much discharge, where the drying properties of the drug are well marked. It was also serviceable in chronic discharge of the middle ear, with much destruction of the tympanum. After the removal of aural polypi sozoiodol appeared to prevent recurrence, but the author does not think that chronic polypi will by its use shrink or disappear. When caries existed no better

result was obtained than with other remedies. It is, however, in the various forms of rhinitis, both simple and hypertrophic, that either the potassium or zinc salts are very effective. The latter may be somewhat irritating at first, but acts with astonishing rapidity. In the after-treatment of operations on the nose the author has now discarded iodoform, preferring the sozoiodolate of potassium, and he considers that its use in many other conditions may also prove of great advantage.

(502) Apocynum Cannabinum in Heart Disease.

A. G. GLINSKI (*Vratch*, Nos. 6 and 7, 1894) after having proved by experiments on cold-blooded and warm-blooded animals that the root of the apocynum cannabinum contains a strong poison which in large doses paralyses the heart, and when given in small quantities retards and strengthens its beats, decided to take it himself, as he is suffering from hypertrophy of the left ventricle, with intercurrent attacks of dilatation of the organ, mitral murmur, dyspnœa, etc. The dose was 15 drops of the fluid extract three times a day. As he found that all his symptoms disappeared in two days, he gave it also to other patients in the same quantity in cases of palpitation, disturbed compensation, in which strophanthus, and adonis vernalis had failed and digitalis seemed contraindicated. He gives a full account of some of his cases, and summarises his experience in the following conclusions: (1) The action of the root of apocynum cannabinum is similar to that of digitalis, without being cumulative. (2) In cases of dilatation the fluid extract rapidly diminishes the area of dulness. (3) It increases the daily amount of urine, stops the palpitation, and promotes the absorption of transudations. (4) With the exception of increased pulsation of the arteries of the head, it has no bad secondary effects. It was used either in the form of a decoction (℥j to ℥viij), 3 to 4 tablespoonfuls a day, or tincture (1 in 10), 5 to 10 ♏, three to four times daily, or fluid extract in doses of 10 ♏ to half a teaspoonful three times daily.

(503) Treatment of Typhoid Fever.

OSLER (*Johns Hopkins Hosp. Rpts.*, vol. iv, No. 1) states that 229 cases of typhoid fever have been treated in the hospital. The cases in the first year, 33 in number, were treated symptomatically: they yielded a mortality of 24.2 per cent. The remaining cases were subjected to the cold bath treatment, and yielded a mortality of 7.1 per cent. The cases in the first year were of unusual severity, but the mortality under the cold bath treatment was very favourable when compared with the average mortality in hospitals in America, which according to Osler ranges from 10 to 15 per cent. A bath at 70° was given every third hour, when the temperature taken in the rectum was 102.5° or over. If the fever was very slightly reduced by the bath at 70° it was given colder (65°). The temperature was taken half an hour after the bath, and again three hours after. If then above 102.5° the bath is repeated. The frequency of the baths thus depended on the severity of the case; the average number in the twenty-four hours was four, but the maximum number, eight, was often given. The patient was lifted into the bath covered with a sheet or with a napkin round the loins. Cold effusions to the head during the bath were regarded as important, especially in cases with marked nervous symptoms; a cloth wrung out of ice-water was placed upon the head, and the head and face bathed with a sponge with the same water. The trunk and limbs were rubbed during the bath with a cloth or bath-rubber; this was found to counteract the shivering and tendency to cyanosis. The usual duration of the bath was twenty minutes, but in feeble patients the duration was reduced, when there were signs of increasing weakness. Brand's injunction to begin the treatment at the very beginning of the disease could not be carried out in the majority of cases, as only 95 cases were admitted in the first week, and most of these at the end of it. Half an hour after the bath the temperature was found to have been lowered from 1° to 3°, but, as a rule, during the height of the disease, in two hours more the temperature had risen again to its former height. In "not a few cases" the bath at 65° had very little influence in reducing the fever, and in none was it found possible to keep a patient afebrile. In some cases, particularly in children, and at a late stage (third week) in adults, the bath at 70° brought the temperature down to normal, or to 96° or 95°. The bath has a tonic effect on the circulatory system, especially in the early stage of the fever; it seems to be exercised as much on the peripheral arterial system as on the heart. The most striking effects of the bath are on the nervous system—headache is relieved; the patient sleeps well; tremor, delirium, stupor, and coma are rare. In the series reported only 13 presented marked nervous symptoms. The dry, brown tongue, and gastric irritation, are less often seen. Speaking generally, the "typhoid state" is not nearly so frequent under the cold bath treatment, which appears also to have an influence in diminishing diarrhœa and tympanites. In the series reported, hæmorrhage and perforation were more frequent, and relapse more often observed in those treated by the cold bath treatment, but this may have been accidental, and, as has been stated, the general mortality was much lower. Complications were rare, with the exception of boils, which were frequent. The baths do not aggravate the preliminary bronchitis, and do not induce pneumonia or pleurisy.

PATHOLOGY.

(504) Functions of the Pituitary Body.

VASSALE AND SACCHI (*Centralb. f. allg. Pathol.*, May, 1894) give a summary of their communication to the Congress at Rome, 1894. Dogs were used, and the pituitary excised or destroyed *in situ* by the injection of chromic acid and by other means. The intensity of the symptoms varied according to whether the gland was wholly or partly removed, and the results are consistent. They show (*a*) a fall of temperature to subnormal, permanent when excision was complete, but returning to normal in partial excision; (*b*) anorexia, listlessness, and progressive hebetude of the animal; (*c*) fibrillary twitchings and tremors of the muscles, with the development later of muscular cramps and spasms (arching of the back, etc.); (*d*) attacks of respiratory spasms (dyspnœa); and (*e*) final death. In complete excision many of the symptoms abated if the animal was injected with pituitary extract. The authors conclude that the pituitary must be looked on as producing a secretion which is of profound importance in the nutrition of the nervous and neuro-muscular systems mainly. The correspondence between these experimental conclusions and those obtained in the comparative investigations of recent workers (notably Lloyd Andriezen) must therefore be of exceptional and permanent importance for future pathological investigation.

(505) Comparative Pathology of Necrosis.

ISRAEL (*Centralbl. f. allgem. Pathol.*, May, 1894) gives a summary of results based upon extensive observations with animal tissues and vegetable cells of various kinds. The pathological changes are grouped under three headings as follows: (1) Changes in the cell protoplasm. These comprise disappearance of the protoplasmic stroma or reticulum, contraction of the protoplasm in clumps (as in vegetable cells), retraction of motile organs (like flagella in the protozoa), extrusion of minute spherical particles from the cell substance (as in various protozoa and in the leucocytes of higher animals), and general granular change in the homogeneous protoplasm and alterations in the pigments. The latter changes include discharge of the colouring matter—in animals from blood corpuscles and in plants from chlorophyll corpuscles—into the surrounding fluids, alteration of the colour, and diffuse staining of cells by the pigment which they absorb from the fluids; finally, alterations in the staining reactions of the cells, especially with fuchsin and methylene blue. (2) Alterations in the nucleus. Swelling and alteration in form of the nucleus, dissolution of its contents (reticulum and nucleoli), a formation of fine diffuse granules, and alteration in the staining reaction, while chromatin particles may even be set free and escape from the nucleus. (3) Alterations in the turgescence of the cell, as in noctiluca among protozoa and in vegetable cells. There is an attempt to furnish a chemical explanation of these changes, which must be regarded, however, as insufficient with existing data, but the importance of which is obvious.

AN EPITOME
OF
CURRENT MEDICAL LITERATURE.

MEDICINE.

(506) Natural Immunity against Cholera.

G. KLEMPERER (*Deut. med. Woch.*, May 17th, 1894) observes that the causes of natural immunity do not lie in the stomach and acid gastric juice alone. Numerous living cholera bacilli have been found in the stools of those going among cholera patients. Thus the intestine must possess protective powers. Loss of the epithelium is always noted in the intestines from cholera patients. Thus it is suggested that the protective mechanism lies in these epithelial cells. The difficulty of giving guinea-pigs cholera is well known. Even if the gastric juice is neutralised and peristalsis arrested by opium, enormous quantities of bacilli are required to overcome the protective action of the intestines. The author's experiments show that between the blood and the intestinal contents a barrier exists which the cholera bacillus can get over only with difficulty or not at all. According to his experience in both man and animals, the intestinal mucous membrane protects against the poison of the cholera bacillus. The blood can be appealed to here only in a very limited degree. Staining with the three-colour stain (Ehrlich) would seem to show that the nucleus of the epithelium is made up of an acid body. Lilienfeld separated by special processes nuclein from the intestinal mucous membrane of a calf in such a way as to lead to the notion that nuclein is present in the epithelium in an uncombined (acid) condition. The author has experimented with this nuclein; a neutral solution was found to kill cholera bacilli, and to alter the poison so that the toxic effect is removed, while the protecting qualities remain. Yet in alkaline solutions of this intestinal nuclein the bacilli grew vigorously. The author would explain natural immunity by the epithelium taking up the cholera poison and the nuclein converting the toxic into a protective action. Thus protective substances are present in large quantities in the blood of those through whose intestines the cholera bacilli have passed without setting up any marked symptoms of cholera. As has been shown by the author, natural immunity is produced in great measure by the action of the intestinal nuclein. It is the part of the living cells to keep this nuclein in an acid state.

(507) Myxœdema and the Thyroid Treatment.

CRARY (*Amer. Jour. of Med. Sci.*, May, 1894) first discusses the various symptoms of this disease. He thinks that the term congenital myxœdema for cretinism gives a wider range of classification, and that the diagnosis depends on the same manifestations as in the acquired form in adults. He draws attention to the differential diagnosis from Bright's disease, the general swelling, dyspnœa, headaches, occasional hæmorrhage from mucous membranes being common to both. The urine may also show a low specific gravity, a small percentage of urea and albumen, with casts in both conditions. The non-pitting character of the œdema, with its distribution, the dry skin, falling of the hair, dysphagia, the low temperature, the manner of speaking and tone of voice are, however, distinctive. The author then gives a sketch of the thyroid treatment and the method of its administration. He uses a glycerine extract of lamb's thyroid. Details are given of three cases of ordinary myxœdema all greatly improved by thyroid extract administered by the mouth. A fourth case of cretinism in a girl, aged 5, is then reported. At three months of age the tongue seemed thick. A few months later the infant ceased to grow as it should do, and the lack of physical and mental development was obvious. Dysphagia was present. Later she presented all the characteristics of the disease. She was treated with lamb's thyroid (24 grains to the drachm), beginning with one drop thrice daily. Improvement began at once, and in six weeks was very considerable. The author thinks that if the term cretinism is given up, and the symptoms of myxœdema more carefully looked for, many cases will be found among idiots, imbeciles, etc., which are due to functional inactivity of the thyroid gland, and therefore capable of improvement and even cure by thyroid treatment. The effects of this treatment are summed up as (1) elevation of temperature, (2) increased appetite, (3) loss of weight, (4) growth of the skeleton in the young, (5) improved bodily nutrition, and (6) increased activity of the mind. The rheumatic pains are said frequently to be increased.

(508) Fæcal Concretions in the Large Intestine.

OTT (*Prager med. Woch.*, 1894) narrates two cases of intestinal concretions in the large intestine. (1) A woman, aged 50, had for a long time suffered from habitual constipation. More recently she had begun to suffer from meteorism and pyrosis, and, in spite of her accustomed aperients, the motions became smaller, sometimes consisting of only a little mucus without fæces; micturition and the desire to defæcate became very frequent. By digital examination of the rectum a stone-like mass was felt close above the anus. This had to be broken up and removed by the finger and the handle of a spoon. (2) A woman, aged 56, who from youth upwards had been subject to habitual constipation, began to suffer from unusual difficulty in defæcation, and suddenly developed fever, abdominal pain, and diarrhœa. The fever and diarrhœa ceased, but the desire for frequent micturition and defæcation continued, and the fæces remained pulpy and were never well formed. The patient also complained of a feeling as of a foreign body in the descending colon, and sometimes had deep-seated pain in the left pelvic region. By external examination nothing was noticed except meteorism and a certain tenderness in the left hypogastric region; digital examination of the rectum gave a negative result. Castor oil had always had a better result than other medicines, and therefore two tablespoonfuls were given every morning: on one occasion the patient felt a hard body move downwards to the anus. It was, however, only after this concretion had been mechanically broken up that it could be passed through the anus. Since then—five months—all the symptoms had disappeared. Ott confirms Canstatt and Curling that the diagnosis of such cases may be very difficult, and agrees with Schuberg as to the various possible modes of origin of such concretions. Habitual constipation and the resulting intestinal atony will obviously favour the formation and growth of such concretions, and it is probably owing to this constipation, induced by a sedentary mode of life, that women are the most liable to them. The diagnosis will vary according to the position, size, and mobility of the concretion; it cannot always be settled by rectal examination, and it may be rendered still more difficult by the presence of long-continued diarrhœa due to intestinal irritation.

(509) Word Blindness.

BIANCHI (*Berl. klin. Woch.*, April 2nd, 1894) reports a case in a printer aged 71, who had suffered for several months from attacks of vertigo, with loss of consciousness, and from fits. In a recent more severe attack, the right side was temporarily paralysed, and he lost his speech. On admission the sight of the left eye was considerably limited, and he had right hemianopsia. There was no motor loss except in the left face. There was marked disturbance of speech. He understands but cannot answer. Reading is impossible. He recognises one or more letters in a word, but constructs a word quite unlike that before him (paralexia). He writes well from dictation, but spontaneous writing is quite inaccurate, and he cannot copy. Hallucinations are present. At the necropsy the following lesions were found in the right hemisphere: (1) A small focus of softening in the outer part of the lenticular ganglion; (2) a lesion in the white matter at the foot of first frontal convolution; and (3) an old lesion in the corpus callosum in connection with the splenium, and extending into the præcuneus. In the left hemisphere there was a focus of disease in connection with the angular gyrus, destroying especially the grey matter of the first temporal sulcus (hinder part), and another one involving the white matter of the angular gyrus, and stretching to the posterior horn, but sparing the first and second temporal convolutions. It is probable that a part of the

verbal acoustic centre is in relation with the verbal visual centre, and that thus the destruction of this latter centre produced not only a simple alexia. The failure of the recollection pictures for speech hindered the motor functions for speech and writing, and since the patient was blind for written words, he was also amnesic for spoken as well as written words.

SURGERY.

(510) The Pathological History of Synovial Tuberculosis.

Recent examinations of about 300 specimens of diseased knee have led König to certain conclusions which he holds to be of great importance in their bearing on the pathological history of articular tuberculosis. Pending the publication of a large work on disease of the knee, he has thought it well to make these conclusions known in a contribution to the *Centralblatt für Chirurgie*, No. 22, 1894, and also in a paper read at the International Congress at Rome. Synovial tuberculosis, he holds, whether occurring primarily in the membrane, or caused through infection from a deposit in bone, always begins with a sero-fibrinous exudation. This exudation is not to be regarded as a definite form of tuberculosis, as it may disappear without leaving any important changes in the affected joint. In most instances, however, the fibrin is deposited in successive layers on the articular cartilages and on the inner surface of the synovial membrane. The layers are thickest in those parts of the joint which are most capacious and most favourable to the deposit of fibrin. The deposited layers after a time become organised, the vessels in deposits on the synovial membrane passing directly into the fibrin, whilst those supplying the deposits on articular cartilage pass from the margin of the synovial insertion. This organisation is speedily associated with the deposit in the fibrin of heaps of round and giant cells. The character of this organised deposit—whether fungoid, caseous, purulent, or fibroid—depends on the activity of the morbid process, whilst the forms it takes in different cases and in different joints are influenced by such conditions as movement of the affected joint and intra-articular pressure. So long as the disease is progressive, every organised deposit presents on its free surface a layer of unorganised fibrinous material. The new-formed tissue, and not degenerated synovial tissue, forms at first the fungoid or granulating masses of articular tuberculosis. Tubercle is primarily deposited in this new-formed tissue, and passes from this to form secondary growths of a like character in synovial membrane, cartilage, and bone. The so-called tuberculous ulceration of articular cartilage is regarded as being at first a passive process. Erosion of cartilage may be caused by a simple organised clot of blood just as readily as by tuberculous granulations. The bone is then attacked in like manner, and defects are formed which in size and shape resemble primary osteal deposits. The present teaching with regard to the occurrence and the frequency of primary deposits in bone must, König holds, be completely revised. Primary osteal deposits occur, he states, much less frequently than is generally supposed. In a number of specimens of diseased knee, shoulder, and hip which have been recently examined, cavities which would hitherto have been regarded as due to primary tuberculosis of bone have really, in König's opinion, been formed by the erosive action of fibrino-tuberculous and other organised new growths. In conclusion, König points out that articular cartilage and the articular extremity of a bone may also be destroyed by a granulating ostitis originating in the subcondial osseous structure. This ostitis, the results of which may be confounded with those of tuberculous disease, is not as a rule of tuberculous nature.

(511) Tapping the Lateral Ventricles.

Frank (*Annals of Surgery*, April, 1894) discusses this question, and comes to the following conclusions: (1) For distension of the ventricles from acute simple, or tuberculous meningitis this operation is clearly indicated, and promises recovery; (2) for ventricular hæmorrhage it makes recovery possible; (3) for abscess, involving the ventricles, it is immediately and imperatively demanded; (4) for effusion into the ventricles it may relieve symptoms; (5) for chronic hydrocephalus, moderate distension of the ventricles, without enlargement of the head, it may afford relief. Otherwise it will lead to a fatal result.

(512) The Cause and Prevention of Neuralgia in Amputation Stumps.

Witzel (*Centralbl. f. Chir.*, No. 23, 1894) holds that neuralgia after amputation is not caused, as is generally supposed, by the formation of neuromata at the ends of the divided nerves. He states that if such were the case it would be necessary to lay aside the amputating knife. The neuralgic pains, he believes, are due to adhesion of the neuromatous swelling to the end of a bone. In order that its functions may be properly performed a nerve should move freely in its sheath. The structural elements which serve the special functions of a nerve are during life extremely delicate and almost fluid. The ordinary movements, therefore, of an adjacent joint would interfere with the structure and functions of the nerves of a limb if these nerves had no longer free range of movement in the direction of their long axes. In two cases of neuralgia after amputation in which Witzel had opportunities of dissecting the stumps he found thick neuromatous swellings at the ends of the divided nerves, which were bound down by tough cicatricial tissue to the ends of the bones. It is evident that during movements of the stump at the nearest joint the fixed nerves must be stretched, those on the flexion side during extension and those on the extension side during flexion. In neuralgia caused by confinement of a nerve in a mass of callus the pain, it is held, is due to the prevention of the nerve's movement and not to its compression. As a preventive treatment Witzel recommends that in every amputation as much attention should be paid to the nerves as to the large arteries, and that the former should be pulled away from the flaps and divided high up. Attention should be particularly directed to this precaution in cases of amputation at the ankle and shoulder.

(513) Appendicitis.

Rushmore (*Annals of Surgery*, May, 1894), discussing the surgical aspect of appendicitis from a clinical standpoint, comes to the following conclusions: Appendicitis is a surgical disease from its beginning. Its diagnosis is usually not difficult. In doubtful cases exploratory laparotomy is justifiable. Appendiectomy, all things considered, offers the best chance, immediate and remote, for the patient. The operation should be done at the earliest possible moment.

MIDWIFERY AND DISEASES OF WOMEN.

(514) Fatal Pneumonia in Infant from Septic Infection During Birth.

Legry and Dubrisay (*Journal de Médecine de Paris*, June 3rd, 1894) record two cases in which the mothers recovered from labour unscathed, but the infants died, evidence of infection being present. In the first case the mother was a primipara, and the membranes ruptured prematurely. The liquor amnii became fœtid, labour being delayed by rigidity of the cervix. Tarnier's dilator and the forceps were used. The child was born asphyxiated, covered with fœtid slime; aspiration brought a quantity of mucus out of the air passages, and the infant revived. It died when sixty hours old of well-marked broncho-pneumonia. The second case occurred in Budin's wards. The mother had a very profuse greenish vaginal discharge. The membranes ruptured prematurely: forty hours later spontaneous delivery occurred, labour lasting only two hours. The child was born slightly asphyxiated, it was revived, and nitrate of silver applied to its eyes. Respiration was embarrassed from the first, and the infant died in eleven hours. Pneumonia and pleurisy were discovered; the pleural fluid and other fluids and tissues contained streptococci, which were also found in the vaginal discharge of the mother.

(515) The Curette in Bleeding Fibroids.

Orloff (*Centralbl. f. Gynäk.*, No. 23, 1894) claims good results in the treatment of 10 cases in which there was abrasion of the endometrium as a complication of uterine myoma. The tumour was interstitial in all but one case, where it was multiple. The

curetting was performed with a Sims's spoon made of soft metal. Immediately after the proceeding equal parts of tincture of iodine and spirit were injected into the uterine cavity. The tumour in every case grew smaller, the uterine cavity shorter, and the uterine hæmorrhage ceased for six to twelve months, being replaced by regular menstruation. Orloff advocates the curette in cases of fibroid where the bleeding, whether as regular menorrhagia or irregular metrorrhagia, has gone so far that an abdominal operation, or even anæsthetisation alone, would involve unjustifiable risk. The patient gains strength after the cessation of hæmorrhage due to the use of the curette; afterwards, when the anæmia has ceased, a radical operation may more safely be undertaken. The curette is also valuable when the patient is near the menopause. Time is gained and the patient's health kept up until the bleeding ceases naturally and the myoma grows no more.

(516) Symphysiotomy: an Objection on Mechanical Grounds.

DIMANTE (*Répertoire Univ. d'Obstét. et de Gynéc.*, May 25th, 1894) has performed symphysiotomy on the cadaver, and finds that, when the pubic bones are pressed apart, the sacrum rotates on its transverse axis, so that its promontory swings backwards and its apex forwards. Hence the antero-posterior diameter of the pelvis diminishes more and more from above downwards to the outlet.

(517) Puberty in Cold Countries.

GRUSDEFF (*Centralblatt f. Gynäk.*, No. 23, 1894) has collected statistics of 10,000 women, all inhabitants of European Russia. The result shows that the period appears comparatively late, as was already generally suspected. It is seen earliest in women German by race—that is, on an average, at 15.14 years, or sixteen short of three months. The averages in years for other races are: Poles, 15.33; Jewesses, 15.40; true Russians, 15.75; Esthonians and Lapps, Finno-Sclavonic races, 16.19; and true Finns, 16.27. The social condition had a great influence on the appearance of the period. In the privileged classes the average age was 14.87, in townwomen 15.33, in peasant women 16.15. It is distinctly later in North than in Middle Russian, and in Middle than in South Russian peasant women. The average for the whole of Russia is 15.74, but a few exceptionally early cases are included in Grusdeff's statistics—namely, 1 in the ninth year, 4 in the tenth, 31 in the eleventh, and 244 in the twelfth. In 3 menstruation was delayed till the age of twenty-four, in 1 till thirty-two. As might be expected from the above statistics, the highest figure out of the 10,000 is at the sixteenth year, namely, 2,012.

(518) Radical Cure of Hydrocele Feminina.

GERKE (*Deutsche med. Woch.*, June 7th, 1894) objects to simple puncture of the hydrocele formed when the inguinal process of peritoneum remains unobliterated in a female subject. Half the cases, it has been shown, are not radically cured, and there is danger of peritoneal infection. Dissecting away the sac prevents recurrence of the hydrocele but does not protect the patient from inguinal hernia, to which she is unusually predisposed, as the inguinal canal is often dilated in hydrocele. He has twice practised excision of the sac and then closed the canal, as in the usual radical operation for inguinal hernia. The latter proceeding should always be undertaken if, after excision of the sac, the inguinal canal is found to be dilated. One of his cases was 36, the other only 11 years old. The results were excellent.

THERAPEUTICS.

(519) Infantile Therapeutics.

LUZET (*Arch. gén. de Méd.*, June 16th, 1874) gives a critical review based on the work of Legendre and Broca. The special points really consist in the phases of development in the infant, in the special feature of disease which here proceeds rapidly towards aggravation or recovery, and in the physiological peculiarities of more active metabolism, of more rapid absorption and circulation, of intact emunctories, and of a more impressionable nervous system. In regard to feeding, the regular increase in weight must be relied upon. A tuberculous nurse must not be employed, for if bacilli do not pass out with the milk, toxins can; in addition, the milk is less rich in fat and casein. Overfeeding the nurse must be avoided. Of course, artificial feeding is only a method of necessity. The milk should be sterilised by means of steam under pressure. The therapeutical bath is used to reduce temperature. The bath is then gradually cooled down from 2° below the child's temperature to 30°; it is useful in enteric fever, severe scarlet fever, and cerebral rheumatism. The bath with increasing temperature is of value in collapse such as occurs in diarrhœa. It may also be a vehicle for certain medicaments. More strictly therapeutical measures are then discussed in the following order: (1) Evacuating medication. The stomach tube is very useful, as well as intestinal injections and emetics. Apomorphine is dangerous. (2) Promotion of excretions. The best diuretic is water. Large rectal injections of cold water constitute a good method of inducing diuresis. In uræmia, icterus, and all intoxications large injections are useful. Cold baths are also of service in increasing renal excretion. Digitalis is well borne by children. Diaphoresis is best obtained by physical agents, heat, wet sheet, hot drinks. Diuresis is more efficient than diaphoresis. (3) Sleep should never be interrupted in disease, with very few exceptions. It may at times be necessary to induce sleep. This may sometimes be done by removing something which interferes with sleep. Physical agents are again the best means, such as tepid baths, etc. Opium requires caution; chloral is useful. Bromides and antipyrin may be of service. (4) Fever is controlled by external agents, baths, etc. Quinine, antipyrin, sodium salicylate may be useful adjuvants. (5) Food is the best tonic. Alcohol is the best stimulant. (6) Antiseptic medication plays a very important part in infantile therapeutics. Carbolic acid in any form must be avoided. The mouth should be cleansed with alkaline lotions. Glycerine is a good non-fermentable medium. Antisepsis of the stomach may be procured by washing it out, and, together with the intestine, by the use of bismuth, salicylate, salol, etc. Calomel is a powerful intestinal antiseptic. Antisepsis of the large intestine is obtained by means of irrigations containing naphthol, etc. It is indicated in typhlitis, appendicitis, membranous colitis, etc.

(520) Para- and Ortho-Chlorphenol in Tuberculous and other Diseases.

N. SIMANOFFSKI (*Vratch*, No. 8, 1894) has used solutions of monochlorphenol in glycerine in the strength of 5 per cent., 10 per cent., and 20 per cent., and points out as special features of these very powerful disinfectants that they do not irritate the mucous membrane, even if applied in a 20 per cent. solution, that they form no stable combination with the tissue albumens, and that they are therefore able to penetrate into the depth of the diseased organ. The tuberculous cases treated were mostly very advanced and serious affections of the throat with impairment of voice and difficulty in swallowing. In one case there was, besides these symptoms, a tuberculous ulcer at the root of the tongue; in another a similar ulcer on the whole posterior wall of the pharynx and part of the naso-pharyngeal region. All cases without exception, even including the last one in which there was a very advanced affection of the lung, improved quickly under the local treatment with monochlorphenols; the ulcers became clean and showed a tendency to heal, and all the accompanying symptoms disappeared. Equally good results were obtained in chronic thickening and hyperplasia of the mucous membranes, which disappeared after a few applications of the same solutions. Simanoffski is of opinion that the monochlorphenols will find a large field of application in diphtheria, etc., and he unhesitatingly recommends them in laryngological practice in preference to iodoform, pyoktanin, menthol, etc., especially as they also possess anæsthetic properties.

(521) Thiol in Erysipelas.

FOLLOWING Ridder's recommendation, N. K. Rüdneff (*Meditzinskoïe Obozreniè*, No. 13, 1893) tried thiol in the form of a 20 to 40 per cent. aqueous solution in 15 cases of erysipelas, 14 of the face and 1 of the leg, all in soldiers. The affected regions, as well as an adjacent healthy zone (about two fingers' breadths wide) were painted five times daily until the appearance of defervescence, and even,

though less frequently, for one or two days more. As adjuvants he employed: (*a*) calomel, 10 grains internally, just after admission; (*b*) sulphate of quinine, 10 grains twice daily (only when high fever is present); (*c*) camphor, 10 or 15 grains a day internally, in the shape of emulsion (as recommended by Pirogoff) (see *Provincial Medical Journal*, February, February, 1891). In 3 cases the disease was cut short within twenty-four hours; in 8 others, treated like the preceding with a 40 per cent. solution of thiol, the patients were practically cured in from two to four days; in 4 earlier cases, in which a 20 per cent. solution was applied, there occurred relapses, the disease permanently subsiding after a subsequent application of the stronger solution. On the whole, Rüdneff is satisfied with thiol, its advantages including a complete absence of odour, and of toxic and irritant properties. The disadvantages are limited to its staining linen, inducing an intense blackish discoloration of the skin, and being rather expensive. The latter circumstance prevents a routine thiol treatment of erysipelas in hospitals. The author himself has recourse to thiol only in cases in which a corrosive sublimate treatment (painting with a 1 to 1000 or 500 aqueous solution) fails to cut short the disease. To judge from Rüdneff's 60 cases treated with the bichloride, the latter affords the most efficacious remedy for erysipelas after thiol.

(522) Izal.

N. A. BLAGOVESHTCHENSKY, of Moscow (*Vratch*, No. 5, 1894), states that his experiments fully support Klein's high opinion of the antiseptic properties of izal (see BRITISH MEDICAL JOURNAL, October 7th, 1893). A 3 per cent. aqueous emulsion destroys the cholera vibrio in fifteen minutes, and a 5 per cent. emulsion in two minutes. Eberth's typhoid bacillus is killed by a 3 or 5 per cent. mixture in three minutes, while pyogenic microbes lose their vitality after a few minutes' contact with a 2 per cent. emulsion. Anthrax bacilli resist a 1 to 5 per cent. mixture, but perish fairly quickly when treated with a 10 per cent. mixture. Dressing and suture materials and hands infected with pyogenic streptococci and staphylococci can be sterilised with izal emulsions in a satisfactory manner. The author declares that "even very strong emulsions of the substance are absolutely harmless."—Referring to this paper, P. I. Diakonoff, of Moscow, points out (*Vratch*, No. 5, 1894) that commercial specimens of izal are found to vary in their chemical composition, while another disadvantage of the new disinfectant consists in its being non-transparent.

PATHOLOGY.

(523) Mixed Infection in Pulmonary Tuberculosis.

STRAUSS (*Sem. Méd.*, May 30th, 1894) disputes the dual nature of the etiology of pulmonary lesions in tuberculosis which recent microscopical and bacteriological research tends to establish. He asks if we are to regard the larger number of cases of pulmonary phthisis as due to a mixed infection in which the intervention of strepto- and pneumococci and the microbes of suppuration plays not only an accessory but an essential part, preparing the ground for the tubercle bacillus; that the latter most frequently acts only secondarily, provoking caseation in the inflammatory exudation caused by the other microbes; and whether, finally, the hectic fever, the cardinal symptom of phthisis, is to be regarded, not as due to the tuberculous process itself, but to a "septicæmia," an infection of the streptococcus. These questions he answers in the negative, and gives the results of his own researches. (1) As to the condition of the blood in the hectic fever of phthisis. In the cases of thirteen patients in whom this was very marked, a very strict bacteriological examination of the blood was made. The blood was taken, not in the ordinary manner by pricking the finger and extracting a drop of blood under conditions where it is absolutely impossible to be certain of its non-contamination, but from the median cephalic vein in the bend of the elbow with a Pravaz's syringe. A larger quantity was thus obtained in a perfectly uncontaminated condition, and 1 cm. of this was sown in bouillon and on agar-agar, with the result that the tubes remained persistently sterile in every case. The author draws attention to the fact that these results must be regarded as more reliable than those of Jankowski, who, using the drop of blood obtained by pricking the finger, always found strepto- or staphylococci in his cultures; also that the discovery of these organisms in the blood and tissues *post mortem* (Petruschky) does not militate against their absence during life in the hectic period, seeing how readily micro-organisms of all kinds find access to the tissues after death. At the same time, Strauss does not deny the possibility of these organisms sometimes being present, but he denies that they are essential to the condition. He suggests that the experiments with tuberculin fully vindicated the pyretogenic powers of the products of the tubercle bacillus. (2) The part played by these accessory microbes in the actual pulmonary lesions has been exaggerated. A. Fraenkel and Troje, in their bacteriological examination of foci of acute pneumonic infiltration in the tuberculous were unable to detect the presence of strepto- or pneumococci either by coloration or culture. Strauss has been equally unsuccessful in most cases, and where these organisms were found they were destitute of virulence, so that their injection into animals was innocuous. (3) Further proof of his position Strauss believes to be furnished by the results of different methods of inoculating animals with tubercle cultures. If introduced into the vein of a guinea-pig or rabbit, acute miliary tuberculosis of the lungs follows. If, on the other hand, it is injected into the trachea, the lesions are of the character of broncho-pneumonia; caseation and cavitation follow, and in microscopical examination the tubercle bacillus is found, to the exclusion of all other microbes. In conclusion, the author urges that the attempted restoration of the dualist theory of pulmonary phthisis on bacteriological grounds appears to be no more fortunate nor better justified than the anatomical dualism which long weighed so heavily on the history of tuberculosis.

(524) Experiments on the Formation of Gall Stones.

J. MAYER, of Carlsbad (*Virchow's Archiv*, 1894, vol. 136, part 3), contributes the following three experiments regarding the pathology of biliary calculi: (1) Under antiseptic precautions, a small unpolished ivory ball, about 1 centimetre in diameter, was introduced into the gall bladder of a dog. The dog was then well fed; gained in weight; and was killed about a year after the operation. *Post mortem*, the gall bladder was found without adhesions; its mucous membrane and the contained bile were normal, and the scar of the operation could not be distinguished. The ivory ball was found covered with a friable pigmented layer, about $\frac{3}{4}$ mm. in thickness, without crystalline structure, containing no cholesterin and little carbonate of lime. (2) Two hollow terra-cotta balls, about $1\frac{1}{2}$ cm. in diameter, were similarly introduced into the gall bladder of a dog. A year after the operation, when the dog was killed, the bile in the gall bladder appeared thickened, and near the two balls was a friable pigmented concretion about the size of a millet grain. The hole in the balls was filled with a slimy material, found to contain large, immotile, non-pathogenic bacilli. A few cholesterin crystals were found in the thin pigmented deposit on the balls. The gall bladder was free from adhesions and its mucous membrane appeared quite healthy. (3) Two lumps of agar-agar were similarly introduced into the gall bladder of a dog. After a a year, when the animal was killed, the gall bladder was found adherent to the neighbouring parts of the liver, but its mucous membrane and contained bile were quite normal, and no remnant of the agar-agar was found. In these three cases Mayer thinks that it was owing to the mucous membrane remaining healthy that no true calculi were formed. These experiments point to Naunyn's view being correct, namely, that an unhealthy condition of the mucous membrane forms a necessary antecedent to the formation of calculi in the gall bladder. In a fourth experiment Mayer introduced into the gall bladder of a dog a terra-cotta ball impregnated with a pure culture of bacterium coli. The dog died three days after the operation with suppuration of the wound, and no concretion was found in the gall bladder, but Mayer thinks that other experiments are necessary to settle what part microbes may play in the production of gall stones.

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